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This sample chapter covers the configuration of the general SAP organizational units (e.g., controlling area, company code, plant, and storage location) used in plant maintenance. It also describes the definition of the maintenance-specific organizational units and Customizing for the work centers in SAP S/4HANA Asset Management.



“Configuring Organizational Structures”



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The Author

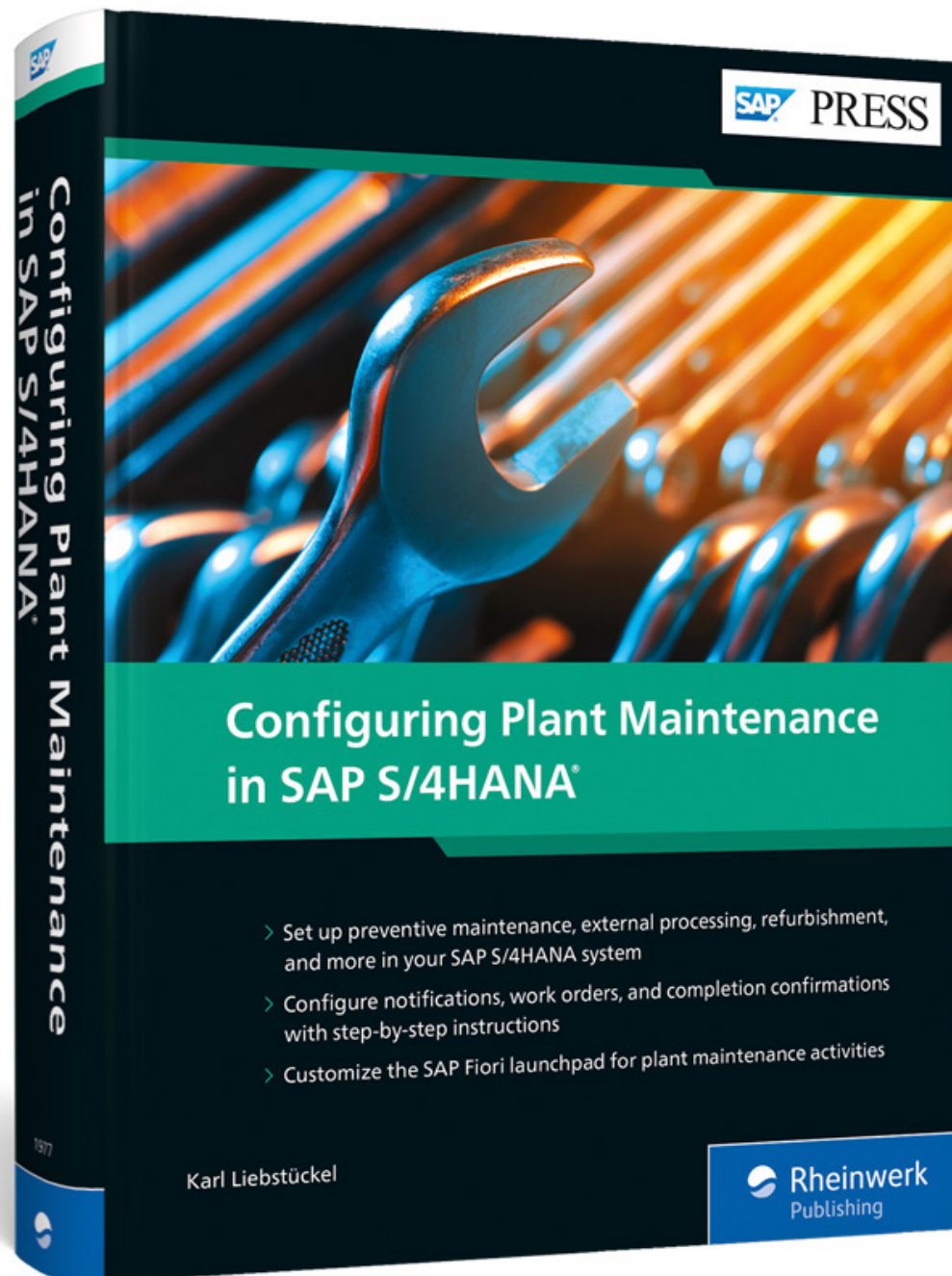
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Configuring Plant Maintenance in SAP S/4HANA

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Chapter 2

Configuring Organizational Structures

This chapter introduces you to the indispensable elements of maintenance processing within the SAP system, namely the general organizational units, the maintenance-specific organizational units, and the work center.

Organizational units define your enterprise's organizational structure in general, and your plant maintenance processes in particular. Consequently, they form the basis for all master data and business processes.

SAP provides a range of organizational units that you can use to map your enterprise structure:

- Some are also used in other functions in SAP S/4HANA (e.g., the company code, controlling area, or plant).
- Some are used in plant maintenance when plant maintenance has its own perspective (e.g., the plant as a maintenance planning plant and as a maintenance plant).
- Finally, some organizational units concern plant maintenance only (e.g., the plant section or the maintenance planner group).

Organizational Units as Authorization Objects

Each organizational unit has at least one authorization object, but usually it has more than one. Consequently, organizational units are perfectly suited to assigning or restricting authorizations. For example, you can use the maintenance planner group to specifically assign authorizations for processing maintenance orders.



Even though it's possible to cautiously enhance the enterprise structure during live operation, deleting organizational units already in use in live systems is a very delicate matter. Changing the organizational structure involves the following tasks, among others:

- Identifying and adjusting affected Customizing tables
- Identifying and adjusting affected selection variants
- Checking custom developments because they may have been developed on the basis of certain organizational structures
- Creating new master data
- Checking the authorization concept
- Using data archiving to ensure that document history is retained
- Checking and correcting all potentially affected documents (e.g., you can no longer continue to process an order if the planner group has been deleted)
- Checking and correcting all potentially affected master data (e.g., you can no longer continue to process a piece of equipment if the work center has been deleted)

From a plant maintenance perspective, defining organizational structures also concerns the following areas:

- The general SAP organizational units (e.g., controlling area, company code, plant, and storage location)
- A definition of the maintenance-specific organizational units (e.g., location or plant section)
- Customizing for the work centers in SAP S/4HANA Asset Management (e.g., mechanical engineering, electronics, and measurement and control technology)

2.1 General SAP Organizational Units

Organizational units are the basis of all master data and business processes in SAP S/4HANA Asset Management. In the following sections, you'll get to know the most important organizational units from the perspective of SAP S/4HANA Asset Management and learn how you should use the associated Customizing functions. Figure 2.1 shows some typical general organizational units.

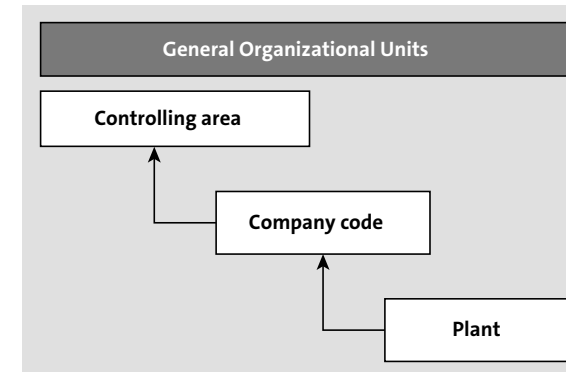


Figure 2.1 General Organizational Units

General Organizational Units Are Usually Predefined

If you implement SAP S/4HANA Asset Management, the general organizational units in the SAP system (e.g., company code, controlling area, and plant) are usually predefined because you defined them when you implemented other functionalities, such as controlling and materials management. Therefore, you can only influence the design if SAP S/4HANA Asset Management is implemented from the outset, or if you define separate organizational units from a pure maintenance perspective.

2.1.1 Company Code

In SAP S/4HANA, the company code maps an independent accounting unit and is therefore the smallest organizational unit in SAP S/4HANA Finance. You therefore use a company code to map, within your corporate group (client), a company that is required to create a balance sheet, profit and loss account, and other year-end documents.

