

Activity-Based Costing



HELP.COALE

Release 4.6C



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Icons

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Activity-Based Costing

Use

To keep data consistent in more than one loosely coupled SAP R/3 system, you can distribute [master \[Ext.\]](#) and [transaction data \[Ext.\]](#) between the systems from Activity-Based Costing. Two ALE distribution methods are available.

The various data maintenance functions are executed in different systems according to the distribution method.

Functions	Distribution Method One (centralized Activity-Based Costing)	Distribution Method Two (decentralized Activity-Based Costing)
Master data maintenance - Business process [Ext.] - Cost element [Ext.] - Activity type [Ext.] - Cost center [Ext.]	Centralized system	Centralized system
Maintaining the standard hierarchy [Ext.]	Centralized system	Centralized system
Administration of totals records	Centralized system	Master system: Business process
Planning	Centralized system	Master system: Business process
Period-End Closing	Centralized system	Master system: Business process
Posting with assignment to a business process	Centralized system/ other system	Centralized system / master system / business process / other system
Information system (individual business processes)	Centralized system	Master system / business process/ centralized system
Information system (global)	Centralized system	Centralized system

Activity-Based Costing provides the following distribution methods:

[Centralized Activity-Based Costing \[Page 7\]](#) (ALE distribution method one)

[Decentralized Activity-Based Costing \[Page 11\]](#) (ALE distribution method two)

Centralized Activity-Based Costing

Use

With a distributed, but integrated SAP R/3 installation, you can use ALE distribution methods to specify which systems communicate with each other, and which types of message are to be distributed.

See also: [Decentralized Activity-Based Costing \[Page 11\]](#)

Integration

Distribution from the Centralized System

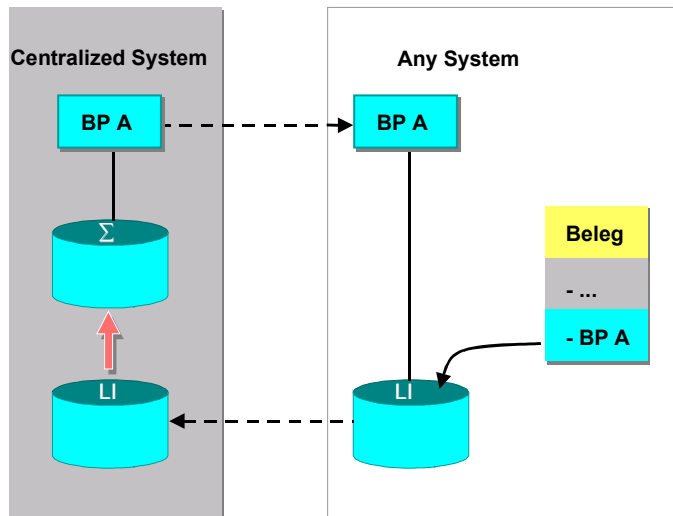
Idoc to be sent (message type)	Name
COABCM	Business processes [Ext.]
COSMAS	Cost centers [Ext.]
COELEM	Cost elements [Ext.]
COAMAS	Activity types [Ext.]
COGRP1	Cost center groups [Ext.]
COGRP2	Cost element groups [Ext.]
COGRP5	Activity type groups [Ext.]
COCOKA	Control data for objects/cost elements
COACTV	Prices [Ext.] for the cost center/activity type



The message types **COSCOR** (cost centers (core)) and **COACOR** (activity types (core)) are obsolete and you should no longer use them. Under no circumstances should they be used with the message types **COSMAS** (cost centers) and **COAMAS** (activity types).

Centralized Activity-Based Costing

Data Flow



BP A = Business Process A
 Σ = Totals Records
 LI = Line Items

In centralized Activity-Based Costing (distribution method one) the [standard hierarchy \[Ext.\]](#) and all business processes are assigned to and maintained in the centralized system (the logical system of the [controlling area \[Ext.\]](#)). All postings made to decentralized systems are forwarded to the centralized system.

The system manages the master data for business processes centrally. You can only evaluate data from the information system in the centralized system.

Planning and allocations at period-end closing also only take place in the centralized system.

Prerequisites

The customizing settings needed are described in the IMG.

