



SAP R/3 PM Training Maintenance Planning

Summary

- Task List/General Task List (without Strategy)
- Maintenance Strategies
- Task List/General Task List (with Strategy)
- Maintenance Planning



Chapter...

**Task List / General Task List
(without Strategy)**

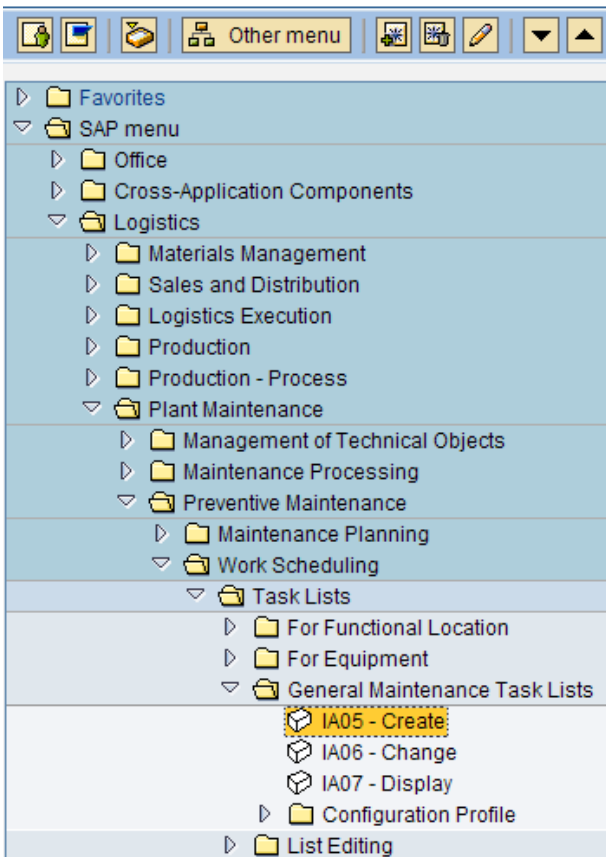
SAP R/3 PM Task List

- SAP has the possibility to describe work steps in form of task lists and general task lists
- Difference between task lists and general task lists are, the general task list has **no relations** to technical objects, task list are **direct linked** to technical objects (Functional Location or Equipment)
- Content of task lists are the description of working steps
- Duration of working steps can be evaluated
- Intervals between working steps can be defined
- Task list can be used at work orders and notifications
- Task lists automatically used with maintenance plans

SAP R/3 PM

Create Task List

SAP Easy Access



Transaction IA05 Create

Path:

Logistic → Plant Maintenance Preventive Maintenance
 → Work Scheduling → Task Lists → General Maintenance
 Task Lists → IA05 - Create

SAP has the possibility to use internal or external group numbers.

For training we using the internal group number. No entries at this field.

Press **ENTER** for the next screen.

Create General Task List: Initial Screen

The screenshot shows the initial screen for creating a general task list. The 'Group' field is highlighted with a yellow box and a red arrow pointing to it. The 'User defaults' section contains the following fields:

Profile	<input type="text"/>
Change Number	<input type="text"/>
Key date	31.05.2010

SAP R/3 PM

Create General Maintenance Task List

Create General Task List: Header General View

Group 44

Group 44

Group Counter 1

Planning plant

Assignments to Header

Work center /

Usage

Planner group

Status

System Condition

Maintenance strategy

Assembly

Deletion flag

QM Data

Inspection points

Ext. numbering

You can see, the system has the group number (44) with the group counter (1) created. This means, at the group 44 we created the first task list. The system has the group counter 1 created.

Edit the description of the task list.
Use at this point a **significant** description.


Select now:


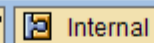
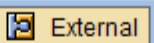
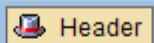
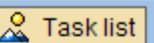
- Planning Plant
- Work center
- Usage
- Planner group
- Status

Press the button **Operation** for the next screen.

SAP R/3 PM

Create General Maintenance Task List

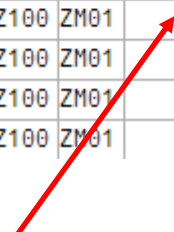
 **Create General Task List: Operation Overview**


 Internal
  External
  Header
  Task list

Group 45 Training MSEI - Documentation Grp.Countr 1

General Operation Overview

OpAc	SOp	Work ctr	Plnt	Ctrl	Operation Description	LT	Work	Un.	No.	Duration
0010		Z-ELEK	Z100	ZM01		<input type="checkbox"/>				
0020		Z-ELEK	Z100	ZM01		<input type="checkbox"/>				
0030		Z-ELEK	Z100	ZM01		<input type="checkbox"/>				
0040		Z-ELEK	Z100	ZM01		<input type="checkbox"/>				



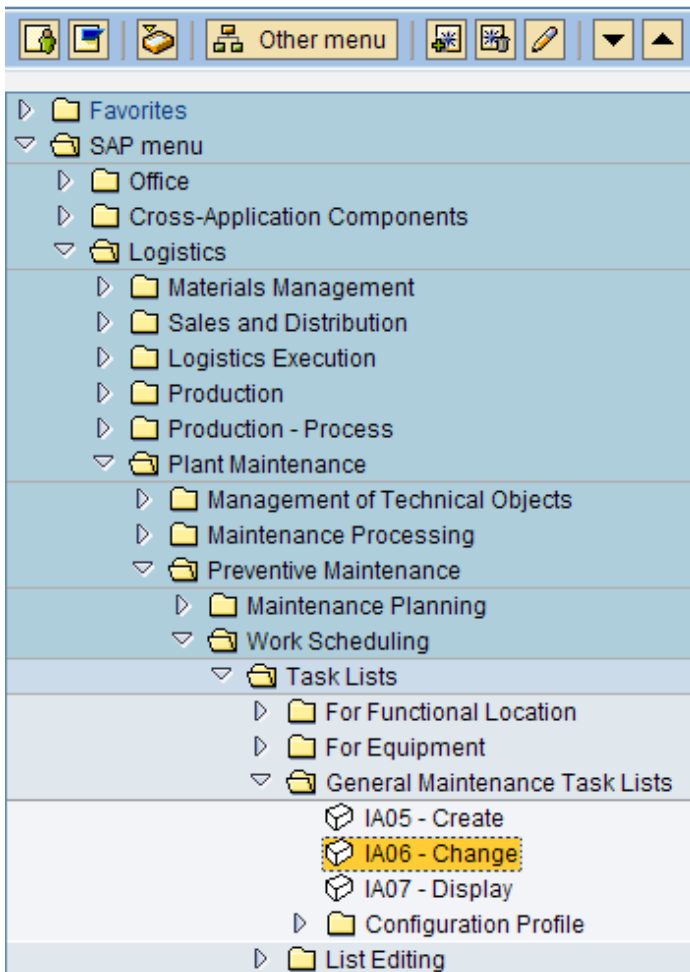
Edit on this point the specific work steps. You can edit for each task the duration and the number. You can change the work center for different responsibilities. You can change the control key for different business transactions (external service)

PROPOSAL: For simply work edit at the **first** task the total duration of working time and confirm only the first task.