Edit Company Code

The company code provides the basis for many other applications, including SAP S/4HANA Asset Management. You use this Customizing function to create new company codes and to make changes to existing company codes.

Prerequisites

You must maintain the countries, languages, and currencies beforehand.

Customizing Path

Enterprise Structure • Definition • Financial Accounting • Edit, Copy, Delete, and Check Company Code

Settings

Choose the **Edit Company Code Data** subfunction. The system then displays a table of defined company codes (see Figure 2.2).

Company Code	Company Name
<input type="checkbox"/> BS00	Global Bike Sharing GmbH
<input type="checkbox"/> DE00	Global Bike Germany GmbH
<input checked="" type="checkbox"/> US00	Global Bike Inc.

Figure 2.2 Company Codes: Overview


On the detail screen, you maintain key parameters such as **Country** or **Currency** (see Figure 2.3).

Company Code: US00
Company Name: Global Bike Inc.

Additional data

City	Dallas
Country	US
Currency	USD
Language	EN

Figure 2.3 Company Code: Details

You can then use the  icon to specify the address data for the company code.

Global Parameters for Company Code

You can use this Customizing function to make key specifications in relation to the company code. These include, among other things, the chart of accounts and the fiscal year variant.

Prerequisites

You must define these specifications in advance, either as master data (e.g., **Chart of Accts**) or in other Customizing functions (e.g., **Company**, **Credit control area**, and **Fiscal Year Variant**).

Customizing Path

Financial Accounting • Financial Accounting Global Settings • Global Parameters for Company Code • Enter Global Parameters

Settings

From a plant maintenance perspective, the following fields are the most important: **Chart of Accts** and **Fiscal Year Variant** (see Figure 2.4).

Company Code: US00 Global Bike Inc. Dallas
Country key: US Currency: USD Language Key: EN

Accounting organization

Chart of Accts	GL00	Country Chart/Accts	
Company		FM Area	
Credit control area	GL00	Fiscal Year Variant	K1
External CoCode	<input type="checkbox"/>	Global CoCde	
Company Code Is Productive	<input type="checkbox"/>	VAT Registration No.	
Hide Company Code in F4	<input type="checkbox"/>		

Processing parameters

Document Entry Screen Variant	2	<input type="checkbox"/> Business Area Fin. Statements
Field status variant	GL00	<input checked="" type="checkbox"/> Propose Fiscal Year
Pstng period variant	GL00	<input checked="" type="checkbox"/> Define default value date
Max. exchange rate deviation	10 %	<input type="checkbox"/> No Exch. Rate Diff. When Clearing in LC
Sample Acct Rules Var.		<input type="checkbox"/> Tax base is net value
Workflow Variant		<input checked="" type="checkbox"/> Discount base is net value
Inflation Method		<input checked="" type="checkbox"/> Financial Assets Mgmt active
Tax CrCy Translation		<input type="checkbox"/> Purchase Acct Proc.
CoCd -> CO Area	2	<input type="checkbox"/> JV Accounting Active
Cost of Sales Accounting Actv.	2	<input type="checkbox"/> Hedge request active
<input checked="" type="checkbox"/> Negative Postings Permitted		<input type="checkbox"/> Enable Amount Split
		<input type="checkbox"/> Tax Reporting Date Active

Figure 2.4 Company Code: Global Parameters

These fields represent the following:

- **Chart of accounts**

The *chart of accounts* is a directory of all general ledger accounts. It provides the basis for all business transactions in SAP S/4HANA. For each business transaction, postings are made in the background to one or more general ledger accounts. For example, in the case of a material withdrawal to a maintenance order, at least one material stock account and a consumption account are used. A chart of accounts must be assigned to each company code. The assigned chart of accounts is known as an operational chart of accounts; that is, the day-to-day postings are made to the accounts of the operational chart of accounts. The operational chart of accounts is used by SAP S/4HANA Finance.

- **Fiscal year variant**

The *fiscal year variant* defines the fiscal year and the posting periods. The fiscal year can correspond to the calendar year, but it doesn't have to, for example, if you don't want to perform year-end closing operations during the public holidays in December. The posting periods usually contain the number of posting periods (generally 12 months) and the number of special periods. A special period is a special posting period that subdivides the last regular posting period for closing operations. A fiscal year can have a maximum of 12 posting periods and 4 special periods.

2.1.2 Controlling Area

The controlling area is the main organizational unit in controlling with SAP S/4HANA Finance and is the basis for all other master data (e.g., cost centers or activity types).

Maintain Controlling Area

A controlling area is defined as an organizational unit within a company that is used to represent a closed system for cost accounting purposes. A controlling area may include single or multiple company codes that may use different currencies. These company codes must use the same operational chart of accounts and the same fiscal year variant.

Prerequisites

You must define the currency, chart of accounts, and fiscal year variant beforehand.

Customizing Path

Enterprise Structure • Definition • Controlling • Maintain Controlling Area

Transaction

OX06

Settings

Choose the **Maintain Controlling Area** subfunction to check or change the settings for a controlling area (see Figure 2.5).

The screenshot displays the SAP 'Change View Basic data' details for Controlling Area NA00. The interface is organized into several sections:

- Controlling Area:** NA00
- Name:** GBI North America
- Person Responsible:** (Empty field)
- Assignment Control:** CoCd->CO Area: 2 Cross-company-code cost accounting
- Currency Setting:**
 - Currency Type: 10
 - Currency: USD
 - Company code currency: United States Dollar
 - Diff. CCode Currency:
 - Active:
- Other Settings:**
 - Chart of Accts: GL00
 - Fiscal Year Variant: K1
 - GBI Global
 - Cal. Year, 1 Special Period
 - Hide Controlling Area in F4:
- Setting for Authorization Hierarchies for Cost Centers:**
 - Do Not Use Std Hier.:
 - Alternative Hierarchy1:
 - Alternative Hierarchy2:
- Setting for Authorization Hierarchies for Profit Centers:**
 - Do Not Use Std Hier.:
 - Alternative Hierarchy1:

Figure 2.5 Controlling Area

A company code maps a company from an external perspective and is primarily created for tax reasons. In other words, company codes are created to optimize an enterprise's tax burden. Consequently, a company code doesn't necessarily reflect the

actual set of services. In contrast, a controlling area maps a company from an internal perspective and is created for the actual business processes and the exchange of services between the various business units.

For example, Mr. Miller, a production planner, and Mr. Lawrence, a maintenance planner, work in the same office and once belonged to the same company (company code) before the decision was made to outsource plant maintenance. Since then, Mr. Lawrence has continued to plan the repair orders and maintenance tasks for Mr. Miller's machine facilities and still works in the same office as Mr. Miller. However, he now belongs to another company (company code). The day-to-day processes haven't changed. Mr. Lawrence can continue to plan his orders in the same way as before because, from an internal perspective (controlling area), his company belongs to the same company as Mr. Miller's production, and the **Cross-company-code cost accounting** option is activated there.

Company Code: Assign Controlling Area

You use this Customizing function to assign the company code that you want to perform common cost center accounting to a controlling area. You only have to explicitly assign company codes to the controlling area if you want to perform cross-company-code cost accounting.

Prerequisites

You must define the company code and controlling area beforehand. Also, both must have the same chart of accounts and fiscal year variant.

Customizing Path

Enterprise Structure • Assignment • Controlling • Assign Company Code to Controlling area

Transaction

OX19

Settings

As shown in Figure 2.6, you call the affected controlling area (here, "NA00") and assign the necessary company codes (here, "US00").

