



Deep Dive in SAP Cost Center Accounting

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Introduction

- Understand the role of cost centers in SAP and how they support planning, allocation, and reporting processes
- Explore planning functionality including KP06, KP26, KP46, KPD6, automated activity price calculation, and planning upload options
- Review actual cost capture and allocation methods including assessments, distributions, repostings, template allocation, and Universal Allocation in S/4HANA
- Learn how Statistical Key Figures (SKFs) are used to drive allocation logic and reporting accuracy
- Examine key data flow and core tables such as COSP, COSS, COST, COKL, and COSL, including what changes in S/4HANA
- Gain guidance on using SAP GUI, Fiori, or hybrid approaches for planning and controlling processes
- Understand activity type postings and the importance of KP26 setup for accurate master data and production integration
- Review commonly used reports, Fiori apps, and transaction codes for plan and actual analysis in Controlling

Contents

- Cost centers and related CO master data
- Cost center planning steps
- Cost allocation methods
- Cost center absorption transactions
- PP<>CO Integration and Activity type data flow
- Role of cost centers for product costing, importance of KP26
- Other cost objects; important Fiori apps, transaction codes
- Resources
- Q&A

Cost center - definition

A cost center is an organizational unit in a controlling area that represents a defined location where costs are incurred. Cost centers can be created based on:

- functional requirements (a department or section),
- allocation criteria (maintenance costs that are allocated to a pool of manufacturing cost centers),
- physical location (headquarters, manufacturing facility 1, manufacturing facility 2, distribution center 1, and distribution center 2), and
- responsibility for costs (finance, accounting, legal, and marketing).
- Cost centers are maintained using the **MANAGE COST CENTERS** app

The screenshot shows the SAP S/4HANA 'Manage Cost Centers' app interface for cost center C51200. The header includes the SAP logo, a back arrow, the title 'Cost Center', and a user icon 'TK'. Below the header, the cost center ID 'C51200' and name 'Choctwn-Candy-Q1' are displayed, along with action buttons: Edit, Delete, Copy, Validity Periods, Where Used, and a share icon. The validity period is '01/01/2022 – 12/31/9999', the user responsible is 'Person Responsible: Carl', and there are navigation icons for up and down arrows. A tabbed menu below includes 'General Information' (selected), 'Organizational Units', 'Control', 'Address', 'Communication', 'Translation', and 'Change Log'. The 'General Information' tab shows a two-column layout of fields: Controlling Area (GCI1 (Global Confectioners, Inc)), Cost Center (C51200 (Choctwn-Candy-Q1)), Name (Choctwn-Candy-Q1), Description (Chocotown-Candy Machine Q1), Valid From (01/01/2022), Valid To (12/31/9999), User Responsible (—), Person Responsible (Carl), Department (—), Cost Center Category (F (Production)), Created On (11/01/2022), and Created By (ASAMPAT (Ashish SAMPAT)). The 'Organizational Units' tab below shows: Standard Hierarchy Node (512-PLANT2 (GCI-MFG-Chocotown-Plant 2)), Company Code (GCI1 (Global Confectioners, Inc)), Business Area (—), Currency (USD (United States Dollar)), Profit Center (51200 (Chocotown-Candy Mfg)), and Functional Area (—).

Controlling Area: GCI1 (Global Confectioners, Inc)	User Responsible: —
Cost Center: C51200 (Choctwn-Candy-Q1)	Person Responsible: Carl
Name: Choctwn-Candy-Q1	Department: —
Description: Chocotown-Candy Machine Q1	Cost Center Category: F (Production)
Valid From: 01/01/2022	Created On: 11/01/2022
Valid To: 12/31/9999	Created By: ASAMPAT (Ashish SAMPAT)

Standard Hierarchy Node: 512-PLANT2 (GCI-MFG-Chocotown-Plant 2)	Currency: USD (United States Dollar)
Company Code: GCI1 (Global Confectioners, Inc)	Profit Center: 51200 (Chocotown-Candy Mfg)
Business Area: —	Functional Area: —

Cost Center - Definition

- A cost center is one of the most widely used master data elements in controlling. Cost centers enable the departmental breakdown of costs.
- They are often the lowest level of an organization where costs and departmental performance can be collected and analyzed.
- Cost centers are therefore useful for departmental budgets and planning versus actual comparison of expenses.
- Cost centers can also be used for the purpose of interdepartmental cost allocations through sender-receiver relationships.
- The relationships can be defined in cost center allocations—some of the widely used methods are distribution and assessments.

Cost center hierarchy

- A cost center hierarchy consists of groups of cost centers in a tree structure, within a controlling area.
- Cost centers can be grouped together to provide summary cost information. A cost center hierarchy consists of nodes and sub-nodes that cost centers are attached to.
- A cost center hierarchy comprises all cost centers for a given period and therefore represents the entire enterprise. This hierarchy is known as the standard hierarchy.
- Cost center hierarchies are typically defined before cost centers are created. Maintenance is handled via the **MANAGE COST CENTER GROUPS** Fiori app.

Cost Center Group: CTR, Global Confectioners, Inc., Stan... All Search

Save Edit Select Group Version

Preview on Key Date: 19.05.2024

Levels New Add Edit Find:

☐	Cost Center Group/Cost Center	Name	Company Code	Company Name
☐	▼ CTR	Global Confectioners, Inc.		
☐	01-HQ	GCI-HQ		
☐	02-MKTG	GCI-Marketing		
☐	03-SALES	GCI-Sales		
☐	04-PROCMT	GCI-Procurement		
☐	▼ 05-MFG	GCI-Manufacturing		
☐	▼ 51-CHOC	GCI-MFG-Chocotown		
☐	▼ 511-PLANT1	GCI-MFG-Chocotown-Plant 1		
☐	C51100	Choctwn-Choclat-M1	GCI1	Global Confectioners, Inc
☐	C51101	Choctwn-Choclat-M2	GCI1	Global Confectioners, Inc
☐	C51102	Choctwn-Choclat-M3	GCI1	Global Confectioners, Inc
☐	▼ 512-PLANT2	GCI-MFG-Chocotown-Plant 2		
☐	C51200	Choctwn-Candy-Q1	GCI1	Global Confectioners, Inc
☐	C51201	Choctwn-Candy-Q2	GCI1	Global Confectioners, Inc
☐	C51202	Choctwn-Candy-Q2	GCI1	Global Confectioners, Inc
☐	C51203	Choctwn-Candy-Q3	GCI1	Global Confectioners, Inc
☐	▼ 519-COMMON	GCI-MFG-Chocotown-Common		
☐	C51900	Choctwn-Common	GCI1	Global Confectioners, Inc
☐	C51901	Choctwn-Maintenance	GCI1	Global Confectioners, Inc
☐	C51902	Choctwn-Energy	GCI1	Global Confectioners, Inc

