

Consolidation (EC-CS)



Release 4.6C



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Icons

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Consolidation (EC-CS)

Consolidation

Purpose

This application component features consolidation functions you can use for external (statutory) rendering of accounts as well as internal (management) reporting.

To do this, this component offers different [consolidation types \[Ext.\]](#) that are based on user-definable organizational units. Specifically, you can perform consolidation for companies, divisions, business areas or profit centers.

In the component, the consolidation types are represented by *dimensions*. For example, you can define one dimension for company consolidations and, at the same time, another dimension for profit center consolidations. Each dimension lets you process flexible and, when needed, parallel hierarchies of consolidation units and consolidation groups:

- *Flexible hierarchies* means that you can use any number of hierarchy levels, define these hierarchies in variable depths, and maintain these hierarchies easily and clearly.
- *Parallel hierarchies* means that you use different criteria for structuring the consolidation units of each type of consolidation (e.g., business area consolidation). For example, one hierarchy could have a structure of consolidation units as companies, another hierarchy could have a structure with business segments.

The component features the ability to use [different consolidation charts of accounts \[Ext.\]](#). For example, this lets you generate consolidated statements for both German HGB requirements as well as US GAAP – in parallel.

You can use [consolidation versions \[Ext.\]](#) to maintain different categories of data, such as actual data, prognostic data or budget data.

Integration

The application features integration functions with different SAP transaction modules that provide data for consolidation; this is available for the consolidation types company consolidation, business area consolidation and profit center consolidation. The integration functions enable the following:

- Generation of the organizational units of consolidation, based on the units in the transaction system.

There must be a clearly defined relationship between the organizational units of the transaction system and those of the consolidation system before an automatic transfer of data can take place.
- Automated collection of transaction data.

Several data transfer methods are available. A prerequisite for the collection of transaction data is that the data carried in local charts of accounts be converted for the aggregated chart of accounts in Consolidation. In some consolidation scenarios the transaction data can even be collected into different consolidation charts of accounts.

Features

- Different methods are available for transferring the transaction data to the Consolidation system. Which method you use depends on your consolidation scenario.

Consolidation

- You can post manual entries, for example to standardize the reported data to the group's methods of balance sheet valuations.
- You can use validations to check the consistency of the reported or standardized financial data.
- You can translate the reported financial data into the currency of the consolidation group.
- You can automatically execute the following consolidation tasks:
 - interunit eliminations (elimination of payables and receivables, elimination of revenue and expense, elimination of investment income)
 - elimination of interunit profit/loss in transferred inventory
 - consolidation of investments
 - reclassifications

The automated postings are controlled by the task settings you previously define in Customizing.

The logic of the consolidation tasks remains the same for all types of consolidation. For example, the system uses the same logic when executing interunit eliminations for either company consolidations or business area consolidations.

- You can generate reports using the standard tools in drilldown reporting, and the Report Painter or Report Writer of R/3. There are also existing reports for listing master data, additional financial data and the control parameters.

The entire consolidation process can be broken down into two areas: a) the collection and preparation of reported financial data, and b) the consolidation of the financial data. Both of these areas have their respective *monitor*, which you can use to maintain and execute all of the individual tasks.

Constraints

The automated execution of the elimination of IU profit/loss in transferred assets is not available in this release.

Execution of a Consolidation

Purpose

The "Consolidation using SAP Consolidation" scenario can be applied to various [consolidation types \[Ext.\]](#). The objective of a consolidation depends on the type of consolidation.

- A statutory (or legal) consolidation (such as company consolidation and business area consolidation) requires that the reported data of the group's consolidation units be aggregated into consolidated financial statements. This requires that:
 - the reported financial data be adjusted to meet the group's balance sheet valuations
 - the reported financial data be translated into the currency of the consolidation group
 - the data be purged of transactions arising from the delivery of goods and services between two consolidation units, as well as any investments in units of the same group
- Internal or managerial consolidations (such as profit center consolidation) are used for controlling areas of corporate enterprises. The main focus of the consolidation tasks is on the elimination of the effects of the delivery of goods and services within such enterprise areas. Let's take the "elimination of interunit sales of merchandise" as an example.

Prerequisites

The consolidation units must report their [financial data \[Ext.\]](#) so that it can be collected in the Consolidation system. There are different methods for transferring financial data into the Consolidation totals database. The method you choose depends on the organization of your corporate group and the systems it uses. The data can be:

- collected from SAP transaction-processing components using the integration feature
- entered off-line (decentralized) and transferred to Consolidation as a data file
- entered on-line directly in the Consolidation system

Note the following important prerequisites needed for error-free data collection.

Mapping

The financial data of the consolidation units is organized in operational organizational units and operational charts of accounts. When this data is transferred, these operational account assignments must be mapped to the account assignments used in the Consolidation system.

Subassignments

The Consolidation system needs account assignments, such as partner units, transaction types, transaction currencies and so on, in order to perform the consolidation tasks. For example, automated elimination of IU revenue and expense is only possible if the system knows which partner units caused the revenues and expenses.

You can define which subassignments each financial statement item needs in the item's master data. These subassignments must be included in the reported financial data.

Execution of a Consolidation

Creating an Initial Data Set

When implementing SAP Consolidation, data concerning your consolidation units usually already exists.

In online and offline data entry, there is basically no difference between transferring historical data and the data of the current period. During data entry in SAP Consolidation, you enter the cumulative value for the historical data.

However, to transfer financial data using integration you first need to create an initial data set. This is because integrated data collection updates the consolidation processing ledger or the consolidation staging ledger with operational (transaction-system) data. Before one of these ledgers is initially updated, you need to create an initial data set in that ledger with the account assignments relevant to consolidation. If the relevant historical documents are still in the system, you can subsequently post these in a separate journal entry.



Preparations for consolidation are needed to establish the requirements mentioned. For more information see the following chapters in the Implementation Guide for SAP Consolidation:

- [Data Collection \[Ext.\]](#)
- [Integration: Preparation for Consolidation \[Ext.\]](#)

Process Flow

A) Customizing

You use the Implementation Guide for Consolidation to customize the component to meet your individual requirements.

The standard SAP system includes default settings for most of the Customizing activities. Check each activity and decide whether you want to use the default settings. In particular, see if you can adopt the predefined [dimensions \[Ext.\]](#) and [consolidation charts of accounts \[Ext.\]](#). Many Customizing settings rely on these objects. Thus, if you use your own dimensions or consolidation charts of accounts, you need to adjust all of the dependent settings accordingly. There are copy functions to assist you.

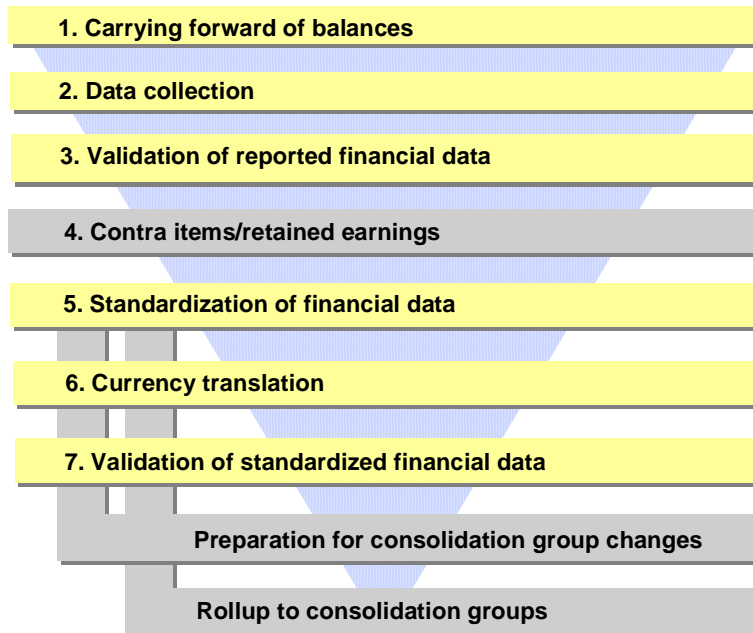
Note that master data for the organizational units can be maintained in the Implementation Guide as well as the application menu.

B) Collection and Standardization of Reported Financial Data

You execute the activities for collecting and standardizing the financial data reported by subsidiaries in the [Data Monitor \[Page 20\]](#) in the Consolidation application menu.

Basic Sequence of Activities in the Data Monitor:

Execution of a Consolidation



The tasks with gray backgrounds are additional tasks that are used in more complex consolidation processes.

1. You carry forward the prior year data into the current fiscal year.

This task is only needed if prior year data already exists in the totals database.

2. You transfer the reported financial data of the consolidation units.

The system writes the reported financial data in the consolidation totals database.

The system also requires additional financial data for the consolidation tasks "Elimination of Interunit Profit/Loss" and "Consolidation of Investments". Additional financial data contains information on:

- a) group-internal deliveries and inventories of assets (needed for the elimination of interunit profit/loss)
- b) investments in and equity of the consolidation units (needed for the consolidation of investments)

The system writes additional financial data in separate database tables – not in the totals database. You collect the additional financial data (as with reported financial data) using the data collection task. In some situations you also have the option to read the values from the execution of the consolidation of investments directly from the totals database.

In some cases, you may want to collect the additional financial data at a later point in time, namely shortly prior to executing the elimination of interunit profit/loss and/or the consolidation of investments. Although this is possible, you should keep in mind that if this done, the status management function resets the task for validating standardized financial data along with all subsequent tasks. Therefore, SAP recommends that you

Execution of a Consolidation

collect the additional financial data immediately after you collect the reported financial data.

3. You validate the reported financial data.

At this point it is not yet necessary to validate the reported financial data. The last task in the data monitor is the validation of standardized financial data in group currency. This last task is mandatory, meaning that the system ensures that this task is successfully executed prior to allowing tasks in the consolidation monitor to be executed (see below).

Nevertheless, it is useful to validate the reported data at this point if no consistency check has yet taken place in some other fashion.

4. If you used the integrated data transfer methods "realtime update" or "rollup" to collect reported data, you need to process the contra items and retained earnings.
 - a) If the balance of any items turned from a debit to a credit balance, or vice versa, this balance must be transferred to the assigned contra item.
 - b) Retained earnings (if the statement of retained earnings appears after the income statement) or annual net income (if retained earnings are stated in the balance sheet) must be calculated and posted to the selected items provided.
5. You post standardizing entries to the reported financial data, if needed. These entries can be posted manually or automatically (using "reclassifications").



An alternative is to also execute this task after currency translation.

6. If the reported financial data is valued in different currencies, you translate the data into the currency of the consolidation group.

In company consolidation, this is usually the currency of the parent company.

Sometimes it is helpful to translate the reported financial data at an earlier point for pre-reconciliations and the like. For example, you may want to pre-maturely execute interunit elimination in test mode to clean up any mismatches between the disclosed receivables and payables, etc. before the consolidation tasks are executed. To do a test run, the financial data must be translated, even if the data of some of the consolidation units has not yet been collected. In this situation, a test run of currency translation is insufficient because a test run of interunit elimination needs the group currency values in the totals database.

To enable this requirement, status management in the data monitor allows the execution of currency translation prior to the completion of data collection or other preceding tasks. Note that the system views such a premature currency translation as a preliminary currency translation. This means that another currency translation must take at the correct task sequence.

7. You validate the standardized financial data.

This task must be executed successfully before running any tasks in the consolidation monitor.

Parallel Activities:

Parallel activities may be helpful or even required at various stages in the data collection process:

Execution of a Consolidation

- If consolidation of investments processes consolidation group changes, for example, you can prepare the data for such activities using automatic postings.

Consolidation group changes result from acquisitions or divestitures of consolidation units. The automatic preparatory postings adjust the financial data as follows:

- The values of the balance sheet items of the acquired or divested consolidation units are broken down by subitems and transferred to the subitem "Acquisition to Consolidation Group" or "Divestiture from Consolidation Group".
- When dealing with acquisitions of consolidation units, the system takes the income statement items and transfers the portion for the periods prior to the acquisition to the item "Retained Earnings Prior to First Consolidation".

- You carry out a rollup to the consolidation groups, if needed.

To increase system performance, you may want to use the rollup feature to summarize consolidation unit data for the consolidation groups or consolidation group hierarchies. This can speed up reporting that uses the Report Writer. Rollups also speed up interunit eliminations.

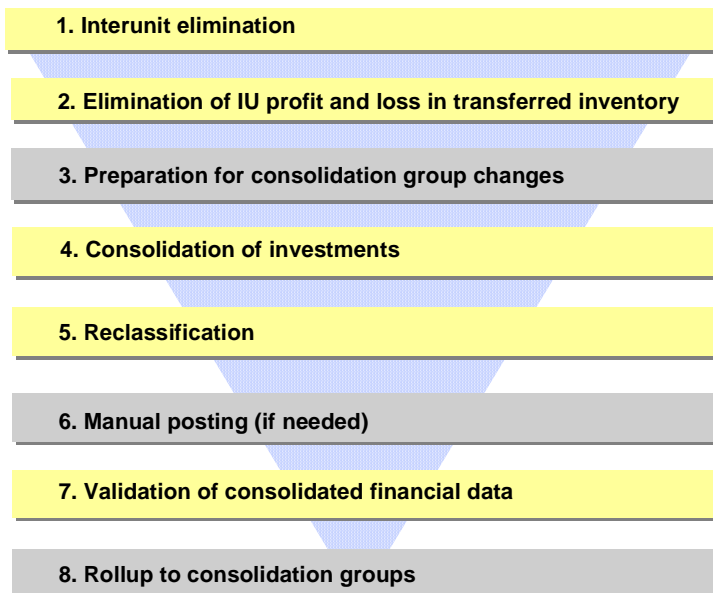
At which point you do this depends on which data is accessed in the Report Writer reports. To speed up interunit eliminations, you need to do a rollup at the end of the data processing, for example, prior to the validation of the standardized financial data.

C) Consolidation of the Financial Data

You remaining activities are executed in the [Consolidation Monitor \[Page 32\]](#).

Which tasks you run in the consolidation monitor depends on the type of consolidation involved and the resulting requirements (see also section "Purpose").

Example of the Activities in the Consolidation Monitor:



Execution of a Consolidation



The tasks with gray backgrounds are additional tasks that are used in more complex consolidation processes.

1. Interunit Elimination

This task eliminates group-internal receivables and payables, and group-internal revenues and expenses.

2. Elimination of Interunit Profit/Loss in Transferred Inventory

This task eliminates group-internal profit and loss. The elimination entries involved require additional financial data that provides information on group-internal goods deliveries and inventories. See section "B) Collection and Standardization of Reported Financial Data", Step 2.

3. Preparation for Consolidation Group Changes

If you run consolidation of investments that, for example, processes consolidation group changes, you prepare the consolidated data for such activities. See also section "B. Collection and Standardization of Reported Financial Data".

4. Consolidation of Investments

This task eliminates ownership relationships within the group. This task is needed particularly for the disclosure of consolidated financial statements that must meet statutory requirements.

The elimination entries involved require additional financial data that provides information on investments in and equities of consolidation units. See section "B) Collection and Standardization of Reported Financial Data", Step 2.

5. Reclassification

This task lets you reclassify data that has been consolidated.



Frequently, consolidated financial statements of a corporate group need to state the retained earnings of the parent unit within the group. You can use reclassifications to reclassify the retained earnings of subsidiaries as appropriations.

6. Manual Postings (if needed)

In exceptional cases it may become necessary to post manual entries to adjust the consolidated financial data.

7. Validation of the Consolidated Financial Data

After executing the consolidation tasks, you validate the consolidated data.

8. Rollup to Consolidation Groups

See also section "B. Collection and Standardization of Reported Financial Data".

Result

You can generate reports on the consolidated data and transfer the data for further processing elsewhere. In the SAP System, you can forward the data to the Executive Information System (EC-EIS) using the integration feature.

Data Monitor

Data Monitor

Use

You use the data monitor to run the activities for collecting and preparing the financial data reported by your consolidation units. In Consolidation, these activities are called *tasks*.

The system manages the status of the tasks and, thus, ensures a logical sequence and consistent data.

Prerequisites

In Customizing , you have defined a task group along with its tasks for the data monitor, and you have assigned the task group to the dimension (global task group).

In addition you have assigned one task group to one consolidation group or to several consolidation groups of the dimension, which includes a partial quantity of task groups. When you enter the consolidation group in the [global parameters \[Ext.\]](#), then the data monitor only shows the organizational units of this group and the tasks of the consolidation group dependent task group.

See also: [Data Monitor \[Ext.\]](#) in the Implementation Guide for Consolidation

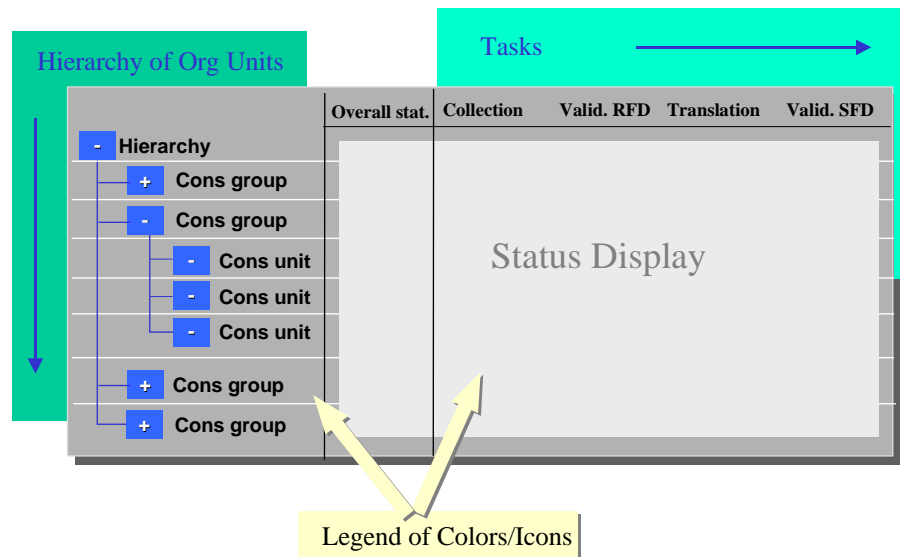
Features

Monitor Layout

- The monitor displays the hierarchy of organizational units vertically.
- The monitor displays the overall status and the tasks horizontally.
- In the resulting table, each organizational unit is shown with its overall status and the status of each related task.

- The legend (found in the menu of the monitor) explains the meaning of the colors and

Data Monitor



icons/texts.

Organizational Units

The data monitor displays the hierarchy of organizational units all the way down to the level of the consolidation units. This means that you can run the tasks for the consolidation groups as well as the consolidation units (also see the section *running the tasks*).

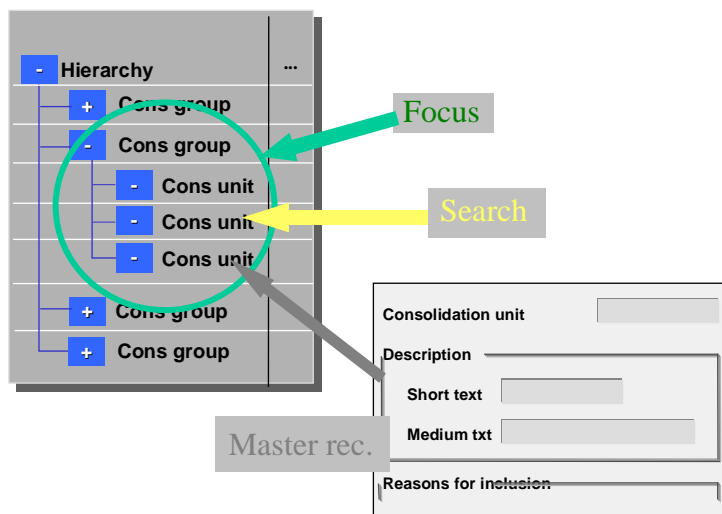


When you enter a consolidation group in the global parameters, then the monitor only displays the organizational units of this group as a hierarchy (as with the focus, see below). When you also enter a consolidation unit of this group in the global parameters, then the monitor displays the detail overview of tasks for this unit.

For a better overview of the organizational units to be processed, the menu contains the following functions:

- You can search the organizational units in the hierarchy.
- You can set the focus on a hierarchy, a group, or a consolidation unit, allowing you to only see these organizational units with their lower-level units.
By double-clicking on the hierarchy column heading, you can reset the focus (or via the menu).
- When you position the cursor on an organizational unit, then you can
 - double-click on it to go to its master record.
This can be very useful, when you want to look at the unit's assignments concerning the data transfer method, validations, currency translation method, and so on.
 - right-click to call up the detail overview of the status for the selected organizational unit

Data Monitor



Tasks

The monitor shows all of the tasks you defined in Customizing and assigned to the task group. The following is important when processing the tasks:

- **All tasks** in the task group **must** generally **be run** for each and every consolidation unit.
An exception is made for the tasks:
 - data collection tasks
 - manual posting tasks
 - tasks that are not relevant to a given consolidation unit (see later)
 In Customizing of the task group, specify which task should be the last task to be executed. When you include the task for validating the standardized financial data in the task group, then the system considers this task as the last task; in this case you cannot tag another task as the last task.
- There is a **mandatory sequence of certain tasks**. This ensures that these tasks are run in the correct sequence as required by the system.



For example, the collection of reported financial data must be complete before the data is validated, that is, the data's consistency is checked.

However, this mandatory sequence is only very broad. The details of the mandatory sequence depends on your specific requirements. Therefore, Customizing lets you further narrow down the mandatory sequence.




If you want to standardize the reported financial data to meet your corporate requirements, you can decide if this task is to be run prior to and after currency translation.

- The following tasks may be **irrelevant** for individual consolidation units:
 - Carrying forward of balances

This task is irrelevant for a consolidation unit if the database does not contain data for the prior fiscal year.
 - Currency translation

This task is irrelevant for a consolidation unit if the unit's local currency is the same as the group currency, or if the unit's data is entered in group currency.

The status of such consolidation units shows if the task is irrelevant and is therefore skipped.
- In Customizing you can determine certain tasks as **milestones**. In the monitor, these tasks are tagged with  in the column heading.

Milestones are used when tasks are run as a bundle. The system stops at each milestone, thus allowing the user to control further processing at that point. However you can run a task successively for the milestones (see also section *Executing Tasks*).

For further information on these Customizing activities, see the Implementation Guide of Consolidation at: [Define Task Group \[Ext.\]](#)

Layout Design

Depending on your group's structure and your consolidation requirements, the matrix in the monitor can become very large and somewhat unwieldy. In this case, you can use the following functions to modify the layout of the monitor:

- In the hierarchy of the organizational units you can:
 - set the focus (see also the section *monitor layout / organizational units*)
 - hide the names of the organizational units, and thus only show the IDs.
 - hide blank lines
- You can manipulate the task columns as follows:
 - scroll horizontally to hide the completed tasks and only show the incomplete tasks
 - hide columns to only show the overall task for the organizational units.
 - set the width, by moving the edges of the column with the cursor
- You can manipulate the status display as follows:
 - set a filter to only show certain statuses – e.g., only show all tasks with errors or with the overall status of *incomplete*
 - choose between icons and text
 - align the icons on the left or centrally
- You can save your user layout (see menu *Layout* or *Icons*). Then your layout settings are retained even when you exit the monitor and are available the next time you call up the monitor.

This concerns the following settings in particular:

Data Monitor

- Focus
- Expand hierarchy
- Status display
- Task display

Some of the saved settings are cross-dimensional, they are *icons/text*, *show/hide blank lines*, *icon alignment*, *reveal/hide tasks*.

Running the Tasks**Selection of the Organizational Units**

In the data monitor, you can run the tasks for each individual consolidation unit.

If you want to be able to run the tasks for the lower level consolidation units of an entire consolidation group, the system must be able to automatically execute the tasks of the lower-level consolidation units. Automatic execution is not possible for:

- the data transfer method *online data entry in the SAP System*
- the task *manual adjustment*



When you position the cursor on a task and right click with the mouse, then you receive a context menu. This menu is dependent on the status of the task. For example, when the task is blocked, then you receive the functions *Unblock* and if required *Last log* as the context menu .

-

Start Mode

You can run the tasks in the following modes:

- Test mode

You can execute test runs regardless of a task's status at any time.
- Update mode

You can run a task in update mode if the task has been opened and the preceding task is blocked (see *Status Management*).
- Update mode with pendent tasks

When you start a task in update mode and the preceding task is not yet blocked, then the system executes the pendent task (see *Status Management*).
- Initial Screen Start

You receive the initial screen start for the tasks in this mode, so that you can enter the selection conditions, the technical settings (test mode or update mode) etc.
- Run successive tasks

A consolidation run automatically triggers multiple executable tasks as a bundle. This feature speeds up the creation of your consolidated statements. The automatic processing stops at the next milestone.

The status bar of the SAP screen shows which task is being processed.

- Run successive tasks without stopping

The system does not stop before the milestone in this mode. Instead it closes the milestone task and moves on to the next task.



For tasks where the system generates a log (for example currency translation), you can call up the last log, by positioning the cursor on the organizational unit and right clicking the mouse.

Opening and Closing Periods

You can open and close periods of a fiscal year, to be precise always for a selected consolidation unit (with subordinated organizational units) or a consolidation unit.

Periods are generally kept open. The following table shows, which actions you can execute in the data monitor or in the consolidation monitor, so that according to the initial situation, you can close or open the period again.

Initial situation	Action	Result	
	in data monitor	in cons monitor	
Period open	-	Close period	Period closed in data monitor and cons monitor
Period open	Close data monitor	-	Period closed in data monitor, open in cons monitor
Period closed	Open period	-	Period open in data monitor and in cons monitor
Period closed	-	Open cons monitor	Period closed in data monitor, open in cons monitor

An authorization object exists for opening and closing periods, enabling you to assign the authorization to a specific circle of co-workers.

Further functions

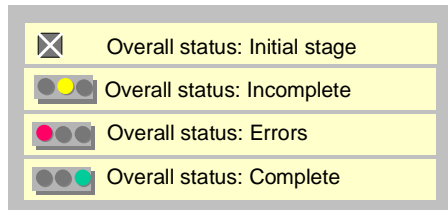
- You can go to the monitor in the database listing in order to check the totals record (menu *Go To*).
- You can go to the data monitor to the consolidation monitor and vice versa (menu *Go To*).

Data Monitor

Status Management

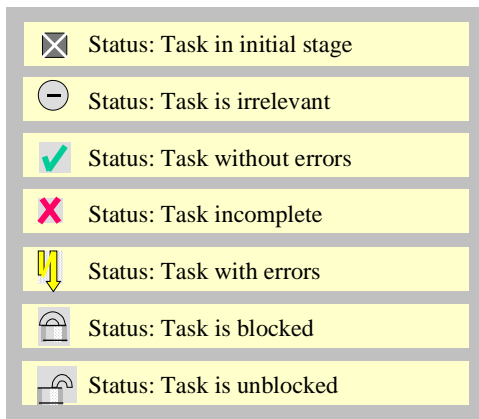
Overall Status

The monitor displays the overall status for each organizational unit. The overall status is portrayed using an *initial stage* icon and three traffic light icons, as illustrated here:



Task Status

As with the overall status, the monitor also displays the status of each task for each organizational unit. Tasks have the following statuses:



You can double-click a status to see more detail. This includes the user name, date and time of the last change.

Status Updating

- At the beginning of processing in the data monitor the status of all tasks are set to *initial stage* or *irrelevant*. When you run a task in update mode, the status is updated for the relevant organizational unit.
- When you run a task in update mode and the preceding tasks are not yet blocked, then the system sets the status *pendent task*. This means that you have to run the task again if you have blocked the preceding tasks.
- A task can only be blocked (see menu) if it was run without any errors and not pendent.

Data Monitor

An exception is made for the tasks *data collection* and *manual standardizing entries*. These can be blocked without having been run.

In Customizing, any task can be set to be automatically blocked after being run without errors. For example, this is useful for the task *validation*.

- A task must be unblocked before it can be rerun after being blocked. Note that this also automatically unblocks all "downstream" tasks. For example, if you unblock the task *data collection*, the tasks *validation*, *currency translation*, and so on are also unblocked.
- The system uses the same update logic for higher-level and lower-level organizational units, and for the overall status. This is illustrated below as follows:
- In certain situations you can reset the status to *initial stage* (in the menu). The system then also resets the statuses of the organizational units for the selected task as follows:
 - the status of the selected consolidation unit or group
 - the statuses of the lower-level consolidation units and groups
 - the statuses of the higher-level consolidation groups
- Another function for certain situations is the function for deactivating status management. This function is described in Customizing step [Check Global System Settings](#). This function is described in Customizing step [Check Global System Settings](#).
- When the status management is deactivated, you will receive a system message on activities in the monitor. You find this function in the step [Check Global System Settings \[Ext.\]](#) in the Implementation Guide. When the status management is deactivated then you get a system message with activities in the monitor. You can activate the status management from the monitor (menu *Environment*).

Example

The following graphics illustrate simple examples of status updating: Say, a user at the subgroup *Acme Pharmaceuticals* runs the tasks for the lower-level consolidation units. Note that some interim steps have been left out below.

The first graphic shows all tasks at the initial stage before any processing occurs.

	Overall	Collection	Valid. RFD	...
- Segments	⊗	⊗	⊗	
+ Consumer, Non-food	⊗	⊗	⊗	
- Pharma	⊗	⊗	⊗	
- Pharma-1	⊗	⊗	⊗	
- Pharma-2	⊗	⊗	⊗	
- Pharma-3	⊗	⊗	⊗	
+ Electronics	⊗	⊗	⊗	
+ Other	⊗	⊗	⊗	

The next graphic shows that the user executed the data collection task for two consolidation units. Note that the status of the subgroup *Pharma* is still *incomplete* because the task has not

Data Monitor

been executed for all consolidation units that belong to the group. The traffic light is yellow. Both of these statuses are reflected at the higher-level organizational unit *Segments*.

	Overall	Collection	Valid. RFD	...
- Segments				
+ Consumer, Non-food				
- Pharma				
- Pharma-1				
- Pharma-2				
- Pharma-3				
+ Electronics				
+ Other				

The next graphic shows that the user blocked the data collection task for both consolidation units and executed the task for validating the reported financial data.

	Overall	Collection	Valid. RFD	...
- Segments				
+ Consumer, Non-food				
- Pharma				
- Pharma-1				
- Pharma-2				
- Pharma-3				
+ Elektronics				
+ Other				

The next graphic shows that the validation for unit *Pharma 1* contained errors. This status is also reflected at the higher-level organizational units.

	Overall	Collection	Valid. RFD	...
- Segments				
+ Consumer, Non-food				
- Pharma				
- Pharma-1				
- Pharma-2				
- Pharma-3				
+ Electronics				
+ Other				

The next graphic shows that the user unblocked the data collection task in order to correct the reported financial data. Afterwards, the user must block the task again and rerun the validation task.

	Overall	Collection	Valid. RFD	...
- Segments				
+ Consumer, Non-food				
- Pharma				
- Pharma-1				
- Pharma-2				
- Pharma-3				
+ Electronics				
+ Others				

The next graphic shows that all tasks for the group *Pharma* ran without errors and have been blocked, which is reflected by the green traffic light.

Data Monitor

	Overall	Collection	Valid. RFD	...
- Segments				
+ Consumer, Non-food				
- Pharma				...
- Pharma-1				...
- Pharma-2				...
- Pharma-3				...
+ Electronics				
+ Other				

Executing Tasks in the Data Monitor

Procedure

All tasks start out in the "initial stage" status. Execute the tasks in the following order:

1. Place the cursor on the "initial stage" status that intersects between the desired organizational unit and the first task displayed.
2. Choose either the start mode (*test run*, *update run*, *run successive tasks*, *run successive tasks without stopping or initial screen start*). The following describes the *update run* mode.

The system carries out the task and displays an audit trail depending on which task is run.
3. Block the task after it is successfully executed.
4. Execute the next task, for example, online data entry of reported financial data and additional financial data.
5. Block the task and run the next one.
6. If a task, such as "validation", produces errors, you must correct the errors before attempting to block the task.

For example, you may have to unblock the data collection task. This will also unblock all of the "downstream" tasks.

7. Execute all of the tasks, including the task for validating the standardized financial data.

Result

After the task for validating the standardized financial data is executed and blocked, you can then execute further tasks in the consolidation monitor.

Consolidation Monitor

Consolidation Monitor

Use

You use the consolidation monitor to run the activities for consolidating financial statement data.

Prerequisites

In the Implementation Guide, you have defined the task group along with its tasks for the consolidation monitor, and you have assigned the task group to the dimension.

In addition you have assigned one task group to one consolidation group or to several consolidation groups of the dimension, which includes a partial quantity of task groups. When you enter the consolidation group in the [global parameters \[Ext.\]](#) then the consolidation monitor only shows this consolidation group (perhaps with subordinated consolidation groups) and the tasks of the consolidation group dependent task group.

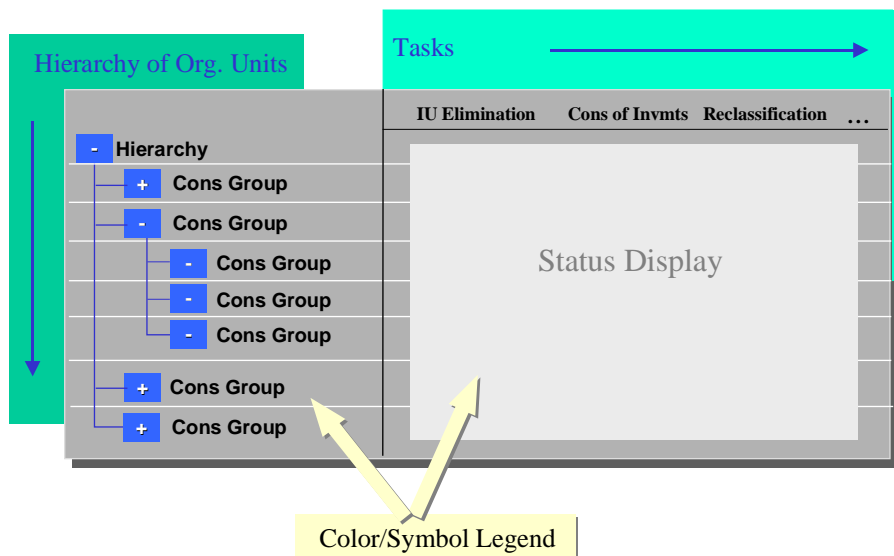
See also: [Consolidation Monitor \[Ext.\]](#) in the Implementation Guide for Consolidation

Features

The consolidation monitor has essentially the same features as the [Data Monitor \[Page 20\]](#) [\[Page 20\]](#). For this reason, the following will only describe the differences.

Monitor Layout

Consolidation Monitor



Organizational Units

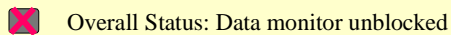
In the consolidation monitor, the hierarchy of organizational units is only broken down to the consolidation group level. This implies that the consolidation monitor executes tasks for consolidation groups. You also have the option of running tasks directly in the SAP menu, area Consolidation (without using the monitor). The initial screen also allows you to select consolidation units.

Tasks

By contrast with the data monitor, the consolidation monitor requires only a few specific task sequences. The most important requirement is that the task *Validation of consolidated financial data* be run after the consolidation tasks that do postings (such as, interunit elimination). The sequence of the other tasks can be defined in Customizing, particularly taking into consideration the postings that build on top of other postings.

Status Management

The consolidation monitor features the additional Overall Status:

A yellow rectangular status box with a grey border. On the left is a red square icon containing a white 'X'. To the right of the icon, the text "Overall Status: Data monitor unblocked" is displayed in a black sans-serif font.

All data monitor tasks must be blocked before you can run a task in update run in the consolidation monitor.

Master Data

Master Data

Use

You use master data to build up your corporate structures in the system. See the topics that follow.

Dimension

Definition

A specific characteristic of consolidated reporting in SAP Consolidation.

Use

In general, you define one dimension for each [consolidation type \[Ext.\]](#) you want to portray. You can have multiple dimensions in the system at the same time. The standard R/3 system contains a predefined dimension for each of the following types of consolidation: company consolidation, business area consolidation, profit center consolidation. There is also a dimension for generic uses.

The one-to-one relationship between dimensions and consolidation types is not mandatory. If needed, you can portray several consolidation types within one dimension. However, doing this can easily cause a lack of clarity of the dimension's data.

In the dimension you define your corporate structure as a hierarchy of consolidation units and consolidation groups.

Structure

The dimension is one of the "pillars" of the architecture of SAP Consolidation. The only key field the dimension is subordinate to (dependent on) is R/3's *client*. Conversely, much of the master data and control data is subordinate to the dimension. This means that this type of data is delimited to the dimension, in which it is created.



Dimension-dependent are:

- Organizational units
- Control data such as tasks and methods

Dimension-independent are:

- Consolidation charts of accounts
- Consolidation versions

You make some fundamental decisions in the dimension's master record concerning:

- the organizational units in the dimension



The dimension determines the field lengths of the consolidation units and groups.

- the consolidation entries posted in the dimension



The dimension determines whether old documents are deleted prior to re-posting, or are reversed.

Dimension**Integration**

The integration feature between Consolidation and the transaction-processing systems of SAP is available for all dimensions you use for company consolidation, business area consolidation, or profit center consolidation. Integration enables the Consolidation system to collect the reported financial data directly from the operational components.

Organizational Units

Definition

The organizational units of SAP Consolidation encompass the consolidation groups and the consolidation units. See the topics that follow.

Consolidation Unit

Consolidation Unit

Definition

Smallest element in a corporate group structure that can be used as a basis of complete consolidation.

Use

This business object can have different contents: A consolidation unit can be such things as a company, business areas within a company, or profit centers within a company. What a consolidation unit is made up of depends on the [consolidation type \[Ext.\]](#) for which you are using the consolidation units.

Internal accounting transactions that are to be eliminated by consolidation are processed between the consolidation units. In an accounting transaction, a consolidation unit can be the triggering consolidation unit or the partner unit.

Structure

The consolidation unit depends on the dimension in which it was created. This means that the master record you create for a consolidation unit exists only in that dimension.

You make the following entries in the master record of a consolidation unit:

- You enter master data such as the name, language key, correspondence data, local currency key, and the reason for inclusion
- You enter attributes, for example the country. You can use these in reports and in addition in the consolidation functions *validation*, *interunit elimination* and *reclassification*.



You can define your own attributes according to your special requirements, so-called [custom attributes of the consolidation unit \[Page 69\]](#).

- You assign control parameters such as the financial data type, translation method, tax rate, and data transfer method

Some of the master data and control parameters that you specify in the master record is valid only in dependency on other data. In particular, some data in the master record is date- and version-sensitive. The following table shows the dependencies for selected data (this list is incomplete):

Dependencies:

	Fiscal year effective	Period effective	Version	Period category	Ledger
Local currency	X				
Financial data type	X				
Data transfer method			Version for data entry		
Validation			Version for data entry	X	

Consolidation Unit

Currency translation method	X	X	Version for currency translation		
Fiscal year variant					X

Integration

A prerequisite for integrated data transfer in the case of company consolidations or profit center consolidations is that the organizational units in consolidation be based on the operational organizational units.

The maintenance screen of the consolidation hierarchy provides a function with which you can structure the organizational units. You create rules in Customizing in which you specify which codes and names you want the system to assign when you structure the organizational units.

See also: [Copy Organizational Units \[Ext.\]](#) in the Implementation Guide for SAP Consolidation

Assignment Between Operational Organizational Units and Consolidation Units

Operational Organizational Units	Consolidation Units
Company code	Company
Company code / Business area	Company / Consolidation business area
Company code / Profit center	Company / Profit center

Consolidation Group

Consolidation Group

Definition

User-defined group of consolidation units created for consolidation and reporting purposes.

Use

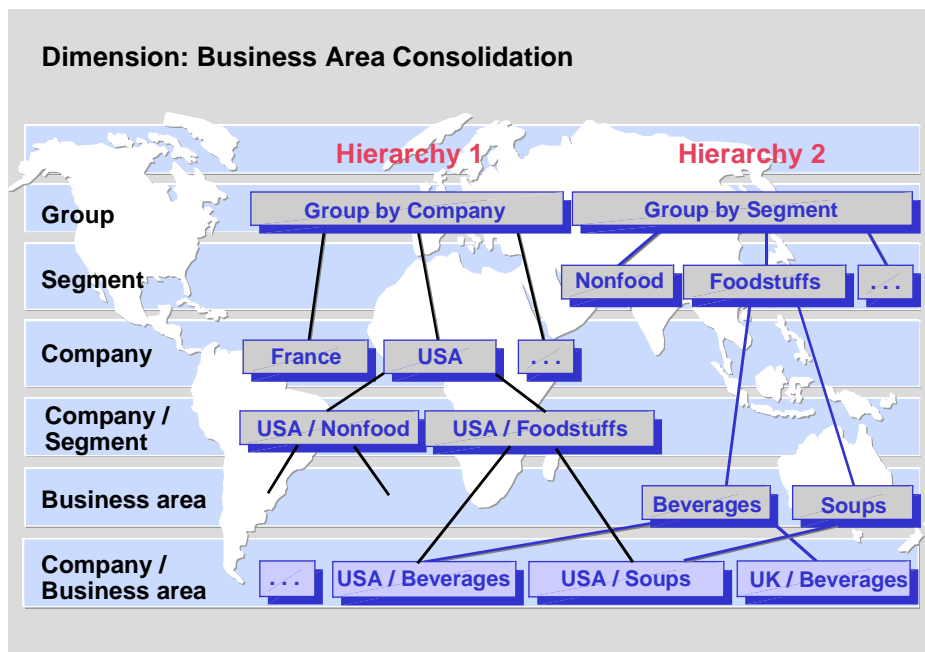
In the dimension that you have chosen for your consolidation, you can use the business object *consolidation group* to represent the structure of the group. Depending on the complexity of your group, you can:

- Group the consolidation units into a consolidation group
- Create multiple consolidation groups and arrange them into a hierarchy.
- Create multiple hierarchies of consolidation groups in parallel to structure the organizational units according to different perspectives

A given consolidation unit can belong to different consolidation groups, and a given consolidation group can belong to different hierarchies.

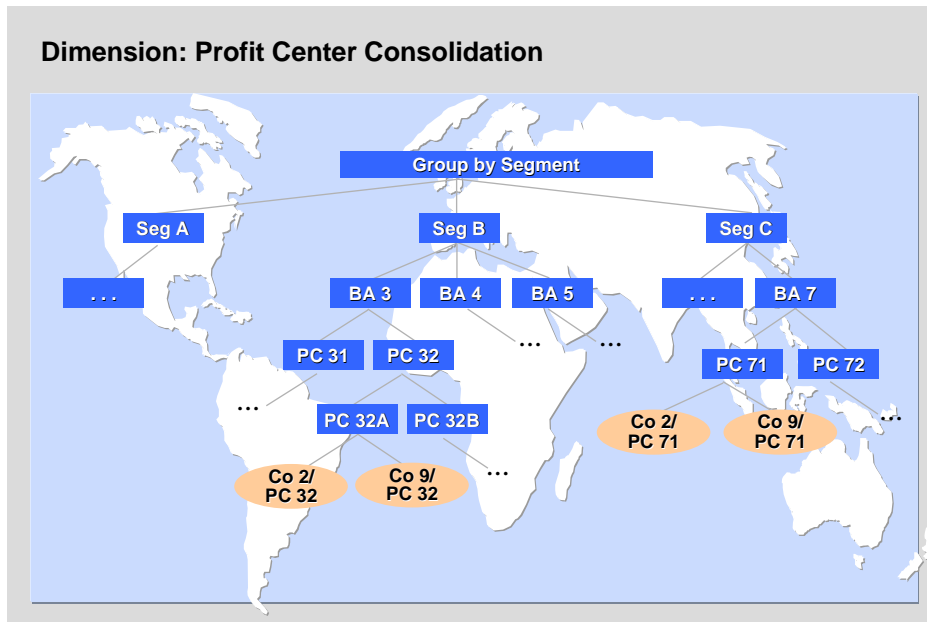
In each dimension, you can define the hierarchy levels and arrange these levels into the desired sequence. You can then assign the levels to the consolidation groups of a hierarchy to clarify the hierarchy structure.

The following graphic shows two parallel hierarchies in one dimension for a business area consolidation. The hierarchies each use part of the hierarchy levels that were defined for the dimension. Each consolidation group is assigned to only one level.



Consolidation Group

The next graphic shows an example of profit centers structured by group area. This is shown in a dimension for profit center consolidation.



Structure

Like the consolidation unit, the consolidation group depends on the dimension in which it was created. The master record that you create for a consolidation group therefore exists only in that dimension.

You specify the following information in the master record of a consolidation group:

- You specify master data such as the name, language key, and correspondence data.
- You assign a ledger.

The ledger currency is determined by the currency in which the consolidation group reports.

- You assign control parameters such as the consolidation frequency and validation rule.
- If applicable, you assign the lower-level consolidation units and consolidation groups.

This is only necessary if you create the consolidation group in individual processing rather than in hierarchy maintenance. In hierarchy maintenance, the assignment is specified by graphic positioning of the organizational units.

- If applicable, you enter control parameters for first consolidation and divestiture accounting for the assigned consolidation units and groups.

This is only necessary if you perform consolidation of investments.

- If applicable, you assign control parameters such as the financial data type, tax rate, and translation method.

Consolidation Group

This is only necessary if you want to enter or post data for the consolidation group.

Integration

See also: [Consolidation Unit \[Page 38\]](#)

If the consolidation units are structured automatically, the system also creates consolidation groups. The following overview shows the characteristic values of the consolidation groups:

Automatic Structuring of Consolidation Groups

Consolidation Type	Entered Value
Company consolidation	Consolidation group for companies
Business area consolidation	<ul style="list-style-type: none">Consolidation business areaCompany <p>You choose one of the two values when you perform the function.</p>
Profit center consolidation	<ul style="list-style-type: none">Profit centerCompany <p>You choose one of the two values when you perform the function.</p>

Maintenance of Organizational Units

Use

In large groups with complex organizational structures, the number of organizational units to be created can be very high. This component therefore provides a number of entry aids that facilitate maintenance of the organizational units.

Features

Initial Setup of Organizational Units

There are a number of different ways to create organizational units in the system:

- You can create the organizational units **manually**. In this case you can choose between hierarchy maintenance and individual processing.
- In hierarchy maintenance, you create the organizational units from the top down. The hierarchy maintenance screen displays the organizational units as a graphic when they are created. The graphic provides an overview of the structure of the organizational units. You can access the master data of the organizational units directly from the hierarchy.

Note that the investment relationships between companies (in the case of company consolidations) are not entered in the hierarchy maintenance screen. You enter investment relationships in the additional financial data for the consolidation of investments.

If you want to create more than one consolidation unit or consolidation group at a given hierarchy level, the system provides the following assistance: You can enter the codes and names as a list and then go directly to the master data maintenance screen of the first organizational unit in the list. The master data that you enter there is passed on to the other organizational units. You then only need to enter the variances in the master data that was passed on.

See also: [Maintain Hierarchies \[Ext.\]](#) in the Implementation Guide for Consolidation

- In individual processing you can maintain the master data of the individual organizational units and assign the lower-level consolidation units and groups to the consolidation groups. When you then create the higher-level consolidation group in the hierarchy, the lower-level organizational units are automatically included in the hierarchy.

See also: [Maintain Consolidation Groups Individually \[Ext.\]](#) in the Implementation Guide

- You can use a **flexible upload** to copy the consolidation units (and part of their master data) from an Excel file into Consolidation.

See also: [Copy Cons Units from PC File by means of Flexible Upload \[Ext.\]](#) in the Implementation Guide

- If you transfer data for integrated consolidation data from operational components, you must have the system **automatically create** the organizational units of consolidation from the operational organizational units.

See also: [Copy Organizational Units \[Ext.\]](#) in the Implementation Guide

Maintenance of Organizational Units

Mass Changes

If you want to change the master data of multiple organizational units in the same way, you can use the *mass change* function in Customizing: You can replace selected master data values with new values in one step.

See also: [Carry Out a Mass Change \[Ext.\]](#) in the Implementation Guide

Defining Required Entries and Optional Entries

Only part of the data in the master records of the organizational units is needed for your specific requirements. In the master record of the dimension, you can therefore define which entries for the master data are optional and which are required.

User-Defined Fields

You can use SAP enhancement FMC10001 to develop your own screens for maintaining the master data of the organizational units. These screens can contain additional fields with special tables. Enhancement projects require knowledge of ABAP programming.

Reporting Options

You can list the organizational units for purposes such as producing hard copies. There are a number of different ways to list the data:

- In the application menu of *Consolidation*, choose *Information system* → *Master data* → *Consolidation units* or *Consolidation groups*.
- In the master data maintenance screen or display screen, choose the *Print* function.

The lists are formatted with the ABAP List Viewer. The List Viewer enables you to set filters or change the content and width of the columns.

See also: [ABAP List Viewer \[Ext.\]](#) in the SAP Library

Generating Sets

For Report Writer reports you can have the system generate sets from the consolidation units and consolidation groups of the hierarchy information. The system automatically offers this function when you save the hierarchy.

Consolidation Chart of Accounts

Definition

Systematic classification of financial statement items that enables preparation of consolidated financial statements. The classification is based on the external or internal requirements regarding the consolidated financial statements that you want to prepare on the basis of the consolidation chart of accounts.

Use

For the administration of operational data, the consolidation units use local charts of accounts with corresponding levels of detail. To enable preparation of consolidated financial statements from the financial data of the consolidation units, however, the operational data must first be aggregated uniformly across the group and reported to the head office. In the head office, you therefore define one or more consolidation charts of accounts to be used by the consolidation units.

The following overview lists the predefined consolidation charts of accounts that are included in the standard system. These charts of accounts are structured according to statutory requirements. You can also define charts of accounts structured according to your internal reporting requirements.

Consolidation Charts of Accounts in the Standard System

Legal framework	Industry	Income statement accounting	Disclosure of retained earnings	Remarks
US GAAP	Manufacturing	Cost of sales	balance sheet	See 1
EU directives	Manufacturing	Period	income statement	See 1
EU directives	Manufacturing	Period	balance sheet	See 1
EU directives	Banking		income statement	See 2
Japanese GAAP	Manufacturing	Cost of sales	balance sheet	See 3

Notes:

1. The standard system contains subsequent Customizing settings for these consolidation charts of accounts with the corresponding financial statement items, such as data entry layouts.
2. The consolidation chart of accounts for Banking contains German item texts.
3. The consolidation chart of accounts for Japanese GAAP contains English item texts.

Structure

Like the dimension, the consolidation chart of accounts is one of the foundations in the architecture of consolidation. The consolidation chart of accounts is not dependent on any data except the client.

Consolidation Chart of Accounts

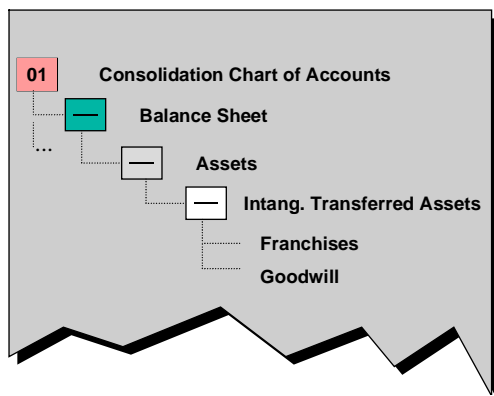


The consolidation chart of accounts is therefore not dependent on the dimension. You can use a consolidation chart of accounts for multiple dimensions or consolidation types.

The financial statement items and the breakdown categories are dependent on the consolidation chart of accounts.

In the consolidation chart of accounts, you arrange the items into FS item hierarchies. For example, you define a consolidation chart of accounts with an FS item hierarchy for balance sheet items and a hierarchy for items in the income statement.

The following graphic illustrates part of an FS item hierarchy:



You enter the following information in the master record of a consolidation chart of accounts:

- The name of the consolidation chart of accounts
- The output length of the item numbers
- How the appropriation of retained earnings is stated
- You can also set the master record of the items to read-only.

Financial Statement Item (and Its Subassignments)

Definition

Fundamental account assignment in the entry, posting, and reporting of quantities or monetary values.

Use

Financial statement items can have different contents. They can represent the following:

- A monetary amount from sources such as the balance sheet or the income statement that are relevant to accounting
- A statistical amount
- A key figure

Structure

A financial statement item is valid only for the consolidation chart of accounts in which it was created.

You enter the following information in the master record of a financial statement item:

- Item texts
- Properties of the item such as the item type, debit/credit sign, and where-applied indicator
- Subassignments

Subassignments

Through subassignments you can differentiate and "expand" the FS item values further. There are standard subassignments which are delivered by SAP, as well as custom subassignments.

Standard subassignments are:

- Partner unit
- Subitem category and subitem
- Transaction currency
- Year of acquisition
- Period of acquisition
- Unit of measure

Custom subassignments could be for example:

- Region
- Product group
- Distribution channel
- And so on

Financial Statement Item (and Its Subassignments)

See also: [Custom Characteristics \[Page 63\]](#).

Subassignments keep the number of items in consolidation charts of accounts down to a manageable level. Without subassignments, you would have to figure out all combinations of subassignments and define them as FS items. For example, you would have to create an FS item for receivables or liabilities for each partner unit.

Not all items require the same subassignments.



For example, you must enter the values of the items *receivables* and *liabilities* with partner breakdown and possibly with breakdown by transaction currency if you want to consolidate these values.

The values of the FS items of the transferred assets, however, must be differentiated by transaction type to show an asset history sheet.

Therefore you create groups of items that require the same assignments. There are usually some items that do not require subassignments.

Breakdown category

You define a breakdown category in Customizing for each FS item set that requires subassignments. In the master record, you assign this breakdown category to all FS items of the group.

With the definition of a breakdown category the system offers you all the standard subassignments and all the custom subassignments. Per subassignment you specify:

- Breakdown type

The breakdown type determines whether the FS item value should be expanded when entering and posting to this subassignment and how the system should check the respective subassignment.

The system offers the following breakdown types:

Breakdown type	Description	Meaning
0	No breakdown	
1	Optional breakdown	Null value allowed.
2	Required breakdown	If no entry, then the system sets the default value.
3	Required breakdown	The system forces the value entry; the default value is allowed.
4	Required breakdown	The system forces the value entry; the default value is not allowed.

- Fixed value, if applicable

A fixed value specifies the characteristic value of the subassignment and to be precise for all FS items with this breakdown category. You enter a fixed value for the following subassignments:

Financial Statement Item (and Its Subassignments)

- Subitem category (see also [subitem category and subitem \[Page 54\]](#))
- Unit of measure
- Custom subassignments which, in accordance with the definition, must have a fixed value in the breakdown category.
- Default set, if applicable
 - You can enter a set with default values (except with fixed value), which are to be shown during online or offline data entry.

You will find more information on the fixed value and the default set in the Implementation Guide for Consolidation, section Master Data, step [Define Breakdown Category \[Ext.\]](#).

The following graphic shows the Customizing of a breakdown category.

Dim. 01 Chart 01 ...

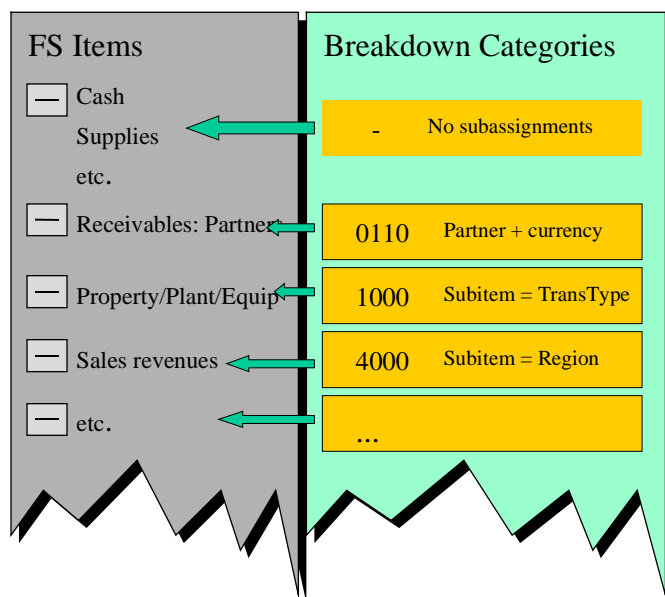
Brkd cat 1000

Breakdown by Characteristic:

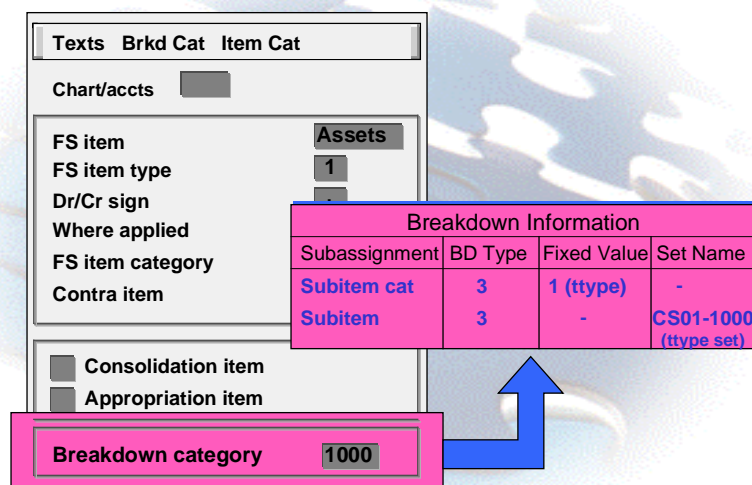
Characteristic	Brkd Type	Fixed Value	Set Name
Partner unit			
Trans. crcy			
Subitem categ	3	1	
Subitem	3		CS01-1000
Unit / measure			
...			

The next graphic shows different breakdown categories from the SAP standard system and its use:

Financial Statement Item (and Its Subassignments)



The next graphic shows the assignment of breakdown category 1000 in the master record of a fixed-asset item. The breakdown category means that the item values are to be broken down into subitems. The subitem (subitem category) is used as a transaction type (subitem category with fixed value 1).



Integration

If you want to integrate reported financial data from operational SAP applications into consolidation, there must be a link between the operational FI accounts and (if applicable) the secondary cost elements on the one hand, and the items of consolidation on the other:

- If realtime update or rollup is being used, the operational accounts or the group accounts assigned to the accounts must have the same code as the FS items.
- If a periodic extract is being used, the items in the financial statement version (G/L accounting) must have the same code as the items in consolidation.

To ensure that the codes match, you can create the consolidation chart of accounts based on an FI chart of accounts or financial statement version.

You will find more information in the section [Group chart of accounts, financial statement version, consolidation chart of accounts \[Page 169\]](#)

Maintenance of Financial Statement Items

Use

The component offers a number of functions that simplify creating and changing one or more consolidation chart of accounts.

Features

Creating a New Consolidation Chart of Accounts

The standard system contains a number of predefined consolidation charts of accounts. You should make use of these predefined charts of accounts if possible. This is because if you decide to create your own consolidation chart of accounts, you must maintain the financial statement items in many affected Customizing settings, such as differential items.

You can create your own consolidation chart of accounts or change an existing one in the following ways:

- You can enter or change the financial statement items manually. You can choose between hierarchy maintenance and individual processing. The procedure is the same as with [Maintenance of Organizational Units \[Page 43\]](#).
See also:
 - [Maintain Item Hierarchies for Cons Chart of Accounts \[Ext.\]](#) in the Implementation Guide for Consolidation
 - [Maintain FS Items Individually \[Ext.\]](#) in the Implementation Guide
- You can use a flexible upload to copy the FS items from an Excel file into Consolidation.
See also [Copy FS Items from PC File by means of Flexible Upload \[Ext.\]](#) in the Implementation Guide
- You can create the FS items based on an FI chart of accounts or a financial statement version.
See also [Copying FS items \[Ext.\]](#) in the Implementation Guide.

Mass Changes

If you want to change the master data of multiple financial statement items in the same way, you can use the *mass change* function in Customizing: You can replace selected master data values with new values in one step.

Reporting Options

You can list the financial statement items for purposes such as producing hard copies. There are a number of different ways to list the data:

- In the application menu of *Consolidation*, choose *Information system → Master data → FS items*.
- In the master data maintenance screen or display screen, choose the *Print* function.

The lists are formatted with the ABAP List Viewer. The ABAP List Viewer enables you to set filters or change the content and width of the columns.

Maintenance of Financial Statement Items

See also: [ABAP List Viewer \[Ext.\]](#) in the SAP Library.

Generating Sets

For Report Writer reports you can have the system generate FS item sets from the hierarchy information. The system automatically offers this function when you save the hierarchy.

Subitem Category and Subitem

Definition

Subitem and subitem category are subassignments for the financial statement items in Consolidation. Both characteristics are in a compound with each other. The subitem is dependent on the subitem category. The subitem category classifies the values of the subitem.



You can define more subitem category-like subassignments yourself, so-called [Custom Subassignments \[Page 64\]](#). The following should explain the concept for this kind of subassignment.

Use

Subitems enable you to make subassignments for the item values as needed. You can use these subassignments with various FS item sets in different ways. You define a breakdown category for each way the subitem is used. In the breakdown category, the subitem category determines how the subitem is to be used. This is called *fixed value in breakdown category* (see also: [Financial Statement Items \[Page 47\]](#)).

The SAP standard system contains a number of predefined subitem categories:

- Transaction types for transferred assets
- Functional area
- Product groups
- Regions
- Transaction types for provisions
- Transaction types for equity

The following graphic shows the relationship between the subitem, the subitem category, the breakdown category, and the FS item:

- The subitems in subitem category 001 are used as transaction types. You need this subassignment for the items of the transferred assets. In the graphic, the following subitems are assigned to the subitem category:

- 100: Opening balance APC
- 120: Acquisitions
- 140: Divestitures

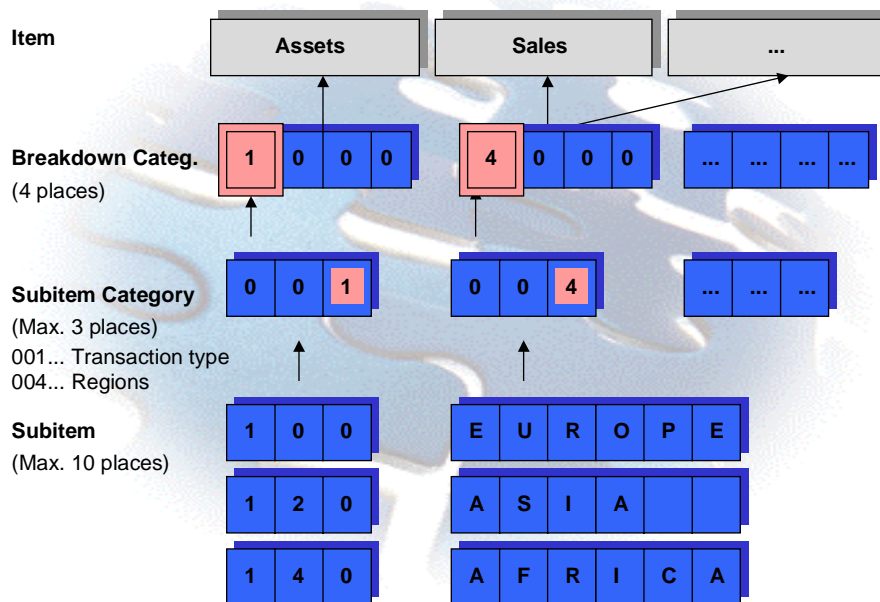
Breakdown category 1000 is used to assign subitem category 001 to the items of the transferred assets.

- With subitem category 004, the subitem is used as region. You need this subassignment for the items of the sales revenues, for example. In the graphic, the following subitems are assigned to the subitem category:
 - Europe

Subitem Category and Subitem

- Asia
- Africa

Breakdown category 4000 is used to assign subitem category 004 to the items for net sales.



Structure

The subitem category is not dependent on any data except the client. The subitems are dependent on the subitem category.



This means that neither the subitems nor the subitem categories are dependent on the consolidation chart of accounts.

You specify control parameters for the subitems in the master record of the subitem category. You maintain the master records of the subitems in dependency on these control parameters.

Integration

In integrated data collection, the subitem can be filled from the accounting document. You specify which sender field is transferred into the subitem in the master data of the subitem category.

Version

Version

Definition

Identifies a separate area in the consolidation database.

Use

Versions make it possible to consolidate financial data according to different criteria. Managers frequently require financial data to be prepared and consolidated according to different criteria or using different valuation approaches.



Versions enable you to:

- Manage and consolidate different categories of data separately, such as actual data, budget data, forecast data, or long-term planning data
- Perform simulations for your consolidated data, such as:
 - Simulating the effects of various exchange rates on your consolidated financial statements
 - Simulating the effect of the divestiture of a consolidation unit on your consolidated financial statements
- Prepare restatements — that is, apply the current "settings" to data of a previous period

For example, if you changed the consolidation hierarchy, you could report the data of the previous fiscal year in the new hierarchy as a restatement.

In simple cases, you can perform such restatements using the functions of reporting without using a new version: You could effect the restatement using a drilldown report if the report does not include postings that are dependent on the consolidation group.
- Prepare different consolidated financial statements in parallel in accordance with different statutory accounting requirements, such as according to GAAP, IAS, or HGB (German accounting law).
- Adapt the "normal" consolidated financial statement for value-based management to be able to calculate performance key figures
- And so on

Structure

The version concept in the SAP Consolidation component includes a number of "version building blocks" that together eliminate redundancy and facilitate data management.

Consolidation Versions and Special Versions

Consolidation Versions

Consolidation versions are used to record, consolidate, and report the financial data collected from consolidation units. A consolidation version is the version in which a consolidated financial statement is prepared. Alternative consolidated financial statements (see the section *Use*) can be represented in different consolidation versions.

Along with dimensions, consolidation charts of accounts, subitem categories, and ledgers, consolidation versions are one of the foundations in the architecture of consolidation. That is, consolidation versions are not dependent on any data except the client. Instead, much of the data depends on the consolidation version.

Special Version

The system stores the totals data of consolidation in the consolidation version. Control parameters are required to process this totals data. Each task accesses both Customizing data and master data. A task may also access additional financial data. The system manages much of this data in special versions. The system uses one or more special versions for each process in consolidation.



There are special versions for:

- Tasks such as data entry, currency translation, or reclassification
- Additional financial data for consolidation of investments
- Master data such as hierarchies of consolidation groups and ledger assignments

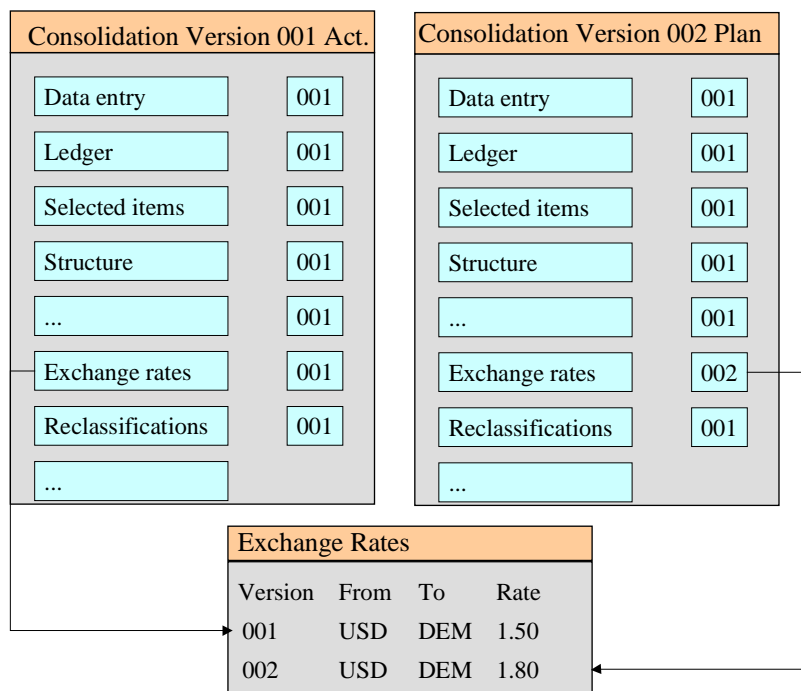
Relationship Between Consolidation Version and Special Version

Special versions eliminate the need for multiple entry of control parameters that are identical in different consolidation versions. Such data only needs to be entered once in special versions.

You assign the special versions that apply to a particular consolidation version to that consolidation version in Customizing.

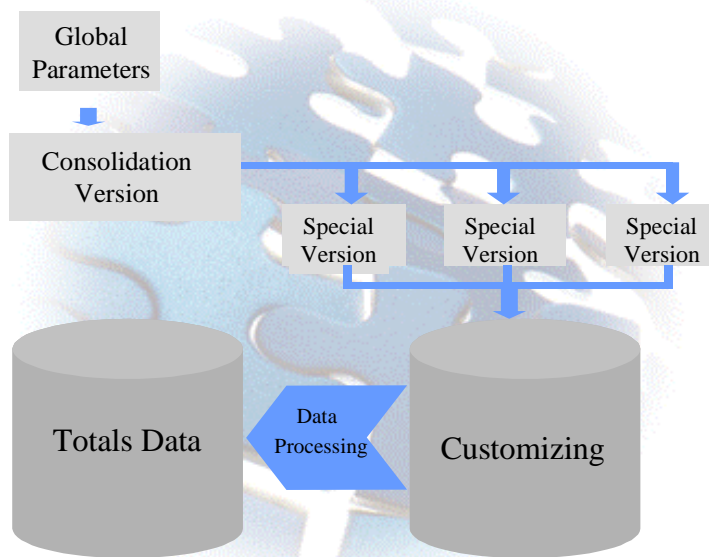
The following graphic illustrates this. Consolidation versions 001 and 002 differ only in the exchange rates. Otherwise the same special versions are assigned to these versions.

