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SAP® S/4HANA Delta for CO Configuration

- ▶ Key changes to Controlling with SAP S/4HANA
- ▶ Customizing updates in SAP S/4HANA
- ▶ Ledger and currency types in S/4HANA
- ▶ Five important design configuration changes

Table of Contents

| | |
|---|-----------|
| Preface | 9 |
| Introduction | 11 |
| 1 SAP Controlling in ECC: an overview | 13 |
| 1.1 Overview of SAP modules | 13 |
| 1.2 The link with SAP FI | 14 |
| 1.3 Links with other SAP modules | 15 |
| 2 SAP Controlling in ECC: features | 19 |
| 2.1 Controlling organizational structure | 19 |
| 2.2 Controlling master data | 20 |
| 2.3 Planning on cost centers | 23 |
| 2.4 Absorption on cost centers | 24 |
| 2.5 Product costing in Controlling | 25 |
| 2.6 Production planning and controlling | 27 |
| 2.7 Month-end close in Controlling | 28 |
| 2.8 Material Ledger and Actual Costing | 29 |
| 2.9 Profitability analysis | 30 |
| 3 S/4HANA overview, changes in Controlling | 33 |
| 3.1 Direction of SAP business software | 33 |
| 3.2 Changes in SAP Finance, Controlling | 35 |
| 3.3 Universal Journal | 37 |
| 3.4 Cost elements now part of G/L Account | 40 |
| 3.5 Cost of goods sold by cost component | 41 |
| 3.6 Production variances by category | 42 |
| 3.7 Margin Analysis | 43 |
| 3.8 Material Ledger is now mandatory | 44 |
| 3.9 SAP Fiori for transactions and reports | 44 |
| 3.10 Cost components increased to 120 | 46 |
| 3.11 Changes in standard costing run | 50 |

| | | |
|----------|--|------------|
| 4 | Ledger and currency types in S/4HANA | 53 |
| 4.1 | Currency types | 53 |
| 4.2 | Currency conversion settings | 55 |
| 4.3 | Ledger | 57 |
| 4.4 | Ledger and currency types | 61 |
| 4.5 | Integration of Controlling with Financial Accounting | 65 |
| 5 | Cost elements now part of G/L accounts | 71 |
| 5.1 | G/L account and setting up cost elements | 71 |
| 5.2 | Impact on CO-FI real-time integration | 75 |
| 5.3 | CO-FI real-time posting in ECC | 76 |
| 5.4 | CO-FI real-time posting in S/4HANA | 77 |
| 5.5 | Default account assignment | 79 |
| 5.6 | Implications for FI and CO period lock | 81 |
| 5.7 | Authorization objects in G/L Account | 86 |
| 6 | Cost of goods sold (COGS) split FI | 89 |
| 6.1 | COGS split configuration | 89 |
| 6.2 | COGS split posting in S/4HANA | 92 |
| 6.3 | COGS posting in costing-based CO-PA | 94 |
| 7 | Production variance split in FI | 97 |
| 7.1 | Overview—settlement of orders | 97 |
| 7.2 | Production variance split configuration | 99 |
| 7.3 | Production variance posting in S/4HANA | 100 |
| 7.4 | Production variance posting in ECC | 103 |
| 8 | Profitability analysis in S/4HANA | 107 |
| 8.1 | Overview of profitability analysis | 107 |
| 8.2 | Profitability with costing-based CO-PA | 108 |
| 8.3 | Margin Analysis in S/4HANA | 110 |
| 8.4 | Characteristic derivation in S/4HANA | 110 |
| 8.5 | Attributed profitability segment | 112 |
| 8.6 | Value flow difference between CO-PA setups | 115 |

| | | |
|-----------|---------------------------------------|------------|
| 9 | Material Ledger in S/4HANA | 119 |
| 9.1 | Material Ledger and Actual Costing | 120 |
| 9.2 | Price control and price determination | 121 |
| 9.3 | Material ledger type setup in ECC | 123 |
| 9.4 | Material ledger type setup in S/4HANA | 124 |
| 9.5 | Actual costing cockpit in ECC | 124 |
| 9.6 | Actual costing cockpit in S/4HANA | 126 |
| 10 | Embedded analytics in S/4HANA | 129 |
| 10.1 | CDS view—standard | 130 |
| 10.2 | Customized CDS view | 132 |
| 10.3 | Reporting using Fiori apps | 136 |
| 10.4 | Semantic tags for reporting | 137 |
| 11 | Other innovations | 143 |
| 11.1 | New optimized transactions | 143 |
| 11.2 | Production/operation level info in CO | 145 |
| 11.3 | Real-time WIP and variance | 146 |
| 11.4 | Other significant changes | 146 |
| A | The Author | 150 |
| B | Index | 151 |
| C | Disclaimer | 153 |