Cost Element, Activity Types, Statistical Key Figures

- A *cost element* can be defined as a vehicle for carrying costs in CO. It is a special GL account that provides management with a view of where and how money is being spent. It enables management to identify any specific areas where the organization might need to focus on controlling costs.
 - Cost elements are profit and loss accounts and can be assigned as either primary or secondary.
- *Activity types* refer to activities performed in cost centers within a controlling area; for example, labor hours or maintenance hours for a maintenance cost center.
 - Activity types describe the specific activity output provided by a cost center to other cost objects such as work orders, internal orders, etc
- A *statistical key figure (SKF)* is used to track quantities and values for various operating activities. SKFs are designed for use in reporting and analysis and can also be used to assist in the allocation of costs.
 - An SKF can be defined as either a fixed value or a total value. Key figures defined as fixed values are valid as of the posting period and in all subsequent posting periods of the fiscal year. In contrast, key figures defined as total values are only valid for the posting period in which they are entered.

Controlling master data objects and Fiori apps

Controlling Master Data Objects and their Fiori Apps	
Controlling Master Data Object	Fiori App
Cost Center	Manage Cost Centers
Cost Center Group	Manage Cost Center Groups
Cost Element / G/L Account	Manage G/L Account Master Data
Cost Element Group	Create Cost Element Groups
Activity Type	Manage Activity Types
Activity Type Group	Manage Activity Type Groups
Statistical Key Figure	Manage Statistical Key Figures
Statistical Key Figure Group	Manage Statistical Key Figure Groups
Internal Order	Manage Internal Orders
Internal Order Group	Manage Internal Order Groups

Contents

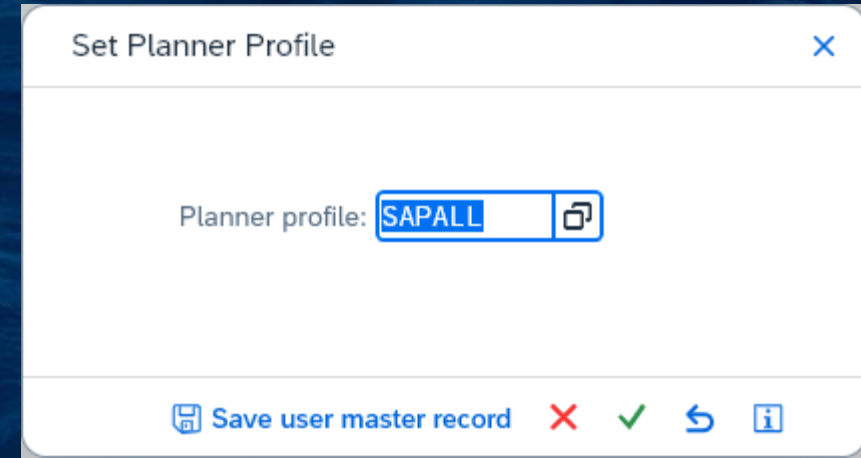
- Cost centers and related CO master data
- Cost center planning steps
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Cost Center Planning Steps

- **Step 1: Setting the planner profile (KP04)**
- **Step 2: Activity quantity planning—cost centers (KP26 / App: EDIT PRICES FOR ACTIVITY TYPES)**
- **Step 3: Activity-dependent cost planning (KP06)**
- **Step 4: Activity-independent cost planning (KP06)**
- **Step 5: Splitting activity-dependent costs (KSS4)**
- **Step 6: Activity price calculation (KSPI)**
- **Step 7: Transferring planned costs for Fiori reports (SA38: R_FINS_PLAN_TRANS_CO_ERP_2_S4H)**
- **Step 8: Transferring activity prices for Fiori reports (SA38: R_FINS_PLAN_TRANS_ACTY_ERP_S4H)**
- **Reports: S_ALR_87013611 / App: Cost Centers Plan/Actual report**

Step 1: Setting the planner profile (KP04)

- **KP04:** planner profile is used to pick and choose the right combination of fields suitable for your planning needs.
- **SAP-delivered standard planner profile SAPALL includes all possible combinations for planning.**
- **For KP26 / KP06: Option to upload cost center plans from Excel**
 - Instead of manually entering the cost center plans, SAP provides a method of uploading the data from Excel spreadsheets.
 - As part of system configuration, file formats are created and assigned to cost center planning layouts.
 - The upload is processed from any one of the planning transaction codes by navigating to the menu option **EXTRAS → EXCEL PLANNING → UPLOAD** from the transaction.



Set Planner Profile

Planner profile: 

 Save user master record    

Step 2: Activity quantity planning

- **KP26: carry out activity quantity planning to determine the base for absorption.**
- **Typically, the activity quantity is determined by the production volume for the planning period,**
- **Can also use Fiori App: Edit Prices for Activity Types**

SAP Change Activity Type/Price Planning: Overview Screen

Menu ▾

Version: 0 Plan/Act - Version
Period: 1 To: 12
Fiscal Year: 2025
Cost Center: C51100 Chocotown-Chocolate Machine M1

Activit...	Plan Activity	Dist...	Capacity	Dist...	Unit	Price (Fixed)	Variable price	Price ...	PL...	Pla...	Av...	Alloc. cost el...	A..	Equiva...
☐ LABOR	6,000.0	2		2	HR			00001	1	☐	☐	611000	1	1
☐ MCHRS	1,800	2		2	H			00001	1	☐	☐	620000	1	1
☐ *Acti...			0.0											2
☐		2		2						☐	☐			
☐		2		2						☐	☐			
☐		2		2						☐	☐			
☐		2		2						☐	☐			
☐		2		2						☐	☐			

Position...