Version



When you perform a task in a consolidation version, the system reads the special versions that are relevant for that task and that are assigned to that consolidation version. The system uses the special version to read the relevant Customizing data and the master data or additional financial data stored in special versions.

The following graphic shows how the system does this:



There is also Customizing data that depends directly on the consolidation version and that is not stored in special versions. For example, the assignment of a consolidation frequency to a consolidation group and the assignment of a task group to a dimension depend directly on the consolidation version.

The following overview lists some of the data that depends on special versions:

Data That Depends On Special Versions

Special Version	Dependent Data
Data entry	Assignments to consolidation unit: - Data transfer method, upload method, logical file name, validation, and so on - Data entry profile
Ledger	Assignment of ledger and local currency to consolidation group
Selected FS items	Definition of selected FS items
Structure	Hierarchy of consolidation groups Assignment of consolidation of investments method
Tax rate	Definition of tax rate of consolidation unit
Translation method	Assignment of translation method to consolidation unit
Exchange rates	Assignment of exchange rate type to exchange rate indicator
Reclassifications	Assignment of method and document type to task

Version

Elimination of IU profit and loss	Customizing: - Definition of posted items - Definition of task Additional financial data: - Inventory data and supplier data
Consolidation of investments method	Assignment of consolidation of investments method Assignment of document type to the task or to activities/accounting techniques
Investment	Values of changes in investments Group shares
Equity	Values of the changes in investee equity Values of equity holdings adjustments
Fair value adjustments	Customizing: - Amortization and prioritization of fair value adjustments - Values of the fair value adjustments



For the task *Interunit Elimination*, there are task versions that are assigned to the interunit eliminations in Customizing for consolidation versions.

See also: [Interunit Elimination \[Ext.\]](#) in the Implementation Guide for Consolidation

Normal Versions and Add-On Versions

Some of the application examples in the section *Use* involve deviations from normal consolidation. The version concept therefore makes a distinction between normal versions and add-on versions.



For example, suppose you want to prepare consolidated financial statements in conformity with the statutory accounting requirements of HGB and a reconciliation in conformity with GAAP. For the reconciliation, you want to post supplementary entries.

You prepare the consolidated financial statements in conformity with HGB in the normal version, and save the supplementary entries in an add-on version.

An add-on version always references another version (called the base version). In reports for an add-on version, the system also includes the data of the base version. The base version can be a normal version (in the above example, the version for the HGB financial statements) or another base version.

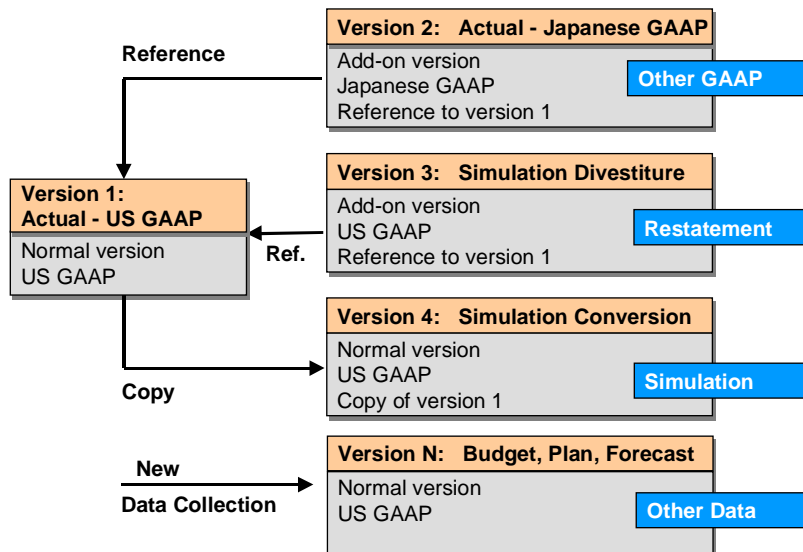
In the definition of a version in Customizing, you can specify a base version in two places:

- You can specify a base version for the consolidation version.
- You can specify a base version for the structure version (special version; see earlier).

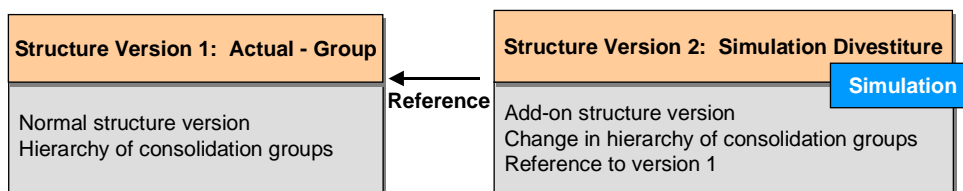
You can also copy the data of one consolidation version into a second consolidation version and perform the supplementary postings in the second version. The drawbacks here are that the copied data is redundant, and changes made in the first version are not automatically reflected in the second version.

Version

The following graphic shows the methods available for including the data of one consolidation version (version 1 in the graphic) in other consolidation versions, and why this may be required:



The next graphic shows an example for an add-on structure version:



Ledger

Ledger

Definition

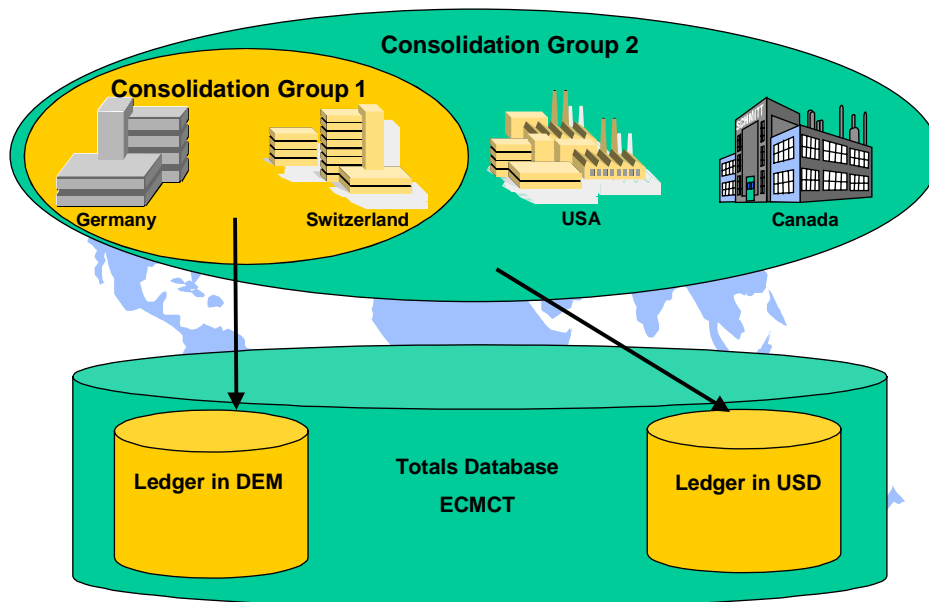
Contains transaction figures and documents showing the changes in the values and quantities resulting from accounting transactions.

Use

The currency of the ledger determines the currency in which the consolidation groups carried in the ledger report their financial data. This is therefore the consolidation group currency.

If you want to consolidate in different currencies, you need a separate ledger for each currency.

The following graphic illustrates this:



Structure

The structure of the ledger is determined by the totals table *ECMCT*.

You assign a ledger to each consolidation group in the master record of the consolidation group. The system saves the assignment in a specific ledger version. This means that you can assign different ledgers, and therefore different consolidation group currencies, to a consolidation group in different consolidation versions.

Custom Characteristics

Use

SAP delivers a large number of predefined characteristics in the consolidation database, for example the consolidation unit, the financial statement item, the subitem and so on. If your group's need for information exceeds that and you therefore want to carry out additional account assignments, then you require so-called custom characteristics.

Custom Subassignments of the Financial Statement Item

Definition

Characteristic that is defined by customers to enhance the transaction data of consolidation (totals records and line items).

Use

You can enhance the transaction data of consolidation with up to five subassignments, for example with the subassignment of the product group, the region, the division or the distribution channel. This enhancement is necessary, if the subassignments which SAP delivers, do not cover your group's need for information.



The following standard subassignments for the financial statement item are delivered by SAP:

- Partner unit
- Subitem categories and subitems
- Transaction currency
- Year of acquisition
- Period of acquisition
- Unit of measure

Just like the standard subassignments, you can control which items are to be posted and entered with the custom subassignments via the breakdown category.

Differentiation of the Usage Possibilities of the Subitem

You can specify any number of breakdowns for the item values via the standard characteristics [Subitem Category and Subitem \[Page 54\]](#), by maintaining several values for the characteristic *subitem category* (for example region, functional area, transaction type and so on). However, you can only use one subitem category per item (as a fixed value in the breakdown category).

By defining additional subassignments you can specify several custom breakdowns per item.

Structure

Definition of Characteristic

You define the subassignments at the beginning of Customizing for Consolidation.

You can define existing entities of other SAP components as subassignments, for example the characteristics country, region or functional area. But you can also define new entities whose technical environment (Data Dictionary, program, maintenance interface and so on) have to be generated again. You carry out the generation in Customizing. You do not have to carry out any programming work.

Custom Subassignments of the Financial Statement Item



The custom subassignments enhance the totals database and the line item database of consolidation with additional key fields. Depending on the usage of this subassignment, the data volume in the database can increase greatly.

For more information on the definition of subassignments, see the Implementation Guide (IMG) for Consolidation in step [Add Characteristics \[Ext.\]](#).

Dependency between Custom Subassignments

Consolidation supports the following combinations:

- Independent characteristics

These are characteristics whose values you define independently of the values of the other characteristics.



Product group

- Characteristics in a compound

These are pairs of characteristics in which one of the characteristics is an independent characteristic. The values of the second characteristic (dependent characteristic) are dependent on the values of the independent characteristic.



Country and region

The country is the independent characteristic and the region is the dependent characteristic. In every country there are different regions.



Note that Consolidation does not support any combinations where there are more than two characteristics in a compound.

- Subitem category-like characteristic

These are characteristics in a compound where you set a fixed value in the breakdown category for the independent characteristic.



Characteristic pair [Subitem Category and Subitem \[Page 54\]](#)

You use this combination when you require more than five additional subassignments, but you *do not* want to *simultaneously* expand an individual item. For each subassignment which you want to portray through this, create a value for the independent characteristic (for example the value functional area). You assign this value via the breakdown category of the respective item which should be expanded by this subassignment. You maintain the value of the subassignment (for example the different functional areas) in the independent characteristic.

Custom Subassignments of the Financial Statement Item

Characteristic Values

The characteristic values are the master data of the characteristics. You maintain this master data in the IMG of Consolidation in section master data, step [Custom Subassignments: Define Characteristic Values \[Ext.\]](#)

For characteristics which you have defined with reference to entities in other SAP components, the system offers the master data maintenance of the corresponding SAP components.

For characteristics which you have defined with a new check table, the system offers a maintenance transaction which was specially generated for this. In addition to this you can transfer values by means of a flexible upload in the system.

Default Values

While defining a subassignment you can decide whether you want to maintain a default value. You maintain the default values in the IMG of Consolidation in section master data, step [Define Default Values for Subassignments \[Ext.\]](#)



In exactly the same way you can enter a default value for the standard characteristics *partner unit* and *subitem*.

You can use the default value of a subassignment as follows:

- For entry and manual posting

In the breakdown category, you can specify that the system updates the default value when you do not enter a value for the characteristic.

- For automatic postings

For example in Customizing you can specify that the system posts the default value for a subassignment if it can not derive the value from the triggering document line item. For more information, see the R/3 Library for each consolidation function.



For dependent characteristics you can enter a default value for the dependent characteristic for each value of the independent characteristic.

Hierarchy

For every custom characteristic you can maintain the hierarchies manually. These hierarchies can be displayed in research and active excel reports.



In exactly this way you can maintain hierarchies for the standard characteristics *item*, *acquisition year*, *acquisition period*, *sub-item* and *document type*.

For more information, see the IMG of Consolidation in section master data, step [Maintain Hierarchies for Characteristics \[Ext.\]](#).

Custom Subassignments in Consolidation Functions

Features

The custom subassignment are taken into account in almost all of the functions of Consolidation. An **overview** is given below, for more information see the R/3 Library for each consolidation function.

Data Collection

With all data collection methods you can transfer the reported data with details to the custom subassignments. You carry out the corresponding enhancements in the settings of methods in Customizing.

Currency Translation

You can post currency translation differences or rounding differences with custom subassignments. You control this with the breakdown category of the differential item.

Validation

You can define validation rules, which take custom subassignments into account.

Interunit Elimination

You can use custom subassignments both with the sets to be eliminated and with the differential items.

Reclassifications

You can use custom subassignments both with the triggering account assignments and with the source and target account assignments.

Elimination of Interunit Profit/Loss in Transferred Inventory

Product Group as Custom Subassignment

If the system is to read the inventory data from the summary database, then you have to define the product group as a subassignment.

Other Custom Subassignments

The system posts the elimination of interunit profit and loss with the subassignment which you have entered in Customizing with the posting item.

If in the message of inventory data, subassignments are given as well, then the system can *not* prove the intercompany profit per value of this subassignment.

Consolidation of Investments

The system can only post the custom subassignments to the special posting items.

More Functions

With the following functions, the system posts the custom subassignments without having to carry out special settings to do this.

Custom Subassignments in Consolidation Functions

- Determination of the contra item and calculation of the retained earnings or annual net income.
- Apportionment
- Preparation for consolidation group changes
- Carrying forward of balances

Reports

In active excel, research, report writer and line item reports, as well as in database listing, the system treats the custom subassignments exactly like the standard subassignments.

In addition to that the hierarchies to the subassignments can be displayed in active excel and research reports.

Custom Attributes of the Consolidation Unit

Definition

Characteristic that is defined by customers to enhance the master record of consolidation units.

Use

You can define any number of attributes for the consolidation unit. You can use these attributes in some consolidation functions and in reports.

All custom attributes are of equal importance to the standard attributes of the consolidation unit.



SAP delivers the following standard attributes for the consolidation unit.

- Country
- Company
- Business area
- Controlling area
- Profit center

Differentiation of the SAP enhancement

You can use SAP enhancement FMC10001 to develop your own screens for maintaining the master data. These screens can contain additional fields with your own defined tables. However this enhancement requires extensive programming work by the customers. In contrast to that, you do not have to carry out programming work with the custom attributes for the consolidation unit.

Structure

Definition of Characteristic

You define the attributes at the beginning of Customizing for Consolidation.

You can define existing entities of other SAP components as attributes. But you can also define new entities whose technical environment (Data Dictionary, program, maintenance interface and so on) have to be generated again. You carry out the generation in Customizing.

All custom characteristics which are not marked as subassignments, can not be assigned to the characteristic *consolidation unit* as an attribute. The system automatically assigns the characteristics *partner unit* and *investee* to the attribute.

For more information on the definition of subassignments, see the Implementation Guide (IMG) of Consolidation in step [Add Characteristics \[Ext.\]](#).

Characteristic Values

The characteristic values are the master data of the characteristics. You maintain this master data in the IMG of Consolidation in section master data, step [Custom Attributes: Define Characteristic Values \[Ext.\]](#)

Custom Attributes of the Consolidation Unit

For characteristics which you have defined with reference to entities in another SAP component, the system offers the master data maintenance of the corresponding SAP components.

For characteristics which you have defined with a new check table, the system offers a maintenance transaction which was specially generated for this. In addition to this you can transfer values by means of a flexible upload in the system.

Maintenance of Organizational Units

When you have defined attributes for the characteristic *consolidation unit*, then in the master record of the consolidation unit under the tab page *attributes*, you can enter values for the attribute and therefore assign the respective consolidation unit.

The system saves these values version and time-dependent.

- As version it saves the attribute version which the current consolidation version is assigned to (global parameter).
- The assignment is valid from the current fiscal year and from the current period (global parameter).

Custom Attributes in Consolidation Functions

Features

You can use custom attributes as well as all standard attributes for the consolidation unit in the following Consolidation functions:

- **Validations**
You can define validation rules, which take custom attributes into account.
- **Interunit Elimination**
You can enter the method attributes in Customizing in order to restrict the data to be eliminated per set.
- **Reclassifications**
You can enter attributes as triggering account assignments.

Data Collection

Data Collection

Purpose

Consolidated financial statements are created on the basis of financial data reported by individual consolidation units, and sometimes so-called additional financial data reported as well by said consolidation units. This data must therefore be collected in the consolidation application.

You require additional financial data if you want to carry out the functions *consolidation of investments* or *elimination of interunit profit and loss in inventory*.

This component contains the functions for collecting the data.

Features

You execute the task of "data collection" in the [Data Monitor \[Page 20\]](#). The task features the following activities:

- Collection of reported financial data
- Manual posting
- Collection of additional financial data

The following illustration shows an example of the selection screen, which appears after starting the task *Data Collection* for the consolidation unit *Pharma 1*:

Data Collection: Update Mode		Consolidation Unit:	Pharma 1	Valid. RFD	...
Reported Data		Data Entry		X	
D.E.Layout	Name			X	
01-1000	Balance Sheet			X	
...				X	
Manual Posting		Data Entry		✓	
Doc. Type	Name			✓	
05	Adjustments/RD			✓	
Additional Financial Data		Data Entry		X	
Inventory data		Flex.Upload		X	
Supplier data				X	
Change in investments				X	
...				X	

Collection of Reported Financial Data

In Customizing you assign a method for collecting the reported financial data to each consolidation unit (data transfer method).

The following data transfer methods are available:

- Online data entry in the SAP System
- Offline data entry on the basis of Microsoft Access, with the option of using the Interactive Excel interface
- Integrated data collection
 - Realtime update
 - Periodic extract
 - Rollup
- Flexible upload from a non-SAP system

The procedure for collecting reported financial data depends on the methods you assign to the consolidation units. The following overview shows when each method can be used, and how each method is started in the monitor:

Data transfer methods for data collection

Method	Use	Execution in the Monitor
Online data entry	Manual data entry using data entry layouts is available for any consolidation scenario. Special consideration: You can use online data entry even if a different method is assigned to the consolidation unit in its master record.	With this method you only run data collection for a single consolidation unit. You only start the online data entry for a group, when the consolidation group itself is ascertainable. The selection screen lets you choose all relevant data entry layouts.
Offline data entry, flexible upload	You use these methods if one or more units do not use integration, but keep their financial data on a PC.	This method allows you to run data collection for a single unit as well as an entire group.
Realtime update	You can use this method for integrated data collection if one or more units keep their financial data in the same SAP system and client. Restriction: You cannot use this method for profit center consolidation.	There is no need to run a task in the monitor because the G/L-related postings are updated in the Consolidation system in "realtime".

Data Collection

Periodic extract	<p>You can use this method for integrated data collection if one or more units keep their financial data in any SAP system.</p> <p>The data collection takes place with an extract from the consolidation staging ledger.</p> <p>Restriction: You cannot use this method for profit center consolidation. In addition you cannot copy the functional area, as this field is not contained in the totals table of the consolidation staging ledger.</p>	This method allows you to run data collection for a single unit as well as an entire group.
Rollup	<p>With this data collection method, you can transfer the reported financial data from any ledger into Consolidation.</p> <p>Note: You can transfer the reported financial data for integrated profit center consolidation per rollup from the profit center ledger.</p>	

Manual Posting

The *data collection* task features an option for manually posting entries. These must use document types that:

- have a posting level less than 20
- are defined for manual postings
- are not assigned to any tasks

For example, the standard SAP system includes a document type for posting adjustments to reported financial data.

Collection of Additional Financial Data

Additional financial data can be:

- entered manually
- collected using the flexible upload method

As an alternative, for certain additional financial data of consolidation of investments you can go to Customizing and determine that the data is to be gathered directly from the totals database.

Before you collect the additional financial data, customize the additional financial data in the Implementation Guide for Consolidation for the areas:

[Elimination of Interunit Profit/Loss in Transferred Inventory \[Ext.\]](#)

[Consolidation of Investments \[Ext.\]](#)

You can collect the additional financial data for a single consolidation unit or for an entire consolidation group.

Special consideration

Status management lets you collect additional financial data even if the *data collection* task is already blocked. At the time of the collection of reported financial data it is often unclear which additional financial data will be needed. However, subsequent collection of additional financial data can cause the system to unblock tasks that have already been carried out.

Case in point 1: Additional financial data for the consolidation of investments

Say, you collect additional financial data for the consolidation of investments after the tasks in the data monitor have been completed, or even after the *consolidation of investments* task has been run. Then the system unblocks the task for validating the standardized financial data as well as all of the tasks that follow.

Case in point 2: Additional financial data for the consolidation of investments, currency translation with key 3 and 4

Same as case 1. In addition, assume that the equity and investment values are translated historically using the additional financial data. Then the system unblocks the *currency translation* task along with all tasks that follow.

Case in point 3: Additional financial data for the elimination of interunit profit and loss in inventory

Same as case 1.



Hence, SAP recommends that you collect the additional financial data directly after the collection of the reported financial data.

Online Data Entry in the SAP System

Purpose

This component enables you to enter reported financial data online using data entry layouts.

Implementation Considerations

Install this component if you want to enter reported financial data online in the SAP System for at least one consolidation unit or consolidation group.

Online data entry in the SAP System is one of the methods available for collecting data in the Consolidation application. You can also use the following methods:

- Automatic data transfer from SAP Systems
- Data transfer using the offline data entry program on the basis of Microsoft Access
- Data transfer from non-SAP systems using the flexible upload program

The options you choose depend on the organization of your corporate group and the systems it uses.

Features

Using the data monitor, you enter financial data online which was reported by those consolidation units for which you specified this data transfer method.

You enter the data in data entry layouts. You can use these layouts to enter the individual financial statements of your consolidation units, for example.

Data Entry Layout

Definition

Form for entering financial data reported by consolidation units and consolidation groups.

Use

Data entry layouts are used for entering reported financial data both online in the SAP System and offline on the basis of MS ACCESS. You can use various layouts, depending on the type of data to be entered and the level of detail involved.

Structure

You define the layouts that you require in Customizing, in the section [Define Data Entry Layouts \[Ext.\]](#).

Each definition is valid for a particular consolidation chart of accounts. You can also restrict a layout to a particular fiscal year, period, version, dimension, consolidation unit and/or unit of measure.

When you define a data entry layout, you specify its structure. A layout consists of a header and an input area.

- The header data specifies the fiscal year, period, chart of accounts, consolidation unit, and so on, for which you are entering data.
- The input area is where you enter financial data. It consists of lead columns and value columns:
 - Lead columns contain characteristics. Financial statement (FS) items, measure of unit and all subassignments (partner unit, subitem, transaction currency, year of acquisition, period of acquisition and all custom subassignments) are supported as characteristics. The line structure of the data entry layout is a combination of characteristics and their corresponding values. This structure usually consists of FS items and their breakdown by subassignments.
 - Value columns contain key figures. Group currency, local currency, transaction currency, and quantity are supported as key figures.

You enter reported financial data in the value columns. Depending on how you define your value columns, you enter data in one or more currencies, or as quantities.



You can also define comparative value columns, for example to display the data from the prior year as a comparison. Comparisons are possible for the characteristics fiscal year, FS item and version.

In addition to that you can define the value columns with formulas, for example to display the difference between the current local currency values and the local currency values of the prior year.

You also have the possibility to use Microsoft Excel functions: The data entry layouts, which were already defined, can be reworked with Excel functions, for example formatting, and then entered in the financial data spreadsheet.

Data Entry Layout

For further information, see the Implementation Guide (IMG) step [Define Data Entry Layouts \[Ext.\]](#).

Data Entry Using Flexible Layouts

Use

You use data entry layouts to enter the data of your consolidation units/groups online. You can use various layouts, depending on the type of data to be entered and the level of detail involved.

Features

You can define your own data entry layouts in Customizing:

- For each layout, you can define a specific structure and determine which currencies/units of measure can be entered.
- The lines in a layout usually contain financial statement (FS) items and their breakdown by subassignments. You can determine which breakdowns are used during data entry in one of the following ways:
 - Specify fixed values for breakdowns in the definition of the data entry layout.
When you access this layout in order to enter data, it automatically contains the appropriate breakdowns.
 - Specify variables for breakdowns in the definition of the data entry layout.
Either you need to enter values in the initial screen for data entry, or the system uses groups which you can specify in the definition of breakdown categories for your FS items.

When entering data, you are not restricted to the breakdowns you preset. You can also manually add new lines with additional breakdowns for your FS items.

Entry of Different Currencies, Entry of Quantities

Use

You can use data entry layouts to enter both monetary values and quantities for your consolidation units/groups.

- Monetary values can be entered in local currency, transaction currency and/or group currency.
- Quantities can be entered: for example, number of employees, number of shares, barrels of oil.

Both currencies and quantities can be entered in the same data entry layout.

Entry of Data Meeting Local and Group Requirements

Use

Financial data reported by your consolidation units either meets the local requirements of those units, or has been adjusted to meet your group's requirements. Local and group requirements can differ, particularly if you are performing a statutory consolidation of data.

- If reported data meets local requirements, you can enter it in the Consolidation application and then post standardizing entries so that it meets the group's requirements. You can use a separate posting level for standardizing entries in order to distinguish them from other entries.
- If the reported data has already been adjusted to meet group requirements, you do not need to post standardizing entries after entering it in the Consolidation application. If you need to post any corrections, you can use a separate posting level for this.

Entry of Periodic or Cumulative Data

Entry of Periodic or Cumulative Data

Use

If you are using online data entry as your data transfer method, you can decide what type of data you want to enter for each consolidation unit. You can enter data periodically or cumulatively. Cumulative entry is the most common input type.

Features

- For periodic entry, you enter the change in the total value since the last data entry as the periodic value.
- For cumulative entry, you enter the total value as of the entry date.

The input type only determines the type of values you enter in the data entry layout. Irrespective of the input type you choose, the system always saves the change in the total value as a periodic value in the database.

Entry of Data with Financial Statement Item Breakdowns

Entry of Data with Financial Statement Item Breakdowns

Use

You can enter data for financial statement (FS) items, broken down by the relevant subitems, partner units, transaction currencies, year of acquisition, period of acquisition or custom subassignments. You enter a breakdown category in the FS item master data to specify the breakdown you require for an item. For example, you can specify that you want payables and receivables items to be broken down by partner unit.

It is technically possible to break down subitems by FS item, however, it is more usual to break down items by their subassignments.

In order to enter online in data entry layouts, using FS item breakdowns, you need to set up appropriate "lead" columns for your layout in Customizing.

Features

You define lead columns for the FS item and its breakdown by subassignments. You sort these columns to match the structure of the financial data you want to enter.

The following table shows some possible combinations of lead columns in a data entry layout:

Example	Lead column 1	Lead column 2	Lead column 3
1	Financial Statement Items		
2	Financial Statement Items	Subitem	
3	Financial Statement Items	Partner unit	
4	Financial Statement Items	Subitem	Partner unit
5	Financial Statement Items	Partner unit	Transaction currency

Data entry for FS items with breakdowns depends on the combination of lead columns and on the breakdown category of the individual items:

- The combination of lead columns determines which breakdowns are supported by a particular layout.
- The breakdown category of each individual FS item determines how that item is broken down.

Data for an FS item must always be entered with the highest possible level of detail. If an item's breakdown category specifies a breakdown that is not set up in the data entry layout you are using, you cannot enter data in the layout for that particular item.

The following table summarizes the requirements for entering data for an FS item in a layout, using a breakdown by subitem as an example:

Requirements for entering data with subitem breakdown

Is a subitem breakdown specified by the breakdown category?	Is a lead column for subitems set up in the layout?	Can data be entered for the breakdown by subitem?

Entry of Data with Financial Statement Item Breakdowns

Yes	Yes	=>	Yes. You can enter data for the breakdown.
Yes	No	=>	No. The layout does not allow data entry for the breakdown. You cannot use this layout to enter any data for the FS item.
No	Yes	=>	No. The FS item is not set up to allow this breakdown. You can enter data for this item without a breakdown.

Examples of Financial Statement Item Breakdowns

Examples of Financial Statement Item Breakdowns

If you want to enter balance sheet values for a consolidation unit, you use a layout which enables data to be entered for FS items, with a breakdown.

Example 1

The following table shows an extract from a data entry layout for FS items with a breakdown by subitem (in this case transaction type).

Excerpt from a data entry layout

Financial Statement Items		Transaction type		Local currency USD
...				
191100	Real estate	100	Opening balance	10,000,000.00
		120	Acquisitions	200,000.00
		220	Depreciation	0.00
		
191500	Machines and equipment	100	Opening balance	50,000.00
		120	Acquisitions	2,500.00
...				

Example 2

The following table shows an extract from a data entry layout for FS items with a breakdown by partner unit and subitem (in this case transaction type).

Excerpt from a data entry layout

Financial Statement Items		Partner unit	Transaction type	Local currency USD
...				
170100	Proportionate shares in affiliated cos	Cons unit 1	100	10,000,000.00
			120	100,000.00
			220	0.00
			...	
		Cons unit 2	100	2,000,000.00

Examples of Financial Statement Item Breakdowns

			120	250,000.00
			...	
130100	Loans to affiliated companies	Cons unit 1	100	50,000.00
			120	0.00
			...	
		Cons unit 2	100	0.00
			120	0.00
...				

Online Entry of Reported Financial Data in the SAP System

Purpose

Before you execute any consolidation tasks, you need to collect the financial data reported by your consolidation units in the Consolidation application. Use the process described below if you want to enter data for one or more consolidation units online in the SAP System. You need to do this in the following cases:

- The consolidation units do not manage their financial data in a SAP System. You therefore cannot transfer the data automatically in the consolidation processing ledger.
- For technical or organizational reasons, the consolidation units can neither transfer their financial data to the Consolidation application using the offline data entry program based on Microsoft Access, nor transfer into the Consolidation application by means of a flexible upload.

Prerequisites

When you set up master data in the Consolidation application, you specify a data transfer method for each consolidation unit. You apply this process to all units which have online data entry in the SAP System specified as the data transfer method.



You can also enter reported financial data online for the consolidation units, which you have assigned to another data transfer method in the master record. Therefore online data entry is possible for all consolidation units.

Process Flow

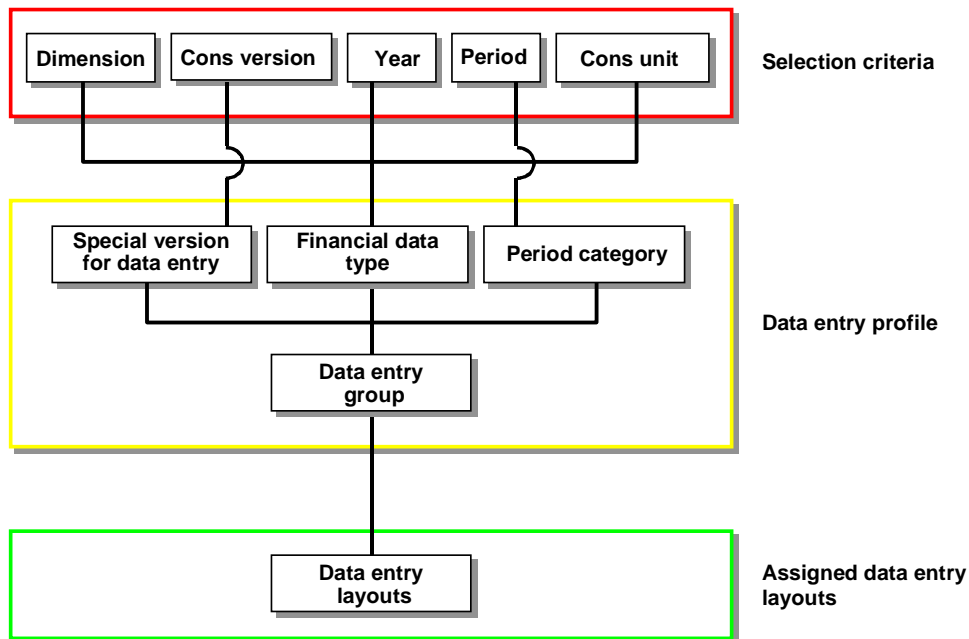
1. You provide your consolidation units with printouts of the data entry layouts.
2. The consolidation units fill out the data entry layouts with their financial data, and return them to the group headquarters.
3. You access the data monitor from the Consolidation menu and choose the data entry function. You then specify the data entry layout and consolidation unit/group in the initial screen. The system refers to the global parameters for further selection criteria.
4. The system checks the following:
 - Does the data entry layout exist for the selected chart of accounts?

If your layout has any fixed values in its general data selection (for example, period, version, dimension or consolidation units), the system checks to see if these correspond with the selection you use to access data entry.
 - Does the data entry layout belong to the data entry group assigned in the unit's data entry profile?

Online Entry of Reported Financial Data in the SAP System

- Is the language specified for the data entry layout identical to the logon language? If necessary, you can translate the texts of a layout (refer to the section [Preparing for Production \[Ext.\]](#) in the Consolidation Implementation Guide).

The following overview shows how the system determines a consolidation unit's data entry profile and assigned data entry layouts. On the basis of your selection criteria, the system reads your Customizing settings to find the applicable data entry layouts.



5. You then enter the reported financial data using a data entry layout.



If you have activated Microsoft Integrated Excel in Customizing, step [Define Data Entry Groups \[Ext.\]](#), then the system starts the Excel spreadsheet, and you enter your financial data in it.

Result

After you have entered data, you run validations to check that it is consistent. Then you proceed with your remaining consolidation tasks.

Entering Reported Financial Data Online

Procedure

1. In the Consolidation menu, choose *Data collection* → *Monitor*.
2. Check the global parameters by choosing *Environment* → *Global parameters*.
3. Put the cursor on the consolidation unit for which you want to enter data and the task for data entry, and choose *Update run*.
4. Select a data entry layout and choose *Enter*.
5. If you have entered variables instead of fixed values or a range of values in your definition of the subassignments, you are required to enter values for the variables in the following screen. Enter these values and choose *Goto* → *Reported data*.



Further procedures are dependent on whether you have activated Integrated Excel in Customizing, step [Define Data Entry Groups \[Ext.\]](#).

Further Procedures for Data Entry without Integrated Excel

1. The data entry layout appears. This contains header data, lead columns and value columns. To reduce the amount of information on the screen, you can hide the header data if you do not need it for reference.
2. Enter the financial data in the value columns. You enter values for items and subitems without a debit/credit sign. The system automatically determines the sign from the item master data.



- Your financial statement items show any breakdowns that are specified both in the layout and in the breakdown category for the individual items.
 - If an item has a breakdown, its identifier and text are displayed in the first row only (for the first breakdown), and you only see the breakdown information. This feature makes it easier for you to locate individual items in the input area. However, you can show the item information in all rows again by choosing *Settings* → *All key values on/off*.
 - The system automatically inserts 0.00 in any lines where you cannot enter values (for example, a totals item).
 - Totals items are displayed if you specifically specify this by choosing *Settings* → *Lead columns*. However, this is only possible if you specified a set generated for item hierarchies as the characteristic value for the item in the layout definition.
3. If you want to make an additional entry with a subassignment value, for a financial statement item in your layout, which will not be displayed as the default value, then use the empty lines at the end of the layout.

To move the new entry to the correct position, choose *Refresh*. The new entry will only be displayed if you entered a value other than zero.

Entering Reported Financial Data Online

4. Save your entries.
5. To print out the layout with the data you entered, choose *Reported data* → *Print reported data*.

Further Procedures for Data Entry with Integrated Excel

1. If in Customizing, you have only set the indicator for the use of Integrated Excel and have not designed any spreadsheet templates, then the system presents the data in the data entry layout, without formatting, in the upper left corner of the new spreadsheet.

If you have designed a spreadsheet template in Customizing, then the system opens it.

2. Enter your financial data. Note the following:

- a. **Avoid** the following Excel functions:

- i. Delete
- ii. Insert
- iii. Sort

When you use these Excel functions, then the system cannot import the data correctly into the database.

- b. If you want to delete the values entered, then choose *Edit* → *Delete*, in the SAP menu.
- c. The ready for input status of individual cells corresponds to how they were defined in the data entry layout, provided that the Excel spreadsheet is protected.
- d. The SAP system only imports data from the first spreadsheet of an Excel folder. Therefore you can execute additional calculations or insert diagrams in the second spreadsheet.
- e. If you enter Excel formulas in the SAP data area, these are overwritten when posting with the result of the formula, and the formula itself is lost.
- f. When you want to save, no cells can be processed in Excel at that point. You can control this by showing the formula bar in Excel (*View* → *Formula bar in Excel*).



The following functions, which the system offers when you enter financial data with data entry layouts, are not supported when using Integrated Excel:

- FS item hierarchy display
 - The following functions under the menu option *Settings*:
 - Number format
 - All key values on/off
 - Header presentation on/off
3. If you want to make an additional entry with a subassignment value, for a financial statement item in your layout, which will not be displayed as the default value, then use the empty lines at the end of the layout.

To move the new entry to the correct position, choose *Refresh*. The new entry will only be displayed if you entered a value other than zero.

Entering Reported Financial Data Online

4. Save the data.

Offline Data Entry with Interactive Excel

Purpose

This component enables a consolidation unit to enter its financial data locally in user-defined matrices, save it to a Microsoft Access database for the offline data entry program, and then transfer it to a central SAP System.

Implementation Considerations

You can use this component if, for technical or organizational reasons, the following methods of data entry are not feasible or desired for the parent and subsidiary in question:

- Online data entry in the SAP System
- Integrated data transfer from an SAP System
- Flexible upload from a non-SAP system
- Offline data entry with Microsoft Access as a standalone solution for decentralized data entry



As a tool for entering data in an Access database, the Interactive Excel component allows you greater flexibility in the definition of data entry forms than the offline data entry program with Access. Data entry form layouts are fixed in Access, and you cannot change the column definition as desired, for example.

Integration

- You can use master data and control parameters in the database to help you define data entry forms.
- Various scenarios are possible for the use of Interactive Excel, as regards the relationship between components and the organization of the data entry procedure. For more information, see the process description [Offline Data Entry with Interactive Excel \[Page 94\]](#).

Flexible Definition of Data Entry Forms

In a data matrix, you enter financial data for various characteristics and combinations of characteristics. In order to simplify definition of a data matrix, you can use lists of proposals for the characteristics predefined in Interactive Excel. These are generated from the master data and control parameters in the database.

However, you are also free to define your own matrix or part of a matrix without using values from Access, and to apply any formatting that you require.

Excel Formatting

Interactive Excel is added on to the standard Microsoft Excel application in the form of a template. It therefore has the advantage of being based on a well-known spreadsheet program that offers a wide range of formatting functions.

Preparation for Data Entry

Before you enter data in a matrix, you can run a preparation for data entry. During this procedure, matrix cells in which data cannot be entered are blocked, and data from the database is imported into the matrix as a reference.

Checks/Validations

Interactive Excel checks the consistency of data before exporting it to the database. You also have the option of triggering a validation of reported financial data using validation rules stored in the database.



Interactive Excel can also be used for reporting. For more information see [Reporting with Interactive Excel \[Page 421\]](#).

Offline Data Entry with Interactive Excel

Offline Data Entry with Interactive Excel

Purpose

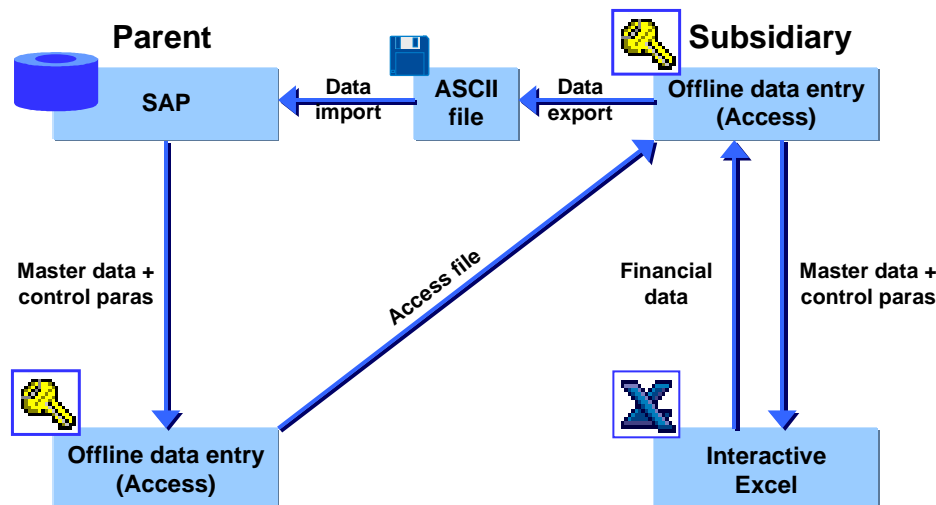
The following graphics illustrate the central scenarios in which Interactive Excel can be used for data entry within a subgroup.

Each scenario is determined by decisions taken within a subgroup concerning the technical organization and procedures for data entry.

Prerequisites

- You have installed Microsoft Excel 97 or Microsoft Excel 2000 and the Interactive Excel component provided by SAP.
- Microsoft Access or the offline data entry program (possibly in the form of a runtime version) is installed at least once within your local area network.
- The relevant Access database is available in the form of a file.

Scenario I: Local Definition of Data Entry Matrices



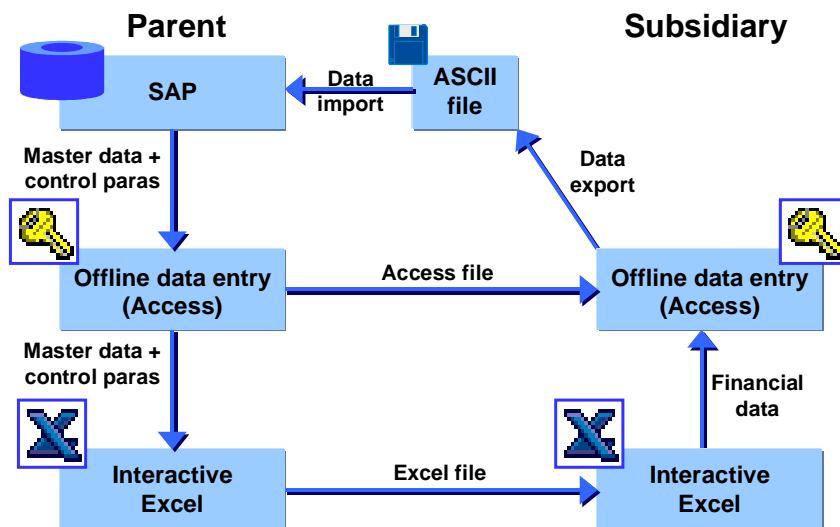
1. A parent company installs the offline data entry program based on Microsoft Access and configures it with master data and control parameters from the SAP System. It then provides a subsidiary with a copy of the Access database.
2. A subsidiary creates its own data entry matrices in Interactive Excel with the help of master data and control parameters from the Access database. It may also run a preparation for data entry for the matrices.
3. The subsidiary enters its financial data in the matrices and saves the data to its local Access database. It then exports relevant data from Access into an ASCII file, which it makes available to the parent company.
4. The parent uploads data from the ASCII file into the SAP System.

Offline Data Entry with Interactive Excel

Comments

- In this scenario, the parent allows its subsidiary to define its own matrices.
- By using a local copy of an Access database, the subsidiary can run the following checks before passing on its data to the parent company:
 - Checks on the data structure and matrix definition when saving to the database
 - Validation of data in the Access database

Scenario II: Central Definition of Data Entry Matrices



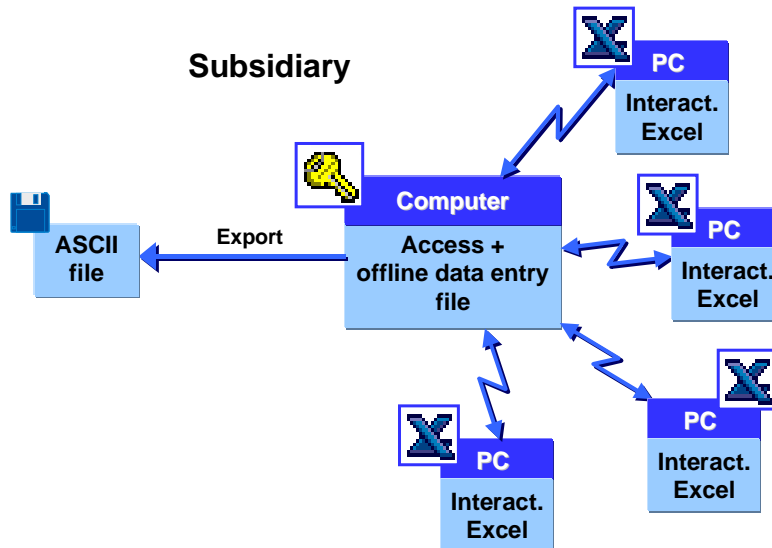
1. A parent company installs the offline data entry program based on Microsoft Access and configures it with master data and control parameters from the SAP System. It also installs Interactive Excel in order to create data entry matrices. The parent then provides a subsidiary with a copy of the database and the matrices (for which it may have run a preparation for data entry).
2. The subsidiary enters its financial data in the matrices and saves the data to its local Access database. It then exports relevant data from Access into an ASCII file, which it makes available to the parent company.
3. The parent uploads data from the ASCII file into the SAP System.

Comments

- In this scenario, the parent company creates all the necessary data entry matrices centrally in order to ensure that they are correctly defined.
- By using a local copy of an Access database, the subsidiary can run the following checks before passing on its data to the parent company:
 - Checks on the data structure and matrix definition when saving to the database
 - Validation of data in the Access database

Offline Data Entry with Interactive Excel

Low-Level Scenario: Data Transfer Within a Network



Comments

- A parent company provides a subsidiary with a copy of its Access database. One instance of this file resides within the subsidiary's network, either on a central computer or on a local PC.
- The database file can be accessed through the local area network in order to save data entered using Interactive Excel.
- Microsoft Access must be installed on at least one subsidiary computer in order to be able to generate an ASCII file of data entered.

Result

After the completion of offline data entry, you can continue processing the data in the SAP system, particularly you can run a consolidation with the SAP Consolidation component.

Data Matrix

Definition

User-defined table in Interactive Excel that can function as either a data entry form or as a report.

Use

You can use data matrices for the following purposes:

- Entering financial data in an Access database for the offline data entry program
The parent in a consolidation group usually decides whether it will define the data entry matrices for all subsidiaries using Interactive Excel, or whether it will allow the subsidiaries to define their own matrices.
- Reporting on the basis of current financial data in a SAP System or Access database for the offline data entry program

Structure

A data matrix consists of the following elements:

Header Data

Characteristics that are valid for a whole matrix and appear outside the row and column layout of the matrix. Single values (for example, fiscal year or version) or set aggregations (for example, a consolidation group consisting of several consolidation units) can be used for these characteristics. Each characteristic value that is defined as header data fills exactly one cell. The values that you select are inserted into the sheet in a block, but you can subsequently move them to a different position.

Constants

Characteristics that are fixed for a whole matrix. You specify these characteristics during matrix definition, after which they are hidden in the matrix and can not longer be selected during further definition.

Column Layout

Multiple values or set aggregations for a characteristic, which extend across several columns. A column layout in a matrix can consist of several rows. These rows do not necessarily have to be positioned directly beneath one another.

Row Layout

Multiple values or set aggregations for a characteristic, or one or more hierarchies, which extend across several rows. A row layout in a matrix can consist of several columns. These columns do not necessarily have to be positioned directly beneath one another.

User-Defined Entries

Empty rows or columns in the column/row layout (in other words where no characteristics are specified for a whole column/row). In reporting, you can use these cells for your own functions, for example, an Excel formula.

Data Matrix

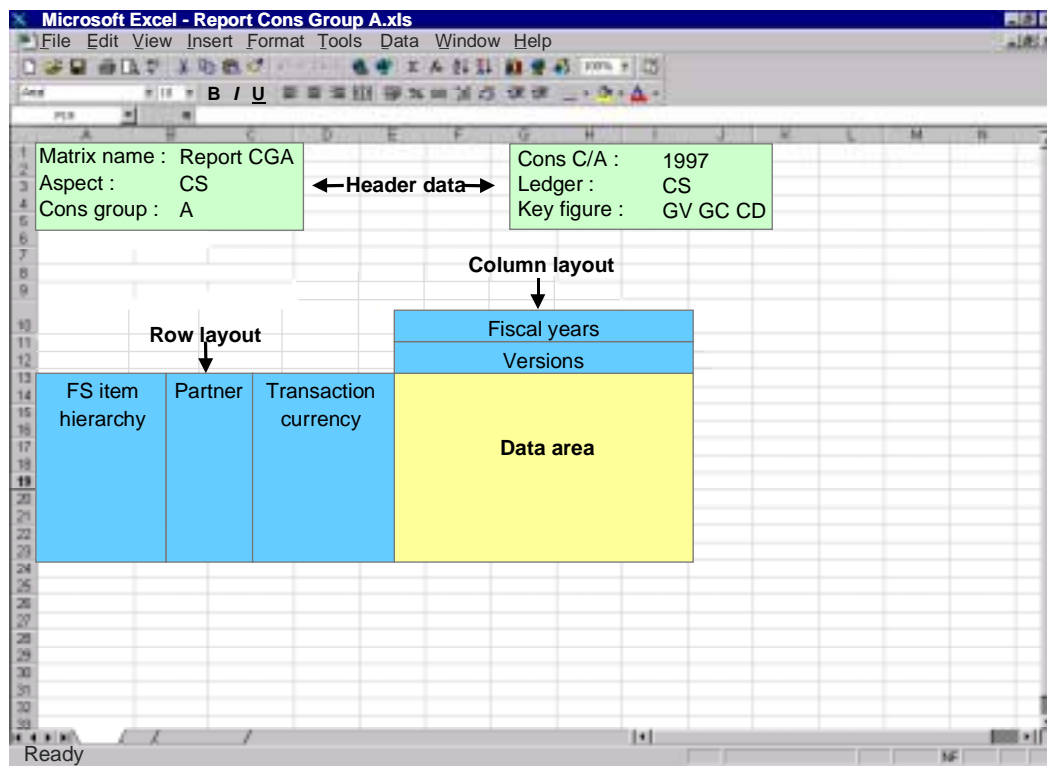
Data Area

Area directly adjacent to the row and column layouts, in which financial data is entered or report data displayed.



Interactive Excel must be able to identify the row and column layout before it can identify a data area. The program cannot distinguish a layout that only covers one row/column from header data, and therefore cannot identify it as a row/column layout. If your layout cannot be identified, a message appears asking you to explicitly indicate the data area.

A Simple Data Matrix and Its Base Elements



If you have created a complex matrix and want to identify the various elements in the matrix definition, you can choose *SAP* → *Origin of data* → *Active matrix*. This function marks the row and column layout and the header data on a sheet.

Opening a New Workbook with Interactive Excel

Opening a New Workbook with Interactive Excel

Prerequisites

You have installed Microsoft Excel 97 and the Interactive Excel component provided by SAP.



If you open an existing workbook from Excel that has been created using the Interactive Excel template, the menu option *SAP* automatically appears. You can use this to log on to a database connected to the SAP System.

Procedure

1. Start Microsoft Excel.
2. In the Excel menu, choose *File* → *New*. Open the Interactive Excel template by double-clicking on the *SAPActiveX* icon in the *General* group.
3. In the following dialog box, choose *Enable macros*.
4. Alternatively, the installation can create an Interactive Excel icon in the SAP Systems Start Menu.

Result

The item *SAP* is added to the standard Excel menu. You use this to log on to a SAP Systems or MS Access database.

Interactive Database Connection

Use

This central function of Interactive Excel enables you to do the following:

- Save reported financial data from a data entry form to the database
- Import up-to-the-minute data into reports defined in Interactive Excel
- Use master data and control parameters stored in the database as value proposals when defining data entry forms and reports

Prerequisites

You have access to the appropriate database.

Features

Communication Between Interactive Excel and the Database

Data can be transferred between Interactive Excel and a database as follows:

- You can only save data entered in an Interactive Excel form to an Access database for the offline data entry program.
- You can import data from an Access database **or** a SAP System into an Interactive Excel report.

Loading of Interface Texts for Interactive Excel

- When using an Access database for the offline data entry program

The interface texts for Interactive Excel are stored in the Access database and originate in the SAP System. You specify the text language when you download master data and control parameters from the central SAP System into the database.

- When using a SAP System as a database

The language that you specify when logging on to the SAP System determines the interface language of Interactive Excel.

Connecting Interactive Excel to an Access Database

Connecting Interactive Excel to an Access Database

Prerequisites

You have opened an empty or predefined file that was created using the Interactive Excel template.

Procedure

1. Choose *SAP* → *Logon* → *Other MS Access Database*.

In the following dialog box, enter your user name and password for the offline data entry program and specify the relevant database file and path, if necessary using the *Browse* function.

The entries that you make here are saved as defaults for the next time you log on. You only need to reenter the password.

If an authorization check is active for the Access database in the Microsoft environment, choose *More*. Check the default values in the additional fields and change the Access user name and password if required.

2. Choose *Open*.

Result

You are connected to the database and a menu option, which refers to the linked SAP application (for example Consolidation, Strategic Enterprise Management), is added to the standard Excel menu.

Additional functions appear under the menu item *SAP*, such as *Read values automatically*, *Settings*, or *Data origin*.

Creation of a Data Matrix

Purpose

In this process, you create a new data matrix as a data entry form or report, by making settings that are valid for the whole matrix. You can create several matrices in a single worksheet.

Prerequisites

- You have opened a workbook that was created using the Interactive Excel template.
- If you want to use master data and control parameters from the target or source database as proposals for the definition of characteristic values, you have logged on to the appropriate database. For more information see [Connecting Interactive Excel to an Access Database \[Page 102\]](#).



You can define a matrix without using proposals originating from existing master data and control parameters, however this fully manual procedure involves making extra definitions, and is therefore more complex.

- You have selected an aspect for the matrix.
An aspect determines the source or target database for matrix data, for example the SAP consolidation application from which you want to import data into reports, and whose master data and control parameters you want to use for the matrix definition.



You **cannot** change an aspect after it has been selected for a matrix.

Your selected aspect is automatically used as the default for further matrices, which you process with Interactive Excel, until you change it.

Process Flow

- You make the following global settings:

Matrix name

If you define several matrices for a single worksheet, you can differentiate between them by giving them different names.



Once a name has been assigned to a matrix, you can **not** change it later.

Debit/credit sign logic

The logic that you select determines the debit and credit signing used for entering data or displayed when data is imported from a database. The logics supported are shown in the following table:

Debit/credit sign logic	Represents
-------------------------	------------

Creation of a Data Matrix

Database values	Values are entered/displayed as they are saved in the database, for example assets items as positive (without a sign) and liabilities/stockholders' equity items as negative (with a minus sign).
Values as per item sign	<p>A value is entered/displayed without a sign if its balance corresponds with the debit/credit sign set in the master data of the item/subitem concerned. If the balance is reversed, the value is entered/displayed with a minus sign.</p> <p>Example: The balance of a liabilities/stockholders' equity item is normally a credit, and therefore the sign — (minus) is set for those items. However, if a debit balance occurs for this item, a minus sign is entered/displayed for the value to indicate a reversed sign.</p> <p>You can use this logic for balance sheets, for example.</p>
Inverse database values	<p>Income statement values are entered/displayed as the inverse of database values. Each time data is transferred, values are automatically converted using the database logic.</p> <p>This logic can be used for an income statement, for example, if you want to show expenses as negative (with a minus sign) and revenue as positive (without a sign). This relationship between positive and negative values enables you to calculate financial results using standard Excel formulas.</p>

Scaling

Data can be entered/displayed at a specified scaling factor. Scaling of 1, 1,000, or 1,000,000 is possible when you create a matrix. However, you can later change the scaling factor as required (condition: this must be a scale).

Return units indicator

If you select this indicator, values are displayed with a unit in Interactive Excel reports (for example currency, unit of measure).

Data entry matrix indicator

You need to set this indicator if you want to use a matrix in order to enter data and run a preparation for data entry.

Display blank lines indicator

Normally blank lines are also displayed in a data matrix, and therefore the indicator is selected. Deselecting the indicator suppresses blank lines. You may want to do this to improve clarity.

Display blank columns indicator

Normally blank columns are also displayed in a data matrix, and therefore the indicator is selected. Deselecting the indicator suppresses blank columns. You may want to do this to improve clarity.

Post 0 for blank cells indicator

When you want to write 0 for blank cells, then you have to use this indicator. You can use this to enter a numerical value in all items.

Update mode

The update mode specifies how the values of data records, which were posted earlier, should be treated. You have the following options:

- *Delete (all items, all subassignments)*: all existing data for each object is reset to zero
- *Delete (entered FS items, all subassignments)*: all existing data for each object in posted items, is deleted before writing the uploaded data.
- *Delete (FS items in the matrix, all subassignments)*: all existing data for each object in the matrix, is deleted with all subassignments, before writing the uploaded data
- *Overwrite (entered FS items + subassignments)*: the existing entries are overwritten by the uploaded ones (when identical to the item and all subassignments), other uploaded data is written, otherwise existing settings remain unchanged
- *Divide (overwrite, but total per item remains unchanged)*: the value, which already exists in an item, is divided onto the uploaded subassignments, the total per item remains unchanged. To achieve this, an automatic offsetting entry is generated on the respective default subassignment.



The function *Divide* is currently restricted to the subassignment *Partner*.

2. You specify global characteristic values.

You can specify single values or set aggregations as characteristic values for a matrix header. To do this, you can use master data and control parameters in the source/target database as proposals.

If a characteristic value is valid for an entire matrix, you can flag it as a constant. The value is set in the background, and the characteristic is no longer available for definition, thereby reducing the number of characteristics that are listed.

You can find out which characteristics are set as a constant and undo this setting at any time. For more information, see [Make Global Settings for a New Data Matrix \[Page 433\]](#).

If a particular characteristic is irrelevant for your matrix, you can mark it as a constant without assigning a value. It will then be inactive and no longer offered for selection.

If you subsequently change a characteristic value in a report matrix when connected to a database, the matrix is automatically refreshed with appropriate database data.

Making Global Settings for a New Data Matrix

Making Global Settings for a New Data Matrix


Prerequisites

You have opened a workbook that was created using the Interactive Excel template.

Procedure

1. Place the cursor on a cell that you want to form the upper left corner of the matrix header data.
2. Choose *Consolidation* → *Data matrix* → *New*.

The settings of existing matrices are copied as default values into your matrix.

A dialog box appears, in which you are shown the *Preset Characteristics* (= global parameters). You have the possibility to deactivate some parameters.
3. On the *Settings* tab page, enter a name for your matrix and specify the following parameters:
 - A debit/credit sign logic
 - A scaling factor for data
 - Whether you want to enter values with units or display units for imported data
 - Whether the matrix is a data entry matrix
 - Whether blank lines should be displayed
4. On the *Characteristics* tab page, specify values for characteristics that are valid for the whole matrix as follows:
 - a) Select a characteristic in the upper part of the dialog box.
 - b) Determine the characteristic type for the value. You can define the value as either a single value or a set aggregation.
 - c) Use the arrow button next to the bottom field to display a list of possible values. Select one of these values.
 - d) Set the *Constant* flag if a characteristic is valid for the whole matrix and you do not want it to appear in the sheet.
 - e) Choose *Confirm* to complete your definition of the characteristic.
 - If you want to change the value selected for a characteristic, position the cursor on the characteristic, select a new value from the list of possible values, and choose *Confirm*.
 - If you want to remove the value selected for a characteristic, position the cursor on the characteristic, select the empty entry at the top of the list of possible values, and choose *Confirm*.
5. Repeat step 4 until you have specified all the characteristic values that you require. Then choose *OK*.

Making Global Settings for a New Data Matrix

Result

- The relevant characteristic values are inserted as a block at the cursor position, unless you specified them as constants, in which case they are invisible. General information, for example user, scaling factor, and aspect are also inserted.
- Header data can be formatted, moved, or deleted after being inserted into a worksheet. All global settings except for the matrix name and aspect can be changed after insertion.
- You can check your settings and make changes at any time by choosing *Consolidation* → *Data matrix* → *Change* and the *Settings* tab page.



In this way, you can find out which characteristic values are flagged as constants and therefore do not appear on the sheet. You can also remove the *Constant* flag for a characteristic value.

- For more information about changing values, see [Changing Characteristic Values \[Page 448\]](#).
- You can preset the settings for new data matrices. To do this choose *Settings* → *Global Parameters* → *Preset Characteristics*. In exactly the same way, you can copy the settings of already existing matrices as default values.

Definition of a Matrix

Definition of a Matrix

Purpose

In this process, you define the row and column layout of a data entry form or report matrix by arranging characteristics and characteristic values on a worksheet.

Prerequisites

You have completed the process [Creation of a Data Matrix \[Page 430\]](#), in which you make basic settings for your matrix.

Process Flow

1. You define characteristic values and insert them into the worksheet as a row and column layout.

You can specify characteristics and their values in the following ways:

- By manually inserting them in the matrix
- By selecting them from proposal lists that are generated from master data and control parameters in the database



The advantage of selecting values from lists of proposals is that the reference of the cell in which a characteristic value is located is automatically recognized by Interactive Excel, and does not need to be explicitly specified. For more information see [Determination of Values for Characteristics \[Page 451\]](#).

If you use proposals, you can display either the key, the short or long text, or everything, in the matrix. If, in addition to the key, you use the long text, the long text automatically changes if you choose a different characteristic value by entering a new key.

The following types of characteristics can be used to define the matrix layout:

- **Single values**

You can arrange these in sequence, either horizontally or vertically.

- **Set list**

A series of single values arranged in sequence, either horizontally or vertically.

- **Set aggregation**

A single entry in the matrix definition that summarizes data for all set entries.

- **Hierarchy**

A series of single values arranged vertically with a structure of up to 8 levels.

You can insert an unlimited number of single values, sets, and hierarchies into your data matrix, and subsequently delete, move, format, or change them.

When you insert a single value or set aggregation into a cell on the sheet, a help function for values is automatically set for this cell. You can display a list of possible values for the

Definition of a Matrix

characteristic by positioning the cursor on the cell and using the function button that appears. This function enables you to change a characteristic value quickly and easily.



If you subsequently change a characteristic value in a report matrix when connected to a database, the matrix is automatically refreshed with appropriate database data.



- Certain characteristics are dependent on others. When you define characteristics, you should take this into account, since the value you set for one characteristic could determine the values that Interactive Excel proposes for a second characteristic.

When you use the *Consolidation* menu in Interactive Excel to set values for characteristics that you want to insert into a matrix, you need to define any delimiting characteristics before a proposal list can be generated.

- Before you can prepare a matrix for data entry, you need to define all required characteristics.

The following table shows the characteristics supported by Interactive Excel, and their dependencies:

Characteristic	Characteristic required	In SAP dependent on...	In Access dependent on...
Dimension	X		
Cons chart of accounts	X		
FS item	X	Cons chart of accounts	Cons chart of accounts
Version	X		
Fiscal year	X		
Period	X		

Definition of a Matrix

Consolidation group <ul style="list-style-type: none"> • Single value • Attributes • Hierarchy 	Characteristic required, if: <ul style="list-style-type: none"> - no ledger or - no consolidation unit or - consolidated data (posting level 30) 	<ul style="list-style-type: none"> • Dimension • Dimension • Version • Fiscal year • Dimension • Version • Fiscal year • Period 	<ul style="list-style-type: none"> • Dimension • Dimension • Version • Fiscal year ./.
Consolidation unit <ul style="list-style-type: none"> • Single value • Attributes • Set • Hierarchy 	Characteristic required, if no cons group	<ul style="list-style-type: none"> • Dimension • Dimension • Fiscal year • Dimension • Fiscal year • Period • Version • Dimension • Fiscal year • Period • Version 	<ul style="list-style-type: none"> • Dimension • Dimension • Fiscal year • Dimension • Fiscal year • Period • Dimension • Fiscal year • Period • Version
Partner unit <ul style="list-style-type: none"> • Single value/Set • Attributes 		<ul style="list-style-type: none"> • Dimension • Dimension • Fiscal year 	<ul style="list-style-type: none"> • Dimension • Dimension • Fiscal year
Key figure	X		
Subitem category			
Subitem		Subitem category	Subitem category
Unit of measure			

Definition of a Matrix

Year of acquisition			
Custom characteristic			
Transaction currency			
Document type		Dimension	Dimension
Ledger	Characteristic required, if no cons group		
Reference version			
Reference fiscal year			
Reference period			
Posting level		Key figure	



Data is aggregated for characteristics without a defined value. If, for example, a receivables item has a breakdown by trading partner and transaction currency and you do not specify a value for the trading partner breakdown, the sum of all data records with a trading partner assignment is calculated (reporting) or must be entered (data entry) for this item. If a row or column contains no specified characteristics, it can be used for a user-defined entry, for example an Excel formula.

- You have the option of displaying additional information for certain characteristics in any cell, in the form of an attribute.



You can display the debit/credit sign of a financial statement item or the currency, text, or language of a company. This additional information is irrelevant for the import (reporting) and export (entry) of data, since it has no influence on the matrix definition.

- You make sure that values or value references are set for all the characteristics that you have defined, so that data can be saved correctly to or imported correctly from the database.
- You specify any remaining required characteristics and check your global settings.
- To check the data structure of the data matrix, choose or *Consolidation or SEM → Data matrix → Check*.

Specifying Single Values

Specifying Single Values

Prerequisites

You want to use a list of proposed values to define a characteristic as a single value and insert it into the matrix.

Procedure

1. Place the cursor on the cell in which you want to insert a characteristic value.
2. In the Interactive Excel menu, choose *Consolidation* → *Single values* and the characteristic you require.


A dialog box appears with a list of values for the characteristic. Depending on the characteristic that you are defining, values for other characteristics that you have already specified, and on which the values in the proposal list are dependent, may appear in fields at the top of the box.



You may want to specify a value for a characteristic that is dependent on the values of characteristics that you have not yet specified. In order to generate a list of valid proposals, you need to specify these delimiting characteristic values. An example of a delimiting characteristic value is the consolidation chart of accounts, which represents a compound of the characteristic *FS item*. Only after you have made this specification is a value list displayed.



If a list is very long, first a condensed form of the list is displayed, which you can selectively expand as desired.

3. Select one or more values. You can use Windows selection functions to select multiple values (**CTRL** + mouse click) or blocks of values (**SHIFT** + mouse click). You can also use the search function by ID values or long texts, in order to go to its position in the list. In addition to that, you can position on a value using .
4. If you want to insert more than one single value, specify how you want them to be arranged on the sheet.
5. Choose **OK**.

Result

The values are inserted at the cursor position, either beside or beneath each another (depending on the alignment selected).

If you select multiple values, these are inserted in the sequence in which they are listed in the database.

Single values can be formatted, moved, deleted or changed after insertion into a worksheet.



You can define multiple single values in a single step.

Specifying Sets

Specifying Sets

Prerequisites

You want to use a list of proposed values to define a characteristic as a set and insert it into the matrix. Sets with the following characteristics are offered: consolidation unit, FS item, transaction currency.

Procedure

1. Place the cursor on the cell in which you want to insert the first entry in the set.
2. In the Interactive Excel menu, choose *Consolidation* → *Sets* and the characteristic you require.


A dialog box appears with a list of values for the characteristic. Depending on the characteristic that you are defining, values for other characteristics that you have already specified, and on which the values in the proposal list are dependent, may appear in fields at the top of the box.



You may want to specify a value for a characteristic that is dependent on the values of characteristics that you have not yet specified. In order to generate a list of valid proposals, you need to specify these delimiting characteristic values. Only after you have made this specification is a value list displayed.



If a list is very long, first a condensed form of the list is displayed, which you can selectively expand as desired.

3. Select one or more sets. You can use Windows selection functions to select multiple values (CTRL + mouse click) or blocks of values (SHIFT + mouse click). You can enter a value ID (in the form of the field name) in order to go to its position in the list. You can also use the search function by ID values or long texts to go to their position in the list. In addition to that, you can position on a value using .
4. Determine the following:
 - How the set entries should be arranged on the sheet (in the case of a set list or multiple set aggregations)
 - Whether the ID and/or short text and/or long text of the characteristic should be displayed
 - Whether the set is a list set or a set aggregation
5. Choose OK.

Result

- **Set list**

The relevant set entries are inserted at the cursor position, either beside or beneath each another (depending on the alignment selected).

Specifying Sets

Set entries are inserted in the sequence in which they are entered in the set.

- **Set aggregation**

Only one entry is inserted into the worksheet. This entry represents the sum of all entries in the set.

Sets can be formatted, moved, deleted or changed after insertion into a worksheet.

Specifying Hierarchies

Specifying Hierarchies

Prerequisites

You want to use a list of proposed values to define a characteristic as a hierarchy and insert it into the matrix. You can specify hierarchies for the following characteristics:

- Consolidation group
- Consolidation unit
- Partner unit
- FS item

Procedure

1. Place the cursor on the cell in which you want to insert the first entry in the hierarchy.



If a list is very long, first a condensed form of the list is displayed, which you can selectively expand as desired.

2. In the Interactive Excel menu, choose *Consolidation* → *Hierarchies* and the characteristic you require.

A dialog box appears with a list of values for the characteristic. For example, here you can choose *consolidation unit*.