For more information, see the IMG section *Cross-Application Components → Standard ALE Business Processes → Accounting → AC <-> AC → Setting up Activity-Based Costing*

To activate the change pointer, see also: [Centralized Cost Center Accounting \[Ext.\]](#)

- If you want to work in Activity-Based Costing with one of the distribution scenarios, you should store the centralized system (logical system of the controlling area) in the basic data of the controlling area.
- You also specify the valid ALE distribution method (ALE distribution method 01 or 02) in the controlling area basic data.
- If you change the distribution method from 01 to 02, you need to assign existing business processes to the logical system of the controlling area. You cannot change the assignment of a business process to a logical system.



Note the following constraints compared to using a fully integrated system.

The information flow from an R/3 to an R/2 cost accounting (RK) is not supported.

Flow Description: Centralized Activity-Based Costing

Flow Description: Centralized Activity-Based Costing

Process Flow

[Master Data \[Ext.\]](#)

The standard hierarchy is assigned to the centralized system (the logical system of the controlling area) and maintained in this system. It is sent to decentralized systems. The standard hierarchy cannot be changed in the decentralized systems.

The following data is distributed from centralized systems to the decentralized systems:

- [Business Processes \[Ext.\]](#)
- [Cost Centers \[Ext.\]](#)
- [Cost Elements \[Ext.\]](#)
- [Activity Types \[Ext.\]](#)

[Transaction Data \[Ext.\]](#)

In decentralized systems you can only record CO transaction data in the actual. The R/3 System automatically sends to the centralized system the document rows of decentrally recorded CO documents that are assigned to business processes. As a reference, the CO documents in the centralized system contain the sending, decentralized system and the number of the CO document in the decentralized system.

You can only create business process reports in the centralized system. This is because totals records for business processes are only updated in the centralized system.

Planning and allocations at period-end closing are also possible only in the centralized system.

Decentralized Activity-Based Costing

Use

With a distributed, but integrated SAP R/3 installation, you can use ALE distribution methods to specify which systems communicate with each other, and which types of message are to be distributed.

See also: [Centralized Activity-Based Costing \[Page 7\]](#)

Integration

Distribution from the Centralized System

Idoc to be sent (message type)	Name
COABCM	Business processes [Ext.]
COSMAS	Cost centers [Ext.]
COELEM	Cost elements [Ext.]
COAMAS	Activity types [Ext.]
COGRP1	Cost center groups [Ext.]
COGRP2	Cost element groups [Ext.]
COGRP5	Activity type groups [Ext.]
COCOKA	Control data for objects/cost elements
COACTV	Prices [Ext.] for the cost center/activity type
CODCMT	CO Document



The message types **COSCOR** (cost centers (core)) and **COACOR** (activity types (core)) are obsolete and you should no longer use them. Under no circumstances should they be used with the message types **COSMAS** (cost centers) and **COAMAS** (activity types).

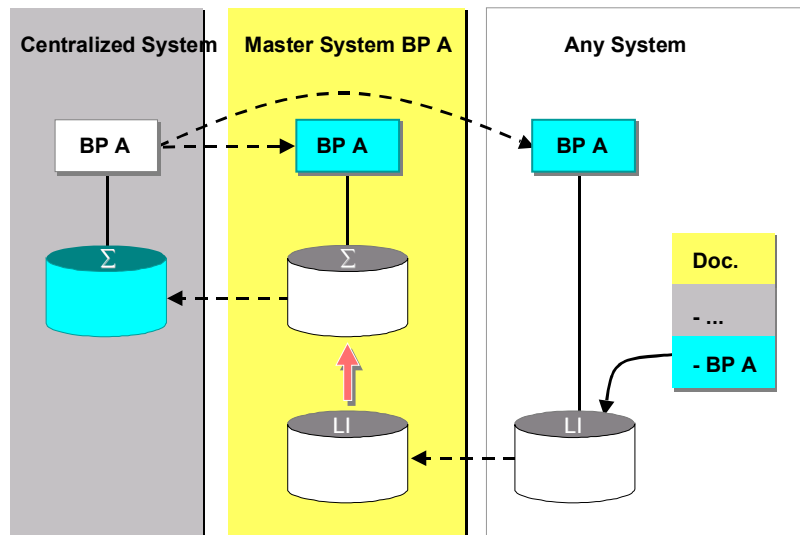
ALE Distribution from a Decentralized System