Post Period Screen

Edit Prices for
Activity Types
Cost Centers



Step 3: Activity-dependent cost planning (KP06)

- **KP06 is used for both activity-dependent cost planning and activity-independent cost planning.**

Activity Type: *

to:

or group:

- If the activity type field on the initial screen is populated with a * or a specific activity, this results in activity-dependent cost planning.

<

SAP

Change Cost Element/Activity Input Planning: Overview Screen

> KP06 ▾

Menu ▾

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🔗 Line items

Change Values

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Print

Exit

Version: 0

Plan/Act - Version

Period: 1

To: 12

Fiscal Year: 2025

Cost Center: C51100

Chocotown-Chocolate Machine M1

Activit...	Cost Element	Plan Fixed Costs	Dist...	Plan Variable Costs	Dist...	Plan fixed consumpt.	Dist...	Plan vbl consumption	Dist...	Unit	Q	Lon...
☐ LABOR	420000		2	120,000.00	2	0.000	2	0.000	2		☐	☐
☐	449000		2	60,000.00	2	0.000	2	0.000	2		☐	☐
☐ MCHRS	416200		2	18,000.00	2	0.000	2	0.000	2		☐	☐
☐	452000	36,000.00	2		2	0.000	2	0.000	2		☐	☐
☐	481000	72,000.00	2		2	0.000	2	0.000	2		☐	☐
☐ *Acti...	*Cost Elem...	108,000.00		198,000.00		0.000		0.000				
☐			2		2		2		2		☐	☐
☐			2		2		2		2		☐	☐
☐			2		2		2		2		☐	☐

📄 Position...

Post

Period Screen

Step 4: Activity-independent cost planning (KP06)

- Leaving the **ACTIVITY TYPE** field as **<blank>** on initial screen results in activity-independent cost planning.

Activity Type:

to:

or group:

- **Fixed-cost planning is usually activity-independent, because these costs occur regardless of whether any tasks have been performed.**

SAP Change Cost Element/Activity Input Planning: Overview Screen KP06 ▾

Menu ▾ ▾ ⬆ ⬇ ↶ 🔍 🖨️ 🗑️ ✂️ 📄 📁 📝 🔗 Line items Change Values 🔄 📤 Print Exit

Version: 0	Plan/Act - Version	
Period: 1	To: 12	
Fiscal Year: 2025		
Cost Center: C51100	Chocotown-Chocolate Machine M1	

☐	Cost Element	Plan Fixed Costs	Dist...	Plan Variable Costs	Dist...	Plan fixed consumpt.	Dist...	Plan vbl consumption	Dist...	Unit	Q	Lon...	⚙️
☐	405200	1,800.00	2	0.00	2		2	0.000	2		☐	☐	
☐	430000	12,000.00	2	0.00	2		2	0.000	2		☐	☐	
☐	435000	24,000.00	2	0.00	2		2	0.000	2		☐	☐	
☐	470101	4,800.00	2	0.00	2		2	0.000	2		☐	☐	
☐	473000	5,400.00	2	0.00	2		2	0.000	2		☐	☐	
☐	*Cost Elem...	48,000.00		0.00		0.000		0.000					
☐			2		2		2		2		☐	☐	
☐			2		2		2		2		☐	☐	
☐			2		2		2		2		☐	☐	
☐			2		2		2		2		☐	☐	

📄 Position...

Post Period Screen

Step 5: Splitting activity-dependent costs (KSS4)

- Activity-independent costs are attached to specific activity types.
- Needed since the goal is to load costs for the to the product, via cost drivers (activity types).

< **SAP** Plan Cost Splitting: List > KSS4 v

Menu v [dropdown] Σ [icon] Cost Elements [icon] [icon] [icon] Exit

Display status Total for all periods

Cost Object	Planned (COArCurr)	Crcy
CTR C51100		USD
ATY C51100/LABOR	24,000.00	USD
ATY C51100/MCHRS	24,000.00	USD

Continue

Step 6: Activity price calculation (KSPI)

SAP Price Calculation Results - Plan KSPI

Menu Messages Activity Analysis Exit

Controlling Area: GCI1 Global Confectioners, Inc
Version: 0 Plan/Act - Version
Fiscal Year: 2025
Period: 001 To 012
Cost center group: 51-CHOC
Plan price calc.: 2 Average price
Currency: USD United States Dollar
Exchange Rate Type: P Standard translation for cost planning
Value Date: 01/01/2025

Processing Status: TestRun
Number of Messages: 1
Maximum Categ.: Information

Processing completed without errors

Period: 001

OTy	Object	Name	AUn	Activity Quantity	Total Price	Price (Fixed)	PUnit
ATY	C51100/LABOR	Choctwn-Choclat-M1	HR	6,000.0	34.00	4.00	1
ATY	C51100/MCHRS	Choctwn-Choclat-M1	H	1,800	8,333.33	7,333.33	100

Save Cancel

- **KSPI: Activity prices calculated for cost center/activity type combinations**
- **Alternate transaction: KP26**
 - **Manual price update – calculate outside the system and update directly**
 - **Does not give the cost component breakdown of activity price into e.g., Labor, Benefits, Depreciation, Maintenance costs**

Step 7: Transferring planned costs for Fiori reports

< **SAP** Transfer CO plan data from CO tables to the ACDOCP table > SA38 v

Menu v Save as Variant... Exit

Transfer plan data from SAP ERP (CO-tables) to SAP S/4HANA (ACDOCP)

Planning area: Cctr:Costs Cost ctrs: Cost ... v

Selections ERP for Reading

* Version: 0

* Controlling Area: GCI1

* Fiscal Year: 2025

* From Posting Period: 1

* To Posting Period: 12

Cost Center: to:

Activity Type: to:

Account Number: to:

* Planning currency: T

Selections S/4HANA for Writing

* Ledger: 0L

* Plan Category: PLN

Test Mode On: ☒

Execute

- Universal Journal uses:
 - ACDOCA table for actual data
 - ACDOCP table for planning data
 - ACCOSTRATE table for calculated rates
- Fiori reports access the newer planning tables but not the special CO tables (COSP, COSS, COST, etc.)
- The planning data should be made available to support Fiori reports for plan/actual comparison.
- SAP has provided a means of updating the planning tables from the CO tables.
- SA38: R_FINS_PLAN_TRANS_CO_ERP_2_S4H

Step 8: Transferring activity prices for Fiori reports

SA38: R_FINS_PLAN_TRANS_ACTY_ERP_S4H)

< **SAP** Transfer Prices from CO table COST to SAP S/4HANA table ACCOSTRATE > SA38 v

Menu v Save as Variant... Exit

Transfer activity prices from SAP ERP (COST) to SAP S/4HANA (ACCOSTRATE)

Selections SAP ERP for Reading

* Version:

* Controlling Area:

* Fiscal Year:

* From Posting Period:

* To Posting Period:

Cost Center: to:

Activity Type: to:

* Planning Currency:

Selections SAP S/4HANA for Writing

Ledger:

* Plan Category:

Test Mode On: ☒

Execute

S_ALR_87013611 - Cost Center Actual/Plan/Variance Report

Plan data populated during planning phase (typically once a year)

Actual data populated on an on-going basis

- Payroll
- Depreciation
- Expenses
- Cost allocation
- Activity confirmation

SAP Cost Centers: Actual/Plan/Variance S_ALR_87013611

Menu

Variation: Cost Center

- CTR Global Confectioners, Inc.
- 05-MFG GCI-Manufacturing
- 51-CHOC GCI-MFG-Chocotown
- 511-PLANT1 GCI-MFG-Chocotown-Plant 1
- C51100 Choctwn-Choclat-M1
- C51101 Choctwn-Choclat-M2
- C51102 Choctwn-Choclat-M3
- 519-COMMON GCI-MFG-Chocotown-Common
- C51900 Choctwn-Common
- C51901 Choctwn-Maintenance
- C51902 Choctwn-Energy

Cost Centers: Actual/Plan/Variance Date: 01/25/2025 Page: 2 / 3

Column: 1 / 2

Cost Center/Group: C51100 Choctwn-Choclat-M1

Person responsible: Carl

Reporting period: 1 to 1 2025

Cost Elements	Act. Costs	Plan Costs	Var. (Abs.)	Var. (%)
404000 Spare parts	200.00		200.00	
405200 Office supply cons.	250.00	150.00	100.00	66.67
416200 Electricity (vbl)	1,200.00	1,500.00	300.00-	20.00-
420000 Direct labor costs	11,000.00	10,000.00	1,000.00	10.00
430000 Salaries	2,000.00	1,000.00	1,000.00	100.00
435000 Annual bonus	2,500.00	2,000.00	500.00	25.00
449000 Other personnel exp	4,000.00	5,000.00	1,000.00-	20.00-
452000 Mach & equip maint		3,000.00	3,000.00-	100.00-
470101 Meals		400.00	400.00-	100.00-
473000 Postage w/o phone		450.00	450.00-	100.00-
481000 Estim. depreciation	6,000.00	6,000.00		
* Debit	27,150.00	29,500.00	2,350.00-	7.97-
611000 Labor Hours		17,000.00-	17,000.00	100.00-
620000 Machine Hours		12,500.00-	12,500.00	100.00-
* Credit		29,500.00-	29,500.00	100.00-
** Over/Underabsorption	27,150.00		27,150.00	

App: Cost Centers Plan/Actual report

Cost Centers
Plan/Actual



Accessible



Cost Center Plan Actual ▾

CHC1 Plan Act ▾

Filtered By (6): Ledger, Key Date, Fiscal Year of Ledger, Plan Category, Fiscal Period, ...



Data Analysis



CHC1 Report ▾

Filter ▾

Sort ▾

Hierarchy ▾

Drilldown ▾

Display ▾

Measures ▾

Totals ▾

Navigate To ▾



Cost Center ▾	Activity ... ▾	G/L Account	Plan Amount i...	Actual Amount...	Difference Actual ...	Difference (%)	Plan Valn Quantity	Act Valn Quantity
C51100	#	405200	Office supply cons.	\$ 1,800.00		\$ -1,800.00	0.00	0
		430000	Salaries	\$ 12,000.00		\$ -12,000.00	0.00	0
		435000	Annual bonus	\$ 24,000.00		\$ -24,000.00	0.00	0
		470101	Meals	\$ 4,800.00		\$ -4,800.00	0.00	0
		473000	Postage w/o phone	\$ 5,400.00		\$ -5,400.00	0.00	0
		Total		\$ 48,000.00		\$ -48,000.00	0.00	0
	LABOR	420000	Direct labor costs	\$ 120,000.00		\$ -120,000.00	0.00	0
		449000	Other personnel expe	\$ 60,000.00		\$ -60,000.00	0.00	0
		611000	Labor Hours	\$ -204,000.00		\$ 204,000.00	0.00	-6,000.0 HR
		Total		\$ -24,000.00		\$ 24,000.00	0.00	-6,000.0 HR
	MCHRS	416200	Electricity (vbl)	\$ 18,000.00		\$ -18,000.00	0.00	0
		452000	Mach & equip maint	\$ 36,000.00		\$ -36,000.00	0.00	0
		481000	Estim. depreciation	\$ 72,000.00		\$ -72,000.00	0.00	0
		620000	Machine Hours	\$ -150,000.00		\$ 150,000.00	0.00	-1,800 H
		Total		\$ -24,000.00		\$ 24,000.00	0.00	-1,800 H
	Total			\$ 0.00		\$ 0.00	0.00	*
Grand Total				\$ 0.00		\$ 0.00	0.00	*