SAP R/3 PM

Change General Maintenance Task List

SAP Easy Access



Transaction IA06 Change
Path:

Logistic → Plant Maintenance Preventive Maintenance
→ Work Scheduling → Task Lists → General
Maintenance Task Lists → IA06 - Change

Edit the group number, the plant and the group counter of your created general maintenance task list.

REMARK:

During one SAP Session the system know the last used task list and give a proposed value at the field group.

Change General Task List: Initial Screen

The screenshot shows the 'Change General Task List: Initial Screen' in SAP. The 'Group' field is highlighted in yellow and contains the value '45'. A red arrow points to this field. Below the 'Group' field, there are sections for 'User defaults' and 'Task List Selection Criteria'.

User defaults	
Profile	<input type="text"/>
Change Number	<input type="text"/>
Key date	31.05.2010

Task List Selection Criteria	
Plant	<input type="text"/>
Group counter	<input type="text"/>
Task list status	<input type="text"/>
Planner Group	<input type="text"/>

SAP R/3 PM

Change General Maintenance Task List

Change General Task List: Operation Overview

Group 45 Training MSEI - Documentation Grp.Countr 1

General Operation Overview

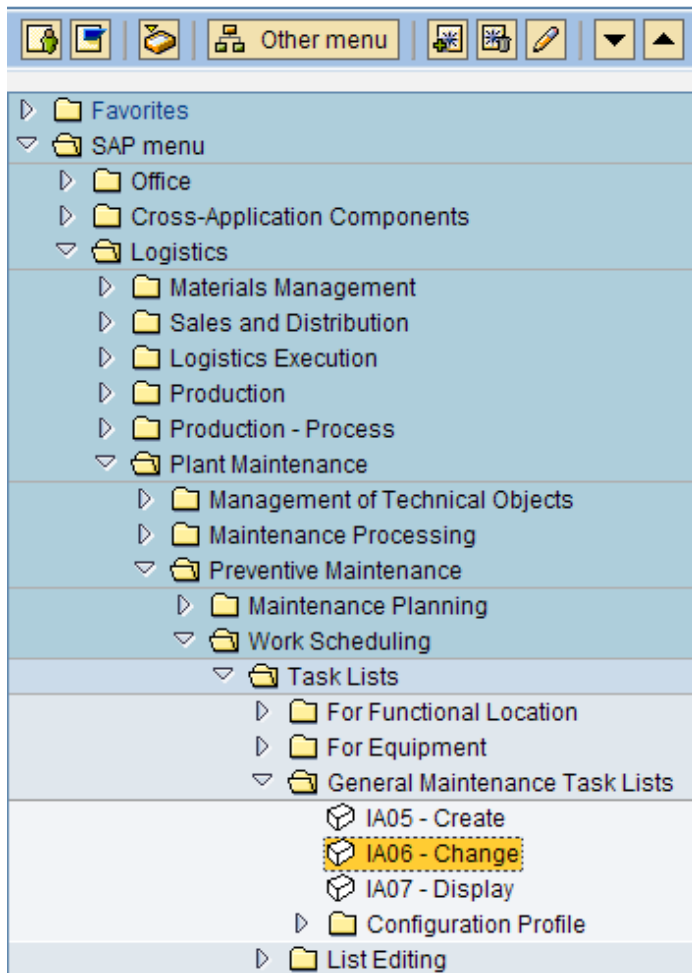
OpAc	SOp	Work ctr	Plnt	Ctrl	Operation Description	LT	Work	Un.	No.	Duration	Un.	C	Pct	Int. distr	Fac	ActTyp
0010		Z-ELEK	Z100	ZM01	Training document	<input type="checkbox"/>									1	Z_HWS
0020		Z-ELEK	Z100	ZM01		<input type="checkbox"/>										
0030		Z-ELEK	Z100	ZM01		<input type="checkbox"/>										
0040		Z-ELEK	Z100	ZM01		<input type="checkbox"/>										
0050		Z-ELEK	Z100	ZM01		<input type="checkbox"/>										

You can add some additional operations or you can mark one ore more operations and delete the operations with button



SAP R/3 PM Task List for Functional Location

SAP Easy Access



Transaction IA11 Create

Path:

Logistic → Plant Maintenance Preventive Maintenance
→ Work Scheduling → Task Lists → For Functional
Location → IA11 - Create

Edit or select the relevant functional location and press
ENTER

Create Functional Location Task List: Initial Screen

The screenshot shows the initial screen for creating a functional location task list. The 'Functional Location' field is highlighted in yellow and contains the value '2000-10-10-010'. A red arrow points to this field. Below the field is a 'User Defaults' section with the following fields:

User Defaults	
Profile	<input type="text"/>
Change Number	<input type="text"/>
Key date	31.05.2010

SAP R/3 PM Task List for Functional Location

Create Functional Location Task List: Header General View

Func. Loc. 2000-10-10-010 SMT 1
 Group 5 SMT 1

Group
 Group Counter SMT 1
 Planning plant

Assignments to Header

Work center /
 Usage
 Planner group
 Status
 System Condition
 Maintenance strategy
 Assembly
 Deletion flag

QM Data

Inspection points
 Ext. numbering

Edit the description of the task list.
Use at this point a **significant** description.

- Select now:
- Planning Plant
 - Work center
 - Usage
 - Planner group
 - Status

Press the button **Operation** for the next screen.

SAP R/3 PM

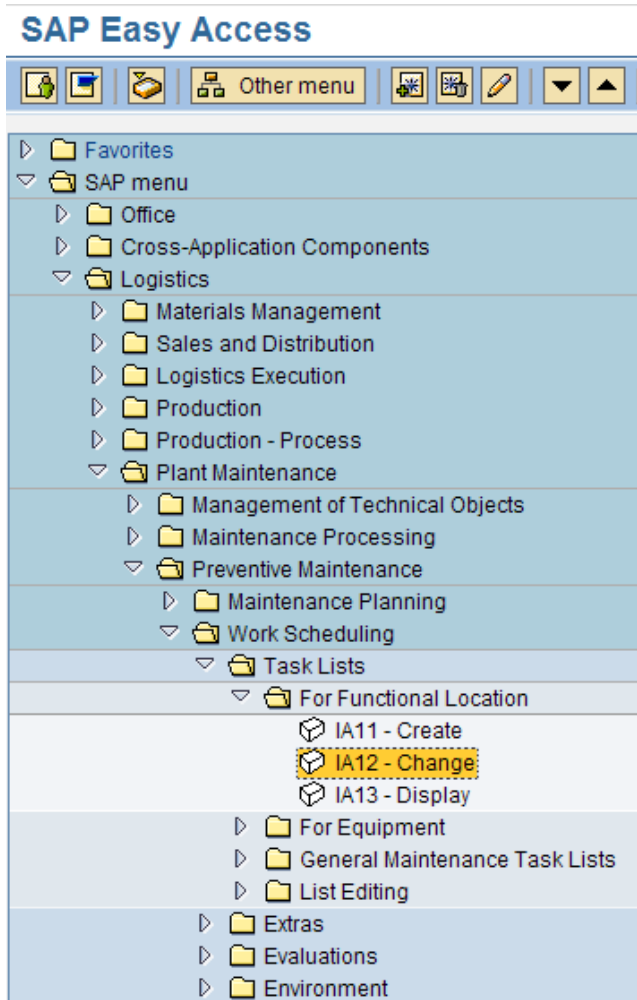
Task List for Functional Location

Create Functional Location Task List: Operation Overview

General Operation Overview														
OpAc	SOp	Work ctr	PInt	Ctrl	Operation Description	LT	Work	Un.	No.	Duration	Un.	C	Pct	
0010		Z-ELEK	Z100	ZM01		<input type="checkbox"/>								
0020		Z-ELEK	Z100	ZM01		<input type="checkbox"/>								
0030		Z-ELEK	Z100	ZM01		<input type="checkbox"/>								
0040		Z-ELEK	Z100	ZM01		<input type="checkbox"/>								
0050		Z-ELEK	Z100	ZM01		<input type="checkbox"/>								