Idoc to be sent (message type)	Name	Decentralized → Centralized	Decentralized → Decentralized
COSFET	Cost centers requests.	X	
COAFET	Activity type requests	X	
COTOTL	Totals records	X	
COCOKA	Control data for objects/cost elements	X	X

Decentralized Activity-Based Costing

COACTV	Prices for cost center/ Activity type	X	X
CODCMT	CO Document	X	X

Data Flow



BP A = Business Process A
 Σ = Totals Records
 EP = Line Items

In decentralized Activity-Based Costing (distribution method two) the [standard hierarchy \[Ext.\]](#) is assigned to and maintained in the centralized system (the logical system of the [controlling area \[Ext.\]](#)). It is distributed to all decentralized systems. You can assign business processes to the decentralized systems, but you need to maintain them centrally.

The totals records for business processes are managed in the master system for each business process. This means that you can only evaluate data from the information system decentrally.

You can only plan decentrally, that is, in the master system of the business process. For this reason, plan price calculation only uses business processes located in the corresponding systems.

Likewise, you can only make plan allocations at period-end closing decentrally. You can make actual allocations in any system.



For example, you could execute actual period-end closing as follows:

- Make all periodic allocations and periodic repostings in the centralized system.
- You should also make periodic allocations and periodic repostings for all business processes located in the decentralized systems.

Decentralized Activity-Based Costing

- c. For example, if you want to evaluate data in a global information system or make central subsequent allocations, you can send the totals records from each of the decentralized systems to the centralized system afterwards.

Prerequisites

The customizing settings needed are described in the IMG.

For more information, see *Cross-Application Components* → *Standard ALE Business Processes* → *Accounting* → *AC <-> AC* → *Setting up Activity-Based Costing*

To activate the change pointer, see also: [Decentralized Cost Center Accounting \[Ext.\]](#)

- If you want to use one of the distribution scenarios in Activity-Based Costing, then store the centralized system (logical system of the controlling area) in the basic data of the controlling area.
- You also specify the valid ALE distribution method (ALE distribution method 01 or 02) in the controlling area basic data.
- All business processes must be assigned to a master system (logical system for the business process). You store the master system for the business process in the master data of the business process.
- If you change the distribution method from 01 to 02, you need to assign existing business processes to the logical system of the controlling area. You cannot change the assignment of a business process to a logical system.



Note the following constraints compared to using a fully integrated system.

The information flow from an R/3 to R/2 cost accounting (RK) is not supported.

Flow Description: Decentralized Activity-Based Costing

Flow Description: Decentralized Activity-Based Costing

Process Flow

[Master Data \[Ext.\]](#)

The standard hierarchy is assigned to the centralized system (the logical system of the controlling area) and maintained in this system. It is sent to decentralized systems. The standard hierarchy cannot be changed in the decentralized systems.

The master data for business processes is also maintained in the centralized system and distributed from there. The business processes are assigned to a logical system, in which the transaction data is managed (master system for the business process). This can be a centralized or a decentralized system. The logical system for the business process is stored in the master data of the business process.

The following master data is distributed from centralized systems to the decentralized systems:

- [Business Processes \[Ext.\]](#)
- [Cost Centers \[Ext.\]](#)
- [Cost Elements \[Ext.\]](#)
- [Activity Types \[Ext.\]](#)

[Transaction Data \[Ext.\]](#)

CO documents are recorded decentrally in the system in which the posting was made. The R/3 System automatically sends the document rows of decentrally recorded CO documents (assigned to business processes) to the master system for the business process. As a reference, the CO documents in the master system contain the sending, decentralized system and the number of the CO document in the decentralized system. Total records are also managed decentrally in the R/3 System to which the cost center belongs.

You can only execute planning and period-end closing in the given master system of business process, as this is where the transaction data for the business process is.

You can also create reports in decentralized systems for business processes belonging to the same logical system.

The totals records are sent from the decentralized system to the centralized system. This means that you can create reports in the centralized system for all the business processes of the controlling area.