

# Asset Accounting (FI-AA)



HELP.FI.AA

Release 4.6C



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## Icons

Icon	Meaning
	Caution
	Example
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	Syntax

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## Asset Accounting (FI-AA)



## Asset Accounting Overview

### Purpose

The Asset Accounting (FI-AA) component is used for managing and supervising fixed assets with the SAP R/3 System. In SAP R/3 Financial Accounting, it serves as a subsidiary ledger to the FI General Ledger, providing detailed information on transactions involving fixed assets.

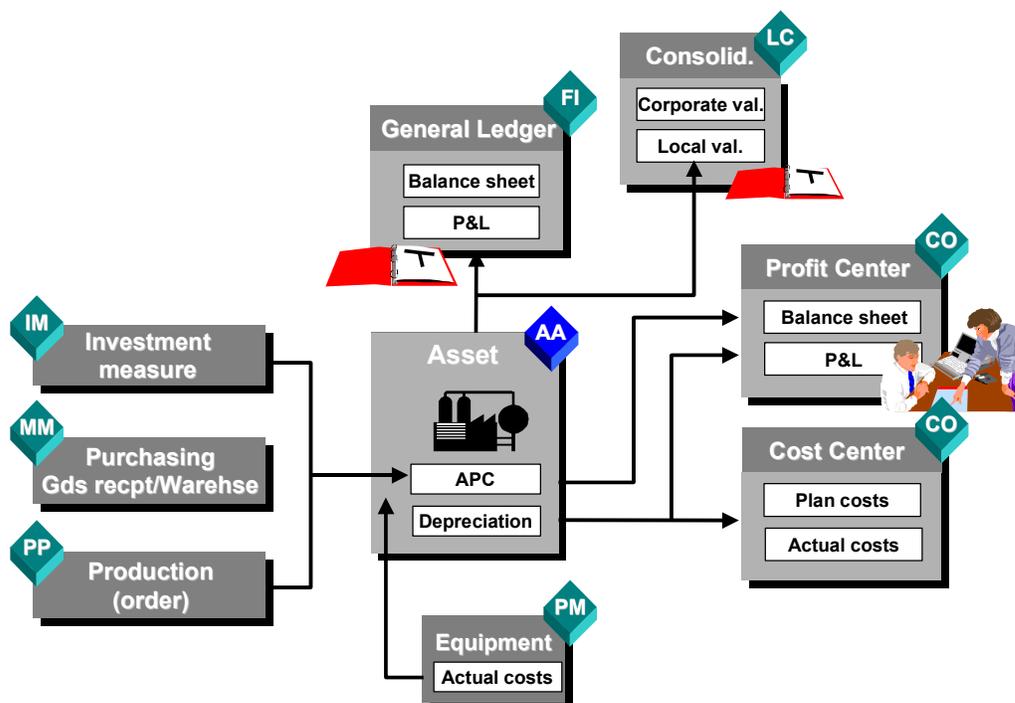
### Implementation Considerations

The R/3 *Asset Accounting* component is intended for international use in many countries, irrespective of the nature of the industry. This means, for example, that no country-specific valuation rules are hard-coded in the system. You give this component its country-specific and company-specific character with the settings you make in Customizing. To minimize the time and energy involved in Customizing, country-specific defaults are provided in the standard system where possible.

The Implementation Guide (IMG) provides the necessary functions for this in Asset Accounting.

### Integration

As a result of the integration in the R/3 System, Asset Accounting (FI-AA) transfers data directly to and from other R/3 components. For example, it is possible to post from the *Materials Management* (MM) component directly to FI-AA. When an asset is purchased or produced in-house, you can directly post the invoice receipt or goods receipt, or the withdrawal from the warehouse, to assets in the *Asset Accounting* component. At the same time, you can pass on depreciation and interest directly to the *Financial Accounting* (FI) and *Controlling* (CO) components. From the *Plant Maintenance* (PM) component, you can settle maintenance activities that require capitalization to assets.



Integration of Asset Accounting

---

**Asset Accounting (FI-AA)****Features**

The *Asset Accounting* component consists of the following parts:

- Traditional asset accounting
- Processing leased assets
- Preparation for consolidation
- Information System

Traditional asset accounting encompasses the entire lifetime of the asset from purchase order or the initial acquisition (possibly managed as an asset under construction) through its retirement. The system calculates, to a large extent automatically, the values for depreciation, interest, insurance and other purposes between these two points in time, and places this information at your disposal in varied form using the Information System. There is a report for depreciation forecasting and simulation of the development of asset values.

The system also offers special functions for leased assets, and assets under construction. The system enables you to manage values in parallel currencies using different types of valuation. These features simplify the process of preparing for the consolidation of multi-national group concerns.



The *Plant Maintenance* (PM) component offers functions for the technical management of assets in the form of functional locations and as equipment. The *Treasury* (TR) component offers special functions for managing financial assets

## Organizational Elements and Structures

### Purpose

In addition to providing for the management of assets and their values, asset accounting should offer an organizational structure for assets that reflects the organizational structure of the enterprise. For this reason, the *Asset Accounting* (FI-AA) component uses the various SAP organizational units. An asset is clearly assigned to these organizational units at any given point in time.

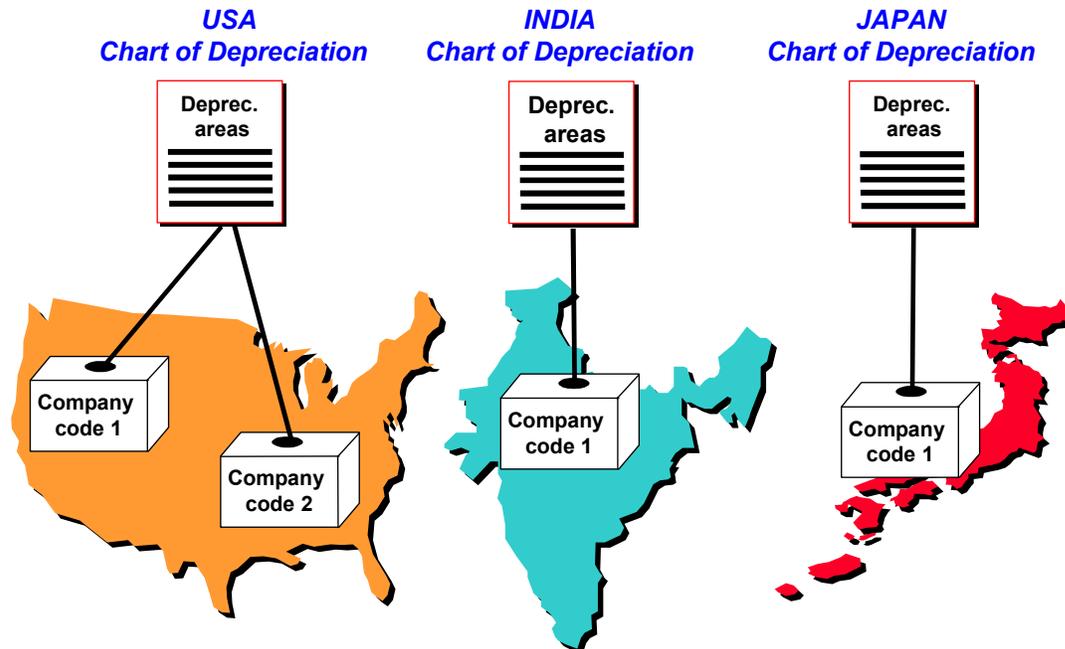
In addition, you need to classify assets according to various accounting criteria (such as depreciation methods). This classification assists in management-accounting-oriented tasks, and in the summarization of asset values in the general ledger.

## Organizational Elements and Structures

## Chart of Depreciation

### Definition

Charts of depreciation are used in order to manage various legal requirements for the depreciation and valuation of assets. These charts of depreciation are usually country-specific and are defined independently of the other organizational units. A chart of depreciation, for example, can be used for all the company codes in a given country (refer to [Company Code Assignment \[Page 22\]](#)).



### Country-Specific Charts of Depreciation

In the simplest scenario, all of your company codes are in the same country and are subject to the same legal requirements for asset valuation, meaning that you only need one chart of depreciation.

### Structure

The chart of depreciation consists of the following parts:

- In general, you are required to calculate values for assets for different needs, both internal and external (such as book depreciation and cost depreciation). Therefore, the *Asset Accounting* component enables you to manage values for assets in parallel in up to 99 **depreciation areas**. The chart of depreciation, therefore, is a directory of depreciation areas organized according to business management requirements. You define the characteristics, and thereby the significance, of the individual depreciation areas in each chart of depreciation. A depreciation area is always assigned to only one chart of depreciation.
- You flexibly define the **keys** for the automatic depreciation of assets in each chart of depreciation. They are based on elements for calculation (calculation methods, period controls, and so on) that are available client-wide.

Organizational Elements and Structures

You can change and add to the standard calculation keys that are delivered with the system (refer to [Depreciation \[Page 123\]](#) )

- There are specific objects in the chart of depreciation for **special calculations of asset values** (for example, investment support keys for investment support - refer to [Special Valuation \[Page 167\]](#) ).

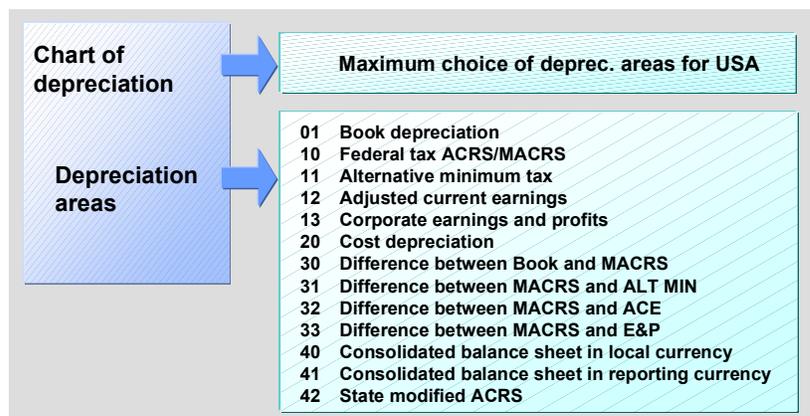
**Use**

SAP supplies typical reference charts of depreciation for each country. They have different depreciation areas and depreciation keys depending on that country's specific requirements. You cannot use these charts of depreciation directly. You must create your own chart of depreciation by copying the reference chart of depreciation. Delete any depreciation areas that are not needed.

You can document the meaning of any chart of depreciation you set up in the system by writing a description for it.



The graphic below shows the standard chart of depreciation for the USA.



**Integration**

**Company Code/Chart of Depreciation**

You have to assign each company code defined in Asset Accounting to exactly one chart of depreciation. In the interests of keeping asset values uniform in your company, you should restrict the number of charts of depreciation used to as few as possible. Company codes in countries with the same valuation rules or company codes of a certain industry sector generally use the same chart of depreciation.

**Chart of Accounts/Chart of Depreciation**

The assignment of a company code to a chart of accounts is independent from its assignment to a chart of depreciation. This means that several company codes can use the same chart of accounts, although they have different charts of depreciation (and vice versa).

**Refer to:**

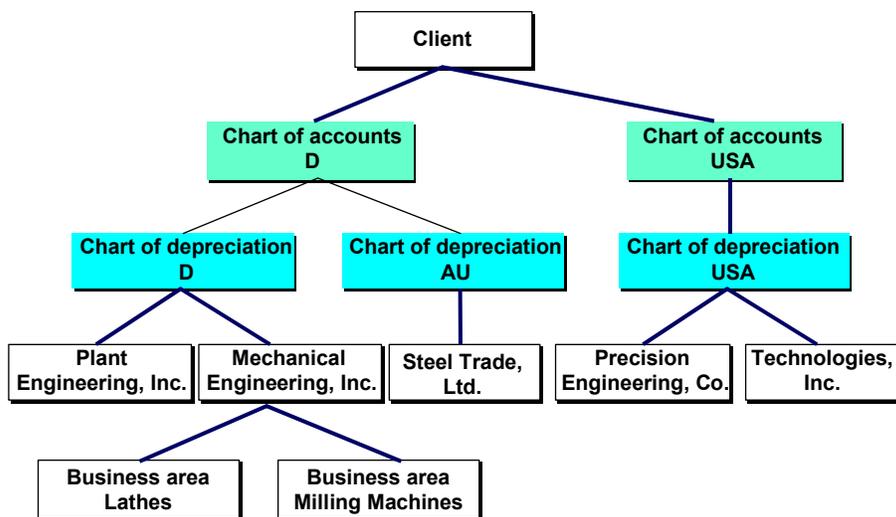
[Graphic: Organizational Structure 1 \[Page 18\]](#)

[Graphic: Organizational Structure 2 \[Page 19\]](#)

Graphic: Organizational Structure 1

## Graphic: Organizational Structure 1

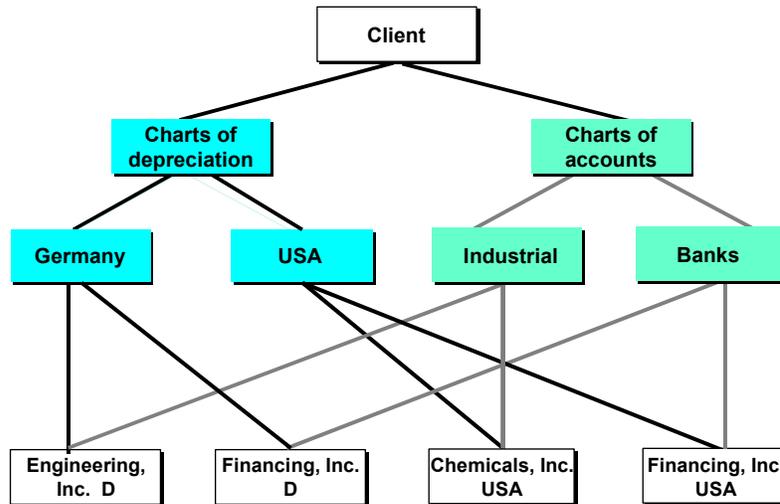
The organizational structure (chart of accounts/chart of depreciation) below shows one possible organization:



Organizational Structure 1

## Graphic: Organizational Structure 2

The organizational structure (chart of accounts/chart of depreciation) below shows one possible organization:



Organizational Structure 2

---

Graphic: Organizational Structure 2

## Chart of Accounts

### Use

In the General Ledger, you can define different charts of accounts. Each company code is assigned to exactly one chart of accounts. The chart of accounts is used for the account assignments within Asset Accounting.

The account assignment is controlled by means of the asset class in Asset Accounting (refer to [Account Assignment \[Page 108\]](#)). You have to specify an account determination in each asset class. In this account determination, you specify the G/L accounts in which automatic posting takes place for different transactions.

## Assignment to Organizational Units

### Use

You can assign an asset to a number of organizational units by making entries in the asset master record. These assignments are meaningful primarily in other SAP R/3 applications. However, there are also functions and requirements for Asset Accounting that make it necessary or desirable to make organizational assignments.

## Assignment to Organizational Units

## Assignment of Company Code

### Use

Asset Accounting uses the same company codes as the General Ledger. However, you need to define these company codes further with the specifications needed for Asset Accounting. An FI company code is not usable in Asset Accounting until it has been defined in this way.

**FI** Company code: **0003 U.S. Subsidiary :**

Global parameters

○ Chart of accounts

○ Fiscal year variant

...

Parallel currencies

**FI-AA** **0003 U.S. Subsidiary (Assets Subsidiary Ledger)**

Chart of depreciation

Number assignment

Status

...

### FI-AA Company Code Definition

### Prerequisites

In order to make a company code usable in *Asset Accounting*, you have to assign a chart of depreciation to the company code. You do so in Customizing for *Asset Accounting*. Choose *Organizational Structures* → [Assign Chart of Depreciation to Company Code \[Ext.\]](#).

Also make the following system settings at the company code level:

- Company code for number assignment (for number assignment across company codes) – refer to [Number Assignment \[Page 211\]](#) .
- Fiscal year variant (only when using a fiscal year variant specifically for FI-AA – refer to [Fiscal Years and Periods in Asset Accounting \[Page 90\]](#) ).
- Depreciation area for net worth tax
- Document type for posting depreciation
- Settlement profile for the settlement of assets under construction

### Features

The most important control feature in the Asset Accounting company code is the [chart of depreciation \[Page 16\]](#) . It contains the parameters (such as the depreciation keys) that are used for calculating asset values in a given country. You have to assign each company code, in which assets are managed, to exactly one chart of depreciation.

## Assignment of Assets to Company Code

You have to enter a company code when you create an asset. This ensures that each asset is always uniquely assigned to a company code.

### Status

An Asset Accounting company code can have one of the following statuses:

- Production status: Transfer of legacy asset data from your previous system is finished. You can only change values by posting.
- Legacy data transfer status: You can enter and change values using legacy data transfer. Posting is not possible.
- Test status: You can change values by legacy data transfer or posting.

### Reports

You create asset reports per company code. For reports for a group concern, it is also possible to run reports on all or several company codes

### Legacy Data Transfer

For legacy data transfer, you can set the transfer date, and make various parameter settings per depreciation area (refer to [Legacy Data Transfer \[Ext.\]](#)).

---

**Assignment to Organizational Units**

## Assignment of Business Area

### Use

The business area is another organizational criterion for General Ledger Accounting, in addition to the company code.

### Features

If you specify in Customizing for the General Ledger that business area balance sheets should be created for a company code, the system requires that assets be assigned to a business area during master record maintenance. The business area can also be adopted automatically from the cost center that you entered. As long as a fixed asset is assigned to a business area, the system makes account assignment of all postings to this asset to this business area, including depreciation and gain or loss postings on asset retirement.

If you want to assign a fixed asset, which has already been posted, to another business area, you have to transfer the fixed asset to a new asset master record. The posting becomes effective at the same time in the General Ledger. If you do not create business area balance sheets, you can change the business area in the time-dependent assignments in the asset master record.

## Assignment to Plant/Location/Address

### Use

The meanings of the *plant* and *location* organizational units are primarily specified in the SAP R/3 logistics components.

### Prerequisites

You maintain plants and locations in Customizing. Choose *Enterprise Structure*.

### Features

#### Plant

Generally, the plant is a plant location or branch. The plant has no asset accounting relevance, but it can be used as a sort and selection criterion for reports. You can assign a fixed asset to one plant for a set time in its asset master record. By changing the asset master record, you can change the assignment to a different plant.

#### Location

The location is handled the same as the plant. In addition to a plant, you can make a time-dependent assignment of the asset to a location.

#### Address

In the Customizing definition of the location, you can also specify an address. Using this method, you can indirectly assign an address to an asset. The comprehensive address data consists mainly of

- Street address
- PO box
- Information for communication (such as telephone number)

Since the address is linked to the location, all assets with the same location must have the same address. You can obtain reports related to the address using a standard report in the FI-AA Information System (refer to [Asset Lists \[Page 287\]](#)). You can display the address in the asset master record, on the *Time-dependent data* tab page.



You can use the address to assist in determining net worth tax burden in the USA.

---

**Assignment to Cost Center and Profit Center**

## Assignment to Cost Center and Profit Center

### Use

For internal accounting, you generally need to assign asset costs to cost centers. Therefore, you can assign each asset in Asset Accounting to exactly one cost center. You make this assignment in the asset master record. At the level of the cost center, you can then

- Post all depreciation and interest for the asset (see [System Settings for Depreciation Posting \[Page 118\]](#) )
- Plan all future depreciation and interest (for primary cost planning, see [Primary Cost Planning \[Page 526\]](#) )
- Statistically post gain or loss from the sale of assets (see [Additional Account Assignment \[Page 110\]](#) )

### Prerequisites

If you want to use cost accounting across company codes, then you have to set this up in Customizing for *Asset Accounting*. Choose *Master Data* → [Specify Cost Center Check Across Company Codes \[Ext.\]](#).

You define the necessary clearing accounts for this for the different company codes in Customizing for *General Ledger Accounting*. Choose *Business Transactions*.

### Features

The cost center assignment of a fixed asset can be set to begin on a specific day. If this date changes over the course of time, the system distributes depreciation and interest, according to the appropriate period, to the different cost centers, whereby costs are always allocated to the cost center valid at the end of the depreciation period. The history of the cost center changes can be managed in the system as long as you wish. A cost center can also be assigned to a business area as an asset can. In asset master record maintenance, therefore, the system ensures that the business area of the cost center matches the business area of the asset.

Assets can be assigned to profit centers indirectly, by means of the cost center. In this way, account assignment to profit center is possible for asset business transactions that affect net income. For more information, see the documentation for the R/3 *Profit Center Accounting* (EC-PCA) component. Special rules apply to changes to cost center assignment, if this change affects the profit center assignment of the asset. When this is the case, certain preconditions have to be met. For more information, refer to [Changes to Master Data \[Page 365\]](#)



If you assign assets to more than one cost center at the same time, you have to do one of the following:

- Distribute the costs within cost accounting using a distribution cost center.
- Post depreciation and interest to an internal order and then settle the order.

For more information, see [Additional Account Assignments \[Page 110\]](#).

---

**Assignment to Cost Center and Profit Center****Cost Accounting across Company Codes**

Cost accounting in the SAP R/3 System can be organized both within one company code and across company codes. Cross-company code cost accounting allows you to assign a cost center to an asset when the company code of the cost center is not the same as that of the asset. Before you do this, you have to allow this procedure in Customizing (under *Master Data*). The system then makes additional account assignment of depreciation and interest to this cost center (that is in a different company code than the asset). The system posts the debits using the cost element that is entered as depreciation expense account in the FI-AA account determination. This type of posting is possible since all of the company codes belonging to a controlling area have to use the same chart of accounts.

The rest of the posting procedure depends on whether the account assignment to cost center takes place in the book depreciation area or in the cost-accounting area:

- If the account assignment to cost center is in the book depreciation area, the system posts the depreciation expense in the company code of the cost center, and the value adjustments in the company code of the asset. In addition, the system creates a clearing posting to the clearing accounts of both company codes. You define the necessary clearing accounts for this for the different company codes in Customizing for *General Ledger Accounting*. Choose *Business Transactions*.

When you set up the system in this way, it is not possible to post revenue/expense from asset transactions (such as gain or loss from asset sales) from the book depreciation area to cost centers.

- If the account assignment to cost center is in the cost-accounting depreciation area, the system posts the depreciation expense and the value adjustments (clearing of cost-accounting depreciation) in the company code of the cost center. In the company code of the asset, the system posts a balance of zero to the clearing account for cost-accounting depreciation. This posting serves to document the account assignment to CO.

The following graphic shows an overview of these postings:

**Assignment to Cost Center and Profit Center**

**Cost Center Acct Assignment in Book Dep.**  
 Asset: Company code 1  
 Cost center: Company code 2

<b>CoCd1</b>	<b>Clearing CoCd 2</b>	<b>Val. Adj. CoCd 1</b>
	1000	1000
<b>CoCd2</b>	<b>Reval./CCtr CoCd 2</b>	<b>Clearing CoCd 1</b>
	1000	1000

**Cost Center Acct Assignment in Cost-Acc. Dep.**  
 Asset: Company code 1  
 Cost center: Company code 2

<b>CoCd1</b>	<b>Clr.Cst-AccDep CC 2</b>	<b>Clr.Cst-AccDep CC 2</b>
	1000	1000
<b>CoCd2</b>	<b>Reval./CCtr CoCd 2</b>	<b>Clr.Cst-AccDep CC 1</b>
	1000	1000

**Cost Accounting across Company Codes**

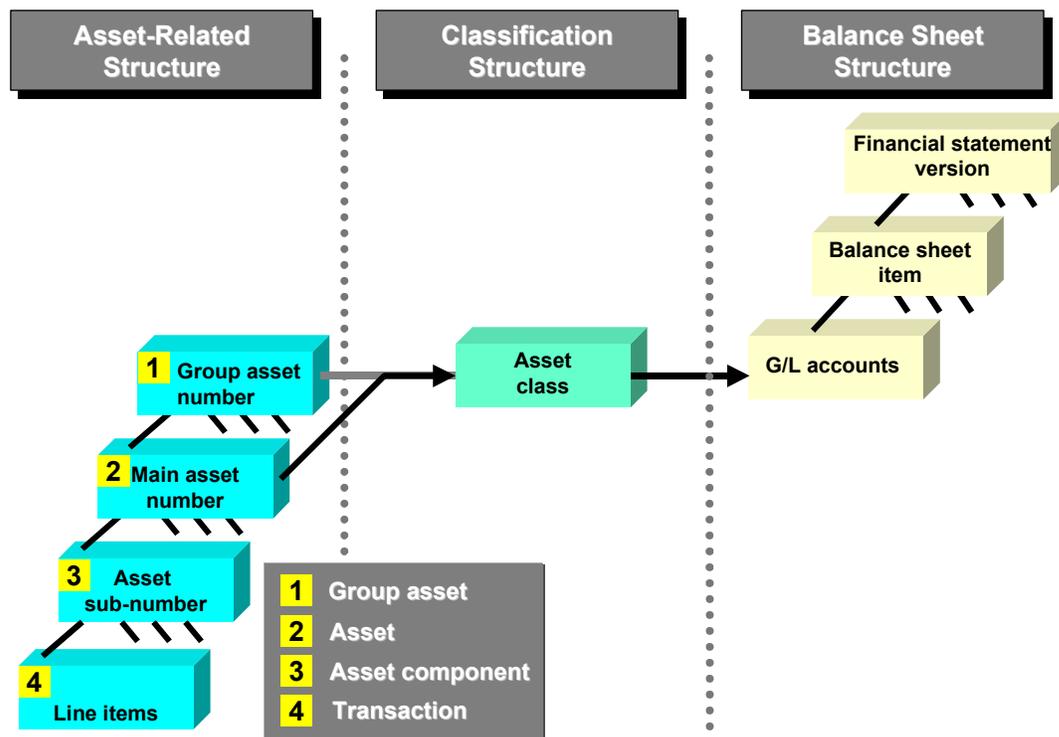
You specify all of these accounts (except for the company code clearing accounts) in Customizing for *Asset Accounting*.

## Structuring Fixed Assets

### Use

It is possible to structure fixed assets at several different levels in the system:

- Balance Sheet Level
- Classification Level
- Asset-Related Level



### Structuring of Fixed Assets

### Features

#### Balance Sheet Level

For structuring according to balance sheet criteria, the R/3 *Financial Accounting* (FI) component offers a three-level hierarchy:

- Balance sheet version
- Balance sheet item
- General Ledger account

## Structuring Fixed Assets

### Classification Level

At this level, fixed assets can be structured using asset classes in the *Asset Accounting* component. You use asset classes to structure assets according to legal requirements or the demands of accounting. Every asset belongs to an asset class. You use the account determination in the asset class to assign each asset to an item in the balance sheet (refer to [Account Determination \[Page 108\]](#)). For more information, see [Functions of the Asset Class \[Page 31\]](#).

### Asset-Related Level

At the asset-related level, a four-level hierarchy has been set up in the *Asset Accounting* component (refer to [Basic Functions of Asset Maintenance \[Page 208\]](#)):

- The group asset makes it possible to group a number of assets together for the purpose of uniform evaluation and depreciation. Group assets are assigned to asset classes, just like other assets. The asset class of the group asset is not related to the asset classes of the assets that belong to it.

Group assets are used primarily in the USA to meet certain tax requirements.

- The asset main number represents an asset that is to be evaluated independently. The asset is viewed as a single unit for evaluation. It contains information for the valuation of the asset, as well as organizational information.
- Below the asset main number, the asset can be further divided into its component parts by the use of asset sub-numbers. You can use sub-numbers to depreciate subsequent acquisitions to an asset separately from the original asset.
- The lowest level consists of the transaction data per depreciation area (such as acquisitions or retirements) that belong to the asset master record (line items).



Please note that this four-tiered hierarchy is not mandatory. You can represent a [simple fixed asset \[Page 50\]](#) just using an asset main number (asset master record).

## Functions of the Asset Class

### Use

Asset classes are the most important means of structuring fixed assets. You can define an unlimited number of asset classes in the system. You use the asset classes to structure your assets according to the requirements of your enterprise. Asset classes apply in all company codes. The asset class catalog, therefore, is relevant in all company codes in a client. The preceding is also true when the company codes have different charts of depreciation and therefore different depreciation areas.

### Prerequisites

You define asset classes in Customizing for *Asset Accounting*. Choose *Organizational Structures* → *Asset Classes*.

You also assign a chart of depreciation to an asset class in Customizing. Choose *Valuation* → *Determine Depreciation Areas in the Asset Class*.

To generate asset classes that correspond to your G/L accounts, choose *Organizational Structures* → *Asset Classes* → *Generate Asset Classes from G/L Accounts* in Customizing for *Asset Accounting*.

### Features

Depending on the functions you want the asset class to have, consider the following when creating asset classes:

- The asset class provides default values to all asset master records in the class. In this way, the asset class functions as a sample master record, and makes it possible to create new asset master records simply and without errors.
- The screen layout, tab layout and the field characteristics (required/optional/suppressed) of the asset master record can be set for the asset class.
- The assignment of asset numbers can be controlled by the asset class.
- The asset class is a selection criteria in all standard reports in Asset Accounting. In addition, you can also request sorting and totaling by class-specific characteristics.

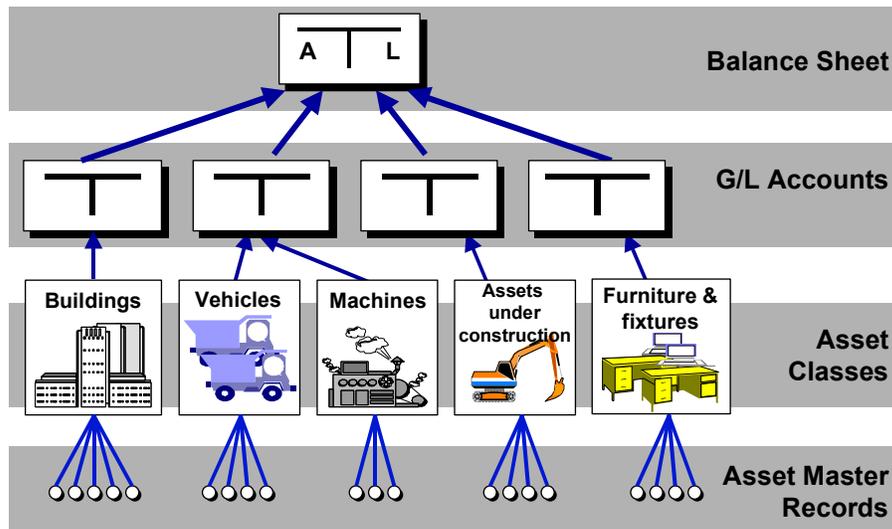


It is particularly useful to use the asset class to provide default values for valuation parameters (depreciation key, and so on). Therefore, define at least as many asset classes as you have assets with different valuation parameters.

### Account Determination

One of the most important functions of the asset class is to establish the connection between the asset master records and the corresponding accounts in the general ledger in Financial Accounting. This connection is created by the account determination key in the asset class (refer to [Account Determination \[Page 108\]](#))

**Structuring Fixed Assets**

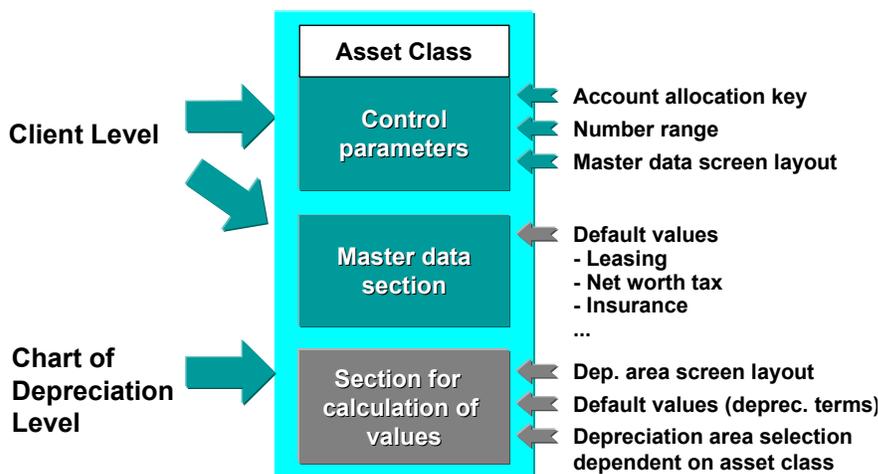


**Account Determination**

**Structure of the Asset Class**

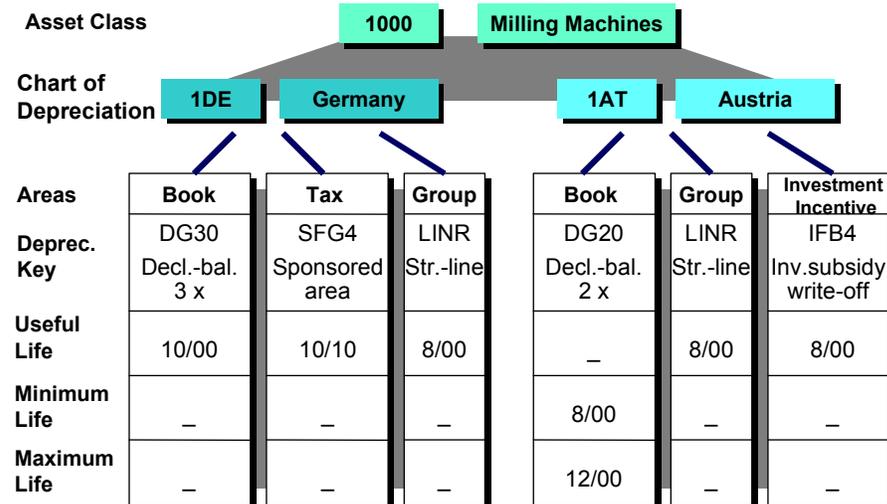
An asset class consists of three main sections:

- A header with the control parameters for master data maintenance and account determination
- A master data section with default values for the administrative data in the asset master record
- A valuation section with control parameters for valuation and default depreciation terms for each depreciation area



**Structure of the Asset Class**

You can assign any number of charts of depreciation to each asset class. In this way, you can have country-specific depreciation terms for each combination of asset class and chart of depreciation. And these depreciation terms are the default values in the given chart of depreciation.



The control parameters and the master data section of the asset class are always valid for all company codes within a client. However, it is also possible to specify that certain general master data is dependent on the chart of depreciation, and to use it also to provide default data.

### Default Values

You should create reasonable default values in the asset class for control and valuation parameters in the asset master record. The most important fields of the asset master record are also found in the asset class (general master data as well as valuation data). You can define the screen layout control, so that these fields can no longer be changed at the master record level (refer to [Screen Layout and Maintenance Level \[Page 214\]](#)).

You need to enter defaults for administrative details (such as insurance information) only once for each asset class, and therefore uniformly for all company codes and charts of depreciation. The following master data can, however, also be entered separately in the asset class for each chart of depreciation:

- Screen layout and account determination
- Evaluation groups (4 characters)
- Insurance type and insurance index series
- Property classification key

### Creating the Asset Class

Creating the asset class is a Customizing activity. Account determination is the most important function of the asset class. There is a function in the system, therefore, for generating an asset class to correspond to each APC general ledger account. The system generates these asset classes automatically, in a one-to-one relationship to the accounts (see *Prerequisites* above).

Note that several asset classes can use the same account determination key. Therefore, you can copy the asset classes that were generated by the system. The asset class, as a result, can provide a more detailed classification of assets than the asset G/L accounts. You need to assign the asset class key yourself for asset classes that you copy. There is no internal number assignment of the asset class key. It can be alphanumeric and up to 8 characters long. When

### Structuring Fixed Assets

you use the system to automatically generate asset classes, the system uses the APC account number as the account key.

After the system creates the asset class, only the account key and the control portion of the asset class are created at first. You maintain the default values for the asset class in further Customizing steps (for example, by choosing *Special Valuation* → *Insurance*). You maintain the depreciation terms (such as the depreciation key) under *Valuation*.

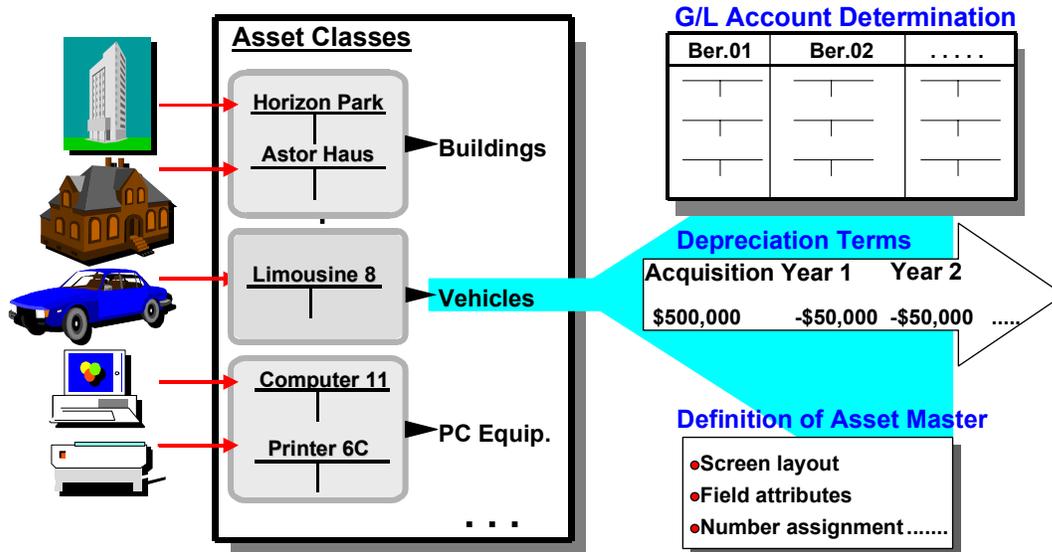


- Changes to master data in the asset class only have an affect on assets created after the change was made. The system does not automatically carry out the changes for assets that already existed. For this purpose, you should use the mass change procedure (refer to [Mass Change \[Page 228\]](#)).
- When you create an asset in an asset class, the chart of depreciation of the asset company code has to be assigned to the asset class.

## Control Information (Asset Class General)

### Use

The asset class carries important control information for managing fixed assets. The following graphic provides an overview of the functions of the asset class.



### Functions of the Asset Class

### Prerequisites

You specify that down payments can be posted (transaction type groups 15 and 16) in asset classes for assets under construction. You make this specification for these asset classes in Customizing for Asset Accounting (choose *Transactions* → *Acquisitions* → *Allow Down Payment Transaction Types in Asset Classes*).

There are no restrictions for any other transaction type groups in relation to the asset class. It is not necessary to specify the asset classes in which these transaction type groups can be used.

### Features

#### Account Determination

In the [account determination \[Page 108\]](#), you define the reconciliation accounts in Financial Accounting that are posted from Asset Accounting. Enter the account determination key in the asset class. When you create a fixed asset, the system checks whether the accounts defined in the account determination actually exist.

#### Depreciation Terms

For more information, see [Control Information in the Valuation Section \[Page 37\]](#).

## Control Information (Asset Class General)

### Screen Layout Control (Master Data)

Using the screen layout control, you control the fields that appear on the screen, the required fields, and the maintenance level of asset master data (see [Screen Layout and Maintenance Level \[Page 214\]](#)). The screen layout you set up in the asset class applies to all asset master records of this class.

There are screen layout controls for master data and for depreciation areas (see [Control Information in the Valuation Section \[Page 37\]](#)).

### Number Assignment

In the asset class, you enter the number range from which the asset numbers of this class are to be assigned. You specify the number range at company code level. It determines the number interval for the number assignment and determines whether the assignment of the main asset number is to be carried out externally or internally.

### Sub-Number Assignment

It is standard for sub-numbers to be assigned by the system in ascending numerical order. In the asset class, you can specify whether sub-number assignment is to be carried out externally. The sub-number must always be numeric.

### Special Functions

By means of control indicators, you can identify an asset class as being for

- [Assets under construction \[Page 40\]](#) with line item management
- Real estate (if the *Real Estate Management* component is being used)
- [Group Assets \[Page 53\]](#)

Using the status for assets under construction activates line item management for any assets belonging to this class. The indicator for group assets means that the asset class can only be used for group assets.

## Control Information in the Valuation Section

### Use

Specify the following control information, per depreciation area, for the charts of depreciation created for an asset class.

### Features

#### Deactivation of a Depreciation Area

When you maintain an asset class, the system displays every depreciation area of the specified chart of depreciation. By deactivating depreciation areas, you can limit the management of asset values to the depreciation areas you need in your enterprise. For example, you can deactivate the depreciation areas in a particular asset class that deal with investment support measures, if they are irrelevant for the assets in this class.

Once you have created asset master records for an asset class, you should not deactivate depreciation areas.

Along with deactivation at the asset class level, it is also possible to deactivate depreciation areas for individual assets directly in the asset master record.

#### Depreciation Keys and Useful Life

In order to guarantee uniform depreciation terms for the asset class, specify the depreciation terms here.

#### Index series

For calculating using replacement values, specify an index series. However, there are prerequisites for calculating with index values. You must have provided for using revaluation when you defined the depreciation area involved; and you must have used a depreciation key that allows you to depreciate from replacement values.

#### Screen Layout (Depreciation Area)

You must specify the screen layout for every active depreciation area in the chart of depreciation entered in the asset class. The screen layout determines the field selection, the required fields, and the maintenance level for the depreciation terms (for example, the depreciation key).

#### Control Indicator

In the detail display of the depreciation area, you can specify the following control indicators that are typical for certain asset types:

- Activation of amount check for individually managed low-value assets
- Activation of the quantity and amount-related check for collectively managed low-value assets
- Allowing the management of negative values. This may be required for assets under construction, for instance, or for investment support managed as a negative asset.
- Maximum/minimum useful life allowed

---

Control Information in the Valuation Section

## Asset Types (General)

### Use

Fixed assets as a whole is made up of a variety of different types of assets. The balance sheet represents this variety using the balance sheet items

- Intangible assets
- Fixed assets
- Financial assets

It is generally desirable to provide for a more detailed classification of assets according to asset types. The FI-AA component does not provide predefined asset types. There is **no** object or control indicator in the system called asset type.

Every asset type is represented by one or more asset classes that you define. These asset classes contain certain control indicators. The asset class can serve as a kind of sample master record for the assets in that class. Generally, all the asset classes for an asset type will use the same

- [Account Determination \[Page 108\]](#)
- [Screen Layout Control \[Page 214\]](#)

---

**Assets under Construction**

## Assets under Construction

### Use

Assets under construction are a special form of tangible assets. They are usually displayed as a separate balance sheet item and therefore need a separate account determination in their asset classes.

### Features

You can manage assets under construction in the system as individual master records, just as you do completed assets.

You can also use collective management of several assets under construction on one master record. You can distribute to the proper assets when the asset under construction is completed by using either

- Line item settlement (see below) or
- Simple transfer to other asset master records

However, if you use collective management, without line item management, there is one limitation. You can only post asset retirements (transfers) with asset value dates that follow in sequential order.



Due to the above restriction, it is not recommended that you manage a large number (or all) assets under construction on **one** master record. Instead, you should use a general ledger clearing account to temporarily collect acquisitions for assets under construction.

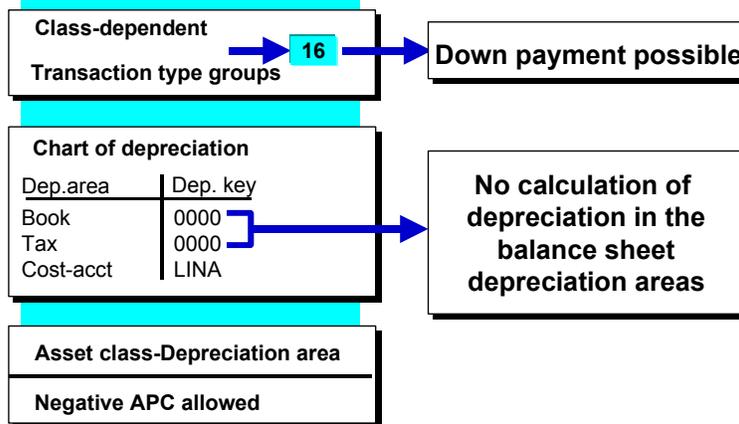
### Depreciation

Ordinary depreciation is not allowed for assets under construction in most countries. You reflect this limitation by choosing a depreciation key that does not allow ordinary depreciation in the book depreciation area. To ensure that this depreciation key is protected during master data maintenance, select the asset class as the maintenance level for the book depreciation area (see [Screen Layout and Maintenance Level \[Page 214\]](#)). For certain assets under construction, special tax depreciation is allowed. In this case you also enter corresponding keys in the asset class, to be used as mandatory default values.

### Down Payments

For posting down payments, allow the posting of the transaction type group "Down payments" (transaction type groups 15 and 16) in these asset classes. In addition, enter the necessary general ledger account in the account allocation. Also set the indicator for negative APC in the depreciation areas of the assets under construction. This allows subsequent credit memos on already capitalized assets.

**Asset Class**



**Control Information for Assets under Construction**

**Line Item Management**

If you make large capital investments in your own in-house produced assets, you can manage assets under construction with open items, and settle the assets under construction per line item to different receivers. The system activates this line item management when you create the asset, if the indicator for it is set in the asset class to which the asset belongs. This indicator also determines that the transaction type for down payments is automatically allowed in these classes.

**Settlement Profile**

You can define profiles for the line item settlement of assets in FI-AA Customizing. The profiles determine the receivers to which you are allowed to settle. In order to settle an asset under construction, an appropriate settlement profile must be entered in FI-AA Customizing per asset company code (*Specify settlement profile*).

**List Versions**

The transaction for the line item settlement of assets under construction enables you to select line items for allocation to a distribution rule group for each asset. You define display variants for these transactions in FI-AA Customizing (*List versions*). Using these variants, you can control which information (document number, posting text, and so on) is displayed when you call up line items. There are also interfaces to additional functions of Asset Accounting (such as, master record display, asset values).

## Low-Value Assets (LVA)

# Low-Value Assets (LVA)

## Use

In general, LVAs are fully depreciated in the year of purchase or in the period of acquisition. This can be achieved by using the special depreciation key GWG and the expected useful life of 1 month (period). In order to ensure that depreciation is fully posted in the acquisition month during the monthly depreciation posting, activate the catch-up method for the depreciation posting run (see [System Settings for Depreciation Posting \[Page 118\]](#)).

## Features

In contrast to fixed assets of greater value, low value assets (LVAs) are completely depreciated in the year in which they are acquired. Therefore, you do not usually need an individual assessment of their values. Since they individually have little value, they are often managed collectively as a single asset master record. In the FI-AA component, you can collectively manage all the LVAs in a certain category (such as belonging to a given cost center) in this way. You activate collective management by entering a unit of quantity in the asset master record (see [Quantity Management \[Page 235\]](#)).

## Maximum Amount

**You set the maximum amount for low value assets when defining the depreciation area at company code level (Customizing: *Transactions* → *Acquisitions*).** You can enter one maximum amount for purchase orders (taking possible discounts into account) and one for the actual acquisition posting. Enter either an individual check or quantity check for the verification of the maximum amount for LVAs. You make this specification in the depreciation area at the asset class level (Customizing: *Valuation* → *Determine depreciation areas in the asset class*):

- **Individual check (individual management) ^**  
When the acquisition is posted, the entire acquisition and production costs of the asset are compared with the LVA maximum amount.
- **Quantity check (collective management)**  
When the acquisition is posted, the entire acquisition and production costs of the asset, divided by the total quantity, are checked against the LVA maximum amount. When you make your first posting, you must also post the quantity.

## Simulation in the Asset History Sheet

When you create an asset history sheet, you can specify that asset retirement be simulated for any low value assets acquired during a specified time period. The affected assets then appear in the asset history sheet as retired. The system ignores any actual retirements of low value assets when it calls up the asset history sheet. You should be aware that choosing to simulate LVA retirement in the asset history sheet means that you are required to do the same in following years. Otherwise, the danger exists that LVA retirements could be listed in two asset history sheets (once as simulated retirement, and once as actual retirement).

Before running the report, enter the classes for low value assets, as well as the time period for the simulation. The simulation time period has to begin with the same date each year (see [Asset History Sheet \[Page 283\]](#)).

**Low-Value Assets (LVA)**

The system then carries out a retirement simulation for all assets belonging to the classes entered, which have a capitalization date in the simulation time period. The system simulates a complete retirement at the end of the fiscal year, if the book value of the asset is zero at that point in time (usually the case for low value assets).

In addition, the retirement affects not only the fiscal year requested in the report, but also the previous fiscal year. There is a certain principle of continuity: if the asset already fulfilled the requirements for retirement simulation at the end of the previous year, then the system bases its simulation on a simulated retirement at the end of the previous year. There are two possible consequences:

- The asset did not have any additional transactions in the current fiscal year. Then the system treats the asset as if it were retired in the previous year. The asset then no longer appears in the list.
- There were additional transactions for the asset in the current fiscal year. In this case, the system treats the asset as if the entire acquisition value were retired at the end of the previous fiscal year. However, the system does not deactivate the asset.



The retirement simulation always simulates the retirements at the end of the fiscal year. Therefore, it does not make sense to simulate asset retirement unless the report date is the end of the fiscal year.

---

**Leased Assets**

## Leased Assets

### Use

Leased assets create special accounting requirements for the lessee. During the term of the lease, leased assets remain the property of the lessor or manufacturer. They represent, therefore, a special form of rented asset. Such assets are legally and from a tax perspective the responsibility of the lessor, and are not relevant for assessing the value of the asset portfolio of the lessee. However, in certain countries, you are nonetheless required to capitalize leased assets, depending on the type of financing.

### Features

#### Valuation Methods for Leased Assets

The result is that there are two different methods for handling the bookkeeping for leased assets, depending on legal requirements and the conditions of the lease. You must capitalize and depreciate certain leased assets (capital lease). Others are handled as periodic rent expense, and flow into the Profit and Loss statement (operating lease). See [Leased Assets \[Page 196\]](#)

#### Master Data

To use these methods, you must enter all the essential leasing contract information in the asset master record. In addition, you can assign a leasing type in the asset master record. You define the leasing type in FI-AA Customizing. The leasing type contains all the information for the acquisition posting. You post the acquisition in the display transaction for asset master records (in the master record screen for lease specifications: *Opening entry*).

## Intangible Assets

### Use

You can manage intangible assets, such as patents, the same as tangible assets in the system. There are no special system functions for handling the needs of intangible assets.

### Features

The account control of the asset class for intangible assets must be assigned to the corresponding balance sheet item. If you want to post down payments, you must specify in the asset class that posting is allowed with the transaction type group "down payments" (FI-AA Customizing: *Transactions* → *Acquisitions*).

Intangible assets are not normally physically retired, and therefore no retirement posting takes place. In the request screen of the asset history sheet, you can specify for the asset class for intangible assets that a retirement is simulated when the book value reaches zero. The assets then appear in the retirement column of the asset history sheet.

Before running the report, enter the classes for intangible assets. The system then carries out a retirement simulation for the assets in the asset classes entered. The system simulates a complete retirement at the end of the fiscal year, if the planned useful life is expired at this point, and the book value is zero (this is usually the case when the useful life is expired).

Financial Assets

## Financial Assets

### Use

The SAP R/3 Treasury (TR) component offers special functions for managing financial assets.

## Technical Assets

### Use

Technical data can only be managed to a limited extent in the asset master record.

### Features

However, you can enter a virtually unlimited amount of technical description using the long text function. In addition, it is possible to link any number of original documents (blueprints, bills of material, and so on) to the asset master record, using the document management system. These options are available for all fixed assets. If separate master records are to be created as technical assets, you should deactivate the book depreciation area for these fixed assets in order to prevent posting taking place.

You can enter detailed technical information for the maintenance of equipment in the SAP R/3 Plant Maintenance (PM) component. You enter this information in the functional location and the equipment master record in PM. You use a field in the equipment master record to assign a piece of equipment to a specific asset.

---

**Real Estate****Real Estate****Use**

The FI-AA Asset Accounting component is not intended for rental contract management of residential buildings, or detailed land register management for real estate. For these types of activities, use the SAP R/3 Real Estate (IM-RE) component.

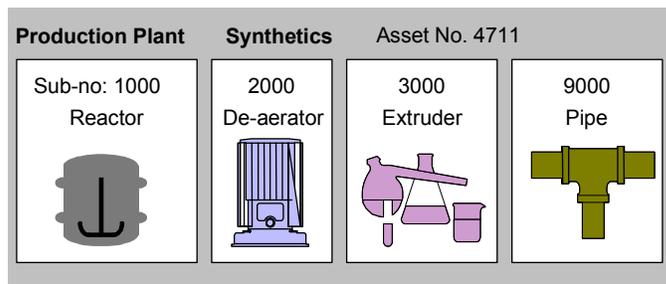
## Representing Fixed Assets

### Use

The term "asset" is used for simple assets, as well as for complex large-scale assets that consist of a number of component assets. The data structure of the system, with a 12 character alpha-numeric main asset number and a 4 character sub-number, allows both. The main asset number represents the asset as a whole. Parts of assets can be represented by different sub-numbers.

### Features

Every master record is automatically created with at least one sub-number, even if no sub-assets exist. The system marks the first master record as an asset main number master record. When you use internal sub-number assignment, this main number has sub-number "0000". You can create additional sub-numbers for this main number master record. The system manages values for each sub-number for every individual depreciation area in year segments. The individual transactions are posted directly to the sub-numbers as line items.



**Main Asset with Sub-Numbers**

Real Estate

## Simple Asset

### Use

A simple asset is represented by only one asset master record. This master record has sub-number "0000". Subsequent acquisitions are posted to this master record. You can meet the most essential business and legal demands with year segments (provided they have not yet been reorganized) and transaction data.

### Features

However, the representation of the asset as a simple asset is limited in the following ways:

- You cannot separate the accumulated depreciation and book values from closed fiscal years according to their acquisition year for a simple asset.
- You have to depreciate subsequent acquisitions in the same way as the original acquisition.

The following graphic shows the line items for subsequent acquisitions to a simple asset (master record):

Asset	4711	0000	Milling Machine	
<b>Postings</b>				
Year	Cumul.APC	Transaction	Deprec.	Book Value
00	--	100,000	30,000	70,000
01	100,000	20,000	27,000	63,000
02	120,000		18,900	44,100
03	120,000	40,000 - 35,000 +	19,320	45,080
<b>Line Items</b>				
Date	Trans.Type	Amount	Transaction	
4/1/X0	100	100,000	Acquisition of machine	
8/1/X1	100	20,000	Replacement of shafts	
1/1/X3	200	40,000	Scrapping of shaft set	
		25,300	Proportional depreciation	
9/1/X3	100	35,000	Aquis. of new shaft set	

### Subsequent Acquisitions Without Sub-Numbers

## Complex Asset with Component Parts

### Use

If an asset consists of several component assets, it may make sense to monitor the individual sub-assets separately. For complex assets, for example, there is often a need for uniform depreciation of the entire asset in the book depreciation and tax depreciation areas, whereas for cost accounting purposes, the sub-assets should be depreciated separately.

### Features

Therefore, you can manage asset components in the system as sub-numbers. There are several reasons for managing component assets as sub-numbers:

- The development of values for component assets is separate for each sub-number.
- The sub-numbers can have different cost accounting assignments (for example, to different cost centers).
- The asset can be divided along technical lines (for example, links to equipment in Plant Maintenance)
- Investment support can be represented as negative sub-numbers.
- If it is necessary to manage subsequent acquisitions separately in order to be able to monitor their depreciation and book values separately, you must manage these acquisitions on independent sub-numbers. For all subsequent acquisitions, create a new sub-number per year of acquisition. You guarantee that this takes place by setting the *Acquisition only in the capitalization year* indicator in the depreciation key.

### Subsequent Acquisitions

The following graphic shows the treatment of subsequent acquisitions to complex assets:

#### Sub-Numbers

Asset	Sub-No.	Description	Acq. Year	APC	Dep.
0011	0000	Office Building	1980	2,000,000	960,000
0011	0100	East extension	1983	3,000,000	1,080,000
0011	0200	West extension	1985	4,000,000	1,120,000
0011	0300	North extension	1987	5,000,000	1,000,000

0011	*	Office Building		14,000,000	4,160,000
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Values for year



Line items

**Complex Asset with Component Parts**

**Subsequent Acquisitions with Sub-Number**

When assigning the sub-number, it can be advantageous to specify the numbers yourself externally, rather than leaving sub-number assignment to the system. In this way, you can represent the specific structure of the asset. In order to monitor the value development of subsequent acquisitions to sub-assets (for example, upgrading or replacement acquisitions) separately according to years of acquisition, it is recommended that you use the following system for sub-number assignment.

Reactor	Extruder	Piping	Extractor
Sub 1093	Sub 2093	Sub 3093	Sub 4093
Acq.yr 1993	Acq.yr 1993	Acq.yr 1993	Acq.yr 1993

Modification	Modification
Sub 1094	Sub 4094
Acq.yr 1994	Acq.yr 1994

**Depreciation Terms**

By means of the screen layout control for the asset class (see [Screen Layout and Maintenance Level \[Page 214\]](#)), you can specify whether the depreciation terms can be maintained at the sub-number level. You also specify in the screen layout control that uniform depreciation be carried out for all sub-numbers belonging to a main number. This specification will ensure that the evaluation and depreciation of all sub-numbers is identical, and that depreciation is calculated using the identical depreciation terms. To carry out changes to asset master data that are uniform for all sub-numbers, enter an asterisk (\*) in the sub-number field in the initial screen of the change transaction. The system then carries out the changes that were made at the main number level for all sub-numbers.

**Reports**

In the display transactions and in reports, you can display asset values either individually by sub-number, or collectively. For displaying the asset values, you can also enter an asterisk (\*) in the sub-number field in order to obtain totals for all sub-numbers. Partial summations are possible by entering the sub-numbers in the following form:

1*	sub-numbers from 1000 - 1999 -
01*	sub-numbers from 0100 - 0199 -
001*	sub-numbers from 0010 - 0019 -

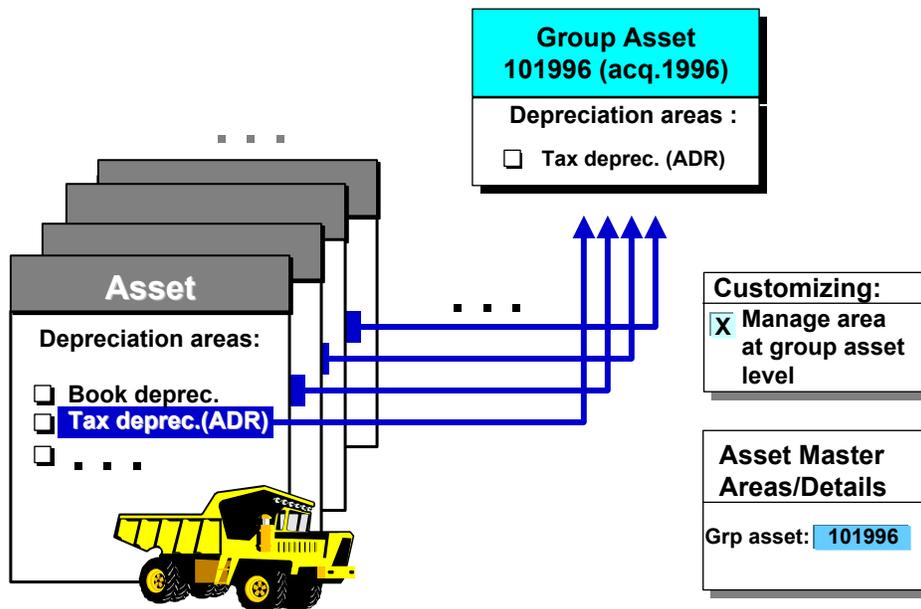
## Group Assets

### Use

In the FI-AA component, the calculation and posting of depreciation generally takes place at the level of the individual asset. The system is fundamentally conceived so that depreciation is calculated for each main number or sub-number. To meet certain tax reporting requirements (such as ADR in the United States), which require depreciation at a higher level than the individual asset (for example, all assets in a given class in a given vintage year).

### Features

Therefore, the R/3 FI-AA component enables you to define group assets for depreciation, in addition to depreciation at the individual asset level. These group assets make it possible to group together a number of assets for the calculation and posting of depreciation.



### Group Assets per Vintage Year

### Master Data Maintenance (Group Asset)

A group asset is represented in the system by a separate master record. The structure of this master record corresponds to the structure of the normal asset master record. You can determine the structure of this master record using screen layout control, just as you do for normal master records. Just the same as a normal asset, a group asset can have any number of sub-numbers. In this way it is possible, for example, to collect all the acquisitions for one year in a single sub-number master record at the level of the group asset.

There is a separate master data transaction for creating group assets (*Asset* → *Create* → *Group asset*). This transaction corresponds to the transaction for creating normal assets. However, there are certain special considerations to keep in mind for master data maintenance of group assets:

## Group Assets

- Group assets can only be deleted when all the assets belonging to them have been marked for deletion.
- Group assets can only manage depreciation areas that have been specially marked. You mark them using an indicator in the company code specific specifications for the depreciation area (FI-AA Customizing: *Specify depreciation areas for group assets*).

Group assets have to be assigned to an asset class, just as normal assets do. You use an indicator in the asset class to specify that the class can be used only for group assets.

## Assignment of an Asset to a Group Asset

You can assign an asset to a group asset by specific depreciation areas. For this purpose, there is a special field in the asset master record (in the detail display of each depreciation area). You enter the number of the group asset in this field. Once this entry is made, the system calculates and posts the depreciation for this depreciation area only at the level of the group asset. In this way, you can also assign one asset to different group assets in different depreciation areas.

[Graphic: Assignment to Group Asset by Depreciation Area \[Page 57\]](#)



Only assets that have the same positive/negative sign for their net book value can be assigned to the same group asset (that is, either all of the assets in the group have positive net book value, or all of the assets in the group have negative book value). It is not possible to have assets with negative net book value and assets with positive net book value belonging to the same group asset.

## Substitution

You can use substitution to assist in making the assignment to group assets, just as you can use substitution for other master data fields (see [Validation and Substitution \[Page 226\]](#)). This method makes it possible to automate the assignment to a group asset. For example, you can have the assignment be a default based on the asset class or on specific evaluation groups.

## Checks and Results of Assignment

An assignment to a group asset is only possible as long as the asset is not capitalized (the asset is inactive). Once an assignment has been made and the asset is capitalized, you can only change the assignment by a complete transfer of the asset to a new asset. Another result of the assignment to a group asset is that the depreciation terms in assigned depreciation areas can no longer be changed at the asset level. They can only be changed at the level of the group asset.

When you assign an asset to a group asset, the system checks if the asset has, at the minimum, all the depreciation areas that the group asset has. If it does not, the assignment is rejected. As a result of the assignment, the asset adopts the account allocation of the group asset. This method ensures that all the assets in a group asset post to the same general ledger accounts.

## Legacy Data Transfer

When you transfer legacy asset data, normal assets and group assets have to be transferred separately. The group asset and the assignment to its asset master records are not created automatically. Therefore, there is no consistency check between the values of the group asset and the values of the individual assets.

## Posting

When you post to an asset belonging to a group asset, the system duplicates all the line items that are created (such as, acquisitions) on the group asset as well. This duplication takes place according to whether depreciation area is assigned to the group asset. Direct posting of transactions to a group asset is generally not possible.

[Graphic: Acquisition to a Group Asset \[Page 58\]](#)

You should note the following special considerations with the different transaction categories:

- **Acquisitions**

There are no special considerations here. The system posts acquisitions to the individual asset and duplicates the line items online to the group asset it belongs to.

- **Retirements**

Gain/loss from asset retirements and transfers requires special handling. You can make specifications for this in FI-AA Customizing for the retirement transaction types, per depreciation area (*Determine treatment of asset retirement*).

- Retirement with gain/loss
- Gain/loss handled on liabilities side
- Gain handled on liabilities side

For more information, see [Posting Gain/Loss \[Page 246\]](#).

When you retire a group asset, the system does not calculate proportional value adjustments in exactly the same way as for the retirement of a single asset. The calculation is to some extent less exact because it can be based on overall figures. As a result, there can be small differences between individual assets and the group asset.

- **Transfers**

You can specify for intracompany transfers whether you want to transfer APC only, or also accumulated depreciation. You make this specification in the transaction type definition for each depreciation area. In this way, it is possible to transfer only APC (without depreciation) when making a transfer within a group asset.

Transfers between assets from different group assets are only possible if the assets were acquired in the same fiscal year. In addition, the same restrictions apply to these transfers as to transfers between assets that do not belong to a group asset.



When transferring acquisitions from prior years between group assets, make sure that you use a transaction type for the acquisition that allows the takeover of the historical depreciation start date (FI-AA Customizing: Indicator in the definition of the transaction type).

- **Write-ups/manual depreciation**

Write-ups and manual depreciation have to be posted directly to group assets, just as automatically calculated value adjustments do.

## Group Assets

### Reports

The FI-AA standard reports identify group assets. The assets that belong to a group asset are **not** shown at first. In this way, double reporting is avoided. Using the function *Break down grp. asset* in the list display of the report, it is possible to see the assets that make up a group asset.

### Required System Settings

If you choose to use group assets, make the following settings in the system:

- Indicate the depreciation areas that you want to manage at group asset level in FI-AA Customizing.
- Set the indicator for group assets in the depreciation areas you want to manage at the group asset level. Set this indicator in the depreciation areas in the asset master record.
- Create the group assets.
- Create separate asset classes for group assets, if needed.
- Define special transaction types for handling retirements and transfers for assets belonging to a group asset.

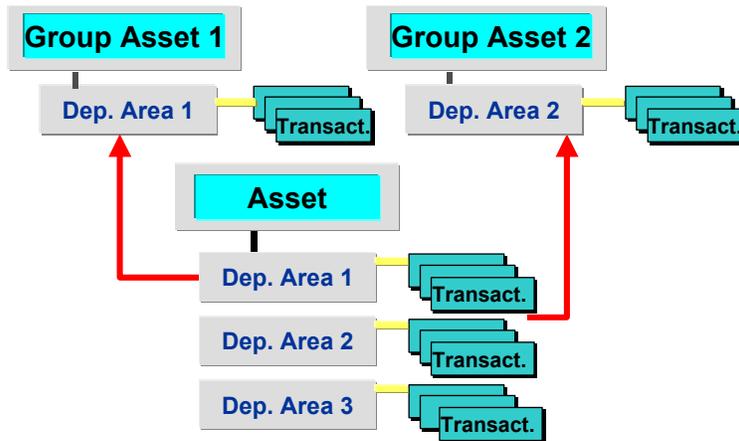


If you have carried out a release upgrade from Release 2.1 or 2.2 and want to use the functions of group assets, you first have to execute report RAXPRA04 (transaction SE38).

Graphic: Assignment to Group Asset by Depreciation Area

## Graphic: Assignment to Group Asset by Depreciation Area

The following graphic shows the assignment of an asset to different group assets in different depreciation areas:

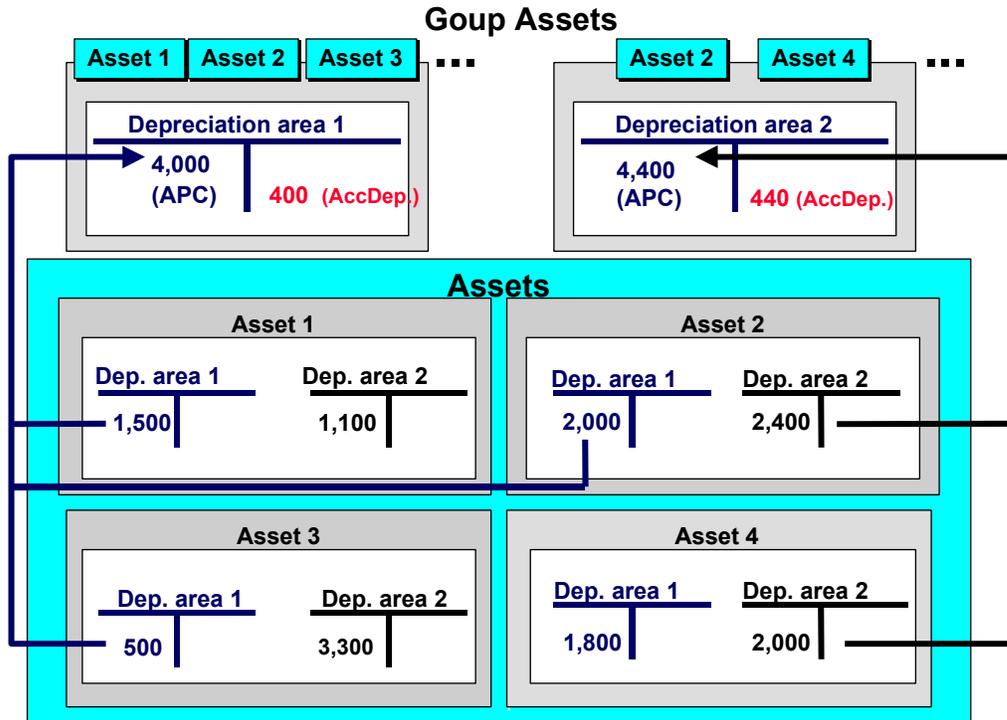


Note that when you enter a group asset in a depreciation area of an asset, that this entry is duplicated in all depreciation areas in the asset that are also managed at group asset level. This means that the assignment of an asset to different group assets for different depreciation areas is only possible if the group assets do not have any common depreciation areas.

Graphic: Acquisition to a Group Asset

## Graphic: Acquisition to a Group Asset

The following graphic shows assets that are assigned to group assets according to specific depreciation areas. Assets 1, 2 and 3 are assigned to the same group asset in depreciation area 1. Assets 2 and 4 are assigned to the same group asset in area 2. The system duplicates the respective APC acquisitions at the asset level also at the group asset level.



## Asset Super Number

### Use

The asset super number offers some advantages of the group asset, without being as complex. You can use the asset super number to assign a number of assets to a single object.

### Features

You assign assets to an asset super number by entering the common asset super number in the asset master record. You can either create the asset super number as a separate master record, or simply use it as a sort criterion. If you want to manage master data at the asset super number level, you must create a statistical asset master record (without values) for the asset super number. It is not possible to calculate asset values for the assets at the asset super number level. The group asset is designed for this purpose (see [Group Assets \[Page 53\]](#)).

You can enter the asset super number as a selection criterion for all standard reports. In this way, you can select all assets belonging to an asset super number for evaluation. In addition, you can use the asset super number as sort/total criterion for sort versions for standard reports (see [Sort Versions \[Page 263\]](#)).

---

**Negative Assets**

## Negative Assets

### Use

You can specify that an asset class allows assets with negative acquisition and production costs (and positive depreciation). You make this specification using an indicator in the detail screen of the depreciation areas in the asset class. Managing negative assets allows you, for example

- To collect investment support on negative assets, or to represent investment support as a negative sub-number to the respective main number (see [Complex Asset with Component Parts \[Page 51\]](#)) or
- To collect credit memos on special assets.



Please note that you can only use one of the above possibilities on any given asset. It is not possible to manage a depreciation area for investment support on an asset that is set up for using credit memos in the book depreciation area.

## Technical Structuring for Plant Maintenance Purposes

### Use

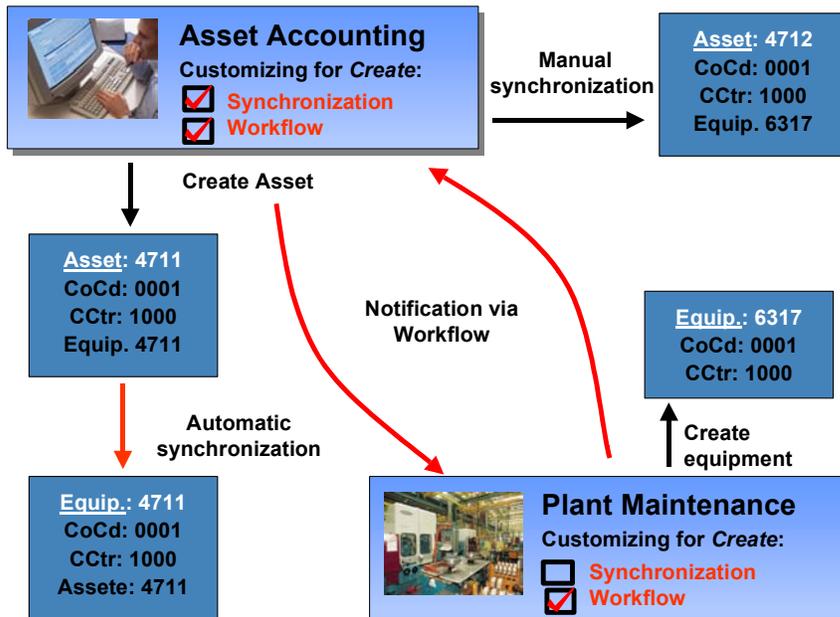
The structuring of assets from a bookkeeping perspective in the *Asset Accounting* (FI-AA) component is independent of the technically-oriented structure in the *Plant Maintenance* (PM) component. The PM component has its own structural organization (functional locations, equipment). This structure enables you to organize fixed assets according to maintenance requirements (in Plant Maintenance, refer to [Technical Objects \(Fixed Asset Structuring\) \[Ext.\]](#)).

### Integration

The system offers an additional option, the integration of the Asset Accounting and Plant Maintenance components by synchronization of asset master records and equipment master records. Synchronization means master data maintenance of the two objects is linked, so that changes to one are automatically made in the other. You can set up this process, so that when you create an asset master record, the system automatically enters an equipment master record number in the asset master record, and copies the values of certain master data fields (for example, company code, cost center). The equipment master record, however, is not actually created until you save. You can delete it from the asset master record before that, if you wish.

You can also set up the system so that equipment master records are automatically updated when you make certain changes to the asset master records linked to them.

The system provides workflow functions here to augment this process, or to handle it completely. For example, a workflow can inform the responsible employee in Plant Maintenance, who then makes the necessary entries manually. (This could involve creating an equipment master record, or checking master data.)



## Technical Structuring for Plant Maintenance Purposes

### Prerequisites

In Customizing for Asset Accounting, you specify whether the system

- Automatically creates an equipment master record and/or triggers a workflow when an asset is created
- Makes synchronous changes in the equipment master record and/or triggers a workflow when an asset master data is changed

When making these settings, you can specify which individual master data fields should automatically be synchronized in the asset and equipment master records (for example, company code, cost center).

You can also make all of these settings in the other direction, meaning that the equipment master record is the initiator. For example, creating an equipment master record then results in the automatic creation of an asset master record, or triggers a workflow. The same applies to changes.



Due to the fact that some asset master data fields are time-dependent, you should ensure that changing the asset master data from the equipment master record only takes place using workflow.

#### Refer to:

Implementation Guide (IMG) for *Asset Accounting*. Choose *Master Data* → *Automatic Creation of Equipment Master Records*

[Specify Conditions for Synchronization of Master Data \[Ext.\]](#)

[Assign Master Data Fields of Assets and Equipment \[Ext.\]](#)

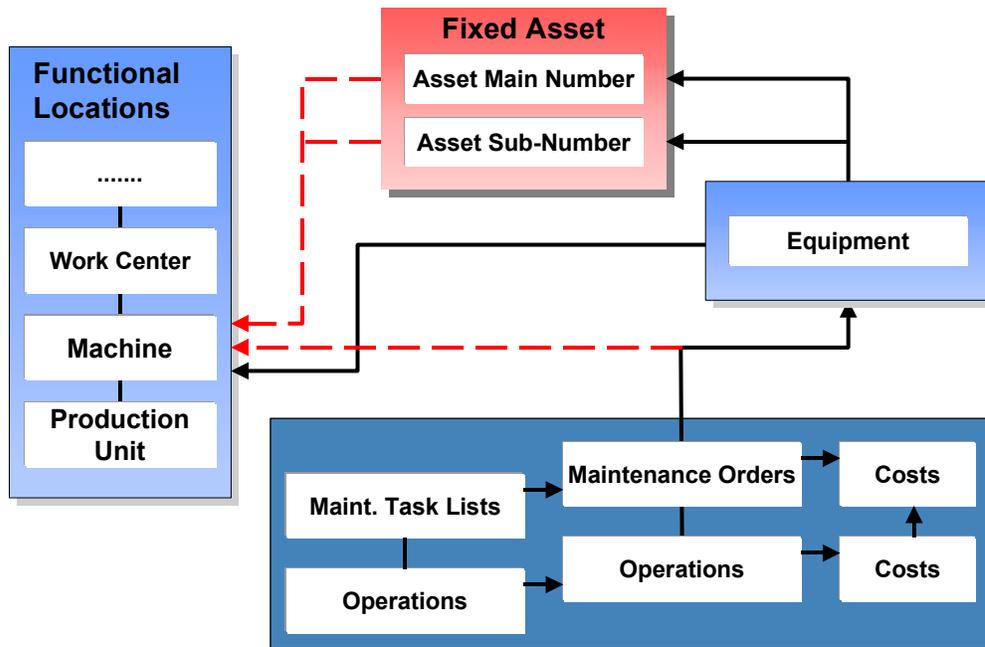
[Develop Enhancement for Field and Class Assignment \[Ext.\]](#)

### Features

You specify the integration of the FI-AA and PM components by entering one or more equipment master records in the asset master record. The other way around, however, it is only possible to enter one asset number in an equipment master record (or functional location). As a result, it is possible

- To jump directly from the asset master record to the appropriate equipment master record
- To select, in the PM component, all the assets that belong to a piece of equipment
- To capitalize, in the PM component, all maintenance orders requiring capitalization, to the respective assets

Technical Structuring for Plant Maintenance Purposes



**Technical Objects**

The solid lines show the relationships between assets and equipment or functional locations, when you use equipment and functional locations at the same time in PM. A piece of equipment can be assigned to the asset main number as well as to the asset sub-number. The broken lines shows the situation when only functional locations are used.

**Activities**

- When the correct Customizing settings are made (see above), the system automatically enters an equipment number in the asset master record. The equipment master record is created when you save. To enter additional equipment master records, choose *Create*.
- Delete equipment records that are not needed by choosing  *Delete line*.
- Specify whether the system should make synchronous changes to the asset master record when the equipment master record is subsequently changed, and also trigger a workflow, or just trigger a workflow. The system enters defaults based on your Customizing settings.

**Basic Functions for Asset Valuation**

## **Basic Functions for Asset Valuation**

### **Use**

The component “Basic Function for Asset Valuation” is used to determine the values of all fixed assets at a given point in time, based on the demands of governmental authorities, or based on your own rules that meet your individual needs.

## Depreciation Areas

### Use

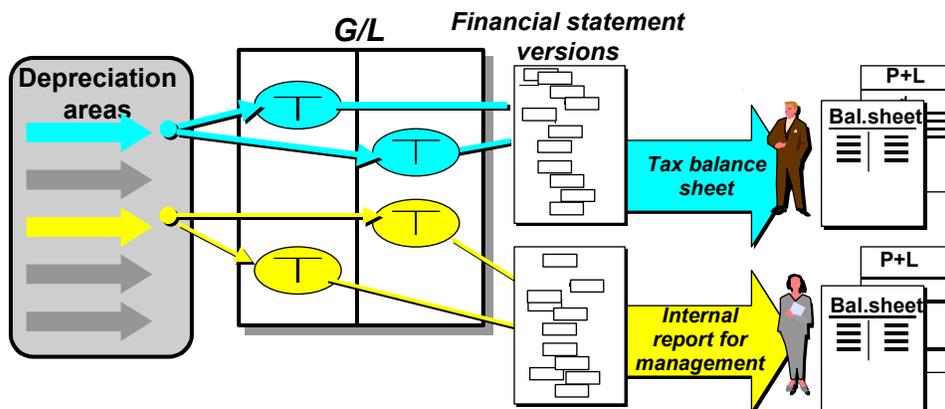
You use depreciation areas to calculate different values in parallel for each fixed asset for different purposes. For example, you may require different types of values for the balance sheet than for cost accounting or tax purposes. You manage the depreciation terms and values necessary for this valuation in the depreciation areas of each asset. Since the system allows you to define up to 99 depreciation areas, you can manage many different types of valuation (Customizing: *Valuation*). Depreciation areas are grouped together, according to the requirements of a specific country or economic area, into a chart of depreciation (refer to [Chart of Depreciation \[Page 16\]](#)).

### Features

The depreciation areas are identified by two-digit numeric keys. You specify the asset-specific depreciation terms for every depreciation area belonging to the chart of depreciation. You enter the depreciation terms in the asset class or directly in the asset master record of the particular asset (see [Asset Master Record \[Page 209\]](#)). This makes it possible, for example, for you to use straight-line depreciation for your internal accounting purposes and use declining-balance depreciation for the balance sheet.

### Account Determination from Within the Depreciation Area

You can post both the asset balance sheet values and the depreciation values from the individual depreciation areas to separate balance sheet accounts or income statement accounts in the general ledger. You specify the accounts individually in the account determination key for each depreciation area. Define the account determination key in FI-AA Customizing and specify the key in the particular asset class. For more information on account determination see [Account Determination \[Page 108\]](#).



### Account Determination from Within the Depreciation Area

Usually you need to post more than one depreciation area in parallel to the general ledger if you are creating different financial statement versions. You can define any number of balance sheet versions per chart of accounts in FI (General Ledger) for this purpose. For each balance sheet account and income statement account, you specify in the financial statement version the balance sheet position or income statement position in which the account values should appear.

## Depreciation Areas

You define the financial statement versions in FI Customizing ( *Financial Accounting* → *General Ledger Accounting* → *Business Transactions* → *Closing* → *Document* ).

## Retained Earnings Account

The retained earnings account is an equity item in the balance sheet. This account shows the balance of all income statement accounts. If you are using different financial statement versions, then you also have to set up corresponding retained earnings accounts (FI Customizing: *Financial Accounting* → *General Ledger Accounting* → *G/L Accounts* → *Master Data* → *G/L Account Creation*). The income statement account type controls which income statement accounts balance to which retained earnings accounts. You enter the income statement account type in the master record of the income statement accounts. When you enter a retained earnings account, enter the income statement account type that the retained earnings account should balance to. You can also define new income statement account types here.

## Activities

You should determine the types of valuation for which you need different depreciation areas before you implement the FI-AA System. Then transfer these areas from the SAP reference chart of depreciation, or copy existing depreciation areas and redefine them. Delete the depreciation areas from the SAP reference chart of depreciation that you do not need.

It is also possible to open depreciation areas after the production start of the system (see [Subsequent Creation/Deletion of a Depreciation Area \[Page 82\]](#)).

## Derived Depreciation Areas

### Use

The “Derived Depreciation Areas” component makes it possible to determine new asset values based on asset values that have already been determined. The derived depreciation area uses mathematical formulas to determine values based on values in ‘real’ areas, such as the difference between depreciation in two depreciation areas. The system then manages these new values in the derived depreciation area.

Derived depreciation areas function the same as real areas in regard to reporting and value field display. You can also post the values of the derived areas to Financial Accounting.

### Features

You define the formula for the derived depreciation area in FI-AA Customizing (*Define depreciation areas*). In the formula for a derived area, you can use up to four real areas. The arithmetic operations allowed are addition and subtraction. It is possible to mix the calculation rules. This includes using proportional values from real areas in the calculation.

When defining the formula, it is up to you to make sure it is reasonable. Make sure that the key of the derived area is larger than the keys of the real areas it is based on. A derived area "03" can be derived from the real areas "01" and "02" but not from areas "04" and "05."

You can also specify that the derived depreciation area is only for reporting. The system then does not subject the area to value checks (such as the check for positive/negative net book value).



- When defining a derived depreciation area, keep in mind that the rules for remaining book value rule in the derived depreciation area can affect the depreciation in the real areas from which it is derived (see [Characteristics of a Depreciation Area \[Page 69\]](#)). Enter a modification area in order to specify which of the real areas this should be.
- Be careful when using derived depreciation areas for group assets. In the formula for derived depreciation areas that are for group assets, you can only use depreciation areas that are also intended for group assets (see [Group Assets \[Page 53\]](#)).



[Graphic: Special Reserves in Germany \[Page 68\]](#)

Graphic: Special Reserves in Germany

## Graphic: Special Reserves in Germany

The following information on special reserves in Germany is included as an example of the use of a derived depreciation area. These special reserves are the difference between book depreciation and tax depreciation. The depreciation area "book depreciation" is subtracted from the area "tax depreciation" for balance sheet purposes." The graphic below shows the Customizing settings needed for these depreciation areas:

Dep. Area	-	01	+	02	=	03
Name		Book depreciation		Tax depreciation		Special reserves
Derived area	-	-		-		X
APC	X		→	X		X
Ordinary dep.	X			X		X
Special dep.	-			X		X
Autom. posting	X			-		X
Book value		≥0		≥0		≤0



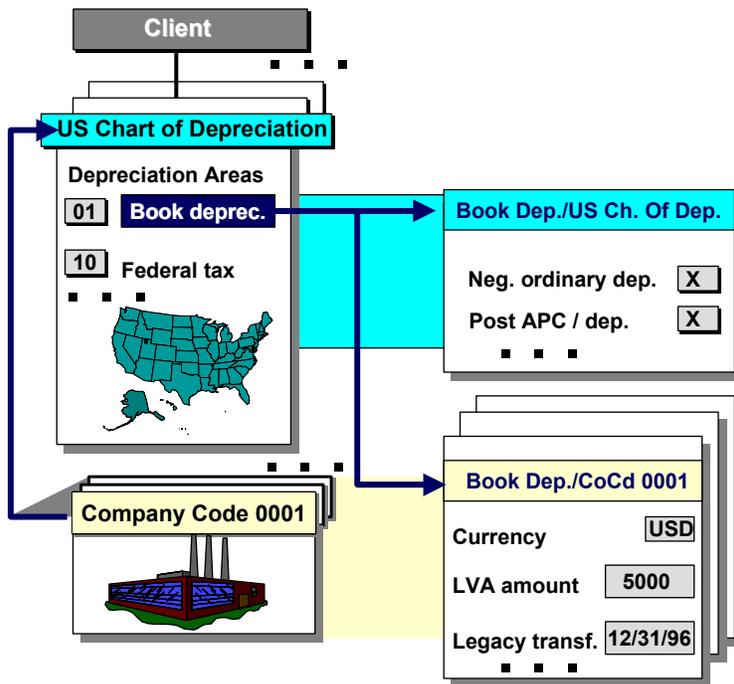
For more information on special reserves, see [Special Depreciation Shown on the Liabilities Side \[Page 85\]](#).

## Features of a Depreciation Area

### Use

The depreciation areas in a chart of depreciation have no automatically defined features. You determine the features of each area individually, based on the basic structure, which is the same for all depreciation areas. You can make specifications for the following levels for each depreciation area:

- At the chart of depreciation level (see [Features at Chart of Depreciation Level \[Page 70\]](#))
- At the company code level (see [Company Code-Related Features \[Page 74\]](#))
- For legacy data transfer (see [Legacy Data Transfer \[Ext.\]](#) )



### Features of a Depreciation Area

This graphic clarifies two different levels — chart of depreciation and company code — at which you can make specifications in the depreciation area: For example, the depreciation area for book depreciation in the US chart of depreciation can be managed in different currencies in different company codes, while the APC and depreciation of the book depreciation area are applicable in all depreciation areas.



You **cannot** define any features that apply **across all charts of depreciation**. Therefore, it is not possible for the system to guarantee that certain depreciation areas (such as book depreciation 01) are defined uniformly in all charts of depreciation that you are using.

## Features at Chart of Depreciation Level

# Features at Chart of Depreciation Level

## Use

You can specify the following features for a depreciation area at the chart of depreciation level (Customizing: *Valuation* → *Depreciation Areas*).

## Features

### Posting Values from Depreciation Area to General Ledger

You can automatically post asset balance sheet values (APC/ proportional value adjustments) and depreciation from each depreciation area to the corresponding general ledger accounts. You can choose whether values are automatically posted immediately online in Financial Accounting (at present, only possible for one area per chart of depreciation; with two exceptions: investment support areas managed on the liabilities side, and areas solely for revaluation), or are posted automatically at periodic intervals to Financial Accounting.

In addition, you can specify that only depreciation (no APC values) should be posted automatically. This type of posting might be useful for depreciation areas for cost accounting depreciation.

### Managing Certain Values

In the definition of a depreciation area, you can specify if the area should manage acquisition and production costs (APC). Areas that **do not** manage APC are, for example, depreciation areas only for value adjustments shown on the liabilities side (for example, investment support).

In addition, you specify in each depreciation area whether the net book value of assets in the area is allowed to be positive and/or negative. The system rejects any posting that leads to a net book value that contradicts the rule you entered.

Allow negative net book value in all areas

- That have depreciation below zero
- That are intended for value adjustments shown on the liabilities side
- That are derived depreciation areas, and can have negative values because of their calculation formula.