Edit on this point the specific work steps. You can edit for each task the duration and the number. You can change the work center for different responsibilities. You can change the control key for different business transactions (external service)

SAP R/3 PM Task List for Functional Location



*Transaction IA12 Change
Path:*

*Logistic → Plant Maintenance Preventive Maintenance
→ Work Scheduling → Task Lists → For Functional Location
→ IA12 - Change*

Edit the number of the functional location and press the button ENTER. You come to the next screen

Change Functional Location Task List: Initial Screen

The screenshot shows the initial screen for changing a functional location task list. It includes a header with 'Task list', 'Header', and 'Operation' buttons. The 'Functional Location' field contains '2000-10-10-010'. Below this are sections for 'User Defaults' and 'Task List Selection Criteria'.

User Defaults	
Profile	<input type="text"/>
Change Number	<input type="text"/>
Key date	31.05.2010

Task List Selection Criteria	
Use	<input type="checkbox"/>
Plant	<input type="checkbox"/>
Group counter	<input type="checkbox"/>
Task list status	<input type="checkbox"/>
Planner Group	<input type="checkbox"/>

SAP R/3 PM

Task List for Functional Location

Change Functional Location Task List: Operation Overview

Func. Loc. 2000-10-10-010 SMT 1
 Group 5 SMT 1 Grp.Countr 1

General Operation Overview

OpAc	SOp	Work ctr	Plnt	Ctrl	Operation Description	LT	Work	Un.	No.	Duration	Un.	C Pct	Int. distr	Fac	ActTyp
0010		Z-ELEK	Z100	ZM01	Test for Training	<input type="checkbox"/>	2	H	1	2	H			1	Z_HWS
0020		Z-ELEK	Z100	ZM01		<input type="checkbox"/>									
0030		Z-ELEK	Z100	ZM01		<input type="checkbox"/>									
0040		Z-ELEK	Z100	ZM01		<input type="checkbox"/>									
0050		Z-ELEK	Z100	ZM01		<input type="checkbox"/>									

If you want attach material to one operation, then you must select one task

Click on the left button by the operation number.

SAP R/3 PM Task List for Functional Location

Change Functional Location Task List: Operation Overview

Internal
 External
 Header
 Task list

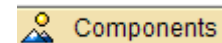
Func. Loc. 2000-10-10-010 SMT 1
 Group 5 SMT 1 Grp.Countr 1

General Operation Overview

OpAc	SOp	Work ctr	Plnt	Ctrl	Operation Description	LT	Work	Un.	No.	Duration	Un.	C Pct	Int. distr	Fac	ActTyp
0010		Z-ELEK	Z100	ZM01	Test for Training	<input type="checkbox"/>	2	H	1	2	H			1	Z_HWS
0020		Z-ELEK	Z100	ZM01		<input type="checkbox"/>									
0030		Z-ELEK	Z100	ZM01		<input type="checkbox"/>									
0040		Z-ELEK	Z100	ZM01		<input type="checkbox"/>									
0050		Z-ELEK	Z100	ZM01		<input type="checkbox"/>									

At the orange color you know, that you have select the operation.

For the selection of material click on the button:



SAP R/3 PM

Task List for Functional Location

Task List for Funct. Location Change: Component Overview

Func. Loc. 2000-10-10-010 SMT 1
 Group 5 SMT 1 Grp.Countr 1

Operation/Activity 0010 Test for Training

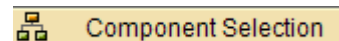
Component Assignments

Material	Quantity	Un	B	M	Component Description	ICT
	<input type="button" value="⊕"/>		<input type="checkbox"/>			
			<input type="checkbox"/>			
			<input type="checkbox"/>			
			<input type="checkbox"/>			

Edit here the required material.

REMARK:

If the functional location has a BOM, then you can select easily the required material by clicking on the button:



SAP R/3 PM

Task List for Functional Location

Change FunctLoc Task List: Structure List

Levels above Expand whole Mat. classes

Functional loc.	2000-10-10-010	Valid From	01.06.2010
Description	SMT 1		
2000	Plant MSEI		
2000-10	module mfg		
2000-20	Facilities		
2000-99	Scrap		
2000-20-10-010	Cell 1		
100048	Oven 2		
75021	ME Oven 2	I	1 ST
10105	Kies english 8/11	L	12 KG
50018		L	1 ST
75022	EL Oven 2	I	1 ST
10000091	Kessel		
2000-20-10-020	Cell 2		

Select one or more required materials by click (more: strg+click)

and transfer the selected materials with click on (F5).

The system transfer the selected materials to the task list.
Save the task list.

SAP R/3 PM Task List for Equipment

REMARK:

The creation/changing of task lists for equipments is similar to the procedure for functional locations.

The differences are by the start - transaction. You are using equipment numbers.

Create Task List for Equipment	IA01
Change Task List for Equipment	IA02

SAP R/3 PM Search for Task Lists

Transaction IE01 Create
Transaction IA08 Change
Path:

Logistic → Plant Maintenance Preventive Maintenance
→ Work Scheduling → Task Lists → List Editing → IA08
- Change

Select one type of task lists or other selection criteria
(create variants for selection)

SAP Easy Access

The screenshot shows the SAP Easy Access menu structure. The path is: SAP menu > Logistics > Plant Maintenance > Work Scheduling > Task Lists > List Editing > IA08 - Change. The 'IA08 - Change' option is highlighted with a yellow box.

Change PM Task Lists: Task List Selection

The screenshot shows the 'Change PM Task Lists: Task List Selection' dialog box. A red arrow points to the 'Equip.Task List' checkbox, which is currently unchecked. The 'FunctLoc.Task List' checkbox is checked. The 'Gen.Task List' checkbox is unchecked. Below the checkboxes, there are fields for 'Functional location', 'Equipment', 'Group', 'Group Counter', 'Key date', and 'Class Selection'. The 'Class Selection' field has two buttons: 'FunctLoc' and 'Equipment'. At the bottom, there is a 'Header Data' section with fields for 'Usage', 'Plant', 'Work center', and 'Status'.