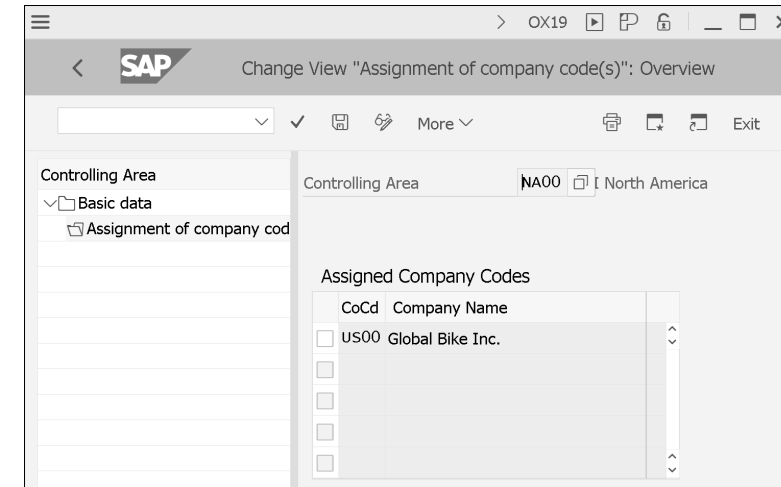


Figure 2.6 Controlling Area: Assign Company Code

Due to poor experiences with other enterprise structures, I unreservedly agree with the recommendation from SAP that you only use one controlling area for the entire enterprise. In other words, you assign all company codes to this one controlling area. The advantages of this are as follows:

- A company code is permitted to be assigned to a controlling area only if both use the same fiscal year variant and chart of accounts. This is the only way you can ensure that all company codes use the same chart of accounts and thus ensure a basic level of standardization.
- You must create master data such as cost elements, cost centers, and profit centers for each controlling area. If you have only one controlling area, this reduces the time and effort needed for master data maintenance considerably.
- You can run cross-company-code analyses in controlling in SAP S/4HANA Finance. It's not possible to display data from different controlling areas in one report.
- Basic controlling functions, such as cross-company-code sales, transfer prices, allocations or cross-plant costing, and, of course, cross-plant and cross-company code plant maintenance, are only possible within a controlling area.

2.1.3 Plant General

The plant is the central and most important organizational unit in logistics.

Define, Copy, Delete, Check Plant

You require a plant for the following areas, for example:

- For production planning for production order processing and capacity requirements planning
- For purchasing as a purchasing or supplying plant
- For shipping as a delivering plant
- For inventory management as an organizational unit in which you manage stocks and values
- For quality management as a unit in which you edit inspection lots
- For materials management for forecasts, material requirements planning (MRP), and product costing
- For the management of all logistics master data (work centers, task lists, bills of material [BOMs], and materials)

Prerequisites

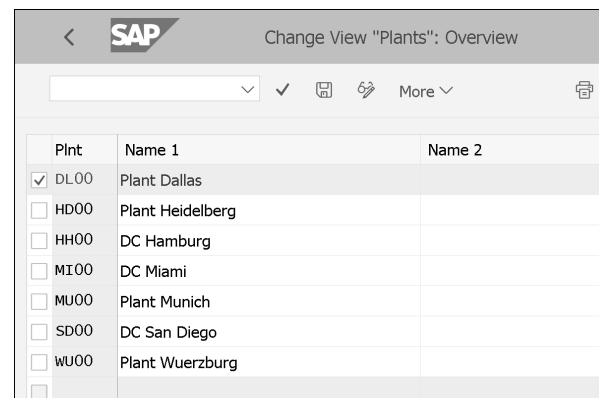
You must maintain the language keys, country keys, regions, and factory calendar beforehand.

Customizing Path

Enterprise Structure • Definition • Logistics – General • Define, Copy, Delete, Check Plant

Settings

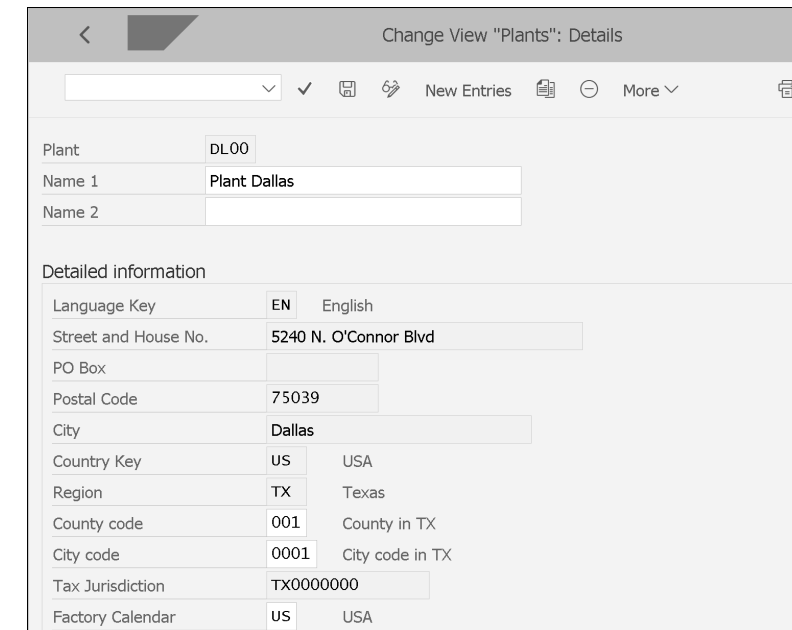
Choose the **Define Plant** subfunction to access an overview of existing plants (see Figure 2.7).



Plnt	Name 1	Name 2
<input checked="" type="checkbox"/> DL00	Plant Dallas	
<input type="checkbox"/> HD00	Plant Heidelberg	
<input type="checkbox"/> HH00	DC Hamburg	
<input type="checkbox"/> MI00	DC Miami	
<input type="checkbox"/> MU00	Plant Munich	
<input type="checkbox"/> SD00	DC San Diego	
<input type="checkbox"/> WU00	Plant Wuerzburg	

Figure 2.7 Plants: Overview

On the detail screen for plants, you can maintain plant addresses in particular (see Figure 2.8). These addresses are later required as object addresses for technical objects or delivery addresses for spare parts.



Detailed information		
Language Key	EN	English
Street and House No.	5240 N. O'Connor Blvd	
PO Box		
Postal Code	75039	
City	Dallas	
Country Key	US	USA
Region	TX	Texas
County code	001	County in TX
City code	0001	City code in TX
Tax Jurisdiction	Tx0000000	
Factory Calendar	US	USA

Figure 2.8 Plant: Details

Plant: Assign Company Code

You use the Customizing function **Plant • Assign Company Code** to assign a plant to its company code. At any one time, a plant can only ever be assigned to one company code. Conversely, this means that, over time, you can assign a plant to another company code. This is necessary, for example, if you outsource your maintenance area, and it becomes a separate company.

Prerequisites

You must define the plant and company code beforehand.

Customizing Path

Enterprise Structure • Assignment • Logistics – General • Assign Plant to Company Code

Transaction

OX19

Settings

As shown in Figure 2.9, you simply define a new entry when you assign the plant (here, DL00) to a company code (here, US00).

CoCd	Company Name	Plnt	Name of Plant
<input checked="" type="checkbox"/>	Global Bike Inc.	DL00	Plant Dallas
<input type="checkbox"/>	Global Bike Germany GmbH	HD00	Plant Heidelberg
<input type="checkbox"/>	Global Bike Germany GmbH	HH00	DC Hamburg
<input type="checkbox"/>	Global Bike Inc.	MI00	DC Miami
<input type="checkbox"/>	Global Bike Sharing GmbH	MU00	Plant Munich
<input type="checkbox"/>	Global Bike Inc.	SD00	DC San Diego

Figure 2.9 Plant: Assign Company Code

2.2 The Plant from a Maintenance Perspective

The plant is, without doubt, the most important organizational unit for plant maintenance. It fulfills several maintenance functions as both a maintenance planning plant and as a maintenance plant. We'll look at both of these functions in the following sections, in addition to the topics of plant-specific maintenance and cross-plant maintenance.