### Derived Depreciation Areas

You enter a formula that defines the derived depreciation area (see [Derived Depreciation Areas \[Page 67\]](#)).



Although you do not allow negative net book values in a derived depreciation area, negative values may occur due to the calculation formula. In this case the depreciation is reduced in the real areas (on which the derived area is based) until the net book value in the derived area is at least zero. For this reason it is recommended that you allow for both positive and negative net book value in derived depreciation areas.

## Takeover Between Depreciation Areas

You can allow for depreciation areas to adopt APC, as well as depreciation terms, from another depreciation area. You can also specify that the takeover is mandatory, and that no changes are allowed. In this way, you ensure that two areas are always supplied with the same values when posting, or that two areas are uniformly depreciated.

You cannot specify takeover rules for derived depreciation areas or for the master area.

[Graphic: Takeover Rules \[Page 73\]](#)

## Different Types of Depreciation/Special Values

The type of value that a depreciation area manages is the most important factor in determining its significance. Therefore, you can decide for each depreciation area (under *Depreciation* or *Special Valuation*) whether it should manage the following value types:

- Ordinary depreciation
- Special tax depreciation
- Unplanned depreciation
- Transfer of reserves
- Investment Support
- Interest

Please be aware that these specifications only **allow** the management of certain value types. Whether or not the system actually calculates these value types depends on additional parameters (such as, depreciation keys) or postings.

## Replacement Values/Revaluation

You have to make the following specifications in depreciation areas that manage replacement values or revaluation:

- Revaluation of APC (replacement values)
- Revaluation of accumulated depreciation (backlog invoice)

For more information, see [Special Valuation \[Page 167\]](#).

## Master Depreciation Area

The master depreciation area (area 01) has a special significance. This area is generally the area for balance sheet values. This master area is subject to the following restrictions:

- The values of this area are always automatically posted to Financial Accounting.
- During the legacy data transfer, you must always enter values in this area first.
- It is not possible for the master area to adopt values or depreciation terms from other depreciation areas.
- The currency of this area must always match the currency of the its company code.
- You cannot delete the master area.

You can make the following specifications per depreciation area:

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**Features at Chart of Depreciation Level****Corporate Group Depreciation Areas**

You can mark certain depreciation areas for valuation related to group consolidation (*Preparations for Consolidation*). This has the following results:

- The system represents retirements to and acquisitions from an affiliated company as transfers in the respective group concern asset history sheet.
- These transfers are posted gross (that is, with historical acquisition and depreciation values).

For more information, see [Requirements for Consolidation \[Page 206\]](#)

Graphic: Takeover Between Depreciation Areas

## Graphic: Takeover Between Depreciation Areas

The following graphic shows an example of the takeover specifications for APC and depreciation terms between the areas in a chart of depreciation. The double arrows show where the takeover has been specified as mandatory. The single arrows show where takeover is not mandatory.

Area	01	02	20	30	31	41
Name	Book	Tax	Cost-acc.	Group DM	Group USD	Inv.subsidy
APC	X	X	X	X	X	
Inv. support						X
Ord. deprec.	X	X	X	X	X	X
Spec. deprec.		X				
Unpland dep.	X	X	X	X	X	
Transf. res.	X	X				
Interest			X			
Revaluation			X			



It is not possible to take over APC from an area defined for identical takeover to a third area (for example, if area 02 takes over identical APC from area 01, then area 30 cannot take over identical APC from area 02).

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**Company Code-Related Features**

## Company Code-Related Features

### Use

In addition to the features at the chart of depreciation level, there are also company-code-related features for each depreciation area (FI-AA Customizing: *Valuation*).

### Features

#### Amount Specifications

You can make amount specifications for: memo value, the maximum amount for low value assets, the changeover value for declining balance depreciation, and rules for rounding off of APC and remaining book value (*Valuation*).

When you carry out a partial retirement, the system automatically triggers depreciation recalculation. This procedure ensures that the remaining net book value is always rounded correctly (even if the proportional value adjustments of the retired APC amount would lead to a book value that is not rounded).

#### Foreign Currencies

The currency in the master depreciation area has to be identical to the local currency in the company code. You can manage other depreciation areas in any currency you like (Customizing: *Valuation* → *Foreign Currencies*). For more information, see [Requirements for Consolidation \[Page 206\]](#)

#### Fiscal Year Version

Asset Accounting uses the same fiscal year version as in the General Ledger. If there are special circumstances, however, you can use a different fiscal year version in each company code/depreciation area (Customizing: *Valuation* → *Fiscal Year*). Also see [Fiscal Years and Periods for Asset Accounting \[Page 90\]](#)

#### Distribution of Depreciation over the Fiscal Year

In general, depreciation is distributed evenly over the individual periods in the fiscal year. That is, the depreciation amount is the same in every period. However, there is a special control in Customizing (*Fiscal Year*) that allows for different amounts to be distributed to the individual periods.

#### Specifications for Net Worth Tax

At the company code level, you determine whether a depreciation area should be included in net worth valuation (see [Net Worth Tax \[Page 205\]](#)).

## Standard Depreciation Areas: USA

### Use

SAP delivers country-specific charts of depreciation, which contain the most commonly used depreciation areas. You can adopt these areas in your active chart of depreciation and you can expand your chart of depreciation by adding your own user-specific depreciation areas.

The following depreciation areas are supplied in the standard chart of depreciation for the USA.

### Features

#### Book

This is the leading area for financial reporting. All documents should be posted to this area.

#### Federal Tax

- Primary Federal Tax Book  
This area is used to calculate normal federal tax depreciation using either ACRS or MACRS.
- Alternative Minimum Tax  
This area is used to calculate the depreciation amount to be used to determine the tax preference items in accordance with the Alternative Minimum Tax regulation.
- Adjusted Current Earnings  
This area is used to determine the tax adjustments in accordance with the Adjusted Current Earnings regulation.
- Corporate Earnings and Profits

#### Derived Depreciation Areas

- Difference between Book and Primary Federal
- Difference between Primary Federal and Alternative Minimum
- Difference between Primary Federal and Adjusted Current Earnings
- Difference between Primary Federal and Corporate Earnings and Profits

#### Miscellaneous Areas

- Cost-accounting depreciation  
This area manages asset values for cost-accounting purposes. The result is a net book value below zero and a calculation of cost-accounting interest..
- Consolidated Balance Sheet in the Local Currency  
If a company is part of a group, which has its own guidelines for the valuation of its fixed assets.
- Consolidated Balance Sheet in the Group Currency

**Standard Depreciation Areas: USA**

This area will be needed if a company belongs to a group, which evaluates in a different currency.

- State Tax (SMACRS)

This area is used to calculate depreciation for those states that do not accept Federal or Book Depreciation.

## Standard Depreciation Areas: Germany

### Use

SAP delivers country-specific charts of depreciation, which contain the most commonly used depreciation areas. You can adopt these areas in your active chart of depreciation and you can expand your chart of depreciation by adding your own user-specific depreciation areas.

The following depreciation areas are supplied in the standard chart of depreciation for Germany:

### Features

#### Book Depreciation (01)

This area is the master depreciation area, in which all business transactions are generally posted. If special tax depreciation is to be managed as special reserves, you are allowed to use the book depreciation area only for depreciation allowed by commercial law (that is, without special depreciation).

#### Special Tax Depreciation for Acquisition and Production Costs in the Individual Balance Sheet (02)

Special tax depreciation is managed in this area. This area is required so that the special depreciation area 03 (which is a derived area) can calculate special reserves according to Paragraph 281(1) HGB (Handelsgesetzbuch = German Commercial Code [GCC]) or the amount differential according to Paragraph 285(5) HGB (GCC). In order for this difference to be determined exactly in the derived depreciation area, the acquisition and production costs must be identical to those in the book depreciation area. In addition, this area is defined so that it adopts posted values directly from area 01 (book depreciation). If different APC is also managed for a balance sheet for tax purposes, then depreciation area 15 should be used for it.



If you choose to represent special tax depreciation as special reserves on the liabilities side of the balance sheet, you are **not** allowed to post depreciation from this depreciation area to Financial Accounting in addition to book depreciation. Use depreciation area 03 for the allocation and/or write-off of special reserves.

#### Special Reserves due to Special Tax Depreciation (03)

Special reserves can result, for example, from one of the following circumstances:

- Special tax depreciation (such as, transfer of reserves)
- Differing depreciation methods (book depreciation/tax depreciation)
- Differing useful life (book depreciation/tax depreciation)

Depreciation area 03 is used for special reserves according to Paragraph 281(1) HGB (GCC - German Commercial Code) or the amount differential according to Paragraph 285(5) HGB (GCC). This area is derived from depreciation area 01 and depreciation area 02. The system does not store values in the derived depreciation area permanently. Instead it determines these values each time as the difference between the values in the depreciation areas for special tax depreciation (02) and for book depreciation (01). The allocation and/or write-off of special reserves from this area are posted during the periodic posting run to the appropriate liability

## Standard Depreciation Areas: Germany

accounts in Financial Accounting. The write-off of special reserves due to asset retirements can be posted using a special report (*Periodic processing* → *Bal sheet posting*).

This area is set up so that the book value must always be negative or zero. This means that the net book value in the area for special tax depreciation (02) must always be less than or equal to the net book value in the book depreciation area. Therefore, you should not enter depreciation terms in the area for special tax depreciation that lead to a higher net book value than in the book depreciation area. If, however, the net book value is higher than in the book depreciation area, the depreciation calculation program automatically reduces the depreciation in the book depreciation area as far as is necessary and possible.



You have to be able to post directly to the asset control accounts for reserves from special tax depreciation (they cannot be reconciliation accounts). The asset control accounts for investment support on the liabilities side, on the other hand, have to be defined as reconciliation accounts (see [Investment Support on the Liabilities Side \[Page 180\]](#)).

## Valuation of Net Assets (10)

In this depreciation area, you specify valuation rules for net worth tax. The area is needed if no other area covers the property valuation rules.

## Balance Sheet for Tax Purposes (15)

This area is used for the management of values for an alternative balance sheet for tax purposes. It can be managed independently from the commercial balance sheet. It is not necessary to manage the balance sheet for tax purposes separately if the only variance from the commercial balance sheet is the inclusion of special tax depreciation, since the balance sheet for tax purposes can be determined through the area "special tax depreciation on APC in the individual balance sheet" (02).

## Cost-Accounting Depreciation (20)

The asset values for cost accounting purposes are managed in this area. This depreciation area (as supplied by SAP) depreciates the replacement values and simultaneously appreciates accumulated past depreciation. Depreciation is carried out below net book value zero and cost-accounting interest is calculated.

## Consolidated Balance Sheet in Local Currency (30)

If a company is part of a corporate group with subsidiaries that use different rules for the valuation of fixed assets, or if gross transfers are carried between affiliated companies, a separate area is needed for consolidated valuation purposes (see [Fiscal Years and Periods for Asset Accounting \[Page 90\]](#)). Both APC and depreciation terms in this area can be different from the balance sheet depreciation area.

## Consolidated Balance Sheet in Group Currency (31)

This depreciation area is needed if a company belongs to a corporate group that reports in another currency. It is managed in the group currency. To clearly separate differences resulting from different valuation methods from differences due to currency conversion, the area "consolidated balance sheet in local currency" is also necessary in addition to this area. The depreciation terms and posting values of the two group areas must be identical for this purpose. For more information, see [Requirements for Consolidation \[Page 206\]](#).

### **Balance Sheet (HB1) in Foreign Currency (32)**

This area is also needed during consolidation, in order to correctly determine the intercompany profit and loss from intercompany asset transfers.

### **Area for Investment Support Managed on the Assets Side (41)**

This area handles investment support measures managed on the assets side of the balance sheet. Investment support of this kind is posted to the book depreciation area, where it reduces the acquisition and production costs. If you are managing only one investment support of this type for your assets, you do not need a separate depreciation area, since the required posting can be handled in the book depreciation area. If you wish to manage more than one investment support for a particular asset, then each subsequent investment support measure must be handled in a separate area of this kind, and be posted from there to Financial Accounting.

### **Area for Investment Support Shown on the Liabilities Side (51)**

This area handles investment support on the liabilities side. The measures are posted as an adjustment item for the acquisition and production costs on the liabilities side. The acquisition and production costs are not reduced in the book depreciation area. No posting is made in the book depreciation area. The investment support handled on the liabilities side can be cleared through depreciation, similar to the reduction of APC through depreciation in the book depreciation area. You post the depreciation and transactions from this area to Financial Accounting during the periodic posting run.

## Standard Depreciation Areas: Germany

## Representation of Asset Values

### Use

In the FI-AA component, acquisition costs are shown separately from depreciation values. Separate accounts are used for acquisition values and value adjustments in FI-AA. This means that depreciation is not deducted directly from the acquisition cost. Over the entire life of the asset, the system updates the acquisition and production costs separately from the accumulated depreciation. Only changes to balance sheet values of the asset result in the updating of the acquisition cost. For partial retirements from an asset, the system automatically determines depreciation (value adjustments) up to the point of retirement, and this amount is retired along with the partial asset.

### Features

#### The Composition of Values

Different types of depreciation and special valuations of assets (for example, interest) result in an asset having various value components. In part, the system calculates these value components automatically, and in part you must enter them yourself.

Type of Value	Entered by user	Automatically calculated
APC	X	-
- Investment support	X	X
+ Revaluation	(X)	X
= Acquisition value (Replacement value)		
- Depreciation		
Ordinary depreciation	-	X
Revaluation of ord. dep.	-	(X)
Special tax depreciation	X	X
Unplanned depreciation	X	-
Transferred reserves (Deferred gains)	X	-
= Book value		
Interest	-	X

#### Composition of Asset Values

#### Net Book Value

The system determines the net book value at the end of a year in the following manner:

- Net book value at the start of the fiscal year
- +/- Transactions affecting APC (for retirements and transfers)

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Standard Depreciation Areas: Germany

- corrected by the proportional value adjustments)
- + Write-ups for the year
- Planned depreciation for the year

Transactions affecting APC are:

- Transactions affecting asset values (acquisition, retirement, etc.)
- Investment support measures
- Transferred reserves
- Revaluation

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**Subsequent Creation/Deletion of a Depreciation Area**

## Subsequent Creation/Deletion of a Depreciation Area

### Use

It is recommended that you define all the depreciation areas you might need before the production start of the system. Creating a new depreciation area after the production start can really only represent a compromise.

### Features

However, if a special need arises, it is possible to define a new depreciation area after the production start, and to add assets to this depreciation area (in the application menu under *Tools*). The values and depreciation terms in the new area will be identical to the area defined in Customizing as the reference area for value transfer, unless the new area is not set to active in the asset class.

If you want the new depreciation area to have different depreciation terms, you have to carry out a mass change after setting up the area, and then recalculate depreciation using the service program. This procedure does not change the values for closed fiscal years. It only changes values for the current fiscal year so that they do not affect retirements or transfers that were already carried out.

### Procedure for Subsequent Creation of Depreciation Area

1. Define a new depreciation area in Customizing for *Asset Accounting* (see *Valuation* in the Implementation Guide). The new depreciation area cannot be solely for handling investment support. Define the new depreciation area so that it adopts its depreciation terms and posting values from other depreciation areas.
2. Check the depreciation terms in the asset class for the new depreciation area, and change them if necessary. If you do not want to manage the new depreciation area in all asset classes, set it to inactive in the asset classes in which it is not needed.
3. Specify in FI-AA Customizing for the individual transaction types, whether posting should always take place in the new depreciation area, or whether posting is optional. Modify especially the definitions for transaction types that only post to certain depreciation areas (such as the cost-accounting area), in case these transaction types should also take the new area into account.
4. If you also want to manage investment support measures in the new depreciation area, also revise the definitions of the support measures concerned (Customizing for *Asset Accounting: Investment Support*).

### Deletion of Depreciation Areas

You can also delete depreciation areas. The area you want to delete must meet the following requirements:

- It cannot be the master depreciation area (01).
- There can be no asset values in the depreciation area (there cannot be any acquisition postings in the area).
- The area cannot be a reference area for another area (for acquisition values or depreciation terms). If it is a reference area, you should change the definitions of the areas that are

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**Subsequent Creation/Deletion of a Depreciation Area**

dependent on the depreciation area you want to delete (see [Characteristics of a Depreciation Area \[Page 69\]](#)).

- The area cannot be used in the calculation formula for a derived depreciation area. If it is used in a calculation formula, you need to change the calculation formula for the derived depreciation area (see [Derived Depreciation Areas \[Page 65\]](#)).
- The area cannot be defined for automatic posting of asset values to the General Ledger. If it is defined for automatic posting, remove the automatic posting indicator in the definition of the area (see [Derived Depreciation Areas \[Page 69\]](#)).

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**Examples for Configuring Depreciation Areas**

## Examples for Configuring Depreciation Areas

### Use

Using the functions of depreciation areas, you are able to meet many very different needs for the calculation of asset values. The following sections describe some of these requirements for asset valuation, and how the system is able to meet them.

## Special Depreciation Shown on the Liabilities Side

### Use

For more information, see [Special Reserves \[Page 187\]](#).

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**Special Reserves on Assets Side of Balance Sheet**

## Special Reserves on Assets Side of Balance Sheet

### Use

Use this procedure if you

- Have special depreciation reserves
- Do not want to manage the difference between book depreciation and tax depreciation as a special reserve, but do want to deduct the full amount of depreciation from APC.

First, set up area 01 according to the specifications for the tax depreciation area 02. Then, delete areas 02 and 03 from your chart of depreciation. Area 01 is then the only area that posts to the balance sheet accounts, value adjustment and expense accounts in Financial Accounting. As a result, depreciation area 01 manages both ordinary depreciation and special depreciation.

## Showing Investment Support on the Assets/Liabilities Side of the Balance Sheet

### Use

Representing investment support measures in the balance sheet is analogous to the representation of special reserves for tax depreciation. To show investment support on the liabilities side of the balance sheet, you need depreciation area 51. For each investment support measure, you need to specify the liability accounts that will be posted.

If you treat the support measure as a reduction of the APC on the assets side of the balance sheet, you do not necessarily need a separate depreciation area. You can deduct the investment support measure from the acquisition and production costs in any depreciation area. However, if you manage more than one investment support measure for a given asset, and you want to display the values separately, use a separate depreciation area for each additional support measure. Depreciation area 41 is defined explicitly for the management of support measures handled as reduction of APC.

For more information, see [Special Valuation \[Page 167\]](#).

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**Valuation for Net Worth Tax**

## Valuation for Net Worth Tax

### Use

In many countries, as long as the valuation for net worth tax is based on the usual valuation for tax purposes, you do not need a separate depreciation area for net worth tax. You can use either area 02 or area 15 for this purpose.

For more information, see [Net Worth Tax \[Page 205\]](#).

## Representing Transferred Reserves (Deferred Gain)

### Use

You can represent the transfer of reserves to assets in three different ways in Asset Accounting:

- in area 01 as a reduction on the assets side of the balance sheet
- in area 03 as special reserves (not separate from other special reserves based on tax legislation)
- in a derived depreciation area you set up, displayed separately

These different methods are explained further in [Transferred Reserves \[Page 189\]](#).

## Fiscal Years and Periods

### Use

You make specifications for fiscal years and posting periods in the SAP R/3 System in Customizing for *Financial Accounting*. This is done in the fiscal year variant in the global parameters of the company code. You define the relationship between calendar dates and FI posting periods in the fiscal year variant. For this reason, you can enter all dates (for example, the asset value date of the posting) as calendar dates, even when you are using a non-calendar fiscal year. Using the fiscal year variant, the system determines which posting period is involved.

### Features

These settings are, in general, also binding for Asset Accounting. The depreciation periods in Asset Accounting then correspond to the posting periods in Financial Accounting. It is usually not necessary to create a separate fiscal year variant for Asset Accounting.

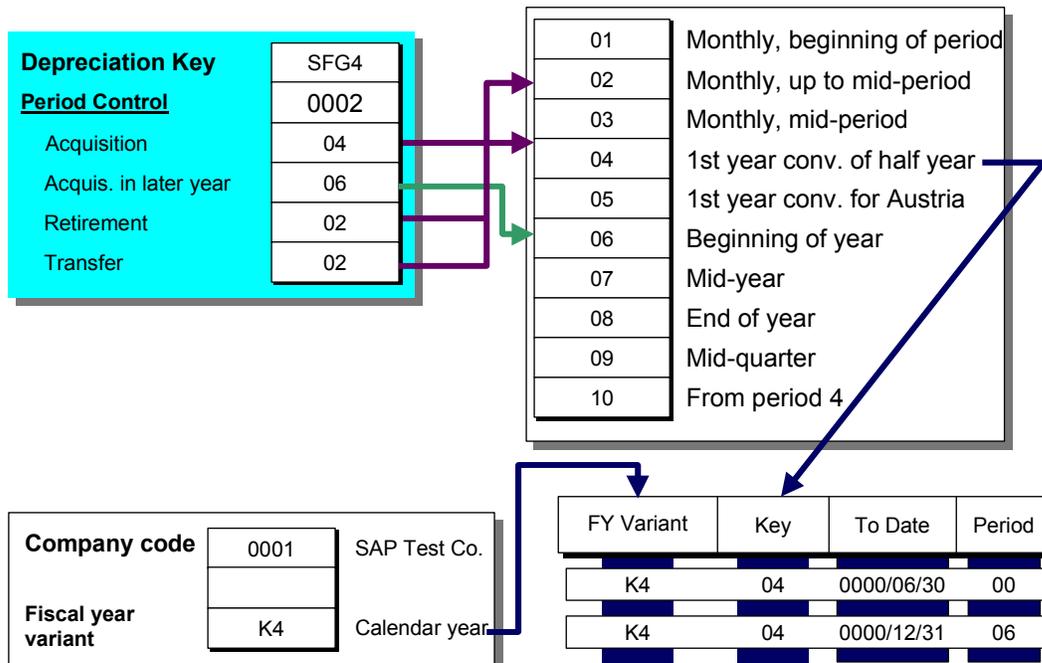
### Period Control

The period control in the depreciation key determines the start and end of depreciation when asset transactions are posted (see [Period Control \[Page 147\]](#) ). The period control determines the relationship between the calendar period in which the asset transaction is posted and the depreciation period.

These calendar periods are independent of the posting periods in Financial Accounting. The only restriction is that the beginning of the first calendar period and the end of the last calendar period defined in a period control have to match the start date and final date of the fiscal year in Financial Accounting.

The graphic below shows how the system determines the period for the start and end of depreciation using period control in the depreciation key (period control method) and the fiscal year variant in Financial Accounting.

Fiscal Years and Periods



Period Control

Period control 4 (first year convention of a half year) applies to the acquisitions transaction type in this example. The period control is defined so that depreciation is calculated starting with period 00 (January 1) for acquisitions up to June 30. For acquisitions that take place between July 1 and December 31, the system calculates depreciation starting with period 06 (July 1). Fiscal year variant K4 corresponds to the calendar year.



Period 00 is interpreted as the start of the year, **not** period 01.

## Non-Calendar Fiscal Years

# Non-Calendar Fiscal Years

## Use

If you choose to work with a non-calendar fiscal year, you need a General Ledger fiscal year variant with posting periods defined for it (FI-Customizing: *Financial Accounting Global Settings*). Assign this fiscal year version to the global company code parameters.

## Features

Using a non-calendar fiscal year does not require special system settings in Asset Accounting. You make all date entries (such as the posting date) as normal calendar dates.



Once assets have been posted, you can no longer change the fiscal year variant of a company code in the current fiscal year, unless there was no posting in any changed period.

## Calendar Assignments in Period Control

When you assign the company code to a chart of depreciation, the system automatically (one time only) makes the calendar assignments for a non-calendar fiscal year for the standard period control in Asset Accounting (for example, first-year convention of a half year). In order for this to occur, you need to have defined the fiscal year variant with 12 (or, in the case of half-periods, with 24) periods. Special periods are not restricted, that is, your fiscal year variant can have as many special periods as you want.

If the fiscal year variant is defined as year-dependent, you have to generate a new calendar assignment for depreciation period control each year (application menu: *Periodic Processing → Settings*).

## Definition of Posting Periods (FI Customizing)

The fiscal year variant contains the correlation between the calendar date and the posting periods. You assign a specific calendar time period to the various posting periods. You make this assignment by entering the last calendar date of each period. For a non-calendar fiscal year, you also have to enter a factor to indicate those periods that do not lie in the current calendar year (+1).



[Assignment Rules/Non-Calendar Fiscal Year \[Page 93\]](#)

## Non-Calendar Fiscal Month

If you also work with non-calendar fiscal months, the last posting period in the calendar year requires special handling. For this period, you have to make an additional entry for December 31. This means that this period requires two calendar assignments:

- A normal assignment for the period through to December 31
- An assignment with a shift for the period after January 1

## Assignment Rules/Non-Calendar Fiscal Year

The following table shows the assignment rules for a non-calendar fiscal year (12 posting periods, fiscal year end June 30):

<u>From</u>	<u>To</u>	<u>Period</u>	<u>Year change factor</u>
<b>01/01</b>	<b>01/31</b>	<b>07</b>	<b>0</b>
	<b>02/28</b>	<b>08</b>	<b>0</b>
	<b>03/31</b>	<b>09</b>	<b>0</b>
	<b>04/30</b>	<b>10</b>	<b>0</b>
	<b>05/31</b>	<b>11</b>	<b>0</b>
	<b>06/30</b>	<b>12</b>	<b>0</b>
	<b>07/31</b>	<b>01</b>	<b>+1</b>
	<b>08/31</b>	<b>02</b>	<b>+1</b>
	<b>09/30</b>	<b>03</b>	<b>+1</b>
	<b>10/30</b>	<b>04</b>	<b>+1</b>
	<b>11/30</b>	<b>05</b>	<b>+1</b>
	<b>12/31</b>	<b>06</b>	<b>+1</b>

## Shortened Fiscal Years

# Shortened Fiscal Years

## Use

A shortened fiscal year results when you change from a normal fiscal year to a non-calendar fiscal year, or the other way around. This type of change might be necessary, for instance, if an enterprise becomes part of a new corporate group.

## Features

The R/3 Financial Accounting component fully supports the use of shortened fiscal years. However, there are still some points to consider from the perspective of Asset Accounting when you use a shortened fiscal year.

## Timing of the Changeover

You change the current fiscal year to a shortened fiscal year by changing the fiscal year version in the FI General Ledger. You can only make this change if there has not been **any** posting yet in a period that will disappear when the shortened fiscal year becomes effective. Reversing any such postings does not make the change possible.

If you have already posted depreciation during the current fiscal year, you need to run the depreciation recalculation program (*Tools* → *Recalculate values*) after the change to the shortened fiscal year.

## Posting Periods

In order for the calculation of depreciation to be correct in the shortened fiscal year, the shortened year must begin with period 1 and be defined with fewer posting periods. Therefore, when you change the fiscal year cycle, you must define the fiscal year version in the given company code as year-dependent. You can specially identify the shortened fiscal year and define fewer posting periods for it, only if the fiscal year version is year-dependent (FI Customizing: *Financial Accounting global settings*.)

As long as you are still posting in or before the shortened fiscal year, or if you are transferring legacy data from this time period, then you must also retain the year-dependent fiscal year version, even after the shortened fiscal year. Define the fiscal year version with the full number of posting periods and the corresponding shift in the posting periods (see [Non-Calendar Fiscal Years \[Page 92\]](#)). You can redefine the fiscal year as not year-dependent only when the shortened fiscal year is closed for accounting, and no more correction postings are expected.



[Calendar Assignments for Shortened Fiscal Year \[Page 97\]](#)

## Historical Fiscal Years

If the fiscal year version was not defined as year-dependent up to the point when the fiscal year cycle was changed, you have to change the definition of the fiscal year version in FI Customizing. Define the fiscal year version as year-dependent, and specify the posting periods for each calendar year. In order to ensure that the calculation of depreciation remains correct after this change is made, you must also maintain the historical calendar dates with the correct posting periods for the calendar years of all open fiscal years (or, at least two calendar years before the shortened fiscal year).

## Future Fiscal Years

It is also necessary to define at least the calendar year following the shortened fiscal year. In order to predict depreciation, maintain the future years involved.



For a version with a non-calendar fiscal year, the calendar/period assignments of the last maintained calendar year define only a part of the last fiscal year. Therefore, the system no longer predicts correct values for this fiscal year.

## Period Control

The system automatically generates the correct calendar assignments for standard period control for Asset Accounting in a shortened fiscal year (see [Period Control \[Page 147\]](#)). However, since all possible period/calendar combinations cannot be one hundred percent predicted and resolved, you should check the assignments and correct them if necessary (FI-AA Customizing: *Period Control*).

You can also manually initiate the generation of calendar assignments for a fiscal year (SAP Easy Access menu: *Environment* → *Current Settings* ).

## Reducing Depreciation

In a shortened fiscal year, you generally reduce depreciation in proportion to the amount that the fiscal year is shortened. Therefore, you can define whether the system should reduce planned depreciation, or if the full year's depreciation should be calculated. You make this specification in Customizing for *Asset Accounting*. You specify for each company code/depreciation area and depreciation type (ordinary depreciation, special depreciation, and so on), whether depreciation should be reduced or not (*Valuation* → *Fiscal Year* ).

## Specialized Depreciation Key

In certain circumstances, the law stipulates depreciation cannot be reduced for certain depreciation methods (for example, a set percentage rate per year). Therefore, you can set an indicator in the Customizing definition of the depreciation key. When this indicator is set, depreciation cannot be reduced for this depreciation key, even though the definition at company code level specifies that depreciation should be reduced.

## Depreciation Levels in Shortened Fiscal Year

Various depreciation keys (for example, for buildings) use special calculation methods. These methods have depreciation levels with time limitations, and specific depreciation percentage rates are set for each depreciation level (see [Multi-Level Depreciation \[Page 143\]](#)). These time limitations are set by entering the term of validity for the depreciation level in years and months (either in calendar years/months or fiscal years/months). A shortened fiscal year has the following affect on the definition of these depreciation levels:

- If you reduce the level depreciation in the shortened fiscal year, the standard depreciation keys supplied by SAP will continue to depreciate correctly, since the useful life (measured in fiscal years) is lengthened in proportion to the reduction. You do not have to make any adjustments. The total period of validity as defined in the calculation method continues to correspond to the useful life in calendar years, and the depreciation in the shortened fiscal year is reduced proportionally to the shortening of the fiscal year.

### Shortened Fiscal Years

- If you allow for a full year's depreciation in the shortened fiscal year, then the useful life as measured in calendar years will be shortened. For multi-level depreciation, this means that the full percentage rate defined for the depreciation level will be used. If the shortened fiscal year falls in the validity period of a depreciation level that has a different percentage rate than the one following it, this has the following result:

Since a validity period defined as a calendar year is longer than the shortened fiscal year, the system continues to depreciate beyond the end of the shortened fiscal year, using the defined percentage rate, although the full percentage was already depreciated in the shortened fiscal year. For this reason, using the standard key in this instance will not ensure that depreciation is correctly calculated. In this case, create your own depreciation key and correct the validity periods for the depreciation levels. Reduce the length of the validity period of the depreciation level in which the shortened fiscal year falls, according to the length of the shortened fiscal year. Adjust the next validity periods to reflect this change.



[Validity Periods and the Depreciation Key \[Page 98\]](#)

Calendar Assignments for Shortened Fiscal Year

## Calendar Assignments for Shortened Fiscal Year

The following example shows how the posting periods and calendar assignments of a shortened fiscal year should be defined.

Fiscal year YYYY is a shortened fiscal year with 6 periods (1/1/YYYY - 6/30/YYYY). The non-calendar fiscal year YYYY + 1 begins on 7/1/YYYY. You must assign the periods for the calendar year YYYY as follows:

<u>From</u>	<u>To</u>	<u>Period</u>	<u>Year change factor</u>
<b>01/01</b>	<b>01/31</b>	<b>01</b>	<b>0</b>
	<b>02/28</b>	<b>02</b>	<b>0</b>
	<b>03/31</b>	<b>03</b>	<b>0</b>
	<b>04/30</b>	<b>04</b>	<b>0</b>
	<b>05/31</b>	<b>05</b>	<b>0</b>
	<b>06/30</b>	<b>06</b>	<b>0</b>
	<b>07/31</b>	<b>01</b>	<b>+1</b>
	<b>08/31</b>	<b>02</b>	<b>+1</b>
	<b>09/30</b>	<b>03</b>	<b>+1</b>
	<b>10/30</b>	<b>04</b>	<b>+1</b>
	<b>11/30</b>	<b>05</b>	<b>+1</b>
	<b>12/31</b>	<b>06</b>	<b>+1</b>

## Calendar Assignments for Shortened Fiscal Year

**Validity Periods and the Depreciation Key**

The following example shows the defined validity periods of a depreciation key with five levels (60, 10, 10, 10, 10%) for the individual acquisition years. 1994 is a shortened fiscal year with 9 months (1/1 - 9/30). A full year's depreciation is to be calculated in the shortened fiscal year:

Acq. Yr.	Valid.Yr./Month	Percent
<b>1994</b>	<b>0/9</b>	<b>60</b>
<b>1994</b>	<b>1/9</b>	<b>70</b>
<b>1994</b>	<b>2/9</b>	<b>80</b>
<b>1994</b>	<b>3/9</b>	<b>90</b>
<b>1994</b>	<b>999</b>	<b>100</b>
<b>1993</b>	<b>1/0</b>	<b>60</b>
<b>1993</b>	<b>1/9</b>	<b>70</b>
<b>1993</b>	<b>2/9</b>	<b>80</b>
<b>1993</b>	<b>3/9</b>	<b>90</b>
<b>1993</b>	<b>999</b>	<b>100</b>
<b>1992</b>	<b>1/0</b>	<b>60</b>
<b>1992</b>	<b>2/0</b>	<b>70</b>
<b>1992</b>	<b>2/9</b>	<b>80</b>
<b>1992</b>	<b>3/9</b>	<b>90</b>
<b>1992</b>	<b>999</b>	<b>100</b>
<b>1991</b>	<b>1/0</b>	<b>60</b>
<b>1991</b>	<b>2/0</b>	<b>70</b>
<b>1991</b>	<b>3/0</b>	<b>80</b>
<b>1991</b>	<b>3/9</b>	<b>90</b>
<b>1991</b>	<b>999</b>	<b>100</b>

You do not have to make changes for acquisition years prior to 1991, since the key is only valid for 5 years, and the shortened fiscal year would no longer have an effect.

## Different Fiscal Year for FI-AA

### Use

You can use a fiscal year version in Asset Accounting that is different from the fiscal year version used in Financial Accounting. However, it is absolutely necessary that the start and end date be the same in Financial Accounting and in the Asset Accounting subsidiary ledger. (However, refer also to [Different Fiscal Year Start or End in FI-AA \[Page 100\]](#)).

You might need a different fiscal year version in FI-AA in order for the system to correctly determine the start and end of depreciation using period control in Asset Accounting. The reason for this is that the calculation of depreciation works only with whole periods. For example, you have an acquisition on June 30 and the system is to calculate depreciation for half a year. However, the FI general ledger is using a version with 13 normal periods. Depreciation would have to be calculated for 6.5 periods. This calendar assignment cannot be defined in period control for Asset Accounting.

### Features

If you want to use a different fiscal year version in Asset Accounting, you have the following options:

- You can define a different fiscal year version at the level of the company code. Specify the fiscal year version in the FI-AA definition of the company code (FI-AA Customizing: *Valuation* → *Fiscal Year Versions*).
- You can also specify a different fiscal year at a lower level, at the level of the depreciation area. Enter the fiscal year version in the FI-AA definition of the depreciation area. This might be necessary if you use a factory calendar for book depreciation that does not correspond to the normal calendar, but use a normal calendar for the tax balance sheet.

The system determines the fiscal year version it should use from the bottom up. If there is a fiscal year version specified at the depreciation area level, the system uses it. If not, the system uses the fiscal year version in the FI-AA definition of the company code. If there is no fiscal year version specified there either, the system uses the version entered for the general ledger.

Note that the fiscal year version itself can only be defined in FI Customizing (*Financial Accounting Global Settings*).



When you use a different fiscal year version for Asset Accounting, consider the problems related to the depreciation posting period (see [System Settings for Posting Depreciation \[Page 118\]](#)).

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**Different Fiscal Year Start or End in FIAA**

## Different Fiscal Year Start or End in FIAA

### Use

The basic rule is that the fiscal year variant is set in the FI General Ledger at the company code level. It is possible, however, to set up a different fiscal year variant in Asset Accounting than the one used in the General Ledger. You make this setting in Customizing, either at the company code level or the chart of depreciation level. However, the start date and end date of the fiscal year variant you specify for Asset Accounting have to be the same as those for the fiscal year variant of the company code (refer to [Different Fiscal Year for FI-AA \[Page 99\]](#) ).

For various reasons, you might also need to have a fiscal year variant for certain depreciation areas that is completely different from the fiscal year variant of the company code. This means that not only is the distribution of the periods within the fiscal year different from that for the company code, but also the start and end of the fiscal year are different. For example, the company code might use a fiscal year variant that goes from April to March, whereas accounting at the group level or for tax reporting requires a fiscal year variant from January to December.

### Features

To assist in such cases, there is a workaround solution that makes it possible to **create reports** using a totally different fiscal year cycle. Depreciation area 01, however, is excluded from this solution. It is not possible to create these kind of reports for depreciation area 01.

The workaround solution is described below using an example.



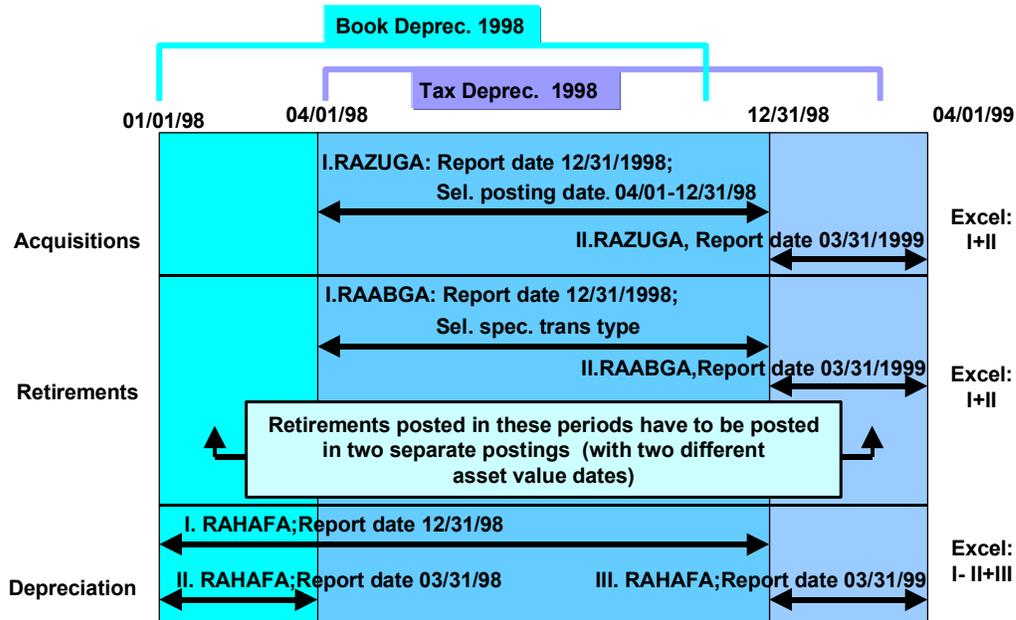
For this example, assume that the fiscal year variant of the company code is defined from January 1 to December 31. The reporting requirements of another depreciation area, however, should be based on a fiscal year variant from April 1 to March 31 of the next year.

- To generate a report on **asset acquisitions**, follow these steps:
  1. Run the acquisitions list RAZUGA01. Report date: 12/31/YYYY. Posting date: 04/01/YYYY to 12/31/YYYY. Export the report to MS Excel.
  2. Run the acquisitions list RAZUGA01. Report date: 03/31/YYYY + 1. Export the report to MS Excel.
  3. Add the values of both reports together, using MS Excel.
- In this scenario, you have to post **asset retirements** in two steps.
  1. Post the retirement for the special depreciation area which needs the differing fiscal year. You have to create a special retirement transaction type for this posting. The transaction type should post only to this depreciation area. Set the asset value date of this special posting so that you also retire the portion of value adjustments that you want.
  2. Post the retirement using the normal retirement transaction type. You may also need a different asset value date, in order to represent the retirement from the point of view of the fiscal year variant that is valid for the company code.

To create a report on asset retirements, follow the procedure outlined above for acquisitions, but using the retirement list RAABGA01.

Different Fiscal Year Start or End in FIAA

- To generate a report on **depreciation**, follow these steps:
  1. Run the depreciation list RAHAF01. Report date: 12/31/YYYY. Export the report to MS Excel.
  2. Run the depreciation list RAHAF01. Report date: 03/31/YYYY. Export the report to MS Excel.
  3. Run the depreciation list RAHAF01. Report date: 03/31/YYYY + 1. Export the report to MS Excel.
  4. Using MS Excel functions, subtract the second report from the first, and then add the third report (I - II + III).



Procedure for Differing Fiscal Year



Before you introduce this solution, you should first discuss with your consultant whether it is necessary and how it should be implemented.

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**Mid-Quarter or Mid-Month Rule**

## Mid-Quarter or Mid-Month Rule

### Use

This version is widely used in the United States. In this version, the posting periods in Financial Accounting differ from the depreciation periods. The system handles this in a special way.

### Features

As long as the number of the posting periods is the same as the number of calendar months (12), you can carry out depreciation calculation on the basis of half months and/or half periods (see [Country-Specific Functions \[Page 330\]](#)).

Proceed as follows:

- Specify the use of half periods and the mid-period date when defining the FI-AA company code.
- If you defined period controls yourself, you must provide for the use of half periods in their assignment rules. For month and quarter periods, corresponding period controls are already set up in the standard system.



- If you specify the use of half periods when defining an asset company code, this specification also applies to other company codes that use the same fiscal year version
- It is **not** possible to use half-periods when you are using non-calendar fiscal months.

## Parallel Currencies in the General Ledger

### Use

You can use the FI general ledger function described below, if you do **not** need valuation parameters (APC/depreciation terms) for the group consolidation that are different from the local valuation, but only need amounts in a foreign currency.

The R/3 FI (Financial Accounting) component enables you to manage all values in one company code, on the same accounts, in up to two additional parallel currencies. In order to do this, you can define two parallel currencies for each company code in FI Customizing. Make the following specifications for each parallel currency:

- Currency type, according to the function of the currency (for example, group currency)
- Exchange rate type for the currency translation
- Source currency for the currency translation
- Date (for example, the document date) for the currency translation

It is also possible to update values that are posted in Asset Accounting in parallel currencies. The asset values can be updated in Financial Accounting in parallel in several currencies in the same FI document as the amount posted in local currency.

### Prerequisites

In order to post to FI with parallel currencies, set up a depreciation area with the following features for each currency:

- The currency type and the currency in the depreciation area are identical to those for the parallel currency it represents (in the company code).
- The depreciation area has identical depreciation terms and the identical acquisition values as the book depreciation area (mandatory takeover).

The system then automatically supplies the corresponding posting documents with the additional values from these depreciation areas. The values from these areas will be posted to the general ledger (independent of their posting rules in the area definition).

The system can also handle parallel currencies for depreciation areas that are posted periodically to the general ledger rather than online.

### Features

The system translates APC acquisitions into the parallel currency based on the exchange rate type (historical valuation). The system does not translate depreciation amounts. Instead, they are calculated in the given currency, using the depreciation terms in the depreciation area. This method guarantees that the net book value zero is reached during the defined useful life in all depreciation areas with parallel currencies. The system also calculates APC retirements and proportional value adjustments directly, rather than translating the currencies. The system calculates the proportional amount being retired based on the amount retired in the local currency area.

### Parallel Currencies in the General Ledger



You cannot use the "parallel currencies" function at a later date if it was not set up originally in your system. The system settings described here must be made before the production start of the given company code.

## Integration

### Use

Asset Accounting is a subsidiary ledger of the General Ledger used for the management and detailed documentation of the accounting transactions related to fixed assets. The FI-AA component enables you to record depreciation and changes to asset values in asset accounting and to update them to the General Ledger in the SAP R/3 System. At the same time, you can make various account assignments to cost accounting.

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**Integration (General)**

## Integration (General)

### Use

The FI-AA component is integrated in numerous ways with other R/3 components. The integration of Asset Accounting with the FI (Financial Accounting, including Accounts Payable and Accounts Receivable) component makes it possible to carry out

- Posting of asset acquisitions and retirements that are integrated with accounts payable and accounts receivable
- Account assignment of down payments to assets when you post down payments in the Financial Accounting (FI) component
- Posting of depreciation from Asset Accounting to the appropriate general ledger accounts

In addition, the integration with certain components allows you to make account assignment to assets from transactions that have to do with assets. These components are:

- These components are: MM (Materials Management) and
- PM (Plant Maintenance)

### Features

#### Purchase Requisition - Outline Agreement - Purchase Order (MM)

If you post to an asset when entering a purchase requisition or an outline agreement, the system checks, with reference to the planned delivery date, whether the fixed asset actually exists and whether you can post to it. The same checks are carried out if you post to a fixed asset when entering a purchase order. Moreover, the system ensures that you do not exceed the upper limit for low-value assets. You can still change the asset, for which account assignment is to be performed, until receipt of the first goods or invoice for a purchase order.

If you want to carry out account assignment to assets when creating purchase orders, purchase requisitions and outline agreements, the account entered in Financial Accounting for "Acquisition and production costs" must be assigned to a field status group that allows entries in the field groups "asset number/sub-number," "transaction type," and "quantity."

#### Goods Receipt (MM)

Depending on the specifications in Materials Management Customizing, you can post the goods receipt for a purchase order as valuated or non-valuated. When the goods receipt is valuated, the system capitalizes the invoiced value of the goods (based on the purchase order) to the fixed asset. Non-valuated goods receipt is posted against a clearing account.

In commercial law, the start-up date of a fixed asset normally determines the start of capitalization. The start-up takes place, for the majority of fixed assets, directly after the physical goods receipt. In most cases, therefore, you should post valuated goods receipts.

#### Invoice Receipt (MM)

You must decide whether invoice receipt takes place before or after goods receipt. If the invoice receipt is first, the invoice amount (minus taxes and, if applicable, cash discount) is capitalized to the asset. If the invoice receipt is second,, the difference between the invoice amount (without tax

and cash discount) and the posted invoiced value of goods is capitalized, providing the goods receipt was valued. For invoice receipt after a non-valuated goods receipt, the total invoice amount (minus tax and cash discount) is also capitalized.

You determine whether cash discount should already be deducted at the invoice receipt by means of the document type you select.

### **Material Reservation - Material Withdrawal (MM)**

If you have account assignment to an asset while making a material reservation, the system checks whether the asset actually exists. Material withdrawal with account assignment to an asset results in capitalization of the purchase or production costs of the material to the fixed asset. When creating a material withdrawal document, you can refer to a material reservation, if there is one.

### **Settlement of Maintenance Orders and Production Orders (PM/PP)**

The system lets you enter assets as the receivers for the settlement of maintenance orders in the Plant Maintenance (PM) component. In this way, you can settle maintenance activities that require capitalization to assets. The system proposes the asset that is assigned to the given equipment or functional location as the settlement receiver.

In a similar manner, you can also settle production orders and internal orders to assets.

### **Cost Planning**

You can determine planned depreciation and interest on a periodic basis for primary cost planning related to cost centers. Using a special report, you can transfer this depreciation and interest to primary cost planning in the Controlling (CO) component. For more information, see [Primary Cost Planning \[Page 526\]](#).

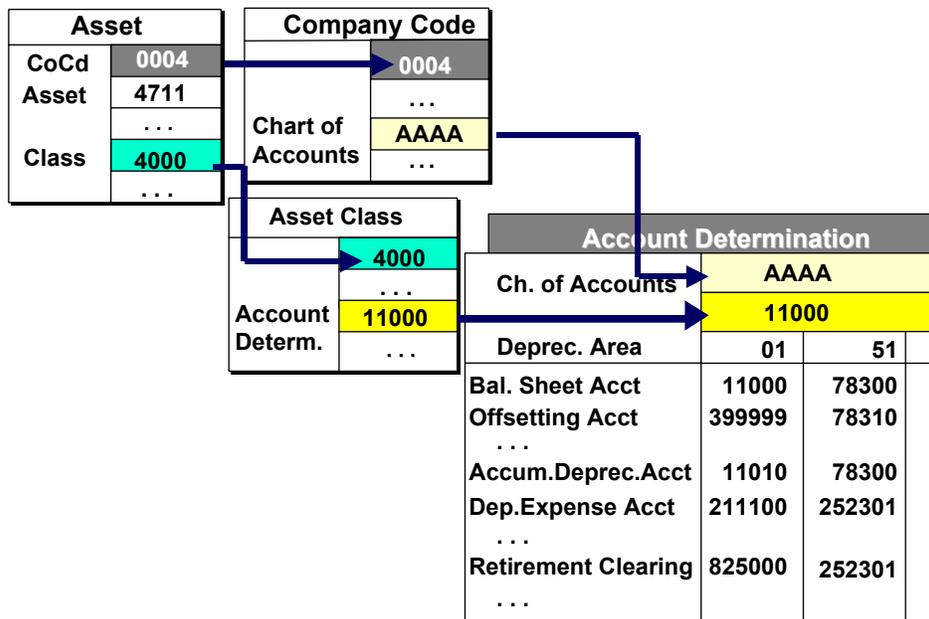
## Account Determination

### Use

Using the FI-AA component, you can automatically update all relevant transactions to the general ledger. These include all accounting transactions that are posted to assets, and all changes to asset values that are automatically calculated by the system (particularly depreciation). This update takes place immediately online for one depreciation area, or as part of periodic processing for all other depreciation areas. (refer to [Updating Values in the Depreciation Area \[Page 234\]](#) ).

### Features

When you post with account assignment to an asset, the system determines the G/L account that is posted, based on four things: the chart of accounts valid in the company code, the depreciation area that is to be posted, the account allocation key, and the transaction type.



### Account Determination

#### Chart of Accounts

The chart of accounts contains all accounts in the general ledger. In Financial Accounting, exactly one chart of accounts is assigned to every company code. This assignment is also binding for Asset Accounting

#### Account Determination Key

You enter the account determination key in the general master data for the asset class. The account determination key defines the reconciliation accounts in Financial Accounting that should be posted during asset transactions. This definition is effective for each chart of accounts and for each depreciation area that is defined as an automatic posting area in the respective chart of depreciation. The chart of depreciation itself is **not** the key criterion for account determination. This fact is important for company codes that have different charts of depreciation, but use the

same chart of accounts. It is not possible to specify reconciliation accounts that are chart-of-depreciation-specific for these company codes.

You have to enter an account determination key in every asset class. Doing so guarantees that the account assignment will be the same for all assets in the given asset class. SAP provides account determination keys for the standard charts of depreciation and standard charts of accounts.



You can obtain more information on the meaning of accounts in an account determination key by using the online F1 help for the reconciliation accounts in the definition of an account determination.

### Automatic Posting Area

When you define depreciation areas, you determine whether the values of the area should be automatically entered in the general ledger (see [Characteristics of a Depreciation Area \[Page 69\]](#)). For every area that is defined for automatic posting, you can specify its own accounts in an account determination key.

It is not possible to make specifications for account assignment for areas that do not have an automatic posting indicator in their area definition.

### Transaction Type

The transaction type identifies the type of business transaction. Using the transaction type, the system posts the transaction to the appropriate accounts of the given account determination (refer to [Transaction Types \[Page 231\]](#)).



You can use a customer enhancement to set up your own controls for account determination that are dependent on the transaction type (see [Customer Enhancements \(Customer Exits\) \[Page 359\]](#)).

---

**Additional Account Assignment**

## Additional Account Assignment

### Use

If you use Asset Accounting in conjunction with cost accounting and/or FI General Ledger, the following additional account assignments are possible, depending on the business transaction to be posted:

- Business area
- Cost center/Internal order
- Profit center
- Funds center/financial budget item ([see Budget Monitoring Using Statistical Orders or WBS Elements \[Page 243\]](#))

### Features

#### Business area

All changes to asset balance sheet values can also be automatically posted at the business area level. There is one prerequisite, however. You must specify for the company code that business area balance sheets are to be created. The system then determines the business area that is to be posted for each posting. The system makes this determination based on the business area entered in the asset master record, and transfers this information to Financial Accounting for the automatic posting.

#### Cost Center/Internal Order

You can make account assignment of the following accounting transactions (G/L accounts) to the cost center entered in the asset master record or to the internal order entered in the asset master record:

- Loss due to scrapping
- Gain/loss due to asset retirements
- Clearing/expense from repayment of an investment support measure (as a result of asset retirement)
- Revenue from post-capitalization
- Revenue from write-ups (all depreciation types)

The necessary conditions for this additional account assignment to CO are listed below:

- A cost center or internal order has to be entered in the asset master data of the asset (in the section for “time-dependent data”)
- The depreciation posting rules for the given area have to allow for additional account assignment to cost center or order (see [System Settings for Posting Depreciation \[Page 118\]](#)).
- The field status variant of the company code/asset accounts has to allow additional account assignment to cost center/internal order as an optional entry ((FI Customizing: *Financial Accounting Global Settings* → *Document* → *Line Item* → *Controls*)).

[Graphic: Account Assignment to CO \[Page 113\]](#)



If someone has entered additional account assignment for both an order and a cost center at the same time, the order takes precedence (that is, there is no account assignment to the cost center). However, the order does not take precedence if it is a statistical order. If the order is statistical, then account assignment to both the statistical order and the cost center is possible.

## Profit Center

When Profit Center Accounting is also active, the system also posts additional account assignment to profit centers. The system determines the profit center to be posted by means of the cost center specified in the asset master record. Further requirements for account assignment to a profit center are outlined below:

- The field status variant of the corresponding reconciliation accounts in Financial Accounting has to allow for additional account assignment to cost center and profit center (FI Customizing: *Financial Accounting Global Settings* → *Document* → *Line Item* → *Controls*).
- The corresponding accounts (cost elements) in cost center accounting have to be defined using the cost element type "revenue element."
- The cost center in the asset master record must be assigned to a profit center in its own master record.

In addition to the account assignment to the profit center, the system automatically carries out the corresponding statistical posting to the respective cost center. It is not possible to allocate the line items posted to the cost center to other CO objects. This prevents duplicate allocation to the same profit center. However, you can still generate reports on these line items in the same way as on other CO line items.

## Account Assignment of Depreciation and Interest

You can post depreciation and interest to internal orders or cost centers. The posting program posts to the cost center or internal order that is entered in the asset master record. If both an order and a cost center have been entered in the asset master record, the system posts to both. However, it does check whether one of the two account assignments is only statistical.

You specify the additional account assignment in the posting rules for the depreciation posting program in FI-AA Customizing (*Depreciation* → *Post depreciation to the general ledger*). This specification also determines the depreciation area for the additional account assignment.

You can also post depreciation and interest to cost centers if you are using cost accounting that applies across company codes. This means that the company code of the asset does not necessarily have to be the same as the company code of the cost center. For more information, see [Assignment to Cost Center \[Page 26\]](#)



Direct posting of depreciation/interest to a project (WBS element) is **not** possible. You have to first post the depreciation/interest to an order, and then settle the order to the project.

---

**Additional Account Assignment****Distribution of Depreciation and Interest**

It is only possible to enter one cost center in the asset master record. The only way to distribute depreciation and interest to different cost centers is to use settlement within cost accounting. The cost center in the asset master record then serves the function of a distribution cost center.

The disadvantage of this approach is that reports show only the distribution cost center, and not the cost centers that are actually debited. Also, you need to enter a separate cost center for the distribution. A different approach is to follow this procedure:

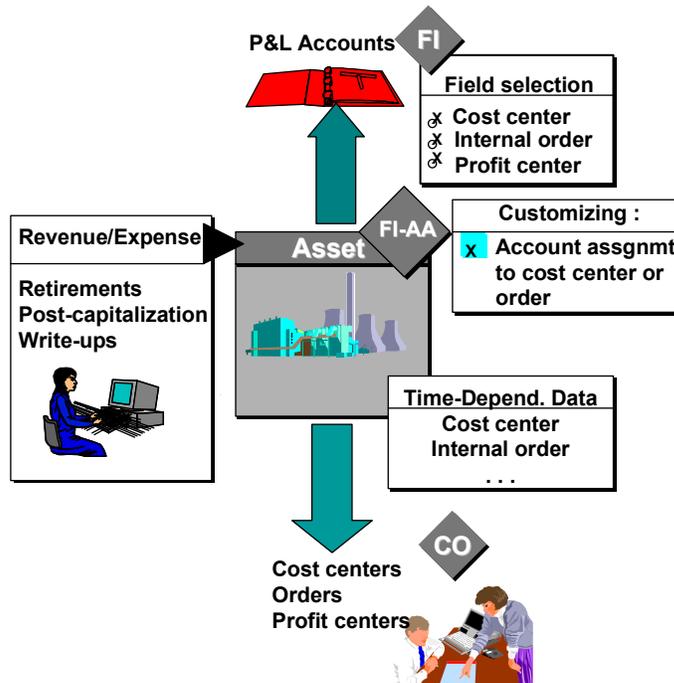
- Determine the cost center that you want to be shown in asset reports as the cost center of the asset. Enter this cost center in the asset master record.
- Enter an internal order in the asset master record. The system posts to this order when it posts depreciation. The system does not post to the cost center.
- Settle the "distribution" internal order to the cost centers that you want to debit.

**Account Assignment to Activity Type**

It is possible to enter an activity type in the asset master record along with the cost center. When an activity type is entered, all debits that have account assignment to the cost center are also posted automatically to the activity type as well. The only prior requirement is that Customizing in the CO component is set up for account assignment of actual postings to activity types.

## Graphic: Account Assignment to CO

The following graphic shows the account assignment to CO of revenue/expense from certain FI-AA business transactions:



### Additional Account Assignment

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**Automatic Posting from Depreciation Areas to the General Ledger**

## Automatic Posting from Depreciation Areas to the General Ledger

### Use

Depending on the specifications in the chart of depreciation and in the asset class, you can manage any number of depreciation areas per asset in the FI-AA component (see [Depreciation Areas \[Page 65\]](#)). Often you are required to post all of these different parallel asset valuations to the general ledger, in order to have these parallel values available at the general ledger level.

### Features

You can specify that the posting values from one depreciation area are updated automatically, online to the general ledger accounts (see [Features at Chart of Depreciation Level \[Page 70\]](#)). (Usually you select the book depreciation area as the area for automatic updating to Financial Accounting). You can update other depreciation areas to the general ledger using periodic processing (see [Parallel Valuation \[Page 507\]](#)). Depreciation can only be updated during periodic processing (see [Posting Depreciation \[Page 116\]](#)).

## Cost-of-Sales Accounting

### Use

In the *General Ledger* (FI-GL) component, you can create financial reports (profit and loss) in accordance with cost-of-sales accounting. Using this procedure, revenue and expense are displayed separately for each functional area.

### Features

Since the expense due to depreciation also has to be accounted for, the depreciation posting program also posts to the functional area belonging to each asset. The system determines this functional area by means of a substitution rule (Customizing: *Special Ledger*). For this substitution rule, you can use all account assignment objects for fixed assets (for example, cost center).

For additional account assignment to a functional area, it is not necessary that the depreciation area post depreciation to a cost center. The only requirement is that account assignment is made to a profit and loss account.



If cost-of-sales accounting is active, then the depreciation posting program supplies values to the *Functional area* field for all depreciation areas.

Make sure that the *Functional area* field is an optional entry field for the affected accounts and posting keys before you process the batch input session.

Or, you can choose the *Direct posting* option on the selection screen of the depreciation posting program. Then the system does not create a batch input session. Instead it posts the documents directly.

Posting Depreciation

## Posting Depreciation

### Use

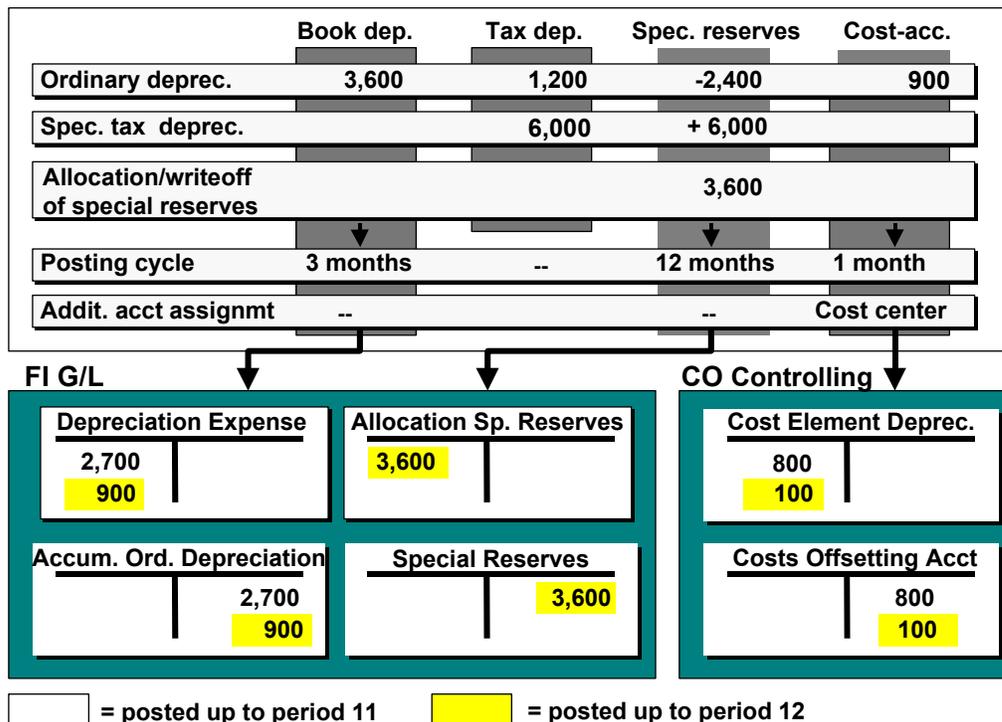
Every asset transaction in the R/3 System FI-AA component immediately causes a change of the forecasted depreciation. However, it does not immediately cause an update of the depreciation and value adjustment accounts for the balance sheet and profit and loss statements. The planned depreciation is posted to the general ledger when you run the periodic depreciation posting run. This posting run uses a batch input session to post the planned depreciation for each posting level for each individual asset as a lump sum amount.

When the system posts depreciation, it creates collective documents. It does not create separate documents for each asset.

### Features

You can choose both the posting cycle and the additional account assignment levels (such as, cost center, order - see [Additional Account Assignment \[Page 110\]](#)) for the depreciation posting run per company code and depreciation area. This specification is made in FI-AA Customizing: *Specify intervals/account assignment rules.*

The following graphic shows the posting of periodic depreciation in account form. You can enter the accounts shown in the account determination in each depreciation area (see [Account Determination \[Page 108\]](#)).



### Depreciation Posting

## Posting Depreciation

Posting depreciation to the corresponding G/L accounts takes place using a batch input procedure. For more information, see [Depreciation \[Page 500\]](#).

**Performance**

It is difficult to provide precise information on performance, since it is strongly dependent on your system configuration. However, you can use the figures below for a rough estimate:

- 16000 assets per hour, for calculating depreciation and creating the posting session for it.
- 2000 documents per hour, for processing the session and creating the FI posting documents.

Since only collective documents are created, the number of documents to be posted per depreciation posting run depends on the number of general ledger accounts to be posted, and even more so on the number of cost centers to be posted.

For more information on improving performance, see [System Performance Improvements \[Page 328\]](#).



Creating a batch input session for posting depreciation can only be carried out as background processing.

## System Settings for Posting Depreciation

# System Settings for Posting Depreciation

## Use

The following is a detailed description of the possible Customizing settings for posting depreciation. (Implementation Guide: *Integration with the General Ledger*.)

## Features

### Posting Document Type

You have to specify a document type for posting depreciation. When you post depreciation using *Periodic processing* → *Depreciation run* → *Execute*, use only document types that are limited to use with batch input according to the indicator in their FI-AA Customizing definition. In this way, you can prevent unintentional use of the document type.



If the *Direct FI posting* indicator is set, it is **not** possible to use a document type that is limited only to batch input. The same applies to program RAPOST00. Using document types limited to batch input is **not** possible when you use this program.

It is also essential that you specify in the Customizing definition of the document type that the document type uses a number range with external number assignment. The depreciation posting program can then assign the document numbers itself (from the specified number range). If the numbers are assigned in this way, the depreciation posting program can keep a check on posting to Financial Accounting. If errors occur, this numbering also makes it possible to make corrections.

### Depreciation Areas to be Posted

You decide which depreciation areas should have their values posted to Financial Accounting. You make this specification for each depreciation area per company code in Customizing for *Asset Accounting* (choose *Integration with the General Ledger* → *Define How Depreciation Areas Post to General Ledger*). Enter depreciation posting rules for these areas.



You should keep in mind that all company codes that are assigned to a chart of depreciation post depreciation to the same depreciation areas. Enter depreciation posting rules for these areas. This means that a depreciation area, which is assigned to two company codes through its chart of depreciation, has to post depreciation in both company codes. Posting in one while omitting the other is not possible.

### Depreciation Posting Cycle

You determine the depreciation posting cycle by entering the length of time (in posting periods) between two depreciation posting runs. This means that a setting of 1 indicates monthly posting, 3 means quarterly posting, 6 means semi-annual, and 12 means annual (for a fiscal year version with 12 posting periods). When you start a depreciation posting run, you have to enter the period for which you want it to be carried out.

You do not have to keep strictly to this posting cycle. You can also choose an unplanned depreciation posting run using an indicator in the initial screen of the depreciation posting program. When you set this indicator, you can skip over several periods, and post the total depreciation for all of the skipped periods in one period. You might need to do this, for example, if

**System Settings for Posting Depreciation**

you carried out legacy data transfer during the fiscal year. This method enables you to post all depreciation up to the transfer date at one time.

You can use a different fiscal year version in Asset Accounting than you do in the general ledger (see [Fiscal Years and Periods for Asset Accounting \[Page 90\]](#)). The period you enter in the depreciation posting run, however, is **always** the period in the fiscal year variant for the general ledger. If you are using a different fiscal year variant in Asset Accounting, the system determines the FI-AA period to be posted in the following way:

First, the system determines the date of the last day of the FI period entered (according to the fiscal year variant of the general ledger). Then it determines the FI-AA period in which this date falls, and posts to this period. For example, you might enter period 1 for the depreciation posting run, but the system posts period 2. The reason for this difference is that January 31 falls in period 2 according to the fiscal year version in Asset Accounting. This problem occurs particularly when you use fiscal year variants that apply to specific depreciation areas.

**Posting Process**

The system supports two different procedures for distributing the forecasted depreciation over the posting periods.

- **Catch-up method**

Using the catch-up method, the system calculates the posting amount in this period as the difference between the planned depreciation and the depreciation posted up to this period.

Acquisition posted in period 5	12000
Depreciation start in period	1
Planned annual depreciation	1200
Deprec. posted up to period 5	0
Planned deprec. up to period 5	500
Deprec. to post in period 5 =	(500-0) = 500
Deprec. to post per period (5-12) = (6-12) =	(700/7) = 100

- **Smoothing**

Using the smoothing method, however, the system distributes the difference between the forecasted annual depreciation and depreciation already posted, to the remaining posting periods.

## System Settings for Posting Depreciation

Acquisition posted in period 5	12000
Depreciation start in period	1
Planned annual depreciation	1200
Deprec. posted up to period 5	0
Remaining periods, incl. period 5	8
Deprec. to post per period (5-12) = (5-12) =	(1200-0)/8 = 150

The difference between the two procedures becomes evident when processing acquisitions within the fiscal year or when handling post-capitalization.

- With the catch-up method, depreciation falling due on a transaction within the fiscal year (from the depreciation start date, according to period control, up to the current period) is posted in one total. The depreciation posting program posts this amount in the period, in which the posting date of the acquisition lies. The amount posted is dependent on the asset value date.
- With the smoothing method, this amount is distributed equally over the periods from the current posting period to the year end (independent of the asset value date of the transaction).

[Graphic: Catch-Up/Smoothing \[Page 121\]](#)



- You should be careful if you use smoothing, and the depreciation start date comes after the acquisition date. In this case, the system does not distribute the planned depreciation first to the periods after the depreciation start date. Instead, it posts depreciation starting from the acquisition date. However, the total amount of planned depreciation is not affected.
- When an asset is retired during the fiscal year (partial or complete retirement) smoothing does not distribute depreciation only up to the retirement date; it distributes depreciation up to the end of the year.

## Additional Account Assignment

You must specify, per depreciation area, whether depreciation is to be posted to cost centers and orders. This information is then taken from the asset master record and passed on to Financial Accounting as an additional account assignment (see [Additional Account Assignment \[Page 110\]](#)).

## Posting Interest/Revaluation

If you manage interest and revaluation in a given depreciation area, you can post them to appropriate accounts in Financial Accounting in the same way as depreciation. Or you can specify that they be ignored. It is not possible to post interest or revaluation alone (without depreciation).

For more information on the calculation of interest to be posted, see [Calculation of Interest \[Page 203\]](#).

## Graphic: Catch-Up/Smoothing

The following graphic shows the depreciation posted for an acquisition made during the fiscal year, depending on which posting procedure is used. The depreciation posted using the two methods is compared to depreciation for an acquisition at the start of the fiscal year.

The depreciation data are as follows:

Depreciation posting cycle: Monthly

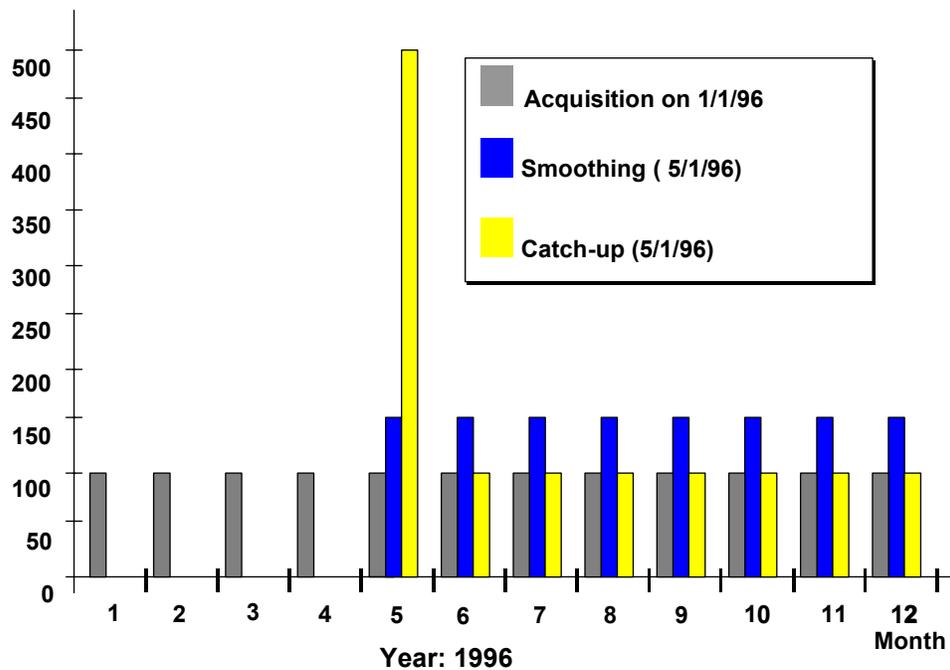
Period control: Half year convention

Acquis. on May 5, 1996 (asset value date) 12,000

Depreciation start date: Jan 1, 1996

Planned useful life: 10 years

Deprec. Posted



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**Graphic: Catch-Up/Smoothing**

## BAPIs

### Use

A [Business Application Programming Interface \[Ext.\] \(BAPI\)](#) is a programming interface by means of which you can access the business data and processes of the R/3 System from a different system.

### Features

The BAPIs listed below can be used for Asset Accounting:

BAPI\_FIXEDASSET\_GETLIST (information on selected assets)

BAPI\_FIXEDASSET\_GETDETAIL (display detail information on an asset)

BAPI\_FIXEDASSET\_CREATE (create asset)

BAPI\_FIXEDASSET\_CHANGE (change asset)

BAPI\_FIXEDASSET\_OVRTAKE\_CREATE (asset legacy data transfer)

BAPI\_ASSET\_ACQUISITION\_CHECK (check asset acquisition)

BAPI\_ASSET\_ACQUISITION\_POST (post asset acquisition)

BAPI\_ASSET\_POSTCAP\_CHECK (check post-capitalization)

BAPI\_ASSET\_POSTCAP\_POST (post post-capitalization)

BAPI\_ASSET\_RETIREMENT\_CHECK (check asset retirement)

BAPI\_ASSET\_RETIREMENT\_POST (post asset retirement)



For more information, see the R/3 long text documentation for the BAPIs and their parameters, as well as the R/3 library CA Business Framework Architecture.

## Depreciation

### Purpose

The *Depreciation* component makes it possible to manage the following types of depreciation in the system:

- Automatically calculated depreciation types (can also be planned manually):
  - Ordinary depreciation
  - Special depreciation
- Depreciation types that are normally planned manually:
  - Unplanned depreciation
  - Transfer of reserves/reduction of APC

Depreciation keys control the automatic calculation of depreciation in the system. These depreciation keys can be modified. In this way, you can define your own methods for calculating asset values.

[Interest calculation \[Page 203\]](#) for imputed interest in cost accounting is treated as a depreciation type by the system, and is therefore also controlled by depreciation keys and calculation methods, similarly to the calculation of depreciation.



The following objects describe automatically calculated depreciation. The handling of manual depreciation (unplanned depreciation) is explained in detail in [Manual Planning of Depreciation \[Page 400\]](#).

## Depreciation Types

# Depreciation Types

## Use

You specify the depreciation types and valuation types allowed for each depreciation area in FI-AA Customizing (*Depreciation*). The system then issues an error message and rejects posting when you try to use a type of depreciation that is not explicitly allowed.

## Features

The following depreciation or valuation types are supported:

### Ordinary Depreciation

Ordinary depreciation is the planned deduction for wear and tear during normal use of an asset.

### Special Depreciation

Special depreciation represents deduction for wear and tear on an asset from a purely tax-based point of view. This form of depreciation allows percentage depreciation, possibly staggered within a period allowed by the tax authority, without taking into account the actual wear and tear on the asset.

### Unplanned Depreciation

Ordinary depreciation reflects the deduction for wear and tear during the normal use of the asset. Unusual influences, such as damage which leads to a permanent decrease in the value of the asset, are covered by unplanned depreciation.

### Transfer of Reserves/Reduction of APC

Reduction of APC allows you to reduce the depreciation base of an asset by a given amount. This type of depreciation has to be posted manually. It cannot be posted automatically using depreciation keys like the other depreciation types.



It is possible to illustrate this type of depreciation using income tax law in certain countries. According to such laws, you are allowed to transfer the gain from the sale of an asset to a replacement acquisition. As a result you can distribute the taxation of the gain over the expected useful life of the replacement acquisition (refer to [Transferred Reserves \[Page 189\]](#)).



Special system functions support the creation and writeoff of these special reserves. (refer to [Derived Depreciation Areas \[Page 67\]](#)).

## Interest

For internal accounting purposes, it is also relevant to evaluate the fixed capital tied up in an asset in addition to the depreciation. You can account for the tied up capital by calculating imputed interest (refer to [Calculation of Interest \[Page 203\]](#)).

**Depreciation Types**

The system treats the calculation of imputed interest as a depreciation type, since it is also controlled by depreciation keys and calculation methods, similarly to the calculation of depreciation..

## Valuation Methods

### Use

In FI-AA Customizing, you can define your own calculation methods for the valuation of fixed assets (*Depreciation* → *Valuation Methods* → *Depreciation Key* → *Calculation Methods*). These calculation methods are not hard-coded in the system. They are based on a number of flexibly-definable calculation keys. By defining your own calculation methods and control parameters, you can represent your specific depreciation methods in the system.

There are pre-defined calculation methods and parameters in the system for the most commonly used depreciation methods.

### Features

Depreciation calculation is based on the control parameters explained below, as well as on the planned useful life of the asset that is entered in the asset master record:

- The [depreciation key \[Page 127\]](#) contains all control data for the calculation of planned annual depreciation. You can enter a depreciation key in each depreciation area in the asset master record.
- The most important part of the depreciation key is the [calculation method \[Page 135\]](#) for the calculation of different types of automatically calculated depreciation (ordinary and special depreciation, and interest). The calculation method is particularly important for defining the [depreciation calculation method \[Page 138\]](#).
- Special functions let you comply with a [cutoff value \[Page 150\]](#) (scrap value).



Changing the Customizing definition of the depreciation keys or calculation methods does not automatically lead to a correction of depreciation values that have already been calculated for individual assets. For that to happen, you have to recalculate depreciation (*Tools* → *Recalculate values*).

## Depreciation Keys

### Use

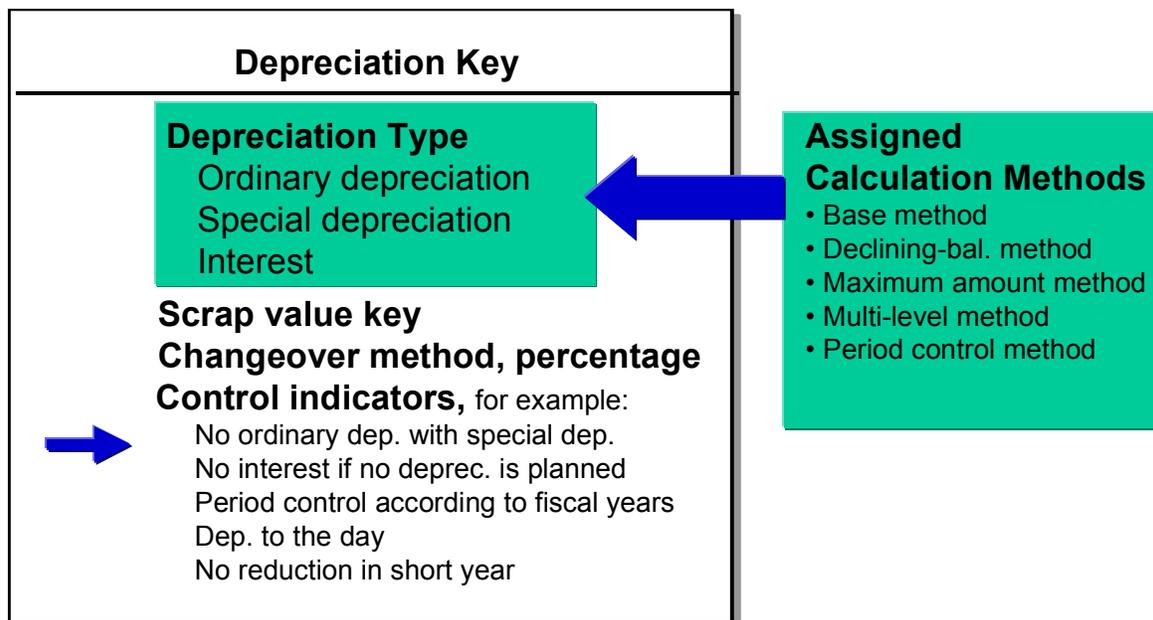
The depreciation key contains the value settings which are necessary for determining depreciation amounts. It represents a combination of calculation rules, which are used for the automatically calculated depreciation types

- Ordinary depreciation
- Special depreciation
- Imputed interest

### Features

You assign [calculation methods \[Page 135\]](#) to each depreciation key for the actual determination of depreciation amounts.

You can define depreciation keys and calculation methods in Customizing for Asset Accounting (*Depreciation* → *Valuation Methods* → *Depreciation Keys*).



### Components and Control Parameters of Depreciation Key

Depreciation keys are defined at the level of the [chart of depreciation \[Page 16\]](#). Therefore, they are available in all company codes. With the help of the depreciation keys defined within a chart of depreciation, you can set up the chart of depreciation with uniform depreciation terms based on the special rules for valuation in an economic area (country, geographical region and so on).

## Depreciation Keys

The standard charts of depreciation in the R/3 System contain depreciation keys that are predefined to meet country-specific depreciation needs.

You can divide the duration of depreciation into several phases in the depreciation key. If you enter a changeover method for one of these phases, the system changes over to the next phase as soon as the event specified in the changeover method occurs. Then the system uses the type of depreciation calculation that is specified for that next phase.

### Refer to:

For more information on the calculation methods and parameters entered in the depreciation key, see:

[Changeover Methods \[Page 129\]](#)

[Changeover After the End of Planned Useful Life \[Page 132\]](#)

[Other Features of Depreciation Key \[Page 133\]](#)

[Calculation Methods \[Page 135\]](#)

[Cutoff Value \[Page 150\]](#)



Also refer to the system long texts for the particular control parameters of the depreciation key.

## Changeover Method

### Use

Certain depreciation methods necessitate a changeover to another calculation method for mathematical reasons in order to depreciate the asset completely within the period of use. An example is the declining-balance method of depreciation, which never results in a net book value of zero. Apart from this, there may be legal regulations that allow or necessitate the changeover to another method.

Therefore, when you assign calculation methods to a depreciation key, you can enter a changeover method. The changeover method specifies when the system should change over to a different calculation method (for example, *Changeover when net book value percentage is reached*). The changeover method also specifies the conditions under which the changeover takes place. You can also enter a net book value percentage for certain changeover methods.

You can divide the duration of depreciation into several phases in the depreciation key. If you enter a changeover method for one of these phases, the system changes over to the next phase as soon as the event defined in the changeover method occurs. Then the system uses the type of depreciation calculation that is specified for that next phase.

### Features

#### Changeover Methods

You can set up the following changeover methods:

- **Changeover when depreciation amount of changeover method higher**

The results of the depreciation calculation in one phase in the depreciation key are compared with the results in the following phase. Changeover takes place as soon as depreciation in the following phase is higher than in the prior phase.
- **Changeover when net book value percentage reached**

With this method, changeover takes place as soon as the net book value falls below a specified percentage of the acquisition value.
- **Changeover when net book value percent less or same as x%**

With this method, changeover takes place as soon as the net book value is the same as or falls below a specified percentage of the acquisition value.
- **Changeover when net book value is less than changeover amount**

In the Customizing definition of company code specifications for a depreciation area, you can specify a global changeover amount in the local currency of the depreciation area. When the net book value falls below this changeover amount, changeover to another method takes place.

You maintain the changeover amount in Customizing for *Asset Accounting*. Choose *Valuation* → *Amount Specifications (Company Code/Depreciation Area)* → *Specify Changeover Amount*.
- **Changeover when net book value is less than straight-line rate**

## Changeover Method

The straight line depreciation rate is calculated from the useful life and serves as a comparison with the net book value. If the net book value falls below this straight line rate, changeover to another method takes place.

- **Changeover after the end of planned useful life**

You can also change over to another method when the planned useful life has expired. Declining-balance depreciation, in particular, is only defined for use during the useful life. If, for example, you were to post a post-capitalization after expiration of the useful life, you would have to use a different method.

With changeover at the end of the planned useful life, the switch to a specified changeover method takes place at an exact period. With other changeover methods, the changeover takes place according to fiscal years. The changeover criteria are checked with reference to the total depreciation for the year, and the depreciation for the entire fiscal year is either calculated with the original key or with the new changeover key.

- **Changeover in next year as soon as straight-line higher (Poland)**

Functions the same as *Changeover when depreciation amount of changeover method higher*, except that the changeover does not take place until the following year.

- **User-defined changeover using a customer enhancement**

Using customer enhancement (customer exit) AFAR0003, you can define your own changeover methods. For more information, see the documentation of the customer enhancement (transaction SMOD.)

## Timing of the Changeover

Generally, the system determines which phase in the depreciation key is to be used for calculating asset values only at the time of the carryforward of annual values. This means that the time of the carryforward of annual values is the only time the system checks if the changeover method necessitates a change in the calculation of depreciation.

Exceptions to this rule are:

- Changeover method *Changeover when depreciation amount of changeover method higher*

In this case, the system checks at the time of the initial acquisition, as well as at the time of the carry-forward of annual values, whether it should change to the changeover method.

- Changeover method *Changeover after end of the useful life*

If the end of planned useful life does not fall at the end of a fiscal year, the system determines the method that applies for each activity (either the year-end carryforward or a transaction), based on the asset value date. However, the system does not calculate using two methods for one activity (that is, for the time period before the end of the planned useful life and the time period after the end of the planned useful life). The determining factor for deciding which method is valid is whether the asset value date for the activity (year-end carryforward or transaction) is before or after the end of the planned useful life. This means that a changeover after the end of planned useful life will only take effect, at a year-end carryforward, after the fiscal year is over in which the planned useful life ended. For a transaction, the system determines on an individual basis whether the value date is before or after the end of the planned useful life.

## Changeover Method



A changeover to a different percentage rate or base value in the levels of a multi-level method is not considered a changeover method in the above sense. The changeover to another level takes place at the exact period for each activity.



[Changeover After the End of Planned Useful Life \[Page 132\]](#)

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**Example: Changeover After the End of Planned Useful Life**

## Example: Changeover After the End of Planned Useful Life

The following conditions apply for this example for changeover after end of the planned useful life:

- Depreciation start: July 01, 1999
- Useful life: 5 years
- End of planned useful life: June 30, 2004
- Acquisition and production costs: 100
- Depreciation method: straight-line, percentage rate based on useful life, base value 100% of acquisition and production costs
- Changeover after the end of planned useful life: percentage rate based on useful life, base value 50% of acquisition and production costs

This results in the following course of depreciation:

1999: 10 ( $100/60*6$ )

2000: 20 ( $100/60*12$ )

2001: 20 ( $100/60*12$ )

2002: 20 ( $100/60*12$ )

2003: 20 ( $100/60*12$ )

2004: 18 ( $100/66*12$ ) or 2000: 10 ( $100/60*6$ )

2005: 10 ( $50/60*12$ )

There is no changeover in the year 2004. Instead, the planned useful life is internally increased by 6 months, and the old method is still used. The system acts in this fashion, since the system determined that this method allowed for depreciation below zero and after the end of the useful life. If you want the other option, you have to change the base method so that calculation of depreciation is only allowed to the end of the useful life and depreciation below zero is not allowed.

A transaction with an asset value date up to June 30, 2004 will be subject to the calculation method of the old phase. A transaction with an asset value date after July 1, 2004 will be subject to the calculation method of the next phase, as a result of the changeover method.

## Other Features of Depreciation Key

### Use

The depreciation key offers further settings for depreciation calculation, in addition to the settings already discussed.

### Features

#### No Ordinary Depreciation with Special Depreciation

You can specify that the system does not calculate ordinary depreciation if there is special tax depreciation. This means ordinary depreciation is set to zero.

#### No Interest If No Depreciation is Planned

You can specify that the system does not calculate imputed interest unless depreciation is also calculated.

#### Period Control According to Fiscal Years

You can specify that a given depreciation key, for selected company codes and fiscal years, uses period controls that are different from those in the period control method.

This may be necessary, for example, when depreciating according to US law, if you only apply the mid-quarter convention to acquisitions in specific company codes or fiscal years.

#### Depreciation to the Day

You can specify that the system performs the depreciation calculation to the day. The period control rules in the calculation method are thereby deactivated for the entire life of the asset.



The system takes the 29th of February into account only if there were transactions for the asset during this leap year. If there were no transactions during a leap year, the annual depreciation for the year is the same as in a normal year.

This special handling meets legal requirements in France.

#### Depreciation Calculation in Shortened Fiscal Years

You can specify that depreciation is not reduced in shortened fiscal years, even if settings were made to that effect in the depreciation area at company code level.

#### Acquisitions Allowed Only in Capitalization Year

You can specify that the system only allows acquisitions in the year in which depreciation started for the asset. This may be necessary for technical reasons when you use sum-of-the-years-digits depreciation, for example. You may also want to use this function for your own internal, organizational reasons.

#### Number of Places for Rounding

You can specify the number places to which the system should round the percentage rate for depreciation calculation.

## Other Features of Depreciation Key

### Depreciation Class

You can classify the depreciation key. This characteristic can be used as a selection criterion in reporting.

### Multiple Shift Use

You can specify that the system calculates increased depreciation due to increased wear and tear on assets during multiple shift use.

### Affect of Scrap Value on Base Value for Depreciation

You can specify how the scrap value influences the base value for depreciation (for example, by reducing the base value).

You need this setting only in the following case: You have a depreciation key with different phases, each with different calculation methods, and you want the treatment of the scrap value to also be different in each phase. Normally the treatment of the scrap value is the same in the depreciation key throughout the useful life.

According to Federal Income Tax law (§350) in the USA, scrap value has to be handled differently in the declining-balance phase of depreciation than after the changeover to straight-line depreciation.

### Calculate Shutdown

By specifying shutdown periods in the master record, you can have the system suspend depreciation during shutdown periods.

Refer also to the online long texts for these functions in the system.

