Cost Center Accounting (CO-OM-CCA)



Release 4.6C



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Icons

Icon	Meaning
Δ	Caution
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②	Recommendation
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Cost Center Accounting (CO-OM-CCA)

Use

So that data remains consistent in a group of loosely-coupled SAP Systems, in cost center accounting you can distribute <u>Master [Ext.]</u> and <u>Transaction Data [Ext.]</u> between the systems. You can choose between two distribution methods.

According to the information in the distribution model, the different data maintenance functions are carried out in different systems.

Functions	Distribution Method 01 (Centralized Cost Center Accounting)	Distribution Method 2 (Decentralized Cost Center Accounting)
Master data maintenance - Cost Element [Ext.] - Activity Type [Ext.] -Cost Center [Ext.] - Resource [Ext.]	central cost accounting system/master data maintenance system	central cost accounting system/master data maintenance system
Maintenance of the <u>Standard</u> <u>Hierarchy [Ext.]</u>	central cost accounting system/master data maintenance system	central cost accounting system/master data maintenance system
Totals records administration	central cost accounting system	master system cost center
Planning	central cost accounting system	master system cost center
Period-end closing	central cost accounting system	master system cost center (sender and receiver)
Posting with account assignment to cost center	central cost accounting system/ decentralized system	central cost accounting system/ master system cost center/decentralized system
Information system (individual cost centers)	central cost accounting system	Master system cost center/ central cost accounting system
Information system (global)	central cost accounting system	central cost accounting system



The period closing function can be executed for distribution method 2 on the central cost accounting system also. However, a warning message will appear. This can be disabled in Customizing. In Customizing for Controlling, choose Controlling: General \rightarrow Account Assignment Logic \rightarrow Change Message Control [Ext.]. Enter the message control κI and disable the message number 005. If you do not enter a user, the change applies to all users.



Cost Center Accounting (CO-OM-CCA)

If centralized period-end closing should not be used in distribution method 2, in the central cost accounting system, you can change the warning message to an error message in the same way.

The following distribution methods are provided in cost center accounting:

Central Cost Accounting [Page 7] (distribution method 1)

Decentralized Cost Accounting [Page 13] (distribution method 2)

For more information about ALE see the SAP Library under Basis \rightarrow Middleware \rightarrow ALE Introduction and Administration.

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 Cost Center Accounting [Page 13]

Integration

Distribution from the Centralized Cost Accounting System

Idoc to be sent (message type)	Name
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
RESOURCECO	Resources [Ext.]



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).



Note that in addition to individual cost centers, cost elements and activity types, you can also distribute cost center **groups**, cost element **groups**, and activity type **groups**.

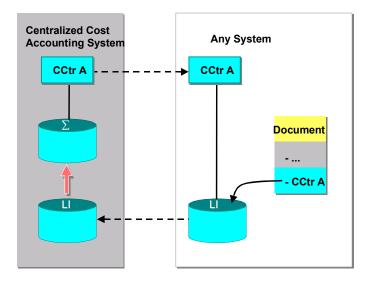
ALE Distribution from a Decentralized System

ldoc to be sent (message type)	Name	
COSFET	Cost centers requests.	
COAFET	Activity type requests	
CODCMT	CO Document	

SAP AG

Centralized Cost Center Accounting

Data Flow



CCtr A = Cost Center A Σ = Totals Records LI = Line Items

In centralized Cost Center Accounting (distribution method one) the <u>standard hierarchy [Ext.]</u> and all cost centers are assigned to and maintained in the centralized system. The system forwards all postings made on decentralized systems to the centralized cost accounting system.



Two centralized systems are available to enable you to maintain the master data for cost centers and the standard hierarchy:

• The **centralized cost accounting system**, which is the centralized system for the controlling area

The system sends the master data from here to the decentralized systems involved.

The centralized system for master data maintenance

The system sends the master data from here to the centralized cost accounting system and to the decentralized systems involved.



In the system where the document was entered, you can use the RKADELIT report to delete the line items already sent by ALE. If you delete all the posting rows in a document, then the document header is also deleted.

You can enter a to-posting date, and / or a to-entry date to restrict the line items that you wish to delete.

The R/3 System manages the cost center master data centrally. You can only evaluate data from the information system in the centralized cost accounting system.