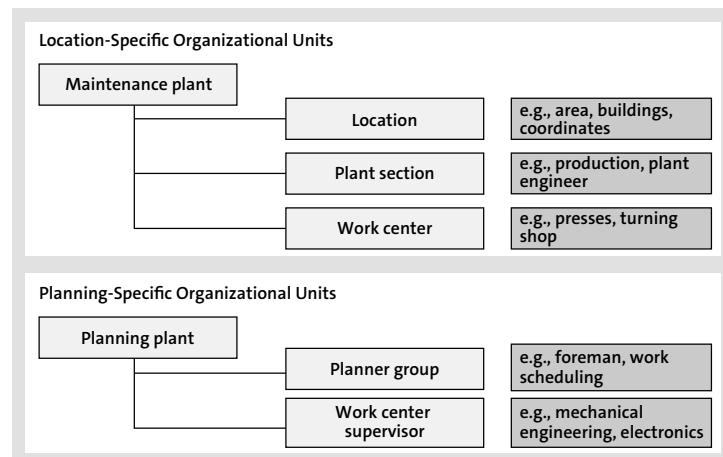


Figure 2.10 Organizational Units in SAP S/4HANA Asset Management

An overview of the various organizational units in SAP S/4HANA Asset Management is provided in Figure 2.10.

Maintain Maintenance Planning Plant

A plant is responsible for planning maintenance activities. This type of plant is called a *maintenance planning plant* (or *planning plant* for short). You use the **Maintain Maintenance Planning Plant Customizing** function to convert a plant to a planning plant.

Prerequisites

You must define the maintenance planning plant as a normal logistics plant beforehand (Section 2.1.3).

Customizing Path

Enterprise Structure • Definition • Plant Maintenance • Maintain Maintenance Planning Plant

Settings

You obtain an overview of existing maintenance planning plants (see Figure 2.11), and you can add new plants to this overview.

Planning Plant	Name 1
<input checked="" type="checkbox"/>	Plant Dallas
<input type="checkbox"/>	Plant Heidelberg
<input type="checkbox"/>	Plant Munich

Figure 2.11 Maintenance Planning Plant

Maintenance Plant: Assign Maintenance Planning Plant

All the technical objects to be maintained are physically present in a plant (functional location, equipment, and serial number). Here, this plant is known as a *maintenance plant*. A plant becomes a maintenance plant if you create a technical object there. Maintenance plants aren't stored in a separate Customizing table.

Every plant in which maintenance processes are to be planned or executed must have an assignment from the maintenance plant to the planning plant. You use the

Assign Maintenance Planning Plant Customizing function to perform this assignment (see Figure 2.11).

Prerequisites

You must define both plants (maintenance plant and planning plant) as normal logistics plants beforehand (Section 2.1.3). If a plant isn't assigned to a planning plant (e.g., plant M100), you can't create any technical objects there (maintenance plant), nor can you plan or execute maintenance tasks (planning plant).

Customizing Path

Enterprise Structure • Assignment • Plant Maintenance • Assign Maintenance Planning Plant to Maintenance Plant

Settings

As shown in Figure 2.12, in the **PIPI** column, assign the general logistics plant to a planning plant if it contains assets or if you want to plan or perform maintenance work.

Plnt	Name 1	PIPI	Name 1
<input checked="" type="checkbox"/>	DL00 Plant Dallas	DL00	Plant Dallas
<input type="checkbox"/>	HD00 Plant Heidelberg	HD00	Plant Heidelberg
<input type="checkbox"/>	HH00 DC Hamburg		
<input type="checkbox"/>	MI00 DC Miami		
<input type="checkbox"/>	MU00 Plant Munich	MU00	Plant Munich
<input type="checkbox"/>	SD00 DC San Diego		
<input type="checkbox"/>	WU00 Plant Wuerzburg		

Figure 2.12 Maintenance Plant: Assign Maintenance Planning Plant

For business processes in SAP S/4HANA Asset Management, you need to differentiate between order planning and execution in only one plant and order planning and execution in different plants.

Plant-Specific Maintenance

In practice, you most frequently encounter a situation where the maintenance requirement is planned in the plant in which it originates, the orders are fulfilled by workshops in the same plant, and the spare parts are stored within the same plant. In

Figure 2.13, this plant is known as **Plant 1000**. Here, the following applies: maintenance plant = planning plant = spare parts storage plant.

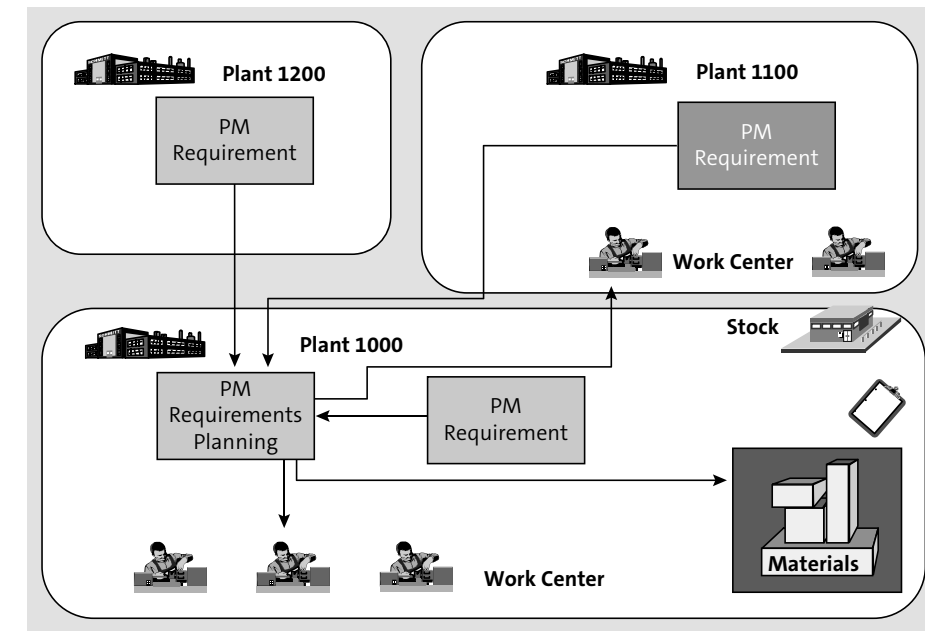


Figure 2.13 Plant and Plant Maintenance

Cross-Plant Maintenance

There are other options in addition to plant-specific maintenance:

- There is a requirement in a plant (here, 1200) because an asset is to be maintained there (i.e., in the maintenance plant), but all other functions (planning, order execution, and spare parts storage) are the responsibility of another plant (here, 1000).
- There is a requirement in a plant (here, 1100), and additional partial functions (order execution) are also the responsibility of this plant, but other partial functions (order planning and spare parts storage) are the responsibility of other plants (here, 1000).

Cross-plant maintenance isn't a problem if the maintenance plant of the technical object and the plant of the executing work center are in the same company code. The same applies if the plants are in different company codes but belong to the same controlling area. This is also a standard scenario.

However, a problem occurs if the plants belong to different controlling areas. Here, there is no standard scenario but rather a customer-vendor relationship. Therefore, in this case, the maintenance plant (customer) has to trigger purchase orders, and the plant of the work center (vendor) triggers a sales order and its associated invoice. The invoice is, in turn, recorded as an incoming invoice in the maintenance plant. All in all, this is a very cumbersome procedure, but it can be simplified as described next.



Plants in Different Controlling Areas

If you implement cross-plant maintenance and your plants are in different controlling areas, the following approach is recommended:

- In the work center plant, create a cost center for the actual maintenance plant.
- Assign all the technical objects to the work center plant (as a maintenance plant) and to this cost center.
- Process all maintenance orders in the work center plant.
- Manually issue periodic invoices (e.g., monthly) from the work center plant whereby the customer maintenance plant is debited the amount, and the cost center is credited the same amount.

This procedure saves you from having to create purchase orders, sales orders, and individual invoices, as well as posting individual incoming invoices.