If a list is very long, first a condensed form of the list is displayed, which you can selectively expand as desired.

3. Select one or more hierarchies. You can use Windows selection functions to select multiple values (CTRL + mouse click) or blocks of values (SHIFT + mouse click). You can enter a value ID in order to go to its position in the list.
4. Choose *SAP* → *Settings*, and determine
 - Whether you want hierarchy levels to be indented when inserted into the worksheet, and whether the column width should be automatically adjusted to fit the contents
 - How many hierarchy levels (up to 8) should be expanded when the hierarchy is inserted into the worksheet
 - Whether a color should be applied to the hierarchy
 - Whether the ID and/or short text and/or long text of the characteristic should be displayed

You can also change these settings by using the context menu and a right mouse click.

5. Choose *OK*.

Result

The relevant hierarchy is inserted at the cursor position, with the specified formatting. All hierarchy entries are inserted, regardless of the number of levels that are expanded.

You can change the color format and indent of the individual levels by choosing *SAP → Settings*. Your settings are saved locally and are therefore only computer-specific.

You can format, move, delete or change hierarchies after insertion into a worksheet. In exactly the same way you can update the hierarchies at any time.

If you want to delete a hierarchy, choose *SAP → Delete hierarchy*. You thereby ensure that the layout, values, and formatting for a hierarchy are completely removed from the worksheet.

Specifying Attributes

Specifying Attributes

Prerequisites

You have specified header data for your matrix. You may have also defined the matrix layout. You now want to insert an attribute into the matrix to provide additional information about a single value, set entry or hierarchy entry. An attribute is not part of the information required for communication between Interactive Excel and the database. Possible attributes are supplied by SAP as well as further custom characteristics.

The information that can be provided by an attribute depends on the characteristic, for example a debit/credit sign or short text can be inserted for a financial statement item.



You cannot insert attributes for a set aggregation, since this characteristic has multiple values.

Procedure

1. Place the cursor on the cell in which you want to insert an attribute.
2. Choose *Consolidation* → *Attribute* and then the relevant characteristic.
A modeless dialog box appears in which you specify the relevant characteristic value.
3. Place the cursor on the cell in which the ID or long text for the value is located.
The cell reference is displayed in the field. Choose *OK*.
By entering an area, you can also display the attributes for all of the fields within the area.
4. In the next dialog box, select an attribute and choose *OK*.



You may want to specify an attribute for a characteristic that is dependent on the values of characteristics that you have not yet specified. In order to generate a list of valid attributes, you need to specify these delimiting characteristic values. Only after you have made this specification is a list of attributes displayed.

Result

The attribute is inserted at the cursor position, and can be subsequently formatted, moved, deleted, or changed.

You can use the procedure described above to change an attribute that you have already defined. When you change an attribute, you need to confirm that you want it to be overwritten with new data.


Working with Structures

Prerequisites

You want to process characteristics with structures. Structures are available in Interactive Excel for all the hierarchies and sets.

Procedure

In the Interactive Excel menu choose *Consolidation* → *Structures* → *Update* or → *Change/Combine/Detach*. You have the following options:

Update structure	You can update the structure, in order to supply it with current data from the SAP System.
Change structure	<p>Here you have the following options:</p> <ul style="list-style-type: none"> - Only compile the area of definition: only the cells which belong to the area of definition of the matrix, are processed/deleted - Compile matrix area: all cells can be processed/deleted, which either belong to the area of definition or to the output area of the matrix - Compile complete rows/columns: complete rows or columns are always processed - You can also select a different hierarchy or a different set for the structure To do this, press <i>Edit</i>, select the structure to be changed and change it <p>With this option you can activate and/or deactivate the automatic update using </p>
Combine structure	<p>You can combine several structures for different characteristics The values of all combinations are multiplied through all levels.</p> <p>For example, this applies to all breakdowns, to sets with consolidation units, transaction types, transaction currencies.</p>
Detach structure	You can detach various combined structures.
Delete structure	You can delete structures, for example the structure of the consolidation units.

Result

By working with structures, you can make the dataset clearer and in particular easier to evaluate.

Changing Characteristic Values

Prerequisites

You want to change some or all of the values that you have already specified for characteristics in a matrix. To do this, you can use one of the procedures described below.

Procedure

Changing Values Manually in a Matrix

Change the existing values by typing over them.

Changing Values by Means of Proposal Lists

Two procedures are available for changing values by means of proposal lists:

- By a selection list:
 - a) Place the cursor on the cell you want to change.
 - b) When sets and/or single values, choose a value from the dropdown menu, for example the name of a specific consolidation unit. You can change hierarchies via the menu, because there is no dropdown menu for hierarchies.
 - c) If a dropdown menu appears, click on the desired value.
 - d) Choose *OK*.
- Using Interactive Excel, from where you go to the application menu for Consolidation:
 - a) Place the cursor on the cell in which the characteristic you want to change is located.
 - b) Choose *Consolidation* and then the relevant characteristic type and the characteristic.
 - c) When prompted, confirm that you want the existing value to be overwritten.
 - d) A dialog box appears with a list of values for the characteristic.
 - e) Select the appropriate value, check that the display format is correct and choose *OK*.

Additional Settings

Additional Settings

Use

Under *SAP* → *Settings*, you can make several formatting settings and general setting for your work with Interactive Excel.

Features

Formats for Hierarchies

You can change the color of the individual levels and their indent level. Your settings are saved locally and are therefore computer-specific.

Formats for Matrix Cells

You can define different formats for the following cells:

- Cells that **cannot** be used for data entry (for example totals items or invalid characteristics)
- Cells that **can** be used for data entry
- Report cells into which data is imported

These settings are valid for the entire workbook.

You choose *Change* for the relevant cells, and a standard Excel dialog box appears. In this box, you define the formats that you want to use.

The default format template for Interactive Excel is set, and should be sufficient for your needs. However, you can choose a different template as required.

Settings

Shortcut Key for Possible Entries Function

When you insert a single value or set aggregation into a cell, a possible entries function is applied to the cell. You can use the button to the right of the cell to display a list of possible values.

The key combination STRG + h is set as default for this function, should you prefer to use the keyboard rather than the mouse. However, you can set a different key combination if desired.

Always read values manually

Choose this setting, when you want to prevent data being automatically read from the SAP System.

Changed matrix data is normally automatically read again from the SAP-System. You can stop this, for example, when you want to create varied valuations on the basis of data from a key date, using Interactive Excel.

When you have activated this option – that means only allowing the manual update – every time you log onto Interactive Excel, you receive a system message informing you that the automatic update is deactivated.

Define Font

If desired, you can change the font used for displaying the interface texts (dialogs) in Interactive Excel. Follow these steps::

1. Choose menu item *SAP*.

A dropdown menu appears.

2. Choose *Settings*.

A list of options is displayed.

3. Choose the tab *Font*.

You can choose either a fixed-width font or a proportional font, for which there are further choices available. You can display sample texts.

Global Settings

Here your selected global parameters, which you work with in the SAP system, are listed and can also be changed by you interactively.

Default Settings

You can use the function *SAP defaults* to restore the predefined settings for Interactive Excel.

Activities

Make your desired settings at menu item *SAP* → *Settings*.

Determination of Values for Characteristics

Determination of Values for Characteristics

Use

The link between the database characteristics and the characteristics available in Interactive Excel is pre-programmed. Your assignment of characteristic values in a matrix to the preset Interactive Excel characteristics enables data to be transferred between the correct database fields and matrix fields.

You can identify a characteristic value by entering one of the following:

- A cell reference
- A single value

If you use master data and control parameters from a database as proposals when defining characteristics, the value reference of characteristic is automatically set. This reference is automatically adjusted when a characteristic is moved to a different location on a sheet.

However, you need to manually specify the value or value reference for characteristics that you have defined as follows:

- By manual insertion in a matrix, outside a list of set entries or a hierarchy
- By copying and pasting from another matrix

It is helpful to specify missing values or missing value references after you have completed the definition of a matrix. To do this, the Interactive Excel menu choose *Consolidation* → *Data matrix* → *Change*, then specify the missing values.

Specifying a Value/Value Reference for Characteristics

Prerequisites

A characteristic value or the cell reference of a characteristic value has not yet been specified, for example if you manually inserted the characteristic into your matrix.

Procedure when Using Detailed Menu

1. Choose Consolidation → *Data matrix* → *Change*.
2. On the tab strip in the following dialog box, choose *Optional characteristics* and select the appropriate characteristic.
3. Enter one of the following in the *Value/Value reference* field.
 - A single value

If the ID of the single value is identical to a possible cell coordinate, for example a transaction type with the ID B10, you need to enter the value preceded by an apostrophe, for example, **B10**.
 - A cell reference, for example, **B3**
 - A cell reference, by clicking on the button to the right of the entry field

A dialog box appears. When you drag the cursor over the appropriate matrix area on the worksheet, its coordinates appear in the dialog box field. Use the function button next to the co-ordinate field in order to confirm your entry.
4. Choose *Confirm*, to complete your selection.
5. Once you have specified all values and value references, choose *OK*.

If a required characteristic has not yet been defined, a warning message appears. In this case, choose *Consolidation* → *Data matrix* → *Change* and define the appropriate characteristics on the *Reqd char.* tab strip. Then choose *OK*.

Procedure when Using Context Menu

1. Select one or more fields, by marking it/them, for example the FS item.
2. Right mouse click
3. Choose *SAP* → *Item* or a characteristic that you have chosen instead.

Result

Cell Reference

An assignment is created between a characteristic on the worksheet and a characteristic preset in Interactive Excel. The cell reference of a characteristic is automatically adjusted if you move the characteristic to a different location on the sheet.

Single Value

The characteristic is invisible on the sheet, as is the case for all constants.

Specifying a Value/Value Reference for Characteristics

Identifying the Area for Data Input/Output

Use

Before it can import data into or export data from a matrix, Interactive Excel must be able to identify the data area in the matrix. The data area in a matrix is adjacent to the column and row layout, and consists of cells relating to these layouts. For a simple graphic showing the different elements of a matrix definition, see [Data Matrix \[Page 427\]](#).

If you define a matrix in which the row and column layouts and their respective cells are unambiguous, Interactive Excel automatically recognizes the data area.

If a layout only occupies a single row or column, it can be confused with the header data and is, therefore, not recognized as a row or column layout. In this case, you are prompted to explicitly specify the data area at the following events:

- After you have saved a matrix definition that you have changed by choosing *Consolidation* → *Data matrix* → *Change*.
- If you choose *Consolidation* → *Import data* in order to fill a matrix with data.



You have inserted a hierarchy of consolidation items in the row layout of a matrix and a version in the column layout. Interactive Excel cannot identify the data area because it does not recognize a layout that only contains one characteristic value.

Activities

1. Select the data area by dragging the cursor over the sheet.
2. Select *Choose* to the right of the coordinate field to confirm your entry.
3. Choose *Confirm*.

Entry of Specific Data Categories

Entry of Specific Data Categories

Use

You can enter cumulative financial data for a combination of the following parameters by specifying an appropriate key figure:

- **Valuation**
 - Local requirements (reported financial data)
- **Currency or quantity**
 - Local currency
 - Transaction currency
 - Quantity



You select the key figure *LV LC CD* (reported financial data, local currency, cumulative).

Activities

When you define a data matrix, you specify the data category for your financial data by setting the appropriate key figure as a global characteristic value. [Make Global Settings for a New Data Matrix \[Page 433\]](#)

Creation of Further Matrices

Use

When you create an additional matrix, global characteristic values set for the initial matrix are automatically proposed for the header data.

Features

When you create an additional matrix, global characteristic values set for the initial matrix are automatically proposed for the header data. This minimizes the effort required for defining two or more matrices with similar or identical header data.

Activities

You create an additional matrix in the same way as the initial matrix, by choosing *Consolidation* → *Data matrix* → *New*.

You select the values that you want to copy. A value is selected when the field to its left is checked. Once you have confirmed your selections, a further dialog box appears for you to define other global settings.

Deleting a Matrix

Deleting a Matrix

Prerequisites

Use this procedure to completely remove a data matrix definition from a worksheet and reset all settings made for the matrix.

Procedure

1. Choose *SAP* → *Delete matrix*.
2. A dialog box appears. There are two ways of identifying the data to be deleted: (a) You can enter the name of the matrix to be deleted. (b) You can select the area to be deleted by dragging the cursor over the appropriate matrix area on the worksheet, after which its coordinates appear in the dialog box field. Use the function to the right of the field to confirm the coordinates of the fields to be deleted.
3. Click *OK* to delete the selected area.

Entry of Data in a Matrix

Purpose

In this process, you enter financial data in a data matrix and save it to an Access database for the offline data entry program.

Prerequisites

The matrix in which you want to enter data is already defined, and you have access to the file in which the matrix is saved. Either you have already completed the process [Definition of a Matrix \[Page 435\]](#), or a parent company/unit has provided you with a predefined matrix in which you can enter data.

Process Flow

1. If required, you run a [Preparation for Data Entry \[Page 132\]](#).

During the preparation, current data from a local Access database is imported into the matrix, certain cells in the matrix are blocked, and other automatic settings are made.



A parent can run a preparation for data entry on a matrix before sending it to a subsidiary. If this is the case, the subsidiary does not have to run a preparation when it receives the matrix.

2. You enter your financial data for the period in the data area of the matrix, either in empty fields or by typing over the reference data from the preparation for data entry.
3. You save the data to the database.

When you save data to the database, characteristic values in your matrix definition are checked for consistency. You also have the option of triggering a validation of data using rules that are stored in the Access database.



If desired, you export data in test mode in order to find and remove any errors before you update the database.

Preparation for Data Entry

Preparation for Data Entry

Use

This function enables you to prepare a data matrix for the entry of financial data. During the preparation, Interactive Excel blocks certain cells in the matrix and makes other automatic settings, as described below. It then imports existing financial data from the database as a reference for data entry.

Preparation for data entry ensures that data is entered correctly. It can be carried out by a parent before distribution of matrices to subsidiaries, or it can be performed by the subsidiaries themselves, if they have access to the appropriate Access database.

Prerequisites

- You have defined a matrix locally following the process [Definition of a Matrix \[Page 435\]](#), or received a predefined matrix from a parent, for which the *Data entry matrix* indicator is set.
- The Access database in which you want to save data is available in the form of a file.

Features

Blocking of Cells against Data Entry

Interactive Excel checks all cells in the data area to determine whether they are valid for data entry. Cells that are not valid for data entry (for example those in which totals items or invalid characteristics are located) are locked and their content cannot be saved to the database.



- If you enter data in invalid cells and try to export it to the database, a warning message is issued and you can then correct the error. Once you have corrected an error, data can be exported to the database. You do not need to rerun the preparation.
- If you **do not** correct a recognized error and you try to export data to the database again, data **is** transferred, however the data with errors is not saved in the database, and an entry is made in the error log. This procedure enables you to save correct data to the database without having to first correct any data with errors.

Using the function [Information about the Origin of Data \[Page 468\]](#), you can display cells that are blocked for data entry.

Insertion of Totals Formulas for Hierarchy Nodes

Values for hierarchy nodes are replaced by totals formulas, which automatically calculate the sum of data entered for all items below the nodes.



Due to the insertion of totals formulas, preparation for data entry is not suitable in the following cases:

- If you use hierarchies of companies/consolidation units in the matrix

Preparation for Data Entry

Only summarization within a hierarchy of consolidation items can produce a value that is valid for consolidation purposes.

- If you have specified that you want to use the debit/credit sign logic 'Values as per item sign'.

Since the majority of values are entered/displayed as positive using this logic, the total calculated at the hierarchy nodes will be incorrect.



A cell comment contains information from the SAP system as to the reason why the update cannot take place. Some reasons might be:

- Subassignments were not transferred from the SAP System.
- A wrong, non-existing company was addressed.
- The item is a totals item.

Deactivation of the Matrix

After it has been prepared for data entry, the matrix is deactivated. The connection to the database is not terminated, but if you subsequently change the definition of the matrix, data is not automatically refreshed. You still have the option of manually triggering a refresh of data, however.



You prepare a matrix with actual data for 1997. You then redefine the matrix for the entry of 1998 plan data, and use the actual data for 1997 as a reference for data entry. When you change the year to 1998, data is not refreshed.

Data Import

Any data that exists in the database for the combination of characteristic values in your matrix definition is inserted into the matrix and serves as a reference that can simply be typed over.

Activities

You can run a preparation as follows:

- When saving a matrix definition under *Consolidation* → *Data matrix* → *Change*, by choosing *Import data*
- By choosing *Consolidation* → *Import data* and the relevant work area

Saving Financial Data to the Database

Saving Financial Data to the Database

Use

This function enables you to export financial data entered in a data matrix into an Access database for the offline data entry program.

Prerequisites

- You have entered financial data in a matrix, possibly after preparing your matrix for data entry.
- The relevant Access database is available in the form of a file.
- The Access application is not running when you save.

Features

Checks

When you save data to the database, characteristic values in your matrix definition are checked for consistency.

- A warning message appears if characteristic values in a matrix are inconsistent with those in the database, for example, if they are invalid or have an incorrect breakdown. You can correct any errors and restart the database update.
- Data in rows or columns without a definition is not saved to the database.
- The value 0 (zero) is saved for empty cells.

Error Log

Errors that are detected during the export are written in an error log in a text editor window. You can delete errors in the text editor once you have corrected them in the matrix, and you can copy the log to other applications in order to print or archive it.

Validation

You have the option of running a validation of reported financial data. This validation takes place in the Access database itself and uses the validation rules that are already stored there. You can run a validation when saving data in either test or update mode. Any errors are listed in the error log.



Before data can be validated, validation rules must either be defined in the SAP System and downloaded into the offline data entry program or maintained directly within the program itself.

- For more information about validations, see the Consolidation Implementation Guide, section *Data → Validations for Reported Data and Standardized Data*.
- For more information about downloads, see the Consolidation Implementation Guide, section *Data → Data Collection → Online and Offline Data Entry → Additional Settings for Offline Data Entry*.

Saving Financial Data to the Database

Database Generation

If the Access database has not yet been generated, the update triggers a generation for the combination of dimension, version, consolidation unit, fiscal year, and period defined in the matrix.

Test Run

You have the option of saving in test mode. Characteristics are checked, data validated if so specified, and a log generated for any errors, without the database being updated. The test run enables you to remove any errors before saving in update mode.

Activities

To save data to the database, you choose *Consolidation* → *Export data*. You specify whether you want to run the update in test mode and whether data should be validated.

You can save data from all matrices in a sheet or all matrices in a file to the database.



At the time the validation and generation of the database takes place in Access, and not in the SAP system, the monitor remains in the SAP system for the status of the validation.

Information About the Origin of Data

Information About the Origin of Data

Use

This function provides you with important information regarding the current status and the origin of data in a data matrix, pivot table, or individual cell on a worksheet.

Features

Origin of Data in a Matrix

You can display and, if required, insert the following information into the worksheet at the cursor position:

- The characteristics used in the matrix and their values
- The logon user name with which data was imported
- The database from which data was imported
- The date on which report data was last refreshed
- The scaling factor
- Further technical information

The following functions are also available in the documentation dialog box:

- Highlighting of cells blocked for data entry
The blocked cells are marked with a color.
- Demarcation of the data matrix definition

The various elements in the matrix definition are highlighted on the worksheet.

The relevant cells are marked until you choose another function. However, you can print out a copy of the sheet with this information displayed before you continue.

Origin of Data in a Cell

You can display and, if required, print information about the parameters for the data in a cell. You may want to do this, for example, if you cannot establish the origin or data in a cell from the characteristic values that appear in the sheet.

If data has been calculated using an Excel formula, the formula is displayed.

Data that has been typed directly into the sheet is identified as a constant.

Activities

To display information about the origin of data, choose *SAP → Origin of data → Current matrix or Cell*.

Alternatively you can get information about the origin of data by using the context menu *SAP → Origin of Data*.

Creating a Snapshot of a Worksheet or Workbook

Creating a Snapshot of a Worksheet or Workbook

Prerequisites

As a security measure, or for test or presentation purposes, you may want to create a copy of a worksheet or workbook. The data in this copy **cannot** be refreshed by importing data from a database.

Procedure

1. Choose *SAP → Snapshot → Workbook or Worksheet*.
2. In the following dialog box, enter the name of the workbook in which you want to create a snapshot, or leave the field empty if you want to create the snapshot in a new workbook.
3. Choose *OK*.

Result

An identical copy of the workbook or worksheet is created in the specified workbook.



This copy cannot be connected to a database.

Upgrading Workbooks in Interactive Excel

Prerequisites

- You have received and installed a new version of Interactive Excel. Now you want to update the template in your Interactive Excel workbooks to make the workbooks compatible with the new version.
- You have opened a workbook or several workbooks, which are in the same directory, in Microsoft Excel with the Interactive Excel template.

Procedure

1. Choose *SAP* → *Upgrade*.
2. In the following Windows dialog box, select one or several Interactive Excel workbook(s) the template of which you want to update. A prerequisite for this, is that you execute the upgrade for several workbooks at the same time, and that these workbooks are in the workbook.

Choose *Open*.

The selected workbooks are upgraded.



The following rule applies here for the derivation of the file name: Enter the desired directory for the workbook and provide the original file name with a prefix and a suffix, to make it easily identifiable.

3. Repeat this procedure until you have updated the templates of all the relevant workbooks.

Data Entry with MS Access

Purpose

Decentralized data entry and processing of individual financial data is possible with MS Access.

Implementation Considerations

Use MS Access to execute the decentralized data entry of individual financial statements for some consolidation units, which have no access to the SAP system.

Features

You can execute the following actions decentrally with the offline data entry program MS Access:

- Display master data
 - It is only possible to display master data here, no changes can be made.
- Import control parameters, which are necessary for data entry, into MS Access
 - The control parameters for offline data entry are delivered by the upper unit and are made available for the import with a download from the SAP system. The following data is necessary for this:
 - Master data
 - Consolidation units and consolidation group
 - Consolidation chart of accounts
 - Data entry layout
 - Exchange rate (optional)
 - Version
 - Dimension
 - Consolidation chart of accounts
 - Validation rules
- Data entry of individual financial data
 - After generating the data structures on the basis of the imported control parameters, the data entry of the individual financial data takes place. You can give authorizations to some employees dependent on the consolidation unit.
- Data entry of additional financial data (inventory and supplier data) for the elimination of IU profit and loss in transferred inventory
- Validation of entered values
 - Validation must be executed before exporting reported financial data into the SAP system. Validation rules are defined in the SAP system. Though in addition to that you can define and change validation rules locally.
- Copying reported financial data

Data Entry with MS Access

- Translation of data with an exchange rate indicator and a translation ratio for reporting purposes or in the sense of a data entry in group currency
- Reporting

The component [Interactive Excel \[Page 92\]](#) can also be used for reporting on the basis of data entered in Access. For further information on this read [Reporting with Interactive Excel \[Page 421\]](#).
- Transferring data into the SAP system as well as into Interactive Excel

The reported financial data can be exported from MS ACCESS and uploaded into the SAP system.

Reported financial data and control parameters can be imported again into the PC data entry program after a release upgrade.
- Compressing the database to the required size

This should be carried out at regular intervals. To do this choose *Tools → Compress database*
- Deleting reported financial data

You choose this option when you no longer require reported financial data in MS Access after the end of a fiscal year or period.

Constraints

You can only enter cumulative data, not periodic data with MS Access.

Technical Prerequisites for the Installation of MS Access

Technical Prerequisites for the Installation of MS Access

Hardware

- Processor: Pentium
- RAM: 32 MB minimum; 64 MB recommended

Software

- MS Windows or MS Windows NT
- MS Access 97 or MS Access 2000
- MS Excel 97 or Excel 2000 (if PC data entry or Reporting with Interactive Excel is used)

Installation

The front-end CD *Presentation* contains the program for offline data entry with MS Access.

In order to install the program for offline data entry on the PC, first you create a new subfolder on the hard disk of the PC.

From the front end CD start the program SAPSETUP.EXE, which automatically creates the new file WDFAECCS.MDB. This contains the offline data entry program.

Prerequisites in the SAP System

Prerequisites

Working in the SAP System

First check the steps on MS Access entry in the Implementation Guide.

In particular you must create directories for consolidation groups and parameter records for the specific and general download. The columns are to be interpreted as follows, the first two columns specify the receiver of control parameters, that is the unit to be entered. The other columns specify the data to be entered.

In offline data entry you can enter data simultaneously for several dimensions or versions. To do this you create several entries which do not differ in the receiver view, the receiver consolidation group and the language. If these entries are downloaded simultaneously, a record of control parameters is generated, which contains all the parameters in the remaining columns.

For example the versions 100 and 200 could be generated in dimension 01 by the following rows:

Dimension	Cons group	Dimension	Version	Hierarchy	Top cons group	Language
01	CG1	01	100	01	CG1	DE
01	CG1	01	200	01	CG1	DE

Execute the download of specific and general control parameters. If you want to transfer comparison values or balance carried forward values into offline data entry with Microsoft Access, then you should also execute a download of reported financial data.

Activities

Customizing of Offline Data Entry in MS Access

After the download of the control parameters into the SAP system has been completed, the following preparations must be made:

1. Maintain the directory for the import/export of data with the menu *Transfer → Definition*.
2. Import the control parameters from the SAP system with the menu *Transfer → Import → Control parameters (SAP)*.
3. Set the global parameters (dimension, version, fiscal year, period, consolidation chart of accounts) with the menu *Tools → Customizing → Global parameters*. The version must be three figures with possible leading zeros to be entered.
4. You assign the companies to be processed to the individual users with the menu *Tools → Administration → Authorization profile*. This task can only be carried out by the users **admin** and **gadmin**.
5. Generate the data structures using the menu *Data entry → Generation*.
6. If necessary import the reported financial data exported from the SAP system with *Transfer → Import → Reported financial data*.

Prerequisites in the SAP System

Data Entry

1. From the data entry layout definition, only the offline data entry is transferred, which contains value items and totals items in the data entry layout.
2. You can only enter the breakdown in accordance with the definition in the breakdown category.
3. You can go to the respective breakdown form by double-clicking on the input field when entering an FS item.
 - The F4 input help for the corresponding breakdowns lists possible input values, taking account of the breakdown indicators (optional, required, no default and so on) and possibly defined maximum sets.
 - The default sets defined in the breakdown category are not relevant for the F4 help.
4. The offline data entry only generates default rows on account of the default sets defined in the breakdown category, without taking into account possible values defined in the data entry layout.
5. If in Access Customizing, you do not activate the indicator *Check, whether total breakdown equals value in main form*, you can enter a total value for the FS item in the overview form, which you then later distribute to the individual subassignments using the breakdown form. Later during validation, it is checked whether the entered total value corresponds to the total breakdowns.

Reporting Data to the Head Office

1. Execute validation and if required, correct the data entered.
2. Export the reported financial data with *Transfer* → *Export* → *Reported financial data*.
3. Load the reported financial data into the SAP system.



As long as the control parameters do not change in the SAP system, you can execute the entry of reported financial data with the same database, without downloading and importing control parameters, for as many periods and years as you like. Though it is advisable to delete financial reporting data which is no longer required from time to time and to compress the database.

Preparations for Data Entry with MS Access

Features

Starting the PC Data Entry Program in MS ACCESS

Open the file WDFAECCS.MDB in MS ACCESS with the menu option *File → Open database*. The logon screen appears.

Logon

Logon with **ADMIN** in the *User name* field and enter **ECCS** in the *Password* field. Enter the language as well.

The system administrator (user **ADMIN/GADMIN**) has the authorizations for all functions of the data entry program including authorization assignment for further users. Therefore for security reasons, you should change the password **ECCS** after logging on for the first time. You make this change under *Tools → Administration → Change password*.

In addition, user **GADMIN** has the authorization to maintain validations in MS Access.

Global Parameters

After logging on enter the global parameters *dimension*, *version* (consolidation version), *year*, *consolidation chart of accounts* and *period*. These are saved, you can change them using the menu option *Tools → Customizing → Global parameters*.



If no control parameters were imported, then you cannot change the set values.

Importing Control Parameters

The control parameters must be imported from the SAP system for every consolidation version. For this enter the path via *Transfer → Definition*, in which the data is stored, that is downloaded from the SAP system. You execute the import via the menu option *Transfer → Import → Control parameters (SAP)*.

All of the control parameters are imported, which are necessary with regard to the consolidation units intended for the decentralized PC data entry with MS ACCESS.

Authorizations for Users

As the system administrator you can create users and allocate authorizations to them. This takes place via the menu option *Tools → Administration*.

The authorization profiles are based on the consolidation units which can be processed. Users can enter and evaluate the consolidation units which are listed in their authorization profile.

As system administrator (user ADMIN) execute the following steps when allocating authorizations:

1. Create the required additional users.
2. Define the authorization profile for the individual users by assigning the respective consolidation units to be processed to them.

You can subsequently delete users or change their authorization profile.

Preparations for Data Entry with MS Access**Generating Data Structures**

Before entering the reported financial data, you generate the data structures in the offline data entry program. This generation takes place on the basis of the imported control parameters.

During generation, the data records are generated with the key fields. The value and quantity fields of the data records are filled by the subsequent data entry.

Generation must take place for every consolidation version and every fiscal year. Execute generation via the menu option *Data entry* → *Generation*. You can execute the generation separately for the individual consolidation units or related for a consolidation group.

The parameter *Effective from period* enables generation of a period interval dependent on the consolidation frequency of the consolidation group. This generation is relevant for mid-year consolidation with regard to data entry.

Executing Data Entry with MS Access

Procedure

Manual Data Entry of Reported Financial Data

You execute the manual data entry in the offline form-based data entry program MS Access analogous to the online data entry in the SAP system. Choose the menu option *Data entry*. In the initial screen you select the consolidation unit to be entered, and one of the data entry forms that relate to the unit.

Note the following FS item attributes:

- Totals items
These are indicated with the sign *. Data cannot be entered for totals items. When entering reported financial data you can calculate the values of the totals items with the function *Update totals*.
- Breakdown items
The breakdowns to be assigned for various FS items are displayed in the data entry form.
- Debit/credit sign
A debit/credit sign is pre-set for every FS item. This enables data entry without a debit/credit sign.

Various entry aids are available for data entry:

- For the data entry of breakdowns to item values you can go to the detailed form by placing the cursor on the input field of a FS item and double-clicking.
- The option of breakdown control enables validation between the data entry of the breakdown and the FS item value in the higher-level form.
You can activate the breakdown control with the menu option *Tools → Customizing → Options*. This has the following effects:
 - With active breakdown control it is not possible to enter FS item values without entering the breakdown.
 - Likewise, changing the FS item value without changing the breakdown is not possible.
 - After entering the breakdowns the FS item value is automatically calculated and entered in the higher-level form.
- By defining the scaling factor you can determine which powers of 10 the entry of values and quantities should be based on. The default scaling factor is set to 0, which means that whole values and quantities are entered.
You can set the scaling factor individually for values as well as for quantities via the menu option *Tools → Customizing → Scaling factor*.
 - The definition for the value scaling factor takes place per combination of version and currency. You can choose powers of 10 from 0 to 9.

Executing Data Entry with MS Access

- The quantity scaling factor is defined flat-rate. You can choose powers of 10 from 0 to 9.
- During entry the program carries out a check of the decimal places. The entries are based on the definition of the respective currency, which was made in the SAP system, with regard to the decimal places.
- Within a data entry form, you can change the consolidation unit to be entered. The following prerequisites must be fulfilled for the consolidation unit which you want to change to:
 - The form is assigned to the consolidation unit via the data entry form group.
 - The consolidation unit has the same local currency.

Manual Data Entry in Interactive Excel

Data can be entered in data matrices in Interactive Excel, which were defined with the help of control parameters from the offline data entry program. The control parameters are transferred to MS ACCESS by a link.

After the entry of data matrices, data can be posted in MS ACCESS. An ASCII file is then exported from the database, which can be imported into the consolidation system.

You can find further information on the data entry of a MS-ACCESS-Database with Interactive Excel under [Offline Data Entry with Interactive Excel \[Page 94\]](#).

Displaying and Printing a Data Entry Log

You can display and print the data entry log from the menu *Data entry* → *Log* → *Reported data*.



You can only enter cumulative data, not periodic data with MS Access.

Currency Translation in MS Access

Use

Currency translation in the offline data entry program serves decentralized reporting purposes.

Features

Translation takes place with an exchange rate indicator and a translation ratio. The exchange rate table is made available as part of the control parameters from the SAP system. It can be updated locally.

Activities

Choose *Currency translation* for local maintenance as well as the execution of currency translation. You can display and print a log on currency translation.

Validation of Data Entered with MS Access

Use

Before exporting the reported financial data into the SAP system it is necessary to execute a validation. The export can only take place when the validation has been executed without errors.

Features

You define the validation rules in the SAP system. In addition the user can define and change the **ADMIN** rules locally. The validation of breakdowns is predefined as validation under the validation group SAP, in the offline data entry program.

Choose the menu option *Validation* to define and or change the validation rules as well as to execute validation. If during execution of validation errors or inconsistencies occur which result in warning messages, then a validation log is generated by the system. You can display and print this for processing.

Exporting Reported Financial Data

Use

The reported financial data is exported, after executing the processing steps in the offline data entry program. They are uploaded into the SAP system and are then available for the execution of Consolidation.

Furthermore you can transfer the reported financial data from MS ACCESS into Interactive Excel via the interface. There you can prepare and evaluate the spreadsheet with the standard functionality.

Features

You define the path for the export of data under *Transfer → Definition*. You have to define a path for the export as well as the import of data.

Execute the export under *Transfer → Export → Reported financial data*.

Release Upgrade

Release Upgrade

Use

For a release upgrade of the offline data entry program, you must execute the tasks mentioned below with regard to control parameters, which are generated decentrally, and reported financial data, which has already been entered.



In this way you avoid the loss of data during a release upgrade.

Activities

- Before executing the release upgrade, export the validation rules created in the offline data entry program. After executing the release upgrade, import these control parameters back into the offline data entry program.
- You have two alternatives to make the reported financial data available after the release upgrade:
 - You can export the reported financial data before the release upgrade and import them again after the release upgrade.
 - You can import the reported financial data directly from the database.

Integrated Data Collection

Purpose

With SAP Consolidation you can execute different consolidation types that are based on user-definable organizational units.

These components enable an integration to operational, data delivering SAP applications for the following consolidation types:

- Company consolidation
(Consolidation units: Companies)
- Business area consolidation
(Consolidation units: Combinations of companies and consolidation business areas)
- Profit center consolidation
(Consolidation units: Combinations of companies and profit centers)

Therefore these consolidation types are described as *integrated consolidation types*.

For integrated consolidation types the system can transfer the business transactions which are relevant to the general ledger. You enter them in the operational SAP applications, in realtime or periodically as reported data in Consolidation.

Features

Data Transfer Methods

The following data transfer methods are available:

- Realtime update
- Rollup
- Periodic extract

The possible uses of this method are dependent on

- for which integrated consolidation type you want to carry forward the operational data
- which company scenario you have

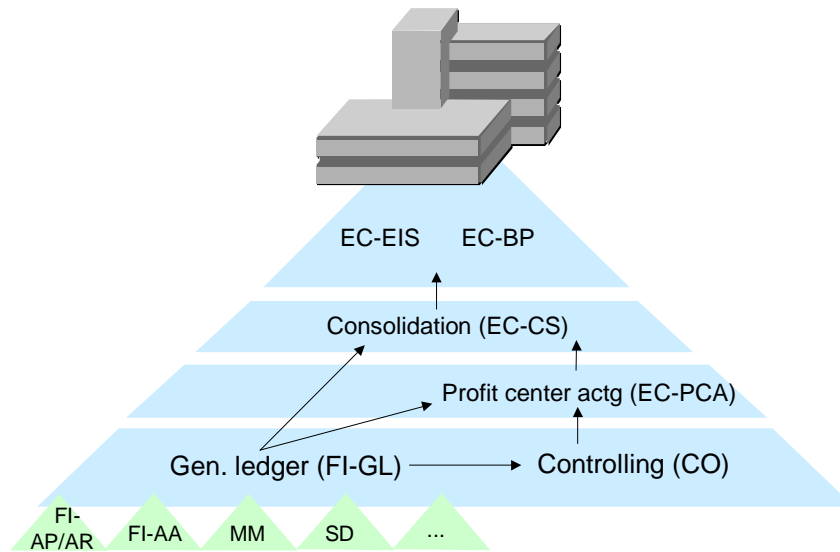
Enterprise Scenarios

The components differentiate the following enterprise scenarios:

- Central scenario:
The company units, which want to carry forward data from operational SAP applications to the SAP Consolidation, work in the same SAP System and in the same clients as the Consolidation.

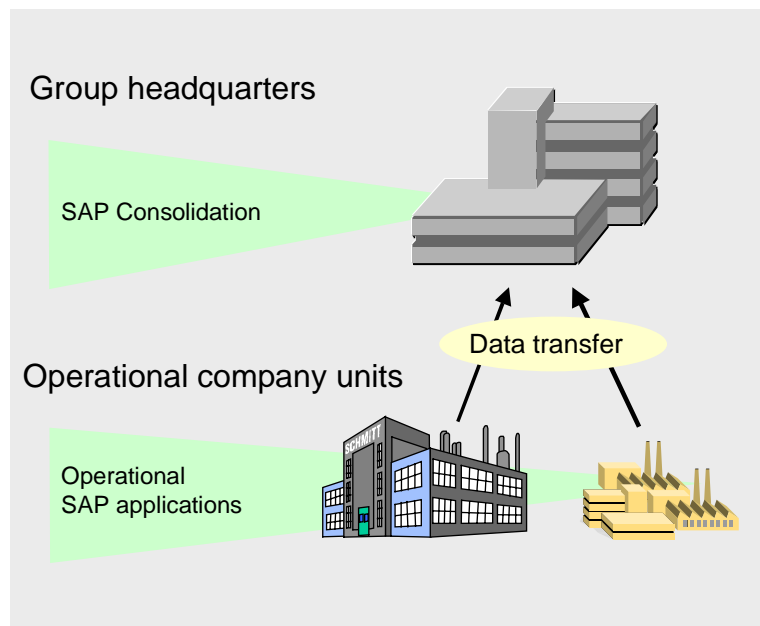
The following graphic shows this scenario. You see, from which operational applications, data can be delivered to the Consolidation.

Integrated Data Collection



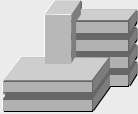
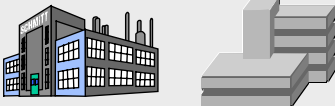
- Decentralized scenario

The operational enterprise units work in another system or client to the Consolidation.
The following graphic shows this scenario:



Possible Uses of the Data Transfer Methods

The following table shows with which data transfer methods you can transfer operational data, dependent on the enterprise scenario and integrated consolidation type.

	Central scenario 			Decentralized scenario 		
	Realtime update	Periodic extract	Rollup	Realtime update	Periodic extract	Rollup
Company consolidation	✓	✓	✓		✓	✓
Business area cons	✓	✓	✓		✓	✓
Profit center cons			✓			✓

Local and Global Account Assignments

Local and Global Account Assignments

Use

The operational applications work partly with other account assignments than Consolidation. Some of these account assignments are local characteristics. The characteristic values of the local characteristics are only known in the respective SAP system. In contrast to that, the characteristic values of global characteristics are clear group wide; therefore you must make sure that the global characteristics are maintained the same in all (integrated) SAP systems and clients and are assigned the corresponding local characteristics.

The Consolidation derives the characteristic values of the corresponding Consolidation characteristics from the characteristic values of the global characteristics.



Assuming that the companies of a group are managed in several SAP systems and every company corresponds to a company code. The identifications of the company codes are identical in different systems, although they represent different companies. However the company identifications must be clear group wide.

Structure

The following tables assign local characteristics, global characteristics and Consolidation characteristics to each other.

Assignment of organizational units

Integrated Cons type	Local characteristic	Global characteristic	Cons characteristic
Company Cons	Company code	Company	Consolidation unit
Business Area Cons	Company code / Business area	Company / Cons business area	Consolidation unit
Profit center Cons	Company code / Profit center	Company / Profit center	Consolidation unit

In the Implementation Guide (IMG) you assign the global organizational units company and consolidation business area to the operational organizational units *Company Code* and if applicable *Business Area*.

For business area consolidations (and profit center consolidations) the system derives the consolidation units from the combinations of company codes and business areas (and profit center).

Assignment of accounts to FS items

Data transfer methods	Local characteristic	Global characteristic	Cons characteristic
-----------------------	----------------------	-----------------------	---------------------

Local and Global Account Assignments

Realtime update	a)	Account	Group account	FS Item
	b)	Account		
Rollup	a)	Account	Group account	
	b)	Account		
	Secondary cost element			
Periodic extract	Account	FS item group financial statement version		

The transfer of a group value into a FS item value is dependent on the data transfer method.

- Realtime update

You have two possibilities:

 - In the IMG you can assign every operational account a group account, whose key is identical with an item key of Consolidation. As a rule it is useful to assign several operational accounts one group account and to aggregate through it.
 - Alternatively it is possible that every account corresponds exactly to a consolidation item. Then the aggregation with the group account is not necessary.
- Rollup

The transfer of account in FS item is exactly as with the realtime update, therefore with or without the group account. In addition to that you can transfer the cost elements in FS items, in fact a cost element in a FS item (1:1) or ranges of cost elements in FS items (N:1).
- For periodic extracts you assign every account a financial statement version in the IMG, whose item key agrees with the item keys of Consolidation(group financial statement structure). As a rule you assign several operational accounts the same FS item of the group financial statement version and aggregate with it.

With this relationship between account and global key, the system can transfer the values to the FS items of Consolidation.

Assignment of subassignments

Local characteristic	Global characteristic	Cons characteristic
Transaction type asset accounting (FI-AA)	Cons transaction type	Subitem or custom characteristic
Business area	Cons business area	Subitem or custom characteristic
Partner	to account assignment of organizational units (see above)	

Local and Global Account Assignments

The subassignments transaction type and business area are aggregated to global characteristics as well. The transfer of partner assignment, that means partner company code and partner business area is analogue to the characteristics company code and business area.

Data Transfer Method 'Realtime Update'

Use

The *realtime update* is a data transfer method with which you can transfer general ledger relevant business transactions in realtime as reported data in Consolidation. You enter the business transactions in the operational SAP applications.

With this data transfer you can transfer reported data for company consolidations and for business area consolidations, however not for profit center consolidations.

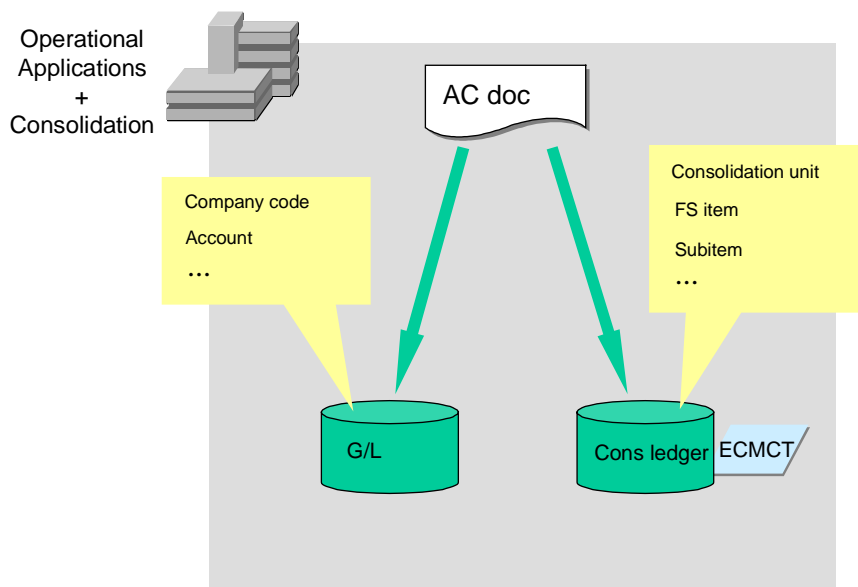
Integration

It concerns a realtime update in a fixed ledger to the totals table ECMCT. This update is different from updates which offer the component special purpose ledger (FI-SL) in variable ledgers. It is not possible to define a variable ledger to the totals table ECMCT.

Prerequisites

Prerequisite for the realtime update is that the sender and receiver of data work in the same SAP System and in the same client.

Features



Parallel Posting in the Consolidation Processing Ledger

When you have activated the realtime update, then the system generates a parallel posting in the consolidation processing ledger for every FI posting. The totals records are updated, in fact with posting level space.

Data Transfer Method 'Realtime Update'

You can determine with the definition of the consolidation processing ledger, that journal entries are generated on realtime update. Journal entries are helpful when you have to post FI data subsequently. With the help of the journal entries the system recognizes when posting subsequently, which documents are already available in the consolidation processing ledger. On the other hand a high volume of data arises from the journal entries. When you decide on journal entries then you must define a document type in the Implementation Guide (IMG) of Consolidation, in the section *Integration*.

Conversion of Operational Account Assignments into Consolidation Account Assignments

The AC document, from which the Consolidation documents will be set up, contains amongst other things account assignments (for example account, company code, business area). They have to be converted into the account assignments of Consolidation (for example FS item, consolidation unit, consolidation business area). This conversion is controlled as follows:

- In the Implementation Guide you have to assign some local account assignments to the global account assignments, for example every company code to be included in the company.
- In Consolidation you always use fixed ledgers with the totals table ECMCT. The transfer of operational fields (sender fields) in the Consolidation fields (receiver fields) is preset by SAP. Therefore you do not have to maintain any field transfers, except for custom subassignments (see below).
- Some of the account assignments in the AC document can be interesting for evaluations in Consolidation, although there are no corresponding fields in the totals table of Consolidation (ECMCT). It may possibly be requested to transfer the values with realtime update into Consolidation. It concerns the following account assignments from the AC document:
 - Consolidation transaction type
 - Functional area
 - Business area
 - Customer's country
 - Cost center
 - G/L account

For these account assignments Consolidation offers the field *Subitem*. In the subitem category, you can define per FS item, which sender field the account assignment in the subitem should be transferred from .

Update in Custom Characteristics of Consolidation

In Consolidation you have the possibility to enhance the database with additional characteristics, so called custom characteristics. In order to fill these characteristics with sender fields of the AC document, you have to add to the field movement 0C03 correspondingly in the IMG and possibly execute the enhancement FMC10011 with the function module exit 250.

See also:

[Make Settings for Custom Subassignments \[Ext.\]](#) in the IMG.

Update in several Ledgers and Fiscal Year Variants

In the master data, the consolidation units can be assigned several ledgers and fiscal year variants. Then it is updated parallel in this ledger. So that the updated data remains consistent, the following applies: A document is updated in a ledger when

- the ledger is assigned all the consolidation units to be posted to on the basis of the document
- the consolidation units use the same fiscal year variant

Activities

You activate the realtime update in the IMG of Consolidation, section *Settings in the Sender System*.



Before you must have executed all the preparations for consolidation steps so that the correct data is updated to the consolidation processing ledger.

Data Transfer Method 'Periodic Extract'

Data Transfer Method 'Periodic Extract'

Use

The *periodic extract* is a data transfer method, with which you can transfer general ledger relevant business transactions periodically as reported data in Consolidation. You enter the business transactions in the operational SAP applications.

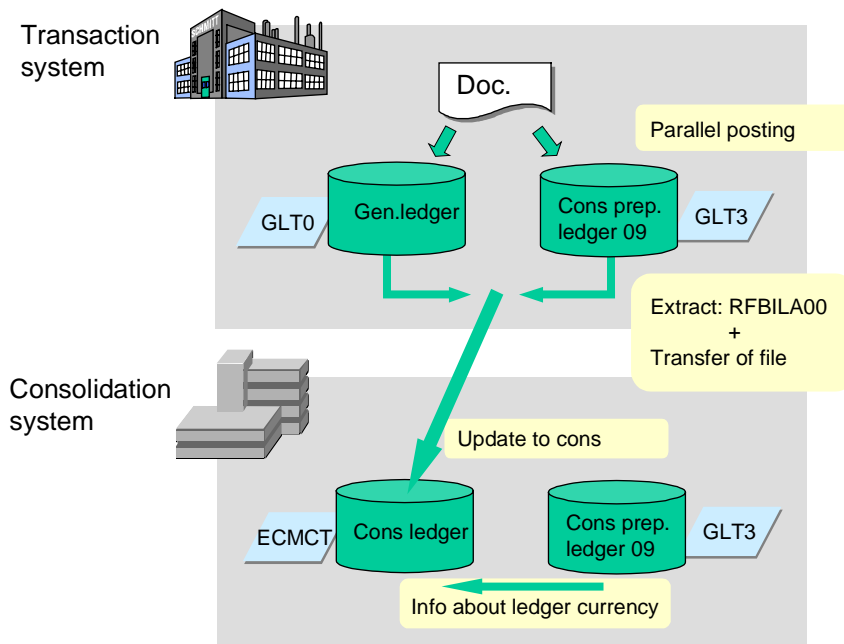
With this data transfer you can transfer reported data for company consolidations and for business area consolidations, however not for profit center consolidations.

An important difference to the data transfer method of realtime update is that the operational system, the consolidation system and the client do not have to be identical. The data is transferred per file from the transaction system to the consolidation system.

Prerequisites

In the transaction system, you must have set up a financial statement version, whose item key is identical with the item keys of the relevant consolidation of investments consolidation (group financial statement structure).

Features



Transaction System

Parallel Posting in the Preparation for Consolidation Ledger

When you have activated the data transfer method *periodic extract*, then the system generates a parallel posting in the preparation for consolidation ledger for every FI posting. The totals records in the preparation for consolidation ledger are updated; journal entries are not generated.

SAP delivers the fixed ledger 09 with the totals table GLT3 as the preparation for consolidation ledger. It is not possible to use another ledger for this.



Parallel posting in the preparation for consolidation ledger is justified that the information which the totals records of the general ledger accounting offers, is not sufficient for the Consolidation. In particular the partner information is missing.

The totals table of the preparation for consolidation ledger, the table GLT3, includes these fields. These fields are filled from the AC document during the realtime update.



When you require the account assignment of the functional area for the portrayal of the cost-of-sales accounting, then you have use a rollup as data transfer method instead of the periodic extract, actually from a ledger whose totals table includes the functional area. The totals table GLT3 does not include the functional area.

Generating a Periodic Extract from the Preparation for Consolidation Ledger

Before executing the consolidation, you generate an extract in the preparation for consolidation ledger. For this you use the program RFBILA00 in the task level menu of the general ledger accounting (section info system). In the initial screen of the program you enter in the field *extract to consolidation*, whether the system should generate the extract at company code level or at business area level. This causes the system to convert the local characteristics company code, business area and so on in the global characteristics company, consolidation business area and so on. You also enter the group financial statement version. The system summarizes the operational accounts to the FS items of this structure.



An extract at business area level can also be useful for company consolidations, namely then, when in the consolidation data you want to manage the consolidation business area as a subassignment.

You can start the extract for one company code or for several company codes.



The system checks when generating the extract whether the totals of the general ledger agree with the totals of the preparation for consolidation ledger. This guarantees a correct dataset. If it finds variances then the system generates the extract from the totals records of the general ledger, this does not then include the necessary breakdowns by partners and so on.



Data Transfer Method 'Periodic Extract'

At the fiscal year change you have to execute a balance carried forward in the preparation for consolidation ledger, actually at the same time as in the general ledger. You start the balance carried forward via the task level menu of the component special purpose ledger (FI-SL).

Transfer of the File

While generating the extract for company or business area consolidation, enter in a dialog box, the logical file name, which you have defined before in the Implementation Guide (IMG) of Consolidation, section *Integration: Preparation for Consolidation → Preparations in the Sender System → Preparation and Activation of the Data transfer → Periodic Extract from Preparation for Consolidation Ledger*. Then choose whether the file should be stored on an application server, or on a presentation server. The system informs you after generating the file, what the file name is (including the link).

The transfer of the file is dependent on the condition of your system. For example the transfer can take place via access to the network.

Updating the Extract to the Consolidation Processing Ledger

In the consolidation system, you run the tasks for the data collection in the data monitor. You enter the physical file name of the extract (including the link) in a dialog box.



Note that the system can only process one extract per execution of the task. If several extracts for a consolidation group are ready for updating, then you have to run the tasks for the relevant consolidation units individually.

The system reads the data from the extract, converts the account assignments and updates the data in the Consolidation processing ledger, actually in local currency, transaction currency and group currency.

To update group currency values, the system proceeds as follows:

1. It determines the currency of the preparation for consolidation ledger (in the consolidation system!).
2. It compares this currency with the currency of the Consolidation processing ledger.
 - a. When these ledger currencies are identical, then the system updates the group currency values from the extract in the Consolidation processing ledger.
 - b. When these ledger currencies are different, then the system translates the group currency values from the extract in the ledger currency of the Consolidation processing ledger and updates them.

You should make sure organizationally, that the ledger currency of the preparation for consolidation ledger in the consolidation system is identical with the ledger currency of the preparation for consolidation ledger in the transaction system, which the periodic extract delivers. When you can not implement this, then the system interprets the group currency values of the extract in the wrong currency. Then you must calculate the transferred local currency values again.

The periodic distances, in which you generate this extract, are dependent on the consolidation frequency of the consolidation group.

Data Transfer Method 'Periodic Extract'

When you use custom characteristics in the Consolidation and want to fill these by a periodic extract, then you have to execute the enhancement FMC 10011 with the function module exit 250 in the IMG.

See also:

[Execute Enhancement for Custom Subassignment \[Ext.\]](#)

Activities

You activate the data transfer method *Periodic Extract* in the IMG of Consolidation, section *Settings in the Sender System*.



Before you must have executed all the preparations for consolidation steps so that the correct data is updated to the preparation for consolidation ledger and can be transferred to Consolidation.

Data Transfer Method 'Rollup'

Use

Rollup is a data transfer method with which you can transfer general ledger relevant business transactions periodically as reported data in Consolidation. You enter the business transactions in the operational SAP applications.

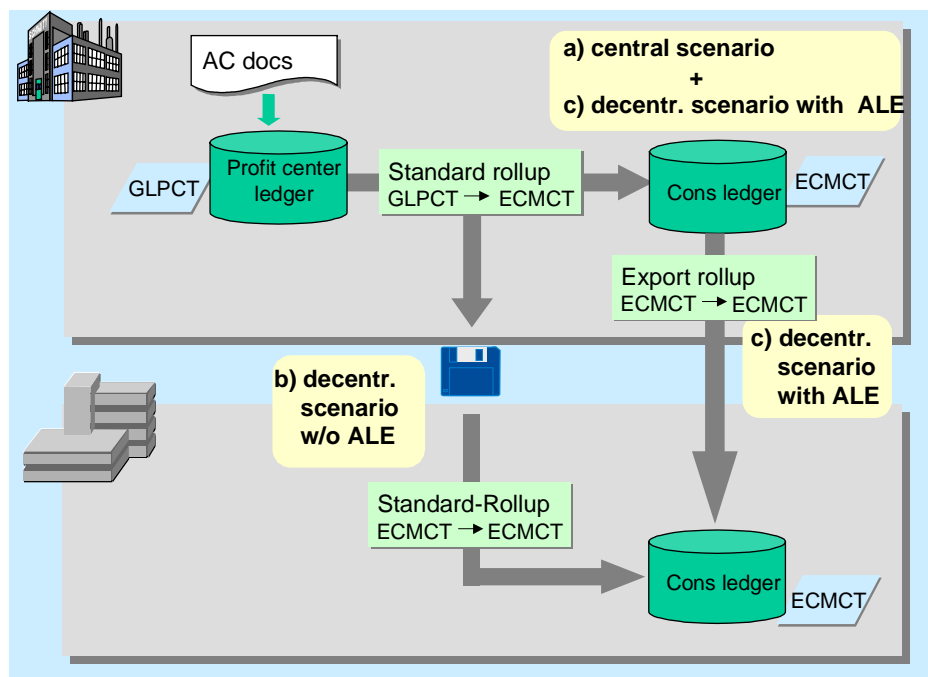
Rollup is the only possibility to transfer data from the operational SAP applications, when

- operational data for profit center consolidations should be transferred
- operational data should be transferred with the account assignment of the functional area (for example from the table GLFUNCT), in order to map the cost of sales accounting with the account assignment of the functional area.
- operational data should be transferred from your own defined tables

Integration

This data transfer method concerns the rollup of the component special purpose ledger (FI-SL).

Features



Posting in Quantities

In the operational applications you set up the postings in the sender ledger. You can generate a rollup from any ledger. However the ledger totals table must contain the field, whose account assignments are necessary for Consolidation.

Rollup from the Sender Ledger

To transfer the data to Consolidation, you execute a rollup which selects the operational data in the sender ledger and converts it in the Consolidation totals table (ECMCT). The following activities are required for this:

1. You [Define Rollup for Data Exports \[Ext.\]](#) in the Implementation Guide (IMG) of Consolidation. A rollup is preset in the SAP standard system which you should use as a reference.
2. You execute the rollup via the task level menu of the component special purpose ledger (FI-SL).

Transfer of the Rollup Data

Update of the rolled data records in the consolidation processing ledger is dependent on the enterprise scenario.

- **Central scenario** (same system, same client) as well as **decentralized scenario with ALE**
The system updates the rolled data records directly in the consolidation processing ledger.
- **Decentralized scenario** (different systems or clients) **without ALE**
 - The standard rollup in the sender system (GLPCT → ECMCT) writes the data records to a file. For this you must enter the physical file name and link when executing the rollup in the parameter screen via *Extras* → *Export File* within the context of *Output Data*. Link and name can be up to a maximum of 30 characters.
 - The transfer of the file to the Consolidation system and to the Consolidation client is dependent on the condition of your system. For example the transfer can take place via access to the network.
 - In the Consolidation system / clients you require a standard rollup to apply the file, which roles from ECMCT to ECMCT. This rollup reads the file, checks the data and updates them in the consolidation processing ledger. The following activities are required for this:
 - You [Define Rollup for Data Imports \[Ext.\]](#) in the Implementation Guide (IMG) of Consolidation.
 - You execute the rollup in the task level menu of Consolidation either via the data monitor, or you choose *Data* → *Reported Data* → *Rollup* In the parameter screen you enter the physical file name and link via *Extras* → *Export File* within the context of *Input Data*.



If required you can also use this procedure in a central scenario.

- **Decentralized scenario with ALE**
 - As with the central scenario: The system updates the rolled data records directly in the consolidation processing ledger of the sender system.
 - To apply the data via ALE in the Consolidation system, you require an export rollup, which roles from ECMCT to ECMCT. Via ALE you update the data in the Consolidation system.

Data Transfer Method 'Rollup'

You will find more information in the IMG Special Purpose Ledger (FI-SL), section *Tools* → [Distribution \(ALE\) \[Ext.\]](#).

Activities

You set the data transfer method *Rollup* in the IMG of Consolidation, section *Settings in the Sender System*.



Before you must have executed all the preparations for consolidation steps so that the correct data is updated to the preparation for consolidation ledger and can be transferred to Consolidation.



When you want to execute a rollup from the consolidation staging ledger (Ledger 09), then note the following:

- When you have set the data transfer method rollup in step [Activate Data Transfer \[Ext.\]](#), then you can **not** execute the FI documents in the preparation for consolidation ledger **in realtime**. The realtime execution in the preparation for consolidation ledger only functions when you have set the *Periodic Extract* as data transfer method.
- However you can set the data transfer method Rollup and **post** the FI documents **subsequently** and **periodically** in the consolidation staging ledger. You have to make sure here, that in the periods to be posted subsequently, no more current postings will take place. For posting subsequently, the step Tools for the Structure of the Initial Data Set → [Post FI Documents \[Ext.\]](#) is available. Afterwards you can execute the rollup from the preparation for consolidation ledger and apply it in the consolidation processing ledger.

Group Chart, Financial Statement Version, Cons Chart

Purpose

In the Implementation Guide (IMG) of Consolidation, section *Preparations in the Consolidation System*, tools are available with which you can set up the group chart of accounts, the group's financial statement version and the consolidation chart of accounts of Consolidation. Which of these structures you require, depends on the data transfer methods which you set in your group.

Some scenarios and how you can set the tools are suggested in this document.

- **Scenario 1: Group chart of accounts is used**

In this scenario we assume that

- for the data transfer in your group, you only use the realtime update and/or the rollup
- the operational accounts do not agree 1:1 with the FS items of Consolidation, therefore you require the group accounts for the transfer of operational accounts into FS items

- **Scenario 2: Group's financial statement version is used**

In this scenario we assume that you set the periodic extract for the data transfer in your group.

- **Scenario 3: Group chart of accounts and group's financial statement version are used**

In this scenario we assume that you set both the periodic extract and the realtime update for the data transfer in your group and possibly also the rollup.

Prerequisites

We assume that in the consolidation system not only the consolidation chart of accounts of consolidation are set up, but also the group chart of accounts and the group's financial statement version are set up and transferred to the transaction systems.

Process Flow

Scenario 1: Group chart of accounts is used

Activities in the Consolidation system

1. Set up consolidation chart of accounts manually
2. Set up group chart of accounts automatically from consolidation chart of accounts



When the group chart of accounts already exists then you can set up the consolidation chart of accounts from it automatically. Though you have to rework the master data of the FS items.

3. Transport the group chart of accounts into the transaction system
4. When data transfer takes place for profit center consolidation, then, if necessary, assign the interval secondary cost element to the FS items.

Group Chart, Financial Statement Version, Cons Chart

5. When rollup is used (for any integrated consolidation type), then export the rollup relevant Customizing settings to file, in order to transfer them to the transaction systems.

Activities in every transaction system

1. Import group chart of accounts
2. Assign group chart of accounts to the operational chart of accounts
3. Assign group chart of accounts to the operational accounts manually
4. When rollup is used, then import the rollup relevant Customizing settings of the consolidation system.

Scenario 2: Group's financial statement version is used**Activities in the Consolidation system**

1. Set up the group's financial statement version manually
You only create the FS items in the structure and do not assign any accounts. (The assignment of accounts takes place in the transaction systems.)
2. Set up the consolidation chart of accounts automatically from the group's financial statement version, provided that it does not exist.
3. Transport the group's financial statement version into the transaction systems

Activities in every transaction system

1. Import the group's financial statement version
2. Assign ranges of operational accounts to the FS items of the structure

Scenario 3: Group chart of accounts and group's financial statement version are used**Activities in the Consolidation system**

1. Set up the group's financial statement version manually
You have the following possibilities:
 - a. You set the indicator *group account number* and assign the corresponding group account to the FS items in the lowest navigation group (after having executed steps 3 and 4).
Explanation:
In this case you do not assign operational accounts to the structure, but group accounts instead. Then the sender system carries forward the operational account values while generating a periodic extract, via the assigned group accounts in the FS items of the financial statement version.
 - b. You only create the FS items in the structure and do not assign any accounts. (The assignment of accounts takes place in the transaction systems.)
2. Set up the consolidation chart of accounts automatically from the group's financial statement version, provided that it does not exist.
3. Set up group chart of accounts automatically from cons chart of accounts

Group Chart, Financial Statement Version, Cons Chart

4. Transport the group's financial statement version and group chart of accounts into the transaction systems
5. When data transfer takes place for profit center consolidation, then, if necessary, assign the interval secondary cost element to the FS items.
6. When rollup is used (for any integrated consolidation type), then export the rollup relevant Customizing settings to file, in order to transfer them to the transaction systems.

Activities in every transaction system

1. Import the group's financial statement version and group chart of accounts
2. If you have chosen case 1.b in the consolidation system, then assign operational account intervals to the FS items of the group's financial statement version
3. Assign group chart of accounts to the operational chart of accounts
4. Assign group chart of accounts to the operational accounts:
 - a. When you have assigned the group's financial statement version operational account intervals (see step 2), then automatically assign the group accounts to the operational accounts with the help of this structure.
 - b. Otherwise assign the group chart of accounts to the operational accounts manually
5. When rollup is used, then import the rollup relevant Customizing settings of the consolidation system.

Result

After these activities you have created the link between the operational accounts and the FS items of Consolidation.

Integrated Company or Business Area Consolidation

Purpose

This process description explains how you transfer data for a company or business area consolidation from operational SAP applications.

Process Flow

A. Customizing in the Sender System and in the Consolidation System

For the integrated data collection you have to execute the Customizing settings both for the sending of data and for the receiving of data.

- Sender of data are the operational SAP applications.
- Receiver of data is Consolidation.

With a central scenario the sender and receiver work in the same system and client,; with a decentralized scenario the sender and receiver work in different systems and clients.

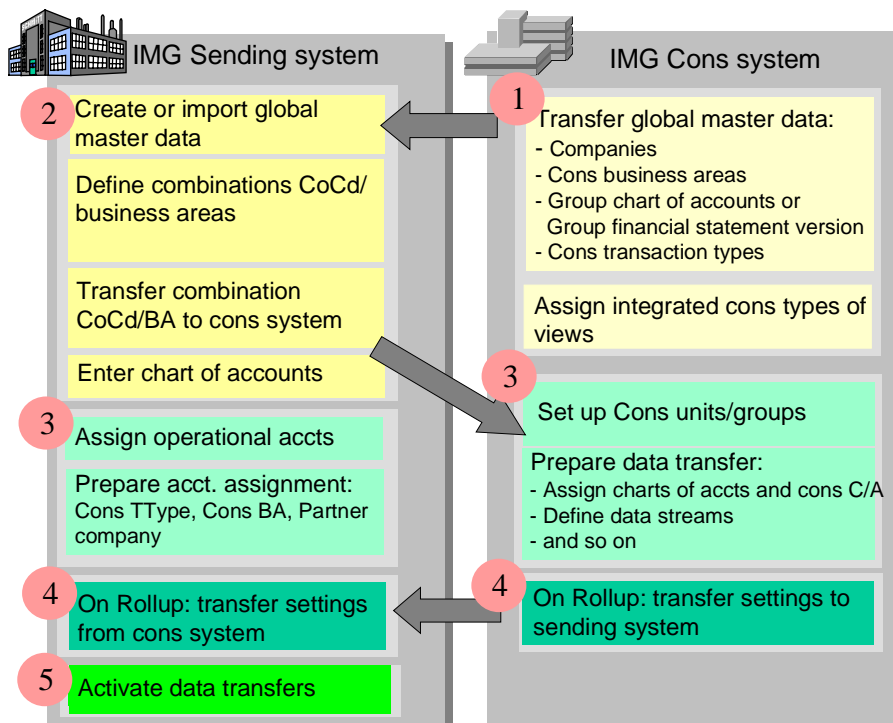


All Customizing settings are offered in the IMG of Consolidation, in the section *Integration → Preparation for Consolidation*. You will find detailed explanations in the documentation on the individual sections.

The IMG section is divided into preparations which are to be executed in the sender system and preparations which are to be executed in the consolidation system. From the more general case, the IMG assumes that the operational applications work in other systems (at least partly). When you have a central enterprise scenario, then nevertheless you have to execute the IMG section part *Preparations in the Sender System and Preparations in the Consolidation System*. Only the steps which offer the transfer of Customizing settings between the systems do not apply in a central scenario.

The following **graphic** shows, in an overview, which settings are to be executed in the IMG. The numbers 1 to 5 set the order of the settings chronologically. As the sender system relies on the Customizing settings of the consolidation system and vice versa, at least a part of the Customizing settings must be organizationally reconciled to each other.

Integrated Company or Business Area Consolidation



1. The group headquarters sets the global master data in advance:

Global characteristics	Transfer to sender systems
Companies	On organizational way or by transport
Cons business areas	
Group chart of accounts and/or group financial statement version (according to data transfer method / scenario; compare Group C/A, Financial Statement Version, Cons C/A [Page 169])	
Cons transaction types	

In the IMG section *Preparations in the Consolidation System*, you will find the tools to create and transport the group chart of accounts and the group financial statement version.

In addition to that you define which integrated consolidation types are to be displayed in the views.

2. In the sender system you create the global master data or import them from the consolidation system. You assign the global organizational units to the local ones:

Integrated Company or Business Area Consolidation

Global characteristics	Local characteristics
Company	Company code
Cons business area	Business area

For business area consolidations you also enter which business areas the individual company codes manage. The system converts the combinations of company codes and business areas which have been defined by you to the combinations of company codes/business areas. It then exports this into a file. You transfer this file to the consolidation system.

3. The next steps can run parallel in the sender system and in the consolidation system.
 - In the consolidation system you automatically set up the integrated consolidation units and groups per view.

Integrated Cons type	Cons unit's structure	Cons group's structure
Company consolidation	from company codes, to which a company is assigned	a top consolidation group
Business area Consolidation	from combinations companies/cons business areas	Hierarchy by cons business areas
		Hierarchy by companies



For every hierarchy you have to create the top consolidation group manually. This is not integrated, that means that there are no corresponding operational organizational units.

Subsequently you prepare the transfer of data. A prerequisite for this is that you find out from the sender system on the organizational way, which operational charts of accounts are being used.

- In the sender system you summarize the operational accounts according to the data transfer method.
 - With realtime update and rollup you assign the group chart of accounts to the operational accounts (that is if the operational accounts correspond to the FS items of Consolidation 1:1).
 - With periodic extract you assign the group financial statement version to the operational accounts.

In addition to that you assign the global characteristics cons transaction type, cons business area (provided that it has not already taken place) and trading partner to the local characteristics, so that the operational data is supplied with that.



Integrated Company or Business Area Consolidation

The steps for this from the operational applications are compiled in the IMG of Consolidation. A part of the step is cross-consolidation type, that means it is necessary for all consolidation types. There are also steps which are only necessary for business area consolidation.