## Calculation Methods (Control Functions)

### Use

The system uses calculation methods for the calculation of depreciation and imputed interest. You assign calculation methods to [depreciation keys \[Page 127\]](#). The calculation methods provide the parameters for the depreciation calculation program.

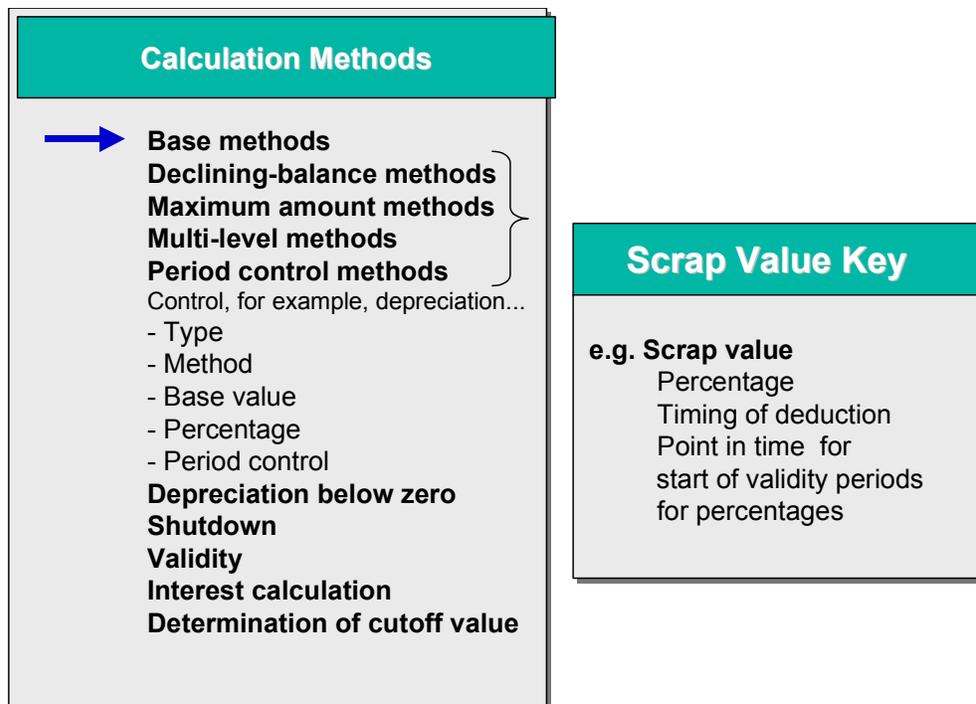
The calculation of depreciation is controlled by the calculation methods, the control parameters that are entered in depreciation keys, and the [cutoff value keys \[Page 150\]](#).

### Features

You maintain each calculation method separately, and then assign it to a depreciation key. Since the individual calculation methods are independent of each other, you can use a given calculation method in more than one depreciation key. As a result, you do not have to define a large number of new calculation methods in order to maintain a number of depreciation keys that function similarly.

The individual calculation methods, with the exception of the base method, are dependent on the chart of depreciation. This means you can represent your country-specific depreciation requirements by means of calculation methods that are chart-of-depreciation-specific. The system helps you to choose the right methods by only offering methods for selection that apply to your given chart of depreciation. You can also enter default values for depreciation areas and company codes.

The following graphic provides an overview of the control functions of calculation methods.



### Calculation Methods

### Calculation Methods (Control Functions)

The standard calculation methods are an integral part of the system and cannot be altered. If you need to modify a calculation method for legal or business reasons, copy the calculation method and make the alterations to the copy. The key of the calculation method that you create has to begin with X , Y or Z.

Any changeovers to other calculation methods during the duration of depreciation are defined in the depreciation key.

### Calculation Methods

Calculation Method	Control Parameters
<a href="#">Base Method [Page 137]</a>	<a href="#">Depreciation type [Page 124]</a> (ordinary or special depreciation, interest) <a href="#">Depreciation calculation method [Page 138]</a> (for example, <i>Stated percentage</i> ) <a href="#">Treatment of the end of depreciation [Page 140]</a>
<a href="#">Declining-Balance Method [Page 141]</a>	Declining-balance multiplication factor, maximum and minimum percentage rate
<a href="#">Maximum Amount Method [Page 142]</a>	Maximum amount, currency, validity date
<a href="#">Multi-Level Method [Page 143]</a>	Validity date or period, levels, <a href="#">base value [Page 145]</a> , calculation of percentage or remaining useful life, reduction of base value
<a href="#">Period Control Method [Page 147]</a>	Period control for acquisition, subsequent acquisition, retirement, transfer



Refer also to the system long text documentation for the control parameters of the individual calculation methods.

### Activities

If you need your own calculation methods, define them in FI-AA Customizing. Choose *Depreciation* → *Valuation Methods* → *Depreciation Keys* → *Calculation Methods*.

## Base Method

### Use

The base method contains general control parameters the system needs for calculating depreciation. You enter the base method in a depreciation key. The base method is independent of the chart of depreciation, meaning that it does not contain any country-specific settings.

### Features

You specify the following in the base method:

- [Depreciation type \[Page 124\]](#)
- [Depreciation calculation method \[Page 138\]](#)
- [Treatment of the end of depreciation \[Page 140\]](#)

### Activities

If you need base methods other than those provided by SAP, define your own base methods in FI-AA Customizing. Choose *Depreciation* → *Valuation Methods* → *Depreciation Keys* → *Calculation Methods*.

## Depreciation Calculation Methods

# Depreciation Calculation Methods

## Use

The depreciation calculation method is the most important characteristic of the base method. The depreciation calculation method makes it possible to carry out the numerous different types of depreciation calculation in the system. Depending on how the depreciation calculation method is set up, the system determines which further control parameters need to be specified in the depreciation key and which do not. For example, when you choose the *Stated percentage* depreciation calculation method, you have to enter a percentage in the depreciation key.

The depreciation calculation methods listed below are provided in the standard system.

## Features

### Percentage from Useful Life / Percentage from Remaining Useful Life

There are two versions of this depreciation calculation method. In the first, the system determines a depreciation percentage rate from the total useful life; the rate remains the same for each year. The second version calculates a new percentage rate for each year based on the remaining useful life. In this version, the depreciation percentage rate rises constantly and then reaches 100% in the last year of the useful life.

### Total Percentage Rate in the Tax Concession Period

This method allows you to depreciate a certain percentage rate from the depreciation base within a tax concession period. In order to calculate the current periodic depreciation, the system first determines the accumulated depreciation up to the period under examination. The period depreciation is the difference between the already existing depreciation and the total depreciation allowed. With subsequent acquisitions, the system automatically catches up depreciation from previous years in a lump sum.

### Stated Percentage Rate

In contrast to a total percentage rate, here you specify the percentage rate for each fiscal year. The system uses this percentage rate for calculating depreciation for each period. For example, you can depreciate 3.5% in each of the first 12 years, then 2% a year for 20 years and 1% per year for the remaining 18 years. The total of the percentage rates over the useful life is logically always 100%, so that complete depreciation is reached by the end of the useful life.

### Percentage Rate from Remaining Life + Changeover Date - Depreciation Start Date

This method is used as a changeover method (in the next phase in the depreciation key) following depreciation within the tax concession period of an investment support measure. The net book value of the asset will be depreciated over the total useful life when the tax concession period ends (that is, the actual duration of depreciation encompasses the tax concession period plus the total useful life that is entered).

### Mean Value from Several Areas

When defining depreciation areas, you can establish dependencies between them by specifying a mathematical formula. This method allows you to calculate depreciation in one area based on the depreciation in another area using this mathematical formula. Using this method you can, for

## Depreciation Calculation Methods

example, calculate the mean value from straight-line depreciation and declining balance depreciation.

### Unit-of-Production Depreciation

Unit-of-production depreciation is based on the output-related use of the asset. When you specify a total expected output or a total expected number of units, and the exact output per period or exact unit of production output figure per period, the system determines the resulting depreciation for each period. You enter the output or number of units at the level of the depreciation key.

### Depreciation Over Remaining Units of Production

In the same way as with the unit-of-production method of depreciation, the amount of depreciation here is dependent on output. In contrast to the unit-of-production method of depreciation, the system uses the remaining units of production and not the total units of production to determine the periodic depreciation. Depreciating using the remaining units of production ensures that, for post-capitalization, the book value reaches zero when the total output or the total units of production is reached.

### Sum-of-the-Years-Digits Method

An arithmetic sequence is set up based on the total useful life. The depreciation percentage rate is proportional to the remaining useful life.

### Depreciation According to the Present Value of Lease Installments

This depreciation calculation method is designed for leased assets that have been capitalized using the capital lease procedure (refer to [Leased Assets \[Page 196\]](#)). The depreciation amounts correspond here to the present value of the periodic lease installments. The interest is determined as the difference between the lease installment and the present value.

### Declining-Balance Method of Depreciation According to Japanese Regulations

Refer to: [Japan: Declining-Balance Method of Depreciation According to Japanese Requirements \[Page 158\]](#)

### Your Own Depreciation Calculation Method

Using customer enhancement (customer exit) AFAR0002, you can program your own depreciation calculation methods. For more information, see the documentation of the customer enhancement (transaction SMOD.)

## Ending Depreciation

# Ending Depreciation

## Use

The depreciation of a fixed asset is usually finished when a net book value of zero or the end of the planned useful life has been reached. Sometimes, the book value has not yet reached zero when the useful life is expired, due to the depreciation method used. By adjusting the way the system handles the end of depreciation (in the base method), you can continue to depreciate beyond the end of the useful life.

## Features

You specify how the end of depreciation is handled in the base method, which is independent of the chart of depreciation. However, you can enter default value for depreciation areas and company codes in Customizing for *Asset Accounting (Depreciation → Valuation Methods → Depreciation Key → Default Values)*. Using such default values, you can maintain your base methods so that you have different ways of handling the end of depreciation in different depreciation areas and company codes.

## Depreciation Calculation after End of Planned Useful Life

The system continues to calculate depreciation after the planned useful life of the fixed asset has ended.

## Curb

With depreciation beyond the planned useful life, the depreciation percentage rate can be derived, not only from the planned useful life, but also from the actual useful life. This method produces a declining-balance effect instead of a straight-line effect (curb).



An asset that originally had a useful life of 10 years is depreciated in year 11 by  $1/11 = 9.09\%$ , in year 12 by  $8.33\%$  and in year  $n$  with  $100/n\%$ .



When you use below-zero depreciation with a curb, the system determines the percentage rate, after the end of planned life, to the exact period and not to the year.

## Depreciation Below Zero

It is also possible to depreciate below zero as long as the depreciation area allows a negative net book value. You have to set an indicator in the base method to allow this kind of depreciation. Depreciation below zero can, for example, be useful for cost-accounting purposes.

If you choose an appropriate changeover method, you can also depreciate after the end of useful life using a different depreciation key. For more information, see [Changeover Method \[Page 129\]](#).

## Reduce Useful Life at End of Fiscal Year

Depreciation usually ends within the fiscal year due to the fact that the depreciation start date for the asset is also within the fiscal year. Using a setting in the base method, you can automatically reduce the useful life so that the close of depreciation always falls at the end of the fiscal year.

## Declining-Balance Method

### Use

Diminishing-rate depreciation includes both the declining-balance method, as well as the sum-of-the-years-digits method (see [Depreciation Calculation Methods \[Page 138\]](#)).

### Features

The normal declining-balance method of depreciation multiplies the straight-line percentage rate resulting from the useful life by a given factor. Since a relatively short useful life can produce a very large depreciation percentage rate, you can specify a maximum percentage rate as the upper ceiling limit in the declining-balance method. A similar principle applies for a very long useful life. Entering a minimum percentage rate prevents the percentage rate from sinking below a given level.

---

**Maximum Amount Method**

## Maximum Amount Method

### Use

You use the maximum amount method to specify the maximum amount up to which the system should calculate depreciation until a certain calendar date. In this way, you can meet those legal requirements, for example, that allow depreciation for certain assets only up to a set amount. During the specified time period, the system calculates depreciation only until this amount is reached.

The maximum amount method does not function in the same way as a maximum [base value for depreciation \[Page 145\]](#). With such a maximum base value, depreciation is based on a limited acquisition value, which may be below the actual acquisition value, being used from the start as the base value for depreciation. In contrast, the system calculates depreciation without any dependency on the acquisition value when a maximum amount method is used. As soon as the maximum depreciation amount that you entered is reached, the system stops calculating depreciation.

You enter the maximum amount method in the depreciation key.

### Activities

If you need maximum amount methods, define them in FI-AA Customizing. Choose *Depreciation* → *Valuation Methods* → *Depreciation Keys* → *Calculation Methods*.

You also specify there whether the maximum amount applies to annual depreciation or accumulated depreciation.

## Multi-Level Method

### Use

Base methods for certain depreciation calculation methods (*Stated percentage* and *Total percentage in concessionary period*) use either a total percentage rate or a periodic percentage rate to calculate depreciation. You can divide these calculation keys into as many levels as you like. A level, in this sense, represents the period of validity of a certain percentage rate. This percentage rate is then replaced by the next percentage rate when its period of validity has expired.

### Features

#### Period of Validity for the Individual Levels

You determine the validity period for the individual levels of a key by specifying the length of time in years and months. You can choose whether the defined validity period begins with

- The capitalization date
- The start date for ordinary or tax depreciation
  - The original acquisition date of the asset under construction
  - The changeover year

The defined time periods of a key always have a common start date. This means that the period from the start of one key to its end will overlap with the next period, which has the same start date but a longer validity period. Therefore, you have to enter the validity periods for the levels in cumulative form.

There is a special indicator you can use when you work with non-calendar fiscal years. The indicator allows you to specify that the definition of the levels applies to the fiscal year and not to the calendar year. However, be aware of the considerations involved when using shortened fiscal years (see [Shortened Fiscal Years \[Page 94\]](#) ).

#### Depreciation Percentage Rates

How you enter the depreciation percentage rate is dependent on the depreciation calculation method being used:

- When using the *Total percentage in concessionary period* depreciation calculation method, you also have to enter the depreciation percentage rate in cumulative form (see example).
- When using the *Stated percentage* depreciation calculation method, you do not enter the percentage rate in cumulative form.



The following example shows the definition of five levels, each one of which should last for a year. The *Total percentage in concessionary period* depreciation calculation method is being used. The depreciation percentage rates in the individual years are 60, 10, 10, 10, and 10%.

Validity period	Percentage
-----------------	------------

**Multi-Level Method**

1 year	60
2 years	70
3 years	80
4 years	90
5 years	100

In addition, you can limit the levels according to specific acquisition years. This enables you, for example, to observe certain legal requirements that place time restrictions.

## Base Value for Depreciation

### Use

The base value for depreciation is closely linked to the selection of the [depreciation calculation method \[Page 138\]](#). Since it is not logical to use every depreciation method with every base value, the base value is usually already determined by the depreciation method. The following base values are defined in the system:

- Acquisition value
- Acquisition value less unplanned depreciation
  - Half of acquisition value
  - Replacement value
  - Half of replacement value
  - Current net book value without special depreciation
- Average net book value (see the example for the calculation in [Calculation of Interest \[Page 203\]](#))
- Average net book value without special depreciation
- Current net book value
- Accumulated ordinary depreciation
- Accumulated special depreciation
  - Sum of accumulated ordinary and special depreciation
- Limited base value (see below)
- Your own base value based on a customer enhancement (AFAR0001) For more information, see the documentation of the customer enhancement (transaction SMOD.)



Since revaluation (refer to [Special Valuation \[Page 167\]](#)) takes place with reference to a specific point in time and not according to a period of time, the system does not calculate a mean value for the **annual revaluation portion** of the asset value when calculating the **average net book value**.

### Features

#### Reducing Percentage Rate

By entering a percentage rate, you can reduce the base value for depreciation. For example, entering 50.000 results in the base value being reduced by half. This reducing percentage rate can be entered in the level definition of the multi-level method.

#### Limited Base Value

You can enter a maximum acquisition value as a base value for the calculation of depreciation. You enter this value in FI-AA Customizing ( *Define maximum base value* ). You can enter this

### Base Value for Depreciation

limited acquisition value, like all other base values, as a key (05) in the definition of the multi-level method.

*Limited acquisition value* means that the system uses a given maximum amount as the base value. If the actual acquisition value of the asset is smaller than the maximum amount, then the system uses the actual acquisition value as the basis for depreciation. If the acquisition value of the asset is above this maximum value, the system depreciates from the maximum value that was set.

You can set a maximum base value per depreciation area and asset class in a given company code. In addition, you can set a time limit on it by entering a "valid to" date. This time limitation applies to the capitalization date of the asset, and therefore can only be set once for each asset. It is, therefore, **not** possible to assign different maximum base values to an asset in the individual years during its useful life.

### Depreciation per Asset Value Date

The system lets you choose to depreciate acquisitions in the original acquisition year either starting from the depreciation start date or from the asset value date of the acquisition. If you choose the depreciation start date, the system carries out uniform depreciation for all acquisitions to an asset. If you choose the asset value date, the system depreciates each acquisition to the asset starting from the asset value date of the individual acquisition posting.

## Period Control Method

### Use

For determining the depreciation start and end date for asset transactions, you can set an appropriate period control in the period control method for the four transaction categories:

- Acquisitions
- Subsequent acquisitions/post-capitalization
  - Intracompany transfers
  - Retirements

This enables you to set the depreciation start date for all acquisitions within the same year to the beginning of the year, for example. You can also set the depreciation start date for retirements to the first or last day of each period. Using the asset value date of a transaction (acquisition or retirement), the system determines the start date or end date of depreciation calculation using the period control.

### Features

#### Standard Period Control

When you set up an asset company code, the system automatically generates period control rules. The most important of these include:

- Pro rata at period start date  
Depreciation start/end is always at the beginning of the period in which the acquisition or retirement takes place.
- Pro rata upto mid-period per period start date  
For transactions up to the middle of the period, the depreciation start or end date is dated from the beginning of the period. Transactions after mid-period, however, are dated from the beginning of the next period.
- Pro rata at mid-period  
This rule corresponds to the first rule. However it is intended for depreciation calculation based on half periods.
- First year convention of a half year  
(See example.)
- Year start date/mid-year/year-end  
For transactions on the first day of a fiscal year, the system calculates a whole year's depreciation, for transactions up to the middle of the year, half a year's depreciation and for transactions after mid-year, no depreciation.
- At the start of the year
- At mid-year
  - At the end of the year (start in the following year)

### Period Control Method

- At mid-quarter  
(see the "pro rata at mid-period" rule)

- At the first quarter
- At the following quarter/following month
  - At the following half-year

Transactions up to the middle of the fiscal year have a depreciation start date on the middle of the year. Transactions after the middle of the fiscal year have a depreciation start date in the following year.

When you specify the fiscal year variant for the company code, the system automatically assigns calendar dates to the posting periods for these period control rules. However, the fiscal year variant has to be set up with either 12 or 24 posting periods.

You can modify these standard rules yourself, allowing you to flexibly define the relationship between the calendar date and the posting periods.



First year convention:	
To 06/30	depreciation start date/end in period 0
From 06/30 to 12/31	depreciation start date/end in period 6

The system interprets period 0 as the start of the fiscal year (January 1), not period 1. Period 6 represents July 1.

### Half-Periods

The number of posting periods in Asset Accounting generally corresponds to the number of posting periods in Financial Accounting. You can, however, double the number of depreciation periods if the basic number of posting periods corresponds to the number of calendar months (12). By setting a control indicator when defining the company code, you can specify the use of half-periods. By specifying the calendar date, on which the second half of a period begins (for example the 16th of the month) you can have the depreciation calculation start and end at the middle of a period. For more information, see [Mid-Quarter Convention \(USA\) \[Page 335\]](#).

In order to use this option, you have to set a special indicator in the allocation rules of the period controls.



It is **not** possible to use half periods when you are using non-calendar fiscal months.

### Variable Period Control

Using an indicator when defining the individual depreciation keys, you can specify that a key does not use the period control of its assigned period control method. Instead it uses period controls you define for the company code and fiscal year.

This may be necessary, for example, when depreciating according to US law, if you only apply the mid-quarter convention to acquisitions in specific company codes or fiscal years.



If you change the period control of assets, in which the depreciation start date was already set, you have to then change their depreciation start date manually.

## Scrap Value

# Scrap Value

## Use

It may sometimes be necessary to depreciate assets not to net book value zero, but only up to a scrap value or cutoff value. Therefore, the system enables you to set up a scrap value for assets per depreciation area. There are two ways of defining a scrap value:

- By assigning a scrap value key to the depreciation key used in the depreciation area
- By explicitly entering an absolute scrap value in the asset master data for the depreciation area

## Features

### Scrap Value Key

In FI-AA Customizing (*Depreciation* → *Valuation Methods* → *Further Settings* → *Define the Scrap Value Key*), you can define scrap value keys with any cutoff percentage rate. You can specify these cutoff percentage rates for each year of acquisition and with a validity period that you define. For each scrap value key, you can specify several cutoff percentage rates with different periods of validity and acquisition years.

In addition, you have to make the following specifications:

- Whether depreciation should first be calculated without considering the scrap value or cutoff value, and then ends when the scrap value is reached. Or whether the scrap value should be deducted from the base depreciation value from the beginning.

In the first case, depreciation stops before the end of the planned useful life. In the second case, the scrap value is the net book value reached at the end of the planned expected useful life.

- At which point the cutoff dates for the defined depreciation levels should start (for example, the capitalization date.)

You can assign a scrap value key to each depreciation key in its definition.



Start date: Capitalization date

Percentage: 5%

Term of validity: 5 years

A cutoff percentage rate of 5% is valid for assets that are no older than 5 years old according to their capitalization date.

### Explicitly Defined Scrap Value

When maintaining the area-specific asset master data, you can enter an absolute scrap value in the detail screen of each depreciation area. This amount is not depreciated.

This has the following affect:

- If no scrap value key is entered in the depreciation key, depreciation ends nevertheless when this value is reached.

**Scrap Value**

- If a scrap value key is defined, the cutoff percentage rate of the key is ignored and the specified amount is used as a scrap value. Depending on the cutoff value key, the amount is either subtracted from the depreciation base before the depreciation calculation start date, or depreciation ends when the value is reached.

**Memo Value**

You can define a memo value or cutoff value for specific assets, as described above. You can also define a memo value that is valid for all assets in a given depreciation area. You enter this memo value in the depreciation area (FI-AA Customizing: *Valuation* → *Amount Specifications (Company Code/Depreciation Area)* → *Specify Memo Value*). This memo value is then valid in this depreciation area for all assets. You can exempt certain asset classes (such as LVAs) from the memo value by means of an indicator in their asset class master record.

The system reflects the memo value by reducing the planned annual depreciation of the acquisition year by the amount of the memo value.



Usually you do not need to manage memo values, since Asset Accounting (FI-AA) always manages gross values. This means it records both the acquisition value and accumulated depreciation, not just the net book value of assets. In this way, the system guarantees that even fully depreciated fixed assets appear in all legally required reports, even if they have a net book value of zero.

---

**Depreciation Methods**

## Depreciation Methods

### Use

The depreciation keys, with their calculation methods and parameters, let you represent the most varied depreciation methods in the system. The following describes the most important of these depreciation methods, and how they are handled in the system.

Standard keys exist in the system for the depreciation methods listed. Examples of depreciation keys for depreciation common in Europe are provided.

## Straight-Line Depreciation over Total Useful Life

### Use

The asset is depreciated uniformly over the specified total useful life. Post-capitalization and subsequent acquisitions necessitate an increase in depreciation, by the amount which would have been necessary to fully depreciate the addition over the original useful life of the asset. This results in an increase in the length of time necessary to depreciate the asset, that is, the time period from the beginning of depreciation until the book value of zero is reached.

### Calculation :

Depreciation = APC / expected useful life



APC: 1000

Useful life: 10

Depreciation = 1000 / 10 = 100

A depreciation key, which determines a percentage rate from expected useful life and uses the acquisition value or replacement value as the base value for depreciation, characterizes this depreciation method. Furthermore, certain depreciation keys (in their base method) allow depreciation below book value zero after the planned life has expired.

In this case, the rate of depreciation can decrease after the planned life because you can then use the already expired useful life instead of the planned expected useful life to calculate depreciation. In the 11th year of use, you would not calculate with 10% as in the preceding 10 years, but only with  $1/11 = 9.0909\%$ .

---

**Straight-Line from the Book Value over Remaining Useful Life**

## Straight-Line from the Book Value over Remaining Useful Life

### Use

The book value of the fixed asset is distributed in uniform amounts over the remaining life. However, unlike straight-line depreciation over the total useful life, this method ensures that post-capitalization and subsequent acquisitions do not lead to an extension of expected useful life. Post-capitalization or subsequent acquisitions after the expiration of the specified expected useful life do, however, cause problems in this depreciation method. In such cases, the changeover key in the depreciation key used has to provide for another method after the expiration of the expected useful life.

### Calculation :

Depreciation = net book value / remaining life



APC: 1000

Useful life: 10

Net book value: 500

Remaining useful life: 5

Depreciation =  $500 / 5 = 100$

You can represent this depreciation method in the system, for example, with a depreciation key that calculates a depreciation percentage rate from the remaining life, due to the depreciation calculation method *Percentage from the useful life* being set in its base method, and the *Rem. life* indicator being set in the multi-level method. Furthermore, the base value indicator "24" in the multi-level method ensures that the net book value is the basis for depreciation. The net book value and the remaining life are related proportionally, which results in straight-line depreciation. In the event of acquisitions after the expiration of the expected useful life, the depreciation key switches to a new phase after the planned end of useful life. The new phase is set up for straight-line/remaining life/pro rata/to zero/to end of life. As a result, these subsequent acquisitions are also depreciated completely.

## Declining-Balance Method of Depreciation

### Use

For the declining-balance method of depreciation, the fixed asset is depreciated by a progressively falling rate. A constant percentage rate is calculated from the expected useful life and a given multiplication factor. This is multiplied with the falling net book value of the fixed asset. For mathematical reasons, the net book value will never reach zero using this method. You change over to straight-line or complete depreciation under these conditions:

- Declining-balance depreciation < straight-line depreciation
- Net book value < x percent of acquisition value
- Net book value < fixed amount
- Net book value < straight-line depreciation

The changeover method is specified in the internal calculation key.

### Calculation :

Depreciation = net book value \* percentage rate from expected useful life and factor



APC: 1000

Exp. useful life: 10

Net book value: 700

Multiplication factor: 3

Depreciation =  $700 * (100\% / 10 * 3) = 210$

---

**Declining Multi-Phase Depreciation**

## Declining Multi-Phase Depreciation

### Use

By specifying the rate of depreciation and the validity period, you can determine a course of depreciation that changes in levels over time (usually decreasing). The validity period can be based, among other things, either on the capitalization date or on the depreciation start date. The change between the levels of depreciation does not have to take place at the start or end of a fiscal year. You can also change to another rate of depreciation during the fiscal year.

#### Calculation :

Depreciation = Acquisition value \* percentage rate of the level



APC: 1000

useful life: 50

Percentage rate year 1-8: 5.00%

Percentage rate year 9-14: 2,50%

Percentage rate year 15-50: 1.25%

Depreciation level 1 =  $1000 * 5.00\% = 50$

Depreciation level 2 =  $1000 * 2.50\% = 25$

Depreciation level 3 =  $1000 * 1.25\% = 12.5$



When you define the depreciation levels in the system, you have to enter the period of validity for the individual depreciation levels as cumulative values (see [Multi-Level Depreciation \[Page 143\]](#)).

## Sum-of-the-Years-Digits Method of Depreciation

### Use

For each year of the expected useful life, the system notes the remaining useful life for the assets and totals the figures in each year. In each fiscal year, the remaining life is divided by this total in order to calculate the depreciation percentage rate for that fiscal year. This method leads to depreciation amounts that are reduced progressively by the same amount each period.

Since the remaining useful life is no longer defined after the end of the planned useful life, this depreciation method does not allow for depreciation after the end of the planned life. However, you can change to another method after the expected useful life has expired.

Acquisitions after the depreciation start year or post-capitalization will necessarily lead to a positive net book value at the end of planned life. For this reason, such transactions are not allowed when using the sum-of-the-years-digits method of depreciation. With this method, you have to handle subsequent acquisitions by creating sub-numbers. It is also a requirement that the acquisition year is the same as the depreciation start year.

#### Calculation :

Depreciation = APC \* remaining useful life (current period) / total of remaining useful life (over entire useful life)



APC: 1000

useful life: 4

Total remaining useful life: 10 (= 4 + 3 + 2 + 1)

Depreciation 1st year =  $1000 * 4 / 10 = 400$

Depreciation 2nd year =  $1000 * 3 / 10 = 300$

Depreciation 3rd year =  $1000 * 2 / 10 = 200$

Depreciation 4th year =  $1000 * 1 / 10 = 100$

---

**Japan: Declining-Balance Method of Depreciation**

## Japan: Declining-Balance Method of Depreciation

### Use

Using this method, the system determines the depreciation percentage rate from the ratio between the relative scrap or cutoff value and the acquisition value. The system then determines the n-th root of this ratio (n = useful life). The depreciation percentage rate is the complement of the percentage that was thus determined. This depreciation percentage rate is in effect for the entire useful life of the asset.

Calculation : Depreciation = Net book value \* depreciation percentage rate



APC: 1000

Scrap value: 10%

Useful life: 10 years

Depreciation percentage rate =  $1 - ((1000/10000)^{1/10}) = 20 \%$

## Mean Value Method

### Use

You can manage the mean value of two depreciation methods in a derived depreciation area that links the values of the two depreciation areas. In order to do so, you have to identify the derived depreciation area as a mean value area. Instead of using the arithmetic mean, you can also link the areas proportionally.

#### Linking formula for the mean value:

Depreciation = (depreciation in area 1) / 2 + (depreciation in area 2) / 2



Depreciation in area 1: 300

Depreciation in area 2: 100

Formula: (depreciation in area 1) / 2 + (depreciation in area 2) / 2

Depreciation = 300 / 2 + 100 / 2 = 200

## Depreciation for Multiple-Shift Operation and Shutdown

# Depreciation for Multiple-Shift Operation and Shutdown

## Use

Increased depreciation is often calculated for assets that are used in multiple shifts. Often no depreciation is calculated for assets that are shut down. The following fields are provided for these instances in the asset master record:

- Multiple-shift factor (time-dependent)
- Variable portion of depreciation (dependent on depreciation area)
  - Shutdown indicator (time-dependent)

## Features

### Multiple-Shift Operation

You can calculate increased depreciation due to multiple-shift operation for all types of depreciation except unit-of-production (unit-of-production depreciation is by definition 100% variable). You take this increased wear and tear on the asset into account using the following method:

- Specify the variable depreciation portion as a percentage rate in the detail screen for the depreciation area. You can enter a different percentage in each depreciation area. Depending on the maintenance level you have defined, you make this entry in either the asset class or the asset master record.
- Enter a multiple-shift factor in the time-dependent data in the asset master record. This shift factor is multiplied by the variable portion of ordinary depreciation.

The total depreciation amount is then calculated as follows:

Depreciation amount = fixed depreciation + (variable depreciation \* shift factor)



The following example shows the depreciation amounts for an asset with 1000 annual depreciation, and 60% variable portion:

shift factor 0:	$400 + (0 * 60 * 1000/100) = 400$ (only fixed portion)
shift factor 1:	$400 + (1 * 60 * 1000/100) = 1000$
shift factor 2:	$400 + (2 * 60 * 1000/100) = 1600$
shift factor 3:	$400 + (3 * 60 * 1000/100) = 2200$

### Expired Useful Life

In the definition of the depreciation key, you can specify for multiple shift use whether

- Both depreciation and the expired useful life should be increased
- Only depreciation should be increased and not the expired useful life
- Neither depreciation nor the expired useful life should be increased

## Depreciation for Multiple-Shift Operation and Shutdown

Using these options, you can ensure, for example, that depreciation is increased during the declining-balance phase, but that the straight-line phase after the changeover continues until the end of the planned useful life.

### Multiple-Shift Operation for Assets with Declining-Balance Depreciation

For assets using declining-balance depreciation, the system increases depreciation amounts during the declining-balance phase of depreciation, based on the multiple shift factor and the variable portion of depreciation. However, depreciation is only increased up to the maximum percentage rate that is specified in the depreciation key.

### Shutdown

If an asset is shut down for a given period of time, you can suspend the depreciation as follows:

- Define the appropriate time interval in the time-dependent data for the asset.
- Set the shutdown indicator in the asset master record for this interval.
- Use a depreciation key that allows shutdown, in the depreciation areas concerned.

The system does not calculate depreciation during the time period of the shutdown. The useful life of the asset increases by this length of time. When you remove the shutdown indicator, the system automatically resumes the calculation of depreciation.



Shutdown does not influence the calculation of interest **to exact periods**. The system stops calculating interest during shutdown only if these conditions are met:

- The *calculate shutdown* indicator is set in the interest calculation key.
- The *no interest if no depreciation is planned* indicator is set in the depreciation key.
- There is no planned depreciation amount for the **entire fiscal year**.

## Unit-of-Production Method of Depreciation

# Unit-of-Production Method of Depreciation

## Use

Unit-of-production depreciation is useful for certain types of assets. This depreciation method allows you to take fluctuations in activity into account for the depreciation calculation by linking the amount of depreciation in the given period directly to the output quantity.

## Features

### Depreciation Method

The calculation of period depreciation is dependent on the depreciation calculation method used in the base method of the depreciation key. Two versions are possible in this case:

- *Depreciation of acquisition value over the total output*

The base value here is the acquisition value or the replacement value.

- *Depreciation of net book value over the remaining output*

Make sure that you use base value 27 (net book value with proportional value adjustments) when using this method.

### Specifications in the Depreciation Key

For forecasting unit-of-production depreciation you have to modify a depreciation key that is dependent on the number of units. You have to modify one depreciation key **for each total output quantity** (application menu: *Environment* → *Current Settings*).

- For the calculation of the unit-of-production depreciation, enter the probable total output quantity of the fixed asset (for the *No. of units/remaining units* depreciation method) or the remaining output (for the *No. of units/total no. of units* depreciation method).

You can change the total output quantity, or the remaining output, to the exact periods. The system then calculates unit-of-production depreciation based on the new total output quantity or the new remaining output, starting with the period in which the change was made.

- Specify the probable output quantity for every depreciation period in fiscal years that are still open.

### Calculation:

Depreciation = acquisition value (net book value) / total output (remaining output) \* period output



APC: 10000

Total output: 10000

Period output: 100

Depreciation = 10000 / 10000 \* 100 = 100

As with other depreciation methods, the actual posting of the unit-of-production depreciation is carried out by the periodic depreciation posting run.

## Examples USA

### Use

A number of depreciation keys that are supplied in the standard chart of depreciation for the United States are described here.

### Features

#### MACRS

For MACRS, the following depreciation keys are defined in accordance with the Internal Revenue Service depreciation rate tables:

- **M200** 3, 5, 7, 10 years property
- **M150** 15, 20 years property
- **MSTL** 27.5 and 31.5 years property

#### ACRS

For ACRS, the following depreciation keys are defined in accordance with the Internal Revenue Service depreciation rate tables:

- **A0xx** defines the ACRS depreciation percentages for 3.5 and 10 years property.
- **A15x** defines the ACRS depreciation percentages for 15 years property. Depending on the month placed in service, use A15A (Jan.) through A15L (Dec.).
- **A18x** defines the ACRS depreciation percentages for 18 years property. Use A18A (Jan.) through A18L (Dec.) for assets placed in service before June 23rd 1984. Use A18M (Jan.) through A18X (Dec.) for assets placed in service after June 22nd 1984.
- **A19x** defines the ACRS-depreciation percentages for 19 years property. Depending on the month placed in service, use A19A (Jan.) through A19L (Dec.).

**Example: German Ordinary Depreciation**

## Example: German Ordinary Depreciation

### Use

Certain general requirements for depreciation stipulated in the German commercial code and German tax law are reflected in special depreciation keys that SAP provides:

- **End of depreciation**

Depreciation always ends when the net book value reaches zero, or when it reaches the memo value specified globally per depreciation area and company code, or when it reaches the scrap value specified in the asset. For German net worth tax purposes, SAP also provides special cutoff keys. However, these special keys are no longer required after 1993.

If you need to take blanket percentage scrap values into account, you can create special scrap value keys. You enter these special keys in the depreciation key as the cutoff value key.

- **Acquisitions during the year of capitalization**

Either the system automatically sets the asset value date to the first day of the capitalization year according to the period control that has been entered; or the user sets the asset value date manually.

- **Acquisitions in subsequent fiscal years**

Additional acquisitions to existing assets are generally allowed. The system always sets the asset value date to the first day of the fiscal year, so that a full year's depreciation is calculated in the year in which the acquisition was posted.

- **Transfers and retirements**

The system calculates transfers and retirements using pro rata temporis. Using pro rata temporis, transactions during the first half of a period start depreciation on the first day of the period, and transactions in the second half of the period start depreciation at the end of the period.

- **Shutdowns**

Shutdowns are not recognized by the standard keys.

The results of these settings for Germany are shown here using the examples of depreciation keys and processes that are currently common in Germany:

### Features

#### LINR Straight-Line Depreciation

This depreciation key calculates depreciation as follows:

Depreciation = net book value / remaining life

In the year of acquisition, the first year convention of a half year is used, whereby the depreciation start date for acquisitions in the first half of the fiscal year is set to the first day of the fiscal year, so that a full year's depreciation is calculated for the asset. For acquisitions during the second half of the fiscal year, the depreciation start date is set to the middle of the fiscal year, so that half of the annual depreciation is calculated.

**Example: German Ordinary Depreciation**

The system ensures that when the planned useful life is expired, the net book value reaches one of the following: either book value zero or the specified scrap value or memo value. Depreciation ends at that point. Acquisitions that are posted to the asset after that time are written off completely in the year they are acquired, so that the net book value of the asset remains the same.

**DGxy Declining Balance with x.y-times the Straight-Line Rate**

Depreciation keys DG20, DG25 and DG30 calculate depreciation from the net book value at x.y-times the straight-line percentage rate, with a maximum of  $10 * x.y \%$ . You enter the declining balance multiplication factor in the declining-balance methods. At the time when this documentation was written, the prescribed depreciation key for new assets in Germany is DG30 with 3-times the straight-line rate, but a maximum of 30%. This depreciation key uses the formula:

Depreciation = net book value \* 3 / total useful life

For existing assets you can use depreciation keys DG25 and DG20.

In the year of acquisition, the first year convention of a half year is used, whereby the depreciation start date for acquisitions in the first half of the fiscal year is set to the first day of the fiscal year, so that a full year's depreciation is calculated for the asset. For acquisitions during the second half of the fiscal year, the depreciation start date is set to the middle of the fiscal year, so that half of the annual depreciation is calculated.

As soon as the straight-line depreciation over the remaining life is greater than the declining-balance depreciation, the system changes over to this straight-line depreciation. The system ensures that when the planned useful life is expired, the net book value reaches one of the following: zero, or the specified scrap value or memo value. Depreciation ends at that point. Acquisitions that are posted to the asset after that time are written off completely in the year they are acquired, so that the net book value of the asset remains the same.

**GL20 / GL25 Buildings Straight-Line**

For the depreciation of buildings, you use depreciation keys that depreciate either 2% over a useful life of 50 years or 2.5% over 40 years. The percentage rates are set in the multi-level methods (14 or 15).

In the year of capitalization, pro rata temporis is used, so that depreciation is calculated starting from the period of the first acquisition. Because of rounding, there can sometimes still be a book value when the useful life has expired. When there are subsequent acquisitions to a building, this results in a mandatory extension of the time period for depreciation. If a book value still exists after the planned useful life is expired, depreciation will continue using the same percentage rate.

**GDxx Buildings Declining Balance**

Depreciation keys GD35, GD50, GD70 and GD10 are provided for declining balance depreciation of buildings according to the different percentage rates permitted by tax laws for particular types of buildings and time periods. These percentage rates are specified in the different multi-level methods of the depreciation key (11, 12, 13, 10).

In the capitalization year a full year's depreciation is always calculated. The percentage rates are specified so that exactly 100% is always depreciated at the end of the planned useful life. However, there still could be a remaining book value after the end of the useful life due to the use of rounding. When there are subsequent acquisitions to a building, this results in a mandatory extension of the time period for depreciation. If a book value still exists after the planned useful life is expired, depreciation will continue using the last percentage rate.

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**Example: German Ordinary Depreciation****LVA Complete Depreciation in Year of Capitalization**

This depreciation key is specifically set up to provide for the complete depreciation of low value assets in the year in which they were acquired. The *Complete depreciation* depreciation calculation method is entered in the base method of the depreciation key. In conjunction with the recommended useful life of one period for low value assets, this depreciation calculation method results in the immediate complete depreciation of the asset in the period of its acquisition. You cannot post subsequent acquisitions in later fiscal years to asset with this depreciation key. In this way, you can always immediately identify low value assets according to their year of acquisition. Retirements in the acquisition year are always calculated with the complete depreciation.

**Net Worth Tax Valuation**

The following depreciation keys are provided for calculating net worth tax values using cut-off values:

- VDxy Declining balance depreciation with x,y-times the straight-line rate
- VLIN Straight-line depreciation
- VGWG Special valuation of low value assets

After 1993 cutoff values are no longer needed for net worth tax considerations, so these depreciation keys are not explained here in detail.

## Special Valuation

### Purpose

The *Special Valuation* component makes it possible to calculate asset values for specialized purposes, such as for insurance contracts.

## Replacement Values (General)

# Replacement Values (General)

## Use

In addition to the historical acquisition and production costs of an asset, the Asset Accounting component enables you to work with the replacement value of the asset, which can provide a more up-to-date basis for calculating values. When determining replacement value, the system offers two options:

## Features

### Indexed Replacement Values

Using index series, you can take periodic changes in value into account automatically. When depreciation is posted, these changes are reflected in the specific asset or asset class. Define the index series or index figures in Asset Accounting (*Periodic Processing*). Enter the key of the index series in the section for asset valuation in the master record of the asset or asset class.

The replacement value of an asset is influenced by two things.

- On the one hand, the replacement value of an asset changes due to inflation.
- On the other hand, technical progress leads to a changed price for an appropriate replacement acquisition.

Therefore, you can specify two index series for each asset for determining replacement value in the Asset Accounting component. The replacement value is then determined by multiplying the index figures in the two index series.

### Revaluation of Fixed Assets and Management of Inflation

The system offers two options for handling changes in the value of all fixed assets in an enterprise:

- Tax laws in your country may require you to carry out a single revaluation of the entire fixed asset portfolio, at intervals of several years, in order to offset the effects of inflation. In the system, you can use [one-time revaluation measures \[Page 175\]](#) for meeting these requirements.

This one-time revaluation is not calculated automatically at the same time as depreciation. You have to define and carry it out manually. You can use collective processing to carry out this revaluation.

To carry out periodic revaluation, choose *Periodic Posting* → *Balance Sheet Revaluation* → *Post Revaluation*.

- Using **periodic revaluation**, you can keep track of and post the effects of inflation.

To carry out periodic revaluation, choose *Periodic Posting* → *Balance Sheet Revaluation* → *Inflation*.

For more information, see the SAP Library for CA – Country-Specific Documentation. The procedure is described using Argentina as an example.

## Indexed Replacement Values

### Purpose

The *Indexed replacement value* component makes it possible to calculate replacement values for assets, and to use replacement values as the basis for calculating depreciation. You determine the replacement values using index series.

The replacement value can be used in certain situations as the basis for depreciation for one of the following reasons:

- In certain countries, where the rate of inflation is very high, depreciation based on replacement value is allowed.
- It makes sense for reasons of pricing policy to take price changes of investment goods into account for cost accounting purposes. For example, a company concerned with inflation accounting can use this method to take actual reduction in the value of assets into account in its pricing policy.
- For companies interested in the preservation of real asset values, they can use depreciation from replacement value as the basis of their reserves policy.

### Features

Therefore, the cost-accounting depreciation area is set up in the standard system so that you can manage replacement values there. Current depreciation based on the replacement value is then periodically transferred to cost accounting when you carry out the depreciation posting run.

However, it is also possible to define replacement values in depreciation areas that automatically post to the general ledger. In this way, the depreciation posting program automatically posts depreciation values, as well as changes to the asset balance due to revaluation (both upward and downward), to Financial Accounting.

### Insurance Values

You can also use index values for determining insurable values. In many instances, the premium for an insurance contract is based on the indexed acquisition value of the asset. You can specify an index series for this purpose in the asset master record or in the depreciation area (see [Insurance Values \[Page 192\]](#)).

### Index Series

The system determines the replacement value of an asset using the index series that you define (*Periodic Processing*) and specify in the individual master records.

The calculation of the current replacement value can take place in two ways. It can be determined from

- The replacement value of the previous year
- The APC in an historical acquisition year (historical calculation)

This procedure is normally used after the legacy data transfer, when you want to calculate new replacement values and there are no values available from the previous year.

**Indexed Replacement Values**



[Graphic: Historical Calculation \[Page 173\]](#)

**Backlog Invoice**

If you set the indicator in the depreciation area definition, the system also calculates any revaluation (upward or downward) of accumulated depreciation from previous years (backlog depreciation). Set this indicator if you want the system to index (revalue) not only the acquisition value, but also the value adjustments (accumulated depreciation) from the past, when it calculates the replacement value.



APC:	10000
Acc. depreciation:	6000
Current net book value:	4000

If this indicator is set, a revaluation of 10% will increase the APC to 11000 and the accumulated depreciation to 6600. This means that the net book value is only increased by 10% to 4400. If this indicator were not set, the net book value would increase to 5000.

**Calculation Formulas**

The graphic shows the calculation formulas that the system uses for the calculation of replacement value and backlog.

**Repl. val. from previous year**

$$RV\text{-Value (curr.yr.)} = RV\text{-Value (prev.yr.)} * \frac{\text{Index (curr.yr.)}}{\text{Index (prev.yr.)}}$$

$$\text{Acc.reval.depr. (Backlog)} = \text{Acc.reval.depr. (prev.yr.)} * \frac{\text{Index (curr.yr.)}}{\text{Index (prev.yr.)}}$$

**Historical calculation**

$$RV\text{-Value (curr.yr.)} = APC * \frac{\text{Index (curr.yr.)}}{\text{Index (acquis.yr.)}}$$

$$\text{Acc.reval.depr. (Backlog)} = \text{Acc.depr. (yr.start)} * \frac{\text{Index (curr.yr.)}}{\text{Index (acquis.yr.)}} - \text{Acc.reval.depr.(yr.start)}$$

**Determining Values with Index Series (APC and Backlog)**

**Age-Dependent and Year-Dependent Index Figures**

Depending on what year the index figures start, the index series can be divided into two types:

**Indexed Replacement Values**

- Age-dependent index figures are based on the n-th year that an asset belongs to the company. Age-dependent figures represent a yearly rate of change from the point in time when the asset was acquired. The year 1 has the index figure 100.
- Year-dependent index figures are based on a specific fiscal year, and represent a rate of change from that base fiscal year. This base year has the index figure 100.

You can use one index to reflect both inflation and technical progress, or you can set up two separate index series for these situations. For example, you can specify a year(inflation)-dependent and an age(progress)-dependent index for determining replacement value (in the detail screen of the depreciation area). When determining the replacement value, the system adds the index figures of the two index series.

Since the system manages revaluation separately from the original acquisition value, you can see these values separately in reporting. Note that the system only automatically revaluates the asset values that existed at the start of the fiscal year. The system does not take transactions in the current fiscal year into account. In addition, the revaluation amounts that the system calculates on the basis of the current index figures are always related to the entire fiscal year (just like planned depreciation).



The index figures in the R/3 FI-AA component always relate to the fiscal year, not the calendar year. Therefore, if you have a non-calendar fiscal year, revise the index figures related to the calendar year accordingly before entering them in the R/3 System.

**Defining the Index Series**

When defining an index series, first select an appropriate index class. The following specifications are made in the index class:

- Whether the index series is year-dependent or age-dependent
- Whether the replacement value should be calculated historically.

SAP supplies the corresponding index classes. When creating an index series, enter index figures according to age or year. Also enter the percentage rate for the increase of asset values to be used for simulation of future fiscal years. Note that the simulation percentage rate defines an increase. Entering a simulation percentage rate of "110" means, for example, an annual increase of 10%.

**Prerequisites**

If you want to use replacement values as the basis for calculation within a depreciation area, be aware of the following:

- When defining the depreciation area in question, allow for revaluation
  - of acquisition and production costs
  - of accumulated depreciation from the past (backlog depreciation)
- Specify (if necessary) that the following should be posted periodically to general ledger accounts
  - Depreciation (depreciation posting program)
  - Changes to the asset balance due to revaluation (depreciation posting program) and

**Indexed Replacement Values**

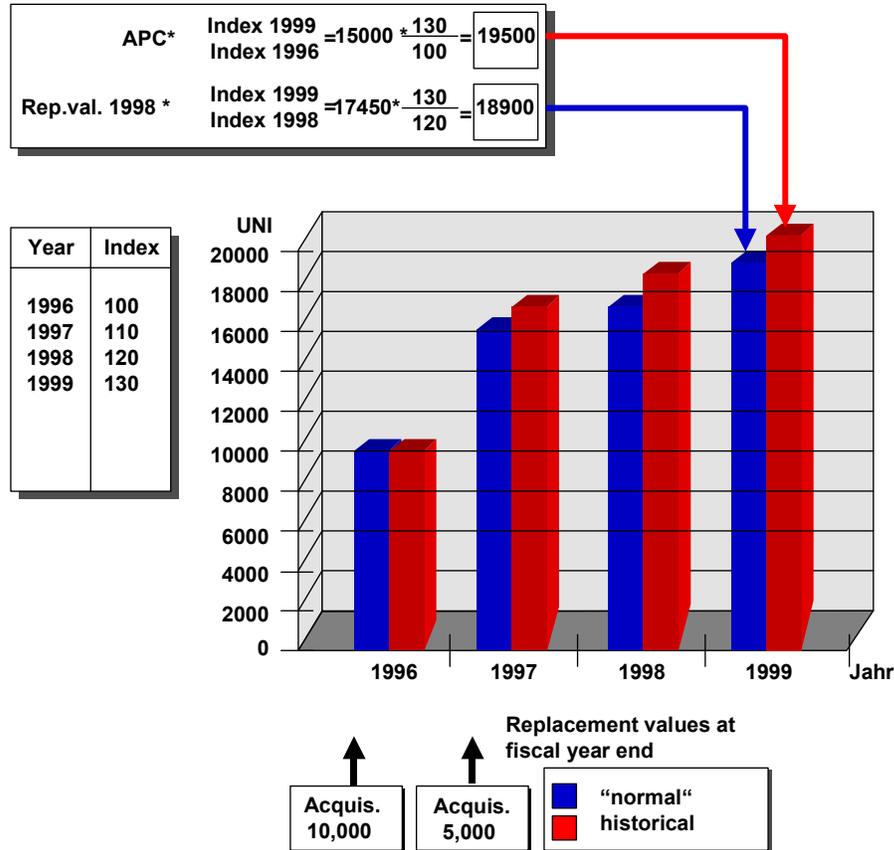
- Changes to the asset balance due to transactions (asset value posting program)  
(See [System Settings for Posting Depreciation \[Page 118\]](#)).
- Enter a depreciation key for this depreciation area with a calculation method (multi-level method) that uses the replacement value as the base value.
- Enter the key of an index series for the depreciation area in the asset master record or in the asset class (you can specify a second index series in the detail screen of the particular depreciation area).
- Maintain your index series by periodically entering current index figures.

[Graphic: System Settings for Replacement Values \[Page 174\]](#)

## Graphic: Historical Calculation

The difference between historical calculation and calculation from the replacement value of the previous year ("normal") is demonstrated by a subsequent acquisition to an asset. When historical calculation is used, the calculation of the replacement value is carried out as if the subsequent acquisition were in the capitalization year.

The graphic below compares this aspect of these two calculation methods.

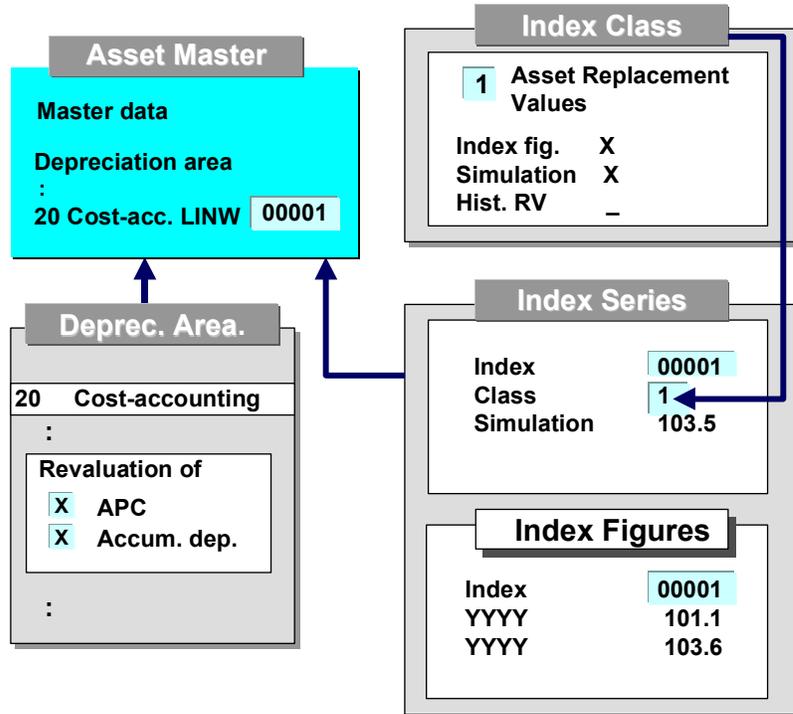


Index series that calculate on the basis of the historical APC are especially suited for assets for which you need to calculate a replacement value, when the assets were acquired in previous years and no replacement values have been calculated. This applies, for example, to assets transferred from a legacy system.

Graphic: System Settings for Replacement Values

## Graphic: System Settings for Replacement Values

The following graphic shows all the entries necessary for calculating with replacement values:



### Calculating Using Replacement Values

## Graphic: System Settings for Replacement Values

## One-Time Revaluation Measures

### Purpose

This component is for carrying out one-time revaluation measures for the balance sheet. This one-time revaluation makes it possible to comply with tax requirements in some countries for a single revaluation of all fixed assets in order to offset the effects of inflation.

#### Refer to:

For more information on periodic revaluation, see *CA – Country-Specific Documentation*. The procedure is described there using Argentina as an example.

### Features

The system enables you to define revaluation measures in Asset Accounting and use collective posting to post them.

You can manage revaluation values in any depreciation area. In accordance with the legal requirements in many countries, however, you must be able to separately identify such changes in value. In this case, you must use a separate depreciation area for each revaluation. You manage and depreciate the revaluation separately from APC and other revaluation in this depreciation area.



You have to manage and depreciate revaluation in its own depreciation area, if you want to post depreciation of the historical APC to different value adjustment accounts than depreciation of the revaluation.

### Definition of Revaluation

You define revaluation (time limitations, base depreciation area for the calculation of revaluation, and so on) in *Customizing for Asset Accounting*. For each revaluation, you define the depreciation area in which it should be carried out. In this way, it is possible to manage and depreciate the revaluation separately in its own depreciation area. You can also define additional (already existing) depreciation areas for revaluation.

Since the rules for revaluation vary widely according to the country and particular time, the system does not provide standard calculation rules for revaluation. However, there is an SAP enhancement project (ARVL0001). You can program your own revaluation rules and install them in the system with the help of this project. You have to assign this SAP enhancement project to a newly-defined user modification project before it can be used (transaction CMOD). See [Customer Enhancements \(Customer Exits\) \[Page 359\]](#).

### Planning Revaluation Using Collective Posting

If you wish to plan and post revaluation using collective posting, follow these steps:

- Define the permitted revaluation and the corresponding depreciation areas in *Customizing for Asset Accounting (Special valuation)*. It is important to specify whether the revaluation should apply only to APC, or if it should also apply to accumulated depreciation from the past (backlog).
- Maintain the depreciation terms of the new depreciation area in the affected asset classes (FI-AA Customizing: *Valuation* → *Determine Depreciation Areas in the Asset Class*).

### Graphic: System Settings for Replacement Values

- Adapt the SAP enhancement project ARVL0001 to your specific requirements. Activate a customer enhancement project with this SAP enhancement project (see [Definition of Revaluation \[Ext.\]](#)).
- Using the revaluation report, create a batch input session for posting the desired revaluation (*Periodic processing* → *Post revaluation*). In addition, the report creates a new depreciation area for all assets that are involved. This new depreciation area is the area in which revaluation is to be carried out, according to your specifications in Customizing.
- Process the batch input session. The session plans the revaluation for each fixed asset in the corresponding depreciation areas.

### Manual Planning

If you choose to plan revaluation manually, the revaluation report can still be used to create the depreciation areas required for the individual assets. If you choose, the report does not create a posting session in that case. For planning, use transaction type *Rxx* (xx = key of the revaluation). The system automatically creates this transaction type when you define the revaluation.

If you want to post gross revaluation, that is, with the revaluation of historical depreciation (backlog calculation), use transaction type 800. Transaction type 800 is defined in the standard system so that it posts to all depreciation areas that allow for revaluation and backlog calculation in their Customizing definitions. If you want to limit the posting of gross revaluation only to specific depreciation areas, you have to change the Customizing definition of transaction type 800 accordingly (function *Areas*). Or copy transaction type 800 and change the copy.

In this instance also, FI documents are not created until the periodic posting of the depreciation area to Financial Accounting is carried out.



For more information on planning revaluation, see [Revaluation \[Page 419\]](#).

### Settings for the Revaluation Depreciation Area

Generally, you need to post the values from a depreciation area that is solely for revaluation (without APC) to the general ledger accounts along with values from the book depreciation area. The system does not create any FI posting documents when planning revaluation in the FI-AA component. Therefore, you have to define such revaluation depreciation areas with the following settings for posting.

- You have to automatically post the changes to asset values due to transactions to the general ledger. This posting ensures that the proportional value adjustments (revaluation) are cleared correctly at asset retirement. Therefore, set the *Post assets in General Ledger realtime* indicator in the definition of the depreciation area (*Define Depreciation Areas*).

For more information, see [Features at Chart of Depreciation Level \[Page 70\]](#).

- Maintain the depreciation posting rules for the depreciation area (*Post depreciation to the general ledger*). The depreciation posting program then posts the values (depreciation and the planned changes to asset values through revaluation) from this area to the appropriate general ledger accounts (see [Posting Depreciation \[Page 116\]](#)).

The system enters the posting date of the last revaluation in the asset master record (*Extras* → *Master data info*).



**Graphic: System Settings for Replacement Values**

The fundamental rule, of course, is that only one depreciation area can be posted automatically in realtime to the General Ledger. It is possible to automatically post proportional value adjustments for asset retirements online from any number of depreciation areas in parallel.

**Graphic: System Settings for Replacement Values**

## Investment Support Measures

### Use

The “investment support” component is for managing government subsidies for certain types of investment. The subsidy can be managed as a reduction of acquisition and production costs, or as a value adjustment. The subsidy amount normally has to be identified separately from the actual acquisition and production costs of the asset.

This investment support is treated either as a reduction of the acquisition and production costs of the asset, or as a value adjustment on the liabilities side of the balance sheet.

### Features

An investment support measure is identified in the system by an investment support key. You define investment support keys in Customizing for *Asset Accounting*. You also determine in FI-AA Customizing whether the investment support measure should be handled as a value adjustment on the liabilities side, or as a reduction of acquisition and production costs. You make this determination when entering the depreciation areas in which the support measure should be carried out.

An investment measure is defined by the following entries:

- Period of validity
- Maximum percentage rate (in regard to the acquisition and production costs) and/or a maximum amount
- Required period of retention
- Type of repayment if the asset is retired ahead of time (only applies to support measures handled on the liabilities side)
- Depreciation areas, in which the measure is managed (on the assets side or liabilities side)

Additional Customizing specifications:

- The account assignment for all business transactions relating to the support measure
- Plausibility check for the assignment of a support measure to an asset



If you want to define a new depreciation area for the management of investment support, you have to copy a depreciation area that is supplied as standard for investment measures.

### Indicating the Assets Eligible for Support

You indicate assets are eligible for subsidies by specifying the investment key in the asset master record. Entering this key also creates the required depreciation area for the asset. You can manage an indefinite number of support measures for each asset. However, if you manage more than one support measure for an asset, each one must be managed in a separate depreciation area. This is necessary, for example, for a partial retirement, in order to exactly identify the part of the retirement amount that is derived from the subsidy amount.

Enter the depreciation areas for all investment support measures that are possible in the respective asset class. When you enter the investment key in the asset master record, the system creates the needed depreciation areas for the individual asset.

### Graphic: System Settings for Replacement Values

Entering an investment support key in the asset master record makes it possible to:

- Create an investment support claim list, with optional posting by the system
- Carry out plausibility tests when claiming the investment support
- Identify violations of the required period of retention when the asset is retired or transferred
- Automatically post the necessary transactions for the investment support when the asset is retired

### Transaction Types for Investment Support Measures

The system generates transaction types for posting investment support when you define the support measure. These transaction types are called (xx = investment support key):

- Ixx for claiming the investment support
- Kxx for post-capitalization of investment support measures (claiming the investment support and entering proportional value adjustments)
- Jxx for an extraordinary write-off of an investment support that is managed on the liabilities side, as the result of an asset retirement (no repayment obligation). For more information, see [Investment Support on the Liabilities Side \[Page 180\]](#) .

### Collective Posting

You can manually post the implementation of investment support measures for each individual asset. However, you can also use a report available in the Asset Accounting menu (under *Periodic processing* ) to create:

- A list of assets eligible for investment support (supplement to the application for investment support)
- A batch input session for claiming the investment support

For more information, see [Reports and Collective Posting \[Page 186\]](#) ). When you process the batch input session, the system posts to Financial Accounting

### Inclusion of Previous Years' Values

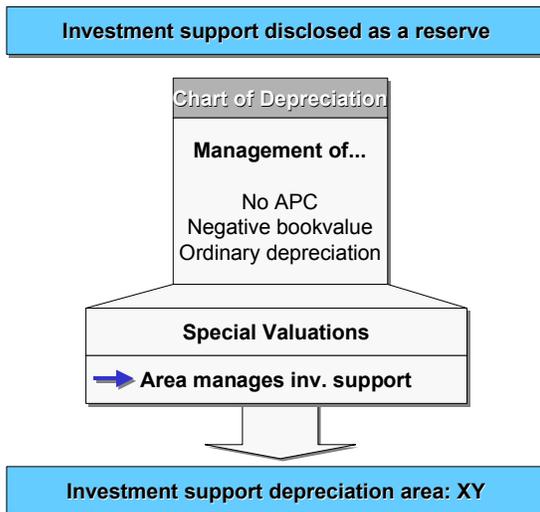
You may have assets that were acquired in previous fiscal years that would have been eligible for investment support. By using an indicator in the investment support key, you can specify that the investment support be "caught up" for those assets. The report for claiming investment support using collective posting will automatically include ("catch up") the investment support from previous years for those assets that have this indicator set in the investment support key.

## Investment Support on the Liabilities Side

## Investment Support on the Liabilities Side

## Use

When investment support is managed on the liabilities side, it is possible to depreciate the full acquisition value of the fixed asset over the expected useful life. The investment support amount granted, which is posted as a special reserve on the liabilities side of the balance sheet, is also depreciated. This treatment on the liabilities side requires at least one separate depreciation area in which the values are managed and posted automatically to Financial Accounting. If you manage more than one investment support measure for an asset at the same time, you need a separate depreciation area for each support measure.



## Area for Investment Support Managed on the Liabilities Side

## Features

The support amount can be written off using all available calculation methods (depreciation keys). As long as you specify that the investment support depreciation area adopts its depreciation terms from the book depreciation area, then you can ensure that the support measure is written off according to permitted book depreciation terms.

## Posting Asset Retirement/Repayment

If you sell an asset that has received investment support within its required retention period, you may be required to repay the amount of the support. When you post the asset retirement, you must be careful to choose the correct transaction type for the retirement, depending on the particular situation:

- Retirements that do not require repayment of the support amount, must be posted using transaction type 201 (retirement due to catastrophic event).
- Retirements that require repayment of the support amount must be posted using normal asset retirement transactions (for example 200).

**Investment Support on the Liabilities Side**

If the retirement takes place during the required retention period, the system automatically creates, depending on the transaction type, either a posting for the write-off of the support measure, or a "repayment of investment support" posting in conjunction with a posting for "expense from the repayment of investment support" (see the example).

You use the repayment type in the Customizing definition of the support measure to control whether the repayment is

- Complete
- Proportional to the amount of the retention period that has expired (to the year)
- Proportional (to the exact period)

If you claimed the investment support in the same year as the retirement is to be posted, you have to reverse the investment support measure before posting the retirement.

**Necessary Accounts**

Treatment on the liabilities side requires the following G/L accounts:

- Claiming of support
  - Special reserves account
  - Allocation clearing

The asset balance sheet accounts for investment support managed on the liabilities side have to be reconciliation accounts in Asset Accounting (as opposed to the asset balance sheet accounts for special reserves in a derived depreciation area).

- Revenue accounts
  - Ordinary write-off (periodic depreciation)
  - Write-off due to premature asset retirement
  - Extraordinary write-off (manual depreciation), with no repayment obligation
- Repayment accounts
  - Clearing: the full support amount is provided here in preparation for a refund
  - Expense: for the part of the support amount already written off

[Posting Example: Investment Support Shown on Liabilities Side \[Page 182\]](#)

Posting Example: Investment Support Shown on Liabilities Side

## Posting Example: Investment Support Shown on Liabilities Side

The accounts for showing investment support on the liabilities side are explained in more detail below. These business transactions are used as examples:

1. Retirement within the required retention period without a catastrophic event (with repayment obligation)

(1) investment support 12% (1,200.00)

(2) planned write-off of support (120.00)

(3) premature write-off with repayment

Special Reserves		Clearing Allocation	
(2) 120	(1) 1200	(1) 1200	
(3) 1200	(3) 120		

Planned Write-off		Expense Repayment	
	(2) 120	(3) 120	

Clearing Repayment	
	(3) 1200

2. Retirement within the retention period due to a catastrophic event (with no repayment obligation)

(1) investment support 12% (1,200.00)

(2) planned write-off of support (120.00)

(3) premature write-off without repayment

Special Reserves		Clearing Allocation	
(2) 120	(1) 1200	(1) 1200	
(3) 1080			

Planned Write-off		Write-off from Retirement	
	(2) 120	(3) 1080	

3. Extraordinary write-off (corresponds to manual depreciation in support depreciation area)

(1) investment support 12% (1,200.00)

(2) planned write-off of support (120.00)

(3) extraordinary write-off of support (600.00)

Posting Example: Investment Support Shown on Liabilities Side

Special Reserves		Clearing Allocation	
(2) 120	(1) 1200	(1) 1200	
(3) 600			
Planned Write-off		Unplanned Write-off	
	(2) 120		(3) 600

4. Retirement after the required retention period: the posting is the same as for a retirement within the retention period due to a catastrophic event. When the retirement includes several sub-numbers, the required period of retention is interpreted separately and posted separately for each sub-number.

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**Investment Support Managed on the Assets Side**

## Investment Support Managed on the Assets Side

### Use

You can handle investment support as a reduction of asset acquisition costs on the assets side of the balance sheet, as long as you are not required to display claimed investment support separately in the balance sheet. When you use this method, the acquisition costs of the asset are reduced by the support amount. The reduced acquisition costs serve as the basis for depreciation.

### Features

If you are managing only one investment support measure for each asset, you do not need a separate depreciation area. The investment support is then handled in the depreciation area that posts automatically to the general ledger (usually the book depreciation area). This area provides Financial Accounting with the necessary posting information.

If you manage more than one investment support measure for a fixed asset and you want each measure to be posted separately in Financial Accounting, you need special depreciation areas. You manage the additional investment support measures in these depreciation areas and post the values from these areas to Financial Accounting. You specify the same depreciation terms for these areas as exist in the automatic entry area (depreciation area 01).

### Accounts

You need the following accounts for posting investment support on the assets side:

- APC balance sheet account, for the posting of the allocation of the investment support (corresponds to the special reserves balance sheet account for showing investment support on the liabilities side of the balance sheet)
- A clearing account for the allocation of investment support

### Posting

The following transactions are supported by the system:

- Claiming of support
- Retirement of support along with acquisition value



The system cannot offer the same automatic assistance for certain transactions when this method is used, as compared to using the method of posting investment support on the liabilities side. Automatic support from the system is not available for retirements during the required period of retention, and for the extraordinary write-off of the investment support resulting from such retirements. The system does not automatically post the repayment of investment support in these instances. You have to post the repayment of the investment support amount manually in the FI General Ledger. In addition, the system does not issue a warning when the asset retirement takes place during the required period of retention.

## Defaults and Checks During Master Data Maintenance

### Use

Investment support is often limited by the government to certain regions or uses. The limitation according to use corresponds approximately to the cost center in Asset Accounting. The region corresponds approximately to the plant.

### Features

The system offers default values and checks during asset master record maintenance to assist you in making these limitations. You specify rules for each investment support in FI-AA Customizing. The system then checks against these rules when you specify the investment support measure in the asset master record.

These rules are made up of organizational units (for example, plant) and objects (for example, asset class). You limit the validity of the investment support measure to these units or objects.

### Limiting Objects

You can limit the validity of an investment support measure to the following objects or units:

- Company code
- Plant
- Cost center
- Asset class

### Plausibility Check

When you enter the support measure in a master record, the system runs a plausibility check with regard to these objects. A prerequisite, however, is that you have defined the support measures with a check indicator. In addition, you can specify in the check table that the investment key appears in master record maintenance as a default value.

You can make generic entries for plant and cost center, that is to say, a generic interpretation of the entries is possible (for example, 1++++++ means: All cost centers/plants beginning with 1).

## Reports and Collective Posting (Investment Support Measures)

### Use

Generally, for year-end closing you need a report list displaying the fixed assets that are eligible for investment support. You use a special report to create this list (Menu: *Periodic processing*).

### Features

#### Investment Support Claim Form for Assets

The report identifies the investment support during the fiscal year for assets which contain at least one support measure in their master record. The report includes the transactions for the year. For measures that would have been eligible for investment support in the past, and for which you want to include previous year's values, the cumulative values from previous fiscal years are included when the report determines the amount of investment support. The report determines the value based on the maximum percentage allowed in the Customizing definition of the investment support measure. If investment support has already been posted manually, the report determines the difference between the maximum allowed amount and the amount already posted.

#### Collective Posting

If you choose, the report will create a posting session for claiming the investment support. When you process this session, the following postings are created in the General Ledger:

- Debit clearing account, credit asset control account (if shown on assets side)
- Debit clearing account, credit special reserves account (if shown on liabilities side)

## Special Reserves

### Purpose

In many countries, you are allowed to use tax depreciation rates for book depreciation. However, the person reading the balance sheet should still be able to recognize that a different approach was used. For this purpose, book depreciation is carried out according to the appropriate requirements, and the depreciation allowed by tax law, which exceeds book depreciation, is shown as special reserves on the liabilities side of the balance sheet.

The “special reserves” component allows you to show the difference between book depreciation and tax depreciation in a derived depreciation area. You can use the values from this derived depreciation area to create special depreciation reserves for the balance sheet.

This kind of special reserve is common in Germany.

### Features

The explanation below relates to the standard chart of depreciation for Germany. Other countries that need these functions also require similar depreciation areas. These are either provided in your standard chart of depreciation, or you have to define them.

To carry out this procedure, you need depreciation areas 01, 02, 03. Areas 01 and 02 depreciate from the identical acquisition and production costs. Area 01 uses book depreciation, while area 02 uses the depreciation allowed by tax law. This difference is shown in depreciation area 03. Depreciation area 03 is a derived depreciation area based on areas 01 and 02. For more information, see [Derived Depreciation Areas \[Page 67\]](#).

### Areas with Automatic Posting

You post the APC and depreciation from depreciation area **01** to the general ledger. You thereby make sure that the APC is posted to the correct APC accounts, and the book depreciation is posted to the correct expense or value adjustment accounts.

You use the depreciation posting program to post the allocation or writing-off of the special depreciation reserves from depreciation area **03** to the corresponding liabilities accounts in the same way. Therefore, you should also post depreciation from area 03 to the general ledger.

In addition, you have to post the write-off of special reserves for tax depreciation, resulting from retirements and transfers, to Financial Accounting. Therefore, you also have to post asset balances from depreciation area 03 to the general ledger (refer to [Parallel Valuation \[Page 507\]](#)).



You are **not** permitted to post depreciation from depreciation area 02 to Financial Accounting in addition to book depreciation 01, since this would result in ordinary depreciation being posted twice.



An asset is acquired at the beginning of year 1, with acquisition and production costs of 10000. The useful life is 5 years. The depreciation terms in the individual depreciation areas are as follows:

Area 01: Straight-line depreciation over total useful life

**Special Reserves**

Area 02: Special tax depreciation 60,10,10,10,10% from APC

Area 03: Special reserves (Difference: tax deprec. - book deprec.)

In the first year, the system posts 2000 ordinary depreciation from area 01, and 4000 (= 6000 - 2000) special tax depreciation (allocation of the special reserves) from area 03 to the corresponding accounts in the general ledger. In each of the following years, 2000 ordinary depreciation is again posted. Due to the reduced depreciation in area 02, the special reserve will gradually be written off.

The following table shows the evolution of the net book value in the individual areas over the total useful life (always at the end of the fiscal year), as well as the allocation or write off of the special reserves posted in the individual years.

	<u>Area 1</u>	<u>Area 2</u>	<u>Area 3</u>
<b>APC</b>	10000	10000	0
<b>Dep. Year 1</b>	-2000	-6000	Alloc. -4000
<b>Net book val.</b>	8000	4000	-4000
<b>Dep. Year 2</b>	-2000	-1000	Wr.-off 1000
<b>Net book val.</b>	6000	3000	-3000
<b>Dep. Year 3</b>	-2000	-1000	Wr.-off 1000
<b>Net book val.</b>	4000	2000	-2000
<b>Dep. year 4</b>	-2000	-1000	Wr.-off 1000
<b>Net book val.</b>	2000	1000	-1000
<b>Dep. Year 5</b>	-2000	-1000	Wr.-off 1000
<b>Net book val.</b>	0	0	0

## Transferred Reserves (Deferred Gain)

### Purpose

The “transferred reserves” component allows all or a part of the undisclosed reserves that arise from the sale of assets to be transferred to replacement assets. The gains from the sale thereby reduce the depreciation base for the newly acquired assets. Or you can show them as special reserves on the liabilities side of the balance sheet.

If such reserves are not transferred in the year in which they arise, because there are no appropriate new acquisitions, then a reserve can be created. In this way the gain from the sale of the asset does not count as profit. This reserve usually must be transferred within the following (two) years to new assets acquired during this time period.

### Features

It is possible to post this transfer of reserves to replacement assets in the FI-AA Asset Accounting component. The allocation of gain resulting from asset sales (as special items with reserves) must be posted manually in the FI General Ledger.

You manage and depreciate the reserves transferred to assets separately from the acquisition and production costs.



The following explanations relate to the standard chart of depreciation for Germany (refer to [Special Reserves in Germany \[Page 77\]](#)). Other countries, in which the transfer of reserves is allowed, require similar depreciation areas.

The following describes the different methods for managing reserves transferred to an asset in the system:

### Handling on the Assets Side

Using this method, the acquisition and production costs of the asset are reduced by the amount of the transferred reserve. Ordinary depreciation and special depreciation are then automatically calculated by the system based on the reduced acquisition and production costs. The reserves transferred to the asset cannot be identified separately from the actual acquisition and production costs.

In order for this calculation to take place, you define the book depreciation area (01), and the tax depreciation area (02) so that they allow for the management of values for the transfer of reserves. You do not need the area for "special depreciation" (03), since the transfer into the areas 01 and 02 must be of the same amount. For the transfer of reserves, therefore, you should use a transaction type that posts to area 01 and area 02. You must also enter the appropriate accounts for the transfer of reserves in the account allocation for the book depreciation area:

- Offsetting account for the transfer of reserves
- Control account for transferred reserves (=asset control account)

### Posting on Liabilities Side

In this case, the transferred reserves can be represented in the balance sheet as value adjustments on the liabilities side. The calculation of depreciation in the book depreciation area is then based on the unreduced acquisition and production costs. The following options exist:

## Transferred Reserves (Deferred Gain)

- **Posting in special reserves depreciation area (03)**

If your accounts in Financial Accounting do not differentiate between reserves for special depreciation that arise from transferred reserves and those that arise from other special tax depreciation (for example, in Germany, the law providing tax credits for investment in the new states), then you can use area 02 "special depreciation based on the trade balance sheet acquisition and production costs," and the derived depreciation area 03 ("special reserves"). However, the system posts to the accounts for area 03 (expense from allocation to reserves and special reserve account) during the transfer of reserves.

Allow for the management of values for transferred reserves in area 02 and 03. Post the reserves with a transaction type that only posts to area 02. The system then automatically shows the reserves in area 03. With the depreciation posting run, the system also automatically posts the transfer and clearing of the reserves to the corresponding accounts for special reserves in Financial Accounting.

- **Posting in a separate depreciation area**

If you want to use a separate account in Financial Accounting for posting transferred reserves, then you must create a new depreciation area using any key (such as, area 04). This area is only used to manage the transferred reserves (not APC). The clearing of the reserves is carried out by normal depreciation.

Carry out these tasks when configuring the system:

- Define the special depreciation area (area 04). Allow for the management of negative book values. **Do not allow APC** in depreciation area 04. Also specify that the depreciation and asset values from this area are posted periodically to the general ledger (FI-AA Customizing: (*Valuation* → *Depreciation Areas* → *Define depreciation areas*)).
- Specify that area 04 is for managing reserves (FI-AA Customizing: *Special Valuation* → *Transferred Reserves (Deferred Gain)*).

Make sure that area 04 is **not** allowed to manage **investment support** (FI-AA Customizing: *Special Valuation* → *Investment Support*).

- Specify that area 04 is for managing **positive** ordinary depreciation (FI-AA Customizing: *Depreciation* → *Ordinary Depreciation* → *Determine depreciation areas*).
- Maintain the account allocation for area 04. Enter the following accounts:
  - Accounts for the allocation of the reserves (FI-AA-Customizing: *Special Valuation* → *Transferred Reserves (Deferred Gain)*).
  - Accounts for ordinary depreciation (write-off) of the reserves (FI-AA Customizing: *Depreciation* → *Ordinary Depreciation*).

Enter the reserves account in the account for ordinary depreciation (write-off) of the reserves. Enter the account for revenue from write-off of reserves in the account for ordinary depreciation expense.
- Revenue account for the writing-off the reserve due to retirement (corresponds to the account for loss from asset retirement) – FI-AA Customizing: *Transactions* → *Retirements*).
- Define a transaction type for the transfer of reserves that posts only to area 04 (FI-AA-Customizing: *Special Valuation* → *Transferred Reserves (Deferred Gain)*).

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**Transferred Reserves (Deferred Gain)**

Use this transaction type to post the reserves **only** to area 04.

- Post the depreciation (the write-off of the reserves) (*Post depreciation*) **and** the changes to asset values from area 04 ( *Bal. sheet posting*) periodically to Financial Accounting (*Periodic processing*).

Make sure that the affected assets have the same depreciation terms in areas 01 and 04, in order to ensure parallel depreciation of the APC and the reserves.

If you want to see the values from book depreciation along with the transferred reserves, you have to define an additional, derived depreciation area (05). Define area 05 so that its values are calculated from adding book depreciation and area 04.

## Insurance Values

# Insurance Values

## Purpose

The fixed assets belonging to an enterprise are normally insured against damage or loss. The insurance companies require certain values and information relevant to the insurance policies. You need to manage this information on an individual asset basis in the system.

The *Insurance* component enables you to manage insurance master data and insurance values for fixed assets. The current insurance values can be stored in the asset master record, or managed in a separate depreciation area. You can also increase or decrease the insurable value using index series.

## Features

The system offers three methods of calculating the insurance value:

- **Value as new insurance**

For value as new insurance, the APC or the indexed APC are used for the calculation of insurance value. By indexing you can account for price rate increases when determining the insurance value.

For example, the current insurance value for fire insurance for buildings is often based on index series that are published by the insurance carrier.

- **Current market value insurance**

With current market value insurance, the APC, reduced by depreciation (that is, the book value) determines the insurance value. You can also use indexing for current market value insurance.

- **Manual insurance value**

A special method is setting the insurance value manually in the master record. The insurance value is usually determined through agreement with the insurance carrier.

## Insurance Type

The insurance type is the most important control feature for maintaining the insurance values. You define the different insurance types in Customizing for *Asset Accounting*. For each insurance type, you specify whether the current market value or the value as new is to be used as the insurance value. At the same time you specify the depreciation area to be used. These entries are needed for the following functions:

- **Update of the base insurable value (for value as new insurance)**

For value as new insurance, a depreciation area is needed for transferring the base insurable value (APC or indexed APC). You can use an area that is already set up (for example, book depreciation).

- **Determining current market value (for current market value insurance)**

Here you can also use the current book values of an existing area. In order to be able to use reporting to your best advantage, however, it is recommended that you define a separate depreciation area for updating the insurance current market values.

- **Currency specifications and rounding**

## Insurance Values

The insurable value is managed in the currency of the depreciation area of the company code. The rounding rules of the depreciation area are also used for the insurable value and the base insurable value.

### Base Insurable Value

The base insurable value is always stored for the last closed fiscal year in the asset master record. It is only needed for value as new insurance. The system determines the base value using the appropriate posting documents for the individual asset.

The annual updating of the base insurable value takes place only when the year-end closing program is run. Make sure that the index series for the year being closed are correct before you run the year-end closing. If you do not have index series at the time of the year-end closing, you have to update the base insurable value using a standard report (under *Tools*) as soon as the index series are maintained.

### Insurance Value

You can display the insurance value for all fiscal years up to the current fiscal year. Depending on the type of insurance, the system then determines the insurance value based on the following:

- **Value as new insurance**

The insurance value is determined by the base insurable value:

Insurable value =

$(\text{base insurance value} + (\text{asset transaction outstanding years} * 100 / \text{index of transaction year})) * \text{index of current year} / 100$

Transactions from the outstanding fiscal years consist of acquisitions, transfer postings and asset retirements.

The average index of the increase of the base insurance value, and not the index of the respective retirement year, as specified in the formula, is used as the best approximation when asset retirements are included:

$\text{Index Prop.} = 100 * \text{accumulated APC beginning of the year} / \text{base insurance value beginning of the year}$

For transfer acquisitions to fixed assets that have already been posted, the transfer acquisition is also valued with the "Index Prop" as with asset retirements. During transfer acquisitions to a new fixed asset, the transfer acquisition is valued with the index of the acquisition year from the depreciation area.

- **Current market value insurance**

- For indexing in the depreciation area itself, the insurance value is equal to the book value of the fixed asset.
- If indexing is not carried out in the depreciation area, the following possibilities exist:
- If there is no index in the insurance master data, the insurance value is equal to the book value of the fixed asset.
- If an index series was entered in the insurance master data, the insurance value is calculated as follows:

$\text{Insurance value} = \text{book value} * \text{index current year} / \text{index of acquisition year (from depreciation area)}$

## Insurance Values

- **Manual insurance value**

When an insurance value has been agreed upon with an insurance company, you can use the value which has been manually entered in the asset master record as the insurance value. There are two scenarios:

- If the insurance value was set once, and was not changed by subsequent acquisitions or indexing, then you have to specify the insurance value **and** the *Manual insurance value* indicator in the asset master record.
- The situation can arise that an insurance value has been manually set at one point, but in following years it should be indexed, or is influenced by transactions affecting the asset. In this case you cannot set the *Manual insurance value* indicator. You have to specify a maintenance year, in addition to the manual insurance value. The maintenance year is not allowed to be a closed fiscal year. Manual insurance value and the *Manual update* indicator can only be changed in fiscal years that are still open. The insurance value is determined as follows:

Current insurance value = manual insurance value \* index (current year) / index (maintenance year)



For the legacy data transfer, you usually have to enter a maintenance year **before** the last closed fiscal year. Therefore, the limitation described above does **not** apply for the transfer transaction (create/change legacy asset).

## Maintaining Insurance Data

Separate field groups exist for the insurance data in the asset master record. By maintaining the screen layout in the asset class, it is possible to activate or switch off insurance data for certain assets. Depending on the maintenance level specified, either the respective asset class supplies the fields with default values or you have to maintain the fields directly.

- **Insurance type**

You define the individual insurance types in Customizing.

- **Insurance index series**

You enter an index series manually in the asset master record for calculating the insurance value.

- **Base insurance value (only for value as new insurance)**

You maintain the base insurance value directly in the master record if this field is offered in the asset view and the field status group.

- **Manual updating only**

When you set this indicator, the insurance value can only be updated manually. Indexing cannot take place.

- **Manual insurance value**

Enter the insurance value that has been agreed upon with the insurance company. If needed, also enter the maintenance year.

- **Insurance rate**

At the present time, the insurance rate serves only informational purposes.



## Leased Assets

# Leased Assets

## Purpose

Leased assets create special accounting requirements for the lessee. During the term of the lease, leased assets remain the property of the lessor or manufacturer. They represent, therefore, a special form of rented asset. Such assets are legally and from a tax perspective the responsibility of the lessor, and are not relevant for assessing the value of the asset portfolio of the lessee. However, in certain countries, you are nonetheless required to capitalize leased assets, depending on the type of financing.

The *Leased Assets* component enables you to capitalize leased assets in the *Asset Accounting* (FI-AA) component using the capital lease method. The system calculates the acquisition value from the present value of the future lease payments in the leasing agreement.

## Features

There are different ways of handling the values of leased assets in the system. Depending on legal requirements and the conditions of the lease, there are two different options:

- You have to capitalize and depreciate certain leased assets (capital lease).
- You treat others as periodic rent expense, which flows into the profit and loss statement (operating lease).

This second type is not relevant to the fixed assets of the lessee. It is therefore sufficient to do one of the following:

- Manage operating leases as statistical assets in the *Asset Accounting* component (with no active depreciation areas)
- Manage them only as cost-accounting values (or for group accounting) in the corresponding depreciation areas

There is a special report on rent liability that can be used for all types of leased assets (see below).

You can also manage insurance values for purely statistical leased assets (without depreciation areas). You enter a manual insurance value and an index series for the leased assets in the asset master record. You obtain reports on these values using the standard report for insurance values.

## Capital Lease Method

Leased assets can be capitalized in the *Asset Accounting* component using the capital lease method. The system calculates the acquisition value from the present value of the future lease payments in the leasing agreement. To be able to determine the future burden of payment, you need to maintain the following leasing conditions in the asset master records:

- Amount of lease payment
- Number of payments
- Payment cycle

In order to calculate present value, also enter an interest rate. The system requires that you post a leasing partner as a vendor in the asset master record at the time of the acquisition posting (opening posting).



At the present time, the capital lease method can only be used for assets that are capitalized in the book depreciation area. An opening posting with simultaneous creation of leasing liability is not possible for assets that have only cost-accounting depreciation areas.

### Handling of Input Tax for the Capital Lease Method

You can only include the net amount (that is, the amount without input tax) of the liabilities for a leased asset when determining the present value. Therefore, you have to enter the net lease payments in the asset master record.

In addition, set the input tax indicator *VO* (= no input tax) in the respective leasing type (see below). In this way, you can ensure that there is no posting of input tax at the time of capitalization. Instead, you should post the input tax directly in the *Financial Accounting* (FI) component (debit input tax and credit vendor) at the time of payment.

### Leasing Type

You define leasing types in Customizing for *Asset Accounting*. The leasing type is a selection criterion in reporting, and the most important control feature for the posting of acquisitions to a leased asset. It determines the following:

- The transaction type used for the acquisition posting of a leased asset. The transaction type controls the depreciation areas in which the capitalization posting takes place (such as book depreciation, group depreciation, and so on). You define the transaction type in Customizing for *Asset Accounting*.
- Different specifications for posting to Financial Accounting (for example, document type, input tax indicator, and so on.)
- The bookkeeping treatment of the leased asset

You can set the depreciation area for automatic posting to active or inactive in each asset class for leased assets. This determines whether the acquisition of leased assets is posted to G/L accounts. The system also determines the accounts to be posted for leased assets using the account allocation in their asset class.

- **Leased assets for cost-accounting purposes**

If you do not want to capitalize leased assets, you can still manage their acquisition values in cost-accounting depreciation areas. Just set the corresponding cost-accounting depreciation areas to active (posting to general ledger: inactive) in the asset class of the assets in question. This ensures that no posting is made to Financial Accounting in the event of asset acquisition. You can still use periodic depreciation in active depreciation areas for cost-accounting purposes.