2.3 Maintenance-Specific Organizational Units

Additional, maintenance-specific organizational units (either maintenance plant-specific or planning plant-specific) play an important role within a plant (refer to Figure 2.10). Technical objects (functional location and equipment) also contain all the maintenance plant-specific and planning plant-specific data, which is then copied to notifications and orders. This data is explained in more detail in this section.

Work centers either perform or are responsible for maintenance tasks. They reference a planning plant or a maintenance plant (Section 2.4).

Define Planner Groups

A maintenance planner group is responsible for planning maintenance tasks. It also references a planning plant. You use the **Define Planner Groups** Customizing function to maintain maintenance planner groups.

Prerequisites

Because maintenance planner groups are always created for a specific maintenance planning plant, you must create the plant as both a general logistics plant and a maintenance planning plant beforehand.

Customizing Path

Plant Maintenance and Customer Service • Maintenance and Service Processing • Basic Settings • General Data • Define Planner Groups

Settings

Assign a three-digit key, description, and, if necessary, a telephone number to each maintenance planner group (see Figure 2.14).

PIPI	PG	Name	Telephone
<input checked="" type="checkbox"/>	DL00 P00	Mr Sandmann	972-555-3000
<input checked="" type="checkbox"/>	DL00 P01	Mr Winter	972-555-3001
<input checked="" type="checkbox"/>	DL00 P02	Mrs Ronalds	972-555-3002
<input type="checkbox"/>	HD00 I00	Herr Mustermann	
<input type="checkbox"/>	HD00 I02	Herr Schröder	
<input type="checkbox"/>	MU00 M00	Group Munich	

Figure 2.14 Planner Groups



Recommendation for Using Maintenance Planner Groups

You set up maintenance planner groups, for example, if you want to map work scheduling or individual maintenance planners known by name.

Define Location

You use a label to indicate the physical location of a technical object. You always define a location with reference to a maintenance plant. Furthermore, you use the **Define Location** Customizing function to maintain locations.

Prerequisites

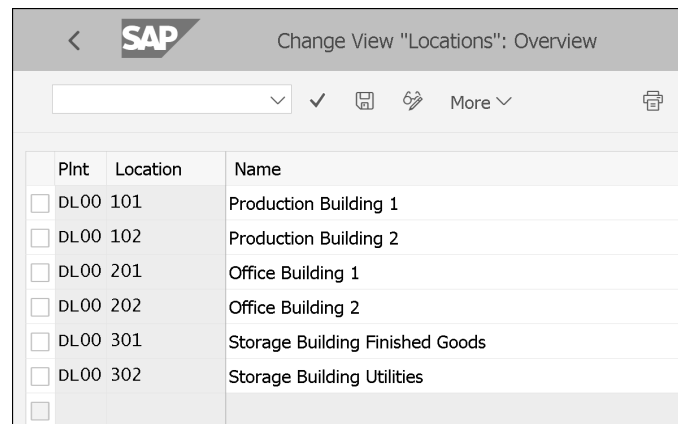
Because locations are always created for a specific plant, you must define the maintenance plant as a normal logistics plant beforehand. Agree on this with your colleagues from production planning and asset accounting because they will also use the location table for work centers and assets.

Customizing Path

Enterprise Structure • Definition • Logistics – General • Define Location

Settings

Assign a number (10-digit maximum) and name to each location (see Figure 2.15).



Plnt	Location	Name
<input type="checkbox"/>	DL00 101	Production Building 1
<input type="checkbox"/>	DL00 102	Production Building 2
<input type="checkbox"/>	DL00 201	Office Building 1
<input type="checkbox"/>	DL00 202	Office Building 2
<input type="checkbox"/>	DL00 301	Storage Building Finished Goods
<input type="checkbox"/>	DL00 302	Storage Building Utilities

Figure 2.15 Locations

**Recommendation for Assigning Names to Locations**

In practice, either building numbers (e.g., F141 or WDF21) or, if they exist, plant coordinates (e.g., A01 or K15), are commonly used locations.

Define Plant Sections

The *plant section* enables you to divide a maintenance plant into production areas. The person responsible for the plant section is the contact person for all coordination between production and plant maintenance. A plant section can be assigned to each piece of equipment and each functional location. You can also specify a plant section when processing notifications and orders.

You define the responsibilities associated with operating a (production) facility as a plant section. To this end, you use the **Define Plant Sections** Customizing function to maintain plant sections.

Prerequisites

Because plant sections are always assigned to a plant, you must define the plant as a general logistics plant beforehand.

Customizing Path

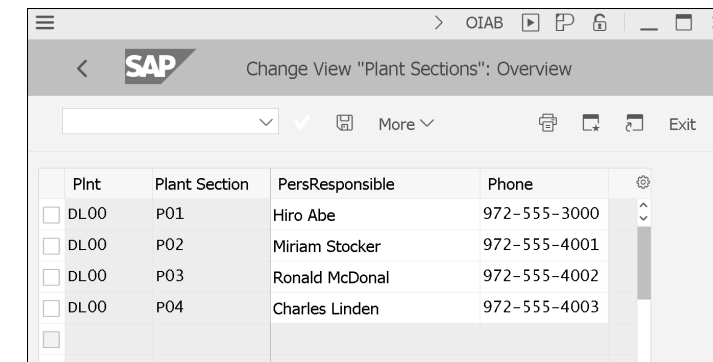
Plant Maintenance and Customer Service • Maintenance and Service Processing • Basic Settings • General Data • Define Plant Sections

Transaction

OIAB

Settings

Assign a three-digit number, a name, and, if necessary, a telephone number, to each plant section (see Figure 2.16).



Plnt	Plant Section	PersResponsible	Phone
<input type="checkbox"/>	DL00 P01	Hiro Abe	972-555-3000
<input type="checkbox"/>	DL00 P02	Miriam Stocker	972-555-4001
<input type="checkbox"/>	DL00 P03	Ronald McDonal	972-555-4002
<input type="checkbox"/>	DL00 P04	Charles Linden	972-555-4003

Figure 2.16 Plant Sections

Recommendation for the Plant Section

In practice, either the plant engineer responsible for the asset or the production area belonging to the asset have proven themselves as plant sections.



2.4 Work Centers

From a maintenance perspective, a work center represents either an individual person (e.g., Mr. John Smith, a technician) or a workshop, that is, a group of people. In practice, the following workshops are commonly used:

- Mechanical workshop
- Electrical workshop
- Measurement and control
- Machine center
- Welding workshop
- Paint shop
- Cleaning line
- Building services engineering

In SAP S/4HANA Asset Management, work centers are used in many locations:

- Responsible work center in the equipment master record and functional location master record
- Responsible work center in a maintenance item
- Responsible work center in the header of a task list
- Performing work center in the operations of a task list
- Responsible work center in the notification
- Responsible work center in the order header
- Planned work center in the operations of an order
- Actual work center in time confirmations

The following sections cover the most important Customizing functions for creating and maintaining work centers.

Define Work Center Types and Link to Task List Application

You use the **Define Work Center Types and Link to Task List Application** Customizing function to define the work center category. When you create a work center, you must always assign a work center category (see Figure 2.17).

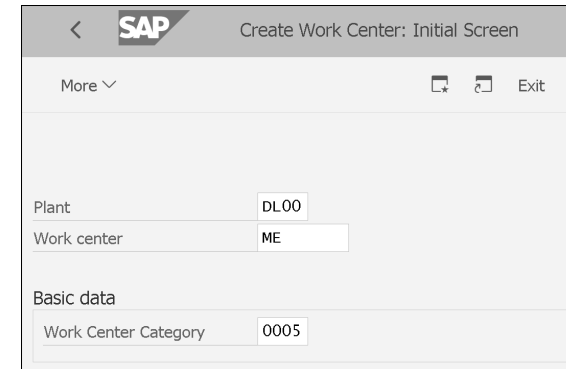


Figure 2.17 Create Work Center: Initial Screen

The work center category determines the following:

- The permitted *task list application* (e.g., SAP S/4HANA Asset Management, production planning, or quality management)
- The screen sequence (e.g., **Basic Data** and **Capacities**)
- The field selection
- The use of change documents to document changes

Prerequisites

There are no prerequisites.