2 SAP Controlling in ECC: features

This chapter provides an overview of the features of Controlling in SAP ECC. It starts with organizational structure and controlling master data, and then moves on to give an overview of the processes: planning, absorption, product costing, production planning, month-end close, material ledger-actual costing, and profitability analysis. For further details on these topics, refer to my previous book “First Steps in SAP Controlling (CO)”¹.

2.1 Controlling organizational structure

The *SAP software organizational structure* is fundamental to the overall structure in which master data and transaction data is defined in SAP. It is essentially the backbone of the system. Accurate design and setup of the software organizational structure is a critical step in SAP implementation; it is extremely difficult to change the structure once it has been designed and configured, and the transaction data has been posted.

SAP software organizational structure reflects a business’s own organizational structure, reporting requirements, and processes in the SAP system.

An enterprise’s organizational structure is mapped to the SAP system organizational structure. This is done in the early stages of SAP implementation projects to ensure that all business processes function smoothly, not only from a transactional processing point of view, but also from an internal and external reporting perspective.

The key elements of SAP organizational structure are:

- ▶ *Chart of accounts*—this is a list of general ledger accounts. Accounts are broadly classified into assets and liabilities, and then broken down into more detail as required by the organization. The chart of accounts can be used across multiple company codes and provides a common definition across all companies. Additionally, it streamlines the financial consolidation of the company’s financial books across multiple legal entities.

¹ “*First Steps in SAP Controlling (CO)*”—published in 2015 by Espresso Tutorials

- ▶ *Fiscal year variant*—this identifies the financial and reporting calendar for an organization. Many companies use a calendar month as the reporting calendar and adopt fiscal year variant K4. Four periods allow for optional additional buckets for quarterly/annual financial reporting.
- ▶ *Operating concern*—this represents an enterprise in terms of profitability analysis. It is the highest organizational structure element in SAP Controlling. It is possible to assign multiple controlling areas to one operating concern.
- ▶ *Controlling area*—this captures and records costs and revenue across the organization, primarily from an internal reporting perspective. It also provides a cross-company view of the organization. To be assigned to the same controlling area, all relevant company codes must have the same chart of accounts and fiscal year variant. Although company code currency can be different, the controlling area has a unique currency in which all transactions are recorded.
- ▶ *Company code*—this is the smallest organizational unit for which a complete set of self-contained accounts can be drawn up for external reporting. A company code represents a legal entity for external reporting and records all relevant transactions. It generates all supporting documents for the legally required financial statements, such as balance sheet and P&L (profit and loss) statement.
- ▶ *Profit center hierarchy/group*—this is a business unit in the enterprise that operates as an independent unit in the marketplace. Both income and expenses can be monitored at the profit center level, thereby creating a complete P&L—and also a partial balance sheet at the working capital level—at the profit center level. This information can then be summarized using the profit center hierarchy to represent the management structure.
- ▶ *Versions*—in SAP Controlling, these maintain independent sets of planning data and actual data. Versions are used in planning to set up alternative scenarios based on different assumptions. Actual data is posted in version 000 to compare plan versus actual costs, as well as plan versus target costs.

2.2 Controlling master data

If we were to visualize organizational structure, master data, and transaction data in a pyramid form, organizational structure would sit at the top of

the pyramid, master data in the middle, and transaction processing at the bottom. Master data receives a significant amount of organizational structure information and passes it along to the transaction processing layer. It is therefore important to define organizational structure and master data attributes during the design phase, and then build on the design on an ongoing basis.

Once defined, it is not necessary to make frequent changes to the organizational structure. However, the master data needs to be continuously maintained.

In addition, master data maintenance is handled by the business—typically directly in the production environment. Accurate maintenance of master data is important to ensure consistent capture of data on the transaction processing layer.

A *cost center* is one of the most widely used master data elements in controlling. Cost centers enable departmental breakdown of costs. They are often the lowest level of an organization where costs and departmental performance are collected and analyzed. Cost centers are therefore useful for departmental budgets and for comparing plan versus actual expenses. Cost centers can also be used for 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 centers are structured into organizational and/or functional hierarchical groups. Each cost center is assigned to a cost center hierarchy and a profit center.