[Graphic: Operating Lease Procedure \[Page 201\]](#)

- **Leased assets capitalized in the general ledger with interest accrued (capital lease)**

In some countries, you are required to capitalize leased assets for book depreciation or for tax purposes. In this case, you have to manage the leased asset in an area that posts

## Leased Assets

to the general ledger (generally the book depreciation area). Set posting in the general ledger to active in the corresponding leased asset classes. In addition, enter specifications for posting to Financial Accounting in the leasing types.

For the acquisition posting, the system capitalizes the fixed asset with the calculated present value. The installment payments are posted to the vendor as scheduled. The system determines the vendor from the leasing partner that you specified in the asset master record.

[Graphic: Capital Lease Procedure \[Page 202\]](#)

- **Leased assets capitalized in the general ledger without separate interest**

In some countries (such as the USA) only the present value is posted as a liability (obligation), in contrast to the above treatment. This means that the interest amount, resulting from the difference between the liability and the present value, as shown in the above case, does not have to be displayed separately. In this case, define the clearing account for the interest portion and the vendor account so that they are both displayed in the same item of the balance sheet.

## Periodic Posting

The depreciation posting program posts the depreciation of leased assets and the write-off of the interest. You can use any depreciation key. The standard R/3 System includes a special depreciation key, in which the depreciation amounts correspond to the present value of the periodic leasing payments (LEAS). Using this key, interest is determined as the difference between the leasing payments and the present value.

## Calculation of Present Value

The present value of the leased asset is calculated on the basis of the following specifications:

g : Amount of lease payment

i : Annual interest rate

n : Number of lease payments

r: Leasing cycle (for example, 3 = quarterly, 6 = semiannual)

m : Number of periods in a year

q : Period interest factor =  $1 + (i / 100 * r / m)$

If payment is made at the beginning of the period, the present value then results from the following formula:

Present value =  $g + g * q^{n-1} / (q^n - 1)$

With payment at the end of the payment period, on the other hand, the present value is calculated as follows:

Present value =  $g * (q^n - 1) / (q^n * (q - 1))$

Example

g : 100

i: 10.000 %

n: 20

r: 3

m: 12

q:  $1 + (10.000 / 100 * 3 / 12) = 1.025$

Present value at the beginning of the payment period:

$100 + 100 * (1.025^{**19} - 1) / (1.025^{**19} * (1.025 - 1)) = 1597.89$

Present value at the end of the payment period:

$100 * (1.025^{**20} - 1) / (1.025^{**20} * (1.025 - 1)) = 1558.92$

## Reports

There is a standard report in the system for determining future leasing liability (especially in regard to leased assets that are not capitalized). The report displays for each leased asset:

- The payments already made
- The payments due up to the date of the report
- The total lease payments to be made for the asset

You can create a totals list with cumulative values for each fiscal year and company code. In order for the report to work properly, you must make sure that the following leasing conditions are properly maintained in the asset master record:

- Start date of the lease
- Payment information (lease payment amount, payment cycle, number of payments)
- Leasing type

Using the *APC by acquisition year* indicator, you can display the theoretical acquisition value of leased assets according to acquisition year. This statistical analysis is required in some countries for financial reports. The system uses the base new value that is specified in the asset master record in the leasing information. The acquisition year is determined from the start date of the lease.

## Implementation Considerations

### General Tips

If you want to manage capitalized leased assets in the system, follow these steps:

- Define leasing types in Customizing for *Asset Accounting* with the specifications for posting asset acquisitions.
- Create special asset classes and account allocations for your leased assets.
- Define depreciation areas, in which you plan to capitalize leased assets using the capital lease procedure, so that they manage interest that can be posted with the depreciation posting program.
- Activate the depreciation areas, in which the leased assets will be capitalized and depreciated, in these asset classes.
- Assign a leasing type to the asset master records for leased assets.
- Maintain the information and conditions of the leasing agreement in the master records of the leased assets. Specify an interest rate for calculating the present value and determine

**Leased Assets**

whether the lease payments should be made at the beginning of the payment period or at the end of the payment period.

- Post the acquisition of a leased asset with the display transaction for asset master data.

## Graphic: Operating Lease Procedure

The following graphic shows the accounting treatment of leased assets that are only capitalized in the cost accounting depreciation area.

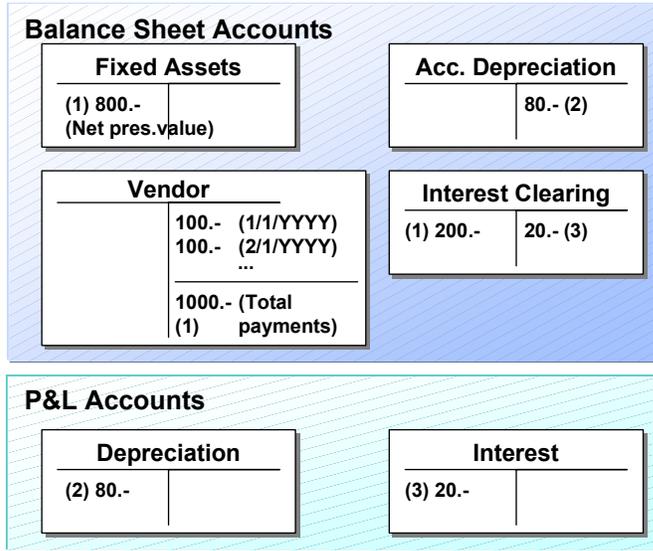
<p><b>Cost-acc. deprec.</b></p> <hr/> <p>(1) 80.-</p>	<p><b>Clearing of cost-acc. depreciation</b></p> <hr/> <p>80.- (1)</p>
<p><b>Vendor</b></p> <hr/> <p>(2) 100.- (periodic lease payments)</p>	<p><b>Lease expense</b></p> <hr/> <p>(2) 100.-</p>

Operating Lease Procedure

Graphic: Capital Lease Procedure

## Graphic: Capital Lease Procedure

The following graphic shows an example of the posting transactions when capitalizing a leased asset:



Capital Lease Procedure

## Calculation of Interest

### Purpose

For cost accounting, you might have to calculate imputed interest on the capital tied up in assets. Therefore, the system enables you to calculate this interest per depreciation area, in addition to the depreciation and/or valuation types already mentioned (ordinary depreciation, special depreciation, unplanned depreciation, and reduction of APC).

### Features

Interest calculation is controlled in the same way as depreciation calculation, using a depreciation key. In addition to the base value for the calculation (for example, acquisition value or replacement value), you can also specify the interest rate using the calculation method of the depreciation key. Interest calculation is carried out either until book value zero is reached, up to the end of expected useful life, or for an unlimited period.

### Calculation of Interest

The calculation of interest to be posted depends fundamentally on the base value of the interest key. When you use an interest key that uses the current net book value as the base value, this net book value is taken into account to the exact period during depreciation posting. Therefore, the planned value for the distribution during the fiscal year is not the planned book value at the end of the year. Instead, the system uses the net book value determined in the posting period (period net book value).



An example of a depreciation key of this kind is the interest from the mean net book value, which is calculated as follows:

$$\text{Interest amount} = (\text{NVSY} + \text{NVPER}) / 2 * \text{Interest rate} / 100$$

NVPER = Net book value in period

NVSY = Net book value at fiscal year start

#### Concrete example:

Asset: Net book value at start of year = APC = 12000, useful life 10 years, straight-line depreciation = 10%

#### 1. Calculation of annual depreciation:

Planned annual depreciation:  $12,000 / 10 = 1,200$

- Period depreciation to be posted: 100 per period
- Net book value per period: 01 – 11: 900; 02 – 11: 800; 03 – 11: 700... 12 – 10,800

#### 2. Calculation of interest: 5% from mean net book value

- Planned annual interest:  $(12,000 + 10,800) / 2 * 5 / 100 = 570$

- Interest to be posted:

Period 01:  $(12,000 + 11,900) / 2 * 5 / 100 / 12 * 1 = 49.79$

Period 02:  $(12,000 + 11,800) / 2 * 5 / 100 / 12 * 2 = 99.17$

### Calculation of Interest

Previously posted: 49.79

To be posted:  $99.17 - 49.79 = 49.38$

Period 03:  $(12,000 + 11,700) / 2 * 5 / 100 / 12 * 3 = 148.13$

Previously posted: 99.17

To be posted:  $148.13 - 99.17 = 48.96$



The figures in the example could be somewhat different, depending on the specifications for rounding that were set in Customizing (for example, rounding to whole numbers). Similar problems can occur when posting depreciation, if the base value for depreciation is also the exact net book value in the period.

### Prerequisites

If you would like the system to calculate interest in a depreciation area, make the following system settings:

- Specify that interest should be managed in the depreciation area.
- Define depreciation posting in this company code and in this depreciation area so that interest should be posted.
- Use a depreciation key that has an interest key assigned to it for calculating interest (or define such a key yourself).

The system then posts interest together with depreciation when you perform a periodic depreciation posting run. Account assignment is to the accounts specified in the given depreciation area in the account determination. It is also possible to have additional account assignment to the cost center entered in the asset master record (just as for depreciation). Refer to [Additional Account Assignment \[Page 110\]](#).

## Net Worth Tax

### Purpose

The net worth tax laws in many countries require a separate valuation of assets. The “net worth tax” component helps you to value assets for this purpose. You can use the values the system calculates in determining your net worth tax burden.

### Features

If the property values are to be depreciated, it makes sense to set up an independent depreciation area for the net worth tax valuation. You then mark this area as the depreciation area for the valuation of net assets when you maintain the asset company codes.

The values in this depreciation area are available for special reports, such as the property list. The structure of this list is determined by the property classification key, which you specify in the master record.

If net worth tax in your country is based on normal tax valuation, then it is not necessary to create a separate depreciation area for it. You can simply use the values from the tax depreciation area.

### Manual Property Value

If the property value is not to be depreciated (for example, assessed value), you can store a manual property value in the master record. However, you then have to set the *Manual property value* indicator. The net worth tax reports in the system then use these values, even if you do not manage a depreciation area for net worth tax.

### Reports

There is a special standard report available for asset values in relation to net worth tax (*Info system*).

## Requirements for Consolidation

## Requirements for Consolidation

### Use

The “requirements for consolidation” component assists you in preparing the for the legal consolidation of a corporate group as relates to fixed assets, using the data in asset accounting.

### Features

For the purposes of consolidation or reporting, you can manage each depreciation area in the system in any desired currency. The exception is the master area (01). The master area always has to use the local currency of its company code.

The currency is a feature of the depreciation area at company code level (FI-AA Customizing: *Foreign Currencies*).

For depreciation areas managed in a foreign currency, all acquisition transactions are converted into the foreign currency at the exchange rate valid on the posting date. The system calculates depreciation and proportional value adjustments at asset retirement or transfer directly in the foreign currency.

### Depreciation Areas for Consolidation

Generally you need a depreciation area in a foreign currency, when your company code is a foreign subsidiary that uses different rules for valuation than its parent company. Usually, you manage a separate corporate group ledger for the group consolidation in the general ledger. The values of the corporate group depreciation area should be posted to the corporate group ledger.

In this case, you must also manage a depreciation area in the local currency that is otherwise identical to the area managed in the foreign/group currency. You must define the foreign currency depreciation area so that it automatically adopts the posting values and valuation parameters from the corporate group area in local currency, making sure that these values cannot be changed. In addition, you need a depreciation area in foreign currency with the local rules for valuation. Overall, when your group has a different currency **and** uses different depreciation terms, you need four depreciation areas in order to ensure correct consolidation values. These depreciation areas should manage:

- Local valuation and local currency
- Local valuation and group currency
- Group valuation and local currency
- Group valuation and group currency

This is the only way to precisely distinguish between differences resulting from currency translation and differences due to different local valuation rules during the consolidation process.



For more information on consolidation in the R/3 System, see the documentation for the [Consolidation \(FI-LC\) \[Ext.\]](#) component, and the section on [Parallel Currencies in the General Ledger \[Page 103\]](#).

## Posting of the Corporate Group Area to the General Ledger

Posting depreciation from the group depreciation area in a foreign currency works the same as it does for of the book depreciation area. You can post periodically to the corporate group ledger using batch input (see [Posting Depreciation \[Page 116\]](#)).

You can also set up automatic posting of changes to the asset value to the corporate group ledger using batch input. Use the appropriate posting program (refer to [Parallel Valuation \[Page 507\]](#)). For these postings, the system uses the consolidation transaction type that corresponds to the transaction type that was originally used for these postings. The system determines the original transaction type from the FI document that was posted online to the local ledger. You specify the consolidation transaction types in the transaction types definitions in FI-AA Customizing. Using the consolidation transaction type is important for the group ledger. It ensures that the type of transaction is also available in the group ledger for reports, such as the asset history sheet.

The system requires the posting amount both in the foreign currency and in the local currency for the group consolidation. Therefore, the system posts the amount in group currency from the group depreciation area to the corporate group ledger, in addition to the amount in the local currency from the group depreciation area managed in local currency. Each document, therefore, contains the amount in group currency as well as in the local currency. The system posts the amount in group currency as the transaction currency for the document. It posts the local currency amount as the local currency for the document.



If you do not have special requirements in regard to consolidation, and only want to have reports in foreign currencies, you do not necessarily have to manage a separate depreciation area in the foreign currency. Instead, you can define currency translation methods in FI-AA Customizing, and enter them as start parameters for all your standard reports (see the Implementation Guide).

## Different Rules for Capitalization in the Corporate Group

For more information, see [Manual Handling of Delivery Costs \[Page 249\]](#)

## Handling of Intercompany Transfers

For more information, see [Intercompany Transfers – Group Perspective \[Page 451\]](#) and [System Settings for Automatic Intercompany Asset Transfers \[Ext.\]](#)

## Master Data Maintenance

### Purpose

The “master data maintenance” component is used for recording the master data of your fixed assets on an individual asset basis. A fixed asset is defined as an individual economic good that it is recognized in the balance sheet at the time of closing, and is in the long-term service of the enterprise.

The list below shows some of the functions provided for assisting with master data maintenance:

- Control of the screen layout
- Validation or substitution of entries
- Mass changes to master record fields

## The Asset Master Record

### Use

The varied demands on master data management for Asset Accounting are met in the R/3 FI-AA component by

- Asset master records that are structured according to functional and goal-oriented requirements
- Master data maintenance that is organized according to this structure, and allows for individual adaptation

### Features

In order to make it easier for the user to create, maintain and evaluate master data, the varied individual information is structured according to its area of use and the relevant functions in the system. The asset master record consists of two main parts:

#### General Master Data

This part of the master record contains concrete information about the fixed asset. The following field groups exist:

- General information (description, quantity, etc.)
- Account assignment
- Posting information (for example, capitalization date)
- Time-dependent assignments (for example, cost center)
- Information for plant maintenance
- Entries for net worth tax
- Information on real estate
- Leasing conditions
- Investment support measures
- Information on the origins of the asset
- Physical inventory data
- Insurance data
- User fields/evaluation groups

In addition, you can create long texts for the individual field groups belonging to the general data part of the asset master record. You can simplify the creation of long texts by using freely-definable long text templates. You define these templates in FI-AA Customizing under *Define long text templates*.

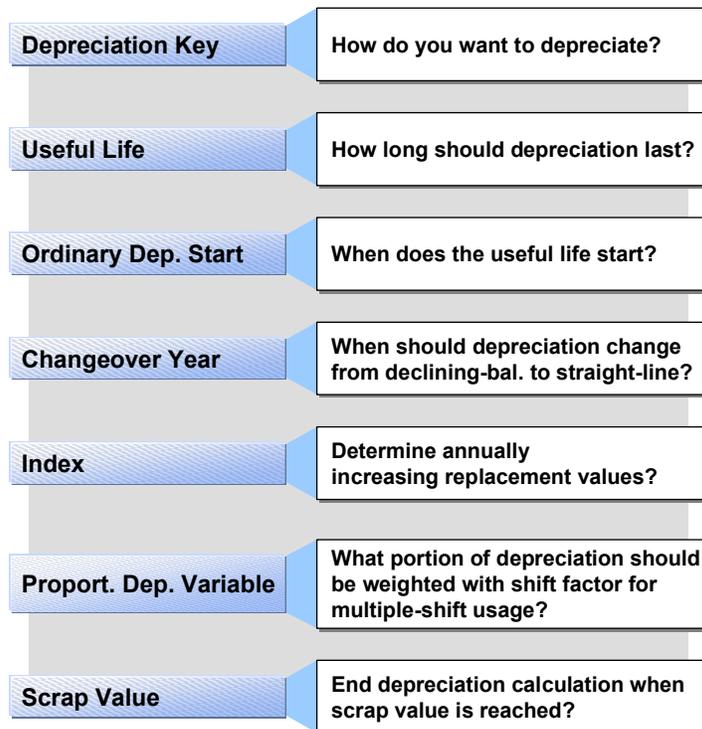
#### Data for Calculating Asset Values

You can specify depreciation terms in the asset master record for each depreciation area in the chart of depreciation. In order for you to make these specifications, the master record contains an

## The Asset Master Record

overview of the depreciation areas. In addition, there is a detailed display available for each depreciation area. If there are depreciation areas that are not needed for a specific asset, it is possible to deactivate these depreciation areas at the asset level.

The following graphic shows the most important depreciation terms in a depreciation area:



## Information for Valuation

## Number Assignment

### Use

The asset number uniquely identifies a fixed asset. It always consists of the main asset number and the asset sub-number. There are two ways of carrying out number assignment in the system:

- External number assignment
- Internal number assignment

In the case of external number assignment, the user directly assigns the asset number. The system displays only the defined number interval, and issues an error message if a number is already assigned. In the case of internal number assignment, the system automatically assigns consecutive numbers.



Do **not** use hyphens or the asterisk (\*) symbol with external number assignment.

### Features

#### Number Range Intervals

You define the number ranges at company code level. In Customizing for the asset class, specify the number range per company code, and specify whether assignment from the number range should be carried out externally or internally. Alphanumeric intervals can only be assigned externally.

You should choose sufficiently large intervals, since an extension is not possible if the extension already belongs to another interval. When you reach the last 10 percent of the maximum assignable asset numbers of an interval, the system notifies you that the number interval will soon be exhausted. When the last number of the interval has been assigned, the system issues a further warning. You should pay attention to these warnings and extend the intervals in time or assign a new number range for the asset classes involved.

#### Cross-Company Code Number Assignment

If you want several company codes to use the same number assignment (cross-company code), you can maintain the number range in one company code, and assign the other company codes to this company code for number assignment.

Cross-company code number assignment in Customizing for *Asset Accounting (Define Cross-Company Code Number Assignment)*:

Company code 0001	Company code 0002
Num.assgn.CC 0001	Num.assgn.CC 0001



Example of a cross-company number assignment in chronological order (for internal number assignment):

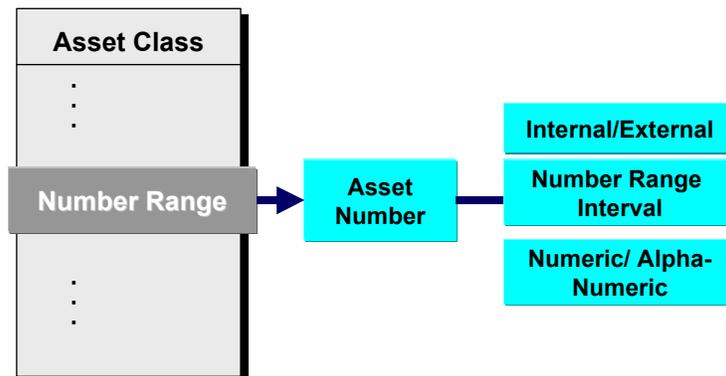
	CoCode 0001	CoCode 0002
--	-------------	-------------

## Number Assignment

1.asset	10001	
2.	10002	
3.		10003
4.		10004
5.	10005	
6.		10006
7.		10007

## Asset Main Number

The asset main number has 12 alphanumeric characters. Number assignment is controlled by the asset class. You specify the number range for an asset class in the asset class. In this way you ensure that number assignment is uniform for the asset class. You can choose between external and internal number assignment by specifying a correspondingly defined number range. Several asset classes can use the same number range.



## Asset Classes and Number Range

## Asset Sub-Number

The asset sub-number has four numeric characters. The first sub-number is assigned at the same time as the main number and is noted as a main asset master record. You do not have to define number ranges for the sub-number assignment. You specify in the asset class whether sub-numbers are assigned externally or internally.

- In the case of internal assignment, the sub-numbers are assigned consecutively for each main number starting with "0000".
- When you use external assignment, you can use your own method for assigning numbers. It is recommended that you devise your own method, especially for complex fixed assets that have component parts. In this way, you can look at and report on the sub-numbers for certain asset components at the same time by using the generic selection of sub-numbers.



## Screen Layout, Maintenance Level, Tab Layout for Master Data

### Use

The asset master record in the FI-AA component has a large number of fields in order to meet the needs of its many functions. To make master data maintenance nonetheless as simple and efficient as possible, the following Customizing functions enable you to design the asset master record to best suit your needs.

- Specification of field characteristics (required entry, optional entry, suppressed) and the maintenance level (asset class/main number/sub-number) for master data fields
- Specification of the layout of the tab pages in the master record

### Features

#### Screen Layout Control

You specify the field attributes in the asset master record, and the maintenance level of the fields, using screen layout control. You can define as many types of screen layout control as you need, and enter them in the asset classes (Customizing *Master Data*). There is screen layout control for

- General master data
- Depreciation terms in the master record (depreciation areas)

In each screen layout control, you can make specifications for the individual field groups. The corresponding maintenance fields are assigned to every field group.

Screen layout control → Field groups → Individual fields

The field groups and their respective fields are defined in system tables. When you define the screen layout, the system proposes all existing field groups, and you maintain each one individually. You define specifications for the screen layout and for the maintenance level of the field groups, and you specify whether the field contents can be copied as a reference.

SAP supplies several predefined screen layout controls. In regard to depreciation terms (areas), the system offers the following depreciation procedures:

- Depreciation terms are maintainable on sub-number level
  - Depreciation is uniform for main assets and their sub-numbers
  - Depreciation is uniform for the asset class

Using the screen layout, you control whether the fields of the field group are required fields, optional fields, display fields, or whether they should be suppressed completely (that is, not appear at all in the screen). For required fields, an entry is always mandatory in master data maintenance. You can choose whether to make entries in optional fields. You can only define field groups as display fields if the system determines the values in these fields (for example, insurance value). If you suppress all field groups of a screen, the screen is not displayed during master data maintenance.

By using the screen layout to control fields, you guarantee that the necessary fields are processed for each asset class. Each field group can have only one value in the screen layout.

### Screen Layout, Maintenance Level, Tab Layout for Master Data



Only fields that are blank or 0 can be suppressed using the screen layout control. Fields that are not blank or 0 are always displayed, regardless of the setting of the screen layout control. These non-initial fields may appear if:

- Screen layout control was changed.
- Suppressed fields were provided with values by the legacy data transfer

In order to suppress these fields, you first have to define them as being changeable, and then delete their contents.

### Maintenance Level

For each field group of the asset master record, you can specify one maintenance level. The maintenance level determines the asset classification level at which a field group can be maintained.

The maintenance levels in the system are:

- Asset class
- Main number
- Sub-number

You assign one of these maintenance levels to a field group, with the following results:

- **Asset class only**

If you specify the asset class as the only maintenance level for a field group, you cannot maintain the fields on main or sub-number level. Instead these fields are for display only at those levels. The values for these fields are copied from the asset class to the main number and sub-number. Later changes to these field values in the asset class are not reflected in existing master records (main number and sub-number), but apply only to newly created assets.

- **Main number only**

If you specify the main number as maintenance level for a field group, you can only maintain these fields when creating or changing the main number. The values of these fields are automatically copied to sub-numbers created later, and can no longer be changed there.

- **Sub-number only**

If you specify the sub-number as maintenance level, you can maintain the field group on the main and sub-number level.

- **Main number and sub-number**

If you specify the maintenance level as main and sub-number, the field group from the main number is proposed as a default value during maintenance of the sub-numbers, but can still be changed.

[Graphic: Screen Layout Control \[Page 217\]](#)

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**Screen Layout, Maintenance Level, Tab Layout for Master Data****Copying Using a Reference (When Creating Master Records)**

You can create an asset using another asset as a reference. You use the screen layout to control whether certain field groups in the target asset can be completed with values from the source reference asset. You should not complete all fields by copying from the reference asset. It makes sense to maintain some of these fields separately for each asset, since they apply only to one asset (for example, the base insurable value and other value fields containing insurance data).



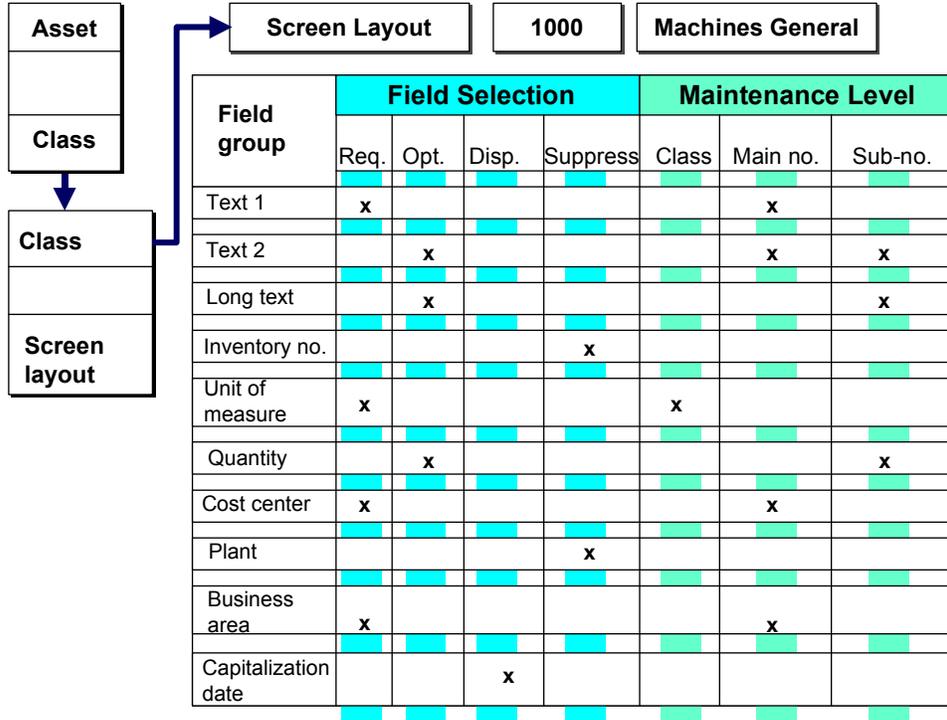
You cannot define a maintenance level for fields which are suppressed by means of the screen layout.

**Tab Layout**

Due to the large number of fields, the asset master record is split up onto different screens and tab pages using tab layout functions. In Customizing (*Master Data*), you can specify how many tabs you want to have (up to a maximum of 8) and which field groups you want to be displayed on the given tab pages. You can make these specifications dependent on the asset class. If necessary, you can define exceptions within an asset class that are dependent on the chart of depreciation.

## Graphic: Screen Layout Control

The following graphic shows an example of screen layout control.



## Master Data Maintenance with Asset Views

### Use

The asset view also has some control over master data maintenance, in addition to its function as an authorization (refer to [Asset Views \[Page 323\]](#)). For every asset view, you can determine in FI-AA Customizing which field groups of the master record are maintained, displayed only, or suppressed for this view (*Asset views*).

### Features

It is only possible to maintain **all** master data fields of an asset using view 1 (asset accounting view). To avoid inconsistencies between the screen layout control and the view control when creating a master record, you should define this view in such a general way that it allows you to maintain all field groups that are defined as required fields in a screen layout control.

If the field maintenance based on the screen layout control is inconsistent with the asset view, the field parameter default takes precedence. This parameter is a more stringent protection of the field.

### Incomplete Assets

It is possible to create assets when working with an asset view that only allows limited access to asset master records, but these assets will be incomplete. "Incomplete" means that all required entries were not made, because the asset view does not have authorization for this master data. For example, an employee in the purchasing department (with the purchasing asset view) can create an asset with master data relevant to purchasing, but without entering cost center information.

### Processing Incomplete Assets

If you are using the R/3 Workflow component, the system automatically creates a worklist of incomplete assets. This worklist is sent to the R/3 Mailbox of the responsible asset accountant. For more information, see [Workflow Scenarios in Applications \[Ext.\]](#)

As an alternative to Workflow, you can use a special report (under *Tools*) for selecting incomplete assets (refer to [Processing Incomplete Assets \[Page 546\]](#)).

### Access to Depreciation Areas

You can also assign a view for the depreciation area specifications in the asset master record. When you assign an asset view to a depreciation area, you can only maintain the depreciation terms of this depreciation area in the asset master record if you have the assigned asset view. However, your specifications apply to the entire depreciation area in this case, and not to individual field groups. For asset views for depreciation areas also, view 1 always has authorization for maintenance.

## User Fields

### Use

In addition to the predefined organizational structures in Asset Accounting, the evaluation groups and certain user fields allow you to classify assets using a feature in the master record.

### Features

#### Evaluation Groups

Evaluation groups can be used to meet your own particular needs for classifying assets. Five evaluation groups are available in the system. They are not pre-defined or limited in regard to their possible uses. You can define evaluation groups in FI-AA Customizing. There is one 8 character and four 4 character evaluation groups in the system. You define their specific features and meanings (under: *Master Data* → *User Fields*). The names of the evaluation groups can be alphanumeric.

There are five evaluation groups in the asset master record that you can use in parallel (four that have 4 characters, and one with 8 characters). Using the screen layout control, you specify whether the evaluation group is a required entry field during master data maintenance. In the Info system, you can define the evaluation group as

- A selection criteria (under *Dynamic selections* in the report selection screen)
- And as a sort criterion (see [Sort Versions \[Page 263\]](#)).

You can also change the key words for the evaluation groups in FI-AA Customizing. The system displays the changed key words in all screens, in reporting, and in the short texts for field help.



Evaluation groups 1 and 2 and their features:

<u>No</u>	<u>Eval.</u>	<u>Descr.</u>
1	SOFT	Software
1	HARD	Hardware
...		
2	PCBS	PC operating sys.
2	PCAW	PC user software
2	PCTO	PC tools
2	UXSO	Unix software
2	UNIX	Unix hardware
2	3270	3270 hardware
...		

#### Other User Fields

Along with the evaluation groups, with their neutral purpose, there are also specific user fields:

**User Fields**

- Reason for investment
- Environmental indicator
- Asset super number (see [Asset Super Number \[Page 59\]](#)).

You define the features of the these fields in FI-AA Customizing. They can also be used for sorting standard reports using sort versions.

## Time-Dependent Data

### Use

Certain assignments during the life cycle of an asset change frequently, and therefore a record should be kept of the changes, both for reporting and for valuation needs. Examples are the assignment of an asset to a cost center, or multiple-shift usage of an asset during a certain time period.

### Features

You can store the following assignments with different time intervals in the asset master record:

- Cost center
- Plant
- Activity type
- Cost order
- Location
- Room
- Personnel number
- Multiple-shift factor
- Shutdown indicator
- Maintenance order
- Maintenance project
- Business area

Data is stored in an unbroken sequence showing the exact day, with a "valid from" and "valid to" date. When you access a master record, the time-dependent data valid for the date of the request is displayed. If the assignment is different in other time periods, this is designated by a history indicator after the field. Using the "Field breakdown" function, you display the entries for a given field at the different intervals.



You can specify in Customizing whether you want the assignment to cost center and/or to business area to be time-dependent or not (under *Master Data*). For more information, refer to [Changes to Master Data \[Page 365\]](#)

### Time Intervals

You can display the available time intervals and select them for maintenance. If you want to change an assignment starting from a certain point in time, you must first specify the new time interval. The system processes the data of the new interval and takes over the original assignments. The new interval can then be maintained.

Time-Dependent Data



[Maintaining Time-Dependent Data \[Ext.\]](#)

## Matchcode

### Use

In the Asset Accounting system, the matchcode is used as a search help for asset master data.

### Features

You find asset classes using the usual F4 entry help function.

The following standard matchcodes have been defined:

- ID: A = name and asset class
- ID: C = cost center
- ID: I = inventory number
- ID: M = investment orders
- ID: P = investment projects
- ID: R = group asset

The standard matchcodes are all updated simultaneously. They are available for the "asset class" and "asset number" fields in the standard transactions. You define your own additional matchcodes in Customizing. Since the simultaneous matchcode update procedure is very taxing on the performance of the system, you should use the non-simultaneous update procedure for your own matchcodes.

Matchcode

## Document Management

### Use

Very often you have a large number of original documents, of both a technical and an accounting nature, for your assets. Your enterprise can digitalize these documents and manage them using the SAP R/3 Document Management component. Access to these documents can be especially important in Asset Accounting.

### Features

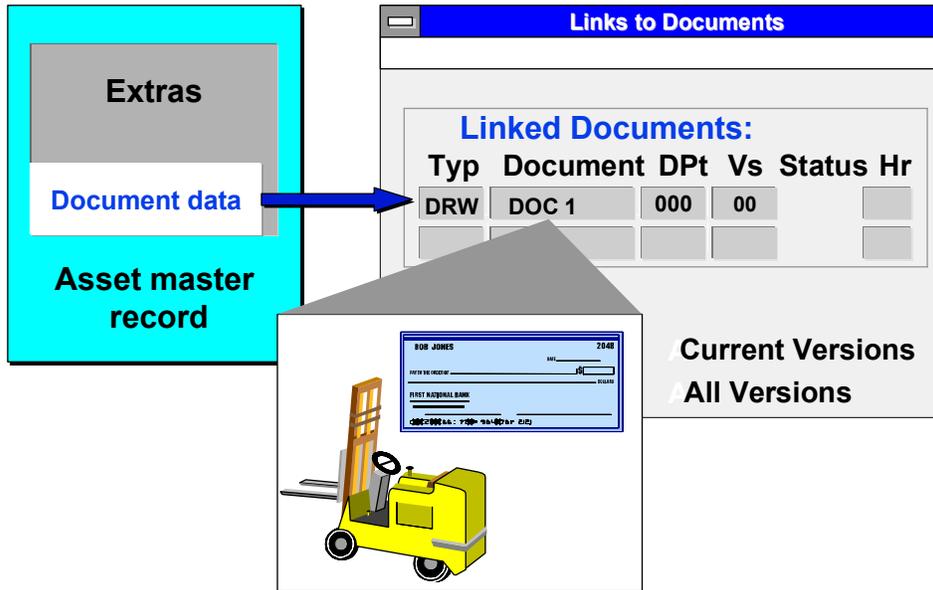
The asset master data transaction contains a link (under *Extras*) to the central function for document management in the R/3 System. This function enables you to link the asset master record to a wide range of documents, such as

- Original documents
- Text files
- Bills of material
- Blueprints
- Video sequences

The documents are not stored locally. They are stored in the central document management of the R/3 System.

In order for a document to be displayed in the FI-AA component:

- The front-end computer must have the required software application that corresponds to the format of the document.
- The computer also has to be defined as a network node in Customizing for *Document Management* (Choose *Document Management* → *General Data* → *Identify Frontend Computers*).
- A connection has to have been made between the document type and the object *asset* in Customizing for *Document Management*. (Choose *Document Management* → *Control Data* → *Define Object Links*.)



**Asset Linked to Document**

For more detailed information on the system settings for Document Management, see the R/3 Implementation Guide under "Cross Application Components." For general information on Document Management, see the R/3 library under [Document Management \[Ext.\]](#).

## Validation and Substitution

## Validation and Substitution

### Use

In order to provide your own customized assistance for asset master data maintenance, the system enables you to define your own validation and substitution rules. You make these specifications in FI-AA Customizing (*Define validation/Define substitution*).

### Features

#### Validation

You create your own validation conditions, which serve as check rules when you create an asset master record. These customized check rules supplement the standard check rules. A validation condition consists of the following:

- Company code
- Specification of the point in time for the check
- Validation rule

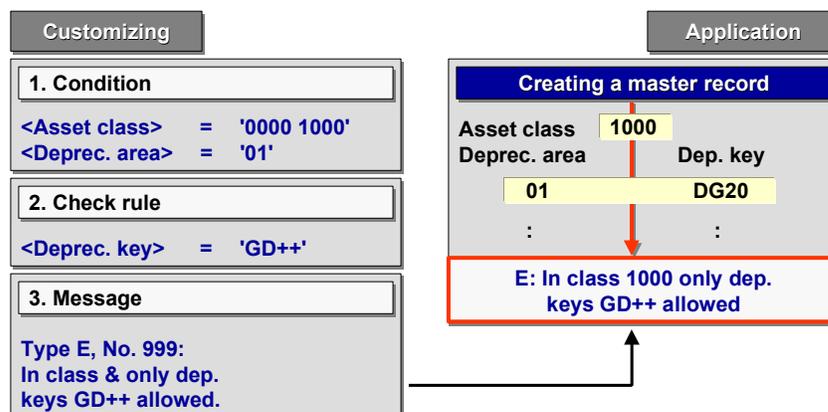
A validation rule consists essentially of the following elements:

- Condition, under which the rule should be checked (such as, if the asset class is LVA)
- Check rule, that cannot be broken (such as depreciation key is GWG1 or GWG2)
- Number of the error message that the system should produce if the check rule is violated

You must define check rules and conditions which conform to Boolean logic.

The system checks the validation conditions when you change to a new screen while creating an asset master record. If a check rule is violated, the system displays an error message. You specify the number of this error message in the validation rule. You have to create this error message yourself (transaction SE61).

The following graphic shows the Customizing settings for a validation rule, and the actions of the user. The validation rule defined is "In asset class 1000 in depreciation area 01, only depreciation keys for buildings are allowed."



#### Definition of a Validation

## Substitution

You can use substitution functions within the realm of asset master data maintenance for the following activities:

- Creating assets
- Mass changes to asset master data (refer to [Mass Changes to Master Data \[Page 538\]](#)).
- Changes to business area or cost center, with a resulting transfer document (refer to [Changes to Master Data \[Page 365\]](#) ).

### Substitution for Creating Assets

Substitution conditions enable you to create default values, in addition to the defaults from the asset class. Substitution conditions are based on freely definable rules, and are dependent on different master data fields in the asset master record.



You can use this method to complete the *Business area* field dependent upon the contents of the field "plant." The substitution rule could then be expressed in the form of a statement: "If the *Plant* field has the value XXXX, then replace the value 0000 (initial) in the *Business area* field with the value YYYY."

The substitution conditions have the same structure as validation conditions. The most important part of the substitution is the substitution rule. A substitution rule consists primarily of the following:

- The conditions under which the rule should be checked
- Substitution if the requirements are met (setting of a constant value in a particular master record field). Or you can use a substitution exit with program code that determines the value to be entered in the master record field.

You define the substitution rules in FI-AA Customizing. They are based on Boolean logic, as the validation rules are.

You can still change values that have been proposed on the basis of substitution rules. You can change these values manually in the master data transaction. Values that you change manually are not changed again by the substitution rule.



For information on the procedure to follow when creating validation or substitution rules, see the explanations in the FI-AA Implementation Guide. You will also find more information on this topic in the documentation of the FI-SL component (SAP Library: Financial Accounting - Special Purpose Ledger).

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**Mass Changes**

## Mass Changes

### Use

You can make master data changes to large numbers of assets in the FI-AA component using mass processing. For more information, see [Mass Changes to Master Data \[Page 538\]](#)



If you set up the workflow so that assigning an agent is not required, the system is not able to send any messages if errors occur. As a consequence, the results of mass processing (mass changes, mass retirement, mass transfer) are not visible. When this happens, look at the worklist (*Environment* → *Worklist* → *Display*) and start the report by entering the number of the worklist. In the list you see the status of the worklist, which shows that it has errors. Then choose *Edit* → *Display errors in WL* to analyze the errors.

## Archiving and Reorganization

### Use

For more information on archiving and reorganization of asset data, see [Archiving in the R/3 System \[Ext.\]](#).

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**Archiving and Reorganization**

## **Basic Functions of Transactions**

### **Purpose**

The “transactions” component enables you to carry out all accounting transactions that occur during the life of a fixed asset in your organization.

### **Integration**

Asset Accounting is a subsidiary ledger of Financial Accounting, along with Accounts Receivable and Accounts Payable. The Asset Accounting component makes it possible to perform all business transactions that affect fixed assets, in integration with Financial Accounting and other R/3 SAP System components, while at the same time guaranteeing parallel updating to the general ledger and the subsidiary ledger.

## Transaction Types

### Use

Within Asset Accounting, asset transaction types identify individual business transactions. A transaction type has to be entered for each transaction that affects assets. Either you make this entry yourself in the posting transaction, or the entry is automatic, based on specifications made in FI-AA Customizing (*Transactions*).

### Features

Each transaction type is assigned to a transaction type group. The business transactions are subdivided on the basis of the transaction type group into:

- Transactions that influence the acquisition and production costs of fixed assets These include: Acquisitions, retirements, transfer postings, post-capitalization
- Down payments
  - Investment support measures
  - Manual depreciation
  - Write-ups

### Specifications (Transaction Type Group)

The transaction type group, to which a transaction type belongs, determines the following:

- Which value fields are updated in the year segments
- Whether the transaction refers to the past (for example write-ups) or to the current fiscal year
- Whether the total of the transactions of a group is positive or negative with reference to a fiscal year
- According to which rule the start period for the depreciation calculation is determined
- In which G/L accounts posting is to take place
- Whether the acquisition date of the fixed asset is set on the date of the first transaction of a group
  - Whether proportional accumulated depreciation can be entered for a transaction (for example during post-capitalization), or is to be determined by the system (for example with asset retirements).

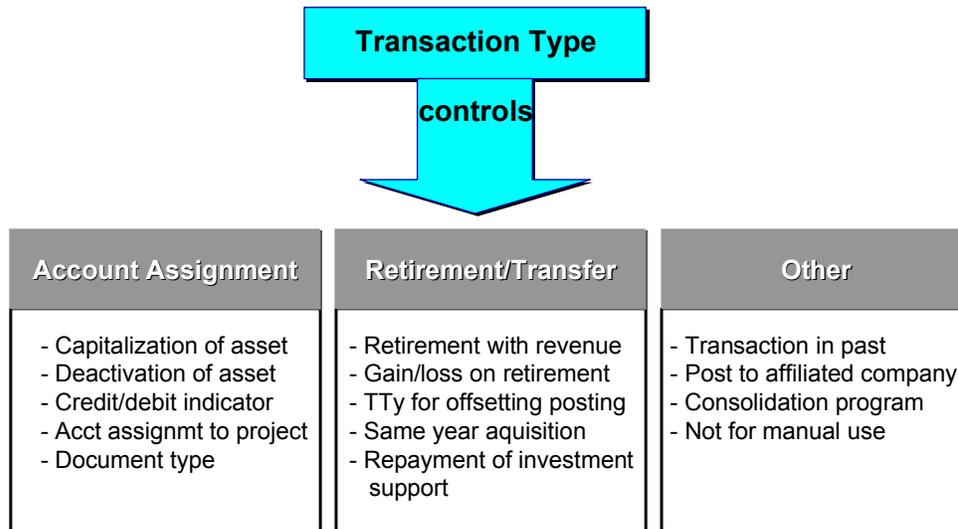
The number of possible transaction type groups, as well as the characteristics of the individual groups, is specified in the system and cannot be changed.

The system carries out a check for the asset class of the fixed asset involved when you post with a transaction type of the *down payment* group. This means that you can only post to fixed assets using these transaction types if you defined this in the asset class.

### Specifications (Transaction Type)

The individual transaction types determine the following:

**Transaction Types**



**Specifying Transaction Types**

Some of these specifications are dependent on the transaction type group, and are mutually exclusive. You cannot make specifications that are inconsistent with the transaction type group.



SAP provides a number of transaction types that cover most common business transactions. Unlike the transaction type groups, you can add new transaction types as needed. In order to prevent the transaction types that you define yourself from being overwritten during a release upgrade, you have to enter the letter x, y, or z at any position in the three place transaction type key.

## Line Items

### Use

From the point of view of Asset Accounting, line items are a proof of how the values displayed for an asset came about. For each transaction, a line item is created for each depreciation area in which posting is to take place. This line item contains the transaction type, asset value date, posted amount, depreciation, and interest on a transaction as well as any proportional value adjustments.

### Features

If posting is integrated with Financial Accounting, the line items created refer to the number of the corresponding posting document. When you display asset values, you can also look at the line items for the values displayed.

### Proof of Origin

There is a special report in the system for displaying the origin of individual line items.

This report lists the origin of transactions that affect acquisition value in a fiscal year. See the documentation for the Investment Management (IM) component in the SAP Library.

### Original Document

In certain circumstances, it may not be possible to obtain a clear proof of origin for the following transaction types: purchase acquisition, intracompany asset transfer, acquisition against clearing account, and goods receipt. If this is the case, the system attempts to determine the origin using plausibility checks, but the transactions are marked with a question mark (?). In these instances, you can only obtain more exact information from the original document. You display the original document from the list by choosing *Choose*.

## Updating Values in the Depreciation Area

# Updating Values in the Depreciation Area

## Use

Depending on the specifications in the chart of depreciation and in the asset class, you can manage multiple depreciation areas per asset in the Asset Accounting (FI-AA) component. (The maximum number is 99, refer to [Depreciation Areas \[Page 65\]](#)).

## Features

You implicitly or explicitly specify the depreciation areas where value field update is carried out when you post:

- **Explicit specification**

In the definition of the transaction type, you select certain depreciation areas for posting (in Customizing for *Asset Accounting*, choose *Transactions*).

- **Implicit specification**

If no explicit specification of this type was made for a transaction type, value update is carried out in the book depreciation area and in all areas which, according to the transfer logic defined in the chart of depreciation, are directly or indirectly dependent on this area. (See [Features at Chart of Depreciation Level \[Page 70\]](#))

If the book depreciation area is not active (for example, for leased assets), posting is carried out in all areas marked as dependent.

## Transfer Logic for Acquisitions

When you post acquisitions, you can manually enter different posting amounts in each depreciation area (using the function *Areas* in the posting transaction). If you explicitly enter an alternative posting amount for a depreciation area manually, all areas dependent on this area are updated. Dependent areas whose amounts were already corrected manually are not updated.



In some functions of the area menu (such as acquisition with automatic offsetting entry), it is not possible to enter values for different areas manually. If you want to use such a function anyway, then you can enter the transaction code manually, leaving off the last letter (for example, ABZO rather than ABZON). The system then calls the transaction in the form from a prior Release level, and you can enter differing posting amounts in it.

## Transfer Logic for Retirements

In the case of asset retirements and transfer postings, the transfer logic of the chart of depreciation does not apply. For each area with values and for which the transaction type has determined that posting should be made, the system determines the proportional retirement amount and the proportional accumulated depreciation.

## Currency Translation

If a dependent area is managed in a different currency from the reference area, amounts are translated into the currency of the dependent area. The posting date of the document is generally used as the value date for currency conversion.

## Quantity Treatment

### Use

Particularly in the case of low value assets, it is often preferable not to manage a separate asset master record for each individual fixed asset. Instead it sometimes makes sense to manage a number of assets on one master record.

### Features

Therefore, you can manage any number of assets in a single master record using collective management. The only requirement is that you enter a basic unit of quantity in the asset master record for the collective asset. When you post to such an asset, the system updates for this quantity, according to the debit/credit indicator of the transaction.

When an acquisition is posted to a collective asset for low value assets, the system checks, per unit, whether the acquisition posting exceeds the maximum amount for low value assets. The acquisition and production costs of the collective asset, plus the total of the amounts posted from the current document, are divided by the total quantity. The value determined in this way is compared with the upper limit which has been set for LVAs.

### Quantity-Related Retirement

A quantity-related retirement is always a partial retirement. There is a restriction in the system for partial retirements which stipulates that any existing postings to the asset are restricted to either asset acquisitions from previous years, or current acquisitions. Otherwise the system cannot clearly assess whether the partial retirement applies to acquisitions from previous years or to current acquisitions. The system determines a percentage rate for the retirement amount based on the ratio between the quantity being retired and the total quantity. If the above-mentioned restriction does not apply to the quantity based asset retirement, you can specify the quantity as additional information.

### Prerequisites

To ensure accurate quantity management of an asset, make the following specifications:

- Define the screen layout of the asset master record so that the basic unit of quantity is a required entry field at asset master data level or asset class level.  
  
In addition, the screen layout has to specify that the *Quantity* field can be changed, or at least displayed (refer to [Screen Layout and Maintenance Level \[Page 214\]](#)). If you want to suppress this field, suppress it using the maintenance level, **not** the screen layout.
- If you post asset retirements and acquisitions with quantity specifications to balance sheet accounts, you have to specify the quantity in the field status variant of the company codes or balance sheet accounts as additional account assignment. (In Customizing for *Financial Accounting*, choose *Financial Accounting Global Settings* → *Document* → *Line Item* → *Controls*).

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**Quantity Treatment**

If you entered a quantity when creating a master record (for example, 1), and you then post an acquisition with a quantity, both of these quantity specifications are added together.

## Dates in Asset Accounting

### Use

In addition to the usual dates entered in Financial Accounting (posting date, document date), there are special dates to consider in Asset Accounting. Either you enter these additional asset accounting dates yourself, or the system determines them.

### Features

#### Asset Value Date

The asset value date is the value date of an asset transaction from the asset accounting point of view. Each transaction on a capitalized asset triggers the automatic calculation of depreciation on the posting amount. The asset value date, corrected by the period control of the depreciation key, is the key factor in determining the depreciation start date.

#### Default Values for Asset Value Date

Since the asset value date has a direct influence on the amount of depreciation, the system creates a default value for this date when it can. The overview that follows shows the default asset value date for the most important asset transactions:

Initial acquisition	Capitalization date from master record (if in same FY, otherwise posting date)
Subs. acquis. in the same year	Asset value date of initial acquisition
Subs. acquis. in later years	Document date
Down payment	Capitalization date from master record (if in same FY, otherwise posting date)
Investment support	Capitalization date from master record (if in same FY, otherwise posting date)
Revaluation	Date of revaluation measure
Credit memo at time of invoice receipt	Value date of the invoice receipt (if in same FY, otherwise posting date)
Later revenue/costs from retirement	Date of last retirement (if in same FY, otherwise posting date)
Manual adjustments	First day of fiscal year
Retirement/transfer	No default value (required entry)
Settlement of AuC	Posting date

If the capitalization date is not set in the asset master record after the initial acquisition, or if this date is not in the current fiscal year, the system uses the logic below to determine a default value for the asset value date:

- If the document date and the posting date are both in the current fiscal year, the system uses the earlier of these two dates as the default asset value date.
- If the document date is in a past fiscal year, the system uses the posting date as the default asset value date.

## Quantity Treatment

### Automatically Set Asset Value Date

In the following posting transactions, you cannot enter an asset value date directly. The system therefore uses the default asset value date automatically. It determines which date it uses based on the table below:

Goods receipt (valuated)	Posting date
Invoice receipt with reference to purchase order (valuated)	Posting date of goods receipt (if in same FY, otherwise posting date)
Invoice receipt without reference to purchase order (valuated)	Posting date
Invoice receipt (difference post.)	Posting date of goods receipt
Stock withdrawal	Posting date

### Defining Your Own Logic for Determining the Asset Value Date

You can set up your own the method for determining the asset value date in Customizing for *Asset Accounting* (choose *Transactions*). Or you can use a customer enhancement project (transaction CMOD).

### Capitalization Date

You can enter the capitalization date manually when you create the asset master record. The system uses this date as the default asset value date when you post the first acquisition to the asset. If you do not enter a capitalization date in the asset master record, the system automatically adopts the asset value date of the first acquisition posting as the capitalization date. The system inserts the asset value date of the first acquisition posting in the capitalization date field (*Capitalized on...*) in the asset master record, when a capitalizing transaction type is used.

### Depreciation Start Date

The system determines the start period for depreciation calculation from the asset value date and the period control specified in the depreciation key (period control method) of the transaction category. The depreciation start date is the first day of the start period. The system determines the book value of an asset at the point of retirement in a similar fashion.

### Date Asset Is Ready for Operation

Along with the date specifications already mentioned, you can also enter the date the asset is ready for operation in the asset master record (in the detail specifications of the depreciation areas). This date is for informational purposes only, and has no influence on the calculation of depreciation. If you do not make an entry in this field, the system automatically enters the capitalization date.

### Fiscal Years That Can Be Posted

In the FI-AA component, it is possible to post to the current fiscal year and all previous fiscal years back to the date of the legacy data transfer for assets. When you post to past fiscal years, the system automatically updates all the relevant values in the subsequent fiscal years. Therefore, it is possible to make correction postings in the previous fiscal year, even after the fiscal year change (but before the year-end closing). However, after posting in a previous fiscal year, you need to run the depreciation posting program again for that year and all the following fiscal years up to the current fiscal year.

It is no longer possible to post to fiscal years that have been closed using the report for this purpose (refer to [Year-End Closing \[Page 520\]](#)).

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**Document Assignment**

## Document Assignment

### Use

The document type classifies the accounting documents. It is noted in the document header. The document type specifies the following, among other things:

- Which account types can be posted in a document
- Which interval is used for document number assignment
- Whether the document number is assigned externally or internally
- Whether the document type can be used online or only for batch input
- Whether cash discounts are to be taken into account (for vendor or customer postings)  
The cash discount percentage rate is managed in the general terms of payment in the vendor or customer master in Financial Accounting.

### Features

In order to have account assignment to fixed assets in a document, select a document type that allows you to post to accounts of account type "A".

For postings with an automatic offsetting entry or intracompany transfers within Asset Accounting (that is, transfer postings not integrated with Financial Accounting), also make sure that a document type with internal number assignment is selected.

When defining the transaction types, you can store a default document type for each transaction type.

## Validation

### Use

In addition to the standard checks, you can specify your own individual checks to be carried out when posting business transactions.

### Features

For this purpose, you assign validation conditions to each transaction type group in FI-AA Customizing (*Define validation*). The system then checks against these conditions when you make a posting using this transaction type group.

If the conditions are met, the system accepts the posting. If the conditions are not met, the system rejects the posting and outputs an error message. You specify this error message in the validation condition.

For more information, see [Validation and Substitution \[Page 226\]](#). The explanations in this topic on the subject of validation during master data maintenance also apply to validation for asset postings.

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## Reversing Documents

# Reversing Documents

## Use

The basic rule of thumb is that you have to reverse documents in the application in which they originated (for example, invoice receipt).

## Features

You can reverse documents that originated in Asset Accounting by choosing *Posting* → *Reverse Document*. When you call up the reversal transaction, the system shows you all the transactions for the asset. Select the transaction you want to reverse, and choose the *Reverse* function.

## Postings that Cannot Be Reversed in Asset Accounting

The following postings **cannot** be reversed in Asset Accounting. They have to be reversed in the integrated application in which they were posted:

- Acquisition with vendor (Accounts Payable)
- Acquisition with purchase order (goods/invoice receipt)
- Retirement with customer (Accounts Receivable)
- Stock withdrawal (Materials Management)

## Reversal Indicator

Along with the special reversal transaction, the initial screen of the FI-AA posting transaction also offers a reversal indicator. When you set this indicator, you can create a posting that corresponds to the selected posting transaction, but has reversed positive/negative signs.

This posting, however, has no relation to the original document. In addition, when you use this posting, the system newly calculates the proportional value adjustments in accordance with the asset value date of the posting. This is different from the procedure with an actual reversal.

## Reversal of the Settlement of an Asset under Construction

There is a separate transaction (*Posting* → *Capitalize Asset u. Const.*) for reversing the settlement of an asset under construction. Enter the number of the asset under construction that was settled. The system then reverses all documents that were posted during the last settlement. If you want to reverse a settlement that was posted before the most recent one, you first have to reverse all the settlements, which were posted after the one you want, in chronological order.

You cannot use this transaction to reverse the settlement of assets under construction that were only managed for cost accounting

## Budget Monitoring Using Statistical Orders or WBS Elements

### Use

The R/3 IM (Investment Management) component provides for controlling-oriented management of large-scale capital investments (see the R/3 library . [Investment Management \[Ext.\]](#)). The IM component offers parallel management of both cost accounting and asset accounting perspectives of capital investments. You manage the investments in the form of overhead cost orders or WBS (work breakdown structure) elements and an accompanying asset under construction. The orders or projects are the primary account assignment objects, and must be settled periodically to Asset Accounting. This kind of order or WBS element with its accompanying asset under construction is called an “investment measure.”

When you use investment measures, all debits charged to the investment measure appear, at least temporarily, in cost accounting and in the profit and loss statement. This applies even if the debits actually will be capitalized to assets. The debits that require capitalization are cleared during the periodic settlement and charged to the asset under construction. In this way, the system enables you to manage both debits that will be capitalized and debits that will not be capitalized on one investment measure.

The investment measure thereby has all of the functions of the asset under construction (such as, special depreciation, investment support measures). In addition, it has functions that are not available for assets under construction by themselves:

- Settlement by cost element of costs that are not to be capitalized (using a source structure)
- Settlement to the asset under construction, with different amounts to each depreciation area
- Account assignment of activity allocation and overhead

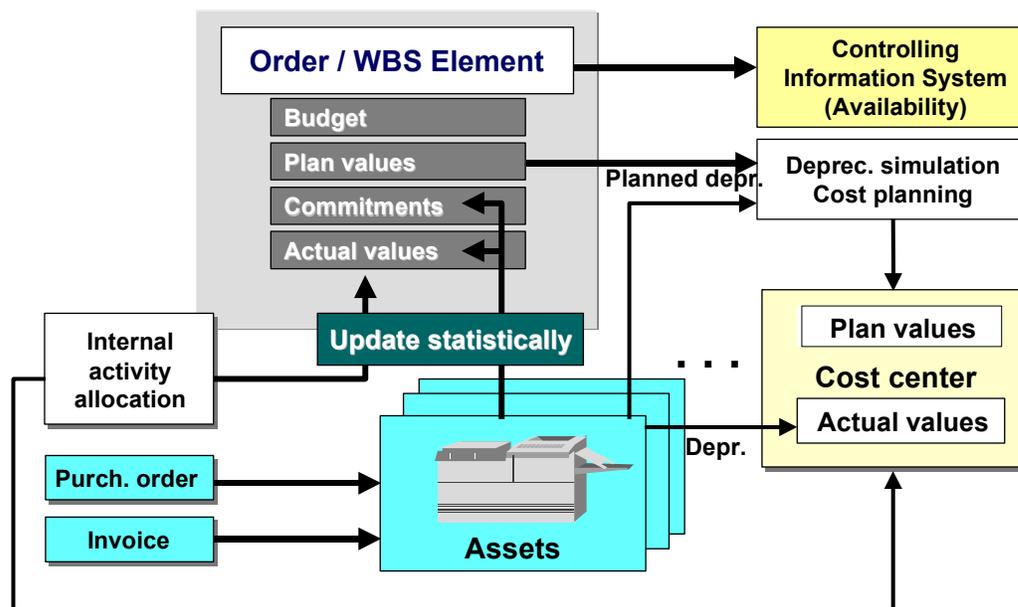
Capital investments that do not have an ‘under construction’ phase are usually capitalized directly in Asset Accounting. However, you may want to manage cost accounting information at the same time. For instance, you may want to manage plan values, budgets and commitments in order to carry out target/actual comparisons.

### Features

Therefore, the FI-AA component makes it possible to post asset transactions directly to assets, while it posts the transactions automatically as statistics to an internal order or a WBS (work breakdown structure) element.

You define the order or WBS element as “statistical” by setting an indicator in the model order or the project profile (or directly in the master record of the order or WBS element). No settlement is possible for statistical orders or WBS elements. Their only purposes are planning and budget monitoring. Therefore, debits that are not eligible for capitalization (internal activity allocation), but that you wish to have reflected in the statistical budget, require special treatment. When you post this type of debit to the statistical order or WBS element, make sure that it also has an additional account assignment to CO (Controlling). The account assignment could be to a cost center, for example. By making this additional account assignment, you ensure that these costs are included in later CO settlements.

## Budget Monitoring Using Statistical Orders or WBS Elements



### Statistical Order or WBS Element Account Assignment for Capital Investments

You can enter a CO order or a WBS element as an account assignment for capital investments. You make this entry in the asset master record under **origin data**. The system then makes an automatic, statistical posting to this order or WBS element at the time of the asset transaction. You can also enter such an additional account assignment directly during the posting transaction.

You specify in the master record of the order or WBS element that it is for statistical posting. Then the system does not allow the order or WBS element to be settled.

### Commitments

The system automatically creates a statistical commitment on the accompanying project when you enter purchase orders for to an asset. This commitment is automatically cleared when you post the goods receipt or invoice receipt.

### Active Budget Monitoring

The system provides a passive availability check, which you carry out using reports. In addition, there is an active availability check, which enables you to prevent posting of transactions that would exceed the budget. The system checks the budget when certain transactions are entered. It determines if the available project budget or the available released budget is still sufficient. The system uses tolerance limits you entered in Customizing when making the availability check.

In order to use the active availability check, you must enter it in the budget profiles of the statistical order or WBS element.

### Activities

You use an indicator in the budget profile in order to control whether the system should monitor a budget for an order or WBS element. You enter the budget profile in the order type or the project profile. You also have to define the necessary tolerance limits. For more information, see the Implementation Guide for Overhead Orders (CO-OM-OPA) or the Project System (PS).

## Budget Monitoring Using Statistical Orders or WBS Elements

The conditions below are necessary for automatic statistical updating:

- The CO object (order or WBS element) has to be entered in the asset master record as investment account assignment (**not** as maintenance order/cost order under time-dependent data)
- The indicator for statistical updating of the order/WBS element has to be set in the definition of the transaction types used for asset transactions (indicator: *Relevant to budget*). This indicator is already set appropriately in the appropriate standard transaction types.
- The asset balance sheet accounts for the APC of the assets have to be entered in the Controlling (CO) component as cost elements (cost element type 90).
- The *internal order* or *WBS element* field has to be set as an optional entry field in the field status variant of the company code or balance sheet account for the APC of the asset.

You make these settings in FI-AA Customizing (*Transactions* → *Budget Monitoring*).



When you have down payments or settlement from an order or WBS element to an asset, it is **not** possible to have automatic, statistical posting from the asset to a statistical order or WBS element. The reason is that down payment and settlement apply to assets under construction. Budget monitoring for assets under construction is handled in the *Investment Measures* part of the *Investment Management* (IM) component.

## Integration

You can include statistical orders and WBS elements in the depreciation forecast (for more information, refer to [Simulation \[Page 531\]](#) and [Simulation / Depreciation Forecast \[Page 290\]](#)). The preconditions are that the order or WBS element

- Has an investment profile in its master record (WBS elements: *Details* → *Control data*; orders: *Investments*). The investment profile must be defined so that
  - It does not create an asset under construction (IM Customizing: *Master Data* → *Define investment profile* – do **not** set the *Manage AuC* indicator)
  - It contains an asset class for depreciation simulation
- Has depreciation simulation data and a planned start-up date in its master record (under *Extras*).

## Funds Management

In addition to budget monitoring using statistical orders/projects, you can also oversee budgets for assets using the *Funds Management* component. In order to do this, set the indicator for budget relevance in the transaction types concerned, as described above. However, note that the settings in the standard system in relation to this transaction type indicator are oriented toward budget monitoring using statistical orders/projects.

Furthermore, the screen layout control of the affected asset accounts must allow for account assignment to a commitment item. For more information, see the documentation for the *FI - Funds Management* component.

## Posting Gain/Loss

## Posting Gain/Loss

### Use

When you post an asset retirement, you can enter the revenue from the sale of the asset. The system automatically determines the gain or loss (affecting income) as the difference between this revenue and the book value of the asset being retired. Since gain or loss from asset retirement does not occur regularly, they have only limited relevance for management accounting. Therefore the system posts gain or loss only as a statistic to the cost center. The actual account assignment to CO takes place to the profit center, which is assigned to the cost center (refer to [Additional Account Assignment \[Page 110\]](#)).

### Features

Gain/loss from asset retirements and transfers requires special handling. You can make specifications for this in Customizing for *Asset Accounting*, in the definition of the retirement transaction types, per depreciation area (Customizing for *Asset Accounting*, choose *Determine Posting Variants, Special treatment of retirement* function).

- **Retirement with gain/loss (variant 0)**

When you use this variant, the system posts the difference between the revenue realized and the book value retired as gain/loss that influences the profit and loss account. This is the type of posting used and allowed in most countries.

- **Show gain/loss as a liability (variant 1)**

This variant can only be used for partial retirements. The system does not post any gain or loss. Instead it corrects the proportional value adjustments being retired by the amount of what would have been the gain or loss. There is no posting of gain/loss to the profit and loss account. Instead, the book value of the remaining part of the asset is increased or decreased by this amount. In this way, the affect on the profit and loss account is postponed from the year of the retirement to the years over which the asset is depreciated.

If the revenue is more than the value adjustments being retired, the system treats the excess revenue as gain as it would in version 0.

The system uses variant 0 for complete retirements here.

- **Revenue as a liability (variant 2)**

With this variant, the system does not post any APC or value adjustments being retired. Instead, the existing cumulative value adjustments are corrected by the amount of the revenue received.

If the revenue is more than the existing cumulative value adjustments, the system treats the excess revenue as gain as it would in variant 0.

[Graphic: Retirement Variants \[Page 248\]](#)



Variants 1 and 2, for example, are required for group assets according to American law on ADR (refer to [Group Assets \[Page 53\]](#)). Note that the system only uses this

## Posting Gain/Loss

liability posting procedure until the book value of the asset is zero. Any revenue that exceeds this amount is posted as gain using variant 0. These postings, therefore, do not lead to negative book values.

### Account Assignment of Gain/Loss to Special Assets

The standard setting is for the system to post gain or loss to the corresponding profit and loss account that is specified in the account determination. There is an indicator in the definition of the transaction type that allows you to change this setting. Gain/loss is then no longer posted to the profit and loss account. Instead, it is posted as write-ups to special assets that are solely for this gain/loss posting. You specify these assets in Customizing for *Asset Accounting* under *Transactions* in the following ways:

- By entering a corresponding asset for each asset class
- By defining a substitution rule, which the system can use to determine the assets (refer to [Validation and Substitution \[Page 226\]](#)).

There is an indicator for the asset account assignment of gain/loss in the definition of the general transaction type. If this indicator is set, you can limit special retirement handling by depreciation area to variant 3 (gain/loss posted to special assets). You make this setting in the transaction screen for special treatment of retirement. (In Customizing for *Asset Accounting*, choose *Transactions* → *Retirements* → *Gain/Loss Posting ### Determine Posting Variants*.)

The reconciliation account for this posting transaction is the value adjustment account that is specified in the account determination for the asset.



You have to allow negative values for special assets used for gain/loss posting. Otherwise, especially if there is no APC on the asset, complete depreciation could be posted in the year of the transfer although the special asset has a useful life of many years.

### Retirement Revenue from Writing Off Special Reserves

You can specify that the system includes retirement-related revenue from the write-off of special reserves in the calculation of gain/loss. You make this specification by entering the gain/loss accounts in the account determination for the depreciation areas for special reserves. If you do not enter any accounts there, the system posts the book depreciation gain and loss separately from the revenue from writing off special reserves.

### Posting Net Book Value

You can specify that the system posts net book value from asset retirements to a clearing account for revenue from asset sale, or a clearing account for sales to an affiliated company. You make this specification in the definition of the asset company code. The system then does not post gain/loss (from sale) or loss (from scrapping) for an asset retirement. This type of posting is necessary, for example, to meet legal requirements in France.

Graphic: Retirement Versions

## Graphic: Retirement Versions

The graphic below shows the three retirement versions in account form. The APC amount being retired is 5000 (proportional value adjustments 4000, revenue 2000):

Retirement with Gain/Loss					
Fixed Assets		Rev. Clearing		Revenue	
10000 (APC)	5000	2000			2000
Accum. Deprec.		Gain		Receivables	
4000	8000 (accum)		1000	2000	

Gain/Loss on Liabilities Side					
Fixed Assets		Rev. Clearing		Revenue	
10000 (AHK)	5000	2000			2000
Accum. Deprec.		Gain		Receivables	
3000	8000 (4000-1000) (accum)		0	2000	

Revenue on Liabilities Side					
Fixed Assets		Rev. Clearing		Revenue	
10000 (AHK)		2000			2000
Accum. Deprec.		Gain		Receivables	
3000	8000(accum) 2000		0	2000	

Posting for the Different Retirement Versions

## Manual Handling of Delivery Costs

### Use

You might have capitalization rules that are different from those in the book depreciation area for different calculation purposes (such as group consolidation). This may be useful, for example, for the capitalization of freight costs. You can use the transaction for posting asset acquisitions to enter different APC amounts in each depreciation area (function: Areas). The only requirement is that the depreciation area cannot have mandatory takeover of APC from another depreciation area (In Customizing for Asset Accounting, choose *Specify Transfer of APC Values*).

### Features

#### Capitalization Scenarios

There are two possibilities at the time an asset is capitalized:

- A larger amount is capitalized in the book depreciation area, than in another depreciation area that is also to be posted to the general ledger.
- A smaller amount is capitalized in the book depreciation area, than in another depreciation area that is also to be posted to the general ledger.

The system reflects each of these situations by its different treatment of the difference in capitalization amounts.

The following graphic shows all possible capitalization scenarios using the depreciation areas required for group consolidation. The local book depreciation area is posted automatically online. The “corporate valuation” area (group area in local currency) is automatically posted periodically, with different capitalization percentage rates. The graphic shows the amounts posted to the respective accounts (balanced) at the asset acquisition. The percentage rates in the first column are the capitalization percentage rates in the respective depreciation areas.

0 /100 %	Local Book	Corp. val.	100 / 0 %	Local Book	Corp. val.
APC	0	1,000+	APC	1,000+	0
Payables	1,000-	-	Payables	1,000-	-
Clearing	-	0	Clearing	-	1,000-
Expense	1,000+	1,000-	Expense	0	1,000+

100 / 60 %	Local Book	Corp. val.	60 /100 %	Local Book	Corp. val.
APC	1,000+	600+	APC	600+	1,000+
Payables	1,000-	-	Payables	1,000-	-
Clearing	-	1,000-	Clearing	-	600
Expense	0	400+	Expense	400+	400-

#### Capitalization Scenarios

The two depreciation areas, local book depreciation and corporate valuation, have to have different APC control accounts in their account allocation. The payables account for the local book depreciation area corresponds in its function to the APC clearing account in the account allocation of the corporate valuation area. The expense account in the local book depreciation area, for example, is the freight cost account. The corresponding account in the account allocation of the corporate valuation area is the “nonoperating expense” account.

---

**Manual Handling of Delivery Costs****Treatment of Differences in the Amount Capitalized**

The system posts the difference between book depreciation APC and other APC to the “nonoperating expense” account. You have to enter this account in the account allocation of the depreciation area that is different from book depreciation (for example, the group depreciation area in local currency). When you post the acquisition, the system creates only one corresponding asset line item for the assets subsidiary ledger. The actual posting to the general ledger takes place when the values from this area are posted periodically.

[Graphic: Different Capitalization Rules in a Corporate Group \[Page 251\]](#)

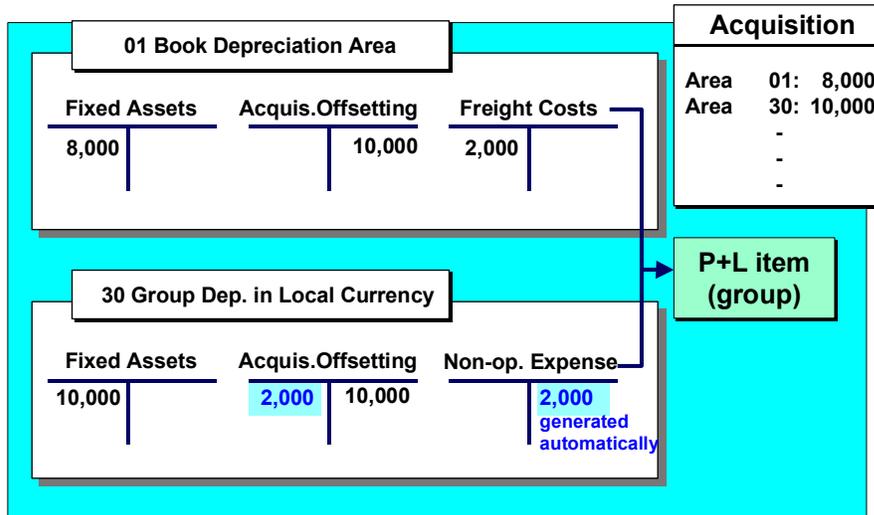


You may want to post an acquisition that should capitalize an amount of 0 in the book depreciation area. In order to make this posting, you have to use a transaction type that, according to its Customizing definition, only posts to depreciation areas in which amounts greater than zero should be capitalized (for example, 030).

Graphic: Different Capitalization Rules in a Corporate Group

## Graphic: Different Capitalization Rules in a Corporate Group

The following graphic shows an asset acquisition with different rules for capitalization, in account form. 8,000 is capitalized in the local book depreciation area, and 10,000 in the corporate valuation area.



The automatically created expense posting makes it possible to show the 2,000 freight costs, which according to commercial law flow into the P&L, as APC in the corporate group balance sheet. This posting is possible, although the account “freight costs” also usually flows into the corporate group P&L. In the corporate group P&L, you have to allow for the accounts “nonoperating expense” and “freight costs” to post to the same profit and loss statement item. In this way, the 2,000 freight costs balance, for the corporate group, with the automatically created nonoperating expense.

Since other expense accounts can be involved, in some cases, in addition to the account for freight costs, balancing is not by line item but by account.

## Information System

### Purpose

The *Information System* component contains a series of standard reports, as well as functions for modifying the Asset Accounting Information System to meet your specific needs.



Reports that encompass the entire fixed asset portfolio can have a negative influence on performance. Therefore, you have to start reports of this type using background processing (in the selection screen of the report: *Program* → *Exec. in background*). You can select a maximum of 1000 assets online.

## The Logical Database ADA

### Use

The logical data base **ADA** places the asset master records as well as their transactions at the disposal of the application reports. You can look at the database structure using transaction **SE36**.

### Features

#### Start Segment

The start segment for the logical database ADA is table ANLA0. This table contains certain control information on the report that is being requested. For example, it contains an indicator that specifies whether or not the report shows assets marked for deletion. This control information improves performance. The information is automatically set by the standard asset reports. You should also use the indicators in the table in reports you program yourself.

#### Standard Reports

The following functions make up the initial screen of the standard reports

- **Selection keys**

Along with the primary keys (company code, asset main number and sub- number), the following secondary keys are also available to provide for quicker access to information:

- Cost center
- Plant
- Asset class
- Business area
- Location
- Asset super number (in the case of real estate management: Complex fixed asset)

In addition to these keys, all fields of the general data section of the asset master record can be used as selection criteria for reports.

- **Report date**

Reports can be run at year-end or during the fiscal year. Reporting during the year means that all transactions after the report date will be ignored and only the depreciation up to this date will be calculated. Therefore, it is possible to create an asset list with book values for the first quarter, for example. You can also request past years, providing they are still in the system.

It is also possible to request future years. You can only use this function with the report date set at the end of a year. You then can select whether you want to see just the specified year under review or the annual values of all years up to the desired year under review.

The report date "01/01/YYYY" has a special significance. If this date is selected, the database will deliver the same data as at the end of the previous year. In this way, the system takes into account the fact that the values at the end of the old fiscal year and the

## The Logical Database ADA

beginning of the new fiscal year should be identical, and that you must be able to verify this.

- **Depreciation areas**

You can specifically request up to three depreciation areas. You can also request all depreciation areas for an asset by entering "\*" in the first depreciation area field on the initial screen. However, the only standard report that uses this function is the depreciation compare list. In the other reports you can only enter one depreciation area.

- **Sort versions**

(see [Sort Versions \[Page 263\]](#)).

- **Summarization levels**

The evaluated data can be provided at three different summarization levels:

- Totals for all asset main numbers and sub-numbers
- Totals only for asset main numbers
- Totals only at group level

- **Translation method (currencies)**

The method for translation of currency is a further parameter of the logical database. You can define a translation method in FI-AA Customizing (*Translation methods*). You can enter this method when starting a report. The system then determines the asset values according to the defined currency translation method and in the respective currency.

- **Customer modifications**

If you have made use of the customer modification projects, it is possible to

- Output a different master record field in place of the asset main number (such as the inventory number) (see [User-Defined Asset Number in Reporting \[Ext.\]](#))
- Make currency translations you have defined yourself (see [Currency Translation in Asset Reporting \[Ext.\]](#))
- Include the field descriptions for fields that are not included in the standard sort versions (see [Output of Description Texts \[Ext.\]](#))

## User-Defined Reports

Some functions of the logical database do not appear directly on the initial screen of the standard reports. However, you can use these functions to create your own reports.

- **Summarization at asset main number**

If desired, you can request a report that displays only one data record for each asset main number. That means the values of the asset are summarized at the asset main number level. The system then uses the master record information, as well as the depreciation area information, from the first asset sub-number that has values (including 0000).

- **Additional information**

The application table **ANLA** has more extensive information and is made available to the report in a special structure (ANLAV).

This information includes:

## The Logical Database ADA

- All time-dependent data that is valid on the report date (cost center, business area, and so on)
- Balance sheet account of the requested depreciation area (if none exists, the master area is used)
- Balance sheet item of the balance sheet account (optional)
- Cost center hierarchy area
- Value type: 0 =asset, 2 = order, 3 = WBS (work breakdown structure) element
- For value type 3: project relating to WBS element

- **Total values**

In addition to the stored values, the transferred value field structure also contains different totals calculated at the time of the creation of the report, such as the net book value at the end of year.

- **Planned capital investments**

Along with the capability of reporting on capitalized assets, it is possible to create reports for planned capital investments (orders/projects/program positions). These planned investments are then evaluated in the light of the data from their depreciation simulation.



For a detailed description of the logic, and the value fields at your disposal, see the online documentation for the logical database ADA.

## General Functions of Standard Reports

# General Functions of Standard Reports

## Use

The Asset Accounting Information System offers report selection in the form of a report tree. This report selection tree is a freely definable hierarchical structure. You specify the structure of the report tree in FI-AA Customizing under *Information System* (see [Report Selection \[Page 269\]](#) ).

In the list reports in the standard report selection for Asset Accounting, there are a series of general functions which are discussed below.

## Features

All of the reports in the standard report selection tree are pre-defined with report variants. Therefore, when you call them up, the initial selection screen appears in a simplified form. You can make different initial selections (such as, by asset number, asset class, cost center, location, and so on).

If you want to see the full initial selection screen, choose the *All selections* function in the selection screen. One of the important pre-defined options in the standard reports is "Display group totals only." If you also want to display individual assets, you can change this option in the full selection screen, which you reach by choosing *All selections*. The report variants all begin with "SAP..." You can copy these variants, if needed. Or you can manually create new variants, and enter them in the report tree.

## Dynamic Selections

The *Dynamic selections* function in the selection screen of the report enables you to narrow the selection of the report even further than the standard selections. You can use all the fields in the general part of the asset master record to limit the report. To do this, you select from the fields displayed (master data fields) in the resulting pop-up window, and choose them with the function *Selections*. In the screen that then appears, you can further limit the values for the report.

## Sort Version

The sorting/totaling of the data records that are issued is variable and is determined on the initial screen of the report by specifying the sort version (see [Sort Versions \[Page 263\]](#)).

## Currency Translation Methods

The method for currency translation is another parameter of the logical data base. You can define the translation method in Asset Customizing (*Information System*) and enter it when starting a report. The system then determines the asset values according to the defined currency translation method and in the respective currency.

## Report Date

The report date has a special significance in the selection criteria for the report. It establishes the fiscal year for which the report is carried out. In the documentation this fiscal year (for which the report is being run) is referred to as the "current fiscal year."

You have to enter the report date in the form of a calendar date. For shortened fiscal years, the system automatically determines the fiscal year concerned based on the fiscal year variant in the respective company code. The following scenarios are possible:

## General Functions of Standard Reports

- **The report date is in the past or in the current fiscal year:** The report date can be the end of the fiscal year, as well as any period end date during the current fiscal year. For fiscal years that are already closed, the only report date allowed is the end of the fiscal year.

For reports for the past, the system uses the report date to determine whether it uses the online database or an archive file.

- **The report date is in a future fiscal year:** In this case, the system always sets the report date to the last day of the respective fiscal year.



- The current fiscal year is always the year, for which the last fiscal year change was carried out.
- In order to ensure that values are identical at the end of the old fiscal year and the start of the new fiscal year, the system treats the report date 1/1/YYYY as if the report were for 12/31/YYYY-1.

## Reports Including Special Periods

Special periods can be taken into account in reports which include posting transactions (asset history sheet, transaction data report). You need to specify the last day of the fiscal year as the report date.

## Summary Report

By selecting parameters for the way the report lists assets, you determine whether the report

- Displays only totals for the sort levels in the respective sort versions
- Lists only asset main numbers (with summarized values for all sub-numbers)
- Lists all sub-numbers and main numbers individually

Summary reports are especially useful for very large datasets. Using summary reports, you can access summarized totals information, without having to create extremely long lists.

## Interactive Reporting

By double clicking on a totals line, you can get a detailed list of all the assets that make up the total. Using the function *Different report* in the list display of a standard report, you can call up other reports (totals and individual lists). For more information, see [Report Interfaces to Other R/3 Components \[Page 261\]](#).

You can use the *Choose* function in most lists. The system then provides additional information which differs depending on the object that you select. The objects that can be selected are:

- Asset main number and sub-number  
The system goes to the display of the asset master record.
- Document number  
The system goes to the display of the document.
- Order number or project number  
The system goes to the display of the order or project.

## General Functions of Standard Reports

- Error number  
The system goes to the long text for the error, if assets with errors appear in the log.
- Simulation version  
The system jumps to the display of the replacement rules in the simulation version that was used.

## Ranking List

By entering a number 'nnnnn' in this selection field, a ranking list — one per company code — is issued containing the top nnnnn fixed assets. It is sorted in descending order by the value field which you marked under "sorting according to value field".

## Sorting by Value Field

When starting the report, you can also specify that additional sorting take place according to value field on the lowest sort levels of the list. You can choose all or some of the value fields issued in the respective report.

Sorting is carried out in descending order from the actual amount of the value field. This request only makes sense for a report on individual assets (that is, not a summary report). If you requested a ranking list, you must select a value field here. The ranking list is then created with reference to this value field.

## Background Processing

Reports that encompass all the assets in the system are very demanding on system performance. For this reason, you have to start reports of this kind as background processing (in the report selection screen: *Program* → *Execute in background*). You can select a maximum of 1000 assets online.

## Additional Entries for Batch Run

- Additional heading  
By specifying an additional heading, you can modify the list header. The list header then contains the specified additional heading.
- List separation  
By selecting this parameter, you can specify separate output destinations for each company code according to table TLSEP.
- Microfiche line  
By selecting this parameter, you can modify the list header. The list header then contains, among other things, information relevant for microfilming.

You can combine these parameters in any way you want.

## PC Download

You can also download reports to Microsoft Excel<sup>®</sup>. You create a file for this purpose in the online display of FI-AA reports under *Edit*. The following conditions have to be met in order to use this procedure:

- The Excel Listviewer<sup>®</sup> has to be installed correctly (see the Implementation Guide under "Information System").

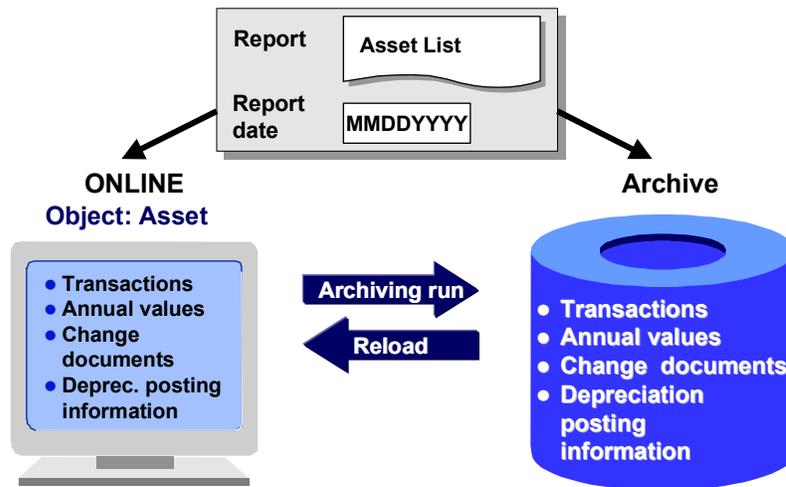
**General Functions of Standard Reports**

- The R/3 FI-AA list has to contain group totals.
- The R/3 FI-AA list cannot contain totals that are derived from several lines in the report, such as in the asset history sheet.

[Graphic: Breakdown of Totals List/Excel Download \[Page 260\]](#)

**Archive Reports**

The system guarantees the consistency between the R/3 database and the archive. Therefore, you can access the archive from the R/3 system. The system uses the report date to determine whether it should access the online database or the archive.



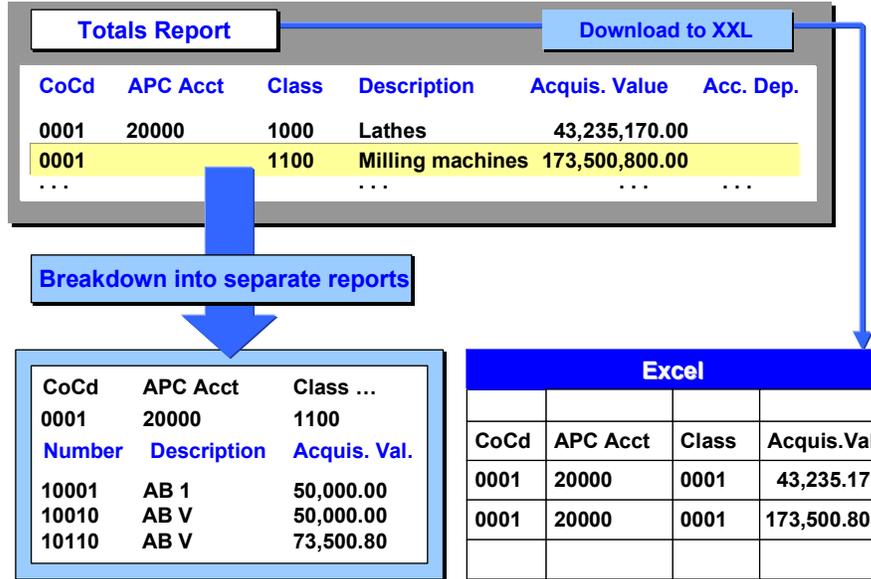
**Archiving/Reporting**

However, the functions for *Dynamic selections* and *Worklist* (see [Mass Changes \[Page 228\]](#) ) are not available when you use archive reports.

Graphic: Breakdown of Totals List/Excel Download

## Graphic: Breakdown of Totals List/Excel Download

The following graphic shows an overview of the breakdown into separate reports and the Excel download.



## Report Interfaces and Navigation

### Use

The online display of the standard reports offers interactive analysis. The various options are listed below.

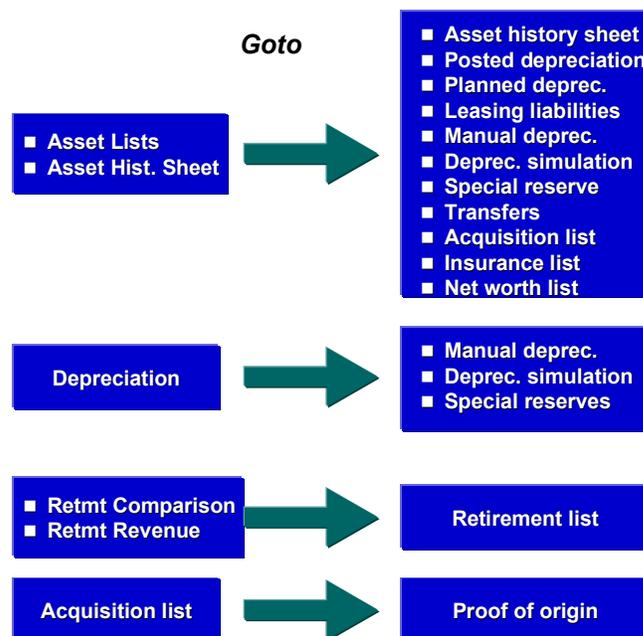
### Features

#### Totals Lists

You can double click on a totals line in a totals report, and the system displays the individual assets that form the total. The system then starts the corresponding individual list, using the selection options that generated the total.

You can jump directly to other Asset Accounting standard reports using *Goto* → *Different report* in the list display. Place the cursor on a totals line. The system then starts the other report using the selection options that led to the total. You can then also break down the total in the new report. You can use this method, for example, to create the individual transaction list for an item in the asset history sheet.