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

Prerequisites

- The customizing settings needed are described in the IMG.
 - For more information, see Basis Components \rightarrow Distribution (ALE) \rightarrow Modeling and Implementing Business Processes \rightarrow Standard ALE Business Processes \rightarrow Accounting \rightarrow AC <-> AC \rightarrow Cost Center Accounting scenario [Ext.].
- In Customizing you also need to process Basis Components → Distribution (ALE) →
 Modeling and Implementing Business Processes → Master Data Distribution →
 Replication of Changed Data → Activate change pointers for message types [Ext.].
 - In the centralized system you need to activate the change pointers for the following message types: COSMAS (cost centers), COELEM (cost elements), COAMAS (activity types), COGRP1 (cost center groups), COCOKA (control data for object/cost element), COACTV (prices for cost center/activity type).
 - You can send the complete standard hierarchy using the change pointers, or at any other time by sending them directly.
 - When you change the hierarchy assignment of a cost center you must send the
 master data changes separately from the changes to the hierarchy (message types
 COSMAS and COGRP1). The sequence is not important, but you should send the
 changes as close together as possible, to ensure that they arrive consistently in the
 decentralized system.
 - The R/3 System writes change pointers only for changes to the standard hierarchy, and not for changes to alternative cost center groups, cost element groups, or activity type groups.
- To distribute the prices, you need to activate *Integrated planning* in the customizing settings for. You do this for each fiscal year, in Customizing for Cost Center Accounting, under *Planning* → *Basic Settings* → <u>Maintain versions</u> [Ext.]
- If you want to work in Cost Center Accounting with one of the ALE 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 ALE distribution method from 01 to 02, you must assign existing cost centers to the logical system of the controlling area. You cannot change the assignment of a cost center 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.
- A commitment is only managed if purchase orders or purchase order requests occur on the logical system of the cost center.

Flow Description: Centralized cost center accounting

Flow Description: Centralized cost center accounting Process Flow

Master Data [Ext.]

The standard hierarchy is assigned to the centralized cost accounting 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. By comparison, alternative Cost Center Groups [Ext.], Cost Element Groups [Ext.] and Activity Type Groups [Ext.] that are distributed from the centralized SAP System, can be changed in the decentralized SAP Systems.



Two centralized systems are available to enable you to maintain the master data for cost centers and the standard hierarchy:

 The centralized cost accounting system, which is the centralized system for the controlling area

The system sends the master data from here to the decentralized systems involved.

The centralized system for master data maintenance

The system sends the master data from here to the centralized cost accounting system and to the decentralized systems involved.

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

- Cost Centers [Ext.]
- Cost Elements [Ext.]
- Activity Types [Ext.]
- Units of measure for the combination "Cost center/cost element".
- Prices [Ext.] for the combination of cost center/activity type.

Transaction Data [Ext.]

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

You can only create cost center reports in the centralized cost accounting system. This is because totals records for cost centers are only updated in the centralized cost accounting system.

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

Flow Description: Centralized cost center accounting

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 Cost Center Accounting [Page 7]

Integration

Distribution from the Centralized Cost Accounting System

ldoc to be sent (message type)	Name
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).



Note that in addition to individual cost centers, cost elements and activity types, you can also distribute cost center **groups**, cost element **groups**, and activity type **groups**.

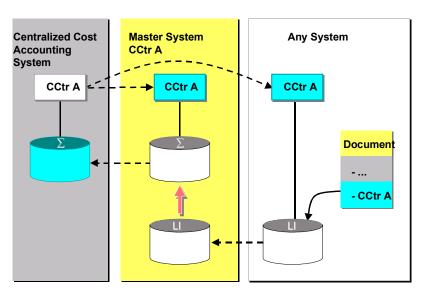
This means that you can use the same groups for report evaluations in all systems.

ALE Distribution from a Decentralized System

ldoc to be sent	Name	Decentralized	Decentralized
(message type)		→ Centralized	\rightarrow
			D ecentralized

COSFET	Cost centers requests.	Х	
COAFET	Activity type requests	Х	
COTOTL	Totals records	Х	
COCOKA	Control data for objects/cost elements	Х	Х
COACTV	Prices for cost center/ Activity type	Х	Х
CODCMT	CO Document	Х	Х

Data Flow



 $\begin{array}{ll} \text{CCtr A = Cost Center A} \\ \Sigma & = \text{Totals Records} \\ \text{LI} & = \text{Line Item} \end{array}$

In decentralized Cost Center Accounting (ALE distribution method two) the <u>standard hierarchy</u> [<u>Ext.</u>] is assigned to and maintained in the centralized cost accounting system (the logical system of the <u>controlling area [Ext.]</u>). It is distributed to all decentralized systems. You can assign cost centers to the decentralized systems, but you need to maintain them centrally.



Two centralized systems are available to enable you to maintain the master data for cost centers and the standard hierarchy:

 The centralized cost accounting system, which is the centralized system for the controlling area

The system sends the master data from here to the decentralized systems involved.

• The centralized system for master data maintenance

The system sends the master data from here to the centralized cost accounting system and to the decentralized systems involved.