SAP R/3 PM

Search for Task Lists

Change PM Task Lists: List of Task Lists

S	Type	Group	G...	Task list description
	T	2	1	Säulenbohrmaschine (Imatec)
	A	3	1	Anleitung BWB1
	T	4	1	Wartung Klimaanlage 4711
	A	5	1	BWB-Plan 1
	T	5	1	SMT 1
	A	6	1	BWB-Plan Inputscript
	A	7	1	BWB-Plan Inputscript
	E	7	1	Fließband 08/15
	A	8	1	BWB-Plan Inputscript
	A	9	1	BWB-Plan Inputscript

Type	Description
A	General maintenance task list
E	Equipment Task List
T	Task List for Funct. Location

You can modify the list to your requirements. (create variants)

SAP R/3 PM Task Lists

Tutorial

Create General Maintenance Task List
(without Strategy)

Change General Maintenance Task List

Create Task List for Functional Location

Change Task List for Functional Location
(required Material)

Searching for Task Lists



Chapter...

Maintenance Strategy

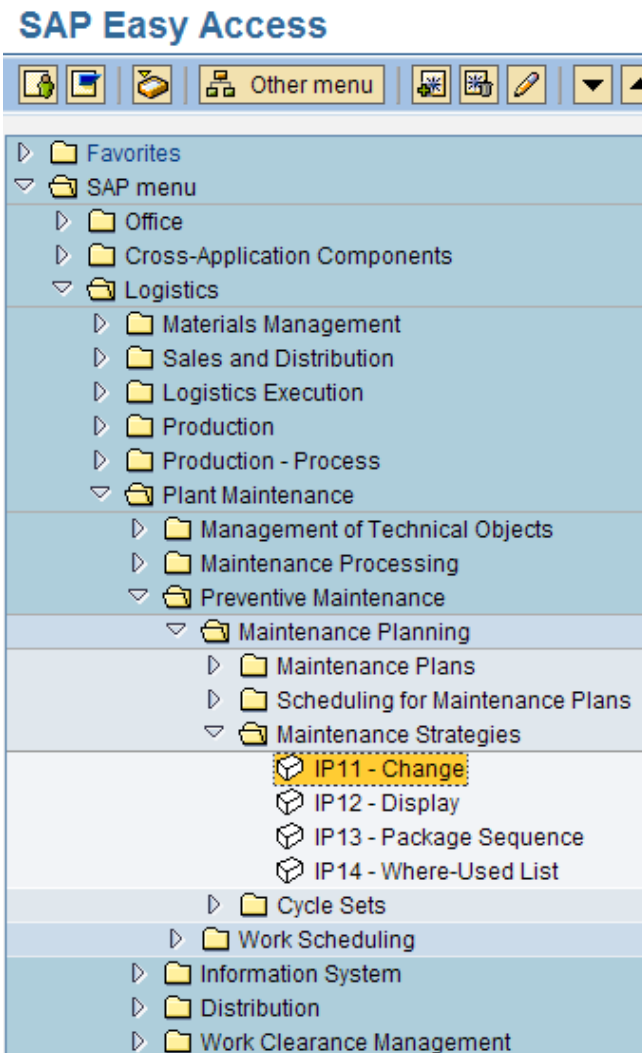
SAP R/3 PM Maintenance Strategy

- Maintenance Strategies includes different cycles named packages
(time, working hours, produced pieces)
- Maintenance Strategies are created on a central point, you can use maintenance strategies on task lists
- If you have allocated one strategy to the task list, than you can select one or more packages to one operation
- Maintenance Strategies can have values for scheduling

SAP R/3 PM Maintenance Strategy and Hierarchy

- With the hierarchy you can fix which servicing package has precedence if several servicing packages are at the same time due.
- Should several servicing packages be at the same time due, they must have the same hierarchy.
- Should a package overstep other packages at due-date, it must have a higher hierarchy.
- If two packages with the same hierarchy are due at the same time, both packages are explained.
- If both packages have a different hierarchy, only the package with the higher hierarchy is explained.

SAP R/3 PM Create Maintenance Strategy



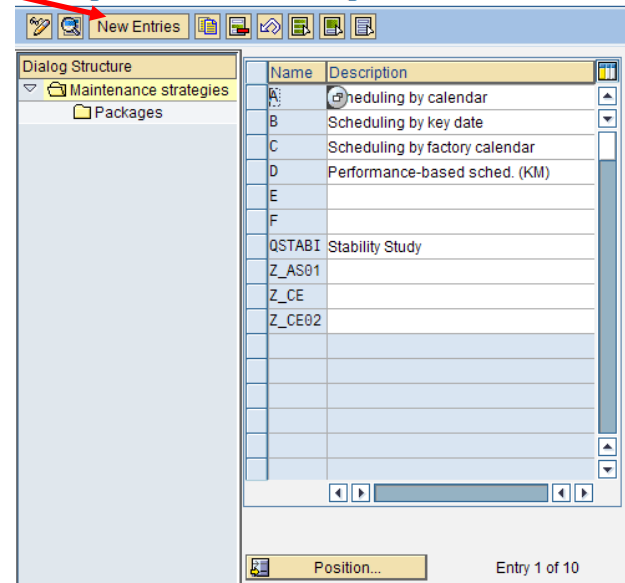
Transaction IP11 - Change

Path:

Logistic → Plant Maintenance → Preventive Maintenance → Maintenance Planning → Maintenance Strategies → IP11 - Change

Click on: **New Entries**
You can create new strategies.