Cost Center Planning Steps

Steps for Planning for Cost Centers at GCI

Description of transaction	Create / Change	Purpose	Display
Set Planner Profile	KP04 (transaction)	Provides combination of fields suitable for your planning needs	
Activity Quantity Planning	Edit Prices for Activity Types	Planning of activity quantity for the planning period	KP27
Activity Dependent Cost Planning	KP06 (transaction)	Planning of activity dependent (direct) costs	KP07
Activity Independent Cost Planning	KP06 (transaction)	Planning of activity independent (indirect / overhead) costs	KP07
Plan Cost Center Splitting	KSS4 (transaction)	Attach activity independent costs to specific Activity Types	
Plan Activity Price Calculation	KSPI (transaction)	Calculate predetermined absorption rate (burden rate)	
Transfer Plan to Universal Journal	SA38 (transaction)	Update plan in table ACDOPC (R_FINS_PLAN_TRANS_CO_ERP_2_S4H)	
Transfer Prices to Universal Journal	SA38 (transaction)	Update activity rates in ACCOSTRATE (R_FINS_PLAN_TRANS_ACTY_ERP_S4H)	

Tools for Cost Center Planning

Description of transaction	Transaction / Fiori app	Purpose
Direct input of activity prices	Edit Prices for Activity Types	Activity type rates are fed manually instead of being calculated via KSPI
Mass upload of activity quantities	Edit Prices for Activity Types	Upload activity quantities using a comma separated (csv) file
Quantity data from long term planning	KSPF (transaction)	Transfers Long Term Planning (LTP) data to cost centers (activity quantity input via KP26 can be avoided or reduced)
Mass upload of planned costs	KP06 (transaction)	Upload costs using a comma separated (csv) text file
Copy from previous year's plan	KP97 (transaction)	Previous year's plan is the base for upcoming year's plans
Copy from previous year's actuals	KP98 (transaction)	Previous year's actual is the base for upcoming year's plans
Plan cost distribution	Manage Allocations	Allocation of costs (sender cost element retained)
Cost center planning report	KSBL (transaction)	Displays activity-dependent and -independent costs for a cost center
Plan cost assessment	Manage Allocations	Allocation of costs (sender cost element not available)
Activity price report	Analyze Prices for Activity Types	Report of activity prices for cost center / cost center group

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Cost Allocation Methods

- A typical manufacturing facility incurs costs in various departments, including services rendered by support departments to the production department.
- Usually, the goal is to transfer costs from service departments to production departments, so that the costs get added to the cost of the product.
- This transfer of costs internally within controlling is achieved using allocations.
- There are two main types of allocations in controlling: distribution and assessments.
 - Distribution: Original, primary cost element is retained and passed on to the receivers.
 - Assessments: Original cost elements are grouped together into assessment cost elements (secondary cost elements); and passed on to the receivers. Original cost elements are not displayed on the receivers.
- The sender and receiver rules are known as segments. Segments are maintained in allocation cycles.
- Once an allocation cycle posts, the sender-receiver (segment) information is displayed in the controlling document.

Distribution

- Whether you select distribution or assessment (or both) as method of cost allocation, depends on your business requirement.
- Example: A facilities department (one sender) responsible for a building.
- Incurs three primary costs: building rent, telephone expenses, and supplies.
- Four departments: marketing, finance, purchasing, and HR (four receivers).
- Costs are allocated based on predefined percentages.
- Distribution:
 - Same primary cost element is used to allocate costs.
 - The sender cost center gets a credit using three original primary cost elements.
 - Four receiving cost centers will each see three original primary cost elements as debits.
 - Each department can identify cost allocated on each of the three cost elements-rent, telephone, supplies.

Assessment

- **Assessment:**
 - A secondary cost element for assessment, (say, facilities expense), is used to allocate costs.
 - The sender cost center gets a credit via the assessment cost element.
 - Four receiving cost centers will each see one secondary cost element as debit.
 - The receivers do not know how much of this facilities expense consists of rent, telephone, and beverage.
 - One would need to look up a report for the sending cost center to identify the breakdown of these costs.

Other Methods for Cost Allocation

Universal Allocations (S/4HANA feature)

- Allocation Context (Cost Centers, Margin Analysis, Profit Centers)
- Actual/Plan Indicator
- Allocation Type (Overhead, Distribution, Intercompany, Top-Down)

Traditional methods (GUI-based)

- KSV5 Distribution
- KSU5 Assessment
- KSC5 Indirect Activity Allocation
- KSW5 Periodic Reposting
- KPAS Template Allocation
- KSI4 Overhead Calculation

The screenshot displays the SAP 'Manage Allocations' interface. On the left, there are filters for 'Standard*' (set to 'Standard'), 'Where-Used', 'Allocation Context' (with a search bar), 'Editing Status' (set to 'All'), 'Ledger' (empty), 'Allocation Status' (empty), 'Plan Category' (empty), 'Allocation Type' (empty), 'Company Code' (set to '1010 (Buchu...'), 'Allocation Cycle' (empty), and 'Actual/Plan' (empty). The main area shows details for 'OP1010 Maintenance Allocations'. It includes fields for 'Ledger: 0L (Ledger 0L)', 'Allocation Type: Overhead Allocation', 'Actual/Plan: Plan', 'Created By:', 'Valid From: 31.12.2016', and 'Allocation Status: Unlocked'. Below these are tabs for 'General Information', 'Field Groups', 'Processing Indicators', 'Derivation Rules', and 'Segments'. The 'Segments' tab is active, showing a table with one segment: '1 MAINT1 Buildings & Maintenance Cost' with an 'Unlocked' status. The table has columns for 'Segment Nu...', 'Segment Name', 'Segment Description', and 'Allocation Status'. Above the table are buttons for 'Create', 'Copy', 'Delete', 'Lock All', 'Unlock All', and 'Show Details'.