The following graphic shows an overview of internal navigation in the FI-AA Info system:



#### Internal Report Interfaces

#### Individual Lists

You can also use the function *Different report* in individual lists. Place the cursor on an asset line. The system then calls the new report using the selected asset as the selection criterion.

## Report Interfaces and Navigation

When you double click on an asset line, the system goes to the individual value display for that asset.

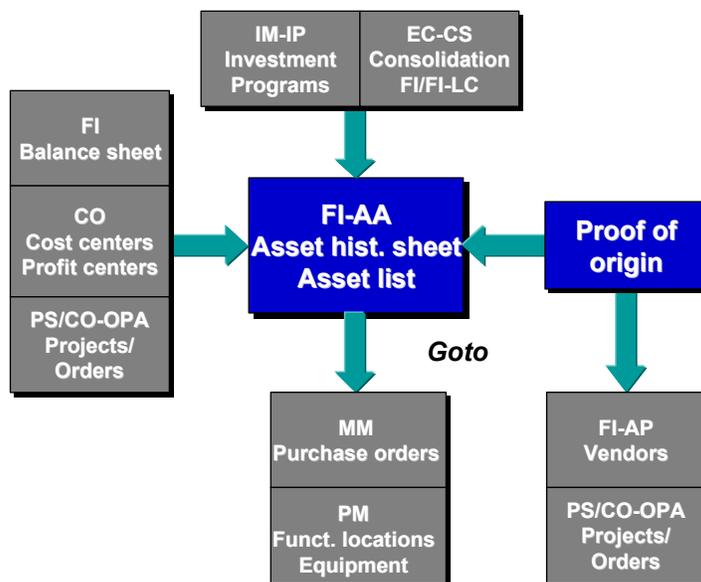
## Report Interfaces to Other R/3 Components

In addition to these options for navigating within FI-AA, the FI-AA Information system also has interfaces to other R/3 components. The interfaces allow you

- To go directly to the asset history sheet and asset lists from reports in other components
- To go directly from the asset history sheet and asset lists to reports in other components

When you start in other components, the system displays all assets that belong to the list item in the report from which you started (for example, all assets for a balance sheet item). When you start in Asset Accounting, the system displays all objects in the other component that belong to the list item in the Asset Accounting report (for example, all purchase orders for an asset).

The following graphic shows an overview of the interfaces to other R/3 components:



## Interfaces to Other R/3 Components

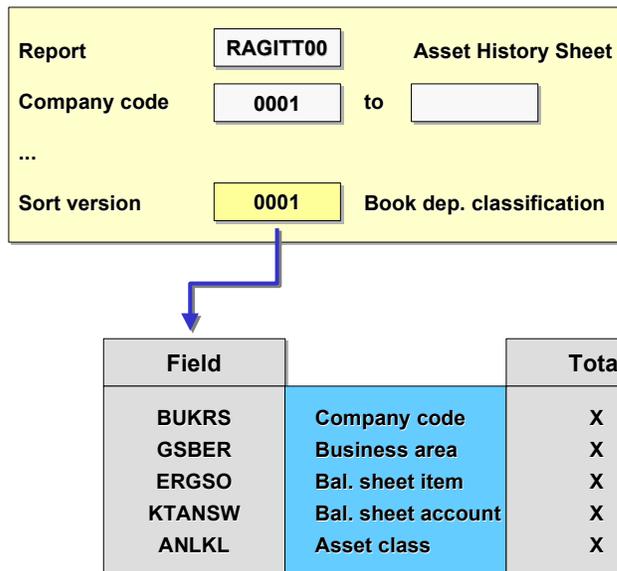
The connection between the PS and CO-OPA components to Asset Accounting only applies if there is automatic, statistical account assignment from assets to orders or WBS elements.

## Sort Versions

### Use

Sort versions are used for sorting and totaling the data records in report lists in Asset Accounting. You enter the sort version as a parameter before running the report. The system offers a standard sort as a default for each report. You can change this default. When you choose the entry help on the *Sort version* field, the system displays an overview of the existing sort versions.

The following graphic shows the definition of a sort version for the standard Asset History Sheet report.



### Sort Version

### Features

You can modify existing sort versions in Customizing for *Asset Accounting*. Choose *Information System*. You can create completely new sort versions under the *Edit* menu option. Follow the procedure below:

Name the sort version using a 4 character identification code. You enter this identification code as a parameter when running reports in order to obtain the desired sorting or totaling.

Choose a name that has some meaning to you, in order to assist you when you use entry help.

### Specifying the Sort Hierarchy

In order to specify the desired sort hierarchy, enter the name of the table and the root name of the desired sort field. You usually need to determine these technical names beforehand, using the information system of the Data Dictionary. You can use all the fields in the dictionary tables ANLAV and ANLB as sort fields.

## Sort Versions

In addition, if you enter the length and the offset, you can include only specific parts of the character string of the sort field in the sort key. By using this method, you can use different parts of the contents of a field in the same sort version for different sort levels.



You want to use the first 2 characters and characters 3 - 4 of the TXJCD field as sort levels:

Field	Offset	Length
TXJCD	0	2
TXJCD	2	2

## Selection of Totals

You specify the sort levels for creating totals in the *Total* column .

## Breakdown of Totals by Depreciation Key/Transaction Type

By setting the *Statistics* indicator, you can obtain a more detailed breakdown in certain lists. You can break down the total of a group level according to depreciation key (for depreciation lists) or according to transaction type (for transaction lists).

## Totals by Main Number

By setting an indicator in the definition of the sort version, you can obtain additional totals for each asset main number. This total represents the cumulative value of all sub-numbers for the main number. The system will only create this kind of total if the asset has at least two sub-numbers.

## Sorting by Sub-Number

Another indicator makes it possible to sort asset sub-numbers for each main number in descending numerical order. In this way, the system usually displays the most recently created sub-number first.

## Usable Tables (Fields)

The fundamental rule is that you can only use fields from the asset itself in a sort version. In reporting, this means table ANLAV which contains the table ANLA, along with the fields of table ANLZ (time-dependent data). As of Release 2.2, you can also use table ANLP (posted depreciation).

You can include values from table ANLV (insurance data) in the insurance list.

For reasons of performance, it is **not** possible to use the supplier name in the definition of sort versions.



- The sort version function is **not** available in standard reports that are based on ABAP query (see [ABAP Queries \[Page 275\]](#)).
- It is not possible to use tables that deal with transactions (ANEK or ANEPV). For example, if you use the transaction type as a sort criterion, it is unavoidable that assets are listed more

**Sort Versions**

than once. Depending on the type of report, multiple listing of assets can lead to considerable problems.

- The program does not perform a check of the tables used when you define a sort version. This type of check would make it impossible to use your own customer tables for sort versions for reports you programmed yourself.

## Simulation Version

# Simulation Version

## Use

A significant function within the framework of Asset Accounting is planning the future development of the value of fixed assets. For this reason, the system offers the following simulation options:

- You can execute standard reports with simulated depreciation terms.
- You can analyze changes in the value of individual assets using simulated depreciation terms and transactions.

## Features

### Reporting with Simulation Versions

When starting a standard list report, enter a defined simulation version in order to generate the list using simulated depreciation terms. You can define these simulation versions yourself with the rules for the simulation. When doing this, specify

- The depreciation area for the simulation
  - The asset class (generic entry from right to left with '+')
  - The depreciation key to be replaced in the simulation
  - A valid-to date, which means that for an asset to be included in the simulation, it has to have a capitalization date on or before this date.

The following options are offered in the function part of the simulation table:

- New depreciation key
- Change to the useful life as a percentage (such as 80% or 125%)
- A valid-from date, which means an asset has to have a capitalization date on or after this date to be included in the simulation

The simulation version that you use is noted in the page header of the list created. This applies to all depreciation lists that allow for the use of simulation versions. Choose the *Choose* function to obtain a list of the parameters for the simulation version. You can also print this list.

[Graphic: Reporting with Simulation Versions \[Page 268\]](#)

### Simulation Versions Using Substitution Rules

Along with the fields described above, you can also enter a substitution in order to define a simulation version. This method enables you to create complex substitution rules and to simulate additional depreciation terms along with the depreciation key and the useful life. However, the system uses the substitution only if it cannot find an appropriate simulation rule (see above). If you want the system to use the substitution in all cases, you have to define a simulation variant without rules and enter only the substitution.

The transaction for defining this type of substitution is found under *Substitution* in the transaction for defining the simulation version. A dialog box appears in which you can select the depreciation terms you want to simulate. You can select the following depreciation terms:

- Depreciation key
- Useful life
- Periods
- Scrap value
- Index series
- Variable depreciation portion

In the next screen, enter the values that should be used to replace these depreciation terms in the simulation. You can enter a fixed value here. You can also enter a substitution user exit that you have programmed.

You can also limit the validity of the substitution by creating conditions for it. When you define the conditions for the substitution, you can use all fields in the asset master record, as well as the simulation version itself.



For more information about substitution, see [Validation and Substitution \[Page 226\]](#)

### Depreciation Forecast

There is a separate standard report for the simulation of depreciation in future fiscal years. The date you enter for the report determines the future fiscal year up to which you want to simulate depreciation.

For more information, see [Simulation \[Page 531\]](#)

### Simulation of Changes to the Value of Individual Assets

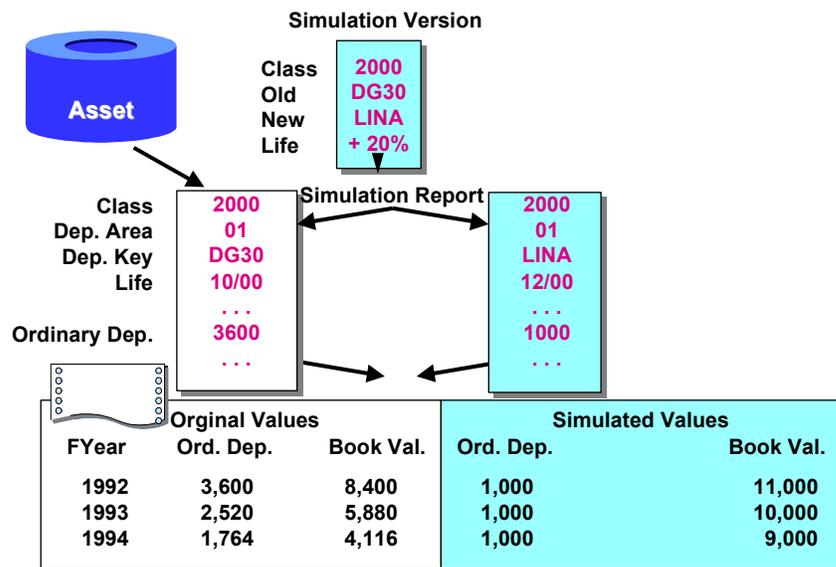
You can use the transaction for displaying asset values to look at values for any fiscal years and fiscal year intervals. The system projects depreciation and values for future fiscal years based on the current values and depreciation terms. In this way, the system enables you to preview the course of future depreciation of the asset.

In order to obtain a more in-depth analysis, you can simulate changes in the depreciation terms (useful life, depreciation key, depreciation start date, index). In addition, you can simulate any number of transactions directly in the value display transaction. The system then displays all asset values at the same time, based on the simulated terms and asset transactions.

Graphic: Reporting with Simulation Versions

## Graphic: Reporting with Simulation Versions

The following graphic shows reporting using simulation versions. Straight-line depreciation (depreciation key LINA) with a 20% increase in the useful life is being simulated.



You cannot use this procedure to recalculate depreciation from the past.

## Report Selection

### Use

The Information System for Asset Accounting is defined in the form of a report selection tree. This report selection tree is a freely definable hierarchical structure. When you double click on a node of the structure, the system calls up a standard report.

### Features

SAP provides a standard report tree (FIA1). You can copy this report tree and modify it to suit your needs (FI-AA-Customizing: *Information System*):

- Remove branches
- Add branches
- Change the call up of reports (call up customer-designed reports)

The report selection tree is found in the Asset Accounting application menu under *Info system*. The report tree displayed is always the one most recently defined in Customizing and set to the status "Active."

### Report Variants

All of the reports in the standard report selection tree are pre-defined with report variants. Therefore, when you call them up, the initial selection screen appears in a simplified form. If you want to see the full initial selection screen, choose the *All selections* function in the selection screen. One of the important pre-defined options in the standard reports is "Display group totals only." If you also want to display individual assets, you can change this option in the full selection screen, which you reach by pressing *All selections*. The report variants all begin with "SAP..." You can copy these variants, if needed. Or you can manually create new variants, and enter them in the report tree.

### User-Specific Report Selection

You can use the function *Edit* → *Create user tree* to copy the standard report tree, or another user's tree, and then modify it to meet your needs. In this way, you can set up the information system to meet your individual demands.

## Definition of the Asset History Sheet

# Definition of the Asset History Sheet

## Use

The asset history sheet is the most important and most comprehensive report for the year-end closing or for an interim financial statement. As with all other lists, it can be set up with any sort versions, and total on any group level. You can also create a compact totals list without individual asset information.

## Features

The structure of the asset history sheet varies widely from country to country, depending on tax laws. You can freely define the line and column structure of the history sheet, therefore. At the same time you can define which values should be displayed in which lines of the report.

## Basic Versions of the Asset History Sheet

SAP provides country-specific versions of the asset history sheet, which satisfy the legal requirements of the given country. Additional history sheet versions are also available.

## Completeness

When you create an asset history sheet, the system notes in the header of every screen whether the asset history sheet version was created using a complete or incomplete version.

An asset history sheet version can be called "complete" when every transaction relevant to the history sheet, and - if they exist - every value adjustment which has been made to them, has been assigned to at least one position in the history sheet. Transactions relevant to the history sheet are the posting of acquisition and production costs, down payments, investment grants and write-ups.

An asset history sheet version is only complete when:

- Every transaction type relevant to the history sheet is assigned to a history sheet group.
- The allocation indicator in column 1 to 5 is set (that is, contains either an X or a period) for every history sheet group except "YA", "YY" or "YZ". These indicators are in the definition of the asset history sheet version, in the detail screen for the history sheet position.

When the asset history sheet version is complete, the indicator for completeness automatically appears in the definition for the version, in the overview screen for the position.

When you are maintaining an asset history sheet version in FI-AA Customizing, you can request a log of the completeness check. You can see in this log the reason that a history sheet version is not complete.



Please be aware that the completeness of the asset history sheet version can only be guaranteed with the standard transaction types and groups provided by SAP. If you have defined your own transaction types, for example, this could influence the completeness of the asset history sheet.

## Definition of the Asset History Sheet

You should also note that having an “incomplete” history sheet version from the system’s point of view does not necessarily mean that the asset history sheet is incorrect for accounting purposes.

### Definition of a History Sheet Version

In order to create a new history sheet version, you must first name it using a four-digit identification code. You will have to specify this identification code in the asset history sheet report as a parameter (in the second page of the report request screen) in order to implement the desired history sheet version.

You define new asset history sheet versions in FI-AA Customizing (*Define history sheet versions*). You set up the structure of the lines and columns of the asset history sheet there. A maximum of 10 lines and 8 columns is possible, but a history sheet version must have at least 2 columns. The first column is always "00", the last one always "99". All further columns must be between "01" and "80". The first step is to consider which lines and columns you need. Enter these into free line or column fields. If more than 5 columns are needed, you must scroll to the right. When you press Enter, the lines and the columns are positioned correctly.

In order to delete existing lines/columns, you have to write over the line or column number with blanks. You can also duplicate lines/columns by writing over the existing line or column number with the new number.

You must then enter all headings for the history sheet items you have created. A history sheet item which has already been created in another language, but which has not yet received a description in the maintenance language, is marked with "\*". In order to define which asset transactions should flow into which history sheet items, you can go through the individual history sheet items one by one, using *Choose*.



You should be aware of the following when you define your own customer-specific history sheet version:

The key of your customer-specific asset history sheet version has to start with the letter “Z.” This procedure protects your history sheet from being overwritten by the system during a release upgrade. For the same reason, you should not modify any standard history sheet versions delivered with the system. Instead, copy a standard history sheet and make modifications to the copy (with a key starting with “Z”).

### History Sheet Groups

There is a list of the history sheet groups in the detail screen of each history sheet position. In the standard system, this screen contains the transaction type groups that are relevant for the history sheet, as well as the special groups YA (values at the start of the year), YY (annual values), and YZ (year-end values). The transaction type groups for the values below are relevant for the asset history sheet:

- Acquisition and production costs
- Down payments
- Investment grants
- Write-ups

Every history sheet group contains 8 indicators. Each indicator represents a history sheet sub-group. By setting these indicators in the selected history sheet position, you specify that the value

## Definition of the Asset History Sheet

fields associated with this group will flow into the selected history sheet position. You can see which value fields are represented in the history sheet sub-groups in the list that follows. History sheet sub-groups that are already allocated to a different (not the selected) history sheet position are identified with a period. By pressing F7=*Info* on the indicator, you can determine the history sheet position into which the transaction type sub-group flows.

The history sheet groups that are delivered with the standard system guarantee uniformity when defining a history sheet version. They help to insure that all transactions that belong to the same transaction type group are handled uniformly. This makes sense, and is also enough of a guarantee in most cases. The definition of the transaction type may contain a transaction type group that does not match the history sheet group, only if you want to allow for transaction types from the same transaction type group to flow into different history sheet positions. In order to allow for this variation, you can define completely new history sheet groups in FI-AA Customizing. When you create your own history sheet groups, they also have to begin with the letter "Z." This protects them from being overwritten during a release upgrade.

[Graphic: Definition of the Asset History Sheet \[Page 274\]](#)

## History Sheet Groups and Associated Value Fields

The meaning of the history sheet sub-groups is not always uniform. Therefore, the standard history sheet groups are explained below.

- **History sheet group YA (cumulative values at start of fiscal year)**

The history sheet sub-groups have the following definitions:

- Trn = accumulated acquisition value start of fiscal year,
- Acc.dep-Ord = accumulated ordinary depreciation start of fiscal year,
- Acc.dep-Spc = accumulated special depreciation start of fiscal year,
- Acc.dep-Upl = accumulated unplanned depreciation start of fiscal year,
- Acc.dep-6B = accumulated transfer of reserves start of fiscal year,
- App-Trn = accumulated appreciation start of fiscal year,
- App-Ord = accumulated appreciation ordinary depreciation start of fiscal year,
- IGr = accumulated capital investment grants start of fiscal year.

- **History sheet group YY (annual values)**

The history sheet sub-groups have the following definitions:

- Trn = transactions changing the acquisition value of the fiscal year,
- Acc.dep-Ord = planned ordinary depreciation of the fiscal year,
- Acc.dep-Spc = planned special depreciation of the fiscal year,
- Acc.dep-Upl = planned unplanned depreciation of the fiscal year,
- Acc.dep-6B = planned transfer of reserves of the fiscal year,
- App-Trn = planned appreciation of the fiscal year,
- App-Ord = planned appreciation ordinary depreciation of the fiscal year,
- IGr = investment grants of the fiscal year.

- **History sheet group YZ (cumulative values at the end of the fiscal year)**

**Definition of the Asset History Sheet**

The history sheet sub-groups have the following definitions:

- Trn = accumulated acquisition value end of fiscal year,
  - Acc.dep-Ord = accumulated ordinary depreciation end of fiscal year,
  - Acc.dep-Spc = accumulated special depreciation end of fiscal year,
  - Acc.dep-Upl = accumulated unplanned depreciation end of fiscal year,
  - Acc.dep-6B = accumulated transfer of reserves end of fiscal year,
  - App-Trn = accumulated appreciation end of fiscal year,
  - App-Ord = accumulated appreciation ordinary depreciation end of fiscal year,
  - IGr = accumulated capital investment grants end of fiscal year,
- **History sheet groups 70, 71, 72, 73, 74 (write-ups)**

Only 4 history sheet sub-groups are possible here, namely

- Acc.dep-Ord = Write-up ordinary depreciation,
- Acc.dep-Spc = Write-up special depreciation,
- Acc.dep-Upl = Write-up unplanned depreciation,
- Acc.dep-6B = Write-up transfer of reserves.

- **All other history sheet groups**

The history sheet sub-groups have the following definitions:

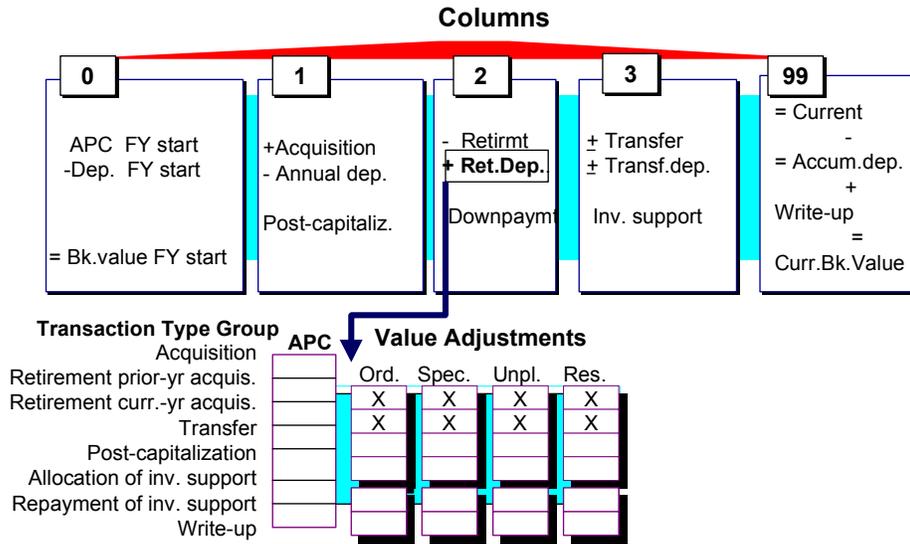
- Trn = transaction amount,
- Acc.dep-Ord = proportional ordinary depreciation,
- Acc.dep-Spc = proportional special depreciation,
- Acc.dep-Upl = proportional unplanned depreciation,
- Acc.dep-6B = proportional transfer of reserves,
- App-Trn = proportional appreciation,
- App-Ord = proportional appreciation ordinary depreciation,
- IGr = proportional capital investment grants.

Proportional values result, for example, in history sheet groups for asset retirements, transfer postings and post capitalization.

Graphic: Definition of the Asset History Sheet

## Graphic: Definition of the Asset History Sheet

The following graphic illustrates the procedure for defining the asset history sheet using the selected history sheet position "Depreciation - Retirement":



## SAP Queries

### Use

The Asset Accounting reports are organized in the form of report tree (refer to [Report Selection \[Page 269\]](#) . Some of these reports are created using [SAP Query \[Ext.\]](#) .

### Features

#### Standard Queries

SAP supplies the following standard queries for Asset Accounting:

- Asset Balances
  - Inventory list
  - Real estate and similar rights
  - Transportation equipment
  - Leased assets
  - Sample for address data for an asset
- Explanations for the Profit and Loss Statement
  - Ordinary depreciation
  - Write-ups
  - Gain for transfer of reserves
  - Depreciation posted per asset and posting period
- Cost Accounting
  - Revaluation and backlog
  - Posted depreciation (related to cost center)
- Preparations for closing: Gain for transfer of reserves

### Transport

Queries are normally client-dependent. Only the queries provided by SAP are automatically available in all clients. In order for the queries that **you have defined** to be available in all clients, you have to transport these queries into all clients in your system.

Assign the R/3 users, who will carry out FI-AA queries, to the user group AM.

### Activities

You process SAP Queries in

- The SAP Easy Access menu for Asset Accounting, by choosing *Information System* → *Tools* → *Ad Hoc Reports*
- Customizing for *Asset Accounting*, by choosing *Information System* → *Define SAP Queries*

---

**SAP Queries**

In order to work with FI-AA queries, select the user group AM (asset manager) using the function *Other user group*.

**Refer to:**

- The Implementation Guide for *Asset Accounting*. Choose *Information System* → [Define SAP Queries \[Ext.\]](#).
- For a detailed description of the functions of SAP Query, refer to the SAP Library. Choose *Basis* → *ABAP Workbench (BC-DWB)* → *BC - SAP Query und QuickViewer*.

## Asset Explorer

### Use

This function shows all the values of a fixed asset, including APC values and depreciation, in various forms and summarization levels. Planned values are displayed, as well as values already posted. You use this function to display and analyze asset values.

The [asset value display \[Page 280\]](#) offers some similar functions. However, in contrast to the asset value display transaction, the Asset Explorer offers increased clarity through its overview tree and use of tabs. The asset value display, on the other hand, has a broader scope of functions (see below).

### Features

The Asset Explorer consists of the:

- Header, in which you enter the company code and asset number
- Overview tree, with which you can navigate between different depreciation areas
- Overview tree that displays objects related to the asset
- Tab, in which you analyze plan values and posted values using different parameters, and compare fiscal years and depreciation areas



The Asset Explorer uses [ALV Grid Control \[Ext.\]](#) for its table display. You can use it to specify the contents of the columns, for example. For more information on using this tool, refer to the SAP-Library and choose *BC - ALV Grid Control*.

### Header

Along with the company code and main asset number, you can also enter the asset sub-number here. Use the ▲ and ▼ icons to navigate to different fiscal years.

### Overview Tree for Depreciation Areas

Choose the pushbutton above the overview tree, or the  *Display master data* function, to reach the display transaction for asset master data.

To navigate between depreciation areas in the overview tree, select the depreciation area you want. Icons indicate the type of depreciation area. The  icon indicates a real depreciation area, and the  icon indicates a derived depreciation area.

### Overview Tree for Related Objects

The system automatically searches for objects related to the asset, such as cost center, equipment, G/L account, and displays them in an overview tree. From this overview tree, you can jump directly to the display transaction of the given master data.

## Asset Explorer

### Tab

#### Plan Values

##### Value Display

On the *Plan values* tab page, the system displays all transactions affecting acquisition and production costs, all depreciation calculated for the asset (including proportional value adjustments), the net book value, and any interest calculated. The values at the beginning of the year appear opposite the current planned values for the end of the year, and any changes are indicated. For each type of depreciation, you can see the accumulated depreciation from the last closed fiscal year (balance at the beginning of the year), and the planned depreciation in the current fiscal year. The system displays investment support measures, reserves, and revaluation separately from acquisition and production costs.

Choose  *Recalculate depreciation* to trigger a recalculation of planned depreciation for the displayed asset.

##### Display of Depreciation Calculation

Select a value and choose  *Depreciation calculation* to view the depreciation calculation.

In many instances it is not immediately clear how individual depreciation values were calculated, due to complex depreciation terms and asset transactions. The system, therefore, enables you to clearly see the origin of asset values by identifying the various levels of the calculations and depreciation terms involved. You can obtain detailed, step-by-step information regarding the calculated asset values, per fiscal year, for each depreciation area, depreciation type and asset transaction.

The system displays the APC balance at the beginning of the year, as well as the planned depreciation. In addition, the system lists all changes to the value of the asset during the current fiscal year, along with the corresponding adjustments to the planned annual depreciation.

To display a hierarchical structure (depreciation trace) that shows all routines that were called during the calculation of depreciation, choose the  *Routines* icon. Expand the tree structure to see the most important parameters.



The *Display depreciation calculation* function automatically carries out a recalculation of depreciation and displays the individual steps. Due to write accesses to the database, this function requires considerably more time than the *Recalculate depreciation* function, especially for assets with a large number of line items (for example, assets under construction). Instead you can choose to perform the [depreciation trace \[Ext.\]](#), with its listing of internal processing steps, at a later point in time. Use report RATRACE0. Each user can load the most recent depreciation trace from the database.



By double clicking on the routines, you can display the program code in the editor. This is useful in order to set [breakpoints \[Ext.\]](#) before you use the [debugger \[Ext.\]](#). This function should be used only by experienced users.

Analyzing the depreciation trace can be helpful for finding errors. For example, if unexpected depreciation amounts appear, the cause can often be found in the number of periods taken into account or in the base value. The depreciation trace can also often pinpoint the reasons for

reduced values (for example, when a value is below the cutoff value, or when the net book value in a derived depreciation area has the wrong positive/negative sign).

### Document Display

Select a transaction line and choose  *Display FI document* in order to see the associated document in Financial Accounting.

### Posted Values

On the *Posted values* tab page, you display the values that have already been posted in Financial Accounting in the current year, rather than planned depreciation. The *Depreciation posted/planned* table shows a breakdown of depreciation by period. The status indicates whether the depreciation is still only planned or has already been posted.

### Comparisons

- You can display the development of values in a depreciation area over a number of years in the form of a table.
- In addition, you can display the development of values in several depreciation in parallel. Use the number pushbuttons to select additional depreciation areas. Choose a number pushbutton a second time to remove that depreciation area from the table.

### Parameters

The *Parameters* tab page contains information such as the depreciation key, useful life and index specifications used.

### More Functions

- You can  *Call asset reports* (for example, asset list, asset history sheet).
- You can choose  *Translate currency amounts* to have the system translate currencies. If you call reports in Asset Accounting after using this function, the reports are displayed in the currency you selected, as are the values in the Asset Explorer.

### Constraints

The functions below can only be performed in the asset value display transaction at the present time:

- Simulations (depreciation terms, APC transactions)
- Breakdown of group assets

Customizing for the asset value display function (short texts for value fields or the reports that can be called directly from the function) have no influence on the Asset Explorer.



The above functions will be integrated in the Asset Explorer in a later release.

### Activities

Start the Asset Explorer and enter a company code and a fixed asset.

#### Refer to:

[Asset Value Display \[Page 280\]](#)

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**Asset Value Display Transaction**

## Asset Value Display Transaction

### Use

Along with the Asset Explorer, the system provides the asset value display transaction as another tool with extensive functions for analyzing asset values. This transaction shows all the individual values of an asset, including APC values and depreciation, in various forms and summarization levels. Planned values are displayed, as well as already posted values.

The Asset Explorer offers a better overview with increased clarity, as compared to the asset value display transaction. The asset value display transaction, on the other hand, offers more functions. For information on the differences in the functions of the two transactions, refer to [Asset Explorer \[Page 277\]](#).

### Features

#### Initial Screen

You can enter a maximum of three depreciation areas and any fiscal year interval in the initial screen of the transaction. Depending on the entries you make in those fields, you can call up the report in the forms below:

- Development of a depreciation area over a number of fiscal years
- Comparison of up to three depreciation areas in one fiscal year or over several fiscal years
- Retracing a derived depreciation area back to the real depreciation areas, from which it is derived (in the standard display of the derived area, choose the function *List derived areas*).
- Display of all transactions for the asset
- Analysis of all values for the asset

#### Display

When you call up the standard display transaction, the system displays all transactions affecting acquisition and production costs, all depreciation calculated for the asset (including proportional value adjustments), the net book value, and any interest calculated (if applicable). The values at the beginning of the year appear opposite the current planned values for the end of the year. For each type of depreciation, you can see the accumulated depreciation from the last closed fiscal year (balance at the beginning of the year), and the planned depreciation in the current fiscal year. The system displays investment support measures, reserves, and revaluation separately from acquisition and production costs.

By clicking on a field, you can access detailed information about the origin of the displayed values. In addition, you can jump to a display of the depreciation terms for the asset. You can also display the proportional value adjustments for the transactions posted to an asset, as well as the G/L documents in Financial Accounting (choose the *Transactions* function and double click on the line item).

Using the function *Posted values* in the initial screen of the transaction, it is possible to display the values actually posted in Financial Accounting in the current fiscal year, rather than the planned depreciation values.

## Display Depreciation Calculation

In many instances it is not immediately clear how individual depreciation values were calculated, due to complex depreciation terms and asset transactions. The system, therefore, enables you to clearly see the origin of asset values by identifying the various levels of the calculations and depreciation terms involved. You can obtain detailed, step-by-step information regarding the calculated asset values, per fiscal year, for each depreciation area, depreciation type and asset transaction. After you select the depreciation in a depreciation area, the system displays the APC balance at the beginning of the year, as well as the planned depreciation. In addition, the system lists all changes to the value of the asset during the current fiscal year, along with the corresponding adjustments to the planned annual depreciation. You can also jump directly to the definition of the respective depreciation key.

## Reports

You can call up standard reports for the asset you are working with under the menu heading *Environment*. You assign the reports to the menu entries in Customizing for *Asset Accounting (Information System → Configure Asset Value Display)*. In this way, you can integrate your own reports and individual report variants into the menu.

## Recalculate Depreciation

Under *Edit*, you can initiate the recalculation of planned depreciation for the displayed asset.

## Simulation

You can also simulate asset values using simulated depreciation terms and simulated transactions. For more information, see [Simulating Depreciation of Individual Assets \[Page 532\]](#)

## Currency Translation

You can enter a currency translation variant by choosing *Extras*. Currency translation variants allow you to show asset values in any currency (refer to [General Functions of Standard Reports \[Page 256\]](#)).

## Value Field Texts

You can assign a special text to each value field in the asset value display transaction. You assign these texts in Customizing for *Asset Accounting (Information System → Configure Asset Value Display)*. This function is particularly useful for derived depreciation areas, since the value fields can have different meanings for the derived depreciation area.

## Activities

Start the asset value display transaction from the Asset Explorer. Choose *Goto → Additional functions*.

## Standard Reports

# Standard Reports

## Use

The standard report selection tree in the FI-AA-Information System contains a series of standard reports. These reports are described in the following objects.

## Asset History Sheet

The most important supplement to the balance sheet, from the point of view of Asset Accounting, is the asset history sheet. The asset history sheet displays all changes to the asset portfolio (transactions) in a fiscal year. You can define any number of history sheet versions in the R/3 FI-AA component (see [Definition of the Asset History Sheet \[Page 270\]](#) ). SAP also provides standard versions of the asset history sheet. The following example shows two of the standard versions:

### 13 Columns (Standard Version)

APC FY start Dep. FY start NBV FY start	Acquisition Dep. for year Dep. post-cap. Post-capit.	Retirement Dep. on retmt Write-up Down paymts	Transfer Dep. transfer Inv. subsidy	Current APC Cumul. Dep. Current NBV
---	---	--	---	---

### 13 Columns (Wide Version)

APC FY start. Dep. FY start NBV FY start	Acquisition Dep. for year	Retirement Dep. on retmt	Transfer Dep. transfer	Post-capit. Dep. post-cap.	Inv. subsidy Write-up	Current APC Cumul. Dep. Current NBV
--	------------------------------	-----------------------------	---------------------------	-------------------------------	--------------------------	---

### Asset History Sheet

You can call up the asset history sheet as a totals list, or as a detail list showing individual assets. The detail list shows the capitalization date for each asset, and, if applicable, the deactivation date and any transactions in the year being reported.

There is a special history sheet version defined for showing special reserves for special depreciation. This version shows the

- Initial balance
- Allocation to special reserves
  - Write-off (depreciation) of special reserves
  - Write-off of special reserves due to asset retirements
  - Write-off of special reserves due to transfers
- Closing balance

### Procedure

1. Call up the report for creating the asset history sheet (*Info system* → *Report selection* → *Balance sheet explanations*).
2. Enter the start parameters for the report. Make the following particularly important entries
  - Company code for the report
  - Report date
  - Sort version that you want to use
  - Asset history sheet version that you want to use

**Asset History Sheet**

- Use the “current book value” indicator to specify if you wish to show planned annual depreciation, or the depreciation already posted.
3. If you have not posted the actual retirement of low value assets, you can use the asset history sheet to simulate their retirement (in order to minimize the transactions necessary for their retirement). In this case, enter the asset class for low value assets.

You also need to specify a time period for the retirement simulation. Please note that the simulation time period must begin on the same date every year so that LVAs can be shown continuously and correctly in the history sheet. This fixed start date should lie in the distant past (for example 1900). Using the same start date each year ensures that LVAs, for which retirement has already been simulated, do not appear in the history sheet with their APC in subsequent years. In addition, the end date for the simulation time period has to be in a fiscal year that is still open.

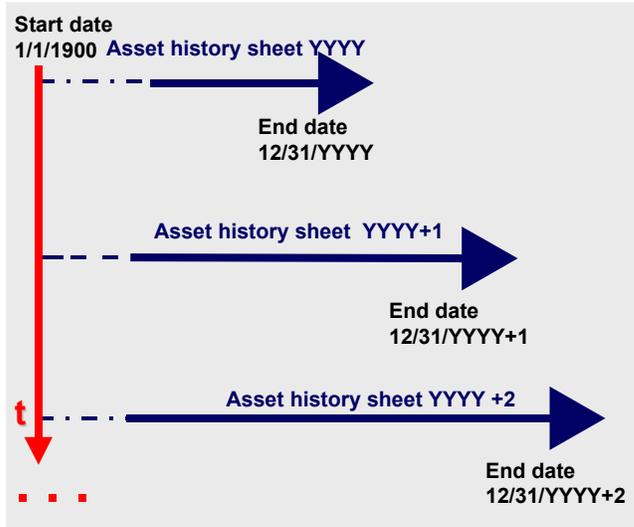
The same procedure applies for intangible assets.

[Graphic: Simulation Time Period \[Page 285\]](#)

4. Limit the report as needed. If needed, make additional entries for lists created using batch input.

## Graphic: Simulation Time Period

The following graphic shows the correct specification of the simulation time period:



## Balance Sheet Explanations

# Balance Sheet Explanations

The following standard reports are available, along with the asset history sheet, as detailed explanations for asset balance sheet positions.

## Leasing Liabilities

The report displays all liabilities from leasing contracts for all fiscal years, including the current fiscal year up to the date of the report. The report date determines the target fiscal year. If you choose, you can also display the total leasing liabilities per acquisition year and per company code.

## Balance Sheet Values According to Reason for Investment

The report shows the asset balance sheet values, sub-totaled by the investment reason. The reason for investment is a field in the asset master record. You can define the allowed entries for the investment reason field in FI-AA Customizing (*Master data* → *User fields*).

## Standard Asset Register (Italy)

The asset register is a report required by law in Italy. The report must display all transactions, such as acquisitions, retirements, transfers, depreciation and revaluation. You are also required to print the report according to specific sort criteria (location, year, description, license plate number).



Machines must be sorted and totaled according to year; buildings have to be sorted and totaled according to location and year; vehicles have to be identified individually and sorted according to license plate number and year, and so on.

If the asset was revalued, there is an additional section of the report that displays data relating to the revaluation.

## Asset Register According to Third-Party Locations

Italian law requires an asset register according to third-party locations. The report contains all assets that are located at third parties. The list is sorted according to locations. The assets are selected on the basis of the property indicator. There is a special column for displaying revaluation of the assets. If revaluation was managed in separate depreciation areas, you must enter these depreciation areas (for example: 01, 71, 72).

## Asset Lists

The following reports are available for evaluating the asset portfolio:

### Standard Asset List

The standard asset list displays the balance sheet values of all assets in a depreciation area. The following values are displayed in detail per asset:

- The cumulative acquisition value at the beginning of the fiscal year
- Accumulated depreciation, including the planned depreciation for the current fiscal year (the sum of all depreciation types)
- The planned book value at the end of the reporting year

There are additional versions of the asset list that allow primary selection according to different criteria (asset class, business area, cost center, and so on).

### Inventory Lists

For more information, see [Generating the Inventory List \[Page 515\]](#)



The inventory list displays only those assets in which the inventory indicator has been set in the asset master record.

### Special Asset Lists

There are additional reports available for

- Real estate
- Vehicles
- Leased Assets

These reports are based on ABAP Query. They display the general master data and the values of the assets. The leasing list displays only assets that have a lessor and a leasing payment cycle entered in their master record. The real estate list and the vehicles list select all assets. You have to limit the report yourself by entering only the appropriate asset classes in the report selection.

### Address List

This report shows the assets and their addresses. You assign an address to an asset by means of the location entered in its master record (refer to [Assignment to Plant/Location/Address \[Page 25\]](#)).

## Explanations for the Profit and Loss Statement

# Explanations for the Profit and Loss Statement

There are a number of depreciation lists to serve as addenda to the profit and loss statement. A depreciation totals list shows the total of all depreciation types.

## Depreciation Types

Additional ABAP Query lists show the individual depreciation types:

- Ordinary depreciation
- Special depreciation
- Unplanned depreciation
- Write-ups
- Transferred reserves (deferred gain)



The depreciation values of the reporting year are planned total annual values. These planned values are not based on the values that have already been posted in the general ledger.

## Compare Depreciation

The report is for comparing depreciation from two or three depreciation areas. These can be specified in the three entry fields for the "depreciation area" in the request screen for the report. If you enter three different depreciation areas, the first difference shown is the difference between area 1 and 2; the second difference is the difference between area 2 and 3.

If you select the parameter 'Positive diff. only', the report only displays assets for which the difference between area 1 and the following depreciation areas is positive. If you entered three depreciation areas, an asset will be displayed when at least one of the differences is positive.

The report displays the following values in detail per asset and depreciation area:

- The current acquisition value
- The planned ordinary depreciation for the current fiscal year
- The planned book value at the end of the fiscal year
- The difference in depreciation as compared to the previous depreciation area.

If desired, you can also display the special depreciation as well as ordinary depreciation. You request this in the request screen.

## Cost Accounting

The following reports are supplied to meet the needs of primary cost accounting:

### Depreciation and Interest

The report displays the depreciation, revaluation and interest for a fiscal year according to depreciation area.

### Revaluation and Backlog

Along with the historical acquisition value, the report displays the revaluation of APC and the revaluation of accumulated depreciation of the past (backlog).

### Depreciation Posted in One Period (Based on Cost Center)

The report displays the depreciation and cost-accounting interest on assets posted to Financial Accounting in one period. These posted values are displayed in a list across from the total depreciation posted in the current year, and the planned annual values. The report sub-totals for each cost center.



The depreciation values of the reporting year are planned total annual values. These planned values are not based on the values that have already been posted in the general ledger.

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**Simulation / Depreciation Forecast**

## Simulation / Depreciation Forecast

The following standard reports are provided for simulating and forecasting future depreciation:

### Simulation for the Current Fiscal Year

This report shows the planned depreciation for the current fiscal year. It also shows the book value at the beginning of the fiscal year, and the predicted book value at the end of the fiscal year.

### Simulation Over the Course of a Number of Fiscal Years

This report allows you to simulate depreciation many years into the future. The date you enter for the report determines the future fiscal year up to which you want to simulate depreciation.

The report displays the following values:

- The book value at the start of the year
- The cumulative transactions affecting APC, up to the beginning of the current fiscal year
- The transactions affecting APC in the current fiscal year
- The planned ordinary depreciation and other depreciation in the current fiscal year
- The planned net book value at the end of the year
- The planned interest in the current fiscal year and the cumulative interest up to the beginning of the current fiscal year



For more information, see [Simulation \[Page 531\]](#).

## Special Valuation

The following standard reports supply information for special calculations of asset values:

### Property List

A special property list displays all information for valuing assets in regard to net worth tax obligations. The following values are displayed for each asset:

- The acquisition value at the beginning of the current fiscal year
- The planned property value at the end of the fiscal year
- The planned book value at the end of the fiscal year
- The cut-off value and cut-off percentage rate

The acquisition value comes from the depreciation area for net worth tax. The book value comes from the depreciation area that supplies the net worth tax depreciation area with values. If the property value is set manually, the system cannot calculate a cut-off percentage or a cut-off value.

### Insurance List

The insurance list displays all insurance data and values for each asset. The report evaluates the depreciation area that is entered in the insurance type.

The following value fields are displayed:

- The current insurable value
- The base insurable value
- The acquisition value at the beginning of the current fiscal year

The system only calculates a base insurable value for value as new insurance. The acquisition value displayed comes from the depreciation area for insurance that is entered in the insurance type. The acquisition value is displayed without possible revaluation, even if revaluation was calculated in this depreciation area.

If a manual insurable value was entered in the asset master record (that is, the asset does not have a depreciation area that manages insurable values), then the insurance list will always display the manually entered value.

## Preparations for Closing

# Preparations for Closing

The following standard reports are provided for preparing for the year-end closing:

## Current Book Value

This report is intended for verifying reconciliation with the general ledger. The report displays the current asset book values in one depreciation area. The following values are displayed in detail per asset:

- The current acquisition value
- The current value adjustments
  - Current value adjustments are the sum of the following values:
    - Accumulated value adjustments from closed fiscal years
    - Write-ups
    - Value adjustments that were post-capitalized, transferred or retired
  - And depreciation posted in the current fiscal year
- The current book value

## Gain on the Transfer of Reserves

This report is based on ABAP Query. It shows all asset retirements and the book value that was retired. It also shows the revenue on the sale. Gain/loss is calculated as the difference between the book value retired and the revenue.

## Mid-Quarter Alert

The purpose of the report is to meet the financial reporting requirements relating to the mid-quarter convention in the United States. The report lists the asset acquisitions per quarter in the reporting year. In addition, the report displays the maximum-allowed acquisition amount for the fourth quarter according to the mid-quarter convention (40% of the total amount acquired in the given year). If the amount acquired exceeds this maximum amount in the fourth quarter, the report issues a warning.

## Change List

The report lists changes to asset master data. The report displays the changes in chronological order. The report is not set up for interactive query.

You can limit the report according to

- The time of the change
- The name of the person who made the change
- The name of the field changed

You can obtain a listing (such as, according to the name of the person who made the change) using a sort version. You can use fields from the tables ANLA, ANLB, ANLV and ANLZ in the sort version. You can determine the names of the fields using the information system of the data dictionary.



You can only display changes to the asset class using the general log for table changes (*System Administration*).

### **Post-Capitalization**

The report shows all post-capitalization in a fiscal year.

---

**Day-to-Day Activities**

## Day-to-Day Activities

The following reports assist in the daily operations of Asset Accounting:

### Transaction Lists

The reports below are used for evaluating asset transactions:

- Acquisition list
- Retirement list
- Open items
- Transfer list

In the report on transfers, you can select by any transaction type in the initial screen. If you do not enter any transaction types, the report displays all transactions that were posted with a transaction type in the "transfer" transaction type group, with the exception of acquisitions in the current fiscal year. The system assumes that these current-year acquisition transfers are not really transfers, but are actually corrected acquisition postings.

### Assets Not Posted

The report displays assets that have never been capitalized (that is, that are unposted). Capitalized assets are not shown in the report.

## Taxes

The following reports for tax requirements are available in the Asset Accounting Info system.

### Depreciation

For more information, see [Explanations for the Profit and Loss Statement \[Page 288\]](#).

### Depreciation Comparison

The report makes it possible to compare the asset retirement values in two depreciation areas. You enter the depreciation areas in the depreciation area fields in the initial screen of the report.

## History Management (Asset Chart)

## History Management (Asset Chart)

For assets that have an especially long useful life and high acquisition and production costs, you may want to keep track of the values for the asset on paper in the form of an asset chart. The report *Asset history* in the Asset Accounting Information System enables you to print out all information on the history of an asset as a freely definable form.

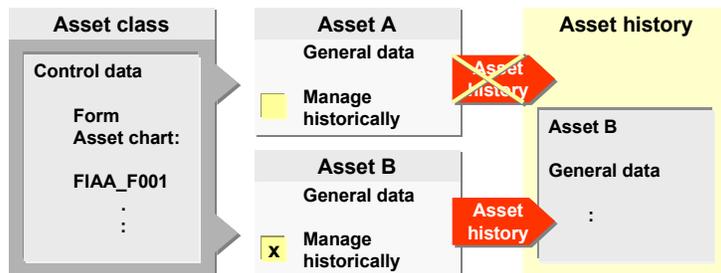
### Form for Each Class

You can specify a key for a separate form in each asset class. The system then uses this form for all assets belonging to the asset class. The transaction for defining the form is found in FI-AA Customizing under *Information System*.

### History Management

Since not all the assets in an asset class need an asset chart, the system only displays assets that have active history management. You activate history management by setting the indicator for it in the asset master record. When this indicator is set

- The asset is displayed with an asset history.
- The asset's values and transactions cannot be reorganized until the asset is deactivated.



### History Management

#### Standard Form

SAP provides the form FIAA\_F001. You should either use this form, or copy it and make your own modifications (*Form* → *Save as*).

The standard form consists of a top window, bottom window and main window. You can only use the fields of the table ANLA as variables for the top and bottom windows. You can use the following variables in the main window:

- All fields of logical database ADA (see [Logical Database ADA \[Page 253\]](#)).
- Long texts for the asset master record
- Change documents



The procedure for changing the standard form is described in the FI-AA Implementation Guide in the step "Information System."

## History Management (Asset Chart)

For a detailed description of the maintenance of R/3 forms, see the R/3 Hypertext STCD\_SF (transaction SO70).

### Structure of the Main Window

The text elements of the main window in the standard form are grouped into events. You can identify events by the entry /E in the tag column. You are **not** allowed to change the names and the sequence of these events (such as ATOP) in the form. However, you can change the contents that are output for an event. An event that has no contents does not appear at all.

The events in the main window are structured on two levels. A main event is called xTOP (x = A - F and TEXT). A sub-event is called x00y (y = a numerical value).

The main window of the standard form has the following main events:

- **Master data**

The structure (sub-events) of this part of the form corresponds to the structure of the general master data segment of the asset master record (without time-dependent data).

- **Business allocations**

These are the time-dependent allocations in the general asset master record (such as cost center)

- **Valuations**

These are the specifications of the depreciation areas in the asset master record.

- **Master data changes**

- **Development of values up to the fiscal year of the report date**

- **Transactions up to the fiscal year of the report date**



You can enter a maximum of three depreciation areas in the selection screen of the report. When you enter \* in the first depreciation area field, the report shows **all** the depreciation areas for the given asset.

## Legacy Data Transfer

## Legacy Data Transfer

### Use

Legacy data transfer is the transfer of existing data from a previous system or from a manually maintained fixed asset card file. The transfer of legacy data is generally the first action after you configure the Asset Accounting (FI-AA) component and classify your assets. This task involves transferring asset master records and transactions from the start of the fiscal year up until you go live. Reconciling the balance sheet accounts takes place later in a separate step.

Below is a brief overview of the different methods for legacy data transfer. For more information, see the documentation for these functions.

### Features

The table outlines the options in Asset Accounting for transferring legacy data to your R/3 System:

#### Transfer Methods

Method	Recommended for ...	Constraints
Automatic legacy data transfer using batch input	<ul style="list-style-type: none"> <li>- Large number of legacy assets (up to approx. 50 000 - 100 000 )</li> <li>- when it is possible to transfer the assets in a few hours (for example, overnight)</li> </ul>	<ul style="list-style-type: none"> <li>- No retirements when legacy transfer during fiscal year</li> </ul>
Automatic legacy data transfer using direct input	Very large number of legacy assets (more than 50 000 )	<ul style="list-style-type: none"> <li>- No retirements</li> <li>- No sub-numbers with group assets</li> </ul> <p>The system performs only limited checks.</p>
Automatic legacy data transfer using BAPI	Medium to large number of legacy assets, if retirements should also be transferred	<ul style="list-style-type: none"> <li>- No group assets</li> <li>- No investment support</li> </ul> <p>The format is not compatible with batch input/direct input.</p>
Manual legacy data transfer transaction	Small number of legacy assets (individual assets, subsequent maintenance)	
Legacy data transfer using Microsoft® Excel	Small and medium number of legacy assets	<ul style="list-style-type: none"> <li>- No retirements</li> <li>- No group assets</li> <li>- No sub-numbers</li> <li>- No investment support</li> </ul>

Legacy Data Transfer



These statements about which method is best for which amount of data are based on our experience. Actual performance is strongly dependent on your hardware environment and system configuration.

Note that in all cases, the FI General Ledger accounts are **not** updated. Only the asset master data and line items are updated in Asset Accounting. Therefore, you have to reconcile the balances with the G/L accounts in a separate step.

**Activities**

**Call of transaction and further information**

Method	In Customizing for Asset Accounting, choose Asset Data Transfer →	Additional documentation
Automatic legacy data transfer using batch input	<i>Automatic Data Transfer → Data Transfer Workbench: Fixed Assets</i>	<i>CA Data Transfer Workbench → Data Transfer Objects by Application → FI Financials → <a href="#">FI-AA - Assets: Data Transfer Workbench [Ext.]</a></i>
Automatic legacy data transfer using direct input	<i>Automatic Data Transfer → Data Transfer Workbench: Fixed Assets</i>	<i><a href="#">FI-AA - Asset Accounting: Data Transfer Workbench [Ext.]</a></i>
Automatic legacy data transfer using BAPI	<i>Automatic Data Transfer → Data Transfer Workbench: Fixed Assets</i>	<i><a href="#">FI-AA - Asset Accounting: Data Transfer Workbench [Ext.]</a></i>
Manual legacy data transfer transaction	<i>Manual Online Transfer → Create/Change/Display Legacy Asset</i>	<i>Asset Accounting → Legacy Data Transfer → Transfer Methods → <a href="#">Manual Transfer [Page 312]</a></i>
Legacy data transfer using Microsoft® Excel	<i>Legacy Data Transfer Using Microsoft® Excel</i>	<i>Asset Accounting → Legacy Data Transfer → Transfer Methods → <a href="#">Legacy Data Transfer Using Microsoft® Excel [Page 314]</a></i>

**Special Considerations for Asset Data Transfer**

## **Special Considerations for Asset Data Transfer**

The following objects contain general information on the transfer of legacy asset data. This information applies to all transfer methods.

## Time of Transfer

The transfer date is the cut-off date for the transfer of legacy data. The transfer will only include data up to this point in time. There are two possibilities:

- The transfer date can be the end of the last closed fiscal year.
- The transfer date can be in the fiscal year that directly follows the last closed fiscal year. This is called "transfer during the fiscal year."

You specify the time of the transfer per company code by setting the transfer date (in *Customizing of Asset Accounting*, choose *Asset Data Transfer* → *Parameters for Data Transfer* → *Date Specifications* → [Specify Transfer Date/Last Closed Fiscal Year \[Ext.\]](#)).

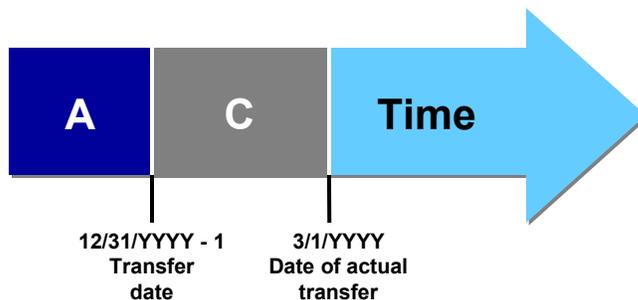
Remember that the transfer date generally is not the same as the date for the **actual** transfer of data. Normally, you create (input) legacy data in the R/3 System after the transfer date. This could be necessary, for example, if you have to perform a closing in your legacy system between the transfer date and the date of the actual transfer. The consequences of this difference will be explained later in more detail.



You can also transfer legacy data to the R/3 System before the transfer date. However, you then have to make sure that the transactions that you posted in your legacy system up until the transfer date are also later posted in the R/3 Asset Accounting component.

### The Transfer Date is the End of the Last Closed Fiscal Year

In this case, you do not need to include any posted depreciation or transactions in the transfer of legacy data. You only need to transfer master data and the cumulative values as of the end of the last closed fiscal year. (In the graphic below, this is the data for time period A). The transfer of balances for the G/L accounts should also use the balances from this date.



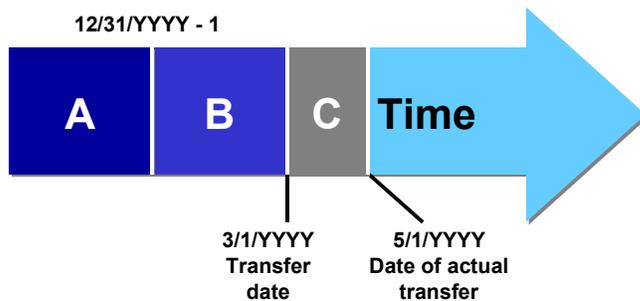
#### Transfer at End of Fiscal Year

Any transactions to legacy asset data that have a value date after the transfer date, but before the date of the actual transfer of data (time period C), have to be posted in the SAP R/3 System after the legacy data transfer.

## Time of Transfer

### The Transfer Date is in the Fiscal Year Directly Following the Last Closed Fiscal Year (Transfer During the Fiscal Year)

In the case of a transfer during the fiscal year, all the business transactions up to the date of transfer have been carried out in the legacy system.



### Transfer During the Fiscal Year

Along with the general master data, and the cumulative values from the start of the fiscal year (time period A), you must also transfer the following values:

- **Depreciation posted**

Include the depreciation posted in the legacy system since the end of the last closed fiscal year up to the date of transfer (time period B). To assist in this procedure, you enter the last period before the transfer date that was posted in your legacy system. You enter this information for each company code and depreciation area in Customizing for *Asset Accounting*. Choose [Specify Last Period Posted in Prv.System \(Transf.During FY\) \[Ext.\]](#). The system requires this information in order to determine the first period that should be posted in the R/3 System.

If you do not want to transfer depreciation posted from your legacy system, you have an alternative. After the legacy data transfer, you can "catch up" the posting of depreciation by carrying out an unplanned depreciation posting run. This posting run will "catch up" all depreciation in the current fiscal year up to the date of the transfer. The system posts all depreciation that the Asset Accounting component determines for this time period.

- **Transactions**

When transferring legacy data during the fiscal year, you also have to include the transactions from the end of the last closed fiscal year up to the date of transfer (time period B). There are two ways of doing this:

- Enter the transactions using the legacy data transfer transaction.

You should be aware, however, that entering these transactions does not result in any updating of General Ledger accounts. When transferring the balances of the G/L accounts, therefore, you need to transfer the balances as they stand on the date of transfer (in Customizing for *Asset Accounting*, choose *Preparing for Production Startup* → [Transfer Balances \[Ext.\]](#)).

- Instead of entering the transactions along with the master records, you can enter the master records without transactions, and post the transactions (from time period B) afterward in the R/3 System. If you use this method, the G/L accounts in the Financial Accounting (FI) component are automatically posted in the background. In

Time of Transfer

this case, you should transfer the balances of the G/L accounts as they stand at the end of the last closed fiscal year (A).

Any asset transactions in your legacy system that have a value date after the transfer date, but before the date of the physical transfer of data (time period C), need to be posted separately in the Asset Accounting component of the R/3 System in any case.

- Current fiscal year YYYY
- Last closed fiscal year YYYY - 1
- End of the last closed fiscal year 12/31/YYYY - 1
- Date of transfer 03/01/YYYY
- Date of actual entry 05/01/YYYY

The following values have to be entered in the transfer transaction in Asset Accounting:

- Cumulative values as of 12/31/YYYY - 1
- Depreciation posted in the year YYYY up to 03/01/YYYY
- Transactions from 01/01/YYYY to 03/01/YYYY

In addition you need the following data

- Balances of the General Ledger accounts involved as of 03/01/YYYY.
- Transactions with asset value dates from 03/01/YYYY to 05/01/YYYY

You can only transfer acquisitions and down payments to the R/3 System using automatic transfer. You have to enter other kinds of transactions (such as retirements) using the manual transfer transaction.

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**Transfer Parameters**

## Transfer Parameters

For transferring fixed assets from your legacy system to the *Asset Accounting* component, you can make a number of settings per company code and depreciation area. In Customizing for *Asset Accounting*, choose *Asset Data Transfer*. The various options are listed below:

- [Specify Entry of Net Book Value \(No Accum. Ordinary Depr.\) \[Ext.\]](#)
- [Recalculate Depreciation for Previous Years \[Ext.\]](#)
- [Recalculate Base Insurable Values \[Ext.\]](#)
- [Recalculate Replacement Values \[Ext.\]](#)
- [Transfer Foreign Currency Areas \[Ext.\]](#)

## Transfer of Assets under Construction

You can manage assets under construction with line item management, and often you post down payments to them. For these reasons, assets under construction require special treatment during the legacy data transfer.

### Transfer of Line Items for Assets under Construction

Assets under construction with line item management manage acquisitions over the course of a number of fiscal years as line items, without cumulating them. This is also reflected in the R/3 System. Therefore, you can enter transactions for this kind of asset under construction during the asset data transfer, even if the transfer date is the end of a fiscal year.

You transfer line items that were posted in the current fiscal year using the usual transaction types for acquisitions (such as 100), when the transfer date is during the fiscal year. Line items that were acquired in previous fiscal years have to be transferred using the special transaction types for legacy data (900, 910). You cannot transfer the historical asset value date for these transactions. Therefore, always use first day of the current fiscal year as the value date. When the transfer date is the end of the fiscal year, use the asset value date of 01/01/YYYY+1 (corresponding to a non-calendar fiscal year). For legacy data transfer during the fiscal year, the correct asset value date is the first day of the year in which the transfer date falls.

### Transfer of Down Payments on Assets under Construction

If you are not implementing Asset Accounting and Accounts Payable at the same time, you have to transfer open down payments from your legacy system separately. The result of this procedure is, after the asset data transfer, there is no connection between the payables in Accounts Payable, and the capitalization of the asset under construction in Asset Accounting. Therefore, automatic clearing of the down payments posted to the asset is not possible. However, there are two ways to get around this limitation:

- **Accounts Payable was transferred before assets**

When you transfer down payments using the asset data transfer transaction in Asset Accounting, it creates line items only in Asset Accounting. You therefore have two choices:

- Reversal of existing down payments before the asset data transfer

Enter all down payments from fiscal years before the transfer year using the asset data transfer transaction in Asset Accounting (transaction type 910). When you are using a transfer during the fiscal year, do not enter **any** down payments which were made between the start of the fiscal year and the transfer date. Then reverse **all** down payments to assets under construction on the Accounts Payable side. Define the *Asset* field as a required field in the screen layout for the *Down payments made to assets* account. Post the down payments again, **with** account assignment to assets. The down payments from fiscal years before the transfer are then posted twice to the asset (once by the legacy data transfer and once by the explicit posting). Therefore, you need to post reversals for the same amount using transaction type 181.

This duplicate posting and reversal are necessary, so that the system can later distinguish (at the settlement of the asset under construction) between down payments from the current fiscal year and from previous fiscal years.

- Manual clearing on the assets side when posting the closing invoice

---

**Transfer of Assets under Construction**

This procedure applies when you have transferred the down payment in Asset Accounting using the normal legacy data transfer transaction, independently of Accounts Payable. You then have to manually clear the down payment in Asset Accounting, after the clearing of the down payment in Accounts Payable with the closing invoice (*Postings* → *Miscellaneous* / transaction type 181). Enter the *Offsetting account for acquisition down payment* as the offsetting account.

- **Assets were transferred before Accounts Payable**

During the transfer of down payments within the framework of the legacy data transfer in Accounts Payable, the down payments are posted with account assignment to assets. Additional down payment postings are therefore made to assets. Therefore you have to make reversals for the amount of these transactions.

When the original down payment was in a closed fiscal year, then you have to post the reversal with transaction type 185. Otherwise, you can use transaction type 181 for posting in the same year as the original down payment.

## Reconciliation of Balances with General Ledger

The transfer of asset data to SAP R/3 Asset Accounting from a legacy system using the legacy data transfer transaction has no influence on the corresponding reconciliation accounts in SAP R/3 Financial Accounting. This means that there is no automatic creation and reconciliation of balances.

### Definition of the Reconciliation Accounts

You are not allowed to manually post to the reconciliation accounts for Asset Accounting in Financial Accounting. Normally, you designate the corresponding General Ledger accounts in Financial Accounting as reconciliation accounts. This change, however, can no longer be made in Financial Accounting, once these accounts already have balances from the legacy data transfer. However, you can use a special report to assign these accounts the status of reconciliation accounts in Financial Accounting (in Customizing for *Asset Accounting*, choose *Preparing for Production Startup* → *Production Startup* → *Set Reconciliation Accounts*).

There is another report for removing this specification (*Reset Reconciliation Accounts*).

### Subsequent Correction Postings to Reconciliation Accounts

Suppose you have already defined the asset G/L accounts in Financial Accounting as reconciliation accounts, but still need to transfer balances to these accounts, or make corrections. You can make correction postings to these reconciliation accounts with a special posting transaction in Customizing for *Asset Accounting* (*Transfer Balances*), using posting key 40 or 50. You can only post to those accounts in a company code with implementation status (Customizing for *Asset Accounting*, choose *Preparing for Production Startup* → *Production Startup* → *Activate Company Code*).

### Verification of the Reconciliation

In order to verify the reconciliation of the balances of the asset G/L accounts and the asset subsidiary ledger, you use the balance list from Financial Accounting (RFSSLD00). From the viewpoint of Asset Accounting, the following standard reports can be used:

- Asset balances: Asset list (RABEST01)
- Balance of down payments made
- Balance of accumulated depreciation
- Balance of investment support
- Balance of special reserves

When the asset data transfer took place at the end of the fiscal year, start all of these reports using January 1 of the current year as the report date. (For a non-calendar fiscal year, use the first day of the fiscal year.) The system then supplies the cumulative values for the start of the fiscal year (that is, transactions from the current year are not included). For example, if the transfer date was December 31, YYYY, then start the reports using the report date January 1, YYYY+1.

For a transfer during the fiscal year, you also have to reconcile the following profit and loss accounts using the following reports:

- Expense accounts for depreciation

---

**Reconciliation of Balances with General Ledger**

- Allocation/write-off of special reserves
- Loss on asset retirement
- Gain/loss on asset sale

For reports on transactions in the current year (for transfer during the fiscal year), you can use the asset history sheet.

**Special Considerations If SAP-FI Financial Accounting Is Already Active**

If your enterprise has already been using SAP R/3 Financial Accounting (FI) before the implementation of FI-AA, then all asset accounts and value adjustment accounts already have the correct status. Therefore, no balance transfer is necessary for G/L accounts. Up until the transfer date (the date that you chose as the cut-off point for the transfer of legacy data), you manage assets in your legacy system. At the same time, asset postings are made to Financial Accounting in the SAP FI System, and are managed in parallel in your legacy system. After the transfer date, and up to the date of the actual physical transfer, you cannot post any further asset transactions. Otherwise, there would be inconsistencies between the general ledger and the subsidiary ledger. The transactions that take place during time period B (refer to [Time of Transfer \[Page 301\]](#)) have to be posted at a later date, after the legacy data transfer.

After the actual transfer of legacy data, you can create and post to new assets in the SAP R/3 System. However, you have to re-define all asset accounts and value adjustment accounts as reconciliation accounts for Asset Accounting on the transfer date (Customizing for *Asset Accounting*, choose *Set Reconciliation Accounts*). After the transfer date, you can no longer post directly to these accounts. Choose *Reset Reconciliation Accounts* to reverse this setting.

## Transfer after SAP R/3 Asset Accounting Is Already Productive

As a basic rule, the asset data transfer should be carried out once completely before a company code becomes productive for Asset Accounting. However, in some instances it may be necessary to transfer data from a legacy system into a live Asset Accounting company code. The reason is usually that all the data could not be transferred directly in the original transfer, because

- Data was managed in a third system.
- Company codes are to be fused.



The first data transfer for company code 0001 took place on 12/31/98. The second data transfer for the same company code takes place in a subsequent fiscal year.

There are two possible solutions in the R/3 System. Only the first of these solutions guarantees that the balances will be clear, correct and continuous in the R/3 System. Using the second solution, it is not possible to compare the initial balances in the asset history sheet in the year of the transfer (that is, the current year) with the final balances in the asset history sheet of the last fiscal year. These problems with reconciliation occur both within Asset Accounting, as well as in the General Ledger, when you use the second solution.

The continuity of balances is reestablished, in any case, in the years following the legacy data transfer.

### Maintaining the Continuity of Balances

When you use this solution, you cannot transfer legacy data using the asset data transfer functions. Instead you have to post the applicable asset acquisitions in the current fiscal year.

### Subsequent Transfer without Continuity of Balances

If it is not necessary for you to maintain the continuity of the account balances for closed fiscal years in the R/3 System, you can carry out the subsequent transfer using the asset data transfer function. Keep in mind:

- You must close the fiscal years that came before the second data transfer. You cannot reopen these fiscal years under any circumstances. For a transfer at fiscal year end, this applies up to and including the year in which the second asset data transfer takes place (transfer date = 12/31/YYYY=> YYYY has to be closed). If the transfer date is during the fiscal year, this applies up to the year before the current year (transfer date = 03/31/YYYY => YYYY-1 has to be closed).
- Before the second transfer, you have to set the company code status to *Asset data transfer not yet completed* (in Customizing for Asset Accounting, choose *Preparing for Production Startup*).
- You are not permitted to use the legacy asset data transactions again, under any circumstances, for assets transferred in the first transfer. It is also extremely important to make sure that no new postings are made in the company code at the time of the second transfer.
- After the transfer is successfully completed, it is mandatory for you to set the company code back to *Asset data transfer completed* status.

---

**Reconciliation of Balances with General Ledger**

- You have to reconcile with the general ledger reconciliation accounts by making the necessary adjustment postings (in Customizing for *Asset Accounting*, choose *Preparing for Production Startup* → *Transfer Balances*). In order to post to these accounts, you have to temporarily reset them for posting (in Customizing for *Asset Accounting*, choose *Preparing for Production Startup* → *Reset Reconciliation Accounts*).

## Transfer Methods

The following objects contain information on the individual legacy data transfer methods in Asset Accounting.

## Manual Legacy Data Transfer

### Use

You can use this function to manually create legacy assets in the R/3 System. For more information, see [Legacy Data Transfer \[Page 298\]](#).

### Features

The asset data part of this transaction is the same as in the *Create asset* function. The data transfer transaction, however, also includes functions for entering cumulative asset values and the transactions in the current fiscal year.

### Master data

When entering master data for a legacy asset, you should be aware of the following:

- The capitalization date is always a required entry. Using the capitalization date, the system determines the depreciation start date and the expired useful life, based on the period control in the depreciation key.  

If the asset was acquired at a time when the company code had a different fiscal year variant, this determination of the useful life will be correct only if the period calendar assignments have been maintained historically.
- The planned useful life is a required entry when a depreciation key for automatic depreciation calculation has been entered.  

You can also account for increased wear and tear on an asset in the past as the result of multiple shift use. You do this by manually correcting the expired useful life that was automatically calculated by the system.
- Time-dependent data (such as the assignment to a cost center) can only be transferred with the values current on the transfer date. To create new time intervals, you have to use the function for changing master data.

### Asset Values

Keep the following in mind when transferring values for assets from your previous system:

- You have to include all active depreciation areas for the asset and enter the historical acquisition costs.
- You can choose not to use automatic calculation of cumulative past depreciation (in Customizing for *Asset Accounting*, choose *Asset Data Transfer* → *Parameters for Data Transfer* → *Options* → [Recalculate Depreciation for Previous Years \[Ext.\]](#)). In that case, you also have to enter the historical depreciation.
- If you transfer legacy data during the fiscal year, you can enter the depreciation that was posted in the current fiscal year.

The system treats depreciation areas defined to adopt values from other areas just as it does for normal posting. The values you enter are also checked against the positive/negative sign rules of the depreciation area (positive/negative net book value, positive/negative ordinary depreciation, and so on).

## Transactions

If the transfer date for legacy data is during the fiscal year (that is, the transfer date in the company code is **not** the end of the fiscal year — refer to [Time of Transfer \[Page 301\]](#)), you can transfer the transactions from the current fiscal year up to the date of the transfer. Keep the following in mind when transferring these transactions:

- Enter the asset value date, the transaction type and the posting amount.  
Note that the asset value date has to be in the current fiscal year, and it must lie **before** the transfer date.
- For asset retirements and intracompany asset transfers, you can enter the cumulative proportional value adjustments from closed fiscal years and the proportional value adjustments of the current fiscal year (Choose *Takeover Values* → *Transactions*, function *Proportional values* in the screen for transferring asset values).  
If you set up the legacy data transfer so that accumulated depreciation is automatically calculated by the system, then the system also automatically calculates cumulative proportional value adjustments from closed fiscal years. For this purpose, the system uses the capitalization date of the asset as the depreciation start date for all line items, and calculates the accumulated proportional depreciation according to the depreciation key in the asset master record.
- If you choose legacy data transfer without automatic calculation of depreciation, you can manually enter the accumulated proportional depreciation of prior years individually for each transaction and depreciation area.



You cannot enter write-ups, and other transactions that only affect certain depreciation areas, using the legacy data transfer transaction. You have to manually re-post them using the applicable posting transactions. This also means that you cannot transfer any legacy assets that manage only write-ups without acquisition costs.

## Assets under Construction

You can use this function to transfer assets under construction with line item management. For more information, see [Transfer of Assets under Construction \[Page 305\]](#).

## Activities

You start this function in Customizing for *Asset Accounting*. Choose *Asset Data Transfer* → *Manual Online Transfer*.

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**Legacy Data Transfer Using Microsoft( Excel**

## Legacy Data Transfer Using Microsoft® Excel

### Use

Along with the [Data Transfer Workbench \[Ext.\]](#), the SAP R/3 Asset Accounting component also offers the option of transferring legacy asset data using Microsoft® Excel. This method is especially suited for transferring small datasets, such as a few hundred fixed assets. The amount of data you can transfer using this method is limited by the maximum number of rows in your Excel version.

### Prerequisites

The first step is to load or manually enter the legacy asset data and values from your legacy system into an Excel sheet. The data transferred to the R/3 System has to be in a specified form. In order to ensure that the data transfer is carried out correctly, you should adhere to the following guidelines when creating the Excel sheet:



SAP recommends that you set the *Standard* Excel format for the entire document before you enter any data. Dates, however, can also be entered using the *Custom* Excel format.

The Excel spreadsheet consists of two parts (see the example below).

- In the **header** (blue in the example), you specify the type of data you want to transfer for your assets, for example, the company code, description, and so on.
- In the **asset section** you enter the individual assets and their values.

The Excel worksheet has to contain cells for the legacy asset number, company code, asset class and capitalization date, and values have to be supplied in these cells for each asset. The same applies for any required entry fields that are defined in the asset class in the R/3 System.



You might want to prepare for the data transfer, although the organizational structures of your enterprise have not yet been specified (for example, the description of a company code is not decided). In this case, you enter variables for the missing information, for example, company code XXXX. Before carrying out the data transfer, you can then use the *Replace* function in Excel to replace the variable with the correct value.

### Header

In the header, you first specify the field descriptions to be transferred. The first 5 rows in the Excel worksheet are reserved for this header information. You are not allowed to use them for asset master data or asset values.

The fields are organized in **record types**. Enter these record types in the first column of the worksheet. The next columns should contain the field descriptions assigned to these record types. SAP recommends the following structure:

#### Use of Record Types

Legacy Data Transfer Using Microsoft( Excel

Record type	Used for...	Is assigned to tab page during field assignment (see below) ...
0	Identifier (legacy asset number); record type 0 is reserved solely for the number of the asset from the legacy system, and is not allowed to be used for any other purpose. The system needs the identifier if there are errors, in order to assign them to the correct assets.	Header data
1	Asset master data, general data and inventory data	Header data
2	Posting information, time-dependent data	Time-dependent data to Leasing
3	Depreciation areas, cumulative values, posted values	Depreciation areas, cumulative values, posted values
4	Transactions	Transactions



If you do not need certain record types (for example, record type 4), then you can omit them when creating your Excel worksheet.

**Asset Section**

Enter the asset values below the header data. You have to enter the asset data in the Excel worksheet so that it corresponds to the structure of the field descriptions in the header.



For example, you specify in the header for record type 1 that the company code is in column B and the asset class is in column C.

The system then recognizes the field contents of all fields of record type 1 in column B as company codes and in column C as asset classes.

Therefore, you have to make sure that for each asset, which is in a row specified as record type 1, that its company code is always in column B and its asset class in column C.

Fields that have leading zeroes in the R/3 System (for example, company code 0001), have to have leading zeroes in this format. Always enter the asset class with 8 places and leading zeroes (for example, 00001000).

Legacy Data Transfer Using Microsoft( Excel

**Example of Structure of Excel Worksheet**

**Example: Structure of Excel Sheet**

Column containing record types



	A	B	C	D	E	F	G	H
1	0	legacy asset number						
2	1	Comp Code	Asset Class	Descrip.	Inv. Number			
3	2	Cost Ctr	Plant	Manufact.	Cap. Date			
4	3	Dep Area	Dep Key	Use Life	UL in Period	Dep Start	Cumul. APC	Cumul. Dep.
5	4	Current	Real Area	Tr Type	Amount	Value Dt		
6								
7	0	10001						
8	1	0001	00001000	Desk	35796			
9	2	1	0001	Comp1	01/01/97			
10								
11	0	30001						
12	1	0001	00003000	Monitor	41756			
13	2	1	0001	Comp2	01/01/97			
14	3	01	LINR	10	0	01/01/97	1000	100
15	3	02	LINR	5	0	01/01/97	1000	200
16	4	1	01	100	5000	01/01/97		

Header

Asset Section

In record type 3 (depreciation area data) always supply the depreciation area name (such as 01) first.

In record type 4 (transactions) you have to enter the sequential number and the depreciation area in the first two fields. The sequential number is used to keep different transactions separate from one another.



Representing Transactions

Record type	Seq. number	Area	Transaction Type	Amount	Posting date
4	1	01	100	5000	01.01.97
4	1	02	100	4900	01.01.97
4	2	01	100	1000	01.01.97

## Features

### Field Assignment Between Excel and the R/3 System (Mapping)

In the R/3 System, you assign the field descriptions of the Excel worksheet cells to fields in R/3 (for example, CoCd to company code). In the initial screen of the transaction, you choose whether you want to use an already existing field assignment or if you want to create a new one. To choose an existing field assignment, select the one you want and choose  *Start with field assignment*. To create a new field assignment, choose *Create field assignment*.



Some Excel versions issue a message at this point in a dialog box. The message states that there is a large amount of data in stored temporarily, and asks if you want this data to be available to other applications. Choose *No*.

You make the field assignment by selecting a row in the *Fields of file* table and selecting its corresponding field on the *Fields of asset master record* tab pages, and then choosing the *Assign* pushbutton. The system does not check if the assignment is logical. However, you can assign each field to exactly one other field. Certain assignments are mandatory. You have to assign the old asset number (from the legacy system). In addition, you have to assign the asset class, company code, capitalization date, and any required entry fields (see above) in the R/3 System.

The system lists only those field descriptions that are defined in the header section of the Excel sheet. These are sorted according to their record type (0, 1, 2 and so on). The asset master data fields that can be completed in the R/3 System are split up on various tab pages. See the **Use of Record Types** table (above) for the valid assignments.

Before the data transfer, the system displays a dialog box, in which it asks if the field assignment should be saved. However, you can also still save the field assignment after the data transfer (*Saved assignments* pushbutton). In this way, you can carry out a number of data transfers that always follow the same pattern. You thereby only have to carry out the mapping and conversion once. It is saved in your saved field assignment and can be used again in the future.



In the Excel sheet in the above graphic, the assignment of header information to table field in the R/3 System would look like this:

Comp Code – company code

Asset Class – asset class

Tr Type – transaction type, and so on

### Setting the Date Format

Choose *Settings* → *Date format* to specify whether the date uses American format (MM/DD/YY or MM/DD/YYYY), ISO format (YYYY-MM-DD), European format (DD.MM.YY or DD.MM.YYYY), or SAP format (YYYYMMDD). Dates in your Excel sheet have to have the same format.

### Transfer of Fixed Assets

During a test run (choose  *Test run* ) the system lists any errors that occur, without actually starting the legacy data transfer.

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### Legacy Data Transfer Using Microsoft( Excel

During a production run (choose  *Assets* ) the system creates new assets using the values from the Excel worksheet. It supplies values to their fields based on the assignments you made. To display master records of assets that were created successfully, choose  *Details of return message* .

Any incomplete or incorrect data that could not be used to create assets can be displayed in a separate Excel worksheet (choose  *Export errors to file*).

### Activities

Start the legacy data transfer program in Customizing for *Asset Accounting*. Choose *Asset Data Transfer* → *Legacy Data Transfer Using Microsoft® Excel*.

## Authorizations and Preparing for Production Startup

### Use

This section describes the authorizations in the system, along with measures that can be taken to increase system performance.

## Standard Authorization Functions

# Standard Authorization Functions

## Use

The authorization protection in the SAP R/3 System is based on authorization objects defined by the system. Using these objects, the user can define authorizations. These authorizations can be grouped in profiles and assigned to individual users.

[Graphic: The Basic Authorization Concept \[Page 322\]](#)

## Features

Authorization objects are represented in the system by particular fields (for example, company code). You define an authorization by specifying the allowed entries for the particular fields in the authorization object (\* = all). You assign the authorizations to users by means of authorization profiles.

The following authorization objects are defined for Asset Accounting:

Functions	Authorization object
Assets in general	Asset view
Asset posting	Company code/asset class
Asset posting	Asset class/transaction type
Asset class maintenance	Asset classes
Asset accounting	Authorization for periodic processing
Asset master record maint.	Company code/asset class
Asset master record maint.	Company code/business area
Asset master record maint.	Company code/cost center
Asset master record maint.	Company code/plant
Group asset maint.	Group asset
Asset Customizing	Chart of depreciation

The object "ABAP program flow checks" is provided for the Asset Accounting Information System. You use this object to control whether a user can execute a report. The authorizations A\_ALL, A\_PROFIL\_02 and A\_PROFIL\_04 are defined for this object. These authorizations consist of an action (executing a report = SUBMIT) and permitted authorization groups. The possible authorization groups correspond roughly to the nodes of standard report selection in Asset Accounting (see *Maintain Authorizations* in the Implementation Guide).

## Standard Profiles

SAP provides the following standard profiles for Asset Accounting

- Asset Accounting full authorization
- Asset Accounting full authorization (display only)
- Sample profile for the Asset Accounting System Administrator

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**Standard Authorization Functions**

- Sample profile for the Asset Accountant
- Sample profile for the Asset Accounting clerk
- Sample profile for the buyer for Asset Accounting
- Sample profile for a technician for Asset Accounting
- Sample profile for a warehouse clerk for Asset Accounting

A detailed description of these profiles can be found in the online documentation. There is also a standard profile in Financial Accounting that authorizes posting to the General Ledger asset accounts (account type A).

### Authorization Checks

The authorization checks are carried out for the following activities:

- Maintenance and display of asset classes
- Maintenance and display of asset master records
- Maintenance and display of the values of a fixed asset
- Posting to a fixed asset
- Carrying out periodic processing
- Creating a list using logical database ADA
- Maintenance and display of control data

For asset class maintenance, you assign the authorization for different activities to the user for each individual asset class. For master record maintenance, you can also assign the authorization for certain organizational units (company code, plant, business area). You can protect asset transactions at company code and asset class level depending on the type of transaction.

### Control Data

Control data is divided into two authorization classes:

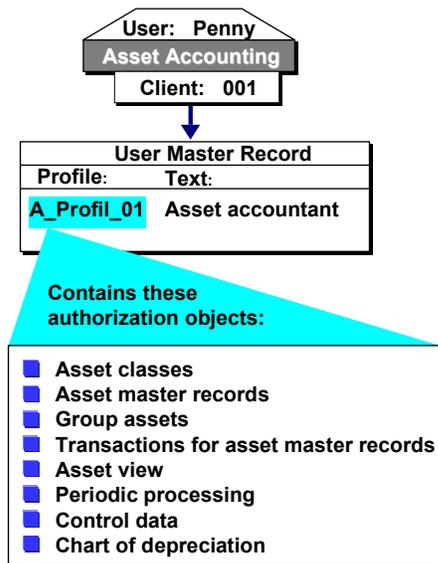
- Customer data (for example organizational structure)
- Program control data

You can specify these authorization classes in detail according to the requirements of your enterprise. To do this, use table TDDAT. In this table, you can specify the authorization class for each Customizing function. This table is already supplied with values in the standard system. For this authorization object, only the *Change* and *Display* activities are allowed.

Graphic: The Basic Authorization Concept

## Graphic: The Basic Authorization Concept

The following graphic shows the relationship between the user master record, the authorization profiles and the authorization objects.



## Asset Views

### Use

Along with the standard R/3 authorization functions, Asset Accounting uses a view concept for the protection of authorizations. Therefore, the *Asset view* authorization object has a special function. The asset view applies especially to employees, who have only occasional limited contact with fixed assets. The asset view allows such employees only a limited view of asset data and values, whether or not they formally have access to every master record. With the *Insurance* asset view, for example, a person responsible for insurance can be granted access only to the data that is relevant for insurance.

### Features

The asset view determines which fields and depreciation areas can be processed from that particular view. Seven predefined asset views are supplied. You can adapt these views according to your own needs. You can reduce the number of the views but you cannot at present increase the number to more than seven views.

The six predefined views are:

View	Description
1	Asset accounting
2	Internet
3	Tax
4	Purchasing
5	Technical
6	Insurance

In Customizing, you can assign a different processing authorization for each asset view to every field group of the asset master record (maintenance authorization, display authorization or no authorization).



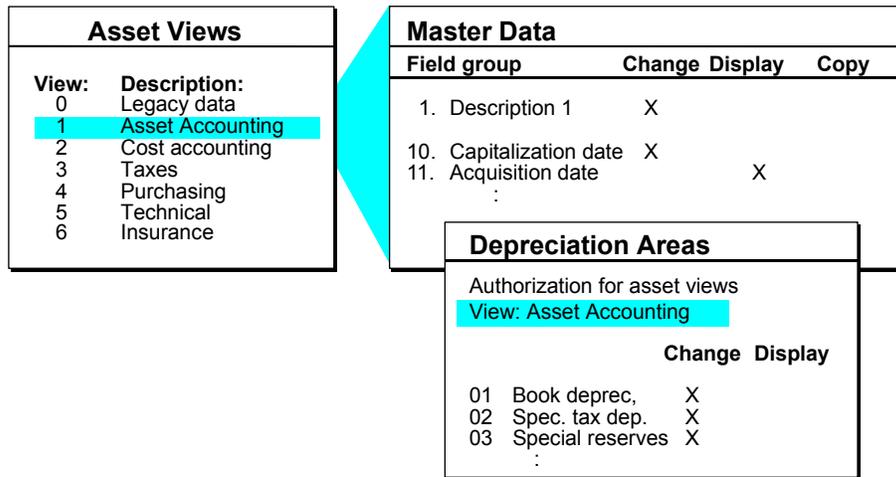
Creating **complete** assets is only possible with asset view 1, defined as the standard *Asset Accounting* view. Users who do not have this view cannot create any assets.

### Assignment to User Master Records

The asset view is an authorization object in Asset Accounting. You can define the authorization for asset views as you would for other objects. You then assign this authorization to the user master records. As with other parameters (for example, company code), an asset view can be stored as a default setting in the user master.

The following graphic shows the structure of an asset view, and the specifications made for it in the definition of the depreciation area:

**Asset Views**



**Authorizations of an Asset View**

**Activities**

Normally the asset views supplied by SAP are sufficient. If you need your own asset views, you can modify the predefined asset views in Customizing for *Asset Accounting*. Choose *Preparing for Production Startup* → *Authorization Management* → *Process Asset Views*.

## Organizational Plan and Workflow

### Use

You can represent the organizational plan of an enterprise in the R/3 System by entering organizational units, plan positions, and positions. This organizational plan is used for employee management in the Personnel Development (PD) component.

### Features

This organizational plan also plays a significant role in controlling SAP Business Workflow (see [SAP Business Workflow \(BC-BMT-WFM\) \[Ext.\]](#)). You need to define Asset Accounting and its employees (system users) in the R/3 organizational plan. These definitions are required for carrying out the following functions in FI-AA:

- Mass changes to master data
- Posting of mass retirement (see [Mass Changes to Master Data \[Page 538\]](#))
- Processing assets that were not created completely (see [Master Data Maintenance with Asset Views \[Page 218\]](#))

However, it is also possible to assign a Workflow task directly to an R/3 user (see the FI-AA Implementation Guide: *Preparations for Production Startup*). In this way, you can carry out the FI-AA standard tasks (such as mass changes) **without** having a defined PD organizational plan.

### Standard Tasks

The tasks listed above are defined in SAP Business Workflow as standard tasks. In order to carry out these tasks, you have to define the organizational unit "Asset Accounting." Then assign these standard tasks to this organizational unit, or to a plan position or position belonging to it.

[Graphic: Defining an Organizational Plan \[Page 327\]](#)

### Procedure

You can carry out the most elementary Workflow Customizing for FI-AA standard tasks in FI-AA Customizing under *Preparations for Production Startup*. For more information, see the FI-AA Implementation Guide.

The following explains how, in addition to these settings, you can create the organizational unit "Asset Accounting" with the plan positions/employees belonging to it, and how to link them to the FI-AA standard tasks:

1. In the R/3 basic menu, choose *Tools* → *Business Engineering* → *Business Workflow* → *Development* → *Definition tools* → *Organizational plan*.
2. Enter the organizational unit that you want to assign to Asset Accounting (for example, "accounting"). Choose *Continue*.  
If there are no organizational plans maintained, you can create one via *Organizational plan* → *Create*.
3. Choose *Create* and enter a freely-definable key and a name for your organizational unit "Asset Accounting."
4. Place the cursor on the new organizational unit and choose *Staff assignments*.