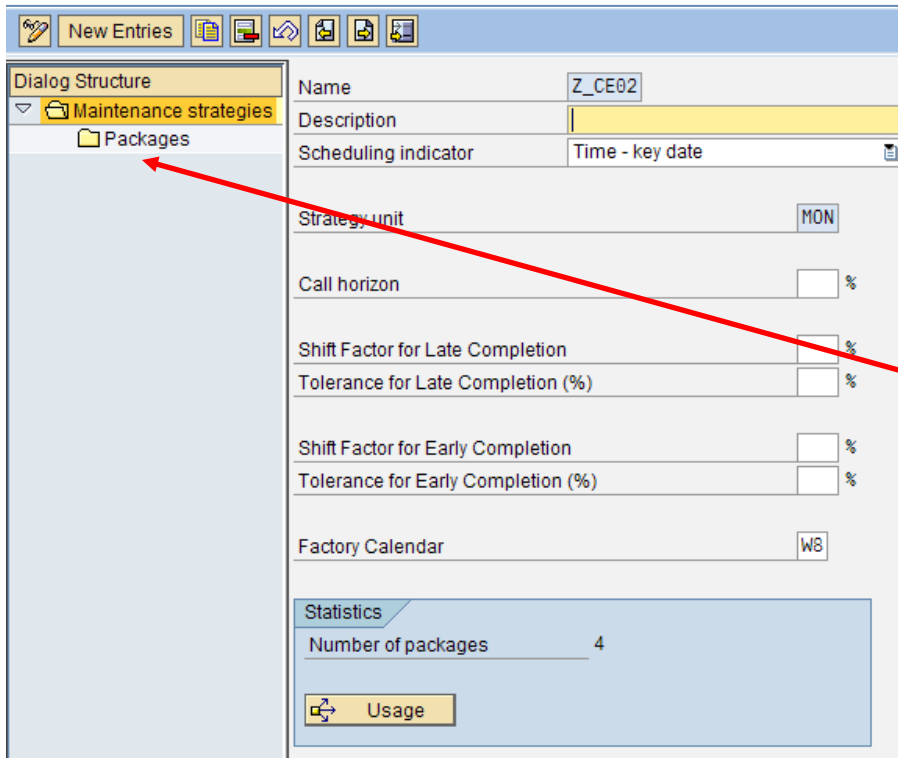
Change Maintenance Strategies: Overview



SAP R/3 PM

Create Maintenance Strategy

Change Maintenance Strategies: Details




The screenshot shows the SAP R/3 PM 'Change Maintenance Strategies: Details' dialog. The 'Dialog Structure' pane on the left shows the hierarchy: 'Maintenance strategies' (expanded) > 'Packages'. A red arrow points from the 'Packages' folder to the 'Description' field in the main form. The main form contains the following fields:

- Name: Z_CE02
- Description: (empty)
- Scheduling indicator: Time - key date
- Strategy unit: MON
- Call horizon: (empty) %
- Shift Factor for Late Completion: (empty) %
- Tolerance for Late Completion (%): (empty) %
- Shift Factor for Early Completion: (empty) %
- Tolerance for Early Completion (%): (empty) %
- Factory Calendar: WB

At the bottom, there is a 'Statistics' section showing 'Number of packages' as 4, and a 'Usage' button.

Enter the **Name** of the strategy, the **Description**, the **Scheduling indicator**, the **Strategy unit**, the **Factory Calendar** and optional other parameter (Values) .








Double click on:  Packages

You get the following slide


SAP R/3 PM

Create Maintenance Strategy

Change Maintenance Packages


 New Entries
 






Dialog Structure
 Maintenance strategies
 Packages

Name: Z_CE02
 Description: Time
 Scheduling indicator: Time - key date  Pack. seq.

Pa...	Cycl.length	Unit	Maintenance cycle text	Cy...	Hi...	Hi...	Offset
5		1 MON			1		
10		3 MON			1		
15		6 MON			1		
20		12 MON			1		

Click on:

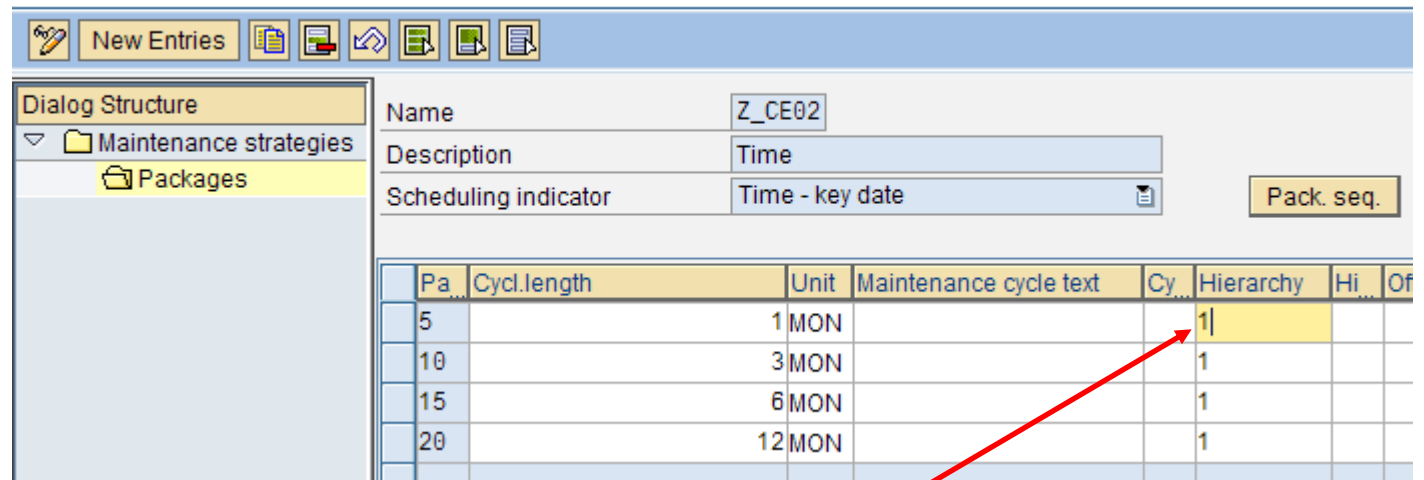
New Entries

now you can edit new packages.

SAP R/3 PM

Create Maintenance Strategy

Change Maintenance Packages



Dialog Structure

- Maintenance strategies
 - Packages

Name: Z_CE02

Description: Time

Scheduling indicator: Time - key date

Pack. seq.

Pa.	Cycl.length	Unit	Maintenance cycle text	Cy.	Hierarchy	Hi.	Of
5		1 MON			1		
10		3 MON			1		
15		6 MON			1		
20		12 MON			1		

On this field you can configure the different hierarchy levels.

Save the strategy.

Click on :

Pack. seq.

SAP R/3 PM

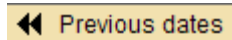
Create Maintenance Strategy

Package Sequence

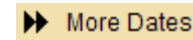
		Time														
PK	Cycle text	1 MON	2 MON	3 MON	4 MON	5 MON	6 MON	7 MON	8 MON	9 MON	10 MON	11 MON	12 MON	13 MON	14 MON	15 MON
5	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M
10	3M			3M			3M			3M			3M			3M
15	6M						6M						6M			
20	12M												1J			

You get the overview of all packages. Here you can also see the differences by using of hierarchy levels

By click on :



or:

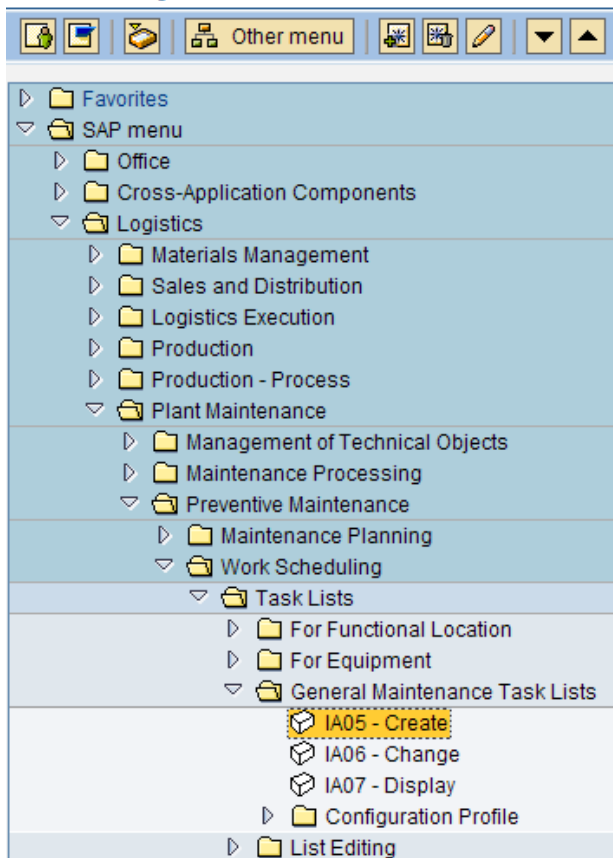


You can change the period.