Segment Nu...	Segment Name	Segment Description	Allocation Status
1	MAINT1	Buildings & Maintenance Cost	Unlocked

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Cost center absorption transactions

Cost center absorption transactions used at CGI

Description of transaction	Transaction / Fiori app	Purpose
Actual cost distribution	KSV5 (transaction)	Allocation of costs (sender cost element retained)
Actual cost assessment	KSU5 (transaction)	Allocation of costs (sender cost element not available)
Maintain splitting structure	OKES (transaction)	Configure splitting structure (cost elements, groups, activities)
Assign cost centers to splitting structure	OKEW (transaction)	Configure assignment of cost centers to splitting structure
Actual cost center splitting	KSS2 (transaction)	Attach activity independent costs to specific activity types
Actual activity price calculation	KSII (transaction)	Calculate actual absorption rate (burden rate)
Revaluation at actual prices	CON2 (transaction)	Revalue process / production orders with actual activity price

Tools for Cost Center Planning

Description of transaction	Transaction / Fiori app	Purpose
Cost Centers: Actual/Plan/Variance Report	S_ALR_87013611 (transaction)	Cost center report (amount, activities, SKFs) – plan vs. actual
Activity price report	Analyze Prices for Activity Types	Report of activity prices for cost center / cost center group
Cost center display	Manage Cost Centers	Display of cost center used in allocation cycles
Cost center group display	Manage Cost Center Groups	Display of cost center group used in allocation cycles
Cost element display	Manage G/L Account Master Data	Display of cost element used in allocation cycles
Cost element group display	Manage Cost Element Groups	Display of cost element group used in allocation cycles
Activity type display	Manage Activity Types	Display of activity type used in allocation cycles
Statistical key figure (SKF) display	Manage Statistical Key Figures	Display of SKF used in allocation cycles

Plan and Actual Transactions

Process step	Frequency-Plan	Plan	Frequency-Actual	Actual
Activity Quantity	Annual	KP26	On-going / Daily	CO11N / CO15 / COR6N / CORK
Activity Dependent Cost	Annual	KP06	On-going / Daily	FI postings
Activity Independent Cost	Annual	KP06	On-going / Daily	FI postings
Indirect Activity Allocation	Annual	KSCB	Monthly	KSC5
Assessment	Annual	KSUB	Monthly	KSU5
Splitting	Annual	KSS4	Monthly	KSS2
Activity Price calculation	Annual	KSPI	Monthly	KSII
Activity Price Report	Annual	KSBT	Monthly	KSBT

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Data Flow of Activity Types in Product Costing

- Configuration:
 - OP19: Standard Value Key is configured, that uses parameters
 - OP7B: Parameters are defined
 - OP54: Formula definition is configured
- Master Data:
 - CRC3 Resource (or CR03 Work Center): Formulae Keys for Activity Types
 - C203 Master Recipe: Activity quantities are maintained
- Transaction Data:
 - Standard costs: CK11N / CK40N uses Activity quantities from Recipe; prices from Cost Center Planning
 - Actual costs: Confirmation absorbs Activity Type costs on orders

OP19: Standard Value Key, OP7B: Parameters

Display View "Standard Value Key Formula": Details

Std val. key Normal production

Parameters

1	SAP_01	Setup
2	SAP_02	Machine
3	SAP_03	Labor
4		
5		
6		

☒ Generate

OP19 sap01-205 OVR

Display View "Parameters": Details

Parameter

Origin Standard value in the operation

Attributes

Parameter text	Setup
Keyword	Setup
Dimension	TIME
Standard Value	0
Standard value unit	MIN
Field name	

OP7B sap01-205 OVR

Parameter

Origin Standard value in the operation

Attributes

Parameter text	Labor
Keyword	Labor
Dimension	TIME
Standard Value	0
Standard value unit	MIN
Field name	

Parameter

Origin Standard value in the operation

Attributes

Parameter text	Machine
Keyword	Machine
Dimension	TIME
Standard Value	0
Standard value unit	MIN
Field name	

OP54: Formula Definition

Display View "Formula Definition": Details

Formula for Labor hours

Formula key: SAP003 Prod: Labor time

Formula:
SAP_03 * SAP_09 / SAP_08 / SAP_11

SAP_03 * SAP_09 / SAP_08 / SAP_11
Labor * Operation qty / Base qty / Operation splits

Indicators

☒ Generate ☐ PRT Allowed For Reqmts.
☒ Allowed for Calculation ☒ Allowed for Scheduling
☐ Work Center for Capacity Reqmts.

Search Fld. for Param.
Parameter

OP54 sap01-205 OVR

Display View "Formula Definition": Details

Formula for Machine hours

Formula key: SAP002 Prod: Machine time

Formula:
SAP_02 * SAP_09 / SAP_08 / SAP_11

SAP_02 * SAP_09 / SAP_08 / SAP_11
Machine * Operation qty / Base qty / Operation splits

Indicators

☒ Generate ☐ PRT Allowed For Reqmts.
☒ Allowed for Calculation ☒ Allowed for Scheduling
☐ Work Center for Capacity Reqmts.

Search Fld. for Param.
Parameter

OP54 sap01-205 OVR

Table Content TC25: 3 of 3 Hits

CL	Form.	Formula	Formula	Formula	Gen.	Cs	CR	CA	S	Formula description
850	SAP001	SAP_01			X	X			X	Prod: Setup time
850	SAP002	SAP_02 * SAP_09 / SAP_08 / SAP_11			X	X			X	Prod: Machine time
850	SAP003	SAP_03 * SAP_09 / SAP_08 / SAP_11			X	X			X	Prod: Labor time

SE16 sap01-205 OVR

Table TC25 where OP54 formulae are stored

C203: Master Recipe

Only three Activities on Recipe, since Resource has only for three Parameters

[Best Practice Recommendation: Define all six parameters and their formulae in Resource, even if you do not plan to use them on the Recipe. This will facilitate potential use of additional Activities in future]

Display Master Recipe: Operation

Recipe group: 50000116 Chocolate Finished Material-1001
Recipe: 1 Plant: CHC1 GCI-Chocotown
Activity: 1200 ☒ Ph Packing
Sup. operation: 1000 ☐ LongText Standard text key

General data Standard values User fields Process instructions Relat...