If required you prepare to manage parallel currencies and evaluations in the operational data.

4. When you use rollup as a data transfer method, then you export the consolidation system's Customizing settings to a file and transfer this to the sender system. The sender system requires some of the Customizing settings in order to convert the operational data, so that they can be processed in the consolidation structures.
5. In the sender system you define per integrated consolidation type, with which data transfer method you want to transfer data to Consolidation. You prepare this method(s) and subsequently activate them.



Note that from the activation of the data transfer methods *Realtime Update* and *Periodic Extract*, the operational data is updated to the consolidation processing ledger and the preparation for consolidation ledger. You have to set up the initial data set before (see B.).

Structure of the Data Initial Set

In the consolidation processing ledger, the preparation for consolidation ledger and the sender ledger for rollup, you set up the initial data set.

See also:

[Legacy Data Transfer \[Page 197\]](#)

Update of Operational Data

The procedure how you transfer data in the consolidation processing ledger, is dependent on the data transfer method.

- Realtime update

The system updates the data directly in the consolidation processing ledger.



Note that the realtime update is dependent on the status which the tasks for data collection have in the data monitor of Consolidation. Even when tasks are blocked, documents are updated.

With realtime update, the status of the tasks for the data collection are not updated. When the status is initial, then it does not change with the realtime update. You can block tasks at a suitable time to execute the subsequent tasks.

See also:

[Data Transfer Method Realtime Update \[Page 159\]](#)

- Periodic extract

Integrated Company or Business Area Consolidation

The system updates the data in the consolidation processing ledger. There you create a periodic extract on the key date of Consolidation. You transfer these to the consolidation processing ledger.

See also:

[Data Transfer Method Periodic Extract \[Page 162\]](#)

- Rollup

The system updates in the sender ledger for the rollup, for example a variable ledger to a custom table. From there you execute a rollup in the consolidation processing ledger at the key date.

See also:

[Data Transfer Method Rollup \[Page 166\]](#)

Result

In Consolidation the integrated data can be formatted and consolidated.

Account Assignment Company and Trading Partner

Use

For postings which originate from inter-group business relationships, company and trading partner have to be assigned, so that these activities can be consolidated.

These account assignments are not only for company consolidations, but are also necessary for business area consolidations and profit center consolidation.

Features

Derivation of the Company

With company code postings, to which a company is assigned, this company is assigned in an AC document.

Derivation of the Trading Partners

Customizing

For every customer and vendor which display an affiliated internal trading partner, you have to enter the company identification in the master record.

When, instead of a customer account or vendor account, a general ledger account is used specially for an affiliated business partner, then also enter the company identification in the master record of this master record. However this case represents an exception.

See also

[Account Assignment Trading partner \[Ext.\]](#) in the IMG Consolidation.

Automatic Account Assignments

When you post to an affiliated customer or vendor, then the system derives the trading partner from the master record and assigns it:

- in the current document line item
- in the document line items of the offsetting entry (inheritance)

However passing on the trading partner from the current lines to the other document line item is only possible when only one trading partner is posted to per document. You can define this in the document type (see IMG step *Account Assignment Trading Partner*).

Manual Account Assignment

When postings have no current reference, then the trading partner can not be automatically derived. For example this applies for a transfer between income statement accounts. In this case you have to enter the trading partner manually in the document header.

Explanation for Selected Business Transactions

Vendor / Customer Invoice (FI-AP/AR)

- Vendor / customer invoice

Account Assignment Company and Trading Partner

The system transfers the company identification from the master record and passes it on in the offsetting entry. Only the trading partner can be posted to per document.

- Vendor / customer payment

It can be required with these business transactions, that more than one trading partner is assigned per document (control via the document type). Then the trading partner is only assigned in the current line and not in the cash accounts. This is sufficient, as the cash accounts are not partner relevant.

- Down payment and down payment clearing

These business transactions always have current reference and are therefore treated like the customer / vendor invoice.

Asset Accounting (FI-AA)

- Asset transfers between company codes

The system create two documents when transferring a fixed asset in another company code. In all document line items, every document has the company identification of the other company code as trading partner.

Materials Management (MM)

- Goods/invoice received

For goods receipt and invoice receipt from an affiliated supplier, the system derives the trading partner from the vendor's supplier data. It assigns both the goods / invoice received and the offsetting entries with this trading partner.

Controlling (CO)

- Cross-company code allocations

These are transferred periodically, via the reconciliation ledger, as adjustment entries to financial accounting. The trading partner derives itself from the company code.

Assignment of Business Area and Partner Business Area

Use

Prerequisite for reports about business areas is, that all FS items of financial statements and income statements, for which the business area has responsibility, are to be supplied with the business area account assignment. This is in particular the FS items of the transferred assets, the receivables and payables, the material stocks, as well as all FS items of the income statement.

In addition to that for business area consolidations, it is necessary that the postings, which originate from group-internal business relationships, are supplied with the trading partner business area.

Therefore the operational postings to the accounts which are relevant for business areas, have to contain business area account assignments and trading partner account assignments.

Features

Account Assignment of Business Area

It depends on the business transaction, how the business area is assigned in the operational postings. Fundamentally there are two possibilities: The system can either derive the business area automatically from master records of the concerned account assignment objects, or the administrator has to enter the business area manually.

You will find detailed explanations at [FI Business Area \[Ext.\]](#) (SAP Library).

The following table explains the account assignment of the business area (BA) in an overview. The table is divided according to the components in which the accounting document occurs. Per component you will be able to go to the detailed FI documentation on the business area.

SAP components	Autom. derivation?	Manual Entry?	FI-Documentation
G/L accounting	When you enter a CO account assignment object, then the system can derive the BA from its master record.	always necessary when no derivation from CO account assignment object occurs	BA in General Ledger Accounting [Ext.]
Asset accounting	from master record of the asset	not necessary	BA in Asset Accounting [Ext.]

Assignment of Business Area and Partner Business Area

Accounts receivable / payable accounting	from one or more business areas for G/L account offsetting entries When several BAs are assigned in offsetting entries, then you have to readjust the BA in the reconciliation account (see below).	not necessary	BA in Accounts Receivable/Accounts Payable [Ext.]
Controlling	from master record of the CO account assignment object	not necessary	BA in Controlling [Ext.]
Materials management	from the BA assignment for material, in fact per combination of division and plant	not necessary	BA in Materials Management [Ext.]
Sales	Derivation rule per sales area (IMG): either BA assignment for each plant/division or each sales area	not necessary	



In the IMG of Consolidation, section *Preparations in the Sender System → Further Settings for Business Area Consolidation*, steps from the operational applications are compiled, which are to be executed for the account assignment of the business area. The compilation was intended as a checklist from a Consolidation point of view.

Assignment of Trading Partner Business Area

As with assigning the business area, it depends on the business transaction, as to how the trading partner business area is assigned. Fundamentally there are two possibilities: The system can either set the trading partner business area “diagonally”, or the administrator has to enter the trading partner business area manually.

“Diagonal” Derivation of the Trading Partner Business Area

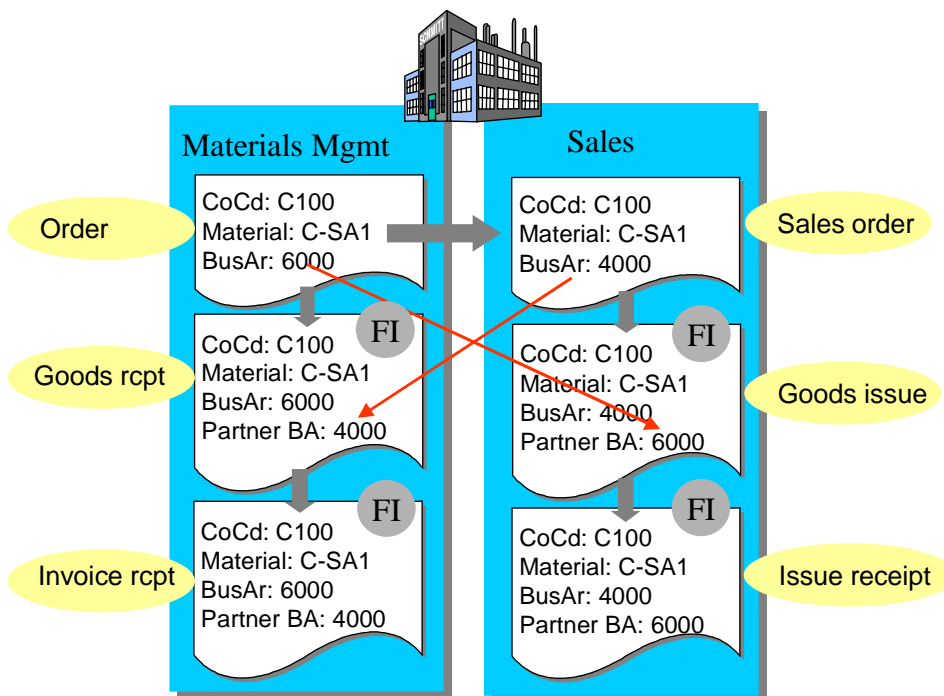
With the business transactions of materials procurement and sales, the system can automatically derive the trading partner business area. Prerequisite for this is that the delivering and receiving partner set the SAP components Materials Management and Sales in the same SAP System and in the same client.

Process Flow:

- You enter a purchase order in Materials Management. In the MM document you assign the business area, for which you are ordering the material. From the purchase order, the system generates a sales order. In the SD document the business area is assigned, from which the material is delivered.

Assignment of Business Area and Partner Business Area

- General ledger relevant documents are created for goods issue (SD) and goods receipt (MM). The system sets the trading partner business area “diagonally” in the documents.
 - In the goods issue document the system assigns the trading partner business area, which it derives from the purchase order.
 - In the goods receipt document the system assigns the trading partner business area, which it derives from the supplier data.
- Subsequently issue receipt (SD) and invoice receipt (MM) are posted. The payment transaction is processed in the vendor / customer invoice.



Customizing:

In the IMG the companies have to identify the same clients to enable the automatic derivation of the trading partner business area.



When Materials Management and Sales of group-internal business partners do not work in the same system and in the same client, then you can bring about the automatic assignment of the trading partner business area via the substitution rule. For example you define the rule that on delivery of material C-SA1 from plant 1, trading partner business area 6000 is assigned.

Manual Entry of Trading Partner Business Area

When you enter in accounts receivable/payable accounting, then you enter the trading partner business area in the document header or in the G/L account. The trading partner business area

Assignment of Business Area and Partner Business Area

is not passed on to the current line (also not when it is clear in the document). Therefore it must be readjusted to the reconciliation account *Receivables* or *Payables* (see below).

To enter the trading partner business area, the administrator must have the information which business area is concerned with the group-internal business partner. You have to organize this flow of information.

Adjustment of Balance Sheet and Income Statement with Business Areas and Trading Partner Business Areas

Business Area Adjustment

The adjustment of business areas is always necessary when you want to create a business area balance sheet / income statement in financial accounting. In addition to that it is also necessary for business area consolidations.

You execute the adjustment in the G/L accounting (menu *Periodic Work*) in fact for the following reasons:

- When posting a document, not all document line items are supplied with the business area. The document line items are not supplied for the following accounts:
 - Reconciliation accounts for receivables and payables (when the business area is not clearly in the document)
 - Tax accounts
 - Cash discount accounts
 - Accounts for exchange rate differences

The adjustment program distributes the business area account assignment from the offsetting accounts to the accounts to be adjusted.
- The adjustment program makes sure that the entire balance is null, per business area. The program creates the corresponding elimination postings.

In the menu *Period Work* there is an adjustment program for the balance sheet account and an adjustment program for the income statement accounts. You will find detailed information in the FI documentation [Generating Business Area Financial Statements \[Ext.\]](#) (SAP Library).



The adjustment can not be carried out at any time, rather it must take place after the evaluation of open items. After that you are not allowed to carry out any more postings to business areas.



The following example explains the adjustment of business areas to the reconciliation accounts *Receivables*, with the help of a simple posting example. Tax postings are disregarded.

Example A

A customer invoice is created in which the sales revenue is assigned to a business area.

Invoice

Account	Business area	Amount
---------	---------------	--------

Assignment of Business Area and Partner Business Area

Customer / receivable	6000 (passed on as offsetting entry)	1,000.00
Revenues	6000	1,000.00-

As the business area is clear in the document, the system can pass on the business area account assignment from the G/L account line to the current line and with it to the reconciliation account *Receivables*. Therefore no adjustment is necessary for this posting.

Example B

A customer invoice is created in which the sales revenue is assigned to several business areas.

Invoice

Account	Business area	Amount
Customer / receivable		1,000.00
Revenues	5000	600.00-
Revenues	6000	400.00-

The system does not pass on the business area to the current line. Otherwise the customer posting would be excessively large. It is important that the receivable is divided into the business areas. You achieve this with the adjustment program.

Adjustment

Adjustment account	Business area	Amount
Receivables		1,000.00-
Receivables	5000	600.00
Receivables	6000	400.00

The adjustment program writes off the amount of 1,000.00 to the adjustment account for the receivable without the business area account assignment and with stock allocation to the business areas again.



Receivables account and adjustment account must be assigned the same FS item from the financial statement version as well as the same consolidation item.

Trading Partner Business Area Adjustment

When you have activated the data transfer for business area consolidation in Customizing, then the adjustment program also assigns the trading partner business area to the accounts to be adjusted.



Invoice

Account	Business area	Trading partner BA	Amount
Customer / receivable	6000 (passed on as offsetting entry)		1,000.00

Assignment of Business Area and Partner Business Area

Revenues	6000	4000	1,000.00-
----------	------	------	-----------

As the business area is clear in the document, the system passes it on from the G/L account line to the current line and with it to the reconciliation account *Receivables*. However the system does not generally pass on the business area to the current line. Therefore the trading partner business area must also be adjusted.

Adjustment

Adjustment account	Business area	Trading partner BA	Amount
Receivables	6000		1.000,00-
Receivables	6000	4000	1.000,00

The adjustment program writes off the amount of 1,000.00 to the adjustment account for the receivable without the business area account assignment and with the business areas again.

Activities from the Consolidation Point of View

The execution of the adjustment is not the Consolidation administrator's responsibility, instead it is the responsibility of the G/L accounting.

However as the person responsible for the data transfer to Consolidation, you should check whether the adjustment program was executed, so that the data, which you transfer to Consolidation, had the necessary business area account assignments.

Data Stream

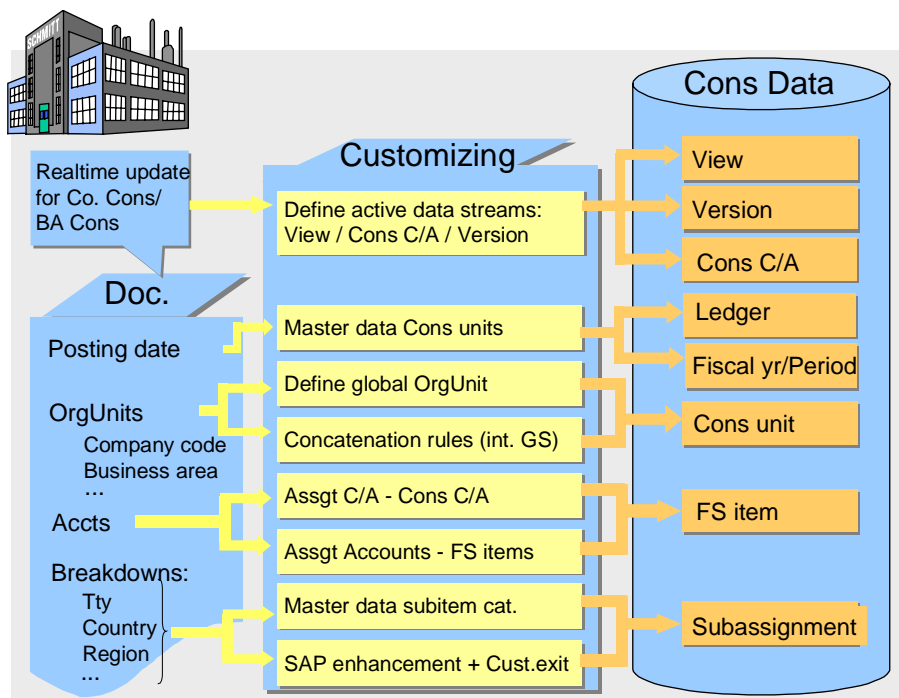
Use

With the help of the definition of the data stream and with the help of other Customizing settings, the system calculates how it should update the operational data streams in the consolidation processing ledger.

Features

The following graphic shows an overview of how the system calculates the Consolidation data streams with the **realtime update** of operational documents.

Subsequently you will find explanations for the data stream with the utilization of the rollup or the periodic extract.



- View, version and Consolidation chart of accounts.

From the IMG settings *Define Data Streams* (section *Preparations in the Consolidation system*) the system calculates the active data streams per active consolidation type).

According to the data transfer method the following applies:

- The realtime update can fill several data streams parallel, that means several data streams can be active at the same time for an active consolidation type.

Data Stream

- A rollup can only fill one data stream. When several data streams are active for an active consolidation type, then the system must choose a data stream exactly.
 - When you start posting the rollup data in the Consolidation menu via the data monitor, then the system chooses view, version and consolidation chart of accounts from the global parameters.
 - When you start posting the rollup data in the Consolidation menu via the detail monitor, then the system identifies the view, version and consolidation chart of accounts from the entries which you made while defining the rollup in the rollup reset set.
- The periodic extract can only fill one data stream. You choose this data stream by entering the view, version and consolidation chart of accounts while applying the extract on the initial screen.
- Consolidation processing ledger
 - The system calculates the Consolidation processing ledger(s) from the master data of the consolidation unit on the realtime update.



The system updates the operational document in every assigned ledger, provided that the following conditions are filled:

- The ledger must be assigned all consolidation units which are to be posted to via the document.
- The consolidation units must use the same fiscal year variant.
- On rollup the system calculates the Consolidation processing ledger(s) which you have entered in the rollup sequence while defining the rollup. Make sure that these ledgers are assigned to the consolidation units to be posted to.
- While applying the periodic extract in Consolidation, the system calculates the ledger from the global parameters. Make sure that this ledger is assigned to the consolidation units to be posted to.
- Fiscal year and period
 - Realtime update

From the posting date and the fiscal year variant, which are set in the master data of the consolidation unit, determines the system the fiscal year and the period.
 - Rollup

When creating a rollup, the system uses the fiscal year variant for consolidation which you specified in the IMG setting *Activate Data Transfers* (section *Preparations in the Sender System*). If the company code data for the rollup is kept in the sender ledger under a different fiscal year variant, the system converts the periods in the rollup.
 - Periodic extract

The systems determines the fiscal year and period from the global parameters.

See also: [Data Collection with Shifted Fiscal Years \[Page 195\]](#)

- Consolidation unit and consolidation group

Data Stream

On the basis of the IMG settings *Enterprise Structure* and *Define Concatenation Rules*, the system converts the operational organizational units into the organizational units of Consolidation.

- FS item
 - With realtime update and rollup

From the IMG settings *Assign Chart of Accounts to the Cons Chart of Accounts* (section *Preparations in the consolidation system*) and the IMG settings *Operational Accounts: Groups Account Assignment*.
 - With periodic extract

The periodic extract already delivers the data with the consolidation item identification, as the extract is generated with the group's financial statement version.
- Subassignments

The system reads the account assignment category from the master data of the FS item and calculates the breakdown by subassignments.

 - When the account assignment category plans a breakdown by subitems, then the system calculates the sender field from the subitem category and transfers the characteristic value of the sender field into the subitem.
 - When the account assignment category plans a breakdown by partners , the system converts the partner assignment in the operational document into the partner unit (analogue to the conversion of the consolidation units).
 - When the account assignment category plans a breakdown by custom subassignments, then you have to set up the transmission of operational characteristics in these subassignments in the IMG settings *Preparation and Activation of the Data Transfer*.

Integrated Profit Center Consolidation

Purpose

This process description explains how you transfer data for a profit center consolidation from operational SAP applications. Rollup is available as a data transfer method.

Prerequisites

You set the profit center accounting and post the data of the current controlling area in the profit center ledger (totals table GLPCT).

Process Flow

A. Customizing in the Sender System and in the Consolidation System

For the integrated data collection you have to execute the Customizing settings both for the sending and receiving of data.

- Sender of data is the operational SAP applications.
- Receiver of data is Consolidation.

With a central scenario the sender and receiver work in the same system and client, with a decentralized scenario the sender and receiver work in different systems and clients.

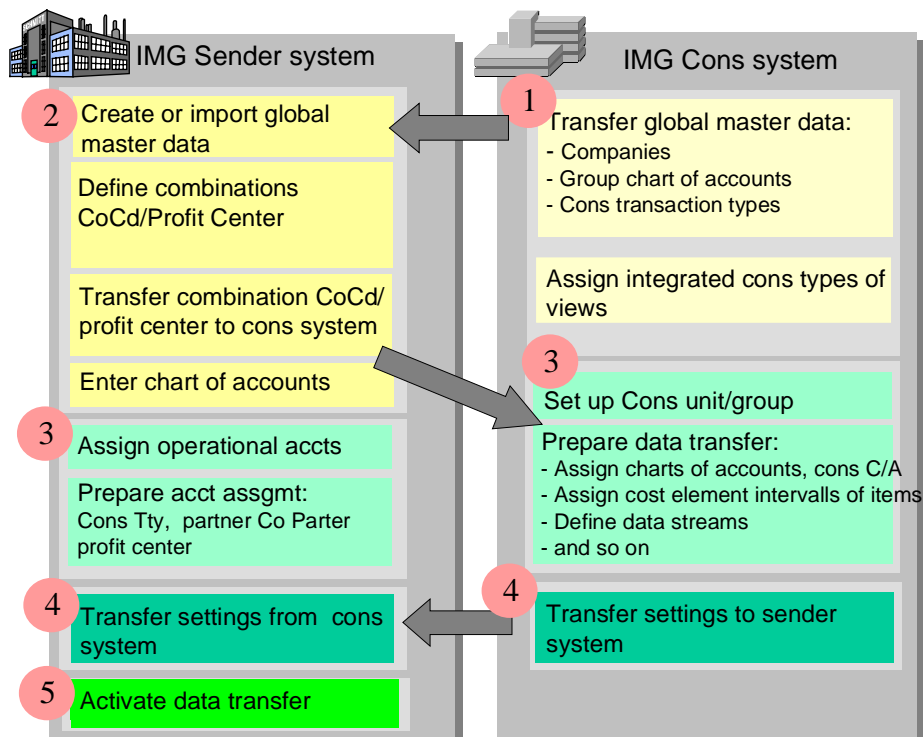


All Customizing settings are offered in the IMG of Consolidation, in the section *Integration → Preparation for Consolidation*. In the documentation on the individual sections you will find detailed explanations.

The IMG section is divided into preparations which are to be executed in the sender system and preparations which are to be executed in the consolidation system. From the more general case, the IMG assumes that the operational applications work in other systems (at least partly). When you have a central enterprise scenario, then nevertheless you have to execute the IMG section part *Preparations in the Sender System and Preparations in the Consolidation System*. Only the steps which offer the transfer of Customizing settings between the systems do not apply in a central scenario.

The following **graphic** shows, in an overview, which settings are to be executed in the IMG. The numbers 1 to 5 set the order of the settings chronologically. As the sender system relies on the Customizing settings of the consolidation system and vice versa, at least a part of the Customizing settings must be organizationally reconciled to each other.

Integrated Profit Center Consolidation



4. The group headquarters sets the global master data in advance:

Global characteristics	Transfer to sender systems
Companies	On organizational way or by transport
Group chart of accounts (see also Group C/A, Financial Statement Version, Cons C/A [Page 169])	
Cons transaction types	



You define the profit center independently of the controlling area. When you include several controlling areas in your profit center consolidation, then you must note the following:

- You must make sure that the profit center is clearly defined group wide. That means: Every characteristic value of the characteristic profit center must be clear group wide and represent one profit center exactly.
- So that you can assign the profit center another controlling area as partner in a controlling area, you have to create the partner profit center in the controlling area to be posted. The system checks whether the partner profit center exists. You should set the block indicator in the master data of this

Integrated Profit Center Consolidation

potential partner profit center. This makes sure that it only posts as partner profit center and not as profit center.

In the IMG section *Preparations in the Consolidation System*, you will find the tools to create and transport the group chart of accounts.

In addition to that you define which integrated consolidation types are to be displayed in the views.

5. In the sender system you create the global master data or import them from the consolidation system. You assign the global organizational units to the local ones:

Global characteristics	Local characteristics
Company	Company code

You also enter which profit centers the individual company codes manage. The system exports the combinations company / profit center to a file. You transfer this file to the consolidation system.

6. The next steps can run parallel in the sender system and in the consolidation system.
 - In the consolidation system you automatically set up the integrated consolidation units and groups per view.

Integrated Cons type	Cons unit's structure	Cons group's structure
Profit center Cons	from Combinations Co/Cons BA	Hierarchy by profit centers
		Hierarchy by companies



For every hierarchy you have to create the top consolidation group manually. This is not integrated, that means that there are no corresponding operational organizational units.

Subsequently you prepare the transfer of data. A prerequisite for this is that you find out from the sender system on the organizational way, which operational charts of accounts are being used.

- In the sender system you summarize the operational accounts according to the data transfer method. You assign the group chart of accounts to the operational accounts (that is if the operational accounts correspond to the FS items of Consolidation 1:1).

In addition to that you assign the local characteristics cons transaction type, trading partner, partner profit center to the local characteristics, so that the operational data is supplied with that.



The steps for this from the operational applications are compiled in the IMG of Consolidation. A part of the step is cross-consolidation type, that means it is necessary for all consolidation types. There are also steps which are only necessary for profit center consolidation.

Integrated Profit Center Consolidation

You possibly prepare to manage parallel currencies and evaluations in the operational data.

4. You export the consolidation system's Customizing settings to a file and transfer this to the sender system. The sender system requires some of the Customizing settings in order to convert the operational data on rollup, so that they can be processed in the consolidation structures.
5. You prepare the rollup in the sender system and enter that you want to transfer data for the integrated consolidation type *Profit Center Consolidation*.

B. Structure of the Data Initial Set

You set the data initial set in the profit center ledger.

C. Update of Operational Data

At the Consolidation key date you execute a rollup in the profit center ledger. You transfer these to the consolidation processing ledger.

See also:

[Data Transfer Method Rollup \[Page 166\]](#)

Result

In Consolidation the integrated data can be formatted and consolidated.

Assignment of Profit Center and Partner Profit Center

Assignment of Profit Center and Partner Profit Center

Use

The primary objective of Profit Center Accounting is to determine the net profits for each area of responsibility. To achieve this goal, all costs and revenue must be allocated to each profit center.

The assignment of balance sheet items to profit centers enables the extension of the profit center to an investment center and its assumption of responsibility for the tied in assets. This also enables the determination of controlling figures, such as Cash Flow, Working Capital, Return on Investment, and so forth.

Profit center consolidation also requires that costs and revenue and any balance sheet changes stemming from group-internal business transactions be assigned with the partner profit center.

Features

Assigning the Profit Center

Profit Center Accounting reflects the portion of transaction data from transaction applications that is relevant. The profit center is not an independent coding object in the SAP system. Instead, the system derives the profit center from the original, posted coding objects.

You make settings in the Implementation Guide for Profit Center Accounting to achieve this derivation. Two essential settings are mentioned here:

- The assignment of coding objects to profit centers:

You assign all objects that contain profit-related data to a profit center - for example orders, cost centers, controlling areas, etc.

- The **selection of additional financial statement accounts** as well as the assignment of a default profit center and, if needed, the definition of derivation rules (in the Implementation Guide under *Actual Postings*):

For example, you could include the balance sheet items for group-internal receivables and payables in Profit Center Accounting and in profit center consolidation.

However, you can transfer these balance sheet items to Profit Center Accounting only periodically, usually at the end of the month. Prior to the transfer, in the G/L application menu you must run the calculation of balance sheet adjustments (*General ledger* → *Periodic tasks* → *Closing* → *Transfers* → *Balance sheet adjustment: Calculate*). Using the relevant FI documents, this program determines which profit centers and partner profit centers are to assume the receivables and payables.

This is illustrated in the following example:



FI Document: Invoice

Account	Profit Center	Partner Profit Center	Amount
Customer / receivable			1 000.00
Revenues	A	C	700.00-

Assignment of Profit Center and Partner Profit Center

Revenues	B	C	300.00-
----------	---	---	---------

The FI document divides the revenues by profit centers; however, the customer or reconciliation account *Receivables* is not divided up.

The FI program passes on the revenue allocation to the receivable.

Calculation of the Adjustment

Account	Profit center	Partner Profit Center	Amount
Receivable	A	C	700.00
Receivable	B	C	300.00

However, instead of in G/L, you post the adjustment in the application menu of Profit Center Accounting (*Actual posting* → *Period closing* → *Transfer receiv. / payables*). The system only posts in Profit Center Accounting - no FI documents are created.

Posting the Adjustment

Account	Profit Center	Partner Profit Center	Amount
Receivable			1000.00-
Receivable	A	C	700.00
Receivable	B	C	300.00



For more information about profit center determination and assignments, see the documentation on Profit Center Accounting in the SAP Library, specifically the following sections:

- *Basic Functions* → *Profit Center Allocations*
- *Actual Postings* → *Transfer of Actual Data*
- *Actual Postings* → *Balance Sheet Items in Profit Center Accounting*

Derivation of the Partner Profit Center

Automatic "Cross-diagonal" Derivation

In material acquisition and sales, the system is able to derive the partner profit center automatically if the supplying or receiving partner uses the corresponding SAP applications on the same system and the same client.

- In the goods issue document the system assigns the partner profit center, which it derives from the purchase order.

- In the goods received document the system assigns the partner profit center, which it derives from the delivery data.

You activate this derivation in the Implementation Guide for Profit Center Accounting, section *Preparation for Consolidation* → *Reread Purchase Orders/Sales Orders*, where you identify the trading partners in your SAP system.

Assignment of Profit Center and Partner Profit Center



For more information, see the Profit Center Accounting documentation in the SAP Library, section *Preparation for Consolidation*.

Using Derivation Rules

If the partner assignment cannot be derived automatically because of different systems or clients, you can use derivation rules to determine the partner profit center. You can have the partner profit center be determined from the vendor number, customer number, material number, partner company, sender profit center, or from a combination of these assignments.

You define these rules in the Implementation Guide for Profit Center Accounting in section *Preparation for Consolidation* → *Derive Partner Profit Centers in Purchasing and Sales*.



For more information, see the Profit Center Accounting documentation in the SAP Library, section *Preparation for Consolidation*.

Transfer from Non-SAP Feeder Systems

If you do not use the SAP components Materials Management and Sales, you must transfer the partner profit centers from the non-SAP feeder systems to SAP Financial Accounting.

Data Collection with Shifted Fiscal Years

Use

The fiscal year variant links the calendar year with the fiscal year. It determines how many periods and special periods a fiscal year has, and assigns the accounting period to each calendar time frame. If the fiscal year periods differ from the calendar year periods, this is referred to as a "shifted fiscal year".

During data collection in Consolidation the system must determine the fiscal year variant that is relevant for consolidation.

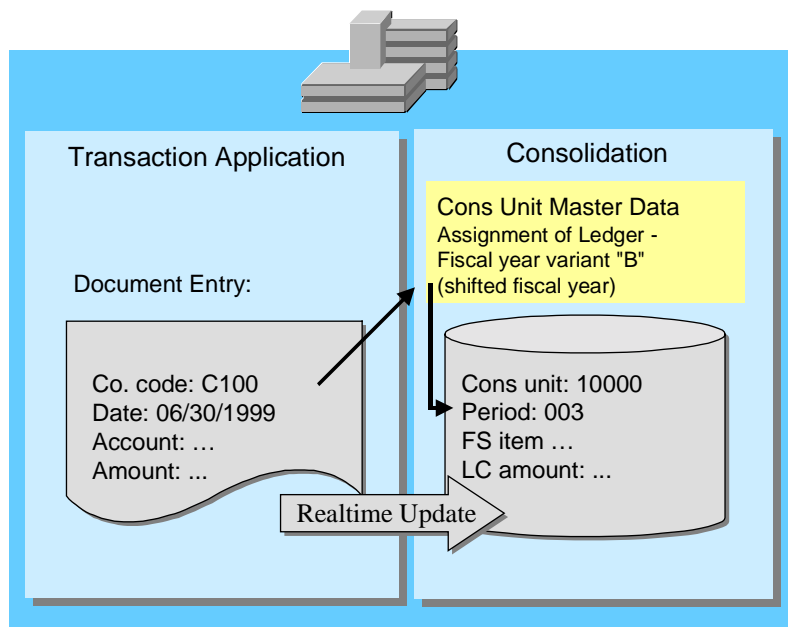
Features

The procedure how the system determines the fiscal year variant depends on the data transfer method. This usually involves the fiscal year variant you specified in [Activating Data Transfers \[Ext.\]](#).

Realtime Update

The system converts the posting date to the period and fiscal year using the fiscal year variant of the consolidation unit.

The following illustration shows the conversion using an example:



Data Collection with Shifted Fiscal Years**Periodic Extract**

The system posts the periodic extract data to the consolidation database using the period and fiscal year that is set in the global parameters.

Rollup

When creating a rollup, the system uses the fiscal year variant for consolidation which you specified in the Implementation Guide setting *Activate Data Transfers*.

If the company code data for the rollup is kept in the sender ledger under a different fiscal year variant, the system converts the periods in the rollup.

Legacy Data Transfer

Use

The initial data must be accurate before starting to transfer operational documents via realtime update to the consolidation processing ledger, the consolidation staging ledger, or the rollup ledger (all of which are referred to as "consolidation ledgers" in this text). This concerns both the initial data (legacy data) and the account assignments that are specifically needed for consolidation.

Initial Data

Usually the customer has legacy data from earlier accounting systems when implementing SAP General Ledger. After the implementation team transfers this data to SAP General Ledger, you can start posting entries in the transaction applications for the current fiscal year.

If you start using SAP Consolidation after you are already using SAP General Ledger, and you want to use integrated data collection, you need to transfer the legacy data as well as the FI postings that have already occurred as the initial data for the consolidation ledgers. You will most likely post cumulative (or year-to-date) balances to generate the beginning balances.

Consolidation-related Assignments

When SAP General Ledger is implemented, customers often transfer the legacy data only as cumulative balances. These balances usually do not include the assignments that are specifically needed for consolidation purposes. In particular, this includes partner assignments and consolidation transaction types.

The FI postings of the current fiscal year only include these assignments if the following customizing settings have been made:

- The company IDs have been inserted in the vendor, customer and G/L master records.
- The consolidation transaction types have been assigned to the asset accounting transaction types.

You must add any missing assignments in the appropriate consolidation ledger.

Features

Various tools are available for preparing the data.

Subsequent Posting of FI Documents

You can adjust the FI documents if they have not yet been archived.

- For information on subsequent postings in "non-consolidation" ledgers, such as the profit center ledger, see the documentation of the corresponding component, for example, Profit Center Accounting.
- You can perform subsequent posting in the consolidation processing ledger or the consolidation staging ledger in the Implementation Guide under *Integration: Preparation for Consolidation* → *Preparation in the Sender System* → *Tools for Building the Initial Data* → [Subsequently Post FI Documents \[Ext.\]](#) :
 - For subsequent postings in the consolidation processing ledger you need to make the following settings in [Activating Data Transfers \[Ext.\]](#) :

Legacy Data Transfer

- Integrated consolidation type *Company Consolidation* or *Business Area Consolidation*
- Data transfer method *Realtime Update*
- For subsequent postings in the consolidation staging ledger you need to make the following settings in [Activating Data Transfers \[Ext.\]](#) :
 - Integrated consolidation type *Company Consolidation* or *Business Area Consolidation*
 - Data transfer method *Periodic Extract* or *Rollup*

If consolidation-related assignments are missing in the FI documents to be subsequently posted, you can specify in the subsequent posting program that the following assignments should be reread:

- Company ID from the customer, vendor and (if applicable) G/L account master records
- Country of the customer from the customer master record
- Consolidation transaction type from the assignments to the asset accounting transaction types



Please note that you cannot simultaneously make subsequent postings in the period in which operational documents are posted. Hence, you should only subsequently post in past periods, which have been closed for operational postings.

Manual Data Entry

If the FI documents are already archived, you must enter the initial balances manually in the consolidation ledger.



When posting manually to the consolidation staging ledger, please note that simultaneous posting is not permitted. Otherwise, update problems can occur. Therefore, you should organize a posting break during the time you post manual entries.

Deleting Transaction Data

If the consolidation ledger contains incomplete data, it usually makes sense to delete this data and repost the FI documents.

Matching the General Ledger with the Consolidation Staging Ledger

You can reconcile these two ledgers to ensure that all G/L data has been posted to the consolidation staging ledger.

Legacy Data Transfer Scenarios

Purpose

The Implementation Guide for Consolidation features various tools for legacy data transfer, depending on your specific situation. Some scenarios are described in this document.

Process Flow

Scenario 1: Subsequent Posting of FI Documents

Assume the following situation:

The sender system has FI documents pertaining to the FI beginning balances as well as the day-to-day FI documents of the fiscal year. However, the FI documents do not have the necessary account assignments. The consolidation ledger (consolidation processing ledger, consolidation staging ledger, rollover ledger) already contain data, but it is incomplete - that is, realtime update is already activated.

Procedure:

1. You customize the assignment of partner companies and consolidation transaction types.
2. You delete the data that was posted in realtime from the consolidation ledger.
3. You repost all of the FI documents. On the selection screen of the program you specify that the system should reread the missing assignments from the master data.
4. You reconcile the reposted balances with General Ledger.

Scenario 2: Manual Entry of the Initial Data

Assume the following situation:

The transfer of legacy data into SAP General Ledger took place over a year ago. For this reason, the effort to repost all FI documents would be too great. It is also possible that the FI documents of preceding years have been archived and no longer exist in the system. No data resides in the consolidation ledger.

1. You customize the assignment of partner companies and consolidation transaction types.
2. In the consolidation ledger you manually enter the cumulative balances (including all necessary assignments) and post these to the highest prior-year period that was posted in General Ledger.
3. You reconcile the entered balances with General Ledger.
4. You carry forward the balances to the current fiscal year.
5. You activate realtime update, which posts all FI documents of the current month to the consolidation ledger.
6. You subsequently post the FI documents for the past months of the current fiscal year. On the selection screen of the program you specify that the system should reread the missing assignments from the master data.

Legacy Data Transfer Scenarios



Please note that you cannot simultaneously make subsequent postings in the period in which operational documents are posted. Hence, you should only subsequently post in past periods, which have been closed for operational postings.

Scenario 3: Manual Entry of the Assignments in the Consolidation Staging Ledger

Assume the following situation:

All FI documents, including the FI legacy data, have been posted to the consolidation staging ledger, but do not contain all of the necessary assignments.

1. You customize the assignment of partner companies and consolidation transaction types.
2. In the consolidation staging ledger you enter the missing breakdowns for the existing totals records, using the highest period already posted. The system writes new data records.
3. You delete the old data records.



Please note that you cannot simultaneously post manual entries. Otherwise, update problems can occur. Therefore, you should organize a posting break during the time you post manual entries.

Result

The data in the consolidation ledger is now correct. Realtime updating of FI documents can now be performed and be transferred as reported financial data to SAP Consolidation.



There are many other combination of the scenarios described above. You need to adjust your procedures to suit your situation when building your data.

Postings

Purpose

The following consolidation tasks lead to postings in the system:

- Standardizing or corrections to reported financial data
- Reclassifications
- Interunit eliminations
- Elimination of interunit profit and loss
- Preparations for consolidation group changes
- Consolidation of investments

The system creates documents for all postings, they are also called journal entries. The documents record the changes that are made to the values in the database. This lets you reconstruct all of the changes that were made to the original reported financial data of the consolidation units in order to arrive at the consolidated data.

The fundamental use of the consolidation components is that you execute the consolidation tasks with postings, which are necessary for your consolidated financial statements and the system creates them automatically. As a result you achieve a high level of automation and with it the efficient processing of your consolidated financial statements. In particular cases you possibly want to supplement automatic postings with manual postings. In addition to this it is often necessary to manually adjust the reported data of consolidation units to the requirements of the group. Therefore these components offer you **both automatic and manual posting functions** for the execution of your consolidation tasks.



With the following consolidation tasks the system, instead it updates the values to the database. You can find out about the value changes with the help of reports and database listings:

- Data entry
- Currency translation
- Apportionment
- Item substitution and calculation of the retained earnings
- Rollup to consolidation groups
- Balance carried forward
- Validation (no database update)

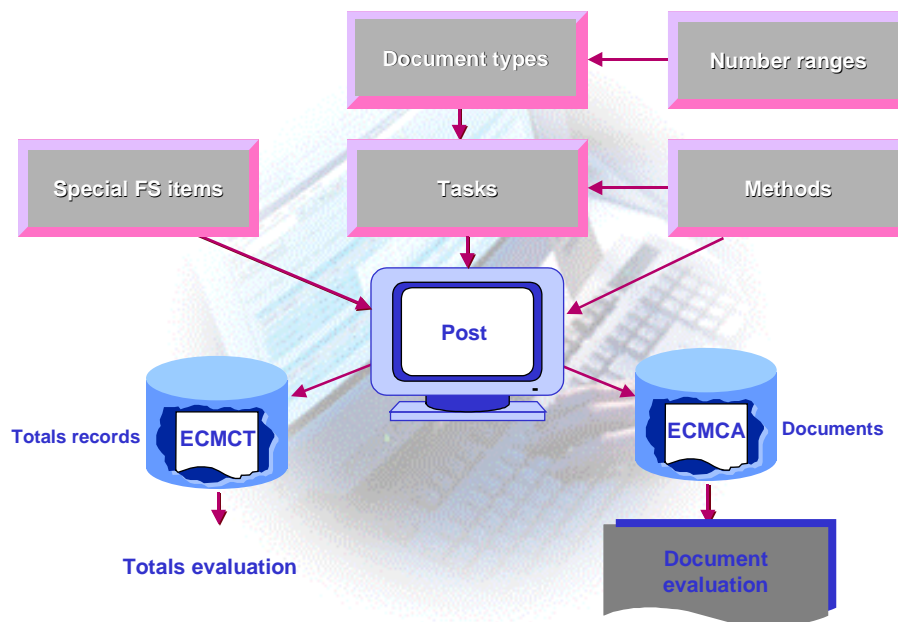
Features

The following graphic shows the relationship between

- the Customizing settings, which are necessary for postings

Postings

- the posting itself
- and the totals records and journal entries, which are generated during posting



Below the relationships which the graphic shows are explained in more detail, on the one hand for automatic postings and on the other hand for manual postings.

		Automatic posting	Manual posting
Custo m.	Task	For example for interunit eliminations	For example for manual standardizing entries
		Assignment of a document type and possibly of a method	
	Document type	Indicator <i>Automatic</i>	Indicator <i>Manual</i>
		Settings for: Posting level, currencies to be posted, post deferred taxes to the credits, treatment of the subassignments and so on.	
		Assignment of number ranges with document number interval	
202			April 2001

Postings

	Method	<p>You control in detail how the system creates postings with the method settings.</p> <p>For example you define in a method for interunit eliminations, which FS items sets should be eliminated against each other.</p> <p>Exception: The function elimination of interunit profit/loss in transferred assets does not know any methods.</p>	None.
	Selected FS items	<p>For both automatic and manual postings the system generates automatic line items for Financial Statement Imbalances, Deferred Income Tax and Consolidation Unit Balance Adjustment [Page 210].</p> <p>So that the system can determine the FS items for these automatic line items, you define selected FS items.</p>	
		<p>For automatic postings of consolidation of investments and elimination of interunit profit/loss in transferred assets, you define more selected FS items.</p>	
Post	<p>You run the tasks via the data/consolidation monitor or via the detail menu.</p>		
	<p>The system generates the posting automatically.</p>	<p>In the Transaction for Manual Posting [Page 229] you enter the document header data and the document line item and post the document.</p>	
Data	<p>The system creates data records to the totals database and journal entries to the journal entry database. You can evaluate this with reports and database listings.</p>		

Postings

Reversal	<p>In the master data of view, you can define what should happen to the old documents when a task is executed again: These can be reversed or deleted.</p> <p>Therefore the reversing or deleting of automatically posted documents is only possible with the repetition of consolidation tasks.</p>	<p>You can reverse [Page 226] documents individually, or use mass reversal.</p>
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To use the support of the system for the consolidation tasks, you should execute the tasks with automatic postings, as far as possible.

Classification of Entries with Posting Levels

Use

A document type is assigned to each entry. The document type determines the entry's posting level, which lets you classify the different types of entries. The system saves the posting levels in the totals records as well as in the journal entries on posting.

The posting level enables a selection of data by content:

- You can evaluate individual sections of the consolidation process in your Consolidation reports, by using the posting levels in the data selection.



For instance, you evaluate the adjusted reported financial data of a consolidation unit, by selecting the data from posting levels space, 00, 01, 08 and 10 for this unit.

When you include the consolidation group in the selection then you receive the data of posting levels 02 and 12 in addition.

- The system uses the posting level
 - for internal consistency checks of data
 - for the selection of data to be edited

For example the system selects all data for interunit eliminations (the consolidation units to be) with posting level smaller than or equal 20 (except for 02 and 12).

Features

The posting levels are predefined for the following entries:

Posting level	Use
00	Reported (financial) data
Space	Reported data from realtime update
01	Adjustment entries to reported data
02	Reported data: Cons group changes
08	Item substitution and calculation of the retained earnings
10	Standardizing entries
12	Standardizing entries: Cons group changes
20	Two-sided eliminating entries
22	Two-sided eliminating entries: Cons group changes
23	Two-sided eliminating entries: Special logic
24	Two-sided eliminating entries: Cons group changes with special logic
30	Consolidation of investments postings

Classification of Entries with Posting Levels

Explanations:

- Reported data (00, space)

The reported data have posting level 00; however they are posted without a document.

Exception: When reported data are transferred into Consolidation per realtime update, then the system saves them with posting level space.

- Adjustment entries to reported data (01)

When you have transferred reported data of consolidation units and subsequently want to change these in the corporate headquarters, then we recommend carrying out these changes with adjustment entries with posting level 01. This has the advantage that the documents report your changes.

- Standardizing entries (10)

May be needed to standardize the reported data to comply with corporate policies or corporate valuation rules



The consolidation unit is assigned to an account in the data records of the posting levels smaller than or equal 10 (except for 02, see below), however not the consolidation group. In reporting the data records are valid in all consolidation groups, in which the consolidation unit is included with purchase method, pooling of interest method or with proportional consolidation.

- Two-sided eliminating entries (20, 23)

Examples for two-sided eliminating entries are interunit eliminations (20, 23), reclassifications (20) and elimination of interunit profit/loss (20). In the data records the consolidation unit as well as the partner unit are assigned to an account. In reporting the data records are valid in all consolidation groups, in which both the consolidation unit and the partner unit are contained, with marginal conditions concerning the accounting techniques (see the following table).

You only use posting level 23 for elimination of investment income with the mutual stock method.



The following table shows, with which accounting techniques the data records of posting levels 20 and 23 are included in reporting:

Cons unit\Part. unit	Purchase method	Pooling	Proportional cons	Mutual stock	Equity/Cost method
Purchase method	20,23	20,23	20,23	23	-
Pooling	20,23	20,23	20,23	23	-
Proportional cons	20,23	20,23	20,23	23	-
Mutual stock	23	23	23	23	-

Classification of Entries with Posting Levels

Equity/Cost method	-	-	-	-	-
---------------------------	---	---	---	---	---

- Preparation postings for consolidation group changes (02, 12, 22, 24)

You carry out these postings in order to correctly display the reported data (02), the adjusted reported data (12) or the consolidated data (22, 24), for the acquisitions or divestitures of consolidation units. Therefore the postings prepare the first consolidation or divestiture accounting of the consolidation of investments.

The preparation postings correct the data of the following posting levels:

Corrected pstng level	Pstng level of preparation pstngs
Space, 00, 01, 08	02
10	12
20	22
23	24

In the data records both the consolidation unit as well as the consolidation group are assigned to accounts, in addition the partner unit with levels 22 and 24. In reporting the data records are only valid in assigned consolidation groups.

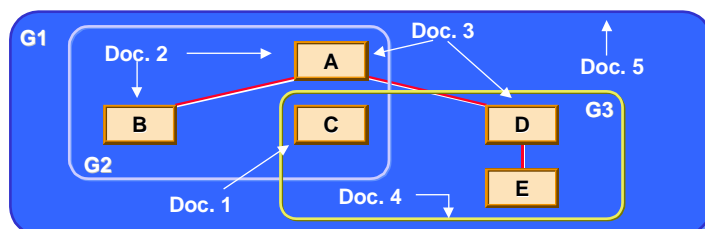
- Consolidation of investment postings

In the data records of consolidation of investment postings the consolidation unit, partner unit and consolidation group. In reporting the data records are valid in assigned consolidation groups and in the higher-level consolidation groups.

Example for the Selection of Data Records

Example for the Selection of Data Records

The following graphic shows three consolidation groups: Group 1 contains all units from A to E as well as both lower-level groups G2 and G3. All consolidation units are fully included.



Five documents with different posting levels are booked:

Doc. no.	Pstng level	Unit	Partner	Cons group	Text
1	10	C	-	-	Standardizing entries
2	20	A	B	-	Elim. of IU payables and receivables
3	20	A	D	-	Elim. of IU payables and receivables
4	30	E	D	G3	Cons of investments
5	30	E	D	G1	Cons of investments

The following table shows in which consolidation groups the documents in reporting are valid:

Docs\Cons groups	G1	G2	G3
1	X	X	X
2	X	X	-
3	X	-	-
4	X	-	X
5	X	-	-

Example for the Selection of Data Records

Financial Statement Imbalances, Deferred Income Tax and Consolidation Unit Balance Adjustment

Financial Statement Imbalances, Deferred Income Tax and Consolidation Unit Balance Adjustment

Use

It can be necessary for both **manual** and **automatic postings** to post financial statement imbalances, deferred income tax or consolidation unit balance adjustments. The system checks each manually or automatically generated posting documents whether a financial statement imbalance, deferred income tax or a consolidation unit balance adjustment needs to be posted and generates additional line items, if necessary.

With manual postings, we are talking of *automatic line items* as the system independently supplements your manually entered document line items with line items.

See following table:

Line items are generated...	if these conditions are given
For posting a financial statement balancing adjustment [Page 216]	An entry between balance sheet and income statement accounts leads to an imbalance in the financial statements
When posting deferred income taxes [Page 218]	The given document type supports this feature, and the entry requires an adjustment for financial statement imbalances
To clear imbalances in each individual consolidation unit [Page 220] when posting interunit entries	The document type supports this feature, and requires a posting level greater than or equal 20 and selected FS items

Features

You will find detailed explanations for financial statement imbalances, deferred income tax or consolidation unit balance adjustments in the subsequent sections of the Consolidation documentation. In this section functions are explained which are valid for all three kinds of additional line items.

Selected FS items

So that the system can generate individual line items for financial statement imbalances, deferred income tax and consolidation unit balance adjustments, you have to set the following in the Implementation Guide (IMG) of Consolidation:

- in step [Specify Selected FS Items for Posting \[Ext.\]](#) enter the items which the system should post for financial statement imbalances and deferred income taxes



You can set the selected FS items for deferred income taxes per document type and as a result override the settings, which you have executed in step *Selected FS Items for Posting*.

Financial Statement Imbalances, Deferred Income Tax and Consolidation Unit Balance Adjustment

- in the definition of document types (see the step in the respective IMG unit, for example [Document Types for Manual Posting \[Ext.\]](#))
 - the indicator *post deferred income taxes to the credits to credit deferred income taxes* or *post deferred income taxes to the debits to debit deferred income taxes* (as well as the tax rate in the master records of the consolidation units)
 - possibly the selected FS items for deferred income taxes (see note above)
 - the selected elimination FS items for the consolidation unit balance adjustments

Subassignments for these Selected FS Items

The selected FS items for financial statement imbalances, deferred income tax and consolidation unit balance adjustments, which you have defined in the step *selected FS items for posting* or in the definition of document types, require a breakdown by [Subassignment \[Ext.\]](#) according to the breakdown category.

In Customizing you have various possibilities to control how the system determines the subassignments for the selected items:

Selected FS Items for Financial Statement Imbalances

For every selected FS item, which allows for one or more subassignment, you can set the indicator *Default* per subassignment and/or enter a value if you do not set the indicator. The following logic is valid in phases:

- When you do not set the indicator *Default*, then you have to enter the value if you do not set the indicator. The system then always posts this characteristic value as a subassignment to the selected FS item.

Exception: When it concerns an optional breakdown then you do not have to enter the characteristic value. The system then does not post the subassignment, instead it debits the null value.

- When you set the indicator, then you do not necessarily have to enter a characteristic value for the subassignment.

The system goes forward step-by-step in order to determine the subassignment. The graphic shows these steps from a) to d):

Financial Statement Imbalances, Deferred Income Tax and Consolidation Unit Balance Adjustment

Customizing

Default value

SI cat. 6

Subitem **c**

Selected FS items

ANI FS

FS item 251200

SI cat. 6

Subitem. **b** Default **x**

ANI IS

FS item 390000

No.	FS item	Text	SIC	SI	Value	AL
1	191500	Eqpt.	1	220	100-	
2	311950	Amortiz.	2	0005	100	
3	251200	RE-ct yr 6	6	?	100	1
4	390000	ANI			100-	1

d Error message reqd breakdwn

Explanations:

- First the system checks whether it can determine the subassignment from the document.
- When a) this is not possible, then it checks whether you have entered the subassignment as a selected FS item.
- When b) is not correct, then it takes the subassignment, which you have defined in step [Define Default Values for Subassignments \[Ext.\]](#).
- When c) is unsuccessful and the breakdown category for the subassignment plans a required breakdown, then the system displays an error message.



Step a), therefore the determination of the subassignment from the document is possible when:

- the subassignment is clearly in the document, that means the same characteristic value is assigned to an account in all line items with this subassignment
- the document per subassignment is divided into a shared document, for which the imbalance over all financial statement items is null (see the graphic example for the clearing item)

Selected FS Items for Deferred Income Tax

The logic how the system finds the subassignment for selected FS items of deferred income tax, is fundamentally exactly the same as the selected FS items for financial statement imbalances. The only difference is that you can define the selected FS items document type dependent. When posting the system first checks whether the selected FS items are maintained for the document type and defines the subassignments in the way which is explained above.

Financial Statement Imbalances, Deferred Income Tax and Consolidation Unit Balance Adjustment

When the selected FS items are not entered per document type, then it gets the (global) settings in step [Define Selected FS Items for Posting \[Ext.\]](#) and uses the logic there.

Default value

SI cat. 2

Subitem. **c**

Selected FS items

Lat.St. GuV

FS item 350100

SI cat. 2

Subitem. 0005 Default

Dfd. inc. tax IS

FS item 150100

Doc. type/Sel. items

Dfd inc.tax IS

FS item 350100

SI cat. 2

Subitem **b** Default **X**

a

No.	FS item	Text	SIC	SI	Value	AL
1	191500	Eqpt.	1	220	100-	
2	311950	Amortiz.	2	0005	100	
3	251200	RE-ct.yr	6	120	60	1
4	390000	AN			60-	1
5	150100	Inc. tax			40	2
6	350100	Inc. tax	2	?	40-	2

d Error message reqd breakdwn

Selected Clearing Items

You maintain the selected clearing items per document type. The logic how the system determines the subassignments is the same as for the selected FS items for financial statement imbalances and deferred income taxes.

Financial Statement Imbalances, Deferred Income Tax and Consolidation Unit Balance Adjustment

No.	PL unit	FS item	Text	Partner	Value	AL
1	A	130100	Rec.	B	100-	
2	B	210100	Lbty.	A	100	
3	A	131000	Elim.	?	100	3
4	B	131000	Elim.	?	100-	3



In the example in the graphic, the system can determine the partner assignment from the document in step a) and to be precise

- Partner B in row 3
- Partner A in row 4

The document is then divided into two shared documents for which the imbalance over all financial statement items is null.

Manual Posting: Help Functions for Automatic Line Items

Simulation

When you enter a posting document in the manual posting transaction, then the system generates the automatic line items while saving the document and subsequently updates the complete document in the database. Before saving the document you can simulate it. The system shows the automatic line items in the simulation. Therefore you can see beforehand whether and how the system will post financial statement imbalances, deferred income tax and/or consolidation unit balance adjustments.

Identification

The system marks the automatic line items with a special number in the document, so that you can differentiate them from your manually entered line items:

Field AUT	Meaning
1	Automatic line items for financial statement imbalances
2	Automatic line items for deferred income taxes
3	Automatic line items for cross-clearing cons units

Financial Statement Imbalances, Deferred Income Tax and Consolidation Unit Balance Adjustment

Entering Manually or Correcting Automatic Line Items

Instead of generating the automatic line items by the system, you can also enter these rows manually. You should note the following:

- When you want to enter the rows manually, then you have to enter **all** "automatic" rows.
- You have to enter the **correct values**, that means
 - the imbalance and the net income or loss of the complete document must be 0
 - you must post the tax portion in the financial statement imbalances of the complete document to the selected FS items for deferred income taxes

First you can simulate the automatic line items by the system and then change, for example change the subassignments or distribute the simulated values to several document line items.

Financial Statement Imbalances

Use

Standardizing and consolidation entries can cause an imbalance in the financial statements. For example, an adjustment to depreciation on machinery involves posting in both the income statement and the balance sheet, causing these two statements to become out of balance. This imbalance is calculated by the system and balancing adjustments are automatically posted.

The system posts the financial statement imbalances **automatically**. This ensures that the balance sheet and income statement are posted consistently. Once the adjustment is posted, the two balance again.

Features

- During each posting, the program checks whether any income statement items are being posted with a non-zero balance. If so, it computes and posts a financial statement balancing adjustment.
- Where the appropriation of retained earnings are stated also affects the financial statement balancing adjustment:
 - If the appropriations are stated after the income statement, the adjustment is posted to *retained earnings* items, in the balance sheet as well as the income statement.
 - If the appropriations are stated in the balance sheet, the adjustment is posted to *annual net income* items, in the balance sheet as well as the income statement.

You determine the which items are posted to in the Customizing of selected items for retained earnings and annual net income.

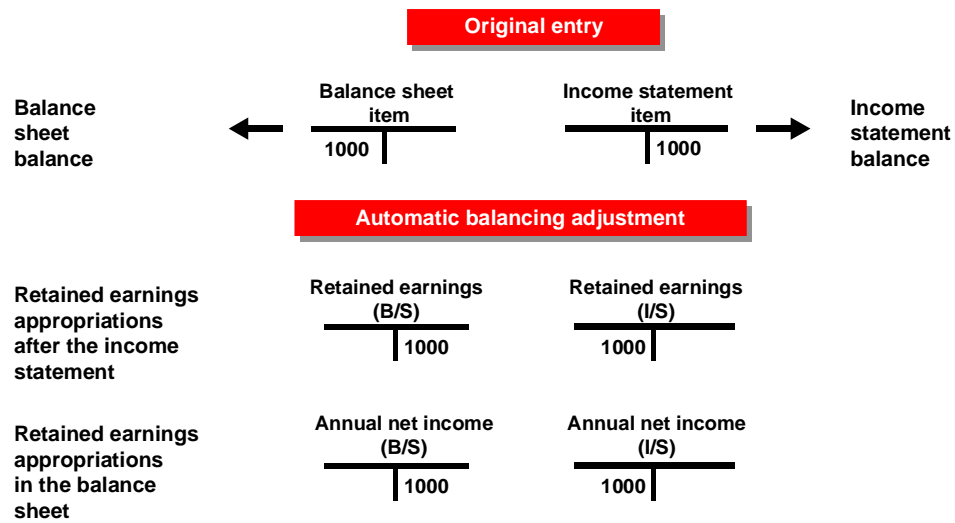
The financial statements remain in balance because the balancing adjustment takes both financial statements into consideration.

Example

Assume that after you post a standardizing entry to a balance sheet item, the balance sheet and the income statement are no longer in balance.

The following illustration shows you how the accounts are affected by the original entry as well as the automatic financial statement balancing adjustment. The automatic posting is depicted for both cases of where the appropriation of retained earnings are stated.

Financial Statement Imbalances



Deferred Income Taxes

Deferred Income Taxes

Use

Because of the tasks that are performed during consolidation, the consolidated earnings for the year usually differ from the sum of the earnings reported by the individual consolidation units. Deferred income taxes are posted within the consolidated financial statements, to adjust the sum of all reported tax expenditures to the consolidated earnings.

The system provides an option of automatically calculating and posting deferred income taxes.

Features

Deferred income taxes can arise from standardizing entries against the reported financial data of the consolidation units, or from consolidating entries.

In Customizing, you can activate the posting of deferred income taxes for each document type. You also define the tax rates for each consolidation unit, and the selected items for the allocation of deferred income taxes.

The system posts deferred income taxes provided you have activated the function in Customizing, and a financial statement imbalance occurs during an entry.

The financial statement imbalance is multiplied by the tax rate. The resulting deferred income tax is posted to the consolidation unit to which the financial statement imbalance itself is posted.

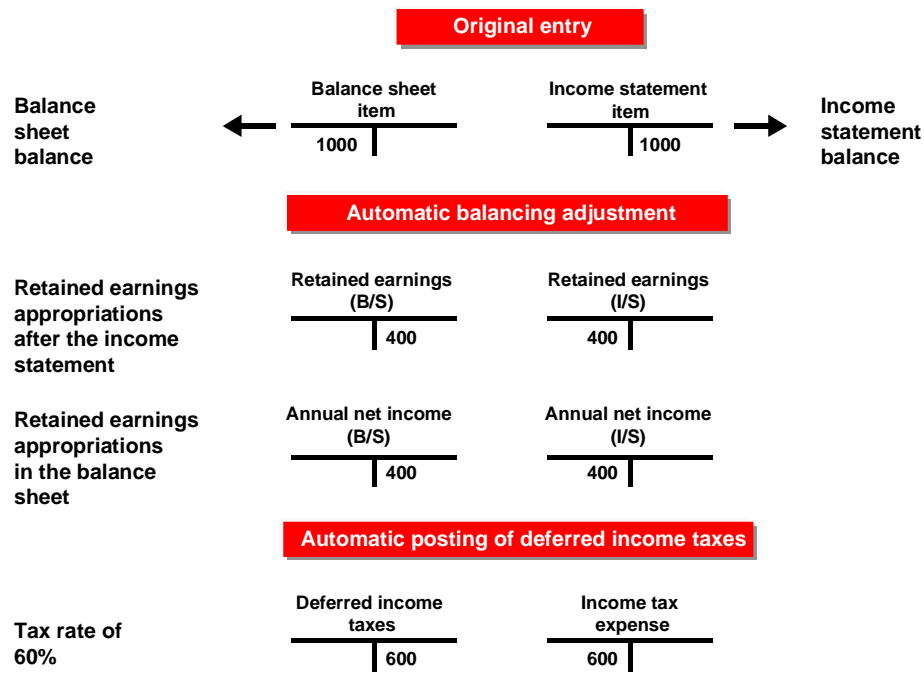
Example

Assume that you post a standardizing entry against a balance sheet item. You use a document type which allows the posting of deferred income taxes. When the standardizing entry is posted, the balance sheet and the income statement are no longer in balance.

The following illustration shows you how the accounts are affected by the original entry, the automatic financial statement balancing adjustment, and the automatic entry for deferred income taxes.

- Prior to posting the deferred income taxes, the financial statement imbalance amounts to 1000 currency units.
- The system multiplies the financial statement imbalance by a tax rate of 60 % and posts the resulting deferred income taxes of 600 currency units. The financial statement imbalance remaining to be posted is 400 currency units.
- The system posts this amount.

Deferred Income Taxes



Clearing of Imbalances Caused by Interunit Entries

Clearing of Imbalances Caused by Interunit Entries

Use

Under certain circumstances, it may be necessary to clear imbalances caused by interunit entries – that is, entries between different consolidation units – not only for the entire document but also for each consolidation unit.

Consequently, after the consolidation, you are also able to create consolidated individual statements for each consolidation unit.

Features

A clearing item is needed for clearing the entries of the consolidation units. In Customizing, you define the clearing item for document types with posting levels greater or equal to 20. Each consolidation chart of accounts requires its own clearing item. Defining a clearing item ensures that the system always posts a balancing entry.

During posting, the system calculates the balance for each consolidation unit, posts it to the clearing item.

Example

You want to post interunit eliminations between two consolidation units. In the document type you are using, you previously defined a clearing item for interunit entries. This results in the following posting document:

Posting document

Line item	Cons unit	Financial statement item	Amount (USD)
01	Cons unit 1	Receivables from affiliates	1,000.00 -
02	Cons unit 2	Payables to affiliates	1,000.00
03	Cons unit 1	Clearing item	1,000.00
04	Cons unit 2	Clearing item	1,000.00 -

Remarks

- Lines 03 and 04 are automatic line items inserted by the system.
- The entire entry balances to zero:
 - All line items add up to zero.
 - Each consolidation unit has a zero balance.
 - The balance of the clearing item remains zero.

Posting in Transaction Currency

Features

You can post FS items with breakdown by transaction currency, when

- the document type allows posting in transaction currency
- the breakdown category of the FS item is set up to allow the breakdown by transaction currency.

You can post several transaction currencies in one document. The system does not check whether the balance per transaction currency is null.

Posting in Quantities

Posting in Quantities

Features

You can post FS item values in quantities, when

- the document type allows posting in quantities
- the breakdown category of the FS item is set up to allow the breakdown by quantity.

The unit of measure has a fixed value in the breakdown category, that means the unit of measure is defined in the breakdown category of the FS item.



You could post FS items in a document, which is assigned different breakdown categories with different units of measure. This means that you can post several quantities in one document. The system does not check whether the balance is null, neither per unit of measure nor for the complete document.

Further Functions for Manual Posting

Use

The subsequent sections explain functions, which only the manual posting function offers.

Fixing or Hiding Subassignments

Fixing or Hiding Subassignments

Use

The FS items which you post to manually, require a breakdown by subassignment according to breakdown category. When you enter documents with lots of FS items and lots of subassignments, then the document entry can be very unclear. Therefore you have the possibility in the Customizing of the document type for each subassignment, to fix or hide them.

- Fixing means that the subassignment must clearly be in the document, so it is only allowed to have a fixed value. You can fix a subassignment permanently or temporarily. When you only fix a subassignment temporarily in Customizing, then you can deactivate the fixing when entering the line item.



For example you could fix the subassignment *transaction currency* temporarily or permanently, when you normally only enter documents in a transaction currency. Through the fixing you make sure that you do not enter two different transaction currencies by mistake.

In the manual posting transaction the system shows the fixed subassignments on the tab page *Clear Subassignments*. The system displays the unfixed characteristics per document line item.

- You can hide subassignments which only appear for a few FS items.

The system then displays these subassignments again, when you enter a FS item in the document line items, whose breakdown category is set up to allow the subassignment(s).

Validations

Use

The system provides standard validations for verifying the entries. You can supplement these by defining your own custom validation rules in Customizing.

The validations are performed during the posting process, specifically, at the callup point defined in the validation rule. There are three callup points: the document header, the document line item, and the posting event.



You might define validation rules for the following purposes:

- To ensure that specific financial statement items are only posted with certain subitems
- To define the currency limits which users are authorized to post
- To ensure that the total amount of depreciation that is posted to asset items using certain subitems, coincides with the total amount in the corresponding depreciation expense item

Reversal of Manual Postings

Reversal of Manual Postings

Use

This function enables you to reverse manual postings. The system reverses the document and adapts the totals record in the totals database.

Features

Two ways to reverse posted documents:

Manual Reversal

You can reverse individual documents with reference to the document to be reversed

Procedure:

1. In the Consolidation menu choose *Data → Enter Manual Posting* or *Consolidation → Manual Posting → Enter*. Then you enter the document type, document number and fiscal year for the document to be reversed.
2. In the following screens you can merely change the text for the reversal document. The other data is only displayed. The amounts of individual document line items have the inverse debit/credit sign in contrast to the document to be reversed
3. You reverse by saving.



In the header data you see the corresponding document number of the reversal document. These document numbers are automatically included in the header data on posting.

Mass Reversal

With the function *mass reversal* you can select and reverse manually posted documents by various criteria, for example by organizational unit, version, time, task, subassignment and so on.

The following status management is valid with regard to this:

- When the status management is active, then the following documents can be exclusively reversed:
 - Documents, whose document type is assigned a task for manual postings
 - Documents, whose document type is not assigned a task, but however is posted with a posting level which is smaller than 20

For these documents the system assumes that they belong, as regards content, to the tasks for data entry

The system resets the status of the concerned tasks after the mass reversal.

- When the status management is deactivated, then you can reverse all manually posted documents with this function, without having the assignment of tasks checked.

Procedure:

Reversal of Manual Postings

In the Consolidation menu choose *Data → Enter Manual Posting* or *Consolidation → Manual Posting → Mass Reversal*.

Then you enter the data, by which the documents to be reversed should be selected.

You execute the function and receive a list of the reversed documents.