SAP R/3 PM

Create General Maintenance Task List

SAP Easy Access



Transaction IA05 Create

Path:

Logistic → Plant Maintenance Preventive Maintenance

→ Work Scheduling → Task Lists → General Maintenance

Task Lists → IA05 - Create

SAP has the possibility to use internal or external group numbers.

For training we using the internal group number. No entries at this field.

Press **ENTER** for the next screen.

Create General Task List: Initial Screen

The screenshot shows the 'Create General Task List: Initial Screen' form. The 'Group' field is highlighted with a yellow box and a red arrow pointing to it. The 'User defaults' section shows the following fields:

User defaults	
Profile	<input type="text"/>
Change Number	<input type="text"/>
Key date	31.05.2010

SAP R/3 PM

Create General Maintenance Task List

Create General Task List: Header General View

Group 44

Group 44

Group Counter 1

Planning plant

Assignments to Header

Work center

Usage

Planner group

Status

System Condition

Maintenance strategy

Assembly

Deletion flag

QM Data

Inspection points

Ext. numbering

You can see, the system has the group number (44) with the group counter (1) created. This means, at the group 44 we created the first task list. The system has the group counter 1 created.

Edit the description of the task list. Use at this point a **significant** description.

Select now:

- Planning Plant
- Work center
- Usage
- Planner group
- Status
- Strategy

Press the button **Operation** for the next screen.

SAP R/3 PM

Create General Maintenance Task List

Create General Task List: Operation Overview

Internal
 External
 Header
 Task list

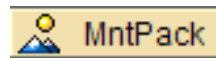
Group 45 Training MSEI - Documentation Grp.Countr 1

General Operation Overview

OpAc	SOp	Work ctr	PInt	Ctrl	Operation Description	LT	Work	Un.	No.	Duration
0010		Z-ELEK	Z100	ZM01		<input type="checkbox"/>				
0020		Z-ELEK	Z100	ZM01		<input type="checkbox"/>				
0030		Z-ELEK	Z100	ZM01		<input type="checkbox"/>				
0040		Z-ELEK	Z100	ZM01		<input type="checkbox"/>				

Edit on this point the specific work steps. You can edit for each task the duration and the number. You can change the work center for different responsibilities. You can change the control key for different business transactions (external service)

By click on button :



select the package overview.

SAP R/3 PM

Create General Maintenance Task List


Change General Task List: Maintenance Package Overview

Maintenance package Internal External Header Task list

Group 43 Prüfung BGV A3 Grp.Countr 1

Operat. Overview Maint. Packages

Op.	SOp	Operation Description	1M	3M	6M	1J
0010		Sichtprüfung	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0020		Messung Isolationswiderstand	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0030		Dokumentation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0040		Kennzeichnung	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Select for each operation the relevant package and save the changes.

REMARK:

You can create task lists for functional locations or equipment on the same way.

SAP R/3 PM Maintenance Strategy

Tutorial

Create/Change Maintenance Strategies

Create General Maintenance Task List with Strategy

Change General Maintenance Task List with Strategy



Chapter...

Maintenance Planning

SAP R/3 PM Maintenance Planning

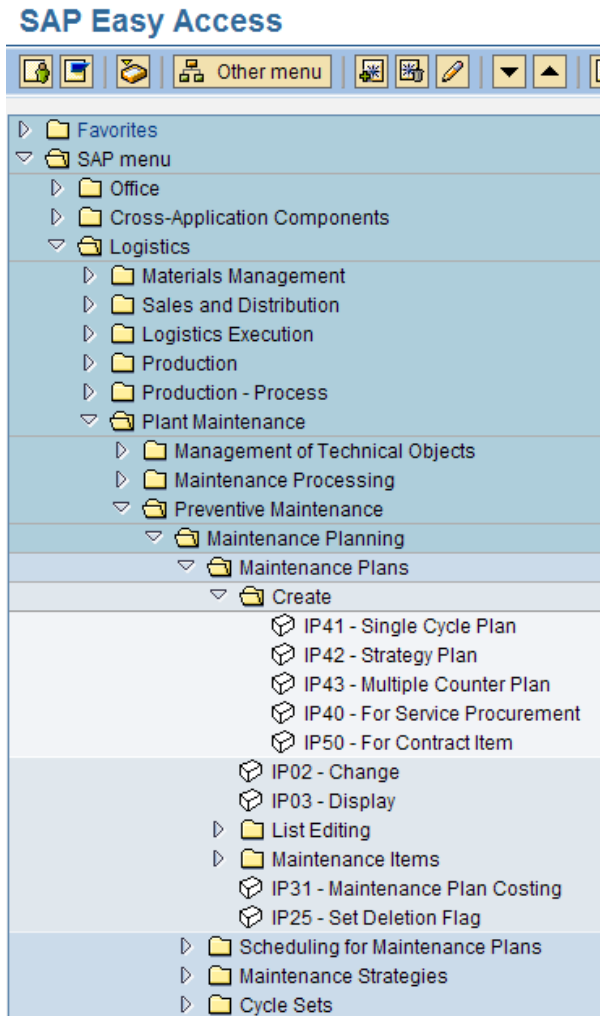
- With the help of the maintenance planning you can describe the appointments and the extent of all periodical measures, e.g., maintenance and inspection operations, at technical objects (TP, EQ).
- With maintenance plans dependent on time the measure is carried out in certain cycles, e.g., all two months, all six months, etc.
- By the counter-steered maintenance planning you can plan your maintenance on the base of measurement documents. In addition measuring points must be created in relation to technical objects (TP, EQ) and regularly measurement documents must be stored in SAP
- By the creation of maintenance plans you must give a maintenance plan type which determines which maintenance call object generates the system with a due maintenance call (e.g., a maintenance order or notification).