**Organizational Plan and Workflow**

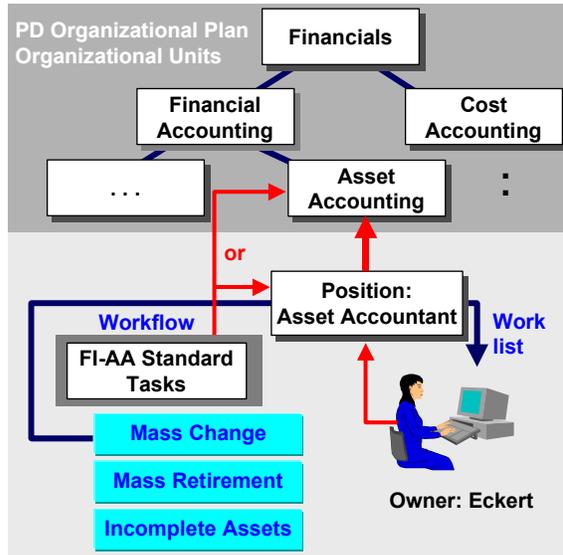
5. Choose *Create plan position*. In the resulting dialog box, enter a key and a name for your new plan position "Asset Accountant."  
If needed, you can enter a descriptive position for your new plan position.
6. Choose *Assign owner* and enter the SAP user name of the asset accountant (owner type US).
7. Choose *Task profile*. Assign all asset-related standard tasks to your new plan position or organizational unit (*Assign tasks*).
8. Leave the transaction for the definition of the organizational plan. Choose *Settings* → *Event linkage*. Set the status of the FI-AA object types to "enabled" (by double-clicking on the line).



To take advantage of the comprehensive functions of SAP Business Workflow, you have to carry out comprehensive and detailed maintenance of the organizational plan. The procedure described above applies primarily when you want to use Workflow for the special functions of Asset Accounting, not for the situation where Workflow is used on a company-wide basis.

## Graphic: Defining an Organizational Plan

The following graphic shows an example of an organizational plan and the corresponding Workflow assignments.



### Organizational Plan



It is not possible to assign standard tasks to a plan position that does not have an organizational unit above it.

## System Performance Improvements

# System Performance Improvements

## Use

There are a range of activities in Asset Accounting that require intensive system resources. You can improve performance for these activities considerably by taking certain steps. System performance is strongly influenced by the number of master records and depreciation areas being processed. The following formula can be used as a guideline: If the number of master records multiplied by the number of depreciation areas is more than 5 million, then SAP recommends that you use the options outlined below for improving performance.

## Features

SAP's general recommendation is that you should divide large datasets into a number of smaller files of equal size, and use multiple background processing jobs. The options for dividing large datasets into smaller portions is dependent on your hardware. If your CPU is already operating at capacity, then it is not possible to increase its speed further.

## Legacy Data Transfer

- When you use external number assignment for the asset number, it is best to divide the assets by asset number. When you use internal number assignment for the asset number, it is preferable to divide the assets by asset class. In this case, you should combine asset classes that use the same number range. This way, the system does not run the jobs in sequence, rather than parallel, due to the number range. You should orient the number of files on the number of application servers and the capacity of the CPU.



However, make sure that you plan each of the jobs using a different system user, since the legacy data transfer program refers in part to user-dependent set/get parameters.

- If you are transferring more than 10,000 legacy assets, you should use the direct data import RAALTD11. As compared to the batch input procedure (RAALTD01), direct data import improves performance by approximately ten times. (However, you should always use a small number of assets from each asset class for testing. Transfer these test assets using the batch input data transfer program, in order to make sure that the data in the input file is correct.)
- Do not recalculate depreciation (this is very time-intensive).
- The use of different fiscal year variants reduces performance. You avoid this by choosing a fiscal year variant that is not year-dependent, and switching over to the fiscal year variant you want once the legacy data transfer is complete.

## Reports

Reports for the close of a period or the fiscal-year closing can usually be divided into several background jobs. Instead of running one report on several company codes, for example, it is much more efficient to plan several jobs, one for each company code, and have them run in parallel. It might also make sense to split up a report on one company code into several jobs. For example, a report by cost center can be divided into several reports, each with one cost center or cost center interval.

- Generating reports with a report date during the fiscal year, rather than at the end of the fiscal year, is extremely demanding on system resources. If you nonetheless need this kind

## System Performance Improvements

of report, try not to choose the report date as a selection criteria. Performance is improved if you limit acquisition and retirement lists by the posting date instead, or limit asset balance lists using the capitalization date.

- Avoid reports based on derived data, such as the profit center. Instead, select using data that is in the asset master record, for example the cost center.
- Do not select using just one criteria, such as the account. Instead use combinations, for instance the asset class with the account group.
- Select group totals.

## Periodic Processing

- RASIMU: Divide the data manually, by cost centers, for example, or using an existing sort version. Determine the overall totals using download to Excel.
- RABUCH: Process in parallel and post directly.
- If you expect performance problems during depreciation posting (due to having over 100,000 assets), you can use a different program rather than the standard depreciation posting program RABUCH00. This alternate program RAPOST00 offers advantages in improved performance when a large number of assets are involved. However, it has some limitations. For more information about RAPOST00, see the online long text for the report in the R/3 system.



There is a report for re-creating a lost batch input session. This report is called RAPOST20.

Reports RAPOST00 and RAPOST20 are not in the FI-AA standard menu at this time. You call these reports using transaction SE38.

- RAPERB, RASKBU, RAJAWE, RAAFAR00, and RAJABS are unproblematic reports.

## Cost Planning

You can speed up the transfer of planned depreciation to cost planning (see [Primary Cost Planning \[Page 526\]](#)) by planning for several jobs at once, instead of just one. For the individual jobs, you have to divide up your fixed assets (such as, by asset class or cost center).

## Mass Changes

You make mass changes in Asset Accounting using R/3 Workflow and worklists (see [Mass Changes \[Page 228\]](#)). If you want to change more than 10% of all assets, you should create multiple worklists. The system can then process these worklists in parallel, making better use of system resources.

## Parallel Processing

When carrying out the fiscal year change or recalculation of depreciation, you can distribute the transactions to several application servers. For more information, see the online help documentation for the *Server group* field.

Country-Specific Functions

## Country-Specific Functions

### Use

The following objects describe some valuation and posting procedures that are specific to certain countries. The Customizing settings you need to carry them out are also described.

## Capital Lease Procedure (USA)

### Use

In the USA, businesses are legally required to capitalize leased assets under certain circumstances. The system provides comprehensive functions for this purpose. For more information, see [Leased Assets \[Page 196\]](#).

## Depreciation at Class Level ADR (USA)

### Use

You can use group assets in order to meet the requirements for depreciation at the asset class level according to ADR regulations. Create a group asset (sub-number) for the respective vintage year, and assign all the appropriate assets to this group asset. (Refer to [Group Assets \[Page 53\]](#)). You also need to make the following settings in Customizing:

- Specify the depreciation areas in which you want to manage group assets. The indicator for this is found in FI-AA Customizing under *Valuation* → *Group Assets*.
- If you choose to manage group assets as separate asset classes (with their own account allocation), you need to create these asset classes. Set the indicator in these asset classes that specifies they can only be used for group assets.
- Specify the accounting method to be used for asset retirements. You make this specification in the Customizing definition of the transaction types for asset retirements (*Transactions* → *Retirements* → *Define transaction types for retirement*). Also see [Posting Gain/Loss \[Page 246\]](#).

## Permanent Impairment of Fixed Assets (USA)

### Use

In the United States, the current accounting guidelines (GAAP) permit you to reduce the base value of a fixed asset if there is a permanent impairment of its value. Generally, this reduction of the asset value is shown separately from the original acquisition and production costs, and is depreciated over the remaining life of the asset.

### Features

In order to carry out the necessary tasks in the system, you can use the same functions that are used for showing investment support on the liabilities side of the balance sheet (see [Special Valuation \[Page 167\]](#)). These system functions make it possible for you to manage the reduction in value in a separate depreciation area, in which it can be depreciated. Define this depreciation area with the following characteristics (under *Valuation*):

- Post assets in general ledger realtime
- Management of positive and negative book values
- **Is not** a derived depreciation area
- Area type: “investment support on liabilities side”
- **No** takeover of APC values from another depreciation area
- Mandatory takeover of depreciation terms from area 01

If depreciation area 01 uses a depreciation key that depreciates the net book value over the remaining useful life, the value reduction will also be depreciated over the remaining useful life of the asset. In that case, it is not necessary to change the remaining useful life manually.

- Periodic posting of depreciation (under: *Depreciation* → *Post depreciation to the general ledger*).
- Indicator set for “depreciation area manages investment support” (under *Special Valuation* → *Investment support*).

### Transaction Types

You use separate transaction types for posting the value reduction. Define these transaction types in FI-AA Customizing (*Special Valuation* → *Investment Support* → *Check transaction types for investment support measures*). The key for these transaction types always begins with capital letter “I” (for example, I01). Please be aware that these transaction types post only to depreciation areas that are defined for managing value reductions.

You can create the value reduction as a “support measure” in FI-AA Customizing (*Define investment support measures*). If you do, the system automatically creates the necessary transaction type.

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**Tax Jurisdiction Code (USA)**

## Tax Jurisdiction Code (USA)

### Use

The tax jurisdiction code is used in the United States for determining tax rates. The tax jurisdiction code defines the tax authority to which taxes must be paid. The determining location is the location to which the asset was delivered. You enter this code in the asset master record under time-dependent data.

### Features

When you post using a tax calculation table, the system enters the tax jurisdiction code in the FI document. For asset postings, the system determines the tax jurisdiction code based on the logic below:

1. It first looks for the tax jurisdiction code in the asset master record.
2. If it is not in the asset master record, the system takes the tax jurisdiction code from the cost center entered in the asset master record.
3. If neither the asset master record nor the cost center contain a tax jurisdiction code, the system takes the tax jurisdiction code from the company code to which the asset belongs.

Procedure 3 is intended for instances when taxes on sales/purchases do not apply to the business transaction.

### Reports

Using sort versions and the offset procedure, it is possible to use the tax jurisdiction code as a sort criterion for reporting. For more information, see [General Functions of Standard Reports \[Page 256\]](#) and [Sort Versions \[Page 263\]](#)



For more information on tax jurisdiction codes, see the FI Implementation Guide (*Company code* → *Taxes on sales/purchases*).

## Mid-Quarter Convention (USA)

### Use

There are certain tax laws (mid-quarter convention) in the United States that require you to calculate depreciation on the basis of half-periods. When the fiscal year version in the FI General Ledger corresponds to the calendar year (12 periods), you can meet this requirement **without** using a different fiscal year variant in Asset Accounting.

For more information, see [Fiscal Years and Periods for Asset Accounting \[Page 90\]](#)

### Subsequent Changes to Period Control

It is sometimes necessary, according to American financial reporting requirements, to use the mid-quarter convention. This convention might require you to change the control of the start of depreciation in the last quarter of the fiscal year, for acquisitions in the current fiscal year.

If you change period control from mid-year to mid-quarter, you have to change to all assets that were created with the old depreciation start date. This can be done individually or using mass change.

The system helps you to comply with the mid-quarter convention by means of a standard report. For more information, see [Preparations for Closing \[Page 292\]](#).

There are two ways of reflecting the requirements of the mid-quarter convention in the system:

- Depreciation key with time-dependent period control
- Depreciation key and sub-number per acquisition year

#### Depreciation key with time-dependent period control

Set the *Period control according to fiscal years* indicator in the Customizing definition of the depreciation key you want to use (*Depreciation* → *Valuation Methods* → *Period Control* → *Define Time-Dependent Period Controls*). These keys then no longer use the period control of your depreciation key. Instead they use period controls that you specify, which are dependent on time and company code. You can define your own specific period controls for these depreciation keys

- Per company code
- Per fiscal year and
- Per transaction type category
- Change the time-dependent period control in these depreciation keys (in the application menu: *Environment* → *Current Settings*).
- Start the program for the re-calculation of depreciation for the affected company codes.

Note that the system uses an across-the-board treatment for retirements of the following years when you use this method. This means that the system does not check whether the asset acquisition was in a year that used the mid-quarter convention or in a year with normal period control. Regardless, the system always uses the period control entered in the depreciation key for the retirement.

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**Mid-Quarter Convention (USA)****Depreciation key and sub-number per acquisition year**

In order to avoid this across-the-board treatment, you can define a special mid-quarter depreciation key, and then work with asset numbers per acquisition year. Make the following settings:

- Define a special mid-quarter depreciation key. Set the following:
  - In the depreciation key, set the *Acquisition only in the capitalization year* indicator. This ensures that the acquisitions in following years have to be managed on asset sub-numbers. As a result, the information about whether the acquisition year is a year with mid-quarter depreciation is not lost.
  - In the depreciation key (or in the period methods assigned to it), set period control for acquisitions and retirements at mid-quarter.
- Manage a separate sub-number for each acquisition year.
- Enter this special depreciation key in the asset main numbers and asset sub-numbers that were acquired in this year. You can use a mass change to enter this depreciation key.

## Reports for the USA

### Use

A series of reports is available to meet the specific reporting needs of the United States. For more information, see [Taxes \[Page 295\]](#) and [Preparations for Closing \[Page 292\]](#).

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**Asset Register (Italy)**

## Asset Register (Italy)

### Use

There is a special report in the system for creating the asset register. It is found in the application menu under *Info system*. You can define the output of this report in FI-AA Customizing (also under *Information System*). For more information, see the explanation for this report in the Implementation Guide.

## Revaluation (Italy)

### Use

The system offers comprehensive standard functions for carrying out revaluation. For more information, see [Management of Inflation \[Page 175\]](#).

## Deferred Depreciation (France)

## Deferred Depreciation (France)

### Use

Tax regulations in France make it possible to defer the posting of some depreciation on all or a portion of assets belonging to the company, in a year with poor financial results. This means:

- A portion of depreciation for this fiscal year, and possibly for subsequent fiscal years, is not posted if they close with a loss
- The deferred amounts are accumulated on the asset.
- The accumulated amount can be reversed in addition to the annual depreciation, if the enterprise closes the fiscal year with sufficient profit.

Reversing the deferred depreciation means that you post this additional amount in addition to the normal depreciation.

### Features

The law requires the enterprise to post at least a minimum depreciation each year, so that the cumulative depreciation posted per asset is not less than the theoretical value of the accumulated straight-line depreciation. The result of this requirement is that at least straight-line depreciation must be posted in each year. This means that you can only defer the posting of depreciation that exceeds the straight line depreciation. This amount is generally the difference between declining-balance and straight-line depreciation.

This law requires reversing of deferred depreciation as soon as the accumulated depreciation that was actually claimed is less than the accumulated minimum depreciation (that is, straight-line depreciation). To meet this legal requirement, the system clears the deferred depreciation automatically, if you have defined a special derived depreciation area (see below).

### Required Depreciation Areas

In order to meet the legal requirements described above, you need the following depreciation areas (FI-AA Customizing: *Valuation* → *Depreciation Areas*). The depreciation areas 01, 02 and 03 described here are also used with the same definitions for representing reserves for special depreciation. Therefore, you can adopt these depreciation areas from the standard chart of depreciation for France.

- **01 Book depreciation**  
Manage the minimum depreciation (= straight-line depreciation) in this depreciation area. Define the depreciation area so that APC values and depreciation are posted immediately online (using the indicator in the area definition: *Post assets in General Ledger realtime*). The net book value should be positive (indicator: *Positive net book value*).
- **02 Tax depreciation**  
Manage the maximum allowed tax depreciation in this depreciation area. Usually this is declining-balance depreciation. Do **not** allow posting from this area to the general ledger. The net book value should also be positive.
- **03 = 02 - 01 Special depreciation (theoretical)**

## Deferred Depreciation (France)

This is a derived depreciation area that is based on areas 01 and 02. This area shows the maximum possible difference between tax depreciation and book depreciation. Allow posting from this area to the general ledger. For more information, see [Special Depreciation Shown on the Liabilities Side \[Page 85\]](#).

- **06 Deferred depreciation**

Manage the deferred depreciation in this depreciation area. The area should manage depreciation only, not APC. The system reverses the positive/negative signs when it updates this depreciation area, so that the area always has a **positive** net book value. Allow posting of asset values to the general ledger from this area (indicator: *Post assets periodically in General ledger*).

- **10 = 02 + 06 - 01 Special depreciation (real)**

This derived depreciation area is required for the automatic reversal of the deferred depreciation. Do not allow posting from this area to the general ledger. Define the depreciation area so that it allows only negative net book values. Enter depreciation area 06 as the modification area for depreciation area 10.



You **must** use the numbers for these depreciation areas as they are described here. You **cannot** use any numbers you wish, because the report for the deferral or reversal of special depreciation is based on the specified numbers.

## Manual Deferral/Reversal

The report RARUECK1 is used for the deferral of depreciation. The report allows you to select the assets affected and to create the corresponding planned depreciation values in depreciation area 06. The report defers the maximum allowed amount of deferred depreciation in the given fiscal year (the difference between area 01 and area 02). The selection screen of the report is the same as for other FI-AA reports.

You can also use the report to reverse the deferred depreciation from depreciation area 06. It then reverses all deferred depreciation at one time.

The report uses transaction type D05 for the deferral, and transaction type D06 for the reversal. These transaction types are limited to posting in depreciation area 06. You maintain these transaction types in FI-AA Customizing under *Depreciation* → *Unplanned Depreciation*.

## Automatic Reversal of Deferred Depreciation

When you follow the specifications outlined above, depreciation area 10 controls the automatic deferral of depreciation.

As soon as the net book value in depreciation area 10 becomes positive, the system reverses deferred depreciation in depreciation area 06 until a book value of at least zero is reached. For this to take place, the definition of depreciation area 10 (a derived depreciation area) must state that depreciation area 06 is its modification area. Therefore, make sure you enter depreciation area 06 as the modification area in the definition of depreciation area 10.



[The Course of Deferred Depreciation \[Page 342\]](#)

## The Course of Deferred Depreciation

## The Course of Deferred Depreciation

The table below shows the course of the net book value (at year end) and the depreciation in the different depreciation areas when deferred depreciation and automatic reversal of deferred depreciation are used. The APC for the asset was 100,000. The asset is depreciated over 10 years. Depreciation is deferred in year 2 and year 3 (a total of 12,812).

Automatic reversal begins in year 8 in the amount of 1,712, since the actual depreciation in this year of 78,288 = 80,000 (depreciation area 01) + 11,100 (depreciation area 03) - 12,812 (depreciation area 06) would be less than the straight-line depreciation (80,000).

	<u>01</u>	<u>02</u>	<u>03</u>	<u>06</u>	<u>10</u>
	<u>Book dep rec.</u>	<u>Tax deprec.</u>	<u>Theoret deprec.</u>	<u>Deferred deprec.</u>	<u>Special real dep</u>
1. Ann.dep.	-10,000	-25,000	-15,000	0	-15,000
Accum.dep	-10,000	-25,000	-15,000	0	-15,000
Net book val.	90,000	75,000	-15,000	0	-15,000
			8.750		
2. Ann.dep.	-10,000	-18,750	-8,750	8,750	0
Accum.dep	-20,000	-43,750	-23,750	8,750	-15,000
Net book val.	80,000	56,250	-23,750	8,750	-15,000
			-4.		
3. Ann.dep.	-10,000	-14,062	-4,062	4,062	0
Accum.dep	-30,000	-57,812	-27,812	12,812	-15,000
Net book val.	70,000	42,188	-27,812	12,812	-15,000
4. Ann.dep.	-10,000	-10,547	-547	0	-547
Accum.dep	-40,000	-68,359	-28,359	12,812	-15,547
Net book val.	60,000	31,641	-28,359	12,812	-15,547
5. Ann.dep.	-10,000	-7,910	2,090	0	2,090
Accum.dep	-50,000	-76,269	26,269	12,812	-13,457

The Course of Deferred Depreciation

Net book val.	50,000	23,731	-26,269	12,812	-13,457
6. Ann.dep.	-10,000	-5,933	4,067	0	4,067
Accum.dep	-60,000	-82,202	-22,202	12,812	-9,390
Net book val.	40,000	17,798	-22,202	12,812	-9,390
7. Ann.dep.	-10,000	-4,449	5,551	0	5,551
Accum.dep	-70,000	-86,651	-16,651	12,812	-3,839
Net book val.	30,000	13,349	-16,651	12,812	-3,839
		automatic reversal			
8. Ann.dep.	-10,000	-4,449	5,551	-1,712	3,839
Accum.dep	-80,000	-91,100	-11,100	11,100	-3,839
Net book val.	20,000	8,900	-11,100	11,100	0
9. Ann.dep.	-10,000	-4,450	5,550	-5,550	0
Accum.dep	-90,000	95,550	-5,550	5,550	0
Net book val.	10,000	4,450	-5,550	5,550	0
10. Ann.dep.	-10,000	-4,450	5,550	-5,550	0
Accum.dep	-100,000	-100,000	0	0	0
Net book val.	0	0	0	0	0

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**Depreciation to Exact Day**

## Depreciation to Exact Day

### Use

There is an indicator in the depreciation key for exact to the day depreciation. You can use this indicator to include the exact day of the depreciation start or end date in the calculation of depreciation (see [Other Features of Depreciation Key \[Page 133\]](#)).

## Posting Net Book Value at Asset Retirement (France)

### Use

You can set an indicator to specify that the system post the net book value from an asset retirement to a 'clearing account for revenue from asset sale' or a 'clearing account for sales to an affiliated company.' You make this specification per company code. The system then does not post gain/loss (for sale) or loss (from scrapping) for an asset retirement. This type of posting is necessary, for example, to meet legal requirements in France.

For more information, see the Implementation Guide for Asset Accounting under *Transactions* → *Retirements* → *Gain/Loss Posting*.

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**Splitting Gain/Loss (France)**

## Splitting Gain/Loss (France)

### Use

Financial reporting requirements in France make it necessary to separately identify gain/loss resulting from asset sales. Based on the length of time the asset has belonged to the enterprise, you must distinguish between long-term and short-term gain or loss.

SAP provides a special report, RAABGF01, for this purpose. For more information, see the R/3 online documentation for this report.

## Net Worth Tax (Japan)

### Use

There is a standard report (RAJPVERM) in the system for displaying asset values in accordance with Japanese net worth tax requirements. For more detailed information, see the online documentation for this report (transaction SE38).

In order for the report to provide correct results, you need to make the following settings in Customizing:

- Define the master data field for the 8 character evaluation group as an optional or required entry field in the screen layout control (FI-AA Customizing: *Master Data*).
- Define the necessary tax offices as 8 character evaluation groups, and enter them in the required assets.
- Define the following property classification key (FI-AA Customizing: *Net Worth Tax*) and enter them in the assets:
  - JP01: Buildings and Structures
  - JP02: Machinery
  - JP03: Ships
  - JP04: Airplanes
  - JP05: Vehicles
  - JP06: Tools, furniture & fixtures

SAP supplies these property classification keys in the standard system.

- Define all exception rules for tax purposes as “reason for manual valuation” (FI-AA Customizing: *Net Worth Tax*) and enter them in the assets.
- Define a sort version with certain sort levels and use them in the report. SAP provides sort version JP01 for this purpose.

## Rounding/Declining-Balance Depreciation (Japan)

### Use

It is a legal requirement in Japan to round the depreciation percentage rates to three decimal places. There is a special control field, which enables you to control the internal determination of the depreciation percentage rates. You maintain this field in FI-AA Customizing (*Valuation* → *Valuation Methods* → *Maintain Depreciation Key*).

You can also define depreciation keys for the special declining-balance depreciation methods used in Japan. For more information, see [Declining-Balance Method According to Japanese Requirements \[Page 158\]](#).

## Reserves for Special Depreciation (Germany)

### Use

The system enables you to handle reserves for special depreciation that result from differing tax depreciation and book depreciation. For more information on special reserves, see [Special Depreciation Shown on the Liabilities Side \[Page 85\]](#).

## Investment Support (Germany)

### Use

The system enables you to post investment support either on the liabilities or the assets side. You manage this kind of depreciation using special depreciation areas. For more information, see [Special Valuations of Fixed Assets \[Page 167\]](#).

## Transferred Reserves (Germany)

### Use

The system simplifies the handling of reserves resulting from paragraph 6B of German income tax law (ESTG). There are special transaction types and depreciation areas for this purpose. For more information, see [Transferred Reserves \[Page 189\]](#).

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**Municipal Tax Requirements (Germany)**

## Municipal Tax Requirements (Germany)

### Use

According to German income tax regulations, enterprises are required to supply information on the depreciation of movable and immovable fixed assets (not on intangible assets). Enterprises that have locations in different municipalities have to supply this information **per municipality**.

### Features

To meet these requirements, you must assign all fixed assets (not intangible assets) to a municipality. You can use the following master data fields:

- **Location** (time-dependent data)

The organizational unit “location” is primarily significant in the logistics components of the R/3 System. For your own information, and for reports you can assign each asset to a location. You define the characteristics of the location per plant (Customizing: *Enterprise Structure* → *Maintain Structure* → *Definition* → *Logistics - General*). The advantage of using this field is that it is time-dependent. Therefore, an asset can be assigned to different locations over the course of time. You can then easily keep track of changes in asset location.

- **Municipality** (real estate specifications)

This field is not linked to a Customizing table. You can make any entries in this field. However, this field is ready for input only if you have specified that all real estate entries are ready for input (as specified in the screen layout rules). If you use this field, there is no history of changes with the help of master data change documents.

### Reports

To gather the required information on depreciation, use the standard depreciation lists in the system. When you are in the report selection screen, choose *Dynamic selections*. You can then use the location field or municipality field as a selection criterion for the report.

In addition, SAP supplies sort versions 0010 (asset class, company code, location) and 0019 (company code, municipality) in the standard system.

## Investment Incentive (Austria)

### Use

The investment incentive amount (paragraph 10 of the Austrian internal revenue code) represents investment support in the form of additional depreciation (over 100%). It does not influence the useful life of the asset. The acquisition and production costs can be completely depreciated by means of ordinary or extraordinary depreciation.

You can also take investment incentive into account for partial production costs, if the production of the asset takes longer than 12 months (asset under construction).

When determining profit, investment incentive amounts claimed are identified in the balance sheet in the form of reserves. If the asset is not retired before the fourth year, you have to clear the reserve as not affecting net income. If the asset is retired before the fourth year, you have to increase profit by the amount of the investment incentive.

### Features

You can represent an almost unlimited number of investment incentive amounts on asset master records. As a result, it is possible to represent the claiming of investment incentives over a number of years for partial production costs on an asset. In order to use this procedure, you have to set up a support measure for each year of support with the following data:

- Period of validity
- Percentage rate in relation to acquisition and production costs
- Required period of retention
- Base depreciation area, that manages the acquisition and production costs for determining the basis of the investment incentive
- Support depreciation area, in which the investment incentive amount is managed

You can post the investment incentive amounts, per depreciation area, to separate accounts. This means that you have to set up a separate depreciation area for every year in which you receive investment support. You have to create all the possible depreciation areas for managing investment incentives in the asset classes. When you maintain asset master data, the system then creates only those depreciation areas that the particular asset requires for investment incentives.

Using the investment key, you can

- Create an investment incentive allocation list, with optional posting by the system
- Carry out maximum amount checks when posting
- Carry out the necessary investment incentive postings at the time of a retirement or transfer

Transaction types for posting the investment incentive are created when you define the investment support measure. These transaction types are (xx = key of the investment support):

- Ixx for the allocation of investment support
- Jxx for the extraordinary write-off (write-off before the end of required period of retention, not affecting income)

### Investment Incentive (Austria)

The system automatically creates postings for a write-off of the investment incentive that increases profit as a result of retirement within the required retention period. These postings are created within the framework of the normal retirement posting.

The write-off of investment support at the end of the retention period is also carried out automatically within the framework of the depreciation posting run.

### Accounts

For each fiscal year, you need to set up at least one special depreciation area. You have to define the following accounts for each depreciation area:

- Capital accounts
  - Reserves according to paragraph 10 income tax law (special reserves account)
- P&L accounts
  - Allocation of the reserves according to paragraph 10 (allocation clearing account)
  - Extraordinary proceeds from write-off of the reserves (repayment account “clearing of repayment”)
  - Income accounts for ordinary write-off and write-off due to retirement (or free reserves)

## Posting Investment Incentive (Austria)

The accounts described in the previous object are explained here in more detail.

1. Claiming of investment incentive amount 9%

(1) from partial production costs in fiscal year YYYY (200,000.--)

(2) from partial production costs in fiscal year YYYY + 1 (300,000.--)

IIn per par. 10 InTax YYYY	Allocation of IIn
(1) 200,000	(1) 200,000
	(2) 300,000

IIn per par.10 InTax YYYY+1
(2) 300,000

Since it is common to identify the yearly amounts of the investment incentive in separate accounts, it is necessary to use two investment keys. These keys each have to be assigned to a separate depreciation area.

2. Retirement with investment incentive of 250,000 during the required retention period

IIn per par.10 InTaxYYYY	Ext.proc. from w-o IIn
200,000	200,000
	50,000

IIn per par.10 InTaxYYYY+1
50,000

3. Manual posting of write-off of 250,000 during the retention period

IIn per par.10 InTax YYYY	Free reserves frm write-off
IIn 200,000	200,000
	50,000

IIn per par.10 InTax YYYY+1
50,000

If you want to integrate this manual write-off in a retirement posting, you have to choose a transaction type in which the *Repayment of investment support* indicator is not set.

4. Write-off of the investment incentive at the end of the required period of retention

IIn per par.10 InTaxYYYY	Free reserves frm write-off
IIn 200,000	200,000
	300.000

IIn per par.10 InTaxYYYY+1
300.000

**Investment Incentive (Austria)**

The automatic clearing of the investment incentive amount after the end of the required retention period is carried out by report RABUCH00. For this to work, you need to use depreciation key IFBA in the depreciation areas for investment incentive. This depreciation key determines the amount to be written off in the fourth year after the capitalization of the asset.

## Reports and Mass Posting for Investment Incentive (Austria)

### Use

Generally, for year-end closing you need a report list displaying the fixed assets that are eligible for investment support. The report RAINZU01 is available for this purpose (menu: *Periodic processing*). Using this report, you can manage a number of percentage rates during the course of one fiscal year on one asset master record with one investment support key.

### Features

#### Investment Support Claim Form for Assets

The report identifies the investment support during the fiscal year for assets which contain at least one support measure in their master record. The report includes the transactions for the year. For measures that would have been eligible for investment support in the past, and for which you want to include previous year's values, the cumulative values from previous fiscal years are included when determining the amount of investment support. The report determines the value based on the maximum percentage allowed in the Customizing definition of the investment support measure. If investment support has already been posted manually, the report determines the difference between the maximum allowed amount and the amount already posted.

#### Mass Posting

If you choose, the report will create a posting session for claiming the investment support. When you process this session, the following postings are created in the General Ledger:

- Debit clearing account, credit asset control account (shown on assets side)
- Debit clearing account, credit special reserves account (if shown on liabilities side)

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**Declining Multi-Phase Depreciation (Czech Republic and Slovakia)**

## Declining Multi-Phase Depreciation (Czech Republic and Slovakia)

### Use

In the Czech Republic and in Slovakia, certain legal requirements necessitate the use of a special depreciation calculation method.

### Features

To help you meet these requirements, SAP supplies the *Declining multi-phase depreciation CZ* depreciation calculation method. This depreciation calculation method determines depreciation using complex logic. In the first year of use, depreciation is calculated using the formula: "base value (e.g. net book value) / useful life"

Starting with the second year of use, the system uses the formula:  
 $2 * \text{base value} / ((\text{useful life} + 1) - \text{expired useful life})$

The *Declining multi-phase depreciation CZ* depreciation calculation method also uses a special depreciation logic when assets are modernized: This logic takes effect as soon as you post a subsequent acquisition using a particular transaction type to an asset that uses the *Declining multi-phase depreciation CZ* depreciation calculation method. The system then automatically sets the depreciation changeover year in the asset master record (in the detail screen for the depreciation areas), and changes the calculation formula for depreciation. The system uses this formula after the changeover:

In the changeover year:  $2 * \text{base value} / \text{complete useful life (from depreciation start)}$

After the changeover year:  $2 * \text{base value} / (\text{complete useful life} - \text{expired useful life starting from changeover})$

You control the setting of the changeover year using an indicator in the definition of the transaction type. The system sets the changeover year if the changeover year field is still blank in the asset master record. Another requirement is that changeover method 0 is entered in the calculation method used.

### Activities

- Define a base method in Customizing that uses the *Declining multi-phase depreciation CZ* depreciation calculation method (under *Depreciation*).

- Define a depreciation key that uses this base method.

- Set the *Set changeover year* indicator in your transaction types for modernization acquisitions (under *Transactions*).

## Customer Enhancements (Customer Exits)

### Use

The system enables you to make your own enhancements to certain standard functions. There are specific points in the standard program that are prepared by the system for calling up your own individually modified function modules.

### Features

In order to make enhancements, you need to create and activate a corresponding modification project (transaction CMOD). You can define the key of the modification project yourself. Then link the project to one of the SAP enhancements described below. The system then automatically calls the function module at the appropriate place in the program. The function modules contain an include of a sample program. You program your individual modifications in this program. The name of the included program has to begin with Z, so that the system recognizes the program as customer-specific. This method of identifying the program ensures that it is not overwritten when a new release is delivered.

#### Standard Functions You Can Enhance

Function	SAP Enhancement
Automatic assignment of inventory number	AISA0001
Determination of base value for depreciation calculation	AFAR0001
Calculation method for depreciation calculation	AFAR0002
Changeover method for depreciation calculation	AFAR0003
Calculation of proportional values during asset retirement	AFAR0004
Definition of revaluation	ARVL0001
Output of descriptions in reporting	ANLR0001
Currency translation in asset reporting	BADA0001
Output of asset number in reporting	BADA0002
Changing posted line items	AIN0004
Checks during posting	AIN0001
Company code relationship for intercompany transfers	AMSP0002
Distribution of revenue for mass retirement	WFOB0001
Account determination during posting	AIN0002
Checks during legacy data transfer	ALTD0001
Repayment percentage or amount	AIN0003
Number range for master data maintenance	AIST0001
Determination of asset value date while posting	AMAV0001

**Customer Enhancements (Customer Exits)**

Defining your own fields for asset master record	AIST0002
Integration of Asset Accounting with Plant Maintenance (PM)	AAPM0002

For a more detailed description of these SAP enhancements, see their long texts in the R/3 System online documentation.



For general information on customer enhancements, refer to transaction CMOD (choose *Information*).

## Asset Master Data Maintenance

### Purpose

The following objects describe master data maintenance for fixed assets.

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**Customer Enhancements (Customer Exits)**

## Creating Master Data

### Purpose

The asset master record contains all information relating to an asset that remains unchanged over a long period of time:

- Technical master data
- Organizational allocations (usually time-dependent)
- Depreciation terms

The system stores all the values and transaction data per each asset master record.

You can differentiate between different types of assets in the FI-AA component. The structure of the master record is identical for all asset main numbers, asset sub-numbers and group assets. Therefore, the basic procedure for creating any of these objects is essentially the same.

### Refer to:

[Master Data Maintenance \[Page 208\]](#)

## Creating an Asset

### Procedure

1. Check whether you are creating an entirely new asset, or if you are adding to an already existing asset:
  - For a completely new asset, first determine the correct asset class. Enter the asset class and the company code in the initial screen of the master data transaction (*Asset* → *Create* → *Asset*). Another option is to use an existing asset as a reference when creating the new asset.
  - If you are adding to an already existing asset, you must first identify the asset main number of the existing asset. Create a new asset sub-number for this asset (*Asset* → *Create* → *Sub-number* → *Asset*). The system uses the main asset number to determine the asset class for the new asset.
2. If you are using external number assignment, enter the new asset main number (or sub-number). If you are using internal number assignment, the system automatically assigns the number.



You **cannot** use a hyphen or the \* symbol as part of the asset number when you use external number assignment.

Choose  *Enter* .

3. Maintain the relevant master record information on the tabs as needed:
  - General data (description, capitalization date, inventory date)
  - Time-dependent assignments (for example, cost center)
  - Allocations (evaluation groups, investment support measures)
  - Information on the origin of the asset
  - Specifications for net worth tax
  - Insurance data
  - Leasing information (especially the relevant data for the opening entry and, if necessary, determination of present value)
4. Maintain depreciation and valuation information for each depreciation area (or check the default values):
  - Depreciation key
  - Useful life in years/periods
  - Start date for depreciation calculation
  - Index series (for the calculation of replacement value)

Choose  *Choose depreciation area* , to go from the overview screen to the detail screen.

5. Deactivate any depreciation areas that are not necessary for the asset.

**Customer Enhancements (Customer Exits)**

6.  Save.

## Changes to Master Data

### Purpose

Different types of changes to master data require different handling in the system. These different types are listed below:

- You want to change normal master record information and entries regarding valuation.
- You want to change time-dependent allocations to organizational units that are **not** relevant to the balance sheet (for example, plant).
- You want to change time-dependent allocations to organizational units that **are** relevant to the balance sheet.

The organizational units that are relevant to the balance sheet in this context are business area and profit center. The system determines the profit center for the asset indirectly on the basis of the asset's cost center. The cost center can also be assigned to a business area. Therefore, the cost center is in this sense also relevant to the balance sheet.

- You want to change the assignment of the asset to the asset class.

### Process Flow

#### Changing Normal Master Record Information

You can change normal asset master record information by simply changing the field contents in the asset master record.

#### Changing Organizational Units Not Relevant to the Balance Sheet

Time-dependent allocations of an asset to organizational units that are **not** relevant to the balance sheet can also be made directly in the asset master record. You have to enter the time period for the change. You may also have to enter a new time interval.

#### Changing Organizational Units Relevant to the Balance Sheet

There are two ways of changing the asset's assignment to organizational units that are relevant to the balance sheet (that is, changing assignment to a business area, or changing the cost center, which in turn affects the profit center).

- The first method: changing the assignment using the master data transaction. However, you can only use this method if the *Business area* and *Cost center* master data fields are **not** managed as time-dependent. You can set the business area and cost to time-independent in Customizing for *Asset Accounting*. Choose *Master Data*.

When you change one of these organizational units in the asset master record, the system automatically creates a transfer document with the acquisition and the retirement, as well as a master data change document. The system uses the system date as the standard default posting date for the automatically created document. However, you can also change this posting date using a substitution (refer to [Validation and Substitution \[Page 226\]](#)).

It is not possible to change only one particular time interval. Changes that take effect on a specific date are also not possible. For both of these reasons, the system is not able to create a history for the assignment to a cost center/profit center. After a change is made,

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**Customer Enhancements (Customer Exits)**

the system displays the new business area or cost center/profit center in all subsequent reports (even if the report is for a time period prior to the change).

- The other option is to change the assignment of business area or cost center/profit center by posting an asset transfer to a new master record, rather than making the change in the asset master data.

You have to use this method if the *Business area* and *Cost center* master data fields are managed as time-dependent. When you use this method, the system displays the business area or cost center that is valid for the given time period in all reports.

No matter which of these methods you use, the system ensures continuity in your business area balance sheets and profit center balance sheets.

**Changing the Asset Class**

Changing the asset class is possible only by posting a transfer to a new asset master record.

## Changing General Data of Assets

### Procedure

1. Change fields in the master record using the master data transaction (*Asset* → *Change* → *Asset*).
2. To change the depreciation terms, choose the *Deprec. areas* tab page. You go directly to the overview screen of all depreciation areas that are managed for that particular asset. When you choose  *Choose depreciation area* , you go from the overview screen to the detail screen for the area.

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**Changing Time-Dependent Data**

## Changing Time-Dependent Data

### Procedure

1. Choose *Asset* → *Change* → *Asset*.
2. Choose the *Time-dependent data* tab page.
3. Choose  *Further intervals*. Determine the time interval for the change. Select an interval that is already defined, or define a new interval.
4.  Save.

## Changing Assignment to Asset Class (Using Transfer)

### Procedure

1. Copy the asset master record that you want to change. You do this by creating a new master record, using the record you want to copy as a reference. However, make the necessary changes in the new master record. Either create the new master record with a new asset class, or enter a new business area in the time-dependent data for the new asset.
2. Use the Asset Explorer to determine whether the asset you are changing has only prior-year acquisitions, or whether there are also current-year acquisitions.
3. Carry out a complete transfer of the original asset to the new master record (refer to [Posting the Splitting or Moving of an Asset \[Page 450\]](#)).
  - Transfer acquisitions from prior years and current acquisitions separately from the original asset to the new asset (transaction type 300/320).
  - Make sure that the new master record manages the same depreciation areas as the original asset.

**Deactivation - Deletion - Blocking**

## Deactivation - Deletion - Blocking

### Purpose

The system supports the removal of an asset from the asset portfolio in the following manner:

### Deactivation - Reorganization

If you scrap a fixed asset or sell it, the system automatically assigns a deactivation date to the asset as a result of the retirement posting. If you reverse this transaction, the system removes the deactivation date. If you later want to post subsequent acquisitions to the asset, you can also cancel the deactivation date manually in the master record.

You can remove deactivated assets from the database and transfer them to an archive file (see [Archiving and Reorganization \[Page 229\]](#)). Bear in mind, however, that the asset history sheet also frequently includes transactions from the previous year. For this reason, the deactivated assets from the previous year cannot be reorganized or archived (minimum residence time = 1 year).

### Deletion of Assets Without Postings or Old Assets

You can delete an asset master record to which no postings have been made, directly online, without archiving. In addition, it is also possible to manually delete old assets (legacy assets from your previous system) during the asset data transfer process. Proceed as follows:

- Delete all the transferred values for the old asset using the old asset change transaction.
- Set the deactivation date for the old asset using the old asset change transaction (in the first master data screen)
- Delete the old asset using the delete transaction (AS06).



You can reset company codes that are in test status by using a special Customizing program (deletion of all application data). You find this program in FI-AA Customizing under *Tools*.

### Blocking

Set the blocking indicator in the asset master record. Once the blocking indicator is set, you can no longer post acquisitions to this asset. The idea behind this, for example, is to prevent future postings to an asset under construction once the project is complete.

Transfers and asset retirement postings to blocked fixed assets are still possible.

### Procedure

[Deleting Assets \[Page 371\]](#)

## Deleting Assets

### Procedure

1. Remove any existing capitalization date in the asset master record (*Asset* → *Change* → *Asset*).
2. Delete the master record physically from the database using the transaction *Asset* → *Block/Delete*.
  - Set the *Physically delete asset* indicator.
  - Save.

## Acquisitions

# Acquisitions

## Purpose

The primary business process in asset accounting is the purchase of assets and/or the capitalization of in-house produced goods or services. The *Asset Accounting* component supports various methods of handling this business process.

## Assets under Construction

Assets under construction are acquisitions to fixed assets that are not permitted to be capitalized and depreciated immediately. The options below apply to direct capitalization:

- Collect the costs using an investment measure (an order or a work breakdown structure element with an asset under construction linked to it). For more information, see the documentation for the *Investment Management* (IM) component.
- Collect the costs on an independent asset under construction in the *Asset Accounting* (FI-AA) component. For more information, see [Settlement of an Asset under Construction \[Page 430\]](#)

## Direct Capitalization

Direct capitalization refers to asset acquisitions that do not have an asset under construction phase. Instead, they are capitalized and begin depreciation immediately. The options below apply to direct capitalization:

- Direct account assignment to the final asset and possible statistical updating to an order or work breakdown structure (WBS) element. For more information, see
  - [External Asset Acquisitions \[Page 373\]](#)
  - [Processing Asset Acquisitions in Purchasing \(FI-AA/MM\) \[Page 381\]](#)
  - [Goods Receipt and Invoice Receipt with Reference to Asset \[Page 384\]](#)
- Account assignment to an order or WBS element (with allocation cost element) and settlement to the final asset (refer to [Acquisition from Internal Activity \[Page 388\]](#))
- Account assignment to a clearing account, and transfer from this account to the final asset. (When you use this method, statistical updating to an order or WBS element is possible only after the transfer to the completed asset. See below for more information.)

## Budget Monitoring Using Statistical Orders or WBS Elements

For Controlling purposes, it is often necessary to monitor spending on assets for the budget. Therefore, the system offers the option of automatic statistical updating to an order or WBS element. For more information, see [Budget Monitoring Using Statistical Orders or WBS Elements \[Page 243\]](#).

## External Asset Acquisitions

### Purpose

An external asset acquisition is a business transaction resulting from the acquisition of an asset from a business partner (in contrast to an acquisition from in-house production). You can post the acquisition of a purchased asset in several different ways, using different components of the R/3 System:

- In Asset Accounting (FI-AA) in integration with Accounts Payable (FI-AP), but without reference to a purchase order
- In Asset Accounting, without reference to a purchase order, without integration with Accounts Payable (posting to a clearing account - with or without clearing).
- In Materials Management (MM) at goods receipt or invoice receipt (refer to [Processing Asset Acquisitions in Purchasing \(FI-AA/MM\) \[Page 381\]](#) and [Goods Receipt and Invoice Receipt with Reference to Asset \[Page 384\]](#)).

### Process Flow

#### Integrated Asset Acquisition Posting

If you are also using SAP R/3 Accounts Payable (FI-AP), it is recommended that you take advantage of this integration and post the asset acquisition (without reference to a purchase order) *With vendor*. This means that you can post the asset acquisition and the corresponding vendor payable in one transaction. Using this transaction reduces the time and energy required for data entry and the possibility of discrepancies.

[Graphic: Acquisition Posted Using Integration \[Page 375\]](#)

#### Non-Integrated Asset Acquisition Posting

You can post the acquisition of a purchased asset to a clearing account rather than using integrated posting to Accounts Payable. There are two scenarios:

- The asset acquisition comes before the receipt of the invoice. The offsetting entry is posted automatically.
  - As the acquisition amount, specify the actual net amount to be capitalized. Regardless of the document type (gross/net) which you use, the system does **not** deduct a discount here.
- The asset acquisition is posted after the receipt of the invoice. You posted the invoice as an open item to a clearing account, and now you need to clear this entry.
  - If the clearing account used is an open item account, when you post the acquisition, you can manually clear the posting to the clearing account (vendor invoice) at the same time (transfer with clearing). The corresponding transaction allows you to select all open items, per clearing account (account type S for General Ledger account) according to varying criteria.

## External Asset Acquisitions

### Cash Discount

When posting an asset acquisition integrated with Accounts Payable, your choice of document type determines whether you post gross (without cash discount deducted) or net (with cash discount deducted).

When you use a document type for net posting, the system determines the cash discount deduction automatically by means of the specified terms of payment, and capitalizes the invoice amount on the fixed asset, minus sales tax and cash discount.

[Graphic: Gross/Net Posting \[Page 376\]](#)

During the payment run, differences may arise between the amount paid and the capitalization amount, because too little or too much cash discount was deducted. In this case, make adjustments to the APC using collective processing in the General Ledger (*General Ledger* → *Periodic processing* → *Closing* → *Regroup* → *Prof.segment adjstmt*).

When you post an asset acquisition without integration with Accounts Payable, you have to capitalize the actual APC amount (without cash discount being deducted) to the asset. In this case, the cash discount is treated only on the vendor side.

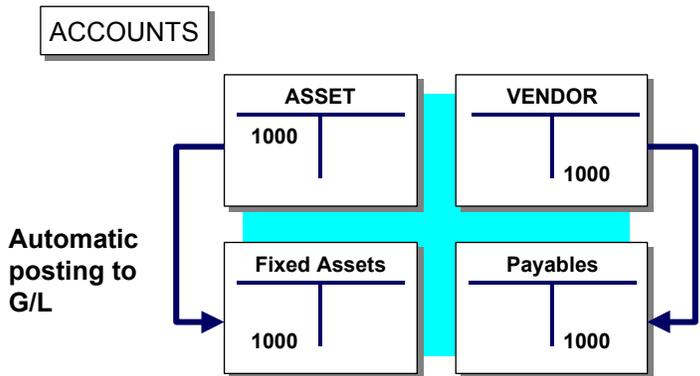
### Acquisition with Value Adjustments

You can post gross acquisitions, if you want to post assets that not only have APC, but also have value adjustments already. In order to use this option, set the *gross acquisition* indicator in the transaction type you use. The system then permits you to enter APC and accompanying value adjustments when you post the acquisition using the transaction under *Postings* → *Miscellaneous*.

## Graphic: Acquisition Posted Using Integration

Posting without discount and input tax on 9/1/CY:

ENTRY				
PK	Account	Amount	TTY	Val.date
70	ASSET	1000	100	9/1/CY
31	VENDOR	1000		



Acquisition Posted Using Integration

## Graphic: Gross/Net Posting

## Graphic: Gross/Net Posting

The following graphic shows how the capitalization amount is determined when you post an asset acquisition (gross/net).

<b>Net posting</b>	
Document type	Asset invoice <b>AN</b>
Account type	K, S, A
Procedure	Gross amount - input tax <u>- cash discount</u> Amount capitalized

<b>Gross posting</b>	
Document type	Asset invoice <b>AA</b>
Account type	D, K, S, A
Procedure	Gross amount <u>- input tax</u> Amount capitalized

## Integrated Asset Acquisition Posting (FI-AA and FI-AP)

### Procedure

1. Determine the asset and the vendor account. Create a new asset master record (refer to [Create Asset \[Page 363\]](#)) or a new vendor master record, if needed.
2. Choose *Postings* → *External acquisition* → *With vendor*.
3. First create the document header (document date, document type, etc.)

The document type determines how the acquisition is posted. Document type AA posts a gross amount, without subtracting a cash discount. Document type AN posts a net amount, subtracting the cash discount.

[Graphic: Integrated Acquisition Posting with Cash Discount \[Page 378\]](#)

4. Enter the capitalization of the asset as the first line item in the first screen (posting key 70, transaction type 100, account = asset number).  
Note: when you post to a specific asset sub-number, enter the asset main number and asset sub-number separated by a hyphen.
5. In the next screen, enter the posting data for the first line item (amount posted, tax indicator, and so on). Check the default asset value date.
6. In the same screen, enter the header information for the second line item (invoice/vendor - posting key 31).
7. In the next screen, enter the posting data for the second line item.
8. Choose *Post*.

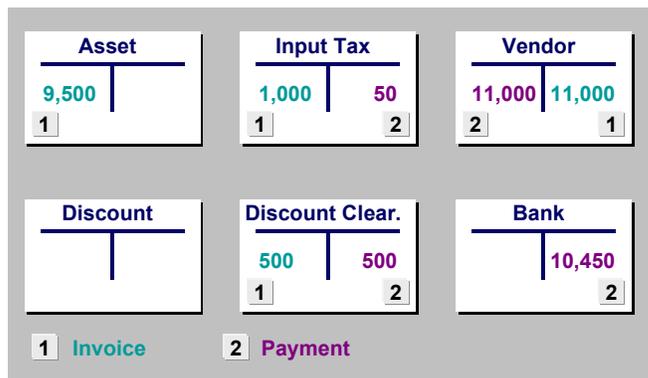


A number of low value assets can be posted to a single asset master record for collective management. If you choose to manage low value assets collectively, enter the quantity during the acquisition posting. Otherwise follow the same procedure as for the acquisition of normal fixed assets.

Graphic: Integrated Acquisition Posting with Cash Discount

## Graphic: Integrated Acquisition Posting with Cash Discount

The example below shows the net posting of an invoice in the form of T accounts:



Please note that the system does not post a discount, since the discount was already deducted from the APC of the asset at the time of the acquisition posting.

## Non-Integrated Asset Acquisition Posting (Before Invoice Receipt)

### Procedure

1. Choose *Postings* → *External acquisition* → *Automatic offsetting entry*.
2. Enter the asset on the *Transaction data* tab page. Or create a new asset for this purpose using the *New asset* function.  
  
Check the proposed date specifications, and make any necessary changes. If you do **not** enter an asset value date, the system automatically determines this date when you save.  
  
Enter the acquisition data (posting amount, quantity if needed). Choose *Multiple account assignment* in order to make multiple account assignments.
3. Enter or check the additional posting information (such as document type, offsetting account) on the *Additional details* tab page.  
  
If you do **not** enter a transaction type, the system automatically determines one when you save.
4. Enter a text for the posting document on the *Note* tab page (optional).
5. Save.

The system then automatically creates the offsetting entry in the clearing account that is specified according to the account determination (FI-AA Customizing: *Transactions* → *Acquisitions* → *Assign Accounts*). You can have the system carry out the clearing of the acquisition line items in the FI component automatically on a periodic basis.



Using this transaction, it is **not** possible to:

- Manually enter different amounts for different depreciation areas
- Have the system propose depreciation areas for certain transaction types

If you need to use one of these functions, then use transaction ABZO.

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**Non-Integrated Asset Acquisition (After Invoice Receipt, with Clearing)**

## Non-Integrated Asset Acquisition (After Invoice Receipt, with Clearing)

### Procedure

1. Determine the asset and the clearing account involved. Create a new asset master record (see [Create Asset \[Page 363\]](#)), if needed.
2. Post the acquisition (*Postings* → *External acquisition* → *Clearing offst. entry*).
  - Post the capitalization of the asset as the first line item (posting key 70, transaction type 100, account = asset number). The selections offered under *Transactions to be processed* are not relevant in this case because they refer only to payment postings.
  - Enter the amount to be posted.
  - Select the *Choose open items* function.
  - Enter the number of the clearing account, the account type S = G/L account, and limit the selection of the line items.
  - Select those items that you do **not** want to clear. Set these items to inactive.
  - Choose *Post*.
3. Check the cleared line items (in General Ledger: *Account* → *Display line items*).

## Processing Asset Acquisitions in Purchasing (FI-AA/MM)

### Purpose

When you are using the FI-AA component in conjunction with the Materials Management (MM) component, you can post an asset acquisition within the framework of the ordering process in purchasing.

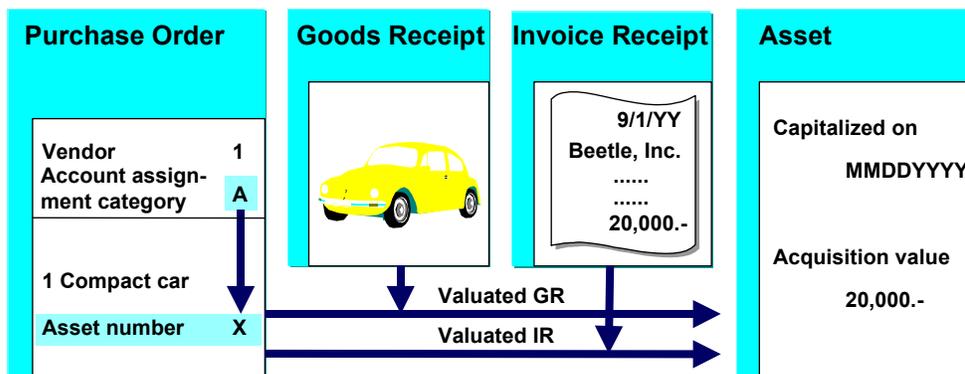
### Process Flow

Unlike most other business transactions, external acquisition using a purchase order requires a sequence of steps to be performed at separate times:

- Creating the purchase requisition
- Creating the purchase order
- Posting the goods receipt
- Posting the invoice receipt

When you use this integrated ordering process, you first have to create an asset master record. You can then post the purchase order or the purchase requisition with account assignment to the asset. It is also possible to create fixed assets from within the transaction for creating the purchase order. This means that you can carry out both steps, “create asset” and “create purchase order or purchase requisition,” within one transaction. You enter the most important asset master data information in a dialog box. From this dialog box, you can go directly to the actual asset master data transaction. If the asset you create is incomplete because essential asset master data information is missing, the asset has to be completed later (refer to [Processing Incomplete Assets \[Page 546\]](#)). You can specify an asset class for each material group in Customizing (*Transactions* → *Acquisitions*) to be used when you create fixed assets from the transaction for purchase orders or purchase requisitions. The system then provides this asset class as a default when you create assets for this material group.

When you post the goods receipt or the invoice receipt, the system automatically capitalizes the asset. From an organizational perspective, it may be difficult to create an asset master record with the purchase order. There is therefore the option of creating a purchase requisition first, without account assignment. Then you enter the asset in the purchase order that results from the purchase requisition.



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**Processing Asset Acquisitions in Purchasing (FI-AA/MM)****Acquisition Posted in Purchasing****Creating a Purchase Order Item**

When you create a purchase order item in the MM component that has account assignment to an asset (account assignment category A), the system first checks to see if the asset exists. It also determines if the asset can be posted on the planned delivery date. The system then determines the G/L account that is to be posted. It then determines the additional account assignments that are valid on the delivery date and notes these for the purchase order item.

When there is account assignment to an asset from a purchase order, no values are updated on the asset, and no line items are created at this point. For this reason, the account assignment of the purchase order item can be changed up to the time of the first goods receipt or invoice receipt.

**Purchase Orders for LVAs**

For account assignment to a low value asset or to a collective low value asset, the system makes sure that the APC of the asset together with the order values of the individual items does not exceed the maximum limit for low value assets.

For collective low value assets, the order quantity is also taken into account for this check. The total amount determined (APC + order value) is divided by the total quantity (amount already on hand + the order quantity), and the result is compared with the maximum value limit that has been specified.

## Creating a Purchase Order for the Asset

### Procedure

1. First, determine the information that is necessary for creating the purchase order:
  - Check in the Purchasing component whether a purchase requisition exists for the asset (*Logistics → Materials management → Purchasing*).
  - Determine the vendor from whom you are ordering the asset. If needed, enter the purchasing data for the vendor.
  - Determine the asset number of the asset that is being ordered. If necessary, create a new asset.
2. Create the purchase order. If there is a purchase requisition, use it as a reference (in Purchasing: *Purchase order → Create*).

In the initial screen, when you specify the account assignment type A (for asset), this determines

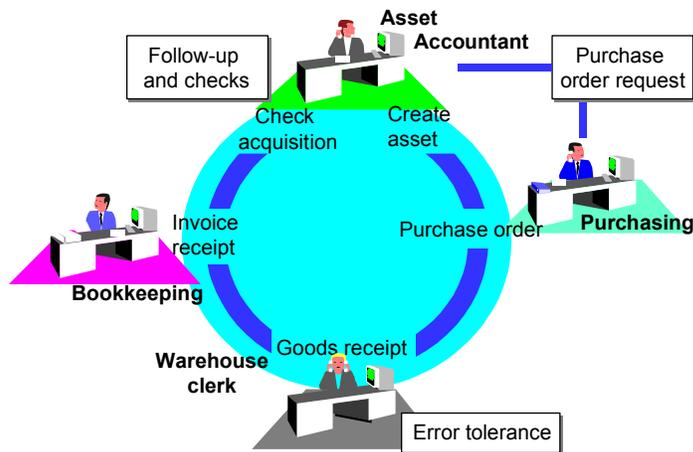
  - The account assignment to an asset
  - How the goods receipt or the invoice receipt is to be handled (are asset values to be posted at the time of the goods receipt or at the time of the invoice receipt).
3. Once you have entered the general purchasing data in the first screen (order date, material group, etc.), a dialog box appears. Enter the asset to which account assignment is to be made in this dialog box.
4. If the asset master record for your purchase has not yet been created, you can create it directly from within the purchase order transaction.
5. Display the order item and its current delivery status (in Purchasing: *Purchase order → List display → By account assignment*).
6. Later, post the goods receipt or the invoice receipt. (The Customizing definition of the account assignment type determines when the asset values are posted - either at goods receipt or at invoice receipt.) See the corresponding documentation for the Materials Management (MM) component.

## Goods Receipt and Invoice Receipt with Reference to Asset

## Goods Receipt and Invoice Receipt with Reference to Asset

### Purpose

You can post the goods receipt and the invoice receipt for an ordered asset with reference to the purchase order.



### Acquisition Posted in Purchasing

### Process Flow

There are several ways of posting this type of business transaction:

- **Valuated goods receipt, before the invoice receipt**

The system capitalizes the asset, creates line items, and updates the value fields of the asset. You post the invoice at later date. If there are differences between the amount posted and the amount of the invoice, the system automatically corrects the APC amount on the asset.

- **Unvaluated goods receipt, before the invoice receipt**

In this case, the system does not create line items and update values until the invoice is received. The system also carries out capitalization at the time of the invoice receipt. The system, however, uses the date of the goods receipt as the capitalization date.

- **Invoice receipt before the valuated goods receipt:**

- Based on the definition in FI-AA Customizing, the goods receipt is assigned a default transaction type (under *Transactions*) that does **not capitalize** the asset. In this case, the asset is capitalized at the time of the invoice receipt. The system creates a line item with an amount of zero (if the purchase order price = the invoice price).
- Based on the definition in Customizing for *Asset Accounting*, the goods receipt is assigned a default transaction type (under *Transactions*) that **does capitalize** the asset. In this case, the asset is not capitalized at the time of the invoice receipt. The

## Goods Receipt and Invoice Receipt with Reference to Asset

system creates a line item with an amount of zero (if the purchase order price = the invoice price).

If the purchase order price differs from the invoice price, you can only post the invoice receipt when this difference is positive. The system rejects the posting of invoices that would result in a negative balance on the asset.

- **Invoice receipt before the unvaluated goods receipt**

The system capitalizes the asset, creates line items, and updates the value fields.

### Setting Valuated or Unvaluated Goods Receipt

You determine whether the goods receipt is valuated or unvaluated by means of the account assignment category (A = asset). In Customizing for *Purchasing*, choose *Account Assignment* → *Maintain Account Assignment Categories*. You can also maintain the control indicator in the detail screen of the purchase order item.

It makes sense to post the goods receipt valuated, since the date of the goods receipt usually determines the moment the asset belongs to the fixed assets of the enterprise.

### Accounts

When you post a **valuated goods receipt**, the system posts a debit to the asset and a credit to the 'Goods receipt/invoice receipt' clearing account. You have to set up this clearing account in Customizing (*Financial Accounting* → *General Ledger Accounting* → *Business Transactions* → *Integration* → *Materials Management*). This account is cleared when the invoice receipt is posted.

When you post an **unvaluated goods receipt**, the system makes an integrated posting (debit to asset and credit to vendor). The system does not create any FI posting document in this case, only an MM document.

### Cash Discount

During the payment run, differences may arise between the amount paid and the capitalization amount, because too little or too much cash discount was deducted. In this case, you follow the same procedure as for an integrated acquisition posting, and make adjustments to APC using collective processing in the General Ledger (*General Ledger* → *Periodic Processing* → *Closing* → *Regroup* → *Prof. Segment Adjstmt*).

### Procedures

[Posting a Goods Receipt \[Page 386\]](#)

[Posting an Invoice Receipt \[Page 387\]](#)

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**Posting a Goods Receipt**

## Posting a Goods Receipt

### Procedure

1. Choose Logistics → Materials management → Inventory management.
2. Choose Goods movement → Goods receipt → For purchase order → PO number known.
3. Enter transaction type 101 and the number of the purchase order in the initial screen. Press **Enter**
4. Confirm the posting in the resulting screen by choosing Post goods receipt. The data defaulted by the system is correct.

## Posting an Invoice Receipt

### Procedure

1. Choose Logistics → Materials management → Invoice verification.
2. Press **Enter** invoice.
3. Enter the document date, the purchase order number and the document type (RE = post gross).
4. Press **Enter** Enter the amount of the invoice and the input tax indicator, if necessary. Set the indicator Calculate taxes.
5. Press **Enter** The system displays the purchase order items.
6. Save.

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**Acquisition from Internal Activity**

## Acquisition from Internal Activity

### Purpose

An acquisition from internal activity is the capitalization of goods or activities that are partly or completely created within your own company.

### Process flow

You are required to capitalize your own costs for such internal activity (for example, production orders or maintenance orders). There are two different approaches that you can use:

- Capitalization of costs collected in a production order (when you manufacture an asset that requires capitalization within the framework of an internal production order)
- Capitalization of costs collected in a maintenance order (for plant maintenance that requires capitalization, such as general improvements)

You capitalize the maintenance order or production order by settling it to an asset. As a prerequisite for this settlement, the settlement profile of the order must allow for receiver type "A" (for asset). You enter the settlement profile in the order type. It is copied from there into the individual order. You define settlement profiles in Customizing of the CO-OM (Overhead Controlling) component.

### Manual Direct Capitalization

If there is no CO order in the system for the internal activity, you can manually post acquisition and production costs or maintenance costs to an asset. When you post in this way, the system posts to the same accounts as it does for a non-integrated purchase acquisition. The offsetting account for the APC account is also the clearing account "offsetting APC account" in the FI-AA account determination.

There is a special transaction type for acquisition from internal activity. This special transaction type makes it possible to distinguish between acquisitions from internal activity and other types of acquisitions in reports.

### Procedure

[Posting Acquisition from Internal Activity Manually \[Page 390\]](#)

[Settling a Production Order to a Fixed Asset \[Page 389\]](#)

## Settling a Production Order to a Fixed Asset

### Procedure

1. Choose *Logistics* → *Production* → *Production control*.
2. Choose *Order* → *Change*.
3. Choose *Header* → *Settlement rule*. Enter your asset as the settlement receiver (type ANL) and enter the settlement amount (percentage rate or equivalence number).
4. Choose *Period-end closing* → *Settlement* and settle the order.

---

**Posting Acquisition from Internal Activity Manually**

## Posting Acquisition from Internal Activity Manually

### Procedure

1. Determine the costs that require manual capitalization.
2. Determine the asset, for which the APC is to be capitalized
3. Post the acquisition (*Postings* → *Acquisition* → *Acquis. in-house prod*). You only need to enter the asset as the account assignment. The system automatically determines the corresponding offsetting account for the clearing according to the account allocation in the asset class.

## Processing a Goods Issue from the Warehouse

### Purpose

Under certain circumstances, you may use goods from the warehouse as replacement parts for existing assets. The value of these goods must then be capitalized to the respective asset. This is essentially a transfer from current assets to non-current assets.

### Process flow

If you are using Asset Accounting in conjunction with the MM (Materials Management) component, you can post this business transaction using one system transaction. In this case, you have to create the goods movement in the corresponding warehouse (inventory management) using special transaction types for the account assignment to an asset. The system then capitalizes the acquisition or production costs of the material on the asset you specify.

### Procedure

[Posting Stock Withdrawal \[Page 392\]](#)

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**Posting Stock Withdrawal**

## Posting Stock Withdrawal

### Procedure

1. Determine the goods from the warehouse, and the asset to which they are being capitalized.
2. Using the R/3 main menu, select inventory management in the "Logistics" component (*Logistics → Materials Management → Inventory management*)
3. Post a goods issue.
  - In the first screen, enter the header data for the posting and the header data for the first line item. Use the transaction type for "consumption of warehouse goods for assets" (241).
  - In the second screen, enter the asset you are posting to and the posting data for the first line item.
  - Create additional line items if needed.

## Acquisition Resulting from Extraordinary Revenue

### Purpose

An 'acquisition resulting from extraordinary revenue' is an asset acquisition that is posted in Asset Accounting without any reference to a valuated goods receipt or invoice receipt. This type of transaction might be necessary because

- A new fixed asset, requiring capitalization, was discovered during the course of a physical inventory
- Your enterprise receives an asset as a gift

### Procedure

[Posting Acquisition Resulting from Extraordinary Revenue \[Page 394\]](#)

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**Posting Acquisition Resulting from Extraordinary Revenue**

## Posting Acquisition Resulting from Extraordinary Revenue

### Procedure

1. If needed, create a new asset master record (see [Create Asset \[Page 363\]](#)).
2. Specify the posting dates:
  - Asset value date

If an asset has just been found, you usually use the start of the fiscal year as the asset value date (capitalization date), and then estimate a remaining useful life based on the age of the asset. However, it is also possible that you know the exact time the capitalization should have taken place. In this case, you can post a post-capitalization with gross APC and historical value adjustments (see [Posting Post-Capitalization \[Page 441\]](#)).
  - Amount to be capitalized
  - Vendor
3. Post the asset acquisition (see [Integrated Asset Acquisition Posting \(FI-AA and FI-AP\) \[Page 377\]](#)). Do not post to the vendor account, but instead to the account for extraordinary revenue.

## Subsequent Acquisition

### Purpose

A subsequent acquisition in this context is an addition or enhancement to a capitalized asset in the current fiscal year (**not** [Posting Post-Capitalization \[Page 441\]](#)). The depreciation start date for the enhancement should be in the current fiscal year.

### Process flow

Assets can be represented differently in the FI-AA component according to their complexity (see [Master Data Maintenance \[Page 208\]](#)). You can post a subsequent acquisition to an already existing asset either to the existing asset master record or to a new sub-number. When you post to an already existing asset master record, the system creates separate line items for each acquisition. However, the system cannot display the depreciation from the subsequent acquisition after the end of the current fiscal year separately from the historical original acquisition. This type of separate display is only possible when you use a separate sub-number for the subsequent acquisition.

[Graphic: Subsequent Acquisitions Without Sub-Numbers \[Page 396\]](#)

[Graphic: Subsequent Acquisitions with Sub-Numbers \[Page 397\]](#)

### Procedure

[Posting Subsequent Acquisitions \[Page 398\]](#)

## Graphic: Subsequent Acquisition Without Sub-Numbers

**Graphic: Subsequent Acquisition Without Sub-Numbers**

The following graphic shows subsequent acquisitions which are managed as separate line items, but without separate sub-numbers:

Asset	4711	0000	Milling machines	
<b>Posting</b>				
Year	Cuml.APC	Transaction	Deprec.	Book value
00	--	100,000	30,000	70,000
01	100,000	20,000	27,000	63,000
02	120,000		18,900	44,100
03	120,000	40,000 - 35,000 +	19,320	45,080
<b>Line Items</b>				
Date	Trns. Type	Amount	Transaction	
4/1/X0	100	100,000	Acquis. of milling machine	
8/1/X1	100	20,000	Replacement shafts	
1/1/X3	200	40,000	Scrapping of shafts	
		25,300	Proportional depreciation	
9/1/X3	100	35,000	New shaft set	

**Subsequent Acquisition Without Sub-Numbers**

The retirement of the shaft set is posted on January 1, 19X3. The system determines the proportional depreciation that is retired. It calculates this value based on the proportion between the 40,000 APC that is being retired and the total APC of 120,000. The replacement shafts that were acquired subsequently (APC of 20,000) are not treated separately when the system determines the proportional depreciation.

Graphic: Subsequent Acquisition with Sub-Numbers

## Graphic: Subsequent Acquisition with Sub-Numbers

The following graphic shows subsequent acquisitions which are managed as separate sub-numbers:

Asset	Sub-No.	Description	Acq. Year	APC	Deprec.
<b>Sub-Numbers</b>					
0011	0000	Office building	1980	2,000,000	960,000
0011	0100	East extension	1983	3,000,000	1,080,000
0011	0200	West extension	1985	4,000,000	1,120,000
0011	0300	North extension	1987	5,000,000	1,000,000
0011	*	Office building		14,000,000	4,160,000

```

graph TD
    A[Sub-Numbers] --> B[Annual Values]
    B --> C[Line Items]
    
```

### Subsequent Acquisition Without Sub-Numbers

The acquisitions posted in each year are managed as individual sub-numbers. As a result, you can depreciate the subsequent acquisitions separately and retire them separately from the main asset.

---

**Posting Subsequent Acquisitions**

## Posting Subsequent Acquisitions

### Procedure

1. Check whether the subsequent acquisition is to be posted to a new sub-number or to an already existing asset number.
2. Create a new sub-number or identify the asset to which you want to post.
3. Determine the asset value date for the posting. Remember that the asset value date determines the start of depreciation.
4. Post the subsequent acquisition using the appropriate transaction type (depending on the to depreciation areas to be posted: 020 - 115), and using an acquisition transaction (for example, *Acquisition with vendor*).
5. Check whether you need to revise the depreciation terms (for example, the useful life) for the asset.

It may be necessary to change the depreciation terms, for example, if the subsequent acquisition has the character of a new asset, and therefore the calculation of depreciation has to be newly started.

6. If required, change the useful life of the asset.



- Changing the useful life of an asset affects the planned depreciation for **all open** fiscal years. Therefore, if you have not closed the previous fiscal year, you should only change the useful life for subsequent acquisitions in the current year after the previous year has been closed.
- Due to a subsequent acquisition, you may need to change the useful life of an asset with declining balance depreciation. In this case, you have to transfer the asset to a new asset master record in order to ensure correct depreciation. The new asset master record must have the new remaining useful life as the planned total useful life.

## Manual Depreciation and Transferred Reserves

### Use

The following objects describe manual planning of depreciation and of transferred reserves. For more information on the automatic calculation of depreciation, refer to [Depreciation \[Page 123\]](#). For more information on depreciation posting and updating, refer to [Processing for Closing \[Page 499\]](#).

---

**Manual Planning of Depreciation**

## Manual Planning of Depreciation

### Purpose

As a rule, the system automatically determines the planned depreciation for the current fiscal year by means of the depreciation keys entered in the master record. If you need to specifically set the amount of depreciation, the system offers a manual depreciation forecasting option. This means you can manually increase the planned values managed for the asset. You can generate manual depreciation amounts for all depreciation types, but it is more common to manually generate unplanned depreciation and the transfer of reserves.

There are several different types of manual depreciation that can be differentiated according to the reason that manual depreciation is required:

- There is an unexpected permanent reduction in the worth of the asset that you have to post as unplanned depreciation.
- You have special tax depreciation that you only partially take into account.
- You are using unit-of-production depreciation and want to manually plan depreciation, rather than using the depreciation key.

### Process Flow

In order to forecast manual depreciation, you can use the standard posting transaction in Asset Accounting. The system provides special transaction types that enable you to forecast depreciation in relation to specific areas, or for all areas that use the corresponding depreciation type, in one stroke.

### Updating in the General Ledger

The G/L accounts in Financial Accounting are not initially affected by this posting transaction. Asset line items are created, but no FI posting documents. The general ledger accounts are updated and the corresponding FI documents are created by the periodic depreciation posting run. The system then determines the depreciation to be posted up to a specific period, and creates the accompanying posting documents.

### Asset Value Date

The system does not initially produce posting documents for manually planned depreciation. These documents are not created until you carry out the periodic depreciation posting run. However, you can still enter an asset value date when you plan manual depreciation. Depending on your Customizing settings for the depreciation posting run (that is, the posting procedure used), this date can have one of these effects:

- If you use the catch-up method, the posting document is not created until the posting period (posting run) in which the asset value date falls.
- If you use smoothing, the asset value date has no effect. The system distributes manually planned depreciation to the remaining posting periods, regardless of the asset value date.



Note that ordinary depreciation and special depreciation can only be posted manually if *No automatic calculation* is the depreciation method set in the base method of the depreciation key entered in the depreciation area.

## Correction of Unplanned Depreciation

As soon as the reasons for the unplanned depreciation no longer exist, you normally have to reverse the effects of the unplanned depreciation. Therefore, we recommend that you use different transaction types for each type of reason you have for claiming unplanned depreciation. In order to make later correction of unplanned depreciation possible, you should set the *Manage historic* indicator in the master record of the fixed asset concerned. Setting this indicator makes it possible later to select the posted depreciation by transaction type. You then post the correction of the unplanned depreciation by reversing the unplanned depreciation already posted (in the current fiscal year) or by posting a write-up (in following years).

## Planning Manual Depreciation

### Procedure

1. Determine
  - The reason for the manual depreciation (such as a permanent reduction in value).
  - Whether prior-year acquisitions or current-year acquisitions are affected.
  - The type of depreciation (ordinary, special or unplanned depreciation).
2. Determine the appropriate transaction type (600 - 653). If needed, define a new transaction type for your special situation.
3. Specify the amount of depreciation and the asset value date for the planning of the depreciation. The depreciation posting program distributes the manual depreciation and posts it to the general ledger accounts starting from this asset value date.
4. Plan the manual depreciation with the standard posting transaction in Asset Accounting (*Postings* → *Manual val. corr.* → *Manual depreciation*).



When you plan depreciation manually, there is not yet an accompanying FI general ledger posting document in the system. The document is created by the depreciation posting run.

## Reserves Resulting from Retirement Revenue

### Purpose

According to the tax legislation in many countries, it is possible to transfer the undisclosed reserves that arise from the sale of assets to replacement assets (refer to [Transferred Reserves \[Page 189\]](#)). The procedure is carried out in the following steps:

- You sell assets, and post the resulting gain to the G/L account set up for reserves (allocation of the reserves).
- You purchase assets to replace the assets that were sold. You transfer the reserve that was "parked" in the reserve account to the new assets. The reserve then reduces the basis for depreciation for the new assets, or is represented as a value adjustment on the liabilities side (special reserves).

### Process Flow

The Asset Accounting system does not yet explicitly support the allocation of reserves from gain on asset sales to a liabilities balance sheet account. You make this allocation of reserves manually in Financial Accounting. Since you are generally not allowed to balance the expense from allocated reserves with gain, the posting is usually a debit to the expense account from allocation of the reserves and a credit to the balance sheet account for allocated (transferable) reserves.

---

**Allocating Reserves**

## Allocating Reserves

### Procedure

1. Create a retirement list showing gain/loss on retirement. Select the losses from the report that come under consideration for the creation of reserves.
2. Determine the expense account for the allocation of reserves, and the asset account for the allocated (not yet transferred) reserves.
3. In Financial Accounting, post a debit for expense from the allocation and a credit to the account for allocated reserves.

## Transfer of Reserves

### Purpose

You post the transfer of reserves in Asset Accounting using a transaction type of transaction type group 68 or 69. The system then automatically reduces the depreciation base by the transferred amount in the posted depreciation areas. As a prerequisite, you must have defined the depreciation areas concerned so that they can manage reserves. You determine, according to which depreciation area you post to, whether the transferred reserve should be handled as a reduction on the assets side, or as a value adjustment on the liabilities side (see [Transferred Reserves \[Page 189\]](#)).

### Process Flow

When you post to Asset Accounting, the system initially creates asset line items only (with no posting documents). The actual posting of transferred reserves in Financial Accounting takes place automatically with the periodic running of the depreciation posting run. If you actively reduce the depreciation base in depreciation area 01, the posting will be a debit to the offsetting account for transfer of reserves and a credit to the value adjustment account for the transfer of reserves.

### Restrictions

The legal restrictions in many countries forbid you (particularly when the allocation and the transfer take place in the same fiscal year) to balance out the revenue from the writing off of the allocated reserves and the expense from the transfer of the reserves to an asset. Therefore, you should not use the balance sheet account for allocated (transferable) reserves as the offsetting account for transferring reserves. This would correspond to a pure transfer within the balance sheet special reserves. Instead, you normally have to post to the corresponding expense account. Therefore, the revenue from the writing off of the transferred reserves must be posted separately and also be posted manually to Financial Accounting.

### Posting on Liabilities Side

When you handle the transferred reserves on the liabilities side in a derived depreciation area, then you do not post to the accounts specified above. Instead you post to the appropriate accounts for the handling of special reserves.

You post a debit to the expense account for allocation to special reserves, and a credit to the balance sheet account for special reserves.

When you handle the reserves on the liabilities side, the required writing off of the reserves transferred to an asset takes place automatically during the periodic depreciation posting run. The system posts to the appropriate accounts for the writing off of special reserves.

[Graphic: Accounts for Transfer of Reserves \[Page 406\]](#)

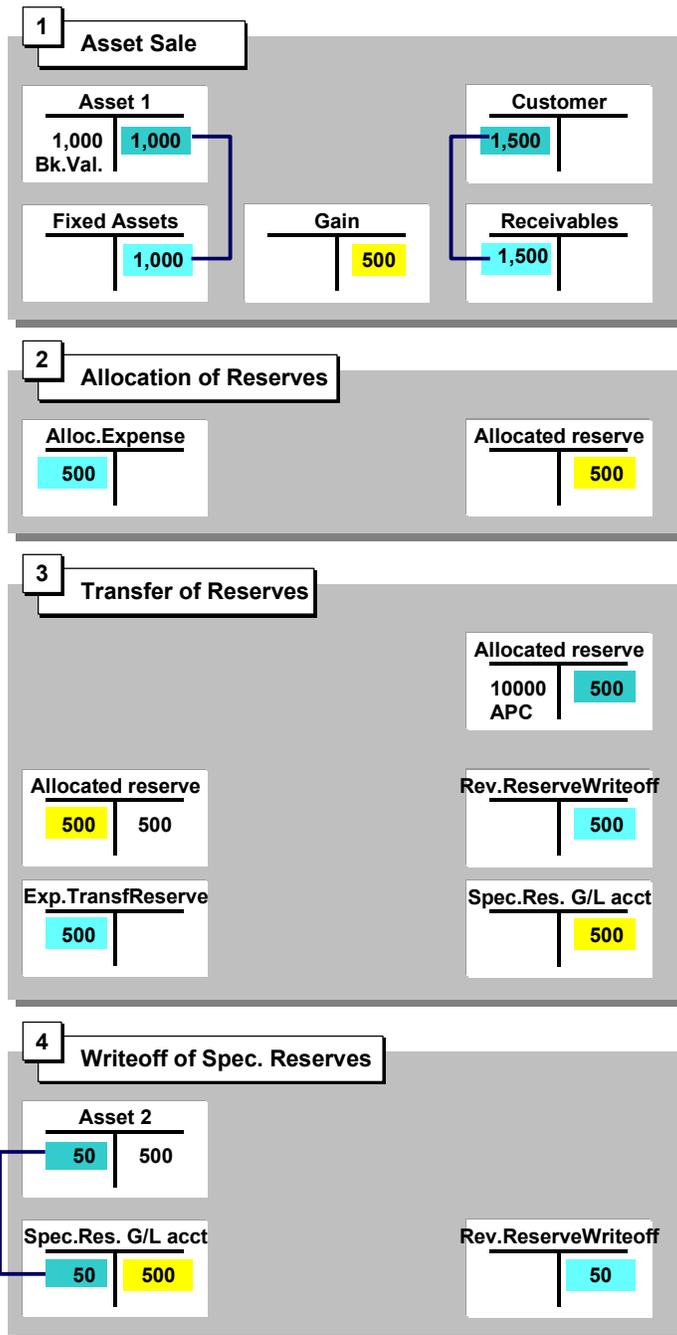
### Procedure

[Transferring Reserves \[Page 408\]](#)

Graphic: Accounts for Transfer of Reserves

## Graphic: Accounts for Transfer of Reserves

The following graphic shows the accounting procedure for the transfer of reserves. The transferred reserve is handled as a value adjustment on the liabilities side. The reserve of 500 resulted from selling an asset with the book value of 1000 for 1500:



---

Graphic: Accounts for Transfer of Reserves

---

**Transferring Reserves**

## Transferring Reserves

### Procedure

1. Create a list of the new acquisitions in the current fiscal year, and determine the assets that come under consideration for the transfer of reserves.
2. Specify the amount to be transferred for each asset.
3. Clear the allocated reserves in the FI component. Post a debit to "G/L allocated reserves" and a credit to "revenue from clearing of allocated reserves."
4. Determine which method you want to use for handling the transferred reserves (either as reduction of APC or as special reserves).
5. Post the transfer of reserves for each asset (*Asset Accounting: Postings → Manual val. corr. → Transfer of reserves*). Depending on the method you chose for handling the reserves, use transaction type 690 or 692. For transfer of reserves for prior-year acquisitions, use transaction type 680 or 682.

The following accounts are posted:

- Debit to offsetting account for transfer of reserves, credit to G/L account for transferred reserves (if the reserves are used to reduce APC).
- Debit to account for expense from allocation of special reserves, credit to balance sheet account for special reserves (if the transferred reserves are treated as special reserves in a derived depreciation area).

The writing off of the special reserves takes place automatically with the periodic posting of depreciation.

## Investment Support and Revaluation

### Use

The following objects describe how the system assists with claiming and processing investment support and with the revaluation of fixed assets for different purposes.

---

**New Investment Support Measures**

## New Investment Support Measures

### Purpose

Investment support measures can be managed separately from actual acquisition and production costs in the system. They can be handled on the assets side as a reduction of APC, or on the liabilities side as special reserves. For either of these methods, you need to define the relevant investment support measure in the system. You might need to define a new investment support measure for one of two reasons:

- You need to redefine an investment support measure that already exists.
- You want to claim a certain kind of investment support for the first time. For more information, see the Implementation Guide under *Define investment support measures*.

### Process Flow

For more information, see [Investment Support Measures \[Page 178\]](#).

## Changing Investment Support Measures

### Procedure

1. Determine the features of the support measure that have changed:
  - Validity period for the investment support
  - Amount of the investment support
2. Change the definition of the investment support key. (FI-AA Customizing)
3. Reverse any existing incorrect support measures (transaction type Jxx, xx = support key).
4. Post the new support measure manually, or using the investment grant report (*Periodic processing*).

## Posting Investment Support

# Posting Investment Support

## Use

Investment support measures are government subsidies that a company receives for particular types of investment. This investment support is treated either as a reduction of the acquisition and production costs of the asset, or as a value adjustment on the liabilities side of the balance sheet.

## Process Flow

You identify assets that are eligible for investment support by means of an investment support key in the asset master record (see [Investment Support Measures \[Page 178\]](#)). You specify all the information for claiming the investment support measure in the definition of this key. You can post the claiming of the support measure manually, or by using collective posting.

## Standard Report for Investment Support

The standard report (under *Periodic processing*) determines the assets that are eligible for investment support in a given fiscal year. You can also use the report to post the investment support you claim. The report creates an investment support claim form for the assets that are eligible for investment support. The report selects all assets, in which there is at least one investment support key in the master record. In determining the amount of investment support, the report includes asset transactions and acquisitions in the year. If the catch-up method was used, the report also includes cumulative values from previous years for determining the amount of the investment support.

## Batch Input Session

When you specify it, the report creates a batch input session which contains the support amounts to be posted (collective posting). You use this posting session to post the claiming of investment support. The system automatically created the transaction types for these postings when you defined the investment support measure (lxx, xx = the investment support key).

## Basis for the Calculation of Investment Support

The report uses the following as a basis for calculating the amount of the support:

- Without catch-up method: all transactions in the fiscal year are selected that are defined as
  - affecting the value of assets, or as down payments
  - acquisitions
- With catch-up method: all transactions in the fiscal year are selected that are defined as
  - affecting the value of assets, or as down payments
  - acquisitions, including
  - cumulative acquisitions from previous years.

The report always determines the support amount according to the investment key as the largest possible percentage of the acquired APC or the down payments made, or as the maximum amount specified in the key.

## Report Output

The following values are listed in detail:

- Total calculated base value
- Calculated base value for the current year
- Total investment support amount posted
- Investment support amount posted in the current year
- Total investment support amount planned
- Remaining support amount

If you request a line item list, the report displays the following for each document:

- Document number
- Asset Value Date
- Line item
- Transaction Type
- Posting amount

The report creates totals per company code and investment support key.



The report **cannot** be used to show investment support that has already been posted. The report lists only those assets for which investment support is possible, but has not already been posted.

## Collective Posting of Investment Support

### Procedure

1. Create a planning list for each investment support measure listing the assets that are eligible for support. Start the standard report (see below) using the test option (*Periodic processing* → *Investment grant*). Limit the report according to your requirements. It is especially important to enter the investment support key for the report. Start the report in the background (in the selection screen for the report: *Program* → *Exec. in background*).
2. Compare the planning list created by the system with your tax allowances. If necessary, correct the asset master records. Either delete the investment support key or change the Customizing definition of the investment support key.
3. If your planned investment support measures meet the approval of the tax authorities, you can initiate the collective posting of the investment support.
  - Start the *Investment grant* report without the test option. The report then creates the required posting session.
  - In the second page of the request screen for the report, enter the asset value date for the posting.
4. Process the batch input session (*System* → *Services* → *Batch input*).
5. Compare the account balance of the affected general ledger accounts with the totals identified in the list created.

## Posting Investment Support Manually

### Procedure

1. Determine the investment support keys for which you want to post. If needed, define a new support measure.
2. Determine the asset to which you want to post.
3. If necessary, enter the new investment support key in the asset master record.
4. Post the claiming of the support measure (*Postings* → *Investment support*). Use the transaction type that the system created especially for the support measure (lxx / xx = number of the support measure).

## Reversing Investment Support

## Reversing Investment Support

### Procedure

1. Determine the number of the asset.
2. Choose *Postings* → *Reverse document* → *Other asset document*.
3. Enter the asset and the fiscal year. Select all documents for the asset.
4. Select the document for claiming the investment support.
5. Choose the *Reverse* function.



The system assists with the repayment of investment support that is necessary due to an asset retirement within the required retention period, but only for investment support shown on the liabilities side. The system provides for the premature write-off of the investment support measure. For more information, see [Investment Support on the Liabilities Side \[Page 180\]](#).

## Defining the Index Series

### Use

The FI-AA component uses index series for determining replacement values and insurable values (refer to [Special Valuation \[Page 167\]](#)). You define the index series in the system with the appropriate index figures.