Reversing a reversal document

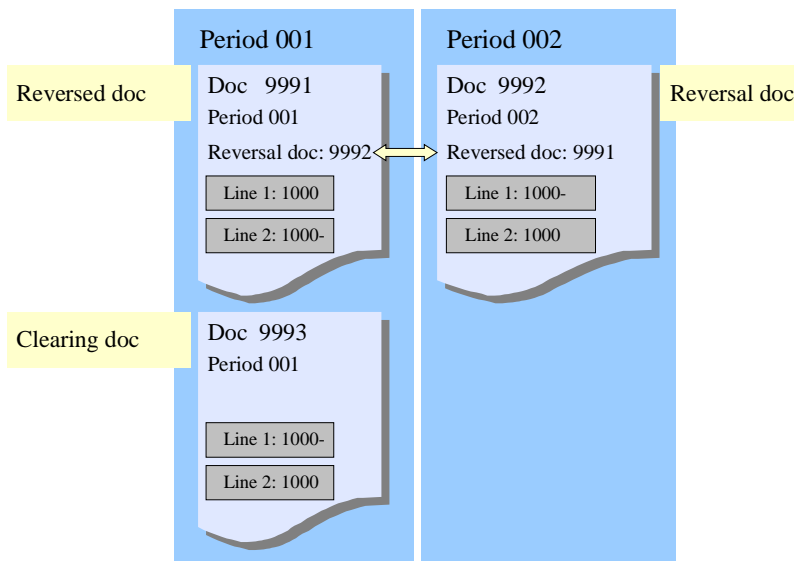
If you reversed a document and want to undo the reversal, you can reverse the reversal document. This is equivalent to posting an entry with reference to the source document. In other words, when reversing a reversal entry, the system posts a regular document – not another reversal entry.

Reversing an already reversed document

The system makes sure that you only reverse a document once. A reversed document cannot be reversed again.

However, the following situation is conceivable: For example, you reversed a document in period 001 with a reversal document in period 002. Afterwards you find out that the reversal should have taken place in period 001. If you then try to enter a reversal in period 001, the system suggests a new document, the values of which contain reversed debit/credit signs. Note that this new document (clearing document) does not reference the reversed document, or vice versa.

See the illustration:



To clear all documents with each other you need to do one of the following:

- also reverse the reversal document 9992 of period 002
- post the clearing document 9993 using a document type that automatically reverses the subsequent period

Reversal of Manual Postings

Manually Posting an Entry

Procedure



The steps 1 to 4 depend on whether you execute the manual posting with the monitor or with the detailed menu.

Start of the Posting Transaction with the Monitor:

1. In the Consolidation menu, choose *Data collection → Monitor* or *Consolidation → Monitor*.
2. Check the global parameters by choosing *Environment → Global parameters*.
3. Place the cursor on the consolidation unit for which you want to post data and on the relevant task and choose *Update run*.

Once you have entered additional account assignments for a line item, an indicator on the line item screen (see steps 5 and 6) shows that additional account assignments exist.



When you have not assigned a task to the document type for manual posting, then the system automatically assigns the task for data entry.

4. The document type and the global parameter are already in the tab page *General*. Enter further necessary data: an explanatory text, the organizational units (each according to the posting level of the document type), if applicable activity and activity number for the consolidation of investments.
5. See below.

Start of the Posting Transaction with the Detailed Menu:

1. In the Consolidation menu choose *Data → Manual Posting → Enter* or *Consolidation → Manual Posting → Enter*.
2. In the tab page *General*, you enter the document type with which you want to carry out the manual posting.

The global parameters *View*, *Consolidation Chart of Accounts*, *Version*, *Period* and *Fiscal Year* are already preset in the initial screen. You can overwrite the parameters *Period* and *Fiscal Year*.

3. You can post with the template of a held document or a reference document.

- Held document:

You can enter a document and before posting, save it in a user-defined, parked clipboard and to be precise either as a sample document or as a simple held document. You enter a number to identify the document. At a later date you can call up, complete and post this document as a template. The system deletes the simple held documents immediately after updating. Sample documents are kept.

- Reference document:

Manually Posting an Entry

You can use a reference document of the same document type as a template, in order to enter a new document. This is useful, when most of the document line items of the reference document are relevant for the new document to be posted..

In addition to that you can reverse a referenced document, by setting the corresponding indicator. See also [Reversing Manual Postings \[Page 226\]](#).

4. After releasing the data, enter the necessary data in the next screen of the tab page *General*: an explanatory text, the organizational units (each according to the posting level of the document type), if applicable the activity and activity number for the consolidation of investments.
5. See below.

Further Steps both for the Monitor and Detailed Menu:

1. On the tab page *Clear Subassignments* the system shows the subassignment, which you have fixed permanently or temporarily in the document type (see also [Fixing or Hiding Subassignments \[Page 224\]](#)). You enter the fixed value per subassignment. For the subassignments which are only temporarily fixed, you can undo the fixing, by removing the subassignment from the tab page. When entering the document line items you can fix the removed subassignments again, if required.
2. Choose the tab page *Document Line Item* and enter the necessary account assignments. The system offers you the following help functions:
 - You can copy, reassign or delete individual document line items.
 - When you enter * in a value field, then the system sets the negative document balance in this field.
 - When you place the sign - in the value field of a value, then the system inverts all the values in the document line item.
7. If applicable remember this document, possibly as a sample document. You can complete and post the document later, by calling it up as a template (see step 3 under the section *Start of the posting transaction with the detailed menu*).
8. Simulate the posting to inform yourself about the of the data and the document line items which were automatically generated by the system. Choose *Posting → Simulate*.

During the simulation the system checks whether

- The document balance is null
- all necessary subassignments have been entered
- all necessary currencies have been entered

With automatic line items you can recognize with the help of an indicator, whether it concerns a financial statement imbalance posting, a deferred income tax posting or the balance adjustment for consolidation units. If required you can change the automatic line items, for example choose other subassignment for the selected FS items (see also [Financial Statement Imbalances, Deferred Income Tax and Consolidation Unit Balance Adjustment \[Page 210\]](#)).

9. Record the document by choosing *Save*.

A message shows you which document number was assigned to the document.

Manually Posting an Entry

10. If desired, display the recorded document by selecting *Consolidation* → *Manual Posting* → *Display* in the Consolidation menu. Then enter the document number.

Currency Translation

Currency Translation

Purpose

This component enables you to translate financial data reported by consolidation units into the currency of your consolidation group.

Financial data reported by consolidation units is usually collected in the Consolidation application in local currency. You need to translate this data into group currency before you can create consolidated financial statements.

Implementation Considerations

Install this component if the local currency of at least one consolidation unit in your group differs from the group currency, and you want to translate this data after it has been reported.

Integration

Financial data may already exist in the Consolidation application in group currency before central currency translation. This is the case if:

- You enter data directly in group currency.
- You enter data using realtime update, periodic extracts or rollups, which transfer both local and group currency values.

If you want to perform consolidation based on these group currency values, you do not need to run central currency translation.

It is common practice, however, to retranslate reported financial data centrally.

Features

Currency translation is based on translation methods. You can use any number of methods to translate reported financial data, however you can only specify one translation method for each unit.

The type of currency translation you use depends on the relationships between your corporate group and its individual consolidation units, and also on the economic situation in the countries where these units are based. You define methods in the Consolidation application to represent those currency translation methods which you use frequently, for example, the current-rate method, temporal method, and so on.

You define translation methods in Customizing.

Translation Method

Definition

Method that determines the exchange rate used for translating financial statement (FS) items, and how translation differences are posted.

Use

Reported financial data which is entered in the Consolidation application in local or transaction currency is translated into group currency using a translation method.

You can define several methods for translating data reported by your consolidation units. However, for each unit you specify a single translation method.

Structure

You define translation methods in [Customizing of Currency Translation \[Ext.\]](#).

These methods are dimension-dependent, meaning that different methods can be used in different dimensions.

When you define a method, you determine the exchange rate used to translate FS item values, and how you want translation and rounding differences to be handled in the system. You define a method using a method entry, which can either be a translation entry or a rounding entry.

- Translation entries are used for translating FS item values.
Each translation entry comprises:
 - An FS item set containing the items you want to translate
 - A currency translation key and an exchange rate indicator
 - The differential items to which you want the system to post translation differences
- Rounding entries are used for calculating rounding differences
Each rounding entry comprises:
 - One or two FS item sets containing the items that you want to reconcile
 - FS items to which you want the system to post rounding differences

You can check your translation methods for errors. The system checks individual method entries and lists any inconsistencies, for example, overlapping FS item sets, in a log.

Translation methods that have no errors can be activated. By activating a method, you indicate that you want to use it for currency translation.

Management with the Data Monitor

Use

Currency translation is one of the tasks whose status is managed by the data monitor. In the monitor, a distinction is made between final and provisional translation.

You can run final currency translation once you have entered all your financial data in the system and run validation checks. If you require translated data at an earlier date, you can run provisional translation.

Features

The following table provides a comparison of provisional and final currency translation:

Comparison of provisional and final translation

	Provisional translation	Final translation
Purpose	Provisional translation must be run before you can create reconciliation lists as part of interunit elimination, because these lists are based on group currency.	Final translation must be run before you can execute further consolidation tasks in group currency.
Prerequisites	None	Status management must allow you to execute the translation task.
When can I execute translation?	You can execute provisional translation at any time.	You can only execute final translation after you have completed the preceding task and subsequently blocked it.
Are group currency values saved to the database?	Yes	Yes

Translation of Transaction Currency to Group Currency

Use

Financial data reported by consolidation units is usually translated from local currency into group currency. If any financial statement item values are reported in both local and transaction currency, you may want to translate from transaction currency into group currency.

For example, you can translate values from goods and service transactions from transaction currency into group currency. This is typically the case for payables and receivables, and revenue and expense.

Features

Local currency or transaction currency can be the base currency for translation. You use a currency translation key in Customizing to determine the base currency as follows:

- With translation keys '9' and 'A', the transaction currency is the base currency.
- With all other translation keys, the local currency is the base currency.

Currency Translation Using Financial Statement Item Sets

Currency Translation Using Financial Statement Item Sets

Use

Financial statement (FS) item sets are the basis for the translation of reported financial data. They contain the FS items that you want to translate. You use translation rules for each set, to determine the exchange rate with which the system translates the items in each set, and how it posts translation differences.

You can therefore translate different FS items in different ways.

You have the option of restricting FS item sets to subitems, so that the system only translates the FS item values which have one of the subitem assignments you specified.

Features

You define FS item sets and their translation rules in Customizing.

FS item sets always contain items with the same where-applied indicator. They contain one of the following:

- Balance sheet items
- Income statement items
- Statistical items

The number of FS item sets you need for translation depends on which exchange rates you want to use. The following situations are possible:

- If you want to translate all items in an individual financial statement in the same way, you only need two item sets for translation: one set containing balance sheet items and one set containing income statement items.



You translate all items in an individual financial statement using the current exchange rate, as listed in the exchange rate table.

- If you want to translate groups of FS items in different ways, you need to use multiple FS item sets.



You might want to use the following FS item sets:

- Investment items, translated historically using data from the changes in investments table.
- Equity items, translated historically using data from the changes in investee equity table.
- Other balance sheet items, translated using the current exchange rate taken from the exchange rate table.

Currency Translation Using Financial Statement Item Sets

- Income statement items, translated with the average exchange rate for the fiscal year taken from the exchange rate table.
- If you want to translate values for subitems using different methods, you need to use subitem sets in addition to your FS item sets.



You can use an FS item set containing asset items to translate asset values, and restrict this set to certain subitem sets.

See also:

[Reporting of Temporal Translation Differences in Asset History Sheets \[Page 267\]](#)

Currency Translation Keys and Exchange Rate Indicators

Currency Translation Keys and Exchange Rate Indicators

Use

Different financial statement item sets are usually translated using different exchange rates. You use various combinations of a currency translation key and exchange rate indicator to determine these exchange rates.

You select a currency translation key for each item set you want to translate. Depending on the translation key, you also select an exchange rate indicator. Your settings provide the system with information which enables it to determine the exchange rate for translation:

- The currency translation key determines the base currency for translation, the table used to find the exchange rate, and the procedure for calculating group currency values.
- The exchange rate indicator specifies whether the current rate, average rate, historical rate, and so on, is used.

Features

Currency Translation Keys

The following table shows the currency translation keys pre-defined in the system:

Currency translation keys

No.	Description	Procedure for translation
0	Translation resulting in consolidated value of zero	The system calculates the group currency value for the current period in such a way that the sum of the group currency values — from the carryforward period to the current period — is equal to zero.
1	Translation using the current rate in the exchange rate table	<p>The exchange rate is taken from the exchange rate table.</p> <p>The system translates the local currency values accumulated between the carryforward period and the current period, using the exchange rate for the current period. The result is a cumulative group currency value.</p> <p>From this value, the system subtracts the group currency value accumulated up to the prior period. It saves this difference as the group currency value for the current period.</p>

Currency Translation Keys and Exchange Rate Indicators

2	Historical translation by year of acquisition, using rates in the exchange rate table	<p>In order to use this translation key, you must have entered values broken down by year of acquisition.</p> <p>The exchange rate is taken from the exchange rate table.</p> <p>The system translates the local currency values accumulated between the carryforward period and the current period, using the exchange rate for the year of acquisition concerned. The result is a cumulative group currency value.</p> <p>As with translation key 1, the system calculates the difference between this value and the group currency value accumulated up to the prior period. It saves this difference as the group currency value for the current period.</p>
3	Historical translation based on data from the changes in investments table	<p>In order to use this translation key, you must have entered investment values in both local and group currency in the changes in investments table. When using this key, you <i>cannot</i> specify that the system read data from the database.</p> <p>The system reads the group currency value for each investment item to be translated from the changes in investments table. It reads the group currency value in the table for each investment item to be translated</p> <p>As with translation key 1, the system calculates the difference between this value and the group currency value accumulated up to the prior period. It saves this difference as the group currency value for the current period.</p>
4	Historical translation based on data from the changes in investee equity table	<p>Same as translation key 3</p> <p>The system reads the values for translation from the changes in investee equity table.</p>
5	Translation using the monthly rate in the exchange rate table	<p>The exchange rate is taken from the exchange rate table.</p> <p>The system translates local currency values of each period using the exchange rate for each respective period. The result is a cumulative group currency value. As with translation key 1, the system calculates the difference between this value and the group currency value accumulated up to the prior period. It saves this difference as the group currency value for the current period.</p> <p>Unlike translation key 1 (for which the system translates cumulative local currency values using the exchange rate for the current period), key 5 indicates that the values for each period are translated using the exchange rate for each respective period.</p>

Currency Translation Keys and Exchange Rate Indicators

6	Existing group currency values are not retranslated	The group currency values which exists in the database are considered valid. Therefore the system does not retranslate the local currency value. The data transfer methods realtime update, periodic extract, and rollup usually provide the Consolidation application with data in both local and group currency.
7	User-defined determination of exchange rates	A user exit determines the exchange rates. In all other respects, the procedure is the same as for translation key 1.
9	Translation of transaction currency values using rates in the exchange rate table	The exchange rate is taken from the exchange rate table. In this exceptional case, transaction currency is the base currency for translation. The system translates the transaction currency values accumulated between the carryforward period and the current period, using the exchange rate for the current period. The result is a cumulative group currency value. As with translation key 1, the system calculates the difference between this value and the group currency value accumulated up to the prior period. It saves this difference as the group currency value for the current period.
A	Translation of transaction currency values using rates in the exchange rate table	The system translates local currency values of each period using the exchange rate for each respective period.

Additional Features for Certain Translation Keys

Additional features are available with some of the translation keys, which are explained above. You can choose these in the translation methods of Customizing, when defining translation entries.

- Use the exchange rate from the previous year

You can use this feature with currency translation keys 1, 2, 5, 9 and A. When customizing these currency translation keys, the indicator *Exchange rate from previous year* appears. When you select the indicator, the system reads the exchange rate from the previous year from the exchange rate table.

You need this feature, for example, when you want to record temporal translation differences in the transferred assets items, in order to create an asset history sheet.

See also: [Reporting in Asset History Sheets \[Page 267\]](#)

- Use the average rate from the previous period for decreases in value

You can use this feature with currency translation keys 5 and A. When customizing these currency translation keys, the indicator *Average rate* appears. The indicator has the following effect: When the period value decreases the cumulative FS item value, then the system translates the period value with the average rate, which arises from the previous period of the fiscal year.

The following table explains this with an example:

Currency Translation Keys and Exchange Rate Indicators

FS Item	Period	LC Value	GC Value	Exchange rate
12345 (example)	001	1,000	1,500	1.5
12345	002	1,000	2,000	2.0
12345	003	1,000-	1,750-	1.75

Explanation:

In period 003 the FS item value decreases by 1,000 monetary units in local currency. The system calculates the exchange rate for this period value as follows:

$$(1,500 + 2,000) / 2,000 = 1.75 \text{ (Average rate)}$$

- Record temporal translation differences

You can use this feature with currency translation keys 1, 7 and 9. When customizing these currency translation keys, the indicator *temporal translation difference* appears. When you select the indicator, the system then calculates the temporal translation differences and records them separately in the database.

See also: [Temporal Translation Differences \[Page 248\]](#)

Exchange Rate Indicators

Exchange rate indicators are not preset for specific translation keys in the system. You decide which indicators you want to use when you maintain your exchange rates. For example, you could use the indicators *Current rate*, *Average rate*, *Current rate from previous year*, and so on.

Whether or not you need to specify an exchange rate indicator when defining currency translation methods in Customizing, depends on the currency translation key you use, as illustrated in the following table:

Currency translation key	Exchange rate indicator required?
0	No
1	Yes
2	Yes
3	No
4	No
5	Yes
6	No
7	No
9	Yes
A	Yes

Currency Translation Keys and Exchange Rate Indicators

Example: Translation Using Translation Keys 1 and 5

Example: Translation Using Translation Keys 1 and 5

The following example shows the differences in the translation of values with translation keys 1 and 5.

The values and exchange rates for the carryforward period and three subsequent periods are the basis for the translation. For each translation key you can calculate the cumulative value in each period in local and group currency, and the group currency value for each individual period.

Values on which translation is based

Period	Value for period in local currency	Exchange rate for period
000 (Carryfwd period)	1000	-
001	1000	0.8
002	1000	0.6
003	1000	0.7

Values using translation key 1

Period	Cumulative value in local currency	Cumulative value in group currency	Group currency value for period
000 (Carryfwd period)	1000 (carried fwd)	700 (carried fwd)	700 (carried fwd)
001	2000	1600	900
002	3000	1800	200
003	4000	2800	1000

Values using translation key 5

Period	Cumulative value in local currency	Cumulative value in group currency	Group currency value for period
000 (Carryfwd period)	1000 (carried fwd)	700 (carried fwd)	700 (carried fwd)
001	2000	1500	800
002	3000	2100	600
003	4000	2800	700

Calculation of Translation Differences

Calculation of Translation Differences

Use

Translation differences arise when different translation rules are applied to different financial statement (FS) item sets within a single translation method. Two types of translation differences can occur when you translate individual financial statements: differences in the balance sheet and differences in the income statement:

- Balance sheet differences occur, for example, if you translated investment and investee equity values using historical exchange rates and the remaining balance sheet items using the current rate.
- Income statement differences occur, for example, if the appropriation of retained earnings is reported on the income statement, and you translate revenue and expense using an average exchange rate and the appropriation of retained earnings values using the current rate.

In order to produce balancing financial statements after translation into group currency, the system calculates translation differences and posts them to differential items.

Features

- Because it is not usually possible to identify the FS items from which translation differences originate, the system translates all item values into group currency using a reference exchange rate, in addition to running actual currency translation. For example, it could translate all items using the current exchange rate as a reference rate.
- This additional translation produces a reference value in group currency for each FS item set. The system uses this reference value to calculate translation differences, which it posts to differential items.

Activities

In Customizing, you specify a reference exchange rate for each translation method. In each FS item set, you also specify one item to which translation differences are posted as debit entries and one item for credit entries.

The system calculates and posts the translation differences as follows:

- Each item value is translated using the reference exchange rate. This is how the system determines the reference value.
- All FS items contained in the translation entry for the translation method are translated using the exchange rate derived from translation key and exchange rate indicator. This is how the system determines the group currency values.

For each item that has a difference between these two values (i.e., a translation difference) the system creates two data records:

Data record per item when a translation difference exists

Item	Translation ID	Value
123456 (example)	0	Reference value

Calculation of Translation Differences

123456	1	Difference between reference value and group currency value (= Translation difference)
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The sum of both data records equates to the item's group currency value.



- The system posts only one data record with the group currency value for items, whose reference value matches the group currency value (i.e., those without a difference).
- The system translates any FS items which are not contained in one of the translation method entries using the reference exchange rate, and saves the resulting value to the database as the actual group currency value.

To settle the posted translation differences, translation differences are calculated for each FS item set and posted to the appropriate differential item, depending on whether they are a debit or credit entry.

Example: Calculation of Translation Differences**Example: Calculation of Translation Differences**

The following example uses sample balance sheet data to demonstrate how local currency is translated into group currency, and how translation differences are calculated.

Customizing

A translation method is assigned to the consolidation unit whose data is to be translated. This method contains the following entries, amongst others:

Translation entry	FS items	Transl. key	Exchange rate indicator
Investments	1033020	3	-
Current assets	1040000 to 1049999	1	Current rate

Reference exchange rate indicator for the translation method: Current rate

Translation

The system calculates translation differences as follows:

1. All FS items are translated using the reference exchange rate (current rate on translation date: 1.5)

FS item	Local currency value	Reference value
1033020	10,000	15,000
1041010	100	150
1042010	400	600
and so on		

2. The FS items are translated using the exchange rates defined in the translation entries:

FS item	Local currency value	Group currency value
1033020	10,000	14,000
1041010	100	150
1042010	400	600
and so on		

Note:

For FS item 1033020 (Investments), the system reads the group existing currency value — in this case 14,000 units — from the changes in investments table.

Example: Calculation of Translation Differences

3. The translation differences are calculated as the difference between the reference value and group currency value.

FS item	Reference value	Group currency value	Translation differences
1033020	15,000	14,000	1,000-
1041010	150	150	0
1042010	600	600	0
and so on			

4. Updating group currency values

FS item	Crcy transl. indicator	Local currency value	Group currency value
1033020	0	10,000	15,000
1033020	1	0	1,000-
1041010	0	100	150
1042010	0	400	600

5. Updating the currency translation indicator of 1,000 to the differential item, which was defined for the translation entry.

Temporal Translation Differences

Temporal Translation Differences

Use

In your consolidated financial statements you may want to determine how exchange rate fluctuations have an effect on the FS item values in group currency. You may like to display these effects separately.

A change in the group currency value, which occurs exclusively through a change in the exchange rate, is called temporal translation difference. On the other hand the change in the group currency value, which occurs through a change in the local currency value, is called transaction difference.



An example for the requirement to display temporal translation differences is the asset history sheet in group currency. In an asset history sheet, you present the changes of the asset values from the opening balance to the closing balance. At the fiscal year change, the closing balance of the old year is transferred to the opening balance of the new year. If during this change, the exchange rate (current exchange rate) changes, then the opening balance in the new year (calculated with the new exchange rate) does not agree with the closing balance of the old year (calculated with the old exchange rate). In this case it is useful to display this temporal translation difference.

The temporal translation differences in an asset history sheet can be displayed in the subitems of the FS items of the transferred assets. For FS items where this procedure is not possible (no breakdown by subitem), the SAP currency translation offers a separate display of temporal translation differences in the totals records.

Prerequisites

Displaying temporal translation differences is only possible and useful for currency translation keys 1, 9 or 7.

Features

Asset History Sheet: Displaying Temporal Translation Differences in Subitems

You will find a detailed explanation in the process description [Asset History Sheet Reporting \[Page 267\]](#).

Displaying Temporal Translation Differences in the Totals Records

In the Customizing of currency translation, in fact in the definition of translation entries, you can set the indicator *temporal translation difference*. The indicator has the following effect:

- The system calculates temporal translation differences between the periods, within a fiscal year
- The system displays the temporal translation differences under a translation indicator and generates separate totals records.

Table: Differentiation of the totals records with the translation indicator

Temporal Translation Differences

Transl. ind.	Period value in local currency	Period value in group currency
0	LC value of transaction	Reference value of transaction
1	Value 0	Delta between value in group currency and reference value of the transaction
2	Value 0	Delta between old reference value and new reference value and for the prior period values Therefore: the temporal translation difference on the basis of the change in the reference exchange rate
3	Value 0	Change of the deltas between value in group currency and reference value and for the prior period values Therefore: the temporal translation difference for the delta between value in group currency and reference value

The separated display of the temporal translation differences is reset for the balance carried forward, that means

- the totals records with translation indicator 2 go into the totals records with translation indicator 0.
- the totals records with translation indicator 3 go into the totals records with translation indicator 1.

Examples

Example 1: Translation for the reference exchange indicator, therefore no currency translation differences

Scenario: The reference exchange rate changes from 1.5 (period 000) to 1.6 (period 012)

Totals records in 1998

FS Item	Transl. ind.	Period: 000 Ref. exchange rate: 1.5	Period: 012 Ref. exchange rate: 1.6	Period: 012 cumulative			
		LC	GC	LC	GC	LC	GC
123456	0	1,000	1,500	100	160	1,100	1,660
123456	2	0	0	0	100	0	100

Note:

The change of the reference exchange rate between period 000 and period 012, results in the temporal translation difference of 100 (1000 LC * 0.1 GC/LC) for the value 1,000 from period 000.

Temporal Translation Differences

The system calculates the difference as follows:

	Reference value cumulative to period 012	1,760
-	Reference value cumulative to prior period	1,500
-	Reference value of period 012	160
=	Temporal translation difference at the prior period	100

Totals records in 1999

FS Item	Transl. ind.	Period: 000 Ref. exchange rate: 1.6	Period ... Ref. exchange rate ...		
		LC	GC	LC	GC
123456	0	1,100	1,760	...	...
123456	2	0	0	...	...

Note:

For the balance carried forward, the temporal translation difference of 100 goes into the totals record with translation indicator 0, so that the cumulative value in group currency is 1,760 in the balance carried forward period.

Example Translation to an exchange rate which is unequal to the reference exchange rate, therefore currency translation differences arise

Scenario:

The reference exchange rate changes from 1.6 (period 000) to 2.0 (period 012). The exchange rate stays the same.

Totals records in 1998

FS Item	Transl. ind.	Period: 000 Ref. exchange rate: 1.6 Exchange rate: 1.7	Period: 012 Ref. exchange rate: 2.0 Exchange rate: 1.7	Period: 012 cumulative			
		LC	GC	LC	GC	LC	GC
123456	0	1,100	1,760	100	200	1,200	1,960
123456	1	0	110	0	-30	0	80

Temporal Translation Differences

123456	2	0	0	0	440	0	440
123456	3	0	0	0	-440	0	-440

Note:

As the exchange rate differs from the reference exchange rate, in period 000 a currency translation difference of 110 is displayed under translation indicator 1.

The change of the reference exchange rate between period 000 and period 012 results in two temporal translation differences.

- Temporal translation difference 1 under the translation indicator 2 is 440 (1,100 LC * 0.4 GC/LC).
- Temporal translation difference 2 under the translation indicator 3 is 440- (1,100 LC * 0.4 GC/LC-).

The system calculates the temporal translation difference 1 as follows:

	Reference value cumulative to period 012	2,400
-	Reference value cumulative to prior period	1,760
-	Reference value of period 012	200
=	Temporal translation difference 1	440

The system calculates the temporal translation difference 2 as follows:

	Value in group currency cumulative to period 012	2,040
-	Value in group currency cumulative to prior period	1,870
-	Value in group currency of period 012	170
-	Temporal translation difference 1	440
=	Temporal translation difference 2	-440

Totals records in 1999

FS Item	Transl. ind.	Period: 000 Ref. exchange rate: 2.0 Exchange rate: 1.7	Period: ... Ref. exchange rate: ... Exchange rate: ...	LC	GC
		LC	GC		
123456	0	1,200	2,400	...	...
123456	1	0	360-	...	...

Temporal Translation Differences

123456	2	0	0	...	...
123456	3	0	0	...	...

Note:

For the balance carried forward, the temporal translation difference 1 of 440 in goes into the totals record with translation indicator 0, so that the cumulative value in group currency is 2,400 in the balance carried forward period. The temporal translation difference 2 of 440- goes into the totals record with translation indicator 1, so that the cumulative value in group currency is 360- in the balance carried forward period.

Transl. Diffs with the Ref. Exch. Rate Indicator *

Use

The system normally uses the current exchange rate to determine reference values.

However, if reported financial data in both local and group currency exists before you start translation, you also have the option of using the reference exchange rate indicator *.

If you use the reference exchange rate indicator *, the system uses values that already exist in group currency as the reference values when it calculates translation differences.

Integration

Reported data usually exists in both local and group currency if you collect it in the Consolidation application by means of automatic data transfer, realtime update, periodic extract or rollup.

This is because the system translates local currency values into group currency when posting them to the consolidation processing ledger, consolidation staging ledger or rollup ledger, using the current exchange rate on the date of posting.

Features

You select the asterisk character * as the reference exchange rate indicator in Customizing.

The system calculates and posts the translation differences as follows:

- For each FS item contained in a translation entry, the local currency or transaction currency value is translated using the exchange rate defined in the translation method.
- The translation difference is calculated as the difference between the new group currency value after translation and the existing group currency value.
- The translation difference is posted for each FS item set.
- The new group currency value replaces the existing value (the reference value).

Disclosure of Translation Differences

Disclosure of Translation Differences

Use

When customizing the methods for currency translation, for each item set you can define which items are to be posted with the translation differences. As you see, there are various ways to disclose the translation differences in your consolidated statements.

Features

Translation differences in the balance sheet

If you post translation differences that occur in the balance sheet within the balance sheet, the balance sheet remains balanced.

If you post the balance-sheet translation differences to income statement items, both the balance sheet and the income statement are (at first) out of balance and contain a net balance. This financial statement imbalance should usually flow into the annual net income and retained earnings. The system automatically posts this financial statement imbalance.

However, you may have the requirement to separately disclose the balance sheet-originated translation difference in the income statement and the balance sheet without incurring a net balance and thus a financial statement imbalance. For this situation the system features an automatic balancing adjustment. You can set up the balancing adjustment in Customizing for Currency Translation. This might look like this:

Income statement item		Balance sheet item
Transfers to currency translation differences (debit)	To	Currency translation differences (credit)

(or vice versa)

See also: [Set Up Postings for B/S Translation Differences to the I/S \[Ext.\]](#)

Translation differences in the income statement

Translation differences incurred in the income statement are usually disclosed under income statement items. In this case, the income statement remains balanced.

But it is also possible to disclose income statement differences on the balance sheet. The standard SAP system includes a method that discloses the differences as follows. (This method is set up for consolidation chart of accounts 01 – US GAAP, retained earnings appropriations in the balance sheet).

- The reference exchange rate is the current rate.
- Revenue and expense items are translated at the average rate. Differences are posted to a differential item in stockholders' equity.
- The *annual net income* item in the income statement is also translated at the average rate. The difference is posted to the *annual net income* item in the balance sheet.

Disclosure of Translation Differences

Translation Differences During Subsequent Consolidation

Translation Differences During Subsequent Consolidation

Use

If you post translation differences that affect earnings, you need to differentiate between translation during first and subsequent consolidation of reported financial data, as follows:

- When translating data during first consolidation, the system posts the entire translation difference with an effect on earnings.
- When translating data during subsequent consolidation, you can only post changes in the translation difference since the prior period. Differences affecting earnings that are posted in prior periods may not affect earnings in subsequent periods.
- When translating data during subsequent consolidation in a new fiscal year, translation differences must be posted from prior periods to the statement of retained earnings, usually to the unappropriated retained earnings item.

Features

You use a selected statistical item to differentiate between first and subsequent consolidation when posting translation differences that affect earnings.

The system uses this item to keep a current record of translation differences. It can then calculate any changes resulting from currency translation prior to a subsequent consolidation, and handle these appropriately.

You define this selected item in Customizing of Currency Translation in the step [Define postings for balance sheet translation differences in the income statement \[Ext.\]](#).

Differential Items with Subassignments

Use

You may want to post from the currency translation using [Subassignments \[Ext.\]](#)

Features

You have the following options:

- Post translation differences to differential items with subassignments (see below).
- Post translation differences to their originating FS items with subassignments.

If you choose this option, you leave the differential item blank in Customizing and state, which subassignment the system should use when posting a translation difference to its originating item.



You have specified a breakdown by the subitem 'transaction type' for asset items. You want to translate depreciation using an average exchange rate, and translate the values for the other subitems using the current rate.

In this case, you should post the translation differences to the relevant asset items, using a transaction type assignment specifically defined for this purpose:

- The asset item is the originating item for the translation difference. The system therefore posts the difference to the asset item.
- In order to distinguish the difference entry from other transaction data, the system posts it using the transaction type you specified.

Subassignments to the Differential Item

So that you can post the translation difference with subassignments to the differential items, the master data of the differential item must record a breakdown by the desired subassignment. This can be a required breakdown as well as an optional breakdown.



For example, it might be necessary for the elimination of investment income, to differentiate currency translation differences by partner units.

Depending on which settings you executed in Customizing of the [Translation Methods \[Ext.\]](#) for the differential item, the system determines the characteristic values of the subassignment(s):

1. You can set a default indicator for the respective subassignment. If you do **not set the default indicator**, then you have to define the characteristic value of the subassignment. Then the system always posts the subassignment with this characteristic value.
 Exception: If it concerns an optional breakdown, then you do not have to define the subassignment. Then the system does not post the subassignments, it debits the null value instead.
2. When you **set the default indicator**, then the system tries to determine the characteristic value of the subassignment from the totals record to be translated.

Differential Items with Subassignments

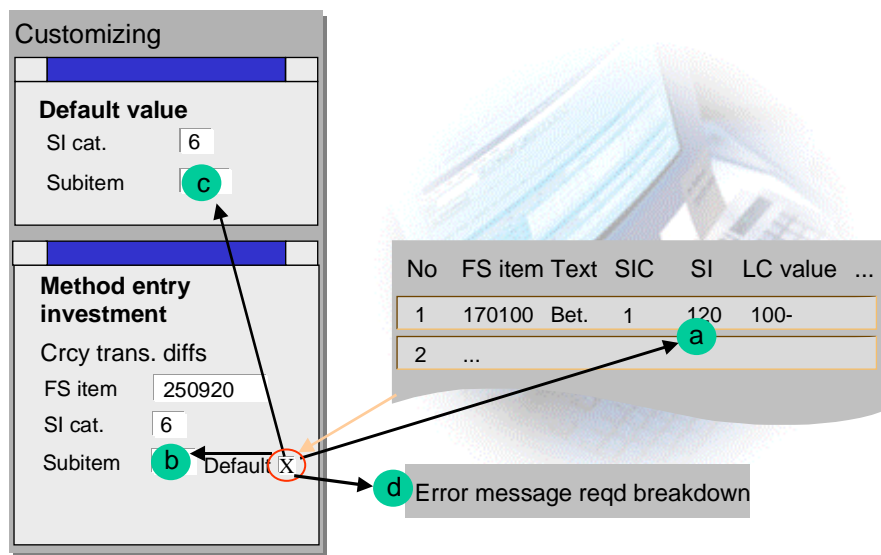
3. When you have **set the default indicator** and the system can **not** determine the **subassignment from the totals record**, then it does the following:

When you have defined a value for the subassignment in Customizing, in addition to the default indicator, then the system assigns this value to an account during the difference posting.

4. When you have not defined a value, then the system assigns the general default value to an account, which you have defined in the IMG step [Default Values for Subassignments \[Ext.\]](#). When you have not defined any general default values and for the subassignment

- it concerns a required breakdown, then the system displays an error message

The following **graphic** shows the logic of the system when you set the default indicator (a shows step 2 and b, c and d show step 3):



Calculation of Rounding Differences

Use

The translation of financial data can produce differences that are caused by rounding in the system. These differences are not related to translation differences.

If rounding differences occur, translated financial data does not pass subsequent validation checks.

Examples of validation checks on translated data

Total assets	=	Total liabilities and stockholders' equity
Total revenue + expense	=	Annual net income
Amortization/depreciation in the balance sheet	=	Amortization/depreciation in the income statement

In order to calculate rounding differences, the system performs rounding checks. It then posts any differences it finds to the appropriate differential items.

These differences are usually very small, because they are purely the result of the inaccuracies involved in rounding.

Features

Financial Statement Item Sets

In Customizing, you define financial statement (FS) item sets to be used for rounding checks. For each set, you specify the FS item to which rounding differences are posted.

You have the following options for setting up rounding checks:

- Run a rounding check using one FS item set only. The system checks whether the sum of items in this set is zero.



You can check whether the sum of all balance sheet items is zero.

- Run a rounding check using two FS item sets. The system checks whether the sum of items in the first set is equal to the sum of items in the second.



You can check whether the sum of the annual net income and appropriation of retained earnings is equal to the retained earnings in the balance sheet.

- Run a rounding check using two FS item sets and restrict the first item set to a set of subitems. The system then checks whether the sum of subitems in the first set is equal to the sum of items in the second set.

Calculation of Rounding Differences



You can check whether the sum of asset items, restricted to depreciation items, is equal to the corresponding sum of depreciation items in the income statement.

Sequence of Rounding Entries

You can define any number of rounding entries. If you are performing multiple rounding checks, you need to specify a check sequence in Customizing, to prevent rounding checks from annulling any previous checks.

You should run localized rounding checks first, for example to establish whether balance sheet depreciation on assets is equal to similar depreciation in the income statement. You can then run larger-scale checks, for example to establish whether the sum of all balance sheet items is zero.

Calculation and Posting of Rounding Differences

- The system performs rounding checks for FS item values in local currency. No differences are allowed for these values. If the system finds any, it outputs an error message.
- Next, the system performs rounding checks for FS items in group currency and calculates rounding differences.
- The system posts the differences to the appropriate differential item, depending on whether they have a debit or credit sign.

Use of Rounding Entries for Reconciling Financial Statement Items

Use

You can use rounding entries to reconcile financial statement (FS) items whose values should be equal after currency translation.

If you report the appropriation of retained earnings at the end of the income statement, for example, you need to reconcile the retained earnings items in the balance sheet with those in the income statement if you have translated them using different exchange rates. Before you can continue with further consolidation tasks, these items must have identical values (with reverse debit/credit signs) in group currency.

Similarly, you need to reconcile annual net income items in the balance sheet with those in the income statement if you report appropriation of retained earnings in the balance sheet.

Features

If you report the appropriation of retained earnings at the end of the income statement, you reconcile retained earnings items in the balance sheet and income statement as follows:

- You define the translation method:
 - You define a rounding entry using an FS item set which contains the retained earnings items for the balance sheet and income statement.
 - As the differential item for rounding differences, you specify the retained earnings item in the income statement.
 - You define a second rounding entry which rounds items in the income statement items (including the appropriation of retained earnings). As the differential item, you specify the carryforward item for retained earnings.
- You run currency translation
 - The system checks whether the sum of all retained earnings items is zero, and posts any differences to the retained earnings item in the income statement.
 - The system then checks whether the sum of all income statement items is zero, and posts any differences to the carryforward item for retained earnings.

Repetition of Currency Translation

Repetition of Currency Translation

Use

If you make changes to the reported financial data in local currency after executing currency translation, you need to repeat the translation run.

You can repeat both a provisional and a final translation. The system overwrites any previously translated values with the new values.

Audit Trail for Currency Translation

Use

The following audit trail and list are available for documenting currency translation:

- An audit trail of the translation run, and information about translation differences and their posting.
- A list of translation rules and financial statement item sets for a translation method.

The system generates these during test runs and update runs of currency translation.

Currency Translation

Currency Translation

Purpose

You need to follow this process if you want to translate financial data reported by one or more consolidation units. You can perform both provisional and final currency translation.

Prerequisites

You will need to perform currency translation if you have done the following:

- Collected reported financial data in the Consolidation application, either by manual entry or automatic transfer
- Posted any necessary standardizing and correcting entries in local currency

The data from these activities requires translation into group currency.

Process Flow

1. You decide whether you want to perform provisional or final currency translation.
2. You check your settings in the system:
 - When running a final translation, you check whether:
 - The translation method and exchange rates are defined
 - The translation method is error-free and activated
 - The data validation task has been executed and blocked
 - When running a provisional translation, you only need to check if the translation method and exchange rates are defined.

If you do not check the translation method, or if the check finds errors, you can still perform provisional translation.
3. In the method definition, you find out whether investment or equity items are translated historically, using data from the changes in investments and changes in investee equity tables.

If they are, you need to check whether the data in these tables is complete.



If you are performing provisional currency translation and can tolerate errors which occur missing entries in these tables, you do not need to complete this step.

4. You start currency translation in the consolidation monitor.
5. The system translates the financial statement items from local currency (or in certain cases from transaction currency) into group currency.
6. For each translation entry, the system calculates translation differences and posts them to the differential items you defined.

Depending on the differential items you assigned to your translation entries, the system posts differences either with or without an effect on net income.

Currency Translation

7. If the system posts differences with an effect on net income, it also calculates and posts a financial statement balancing adjustment.
8. The system runs rounding checks using your rounding entries.
 - First it checks whether any rounding differences exist in local currency. If they do, it terminates the translation run with an error message.
 - If the rounding check does not find rounding differences in local currency, the system checks for differences in group currency. It posts these to the differential items that you pre-defined.
9. You use the translation audit trail to see if the system output any error messages. If you are performing final translation, no errors are allowed. If any errors occur, the system regards the translation as being provisional.

Result

- If you performed a final translation, block the translation task in the consolidation monitor. You can then perform subsequent consolidation tasks in group currency.
- If you performed provisional translation, you cannot block the translation task in the consolidation monitor.

You can generate a reconciliation list for interunit elimination, based on the values produced by provisional translation.

Running Currency Translation

Procedure

1. In the Consolidation menu, choose *Data collection* → *Monitor*.
2. Check the global parameters by choosing *Environment* → *Global parameters*.
3. Place the cursor on the consolidation unit whose data you want to translate and on your currency translation task, and choose *Update run*.

The audit trail for the translation is displayed.

Asset History Sheet Reporting (Temporal Translation Differences)

Purpose

Asset history sheets, which show changes in asset values between the opening and the closing balance, are often required as a supplement to both the individual and consolidated financial statements.

If you translate asset values using the current exchange rate for the current period, and not historically by year of acquisition, then temporal translation differences occur if the current exchange rate changes with a new fiscal year. The closing balance for the prior year no longer corresponds to the opening balance of the current year. In asset history sheets, however, these two balances must be identical.

You follow the process described below if you want to report temporal translation differences separately in your asset history sheet. You would want to do this in order to show the correspondence between the closing balance of the prior year and the opening balance of the current year.

Prerequisites

The system must calculate temporal translation differences during currency translation and post them separately, before it can report them in the asset history sheet. This process therefore begins with definition of translation methods.

Process Flow

1. You define translation methods in Customizing.
 - You select the current rate as the reference exchange rate indicator.
 - You make translation entries for the asset items you want to include in the asset history sheet, to specify how temporal translation differences will be handled, as shown in the following table:

Entries for translation differences

No.	Content	Exchange rate indicator	Trl. key	Differential item
001	Set of assets items, restricted to the subitem for acquisition and production costs (APC).	Current rate for last period of prior year (indicator in trl. entry)	1	Originating item Post with the subitem for temporal translation differences in APC.
002	Set of asset items, restricted to the subitem for the opening balance of value adjustments.	Current rate for last period of prior year (indicator in trl. entry)	1	Originating item Post with the subitem for temporal translation differences in accumulated depreciation.

Asset History Sheet Reporting (Temporal Translation Differences)

003	Set of asset items, restricted to remaining subitems.	Current rate	1	Item for differences from currency translation.
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You select the indicator *Exchange rate from the previous year*, for translation entries 001 and 002. This means that the system reads the exchange rate from the previous year from the exchange rate table.

2. You run currency translation. In accordance with the settings you made in your translation entry, the system:
 - Calculates temporal translation differences between the current rate for the last period in the prior fiscal year and the current rate for the current period. It does this for acquisition and production costs, and for the opening accumulated depreciation balance.
 - Posts any temporal translation differences to the relevant asset items with the subitems you specified for temporal translation differences.
 - Translates the remaining asset items (acquisitions, depreciation, transfers, and so on) using the current exchange rate for the current year.
3. In order to determine the structure of your asset history sheet, you define a report with the following line and column layout:

Example data

	Closing bal. prior yr	Temporal transl. diffs	Open. bal.	Acquis.	... Clos. bal.
APC					
Accum. Depr.					

The opening balance equals the closing balance of the prior year plus any temporal translation differences.

Result

You can use the report you defined to generate an asset history sheet which reports temporal translation differences separately.



To see how temporal translation differences are calculated and recorded see also [Temporal Translation Differences \[Page 248\]](#)

Asset History Sheet Reporting (Temporal Translation Differences)

Interunit Elimination

Interunit Elimination

Purpose

This component enables you to eliminate trading partner relationships within your corporate group, which exist if goods or service transactions take place between consolidation units. Interunit (IU) elimination includes the following main procedures:

- Elimination of IU payables and receivables
- Elimination of IU revenue and expense
- Elimination of investment income

These procedures are necessary if pairs of consolidation units report reciprocal payables and receivables, revenue and expense, and/or costs and sales revenue. From the group point of view, these relationships must be eliminated.

Implementation Considerations

The elimination of IU trading partner relationships is one of the central procedures in consolidation.

Install this component if you want to perform IU eliminations using automatic posting. If you do not install this component and still want to perform IU eliminations, you can use manual posting.

Features

- To enable the system to eliminate trading partner relationships within your corporate group, you need to enter the relevant financial statement (FS) item data using trading partner account assignments. The system uses these account assignments to identify trading partner relationships between consolidation units.
- You define tasks and methods for IU eliminations in Customizing.
 - Tasks represent consolidation procedures such as the elimination of IU payables and receivables or revenue and expense, and so on. You can define as many tasks as required to match the procedures you use.
 - Methods determine the FS items for reciprocal elimination and how the system should post any elimination differences.
- You execute IU elimination tasks from the consolidation monitor. From the method assigned to the task, the system determines the FS item values to be eliminated for each pair of consolidation units, and automatically generates an entry.

The system posts any differences to the differential items, which you specify in Customizing.

- You can execute IU eliminations in test mode, and generate a reconciliation list during your preparations for consolidation, in order to find any differences before you start actual consolidation. You can then use this list to evaluate each difference.

Two-Sided Elimination Entries

Two-Sided Elimination Entries

Use

The system performs interunit (IU) eliminations for pairs of consolidation units, using a predefined posting level (level 20, or 23 for mutual stock consolidation) that is reserved for this task. The automatic elimination entries which the system generates are based on the financial statement (FS) items for elimination which you specify in Customizing, and on the partner account assignments of the data to be eliminated.

The system generates an elimination entry if:

- a consolidation unit reports a value for an FS item requiring elimination (possibly delimited by subassignments - see further on)
- another consolidation unit is assigned as the trading partner for this value
- you have specified that both of the above consolidation units are to be included in IU elimination

Features

Elimination Entries

Each line item in an elimination entry posts the amount to be eliminated to both a consolidation unit and a partner unit, with a reversed debit/credit sign.

FS Item Sets

You define financial statement item sets for your [methods for IU eliminations \[Ext.\]](#) in Customizing. In these sets, you specify the FS items which eliminate each other.

You can create **multiple pairs of FS item sets for each IU elimination method**. The first set in the pair contains the FS items for elimination; the second set contains the corresponding offsetting items. These pairs of FS item sets represent a trading partner relationship.

To delimit the which item values are eliminated, you can create the following characteristic values for each item set:

Characteristic	Procedure	What is Listed
Subassignments	<p>The system displays the subassignments that are defined in the breakdown category of at least one of the items in the set.</p> <p>You can specify a single value or a set of values for each subassignment.</p> <p><i>NOTE:</i> Delimiting by a subassignment value is usually only useful if all items of the set are broken down by such a subassignment.</p>	all item values in the item set that were posted with this subassignment

Two-Sided Elimination Entries

Consolidation unit or partner unit	You can also display these characteristics and specify a single value or a set of characteristics.	only those consolidation units and partner units that you specify in the IU Elimination selection screen via the consolidation group
Attributes of the consolidation/partner units		only those units with matching attributes
Document type		only those data records that were posted with these document types



You could create the following pair of FS items for a method:

- Item set 1: Interest and similar expenses
- Item set 2: Interest and similar revenue

You could delimit the selection values to certain consolidation and partner units. For example, if you distinguish between production companies and finance companies, you could constrain the IU elimination to one of these company types. This would allow you to evaluate the IU differences separately.

Differentiation of Trading Partner Relationships

The system differentiates elimination entries according to trading partner relationships, as follows:

- The system processes each pair of consolidation units.
- For each pair of consolidation units, the system processes one pair of FS item sets at a time.
- The item values of consolidation unit 1 in item set 1 (with consolidation unit 2 as the trading partner account assignment) and the item values of consolidation unit 2 in item set 2 (with consolidation unit 1 as the trading partner account assignment) indicate a trading partner relationship. The system eliminates these values and determines any remaining difference.

The reverse correlation also indicates a trading partner relationship, therefore the system eliminates the item values of consolidation unit 2 from item set 1 and the item values of consolidation unit 1 from item set 2.

Elimination Differences

Elimination differences are posted to differential items. You define these items as item pairs in item sets in Customizing. You also define the [strategy \[Page 281\]](#) the system uses to choose which consolidation unit the difference is posted to.

Two-Sided Elimination Entries

How to control subassignments of the differential items

If the differential item has a breakdown by subassignments, the system needs to know which value is to be posted for each subassignment. You can define a value for each subassignment in Customizing, and you can also set the *default value*. The system uses the following logic:

- If the default flag is *not* selected, you must enter a value for the subassignment. This value is then always assigned to the differential entry.

Exception: If the breakdown is optional, a value does not have to be entered. If no value is entered, the subassignment is left blank.
- If the default flag is selected, the system attempts to obtain the subassignment from the elimination data.
- If the default flag is selected and the system cannot derive the subassignment from the data, the system proceeds as follows:
 - If Customizing shows a value for the subassignment, in addition to the default flag, the system uses assigns this value.
 - If Customizing does not show a value for the subassignment, the system uses the general default value that is defined in IMG step [Default Values for Subassignments \[Ext.\]](#).
 - If there is no general default value and the subassignment is a required breakdown, the system displays an error message.



Other factors concerning the default flag are taken into consideration for subassignments that belong to a compound:

- The default flags of compound characteristics (e.g., country and region) should be either both selected or both not selected.
- If the independent subassignment has a fixed value in the breakdown category (subitem category-like subassignments), then you can select the default value for the dependent characteristic only if:
 - all items of both item sets are broken down by these subassignments, and
 - the fixed value of the independent subassignment is identical for all concerned items (or rather in the breakdown categories of those items)

Otherwise, the data can become inconsistent.

Which data records does the system aggregate to calculate and post elimination differences?

1. The system aggregates all data records that belong to the same business relationship.
2. If the differential item has subassignments and the system determines these subassignments from the data records (that is, the default flag is selected), then the system posts the elimination difference for each different subassignment value (see the example).

Posting Documents

A posting document is created for each business relationship.

Example of Elimination Entries

Example of Elimination Entries

Scenario

This example reflects data of a business relationship between consolidation units **A** and **B**.

Customizing

Item Set 1

Characteristic	Single Value / Set
FS item	Receivables
Subitem category	BA
Subitem	
Customer group	

Item Set 2

Characteristic	Single Value / Set
Item	Payables
Subitem category	BA
Subitem	
Customer group	



The case studies below show how to customize the differential items.

Differences are always posted to consolidation unit A because this unit supplies the values from item set 1 (receivables).

Initial Data in the Database (Posting Level < 20)

Cons Unit	Item	Partner Unit	Subitem Cat	Subitem	Customer Group	Cons Value
A	Receivables	B	BA	1000	C1	60
A	Receivables	B	BA	2000	C2	80
B	Payables	A	BA	3000	C2	20-
B	Payables	A	BA	1000	C1	30-

Example of Elimination Entries

Interunit Elimination

Case 1

Customizing of the Differential Item

Characteristics	Debit	Credit	Default
Item	Other Expenditures	Other Revenue	
Subitem category	BA	BA	
Subitem			X
Customer group			X

Entries (Posting Level 20)

Cons Unit	Item	Partner Unit	Subitem Cat	Subitem	Customer Group	Cons Value
A	Receivables	B	BA	1000	C1	60–
A	<i>Other Exp.</i>	<i>B</i>	<i>BA</i>	<i>1000</i>	<i>C1</i>	<i>60</i>
A	Receivables	B	BA	2000	C2	80–
A	<i>Other Exp.</i>	<i>B</i>	<i>BA</i>	<i>2000</i>	<i>C2</i>	<i>80</i>
B	Payables	A	BA	3000	C2	20
A	<i>Other Rev.</i>	<i>B</i>	<i>BA</i>	<i>3000</i>	<i>C2</i>	<i>20–</i>
B	Payables	A	BA	1000	C1	30
A	<i>Other Rev.</i>	<i>B</i>	<i>BA</i>	<i>1000</i>	<i>C1</i>	<i>30–</i>



The differentials are displayed in *italics* for better orientation.

Case 2

Customizing of the Differential Item

Characteristics	Debit	Credit	Default
Item	Other Expenditures	Other Revenue	
Subitem category	BA	BA	
Subitem	9000	9000	
Customer group	C3	C3	

Entries (Posting Level 20)

Example of Elimination Entries

Cons Unit	Item	Partner Unit	Subitem Cat	Subitem	Customer Group	Cons Value
A	Receivables	B	BA	1000	C1	60–
A	Receivables	B	BA	2000	C2	80–
B	Payables	A	BA	3000	C2	20
B	Payables	A	BA	1000	C1	30
A	<i>Other Exp.</i>	<i>B</i>	<i>BA</i>	<i>9000</i>	<i>C3</i>	<i>90</i>

Case 3**Customizing of the Differential Item**

Characteristics	Debit	Credit	Default
Item	Other Expenditures	Other Revenue	
Subitem category	1	1	
Subitem	1	1	
Customer group			X

Entries (Posting Level 20)

Cons Unit	Item	Partner Unit	Subitem Cat	Subitem	Customer Group	Cons Value
A	Receivables	B	BA	1000	C1	60–
B	Payables	A	BA	1000	C1	30
A	<i>Other Exp.</i>	<i>B</i>	<i>1</i>	<i>1</i>	<i>C1</i>	<i>30</i>
A	Receivables	B	BA	2000	C2	80–
B	Payables	A	BA	3000	C2	20
A	<i>Other Exp.</i>	<i>B</i>	<i>1</i>	<i>1</i>	<i>C2</i>	<i>60</i>

Case 4**Customizing of the Differential Item**

Characteristics	Debit	Credit	Default
Item	Other Expenditures	Other Rev.	
Subitem category	1	1	
Subitem	1	1	
Customer group	C3	C3	

Example of Elimination Entries

Additional breakdown	Z	Z	
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Entries (Posting Level 20)

Cons Unit	Item	Partner Unit	SI Cat	Subitem	Customer Group	Addl. Breakdown	Cons Value
A	Receivables	B	BA	1000	C1		60–
A	Receivables	B	BA	2000	C2		80–
B	Payables	A	BA	3000	C2		20
B	Payables	A	BA	1000	C1		30
A	<i>Other Exp.</i>	B	1	1	C3	Z	90

One-Sided Interunit Elimination

One-Sided Interunit Elimination

Use

One-sided interunit (IU) elimination is a simplified procedure for eliminating data from trading partner relationships within your corporate group. In this procedure, the system posts elimination entries based on the values in one financial statement (FS) item set only.

IU revenue and expense, in particular, can be eliminated using this simplified procedure.

Features

When you define elimination methods in Customizing, you select the one-sided IU elimination option. You define one FS item set for elimination only. In this set, you list the FS items on which elimination should be based, for example, revenue items. As the differential item, you specify the offsetting item, for example, an expense item.

When you run IU elimination, the system calculates a difference equal to the sum of the values in the FS item set you specified, and posts this value to the differential item.

Constraints

When IU elimination is based on values of one FS item set, the system does not calculate and post real elimination differences. Instead, the values of the FS item set are used for the elimination entries, and it is assumed that corresponding offsetting values exist.

If the values of FS items in the item set differ from the offsetting values for elimination, the system eliminates inaccurate values during a one-sided elimination.



Within your corporate group, a revenue of 1000 currency units (MU) is offset by expenses of 900 MU. You want to perform one-sided IU elimination based on revenue values. You have specified an expense item as the differential item.

Using reversed debit/credit signs, the system posts 1000 MU to revenue and a difference of 1000 MU to the expense item. This process therefore eliminates from expenses excesses of 100 MU.

Using Strategies for Posting Elimination Differences

Use

Elimination differences can occur during interunit (IU) eliminations. The system calculates and posts these differences for each trading partner relationship between two consolidation units (further differentiated by subassignments).

The system posts the differences to one of the two consolidation units concerned. In Customizing, you can define the strategy which the system uses to determine which consolidation unit it must post the difference to.

Features

The system supports strategies for posting differences according to:

- A specified financial statement (FS) item set
The system posts differences to the consolidation unit which reports values for the FS items in a specified item set.
You select one of the sets from each set pair in Customizing.
- The lower value
The system posts differences to the consolidation unit that reports the lower of the FS item values.
- The higher value
The system posts differences to the consolidation unit that reports the higher of the FS item values.

Limit for Elimination Differences

Limit for Elimination Differences

Use

When you perform interunit (IU) eliminations, you may want to prevent the system from posting elimination entries if elimination differences are too high.

For this purpose, you can specify a limit for elimination differences in Customizing.

Features

If elimination differences exceed the limit, the system does not post the elimination entry. It generates proposed entries only.

Furthermore, the audit trail indicates if the limit is exceeded.

Splitting of Elimination Differences

Use

Elimination differences can be categorized by the system according to their cause; either currency-related or other.

- Currency-related differences occur if a consolidation unit and its partner have the same transaction currency values in a business transaction, but report different group values because they use different local currencies and/or exchange rates.
- Other differences occur if a consolidation unit and its partner report different financial data for their trading partner relationship.

This data can differ, for example, if:

- The units post their data on different dates
- The units use different accounting and valuation methods
- One unit makes an error in posting

If you specify splitting of elimination differences, you can subsequently post each type of difference separately.

Features

- To enable differences to be split, the financial statement items to be eliminated and the differential items must be broken down by transaction currency.
- When you define a method for interunit (IU) elimination in Customizing, you specify the following:
 - Splitting of differences as a control option
 - Separate differential items for currency-related and other differences
 - The exchange rate indicator that is used as a reference exchange rate indicator when elimination differences are split

You also set up the document type so that the system posts elimination entries in both transaction currency and group currency.

- In order to categorize differences, the system reads the FS item values for elimination in both group currency and transaction currency. If elimination differences exist in transaction currency, the system translates these into group currency. The reference exchange rate indicator and the consolidation version determine the exchange rate for this translation.

The resulting translated value represents other differences. The differential between this and the total elimination difference in group currency represents currency-related differences.

The system posts these differences to the allocated FS items.

Splitting of Elimination Differences

Example

You want to eliminate receivables and payables and split elimination differences. The exchange rate for translating the differences from transaction currency FRF into USD is 0.4.

Initial data

FS item	Posting level	Transaction currency	Local currency	Group currency
Receivables	0	1000 FRF	300 USD	300 USD
Payables	0	1200- FRF	1200- FRF	480- USD
		-----		-----
		200- FRF		180- USD

Splitting of differences

Total difference	=	180- USD
Other differences	=	80- USD (200- FRF x 0.4)
Currency-related differences	=	100- USD

Balance Reconciliation and Elimination Entries

Purpose

You need to follow this process if you want to reconcile and then eliminate data from trading partner relationships between consolidation units in a consolidation group.

Before you post elimination entries for interunit (IU) elimination, it is helpful to reconcile the balances of data from trading partner relationships. You can use the reconciliation list to check for elimination differences. If any differences are unexpected or unacceptable, you can consult the consolidation units concerned and make any necessary corrections.

See also:

[Reconciliation in Financial Accounting \[Page 287\]](#)

[Reconciliation Entries](#)

[\[Page 288\]Reconciliation List at Consolidation Group Level](#)

[\[Page 289\]](#)Afterwards, you post the entries for IU elimination.

Prerequisites

Before you can carry out a preliminary balance reconciliation, you must first carry out currency translation.

Status management allows currency translation in update mode, even if the preceding tasks (such as Data Entry) have not yet been blocked. The system regards this as a tentative translation.

See also:

[Management with the Data Monitor \[Page 234\]](#)

Process Flow

1. You execute IU elimination tasks in test mode from the consolidation monitor during the preparatory phase of consolidation.
The system generates a reconciliation list of financial statement item values to be eliminated, and elimination differences.
2. You analyze the elimination differences and consult the consolidation units concerned, if required.
3. You may want to post reconciliation entries centrally in the Consolidation application.
4. When you are ready to create your consolidated financial statements, you execute the IU elimination tasks in update mode. The system generates elimination entries.
5. After the system posts elimination entries, you may want to execute the tasks again in test mode and request that the system display a list of original values. Using this list, you can reconstruct the situation before the elimination entries were posted.

Result

Once this process is completed, you can use reports to evaluate your consolidated financial data.

Balance Reconciliation and Elimination Entries

Reconciliation in Financial Accounting

Integration

The audit trail for interunit elimination features a program for reconciling with the component *Financial Accounting (FI)* if you are performing company consolidation in which the consolidation units are integrated with the company codes of Financial Accounting, and Financial Accounting uses the same SAP system and client.

The program reconciles customer and vendor documents that were created for business transactions within the group. The program is intended to guarantee that the customer and vendor documents match.

SAP recommends that you run this program in Financial Accounting regularly.

Activities

Call up the program from within the audit trail for interunit elimination by placing the cursor on the second consolidation unit of a given pair of units, and choosing *Goto → Reconcile trading partners*. For more information, see the program documentation.

Reconciliation Entries

Reconciliation Entries

Use

You have the option to manually post reconciliation entries if the balance reconciliation list contains differences that you want to purge prior to posting the elimination entries centrally in the consolidation system.

You can use posting level 21 for these entries.

You can later use the posting level to select reconciliation entries and to reverse them, if required. Another option is to post the entries with a reversal in the subsequent period.

Example

The following situation could exist on the day when your units prepare their individual financial statements:

A shipment between consolidation units is still in transit. The supplying unit has posted a receivable but the receiving unit has not yet posted a payable. In order to ensure that no difference is posted during IU elimination, you post a reconciliation entry and reverse this in the following period.

Reconciliation Lists Using Aggregated Data

Use

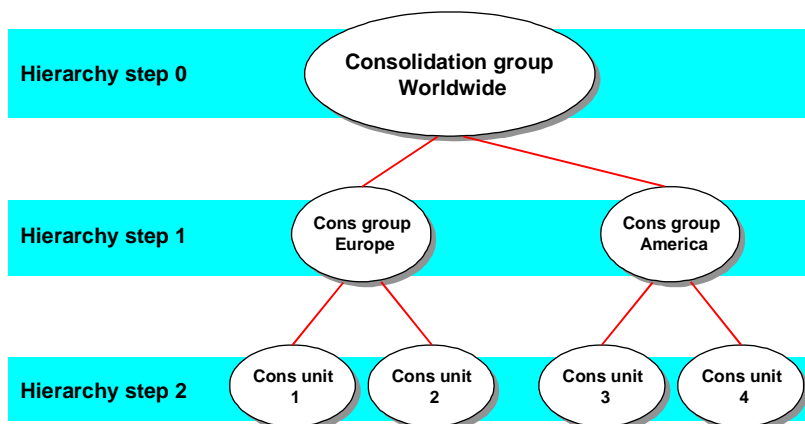
In addition to running interunit elimination on the level of consolidation units, you may want to simulate elimination on the level of consolidation groups for information purposes, using aggregated values.

If you specify a hierarchy step on the initial screen for interunit elimination, the system generates a reconciliation list based on consolidation groups.

Your hierarchy may have several steps because further consolidation groups can be assigned below the top group. You can display a reconciliation list for each hierarchy step.



Reconciliation lists for eliminations on consolidation group level are purely informative. No elimination entries can be posted on this level.



Running Interunit Elimination

Procedure

1. In the Consolidation menu, choose *Consolidation → Monitor*.
2. Check the global parameters by choosing *Environment → Global parameters*.
3. Place the cursor on the appropriate consolidation group and your task for interunit elimination, and choose *Update run*.

An audit trail of the elimination is displayed.

Elimination of Interunit Profit/Loss in Transferred Inventory

Purpose

This component enables you to eliminate profit and loss resulting from inventory transfers between subsidiaries in your corporate group. This elimination may be a legal requirement and/or a policy of management accounting for the group.

You can use this component if:

- Interunit (IU) profit or loss has been recorded in your group as a result of the sale of inventory.
- The subsidiaries involved in the inventory transaction are included in consolidation for the group.
- On the date of consolidation, the inventory concerned is still owned by the group.
- You want elimination entries to be posted automatically.

Implementation Considerations

Install this component if you want to eliminate IU profit/loss resulting from inventory transfers by means of automatic posting.

Features

The elimination of interunit profit/loss in inventory (IPI) is based on data from the consolidation unit managing the inventory concerned and the unit that supplied the inventory. This data shows the supply relationships on the level of product groups, for which elimination takes place. The product group is in this case used for a comparison between inventory and supplier data.

The calculation base is the book value of the asset and the group cost of goods manufactured which are determined using additional financial data, or they may exist in the totals database (the latter applies only to inventory data).

IU profit/loss is the difference between the book value of the inventory and the group COGM. IU loss (inventory book value greater than group COGM) is eliminated by reducing the book value to match the group COGM. IU loss (inventory book value less than group COGM) is eliminated by increasing the book value to match the group COGM. You have the option of not eliminating IU losses if the inventory concerned was sold at a market price that is lower than the group production costs, or if it would be relatively difficult to calculate the exact amount involved.

The inventory book value is adjusted to match the group COGM, and an offsetting entry is posted to the income statement. The retained earnings or annual net income, and deferred taxes are thereby automatically adjusted.

Constraints

Currently, materials data relevant to IPI cannot be accessed by means of integration with *Product Cost Controlling* (CO-PC).

A supply chain encompassing multiple trading partner relationships is not available at present. Supply relationships can currently only involve pairs of units.

Elimination of Interunit Profit/Loss in Transferred Inventory

Product Group

Definition

A collection of individual products for use by the user. The criterion for the aggregation is the similarity with regards to the type or use of the individual products.

Use

You define product groups to subdivide financial statement items for inventory into logical units. Product groups are used only for the elimination of interunit profit/loss in transferred inventory (also referred to as IPI). They serve as a framework for calculating interunit profit or loss from inventory transfers between group subsidiaries. The product group can be derived from additional financial data or from the field in the totals database (with respect to inventory data).

In SAP Consolidation, the assumption is made that the supply relationships only exist between pairs of subsidiaries and that the supplying consolidation unit sells inventory to the inventory-managing consolidation unit. Data for supply chains cannot be processed.

The system automatically performs the elimination of interunit profit/loss and the respective valuation allowance for the specified product groups at the level of inventory items or product groups. Here, the IU profit/loss is calculated at the product group level. In contrast, the posting takes place at the inventory item level, whereby it is possible that breakdowns by product group are also posted if you created a custom characteristic for the product group (data element FC_PRGRP).

Structure

The assignment of inventory items to product groups enables IPI to take place per product group and pair of consolidation units. You create product groups as in accordance with the requirements of your corporate group.

You can also create the product group as a custom characteristic in the totals database.

However, the product group is still used in the additional financial data.



Example

In the automobile industry, product groups could be created for different versions of individual models.

Elimination of Interunit Profit/Loss: Elimination Logic

Elimination of Interunit Profit/Loss: Elimination Logic

Use

Any profit/loss resulting from the sale of inventory between subsidiaries in a corporate group must be eliminated from the point of view of the group as a single entity. Interunit (IU) profit/loss is calculated as the difference between the book value of the goods supplied and the acquisition and production costs incurred from the point of view of the group.

- Any positive difference is an IU profit. The value of inventory is decreased to match the group cost of goods manufactured (COGM).
- Any negative difference is an IU loss. The value of inventory is increased to match the group cost of goods manufactured (COGM).

The programmed elimination logic in the SAP *Consolidation* component enables IU profit/loss to be eliminated automatically. The following functions are provided as part of the logic:

- Posting of offsetting entries in the balance sheet or income statement
- Transfer of translation differences to specified items
- Transfer of distribution costs to a specified item, such as COGM

The Customizing settings that you make for these functions are specific to the task that you create for the elimination. Once you have made these settings, automatic entries can be posted when you run an elimination.

Features

Elimination of interunit profit/loss in inventory (IPI) is executed by means of user-defined [tasks \[Ext.\]](#) in the SAP Consolidation System. In the [data monitor \[Ext.\]](#), you require tasks for the entry and validation of data. In the [consolidation monitor \[Ext.\]](#), you require a task for IPI. You specify the point in time as of which this task is effective, the document types it uses, and a comparative exchange rate indicator. Consolidation units report data resulting from internal goods transactions in local currency. You only need to specify a comparative exchange rate indicator if you want to separately analyze translation differences resulting from the use of different exchange rates.

The elimination entry is posted using posting level 20 and is not group-dependent. The value of the balance sheet item is adjusted and an offsetting entry posted against the corresponding expense (in the case of IU profit) or revenue (in the case of IU loss) item. Financial statement balancing adjustments and deferred taxes are automatically posted.