Control key: PI01 Master recipe/process order

Base Quantity: 1,000 KG
Charge Quantity: 1 KG Equals Operation Qty: 1 KG

Resource: 01 Mixer 3
Plant: CHC1

	Duration	Un	Activity Type
Setup	0	MIN	
Machine	10.0	HR	MCHRS
Labor	15.0	HR	LABOR

☐ Flex. duration

3
4

C203 sap01-205 OVR

Activity quantities (10 Machine Hours, 15 Labor Hours) for the given Base Quantity in Recipe Header (1,000 KG)

CK13N: Display Cost Estimate

Display Material Cost Estimate with Quantity Structure

Costing Structure Off Detail List Off Hold

Material: **FG-1001** Chocolate Finished Material-1001
Plant: **CHC1**

Costing Structure
Chocolate Finished Mate
Chocolate Raw Mate
Packing
Packing

Activity quantities (100 Machine Hours, 150 Labor Hours) for the given Costing (10,000 KG)
Proportionately calculated based on 1,000 Base qty in Recipe (10 Machine, 15 Labor Hours)
[Activity Rate: MCHRS: 74 / Hour; LABOR: 36.80 / Hour]

BOM Data
BOM: 00003037
Usage: 1
Alternative: 1

Routing Data
Task List Type: 2
Group: 50000116
Group Counter: 1

Itemization for material FG-1001 in plant CHC1

ItmNo	I	Resource	Cost Element	Σ	Total Value	Σ	Fixed Value	COCr	Quantity	Un
1	M	CHC1 RAW-1001	400000		30,000.00		0.00	USD	10,000,000	G
2	E	C51100 01 MCHRS	620000		11,100.00		9,600.00	USD	150.00	H
3	E	C51100 01 LABOR	611000		3,680.00		680.00	USD	100.00	H
					44,780.00		10,280.00	USD		

CK13N sap01-205 OVR

Activity Absorption on Orders

Display Actual Cost Documents

Document Master Record

Layout: 1SAP Primary cost posting
 COArea currency: USD USD
 Valuation View/Group: 0 Legal Valuation

DocumentNo	Doc. Date	Document Header Text	RT RefDocNo	User Name	Rev RvL	
PRW OTy Object		CO object name	Cost Elem. Cost element name	Val/COArea CrCY	Total quantity	PUM C
900000100	04/11/2015		R 99192	SAMPAT		
1 ATY C51100/MCHRS		Choctwn-Choclat-M1 / Machine --	620000 Machine Hours		2,343.36-	1,900- MIN
2 ORD 70000762		Chocolate-FG 1001	620000 Machine Hours		2,343.36	1,900 MIN
4 ATY C51100/LABOR		Choctwn-Choclat-M1 / Labor Ho-	611000 Labor Hours		797.35-	1,300- MIN
5 ORD 70000762		Chocolate-FG 1001	611000 Labor Hours		797.35	1,300 MIN

KSB5 sap01-205 OVR

- Accounting entry on order confirmation:
 - Credit: Activity Type secondary cost element and Cost Center
 - Debit: Activity Type secondary cost element and Process Order
- Pre-determined Activity Rate is used for posting [MCHRS: 74.00; LABOR: 36.80]
- Controlling-focused posting [FI is updated based on CO-FI real-time integration (new GL) or CO-FI Reconciliation (classic GL); or Activity allocation cost element (S/4HANA)]
- Can (optionally) revalue orders with actual activity rate at month-end

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Steps followed during manufacturing plant go-live

- Stock upload using transaction code MIGO, movement type 561
 - Quantity is entered in the material document; cost is picked up from material master
 - Standard cost from legacy system should have already been updated during material master load
 - Quantity X standard cost = inventory value in SAP
 - Material documents are posted, can be reviewed using MB51
 - Financial documents are posted behind the scenes
 - Debit Inventory
 - Credit Migration Account
- Review stock quantity and amount in MB52, reconcile with inventory file provided
- Review inventory posting in financial accounting using MB5L – MM and FI must tie
 - Can filter for plant and material to ensure only new plant related inventory balances are looked at
- Alternate transaction code to review inventory balance in FI – FAGLB03, restrict for profit centers

Steps followed during manufacturing plant go-live

Activities	Team
Cross-function: MM01 Create material master, update prices – MBEW – STPRS	Master Data
Cost center and Profit center Load	Master Data
KP26 Maintain [Cost Center + Activity Type] combination	Product Costing
CRC1 Resource Master Load	Master Data
Bills of Materials and Recipe load	Master Data
Product Costing - Dry Runs (dependency on BOM, Recipe, Activity prices, Material prices)	Product Costing
Inventory load	Logistics
Check stock values (should be exactly same as legacy value – since standard price is loaded)	Finance
Final Validation/check Costing (determine expected revaluation, should be within tolerance)	Product Costing

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Cost Objects: Overview

- Production Order: Material Master, BOM, Work Center, Routing (Order category 10, Type PP01)
- Process Order: Material Master, BOM, Resource, Master Recipe (Order category 40, Type PI01)
- CO Production Order: Material Master (Order category 4, Type CP01)
- Product Cost Collector: Material Master, BOM, Work Ctr, Routing (Order cat. 5, Order Type RM01)
- Internal Order: No logistics master data is necessary (Order cat. 1, several order types available)
- Plant maintenance order: Work Center, Functional Location (Order category 30, Type PM01)
- Sales Order: Sales and Distribution side master data
- Cost Center: No logistics master data is necessary

Cost Objects: Prerequisites (Master Data), Order Type Used

Comparison of various cost objects used in Shop Floor Control and Overhead Cost Control									
Process group	Process (rows), cost object (columns), transaction code (cells)	Production Order	Process Order	CO Production Order	Product Cost Collector	Internal Order	Plant Maintenance	Sales Order (as cost object)	Cost Center
Pre-requisite master data	Material Master	MM03	MM03	MM03	MM03	NA	NA	MM03	NA
	Bill of Material	CS03	CS03	NA	CS03	NA	NA	NA	NA
	Work Center / Resource	CR03	CRC3	NA	CR03	NA	CR03	NA	NA
	Routing / Master Recipe	CA03	C203	NA	CA03	NA	NA	NA	NA
Order / Object Type / Settlement info	Example Order Type (KOT2)	PP01	PI01	CP01	RM01	0100 / 0600	PM01	NA	NA
	Object Type (KOT2)	Production	Production	Production	Production	Overhead / Investment	Overhead	NA	NA
	Order Category (KOT2)	10-PP Production Order	40-Process Order	4-CO Production Order	5-Product Cost Collector	1-Internal Order	30-Maintenance Order	NA	NA
	Settlement Profile (KOT2 / OKO7)	PP01-Production order	PI01-Process order	PP01-Production order	PP01-Production order	20-Overhead; 50-Asset Settlement	40-Maintenance	NA	NA
	Allocation Structure (OKO7 / OKO6)	A1-CO Allocation structure	A1-CO Allocation structure	A1-CO Allocation structure	A1-CO Allocation structure	20 - Internal Ord; 50 - Investmnt Ord	A1-CO Allocation structure	NA	NA
	PA Transfer Structure (OKO7 / KEI1)	E1-PA settlement	E1-PA settlement	E1-PA settlement	E1-PA settlement	E1-PA settlement; NA	NA	NA	NA