SAP R/3 PM Elements of Maintenance Planning

- A maintenance **position** describes which preventive maintenance activities should take place in a technical object or in a group of technical objects at regular intervals.
- The maintenance plan contains scheduling information from the following springs:
 - from the maintenance strategy which is assigned to the maintenance plan
 - with single cycle plans from the maintenance cycle
 - with multiple counter plans from the maintenance cycles
 - from the scheduling information, especially for this maintenance plan
- There are three different maintenance plan types which allow it to you the maintenance planning for your requirements.
 - Single cycle plan
 - Strategy plan
 - Multiple counter plan

SAP R/3 PM

Create Single Cycle Plan



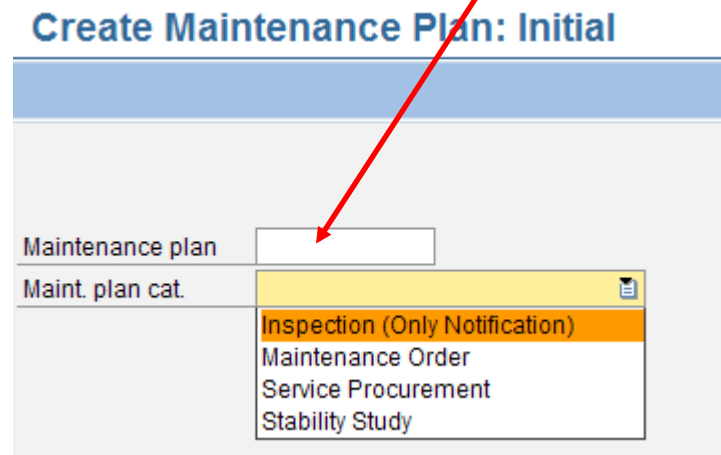
Transaction IP41 – Single Cycle Plan

Path:

Logistic → Plant Maintenance → Preventive Maintenance
 → Maintenance Planning → Maintenance Plans → Create
 → IP41 – Single Cycle Plan

Select at the entry screen the maintenance plan category (Maintenance Order or Notification).
 The maintenance plan number will be created automatically.

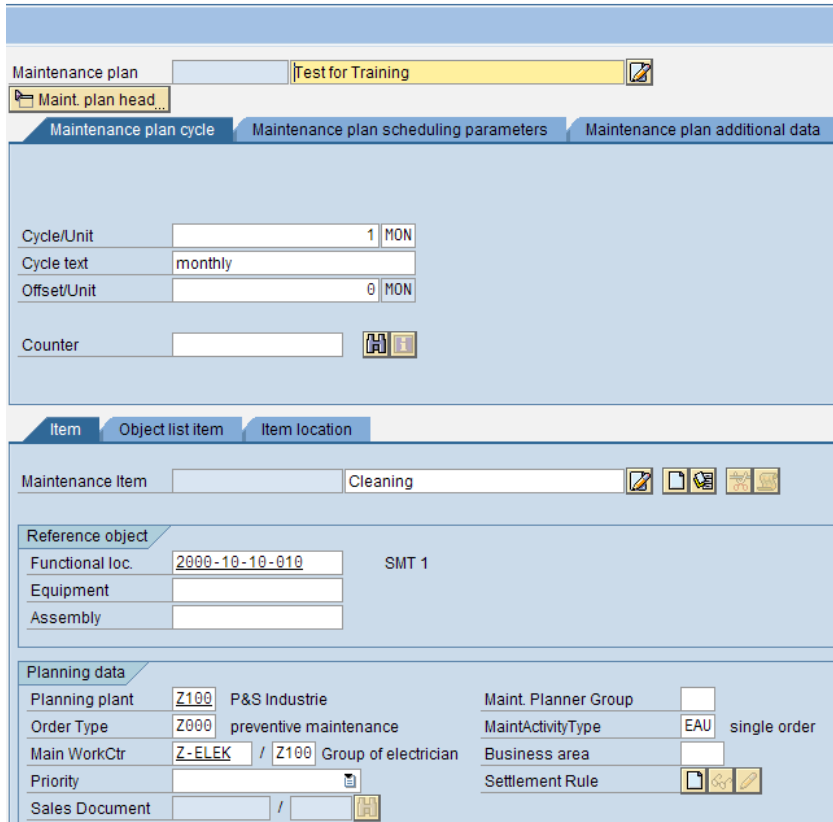
Press the **ENTER** button



SAP R/3 PM

Create Single Cycle Plan

Create Maintenance Plan: Single cycle plan



The screenshot shows the SAP R/3 PM interface for creating a single cycle maintenance plan. The main window is titled "Create Maintenance Plan: Single cycle plan".

Maintenance plan cycle register:


- Maintenance plan: Test for Training
- Maint. plan head... (button)
- Maintenance plan cycle (selected tab)
- Maintenance plan scheduling parameters
- Maintenance plan additional data
- Cycle/Unit: 1 MON
- Cycle text: monthly
- Offset/Unit: 0 MON
- Counter: (empty field with icons)

Item register:

- Item (selected tab)
- Object list item
- Item location
- Maintenance Item: Cleaning
- Reference object:
 - Functional loc.: 2000-10-10-010 SMT 1
 - Equipment: (empty field)
 - Assembly: (empty field)
- Planning data:
 - Planning plant: Z100 P&S Industrie
 - Order Type: Z000 preventive maintenance
 - Main WorkCtr: Z-ELEK / Z100 Group of electrician
 - Priority: (empty field)
 - Sales Document: (empty field)
 - Maint. Planner Group: (empty field)
 - MaintActivityType: EAU single order
 - Business area: (empty field)
 - Settlement Rule: (empty field)

Edit the following fields:
 Maintenance Plan Description
 At the register „**Maintenance plan cycle**“, edit the cycle and optional one text for the cycle.

At the register „**Item**“, you must edit the following fields:

- Functional location or Equipment
- Order Type (at P&S SAP „**Z000**“ for Maintenance)
- Main Work Center (if the information not automatically filled from the technical object)
- Task List (searching with button )

SAP R/3 PM Create Single Cycle Plan

Create Maintenance Plan: Single cycle plan

Maintenance plan: Test for Training

Maint. plan head...

Maintenance plan cycle | Maintenance plan scheduling parameters | Maintenance plan additional data

Date determination

Shift Factor Late Compl. %

Tolerance (+) %

Shift Factor Early Compl. %

Tolerance (-) %

Cycle modification factor: 1,00

Factory calendar

Call control parameter

Call horizon %

Scheduling period DAY

Completion Requirement

Scheduling indicator

Time

Time - key date

Time - factory caldr

Start scheduling

Start of cycle

Item | Object list item | Item location

Maintenance Item: Cleaning

Click on the register "Maintenance plan scheduling parameters"

With these parameters you can customize the scheduling of the maintenance plan.

Main parameters:

- Shift Factor
- Cycle modification Factor
- Call horizon
- Scheduling indicator

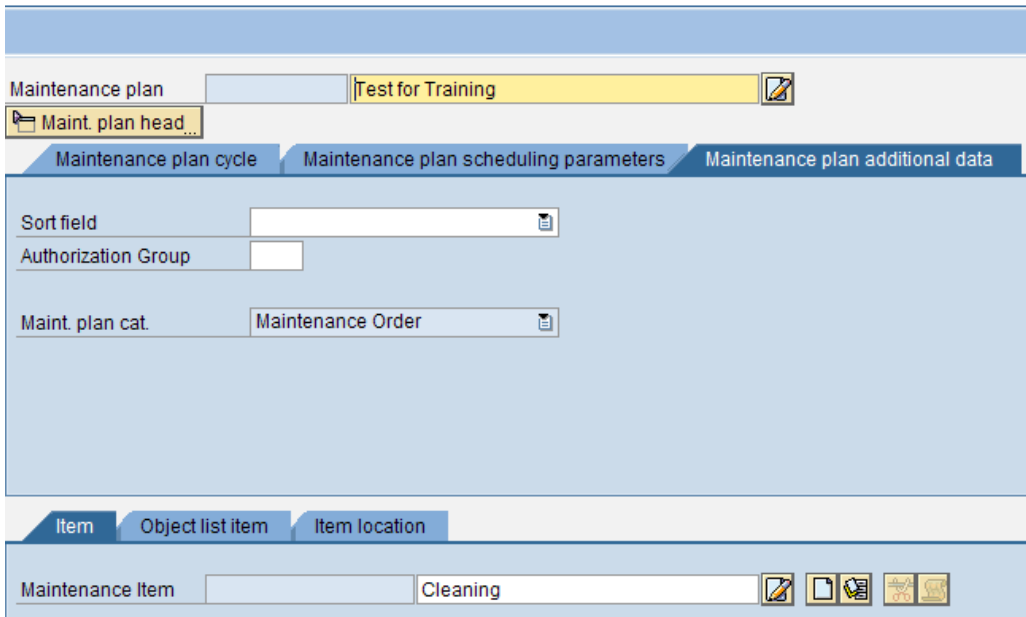
Not use "Completion Requirement"