Usually only the difference between the IU profit/loss in the prior period and current period is posted. The only exception is if IU profit/loss was eliminated in the prior period using a document type which specifies automatic reversal in the following period. In this case, IU profit/loss is posted in full.

If distribution costs are reported by the supplying consolidation unit, these are automatically reclassified to an item that you have specified in Customizing, for example, cost of goods manufactured.

Example

The following assumptions are made in this simple example:

Elimination of Interunit Profit/Loss: Elimination Logic

- Consolidation units A and B are trading partners, and are consolidated using the purchase method. A supplies goods to B at an IU profit of 100 monetary units.
- No translation differences are posted and no reclassification of distribution costs takes place.
- No IU profit/loss from prior periods is taken into account.

The following standardized data was reported by A and B in group currency:

Individual Financial Statement A

Assets	Liabilities & Stockholders' Equity		
Fixed Assets	500	Stockholders' equity	700 -
Inventory	500	Liabilities	100 -
		Retained earnings	200 -
	1000		1000 -

Income Statement A

Sales Revenue	1200 +
Expenses	1000 -
Annual Net Income	200 +
Unappropriated Retained Earnings (prior year)	100 +
Appropriation of Retained Earnings	100 -
Retained Earnings	200 +

Individual Financial Statement B

Assets	Liabilities & Stockholders' Equity		
Fixed Assets	1200	Stockholders' equity	1000 -
Inventory	300	Liabilities	400 -
		Retained earnings	100 -
	1500		1500 -

Income Statement B

Sales Revenue	2000 +
Expenses	1500 -

Elimination of Interunit Profit/Loss: Elimination Logic

Annual Net Income	500 +
Unappropriated Retained Earnings (Prior Year)	200 +
Appropriation of Retained Earnings	600 -
Retained Earnings	100 +

The following entries are posted to eliminate the IU profit of 100 monetary units, with a tax rate of 50% (debit entry to credit entry):

Expenses	to	Inventory	100
Deferred Tax Assets	to	Deferred Tax Expense	50
Retained Earnings (B/S)	to	Retained Earnings (I/S)	50

The [deferred income taxes \[Ext.\]](#) that arise are balanced out in subsequent periods.

After the elimination, the consolidated financial statements show the following data:

Consolidated Balance Sheet

Assets	Liabilities & Stockholders' Equity		
Fixed Assets	1700	Stockholders' Equity	1700 -
Inventory	700	Liabilities	500 -
Deferred Income Tax	50	Retained Earnings	250 -
		Deferred Taxes Payable	----
	2450		2450 -

Consolidated Income Statement

Sales Revenue	3200 +
Expenses	2550 -
Annual Net Income	650 +
Unappropriated Retained Earnings (Prior Year)	300 +
Appropriation of Retained Earnings	700 -
Retained Earnings	250 +

Posting Items

Definition

Balance sheet or income statement items against which entries are automatically posted to eliminate interunit (IU) profit/loss in transferred inventory. Each posting item that you specify is defined as an inventory item or a product group.

You can use both assignments in a consolidation activity simultaneously. Furthermore, you do not need to fill the field for the inventory item/product group (value ' '). In this case, the posting items you assigned are valid across all inventory items/product groups.

Use

You specify posting items as part of the process of setting up automatic interunit elimination of profits/losses.

Posting item for offsetting entries

For every inventory item you can decide which income statement item is to be used for the offsetting entry for IU profit/loss. You can use a debit or a credit item, this in turn with all subassignments.

The consolidation system clears the IU profit/loss to be eliminated from the inventory item. Usually, the offsetting entry is posted to an income statement item.

By assigning the item for the offsetting entry, you define the treatment routine for interunit profit/loss. Interunit profit/loss is posted either with an effect on earnings (to an income statement item) or without an effect on earnings (to stockholders' equity).

Furthermore, you decide whether the offsetting entry is posted to the inventory managing consolidation unit or the supplier consolidation unit. To do this, you select the related flag in the task you create for the elimination of interunit profit/loss.

Posting item for currency translation differences

You use posting items for translation differences if your group needs to separately post and disclose translation differences arising from the elimination of interunit profit and loss.

Currency translation differences are incurred during the elimination of interunit profit and loss as follows:

- Trade relationships are entered for each pair of consolidation units and for each product group. This additional financial data is translated into group currency when computing the interunit profit/loss. The system uses the translation method of the inventory managing consolidation unit and determines the exchange rate for the inventory item assigned to the product group.
- Thus, the computed interunit profit/loss is based on the exchange rate for the inventory accounts. The elimination entry for the interunit profit/loss is posted to the inventory item as well as the offsetting item, the latter of which is usually an income statement item.
- Income statement items are often translated with exchange rates that differ from those of balance sheet items – for example, average exchange rates. Hence, the consolidated value of the revenue and expenses to be eliminated can differ from the computed interunit profit/loss. This is the currency translation difference.

Posting Items

- Currency translation differences from the elimination of interunit profit and loss are the result from the twofold currency translation of the additional financial data. On the one hand, additional financial data is translated with the exchange rate indicator of the translation method. On the other hand, additional financial data is translated with the comparison exchange rate indicator stored in the task for elimination of interunit profit and loss.

Posting item for distribution costs

You use posting items for distribution costs if your group generates the income statement according to the cost of goods sold and, because if this, you have the requirement to disclose the portion of your distribution costs that is allotted to sales as a part of the cost of goods manufactured.

Features

The Consolidation system automatically posts the offsetting entry for interunit profit/loss.

The Consolidation system automatically posts currency translation differences incurred on FS items of inventory to the currency translation difference item defined for the posting items. This should be the currency translation difference item that is defined as the offsetting item in Customizing for currency translation. Temporal translation differences result from changes in exchange rates between different statement dates and themselves influence the interunit profit/loss. These temporal differences are posted as a total, and are currently not divided into a "pure interunit profit/loss" portion and another portion that is the result of these exchange rate fluctuations between the statement dates.

For the respective items of the inventory, the system automatically clears the distribution costs, which were entered as a distribution cost percentage rate, onto an income statement item (that belongs to the cost of goods manufactured).

Activities

1. In the Implementation Guide for Consolidation, in the Posting Items section, name the selected posting items for offsetting entries, currency translation differences, and distribution costs (both as source and destination item for the latter).

If you want the same item to be used for posting offsetting entries or translation differences, or for reclassifying distribution costs – regardless of the inventory item concerned – enter only one item for each of these automatic posting activities. In this case, you do not need to specify the inventory item concerned.

2. In the task definition specify a comparison exchange rate indicator for the translation of the posting item.

Interunit profit/loss can be broken down to reflect the effects of currency translation.

3. Enter the distribution cost portion of sales as the additional financial data of the supplying consolidation unit.

Result

The currency translation differences and distribution costs appear in the audit trail as soon as the consolidation task is carried out.

Posting Items, Product Group-dependent

Posting Items, Product Group-dependent

Use

This function allows you to assign the posting items to your product groups to be able to compute the interunit profit/loss in your group.



If you leave the product group field blank, the posting item settings then apply to all product groups.

You can make the assignments of posting items to product groups more detailed than the assignments of posting items to the inventory items.

Posting Items, Inventory Item-dependent

Use

This function allows you to assign the posting items to your inventory items to be able to compute the interunit profit/loss in your group.



If you leave the inventory item field blank, the posting item settings then apply to all inventory items.

You can make the assignments of posting items to inventory items more global than the assignments of posting items to product groups.

Additional Financial Data

Definition

Information required in order to perform consolidation. Additional financial data provides information concerning changes in investments and investee equity, and also concerning goods supply and service relationships.

Use

In the component *SAP Consolidation*, additional financial data is required for the consolidation of investments and the elimination of interunit profit/loss in transferred inventory (IPI).

During IPI, the book value of inventory and the group cost of goods manufactured are determined from the additional financial data. The basis for this calculation is standardized financial data, in which incidental acquisition costs requiring capitalization are taken into account.

Structure

The component SAP Consolidation features the following types of additional financial data for the [consolidation of investments \[Ext.\]](#):

- Changes in Investments
- Changes in Investee Equity
- Amortization of Goodwill
- Equity Holdings Adjustments

To enter additional data, you select the function for data transfer/entry in the data monitor and choose *Update run*. From the following screen, you can access data entry functions for both reported financial data (balance sheet, income statement) and additional financial data.

In the list that is displayed, you select the data that affects the consolidation of investments and you go to the respective entry screen. There you can maintain the basic data for the consolidation of investments. In the Info System, you can create reports specifically for additional financial data.

You need to enter the following additional financial data for the [elimination of interunit profit/loss in inventory \[Page 291\]](#):

- Inventory Data
- Supplier Data

To enter additional data, you select the function for data transfer/entry in the data monitor and choose *Update run*. Select the function for entering either inventory or supplier data for IPI. Now you can specify the supplier relationship.

The inventory and supplier data is valid effective as of the entry period until you make any adjustments to reflect changes in the supply relationship. This minimizes the effort required for entering data.

Additional Financial Data Concerning Supply Relationships

Definition

Supply relationships are partnerships that form the basis for the sale of goods and services between subsidiaries. They are established on the level of product groups.

Use

Supply relationships represent the material interdependencies within a corporate group. Data for these relationships is used to determine the following:

- The group cost of goods manufactured for an item in the inventory
- The amount of interunit (IU) profit or loss

Structure

A supply relationship always exists between two consolidation units and is valid for a particular product group. The supplying consolidation unit supplies inventory items (raw materials and operating supplies, semifinished and finished products) to the inventory managing unit.

Inventory Data

The most important elements of the inventory data are the inventory quantity and incidental acquisition costs (which can be expressed as a percentage of sales). Incidental acquisition costs are cost which must be capitalized from the group's point of view, and which increase or decrease the group cost of goods manufactured (COGM).

Supplier Data

In addition to the ID of the unit supplying the inventory and the product group, the supplier data comprises the profit percentage, distribution cost percentage, and cost of goods manufactured. You can enter the profit percentage as either a markup or as a gross margin.

Example: Profit Percentage Variants

Profit percentage 20
Supplier sales 300

Profit if markup	Profit if gross margin
$300 * 20 / 120 = 50$	$300 * 20 / 100 = 60$

Entering Additional Financial Data for IPI

Entering Additional Financial Data for IPI

Use

You follow this procedure to enter the additional financial data required for the elimination of interunit profit/loss in inventory (IPI).

Procedure

1. From the Consolidation menu, choose *Data monitor*, and put your cursor on the intersection between the column for the data entry task you have already created and the row for the unit whose data you are entering. Then choose *Update run*.
2. A dialog box appears containing options for entering various types of data.

To enter inventory data online, select *Inventory Data* and choose *Enter*.

Inventory Data

Supply relationship	Value of goods supplied	Other information concerning the inventory transfer
Inventory managing consolidation unit	Book value	Inventory quantity
Supplying consolidation unit	Valuation allowance (loss allowed)	Incidental acquisition costs (absolute value)
Product group (18-character ID)	Valuation allowance (without loss)	Incidental acquisition costs (percentage)

You specify a **valuation allowance with no loss allowed** if the amount concerned represents a permanent adjustment that must not change a gross interunit profit into a loss (gross profit = book value in reporting period - group cost of goods manufactured). This procedure respects the principles of prudence and minimum values. In this case, the amount to be eliminated cannot be negative.

To enter supplier data online, select *Supplier Data* in the dialog box and choose *Enter*.

Supplier Data

Supply relationship	Percentage values	Absolute value
Supplying consolidation unit	Percentage profit as markup	Cost of goods manufactured per unit of measure
Inventory managing consolidation unit	Distribution cost	
Product group (18-character ID)	Cost of goods manufactured	



If you enter additional data for IPI using the data monitor, make a note of whether the consolidation unit you select is an inventory managing or supplying unit.

Entering Additional Financial Data for IPI

You have the option of collecting additional financial data by means of a flexible upload. In order to use this function, you need to complete the steps [Define Method for Uploading Inventory/Supplier Data \[Ext.\]](#) in the Implementation Guide. You can also enter additional financial data offline using Microsoft Access.

Result

Once you have entered the relevant additional financial data you can execute the IPI task.

Validation of Additional Financial Data

Use

This function enables you to validate the inventory data reported as part of the additional financial data for the elimination of IU profit/loss in inventory (IPI). During the validation, the reported inventory values are compared with the values in the totals database.

Prerequisites

You have entered the additional financial data concerned and created a data monitor task for the [validation \[Ext.\]](#) of standardized financial data.

Features

When you run a validation of standardized financial data, the additional financial data for IPI are automatically checked in local currency.

For each inventory item, the total amount reported by the inventory managing unit is compared to the corresponding entry in the totals database. If an item has a breakdown by partner unit, the check takes place per partner, otherwise only the total over all partner units (in this case, supplying units) is checked.

The validation is only completed successfully if no differences are found in the data.



If the task runs with errors, you cannot execute subsequent consolidation steps until you have made manual adjustments to reconcile the two sets of data.

IPI Task

Definition

A task is a user-defined technical object that represents a real-life consolidation processing activity and which triggers a corresponding function in the system, in this case the elimination of interunit profit/loss in inventory (IPI).

Use

You use a task to bundle the functions that you require for IPI processing.

Structure

You give your task a meaningful name and define a [document type \[Ext.\]](#) that is suitable for two-sided eliminations. The document type must have the following characteristics:

- Posting level 20
- Posting in group currency
- Posting of deferred income taxes if appropriate

You also need to perform Customizing for [Currency Translation \[Page 232\]](#).

When you define a task, you can determine whether the offsetting entry for the elimination is posted to the inventory managing consolidation unit, and whether the posting of interunit loss is allowed.

If you specify that the offsetting entry is posted to the inventory managing consolidation unit, for example, the inventory adjustment and offsetting entry is only listed for this unit in reporting.

Calculation of the Group Cost of Goods Manufactured

Calculation of the Group Cost of Goods Manufactured

Use

The group cost of goods manufactured (COGM) forms the basis for the calculation of the interunit (IU) profit/loss requiring elimination. This cost is determined for the group as if it were a single entity. Transportation costs for goods transferred within the corporate group, for example, are distribution costs from the point of view of the individual enterprise and part of COGM from the point of view of the group.

Prerequisites

COGM is calculated from the following data:

- COGM
- Incidental acquisition costs

You enter the incidental acquisition costs, for example, transportation costs, as part of the [additional financial data \[Page 302\]](#) concerning the inventory.

The system requires the following additional data in order to determine the group COGM:

Inventory data	Supplier data
Consolidation units involved in transaction	Consolidation units involved in transaction
Product group	Product group
Book value	Profit percentage
Inventory quantity	Distribution costs (%)
Valuation allowance	Cost of goods manufactured (%)
Incidental acquisition costs	

Features

The system can calculate group COGM in the following ways:

- Using the supplier's profit percentage: $\text{group COGM} = \text{sales} * \text{percentage COGM} + \text{incidental acquisition costs}$
- Using the COGM per unit of measure and the inventory quantity: $\text{group COGM} = \text{inventory quantity} * \text{COGM} + \text{incidental acquisition costs}$



The inventory and supplier data used to determine the IU profit/loss are automatically translated from local into group currency within the program when you start the elimination task.

Calculation of the Interunit Profit/Loss for Elimination

Use

This function automatically determines the amount of profit/loss that results from the transfer of inventory between group subsidiaries and that must be eliminated. The [calculation of the group cost of goods manufactured \[Page 308\]](#) forms the basis for the calculation of the interunit (IU) profit/loss requiring elimination.

Prerequisites

IU profit/loss has resulted from the sale of inventory between individual enterprises in the corporate group. From the point of view of the group as a single entity, no such profit/loss may occur. The amount of IU profit/loss calculated depends on the volume of inventory transferred and the profit percentages fixed within your group. Another factor influencing the profit/loss are the distribution costs and other incidental acquisition costs that arise at different stages in the supply chain. From the group's point of view, these costs are considered part of the cost of goods manufactured as long as the goods for which they are incurred are not sold externally.

Features

The system calculates the IU profit/loss requiring elimination as follows:

Schema for the Calculation of IU Profit/Loss

Variable	Formula	Represents
A		(Net) book value in reporting period
B		Valuation allowance (loss allowed)
C		Valuation allowance (no loss allowed), in other words, a valuation allowance that must not change an interunit profit into a loss.
D	$A + B + C$	Value of goods supplied / inventory value from the goods transaction
E		Incidental acquisition costs (absolute or as a percentage); need to be capitalized from the point of view of the group
F	$D - E$	Sales revenue
G		Profit percentage; either a markup or a gross margin
H	$100 - G$	Cost of goods manufactured (%)
I	$(F * H) + E$ Or: $F * (H + E)$	Group cost of goods manufactured ...if incidental acquisition costs are entered as a percentage
J	$A - I$	Interunit profit/loss for elimination

- First, the sales revenue is determined. All value adjustments included in the balance sheet value / book value are reversed, giving the inventory value. The incidental

Calculation of the Interunit Profit/Loss for Elimination

acquisition costs entered as a percentage or as an absolute value are deducted from the inventory value, giving the sales revenue.

- The group cost of goods manufactured (COGM) is calculated from the sales revenue, by multiplying this amount by the percentage COGM and adding the incidental acquisition costs (or by multiplying sales revenue by the sum of the COGM and incidental acquisition cost percentages).
- The IU profit/loss requiring elimination is the difference between the balance sheet value and group COGM.

Note that incidental acquisition costs are considered to be part of the COGM for the purposes of calculation. This is because, from the group's point of view, no incidental acquisition costs can be incurred for a good that was manufactured within the group and sold to a group subsidiary.

You have two options for calculating IU profit/loss:

Procedure 1

IU profit/loss is calculated using a profit percentage that you enter as part of the supplier data. The profit percentage can be interpreted in the following different ways:

- As a markup on COGM
- As a gross margin (a percentage of sales)



Example

Profit percentage: 20 %

Invoiced amount: 2500

If the profit percentage is a markup, the following IU profit is calculated:

$$2500 \cdot 20 / 120 = 417$$

If the profit percentage is a gross margin, the following IU profit is calculated:

$$2500 \cdot 20 / 100 = 500$$

Procedure 2

The COGM for the supplier is calculated by multiplying the inventory quantity by the COGM that you enter per unit. With this procedure, variant J in the above schema is calculated differently, as follows:

Schema for the Calculation of the Group Cost of Goods Manufactured

Variable	Formula	Represents
A		Quantity
B		Cost of goods manufactured per unit of measure
C		Incidental acquisition costs
D	$A \cdot B + C$	Group cost of goods manufactured

Calculation of the Interunit Profit/Loss for Elimination

Valuation Allowance (with no Loss Allowed)

The following situations can occur during the calculation of IU profit/loss:

1. Typically, IU profit/loss is calculated as follows:

inventory book value - group COGM

2. In exceptional cases:

IU profit/loss = 0

This situation occurs if an IU loss is calculated and you have recorded a valuation allowance with no loss allowed.

A valuation allowance with no loss allowed must not change an IU profit into a loss. No loss can be posted in this case in order to respect the principles of prudence and minimum values.

The book value resulting in this case is the maximum value permitted from group's the point of view.

Elimination of IU Profit/Loss

The system eliminates IU profit/loss for pairs of consolidation units, and lists the postings made in an audit trail. The sum of the group COGM and the IU profit/loss is the inventory book value.

Deferred income taxes are normally posted during the elimination because the IU profit/loss calculated must be allocated to the period in question. The profit/loss that is eliminated is realized in a later period on sale of the inventory to an external enterprise. Income taxes therefore become due at a later date (additional payments or refunds). Distribution costs are reclassified to COGM (if specified). Translation differences are posted separately if the exchange rate indicator used for translating the balance sheet differs from that used for the income statement and you specified a comparative exchange rate indicator in the elimination task.

If you do not want deferred income taxes to be posted, you need to specify this in the document type that you use for the elimination.



Example

Unit A	Sale of goods to unit B	Sales: USD 1,200	COGM: USD 1,000
Unit B	Sale of 80% of the goods from A to an external company	Sales: USD 1,300	COGM: USD 960
Unit B	Inventory supplied by unit A	USD 240	
Currency translation	Balance sheet and annual net income at current rate of 2.00 DEM/USD	Income statement at average rate of 1.50 DEM/USD	

Unit A

Unit B

Elimination of
sales revenue

IPI

Consolidated
data

Calculation of the Interunit Profit/Loss for Elimination

	Reported data	Reported data			Total
Inventory	0	480		- 80	400
Cash	2400	200			2600
Annual net income	-400	- 680		80	-1000
Stockholders' equity	- 2000				- 2000
Sales revenue	- 1800	- 1950	1800		- 1950
Cost of goods manufactured	1500	1440	- 1800	60	1200
Translation differences	- 100	- 170		20	- 250
Transfer to annual net income	400	680		- 80	1000

Elimination of Interunit Profit/Loss

Prerequisites

You have entered additional financial data relevant for the elimination of interunit (IU) profit/loss in transferred inventory. This data reflects the transactions in which goods were transferred between consolidation units. You link the trading partners and goods transferred in the information you provide about the supply relationship.

Features

The system automatically eliminates IU profit/loss resulting from the predefined supply relationships. It does so using the method described in the section [Elimination of Interunit Profit/Loss in Inventory: Logic \[Page 294\]](#).

Activities

The system automatically calculates and eliminates IU profit/loss. It also creates an audit trail that lists the postings that were made.

IPI Audit Trail

IPI Audit Trail

Use

The audit trail for the elimination of interunit (IU) profit/loss in inventory gives you an overview of the IU profit/loss arising from the transfer of goods between group subsidiaries. It lists the relevant sales, the group cost of goods manufactured, and other information.

Features

The SAP Consolidation system lists the IU profit/loss that it calculates in an audit trail.

Each inventory transfer involves both the unit reporting data and a partner unit.

The audit trail lists the following information for each pair of units:

- The IU profit/loss eliminated
- The IU profit/loss for the current period with posting documents
- The IU profit/loss for the prior period with posting documents
- Any messages for the elimination run

Activities

You start the task for elimination of IU profit/loss in inventory in the consolidation monitor.

The posting document listed in the audit trail show the IU profit/loss for the individual inventory items and product groups, and all the entries posted during its elimination.

Executing the Task for the Elimination of Interunit Profit/Loss in Inventory

Use

You follow this procedure to run automatic elimination of interunit profit/loss in transferred inventory (IPI).

Prerequisites

The data concerning goods transactions between group subsidiaries has been entered in the SAP System either manually or by means of a flexible upload.

Procedure

1. Create a task for IPI and assign it to the consolidation monitor.
2. Give the task a meaningful name.
 - Specify whether the offsetting entry for the elimination is to be posted to the inventory managing unit or — as is normally the case — to the supplying unit. Also indicate whether interunit (IU) losses may be posted.
 - Assign a document type to the task for postings related to the current and prior periods, and also the comparative exchange rate indicator for currency translation.

Tasks are valid as of a specified year and period. You therefore do not need to redefine the task until such time as you change your posting procedures. If you are running IPI for the first time, you need to assign a document type for posting the portion of profit/loss calculated for the prior period. This amount is posted against the retained earnings carried forward and the system simulates IPI for the prior period. No deferred taxes are posted for the portion of profit/loss relating to the prior period. However, an offsetting entry is posted to the income statement.

To run IPI, proceed as follows:

3. Define the following in the Consolidation [Implementation Guide \[Ext.\]](#):
 - Product groups, which form the basis of the elimination
 - Items for posting offsetting entries
 - Any items required for reclassifying distribution costs
 - Any items required for reclassifying distribution costs
4. Enter inventory and supplier data as [additional financial data \[Page 302\]](#) in the data monitor. The data originates from inventory transfers between group subsidiaries, and is used by the system to calculate the resulting IU profit. This profit must be eliminated because it is considered an acquisition and production cost rather than a profit from the group's point of view.
5. Execute the IPI task that you defined from the [consolidation monitor \[Ext.\]](#) or the Consolidation menu.

Executing the Task for the Elimination of Interunit Profit/Loss in Inventory**Result**

The system automatically calculates and eliminates IU profit/loss, and documents the amounts involved in an audit trail.

Consolidation of Investments



Instead of the normal documentation, SAP offers a Knowledge Product as a CD ROM on the topic *Consolidation of Investments*. This was developed in co-operation with the Institute of Financial Accounting and Auditing at the University of Saarland.

The Knowledge Product explains both the business basics of the consolidation of investments and the execution of the consolidation of investments in the SAP System. The process and the activities to be carried out for an example company are illustrated with Screencams.

The CD can be ordered free of charge by customers and partners. You will find information on how to order the CD in SAPNet, note 0117253.

Reclassification

Reclassification

Purpose

This component provides the functionality for reclassifying the values of financial statement (FS) items.

In the consolidation system you can use reclassifications:

- to adjust the financial data reported by consolidation units to meet the group's requirements (standardizing entries)
- to reclassify already-consolidated data

Implementation Considerations

Choose this component if you want to perform reclassifications needed for consolidation using automatic posting functions. If you do not choose this component, you must use the manual posting functions to process reclassifications.

Reclassification Based on Triggering Items

Use

In general, reclassifications transfer the value of a financial statement item to a second item.

Example: The value of *Finished goods* might be reclassified to *Unfinished goods*.

An additional requirement is to be able to reclassify an item's value from a second item to a third item. Example: The value of *Plant Equipment* might be reclassified from *Sales Revenue* to *Other Capitalized Goods On Own Account*.

Furthermore, the capability of reclassifying only a portion of an item's value instead of the entire value should also be given.

Features

You make the settings for the reclassification rules shown hereafter in Customizing, at Method Definition for reclassification.

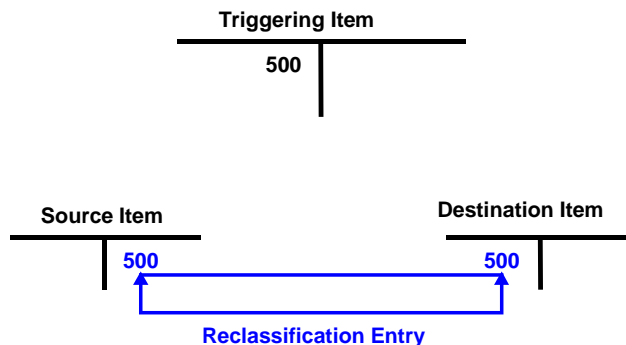
Affected Items/Item Sets

You distinguish between:

- the *triggering item*, which triggers the reclassification
- the *source item*
- the *destination item*

The system uses the value of the triggering item, reverses the sign of the value, and reclassifies that amount from the source item to the destination item.

The following graphic illustrates this:



You can reclassify the value of a single item or the total value of a set of items. Whichever you choose, however, the system always reclassifies onto a single item.

Posting to the triggering consolidation unit, partner unit or other consolidation unit

By default, the system posts the reclassification entries at the triggering consolidation unit.

When reclassifying at posting level 20, you can determine that the reclassification entries are posted at the partner unit instead of the triggering consolidation unit. Alternatively, when

Reclassification Based on Triggering Items

reclassifying at posting level 30, you can determine that the reclassification entry is posted at any other consolidation unit.

- When you define that the source item or the destination item is posted to the partner unit, the system assigns the triggering consolidation unit as the partner unit.



A fixed asset is sold by one consolidation unit to another consolidation unit within a corporate group. From the group's point of view, the sales revenue of the selling consolidation unit needs to be reclassified as *Other Capitalized Goods On Own Account*.

The consolidation unit receiving the asset is the triggering unit. The reclassification posts to the selling unit, that is, the partner unit.

See also: [Example 3: Reclassification of Sales Revenue \[Page 335\]](#)

- If you want to post the reclassification entries (at posting level 30) at any consolidation unit, you can choose any consolidation units for the triggering item as well as the source and destination item.

Restriction of reclassifications to parent units and subsidiary units

In a reclassification with posting level 30, the system by default posts the entries for all relevant consolidation units of the consolidation group.

However, you can define the method to also restrict the entries to parent units or subsidiary units.

See also: [Reclassification with different posting levels \[Page 325\]](#)

Percentage Reclassification

If you want to reclassify only a portion of an item's value, you can define a fixed percentage rate for the reclassification.

When eliminating investment income and you want to automatically reclassify income taxes, instead of setting a fixed percentage rate you can determine that the percentage rate be set to the tax rate for investment income that has been defined in the master data of the triggering consolidation unit. The tax entry is posted within a reclassification task that precedes the elimination of investment income. A prerequisite for the percentage reclassification is that dividend payments and the investment income tax are each posted to separate items.



You can also use the respective tax rate for investment income defined in the master data of the consolidation unit for other reclassification entries (beyond the elimination of investment income). In each case, the system uses the individual percentages instead of the fixed percentage.

Partner Selection

At posting level 30 the system selects the item values regardless of the partner assignment. However, at posting level 30 you can influence the partner selection to the extent that only those partner units are selected, which belong to the group, or do not belong to the group.

Posting level 30 also provides the following function: If you chose the consolidation group as the characteristic for the triggering item, in the *Settings* you can influence the entries at the various levels of the consolidation group hierarchy in the following way: You can determine whether the

Reclassification Based on Triggering Items

entry is or is not posted in the group, and whether the entry is posted in the lower-level or higher-level groups.

See also:

[Reclassification with Subassignments \[Page 322\]](#)

[Reclassification with Different Posting Levels \[Page 325\]](#)

Reclassification with Subassignments

Reclassification with Subassignments

Use

When reclassifying item values you can use the following characteristics:

- You can restrict the triggering item values to:
 - the standard subassignments (subitem, partner unit, subitem category; and subitem, transaction currency, acquisition year, acquisition period, unit of measure)
 - custom subassignments
 - attributes
 - several standard characteristics, such as consolidation unit, document type and posting level

If you do this, the system reclassifies only those item values that have been collected or posted with these subassignments or attributes.

- You can use all standard and custom subassignments for the source and destination assignments.

Features

You define the reclassification rules in *Customizing* under the definition of reclassification methods. There you can specify subassignments for the triggering item, the source item, and the destination item. Plus, you can specify attributes for the triggering item.



In general, the system displays a default indicator for the source and destination subassignments. In some cases it is selected, in other cases it is not. You should not modify the setting of the default indicator. Then, the system posts using the logic that results from the you other settings (for example, inheritance of a subassignment from the triggering item).

Inheritance of Account Assignments

Use

A reclassification can automatically pass on the financial statement items as well as subassignments between the triggering item, the source item and the destination item.

Some possible applications are:

- You want to reclassify the value of an FS item to a second item.

In this case, the triggering item and source item are the same. Therefore, there is no need to specify the source item. It defaults to the triggering item.



The item *Finished Goods* is reclassified as *Unfinished Goods*. The triggering item and source item are identical.

- The same applies when reclassifying the values of FS item sets to a destination item. Here, you specify the triggering item set and the destination item. The source items automatically default to the set of triggering items, respectively.
- You want to reclassify an item's value, delimited to a set of subitems or partner units, to a second item, and at the same time retain these subassignments.

In this case, the subassignments of the triggering item must be passed to the source item and the destination item when the reclassification entry is posted.



Your *Finished* and *Unfinished Goods* items are classified by enterprise areas using subitems. During consolidation it might be necessary to reclassify the *Finished Goods* as *Unfinished Goods*. The subassignment of the enterprise areas need to be retained.

Features

You define automatic inheritance of items and subassignments in Customizing under the definition of reclassification methods for the triggering item, the source item and the destination item, and their respective subassignments.

The following chart shows in detail which defaults/transfers are supported for each of the three items. The *Customizing Settings* column lists which settings can be generally made for FS items and subassignments.

Item Inherited From	Customizing Settings	Inheritance Logic
---------------------	----------------------	-------------------

Inheritance of Account Assignments

Triggering item	Item (or item set) Subitem (or set) Other characteristics (or set)	<ul style="list-style-type: none"> Object is passed to the source item if no setting is made Object is passed to the destination item if no setting is made
Source item	FS item Subitem Other subassignments	Object is passed to the destination item if no setting is made
Destination item	FS item Subitem Other subassignments	No inheritance occurs because the destination item is the last item in reclassification

Remarks:

- You must always specify the triggering item.
- In some cases, you only want to pass the subassignments from the triggering item to the source item and destination item, without having passing the items.
In this case, you specify the triggering item (with its subassignments), the source item, and the destination item. You do not specify any subassignments for the source item and the destination item.



When running a reclassification triggered by the debit/credit sign (instead of a standard reclassification), you must always specify the triggering item, the source item and the destination item.

See also: [Sign-triggered Reclassification \[Page 328\]](#)

Reclassifications with Different Posting Levels

Use

You can use different posting levels when posting reclassifications to achieve different results:

- Use posting level 10 for standardizing entries at the triggering consolidation unit.

See also:

[Example 1: Reclassification of Finished Goods \[Page 332\]](#)

[Example 2: Standardization of Fixed Asset Depreciation \[Page 333\]](#)

- Use posting level 20 for consolidation entries taking the partner unit into consideration.

See also:

[Example 3: Reclassification of Sales Revenue \[Page 335\]](#)

[Example 4: Sign-triggered Reclassification of a FS Item \[Page 337\]](#)

[Example 5: Netting of Receivables Against Payables \[Page 339\]](#)

- Use posting level 30 for consolidation-group-based consolidation entries

See also:

[Example 6: Reclassification in Balance Sheet and Income Statement \[Page 341\]](#)

[Example 7: Reclassification of Retained Earnings of Subsidiaries \[Page 343\]](#)

Features

You define a method and a document type for each task in Customizing in the definition of tasks for reclassifications. A posting level is assigned to the document type.

The reclassification includes the values of all items that have been entered or posted with a posting level less than or equal to the posting level assigned to the document type.

Reclassification logic based on posting levels

Posting level	Values of the triggering consolidation unit that are included in reclassification	Reclassification posting
10	<p>All values of the triggering item(s) posted with posting level less than or equal to 10.</p> <p>When applicable, the values can be delimited to subassignments, such as subitems.</p>	<p>Entry is always posted at the triggering unit</p> <p>Value is broken down by subitems or other subassignments, when applicable</p>

Reclassifications with Different Posting Levels

20	<p>All values of the triggering item(s) that are posted with</p> <ul style="list-style-type: none"> • A posting level less than or equal to 20 • A partner unit belonging to the selected consolidation group <p>When applicable, the values can be delimited to subassignments, such as subitems.</p>	<p>Entry is generally posted at the triggering unit with a partner unit assignment.</p> <p>Value is broken down by subitems or other subassignments, when applicable</p>
30	<p>All values of the triggering item(s) posted with posting level less than or equal to 30.</p> <p>When applicable, the values can be delimited to subassignments, such as subitems.</p>	<p>Entry is generally posted at the triggering company.</p> <p>Value is broken down by subitems or other subassignments, when applicable</p>



Keep in mind that the system posts all reclassifications at the triggering consolidation unit unless you specify in Customizing that they are to be posted to the partner unit or any other consolidation unit.

Periodic Reclassifications

Use

When the triggering item is not the same as the source item, the reclassification during subsequent consolidations keeps on using the original total value of the triggering items as the basis.

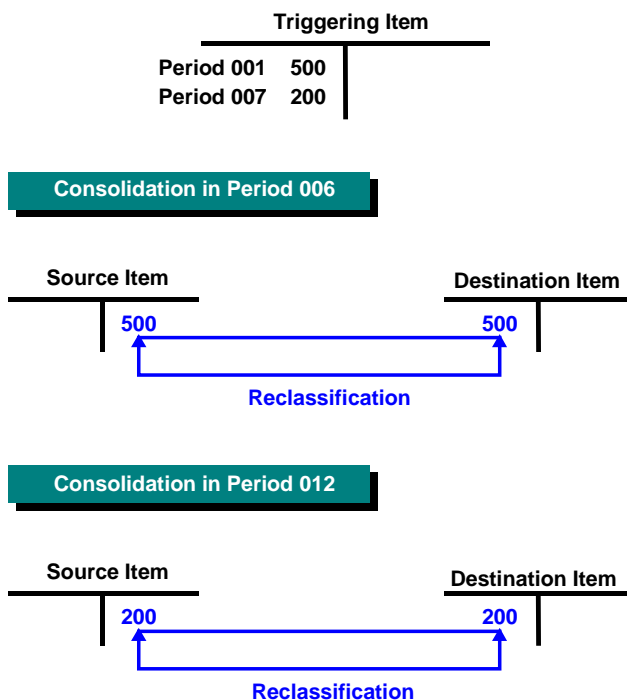
In such cases, it is necessary to reclassify only the changes of the value of the triggering item.

Features

In Customizing in the definition of reclassification methods, you can define the reclassification as being "periodic" in each reclassification rule.

When a reclassification is periodic, the system only includes the item values of those periods that belong to the current range of periods in the consolidation frequency.

The following example uses consolidation frequency 2 (semi-annual statements), and you have chosen the option *Periodic Reclassification*.



Note that reclassification entries can only be posted in the last period in the range of periods specified in the consolidation frequency. For example, when using a semi-annual frequency, you can only post reclassifications in the periods 6 and 12.

Sign-triggered Reclassifications

Sign-triggered Reclassifications

Use

An alternative to the standard reclassification logic is the debit/credit sign-triggered reclassification. It lets you determine that a reclassification should only take place if the balance of the triggering item (or the set of triggering items) matches the debit/credit sign you specified in Customizing.

Some possible applications are:

- **Reclassifications when the sign of an item's value changes**
You want to reclassify the value of an item to another item if the item's balance changes to an undesired debit/credit sign.
See also: [Example 4: Sign-triggered Reclassification of an Item \[Page 337\]](#)
- **Reclassifications for balancing FS items**
You want to state the value of two or more items or subitems as a total. The debit/credit sign determines which item is to state the balance.
See also: [Example 5: Netting of Receivables and Payables \[Page 339\]](#)

Features

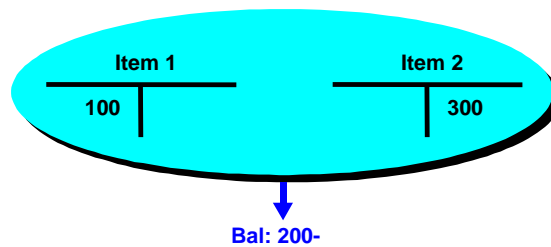
In Customizing in the definition of reclassification methods, you can determine for each rule whether a reclassification should be triggered by a debit/credit sign. You specify the balance the system checks to determine whether to post a reclassification (value balance < 0; value balance > or = 0; value balance > 0).

A reclassification then takes place if the balance of the triggering item (or the set of triggering items) meets the condition you specified.

This type of reclassification reclassifies the value of the source item – as opposed to the standard reclassification logic, which reclassifies the value of the triggering item (or item set). In other words, the reclassification "clears" the source item.

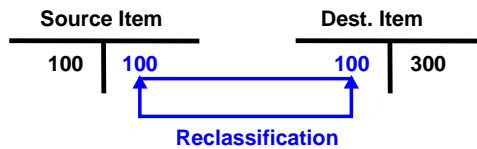
The following example illustrates this:

Sign-triggered Reclassifications

Triggering
Item Set

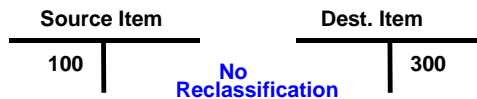
Rule 1

Reclassification if sign is "-"
(balance < 0)



Rule 2

Reclassification if sign is "+"
(balance > 0)



Sign-triggered reclassification also allows you to restrict the reclassification entries to any characteristics per financial statement item. Any characteristics can be used to build the balance.

For example, with posting level 30 you can specify whether the balance is to apply per consolidation unit. If you do not specify a consolidation unit, the system builds a balance for each consolidation group.

See also: [Reclassification with Subassignments \[Page 322\]](#)

Repetition of a Reclassification

Repetition of a Reclassification

Use

If you run a reclassification and, afterwards, need to modify the initial data, you need to rerun the reclassification.

Features

In general, the reclassification can be repeated without causing any problems. Before re-posting the reclassification entries, the system deletes all of the previously-created journal entry documents and totals records that pertain to the selected consolidation units and period. Then the system reposts the reclassification entries.

Constraints

If you run two reclassification tasks, each of which uses a different document type, and both of which use the same items (or at least partially), the repetition of the first task can lead to incorrect results.



First, you run reclassification task 1 at consolidation unit A, then you run reclassification task 2. Different document types are assigned to the tasks. FS item 1234 is the triggering item for both tasks.

Afterwards, you repeat task 1. The system deletes the documents and totals records initially created during task 1 and reposts the reclassification entries. Because the documents and totals records created by task 2 still exist, the system finds the value of item 1234 which was modified by task 2, and reclassifies the wrong value.

Running of Reclassifications

Purpose

You perform this process if you want to reclassify the reported financial data or the consolidated data of one or more consolidation units.

Prerequisites

You might need to perform reclassification tasks at various intervals of the consolidation process:

- After the collection of the reported financial data – in order to standardize the data to meet standards required for the corporate group
- After currency translation of the reported financial data – in order to standardize the data translated into the group's currency to meet standards required for the corporate group
- After currency translation and the standardization of the reported financial data – as one of the tasks belonging to the consolidation process itself
- After performing all of the remaining consolidation tasks – to prepare the consolidated data for the creation of group statements.

Process Flow

1. You customize your reclassifications.
2. You run the reclassification either in the data monitor or the consolidation monitor, depending on the type of reclassification task.



See also the examples of how the reclassification process is used.

Result

For documentation purposes, the system displays an audit trail upon completion of the reclassification. The system displays the audit trails for runs in test mode as well as update mode.

After running the reclassification, you can perform the following consolidation tasks, based on the reclassified data.

Example 1: Reclassification of Finished Goods**Example 1: Reclassification of Finished Goods****Purpose**

From the corporate group's point of view, it might be necessary to reclassify Finished Goods as Unfinished Goods.

The reclassification is posted as a standardizing entry with posting level 10.

Example data

FS item	Value
10410300 Finished Goods	400

Prerequisites

You run the reclassification after the reported financial data has been translated. An alternative is to reclassify in local currency.

Process Flow

1. You customize your reclassifications. You create the following reclassification rules:

Reclassification Rule

FS item	Entered Value
Triggering item	10410300 Finished Goods
Source item	(blank)
Destination item	10410200 Unfinished Goods

2. You run the reclassification in the data monitor.

The system posts as follows:

FS item	Value
10410300	400-
10410200	400

Result

Finished Goods is now reclassified.

Example 2: Standardization of Fixed Asset Depreciation

Example 2: Standardization of Fixed Asset Depreciation

Purpose

The corporate group might require a different method for depreciating fixed assets from those used for the financial statements of the individual consolidation units.

If you use Asset Accounting (FI-AA), you can manage the different valuations simultaneously in different depreciation areas:

- The book depreciation area manages values that are valid for the consolidation unit. These values are posted to the accounts allocated to the items *Plant and Equipment* and *Depreciation*.
- The group depreciation area manages values that are valid for the corporate group. These values are posted to accounts allocated to statistical FS items.

In the Consolidation system, you can use reclassifications to adjust the values of the *Plant and Equipment* items to match the group values. The reclassification entry uses posting level 10.

Example data

FS item	Subitem	Value	Depreciation area
10320200 Plant and Equipment	220 Depreciation	200-	Book depreciation
30710100 Depreciation	-	200	Book depreciation
91032020 Statistical Item for Fixed Assets	220 Depreciation	300-	Group depreciation
93071010 Statistical Item for Depreciation	-	300	Group depreciation

Prerequisites

After the reported financial data is translated into group currency, you can standardize the depreciation. An alternative is to standardize in local currency.

Process Flow

1. You customize your reclassifications. You create the following reclassification rules:

Table: Reclassification Rule 1

FS item/Transaction type	Entered Value
Triggering item	10320200 Plant and Equipment
Triggering transaction type	220 Depreciation
Source item	10320200 Plant and Equipment
Destination item	30710100 Depreciation

Example 2: Standardization of Fixed Asset Depreciation**Table: Reclassification Rule 2**

FS item/Transaction type	Entered Value
Triggering item	9111111 Statistical item
Triggering transaction type	220 Depreciation
Source item	30710100 Depreciation
Destination item	10320200 Plant and Equipment

2. You perform the reclassifications in the data monitor.

The system posts as follows:

- Reclassification rule 1 posts the depreciation of 200 currency units against the item *Plant and Equipment* and the expense item *Depreciation*.

FS item	Transaction type	Value
10320200	220	200
30710100	-	200-

- Reclassification rule 2 posts the depreciation of 300 currency units against the same items.

FS item	Transaction type	Value
30710100	-	300
10320200	220	300-

Result

After the reclassification, the values of the items *Plant and Equipment* and *Depreciation* are adjusted from 200 to 300 currency units.

Example 3: Reclassification of Sales Revenue

Example 3: Reclassification of Sales Revenue

Purpose

From the corporate group point of view, sales revenue gained from partner units must be reclassified as *Other Capitalized Goods on Own Account* (when using the period accounting method).



This process does **not** eliminate interunit profit and loss. In a sense, this type of reclassification represents a simplified form of elimination of interunit profit and loss in transferred assets.

The reclassification entry uses posting level 20.

Example data

Cons unit	FS item	Subitem	Partner unit	Value
A	10320200 Plant and Equipment	125 (Acquisitions)	B	100
B	30100100 Sales Revenue	-	A	100-

Prerequisites

After the data is translated and standardized, you run the reclassification in the consolidation monitor.

Process Flow

1. You customize your reclassifications. You create the following reclassification rules:

Table: Reclassification Rule

FS item/Subitem/Partner unit	Entered Value
Triggering item	10320200 Plant and Equipment
Triggering subitem	125 (Acquisitions)
Triggering partner unit	A partner set including partner unit B
Source item	30300000 Other Capitalized Goods on Own Account
Destination item	30100100 Sales Revenue

In the rule you also specify that entries are to be posted at the partner unit.



In this reclassification, the order of the source item and destination item is reversed in regards to normal accounting logic. This is necessary because the debit/credit signs of the triggering item and the source item differ.

2. You run the reclassification in the consolidation monitor.

The system posts as follows:

Example 3: Reclassification of Sales Revenue

Cons unit	FS item	Subitem	Partner unit	Value
B	30300000	-	A	100-
B	30100100	-	A	100

Result

After the reclassification, *Sales Revenue* is reclassified as *Other Capitalized Goods on Own Account*.

Example 4: Sign-triggered Reclassification of a FS Item

Example 4: Sign-triggered Reclassification of a FS Item

Purpose

Assume that you set up the Customizing of interunit elimination to post elimination differences to *Miscellaneous Expenses*, in debit entries as well as credit entries. This lets you state the net total of the differences.

Just in case the item's balance has a negative balance after the interunit eliminations, you set up a reclassification triggered by the debit/credit sign, which reclassifies the balance as *Miscellaneous Revenue*.

The reclassification entry uses posting level 20.

Example data

FS item	Partner Unit	Value
30800000 Miscellaneous Expense	(any unit within the consolidation group)	100-

Prerequisites

You start this reclassification after interunit eliminations.

Process Flow

1. You customize your reclassifications. You create the following reclassification rules:

Table: Reclassification Rule

FS item	Entered Value
Triggering item	30800000 Miscellaneous Expense
Source item	30800000 Miscellaneous Expense
Destination item	30400000 Miscellaneous Revenue
Sign of the net balance	-

2. You run the reclassification in the consolidation monitor.

The system posts as follows:

Cons unit	FS item	Partner unit	Value
(any selected unit)	30800000	(any selected unit)	100
(any selected unit)	30400000	(any selected unit)	100-

Result

After the reclassification, the value of *Miscellaneous Expense* is reclassified as *Miscellaneous Revenue*.

Example 4: Sign-triggered Reclassification of a FS Item

Example 5: Netting of Receivables Against Payables

Example 5: Netting of Receivables Against Payables

Purpose

One part of consolidation is interunit elimination, which eliminates receivables and payables incurred by business transactions that take place within the boundaries of a corporate group. However, in some instances, your consolidated group may also include trading partners (defined as partner units), which are not consolidated within your particular consolidation group. This could be part of a step consolidation scenario, in which your consolidation group is submitted to a higher-level consolidation group that, in turn, includes the trading partners concerned.

Such business relationships might require that you net your receivables against the payables, from and to each trading partner – thus, stating a net balance for each trading partner.

The reclassification entry uses posting level 20.

Example data

Cons unit	FS item	Partner unit	Value
A	10420200 Receivables	B	300
A	10420200 Receivables	C	400
A	20460000 Payables	B	200-
A	20460000 Payables	C	600-

Prerequisites

You run the reclassification in combination with interunit eliminations.

Process Flow

1. You customize your reclassifications. You define two reclassification rules. You need one rule for each sign of the net balance.

Table: Reclassification Rule 1

FS item/Partner unit	Entered Value
Triggering item set	10420200 Receivables 20460000 Payables
Source item	10420200 Receivables
Destination item	20460000 Payables
Sign of the net balance	-

Table: Reclassification Rule 2

FS item/Partner unit	Entered Value
Triggering item set	10420200 Receivables 20460000 Payables
Source item	20460000 Payables
Destination item	10420200 Receivables
Sign of the net balance	+

In both rules you specify that the net balance is to be computed per partner unit.

2. You run the reclassification in the consolidation monitor.

Example 5: Netting of Receivables Against Payables

The system posts as follows:

Cons unit	FS item	Partner unit	Value
A	10420200	C	400-
A	20460000	C	400
A	20460000	B	200
A	10420200	B	200-

Result

The reclassification results in a net receivable of 100 currency units from partner unit B, and a net payable of 200 currency units to partner unit C.

Example 6: Reclassification in Balance Sheet & Income Statement

Example 6: Reclassification in Balance Sheet & Income Statement

Purpose

When dealing with provisions, you might be required to net the additions to provisions against the reversals. This must also take into consideration the subitems of the provisions balance sheet item as well as the related revenue and expense items in the income statement.

The reclassification entry uses posting level 30.

Example data

FS item	Subitem	Value
20310000 Provisions	520 (Additions)	300-
20310000 Provisions	560 (Reversals)	200
30800100 Expense for Additions		300
30400100 Revenue from Reversals		200-

Prerequisites

You run the reclassification after all other consolidation tasks are completed.

Process Flow

1. You customize your reclassifications. You define four reclassification rules.
 - Rules 1 and 2 net the subitems of the provisions balance sheet item. You need one rule for each sign of the net balance.
 - Rules 3 and 4 net the revenue and expense items. You need one rule for each sign of the net balance.

Table: Reclassification Rule 1

Item/ Subitem	Entered Value
Triggering item	20310000 Provisions
Triggering subitem set	520 (Additions) 560 (Reversals)
Source item	20310000 Provisions
Source subitem	520 (Additions)
Destination item	20310000 Provisions
Destination subitem	560 (Reversals)
Sign of the net balance	+

Table: Reclassification Rule 2

Item/ Subitem	Entered Value
Triggering item	20310000 Provisions
Triggering subitem set	520 (Additions) 560 (Reversals)

Example 6: Reclassification in Balance Sheet & Income Statement

Source item	20310000 Provisions
Source subitem	560 (Reversals)
Destination item	20310000 Provisions
Destination subitem	520 (Additions)
Sign of the net balance	-

Table: Reclassification Rule 3

Item/ Subitem	Entered Value
Triggering item	20310000 Provisions
Triggering subitem set	520 (Additions) 560 (Reversals)
Source item	30800100 Expense for Additions
Destination item	30400100 Revenue from Reversals
Sign of the net balance	+

Table: Reclassification Rule 4

Item/ Subitem	Entered Value
Triggering item	20310000 Provisions
Triggering subitem set	520 (Additions) 560 (Reversals)
Source item	30400100 Revenue from Reversals
Destination item	30800100 Expense for Additions
Sign of the net balance	-

2. You run the reclassification in the consolidation monitor.

The system posts as follows:

FS item	Subitem	Value
20310000	560	200-
20310000	520	200
30400100		200
30800100		200-

Result

After the reclassification, the balance sheet and the income statement both state the net balance of the additions and reversals of the provisions.

Example 7: Reclassification of Retained Earnings of Subsidiaries

Example 7: Reclassification of Retained Earnings of Subsidiaries

Purpose

Frequently, consolidated financial statements of a corporate group need to state the retained earnings of the parent unit within the group. You can use reclassifications to reclassify the retained earnings of subsidiaries as appropriations.

The reclassification entry uses posting level 30.

Prerequisites

You reclassify retained earnings after all other consolidation tasks are completed.

Process Flow

1. You customize your reclassifications. You define one of the following reclassification rules depending on where you state retained earnings:

Reclassification rule if retained earnings are stated after the income statement

FS item	Entered Value
Triggering item	20140000 Retained Earnings
Source item	70800000 Transfers to Appropriations
Destination item	20130000 Appropriations

Reclassification rule if retained earnings are stated in the balance sheet

FS item	Entered Value
Triggering item set	20140000 - 20149990 Annual Net Income + Retained Earnings
Source item	85600000 Transfers to Appropriations
Destination item	20130000 Appropriations

2. You run the reclassification in the consolidation monitor. Choose *Only Subsidiaries* in the selection screen.

Result

After the reclassification, the retained earnings of the group only include the retained earnings of the parent unit.



Example 7: Reclassification of Retained Earnings of Subsidiaries

Note the following:

- The retained earnings of the parent may include standardizing and consolidation entries. If so, the retained earnings will deviate from the parent's original retained earnings in the reported financial data.
- If you state minority interest in retained earnings separately, you must likewise reclassify this as minority interest in appropriations.

Running a Reclassification

Procedure

1. In the Consolidation menu, choose
 Data → Monitor or
 Consolidation tasks → Monitor.
2. Check the global parameters by choosing *Environment → Global parameters*.
3. Place the cursor on the appropriate organizational unit and your task for reclassification, and choose *Update run*.
4. An audit trail of the reclassification is displayed.

Proportional Consolidation

Proportional Consolidation

Purpose

This component enables you to include consolidation units proportionally in the consolidated financial statements, based on statutory requirements or based on the management perspective.

Proportional consolidation includes the items of the balance sheet and income statement into the consolidated statements according to the upper unit's percentage of ownership in the investee unit, rather than at the full amount (as in the purchase method).

Implementation Considerations

You implement this component...

- as part of company consolidation when you are required to proportionally consolidate a joint venture company (rather than using the equity method) due to statutory requirements. A typical joint venture company is owned by two parent companies at 50% each.
- as part of business area consolidation or profit center consolidation when you do not want to consolidate the unit using the equity method.

Integration

You utilize proportional consolidation as part of the SAP component *Consolidation*.

Proportional consolidation utilizes the rounding logic in [Currency Translation \[Page 232\]](#).

Features

You record the reported financial data and standardizing entries in full amounts. The proportionally consolidated units are specially treated in all consolidation functions. The system generates separate apportionment data records for the reported financial data and the standardizing entries, as well as for all consolidation functions.

- A dedicated task is available for the apportionment of the reported financial data and standardizing entries (also after currency translation, if necessary). You can assign this task in the data monitor.
- Proportionally consolidated units also require special treatment for the following tasks:
 - Interunit Elimination
 - Elimination of Interunit Profit/Loss in Transferred Inventory
 - Consolidation of Investments
 - Preparation of Consolidation Group Change
 - Data Selection in Validation and Reports

Here, the apportionment is automatic in the respective consolidation function.

The proportion of consolidation is independent of the consolidation group, which means that the consolidation unit has the same proportion in each consolidation group, to which it belongs.



Proportional Consolidation

The use of proportional consolidation as part of the consolidation of investments is not discussed in this section. See the corresponding [note \[Page 317\]](#).

Constraints

Only one proportion change is possible per consolidation period. However, you can specify whether the proportion change becomes effective at the beginning or at the end of the period.

Reclassifications do not perform apportionments.

Execution of Proportional Consolidation

Execution of Proportional Consolidation

Purpose

You perform this process if you want to proportionally consolidate one or more consolidation units.

Prerequisites

The following prerequisites must be given before beginning proportional consolidation:

- You have collected the reported financial data (with full amounts, not proportional).
- You have posted standardizing entries, where applicable.
- You have performed currency translation, where applicable.

Process Flow

A. Customizing

You execute the following steps in Customizing for Consolidation:

1. You specify that proportional consolidation is to be used as the accounting technique: Go to *Consolidation Functions* → *Automatic Posting* → *Consolidation of Investments* → *Determine System Utilization for C/I*



This must be done, even if this is the only accounting technique used in consolidation of investments.

2. You define one or more methods for proportional consolidation in step *Consolidation of Investments* → *Methods* → *Define Methods*.



This must be done, even if this is the only accounting technique used in consolidation of investments.

3. In step *Consolidation of Investments* → *Methods* → *Assign Methods to the Consolidation Units* you assign a method with accounting technique *proportional (proportional consolidation)* to all consolidation units that are to be proportionally consolidated.

Also enter the proportion (any percentage rate between zero and 100).

The same inheritance rules apply in the consolidation group hierarchy as for the method itself.



If you change the proportion in a period subsequent to that of first consolidation, you can assign this proportion change to an activity of that period.

Only one proportion change is possible per consolidation period.

Execution of Proportional Consolidation

4. In step *Data → Automatic Posting → Apportionment: Define Task* you create the task *Apportionment* and assign task category *Apportionment*.
5. In step *Data → Data Monitor → Define Task Group* you assign the task *Apportionment* to a task group for the data monitor.
6. If you use consolidation of investments, you may have to enter selected items for minority interest; and you may need to specify the *ANI Prior to Proportion Change* item under *Specify Miscellaneous Selected Items*.
7. Proportional consolidation uses the rounding logic of the currency translation function. Therefore, you must assign a currency translation method, which contains rounding rules, to the consolidation units to be proportionally consolidated.

This must also be done if the consolidation unit does not require currency translation (because the local currency and group currency are the same) and you only want to use the rounding function.

8. When in the process of interunit elimination a proportionally consolidated unit is eliminated against a fully consolidated unit (purchase method), then a portion of the eliminated amount (that is, the amount of the third-party share in the proportionally consolidated unit) must be reclassified from the fully consolidated unit to a separate financial statement item (*third parties*).

You define these reclassifications for each item to be eliminated in step *Interunit elimination → Define Methods*.

9. When in the process of interunit elimination two proportionally consolidated units are eliminated against each other, you can choose between [Minimum Apportionment and Product Apportionment \[Page 361\]](#) procedures for determining the share to be eliminated. You make this setting in step *Master Data → Define Dimensions*.

B. Tasks in the Data Monitor

After you have recorded the reported financial data with their full amounts, and you have posted standardizing entries and performed currency translation (if applicable), you execute the [Task for Apportioning Reported Data and Standardizing Entries \[Page 351\]](#).

C. Tasks in the Consolidation Monitor and Further Consolidation Functions

In the consolidation monitor you execute the following tasks relevant to proportional consolidation:

- Interunit Elimination including
 - [Elimination of IU Payables and Receivables \[Page 356\]](#)
 - [Elimination of IU Revenue and Expense \[Page 356\]](#)
 - [Elimination of IU Investment Income \[Page 359\]](#)
- [Elimination of IU Profit/Loss in Inventory \[Page 363\]](#)
- Consolidation of Investments

Result

The system carries out all consolidation tasks while taking into account the proportion records of the proportionally consolidated units.

Execution of Proportional Consolidation**Example**

Here is a typical sequence of consolidation tasks:

Task	Posting Level [Page 205]	Apportionment Indicator
1. Data Collection	Space, 00, 01	0
2. (Currency Translation, if applicable)	Space, 00, 01	0
3. <i>Apportionment of Reported Financial Data</i>	00	1
4. (Preparation for Consolidation Group Change, if applicable)	02	0
5. Standardization of Financial Data	10	0
6. (Currency Translation, if applicable)	10	0
7. <i>Apportionment of Standardized Financial Data</i>	00	1
8. (Preparation for Consolidation Group Change, if applicable)	12	0
9. Two-Sided Elimination Entries	20, 21	0
<i>Apportionment for Two-sided Elimination Entries</i>	20	1
10. Two-Sided Elimination Entries with Special Logic	23	0
<i>Apportionment for Two-sided Elimination Entries with Special Logic</i>	23	1
11. (Preparation for Consolidation Group Change, if applicable)	22, 24	0
12. Consolidation of Investments	30	0
<i>Apportionment for Consolidation of Investments</i>	30	1



If you want to execute the tasks...

- Currency Translation
- Standardizing Entries, and
- Preparation for Consolidation Group Change

you need to execute the apportionment between the tasks *standardizing entries* and *preparation for consolidation group change*.

Apportionment of Reported Data and Standardizing Entries

Use

You use this function to value the reported financial data and standardizing entries using the proportion of a proportionally consolidated unit. The apportioned (proportionate) values are written to the totals database and are then available to other consolidation functions.

Prerequisites

You made the following settings in Customizing:

- You selected the accounting technique *proportional consolidation*.
- You assigned a method with accounting technique *proportional consolidation* to all proportionally consolidated units.
- You created the task *Apportionment* and assigned it to a task group in the consolidation monitor.

You executed the task for the collection of reported financial data in the data monitor. If applicable, you also executed the tasks for standardizing the financial data and for currency translation.

Features

The system apportions the reported financial data, which you recorded at their full amounts. In order to be able to display the unapportioned values after the apportionment, the system retains the original values and creates separate data records (proportion records), which are used to clear the non-apportioned portions of the original records. The focus of the apportionment is the investment proportion, which is specified in Customizing under *Consolidation of Investments → Methods → Assign Methods to the Consolidation Units*.

The system calculates the proportion records as follows:

$$\begin{aligned} \text{proportion value} &= \text{reported value} \times \text{proportion} - \text{reported value} \\ &= \text{reported value} \times (\text{proportion} - 1) \end{aligned}$$

Activities

You execute the apportionment task in the data monitor.

See also: [Executing Tasks in the Data Monitor \[Page 31\]](#)

Example

Say, the consolidation group owns 75% of a proportionally consolidated unit.

The table below shows which proportion records are generated from the reported financial data, and how the apportioned values are stored in the totals database.

Item	Description	Reported Data (PL 00)	Proportions for reported data	Values in Totals Database

Apportionment of Reported Data and Standardizing Entries

191100	Land & Buildings	1200	1200 *(0.75-1) =-300	900
191500	Machinery and Equipment	2000	-500	1500
135100	Raw Materials and Operating Supplies	1600	-400	1200
120100	Accounts Receivable	2000	-500	1500
110100	Cash	600	-150	450
250100	Common Stock	-1200	300	-900
250500	Additional Paid-In Capital	-200	50	-150
251100	Retained Earnings – Prior Years	-200	50	-150
251200	Retained Earnings – Current Year	-200	50	-150
201100	Accounts Payable	-4000	1000	-3000
201200	Other Liabilities	-1600	400	-1200
301100	Sales Revenue	-1700	425	-1275
310100	Cost of Materials	1000	-250	750
320900	Other Expenditures	500	-125	375

Proportion Change

Use

You use this function to record a change in the proportion of the investment (proportion increase or decrease).

Features

You can specify whether the proportion change is carried out at the beginning or the end of the period. Only one proportion change is possible per consolidation period.

The proportion change function treats balance sheet items and income statement items differently:

- Balance sheet items: The year-to-date values are valued with the new proportion.
- Income statement items:
 - The prior period values remain unchanged.
 - A proportion change
 - at the beginning of the period values the current period values with the new proportion
 - at the end of the period values the current period values with the old proportion

The clearing entry for the proportion change posts to item *Annual Net Income Prior to Proportion Change* or item *Clearing for Consolidation of Investments*.

The system performs the following when converting the subitems:

- If the proportion change takes place at the beginning of the period, the year-to-date value of the prior period is revalued by the proportion change.
- If the proportion change takes place at the end of the period, the year-to-date value of the current period is revalued by the proportion change.

The apportionment of the prior period values differs for proportion increases and decreases:

- Proportion increases post the adjustment to balance sheet items while converting the subitems to *Additions to Consolidation Group*. Furthermore, the system posts to the item *Annual Net Income Prior to Proportion Change*, instead of the *Annual Net Income* item.
- Proportion decreases post the adjustment to balance sheet items while converting the subitems to *Divestitures from Consolidation Group*. Here, the system posts to the item *Clearing for Consolidation of Investments*, instead of the *Annual Net Income* item.

Activities

You specify the new proportion for consolidation of investments in Customizing under step *Assign Methods to Consolidation Units*. You also specify whether the proportion change takes effect at the beginning or at the end of the period.

Proportion Change

Example

Example: Proportion Increase

Say, the proportion of a consolidation unit in period 001 is 75%. This is increased at the beginning of period 002 to 80%.

		P=001	P=002			
Item	SI	Reported Data	Proportions for reported data	Reported Data	Proportions for reported data	Total
		L=00; A=0	L=00; A=1	L=00; A=0	L=00; A=1	
M&E	Open.Bal.	100	-25			75
M&E	Additions			50	-10	40
M&E	Add. CG				5	5
Ret.Earn. (B/S)	Additions	-100	25	-50	10	-115
ANI Prior Prop.Chg.	Add. CG				-5	-5
Gain		-100	25	-50	10	-115
ANI (I/S)		100	-25	50	-10	115

Abbreviations:

- P = period
- SI = subitem
- L = posting level
- A = apportionment indicator (0 = no apportionment; 1 = with apportionment)
- M&E = machinery and equipment
- ANI = annual net income
- Prop.Chg. = proportion change
- Add. CG = additions to consolidation group
- Div. CG = divestitures from consolidation group

Example: Proportion Decrease

Say, the proportion of a consolidation unit in period 001 is 75%. This is decreased at the beginning of period 002 to 70%.

		P=001	P=002	
--	--	-------	-------	--

Proportion Change

Item	SI	Reported Data	Proportions for reported data	Reported Data	Proportions for reported data	Total
		L=00; A=0	L=00; A=1	L=00; A=0	L=00; A=1	
M&E	Open.Bal.	100	-25			75
M&E	Additions			50	-15	35
M&E	Div. CG				-5	-5
Ret.Earn. (B/S)	Additions	-100	25	-50	15	-110
Clear C/I	Div. CG				5	5
Gain		-100	25	-50	15	-110
ANI (I/S)		100	-25	50	-15	110

Apportionment with Elim. of IU Payables/Recv. and Rev./Exp.

Apportionment with Elim. of IU Payables/Recv. and Rev./Exp.

Use

You use this function to carry out the elimination of interunit payables/receivables and revenue/expense for proportionally consolidated units.

Integration

You utilize the functions for interunit elimination.

See also:

- [Interunit Elimination \[Page 270\]](#)
- [Two-sided Elimination Entries \[Page 272\]](#)

Prerequisites

You have customized the settings for the apportionment.

You have completed the tasks in the data monitor.

Features

The system uses the same procedure for posting the apportionment for all two-sided elimination entries, including the elimination if IU payables/receivables and revenue/expense.

Procedure with a single proportionally consolidated unit

If only one of the two consolidation units is proportionally consolidated, the system eliminates payables and receivables (or revenue and expenses) at the non-proportionally consolidated unit against the trading partner in accordance with the proportion. The system reclassifies the remaining amount (that is, the difference between 100% and the proportion percentage) of the payables/receivables (or revenue/expense) to the corresponding items "... to/from Third Parties" (for example, *Receivables from Third-Parties*).

Procedure with two proportionally consolidated units

If both consolidation units are proportionally consolidated, say at the percentage rates of p_1 and p_2 , and p_2 is less than p_1 , then the system eliminates the proportion of p_2 at the unit with rate p_1 , and reclassifies the remaining proportion ($p_1 - p_2$) to "third parties".



The procedure for two proportionally consolidated units, which is described here, is called the Minimum Procedure.

See also: [Apportionment Procedures for All Two-sided Eliminations \[Page 361\]](#)
(minimum procedure and product procedure)

Activities

Execute the task for interunit eliminations in the consolidation monitor.

Apportionment with Elim. of IU Payables/Recv. and Rev./Exp.

See also: [Consolidation Monitor \[Page 32\]](#)

Example

Say, unit A is consolidated with the purchase method, and unit B is proportionally consolidated with proportion rate of 40%.

Example: Elimination of IU payables/receivables without a difference

CU	PU	Item	Reported Data	Proportions for reported data	Two-sided Elimination	Proportions for elimination	Total
			L=00; A=0	L=00; A=1	L=20; A=0	L=20; A=1	
A	B	Rec/Pay	100		-100		0
B	A	Pay-TP	-100	$-100 \cdot (0.4 - 1) = 60$	100	$100 \cdot (0.4 - 1) = -60$	0
A	B	Rec-3rdP				$100 \cdot (1 - 0.4) = 60$	60

Abbreviations:

- CU = consolidation unit
- PU = partner unit
- L = posting level
- A = apportionment indicator (0 = no apportionment; 1 = with apportionment)
- Rec-3rdP = receivables from third parties
- Rec-TP = receivables from trading partners
- Pay-3rdP = payables to third parties
- Pay-TP = payables to trading partners
- D = difference

Example: Elimination of IU payables/receivables with a difference

CU	PU	Item	Reported Data	Proportions for reported data	Two-sided Elimination	Proportions for elimination	Total
			L=00; A=0	L=00; A=1	L=20; A=0	L=20; A=1	
A	B	Rec/Pay	90		-90		0
B	A	Pay-TP	-100	$-100 \cdot (0.4 - 1) = 60$	100	$100 \cdot (0.4 - 1) = -60$	0
B	A	D			-10	$-10 \cdot (0.4 - 1) = 6$	-4

Apportionment with Elim. of IU Payables/Recv. and Rev./Exp.