Customizing Path

Plant Maintenance and Customer Service • Maintenance Plans, Work Centers, Task Lists, and PRTs • Work Centers • General Data • Define Work Center Types and Link to Task List Application

Transaction

OIZA

Settings

SAP delivers work center category **0005 (Plant maintenance)** (see Figure 2.18). Usually, this work center category is sufficient. Therefore, you only need to create your own work center category if you require other control options or advanced control options.

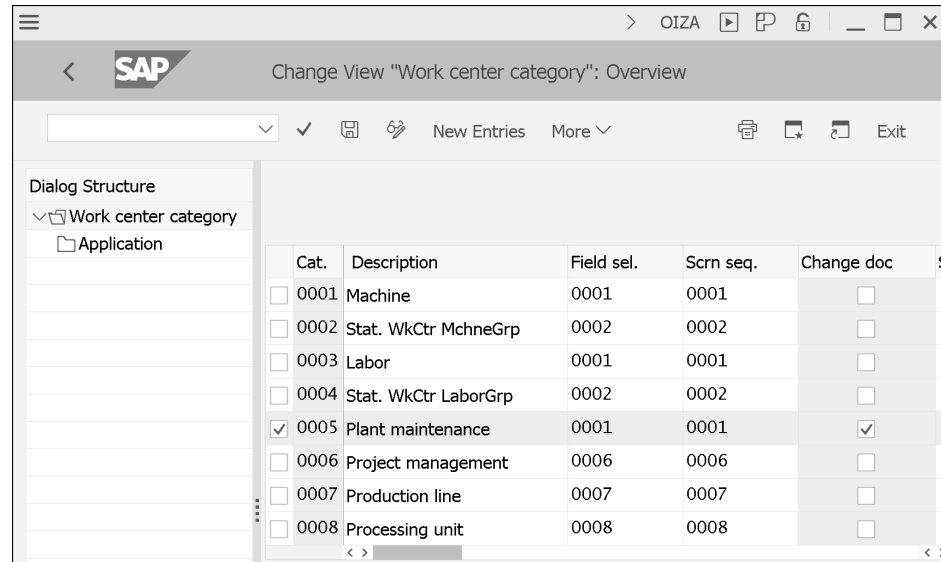


Figure 2.18 Work Center Category

To use the work center category in SAP S/4HANA Asset Management, you must assign it to a task list application (**Application**) (see Figure 2.19). Make sure that your work center category is assigned to task list application I for plant maintenance. If you also want to use your work centers in other applications (e.g., in production orders as a production aid), you need to add other task list applications.

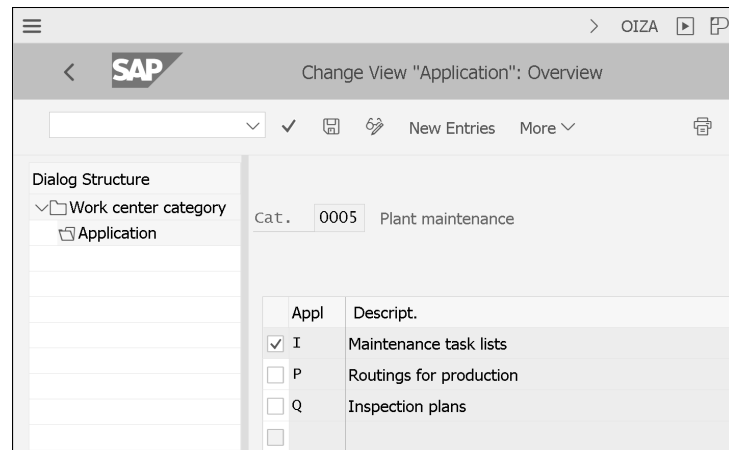


Figure 2.19 Work Center Category Assigned to Applications

Work Center Category 0005 Should Suffice

Usually, work center category 0005 is sufficient for assignments to SAP S/4HANA Asset Management, and you don't have to define any other work center category.

Define Field Selection

You use this Customizing function to define field attributes when maintaining work centers. You can choose from the following options:

- Required entry field
- Hidden field
- Display field
- Normal entry field

These fields are divided into *screen groups* (see Figure 2.20).

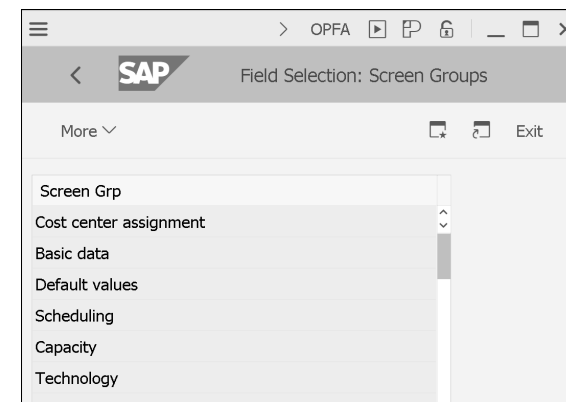


Figure 2.20 Work Center: Screen Groups

Prerequisites

Because I recommend that you don't configure a general field selection for all work center types but instead configure a specific field selection for each work center type, you must maintain the work center type beforehand.

Customizing Path

Plant Maintenance and Customer Service • Maintenance Plans, Work Centers, Task Lists, and PRTs • Work Centers • General Data • Define Field Selection

Transaction

OPFA

Settings

In the overview screen, choose the **Influencing** button to configure the field selection on the detail screen on the basis of the relevant work center type. Figure 2.21 shows an example of the field selection for the **Basic data** screen group.

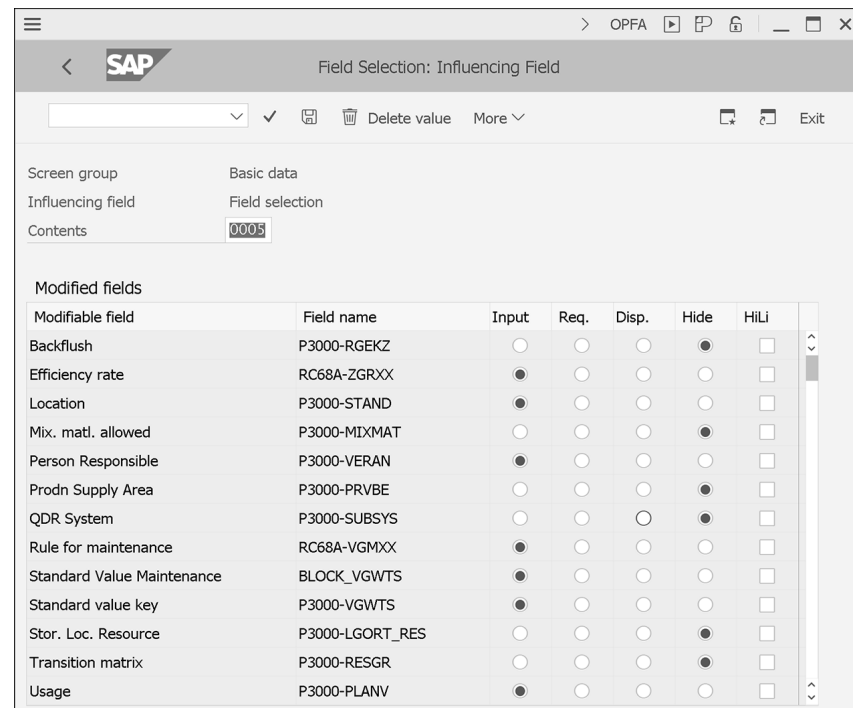


Figure 2.21 Work Center: Field Selection

Define Standard Value Keys

You use this Customizing function to define *standard value keys*. The standard values are plan values for determining the execution time for operations in the task list and order.