Cost Objects: Transaction Codes For Various Processes

Comparison of various cost objects used in Shop Floor Control and Overhead Cost Control									
Process group	Process (rows), cost object (columns), transaction code (cells)	Production Order	Process Order	CO Production Order	Product Cost Collector	Internal Order	Plant Maintenance	Sales Order (as cost object)	Cost Center
Cost object data	Create	CO01	COR1	KKF1	KKF6N / KKF6	KO01	IW31	VA01	KS01
	Change	CO02	COR2	KKF2	KKF6N / KKF7	KO02	IW32	VA02	KS02
	Display	CO03	COR3	KKF3	KKF6N / KKF8	KO03	IW33	VA03	KS03
Goods movement / activities	Goods Issue	MIGO / MB1A	MIGO / MB1A	MIGO / MB1A	MFBF	MIGO / MB1A	MIGO / MB11	NA	MIGO / MB1A
	Confirmation	CO11N / CO15	COR6N / CORK	KB21N	MFBF	KB21N	IW41	NA	KB21N
	Goods Receipt	MIGO / MB31	MIGO / MB31	MIGO / MB31	MFBF	MIGO / MB31	MIGO / MB31	NA	NA
Period-end closing	Overhead - individual	KGI2	KGI2	KGI2	CO42	KGI2	KGI2	VA44	KSI4
	Overhead - collective	CO43	CO43	CO43	CO43	KGI4	KGI4	VA44	KSI4
	Revaluation of Activity prices- individual	MFN1	MFN1	MFN1	CON1	KON1	KON1	VAN1	NA
	Revaluation of Activity prices- collective	CON2	CON2	CON2	CON2	KON2	KON2	VAN1	NA
	Template Allocation - individual	CPTA	CPTA	CPTA	CPTA	CPTA	NA	CPTJ	KPAS
	Template Allocation - collective	CPTD	CPTD	CPTD	CPTD	CPTB	NA	CPTJ	KPAS
	WIP - individual	KKAX	KKAX	KKAS	KKAS	KKAI	KKAI	KKAK	NA
	WIP - individual display	KKAY	KKAY	KKAT	KKAT	NA	NA	KKAK	NA
	WIP - collective	KKAO	KKAO	KKAO	KKAO	KKAI	KKAI	KKAK	NA
	WIP - collective display	KKAQ	KKAQ	KKAQ	KKAQ	NA	NA	KKAK	NA
	Variance - individual	KKS2	KKS2	KKS6	KKS6	NA	NA	NA	KSS1
	Variance - collective	KKS1	KKS1	KKS5	KKS5	NA	NA	NA	KSS1
	Settlement - individual	KO88	KO88	KO88	KK87	KO88	KO88	VA88	NA
	Settlement - collective	CO88	CO88	CO88	CO88	KO8G	KO8G	VA88	NA
Reporting	Line Item Display (specific to object / generic)	KOB1	KOB1	KOB1	KRMI / KOB1	KOB1	KOB1	KVBI	KSB1
NA = Not applicable									

New transaction codes for S/4HANA: KKAOH (WIP)
 KKS1H (Variance)
 CO88H (Settlement)
 KO8GH (Settle Internal Order)
 VA88H (Settle Sales Order)
 KKAKH (WIP-Sales Order)
 KSS1H (Variance-Cost Center)

Fiori apps with associated GUI transactions

Fiori App	Transaction	Fiori App	Transaction
Analyze Order	KKBC_ORD	Display Process Order	COR3
Analyze Summarization Hierarchy	KKBC_HOE_H	Display Production Order	CO03
Calculate Work in Process Collective	KKAO	Display Resource	CRC3
Calculate Work in Process Order - Single	KKAX	Display Stock Overview	MMBE
Change Material	MM02	Display Work Center	CR03
Change Process Order	COR2	Distribution of Inventory Differences	CKMDUVMAT
Change Production Order	CO02	Edit Actual Costing Runs	CKMLCP
Change Resource	CRC2	Edit Prices for Activity Types	KP26
Change Work Center	CR02	Manage Costing Runs	CK40N
Confirm Process Order Phase	COR6N	Manage Master Recipes	C201/C202/C203
Create Material	MM01	Material Costs and Inventory Values	S_ALR_87013181
Create Material Cost Estimates	CK11N	Material Price Analysis	CKM3
Create Process Order	COR1	Material Value Flow Monitor	ML4HVFM
Create Production Order	CO01	Monitor Process / Planned Orders	COOISPI
Create Resource	CRC1	Monitor Production / Planned Orders	COOIS
Create Unit Cost Estimate Single	KKPAN	Post Goods Movement	MIGO
Create Work Center	CR01	Release Material Cost Estimates	CK24
Display Warehouse Stock	MB52	Run Variance Calculation Order - Single	KKS2
Display Journal Entries	FB03	Run Variance Calculation Orders - By Lot	KKS1
Display Material	MM03	Run Actual Settlement Order - Single	KO88
Display Material Document List	MB51	Select Orders	S_ALR_87013127
Display Plan Data for Activity Types	KP27	Settle Orders Optimized	CO88H

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Resources

- **First Steps in SAP S/4HANA Controlling** (Second Edition) by Ashish Sampat and Tom King; 2025; Espresso Tutorials
<https://www.espresso-tutorials.com/learning-content/first-steps-in-sap-s4hana-controlling-second-edition>



This is the second edition of the book “First Steps in SAP Controlling” which I had the honor of authoring in 2015.

The second edition is co-authored by Tom King, updated for S/4HANA and Fiori.

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Questions & Answers

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