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 consists of 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 creating cost centers.

Cost center groups organize cost centers into groups, according to various criteria, to enable the structure of the organization to be represented in the system.

Cost center groups are also referred to as *alternative hierarchies*.

Cost elements can be defined as vehicles for carrying costs in CO, much like G/L accounts. They provide a view of where and how money is being spent, and enable management to identify specific areas where the organization may need to focus on controlling costs.

Primary cost elements create the link between FI and CO. In general, for every P&L type G/L account in Finance, a corresponding cost element is created in Controlling. These elements are called primary cost elements. There may be some exceptions where not all G/L accounts are created as cost elements; for example, interest expense—when management does not want to track interest expense by a cost center.

Secondary cost elements can be created to record controlling-specific transactions such as settlement, overhead rates, assessment, and activity allocation. They describe cost flows that occur within SAP Controlling. Unlike primary cost elements, there is no link to the G/L account in FI in ECC.

Cost elements are now part of the G/L account in S/4HANA!



Note that with S/4HANA, cost elements are now maintained in G/L Account. Further information can be found in Chapter 5.

Cost element groups collect cost elements that have similar characteristics.

Cost element groups can be utilized for reporting; for example, to define the row structure of a report.

Cost element groups can also be used when several cost elements are needed in one transaction; for example, in cost center planning, distribution, or assessment.

Activity types classify the activities produced in the cost centers within a controlling area. The activity type represents the activities performed in a

cost center; for example, labor hours, or maintenance hours for a maintenance cost center.

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.

2.3 Planning on cost centers

Most organizations undertake an annual budgeting (or planning) process that helps them prepare for the upcoming year. One planning method, or a combination of methods, can be used. This could involve taking the previous year's plan as the base, the previous twelve months' actual as the base, or planning from scratch (commonly referred to as *zero-based budgeting*). The planning process typically starts with sales and operations (S&OP) planning, which is then broken down into a production plan, procurement plan, labor cost plan, and overhead cost plan. This section provides an overview of cost center planning, which typically covers overhead planning and labor cost planning.

The goal of a manufacturing unit is to always deliver throughput with a consistent quality, while maintaining optimum inventory levels. In doing so, it must accurately determine and control the cost at which it has produced this material.

Product costs include direct costs and indirect costs. Direct costs consist of the costs of raw materials and packaging materials, as well as the direct conversion costs of producing the finished material. Indirect costs are those that cannot be directly associated with production, but are required to support the operations (e.g. maintenance supplies to keep the machines running).

One way to look at conversion costs is that a product must *carry* (absorb) the cost of the departments it passes through. A predetermined absorption rate is used to load the product with the department's costs.

These costs can be broken down into labor hours, machine hours, and any other additional cost drivers based on business requirements. These drivers are often referred to as an *activity type* in the SAP system.

B Index

A

Account-based CO-PA 30
Account modifier 42, 90, 99
Activity type 22
Actual activity price calculation 25
Actual cost center splitting 25
Authorization group 81

B

Bill of material 26

C

Characteristic derivation 110
Completed order 97
Complete order 28
Contribution margin 30
CO Period lock 83
Cost center 21
Cost center absorption 24
Cost center assessment 25, 76, 83
Cost center distribution 25, 83
Cost center group 22
Cost center hierarchy 21
Cost center over/under absorption 24
Cost component 27, 41, 89
Cost element 22
Cost element group 22
Costing-based CO-PA 30
Costing run 50
CO-through postings in FI 83

D

DLV (delivered) 97

E

Exchange Rate Type 55

F

Fiscal year variant 20

G

Global Currency Conversion
Settings 55
Goods issue 28
Goods receipt 28

M

Made-to-order 17
Made-to-stock 17
Master recipe 27
Material ledger closing cockpit 124
Material movement 29

O

Operation 28
Order status 97

P

Periodic unit price 29
Posting period variant 81

Primary cost element 22
Process order confirmation 28
Product costing 25
Production planning 13
Profitability analysis 30, 107
Profitability segment 107

R

Resource 27

S

Sales and distribution 14
SAP organization structure 19
Secondary cost element 22
Settlement 98
Statistical key figure 23

T

TECO (technically complete) 97
Transaction based price determination 121
Translation Date Type 55

V

Value field 31, 108
Variance calculation 97

W

Work center 27