Prerequisites

There are no prerequisites.

Customizing Path

Plant Maintenance and Customer Service • Maintenance Plans, Work Centers, Task Lists, and PRTs • Work Centers • General Data • Define Standard Value Keys

Transaction

OIZ2

Settings

The task lists and orders in SAP S/4HANA Asset Management always take into account the duration of an operation for scheduling orders and the work associated with costing and capacity requirements planning. For work centers used solely by SAP S/4HANA Asset Management, use the standard value key for which no standard values are defined. SAP delivers the standard value key **SAP0** for this purpose (see Figure 2.22). Assign this key to each of your work centers in SAP S/4HANA Asset Management.

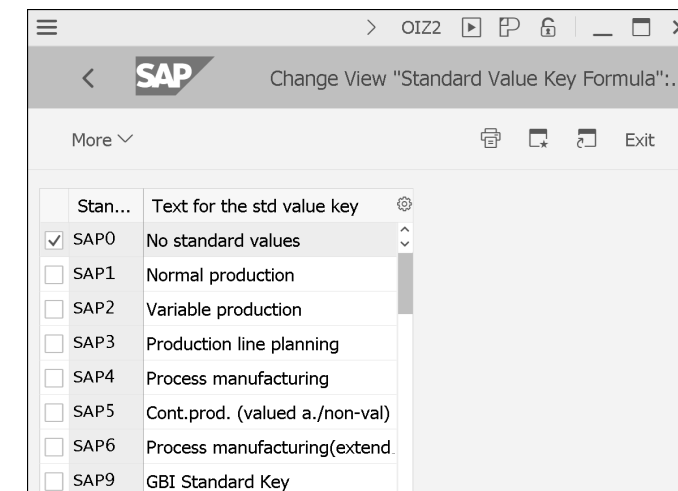


Figure 2.22 Work Center: Standard Value Key

Assign Standard Value Key SAP0

The standard value key in the standard SAP system is sufficient. You don't have to define any other standard value keys. However, make sure to assign it to each of your SAP work centers.



Define Task List Usage Keys

You use this Customizing function to specify the task lists and order categories in which a *work center* is permitted to be used. For example, you could differentiate between whether you want to use work centers in maintenance processing or inspection processing.

Prerequisites

There are no special prerequisites.

Customizing Path

Plant Maintenance and Customer Service • Maintenance Plans, Work Centers, Task Lists, and PRTs • Work Centers • Task List Data • Define Task List Usage Keys

Transaction

OIZD

Settings

For plant maintenance purposes, SAP delivers task list usage **004 (Only maintenance task lists)** and task list usage **009 (All task list types)** (see Figure 2.23).

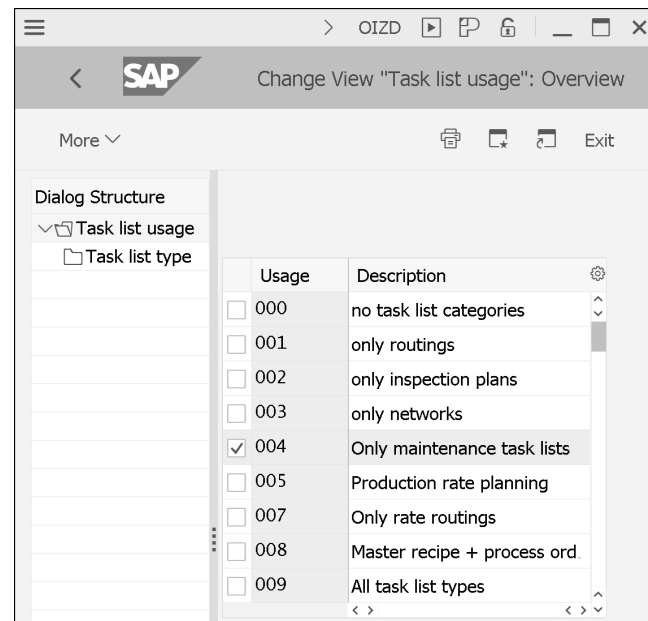


Figure 2.23 Work Center: Task List Usage

You should assign one of these task list usages to each of your work centers in SAP S/4HANA Asset Management. Specify the relevant task list types on the detail screen (e.g., **E** = equipment task lists, **A** = general maintenance task lists, and **T** = functional location task lists), as shown in Figure 2.24.

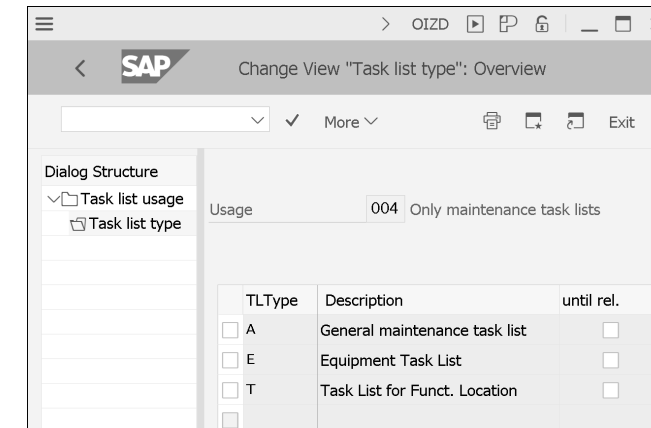


Figure 2.24 Work Center: Task List Types

Assign Task List Usage Key 004 or 009

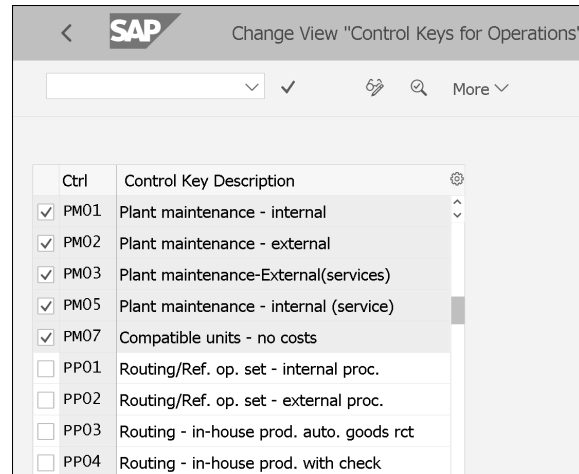
The task list usage keys in the standard SAP system are sufficient. You don't have to define any other task list usage keys. However, make sure to assign one of these task list usage keys to each of your work centers.

Maintain Control Keys

On the **Default Values** screen, you can assign a control key to a work center. From here, the control key is transferred as a default value to the operations associated with a task list or order. You can use the *control key* of an operation to define which business functions you want to execute or how you want to handle the *operation*.

Prerequisites

There are no technical prerequisites. Because, however, the control key is used not only in SAP S/4HANA Asset Management but also for production planning, quality management, project management, and customer service, you should consult with your colleagues from these areas on the naming convention for the control key (see Figure 2.25).