CU	PU	Item	Reported Data	Proportions for reported data	Two-sided Elimination	Proportions for elimination	Total
			L=00; A=0	L=00; A=1	L=20; A=0	L=20; A=1	
A	B	Rec-3rdP				$90 \cdot (1 - 0.4)$ =54	54

Apportionment for the Elimination of Investment Income

Apportionment for the Elimination of Investment Income

Use

You use this function to carry out the elimination of investment income for proportionally consolidated units.

Integration

You utilize the functions for interunit elimination.

See also:

- [Interunit Elimination \[Page 270\]](#)
- [Two-sided Elimination Entries \[Page 272\]](#)

The elimination of investment income is impacted by the apportionment function as well as the *Consolidation of Investments* component.

Prerequisites

You have customized the settings for the apportionment.

You have completed the tasks in the data monitor.

Features

The apportionment for the elimination of investment income works the same way as for the [elimination of IU payables/receivables and revenue/expense \[Page 356\]](#).

Example

Say, the consolidation group owns 75% of consolidation unit A. Unit A owns 80% of unit B. Unit B pays dividends of 100, 80 of which is paid to unit A.

In this example, the consolidation of investments activity *subsequent consolidation* is formally split into two parts (30/1 and 30/2)

- The first part represents the purchase method logic of subsequent consolidation when dividends are distributed.
- The second part represents the proportional consolidation logic for the distribution of dividends.

CU	Item	Reported Data	Proportions for reported data	Two-sided Elimination	Proportions for elimination	C/I Subsequent Cons.	Total	
		L=00; A=0	L=00; A=1	L=20; A=0	L=20; A=1	L= 30/1	L= 30/2	
A	Clr Divd			-80	16	20	-16	-60
A	MI-Clr Divd					-20	16	-4

Apportionment for the Elimination of Investment Income

CU	Item	Reported Data	Proportions for reported data	Two-sided Elimination	Proportions for elimination	C/I Subsequent Cons.	Total	
		L=00; A=0	L=00; A=1	L=20; A=0	L=20; A=1	L= 30/1	L= 30/2	
A	Ret.Earn. (B/S)	-80		80	-16		16	0
A	MI– Ret.Earn. (B/S)						-16	-16
A	Divd Inc.	-80		80				0
A	Invst Inc.– 3rdP				-16			-16
A	MI–ANI (I/S)						16	16
A	ANI (I/S)	80		-80	16		-16	0
B	Divd Distr.	100	-20	-80	16	-20	4	0
B	MI–Divd Distr.					20	-4	16
B	Clr Divd			80	-16	-20	16	60
B	MI–Clr Divd					20	-16	4

Abbreviations:

- CU = consolidation unit
- L = posting level
- A = apportionment indicator (0 = no apportionment; 1 = with apportionment)
- MI = minority interest
- Clr Divd = clearing item for dividend payments
- ANI = annual net income
- Divd Inc. = dividend income (received)
- Invst Inc.–3rdP = investment income from third parties
- Divd Distr. = dividend distributions

Apportionment Procedures for All Two-sided Eliminations

Use

You use this function to eliminate the two-sided relationships between two proportionally consolidated units. You can choose between the Minimum Procedure and the Product Procedure.

Features

Minimum Procedure

This type of apportionment carries out a complete elimination at the proportionally consolidated unit with the smaller proportion. At the proportionally consolidated unit with the larger proportion, the system posts to a "... *to/from Third Parties*" item (for example, *Receivables from Third Parties*).

Product Procedure

This type of apportionment carries out an elimination at both proportionally consolidated units using the (mathematical) product of the two proportions. The system clears the difference of the product to a "... *to/from Third Parties*" item (for example, to the item *Receivables from Third Parties* at the one consolidation unit and to the item *Payables to Third Parties* at the other consolidation unit).

Activities

1. In Customizing of Consolidation, choose *Master Data* → *Dimensions*.
2. Choose the desired apportionment procedure.

Example

Example: Minimum Procedure

See the following examples of minimum apportionment:

- [Apportionment with the Elimination of IU Payables/Receivables and Revenue/Expense \[Page 356\]](#)
- [Apportionment with the Elimination of IU Profit/Loss in Transferred Inventory \[Page 363\]](#)

Example: Product Procedure

Interunit payables/receivables are to be eliminated between consolidation units A and B. The consolidation group includes consolidation unit A at the proportion of $\frac{1}{2}$ (one half), and consolidation unit B at $\frac{1}{3}$ (one third).

CU	PU	Item	Reported Data	Proportions for reported data	Two-sided Elimination	Proportions for elimination	Total
			L=00; A=0	L=00; A=1	L=20; A=0	L=20; A=1	

Apportionment Procedures for All Two-sided Eliminations

CU	PU	Item	Reported Data	Proportions for reported data	Two-sided Elimination	Proportions for elimination	Total
			L=00; A=0	L=00; A=1	L=20; A=0	L=20; A=1	
A	B	Rec/Pay	90	$90 \cdot (1/2 - 1) = -45$	-90	$90 \cdot (1 - 1/2) = 45$	0
B	A	Pay-TP	-120	$-120 \cdot (1/3 - 1) = 80$	120	$-120 \cdot (1 - 1/3) = -80$	0
B	A	D			$90 + (-120) = -30$	$-30 \cdot (1/2 \cdot 1/3 - 1) = 25$	-5
A	B	Rec-3rdP				$90 \cdot 1/2 \cdot (1 - 1/3) = 30$	30
B	A	Pay-3rdP				$-120 \cdot 1/3 \cdot (1 - 1/2) = -20$	-20

Abbreviations:

- CU = consolidation unit
- PU = partner unit
- L = posting level
- A = apportionment indicator (0 = no apportionment; 1 = with apportionment)
- Rec-3rdP = receivables from third parties
- Rec-TP = receivables from trading partners
- Pay-3rdP = payables to third parties
- Pay-TP = payables to trading partners
- D = difference

Apportionment with Elimination of IU Profit/Loss in Inventory

Use

You use this function to correctly eliminate the interunit profit and loss of a proportionally consolidated unit (that is, according to its proportion).

Integration

You use the function [Elimination of IU Profit/Loss in Transferred Inventory \[Page 291\]](#).

Features

One proportionally consolidated unit:

If the inventory-managing or supplying consolidation unit is proportionally consolidated, the system does not clear the entire interunit profit/loss from the inventory item. Instead, the IU profit/loss is multiplied by the proportion.

Two proportionally consolidated units:

If both the inventory-managing unit and the supplying unit are proportionally consolidated, the system multiplies the interunit profit/loss either by the product of both proportions (product procedure) or by the smaller of the two proportions (minimum procedure).

See also:

[Apportionment Procedures for All Two-sided Eliminations \[Page 361\]](#) (product procedure and minimum procedure)

Example

Example: Elimination of IU Profit/Loss with the Minimum Procedure

Consolidation unit B supplies raw materials to A for a value of 120; production costs were 100. Interunit profit amounted to 30.

A has a proportion of 60%. B has a proportion of 50%. The minimum proportion is 50% (see emphasized proportion in the table).

CU	PU	Item	Reported Data	Proportions for reported data	Two-sided Elimination	Proportions for elimination	Total
			L=00; A=0	L=00; A=1	L=20; A=0	L=20; A=1	
A	B	RMOS	120	$120 \cdot (0.6 - 1) = -48$	-30	$-30 \cdot (0.5 - 1) = 15$	57
B		Expense	-100	$-100 \cdot (0.5 - 1) = 50$	30	$30 \cdot (0.5 - 1) = -15$	-35

Abbreviations:

- CU = consolidation unit

Apportionment with Elimination of IU Profit/Loss in Inventory

- PU = partner unit
- L = posting level
- A = apportionment indicator (0 = no apportionment; 1 = with apportionment)
- RMOS = raw materials and operating supplies

Example: Elimination of IU Profit/Loss with the Product Procedure

The initial data is the same as in the previous example. In this case, the product proportion is 30%.

CU	PU	Item	Reported Data	Proportions for reported data	Two-sided Elimination	Proportions for elimination	Total
			L=00; A=0	L=00; A=1	L=20; A=0	L=20; A=1	
A	B	RMOS	120	$120 \cdot (0.6 - 1) = -48$	-30	$-30 \cdot (0.6 \cdot 0.5 - 1) = 21$	63
B		Expense	-100	$-100 \cdot (0.5 - 1) = 50$	30	$30 \cdot (0.6 \cdot 0.5 - 1) = -21$	-41

Information System

Purpose

After you have completed your consolidation tasks, you may want create reports in order to evaluate data. This component comprises the various reporting functions. SAP supplies many standard reports that you can use, however, you can also create reports to meet you own individual requirements.

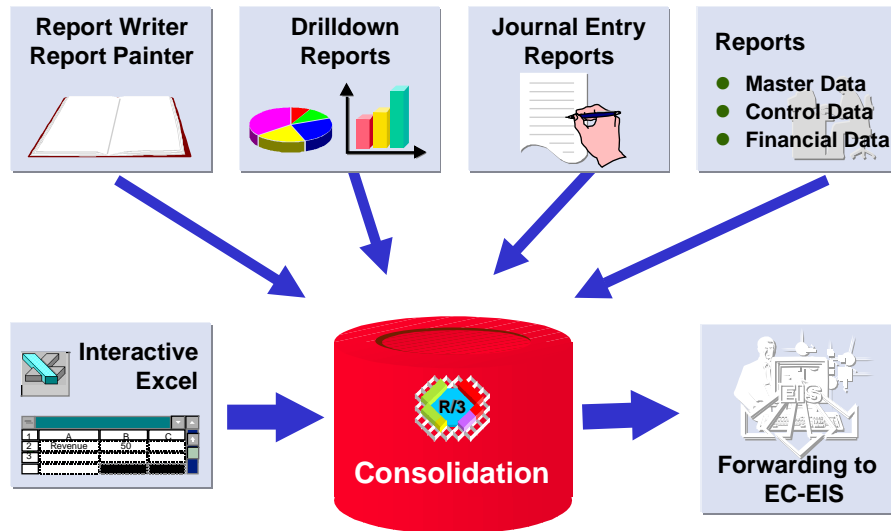
Features

- Master data, reported financial data, and control parameters form the basis of consolidation. You can use reports predefined by SAP to evaluate this data.
- If you want to evaluate the changes to financial data as a result of consolidation entries, you can create [journal entry reports \[Page 414\]](#).
- You can use [Report Writer or Report Painter \[Page 367\]](#) reports and [Drilldown Reporting \[Page 376\]](#) to evaluate consolidated data in reports using different criteria, for example:
 - Reports for consolidation units
 - Period and fiscal year comparisons
 - Listing of data by posting level, subitem, and so on

You can also create detailed reports for the notes to your consolidated financial statements or for internal information, for example, an asset history sheet, a sales-by-region report, and so on.
- To analyze data stored in the database, you can generate a database listing.
- You can use the [Interactive Excel \[Page 421\]](#) component to evaluate consolidation data in reports using the standard spreadsheet functions of Microsoft Excel and a live connection to the SAP System or an Access database of the offline data entry program.

The following figure shows all of the parts of the Information System.

Information System



Report Writer Reports

Purpose

You use the Report Writer – in conjunction with the Report Painter – to create reports with the data in SAP Consolidation.

The Report Painter uses a graphic reporting structure, which is the basis for the report definition. While defining the report, you are able to see the structure of the report as it appears when the data is output.

Features



You can use Report Writer reports in many SAP applications.

The following sections focus on the special features of Report Writer reports in SAP Consolidation.

For detailed information, see the SAP Library under *Accounting* → *Financial Accounting (FI)* → *Special Purpose Ledger (FI-SL)* → [Report Writer \[Ext.\]](#)

You can use Report Writer reports to:

- define reports
- edit reports
- execute reports using report groups

The following characteristics in SAP Consolidation are available for the reports:

- Dimension, version, and ledger
- Consolidation units, consolidation groups
- Financial statement items and subitems
- Fiscal years and periods
- and so on

See also

- [Library, Database Structure, Characteristics and Selection Logic \[Page 370\]](#)
- [Use of Sets and Custom Characteristics \[Page 372\]](#)
- [Rollup to Consolidation Groups \[Page 373\]](#)

Constraints

SAP Consolidation does not support *multiple selections* of data. Instead, you can use *variations* for the characteristics in the *General Selection* (see also: [General Selections \[Ext.\]](#)).

Report Writer Reports

Examples of Report Writer Reports in Consolidation

Example: Balance Sheet Changes

Report:	Balance Sheet Changes, Assets			
Consolidation Unit:	CU1000			
Period/Fiscal Year:	012/2000			
Assets	Reported (Local) Value	Standardizing Entries	Elimination Entries	Consolidated Value
Inventory	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX
Accounts Receivable and Other Assets	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX
Securities	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX
Total Current Assets	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX
Unpaid Equity Contributions	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX
Intangible Assets	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX
Property, Plant & Equipment	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX
Financial Assets	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX
Total Fixed Assets	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX
Prepayments/Accruals	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX
TOTAL ASSETS	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX	XXX,XXX,XXX.XX

Explanation:

- The columns use the *posting level* characteristic.
- The rows use a generated *item set*.

Example: Consolidated Income Statement of Business Areas

Report:	Income Statement by Business Areas		
Consolidation Group:	CG1		
Period/Fiscal Year:	012/2000		
	Annual Net Income	Net Sales	Return (in %)
Pest Control	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -

Report Writer Reports

Seeds	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX
Agriculture	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX
Dyes	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX
Industrial Chemicals	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX
Plastics	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX
Fine Chemicals	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX
Chemicals	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX
Baked Goods	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX
Beverages	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX
Soups	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX
Foods	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX
Cosmetics	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX
Pharmaceuticals	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX
Health Products	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX
TOTAL	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX -	XXX,XXX,XXX.XX

Explanation:

- The columns use financial statement items and a formula for the return.
- The rows use a custom characteristic *business area*.

Library, Database Structure, Characteristics and Selection Logic

For general information on libraries and characteristics, see [Library \[Ext.\]](#).

Library

SAP delivers the library **OCS** in client 000 for Report Writer reports in Consolidation.

Database Structure

The name of the database structure for Report Writer reports in Consolidation is **FIMC**.

It contains all of the essential characteristics needed for Report Writer reports in Consolidation.

Characteristics

Length of Characteristics

The length of the characteristics in the Report Writer must be less than or equal to 24 characters. Make sure this maximum length is not exceeded when defining custom characteristics in Consolidation for use with the Report Writer.

Discussion of Certain Characteristics

Certain characteristics of database structure FIMC need further explanation:

Characteristic		Explanation
RYEAR	Fiscal Year	<ul style="list-style-type: none"> Used for selecting data
RPMAX	Period	
CGYEAR	Fiscal year for drilling down a consolidation group	<ul style="list-style-type: none"> Time characteristics for drilling down the hierarchy Each is typically a single value – for better performance
PERID	Period for drilling down a consolidation group	
INICG	Consolidation Group	You are urged to use this characteristic uniformly within a report.

You can use the two separate characteristics for the fiscal year and the period for restatements, for example, to report on the values of past fiscal years for the present consolidation group hierarchy.

Consolidation-Specific Selection Logic

Reports for Consolidation Groups

The system uses the consolidation-specific selection logic for the following characteristics in Report Writer reports for consolidation groups:

- Consolidation group (INICG)
(with accounting techniques of the consolidation of investments methods)

Library, Database Structure, Characteristics and Selection Logic

- *Posting level* (PLEVL)
- *Partner unit* (RBUPTR)

In Report Writer reports for consolidation groups, the data selection is dependent on the posting level:

- Posting levels 02, 12, 22:
The system selects only the data records that were posted in the selected consolidation group.
- Posting levels 20, 21:
The system selects only the data records where both the consolidation unit itself and the partner unit belong to the consolidation group. (However, the system does not select data records of consolidation units and partner units which are consolidated using the equity method or the mutual stock method.)
- Posting level 30:
The system selects only the data records that were posted in the selected consolidation group or a lower-level group subordinate to the selected consolidation group.
- All posting levels:
The date of first consolidation and the date of divestiture are used when determining whether a consolidation unit belongs to a consolidation group.

Reports for Consolidation Units

In reports for consolidation units (without the characteristic *consolidation group*), the system does not assess the aforementioned dependencies that are valid for consolidation groups.

Use of Sets and Custom Characteristics

Sets

In SAP Consolidation you can automatically generate financial statement (FS) item sets for Report Writer reports: After [creating the hierarchy of the consolidation chart of accounts \[Page 52\]](#), you choose *Edit* → *Generate Sets*.

When you change the item hierarchy, the system automatically offers you to re-generate the FS item sets (if you specified this feature in Customizing for Consolidation at *Master Data* → *Define Dimensions*).

The same applies to the [maintenance of organizational units \[Page 43\]](#).



We recommend that you use these automatically generated sets for the Report Writer reports.

Custom Characteristics

If you have defined custom characteristics, these automatically appear in the library.

Report Writer reports treat custom subassignments the same as standard subassignments.

Value Variables and Set Variables

Note the following when you specify sets or values when running a Report Writer report:

Variable	Value Entry	No Entry
Set Variable	Selection options appear.	Do not make an entry if you want to select <SPACE> as the set variable. Example with the posting level: You select posting level "space" (for reported data from realtime updates)
Value Variable	You specify single values.	Do not make an entry if you want to select all values. Example with the posting level: You select all posting levels.

See also *Accounting* → *Financial Accounting (FI)* → *Special Purpose Ledger (FI-SL)* → *Tools* → [Variable \[Ext.\]](#)

Rollup to Consolidation Groups

Use

You can use this function to increase performance of Report Writer reports.

The use of this function is optional.



The rollup discussed in this topic is not the same as the [data transfer method “rollup”](#) [\[Page 166\]](#).

Prerequisites

To enable rollups to consolidation groups, you need to make the following settings in Customizing for Consolidation:

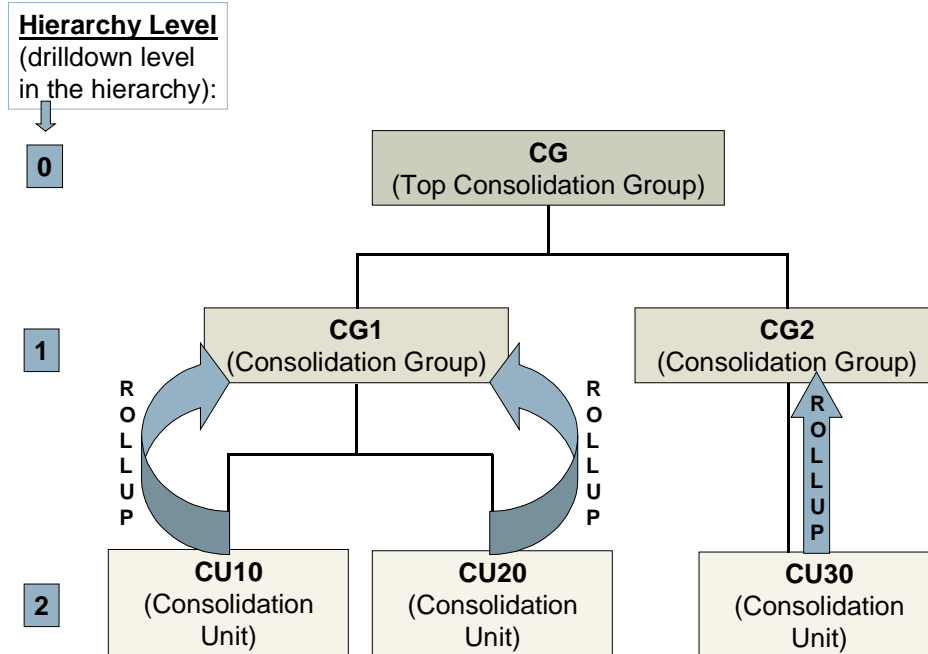
- You define a task under *Data → Rollup to Consolidation Groups: Define Task*.
- You assign this task to:
 - the task group for the data monitor, or
 - the task group for the consolidation monitor

Features

You can use a rollup to summarize and transfer the data of consolidation units to consolidation groups and consolidation group hierarchies. This provides faster access to the required data because the Report Writer reports no longer need to select data from the entire hierarchy, but rather only down to the specified hierarchy level.

Example: Rollup up to Hierarchy Level 1

Rollup to Consolidation Groups



The following functional restrictions exist when rolling up data to the rollup consolidation units of the consolidation groups:

- The rollup produces useful results only for those consolidation groups, to which no individual consolidation unit has been assigned more than once (in lower-level consolidation groups). Due to the level-by-level rollups, the data of such a unit would be rolled up multiple times to the consolidation group – that is, once to each lower-level consolidation group to which the unit is assigned.
- The system does not roll up additional field information to higher levels. Hence, these details get lost during a rollup.
- Rollups ignore group-dependent data records that were created by the rollup program in preparation for consolidation group changes (posting levels 02, 12, 22 and 24).
- Rollups do not recognize method changes for consolidation units that are assigned more than once within a hierarchy.
- When the rollup is started directly in the menu, the rollup is considered a task in the consolidation monitor. Even if the rollup is also defined as a task in the data monitor, the system still rolls up all (rollup-capable) data records – including totals records with posting levels greater than 10.

Activities

You start a rollup and the Report Writer report as follows:

1. You start the rollup in the data monitor or the consolidation monitor.
2. In the report, restrict the selection to a certain drilldown level of the hierarchy (hierarchy level).

Rollup to Consolidation Groups

(In the example, this is hierarchy level 1 – see figure.)

3. Execute the Report Writer report.

Drilldown Reporting

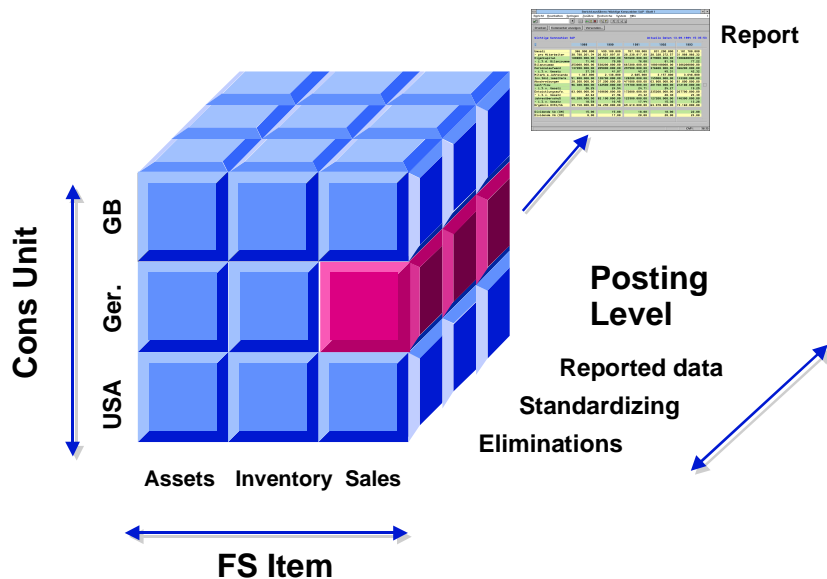
Drilldown Reporting

Purpose

This component is a dialog-oriented information system which you can use to generate reports on the data in your SAP consolidation database.

The component adheres to the principle illustrated below: For example, you can create report on the sales of individual consolidation units that differentiates between posting levels (reported financial data, standardizing entries, elimination entries).

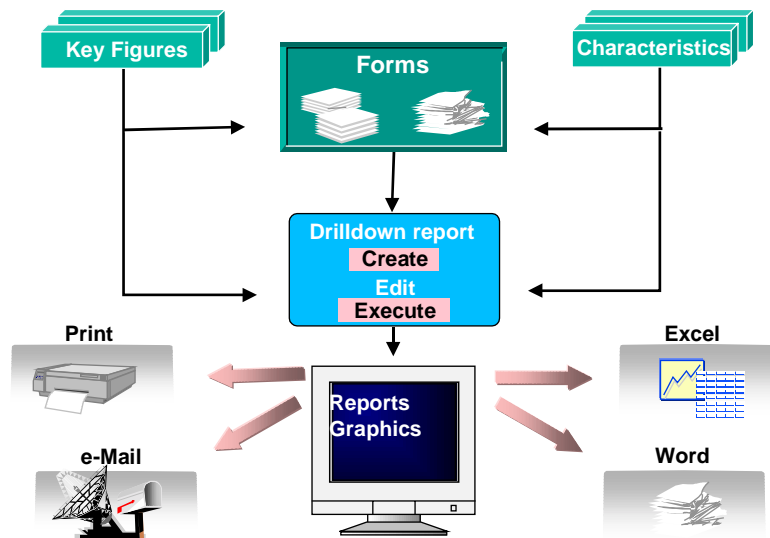
The Principle of Drilldown Reporting



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Drilldown reporting has been designed as follows: Using the forms, both the key figures and the characteristics become part of a drilldown report. After a drilldown report has been created, you can still modify it, for example to include different consolidation units. You can also "mail" the drilldown report or post-edit it in MS Office applications.

The Architecture of Drilldown Reporting



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Implementation Considerations

Implement interactive drilldown reporting if you want to evaluate the data in your SAP Consolidation component according to various characteristics.

Integration

Many other components of the SAP System feature the functions of drilldown report. Under certain circumstances, the drilldown reports of different components can use the report/report interface to call each other interactively.

Features

You can use drilldown report layouts and output to create simple, data-driven reports as well as complex, formatted reports. Drilldown reports can reflect and analyze the data in your SAP System.

Drilldown reporting features easy-to-use functions for the following scenarios:

Interactive Editing of a Report

- Sort
- Pre-defined conditions
- Ranking lists
- Exceptions
- Editing of key figures and characteristics

Drilldown Reporting

Navigation in the Database

- Next level
- Next object on the same level
- Level hiding
- Detail lists and drilldown lists
- Saving of data that was selected for a report (for example to further process the report at a later date)

Outputting and Sending Reports

- SAP Graphics and SAPmail
- Print functions in MS Excel and Winword
- Level hiding

Drilldown reporting in SAP Consolidation lets you use characteristics with special semantics: **Custom characteristics**, **standard attributes** and **custom attributes** [\[Ext.\]](#) can serve as selection criteria as well as drilldown characteristics. For more detailed information, see the units [Reference Characteristics \[Page 406\]](#) and [Hierarchy-related Options in Drilldown Reporting \[Page 394\]](#).

You can use the characteristic **totals consolidation group** to define a selection criterion for consolidation groups in a form or report, thus specifying any combination of consolidation groups and units as a totals consolidation group.



For more information, see the field help for the totals consolidation group.

Likewise, you can have **totals items** to easily define a selection criterion for financial statement items.

You can create global variables with an SAP Exit for certain standard characteristics, which simplify the handling of drilldown reports considerably. For more information, see the unit [Variable \[Page 384\]](#).

You can manipulate the display properties of [hierarchies \[Page 394\]](#) to the extent that the report proposes hierarchy names while selecting the hierarchies. This also simplifies the handling of interactive drilldown reports.

Drilldown Report

Definition

A report that was created using interactive drilldown reporting. It can be an ad-hoc report or a form report.

Use

Drilldown reports in SAP Consolidation are used to evaluate the consolidation data according to the information requirements of various users.

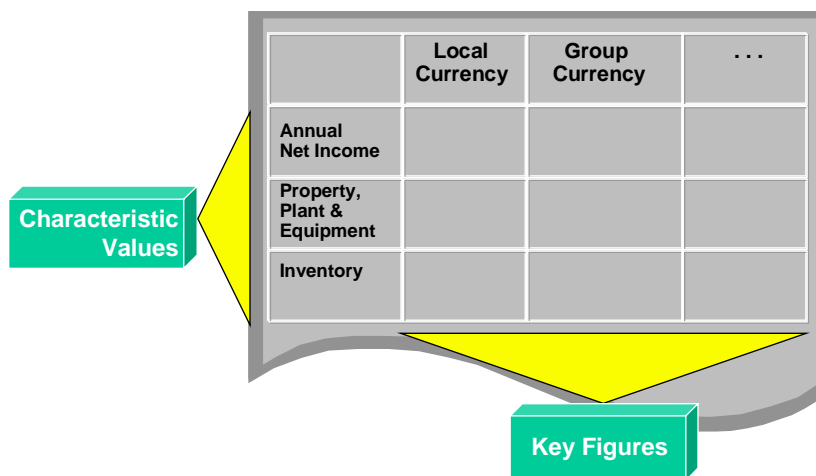
Types of Drilldown Reports

A [drilldown report \[Ext.\]](#) can be created as either an ad-hoc report or a form report.

Ad-hoc Report

In ad-hoc reports you assign key figures to the characteristic values. You choose **variables**, **characteristics** and **key figures** that are used to create a report. You can delimit any characteristic to a specified characteristic value. The selected characteristics unfold a multi-dimensional datacube. The columns of the report consist of the key figures. You can create an ad-hoc report very quickly and flexibly because no form is required.

Ad-hoc Report



For more information, see [Ad-hoc Report \[Ext.\]](#).

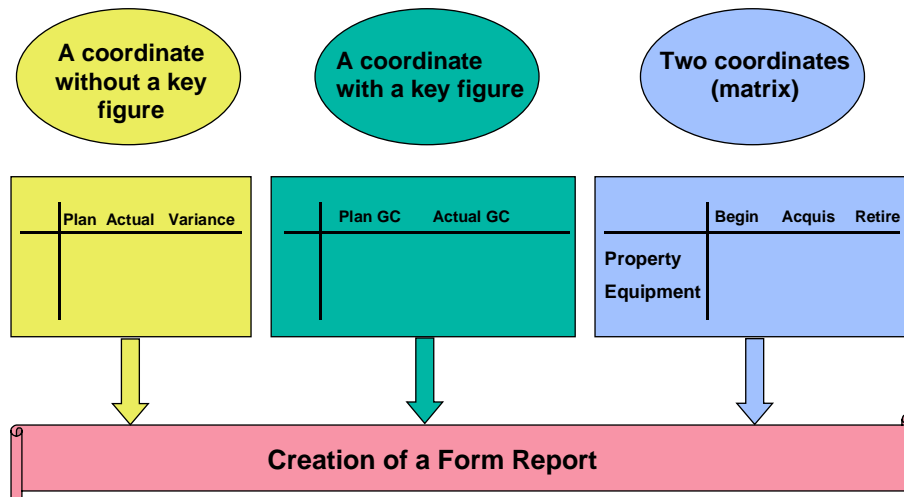
Form Report

You define a form that specifies the form report. A form report consists of one or two coordinates. Form reports are more target-oriented than ad-hoc reports. The contents and layout of a form

Drilldown Report

report can be designed as needed. Form reports are generally used for official and, more importantly, statutory reporting.

The Different Types of Forms



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For more information, see [Ad-hoc Reports and Form Reports \[Ext.\]](#).

Structure

Elements of a Drilldown Report

- Characteristics
- Variable
- Output type
- Options

Report Parameters

- General parameters such as the report name, long text, report type (form vs. ad-hoc)
- Basic information about the report such as the short text, report description, author, date created, last date changed
- General selection criteria such as the fiscal year, period (from/to), dimension, consolidation chart of accounts, ledger, version
- Variables: ledger source, fiscal year, dimension, balance sheet hierarchy, totals consolidation group
- The chosen hierarchy

- The chosen characteristics



For more information, see [Functions in the Report Definition \[Ext.\]](#) in the general drilldown documentation.

Characteristic

Characteristic

Definition

A data field without a value that is used in drilldown reporting.

You can display characteristic values when you have cube of three characteristics, each side of which represents one of those characteristics.

A combination of characteristics is called an **object**.

Use

In drilldown reporting, you can use characteristics as a means of structuring the data.

The following is a sampling of possible characteristics in SAP Consolidation:

- Consolidation unit: United States
- Financial statement item: Sales
- Posting level: Reported financial data
- Custom characteristics (for example, country, controlling area, company, profit center, business area)

Integration

Drilldown reporting uses characteristics system-wide.

For more information about characteristics, see [Choosing Characteristics \[Ext.\]](#).

Key Figure

Definition

A data field with a value that can be used in drilldown reporting as follows:

- as an amount (local currency, group currency, transaction currency)
- as a quantity

Use

You can choose key figures in forms or in reports.

Some examples of key figures are: sales, number of employees (basic key figure), earnings by sales, sales by number of employees (computed key figures).

Integration

Drilldown reporting uses key figures system-wide. For more information, see [Choosing Key Figures \[Ext.\]](#).

Variable

Variable

Definition

A parameter of a report or form, which you specify when defining or executing a report.

In drilldown reporting of SAP Consolidation you can create global variables for some of the standard characteristics, thus simplifying the handling of drilldown reporting considerably.

For more information, see [Variables \[Ext.\]](#) in the general drilldown documentation, and also [Defining Global Variables \[Ext.\]](#) in the Implementation Guide for Consolidation.

Use

You use a local variable if it is only used in a specific report or form. However, you use global variables if you want them to be available in all reports or forms.

Structure

SAP Consolidation features several types and categories of variable, which you can use depending on how often they are needed or reused, and which specific drilldown goals are to be achieved.

Types of variables in SAP Consolidation

	Global Variables	Local Variables
Leading character(s)	&	&\$
Where valid	all reports or forms	only one report or form
Where defined	centrally in Customizing	in the report or form itself
Example	consolidation chart of accounts	customer group

You can use the following **variable categories** in your forms and reports:

- Variables for characteristic values
- Variables for texts
- Variables for formulas

These variables are only defined in reports that use formulas and in the form itself. Substitution occurs when the report is executed. You can use formula variables, for example, as an easy way of portraying simulations and projections.

- Variables for [hierarchies \[Page 394\]](#)

Standard Report

Definition

A report that is available in the standard SAP Consolidation system.

For more information, see [Report \[Ext.\]](#) in the general drilldown documentation.

Use

You use standard reports for form-oriented reporting, for example to meet statutory reporting requirements. The following are some of the reports that are available:

- Balance sheet (for example, balance sheet for the current year with percentage rates)
- Income statement (yearly/quarterly/monthly comparisons, sales by region, income by functional areas)
- Changes in values
- Asset history sheet

For more information, see the documentation for the individual reports, which will soon be available.

Custom, User-defined Report

Custom, User-defined Report

Definition


A report that is not based on forms, but rather created by the user "ad-hoc" to achieve her individual reporting objectives.

Use

You use custom reports to evaluate the data in your system according to the characteristics you select whenever the available form reports do not accommodate the information required.

Structure

The following characteristics are predefined in ad-hoc reports: dimension, totals consolidation group, version, year.

You can choose the report parameters one-by-one and click  to display those parameters.

Form

Definition

A form is the basis for a drilldown report. It defines the basic content and technical design of report listings. One should regard it as a semi-finished report definition that is later completed with characteristics and key figures.

As opposed to an ad-hoc report, this type of drilldown report requires a form with the same ID as the drilldown report.

Use

You use forms to design drilldown reports according to your own criteria. Forms enable you to analyze SAP data according to all characteristics that are contained in the totals database of Consolidation.

In the list of available characteristics, you choose the characteristics you need for your drilldown report.

Structure

A form has rows and columns. The rows display the values of the [characteristics \[Page 382\]](#) that are selected for the columns.

There are different types of forms:

- One coordinate forms without a key figure (simplest type)
- One coordinate forms with a key figure
- Two coordinate forms with a key figure (most complex)

When creating a form, you define the name and the form type.

Creating a Form

Creating a Form

Use

Use this procedure if you want to create a [form \[Page 387\]](#) for a drilldown report.

Prerequisites

The selection screen of the drilldown report is on your screen.

Procedure

1. Choose *Environment* → *Form* → *Create*.

The following screen appears: *Report Painter: Create Form*.

2. Specify a short and a long text for the name of the form.

SAP recommends using the same name for the drilldown report and the corresponding form.

3. Under *Structure*, choose one of the following structures:

- two coordinates (matrix)
- one coordinate with key figure
- one coordinate without key figure

4. If applicable, in the *Copy from* area choose a form that should serve as a template.

5. Choose *Create*.

Result

You can create a form and re-use the form for a variety of reports.

This form has characteristics and key figures in the rows and columns.

Creating a Drilldown Report with a Form

Use

You use these steps to create a drilldown report that is based on a form.

Prerequisites


You want to report on data from within SAP Consolidation according to your own criteria, that is [characteristics \[Ext.\]](#).

Procedure

1. In the SAP level, choose *Accounting → Enterprise Controlling → Consolidation → Information system → Tools → Drilldown reporting → Drilldown report → Create*.
2. Enter a suitable name for the drilldown report.
3. In the *Report type* area, select *Report with form*.
4. Choose a form using Possible Entries (F4) and choose *Create*.



There is also an option to create a report using a template. To do this, under *Copy from* choose a template report in the list of possible entries.

5. You create a *Report with hierarchy* by selecting  (*hierarchy*) for one of the characteristics. After doing this, a window appears in which you can select a hierarchy.



Here are examples of hierarchies you can choose from if the characteristic is an organizational unit:

- Consolidation group hierarchy (entry of a hierarchy name – this option lets you specify a fixed name for the hierarchy)
- Hierarchy from totals consolidation group (This is a hierarchy variable for an SAP exit. If you choose this option, the system always selects the hierarchy that is suitable for the transaction data.)
- No hierarchy
- Enter at execution (If chosen, you can enter the name when the report is executed.)
- Hierarchy names explicitly defined in Customizing
- Custom, user-created hierarchy variable with a fixed value

Creating a Drilldown Report with a Form



The prior-to-the-last option has the advantage that the hierarchy names defined in Customizing appear as a default when choosing the hierarchy in the report.

By contrast, using hierarchy variables with a fixed value has the advantage that the fixed value is defined centrally in Customizing. Changing the fixed value centrally takes effect immediately in all reports that use the hierarchy variable.

6. In the list of available *Characteristics*, choose the characteristics you need for your drilldown report.

You can make the list of available characteristics systemic by first choosing a characteristic group.



Examples of characteristic groups you can choose at this point:

- Posting characteristics
- Organizational units
- Subassignments
- Version, date

7. Choose the *Output Type* of the drilldown report. You can choose from graphic, classic, object list (ALV) and XXL (spreadsheet).

8. Choose further *Options*:

- Print setup (drilldown and details, or details only)
- Extras

Under Extras you can maintain and display comments, make report assignments, use the functions of [inSight \[Ext.\]](#) for your drilldown report, and either read all of the data or reread the data at each navigation step.

Result

You can reuse the form as often as you like for your reports.

Drilldown Reports Available in Standard SAP Consolidation

Definition

Various drilldown reports you use on the data of SAP Consolidation to meet your informational requirements.

Use

You use these reports to evaluate the data at different time intervals with different criteria.

Standard Report

Standard reports evaluate the balance sheet of the current year using the percentages for each FS item in relationship with the balance sheet total. The output can be disclosed on your public consolidated statements.

Comparison Reports

The following comparisons are available:

Period Comparisons	Use
Prior-year comparison with balance sheet percentages	The prior-year comparison is very popular. You can portray the group's structure (for example with an industry-specific balance sheet structure) by also outputting the proportions of individual balance sheet items to the corporate balance sheet total.
Multi-year comparison	Multi-year comparisons (such as the 10-year comparison) is also often found in public consolidated statements.
Quarterly comparison	Interim statements are often needed to meet the requirements of IAS and US GAAP. These comparisons are of interest to shareholders and analysts.
Monthly comparison	The monthly comparison is mostly used by internal corporate controllers for timely recognition of negative variances and reactions thereupon.

Other Comparisons	Use
Comparison of local vs. group currency	This comparison shows the effects of currency translation.

Drilldown Reports Available in Standard SAP Consolidation

Version comparison	You can use this comparison, for example, to create multiple versions of consolidated statements in parallel according to various accounting principles and valuations.
Comparison of consolidation units	shows the materiality of individual consolidation units
Comparison of consolidation groups	shows the materiality of individual consolidation groups
Comparison of consolidation unit vs. consolidation groups	shows the parent unit's influence on the consolidation group

Changes in Values

Changes from reported values to consolidated values	shows how the aggregated statement changed to the consolidated statement
Quarterly changes in the income statement	shows the short-term changes to the income statement. This is of interest to internal controlling as well as equity markets.
Quarterly changes in the balance sheet	shows the short-term changes to the balance sheet. This is of interest to internal controlling as well as equity markets.
Monthly changes	shows very short-term changes to the balance sheet and/or income statement. This is of interest to internal controlling as well as corporate management.

Other Reports

Sales by region	shows which regions generated the most sales.
Income statement by functional area	is useful for generating an income statement according to the cost of sales method.
Changes in investee equity	IAS 5 requires (further) disclosures on the changes in stockholders' equity during a fiscal year. Changes in equity are also useful for multi-period comparisons (for example, 10-year comparisons) for assessing the financing of the group over a time period.
Asset history sheet	discloses information about capital investments and the remaining book values of individual portions of fixed assets.

You customize the standard drilldown reports as follows:

1. Copy the desired report from client 000 to the client you work in, or from another system to the system you use, by running [Import or Transport Reports \[Ext.\]](#) in the Implementation Guide for Consolidation.

Drilldown Reports Available in Standard SAP Consolidation

2. Likewise, copy the desired forms for the report from client 000 to the client you work in, or from another system to the system you use, by running: [Import or Transport Forms \[Ext.\]](#) in the Implementation Guide for Consolidation.
3. Adjust the chart of accounts and dimension as needed.
4. Replace the fixed values in the global variables with the parameters you require.

Structure

You can use the standard SAP reports in addition to your own custom reports. This minimizes the effort involved in reporting on the various aspects of consolidation data.

Hierarchy-related Options in Drilldown Reporting

Hierarchy-related Options in Drilldown Reporting

Use

You use this function to portray hierarchies in drilldown reports to meet your individual reporting requirements.

Features

The purpose of hierarchy-related drilldown is to evaluate hierarchies using consolidation units or financial statement items, and to use different hierarchies as the basis for evaluating a *specific* snapshot of your data.

Hierarchy-related Drilldowns: Hierarchy of Consolidation Units

A hierarchy already exists in a dimension. This is differentiated as follows:

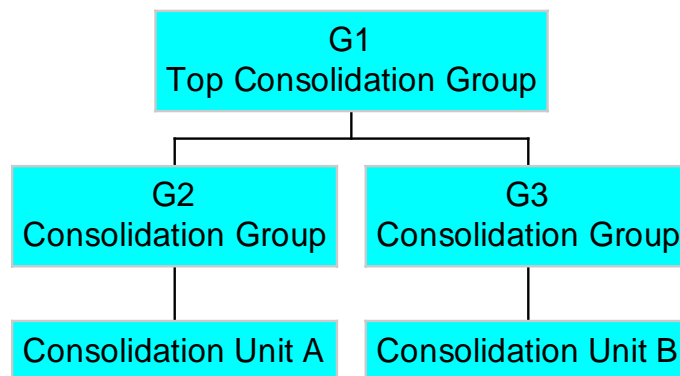
	Case 1	Case 2
A consolidation unit belongs to "n" consolidation group(s) in the hierarchy	$n = 1$	$n > 1$
Accounting Technique	all	The consolidation unit is included fully or proportionately in only one consolidation group at the most; the unit can be included in other consolidation groups using the equity method or the mutual stock method.
Display of Consolidation Unit	The consolidation unit is shown only in the one consolidation group.	The consolidation unit is shown only in the group that includes it fully or proportionately; the unit is hidden in all other groups.



In all other cases an error message is displayed which reveals that the hierarchy assigned to the drilldown report is ambiguous. This is done because a consolidation unit has been included fully or proportionately in more than one consolidation group.

Example

Consolidation Group Hierarchy



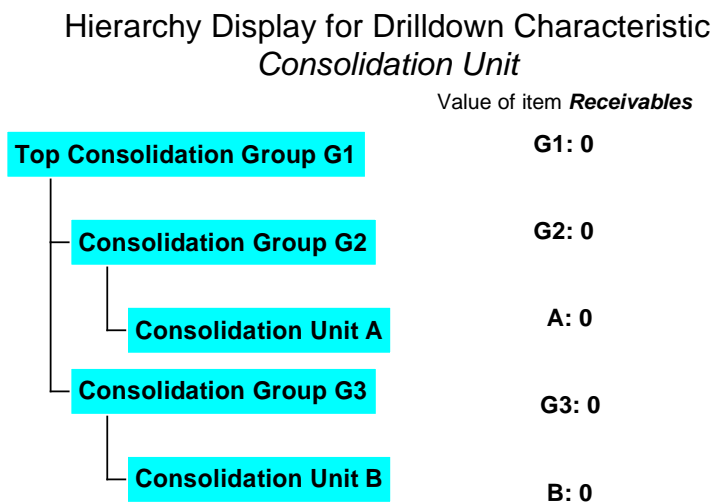
Consolidation Unit	Item	Partner Unit	Entry at posting level 00 (in group currency)	Entry at posting level 20
A	Receivables	B	100+	100–
B	Receivables	A	200+	200–
A	Payables	B	200–	200+
B	Payables	A	100–	100+

When the consolidation group is constructed as shown in the illustration, you could execute a **Report 1** for the relationships shown above with the following parameters:

Item	Receivables
Totals Consolidation Group	G1
Navigation Characteristic	Consolidation unit with a hierarchy for G1

This report would have the following output:

Hierarchy-related Options in Drilldown Reporting

**Advantage**

- The hierarchy contains the individual consolidation units.

Disadvantages

- Particularly the group-dependent eliminations are shown from the perspective of totals consolidation group G1, hence the desired results are not displayed at the lower levels of the hierarchy.
- The report can only be built so that each consolidation unit is fully or proportionately consolidated in one consolidation group at the most.

Alternatively, you could execute a **Report 2** with the following parameters:

Item	Receivables
Totals Consolidation Group	G1
Navigation Characteristics	<ul style="list-style-type: none"> • Consolidation unit with a hierarchy for G1 • Consolidation Unit

This report would have the following output:

Hierarchy-related Options in Drilldown Reporting

Hierarchy Display for Drilldown Characteristics *Consolidation Group and Consolidation Unit*

Value of item **Receivables** with drilldown by consolidation units:

	Value at Group level	Drilldown → Cons.Unit	Value at Unit level
G1 Totals Consolidation Group	0	A B	0 0
G1 Consolidation Group	G1: 300-	A B	100- 200-
G2 Consolidation Group	G2: 100+	A	100
G3 Consolidation Group	G3: 200+	B	200

Advantages

- All amounts are displayed accurately, even at all hierarchy levels.
- A consolidation unit can be fully or proportionately consolidated in multiple consolidation groups. (This is the case, for example, when consolidation units are transferred from one consolidation group to another.)

Disadvantage

- Details on individual consolidation units can only be obtained by drilling down.



However, it is possible to combine the drilldowns by consolidation group and consolidation unit in the printout of the report.

You can do this in *Settings for Mass Printing* under : *Report* → *Print layout* → *Drilldown and Detail List* → *Mass Print* → *Settings*. Change the sort sequence so that the consolidation group appears as the first characteristic, and the consolidation unit appears as the second characteristic. Make the consolidation unit the most detailed breakdown, and select *No page break*.

Hierarchy-related Drilldowns: Hierarchy of FS Items

You display the income statement with a hierarchy of financial statement items.

Option: Report Definitions

- Case 1: The selection is defined using the FS item. Here you generally specify several single values and ranges. You use the FS item as a navigation characteristic, too.

Hierarchy-related Options in Drilldown Reporting

- Case 2: In general, you defined a totals item in hierarchy maintenance, which reflects the total of all income statement items. This makes the report definition easier as in Case 1 in addition to the fact that you use the characteristic *totals item* for the selection criteria: Specify "Income statement total" as a single value. As in Case 1, you use the characteristic *FS item* to display a drilldown or hierarchy of FS items.




In a form, never use the characteristics *FS item* and *totals item* as selection criteria at the same time.

Hierarchy Variables

Hierarchy variables exist for totals consolidation groups and totals items. You can use hierarchy variables both in ad-hoc reports and form reports.



For more information, see [Specify Global Variables \[Ext.\]](#) in the Implementation Guide for SAP Consolidation.

If you choose the hierarchy icon  for a characteristic, you must specify the desired hierarchy in another window.

Activities

As an example, we will define a drilldown report that compares the amounts in local and group currency. A hierarchy of consolidation units is to be displayed on the first screen. Note that the consolidation unit must be unambiguous in a report using local currency. This can only be achieved by defining two reports, and linking them via the [Report-Report Interface \[Ext.\]](#):

1. Create a one-dimensional form with a key figure and the following general selections:

- Ledger
- Fiscal Year
- Dimension
- Consolidation Unit

Create a local variable for each of these general selections.

One column of the form displays the values in local currency, a second column displays the values in group currency.

2. Create a report for this form.
3. In the report choose the following characteristics:
 - Version
 - Consolidation Chart of Accounts
 - Item
 - Totals Consolidation Group
 - Posting Level
4. Define a local variable for each characteristic.

Hierarchy-related Options in Drilldown Reporting

5. Create an ad-hoc report. Choose the following characteristics:
 - Consolidation Chart of Accounts
 - Item
 - Consolidation Unit
 - Posting Level 00
6. Choose the consolidation chart of accounts as the local variable, and the group currency as the key figure.
7. For the ledger, choose the global variable `&0FROMTCG`
8. Sort the characteristics as follows:
 - Consolidation Unit
 - Item
9. Assign the ad-hoc report you just created to the form report you created beforehand.
10. Start the ad-hoc report.

Result

Using a hierarchy you can compare the amounts in local currency and group currency of consolidation units. Mark a cell with a consolidation unit and select the function *Execute report*.

Restatement Options using Drilldown Reporting

Use

You use this function, for example, to list the figures of past fiscal years the current premises (for example, the corporate structure) after corporate rebuilding or after shifting to a different accounting standard (for example from German HGB to IAS or US GAAP).

Prerequisites

You have already created a report using interactive drilldown and want it to be, for example, based on a modified consolidation group hierarchy.

Features

Restatements permit "what-if" analyses with the following content:

- **Version-based restatement using the reference version:**

Here, the reference version of a report determines which (version-dependent) composition of consolidation units in a consolidation group is to be used for the selection of transaction data.

If the attributes of the organizational units are version and date sensitive, the reference version is also the version for which the attributes of the organizational unit are determined.

With a version-based restatement you can compare the data of different consolidation versions.

- **Temporal restatement using the reference period and reference fiscal year**

Here, the reference period and reference fiscal year of a report determines which (date-dependent) composition of consolidation units in a consolidation group is to be used for the selection of transaction data.

If the attributes of the organizational units are version and date sensitive, the reference period and reference fiscal year are also the period and fiscal year for which the attributes of the organizational unit are determined.

With a temporal restatement you can compare the data of different periods or years.

You can use these "what-if" analyses to portray how a changed composition of a consolidation group can affect the group's earnings. This can be useful to show the results of an addition or divestiture of a certain consolidation unit.

The following illustration shows the display options for a changed hierarchy:

Restatement Options using Drilldown Reporting

Restatements in Reporting

TOP		1997	
SEG1		SEG2	
BA1	BA2	BA3	BA4
10	30	20	30

Report w/o Restatement	
Sales	
	1997 1998
TOP	90 130
└ SEG1	40 80
└ SEG2	50 50
Drilldown ↓	
SEG2	50 50
└ BA3	20 0
└ BA4	30 35
└ BA5	0 15

TOP		1998	
SEG1		SEG2	
BA1	BA2	BA3	BA4
20	20	40	35
			15

Report with Restatement	
Sales	
	1997 1998
TOP	90 130
└ SEG1	60 80
└ SEG2	30 50
Drilldown ↓	
SEG2	30 50
└ BA4	30 35
└ BA5	0 15

Note that in the illustrated **Reports without and with Restatement** the change in the composition of business areas takes effect at different dates.

- The **report without restatement** shows the same values at the top consolidation group level as those that are shown in the report with restatement. In fiscal year 1997, the subdivision of sales revenue is based on the hierarchy of the year 1997, in fiscal year 1998 it is based on the hierarchy of the year 1998. You define this report by specifying the fiscal year in each column.
- The **report with restatement** evaluates the data of the old fiscal year (1997) with the hierarchy of the current fiscal year (1998), the latter of which is the reference fiscal year. The definition of this report is different from the definition of the report without restatement, in that the reference fiscal year 1998 is specified in the general selection screens of the report.



This technique can be used to portray the corporate group as if it had existed in 1997 in the constellation of 1998. This can be used, for instance, to ensure a high comparability of the consolidated statements of several fiscal years in a often-changing consolidation group.

The [reference fiscal year \[Page 411\]](#) relevant in this case is the one that reporting uses as the base for the reference characteristic when drilling down the consolidation group into consolidation units. The selection of transaction data uses the reference fiscal year to determine the (date-dependent) composition of consolidation units in a consolidation group.

If the reference fiscal year is not specified, the characteristic fiscal year is used instead of the reference fiscal year for drilling the hierarchy and determining the attributes. This is the case with the report without restatement.



The report with restatement uses the same fiscal year for both columns in a hierarchy drilldown; therefore, you can also use the characteristic *consolidation unit*

Restatement Options using Drilldown Reporting

for breakdowns and hierarchy drilldowns. However, this is only possible if the consolidation unit in question is included using the purchase method or proportional consolidation in only one consolidation group.

Limitations of Restatements

Restatements are not possible when dealing with group-dependent postings that reflect very complex business transactions. For example, this is the case with postings for the consolidation of investments.

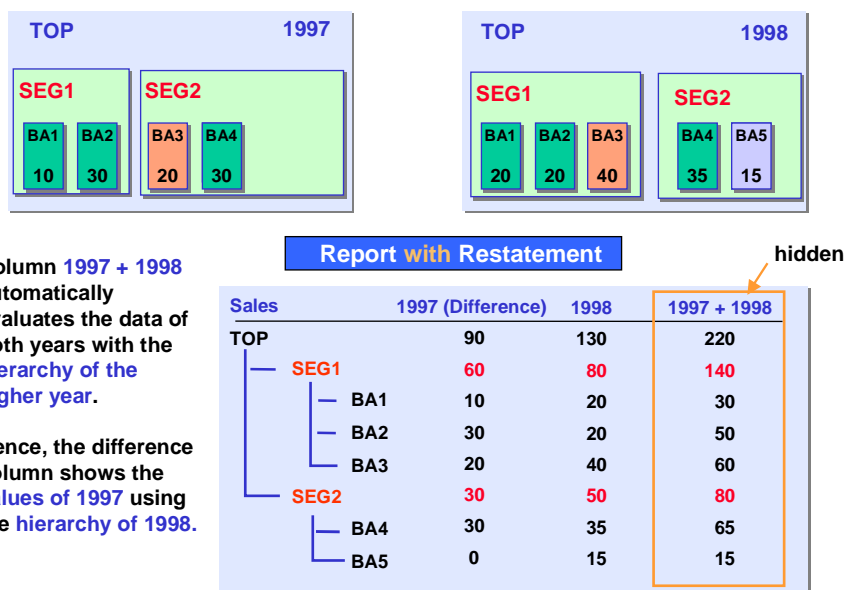
Restatement Options up to and Including Release 4.5

Reference characteristics are not available in Release 4.5 and earlier.

The following illustration shows the available restatement options in SAP systems with Release 4.5 and earlier. A means of simulating the hierarchy of the year 1998 is achieved by creating the total of the amounts of both fiscal years at a given FS item (in a hidden column) and showing the "old" fiscal year 1997 as the difference between the total of both years (1997 and 1998) and the amount of fiscal year 1998.

Restatement in Drilldown Reporting

-- Technique up to Release 4.5 --



Activities

Create your reports with reference versions to state additional information about the influence of individual consolidation units and consolidation groups as well as its history. Do this as follows:

1. In the SAP Consolidation menu choose *Information system* → *Tools* → *Drilldown reporting*.

The screen *Execute Drilldown Report: Selection* appears.

2. Choose *Environment* → *Form* → *Create*.

The screen *Report Painter: Create Form* appears.

Restatement Options using Drilldown Reporting

Define two columns. Confine the selection of data to the version. Define local variables 1 and 2 for each version. Create a local variable for the reference version in the general selection area. Save the form and create the report.




The general drilldown documentation contains all further information for creating and using forms: see [Form \[Ext.\]](#).

3. Choose the hierarchy name of the consolidation group and define the following:
dimension, consolidation group, version, fiscal year, period

4. Choose .

The drilldown report is executed. The output is shown in the fashion you select beforehand (for example, as a classic drilldown report).

5. To save the output, choose *Report* → *Save data*
6. Afterwards, go back to the drilldown report selection screen and choose  again.



At this point, you should copy the definition of the initial report to a new report, so you only need to enter the parameters that are to be changed for the additional version.

7. Now choose, for example, a different version so you can run a version-based restatement. Do not change the other parameters.
8. Execute the modified drilldown report and save the output.
9. Compare the output of the two reports.

Result

You have three versions of your report: the two reports you created utilizing the columns, and the reference version. Specify that one of the two versions you created is to serve as the reference version.

Totals Consolidation Group

Totals Consolidation Group

Definition

A characteristic in drilldown reporting for SAP Consolidation.

Use

The totals consolidation group is any desired combination of consolidation groups for reporting purposes.

The characteristics totals consolidation group and consolidation group are different if a consolidation group (e.g., an upper CG) contains one or more other consolidation groups (e.g., a lower CG).

You use the characteristic **totals consolidation group** whenever you want to formulate a selection condition in a form or a report.

You use the characteristic **consolidation group** if you want to display drilldowns of consolidation groups in a hierarchy display of a report.

Consolidation group hierarchies can be displayed only for the characteristic consolidation group, but not for the totals consolidation group.

Example

Say, the consolidation group ON-TOP CG only contains one other consolidation group, BENEATH CG. The annual net income of ON-TOP CG amounts to 1000 currency units, 200 of which belongs to BENEATH CG and the remainder to ON-TOP CG.

When you define a report with the selection condition **totals consolidation group = ON-TOP CG**, then the system displays the total value for ON-TOP CG including all lower groups, hence including the values for BENEATH CG.

In this example, the report shows an annual net income of 1000 currency units.

When you define a report with the selection condition **consolidation group = ON-TOP CG**, then the system only displays the value that belongs to ON-TOP CG, that is, a delta value (total value for ON-TOP CG less the total values of all lower groups).

In this example, the report shows an annual net income of 800 currency units.

Totals Item

Definition

A characteristic in drilldown reporting for SAP Consolidation.

Use

The totals item is any desired combination of financial statement items for reporting purposes.

Use the characteristic **totals item** for easy entry of selection conditions concerning FS items in a form or a report: Instead of specifying each and every value item, or range of items, that belongs to a totals item, you can use the characteristic totals item and specify the totals item itself. If you use totals items for the definition of cells (or rows or columns), you should specify the characteristic totals item in all cells; otherwise, the report may not show the correct values.

You use the characteristic **FS item** if you want to display drilldowns of financial statement items in a hierarchy display of a report.



Item hierarchies can be displayed only for the characteristic FS item, but not for the totals item.

Reference Characteristics

Definition

[Characteristics \[Page 382\]](#) that determine the version, period and year for selecting transaction data in drilldown reporting, which are used:

- to drill down the consolidation groups into consolidation units
- to determine the custom attributes of the consolidation units. (In contrast to the standard attributes, the custom attributes of a consolidation unit are not version and date dependent.)

SAP Consolidation uses the following reference characteristics:

- [Reference version \[Page 408\]](#)
- [Reference period \[Page 409\]](#)
- [Reference fiscal year \[Page 411\]](#)

Use

Reference characteristics are used in drilldown reporting as the basis for drilling into the consolidation units of a consolidation group.

Furthermore, they are used for determining the attributes of consolidation units. But this only applies to attributes that are version and date-dependent.

Reference Version

The reference version determines which version is used for drilling into the consolidation units of a consolidation group. If a consolidation version is specified in addition to the reference version, the consolidation version determines the version that is used for reading transaction data.

If no reference version is specified, then the characteristic *consolidation version* is used for hierarchy drilling and attribute determinations. In this case, the consolidation version must be unambiguously specified for each cell (or row or column) of the report. Moreover, the consolidation version always determines the version of the transaction data to be selected.

Reference Period

The reference period determines the period for which the consolidation group hierarchy and the attributes are read. The consolidation group hierarchy and attributes are the basis for interpreting the transaction data. The period determines the period of the transaction data to be read. If no reference period is specified, then the characteristic *period* is used for hierarchy drilling and attribute determinations.

Reference Fiscal Year

The reference fiscal year determines the fiscal year for which the consolidation group hierarchy and the attributes are read. The consolidation group hierarchy and attributes are the basis for interpreting the transaction data. The fiscal year determines the fiscal year of the transaction data to be read. If the reference fiscal year is not specified, the characteristic *fiscal year* is used for hierarchy drilldowns and attribute determination.

Example

See the examples that follow in units [Reference Version \[Page 408\]](#), [Reference Fiscal Year \[Page 411\]](#), and [Reference Period \[Page 409\]](#):

Version-based Restatement using Reporting

Temporal Restatement in Reporting: Yearly Comparison

Temporal Restatement in Reporting: Period Comparison

Reference Version

Reference Version

Definition

The reference version of a report is the version that is used during the selection of transaction data to determine the (version-dependent) grouping of consolidation units in a consolidation group.

It is one of the [characteristics \[Page 382\]](#) that are used in drilldown reporting for selecting transaction data for a consolidation group.

Use

You use the reference version to explicitly specify in drilldown reporting the parameters for drilling into the consolidation units of a consolidation group.

If no reference version is specified, then the characteristic *consolidation version* is used for hierarchy drilling and attribute determination. In this case, the consolidation version must be unambiguously specified for each cell (or row or column) of the report. Moreover, the consolidation version always determines the version of the transaction data to be selected. If a consolidation version is specified in addition to the reference version, the consolidation version determines the version that is used for reading transaction data.

Example

Version-based Restatement using Reporting

You define a form with one coordinate as follows:

Single values	Dimension
	Totals consolidation group
	Fiscal year
	Reference version
Columns	2 columns with the same key figure
Difference between the columns	Consolidation version 100 vs. 200

The corresponding report shows transaction data for the two consolidation versions in the two columns. However, the report uses the composition of the consolidation group as the basis for the reference version. If you specify the consolidation version of the first column (100) as the reference period, reporting then re-interprets the data of the second column. This means that the data of the second column is selected for consolidation version 200. However, this is based on the composition of the consolidation group according to consolidation version 100 (the reference version). This enables the report to show a drilldown on the characteristic *consolidation group* that shows a hierarchy for consolidation version 100.

Reference Period

Definition

The period that is used as the reference characteristic for drilling into the consolidation units of a consolidation group. The reference period of a report is the period that is used during the selection of transaction data to determine the (date-sensitive) grouping of consolidation units in a consolidation group.

[The characteristic \[Page 382\]](#) that enables you to explicitly specify in drilldown reporting the parameters for drilling into the consolidation units of a consolidation group. This is necessary to select transaction data for a consolidation group.

If the attributes of the organizational units are version and date sensitive, the reference period is also the period for which the attributes of the organizational unit are determined.

Use

As with all reference characteristics, the reference period is a basis for drilling into the consolidation units of a consolidation group, and determines which period is used to read the consolidation group hierarchy and the attributes. The consolidation group hierarchy and attributes are the basis for interpreting the transaction data. The period determines the period of the transaction data to be read.

If no reference period is specified, then the characteristic *period* is used for hierarchy drilling and attribute determinations. If the period is specified in a cell (or a row or a column) of the report, then the highest of the specified periods is used as the reference period. If the period is not specified in a cell of the report, then the value 16 is used as the reference period.

The reference period can only be used in conjunction with the consolidation group, the totals consolidation group or a version and date-sensitive attribute. If the reference period in a form is defined in the cell definition, instead of in the general selection, the reference period must then be specified in all other cells as well.

Example

Temporal Restatement in Reporting: Period Comparison

You define a form with one coordinate as follows:

Single values	Dimension
	Totals consolidation group
	Consolidation version
	Fiscal year
	Reference Period
Columns	2 columns with the same key figure
Difference between the columns	Period range 0-12 vs. 0-6

The corresponding report shows year-to-date transaction data for the two time periods in the two columns. However, the report uses the composition of the consolidation group as the basis for the reference period. If you specify the ending period of the first column (12) as the reference

Reference Period

period, reporting then re-interprets the data of the second column. This means that the data of the second column is selected for period range 0-6. However, this is based on the composition of the consolidation group according to period12 (the reference period). This enables the report to show a drilldown on the characteristic *consolidation group* that shows a hierarchy for the given fiscal year and period 12.

Reference Fiscal Year

Definition

The fiscal year that is used as the reference characteristic for drilling into the consolidation units of a consolidation group. The reference fiscal year of a report is the fiscal year that is used during the selection of transaction data to determine the (date-sensitive) grouping of consolidation units in a consolidation group.

If the attributes of the organizational units are version and date sensitive, the reference fiscal year is also the year for which the attributes of the organizational unit are determined.

Use

The reference fiscal year determines the fiscal year for which the consolidation group hierarchy and the attributes are read. The latter (consolidation group hierarchy and attributes) are the basis for interpreting the transaction data. The fiscal year determines the fiscal year of the transaction data to be read.

In this case the following applies: The fiscal year must be specified for each cell (or row or column) of the report. If more than one fiscal year is entered, the highest fiscal year specified is used as the reference fiscal year.

The reference fiscal year can only be used in conjunction with the consolidation group, the totals consolidation group or a version and date-sensitive attribute. If the reference fiscal year in a form is determined in the cell definition, instead of in the general selection, the reference fiscal year must then be specified in all cells.

Example

Temporal Restatement in Reporting: Yearly Comparison

You define a form with one coordinate as follows:

Single values	Dimension
	Totals consolidation group
	Consolidation version
	Reference fiscal year
Columns	2 columns with the same key figure
Difference between the columns	Fiscal year 2001 vs. fiscal year 2000

The corresponding report shows transaction data for the two fiscal years in the two columns. However, the report uses the composition of the consolidation group as the basis for the reference fiscal year. If you specify the fiscal year of the first column (2001) as the reference fiscal year, reporting then re-interprets the data of the second column. This means that the data of the second column is selected for fiscal year 2000. However, this is based on the composition of the consolidation group according to fiscal year 2001 - the reference fiscal year. This enables the report to show a drilldown on the characteristic *consolidation group* that shows a hierarchy for fiscal year 2001.

Creating, Executing, Reusing, and Modifying Drilldown Reports






Purpose

You use this process to process drilldown reports for evaluating data in SAP Consolidation.

Prerequisites

You have maintained your consolidation data in the SAP Consolidation component.

Process Flow

1. Define a drilldown report in the [Implementation Guide \[Ext.\]](#) for Consolidation.
Decide whether you want to create a form report or an ad-hoc report.
Also decide if you want to use variables. If you want to use variables, choose .
2. If you want to create a form report, define a form.
3. If you want to create an ad-hoc report, choose the characteristics and key figures that you find of most interest.
4. If you want to make use of the hierarchy-related options in drilldown reporting, select the flag  for the characteristic that is to be drilled down.
For more information, see [Hierarchy-related Options in Drilldown Reporting \[Page 394\]](#).
5. Execute the report by choosing .
6. If you want to double-check your selection, choose  to display the report parameters.
7. If you want to re-use the report, at a later date you can rerun the report with updated data by choosing .
8. If you want to modify a report, change the report parameters and save the report.



If you want to retain the original report, save the changed report under a new name.

Result

You utilized the capabilities of drilldown reports, in particular the reusability of once-only defined reports.

Journal Entry Reports

Journal Entry Reports

Purpose

Within the consolidated financial statements, value-based changes in individual financial data are entered in the SAP system with posting documents. The journal entries, that means the line items of postings to the posting levels of consolidation (posting level 01 to 30), can be displayed by means of the journal entry reports.

You use these components, when you want to create journal entry reports with the help of the predetermined logic.

Implementation Considerations

Choose these components if you want to display the changes in individual financial data, which are based on the consolidation entry. In contrast to the database listing of journal entries, on application of the logic the posting levels are selected. For more information about this logic, read the section "Classification of Entries with Posting Levels" in the unit [Postings \[Page 201\]](#) in the Consolidation manual in the SAP Library.

Features

With the help of the journal entry reports you can select all consolidation documents flexibly and also display them hierarchically. In this way you can evaluate the postings according to freely selectable sort sequences and summarizations.

Fundamental sort criteria are:

- Document type
- Document number
- FS item number
- Consolidation unit

You can change the structure of the journal entry report. Settings which are delivered as standard in the journal entry layouts are available for this. Though the above mentioned sort criteria and possible summarizations are predetermined by the journal entry layout.

In addition to that in the section [Define Journal Entry Layouts \[Ext.\]](#) in the Consolidation Implementation Guide, you can define more journal entry layouts according to your requirements.

Journal Entry Report

Definition

Report which is created by means of the information system and gives information about the individual postings in the SAP Consolidation component.

Use

You use the journal entry report when you want to analyze the affected items from the consolidation entries.

Structure

The journal entry report is structured as follows:

The global parameters are listed in the first header:

- Dimension
- Consolidation chart of accounts
- Version
- Period

The relevant selections are listed for the respective report in the second header:

- Effective until period
- Chosen journal entry layout
- Treatment of reversal documents
- Chosen currency

The posting document, which is selected by means of the journal entry layout, is listed in the data block of the journal entry report. Here you can see the individual posting lines of documents in the respective currency, chosen by you.

Journal Entry Layout

Journal Entry Layout

Definition

Layout which determines the structure of the [Journal Entry Report \[Page 415\]](#).

Use

You use the journal entry layout to determine the hierarchical structure of the list output. This involves the following:

- which characteristics and key figures of journal entries are displayed in which order
- which characteristics should be cumulated.

You can define one of the journal entry layouts as a **proposal**. This is then used as standard when you have not used a journal entry layout in a terminal session.