In the system where the document was entered, you can use the RKADELIT report to delete the line items already sent by ALE. If you delete all the posting rows in a document, then the document header is also deleted.

You can enter a to-posting date, and / or a to-entry date to restrict the line items that you wish to delete.

The cost center totals records are managed in the master system of the given cost center. This means that you can only evaluate data from the information system decentrally.

You can send the totals data to the centralized cost accounting system using the RBDSECOT report. This means that evaluations (such as, for period-end closing) can be made in a central information system. If you post to a cost center directly in the centralized cost accounting system, the system updates the totals record there. At the same time, the system sends the line item to the corresponding master system for the cost center, and updates the totals record there in the same way. You do **not** need to retransport the transaction data to the centralized cost accounting system in this case.

You can only plan decentrally, that is, in the master system of the cost center. For this reason, plan price calculation only uses cost centers 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:

- 1. Make all periodic allocations and periodic repostings in the centralized system.
- 2. You should also make periodic allocations and periodic repostings for all cost centers located in the decentralized systems.
- 3. For example, if you want to evaluate data in a global information system or subsequently make central allocations, you can send the totals records from each of the decentralized systems to the centralized system afterwards.



Until Release 3.0F you could only use ALE distribution method 1 for distributed systems.

Prerequisites

The customizing settings needed are described in the IMG.

For more information, see Basis Components \rightarrow Distribution (ALE) \rightarrow Modeling and Implementing Business Processes \rightarrow Standard ALE Business Processes \rightarrow Accounting \rightarrow AC <-> AC \rightarrow Cost Center Accounting scenario [Ext.].

- In Customizing you also need to process Basis Components → Distribution (ALE) →
 Modeling and Implementing Business Processes → Master Data Distribution →
 Replication of Changed Data → Activate change pointers for message types [Ext.].
 - In the centralized system you need to activate the change pointers for the following message types: COSMAS (cost centers), COELEM (cost elements), COAMAS (activity types), COGRP1 (cost center groups), COCOKA (control data for object/cost element), COACTV (prices for cost center/activity type).
 - In the decentralized system you need to activate the change pointers for the following message types: COCOKA (control data for object/cost element) and COACTV (prices for cost center/activity type)
 - You can send the complete standard hierarchy using the change pointers, or at any other time by sending them directly.
 - When changing the hierarchy assignment of a cost center, you need to send the changes to the master data separately from the changes to the hierarchy (message types COSMAS and COGRP1). The sequence is not important, but you should send the changes as close together as possible, to ensure that they arrive consistently in the decentralized system.
 - The R/3 System writes change pointers only for changes to the standard hierarchy, and not for changes to alternative cost center groups, cost element groups or activity type groups.
- If you want to distribute the prices, you need to activate *Integrated planning* in the
 customizing for Cost Center Accounting. You do this in the settings for each fiscal year,
 under *Planning* → *Basic Settings* → Maintain versions [Ext.]
- If you want to work in Cost Center Accounting with one of the ALE 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.
- All cost centers must be assigned to a master system (logical system of the cost center).
 You store the master system of the cost center in the cost center master data.
- If you change the ALE distribution method from 01 to 02, you must assign existing cost centers to the logical system of the controlling area. You are not allowed to change the assignment of a cost center 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.
- A commitment is only managed if purchase orders or purchase order requests occur on the logical system of the cost center.

Flow Description: Decentralized cost center accounting

Flow Description: Decentralized cost center accounting Process Flow

Master Data [Ext.]

The standard hierarchy is assigned to the centralized cost accounting 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. By comparison, alternative Cost Center Groups [Ext.], Cost Element Groups [Ext.] and Activity Type Groups [Ext.] that are distributed from the centralized SAP R/3 System, can be changed in the decentralized SAP-R/3-Systems.

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



Two centralized systems are available to enable you to maintain the master data for cost centers and the standard hierarchy:

 The centralized cost accounting system, which is the centralized system for the controlling area

The system sends the master data from here to the decentralized systems involved.

The centralized system for master data maintenance

The system sends the master data from here to the centralized cost accounting system and to the decentralized systems involved.

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

- Cost Centers [Ext.]
- Cost Elements [Ext.]
- Activity Types [Ext.]

The following master data is distributed from the logical system of a cost center to the other systems.

- Units of measure for the combination "Cost center/cost element".
- Prices [Ext.] for the combination of cost center/activity type.

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 cost centers) to the cost center master system. As a reference, the CO documents in the master system contain the sending, decentralized system and the number of the CO

Flow Description: Decentralized cost center accounting

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 a cost center. This is because there is cost center transaction data in this system.

You can also create reports in decentralized systems for cost centers that belong to the same logical system.

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