---

**Defining Index Series**

## Defining Index Series

### Procedure

1. Choose the transaction *Environment* → *Current Settings* → *Maintain Index Series*.
2. You can create new index series by choosing *New entries*. Enter an index class and an index figure for the simulation of future fiscal years (not yet supplied with index figures).
3. Select the desired index series and choose the *Index figures* function.
4. Under *New entries*, enter
  - The index year
  - The index figure
5. Check whether the currently maintained index figures affect only future fiscal years, or if they affect the current fiscal year. If they affect the current fiscal year, start the depreciation recalculation program (*Environment* → *Recalculate Values*).

## Definition and Execution of One-Time Revaluation

### Use

In certain countries, tax laws allow you to balance the affects of inflation by a one-time revaluation of the entire asset portfolio (refer to [Management of Inflation \[Page 175\]](#)). This revaluation is allowed at given intervals (usually several years).

### Collective Posting/Individual Posting

The system can post the revaluation using collective posting. You can also manually revalue individual assets. For this you use the standard posting transactions in the FI-AA component (*Postings* → *Revaluat.(bal.sht.)*). With transaction type 800 you can enter the amount of APC revaluation and the appropriate accumulated proportional depreciation (backlog).



Please note that depreciation for the current fiscal year is automatically corrected (revaluated) by the depreciation calculation program. Therefore, you usually only need to enter revaluation of the accumulated depreciation for closed fiscal years in the posting transaction.

---

**Carrying Out Revaluation Using Collective Posting**

## Carrying Out Revaluation Using Collective Posting

### Procedure

1. Define the allowed revaluation and the depreciation areas that are to be used (FI-AA Customizing: *Special Valuation* → *Revaluation of Fixed Assets*).
2. Add the depreciation area to the asset classes, and maintain the depreciation terms (FI-AA Customizing: *Valuation* → *Determine depreciation areas in the asset class*).
3. Define the index for revaluation. Use the SAP enhancement project ARVL0001 to define the index (refer to [Management of Inflation \[Page 175\]](#)).
4. Using the revaluation report, create a batch input session for posting the revaluation (*Periodic processing* → *Post revaluation*). In addition, the report creates a new depreciation area for all assets that are involved. This new depreciation area is the area in which revaluation is to be carried out, according to your specifications in Customizing.
5. Process the batch input session. The batch input session posts the revaluation for each asset in the appropriate depreciation area.
6. Document the revaluation (for example, in a long text in the depreciation area).

## Other Transactions During Life of an Asset

### Purpose

The following objects describe business transactions that can take place during the life of a fixed asset.

## Down Payments to Assets Under Construction

# Down Payments to Assets Under Construction

## Purpose

Down payments represent a type of acquisition to fixed assets which you generally need to capitalize and report in a separate balance sheet item. For this reason, down payment postings use separate, special transaction types in the SAP R/3 System.

## Process flow

The following transactions should be posted in connection with the down payment:

- Creating a down payment request
- Posting the down payment
- Posting the corresponding closing invoice
- Clearing the down payment with the closing invoice

## Posting to Accounts Payable

The R/3 FI-AP (Accounts Payable) component has specific transactions that allow for posting to the corresponding assets. You post the down payment made to the reconciliation account for Asset Accounting ("Capitalized down payments to assets") as well as to the reconciliation account for Accounts Payable ("Down payments made to assets"). The offsetting account for the reconciliation account in Asset Accounting is a clearing account. In order to prevent down payments from being shown twice in the balance sheet, this clearing account must be linked to the same balance sheet item as the reconciliation account in Asset Accounting.

When the closing invoice is received, it must be posted in full and capitalized to the asset. After this, you must clear the down payments with the closing invoice. When you clear the down payment, the system reverses the original acquisitions (the down payments) to the asset.

[Graphic: Down Payments \[Page 424\]](#)

## Down Payment Requests

When you create a down payment request with account assignment to asset, the system carries out the same checks that take place when you post directly to an asset. You can use the down payment request as a posting reference when you post the down payment manually. The payment program can also convert it automatically into a down payment posting.

## Down Payments Made

You post the down payment made to the reconciliation account for Asset Accounting ("Capitalized down payments to assets") as well as to the reconciliation account for Accounts Payable ("Down payments made to assets"). The offsetting account for the reconciliation account in Asset Accounting is a clearing account.

## Posting in Asset Accounting

As an alternative to posting in Financial Accounting, you can post the assets side of the accounting transaction in Asset Accounting **without** integrated posting to Accounts Payable.

## Down Payments to Assets Under Construction



If you manage depreciation areas in foreign currency, it is mandatory that you post down payments and the clearing of down payments using special FI transactions. Otherwise differences due to currency conversion can arise when you capitalize the asset under construction.

### Posting Down Payments Using the Payment Program

You can use the payment program in Financial Accounting to have the system automatically post down payments. This option is open to you in addition to the manual posting of down payments in Asset Accounting. The payment program processes all of the down payment requests in the system that have come due and have been properly flagged. For more information on down payment processing in Financial Accounting, see the R/3 library.

### Capitalizing Down Payments Without Closing Invoice

If you want to start up an asset under construction at the year-end closing, you have to settle (transfer) the asset under construction to a capitalized asset. If the invoice receipt for a down payment does not take place in the same fiscal year as the down payment, you have to clear the open down payments already made first. They must be cleared with a forecasted invoice (reserve). The asset under construction can only be settled after this clearing.



[Capitalizing Down Payments Without a Closing Invoice \[Page 426\]](#)

### System Settings

In order to post down payments to assets in the FI-AA component, you have to make the following system settings:

- Enter the reconciliation account for down payments made in the appropriate account allocations. Also enter the offsetting account for Asset Accounting (FI-AA Customizing: *Transactions* → *Acquisitions*). The system posts to the G/L accounts entered under “acquisition down payment” and “offsetting account acquisition down payment.”
- Allow posting with the transaction type group for down payments in the appropriate asset classes. This is found in the maintenance transaction for asset classes under *Extras*.

### Procedures

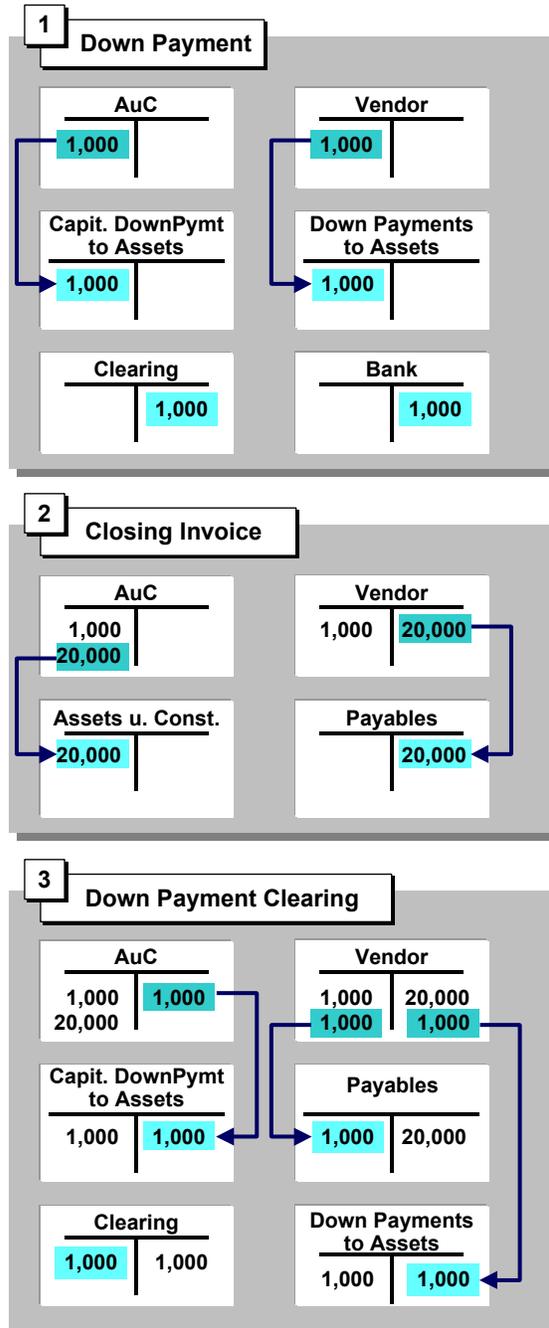
[Integrated Posting of Down Payments \[Page 428\]](#)

[Non-Integrated Posting of Down Payments \[Page 429\]](#)

Graphic: Down Payments

## Graphic: Down Payments

The following graphic shows processing a down payment of 1000 with a closing invoice of 20,000:





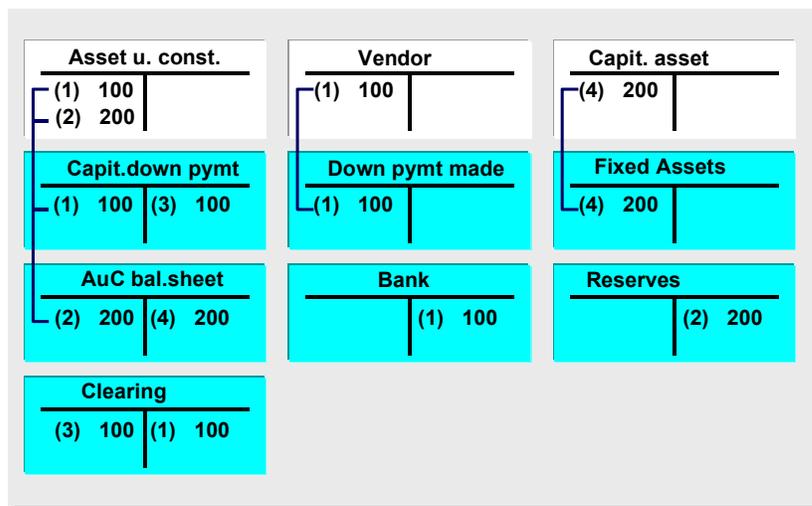
Graphic: Down Payments

## Capitalizing Down Payments Without a Closing Invoice

Under certain conditions, you may need to capitalize an asset under construction before all suppliers have presented their closing invoices. This can cause a few difficulties, especially if the closing invoice cannot be posted until the fiscal year following the capitalization of the asset under construction, and down payments were already posted to the asset under construction.

Initially, you post the down payment normally. If you then need to capitalize the asset under construction at the end of the fiscal year, but before the closing invoice is received, you post reserves for the total amount of the expected invoice. You post these reserves directly to the capitalized asset (external acquisition with vendor, transaction type 100). In the case where you plan to distribute the values from the asset under construction to several final assets, it makes sense to post the reserve to the asset under construction first, and then capitalize it. Whichever method you use, you have to reverse the down payment on the asset under construction, since the down payment is not allowed to appear in the account for down payments to fixed assets. Instead it has to appear in the account for completed assets.

1. Down payment 100
2. Reserves for expected closing invoice 200
3. Reversal of down payment 100
4. Capitalization of reserve 200 (if not posted directly to capitalized asset)



### Down Payment, Reserves, Reversal, Capitalization of Reserves

You can post the closing invoice to one of the following:

- Directly to the reserve account
- To the capitalized asset
- To the asset under construction

Afterward, transfer the down payment to the vendor. When you make this transfer, the system automatically reverses the down payment on the asset under construction. However, in this case, the down payment was already reversed after the reserve was posted (step 3). Depending on how you posted the closing invoice, you may also have to transfer the reserve or the difference between the reserve and the closing invoice.

Graphic: Down Payments

5. Closing invoice 250
6. Transfer of down payment 100
7. Reversal of down payment transfer 100
8. Reversal of reserves 200
9. Capitalization of difference amount 50

<b>Asset u. const.</b> <hr/> (5) 250   (6) 100 (7) 100   (8) 200 (9) 50	<b>Vendor</b> <hr/> (6) 100   (5) 250 (6) 100	<b>Capit. asset</b> <hr/> (9) 50
<b>Capit. Down paymt</b> <hr/> (7) 100   (6) 100	<b>Down paymt made</b> <hr/> (6) 100	<b>Fixed Assets</b> <hr/> (9) 50
<b>AuC bal. sheet</b> <hr/> (5) 250   (8) 200 (9) 50	<b>Payables</b> <hr/> (6) 100   (5) 250	<b>Reserves</b> <hr/> (8) 200
<b>Clearing</b> <hr/> (6) 100   (7) 100		

Invoice, Transfer, Reversal, Capitalization Difference

---

**Integrated Posting of Down Payments**

## Integrated Posting of Down Payments

### Procedure

1. Go into Accounts Payable (*Accounting → Financial accounting → Accounts payable*).
2. Post the down payment (*Document entry → Down payment → Post*).
  - In the initial screen of the transaction, enter the document header, the vendor, the special general ledger indicator (down payment to fixed asset), the amount paid, and the bank.
  - In the next screen, enter the amount of the down payment, the tax specifications and the asset for the account assignment.
3. Post the closing invoice to the asset in full (*Asset Accounting: Postings → External acquisition → With vendor*).
4. Clear the down payment in Accounts Payable with the closing invoice (*Document entry → Down payment → Clear*).
  - In the initial screen, enter the document header, the vendor and the document number of the closing invoice.
  - Select the affected line items on the subsequent screen. Choose the function *Post*.

## Non-Integrated Posting of Down Payments

### Procedure

1. Choose Postings → Miscellaneous.
2. Start the transaction using transaction type 180 and the asset to which you want to post.
3. Post the amount of the down payment.
4. Post the closing invoice for the full amount in Financial Accounting.
5. Clear the closing invoice with the down payments made that belong to it in Asset Accounting (transaction type 181).

## Settlement of an Asset under Construction

# Settlement of an Asset under Construction

## Purpose

An asset that you produce yourself has two stages in its life that are relevant for accounting from the point of view of your company:

- Under construction phase
- Useful life

Generally, an asset has to be shown in different balance sheet items, depending on the phase that it is in. Therefore, it is necessary to manage the asset as a separate object or asset master record during the construction phase. The transition between these two phases is called "capitalization of the asset under construction" in the following.

## Process Flow

You can manage the asset under construction in the system in two different ways, depending on the types of functions that you need. The asset under construction can be either a normal asset record, or a master record with line item management. As a result, the transfer from the asset under construction to completed fixed assets can be handled in one of two ways:

- Summary transfer from a normal asset master record to the receiver assets (transaction type 348/349)
- Line item settlement of an asset under construction that has line item management



The R/3 Investment Management (IM) component is recommended for handling large-scale capital investments. Using the IM component, you can manage a capital investment in parallel: for financial accounting purposes as an asset under construction, and for controlling purposes as an internal order or project. For more information, see the documentation for the *Investment Management* component.

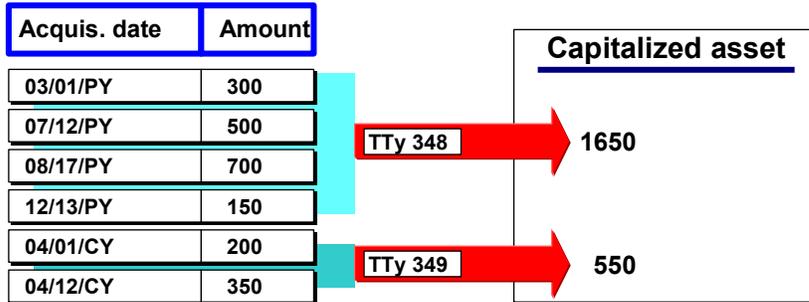
## Assets under Construction Without Line Item Management

The procedure corresponds to the procedure for the transfer between two assets within the same company code (see [Posting the Splitting or Moving of an Asset \[Page 450\]](#)). Before carrying out a full transfer of an asset under construction, you have to reverse any down payments that were posted in the current fiscal year. Down payments are ignored for a partial transfer.

Special transaction types for the transfer of assets under construction allow for transfers to be displayed in the asset history sheet as acquisitions to fixed assets.

Settlement of an Asset under Construction

**AuC Acquisitions**



**Intracompany Transfer of Asset under Construction**

**Assets under Construction with Line Item Management**

In the FI-AA component, you can accumulate costs under purely technical aspects in an asset under construction. You do not need to consider the later creation of fixed assets at this point. During the construction phase, you can accumulate all acquisitions for an investment in a single asset. These acquisitions include

- External activity (acquisition from vendor)
- Internal activity (internal order)
- Stock material (withdrawal from warehouse)

in a single asset. When using this 'collective management' of assets under construction, it is possible to manage the individual acquisitions as open items over the course of several fiscal years. At completion, the line items must be cleared and then distributed to the various receivers. The system activates open item management when an asset under construction is created, if you set the corresponding indicator in the asset class. In addition, you have to assign a settlement profile to the company codes involved, in Customizing for *Asset Accounting*, in order for the line item settlement to work (see *Define Settlement Profile* in the Implementation Guide). The main function of the settlement profile is to specify the allowed receivers (such as, assets or cost centers).

[Graphic: Line Item Settlement \[Page 434\]](#)

**Distribution Rules**

Line item settlement is carried out by using distribution rules. Distribution rules are asset-specific. Several distribution rules form a distribution rule group. You can assign these groups to one or more line items of an asset. Distribution rules consist of a distribution key and a receiver. The distribution key can be equivalence numbers or percentage rates. In this way, you can distribute any number of combinations of line items to any number of combinations of receivers.



Distribution rule group with percentage distribution

**Distribution key    Receiver (Asset)**

10%	10531-1000
20%	10531-2000

## Settlement of an Asset under Construction

40%      10533-0000

30%      10533-1000

Distribution rule group with equivalence numbers

1 : 2 : 4 : 3

## Receivers

You must settle those parts of the asset under construction that require capitalization to capitalized assets. Those parts that do not require capitalization (expense) can be settled as a adjustment postings to cost centers. You can specify a cost element in the account determination in Asset Accounting for this settlement to cost centers. However, you should be aware that you can only settle acquisitions from the current fiscal year to CO receivers. This restriction applies since acquisitions from previous fiscal years should not have an effect on expenses of later fiscal years.

In addition, it is possible to settle to general ledger accounts. However, these G/L accounts cannot be defined with additional account assignment to a CO object. Therefore, you should first settle to clearing accounts, if necessary, and then transfer the values to the corresponding accounts in Financial Accounting.

## Investment Support

Just as it does for completed assets, the system calculates depreciation and interest for the asset under construction. This calculation is based on the depreciation terms specified in the asset master record or in the asset class. It is also possible to manage investment support on the asset under construction. However, it is not possible to transfer investment support that was posted to the asset under construction in the year of capitalization. The investment support cannot be transferred to a completed asset, because you cannot tell if the investment support applies to acquisitions in the current fiscal year or earlier fiscal years. Therefore, you have to reverse the investment support manually before the settlement. After the settlement, you post it to the completed asset.

## Initiating the Settlement

You can set up the settlement rules at a given point in time, and then carry out the corresponding update of the line items at a later point in time, since a separate transaction exists for the actual settlement. This transaction triggers the settlement posting for the selected assets under construction, and creates the necessary posting documents.

During this process, the system automatically separates the transfer of asset acquisitions from prior fiscal years from acquisitions that took place in the year of capitalization. When the prior-year acquisitions are transferred, (special) depreciation and investment support measures are also transferred proportionally. The system automatically generates carryforward postings for partial capitalization.

There is a standard report that enables you to trace the origin of the items in the capitalized asset back to the original asset under construction.

## Procedures

[Posting Capitalization of AUC \(Intracompany Transfer\) \[Page 435\]](#)

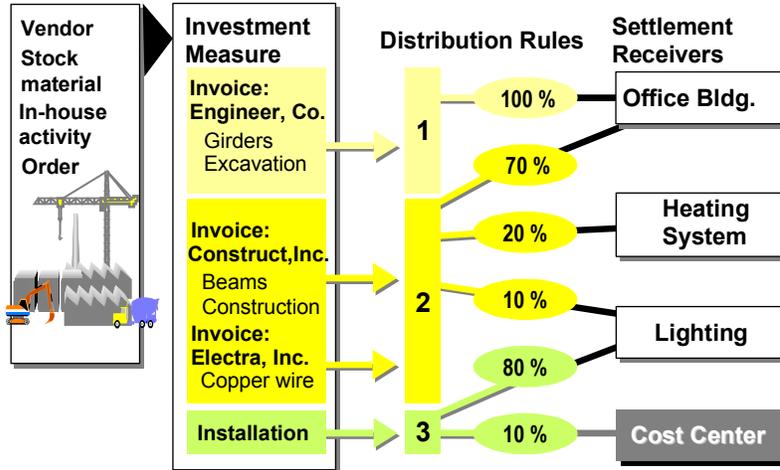
[Posting Capitalization of AUC with Line Item Settlement \[Page 436\]](#)



Graphic: Line Item Settlement

## Graphic: Line Item Settlement

The following graphic shows the line item settlement of an asset under construction:



The line items from the invoice for Construct, Inc. and Electra, Inc. use the same distribution rule (2). The invoices for Engineer, Co. and Installation use different distribution rules (1 and 3).

## Posting Capitalization of AuC (Intracompany Transfer)

### Procedure

1. Determine the asset under construction, and the asset master record for the completed asset. If necessary, create a new asset master record.
2. Determine the amount that is to be capitalized.
3. Determine whether the transfer involves asset acquisitions in prior fiscal years, or if it involves current-year acquisitions.
4. Transfer the asset amount to the completed asset (*Postings* → *Transfer*). Use the appropriate transaction type (348 for prior-year acquisitions, 349 for current-year acquisitions). Post a retiring transfer from the asset under construction. Within the posting transaction, enter the receiving asset. The asset value date for the transfer is determined for these transaction types by the capitalization date of the completed asset.

Limiting the transaction type to specific depreciation areas of the capitalized asset is not possible during full settlement.

Make sure you **avoid** using a transfer transaction type that automatically adopts the depreciation start date historically from the asset being transferred (such as 300).

## Posting Capitalization of AUC with Line Item Settlement

## Posting Capitalization of AUC with Line Item Settlement

### Procedure

1. Determine the asset under construction that is being capitalized, and the finished asset or other receivers (such as cost centers).
2. Clear any existing open down payments, which need to be capitalized, using a reserve (see [Down Payments to Assets Under Construction \[Page 422\]](#)).
3. Create the distribution rules for the line items you want to settle for the asset under construction (*Postings* → *Cap. asset u. cons.* → *Distribute*).
  - Select (mark) the affected line items.
  - Choose the function *Create s. dist. rule*.
  - Enter the means for the distribution in the settlement distribution rule (percentage rates or equivalence numbers) and the respective receivers (assets or general ledger accounts).
4. Start the settlement of the asset under construction (*Postings* → *Cap. asset u. cons.* → *Post settlement*). The system then settles the line items, to which a distribution rule with receivers have been assigned. Remove the selection for *Test run* in the initial screen of the transaction, and enter the value date of the settlement.



- Once the asset under construction has been completely settled (there are no more values in any depreciation areas), the system automatically deactivates the asset under construction. You can switch off this automatic deactivation using an indicator in the definition of transaction types 340/345.
- For information on reversing a settlement, see [Reversals \[Page 495\]](#).

## Credit Memos (Received)

### Purpose

A credit memo, which reduces the acquisition and production costs of an asset, essentially represents the opposite of an invoice for a purchased asset. Therefore, it is possible to post the credit memo, as you do when you post an external acquisition, either integrated with a vendor, or to a clearing account (refer to [External Asset Acquisitions \[Page 373\]](#)).



When credit memos are received for a fiscal year that is already closed, the system cannot correct the depreciation posted in the closed fiscal year. Therefore, you have to correct the depreciation for the closed fiscal year manually using a write-up before you can post the credit memo.

### Procedures

[Posting Credit Memos Integrated with Vendor \[Page 438\]](#)

[Posting a Credit Memo Offset Against a Clearing Account \[Page 439\]](#)

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**Posting Credit Memos Integrated with Vendor**

## Posting Credit Memos Integrated with Vendor

### Procedure

1. Determine if the asset was acquired in the current fiscal year or in a closed fiscal year (*Display asset values*).
2. If the asset was acquired in a fiscal year that is now closed, correct the past depreciation using a write-up (refer to [Posting Write-Ups \[Page 445\]](#)).
3. Determine the vendor and the asset to which the credit memo belongs.
4. Choose the transaction *Postings* → *External acquisition* → *With vendor*.
5. Post the credit memo (debit vendor, credit asset):
  - For credit memos on acquisitions in the current year, post the credit to the asset using posting key 75 and transaction type 105.
  - For credit memos on acquisitions from prior fiscal years, use posting key 75 and transaction type 160.

Post the debit to the vendor in both cases with posting key 21. You do not need to enter a transaction type when posting to the vendor.

## Posting a Credit Memo Offset Against a Clearing Account

### Procedure

1. Determine if the asset was acquired in the current fiscal year or in a closed fiscal year (*Display asset values*).
2. If the asset was acquired in a fiscal year that is now closed, correct the past depreciation using a write-up (refer to [Posting Write-Ups \[Page 445\]](#)).
3. Select the transaction *Postings* → *Acquisition* → *Credit memo*.
4. In the initial screen, enter the asset and transaction type (105 for credit memo on current acquisition, or 160 for credit memo on acquisitions from prior years).
5. In the second screen, enter the amount of the credit memo. Check the clearing account that is offered as a default.

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**Post-Capitalization (Write-Up to APC)**

## Post-Capitalization (Write-Up to APC)

### Purpose

Post-capitalization, in this context, represents subsequent corrections to the acquisition and production costs of a fixed asset. An example of when you need this type of correction is if you neglected to add expenditures and costs linked with the acquisition or assembly of an asset to its APC in a fiscal year that is now closed.

### Process Flow

The system posts gross post-capitalizations, meaning with historical depreciation amounts. The system newly calculates depreciation from closed fiscal years on the basis of the capitalization date entered in the asset master record.

The system then posts the historical APC as an acquisition to the asset balance sheet account, and the accumulated depreciation from past fiscal years to the accumulated depreciation account. The system also posts extraordinary revenue in the amount of the difference between the APC and the accumulated depreciation.



If you want to post net (enter the value adjustment manually), that is, you have already reduced the posting amount by the historical depreciation, you can use transaction ABNA to post without entering historical depreciation values. The system then posts the acquisition only in the amount of the net book value to the asset balance sheet account, and extraordinary revenue of the same amount.

### Procedure

[Posting Post-Capitalization \[Page 441\]](#)

## Posting Post-Capitalization

1. Choose *Postings* → *Post-capitalization*.
2. Check whether you need a new master record for the post-capitalization. You need to create a new asset main number or sub-number for post-capitalization in the following cases:
  - You forgot to capitalize a complete asset.
  - The asset amount for the post-capitalization should have a different capitalization date than the asset that is already capitalized.

If you do not need a sub-number, skip the next step.

2. If necessary, create an additional sub-number or a new asset main number (choose *New asset*).

3. Enter the asset on the *Transaction data* tab page.

Enter a posting amount.

Check the proposed date specifications, and make any necessary changes.

Enter the acquisition data (posting amount, quantity if needed). Choose *Multiple account assignment* in order to make multiple account assignments.

4. Enter or check the additional posting information (such as offsetting account) on the *Additional details* tab page. The system automatically enters document type 400 when you save.
5. Enter a text for the posting document on the *Note* tab page.

Using this transaction, it is **not** possible to:

- Manually enter different amounts for different depreciation areas
- Have the system propose depreciation areas for certain transaction types

If you need to use one of these functions, then use transaction ABNA.

The following example shows a post-capitalization and the calculation of the accumulated depreciation:

Post-capitalization: 10000

Useful life: 10 years

Depreciation key: Straight-line from net book value

Hist. dep. start date: 7/1/YYYY

Posting date: 4/1/YYYY + 3

Asset value date: 1/1/YYYY + 3

Manual calculation of depreciation from 7/1/YYYY to 12/31/YYYY + 2:

$500 (YYYY) + 1000 (YYYY + 1) + 1000 (YYYY + 2) = 2500$

Posting Post-Capitalization

## Write-ups

### Purpose

A write-up is generally understood to be a later change to the valuation of an asset. This change can take different forms, depending on the reasons for the change. There are two common reasons for write-ups:

- You forgot to capitalize an asset in a fiscal year that is now closed, and this omission must now be corrected (write-ups to APC are usually called post-capitalization). This procedure is described in detail in [Post-Capitalization \(Write-Up to APC\) \[Page 440\]](#).
- The value adjustments (depreciation) that you calculated in the past were too high. You must now correct this error using a write-up in the current fiscal year. Excessive depreciation generally results from
  - The use of incorrect depreciation terms (incorrect expected useful life, incorrect depreciation key)
  - Unplanned depreciation, which is no longer valid in the current situation
  - A later reduction in the acquisition and production costs of an asset (for example, due to a subsequent credit memo)

### Process Flow

Write-ups can be posted to:

- Ordinary depreciation
- Special depreciation
- Unplanned depreciation
- Manual depreciation
- Transferred reserves

Write-ups increase the book value of a fixed asset. When used with a depreciation method based on the net book value, write-ups increase the planned depreciation. During a fiscal year change, the write-ups posted up to the year-end are balanced with the depreciation amounts.

### Transaction Types

The standard transaction types allow you to post write-ups to each of these depreciation types (transaction type group 7x). When you post the write-up, the transaction type determines whether all depreciation areas are affected or only some of the areas. Furthermore, there are transaction types that allow for simultaneous posting of write-ups to ordinary and special depreciation.

You need to enter the correct accumulated depreciation account and the correct offsetting account for certain depreciation areas and depreciation types. This requirement applies to every area, for which asset values are posted automatically to the General Ledger, and for every depreciation type that these areas manage.

### Procedure

[Posting Write-Ups \[Page 445\]](#)

Write-ups

## Posting Write-Ups

### Procedure

1. Check whether you really need to post a write-up, or if it is sufficient to identify the amount of the write-up in an appendix to the balance sheet. In the second case, you need a new transaction type and a separate depreciation area to allow for this separate identification of the write-up in reports

In the first case, proceed with step 2.

2. Determine the reason for the write-up. It is particularly important for you to decide the type of depreciation for the write-up (ordinary depreciation, special depreciation, and so on), and which depreciation areas should be posted. Choose the appropriate transaction type (transaction type group 7xx).
3. Determine the amount of the write-up.
4. Check whether it is necessary to change the depreciation terms of the asset. This may be necessary in order to ensure the correct calculation of depreciation in the future. If necessary, change the asset master record.
5. Post the write-up (*Postings* → *Manual val. corr.* → *Write-up*).
  - Enter the transaction type (for example, 700) in the initial screen. The transaction type controls the depreciation types (ordinary depreciation, special depreciation, and so forth) for which you will be able to enter write-up amounts in the transaction.
  - Depending on the definition of the transaction type that you used, the next screen should allow you to select the depreciation areas you want to post.
  - In the main screen for the transaction, enter the amount of the write-up for each type of depreciation. Choose an asset value date in the current fiscal year.
  - You can choose the function *Areas* and enter a different write-up amount for each depreciation area.

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**Intracompany and Intercompany Asset Transfer**

## Intracompany and Intercompany Asset Transfer

In Asset Accounting, SAP differentiates between two types of transfer, intracompany and intercompany asset transfer:

- Intracompany asset transfer: a sending asset (or component of an asset) is transferred to a target asset **within a single company code**, for example, if the asset was created in the wrong asset class.
- Intercompany asset transfer: a sending asset (or component of an asset) is transferred to a target asset **that is assigned to a different company code**.

You can post both of these types of transfer either **automatically** (retirement and acquisition posted in one step) or **manually** (retirement and acquisition posted in two separate steps).



There are a number of Customizing settings that apply to both intercompany and to intracompany transfer transactions.

## Intracompany Asset Transfer

### Use

Using intracompany asset transfer, you transfer a fixed asset, or an asset component, to a different asset master record. The target asset has to be in the same company code as the sending asset. Intracompany transfer may be necessary for one of the following reasons:

- An asset was created in the wrong asset class. Since you cannot change the asset class in the asset master data, you have to transfer the asset to a new master record.
- You split up an asset or move part of an asset (transfer from asset to asset).
- You settle an asset under construction and transfer it to a finished asset. This procedure is described in detail in [Settlement of an Asset under Construction \[Page 430\]](#).



For information on intercompany asset transfer to a different company code within a corporate group, see [Automatic Intercompany Transfer \[Page 453\]](#).

For information on transferring stock material (current assets) to a fixed asset (for example, installation of a replacement part) see [Processing a Goods Issue from the Warehouse \[Page 391\]](#).

### Prerequisites

You configure the transfer of capitalization and depreciation dates, as well as the transfer of field contents from the sending to the receiver asset, in Customizing for *Asset Accounting*. Intracompany transfers (within a company code) use transfer variants and field transfer rules, as do intercompany transfers. You find the Customizing steps for making these settings (for both types of transfer) by choosing *Intercompany Asset Transfers* → *Automatic Intercompany Asset Transfers*.

### Field Transfer

The same conditions apply for both types of transfer (intracompany and intercompany) regarding field transfer and adopting specifications for capitalization and the depreciation start date. For more information, see [Field Transfer \[Page 465\]](#).

### Transaction Types and Transfer Variants

SAP supplies standard transaction types for intracompany asset transfers. You can create additional transaction types or change existing ones in Customizing for *Asset Accounting* (choose *Transactions* → *Transfers* → *Define Transaction Types for Transfers*).



SAP recommends that you create your own transaction types in the customer name range, using the standard transaction types as references. Avoid changing the standard transaction types themselves.

For intracompany asset transfers, the system determines the transaction types from the transfer variant, the same as it does for intercompany (cross-company code) asset transfers. The system default for intracompany transfers is always transfer variant 4 (*Transfer within a company code*). However, you can change the transfer variant on the *Additional details* tab page. You define

## Intracompany Asset Transfer

transfer variants, both for intracompany and intercompany transfers, in *Customizing for Asset Accounting*. Choose *Transactions* → *Intercompany Asset Transfers* → *Automatic Intercompany Asset Transfers* → *Define Transfer Variants*.

For more information, see [Transfer Variant \[Page 462\]](#).

## Depreciation Areas

Transfer posting from one fixed asset to another within the same company code can be carried out in one step. The prerequisites, however, for automatic transfer posting are that no values (APC and depreciation) from the sending asset are lost, and that every area of the target asset is supplied with values. Below is a more detailed listing of what you need to fulfill these prerequisites:

- Each depreciation area of the sending asset, for which the system determined a retirement amount, also has to be managed in the target asset.
- Each non-dependent depreciation area in the target asset also has to be managed in the sending asset.
- If ordinary depreciation is calculated for a depreciation area of the sending asset, the corresponding area in the target asset also has to calculate ordinary depreciation. The same applies for special depreciation.
- The keys used for investment support measures must correspond in each depreciation area. The same applies to revaluation keys.

If it is not possible to use automatic transfer posting because of these restrictions, you have to manually post a retirement and then an acquisition to carry out the transfer.

## Features

You can create a new asset within the transfer posting transaction, or you can transfer to an existing asset. The system enters the number of the sending asset in the target asset (on the *Origin* tab page).

As with asset retirement, the intracompany transfer posting procedure distinguishes between prior-year asset acquisitions and current-year acquisitions. Full and partial transfer postings are possible. Full transfers can be posted in a single step (prior-year asset acquisitions and current-year acquisitions together). However, for partial transfers, you have to post prior-year acquisitions and current-year acquisitions separately. Partial transfers can be posted by specifying a quantity, a percentage rate, or an amount (on the *Partial transfer* tab page). The system determines the amounts to be transferred and the proportional accumulated depreciation in the same way as for asset retirement posting.



When you create an asset within the intracompany transfer transaction, you can only jump once to the dialog box for master data maintenance. (The same is true when creating an asset within the intercompany transfer transaction.) To change the master data of a new asset created in this way, you have to start the transaction again.

## Activities

[Splitting an Asset \(Intracompany Asset Transfer\) \[Page 450\]](#)



## Posting an Intracompany Asset Transfer (Splitting an Asset)

## Posting an Intracompany Asset Transfer (Splitting an Asset)

### Procedure

1. Choose *Postings* → *Transfer* → *Intracompany transfer*.
2. Enter the asset to be transferred.
3. Enter the asset, to which you want to transfer, in the *Transaction data* tab page. Or create a new asset for this purpose using the *New asset* function.

Check the date specifications, and make any necessary entries there. If you do **not** enter an asset value date, the system automatically determines this date when you save.

Make sure that the target asset manages the same depreciation areas as the original asset.

4. Enter or check the additional posting information (such as document type) and the transfer variant on the *Additional details* tab page.  
In the standard system, the system uses transfer variant 4 for intracompany asset transfers.
5. To post a partial transfer, enter a posting amount, a percentage or a quantity on the *Partial transfer* tab page. Specify whether the transfer applies to prior-year acquisitions or to current-year acquisitions.

If you do not make any entries on this tab page, the system carries out a complete transfer.

6. Enter a text for the posting document on the *Note* tab page, if you wish.
7. Save.

The system carries out the transfer. The system automatically determines the transaction types from the transfer variant used.



For partial transfers, make sure you transfer acquisitions from prior years separately from acquisitions in the current fiscal year.



Using this transaction, it is **not** possible to:

- Manually enter different amounts for different depreciation areas
- Have the system propose depreciation areas for certain transaction types

If you need to use one of these functions, then use transaction ABUM.

## Intercompany Asset Transfer (Between Company Codes)

### Use

You use this function to carry out **intercompany asset transfers (between company codes)**. For the individual companies, an intercompany transfer represents a retirement for the one company and an acquisition for the other. From the point of view of the corporate group, however, it typically represents a transfer that balances to zero in the group asset history sheet



For **intracompany transfers (within one company code)**, use the [Intracompany Asset Transfer \[Page 447\]](#) function.

An intercompany asset transfer within a corporate group may be necessary for one of the following reasons:

- The physical location of the asset has changed, making it necessary to assign the asset to a new company code.
- The organizational structure of the corporate group has changed, requiring you to reassign the asset to a different company code.

### Features

It is not possible to change the organizational assignment of the asset by changing the asset master record. For each asset that you want to transfer, you have to create a new master record in the target company code, or you use an existing asset master record. The unique identity of the asset is preserved using the inventory number in the asset master record.

There are three types of intercompany asset transfer:

- It is a transfer **within one client**. You can post the retirement transfer and the acquisition transfer in one step (**automatic intercompany transfer**).
- It is a transfer **between two clients (automatic intercompany transfer)**. For this type of transfer, you can use ALE (Application Link Enabling) functions. Using these, a retirement is posted first in the sending company code, and then an asset acquisition is posted in the target company code. For more information, see the *ALE Scenarios in Asset Accounting* topic.
- If you do not have access to ALE functions, you can post a **manual intercompany transfer** in two separate steps as a retirement and an acquisition (**no automatic intercompany transfer**).  
When you post manual intercompany transfers, the posting can be integrated with accounts payable and accounts receivable, which is not the case when you use the automatic intercompany transfer.

### Reversal Function

You can reverse automatic intercompany asset transfers, like other postings, using the normal reversal functions in Asset Accounting. The system then reverses the retirement document in the sending company code and the acquisition document in the target company code. If a new asset

**Intercompany Asset Transfer (Between Company Codes)**

was created in the target company code, you can block the asset to any additional acquisition postings. After its retention period has expired, it can be reorganized.

For manual intercompany transfer and transfers using ALE, you have to reverse the retirement and the acquisition separately in the company code in which they took place.

## Automatic Intracompany Asset Transfer

### Use

You use this transaction to transfer a fixed asset between two company codes. The retirement and acquisition transactions are posted in one step. Depending on the organizational structure of your enterprise, this combined transaction can be posted using intracompany transfer transaction types or with retirement and acquisition transaction types.

### Prerequisites

In order to automatically post the intercompany asset transfer and create the target asset, you need to make certain system settings in Customizing for *Asset Accounting*

In the transfer transaction, you specify the **transfer variant** that the system should use for posting the asset transfer. You create and change transfer variants in Customizing for *Asset Accounting*. Choose *Transactions* → *Intercompany Asset Transfers* → *Automatic Intercompany Asset Transfers*. You define transfer variants based on the following considerations:

- Is the asset being transferred within a single company? For intercompany asset transfer, the system checks the company code relationship (**company code relationship type**) of the companies and if they are **affiliated companies**. You have to enter the transaction types accordingly.
- Which **transfer method** (gross, net, new value) should be used for posting? By using cross-system depreciation areas, you can specify a separate transfer method for each depreciation area.
- Do the sending and target company codes have different charts of depreciation? Using cross-system depreciation areas, you can transfer the values of depreciation areas that have the same function. You can also prevent a depreciation area from being transferred.
- Do you want the contents of fields to be transferred from the sending asset master record to the target asset? Then you have to define **field transfer rules**.

### Features

You post the retirement transfer from the viewpoint of the sending company code. The system posts the transfer acquisition in the target company code automatically. If a new asset master record is needed in the target company code, you can enter the required information in a dialog box. You can also enter an asset to be used as a reference:

- The sending asset
- A reference asset in the target company code
- No reference (with a jump to the asset master data transaction)

## Automatic Intracompany Asset Transfer



When you create an asset within the intercompany transfer transaction, you can only jump once to the dialog box for master data maintenance. (The same is true when creating an asset within the intracompany transfer transaction.) To change the master data of a new asset created in this way, you have to start the transaction again.

## Mass Transfer

When an enterprise transfers a large portion of the asset portfolio (such as a plant or a building), it is necessary to post the transfer of all the individual assets which make up the whole. Since the number of affected assets can be very large, the *Asset Accounting* (FI-AA) component makes it possible to make the necessary postings using mass processing. For more information, refer to [Mass Transfer \[Page 545\]](#).

## Constraints

Integrated posting with Accounts Receivable is not possible with automatic intercompany transfers. The system handles the posting in the sending company code like a non-integrated asset retirement posted to a clearing account. For this reason, the system does not create any tax postings during the intercompany transfer. You have to post the taxes when you post the invoice. The revenue from the sale of the asset in the sending company code is treated like revenue from a normal asset retirement (refer to [Asset Retirement \[Page 484\]](#)).

Similarly, the acquisition in the target company code is not integrated with Accounts Payable (refer to [External Asset Acquisitions \[Page 373\]](#)). Instead, it is offset against a clearing account.



It is not always possible to post an automatic intercompany transfer between two company codes that have two different fiscal year versions. If the posting date is in two different fiscal years, based on the fiscal year version definitions of the two company codes, automatic intercompany transfer is not possible.

Asset transfers can also be made between clients or systems. For more information, see the description of Asset Accounting in a distributed system environment ([ALE Scenarios in Asset Accounting \[Ext.\]](#)).

## Company Code Relationship Type

### Definition

Characteristic that specifies the type of legal relationship existing between two company codes. One of the following applies:

- The company codes are separate legal entities.
- The company codes are both part of the same legal entity.

In the asset transfer variant, you can specify different transfer methods for asset transfers between company codes, depending on the type of company code relationship.

### Use

For intercompany asset transfers, the system determines the company code relationship type using the following logic:

- If both the sending and the receiving company codes belong to the same company (they have the same company ID), then they are considered part of a **single** legal entity (relationship type 02).
- If the sending and the receiving company codes do **not** belong to the same company (they do not have the same company ID), then they are considered legally independent entities (relationship type 01). The same applies if one or both of the company codes is not assigned to a company ID.

The company (company ID) is an organizational unit in accounting that allows you to organize your enterprise to meet certain legal requirements.

To create your own company code relationship types, you can use customer enhancement AMSP0002. For more information, see the documentation on customer enhancements (transaction SMOD), and [Customer Enhancements \(Customer Exits\) \[Page 359\]](#).

In the standard system, SAP assumes that transfers within the organizational unit company (relationship type 02) are treated as intracompany transfers and posting takes place using the gross method and intracompany transfer transaction types. Intercompany asset transfers between company IDs (relationship type 01), on the other hand, can be posted using the gross, net or new value method using retirement and acquisition transaction types. For more information, see [Transfer Variants \[Page 462\]](#) and the examples for intercompany asset transfer.

### Integration

The relationship between company codes is also defined by whether or not they are affiliated companies:

- If the two company codes belong to different companies (company IDs), then they are **affiliated companies**.
- If one or both company codes are not assigned to a company, then they are **not** considered to be **affiliated companies**. They are also **not** considered to be affiliated companies if they both belong to the same company.

The transaction types entered in the transfer variant also have to be defined in keeping with this (*Post to affiliated company / Do not post to affiliated company* indicator).

---

**Company Code Relationship Type**

The company code relationship type is not allowed to conflict with the *Post to affiliated company / Do not post to affiliated company* indicator in the transaction types used in the transfer. As a consequence, you may have to create a separate transfer variant for each pair of company codes affected by transfers.

## Cross-System Depreciation Area

### Definition

A depreciation area that has the same function and significance in all charts of depreciation within a corporate group. A cross-system depreciation area consists of a key and a description only. It has no control parameters of its own. Cross-system depreciation areas are needed only if assets are transferred between company codes that have different charts of depreciation.

### Use

When you transfer assets between company codes, the two company codes might not use the same chart of depreciation. Nonetheless, there could be depreciation areas in the two charts of depreciation that actually have the same function, although they have different keys. Cross-system depreciation areas are used to control the transfer of values during intercompany asset transfer.

By defining cross-system depreciation areas in *Customizing for Asset Accounting*, you ensure the unique assignment to one another of depreciation areas with the same function. You assign depreciation areas from different charts of depreciation, but that have the same function, to the same cross-system depreciation area. This assignment provides all of these depreciation areas with one key that is valid in all clients, but is at the same time independent of the key of the depreciation area in its local client.

In most cases, you do not need cross-system depreciation areas. You need them only in the following situations:

- You use different charts of depreciation, but the function of certain depreciation areas is the same.
- There is one depreciation area that you do not want to transfer. Then do not assign that area to a cross-system depreciation area.
- Some depreciation areas have the same key, but have different functions.

Any depreciation areas that are transferred **gross** have to be active in the target asset (see below).

### Matching Depreciation Areas when the Cross-System Depreciation Area is Not Used

If you have **not** defined an appropriate cross-system depreciation area (an asterisk is entered in the transfer variant), the system determines the amount that is capitalized in the individual depreciation areas in the target asset as follows:

- **Depreciation area exists on both assets**  
The receiving asset has a depreciation area with the same key as a depreciation area in the sending asset. Then the system transfers the values according to the transfer method specified in the transfer variant for this company code relationship type.
- **Depreciation area exists only on target asset**  
There is a depreciation area on the target asset that is **not on the sending asset** (or it is deactivated on the sending asset): The system does not transfer values for this depreciation area. Nonetheless, this depreciation area in the target asset can adopt values from a

## Cross-System Depreciation Area

different depreciation area during the transfer transaction, but only if the following conditions are met:

- The depreciation area in the target asset has to have been defined as a dependent area in Customizing, meaning that it is defined to adopt values automatically from another depreciation area (see [Features at Chart of Depreciation Level \[Page 70\]](#) ).
  - The depreciation area that automatically supplies values to the dependent area has to have received the asset transfer using the net method.
- **Depreciation area exists only on sender asset**  
There is a depreciation area for **net** transfer in the sending asset, and that depreciation area is **not in the target asset** (or it is deactivated in the target asset): The system does carry out the posting, but does not transfer values for this depreciation area (retirement by scrapping). Any depreciation areas that are transferred using the **gross** method have to exist in both the sending and the receiving asset. Otherwise the system rejects the posting.

## Integration

If you make use of cross-system depreciation areas, you have to create cross-system depreciation areas explicitly for all depreciation areas that are transferred. This applies even if you only actually need the cross-system depreciation area for one depreciation area, and all other local depreciation areas (with identical functions) have the same keys.

Assign the necessary local depreciation areas to the cross-system depreciation areas for all charts of depreciation you use. To do so, you have to temporarily change the chart of depreciation when customizing cross-system depreciation areas.

Defining cross-system depreciation areas affects the transfer of values only. Cross-system depreciation areas have no influence on the creation of depreciation areas on the target asset. Instead, the creation of depreciation areas on the target asset is controlled by the Customizing settings under *Determine Depreciation Areas in the Asset Class*.

## Transfer Method

### Definition

Method within a [transfer variant \[Page 462\]](#) that determines how a transferred asset is capitalized in the receiving company code. The transfer methods are fixed in the system and cannot be changed by the user.

### Use

The system controls the valuation of transferred assets using **transfer variants** that you define. You can enter one of the following **transfer methods** in the transfer variant:

- **Gross method (methods 1 and 4 - with/without transfer of values to dependent areas)**

When you use this method, the system transfers the historical APC and the accumulated depreciation from the sending asset. That is, the asset is capitalized with its historical APC and accumulated depreciation.

When this transfer method is used, there is normally no sales revenue entered.



SAP recommends that you always use the gross method for transfers between two companies that are not legally independent entities (relationship type 02). You should also use the gross method for transfers between group depreciation areas.

- **Net method (method 2)**

When you use this transfer method, the system transfers the net book value of the sending asset. That is, the net book value of the asset is capitalized in the receiving company code. You specify during the transfer transaction which depreciation area should be used for determining the net book value.



SAP recommends that you use the net method only for transfers between two companies that are legally independent entities (relationship type 01).

- **New value method (method 3)**

When you use this transfer method, you enter the transfer price manually in the transfer transaction. That is, the asset being transferred is capitalized in the receiving company code with a value you entered manually during the transfer. Another option is to enter a depreciation area that is used for determining the net book value.



SAP recommends that you use the new value method only for transfers between two companies that are legally independent entities (relationship type 01).

Transfer Method

	Gross Method	Net Method	New Value Method												
Using value of source asset in source company code as a base value	<table border="1"> <thead> <tr> <th>APC</th> <th>Acc.Dep.</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>30</td> </tr> </tbody> </table> <p>No sales revenue Clearing via a clearing account or account</p>	APC	Acc.Dep.	100	30	<table border="1"> <thead> <tr> <th>APC</th> <th>Acc.Dep.</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>30</td> </tr> </tbody> </table> <p>Sales revenue equal to net book val. Clearing via retirement clearing account</p>	APC	Acc.Dep.	100	30	<table border="1"> <thead> <tr> <th>APC</th> <th>Acc.Dep.</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>30</td> </tr> </tbody> </table> <p>Revenue: 50 Clearing via retirement clearing account and revenue account</p>	APC	Acc.Dep.	100	30
APC	Acc.Dep.														
100	30														
APC	Acc.Dep.														
100	30														
APC	Acc.Dep.														
100	30														
Using value of target asset in target company code as a base value	<table border="1"> <thead> <tr> <th>APC</th> <th>Acc.Dep.</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>30</td> </tr> </tbody> </table> <p>Posting by means of clearing account</p>	APC	Acc.Dep.	100	30	<table border="1"> <thead> <tr> <th>APC</th> <th>Acc.Dep.</th> </tr> </thead> <tbody> <tr> <td>70</td> <td></td> </tr> </tbody> </table> <p>Posting by means of clearing account</p>	APC	Acc.Dep.	70		<table border="1"> <thead> <tr> <th>APC</th> <th>Acc.Dep.</th> </tr> </thead> <tbody> <tr> <td>50</td> <td>.</td> </tr> </tbody> </table> <p>Posting by means of clearing account</p>	APC	Acc.Dep.	50	.
APC	Acc.Dep.														
100	30														
APC	Acc.Dep.														
70															
APC	Acc.Dep.														
50	.														

Base Values in Different Transfer Methods

Example

The following example shows the effects of using three different transfer methods on the posting amounts of an asset retirement (partial retirement).

APC of the asset: 2000

Accum. depreciation: 1000

Revenue entered manually: 3000 (using new value method)

Percentage retired: 50%

Gross method:

- **Sending asset:** You retire 1000 APC (50% of 2000) and 500 accumulated depreciation (50% of 1000).
- **Target asset:** Acquisition of 1000 APC (amount retired) and 500 accumulated depreciation (depreciation retired).

Net method:

- **Sending asset:** You retire 1000 APC (50% of 2000) and 500 accumulated depreciation (50% of 1000).
- **Target asset:** Acquisition of 500 APC (APC minus depreciation).

**New value method:**

- **Sending asset:** You retire 1000 APC (50% of 2000) and 500 accumulated depreciation (50% of 1000).
- **Target asset:** Receives 3000 APC (revenue that was entered manually).

Transfer Variant

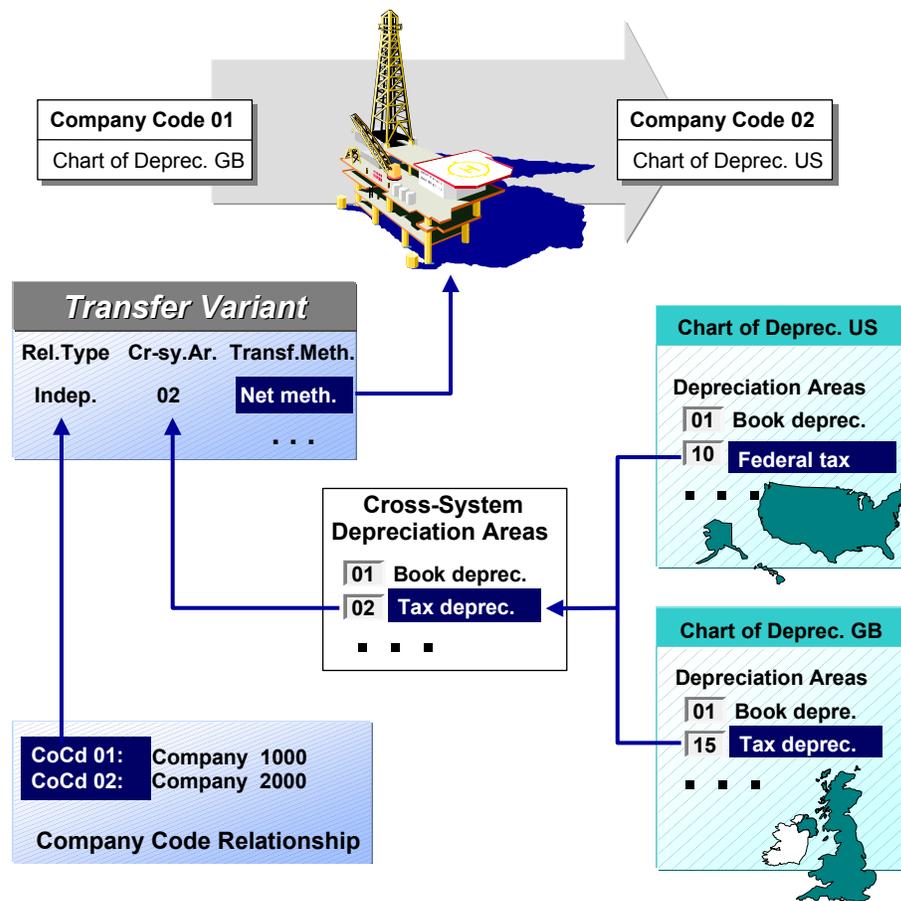
## Transfer Variant

### Definition

In the transfer variant, you specify the transfer method and transaction types for use in intercompany asset transfers. You make these specifications based both on the relationship (are they part of the same legal entity, or legally independent entities?) between the company codes involved, as well as the cross-company depreciation areas concerned.

### Prerequisites

The transfer variants supplied by SAP cover most intercompany transfers. If you need additional transfer variants, you create them in Customizing for *Asset Accounting*. Choose *Transactions* → *Intercompany Asset Transfers* → *Automatic Intercompany Asset Transfers* → *Define Transfer Variants*.



### Definition of the Transfer Variant

## Use

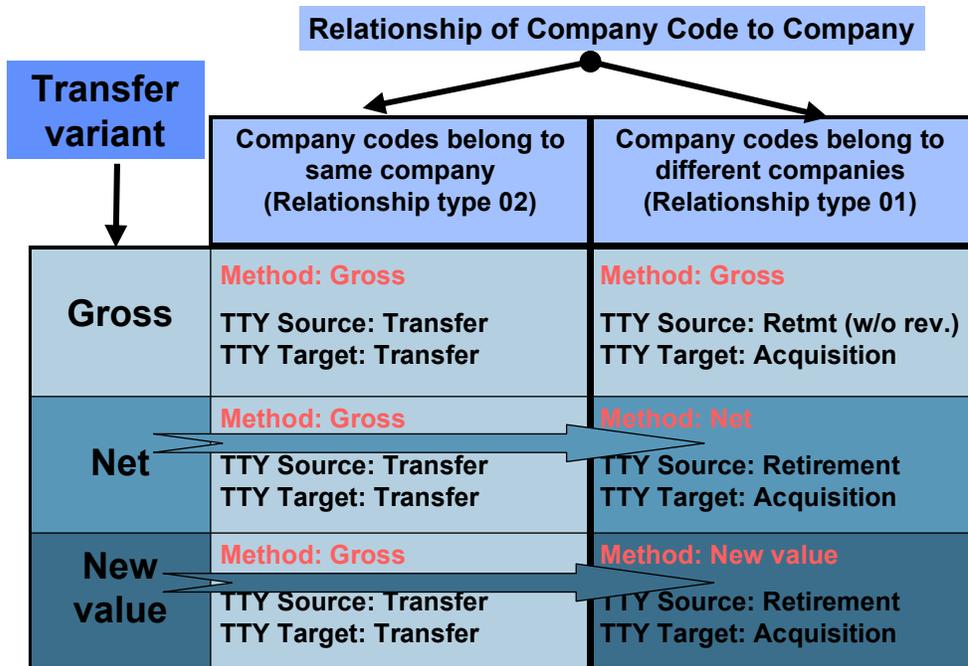
In the standard system, the system uses transfer variant 1 (gross transfer) for intercompany asset transfers. If you want to use a different transfer variant, you have to enter it in the transfer transaction on the *Additional details* tab page.

## Integration

### Company Code Relationship and Transfer Method

In the standard system, SAP assumes that transfers within the *company* organizational unit (relationship 02) are treated as intracompany transfers and the posting is gross. Therefore intracompany transfer transaction types are used. Gross transfer should always be posted without revenue. Company codes that belong to the same company are not legally independent entities and do not draw up their own external financial statements. The company (company ID) is the smallest organizational unit for which individual financial statements are required according to the relevant commercial law.

SAP does not supply any transfer variants that allow asset transfers within a company using the net method or the new value method. If your enterprise allows asset transfers to show gain or loss, then you have to define your own transfer variants.



### Standard Settings for Transfer Variants

The graphic assumes that with relationship type 01, the company codes belong to different companies, and are therefore affiliates belonging to a corporate group. For this reason, the *Post to affiliated company* indicator is set in the transaction type. As soon as one of the company codes does **not** belong to a company, then the company codes are not affiliated. In that case, you have to use transaction types in which the *Do not post to affiliated company* indicator is set.

## Transfer Variant



Transfer variants 5 and 6 are used solely by the system itself for internal purposes, and are not available for asset transfers.

## Transaction Types

In addition to the transfer method, you have to enter transaction types in the transfer variant. You need to enter transaction types for each company code relationship type or cross-system depreciation area. Depending on the transfer method you use, there are different transaction types that are permitted. The following rules apply to the Customizing definitions of the transaction types (standard cases):

- **Gross method**

Transaction type category/class: *Retirement/acquisition* or *Retirement transfer/acquisition transfer*

Transaction type category/proportional values: For retirement *Proportional values are automatically determined*; for acquisition *Proportional values are entered*

Transaction type/revenue indicator: Deselect *Retirement with revenue*

- **Net method**

Transaction type category/class: *Retirement/acquisition*

Transaction type category/proportional values: For retirement *Proportional values are automatically determined*; for acquisition *Proportional values are entered* or *No proportional values*

Transaction type/revenue indicator: Deselect *Retirement with revenue*

- **New value method**

Transaction type category/class: *Retirement/acquisition*

Transaction type category/proportional values: For retirement *Proportional values are automatically determined*; for acquisition *Proportional values are entered* or *No proportional values*

Transaction type/revenue indicator: Deselect *Retirement with revenue*

The transaction type category for all of the transaction types you use has to be *Acquisition and production costs*.



The transaction types valid for postings and their offsetting postings always have to use the same document type. However, in the intercompany transfer transaction, you can enter a different document type, just as you can in the intracompany transfer transaction.

## Field Transfer

### Use

You use this function to control which field contents are transferred from the sending asset to the target asset during intercompany or intracompany asset transfers.

### Prerequisites

You define field transfer in Customizing for *Asset Accounting*. Choose *Transactions* → *Intercompany Asset Transfers* → *Automatic Intercompany Asset Transfers* → *Define Transfer Variants*.

### Features

#### Transfer of Field Contents

If there is no target asset for the transfer in the target company code, a new asset has to be created there. The system creates this new asset, mostly automatically, from the intercompany transfer transaction. You only need to enter the asset class, the most important asset master data, and a reference asset.

Usually you want to retain as much of the data from the original asset as possible. You can therefore use the sending asset as the reference asset for creating the new asset. For each transfer variant, you can specify the fields to be transferred from the reference asset to the new asset. The following rules apply:

- The system copies field contents from the sending or reference asset only if the *Copy* indicator is set in the transfer variant for the field groups to which the fields belong.
- Field contents are transferred to the target asset only if the *Copy* indicator is set in the screen layout rule of the asset class of the target asset for the given field group. Otherwise the system leaves the field empty.
- Field contents originating from a sending or reference asset can be overwritten in dialog mode.

Field assignments specified in Customizing are valid only as long as you do not make manual entries in the master data (for example, entering a cost center). In other words, field assignments are overwritten by manual entries.



You want to transfer the cost center from a reference asset while transferring using transfer variant 4 to a new asset in asset class 3000. The following settings have to be made in Customizing for *Asset Accounting*:

The *Copy* indicator has to be set for field group 15 (cost center) in the screen layout rule of asset class 3000.

The *Copy* indicator has to be set for field group 15 (cost center) in transfer variant 4.

## Field Transfer

When the new asset is created, the *Reference asset* indicator has to be set in the transfer transaction. Do not make an entry in the *Cost center* field, since a manually entered cost center would overwrite the copied value.

In addition, the system stores the following master data information in the target asset, based on the transfer data (independent of the field transfer rules):

- Company ID of the partner company (origin), if the two company codes belong to different companies
- Acquisition date of the sending asset
- Original asset in the case of intracompany transfer (main number/sub-number)

You can also use substitution rules, that allow you to automatically substitute the cost center, location, and depreciation terms (refer to [Validation and Substitution \[Page 226\]](#)). If the asset class changes as a result of the transfer, then the field transfer rules of the transfer variant take priority over the default values in the new asset class (when the new asset is created).

## Historical Transfer of Capitalization Data

Along with the general master data fields, you can also historically transfer specifications for capitalization and the start of depreciation from the sending asset to the target asset. You specify this transfer in the transfer variant, for each cross-system depreciation area. In addition, you have to set the *Transfer adopting dep. start date* indicator in the transaction type.

In order for this transfer to work, the capitalization date and the depreciation start date cannot be entered manually in the master record of the target asset. When this indicator is not set, the system determines the capitalization date based on the asset value date of the transfer, and the depreciation start date using the period control in the depreciation key.



Setting this indicator does **not** make sense for assets under construction.

## Posting Automatic Intercompany Asset Transfer

### Procedure

1. Choose *Posting* → *Transfer* → *Intercompany Transfer*.
2. Enter the asset to be transferred.
3. Check the date specifications, and make any necessary entries on the *Transaction data* tab page. If you do **not** enter an asset value date, the system automatically determines this date when you save.  
Specify in the *Specifications for revenue* group box whether there is revenue for the asset sale. If there is revenue, enter either the
  - Amount
  - Depreciation area, from which the net book value should be used as the revenue amountIn the *Interco. transfer to* group box, enter the target asset or create a new asset.
4. Enter additional posting information (such as document type) and the transfer variant on the *Additional details* tab page.
5. To post a partial transfer, enter a posting amount, a percentage or a quantity on the *Partial transfer* tab page. Specify whether the transfer applies to prior-year acquisitions or to current-year acquisitions.  
If you do not make any entries on this tab page, the system carries out a complete transfer.
6. Enter a text for the posting document on the *Note* tab page, if you wish.
7. Save.

The system carries out the intercompany transfer. The system automatically determines the transaction types from the transfer variant (transfer variant 1 is standard).



Using this transaction, it is **not** possible to:

- Manually enter different amounts for different depreciation areas
- Have the system propose depreciation areas for certain transaction types

If you need to use one of these functions, then use transaction ABT1.

**Example: Gross Transfer within Company**

## Example: Gross Transfer within Company

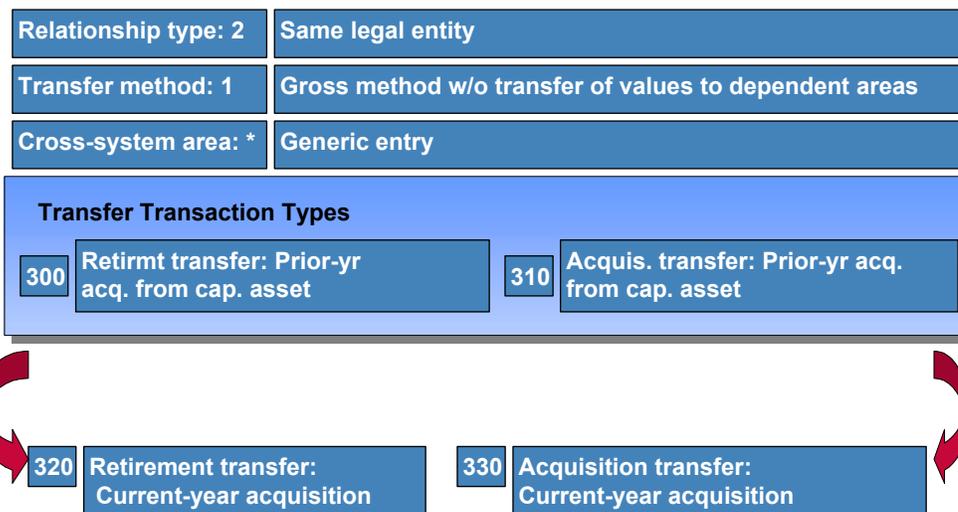
Asset 2391 is transferred from company code 1000 to company code AA15. Both company codes belong to the same **company** (organizational unit), so they are part of a **single legal entity**. However, this means they are not affiliated companies.

The **gross** value of the asset is transferred, and **intracompany transfer transaction types** are used.

### Customizing the Transfer Variant

To post the transfer, a customer-specific transfer variant XY01 was created with the following settings:

Transfer Variant XY01



### Transfer Variant XY01 (Customizing)

The same chart of depreciation is used in both company codes. The asset will manage the same depreciation areas in company code AA15 as it did in company code 1000. Therefore, it is not necessary to define cross-company depreciation areas.

Transfer transaction types have to be entered for treatment of each of the following: retirements (prior-year acquisitions) in the old company code, and acquisitions (prior-year acquisitions) in the new company code. The transaction types for handling current-year acquisitions are contained in the transaction types for prior-year acquisitions.

### Asset Transactions

After the intercompany asset transfer, during which a new asset master record was created in company code AA15, the Asset Explorer shows the following transactions:

Example: Gross Transfer within Company

**Asset 2391 / company code 1000**

1999	External acquis. (TTY 100)	2000 UNI
2000	External acquis. (TTY 100)	1000 UNI

**Asset transfer on 06/13/2000  
to asset 30000 / company code AA15**

**Asset 2391 / company codekreis 1000  
Transactions / As of: 06/14/2000**

2000	External acquisition (TTY 100)	1000 UNI
2000	<b>Retirmt transfer:</b> Prior-yr acq. from cap. asset (TTY 300)	2000 UNI
2000	<b>Retirement transfer:</b> Current-year acquisition (TTY 320)	1000 UNI

**Asset 30000 / company code AA15  
Transactions / As of: 06/14/2000**

2000	<b>Acquis. transfer:</b> Prior-yr acq. from cap. asset (TTY 310)	2000 UNI
2000	<b>Acquisition transfer:</b> Current-year acquisitions (TTY 330)	1000 UNI

Display of Transactions before and after Asset Transfer

## Example: Gross Transfer within Company

## FI Transactions

Itm	CoCd	PK	G/L Acct	Short Text	Amount	Cur.	TTY
1	1000	75	11000	2391	2000.00 -	UNI	300
2	1000	75	11000	2391	1000.00 -	UNI	320
3	1000	70	11010	2391	326.00	UNI	390
4	1000	40	199990	Asset Acquisition Clearing	2674.00	UNI	
5	AA15	70	11000	30000	2000.00	UNI	310
6	AA15	70	11000	30000	1000.00	UNI	330
7	AA15	75	11010	30000	326.00 -	UNI	395
8	AA15	50	199990	Asset Acquisition Clearing	2674.00 -	UNI	

## Line Items Created

Transaction types 390 and 395 are transaction types for proportional value adjustments.

Full names of the G/L accounts:

11000: Machinery and Equipment

11010: Accumulated Depreciation on Machinery and Equipment

199990: Clearing of Non-Integrated Asset Acquisition

Example: Gross Transfer Between Companies

## Example: Gross Transfer Between Companies

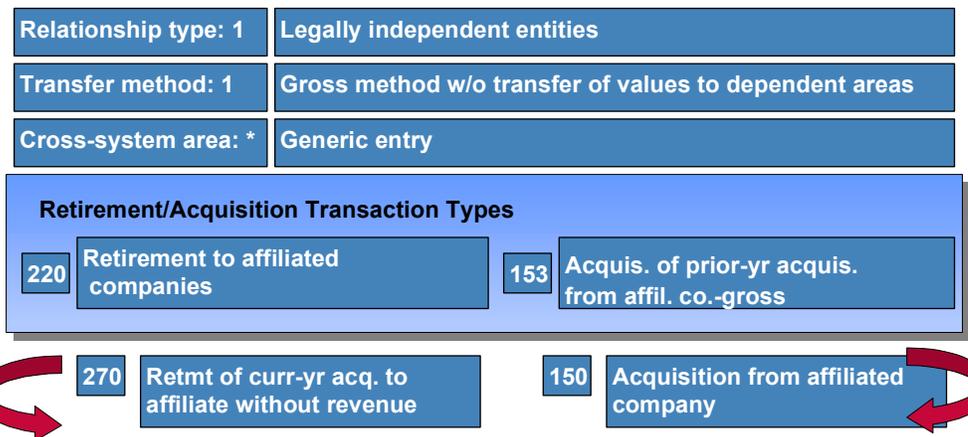
Asset 2392 is transferred from company code 1000 to company code AA15. The company codes belong to different **companies**, so they are **legally independent entities**.

The **gross** value of the asset is transferred, and **acquisition and retirement transaction types** are used.

### Customizing the Transfer Variant

To post the transfer, a customer-specific transfer variant XY02 was created with the following settings:

Transfer Variant XY02



### Transfer Variant XY02 (Customizing)

The same chart of depreciation is used in both company codes. The asset will manage the same depreciation areas in company code AA15 as it did in company code 1000. Therefore, it is not necessary to define cross-company depreciation areas.



If the two companies are not affiliated, then you have to define other acquisition and retirement transaction types, in which the *Do not post to affiliated company* indicator is set.

### Asset Transactions

After the intercompany asset transfer, during which a new asset master record was created in company code AA15, the Asset Explorer shows the following transactions:

Example: Gross Transfer Between Companies

**Asset 2392 / Company Code 1000**

1999	External acquis. (TTY 100)	2000 UNI
2000	External acquis. (TTY 100)	1000 UNI

**Intercompany transfer on 06/13/2000  
to asset 30001 / company code AA15**

**Asset 2392 / company code 1000  
Transactions / as of: 06/14/2000**

2000	External acquisition (TTY 100)	1000 UNI
2000	Retmt of curr-yr acq. to affiliate without revenue (TTY 270)	1000 UNI
2000	Retirement to affiliated companies (TTY 220)	2000 UNI

**Asset 30001 / company code AA15  
Transactions / As of: 06/14/2000**

2000	Acquis. of prior-yr acquis. from affil. co.-gross (TTY 153)	2000 UNI
2000	Acquisition from affiliated company (TTY 150)	1000 UNI

Example: Gross Transfer Between Companies

**FI Transactions**

Itrm	CoCd	PK	G/L Acct	Short Text	Amount	Cur	TTY
1	1000	75	11000	2391	2000.00 -	UNI	220
2	1000	75	11000	2391	1000.00 -	UNI	270
3	1000	70	11010	2391	300.00	UNI	295
4	1000	70	11010	2391	50.00	UNI	296
5	1000	40	200010	Scrapped Asset Clearing	2650.00	UNI	
6	AA15	70	11000	30001	1000.00	UNI	150
7	AA15	70	11000	30001	2000.00	UNI	153
8	AA15	75	11000	30001	50.00 -	UNI	150
9	AA15	75	11000	30001	300.00 -	UNI	153
10	AA15	50	199991	Affiliated Company Clearing	2700.00 -	UNI	

**Line Items Created**

Transaction types 295 and 296 are transaction types for proportional value adjustments.

Full names of the G/L accounts:

11000: Machinery and Equipment

11010: Accumulated Depreciation on Machinery and Equipment

200010: Loss on Scrapped Assets

199991: Affiliated Companies Clearing, Fixed Assets

## Example: Net Transfer Between Companies

### Example: Net Transfer Between Companies

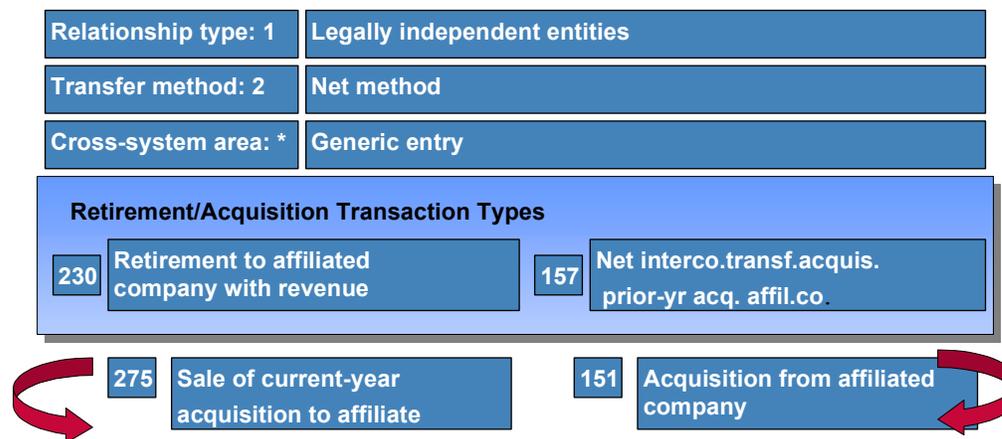
Asset 2393 is transferred from company code 1000 to company code AA15. The company codes belong to different **companies**, so they are **legally independent entities**.

The **net** value of the asset is transferred, and **acquisition and retirement transaction types** are used.

### Customizing the Transfer Variant

To post the transfer, a customer-specific transfer variant XY03 was created with the following settings:

#### Transfer Variant XY03



The same chart of depreciation is used in both company codes. The asset will manage the same depreciation areas in company code AA15 as it did in company code 1000. Therefore, it is not necessary to define cross-company depreciation areas.



If the two companies are not affiliated, then you have to define other acquisition and retirement transaction types, in which the *Do not post to affiliated company* indicator is set.

### Asset Transactions

After the intercompany asset transfer, during which a new asset master record was created in company code AA15, the Asset Explorer shows the following transactions:

Example: Net Transfer Between Companies

**Asset 2393 / Company code 1000**

1999	External acquis. (TTY 100)	2000 UNI
2000	External acquis. (TTY 100)	1000 UNI

**Asset transfer on 06/13/2000  
to asset 30001 / company code AA15**

**Asset 2393 /company code 1000  
Transactions / As of: 06/04/2000**

2000	External acquisition (TTY 100)	1000 UNI
2000	Sale of current-year acquisition to affiliate (TTY 275)	1000 UNI
2000	Retirement to affiliated company with revenue (TTY 230)	2000 UNI

**Asset 30002 / company code AA15  
Transactions / As of: 06/14/2000**

2000	Net interco.transf.acquis. prior-yr acq. affil.co. (TTY 157)	1700 UNI
2000	Acquisition from affiliated company (TTY 151)	950 UNI

## Example: Net Transfer Between Companies

## FI Transactions

Itm	CoCd	PK	G/L Acct	Short Text	Amount	Cur.	TTY
1	1000	75	11000	2394	2000.00 -	UNI	230
2	1000	75	11000	2394	1000.00 -	UNI	275
3	1000	70	11010	2394	300.00	UNI	295
4	1000	70	11010	2394	50.00	UNI	296
5	1000	40	825000	Asset Retirement Clearing	2650.00	UNI	
6	AA15	70	11000	30003	1700.00	UNI	151
7	AA15	70	11000	30003	950.00	UNI	157
8	AA15	50	199991	Affil. Companies Clearing	2650.00 -	UNI	

## Line Items Created

Full names of the G/L accounts:

11000: Machinery and Equipment

11010: Accumulated Depreciation on Machinery and Equipment

82500: Asset Retirement Clearing

199991: Affiliated Companies Clearing, Fixed Assets

Example: New Value Transfer Between Companies

## Example: New Value Transfer Between Companies

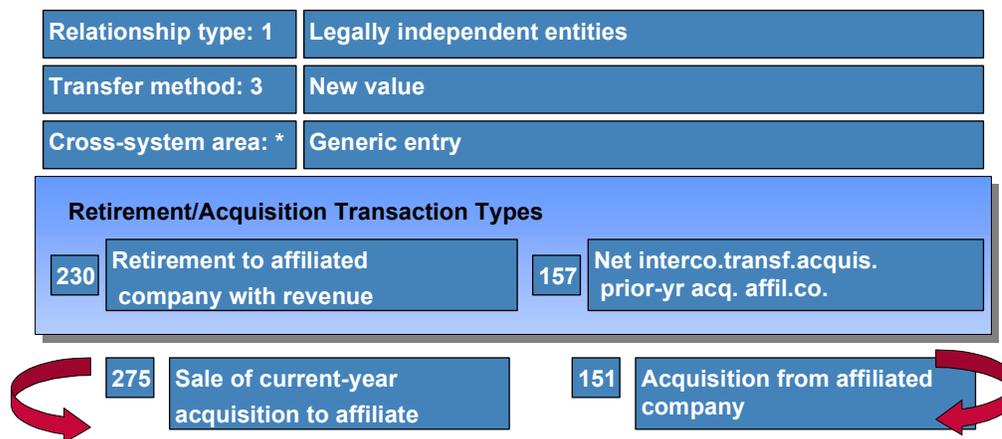
Asset 2394 is transferred from company code 1000 to company code AA15. The company codes belong to different **companies**, so they are **legally independent entities**.

The asset receives a **new value** in the target company code and is posted using **acquisition and retirement transaction types**.

### Customizing the Transfer Variant

To post the transfer, a customer-specific transfer variant XY04 was created with the following settings:

Transfer Variant XY04



The same chart of depreciation is used in both company codes. The asset will manage the same depreciation areas in company code AA15 as it did in company code 1000. Therefore, it is not necessary to define cross-company depreciation areas.

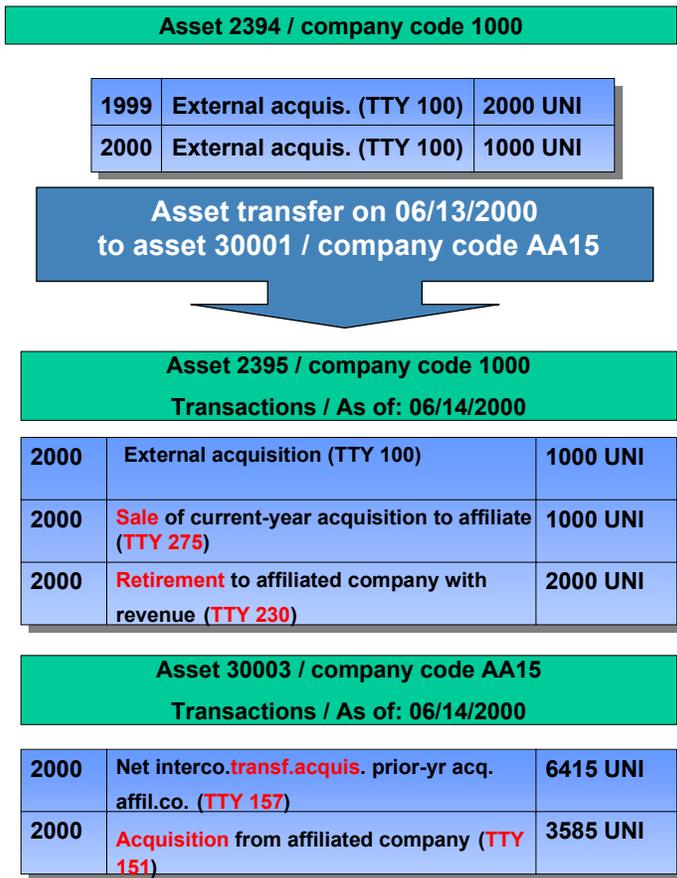


If the two companies are not affiliated, then you have to define other acquisition and retirement transaction types, in which the *Do not post to affiliated company* indicator is set.

### Asset Transactions

After the intercompany asset transfer, during which a new asset master record was created in company code AA15, the Asset Explorer shows the following transactions:

Example: New Value Transfer Between Companies



Example: New Value Transfer Between Companies

**FI Transactions**

Itm	CoCd	PK	G/L Acct	Short Text	Amount	Cur.	TTY
1	1000	75	11000	2395	2000.00 -	UNI	230
2	1000	75	11000	2395	1000.00 -	UNI	275
3	1000	70	11010	2395	300.00	UNI	295
4	1000	70	11010	2395	50.00	UNI	296
5	1000	40	825000	Asset Retirement Clearing	10,000.00	UNI	
6	1000	50	250000	Gain on Asset Retirement	7350.00-	UNI	
7	AA15	70	11000	30005	6415.09	UNI	157
8	AA15	70	11000	30005	3584.91	UNI	151
9	AA15	50	199991	Affil. Companies Clearing	10,000.00 -	UNI	

**Line Items Created**

Full names of the G/L accounts:

11000: Machinery and Equipment

11010: Accumulated Depreciation on Machinery and Equipment

825000: Asset Retirement Clearing

250000: Gain on Asset Retirement

199990: Clearing of Non-Integrated Asset Acquisition

199991: Affiliated Companies Clearing, Fixed Assets

## Manual Intercompany Asset Transfer

## Manual Intercompany Asset Transfer

### Use

You use this function to post asset transfers across company code and client boundaries. You have to post the retirement transfer and the acquisition transfer in two separate steps.



SAP recommends that you post transfers that are both cross-company and cross-client using ALE (Application Link Enabling) functions, rather than using manual intercompany asset transfer.

For more information, see the *ALE Scenarios in Asset Accounting* topic.

### Prerequisites

For manual intercompany transfers, there is an indicator in the Customizing definition of the depreciation areas that makes it possible to handle transfers between company codes according to corporate group needs (under *Special Valuation* → *Preparations for Consolidation* → *Specify Group Depreciation Areas*).

The indicator has the following affects:

Retirements to and acquisitions from an affiliated company are automatically posted in the group depreciation areas using transaction types for retirement transfers or acquisition transfers. This practice ensures that these transactions are shown correctly in the asset history sheet for the corporate group. You specify these transaction types in Customizing for *Asset Accounting* under *Transactions* → *Determine Transaction Types for Internal Transactions*.

The system uses different transaction types for transferring acquisitions from prior years and transferring current acquisitions. The standard transaction types (acquisitions from prior years/current acquisitions) are:

- Retirement transfer: 350/370
- Acquisition transfer: 360/380

When you define the transaction type for transfer of prior-year acquisitions (350 and 360) in Customizing, you can specify the corresponding transaction type for current acquisitions (370 and 380) at the same time.

[Graphic: Intercompany Asset Transfer \(from Group Standpoint\) \[Ext.\]](#)



If you are using the R/3 Legal Consolidation (FI-LC) component, **do not** set this indicator in the consolidation depreciation areas. The group depreciation area in this case does not represent the final consolidated financial statements, but only the corporate valuation. Transfers within the corporate group are not cleared until consolidation takes place in the FI-LC component.

Depending on the reason for the transfer and the relationship between the company codes, you have to post the acquisition of the transferred asset either gross (with its historical APC and value adjustments) or net (with its net book value). Therefore, there are special indicators in the definition of the transaction types. These indicators specify whether the transaction type is for

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**Manual Intercompany Asset Transfer**

posting to affiliated companies, and whether the posting is gross or net (*Transactions* → *Intercompany Asset Transfers* → *Specify Gross or Net Transfer Method for Manual Transfer*).

The indicators described here apply only when the intercompany transfer is posted manually. For automatic intercompany asset transfers, these two things are controlled by the transfer variant.

When posting without customer or vendor, you have to enter the sending and/or receiving company ID for both the retirement and the acquisition. When posting with a customer or vendor, you have to assign a company ID to the customer or vendor.

The line items created by the retirement can be used as a reference for the creation of the acquisition posting. They contain the retirement amounts and the proportional value adjustments for the individual depreciation areas.

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**Manual Posting of Intercompany Asset Transfer/Retirement**

## Manual Posting of Intercompany Asset Transfer/Retirement

### Procedure

1. Determine the company receiving the asset.
  - If you want to post the asset against a customer account, make sure that the ID of the partner company is entered in the customer master record.
  - When posting without a customer (to a clearing account) you must determine the number of the receiving company in the FI-LC system (Consolidation: *Master data* → *Display*).
2. Determine the retirement costs and the amount of gain on the sale, if any.
3. Post the asset retirement using transaction type 220/230 (retirement of prior-year acquisitions without/with revenue), or 270/275 (retirement of current-year acquisitions without/with revenue). For more information, refer to [Asset Retirement \[Page 484\]](#).

## Manual Posting of Intercompany Asset Transfer/Acquisition

### Procedure

1. Create a new asset master record in the receiving company (company code).
2. Determine the company providing the asset.
  - If you are posting the retirement against a vendor account, make sure that an ID for the partner company is entered in the vendor master record.
  - When posting without a vendor (to a clearing account) you must determine the number of the sending company in the FI-LC system (Consolidation: *Master data* → *Display*).
3. Determine the acquisition date and the proportional accumulated depreciation from the retirement document (*Display asset values: Transactions* → *Proportional values*).
4. Post the asset acquisition with transaction type 150 (see [Integrated Asset Acquisition Posting \(FI-AA and FI-AP\) \[Page 377\]](#)). In the dialog box of the posting transaction, enter for each group depreciation area the APC that is being transferred and the proportional value adjustments (accumulated depreciation).

## Manual Posting of Intercompany Asset Transfer/Acquisition

## Asset Retirement

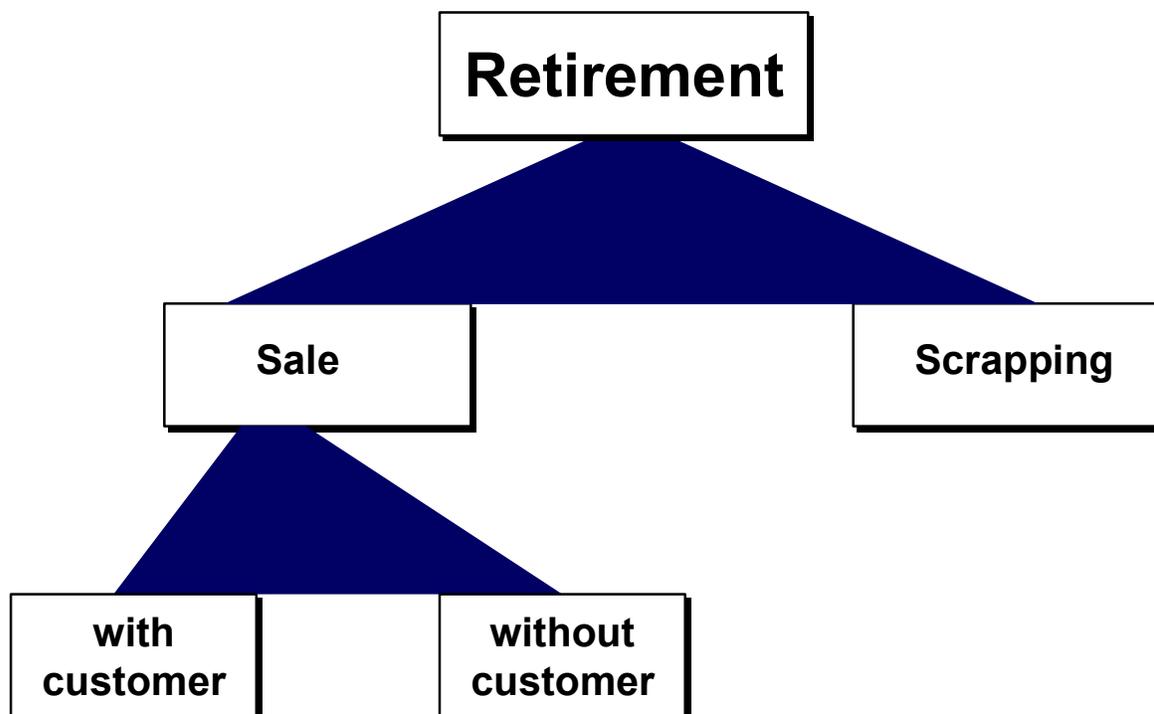
### Purpose

Asset retirement is the removal of an asset or part of an asset from the asset portfolio. This removal of an asset (or part of an asset) is posted from a bookkeeping perspective as an asset retirement. Depending on organizational considerations, or the business transaction which leads to the retirement, you can distinguish the following types of retirement:

- An asset is sold, resulting in revenue being earned. The sale is posted with a customer.
- An asset is sold, resulting in revenue being earned. The sale is posted against a clearing account.
- An asset has to be scrapped, with no revenue earned.
- An asset is sold to an affiliated company (refer to [Manual Posting of Intercompany Asset Transfer/Retirement \[Page 482\]](#))

### Process Flow

There are transactions and transaction types in the system for these different retirement types.