Ctrl	Control Key Description
<input checked="" type="checkbox"/>	PM01 Plant maintenance - internal
<input checked="" type="checkbox"/>	PM02 Plant maintenance - external
<input checked="" type="checkbox"/>	PM03 Plant maintenance-External(services)
<input checked="" type="checkbox"/>	PM05 Plant maintenance - internal (service)
<input checked="" type="checkbox"/>	PM07 Compatible units - no costs
<input type="checkbox"/>	PP01 Routing/Ref. op. set - internal proc.
<input type="checkbox"/>	PP02 Routing/Ref. op. set - external proc.
<input type="checkbox"/>	PP03 Routing - in-house prod. auto. goods rct
<input type="checkbox"/>	PP04 Routing - in-house prod. with check

Figure 2.25 Work Center: Control Keys Overview

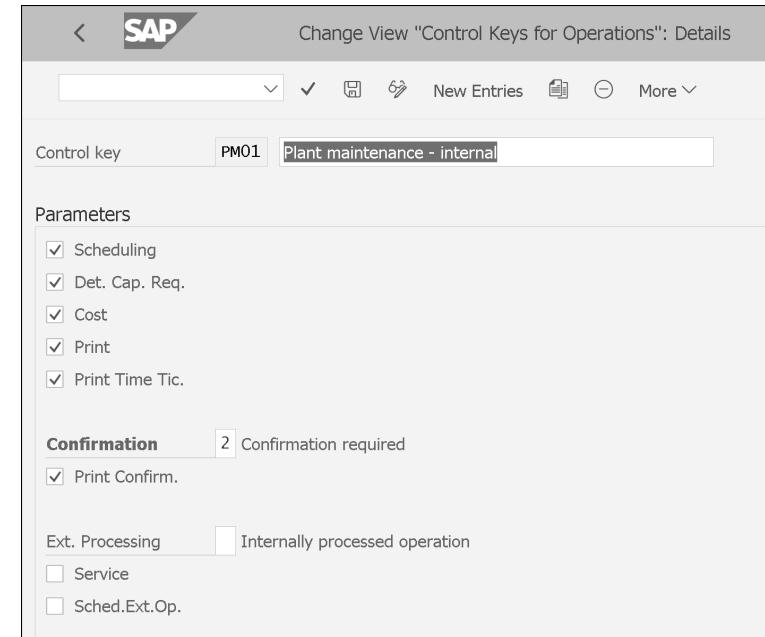
Customizing Path

Plant Maintenance and Customer Service • Maintenance Plans, Work Centers, Task Lists, and PRTs • Work Centers • Task List Data • Maintain Control Keys

Settings

You use the control key to define which of the following business functions are to be executed in the order at a later stage (see Figure 2.26):

- Whether the operation is to be part of costing
- Whether the operation is to be scheduled
- Whether the operation is to generate capacity requirements
- Whether completion confirmations are expected for the operation
- Whether the operation is to be assigned to an external company
- Whether an externally processed operation is to be taken into account in scheduling
- Whether service specifications are to be set up in the operation
- Whether the operation is to be printed
- Whether time tickets or completion confirmation slips are also to be printed for the operation
- Whether inspection characteristics are to be assigned to the operation



Control key: PM01 Plant maintenance - internal

Parameters

- Scheduling
- Det. Cap. Req.
- Cost
- Print
- Print Time Tic.

Confirmation: 2 Confirmation required

- Print Confirm.

Ext. Processing: Internally processed operation

- Service
- Sched.Ext.Op.

Figure 2.26 Work Center: Control Key Detail Screen

Using the Control Key

You can use the control key to control, in detail, the business functions that an operation is to have (cost, print, confirm, assign externally, schedule, etc.).

You require at least two control keys: a key for internal processing and a key for external processing. You can use other control keys as required.

You should always define the control key in the work center as a default value so that you don't always have to manually enter it in the task list and order.

Configure Screen Sequence for Work Center

You use this Customizing function to define which screens are to appear when you maintain a work center, as well as the order in which they are to appear.

Prerequisites

Because the work center type determines the order in which the screens are displayed, you must define the work center type beforehand.

Customizing Path

Plant Maintenance and Customer Service • Maintenance Plans, Work Centers, Task Lists, and PRTs • Work Centers • Configure Screen Sequence for Work Center

Transaction

OIZU

Settings or Recommended Settings

Figure 2.27 shows an overview of the screens most commonly used for the work center. The following screens are available:

- Basic Data
- Defaults
- Scheduling
- Capacities
- Costing
- Technical data
- Hierarchy classification
- HR assignment
- Res.NetworkRelation.

Use the **No.** column to define the order in which these screens are displayed.

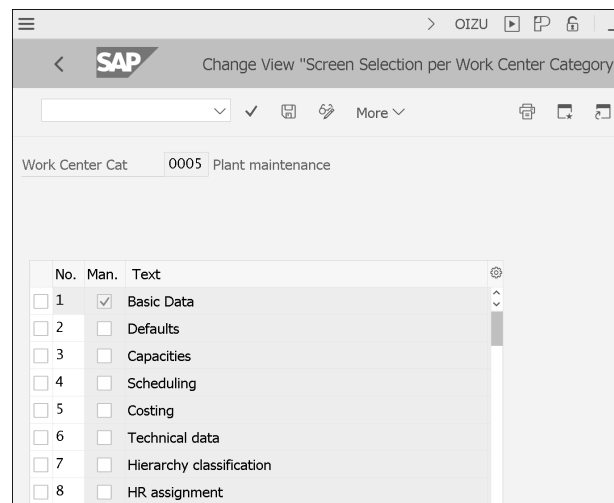


Figure 2.27 Work Center: Screen Sequence

2.5 Summary

Following are the major takeaways for SAP S/4HANA Asset Management organizational structures:

- With organizational units, you define your enterprise's organizational structure in general and your plant maintenance structures in particular.
- Organizational structures provide a basis for all master data and business processes.
- In SAP S/4HANA Asset Management projects, the general organizational units in the SAP system (e.g., the company code, controlling area, and plant) are usually predefined.
- The best way for all logistic processes, if possible, is to only use one controlling area for the entire enterprise.
- The plant is the central and most important organizational unit in logistics.
- From a plant maintenance perspective, you have to define maintenance planning plants and maintenance plants.
- SAP S/4HANA Asset Management supports plant-specific maintenance and cross-plant maintenance.
- From a maintenance perspective, a work center represents either an individual person or a workshop.
- In SAP S/4HANA Asset Management, work centers are used in many locations.
- With several Customizing functions, you differentiate plant maintenance work centers from other uses (e.g., production).

This chapter has provided you with instructions for defining your organizational units, plants, and work centers.

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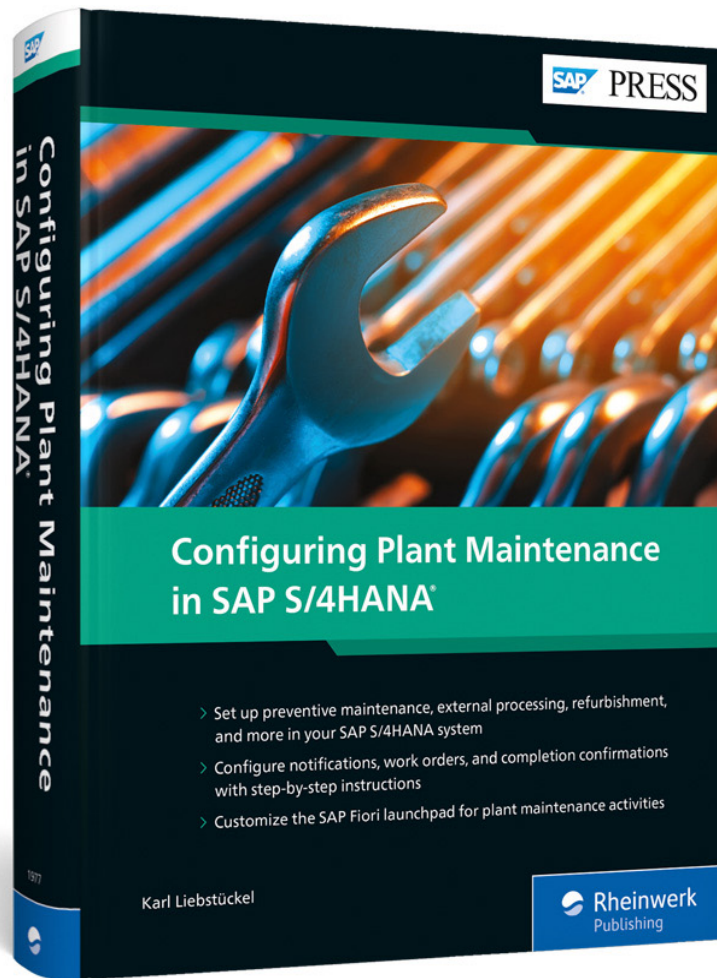
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