Standard System

Technical name of journal entry layout	Long text	Objective
CS01-01	Documents per consolidation unit	For the individual consolidation-specific document types, documents posted in the selected period are displayed in transaction, local and group currency.
CS01-02	Documents per consolidation unit with additional account assignment	In addition to CS01-01 the partner relationships are delivered with this one.
CS01-03	FS items per document type	For the individual consolidation-specific document types, the FS items posted in the selected period are displayed. The posted amounts are displayed using the document number.
CS01-04	FS items per document type and consolidation unit	In addition to CS01-03 the consolidation units are delivered with this one. This means that the journal entries are first sorted by document types, and within a document type by consolidation units.

Journal Entry Layout

CS01-05	FS items per document type by consolidation unit	In contrast to CS01-04 the consolidation-specific document types are displayed first by FS item and then by consolidation unit.
CS01-01	FS items per consolidation unit and document type	Here the consolidation-specific postings are disclosed by consolidation unit, for each affected FS item.
CS03-01	FS items by consolidation units	First arranged by FS items and then by consolidation units, the posted amounts are displayed here by means of the individual documents.
CS03-02	FS items by document types	First arranged by FS items and then by document types, the posted amounts are displayed here by means of the individual documents.
CS03-03	FS items by document types and consolidation unit	First arranged by FS items and then by document types as well as consolidation units, the posted amounts are displayed here by means of the individual documents.
CS04-01	Document journal	The individual documents are displayed with the following components: <ul style="list-style-type: none"> • Document type • Posting line • FS item • Cons unit • Amount in transaction and group currency
CS04-02	Audit trail with text	The individual documents are displayed with the following components: <ul style="list-style-type: none"> • Document number • Document type (with long text) • Posting explanation

Journal Entry Layout**Structure**

The journal entry report, which is based on the journal entry layout, has the following structure:

The global parameters with which you work are listed in the header of the journal entry report.

Further selections, which you have made for your journal entry layout, are displayed in the second block. These are some of the selection parameters and characteristics with clear characteristic value in the selected data. For example this could be:

- Effective until period
- Journal entry layout
- Treatment of reversal documents
- Selected currency

In the list, characteristics and key figures are displayed in a hierarchical list structure according to the journal entry layout. Characteristics with clear values (= potentially redundant information) are displayed in the list header, to keep the list clearly arranged.

Creating a Journal Entry Report from the Standard System

Use

Use this procedure to create a journal entry report from the [Standard System \[Page 416\]](#).

Prerequisites

You want to analyze your consolidation data by means of the journal entry report.

Procedure

1. In the SAP Consolidation component choose *Information system* → *Journal entries*.
You reach the screen *Journal entries*.
2. Limit the search to the journal entries as described in [Create a Journal Entry Layout \[Page 420\]](#).
3. In the technical parameters, select one of the journal entry layouts from the standard system.
4. Copy the layout from client 100 into the client in which you are working.
5. Create your journal entry report on the basis of the journal entry layout.

Create a Journal Entry Layout and Use as the Basis of a Report

Create a Journal Entry Layout and Use as the Basis of a Report

Use

You use this procedure to create further layouts for the evaluation of data in the SAP Consolidation component, in addition to the journal entry layouts offered in the [Standard System \[Page 419\]](#).

Prerequisites

Your need for information exceeds the layouts available in the standard system.

Procedure

1. In the Consolidation Implementation Guide choose the section [Define Journal Entry Layouts \[Ext.\]](#) and follow the procedure which is described there.
2. In the Consolidation application menu choose: *Information system* → *Tools* → *Journal entries*. You reach the dialog box *journal entry report*.
3. Select one journal entry report, limit the search by entering further criteria. Here you have the following choices:
 - Organizational units
 - Version/Time period
 - Technical settings
 - Further restrictions
4. Save your entries.

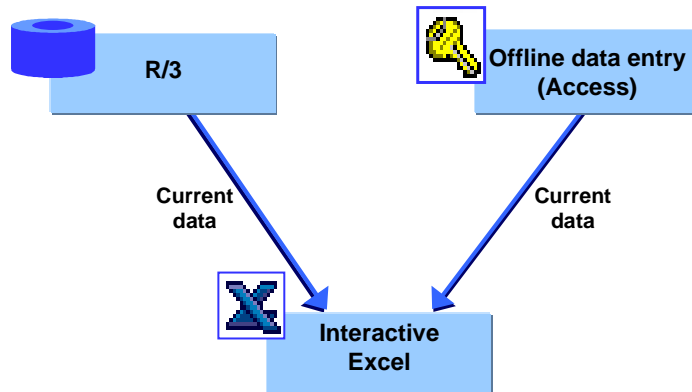
Result

You can use the journal entry layout repeatedly for your journal entry reports.

Reporting with Interactive Excel

Purpose

This component enables you to evaluate current data from a SAP System or Microsoft Access database in user-defined reports, as shown in the following graphic:



Implementation Considerations

You can use Interactive Excel to create reports on data from the following sources:

- A central Access or SAP System database (through a network)
- An Access database residing locally on your PC

Features

- **Flexible definition of reports**

Interactive Excel enables you to evaluate data in the following report types:

- Data matrices
- Pivot tables
- Additions to reports, for example charts

In a report, you evaluate financial data for various characteristics and combinations of characteristics. In order to simplify definition of a report, you can use lists of proposals for the characteristics predefined in Interactive Excel by accessing master data and control parameters that exist in a SAP System or Microsoft Access database. However, you are also free to define your own report or part of a report without using values from Access, and to apply any formatting that you require.

- **Excel formatting**

Interactive Excel is added on to the standard Microsoft Excel application in the form of a template. It therefore has the advantage of being based on a well-known spreadsheet program that offers a wide range of formatting functions.

Reporting with Interactive Excel

- **Import of report data**

Current data can be imported from a database into a report for the purpose of evaluation. Data imported from the SAP System originates from the Consolidation totals table.

- **Refreshing of report data**

A live link to the relevant database enables report data to be automatically refreshed after any changes in the report definition (for example a change in the fiscal year). You also have the option of triggering a refresh at any time, in order to overwrite data in a report with the up-to-the-minute data from the database.

- **Manual refreshing of pivot tables**

If you already created a pivot table for reporting on the data processed in Interactive Excel, you can refresh the data for the pivot table without having to creating an entirely new pivot table. To do this, go to Interactive Excel and choose *Consolidation* → *Pivot table* → *Refresh*.

With this feature, you can flexibly create and adapt your reports to meet your changing demands.

Opening a New Workbook with Interactive Excel

Prerequisites

You have installed Microsoft Excel 97 and the Interactive Excel component provided by SAP.



If you open an existing workbook from Excel that has been created using the Interactive Excel template, the menu option *SAP* automatically appears. You can use this to log on to a database connected to the SAP System.

Procedure

1. Start Microsoft Excel.
2. In the Excel menu, choose *File* → *New*. Open the Interactive Excel template by double-clicking on the *SAPActiveX* icon in the *General* group.
3. In the following dialog box, choose *Enable macros*.
4. Alternatively, the installation can create an Interactive Excel icon in the SAP Systems Start Menu.

Result

The item *SAP* is added to the standard Excel menu. You use this to log on to a SAP Systems or MS Access database.

Interactive Database Connection

Use

This central function of Interactive Excel enables you to do the following:

- Save reported financial data from a data entry form to the database
- Import up-to-the-minute data into reports defined in Interactive Excel
- Use master data and control parameters stored in the database as value proposals when defining data entry forms and reports

Prerequisites

You have access to the appropriate database.

Features

Communication Between Interactive Excel and the Database

Data can be transferred between Interactive Excel and a database as follows:

- You can only save data entered in an Interactive Excel form to an Access database for the offline data entry program.
- You can import data from an Access database **or** a SAP System into an Interactive Excel report.

Loading of Interface Texts for Interactive Excel

- When using an Access database for the offline data entry program

The interface texts for Interactive Excel are stored in the Access database and originate in the SAP System. You specify the text language when you download master data and control parameters from the central SAP System into the database.

- When using a SAP System as a database

The language that you specify when logging on to the SAP System determines the interface language of Interactive Excel.

Connecting Interactive Excel to a Database

Prerequisites

You have opened an empty or predefined file that was created using the Interactive Excel template.

Procedure

Logging On to an Access Database

1. Choose *SAP* → *Logon* → *MS Access*.

In the following dialog box, enter your user name and password for the PC data entry program and specify the relevant database file and path, if necessary using the *Browse* function.

The entries that you make here are saved as defaults for the next time you log on. You only need to reenter the password.

If an authorization check is active in your database, choose *More*. Check the default values in the additional fields and change the Access user name and password if required.

2. Choose *Open*.

Logging On to an SAP System

1. Choose *SAP* → *Logon* → *R/3*.
2. Use the standard R/3 logon popup to log on to the R/3 System.

The language that you specify when logging on determines the interface language of the Interactive Excel component.

Result

You are connected to the database and the item *Consolidation* for Interactive Excel is added to the standard Excel menu. Additional functions appear under the menu item *SAP*.



You can use a workbook with both SAP and Access interchangeably, however each workbook can only be connected to a single database at a time.

Creation of Reports on the Basis of Interactive Data Matrices

Use

You can use this function to create a report in the form of a data matrix, into which current data can be imported from a database at any time.

Prerequisites

- You have installed Microsoft Excel 2000 or Microsoft Excel 97 and the Interactive Excel component provided by SAP.
- The source database for report data resides either locally on your PC or can be accessed through your local area network.

Data Matrix

Definition

User-defined table in Interactive Excel that can function as either a data entry form or as a report.

Use

You can use data matrices for the following purposes:

- Entering financial data in an Access database for the offline data entry program
The parent in a consolidation group usually decides whether it will define the data entry matrices for all subsidiaries using Interactive Excel, or whether it will allow the subsidiaries to define their own matrices.
- Reporting on the basis of current financial data in a SAP System or Access database for the offline data entry program

Structure

A data matrix consists of the following elements:

Header Data

Characteristics that are valid for a whole matrix and appear outside the row and column layout of the matrix. Single values (for example, fiscal year or version) or set aggregations (for example, a consolidation group consisting of several consolidation units) can be used for these characteristics. Each characteristic value that is defined as header data fills exactly one cell. The values that you select are inserted into the sheet in a block, but you can subsequently move them to a different position.

Constants

Characteristics that are fixed for a whole matrix. You specify these characteristics during matrix definition, after which they are hidden in the matrix and can not longer be selected during further definition.

Column Layout

Multiple values or set aggregations for a characteristic, which extend across several columns. A column layout in a matrix can consist of several rows. These rows do not necessarily have to be positioned directly beneath one another.

Row Layout

Multiple values or set aggregations for a characteristic, or one or more hierarchies, which extend across several rows. A row layout in a matrix can consist of several columns. These columns do not necessarily have to be positioned directly beneath one another.

User-Defined Entries

Empty rows or columns in the column/row layout (in other words where no characteristics are specified for a whole column/row). In reporting, you can use these cells for your own functions, for example, an Excel formula.

Data Matrix

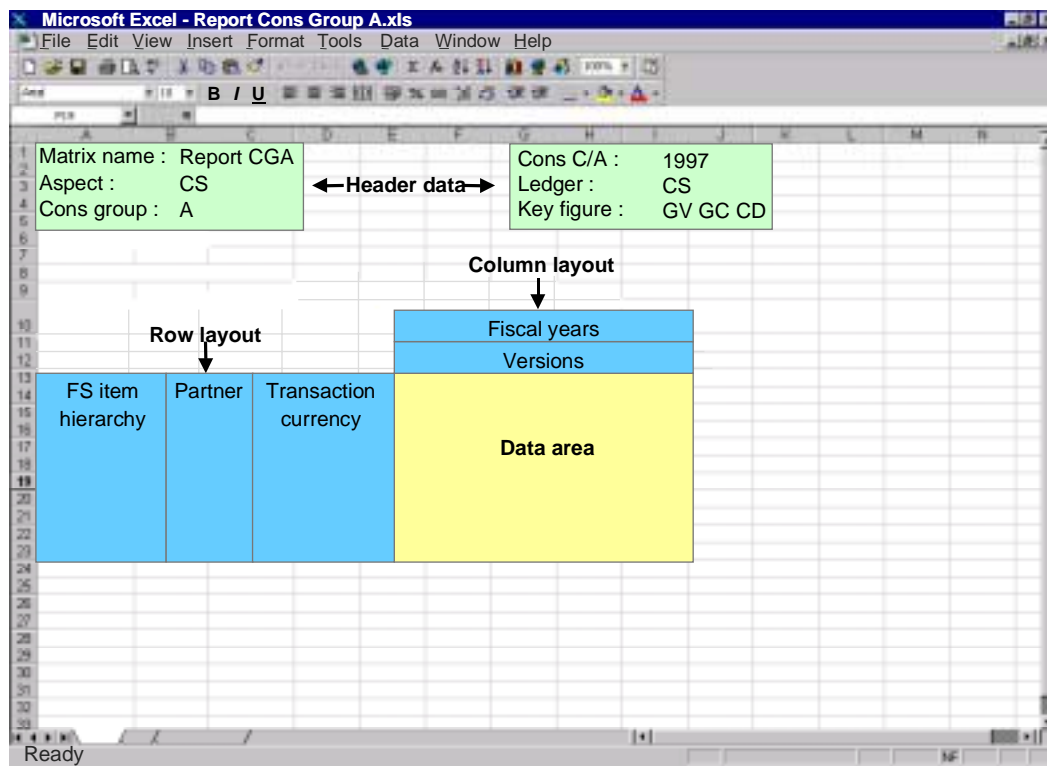
Data Area

Area directly adjacent to the row and column layouts, in which financial data is entered or report data displayed.



Interactive Excel must be able to identify the row and column layout before it can identify a data area. The program cannot distinguish a layout that only covers one row/column from header data, and therefore cannot identify it as a row/column layout. If your layout cannot be identified, a message appears asking you to explicitly indicate the data area.

A Simple Data Matrix and Its Base Elements



If you have created a complex matrix and want to identify the various elements in the matrix definition, you can choose *SAP* → *Origin of data* → *Active matrix*. This function marks the row and column layout and the header data on a sheet.

Creation of a Data Matrix

Creation of a Data Matrix

Purpose

In this process, you create a new data matrix as a data entry form or report, by making settings that are valid for the whole matrix. You can create several matrices in a single worksheet.

Prerequisites

- You have opened a workbook that was created using the Interactive Excel template.
- If you want to use master data and control parameters from the target or source database as proposals for the definition of characteristic values, you have logged on to the appropriate database. For more information see [Connecting Interactive Excel to an Access Database \[Page 102\]](#).



You can define a matrix without using proposals originating from existing master data and control parameters, however this fully manual procedure involves making extra definitions, and is therefore more complex.

- You have selected an aspect for the matrix.

An aspect determines the source or target database for matrix data, for example the SAP consolidation application from which you want to import data into reports, and whose master data and control parameters you want to use for the matrix definition.



You **cannot** change an aspect after it has been selected for a matrix.

Your selected aspect is automatically used as the default for further matrices, which you process with Interactive Excel, until you change it.

Process Flow

- You make the following global settings:

Matrix name

If you define several matrices for a single worksheet, you can differentiate between them by giving them different names.



Once a name has been assigned to a matrix, you can **not** change it later.

Debit/credit sign logic

The logic that you select determines the debit and credit signing used for entering data or displayed when data is imported from a database. The logics supported are shown in the following table:

Debit/credit sign logic	Represents

Creation of a Data Matrix

Database values	Values are entered/displayed as they are saved in the database, for example assets items as positive (without a sign) and liabilities/stockholders' equity items as negative (with a minus sign).
Values as per item sign	<p>A value is entered/displayed without a sign if its balance corresponds with the debit/credit sign set in the master data of the item/subitem concerned. If the balance is reversed, the value is entered/displayed with a minus sign.</p> <p>Example: The balance of a liabilities/stockholders' equity item is normally a credit, and therefore the sign — (minus) is set for those items. However, if a debit balance occurs for this item, a minus sign is entered/displayed for the value to indicate a reversed sign.</p> <p>You can use this logic for balance sheets, for example.</p>
Inverse database values	<p>Income statement values are entered/displayed as the inverse of database values. Each time data is transferred, values are automatically converted using the database logic.</p> <p>This logic can be used for an income statement, for example, if you want to show expenses as negative (with a minus sign) and revenue as positive (without a sign). This relationship between positive and negative values enables you to calculate financial results using standard Excel formulas.</p>

Scaling

Data can be entered/displayed at a specified scaling factor. Scaling of 1, 1,000, or 1,000,000 is possible when you create a matrix. However, you can later change the scaling factor as required (condition: this must be a scale).

Return units indicator

If you select this indicator, values are displayed with a unit in Interactive Excel reports (for example currency, unit of measure).

Data entry matrix indicator

You need to set this indicator if you want to use a matrix in order to enter data and run a preparation for data entry.

Display blank lines indicator

Normally blank lines are also displayed in a data matrix, and therefore the indicator is selected. Deselecting the indicator suppresses blank lines. You may want to do this to improve clarity.

Display blank columns indicator

Normally blank columns are also displayed in a data matrix, and therefore the indicator is selected. Deselecting the indicator suppresses blank columns. You may want to do this to improve clarity.

Post 0 for blank cells indicator

When you want to write 0 for blank cells, then you have to use this indicator. You can use this to enter a numerical value in all items.

Creation of a Data Matrix

Update mode

The update mode specifies how the values of data records, which were posted earlier, should be treated. You have the following options:

- *Delete (all items, all subassignments)*: all existing data for each object is reset to zero
- *Delete (entered FS items, all subassignments)*: all existing data for each object in posted items, is deleted before writing the uploaded data.
- *Delete (FS items in the matrix, all subassignments)*: all existing data for each object in the matrix, is deleted with all subassignments, before writing the uploaded data
- *Overwrite (entered FS items + subassignments)*: the existing entries are overwritten by the uploaded ones (when identical to the item and all subassignments), other uploaded data is written, otherwise existing settings remain unchanged
- *Divide (overwrite, but total per item remains unchanged)*: the value, which already exists in an item, is divided onto the uploaded subassignments, the total per item remains unchanged. To achieve this, an automatic offsetting entry is generated on the respective default subassignment.



The function *Divide* is currently restricted to the subassignment *Partner*.

3. You specify global characteristic values.

You can specify single values or set aggregations as characteristic values for a matrix header. To do this, you can use master data and control parameters in the source/target database as proposals.

If a characteristic value is valid for an entire matrix, you can flag it as a constant. The value is set in the background, and the characteristic is no longer available for definition, thereby reducing the number of characteristics that are listed.

You can find out which characteristics are set as a constant and undo this setting at any time. For more information, see [Make Global Settings for a New Data Matrix \[Page 433\]](#).

If a particular characteristic is irrelevant for your matrix, you can mark it as a constant without assigning a value. It will then be inactive and no longer offered for selection.

If you subsequently change a characteristic value in a report matrix when connected to a database, the matrix is automatically refreshed with appropriate database data.


Making Global Settings for a New Data Matrix

Prerequisites

You have opened a workbook that was created using the Interactive Excel template.

Procedure

3. Place the cursor on a cell that you want to form the upper left corner of the matrix header data.
4. Choose *Consolidation* → *Data matrix* → *New*.
 The settings of existing matrices are copied as default values into your matrix.
 A dialog box appears, in which you are shown the *Preset Characteristics* (= global parameters). You have the possibility to deactivate some parameters.
4. On the *Settings* tab page, enter a name for your matrix and specify the following parameters:
 - A debit/credit sign logic
 - A scaling factor for data
 - Whether you want to enter values with units or display units for imported data
 - Whether the matrix is a data entry matrix
 - Whether blank lines should be displayed
5. On the *Characteristics* tab page, specify values for characteristics that are valid for the whole matrix as follows:
 - f) Select a characteristic in the upper part of the dialog box.
 - g) Determine the characteristic type for the value. You can define the value as either a single value or a set aggregation.
 - h) Use the arrow button next to the bottom field to display a list of possible values. Select one of these values.
 - i) Set the *Constant* flag if a characteristic is valid for the whole matrix and you do not want it to appear in the sheet.
 - j) Choose *Confirm* to complete your definition of the characteristic.


 - If you want to change the value selected for a characteristic, position the cursor on the characteristic, select a new value from the list of possible values, and choose *Confirm*.
 - If you want to remove the value selected for a characteristic, position the cursor on the characteristic, select the empty entry at the top of the list of possible values, and choose *Confirm*.
6. Repeat step 4 until you have specified all the characteristic values that you require. Then choose *OK*.

Making Global Settings for a New Data Matrix**Result**

- The relevant characteristic values are inserted as a block at the cursor position, unless you specified them as constants, in which case they are invisible. General information, for example user, scaling factor, and aspect are also inserted.
- Header data can be formatted, moved, or deleted after being inserted into a worksheet. All global settings except for the matrix name and aspect can be changed after insertion.
- You can check your settings and make changes at any time by choosing *Consolidation* → *Data matrix* → *Change* and the *Settings* tab page.



In this way, you can find out which characteristic values are flagged as constants and therefore do not appear on the sheet. You can also remove the *Constant* flag for a characteristic value.

- For more information about changing values, see [Changing Characteristic Values \[Page 448\]](#).
- You can preset the settings for new data matrices. To do this choose *Settings* → *Global Parameters* → *Preset Characteristics*. In exactly the same way, you can copy the settings of already existing matrices as default values.

Definition of a Matrix

Purpose

In this process, you define the row and column layout of a data entry form or report matrix by arranging characteristics and characteristic values on a worksheet.

Prerequisites

You have completed the process [Creation of a Data Matrix \[Page 430\]](#), in which you make basic settings for your matrix.

Process Flow

1. You define characteristic values and insert them into the worksheet as a row and column layout.

You can specify characteristics and their values in the following ways:

- By manually inserting them in the matrix
- By selecting them from proposal lists that are generated from master data and control parameters in the database



The advantage of selecting values from lists of proposals is that the reference of the cell in which a characteristic value is located is automatically recognized by Interactive Excel, and does not need to be explicitly specified. For more information see [Determination of Values for Characteristics \[Page 451\]](#).

If you use proposals, you can display either the key, the short or long text, or everything, in the matrix. If, in addition to the key, you use the long text, the long text automatically changes if you choose a different characteristic value by entering a new key.

The following types of characteristics can be used to define the matrix layout:

- **Single values**

You can arrange these in sequence, either horizontally or vertically.

- **Set list**

A series of single values arranged in sequence, either horizontally or vertically.

- **Set aggregation**

A single entry in the matrix definition that summarizes data for all set entries.

- **Hierarchy**

A series of single values arranged vertically with a structure of up to 8 levels.

You can insert an unlimited number of single values, sets, and hierarchies into your data matrix, and subsequently delete, move, format, or change them.

When you insert a single value or set aggregation into a cell on the sheet, a help function for values is automatically set for this cell. You can display a list of possible values for the

Definition of a Matrix

characteristic by positioning the cursor on the cell and using the function button that appears. This function enables you to change a characteristic value quickly and easily.



If you subsequently change a characteristic value in a report matrix when connected to a database, the matrix is automatically refreshed with appropriate database data.



- Certain characteristics are dependent on others. When you define characteristics, you should take this into account, since the value you set for one characteristic could determine the values that Interactive Excel proposes for a second characteristic.

When you use the *Consolidation* menu in Interactive Excel to set values for characteristics that you want to insert into a matrix, you need to define any delimiting characteristics before a proposal list can be generated.

- Before you can prepare a matrix for data entry, you need to define all required characteristics.

The following table shows the characteristics supported by Interactive Excel, and their dependencies:

Characteristic	Characteristic required	In SAP dependent on...	In Access dependent on...
Dimension	X		
Cons chart of accounts	X		
FS item	X	Cons chart of accounts	Cons chart of accounts
Version	X		
Fiscal year	X		
Period	X		

Definition of a Matrix

<p>Consolidation group</p> <ul style="list-style-type: none"> • Single value • Attributes • Hierarchy 	<p>Characteristic required, if:</p> <ul style="list-style-type: none"> - no ledger or - no consolidation unit or - consolidated data (posting level 30) 	<ul style="list-style-type: none"> • Dimension • Dimension • Version • Fiscal year • Dimension • Version • Fiscal year • Period 	<ul style="list-style-type: none"> • Dimension • Dimension • Version • Fiscal year ./.
<p>Consolidation unit</p> <ul style="list-style-type: none"> • Single value • Attributes • Set • Hierarchy 	<p>Characteristic required, if no cons group</p>	<ul style="list-style-type: none"> • Dimension • Dimension • Fiscal year • Dimension • Fiscal year • Period • Version • Dimension • Fiscal year • Period • Version 	<ul style="list-style-type: none"> • Dimension • Dimension • Fiscal year • Dimension • Fiscal year • Period • Dimension • Fiscal year • Period • Version
<p>Partner unit</p> <ul style="list-style-type: none"> • Single value/Set • Attributes 		<ul style="list-style-type: none"> • Dimension • Dimension • Fiscal year 	<ul style="list-style-type: none"> • Dimension • Dimension • Fiscal year
Key figure	X		
Subitem category			
Subitem		Subitem category	Subitem category
Unit of measure			

Definition of a Matrix

Year of acquisition			
Custom characteristic			
Transaction currency			
Document type		Dimension	Dimension
Ledger	Characteristic required, if no cons group		
Reference version			
Reference fiscal year			
Reference period			
Posting level		Key figure	



Data is aggregated for characteristics without a defined value. If, for example, a receivables item has a breakdown by trading partner and transaction currency and you do not specify a value for the trading partner breakdown, the sum of all data records with a trading partner assignment is calculated (reporting) or must be entered (data entry) for this item. If a row or column contains no specified characteristics, it can be used for a user-defined entry, for example an Excel formula.

3. You have the option of displaying additional information for certain characteristics in any cell, in the form of an attribute.



You can display the debit/credit sign of a financial statement item or the currency, text, or language of a company. This additional information is irrelevant for the import (reporting) and export (entry) of data, since it has no influence on the matrix definition.

6. You make sure that values or value references are set for all the characteristics that you have defined, so that data can be saved correctly to or imported correctly from the database.
7. You specify any remaining required characteristics and check your global settings.
8. To check the data structure of the data matrix, choose or *Consolidation or SEM → Data matrix → Check*.

Specifying Single Values

Prerequisites

You want to use a list of proposed values to define a characteristic as a single value and insert it into the matrix.

Procedure

3. Place the cursor on the cell in which you want to insert a characteristic value.
4. In the Interactive Excel menu, choose *Consolidation* → *Single values* and the characteristic you require.


A dialog box appears with a list of values for the characteristic. Depending on the characteristic that you are defining, values for other characteristics that you have already specified, and on which the values in the proposal list are dependent, may appear in fields at the top of the box.



You may want to specify a value for a characteristic that is dependent on the values of characteristics that you have not yet specified. In order to generate a list of valid proposals, you need to specify these delimiting characteristic values. An example of a delimiting characteristic value is the consolidation chart of accounts, which represents a compound of the characteristic *FS item*. Only after you have made this specification is a value list displayed.



If a list is very long, first a condensed form of the list is displayed, which you can selectively expand as desired.

6. Select one or more values. You can use Windows selection functions to select multiple values (CTRL + mouse click) or blocks of values (SHIFT + mouse click). You can also use the search function by ID values or long texts, in order to go to its position in the list. In addition to that, you can position on a value using .
7. If you want to insert more than one single value, specify how you want them to be arranged on the sheet.
8. Choose *OK*.

Result

The values are inserted at the cursor position, either beside or beneath each another (depending on the alignment selected).

If you select multiple values, these are inserted in the sequence in which they are listed in the database.

Single values can be formatted, moved, deleted or changed after insertion into a worksheet.



You can define multiple single values in a single step.

Specifying Single Values

Specifying Sets

Prerequisites

You want to use a list of proposed values to define a characteristic as a set and insert it into the matrix. Sets with the following characteristics are offered: consolidation unit, FS item, transaction currency.

Procedure

4. Place the cursor on the cell in which you want to insert the first entry in the set.
5. In the Interactive Excel menu, choose *Consolidation* → *Sets* and the characteristic you require.

A dialog box appears with a list of values for the characteristic. Depending on the characteristic that you are defining, values for other characteristics that you have already specified, and on which the values in the proposal list are dependent, may appear in fields at the top of the box.



You may want to specify a value for a characteristic that is dependent on the values of characteristics that you have not yet specified. In order to generate a list of valid proposals, you need to specify these delimiting characteristic values. Only after you have made this specification is a value list displayed.



If a list is very long, first a condensed form of the list is displayed, which you can selectively expand as desired.

6. Select one or more sets. You can use Windows selection functions to select multiple values (CTRL + mouse click) or blocks of values (SHIFT + mouse click). You can enter a value ID (in the form of the field name) in order to go to its position in the list. You can also use the search function by ID values or long texts to go to their position in the list. In addition to that, you can position on a value using .
4. Determine the following:
 - How the set entries should be arranged on the sheet (in the case of a set list or multiple set aggregations)
 - Whether the ID and/or short text and/or long text of the characteristic should be displayed
 - Whether the set is a list set or a set aggregation
5. Choose OK.

Result

- **Set list**

The relevant set entries are inserted at the cursor position, either beside or beneath each another (depending on the alignment selected).

Specifying Sets

Set entries are inserted in the sequence in which they are entered in the set.

- **Set aggregation**

Only one entry is inserted into the worksheet. This entry represents the sum of all entries in the set.

Sets can be formatted, moved, deleted or changed after insertion into a worksheet.

Specifying Hierarchies

Prerequisites

You want to use a list of proposed values to define a characteristic as a hierarchy and insert it into the matrix. You can specify hierarchies for the following characteristics:

- Consolidation group
- Consolidation unit
- Partner unit
- FS item

Procedure

1. Place the cursor on the cell in which you want to insert the first entry in the hierarchy.



If a list is very long, first a condensed form of the list is displayed, which you can selectively expand as desired.

2. In the Interactive Excel menu, choose *Consolidation* → *Hierarchies* and the characteristic you require.

A dialog box appears with a list of values for the characteristic. For example, here you can choose *consolidation unit*.



If a list is very long, first a condensed form of the list is displayed, which you can selectively expand as desired.

3. Select one or more hierarchies. You can use Windows selection functions to select multiple values (CTRL + mouse click) or blocks of values (SHIFT + mouse click). You can enter a value ID in order to go to its position in the list.
4. Choose *SAP* → *Settings*, and determine
 - Whether you want hierarchy levels to be indented when inserted into the worksheet, and whether the column width should be automatically adjusted to fit the contents
 - How many hierarchy levels (up to 8) should be expanded when the hierarchy is inserted into the worksheet
 - Whether a color should be applied to the hierarchy
 - Whether the ID and/or short text and/or long text of the characteristic should be displayed

You can also change these settings by using the context menu and a right mouse click.

5. Choose *OK*.

Specifying Hierarchies

Result

The relevant hierarchy is inserted at the cursor position, with the specified formatting. All hierarchy entries are inserted, regardless of the number of levels that are expanded.

You can change the color format and indent of the individual levels by choosing *SAP → Settings*. Your settings are saved locally and are therefore only computer-specific.

You can format, move, delete or change hierarchies after insertion into a worksheet. In exactly the same way you can update the hierarchies at any time.

If you want to delete a hierarchy, choose *SAP → Delete hierarchy*. You thereby ensure that the layout, values, and formatting for a hierarchy are completely removed from the worksheet.

Specifying Attributes

Prerequisites

You have specified header data for your matrix. You may have also defined the matrix layout. You now want to insert an attribute into the matrix to provide additional information about a single value, set entry or hierarchy entry. An attribute is not part of the information required for communication between Interactive Excel and the database. Possible attributes are supplied by SAP as well as further custom characteristics.

The information that can be provided by an attribute depends on the characteristic, for example a debit/credit sign or short text can be inserted for a financial statement item.



You cannot insert attributes for a set aggregation, since this characteristic has multiple values.

Procedure

1. Place the cursor on the cell in which you want to insert an attribute.
2. Choose *Consolidation* → *Attribute* and then the relevant characteristic.
A modeless dialog box appears in which you specify the relevant characteristic value.
3. Place the cursor on the cell in which the ID or long text for the value is located.
The cell reference is displayed in the field. Choose *OK*.
By entering an area, you can also display the attributes for all of the fields within the area.
4. In the next dialog box, select an attribute and choose *OK*.



You may want to specify an attribute for a characteristic that is dependent on the values of characteristics that you have not yet specified. In order to generate a list of valid attributes, you need to specify these delimiting characteristic values. Only after you have made this specification is a list of attributes displayed.

Result

The attribute is inserted at the cursor position, and can be subsequently formatted, moved, deleted, or changed.

You can use the procedure described above to change an attribute that you have already defined. When you change an attribute, you need to confirm that you want it to be overwritten with new data.

Specifying Attributes


Working with Structures

Prerequisites

You want to process characteristics with structures. Structures are available in Interactive Excel for all the hierarchies and sets.

Procedure

In the Interactive Excel menu choose *Consolidation* → *Structures* → *Update* or → *Change/Combine/Detach*. You have the following options:

Update structure	You can update the structure, in order to supply it with current data from the SAP System.
Change structure	<p>Here you have the following options:</p> <ul style="list-style-type: none"> - Only compile the area of definition: only the cells which belong to the area of definition of the matrix, are processed/deleted - Compile matrix area: all cells can be processed/deleted, which either belong to the area of definition or to the output area of the matrix - Compile complete rows/columns: complete rows or columns are always processed - You can also select a different hierarchy or a different set for the structure To do this, press <i>Edit</i>, select the structure to be changed and change it <p>With this option you can activate and/or deactivate the automatic update using </p>
Combine structure	<p>You can combine several structures for different characteristics The values of all combinations are multiplied through all levels.</p> <p>For example, this applies to all breakdowns, to sets with consolidation units, transaction types, transaction currencies.</p>
Detach structure	You can detach various combined structures.
Delete structure	You can delete structures, for example the structure of the consolidation units.

Result

By working with structures, you can make the dataset clearer and in particular easier to evaluate.

Changing Characteristic Values

Changing Characteristic Values

Prerequisites

You want to change some or all of the values that you have already specified for characteristics in a matrix. To do this, you can use one of the procedures described below.

Procedure

Changing Values Manually in a Matrix

Change the existing values by typing over them.

Changing Values by Means of Proposal Lists

Two procedures are available for changing values by means of proposal lists:

- By a selection list:
 - e) Place the cursor on the cell you want to change.
 - f) When sets and/or single values, choose a value from the dropdown menu, for example the name of a specific consolidation unit. You can change hierarchies via the menu, because there is no dropdown menu for hierarchies.
 - g) If a dropdown menu appears, click on the desired value.
 - h) Choose *OK*.
- Using Interactive Excel, from where you go to the application menu for Consolidation:
 - f) Place the cursor on the cell in which the characteristic you want to change is located.
 - g) Choose *Consolidation* and then the relevant characteristic type and the characteristic.
 - h) When prompted, confirm that you want the existing value to be overwritten.
 - i) A dialog box appears with a list of values for the characteristic.
 - j) Select the appropriate value, check that the display format is correct and choose *OK*.

Additional Settings

Use

Under *SAP* → *Settings*, you can make several formatting settings and general setting for your work with Interactive Excel.

Features

Formats for Hierarchies

You can change the color of the individual levels and their indent level. Your settings are saved locally and are therefore computer-specific.

Formats for Matrix Cells

You can define different formats for the following cells:

- Cells that **cannot** be used for data entry (for example totals items or invalid characteristics)
- Cells that **can** be used for data entry
- Report cells into which data is imported

These settings are valid for the entire workbook.

You choose *Change* for the relevant cells, and a standard Excel dialog box appears. In this box, you define the formats that you want to use.

The default format template for Interactive Excel is set, and should be sufficient for your needs. However, you can choose a different template as required.

Settings

Shortcut Key for Possible Entries Function

When you insert a single value or set aggregation into a cell, a possible entries function is applied to the cell. You can use the button to the right of the cell to display a list of possible values.

The key combination STRG + h is set as default for this function, should you prefer to use the keyboard rather than the mouse. However, you can set a different key combination if desired.

Always read values manually

Choose this setting, when you want to prevent data being automatically read from the SAP System.

Changed matrix data is normally automatically read again from the SAP-System. You can stop this, for example, when you want to create varied valuations on the basis of data from a key date, using Interactive Excel.

When you have activated this option – that means only allowing the manual update – every time you log onto Interactive Excel, you receive a system message informing you that the automatic update is deactivated.

Additional Settings

Define Font

If desired, you can change the font used for displaying the interface texts (dialogs) in Interactive Excel. Follow these steps::

4. Choose menu item *SAP*.

A dropdown menu appears.

5. Choose *Settings*.

A list of options is displayed.

6. Choose the tab *Font*.

You can choose either a fixed-width font or a proportional font, for which there are further choices available. You can display sample texts.

Global Settings

Here your selected global parameters, which you work with in the SAP system, are listed and can also be changed by you interactively.

Default Settings

You can use the function *SAP defaults* to restore the predefined settings for Interactive Excel.

Activities

Make your desired settings at menu item *SAP* → *Settings*.

Determination of Values for Characteristics

Use

The link between the database characteristics and the characteristics available in Interactive Excel is pre-programmed. Your assignment of characteristic values in a matrix to the preset Interactive Excel characteristics enables data to be transferred between the correct database fields and matrix fields.

You can identify a characteristic value by entering one of the following:

- A cell reference
- A single value

If you use master data and control parameters from a database as proposals when defining characteristics, the value reference of characteristic is automatically set. This reference is automatically adjusted when a characteristic is moved to a different location on a sheet.

However, you need to manually specify the value or value reference for characteristics that you have defined as follows:

- By manual insertion in a matrix, outside a list of set entries or a hierarchy
- By copying and pasting from another matrix

It is helpful to specify missing values or missing value references after you have completed the definition of a matrix. To do this, the Interactive Excel menu choose *Consolidation* → *Data matrix* → *Change*, then specify the missing values.

Specifying a Value/Value Reference for Characteristics

Specifying a Value/Value Reference for Characteristics

Prerequisites

A characteristic value or the cell reference of a characteristic value has not yet been specified, for example if you manually inserted the characteristic into your matrix.

Procedure when Using Detailed Menu

1. Choose Consolidation → *Data matrix* → *Change*.
2. On the tab strip in the following dialog box, choose *Optional characteristics* and select the appropriate characteristic.
3. Enter one of the following in the *Value/Value reference* field.
 - A single value
If the ID of the single value is identical to a possible cell coordinate, for example a transaction type with the ID B10, you need to enter the value preceded by an apostrophe, for example, **B10**.
 - A cell reference, for example, **B3**
 - A cell reference, by clicking on the button to the right of the entry field
A dialog box appears. When you drag the cursor over the appropriate matrix area on the worksheet, its coordinates appear in the dialog box field. Use the function button next to the co-ordinate field in order to confirm your entry.
4. Choose *Confirm*, to complete your selection.
5. Once you have specified all values and value references, choose *OK*.

If a required characteristic has not yet been defined, a warning message appears. In this case, choose *Consolidation* → *Data matrix* → *Change* and define the appropriate characteristics on the *Reqd char.* tab strip. Then choose *OK*.

Procedure when Using Context Menu

4. Select one or more fields, by marking it/them, for example the FS item.
5. Right mouse click
6. Choose *SAP* → *Item* or a characteristic that you have chosen instead.

Result

Cell Reference

An assignment is created between a characteristic on the worksheet and a characteristic preset in Interactive Excel. The cell reference of a characteristic is automatically adjusted if you move the characteristic to a different location on the sheet.

Single Value

The characteristic is invisible on the sheet, as is the case for all constants.

Specifying a Value/Value Reference for Characteristics

Identifying the Area for Data Input/Output

Identifying the Area for Data Input/Output

Use

Before it can import data into or export data from a matrix, Interactive Excel must be able to identify the data area in the matrix. The data area in a matrix is adjacent to the column and row layout, and consists of cells relating to these layouts. For a simple graphic showing the different elements of a matrix definition, see [Data Matrix \[Page 427\]](#).

If you define a matrix in which the row and column layouts and their respective cells are unambiguous, Interactive Excel automatically recognizes the data area.

If a layout only occupies a single row or column, it can be confused with the header data and is, therefore, not recognized as a row or column layout. In this case, you are prompted to explicitly specify the data area at the following events:

- After you have saved a matrix definition that you have changed by choosing *Consolidation* → *Data matrix* → *Change*.
- If you choose *Consolidation* → *Import data* in order to fill a matrix with data.



You have inserted a hierarchy of consolidation items in the row layout of a matrix and a version in the column layout. Interactive Excel cannot identify the data area because it does not recognize a layout that only contains one characteristic value.

Activities

1. Select the data area by dragging the cursor over the sheet.
2. Select *Choose* to the right of the coordinate field to confirm your entry.
3. Choose *Confirm*.

Creation of Further Matrices

Use

When you create an additional matrix, global characteristic values set for the initial matrix are automatically proposed for the header data.

Features

When you create an additional matrix, global characteristic values set for the initial matrix are automatically proposed for the header data. This minimizes the effort required for defining two or more matrices with similar or identical header data.

Activities

You create an additional matrix in the same way as the initial matrix, by choosing *Consolidation* → *Data matrix* → *New*.

You select the values that you want to copy. A value is selected when the field to its left is checked. Once you have confirmed your selections, a further dialog box appears for you to define other global settings.

Deleting a Matrix

Deleting a Matrix

Prerequisites

Use this procedure to completely remove a data matrix definition from a worksheet and reset all settings made for the matrix.

Procedure

1. Choose *SAP* → *Delete matrix*.
2. A dialog box appears. There are two ways of identifying the data to be deleted: (a) You can enter the name of the matrix to be deleted. (b) You can select the area to be deleted by dragging the cursor over the appropriate matrix area on the worksheet, after which its coordinates appear in the dialog box field. Use the function to the right of the field to confirm the coordinates of the fields to be deleted.
3. Click *OK* to delete the selected area.

Creation of Reports on the Basis of Pivot Tables

Use

You can use this function to create a report in the form of a standard Excel pivot table, into which you can import current data from the database as required.

The data in a pivot table can be reorganized interactively in order to summarize it in different ways.

Prerequisites

- You have installed Microsoft Excel 2000 or Microsoft Excel 97 and the Interactive Excel component provided by SAP.
- The source database for report data resides either locally on your PC or can be accessed through your local area network.

Features

Interactive Structuring of Reports

Pivot table reports are extremely flexible in their layout. Characteristics are inserted into the sheet in the form of field buttons that you can drag between the header, rows, and columns, as required.

Multiple Dimensions

Flexible restructuring of pivot tables enables data to be summarized in different ways.

Definition of a Pivot Table or a Pivot Chart with Excel 2000

Use

You can use this function to define the basic layout of a pivot table. You define a pivot table by specifying characteristic values and determining where they should appear when the table is inserted into the worksheet.

However, you can also interactively rearrange data in the table at any time, using standard Excel pivot table functions.

Prerequisites

You have opened a workbook that uses the Interactive Excel template.

Features

Specification of Characteristic Values

You can enter the following types of characteristics in a pivot table:

- **Single value**
- **Set list**
A list of single values is inserted.
- **Hierarchy**
A list of single values is inserted (without structuring into levels). Only the hierarchy pages are used.
- **Characteristic without a value**
Data is aggregated for characteristics without a defined value.

Location of a Characteristic in a Table

- **Row/column layout**
The characteristic values you select are inserted across the rows and/or down the columns of the table. You can subsequently change their position as required.
- **Header data**
Constant data is displayed as header data.

Specification of Debit/Credit Sign Logic

The logic that you select determines the debit/credit signs displayed when data is imported from a database. The logics supported are shown in the following table:

Debit/credit sign logic	Procedure
-------------------------	-----------

Definition of a Pivot Table or a Pivot Chart with Excel 2000

Database values	Values are entered/displayed as they are saved in the database, for example assets items as positive (without a sign) and liabilities/stockholders' equity items as negative (with a minus sign).
Values as per item sign	A value is entered/displayed without a sign if its balance corresponds with the debit/credit sign set in the master data of the item/subitem concerned. If the balance is reversed, the value is entered/displayed with a minus sign. Example: The balance of a liabilities/stockholders' equity item is normally a credit, and therefore the sign — (minus) is set for those items. However, if a debit balance occurs for this item, a minus sign is entered/displayed for the value to indicate a reversed sign. You can use this logic for balance sheets, for example.
Inverse database values	Income statement values are entered/displayed as the inverse of database values. Each time data is transferred, values are automatically converted using the database logic. This logic can be used for an income statement, for example, if you want to show expenses as negative (with a minus sign) and revenue as positive (without a sign). This relationship between positive and negative values enables you to calculate financial results using standard Excel formulas.



You should use the logic of absolute values with caution. Totals can be automatically calculated for header characteristics in pivot tables, and if you use this logic, totals will invariably be incorrect.

You can create a pivot chart in Excel 2000 with the indicator pivot diagram and the selection of the diagram category.

Defining a Pivot Table

Defining a Pivot Table

Procedure

1. In the Interactive Excel menu, choose *Consolidation* → *Aspects*.
In the next dialog box, select the appropriate aspect and choose *OK*.
2. Place the cursor on a cell that you want to form the uppermost left corner of the table.
3. Choose *Consolidation* → *Pivot table* → *New*.
4. Specify *characteristics* and values for selected characteristics as follows:
 - Select a characteristic in the upper part of the dialog box.
 - Determine the characteristic type for the value. You can define a value as either a single value, a set, or a hierarchy.
 - Use the value help in the form of an arrow button next to the bottom field to display a list of possible values for the selected characteristic. Select one or more of these values.



There are two special functions available:

If you want to choose all of the possible values for a characteristic into the table, select the asterisk from the list.

If you do not want to choose any values for a characteristic, leave the field blank.

- Determine the position in the pivot layout at which the characteristic should be inserted when the table is generated. You have the following possibilities to choose from: rows, columns, header, constant.
- Choose *Confirm* to complete your definition of the characteristic.



If you want to change the value selected for a characteristic, position the cursor on the characteristic, select a new value from the list of possible values, and choose *Confirm*.

If you want to remove the value selected for a characteristic, position the cursor on the characteristic, select the empty entry at the top of the list of possible values, and choose *Confirm*.

5. Repeat step 4 until you have specified all the characteristic values that you require. Then choose *OK*.
6. In the tab page, specify the debit/credit sign logic *settings* for the table.
7. Give the pivot table a name.
8. Decide whether you want the output in the form of a pivot diagram.
9. If you decide in favor of the pivot diagram form, you need to decide on the following display formats: bar chart, pie chart or a line chart

Result

- **Display options**

In Excel 2000 you can choose between a chart or a diagram as the display format.

- **Matrix layout is inserted**

A field button is inserted for each characteristic.

- **Values are imported from the database**

When a layout is inserted into a sheet, its data area is automatically filled with data from the database. This data is temporarily stored in the background.

- **Pivot functions are activated**

In pivot tables, the inserted report data is automatically totaled. Other pivot functions (such as the dynamic report layout) are also available.

You can change the layout of the table by repositioning the field buttons.



The characteristic values that you specify during your definition cannot be subsequently changed once the table has been generated.

You can your pivot table by choosing *Consolidation* → *Pivot table* → *Change*.

Additional Settings

Additional Settings

Use

Under *SAP* → *Settings*, you can make several formatting settings and general setting for your work with Interactive Excel.

Features

Formats for Hierarchies

You can change the color of the individual levels and their indent level. Your settings are saved locally and are therefore computer-specific.

Formats for Matrix Cells

You can define different formats for the following cells:

- Cells that **cannot** be used for data entry (for example totals items or invalid characteristics)
- Cells that **can** be used for data entry
- Report cells into which data is imported

These settings are valid for the entire workbook.

You choose *Change* for the relevant cells, and a standard Excel dialog box appears. In this box, you define the formats that you want to use.

The default format template for Interactive Excel is set, and should be sufficient for your needs. However, you can choose a different template as required.

Settings

Shortcut Key for Possible Entries Function

When you insert a single value or set aggregation into a cell, a possible entries function is applied to the cell. You can use the button to the right of the cell to display a list of possible values.

The key combination STRG + h is set as default for this function, should you prefer to use the keyboard rather than the mouse. However, you can set a different key combination if desired.

Always read values manually

Choose this setting, when you want to prevent data being automatically read from the SAP System.

Changed matrix data is normally automatically read again from the SAP-System. You can stop this, for example, when you want to create varied valuations on the basis of data from a key date, using Interactive Excel.

When you have activated this option – that means only allowing the manual update – every time you log onto Interactive Excel, you receive a system message informing you that the automatic update is deactivated.

Define Font

If desired, you can change the font used for displaying the interface texts (dialogs) in Interactive Excel. Follow these steps::

7. Choose menu item *SAP*.

A dropdown menu appears.

8. Choose *Settings*.

A list of options is displayed.

9. Choose the tab *Font*.

You can choose either a fixed-width font or a proportional font, for which there are further choices available. You can display sample texts.

Global Settings

Here your selected global parameters, which you work with in the SAP system, are listed and can also be changed by you interactively.

Default Settings

You can use the function *SAP defaults* to restore the predefined settings for Interactive Excel.

Activities

Make your desired settings at menu item *SAP* → *Settings*.

Reporting for Specific Data Categories

Reporting for Specific Data Categories

Use

You can import financial data for a combination of the following parameters by specifying an appropriate key figure:

- **Valuation**
 - Local requirements (reported financial data)
 - Group requirements (standardized financial data)
 - Consolidated data
- **Currency or quantity**
 - Local currency
 - Group currency
 - Transaction currency
 - Quantity
- **Input type**
 - Periodic
 - Cumulative



You select the key figure *CV GC CD* (consolidated data, group currency, cumulative).

Activities

When you define a data matrix or pivot table, you specify the data category for your report data by setting the appropriate key figure as a global characteristic value.

Job

Use

You use a job to report on a workbook by several values of a characteristic. The following values are possible:

- single value
- hierarchies
- sets
- attributes

Jobs are defined, changed or deleted in the Job Manager found in Interactive Excel at *SAP* → *Job Manager* → *Define/Change*.

Structure

To define a job, you can choose from a list of characteristics, such as dimension, consolidation chart of accounts, fiscal year, consolidation unit, key figure. For each characteristic you choose, you can choose one of the values listed under *Use*. For example, these might encompass a key figure and a single value. Afterwards, you name an Excel macro.

Refreshing of Report Data

Use

This function enables you to overwrite data in an Interactive Excel matrix report with up-to-the-minute data from a database. Data can be imported into one or more reports via an interactive connection to a SAP System or Microsoft Access database.

Prerequisites

- You have opened an Interactive Excel workbook in which a matrix report is defined.
- You have logged on to a SAP System or Access database for the offline data entry program.

Features

Automatic Refresh

Whenever you change characteristics and their values in your report definition, report data is automatically refreshed. You can activate and deactivate the automatic update of data, using the menu option *SAP → Refresh values automatically*.



The automatic refresh function cannot be used for a pivot table, since a pivot table definition cannot be subsequently changed.



Report data is not automatically refreshed when data in the database is modified. However, each time you log on to a database you are asked whether you want to refresh report data.

Manual Refresh

You can also import the latest database data into a matrix without having to change the matrix definition. In this case, you need to trigger the refresh manually. This ensures that no undesired changes are made to report data.

You can refresh a single matrix, a pivot table, a worksheet, or an entire workbook.

Activities

- After you have changed a matrix definition, data is refreshed automatically when you choose **ENTER**.
- To refresh report data in a data matrix, choose *Consolidation → Import data* and select the relevant report area.
- To refresh report data in a pivot table, choose *Consolidation → Pivot table → Refresh*.

Refreshing of Report Data



Before you refresh one of several reports on a sheet, you need to make sure that the relevant report is selected. As the last items in the menu item *Consolidation*, the names of all the reports on the sheet are listed for selection with the currently selected report marked. Only one report can be selected at a time.

Information About the Origin of Data

Information About the Origin of Data

Use

This function provides you with important information regarding the current status and the origin of data in a data matrix, pivot table, or individual cell on a worksheet.

Features

Origin of Data in a Matrix

You can display and, if required, insert the following information into the worksheet at the cursor position:

- The characteristics used in the matrix and their values
- The logon user name with which data was imported
- The database from which data was imported
- The date on which report data was last refreshed
- The scaling factor
- Further technical information

The following functions are also available in the documentation dialog box:

- Highlighting of cells blocked for data entry
The blocked cells are marked with a color.
- Demarcation of the data matrix definition

The various elements in the matrix definition are highlighted on the worksheet.

The relevant cells are marked until you choose another function. However, you can print out a copy of the sheet with this information displayed before you continue.

Origin of Data in a Cell

You can display and, if required, print information about the parameters for the data in a cell. You may want to do this, for example, if you cannot establish the origin or data in a cell from the characteristic values that appear in the sheet.

If data has been calculated using an Excel formula, the formula is displayed.

Data that has been typed directly into the sheet is identified as a constant.

Activities

To display information about the origin of data, choose *SAP → Origin of data → Current matrix or Cell*.

Alternatively you can get information about the origin of data by using the context menu *SAP → Origin of Data*.

Report Lock

Report Lock

Use

You can use this security function to protect a report against changes by unauthorized persons.

Features

Workbook Lock

This function locks an entire workbook so that no changes can be made to the row and column layout. It thereby prevents an automatic refresh of data that could result from such changes.

You can still do the following, even with the lock in place:

- Import current data from the database
- Change characteristic values in the header data

Lock with Signature

When you lock a workbook, you can insert a signature box at the cursor position. This box contains information about the lock and the dates on which report data was refreshed.

Activities

- To lock a workbook without a signature box, you choose *SAP → Security → Lock*. To lock a workbook with a signature box, you choose *SAP → Security → Signature*.
You specify a password and enter it again as confirmation. Interactive Excel logs you out of the database to lock the book.
- To unlock a workbook, you choose *SAP → Security → Unlock*.
You enter the appropriate password.

Creating a Snapshot of a Worksheet or Workbook

Prerequisites

As a security measure, or for test or presentation purposes, you may want to create a copy of a worksheet or workbook. The data in this copy **cannot** be refreshed by importing data from a database.

Procedure

1. Choose *SAP → Snapshot → Workbook or Worksheet*.
2. In the following dialog box, enter the name of the workbook in which you want to create a snapshot, or leave the field empty if you want to create the snapshot in a new workbook.
3. Choose *OK*.

Result

An identical copy of the workbook or worksheet is created in the specified workbook.



This copy cannot be connected to a database.

Upgrading Workbooks in Interactive Excel

Upgrading Workbooks in Interactive Excel

Prerequisites

- You have received and installed a new version of Interactive Excel. Now you want to update the template in your Interactive Excel workbooks to make the workbooks compatible with the new version.
- You have opened a workbook or several workbooks, which are in the same directory, in Microsoft Excel with the Interactive Excel template.

Procedure

1. Choose *SAP* → *Upgrade*.
3. In the following Windows dialog box, select one or several Interactive Excel workbook(s) the template of which you want to update. A prerequisite for this, is that you execute the upgrade for several workbooks at the same time, and that these workbooks are in the workbook.

Choose *Open*.

The selected workbooks are upgraded.



The following rule applies here for the derivation of the file name: Enter the desired directory for the workbook and provide the original file name with a prefix and a suffix, to make it easily identifiable.

3. Repeat this procedure until you have updated the templates of all the relevant workbooks.

Archiving

Purpose

You use archiving to remove mass data you no longer need in SAP Consolidation from the database, and to store it in an archive file where it can still be evaluated.

Integration

The SAP Data Archiving concept is based on the Archive Development Kit (ADK). The ADK provides the technical basis for the archiving transaction (*SARA*). To call the archiving transaction, choose *Tools* → *Administration* → *Management* → *Data Archiving*, or enter the transaction code.

Archiving objects for each application component are predefined in the system.

For more information on archiving objects in SAP Consolidation, see [Archiving of Consolidation Totals Records and Journal Entries \[Page 474\]](#).

See also

[Introduction to Data Archiving \(CA-ARC\) \[Ext.\]](#).

Archiving of Consolidation Total Records and Journal Entries

Archiving of Consolidation Total Records and Journal Entries

Use

You use archiving for consolidation totals records and consolidation journal entries to remove mass data you no longer need in SAP Consolidation from the database. By storing such data in a database, you can reduce the data volume.

If your database contains a great number of journal entries, you can archive these data records on a regular basis. If your system has sufficient storage space, you only need to archive your data records once every fiscal year.

Features

SAP Consolidation has the following archiving objects:

- `CONS_SUM` for archiving and deleting totals records
- `CONS_ITEM` for archiving and deleting journal entries

With these two archiving objects, you can archive and delete journal entries and totals records according to your selections in [Variant Maintenance \[Page 482\]](#).

It is not possible to read from the archive or to restore journal entries and totals records to the database.

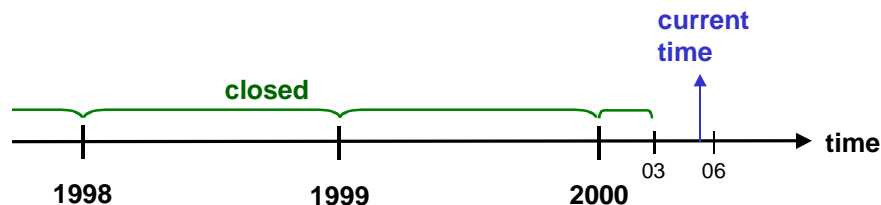
Archiving

You can only archive **journal entries** if

- the selected period to be archived is closed and
- the fiscal year immediately preceding the period to be archived has been completely closed.



The first quarter 2000 and all preceding fiscal years are closed.



Consequently, with quarterly consolidation, you can archive the journal entries from the first quarter 2000 as well as those from all preceding fiscal years.

Totals records can only be archived if

- the corresponding journal entries have been archived
- all periods of the selected fiscal year are closed

Archiving of Consolidation Total Records and Journal Entries

- the preceding and next to last fiscal year are closed. This means, you cannot archive totals records from the current and the preceding fiscal year.

For example, if you archive a totals record in May and create new postings in June, the system creates a new totals record. This would lead to a second totals record for the same time period, and thus to inconsistencies.



You should only archive totals records, when you do not need them any more for reporting purposes.


Delete

You have two options for starting the delete operation:

- You can perform the archiving and then start the delete operation manually.
- You can specify that the system automatically starts the delete operation once the archiving session is completed (option *Archive and Delete* in the [processing options \[Page 482\]](#)).

In both cases, the system first performs the archiving for safety reasons (this means, it writes the data to an archive file); the system deletes the data from your database only in the second step.

Further Information

You will find additional information in the hints documentation for each action. In the application menu, choose the symbol , or choose *Goto → Hints*.

Authorization Management

Use

If you want to archive data in SAP Consolidation, you need the general authorizations for archiving.

Features

The system checks the authorization for the programs of an archiving object using an authorization object (*S_ARCHIVE*). The Archive Development Kit (ADK) performs this check when an archive file is opened for the following actions:

- Writing and
- Delete

Customizing

Use

You adjust the parameters having an effect on data archiving in Archiving Customizing.

Prerequisites

You possess the authorization for Customizing.

Activities

Customizing covers the following areas

- General Customizing (usually performed during installation of the SAP System)
- [Cross-archiving object Customizing \[Ext.\]](#)
- [Archiving object-specific Customizing \[Page 478\]](#)

Archiving Object-Specific Customizing

Archiving Object-Specific Customizing

Use

Here, you can set parameters, which apply only to the specific archiving object (specifically to *CONS_ITEM* or to *CONS_SUM*).

Activities

You can make the following settings by choosing the pushbutton *Customizing*:

- [Logical file name \[Ext.\]](#)
- [Size of the archive file \[Page 479\]](#)
- [File storage to storage system \[Ext.\]](#)
- [Delete program settings \[Page 480\]](#)
- [Server selection \[Ext.\]](#)

Size of the Archive File

Use

You can specify the maximum size of the archive file during the write run using this parameter.

Features

You can determine the following settings:

- Maximum size in MB
- Maximum number of data objects

The first of the values that is reached triggers the creation of a new archive file. If both fields are left blank, the system only creates **one** archive file.



SAP recommends the following settings:

- Maximum size in MB: **50-100**
- Maximum number of data objects: **0**

With these settings, the file size is the only determining factor.



Note that the maximum size of an archive file is limited by the operating system you use, and also by the storage system, if such a system is used in *Content Management Service*.

Delete Program Settings

Delete Program Settings

Use

Here, you determine the control parameters for the execution of the delete program.

Features

- For the *Test run variant*, enter a variant whose parameters are set to test run. In this case, no data is deleted in the database.
- For the *Production session variant*, enter a variant whose parameters are set to production session. This variant deletes the archived data in the database.



The variants of the delete programs are client-dependent! You therefore have to configure the variants for each client in which you wish to perform archiving sessions.

The first time you archive the selected archiving object, you have to maintain the corresponding test run and production session variants of the delete program completely.

Check if both variants exist. In particular, if the production session variant does not exist, no data is deleted from the database when the deletion session was started in the productive system.

If you choose the option *Detail log*, you obtain a [Detail Log \[Page 481\]](#).

- If you wish the production session option *Archive and Delete* to be activated during [Variant Maintenance \[Page 482\]](#), set the indicator *Start automatic*. Only then will the system start the deletion process automatically with the option *Archive and Delete*.

Log

Definition

Analysis that is created for each archiving or deletion session, and for each archive file. The log file lists the number of archiving objects for each table.

Structure

To display the log, choose the pushbutton *Spool list* in the screen *Archive Management: Archiving Session Overview*. Choose *Display* in the following screen.

The log consists of the following parts:

- **Header**

Contains information on the user, the processing options and the start and end times.

- **General section**

Lists the number of archived and/or deleted data records.

- **Detail log**

If you set the indicator *Detail log* in Variant Maintenance, you will find here information on the version, consolidation units, number of archived and/or deleted data records.



You can obtain an overview of the current jobs by choosing *Goto → Job overview* in the screen *Archive Administration: Initial Screen*.

Variant Settings for Archiving

Variant Settings for Archiving

Use

If you wish to create an archive file, you have to enter an existing variant, or define a new variant.

The variant contains

- the selection criteria for the totals records or journal entries you wish to archive
- the processing options (Test run or production session)
- if desired, the indicator for the detail log
- if desired, a note (comment) on the archiving session

Features

Criteria for the selection of data records

The system only archives data which fulfills the selection criteria you specified in the variant. The following selection criteria are available to you:

Selection Criteria

		For journal entries	Required?	For totals records	Required?
Consolidation	Dimension	X	X	X	X
	Consolidation chart of accounts	X	X	X	X
Restrictions	Fiscal year	X	X	X	X
	Period	X			
	Version	X		X	
	Document category	X			

In the selection screen, you can only enter the main versions. If delta versions exist, the system automatically archives these at the same time.

Processing options

Here, you can choose between

- *Test run* and
- *Production session* options
 - *Archive* and
 - *Archive and Delete*

Variant Settings for Archiving

- Choose *Test run* if you only want to simulate the archiving session for the selection criteria you entered. The system reads the data, but it does not create an archive file, and it does not delete any records from your database. You do, however, obtain a log - as in a production session - with the records that the production session would archive.
- Choose *Archive* if you want to start the write program and create an archive file with the selection criteria you entered. With this option, the system does **not** automatically delete records from your database.

You [start the deletion run \[Page 486\]](#) later separately. To do this, select the desired archive files.

- Choose *Archive and Delete* if you want to start the write program **and** create an archive file with the selection criteria you entered. The system then automatically deletes the data records from the database. However, this is only done once the archiving session completed successfully.



The option *Archive and Delete* only works if you set the indicator *Start automatic*. in the [Settings for delete program \[Page 480\]](#).

If you did not set the indicator, the system only performs the archiving.

Detail log

If you set this indicator, the system writes an extended log. It contains the number of archived and deleted records for each version and consolidation unit.

See also: [Log \[Page 481\]](#)

Comment on archiving run

Here, you can enter a personal note (comment) for the variant. It appears in archive management in the overview of archiving sessions and helps to identify archiving sessions more easily.

Archiving Data Using a Variant

Archiving Data Using a Variant

Prerequisites

You have maintained the [Customizing Settings \[Page 477\]](#) for archiving (such as the size of the archive file and the variants for test and production sessions of the delete program).

The specific conditions for archiving journal entries and totals records are fulfilled (for example, the corresponding periods are closed).

See [Archiving of Consolidation Totals Records and Journal Entries \[Page 474\]](#).

Procedure

1. Choose *Tools* → *System Administration* → *Administration* → *Data Archiving*, or start the transaction using the transaction code SARA.
2. In the screen *Archive Management: Initial Screen*, enter the object name **CONS_ITEM** (for journal entries) or **CONS_SUM** (for totals records), and choose *Archive*.
3. In the screen *Archive Management: Create Archive Files*, enter the name of a variant.

The variant contains the selection criteria for the totals records or journal entries of the consolidation that you wish to archive.

Here, you can create a new variant, or use an already existing variant.

If you wish to create a new variant, enter the name and choose *Maintain*.
4. In the screen *Variants: Change Screen Assignment*, choose *Continue*.
5. In the variant maintenance screen, you
 - determine the selection criteria (*View, Consolidation Chart of Accounts, Fiscal Year*, and so on),
 - determine the processing options (*Test run, Archive* or *Archive and Delete*), and
 - if desired, choose the option *Detail log* and enter a note for the variant.

For more information, see [Variant Settings for Archiving \[Page 482\]](#).

Save the variant by choosing *Continue*.
6. In the following screen, enter the *Variant description*, and save the variant again.
7. Return to the screen *Archive Management: Create Archive Files*, and choose *Start Date*.
8. Specify the start time and save your entries.
9. In the screen *Archive Management: Create Archive Files*, choose *Spool params*.
10. Enter the spool parameter information for the archiving session and save your entries.
11. Once you have maintained the start time and the spool parameters, select *Execute* in order to start the write program.

In order to display the status of the job you have created, select *Goto* → *Job overview*.

Result

The result depends on the processing options you chose:

Archiving Data Using a Variant

- If you chose Test run, the system reads the data, but it does not create an archive file and it does not delete any records from the database.
- If you chose the processing option *Archive*, the system writes the data records in one or more archive files according to your selections, but it does not automatically delete any records from your database.
- If you chose the processing option *Archive and Delete*, the system transfers the totals records or journal entries to one or more archive files. The system then automatically starts the delete program for each archive file. The delete program once more reads the data to be deleted from the archive files, and then deletes the data from the databases.

No matter which option you chose for processing, the system always creates a [log file \[Page 481\]](#).

Deleting Archived Data from the Database

Deleting Archived Data from the Database

Use

When you choose the processing option *Archive and Delete* for an archiving session, the archived data is automatically deleted from the system. However, sometimes it may be necessary to start the delete program manually.



You create an archive file and start the write program. The data records are copied to the archive file(s), but the system interrupts processing when the delete program is already running. In this case, you have to delete the archived data in a separate step.

Prerequisites

You have maintained the Customizing settings (in particular the [Variants for Test and Production Sessions \[Page 480\]](#)).

Procedure

1. Choose *Tools* → *System Administration* → *Administration* → *Data Archiving*, or start the transaction using the transaction code SARA.
2. In the screen *Archive Management: Initial Screen*, enter the object name **CONS_ITEM** (for journal entries) or **CONS_SUM** (for totals records), and choose *Delete*.
3. In the screen *Archive Management: Execute Delete Program*, choose *Test run* if you wish to start the delete program in test mode. (In test mode, no data records are deleted from the database.)

Choose *Archive Selection*.

The system produces a list of files that contain already archived data.

4. Select the archive files which are to be deleted from your database.

Return to the previous screen.

5. Choose *Start date*.

6. Enter the start time for the delete program and save your entries.

Return to the previous screen.

7. Choose *Spool params*.

8. Enter the spool parameter information for the delete program and save your entries.

Return to the previous screen.

9. In the screen *Archive Management: Execute Delete Program*, choose *Execute* to start the delete program.

Result

If you started the delete process in the production session, the system deletes the data records from your database according to the archive files you selected.

Deleting Archived Data from the Database

If you started the delete process in a test run, the system does not delete any data records, but only reads them.

In both cases, you obtain a [Log \[Page 481\]](#).

Administration

Administration

Use

This function provides an overview of the archiving sessions.

Features

The overview of archiving sessions contains the variants with a note (your personal comment). The archive files are listed per variant.

You can read the status of each archive file:

Status	Meaning
Complete (green traffic light)	<ul style="list-style-type: none">Archiving is completedCorresponding data records are deleted
Incomplete (yellow traffic light)	<ul style="list-style-type: none">Archiving is completedCorresponding data records have not yet been deleted
Red traffic light	Session was interrupted

You can obtain detailed information on an archive file by double-clicking on the file. You can, for example, see the path name and whether the file is accessible.

You obtain details on a variant by selecting the variant and choosing *User input* in the context menu.

Filename: EXP_OOOO.doc
Directory: C:\TEMP\iwbprint0002
Template: C:\Users\templates\sapkeeh.dot
Title: Consolidation (EC-CS)
Subject:
Author: SAP AG
Keywords:
Comments: Release 46C 17.07.2001
Creation Date: 17.07.01 11:47
Change Number: 2
Last Saved On: 17.07.01 11:47
Last Saved By: SAP AG
Last Printed On: 17.07.01 12:51
As of Last Complete Printing
Number of Pages: 488
Number of Words: 102.218 (approx.)
Number of Characters: 541.759 (approx.)