#### Asset Retirement

##### Asset Sale with Customer

The system enables you to post the entry to *Accounts Receivable*, the revenue posting and the asset retirement in one step. In this posting transaction, you have to post the revenue (debit A/R,

## Manual Posting of Intercompany Asset Transfer/Acquisition

credit revenue from asset sale) first, and then post the asset retirement. An indicator in the posting transaction specifies that the system posts the asset retirement after the revenue posting.

The prerequisite for this is that the sales revenue account in *Financial Accounting*, to which the revenue should be posted, has a field status variant in its master data in which the *Asset retirement* field (category Asset Accounting) is defined as a required or optional entry field. You define the field status variant in Customizing for *Financial Accounting (Financial Accounting Global Settings → Document → Line Item → Controls)*.

### Posting of Gain or Loss

When you use the standard transaction types, the system automatically creates a gain posting or a loss posting, as well as a revenue clearing entry, in addition to the asset and accumulated depreciation correction postings. This gain/loss posting, as well as the revenue posting, are not dependent on the transaction type. The automatic creation of these postings is controlled by the *Gain/loss from retirement* indicator in the definition of the transaction type. You can also choose not to set this indicator, in which case you have to enter the postings manually.

For more information on ways of posting gain and loss, see [Posting Gain/Loss \[Page 246\]](#).

### Retirement Without Revenue

A retirement without revenue is the removal of an asset from the asset portfolio without any revenue, for example, by scrapping. When you use this posting option, the system does not create revenue and gain/loss postings. Instead it creates a *Loss from an asset retirement without revenue* posting in the amount of the net book value being retired.

### Complete/Partial Retirement

An asset retirement can refer to an entire fixed asset (complete retirement) or part of a fixed asset (partial retirement). In both cases, the system automatically determines, using the asset retirement dates entered, the amounts to be charged off for each depreciation area. You can initiate the partial retirement of a fixed asset by entering **one** of the following:

- The amount of the acquisition and production costs being retired
- A percentage rate
- A quantity

When you enter the amount of APC that is being retired, the system determines the percentage to be retired from the asset using the first depreciation area in which posting is to take place. It determines the percentage amount of APC being retired in that area, and uses the same percentage for other areas. You can enter a quantity, provided that you have not specified a retirement amount or percentage rate. The system interprets the quantity as a ratio to the total quantity of the asset and thereby determines the asset retirement percentage rate. If necessary, you can also manually correct the retirement amounts that were calculated by the system in individual depreciation areas. The system then recalculates the retirement amounts for that area, and any areas that are dependent on that area.

The asset value date of the retirement is recorded in the asset master record. You cannot post any transactions with a value date before the value date of the last retirement. If you nevertheless need to post such a transaction, you must first reverse all retirements that lie after the value date of the belated posting. After posting the belated transaction, you can then re-post the retirements.

### Transaction Type (Prior-Year Acquisitions/Current-Year Acquisitions)

## Manual Posting of Intercompany Asset Transfer/Acquisition

Make sure that you select the correct transaction type for both partial and complete retirement. For the complete retirement of a fixed asset acquired in previous years, always select a transaction type intended for prior-year acquisitions. A partial retirement can always relate either to prior-year acquisitions or to current-year acquisitions.

The complete retirement of a fixed asset is only possible if all transactions to the asset were posted with a value date before the asset value date of asset retirement. You must clear or reverse down payments and investment support measures, which are in the same posting year as the retirement, before you post the complete retirement.

## Proportional Value Adjustments

Based on the value date and period control, the system automatically determines the reference period for the retirement. The system automatically determines any depreciation (value adjustments) that is applicable to the part of the asset being retired, up to the reference period (retirement). The system automatically retires this depreciation at the time of the retirement transaction. This procedure guarantees that the percentage of the book value that is retired is identical with the percentage of the acquisition and production costs that is retired.

[Graphic: Determining Proportional Value Adjustments \[Page 488\]](#)

The system automatically posts the proportional value adjustments retired during an asset retirement. You can specify special transaction types for this automatic posting. You enter these transaction types in the Customizing definition of the retirement or transfer transaction types (*Value adjustments* function). These special transaction types for the proportional value adjustments are particularly important for group consolidations, so that the individual transaction can be identified as retirement of transfer.

The standard transaction types delivered by SAP are already defined in this way. The system uses the transaction type 290 for proportional values with retirements. For transfers it uses transaction types 390/395 (transfer retirement/acquisition).

## Retirement of Low Value Assets

There are special considerations for the retirement of low value assets (LVAs). It is usually necessary to simplify the business transactions involved, due to the large number of assets that are being retired. It is not necessary to actually post the retirement of low value assets in order for the assets transactions to be displayed correctly in the asset history sheet. It is possible to simulate the retirements of low value assets during a time period you specify. Enter the LVA asset classes and the simulation time period in the initial screen of the asset history sheet (see [Asset History Sheet \[Page 283\]](#)).

If you want to actually post the retirement of low value assets, use the usual procedure for asset retirements.

## Retiring Several Asset Sub-Numbers Simultaneously

The system enables you to post the complete retirement of several sub-numbers of a fixed asset in one step (generic entry using an asterisk (\*) in the sub-number field). The system performs asset postings and value adjustment postings for each sub-number.

Sales revenue is proportionally allocated to the individual sub-numbers according to their acquisition value (including revaluation).

## Retirement of Assets with Investment Support

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## Manual Posting of Intercompany Asset Transfer/Acquisition

For information on the special concerns involved when retiring assets with investment support, see [Investment Support on the Liabilities Side \[Page 180\]](#) and [Investment Support Managed on the Assets Side \[Page 184\]](#).

### Retirement Costs

It is possible to enter the costs of the retirement (for example, removal costs) for statistical purposes during the retirement posting. The standard report for asset retirements (*Information System*) then displays these costs in a special field. Note that gain/loss and retirement costs are shown separately in the report. In addition, the retirement costs are **not** automatically transferred to cost accounting.

### Mass Retirement

When an enterprise sells a large portion of its fixed assets (such as a plant or a building), it is necessary to post the retirement of all the individual assets which make up the whole. Since the number of affected assets can be very large, the FI-AA component makes it possible to make the necessary postings using mass processing. For more information, see [Mass Retirement \[Page 543\]](#).

## Graphic: Determining Proportional Value Adjustments

## Graphic: Determining Proportional Value Adjustments

The following graphic shows how proportional value adjustments are determined on asset retirement:

Acquis. Date 1/1 year before last; life 10yrs	
APC	10,000
Dep: Str-line from APC (1000 per year)	
Value date of retirement: 7/1 prior year	
Retired amount: 50% of APC	
<b>Depreciation for prior periods:</b>	
2,000; of which 50%	= 1,000
<b>Depreciation in current period:</b>	
1,000; of which 50% for 1/2 year =	250
	<b>1,250</b>

## Posting Retirement with Revenue with Customer

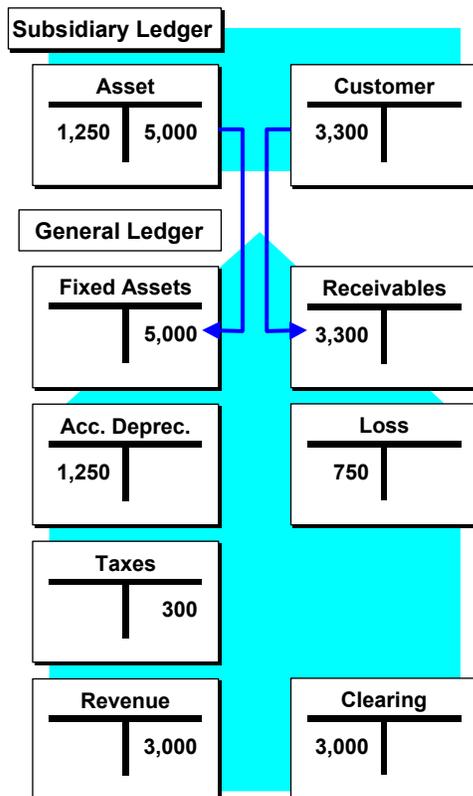
### Procedure

1. Specify the customer, against whose account you want to post the retirement. Specify the revenue account, to which you want to post.
  2. Specify the affected asset, the amount of APC that is being retired, and the amount of revenue that was earned. The system determines and posts the proportional value adjustments automatically.
  3. Check whether investment support was claimed for the asset in the current fiscal year (*Display asset values: Transactions*). If there area any, reverse the investment support measures (transaction type lxx).
  4. Check if you are retiring old asset data (acquisitions from previous fiscal years) or acquisitions in the current fiscal year (*Display asset values: Transactions*).
  5. Post the asset retirement (*Postings* → *Retirement* → *Asset sale* → *With customer*).
    - First post the revenue (debit customer invoice, credit revenue account - posting key 01/50). Enter the total amount of the revenue as the amount of the customer posting. You do not need to enter a transaction type yet.
    - In the screen for creating the revenue line item, you must select the indicator "asset retirement." In the "amount" field, enter "\*". The system then uses as posting amount the total of all line items created up to this point, with reversed debit/credit indicators. If needed, enter information for determining output tax.
    - In the dialog box that then appears, post the asset retirement. Enter the asset and the amount of APC being retired. Instead of the amount being retired, you can also enter a quantity, or you can select the indicator for complete retirement.
    - Also enter the retirement date and the transaction type either for retirement of prior-year acquisitions or current-year acquisitions (210/260).
- [Graphic: Accounts for Retirement with Revenue Posted to Customer \[Page 490\]](#)
6. Check the retirement values in the individual depreciation areas (F13) and post the document.
  7. Manually create an invoice in the amount of the posted receivable from the customer.

Graphic: Accounts for Retirement with Revenue Posted to Customer

## Graphic: Accounts for Retirement with Revenue Posted to Customer

The following graphic shows the retirement of an asset with an acquisition and production cost of 5000 that was sold for 3000. Due to accumulated depreciation of 1250, the net book value at retirement is 3750, resulting in a loss of 750.



### Accounts for Integrated Retirement

The revenue clearing entry is the same amount as the revenue posting to the account "revenue for asset sale (clearing account)" but with a reverse debit/credit indicator. This account is needed because the sale of a fixed asset is subject to sales tax (=> automatic generation of tax posting in Financial Accounting). Internal determination of gain or loss, however, has to take place without taxes.

## Posting Retirement with Revenue to Clearing Account

### Procedure

1. Choose *Posting* → *Retirement* → *Retirement with revenue* → *No customer*
2. Enter the asset.
3. Check the date specifications, and make any necessary entries on the *Transaction data* tab page. If you do **not** enter an asset value date, the system automatically determines this date when you save.

Enter the revenue in the *Specifications for revenue* group box. Enter the:

- Revenue amount
  - Depreciation area, from which the net book value should be used as the revenue amount
4. Enter additional posting information (such as document type) and the transaction type on the *Additional details* tab page.

In addition, you can also enter costs here that arose from the retirement. However, these costs are posted only as asset line items. However, there is **no** integration of this posting with cost accounting or the general ledger.

If you do **not** enter a transaction type, the system automatically determines one when you save.

5. To post a partial transfer, enter a posting amount, a percentage or a quantity on the *Partial transfer* tab page. Specify whether the retirement applies to prior-year acquisitions or to current-year acquisitions.

The system determines the appropriate transaction type automatically.

If you do not make any entries on this tab page, the system carries out a complete transfer.

6. Enter a text for the posting document on the *Note* tab page.
7. Save.



Using this transaction, it is **not** possible to:

- Manually enter different amounts for different depreciation areas
- Have the system propose depreciation areas for certain transaction types

If you need to use one of these functions, then use transaction ABAO.

## Posting Retirement without Revenue (Scrapping)

## Posting Retirement without Revenue (Scrapping)

### Procedure

1. Choose *Posting* → *Retirement* → *Scrapping*.
2. Enter the asset.  
Check the date specifications, and make any necessary entries on the *Transaction data* tab page. If you do **not** enter an asset value date, the system automatically determines this date when you save.
3. Enter additional posting information (such as document type) on the *Additional details* tab page.  
If you do **not** enter a transaction type, the system automatically determines one when you save.
4. To post a partial retirement, enter a posting amount, a percentage or a quantity on the *Partial transfer* tab page. Specify whether the retirement applies to prior-year acquisitions or to current-year acquisitions.  
If you do not make any entries on this tab page, the system carries out a complete transfer.
5. Enter a text for the posting document on the *Note* tab page.
6. Save.

The system posts the retirement.



Using this transaction, it is **not** possible to:

- Manually enter different amounts for different depreciation areas
- Have the system propose depreciation areas for certain transaction types

If you need to use one of these functions, then use transaction ABAV.

## Subsequent Revenue/Costs

### Purpose

It is sometimes necessary to post revenue or costs for an asset retirement that has already been posted. For example, you might need to post an insurance benefit as subsequent revenue to an asset, although the asset has already been scrapped (deactivated).

### Process flow

There are two transactions in the FI-AA component that make it possible to create line items for cost or revenue posted after the retirement. You can report on these asset line items in the standard retirement list.



However, when you use this method, there is no integration with Financial Accounting (or Controlling). This means that you must post the costs or revenue again explicitly in Financial Accounting in order to create a corresponding posting document (CO document).

### Procedure

[Posting Subsequent Revenue/Costs \[Page 494\]](#)

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**Posting Subsequent Revenue/Costs**

## Posting Subsequent Revenue/Costs

### Procedure

1. Determine the asset concerned and the amount that has to be entered as subsequent revenue or costs. Have the system show you the corresponding posting document in the FI System (*Accounting → Financial accounting → General ledger → Document → Display*)
2. Call the transaction in the FI-AA component (*Postings → Retirement → Subsequent revenue/Subsequent costs*)
  - Enter the asset in the initial screen. Check the date specifications.
  - Enter the amount of the subsequent revenue or costs in the second screen. Check the value date.
  - Choose the function *Post*.

## Reversals

### Purpose

Asset transactions have to be reversed using the reversal transaction of the application in which the original transaction was posted (for example, invoice receipt). You automatically go to the appropriate reversal transaction when you choose *Postings* → *Reverse document*.

### Reversal Transactions

In addition to the reversal transactions for documents created in Asset Accounting, there are also the following reversal transactions in the applications integrated with FI-AA:

- Reversal of external acquisition with vendor (Accounts Payable)
- Reversal of acquisition with purchase order reference (goods/invoice receipt)
- Reversal of retirement with customer (Accounts Receivable)



Be careful when you have an asset with several transactions, and you want to reverse a transaction that is chronologically immediately after a negative transaction. In this case, you may have to reverse the negative transaction as well, since the net book value of the asset could become negative after the first reversal.

### Reversal Indicator

Along with the special reversal transaction, the initial screen of the FI-AA posting transaction also offers a reversal indicator. When you set this indicator, you can create a posting that corresponds to the selected posting transaction, but has reversed positive/negative signs.

This posting, however, has no relation to the original document. In addition, when you use this posting, the system newly calculates the proportional value adjustments in accordance with the asset value date of the posting. This is different from the procedure with an actual reversal.

---

**Reversing a Document**

## Reversing a Document

### Procedure

1. Choose *Postings* → Reverse document → *Other asset document*.
2. Enter the asset.
3. Press *Enter*
4. Select the document to be reversed.
5. Choose the Reverse function.

## Reversing Settlement of an Asset Under Construction

### Procedure

1. Choose *Postings* → *Reverse document* → *Cap. asset u. const.*
2. Enter the asset under construction that was settled.
3. Press **Enter**

The system then reverses all documents that were posted during the last settlement.

4. If you want to reverse a settlement that was posted before the most recent one, you first have to reverse all the settlements, which were posted after the one you want, in chronological order.



You cannot use this transaction to reverse the settlement of assets under construction that were only managed for cost accounting

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**Changing a Document**

## Changing a Document

### Procedure

1. Choose *Postings* → *Edit document*.
2. Choose the function *FI document*.
3. Change the entries in the document that need to be changed.

You can only change those document fields that have been specified in the document change rule (FI Customizing: *Business transactions* → *Base parameters*).

## Processing for Closing

### Purpose

The following objects describe tasks that are carried out during period-end closing or year-end closing in Asset Accounting, rather than on an individual basis. In addition, there are descriptions of certain tasks that are required for special valuation of assets (such as replacement values).

### Schedule Manager

You can manage and monitor periodic processing in Asset Accounting using the [Schedule Manager \[Ext.\]](#). Schedule Manager is a tool for planning and overseeing business tasks. This tool makes it easier to carry out periodic processing, and is able to help automate these processes where possible. Using Schedule Manager you can display the current status of the period-end closing.

You can use the Schedule Manager to manage the following periodic processing in Asset Accounting:

- Posting depreciation
- Automatic posting of asset transactions from a depreciation area to the General Ledger

You find the Schedule Manager in the Asset Accounting menu (choose *Periodic processing*).

For more information on the Schedule Manager, see the SAP Library. Choose *CA-Cross Application Components* → *General Application Functions (CA-GTF)* → *Schedule Manager*.

Posting Depreciation

## Posting Depreciation

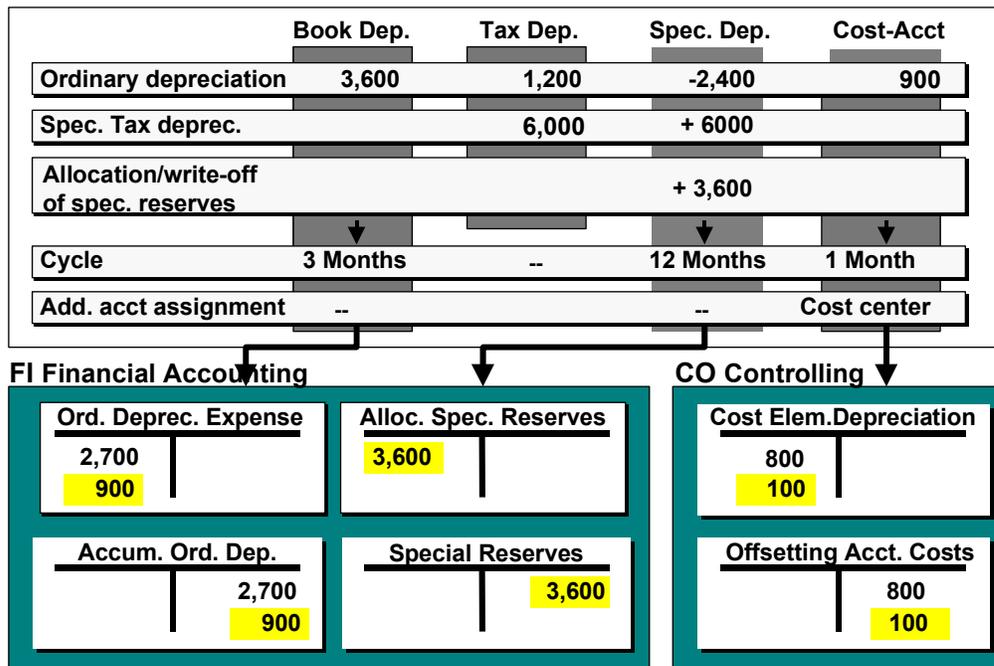
### Purpose

Every asset transaction in the R/3 Asset Accounting (FI-AA )component immediately causes a change of the forecasted depreciation. However, it does not immediately cause an update of the depreciation and value adjustment accounts for the balance sheet and profit and loss statements. The planned depreciation is posted to the general ledger when you run the periodic depreciation posting run. This posting run uses a batch input session to post the planned depreciation for each posting level for each individual asset as a lump sum amount.

### Process Flow

The calculation and scheduling of depreciation, interest and revaluation are automatically controlled by keys in the system, or you can control them manually using a special posting transaction. In both cases, planned depreciation from Asset Accounting must be periodically posted to the corresponding asset and expense accounts of the general ledger. You carry out this posting using a batch input session. In addition to the various depreciation types, interest and revaluation, this batch input session also posts the allocation and writing off of special reserves.

When the system posts depreciation, it creates collective documents. It does not create separate documents for each asset.



□ = Posted until period 11      □ (yellow) = Posted until period 12

### Depreciation Posting in Account Form



## Posting Depreciation

For additional information on the system settings for the depreciation posting run, see [System Settings for Posting Depreciation \[Page 118\]](#) and [Posting Depreciation \[Page 116\]](#).

## Creating a Batch-Input Session

You call up the report for posting depreciation by choosing *Periodic Processing* → *Depreciation Run* → *Execute*. The report should be run according to periods (annually, semi-annually, quarterly or monthly). This program creates a batch input session which contains all posting information for Financial Accounting. The required posting documents are created when this batch input session is processed. You can only start this report in the form of background processing.

The system creates posting sessions with postings per depreciation area and account group in accordance with the posting cycles specified in Customizing. As posting date, the system uses

- The last day of the period for normal periods (no special periods)
- The last day of the fiscal year for special periods.

The parameters for starting the report are described below.

## Posting Period

For planned posting runs, the periods are posted in chronological order according to the specified posting cycle.

As long as the last normal period was already posted, it is possible to post to special periods in Financial Accounting. This is generally required, when certain measures for the year-end closing (regarding accounting policy) should be kept from distorting the results for the last normal period. Start a planned posting run by entering any special period (for example, 13).

When you have a non-calendar fiscal year, you still have to enter the FI period to be posted, rather than the calendar period. For more information, see [System Settings for Posting Depreciation \[Page 118\]](#).

## Purpose of the Posting Run

You can choose the following activities during each posting run by setting certain parameters in the initial screen:

- **Next planned posting run**

You post to the next period that is specified according to the posting cycle. During a regular posting run of this kind, the system does not allow for limiting the run to particular assets.

- **Repeat posting run**

You can request a repeat posting run for the last period posted. A repeat run might be necessary, for example, if the depreciation terms were changed for individual assets in connection with the year-end closing. During a repeat posting run, the system only posts the differences that resulted between the first posting run and the repeat posting run (=> no double posting). You can limit the run to particular assets.

Take note of the following special considerations related to the posting process (use of catch-up or smoothing) when you make a repeat run (refer to [System Settings for Posting Depreciation \[Page 118\]](#)).

## Posting Depreciation

- **Catch-up method**

When you use the catch-up method, the system calculates depreciation over again from the start of the year (or depreciation start) up to and including the depreciation period you are now posting. The difference between this amount and the total depreciation already posted is the new depreciation amount that is posted in the case of a repeat run. As a result of this recalculation of depreciation, new postings and changed depreciation parameters are included in the repeat run.

- **Smoothing**

When you use the smoothing method, the annual depreciation that is still to be posted is distributed evenly over the periods that have not yet been posted. There is no recalculation of depreciation, as there is when the catch-up method is used. Once a period is posted, there can be no new posting to the same period. Any changes to depreciation terms, and/or any new acquisition postings, become effective only in the following period. The only exception is when a new asset is created. Depreciation is then posted for this asset in the repeat run, since no depreciation was posted for it up to that point.

- **Restart**

If posting run terminated for technical reasons, and changes were already made to the database, you must begin the report over again in restart mode. Using the restart mode ensures that all system activities that were interrupted by the termination are repeated

- **Unplanned posting run**

If, for certain reasons, you want to skip over one or more posting periods, specify an unplanned posting run. The system then creates a posting session for all periods which were skipped, as well as for the period entered. The posting period which you specify, however, must fit into the posting cycle. If you specify period 7, for example, for a quarterly posting cycle, no posting will occur.

## Individual List/Test Run

In addition to the batch input session, the report provides a list of depreciation. This list shows the planned depreciation for the year, the depreciation which has been posted up to this period, and the depreciation to be posted in this period, for each account group and depreciation area (and, if desired, for each asset). Correlation of the list and the posting documents is aided by the inclusion of the internally assigned document numbers in the list.

In order to ensure that all assets are processed within a posting period, you can limit the report to certain assets only during a repeat run. If desired, you can start the report in test mode.

## Periodic Posting of Depreciation

### Procedure

1. Call up the report for creating the batch input session (*Periodic processing* → *Depreciation run* → *Execute*).
2. Specify the company code and the depreciation posting period for which you want to carry out a posting run in the initial screen of the report.
3. Determine, also in the initial screen of the report, the specific activity you want to carry out in the posting run:
  - Periodic posting run in the normally planned sequence
  - Repeat run for a period already posted
  - Unplanned posting run (not in the normally planned sequence of periods)
  - Posting run for a special period

Note that it is only possible to limit the run to specific assets in a repeat run.

4. Create the depreciation posting session by starting the report (*Program* → *Exec. in background*).

See the objects below for more information on

- The start parameters of the report: [Depreciation \[Page 500\]](#)
- The Customizing settings required for depreciation posting: [System Settings for Posting Depreciation \[Page 118\]](#)
- Correcting handling errors when creating a batch input session: [Handling of Errors During Depreciation Posting \[Page 505\]](#)



Due to performance concerns, you are required to create the depreciation posting run in background mode.

5. Check the report log (*Periodic processing* → *Depreciation run* → *Create log*).

Along with the batch input session, the report provides a list that identifies (per account group and per depreciation area)

- The planned annual depreciation
- The depreciation posted up to this period
- The depreciation to be posted in this period

This list also identifies

- Assets with errors and the reason for the error
- Accounts that are not defined

The comparison of the list and the posting documents is simplified because the document numbers assigned by the system are printed in the list. If the listing by totals

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**Periodic Posting of Depreciation**

- for the account group/depreciation area is not detailed enough, you can also request a listing by asset.
6. Process the posting session (*System* → *Services* → *Batch input*).
  7. Print the batch input log and check it for update errors.

## Handling of Errors During Depreciation Posting

### Use

Various handling errors can appear when the batch input session is created for the posting of depreciation, or when the session is processed for Financial Accounting. The causes of these errors and methods for handling them are outlined below.

### Checks During the Posting Run

After the start of the posting program, the system carries out various checks:

- First the system checks the posting period that has been entered. For a regular posting run, the posting period must follow the last posting period in chronological order.
- Then the system runs a plausibility check on the depreciation amounts to be posted. If an error is discovered, this does **not** lead to a termination of the posting program. The system continues to create the batch input session, and lists the assets with errors, along with the cause of the error, in the report log. The depreciation amounts for the assets with errors are not included in the batch input session.

Check the values for the assets with errors in the asset value display transaction and make the necessary corrections. You can post the depreciation for these assets to Financial Accounting, either through a repeat run or in the next planned depreciation posting run.

- Another important check criterion is the existence of the G/L accounts to be posted. If the system finds a G/L account that is not defined, it terminates processing. You must then first complete the account definitions. Then you have to restart the program using the restart option.

### Termination While the Posting Session is Being Created

The posting program may terminate while creating the posting session, because, for example, it came to an account that was not defined. The system then lists the account allocations that have errors in the log of the posting program for each depreciation area. After making the required corrections in Customizing, you must restart the program using the restart option. The program then continues processing in the asset database from the point at which it previously terminated. The program creates a new, complete posting session, including the data in the session that was terminated.

You no longer need the first posting session. If the first session still exists in the system in the status "Create", you can delete it. Do not process this incorrect session under any circumstances.

### The Batch Input Session is Destroyed (Recreate Session)

If errors cause a termination of the batch input session while it is processing, or if the session is accidentally deleted, you can recreate the batch input session (*Periodic processing* → *Depreciation run* → *Recreate session*).

In this case, the system only recreates those documents that were not already posted. That is, the recreation takes into account the fact that the posting session may have partially been processed before the termination.

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**Handling of Errors During Depreciation Posting**

The prerequisite for the correct restart or recreation of a session is, however, that you have not made any Customizing changes in the meantime to the depreciation posting rules or the number range for the depreciation document type. Furthermore, you cannot have made any changes to any additional account assignments in the asset master record (such as order or cost center).

**Session with Incorrect Customizing Definitions**

If you have created a posting session in a system that has errors in its Customizing settings (for example, incorrect account allocations), you are nevertheless required to process the session. Otherwise inconsistencies will result between the general ledger and the subsidiary ledger, Asset Accounting. Make any necessary corrections directly in the general ledger after the session has processed.

## Parallel Valuation

### Purpose

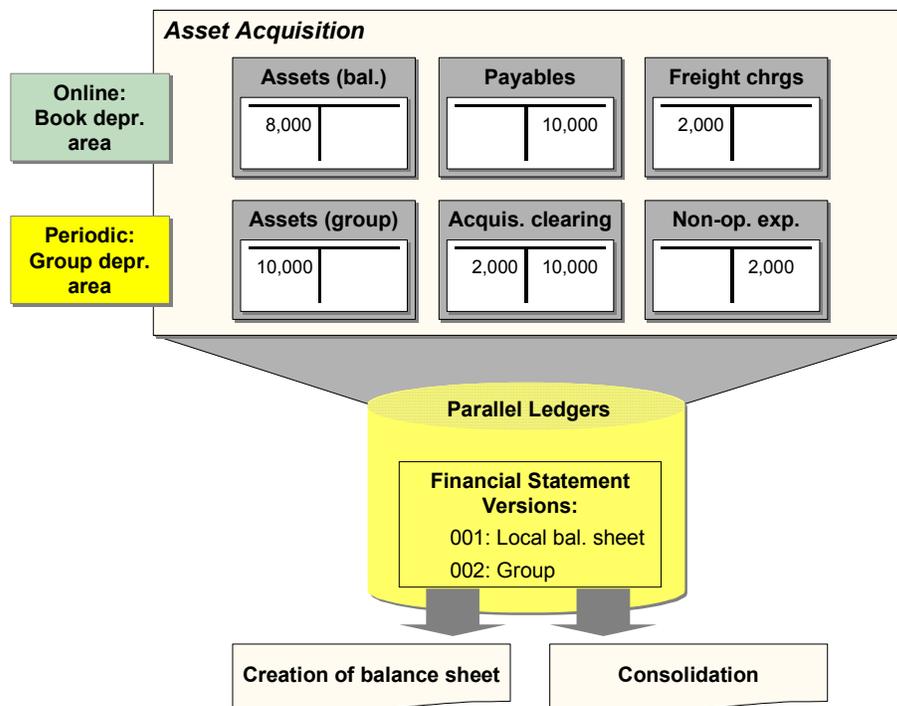
Alongside the posting of depreciation (using the depreciation posting run), the most important periodic processing you perform is the posting of changes to asset balance sheet values. These changes consist of all postings that affect the APC of the asset, including acquisitions, retirements, and so on.

You need to post changes to asset balance sheet values from more than one depreciation area to the general ledger, if one of the following applies:

- You need to create different balance sheet versions, for example, for internal and external purposes. You can define any number of balance sheet versions per chart of accounts in FI (General Ledger) for this purpose.
- You have a group depreciation area in a foreign currency, and you need to post changes to asset balance sheet values from this area to the ledger of the corporate group (see below).
- You calculate special reserves for special depreciation in a derived depreciation area. (This is common in Germany in depreciation area 03 of the standard chart of depreciation.)

### Process Flow

At the present time, **online** automatic posting to Financial Accounting is only possible for one depreciation area. It is therefore necessary that changes to asset balance sheet values (transactions) from other depreciation areas be posted to the respective G/L accounts on a **periodic** basis.



### Parallel Valuation

## Parallel Valuation



These G/L accounts that you post to periodically are not permitted to be reconciliation accounts (per the indicator in the master record for the account).

## Batch Input Session

Using a report (*Periodic Processing* → *Periodic Posting*) you create a batch input session. When the *Post assets periodically to General Ledger* indicator is set in the definition of the depreciation area, this batch input session posts all changes to asset values (APC) from these depreciation areas to the respective G/L accounts. When you process the batch input session created, the system posts the APC transactions to the accounts in the account determination of the depreciation area.

The report generates one document for each month. This document has a line item for each account or business area. These line items are created in the same way as those for the online posting transaction.

The field status of the G/L account is the determining factor for whether the cost center, profit center, order, or consolidation transaction type are taken into account.

## Start Parameters

When starting the report, you can enter only the company codes, **not** the periods to be posted. The report always posts all transactions that took place up to the start date of the report, and which were not yet posted to the general ledger.

Always carry out the report using background processing, in order to improve system performance. Therefore, start the report as a background job. In the report selection screen, choose *Program* → *Execute in background*.



The accounts for parallel valuation are not permitted to be reconciliation accounts.

## Corporate Group Ledger

The system always uses the consolidation transaction type from the originally used transaction type when both of the following apply: the system is posting a transaction affecting APC values and this transaction is from a depreciation area for parallel valuation that is posted periodically to the general ledger.

The system requires the posting amount both in the foreign currency and in the local currency for the group consolidation. Therefore, for APC postings, the system posts the amount in group currency from the group depreciation area to the corporate group ledger, in addition to the amount in the local currency from the group depreciation area managed in local currency. For more information, see [Requirements for Consolidation \[Page 206\]](#)

## Special Reserves

There are also derived depreciation areas that do not manage acquisition and production costs, but that are used for creating special reserves (for example, area 03 special tax depreciation for Germany). These depreciation areas also have to be posted periodically as parallel valuation. For these derived areas, the program posts the proportional value adjustments resulting from retirements, transfers, post-capitalization, and so on.

Parallel Valuation



An asset has the depreciation areas 01-book depreciation, 02-tax depreciation, 03-special depreciation (derived from 02 minus 01). You post a complete retirement to this asset (asset value date 12/31). The acquisition and production cost was 1000, the asset has a useful life of 10 years, and is in the 4th year of use. The three depreciation areas would then have the values below:

Area	01	02	03
APC	1000	1000	0
Prop. accumulated depreciation	-300	-600	-300
Prop. depreciation current fiscal year	-100	-50	50
Current book value	600	350	-250

The system posts the 600 being retired from the book depreciation area online automatically within the framework of the retirement transaction. No automatic posting takes place for area 02. The write-off of the special reserve amount of -250 is carried out by the periodic posting of changes to asset values in area 03.



For more information on parallel updating of depreciation areas in the general ledger, see [Depreciation Areas \[Page 65\]](#).

## Automatic Posting from Depreciation Area to General Ledger

## Automatic Posting from Depreciation Area to General Ledger

### Procedure

1. Check if the *Asset values during fiscal year* indicator is set for periodic posting in the definition of the depreciation area to be posted automatically (*Customizing: Valuation → Depreciation Areas*).
2. Check whether the account assignments are set up for the area that you want to post automatically (*Customizing: Integration with the General Ledger → Assign G/L Accounts*).
3. Create a batch input session with the values to be posted automatically (*Periodic processing → Periodic posting*). If necessary, start the program in test mode first.
  - Limit the report as needed.
  - Enter a document type.



For performance reasons, the posting program should be run as background processing. Therefore, start the report as a background job (in the selection screen of the report: *Program → Exec. in background*).

4. Process the batch input session created (*System → Services → Batch input*).
5. Create an asset history sheet for the depreciation areas affected (*Info system → Report selection → Balance sheet explanations → Asset history sheet*), and compare these values with the balances of the respective reconciliation accounts in Financial Accounting (*General Ledger: Account → Display balances*).

## Periodic Reports

### Purpose

There are a number of standard reports available for the analysis of asset transactions (see [Information System \[Page 252\]](#)). In most cases, it makes sense to bundle or to automate the creation of the reports for this type of analysis.

### Procedure

[Generating Periodic Reports \[Page 512\]](#)

## Generating Periodic Reports

### Procedure

1. Specify the scope of the report:
  - Determine the standard reports you need for your purpose.
  - Define the required sort versions (see [Sort Versions \[Page 263\]](#)).
  - Define report variants in the individual reporting transaction under *Goto*.
2. Bundle the reports in a background job (*System* → *Services* → *Jobs* → *Definition*).

## Physical Inventory

### Use

A physical inventory is the recording of the quantities and amounts relating to the asset portfolio. The FI-AA component provides the following functions to support the physical inventory:

### Process Flow

#### Inventory list

The system provides an inventory list to assist with physical inventory. You find this list in the standard Information System for Asset Accounting. You adapt the structure and sorting of the list to meet your specific needs. You make these modifications using standard ABAP Query (see [ABAP Query \[Page 275\]](#)). The list displays only those assets in which the inventory indicator is set in the asset master record,

#### Barcode

There is an additional report that enables you to print selected information from the asset master record together with a bar code. It is printed using a freely-definable SAPscript form. You can use the printout for labeling assets for individual identification. The barcode is unique for each asset, since it represents (in the standard system) the asset main number and sub-number.

SAP provides the standard form (formerly called layout set) FIAA\_0003. You can use this form, or use a copy of it as the basis for defining your own form (see the Implementation Guide: *Information System* → *Define/assign layout sets*). The standard form contains the following text elements:

- Asset description
- Cost center of the asset
- Inventory number
- Asset main number and sub-number
- Barcode

Along with this master record information, you can use all fields in table ANLAV in your form. You can also have any fields in table ANLAV appear as barcode.



If you want to have the inventory number as barcode, rather than the asset main and sub-number, replace this line in the standard form

<BC>&ANLAV-ANLN1&-&ANLAV-ANLN2&</> with the line

<BC>&ANLAV-INVNR&</>.

#### Barcode Format

Various barcode formats are available in the SAP System (such as EAN 13). The standard form is set for the format BC\_CD39C. This format allows the barcode conversion of all alpha-numeric characters and the hyphen (**no** other special symbols).

## Physical Inventory

In order to change the barcode format (for example, to one with 128 codable characters), you have to change the character string <BC>. You make this change in the transaction for maintaining forms: *Change text elements*.

### Size of the Label

You can also determine the size of the label: Proceed as follows:

1. Choose *Change windows* in the transaction for form maintenance.
2. Choose *Edit* → *Main windows*.
3. Enter the number of labels you want in each row and column on each page (print area). The system then automatically creates the right size windows for the form. It uses the page format that is specified in the form header (such as 8 1/2 by 11).

Make sure that the printed contents of the label fit in the size label you have chosen. You can change the size of the font in the form window.

### Interfaces to Non-SAP Systems

There are various interfaces you can use to link inventory software to the SAP R/3 system (refer to [Inventory Interface for Non-SAP Systems \[Page 516\]](#)). These interfaces are particularly useful for returning inventory data, which was gathered using non-SAP software, to the R/3 System.

## Generating the Inventory List

### Procedure

1. Specify the scope of the inventory: Determine the company codes, plants, locations, and so on, in which the inventory should take place. Determine the employees who are to carry out the physical inventory.
2. Create inventory lists (*Info system* → *Report selection* → *Asset portfolio*) and distribute them to the employees carrying out the inventory:
  - Define a sort version that contains the relevant master data fields (for example, inventory indicator, location, room) as sort criteria.
  - Start the inventory list using this sort version.
3. Process the results of the inventory:
  - If an asset is missing, post a retirement. If an asset is found, post an asset acquisition.
  - For assets that have changed location, change the asset master record (for example, the location).
4. Enter the inventory date in the affected assets.

## Inventory Interface for Non-SAP Systems

### Inventory Interface for Non-SAP Systems

The R/3 System does not provide special functions for carrying out physical inventory (for example, for generating barcode data). However, it does provide standardized business application interfaces (BAPIs) that enable you to interface with inventory software. The interfaces allow you

- To transfer the current asset inventory data from the R/3 System to non-SAP software
- To import the data from the physical inventory back into the R/3 System, and trigger any necessary postings

The procedure for carrying out your inventory with the help of non-SAP software could look like this:

1. First the non-SAP system receives an overview of the fixed assets in the R/3 System. It gets this overview by calling the BAPI `BAPI_FIXEDASSET_GETLIST`, which provides information on all fixed assets managed in one company code in the R/3 System, or a subset thereof (for example, all fixed assets at a given location).
2. Then you carry out the inventory using the non-SAP system. Depending on the various possible results of the inventory, there are several possible scenarios:
  - The inventory results match the fixed assets data from the R/3 System. If this is the case, you can use the BAPI called `BAPI_FIXEDASSET_CHANGE` to update the inventory date in the asset master record.
  - The results of the inventory are not the same as in the R/3 System. For example, an asset is at a location different from the one stored in the R/3 System. If this is the case, you can use the BAPI called `BAPI_FIXEDASSET_CHANGE` in order to make the necessary changes (for example, to change the location) in the asset master record.
  - The inventory does not find the fixed asset. If this is the case, use the BAPI called `BAPI_ASSET_RETIREMENT_POST` in order to post a retirement on the basis of the results of the inventory.
  - The inventory finds fixed assets that were not recorded at all in the R/3 System. Using the BAPI called `BAPI_FIXEDASSET_CREATE` you can create fixed assets in the R/3 System. After creating the asset, you can use the BAPI called `BAPI_ASSET_ACQUISITION_POST` to post the asset acquisition, or `BAPI_ASSET_POSTCAP_POST` to post a post-capitalization.

For each BAPI that creates a posting (acquisition, post-capitalization or retirement), there is a corresponding BAPI that carries out all of the same checks as for the posting, but does not create a document. One example is `BAPI_ASSET_ACQUISITION_CHECK`. You can use these check BAPIs to find incorrect postings before they are imported into the R/3 System.



For more information on the specifications for the interfaces for these BAPIs, see the documentation for their function modules.

Also note that the use of these BAPIs is not restricted to use related to physical inventories. The same BAPIs can be used for other reasons in order to link Asset Accounting to non-SAP Systems.



## Fiscal Year Change

# Fiscal Year Change

## Purpose

From the point of view of the system, a fiscal year change is the opening of a new fiscal year for a company code. At the fiscal year change, the asset values from the previous fiscal year are carried forward cumulatively into the new fiscal year. Once the fiscal year change takes place, you can post to assets using value dates in the new fiscal year. At the same time, you can continue to post in the previous fiscal year. You find the fiscal year change program under *Periodic processing*.

## Process flow

The fiscal year change can only be carried out (even in test mode) for the new fiscal year. The earliest that you can carry out a fiscal year change is in the last month of the old fiscal year. You can choose any point in the new fiscal year for carrying out the fiscal year change. Before you can change to fiscal year YYYY, you must have already closed fiscal year YYYY - 2 (refer to [Year-End Closing \[Page 520\]](#)). You can have a maximum of two fiscal years open for posting at one time.

No business transactions can be posted in a new fiscal year before the fiscal year change. You can continue to post in the old fiscal year, even after the fiscal year change. The system automatically corrects any values that are affected by postings in the past.

## Background Processing

The fiscal year change has to be carried out as background processing for performance reasons. Therefore, start the report as a background job (in the selection screen of the report: *Program* → *Exec. in background*). You can carry out test runs with fewer than 1000 assets in the foreground.

## Error Log

The system carries out the fiscal year change for all assets, even if the assets have errors. The system provides statistics per company code for the assets that have been changed.

The system writes assets with errors to an error log and to a worklist (refer to [Tools \[Page 535\]](#)). You can access a long text for the error messages that appear (*Long text*).

In the case of program termination, you can repeat the fiscal year change as often as required.



You close the fiscal year for bookkeeping using the year-end closing program. After you run the year-end closing program, it is no longer possible to post in the closed fiscal year (refer to [Carrying Out Year-End Closing \[Page 522\]](#)).

## Procedure

[Carrying Out Fiscal Year Change \[Page 519\]](#)

## Carrying Out Fiscal Year Change

### Procedure

1. Choose *Periodic processing* → *Fiscal year change*.
2. Enter the company code and the new fiscal year.
3. Choose *Program* → *Exec. in background*.
4. Process the assets with errors that were identified during the fiscal year change (*Tools* → *Assets with errors*).

Make use of the long texts of the error messages that appeared.

## Carrying Out Fiscal Year Change

# Year-End Closing

## Purpose

The year-end closing is an annual balance sheet, an annual profit and loss statement, and an appendix with additional information (annual report), which has to be created to meet the particular legal obligations in each country. Before you can close a fiscal year in Financial Accounting from a bookkeeping perspective, you have to carry out preparatory measures in Asset Accounting.

## Process Flow

You use the year-end closing program to close the fiscal year for one or more company codes from an accounting perspective. Once the fiscal year is closed, you can no longer post or change values within Asset Accounting (for example, by recalculating depreciation). The fiscal year that is closed is always the year following the last closed fiscal year. You cannot close the current fiscal year.



(non-calendar fiscal year is not being used)

current fiscal year (current date): March 19xx

last closed fiscal year: 19xx - 2

=> you can close fiscal year 19xx - 1

## Background Processing

You have to carry out the year-end closing as background processing for performance reasons. Start the report, therefore, as a background job (in the selection screen for the report: *Program* → *Exec. in background*). You can carry out test runs with fewer than 1000 assets in the foreground.

## Updating the Base Insurable Value

The year-end closing also updates the base insurable value. For more information, see [Insurance Values \[Page 192\]](#).

## Checks

The system only closes a fiscal year in a company code if

- The system found no errors during the calculation of depreciation (such as, incorrectly defined depreciation keys).
- Planned depreciation from the automatic posting area has been completely posted to the general ledger.
- Balances from depreciation areas that are posted periodically have been completely posted to the general ledger.
- All assets acquired in the fiscal year have already been capitalized.  
Since this check does not make sense for assets under construction, you can prevent this check from being made for assets under construction by means of the asset class.
- All incomplete assets (master records) have been completed.

## Carrying Out Fiscal Year Change

The system lists any assets that do not meet the above requirements in the log of the year-end closing. The log also shows the reason for the errors.

### Reversing the Year-End Closing

If you closed a fiscal year too soon, and still need to make corrections, you can reset the last closed fiscal year in Customizing for *Asset Accounting (Periodic processing → Year-end closing → Reverse)*. Using this function, you can re-open the last closed fiscal year, either for selected depreciation areas in a company code, or for all depreciation areas in a company code. You do this by changing the field for the last closed fiscal year.



Be careful if you re-open a fiscal year only for certain depreciation areas, and you need to make adjustment postings only in these areas. You **cannot** use the standard transaction types for these postings, since the standard transaction types post to all depreciation areas. Instead, you have to define your own transaction types in Customizing for *Asset Accounting (Transactions)*, limiting them to the required depreciation areas.



For more information, see [Handling Errors during Year-End Closing \[Page 524\]](#)

### Procedure

[Carrying Out Year-End Closing \[Page 522\]](#)

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**Carrying Out Year-End Closing**

## Carrying Out Year-End Closing

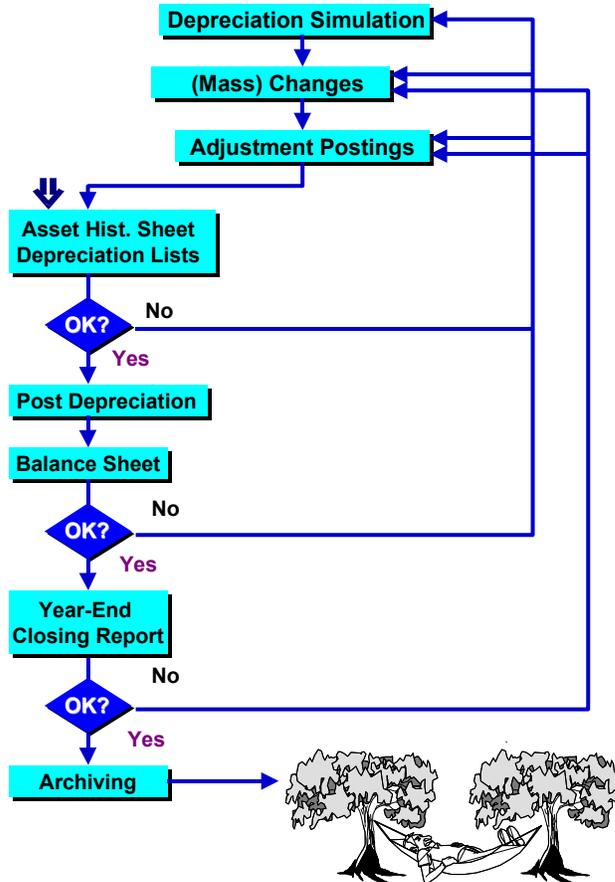
### Procedure

1. Determine the company codes that are to be closed.
2. Check what the last closed fiscal year was (*Periodic processing* → *Year-end closing* → *Reverse*).
3. Check whether all low value assets have been capitalized. If LVAs were collected in a profit and loss account, the balance from this account must be capitalized to an asset.
4. Settle all assets under construction that were completed in the fiscal year you want to close.
5. Start the program for recalculating depreciation (refer to [Recalculating Values \[Page 536\]](#)), in order to include any possible changes in the depreciation terms for assets in the fiscal year to be closed.
6. Run the last regular depreciation posting run. If the depreciation amounts changed since the last regular posting run, you can start additional posting runs for special periods (refer to [Periodic Posting of Depreciation \[Page 503\]](#)).
7. Run reports on the current asset values. Analyze whether these values meet the requirements of your accounting policy. If necessary, you can make adjustment postings within the latitudes allowed for asset values and for the inclusion of assets in the asset portfolio. Return to point 5.
8. Start the year-end closing program (*Periodic processing* → *Year-end closing*). The program blocks the current fiscal year to further posting to assets.
9. Create the necessary reports (for example, asset history sheet).

[Graphic: Year-End Closing - Flowchart \[Page 523\]](#)

## Graphic: Year-End Closing - Flowchart

The following graphic shows the year-end closing procedure in the form of a program flowchart:



## Handling Errors during Year-End Closing

# Handling Errors during Year-End Closing

## Use

The errors that can occur during the year-end closing are listed below, along with methods for correcting them.

### Errors Due to Depreciation Calculation

When there are errors in depreciation, choose the function *Recalculate values* in the master data of the asset (under *Edit* - refer to [Recalculating Values \[Page 536\]](#)). Either you now receive an error message with additional long text explanations, or the error is corrected by the recalculation. When the error has been corrected, it is possible that planned depreciation values could have changed. Therefore, carry out another depreciation posting run (repeat run or posting to special periods - refer to [Periodic Posting of Depreciation \[Page 503\]](#)).

### Planned Depreciation was not Posted Completely to the General Ledger

If depreciation was not completely posted, carry out a depreciation posting run (repeat run or posting to special periods).

### Balance Sheet Values were not Posted Completely to the General Ledger

In this case, carry out periodic posting of balance sheet values (refer to [Posting Asset Transactions from a Depreciation Area on a Periodic Basis \[Page 510\]](#)).

### The Capitalization Date was not Set

If the capitalization date was not set, check if all asset classes for assets under construction have been entered correctly in the initial screen of the year-end closing transaction. It is normal that assets under construction are not capitalized. When you enter the asset classes for assets under construction in the initial screen, these assets are exempted from the check to see if assets are capitalized.

If the assets with this error are not assets under construction, set the capitalization date manually in their master records. Then carry out a depreciation posting run.

### Errors in Updating the Base Insurable Value

The problem here is usually missing index figures for the fiscal year that is being closed. Maintain the missing index figures (see [Defining Index Series \[Page 418\]](#)). Go to master data maintenance for the asset. Go to the screen for the insurance data and choose the fiscal year change function. If you receive an error message, see the long text for more information.

### Index Series do Not Exist

In order for the indexed base insurable value to be updated, the index series have to be maintained for the fiscal year that is being closed. If the index figures are not available at the time of the year-end closing, then use estimated index figures. When the correct index figures are available, reverse the year-end closing and maintain the index series. Then carry out the year-end closing again.

## Incomplete Assets

Any incomplete asset master records that are identified during the year-end closing have to be completed. There is a special report for selecting the incomplete assets and analyzing the reason for incompleteness. This report is found under *Tools*. For more information, see [Processing Incomplete Assets \[Page 546\]](#)

## Primary Cost Planning

# Primary Cost Planning

## Purpose

For primary cost planning related to cost center accounting, you need to forecast future depreciation. Therefore, you can determine planned periodic depreciation and interest for any Asset Accounting depreciation area. The depreciation area has to be a real depreciation area, not a derived depreciation area. Using a special report (*Periodic Processing*), you can transfer this depreciation and interest to the Controlling (CO) component. There is an indicator in the report request screen you use to specify if planning should take place on cost centers or on orders.

## Process Flow

The way the system determines planned depreciation for this purpose is similar to the way it simulates depreciation. For more information, see [Depreciation Forecast \[Ext.\]](#) and [Depreciation Forecast with Planned Investments \[Ext.\]](#) and [APC Values for Planned Investments \[Ext.\]](#).

The transfer report plans the depreciation, using the appropriate cost element, on the cost center or order. The report **overwrites** any existing planned costs for this cost element (meaning that the new costs **are not added** to the existing costs). When you run the report in update mode and it is not possible for the report to transfer certain values, the report terminates and issues an error message. After you correct the error, you can restart the report for the original dataset. This does not present a problem, since the plan values that were already transferred are now overwritten (rather than being added to).

## Planned Investments

If you are using the Investment Management (IM) or Overhead Orders (CO-OPA) and Project System (PS) components, you can also include the simulated depreciation and interest derived from the planned values of investment measures and investment program positions, in addition to those of capitalized assets, in primary cost planning. You can choose whether the system uses the budgeted values or plan values as the APC for planned capital investments. You make this specification when you start the report. When the simulation is based on plan values, you can also specify the plan version to be used.

In order to carry out primary cost planning with planned investments, the requirements below must be met:

- Depreciation simulation data has to be entered in the master data of the order or WBS element or investment program position (master data maintenance is found under *Extras*).
- The planned investment has to have budget or plan values.

## Capitalizations in the Current Fiscal Year

The system bases the calculation of the APC basis for the depreciation simulation of planned investments on the plan values or budget values.

The system does not normally adjust these values for orders or WBS elements when part of the planned investment has already been capitalized (that is, settled to capitalized assets). For a depreciation simulation that includes capitalized assets and planned investments at the same time, this could cause problems. The system would include the plan or budget values from the

Primary Cost Planning

order or WBS element along with the values from the capitalized asset. As a result, the already capitalized values would be duplicated.

In order to prevent duplications, there are two options in the initial screen of the depreciation simulation for handling capitalizations in the current fiscal year:

- The report ignores the capitalization postings in the current year. As a result the simulation is always based on the asset balance sheet values at the start of the current fiscal year.
- The report excludes capitalization that has already been posted for orders and WBS elements. These amounts are not considered as part of the APC basis for the depreciation simulation.

You specify the method you want to use by setting that indicator in the initial screen before starting the depreciation simulation.

**Refer to:**

For more detailed information on the logic used for the calculation, refer to [Depreciation Forecast with Planned Investments \[Ext.\]](#) . Also refer to the field documentation for the related indicators.

**Determination of the Cost Center or Order**

For capitalized assets, the system plans on the cost center or order that is entered in the asset's time-dependent data, and which is valid during the planning time period. For planned investments, the system uses the cost center or order in the depreciation simulation data (the receiving cost center/order).

The assets, orders, and projects, for which the system cannot determine a cost center or order, are listed in the log under the cost center (or order) ??????????. This is a problem particularly for orders for which you have already entered explicit settlement rules. The system can no longer determine a cost center for these orders, since the settlement cost center is no longer available from the order master record. The system lists records under the cost center (or order) ?????????? in the log, but the values for these records are not included in the transfer to the Controlling (CO) component during an update run. You need to perform a manual follow-up, in which the costs from the log are planned for the desired cost centers.

**Activity Type**

You can request activity-type dependent and/or activity-type independent planning.

- **Planning only independent of activity type**  
 Planning takes place in the cost center, independent of the activity type. Any activity types in the asset master record are ignored.
- **Planning only dependent on activity type**  
 Planning takes place in the cost center, dependent on the activity type. Any asset master records without activity types are ignored.
- **Planning activity type dependent and independent**  
 Costs for assets with activity types are planned in the cost center, dependent on the activity type. Costs for assets without activity types are planned in the cost center independent of the activity type.

## Primary Cost Planning

### Distribution Key

If you specify a distribution key when starting the report, values are determined based on the time period specified in the from/to period. The values are then distributed according to the distribution key to the individual periods. If you do not enter a distribution key, the system determines the values individually for each period in the specified planning interval.

### Separation of Fixed and Variable Costs

It is basically possible to separate the depreciation of assets into fixed and variable portions (refer to [Depreciation for Multiple-Shift Operation and Shutdown \[Page 160\]](#)). This separation is also recognized in primary cost planning. The report calculates the pure fixed cost portion along with the total costs. The variable costs are determined, according to the definition, as the difference between these two values. However, the system only calculates fixed costs separately if the following requirements are met:

- You must have requested activity-type dependent planning.
- There has to be an activity type and a multiple shift factor specified in the asset master record. If the asset is not used in multiple shifts, you have to set a multiple shift factor of 1.
- The planning parameter that is entered must specify manual fixed cost planning that is activity type-dependent.

### Changing the Cost Center in the Asset Master Record

The assignment of the asset to a cost center may change during the fiscal year. When this happens, the system recognizes the period in which the change took place. The following should be kept in mind:

- The change of cost center has to take place at the end of one period or the beginning of the next.
- There are special considerations if primary cost planning takes place using a distribution key. You then have to sub-divide the period interval into smaller intervals, so that the change of cost center is always at the start of one of these smaller intervals. Start a separate primary cost planning run for each sub-interval.



You want to plan for an entire fiscal year for periods 1 to 12. Changes to the cost center took place on April 1 and October 1.

If you enter a distribution key when starting primary cost planning, you have to carry out three primary cost planning runs:

- For periods 1 to 3
- For periods 4 to 9
- For periods 10 to 12

If you do not enter a distribution key, then you only have to carry out a primary cost planning run for periods 1 to 12 at the same time.

### Limits

You can limit the selection of assets in the initial request screen for the report. Limitations according to company code, asset class, business area, cost center and plant apply to assets as

**Primary Cost Planning**

well as to orders or projects. Limitation according to location and asset super number applies only to assets. Also enter the depreciation area, from which the depreciation or interest that is being planned stems.

Enter the fiscal year, for which you are planning. The system determines the cost center/activity type for assets based on the cost center/activity type that is valid for the asset at the **end** of this fiscal year.

You can limit the planning to a given period interval in the fiscal year. If you do not make any limitation, the system plans for the entire fiscal year (from the first period to the last period).

**Procedure**

[Carrying Out Cost Planning \[Page 530\]](#)

## Carrying Out Cost Planning

### Procedure

1. Call up the report for primary cost planning (*Periodic Processing* → *Primary Cost Planning*).
2. Set up the standard limits of the logical data base for Asset Accounting.
3. Enter a depreciation area. The values from this depreciation area are used for cost planning. You cannot use a derived depreciation area (refer to [Derived Depreciation Areas \[Page 67\]](#)).
4. Limit the report:
  - Enter the controlling area/activity type for the transfer.
  - Specify whether you want to include planned capital investment measures.
  - Specify how you want to handle capitalizations in the current fiscal year.
  - Limit the periods to be planned.
  - Specify if you want activity type dependent planning, or activity type independent planning.
5. Specify how you want capitalizations in the current fiscal year should be calculated.
6. Start the report.

## Simulation

### Purpose

Simulation is the experimental changing of the depreciation parameters for all assets or for certain assets. When simulating the value development of assets, you can vary all of the important depreciation terms (depreciation key, useful life, index series). There are several different approaches that you can use:

- Simulation of values for a single asset by changing the depreciation parameters using the asset value display transaction. There are two main parameters that you can change:
  - Depreciation terms (depreciation key, useful life, and so on)
  - Transactions
- Simulation of depreciation for future fiscal years for groups of assets with the help of a special simulation report and a simulation version (refer to [Simulation Version \[Page 266\]](#)).
- Simulation of the accumulated depreciation from the past using a new depreciation area.



In addition, it is possible to include planned capital investments (orders/projects and capital investment programs) in the simulation.

### Procedures

[Simulating Depreciation of Individual Assets \[Page 532\]](#)

[Simulating Depreciation for Future Fiscal Years \[Page 533\]](#)

[Simulating Past Depreciation \[Page 534\]](#)

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**Simulating Depreciation of Individual Assets**

## Simulating Depreciation of Individual Assets

### Procedure

1. Determine the asset for which you want to simulate values.
2. Call up the asset value display transaction for this asset (*Asset* → *Asset value display*). In the initial screen, choose the function *Sim. dep. terms*.
3. Specify the depreciation terms for the simulation (depreciation key, useful life, and so on) for the asset. If you wish, you can also define a new depreciation key, or update the index series specified in the depreciation terms.
4. Start the simulation (*Enter*). Analyze the values displayed. You can follow the value development of the asset in future fiscal years (Function: *Next fiscal year*) and in different depreciation areas (Function: *Next area*).
5. Call up the asset value display transaction again and choose the function *Simulate trans.*
6. Create the posting entries for the transaction you want to simulate.
7. Start the simulation. Analyze the values displayed.

## Simulating Depreciation for Future Fiscal Years

### Procedure

1. Decide if you want to include planned capital investments in the simulation.
  - If you choose to include them, determine the orders or projects, or the investment programs, concerned.
  - Check the simulation parameters in the master records of the orders or projects (in the master data transaction of the components CO-OPA or PS or IM under *Extras*).
2. Check if there is already a simulation version that you can use (*Info system* → *Simulation version*). If necessary, create a new simulation version with the appropriate depreciation terms. If there is no appropriate depreciation key available, create a new depreciation key in FI-AA Customizing (refer to "Depreciation/Valuation Keys" in the Implementation Guide).
3. If necessary, modify the definition of the depreciation areas you want to use in FI-AA Customizing. This modification might be necessary, for example, if the definition of the depreciation area only allows for positive net book values, and you want to simulate depreciation below zero (refer to "Depreciation Areas" in the Implementation Guide).
4. Call up the report (*Info system* → *Report selection* → *Depreciation forecast* → *Several years*).
  - Make the required limitations (assets, orders/projects, capital investment programs).
  - Enter a simulation version.
  - Specify, if needed, that the depreciation amounts should only be simulated up to the planned retirement date of the asset (indicator in the initial screen of the report).
5. Start the report.

## Simulating Past Depreciation

### Procedure

1. In FI-AA Customizing, define a new depreciation area (refer to [Subsequent Creation/Deletion of a Depreciation Area \[Page 82\]](#)).
2. In the asset classes you want to simulate, maintain the depreciation terms for the new depreciation area according to what you require for your simulation.
3. Open the new depreciation area (*Tools* → *New depr. area*). Enter a depreciation area that is already active as a reference for the values in the new area.
4. Calculate values in the new area.

## Tools

### Purpose

You find the following activities in the FI-AA menu under *Tools*:

### Worklist

Using this transaction, you can create a worklist for mass processing of assets (see [Mass Changes to Master Data \[Page 538\]](#)). For this purpose, the system uses the standard asset list from Asset Accounting. Proceed as follows:

1. Start the asset list with the desired selections.
2. Choose the function *Worklist* in the resulting list display.
3. Enter the task for the worklist (mass retirement or mass change) in the resulting dialog box.



Note that this report only displays assets with an APC balance. If you want to select unposted assets you need to use the standard report “Unposted assets” (under “Day-to-day activities”).

### Mass Change Rule

For mass changes to master records you can define substitution rules. Use the application area “AM” and the callup point “4”. For more information on the procedure for defining substitution rules, see [Mass Changes to Master Data \[Page 538\]](#).

### New Depreciation Area

For more information, see [Subsequent Creation/Deletion of a Depreciation Area \[Page 82\]](#).

### Archiving and Reorganization

For more information on archiving and reorganization of asset data, see [Archiving in the R/3 System \[Ext.\]](#).

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**Recalculating Values**

## Recalculating Values

### Purpose

It might be necessary to recalculate planned annual depreciation in certain company codes or for individual assets. This might be necessary if:

- You have changed depreciation keys.
- You have made mass changes that you programmed yourself, and these changes affected data relevant to depreciation.
- You want to calculate subsequent revaluation (after the legacy data transfer is closed) using current index figures. In order to correctly calculate replacement values, however, you can only use index series that calculate historically.

Start the program for the recalculation of depreciation (found under *Tools* → *Recalculate values*). This program enables you to recalculate planned annual depreciation using the depreciation terms that are valid at the time that you start the report. You can also run the report in test mode. However, you can only recalculate planned depreciation for fiscal years that are still open.

After the system recalculates the planned annual depreciation, it creates a statistical log with the total number of assets processed and the number of assets with errors. You can check the assets with errors using the asset value display transaction.

The depreciation posting program corrects the periodic depreciation for the fiscal year. It does so by correcting the depreciation in periods that are still to be posted in the fiscal year. To determine this depreciation, the system uses the newly calculated annual depreciation and the periodic depreciation that has already been posted.



For performance reasons, the depreciation recalculation program should only be carried out as background processing. Therefore, start the report as a background job (in the selection screen of the report: *Program* → *Exec. in background*).

## Mass Processing

### Use

The following objects describe accounting transactions that are normally carried out using individual processing, but for which you also have the option of using mass processing.

## Mass Changes to Master Data

# Mass Changes to Master Data

## Purpose

The Asset Accounting component provides a function for mass processing of freely definable changes to asset master data. The system carries out these changes automatically to a large extent. This type of mass asset change might be necessary in the following cases:

- When there is a change to the cost center plan, you have to change the cost center assignment of all assets affected.
- As part of year-end closing, you have to change depreciation terms.
- Following the legacy data transfer, you have to make entries in certain asset master data fields that could not be copied from your legacy system.
- You made a change at the asset class level. Changes at this level affect only those assets that are created after the change was made. Therefore, you have to make this change in the already existing assets.



In order to carry out a mass change, you need the normal authorization for asset master data maintenance, as well as authorization for authorization object A\_PERI\_BUK (authorization for periodic processing) with activity 40. This authorization is contained in the standard profile A\_ALL.

## Process Flow

The mass change process has three levels:

- Defining the change rules
- Selecting the assets, and entering them in a worklist
- Checking and correcting the worklist, and releasing the worklist (= execution of the mass change)

## Defining the Change Rules

You define the change rules using substitution (in Customizing for *Asset Accounting* under *Master Data* - also refer to [Validation and Substitution \[Page 226\]](#)). The change rules determine under which circumstances which master data field should receive which new contents. When you create a worklist for mass change, you have to enter a substitution rule. When the worklist is processed, all the assets in the worklist are changed according to the defined rules.

For more information on substitution rules, see the documentation in the FI-AA Implementation Guide under *Master Data*. The procedure for defining a substitution rule is described there.

The following graphic shows the Customizing definition of a substitution rule. In all assets with cost center 4711, the cost center should be replaced by cost center 8936.

Mass Changes to Master Data

Substitution **COST 1**

Step **001** **Change cost center 4711 to 8936**

Precondition

ANLZ-KOSTL = '000004711' More ...

Continue

Replacement (when condition is met)

Field	Constant value	Sub. Exit
Cost center	8936	

Entry 1 of 1

Definition of conditions using Boolean logic

Constant value or programexit, if condition is met

**Substitution Rule**



Please note that when you make a change to time-dependent data (such as the assignment to a cost center), you always have to enter the time interval (valid from/to date) in the substitution rule. When you enter a new *valid from* date in the substitution, the system automatically opens a new time interval. You can only change one time interval in each mass change. It is **not** possible to change in several time intervals in parallel.

Also note that when you make changes to the depreciation terms, you also have to enter the depreciation area (AFABE) in the condition.



[Definition of a Substitution \[Page 541\]](#)

**Selecting Assets**

You have to select the assets that you want to change. You make this selection using any standard report in the Asset Information System. Select using the report under *Tools* → *Worklist* → *Generate*, or use any other standard FI-AA report. Then place the selected assets in a worklist (function *Create worklist* in the list display of the report). Note that you can only select assets from a **single** company code.

The function *Dynamic selections* in the report selection screen allows you to further limit the selection. In addition to the standard reporting selection criteria, this function allows you to use all the fields of the general data part of the master record as selection criteria. Using these selection options, you can select the assets for the change according to your own specific requirements. You can add individual assets to a worklist (under *Environment*):

- From within the asset master data transaction

### Mass Changes to Master Data

- From within the asset value display transaction
- During later processing of the worklist



The report for creating a worklist only shows assets that have APC amounts. In order to select assets that have not been posted, you have to use the standard report for unposted assets (under *Day-to-day activities*).

### Documenting the Mass Change

The system documents the mass change to master data using change documents, just as it does for manual changes. You can enter the number of the worklist as a selection criteria in the standard report for displaying master data changes. The report shows all changes that were made using a mass change. It also shows the user who processed the mass change.

### Procedure

[Carrying Out Mass Change \[Page 542\]](#)



You can also include more than one person in carrying out a mass change to asset master data. Using this method provides you with an opportunity for additional checks by other members of your enterprise. For more information, see [BC Workflow Scenarios in the Applications \[Ext.\]](#).

The workflow scenario “Mass changes to asset master data” (including more than one person) is active as soon as a user is assigned to the standard activity “Correct worklist” (FI-AA Customizing: *Preparing for Production Startup → Management of Authorizations*). On the other hand, you have to make sure that this activity is **not** assigned to a user, if you do not want to use workflow and instead plan to use the procedure described above.

## Definition of a Substitution

The following example shows a substitution rule for changing the cost center in the asset master record. The cost center should be changed for all assets in the asset class 1000 as of 1/1/1996 from "QKI" to "1", if "QKI" is the valid cost center after 12/31/1995:

**Precondition:**

ANLA - ANLKL = '00001000' and

ANLZ - KOSTL = 'QKI ' and

ANLZ \$BDATU > '19951231'

**Substitution** (when the condition is fulfilled):

Cost center: 1

Valid from: 01/01/96

Note that the *Valid to* date (BDATU) in the condition has to be entered in the year/month/day form.

## Carrying Out Mass Changes

## Carrying Out Mass Changes

### Procedure

1. Define a substitution rule for the mass change (*Tools* → *Mass change rule*)
  - Choose *New entries*. Then enter the company code, a number and a description for the substitution.
  - Choose *Goto* → *Substitution*. Choose *Substitution* → *Create*.
  - Define a substitution step (*Insert entry*). In the resulting dialog box, you have to select the fields that should be changed in the substitution step.
  - Define the conditions for the substitution. Enter the values that you want the fields to adopt when the conditions are met. The system assists you in creating substitution rules with the function *Flds in Bool. stmtnt*. Refer to the F1 help for the syntax of the substitution conditions.
2. Select the assets that are to be changed. Either start any standard FI-AA report, or use the function *Tools* → *Work list* → *Generate*. Start the report with the appropriate limitations. Please note that you can only enter one company code when making selections.
3. Select the function *Create worklist* in the list display. Select the standard purpose "Change master record."
4. In the next dialog box, select the substitution rule that you want to use for the mass change.
5. Choose *Tools* → *Worklist* → *Edit*. Enter the number of your worklist and choose *Execute*.  
You can enter individual assets in the worklist or delete them under *Edit*. You can also include complete worklists in the worklist under *Add to worklist*.  
Under *Change worklist header*, you can change the substitution rule for the mass change.
6. Release the worklist (*Release*).
7. Check the status of the worklist (*Refresh screen*). The following statuses are possible:
  - Ready (was created, but not yet processed)
  - Accepted (being processed, but not yet released)
  - Ended (all assets were changed correctly)
  - With errors (the change could not be made for at least one asset because an error occurred)
8. Check any errors that occurred during the mass change to master data (*Edit* → *Display error*). Correct the errors. Use the long text of the error message as a help.  
Create and process a new worklist for the assets that had errors.
9. Check the results using the change document list (*Info system* → *Report selection* → *Preparations for closing*).

## Mass Retirement

### Use

When an enterprise sells a large portion of the asset portfolio (such as a plant or a building), it is necessary to post the retirement of all the individual assets which make up the whole. Since the number of assets involved can be extremely high, the FI-AA component makes it possible to carry out the retirement using mass posting.



In order to carry out a mass retirement, you need the “normal” authorization for asset transactions, as well as authorization for the authorization object A\_PERI\_BUK (authorization for periodic processing) with activity 40. This authorization is contained in the standard profile A\_ALL.

### Process Flow

The selection of the assets involved and the basic procedure for mass retirement is carried out using the same functions as a mass change to asset master data. You use a work list (refer to [Mass Changes to Master Data \[Page 538\]](#)). When you create a worklist for mass retirement, you have to enter the purpose as either “retirement with revenue” or “retirement without revenue (scrapping).” You also have to make these entries needed for posting the mass retirement:

- Posting date
- Transaction Type
- Revenue and type of revenue distribution

The rest of the procedure for mass retirement corresponds to the procedure for a mass change (refer to [Mass Changes to Master Data \[Page 538\]](#)).

### Revenue Distribution

The revenue for the assets sold can be distributed to the affected assets in one of the following ways:

- Proportional to the book value of the affected assets
- Proportional to the acquisition and production costs of the assets
- Individually using a customer enhancement project (or manually)

The name of the enhancement project is WFOB0001. For more information, see [Revenue Distribution for Mass Retirement \[Ext.\]](#).

### Manual Distribution of Revenue

In worklists for individual distribution of revenue, you also have the option of entering the revenue individually for each asset while you are processing the worklist (*Change revenue distribution*). In this case, you do not need customer enhancement project WFOB0001. The revenue determined by the system for each asset is then initially zero. You can manually change this value to the value you want.

You can change a worklist to allow individual distribution of revenue after the worklist has already been created. Choose *Edit* → *Change header*. In addition, you can manually change the total

## Mass Retirement

revenue at the same time. When you save the worklist, the system recalculates the revenue for each asset based on the type of revenue distribution.



It is also possible to carry out mass retirement (like mass changes to master data) using R/3 Workflow. Using this method provides you with an opportunity for additional checks by other members of your enterprise. For more information, see [Workflow Scenarios in Applications \[Ext.\]](#)

The workflow scenario “Mass retirement” is active as soon as a user is assigned to the standard activity “Correct worklist” (FI-AA Customizing under *Preparing for Production Startup* → *Management of Authorizations*). On the other hand, you have to make sure that this activity is **not** assigned to a user, if you do not want to use workflow and instead plan to use the procedure described above.

## Mass Transfer

### Purpose

If you want to change the company code of a large portion of the asset portfolio (such as a plant or a building), it is necessary to post the transfer of all the individual assets which make up the whole. Usually the change of a company code results from organizational restructuring of the enterprise. Since the number of affected assets can be very large, the FI-AA component makes it possible to make the necessary postings using mass processing.

### Features

Mass transfer, like mass retirement, is based on the Workflow functions of the R/3 System (refer to [Mass Retirement \[Page 543\]](#)). The selection of the assets is carried out using a worklist, as it is for mass retirement. When you create the worklist, you have to enter the purpose as *asset transfer*. You also have to make these entries needed for posting the mass transfer:

- Posting date
- Transfer variant
- Revenue

In addition, you can enter **one** target asset for the transfer. The system transfers the values of **all** sending assets to this one asset. If you **do not enter a target asset**, the system creates one receiving asset in the target company code for each sending asset, and transfers the values of one sending asset to each new asset.

## Processing Incomplete Assets

# Processing Incomplete Assets

## Use

Incomplete assets are assets that have been entered in the system, but in which important master data was not entered (primarily account assignment information and required entries). This kind of asset could have been entered under one of these circumstances:

- When an investment measure is created, the system automatically creates an asset under construction. For some reason, the system could not automatically supply all the necessary default values for the asset under construction (refer to: [Investment Management \[Ext.\]](#)).
- When creating an asset from another component, either from within a purchase order or from the settlement rules of orders or WBS elements, assets were not entered with all of the necessary information.
- The incomplete asset was entered using an asset view that allows only limited access to asset master records (see [Master Data Maintenance with Asset Views \[Page 218\]](#)).

## Degree of Completeness

An asset can be considered complete to the degree listed below. The possible levels of completeness are:

- The asset is complete (all required fields defined in the screen layout are maintained).
- The asset is incomplete, but can be posted (all account assignment information is complete).
- The asset is incomplete and cannot be posted.

## Limitations on Incomplete Assets

You must complete any incomplete assets. Incomplete assets are therefore subject to these limitations:

- You cannot retire an incomplete asset (retirement posting is not possible).
- You cannot close the fiscal year in Asset Accounting for the company code in which incomplete assets are found.
- The system does not post depreciation for incomplete assets.

You can post acquisitions to incomplete assets. However, either the business area must have been entered in the asset, or else your enterprise does not create business area balance sheets (according to the definition in the FI General Ledger).

You can define your own checks for posting to incomplete assets by using validations (see [Validation \[Page 241\]](#)).

## Process Flow

If you are using the R/3 Workflow component, the system automatically creates a worklist of incomplete assets. This worklist is sent to the R/3 Mailbox of the responsible user. For more information, see [Workflow Scenarios in Applications \[Ext.\]](#).

**Processing Incomplete Assets**

As an alternative, you can use a special report (under *Tools* → *Problem analysis*) for selecting incomplete assets. This report lists all incomplete assets, in any number of company codes, and provides detailed information about why they are incomplete. In this way, the report helps you to determine the reason the asset is incomplete, and to make needed corrections. There could be assets for which the reason for their being incomplete no longer exists (for instance, because their screen layout control has changed). There is a function on the report display that allows you to indicate that these assets are now complete.

---

**Selecting/Correcting Incomplete Assets**

## Selecting/Correcting Incomplete Assets

### Procedure

1. Choose *Tools* → *Problem analysis* → *Incomplete assets*.
2. Enter the company code and the completeness indicator (1 or 2).
3. Start the report.
4. Set the status of those assets to “complete” that now meet the completeness requirements (Function *Correct incomplete assets* in the report output screen).
5. Start the report again.
6. Correct the remaining assets by correcting their incomplete fields (double click on the line in the report output screen).

## Problem Analysis

### Purpose

A report is available (under *Tools*) for analyzing problems which arise in the context of Asset Accounting. This report reads the summary data for assets and saves this in a table with a key.

### Selection Criteria

You need to specify the asset company code, the main asset number and the asset sub-number so that the system can find the asset data. This information identifies the asset precisely.

You also specify a key to enable the system to correctly access data stored in the table. Asset data is saved under this key and can be accessed later for the purpose of analysis. The key must begin with "FIAAUM" (the system default), which indicates the application "FIAA" and the report to which the data belongs ("UM" = asset summary). The user name should then follow. The remaining places (at least two) are freely-definable.

### Report Output

The report first checks whether the user has authorization to display the asset class to which the selected asset belongs, and for the selected company code. If the authorization is correct, the system outputs asset data (important master data, annual values, line items) and control data related to the specified asset.

G/L Reconciliation

## G/L Reconciliation

### Purpose

A reconciliation report (found under *Tools*) identifies inconsistencies between Asset Accounting line items and the balances of the various asset reconciliation accounts (for a specific account). This report can be used if differences occur between the general ledger balance list and the values shown in the asset history sheet. There two steps to the data analysis:

1. First the report compares the totaled line items and the calculated totals for each asset with the totals updated on this asset.
2. If no inconsistencies are found, the system then runs a comparison on document level. Asset line items created for each document number are totaled, and this total is compared with the total of document line items posted to this asset.

### Report Output

The report generates a list in which the inconsistencies are classified by error category and displayed with notes to help you remove the errors.

### Example

Consistency check in General Ledger and Asset Accounting

```
Asset no. Sub no. Doc no. log. syst. RfTyp Reference key
-----
```

```
Asset values not updated correctly
*****
```

```
30042      0
          
```

A precondition for using this report to analyze reconciliation problems is that line item management is active for the appropriate general ledger accounts. You can also activate line item management subsequently. If you do this, however, you will need to start report RFSEPA01 for the relevant account. This report generates the necessary line items at this later point in time, although line item management was not active originally.

## Settings for Special Valuations

### Purpose

The following activities may need to be carried out for special valuation of assets under certain circumstances.

### Unit-of-Production Method of Depreciation

If you want to use the unit-of-production method of depreciation, enter the total number of units (or the remaining output) and the actual quantity produced for each depreciation posting period. You make these entries for the depreciation key defined for unit-of-production depreciation. The system determines the depreciation amount based on the APC or the net book value and based on the values that you entered for the units of production. The depreciation key is dependent on units of production when its base method uses a depreciation calculation method for this type of depreciation (*No. of units/Total no. of units* or *No. of units/remaining no. of units*). Refer to [Unit-of-Production Method of Depreciation \[Page 162\]](#).

### Index Figures

You update of replacement values and insurable values in the system using index series (refer to [Special Valuation \[Page 167\]](#)). You define the features of the index series in Customizing for *Asset Accounting*. Specifying the current index figures is one of the tasks you should carry out periodically in Asset Accounting. You can specify index figures (to the day, if desired) for each defined index series under *Periodic processing*

### Generating Period Rules

When you assign the fiscal year variant to a given company code, the system generates the calendar assignment for the standard period control once for that company code. If you are using a year-dependent fiscal year version in Financial Accounting, therefore, you have to define the new calendar assignment for period control each year. You have to define it, at the latest, before the start of the new calendar year. There is a separate transaction for making this definition. This transaction generates the calendar assignment for standard period control when you enter the fiscal year variant and the calendar year.

### Dependent Period Control

You can define certain depreciation keys in Customizing that do not use the period control of the depreciation key itself. Instead they use period controls that are time-dependent and company-code-dependent. To define this type of depreciation key, set the *Period control according to fiscal years* indicator in their definition. You can define your own specific period controls for these depreciation keys

- Per company code
- Per fiscal year and
- Per transaction type category

### Maximum Base Values

In this transaction, you define a limited acquisition value as the maximum base value for the calculation of depreciation. For more information, see the Implementation Guide (IMG) for Asset

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**Settings for Special Valuations**

Accounting. Choose *Depreciation* → *Valuation Methods* → *Further Settings* → *Define Maximum Base Value*.



You define the maximum base value with a *Valid to* date. This time limitation refers to the capitalization date of the given asset, and is therefore unique for each asset. It is, therefore, **not** possible to assign different maximum base values to an asset in the individual years during its useful life.

## Processing Leased Assets

### Purpose

The “Leased Assets” scenario describes the management of leased assets from the standpoint of the lessee.

Leased assets create special accounting requirements for the lessee, as compared to assets that an enterprise purchases or produces itself. During the term of the lease, leased assets remain the property of the lessor or manufacturer. They represent, therefore, a special form of rented asset. Such assets are legally and from a tax perspective the responsibility of the lessor, and are not relevant for assessing the value of the asset portfolio of the lessee. However, in certain countries, you are nonetheless required to capitalize leased assets, depending on the type of financing.

This scenario makes it possible to handle different types of leased assets differently. Depending on legal restrictions, you can capitalize and depreciate leased assets (capital lease) or post their rent expense periodically to the profit and loss statement (operating lease).

The following objects describe the most important business transactions in the life of a leased asset from the lessee's point of view.



Special functions are being developed for transferring leased assets.

For further information on how to handle leased assets, see [Leased Assets \[Page 196\]](#).

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**Acquisition of Leased Assets**

## Acquisition of Leased Assets

### Purpose

The "acquisition of a leased asset" is considered for our purposes to be the entry of the leased asset in the FI-AA System. This does not necessarily mean that the leased asset must be capitalized. You can enter a leased asset simply to manage purely statistical data. You handle the leased asset as a master record, with no values in the book or tax depreciation areas.

Posting the acquisition of a leased asset may be necessary for one of the following reasons:

- You have received a new leased asset (goods receipt).
- You need to change the way bookkeeping is handled for a leased asset due to a change in the conditions of the lease.
- You need to post a leased asset to a new asset master record due to a transfer.

### Process Flow

Before posting the acquisition of the leased asset, you must determine the bookkeeping method to be used, either:

- Capitalization of the leased asset to fixed assets, with the present value of the future lease payments and depreciation of the present value (capital lease)
- Statistical management of the leased asset (no capitalization), and direct posting of the lease payments as rental expense in the profit and loss statement (operating lease)

### Procedures

[Posting the Acquisition of Leased Assets \(Capital Lease\) \[Page 555\]](#)

[Posting the Acquisition of Leased Assets \(Operating Lease\) \[Page 556\]](#)

## Posting Acquisition of Leased Asset (Capital Lease)

### Procedure

1. Analyze the lease according to the data required for valuation:
  - Amount of the lease payments (net, without input tax)
  - Number of payments
  - Payment cycle
  - Pre-payment or post-payment
2. Determine the cost-accounting interest rate for determining the present value (leasing factor).
3. Create the leased asset:
  - Choose an asset class, in which the depreciation areas for book depreciation and tax depreciation are both active.
  - Set up the corresponding field group in the asset master record for data relevant to leased assets (lease data, leasing partner). You can also enter additional statistical data regarding the leasing contract.
  - In the same field group, enter a leasing type for assets leased under the capital lease method.
  - Maintain the specifications for the depreciation area in the asset master record. It is especially important to enter the appropriate depreciation key (for example, LEAS).
4. Choose *Asset* → *Display* → *Asset* in the menu.
5. Choose the function *Opening posting* in the master record screen for leasing information. This function automatically creates the acquisition posting by
  - Capitalizing the leased asset with the present value of the lease payments
  - Creating the liabilities for the lease payments (with their due dates)

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**Posting Acquisition of Leased Asset (Operating Lease)**

## Posting Acquisition of Leased Asset (Operating Lease)

### Procedure

1. Analyze the lease according to the data required for valuation:
  - Amount of the lease payments (net, without input tax)
  - Number of payments
  - Payment cycle
  - Pre-payment or post-payment
2. Create the leased asset:
  - Choose an asset class, which has no active depreciation areas, or in which only the cost-accounting area is active.
  - Specify the conditions of the lease in the asset master record. This data is required in order to evaluate the leased assets using the corresponding standard report.
  - Enter a leasing type for the operating lease method.
  - Maintain the specifications for the depreciation area in the asset master record. In particular, make sure that only the cost-accounting depreciation area is active (no book or tax depreciation).
3. Post the asset acquisition using a transaction type that only posts to cost-accounting depreciation areas (020).
4. If necessary, post one-time payments as 'debit of invoice - line item, credit to vendor' (*Accounting → Financial Accounting → Accounts payable*).
5. In the General Ledger menu, manually create a recurring document for the lease payments according to the conditions of the lease (*Postings → Reference document → Recurring document*)

## Lease Payments

### Purpose

Regardless of whether the lease is treated as a capital lease or an operating lease, you are required to pay the periodic lease payments to the lessor (vendor). In the case of a capital lease, the corresponding liabilities are created within the framework of the opening posting. The offsetting account for the posting to the vendor is the asset control account.

For leased assets that are not capitalized, you need to create an appropriate recurring document.

### Procedure

[Posting Lease Payments \[Page 558\]](#)

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**Posting Lease Payments**

## Posting Lease Payments

### Procedure

1. Check whether you have carried out the appropriate opening postings for all leased assets that require capitalization (see [Posting the Acquisition of Leased Assets \(Capital Lease\) \[Page 555\]](#)).
2. Check whether you have created the appropriate recurring documents for all leased assets that are handled as operating leases,.
3. Start the payment program in Financial Accounting. (See the documentation for the Financial Accounting (FI) component in the R/3 library).

## Asset Retirement for Leased Assets

### Purpose

A leased asset can be retired for one of the following reasons:

- The lease expired or was canceled ahead of time.
- The leased asset had to be scrapped.

### Change in the Conditions of the Lease

There are two different cases that affect assets:

- The changes in the conditions of the lease allow for changing an asset that was capitalized (capital lease) to non-capitalized (operating lease).
- The asset remains capitalized, but the payment conditions make a new valuation of the leased asset necessary.

### Process flow

In both cases, you are required to retire the leased asset and then post an acquisition to a new asset master record.

### Procedures

[Processing the Expiration of the Lease \[Page 560\]](#)

[Scrapping a Leased Asset \[Page 561\]](#)

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**Processing the Expiration of the Lease**

## Processing the Expiration of the Lease

### Procedure

1. Check whether the leased asset was capitalized (capital lease). If the leased asset was not capitalized, all you need to do is delete any asset master record that may have been created for statistical purposes. As far as Asset Accounting is concerned, you do not have to carry out any other activities. However, you must close the rental agreement in Financial Accounting.
2. If the leased asset was capitalized, determine if the asset is being purchased, or if it is being returned. If the asset is being purchased, carry out an asset transfer (see [Posting the Splitting or Moving of an Asset \[Page 450\]](#)).
3. If the asset is being returned, post an asset retirement.
4. If the lease is canceled ahead of time, you must reverse the corresponding future liabilities that are due.

## Scrapping a Leased Asset

### Procedure

1. Take into account any possible insurance benefits.
2. Reverse the recurring document for the payment of the lease installments.
3. Post an asset retirement.