Planned Date	Confirmation	Shift Factor	Next Date
01.02.2010	16.02.2010	0 %	01.02.2011
		50 %	08.02.2011
		100 %	16.02.2011

SAP R/3 PM

Create Single Cycle Plan

Create Maintenance Plan: Single cycle plan



The screenshot shows the SAP R/3 PM interface for creating a single cycle maintenance plan. The main window is titled 'Create Maintenance Plan: Single cycle plan'. At the top, there is a 'Maintenance plan' field with the value 'Test for Training'. Below this is a 'Maint. plan head...' button. The interface is divided into three tabs: 'Maintenance plan cycle', 'Maintenance plan scheduling parameters', and 'Maintenance plan additional data'. The 'Maintenance plan additional data' tab is active, showing fields for 'Sort field', 'Authorization Group', and 'Maint. plan cat.' with the value 'Maintenance Order'. At the bottom, there is a 'Maintenance Item' field with the value 'Cleaning'. The interface includes various icons for editing, saving, and printing.

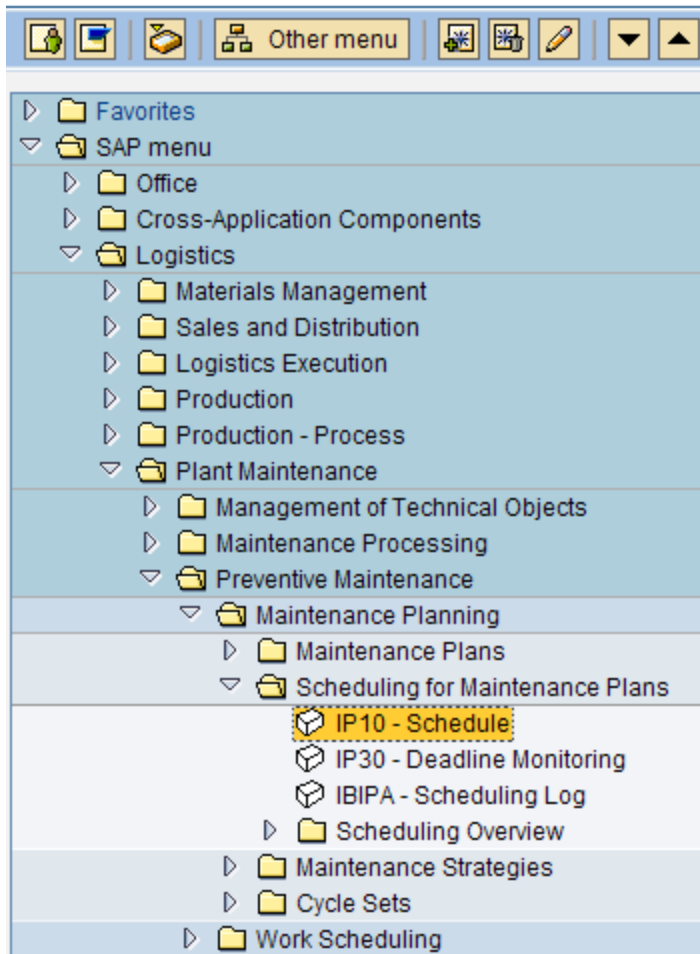
Here you can edit a field Sort field and an Authorization group. Both entries can serve the selection. By means of an authorization group can be steered that only employees may indicate this maintenance plan or change which have the same authorization group in her user's profile. At the moment the use is not planned by field **Sort field** and **Authorization group**!

If you have effected your inputs, you must safe the maintenance plan.

According to the given start date and cycle the system with achievement of the interval will generate an maintenance order for the realization of the maintenance/ inspection.

SAP R/3 PM Schedule Maintenance Plans

SAP Easy Access



Transaction IP10 - Schedule

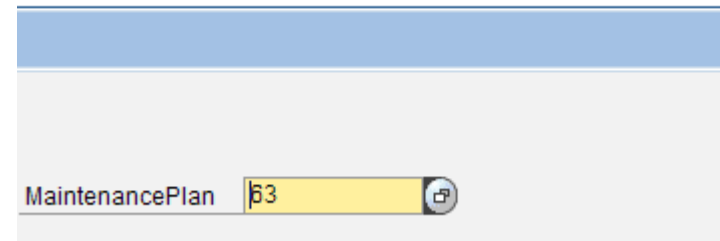
Path:

*Logistic → Plant Maintenance → Preventive Maintenance
→ Maintenance Planning → Scheduling for Maintenance
Plans → IP10 - Schedule*

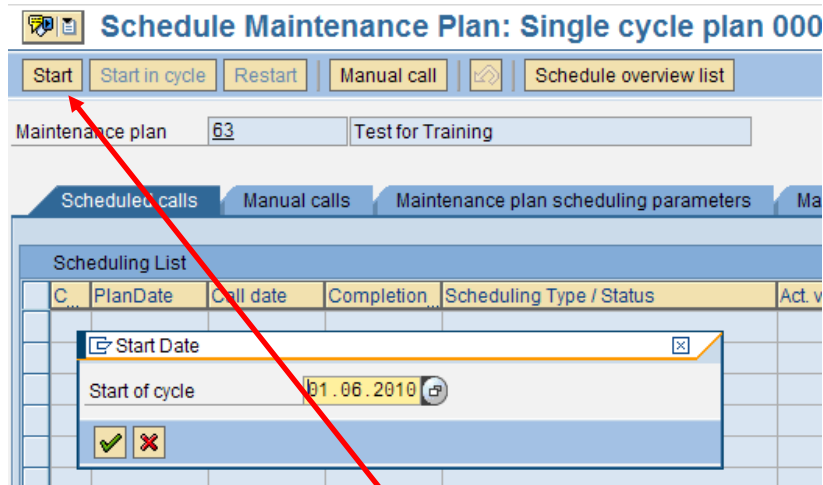
Beside the automatic scheduling by the system it is also possible to schedule a maintenance plan by hand.

The last used maintenance plan number is automatically selected.

Schedule Maintenance Plan: Initial



SAP R/3 PM Schedule Maintenance Plan



Press the button:

Start

Now you can start the maintenance plan.

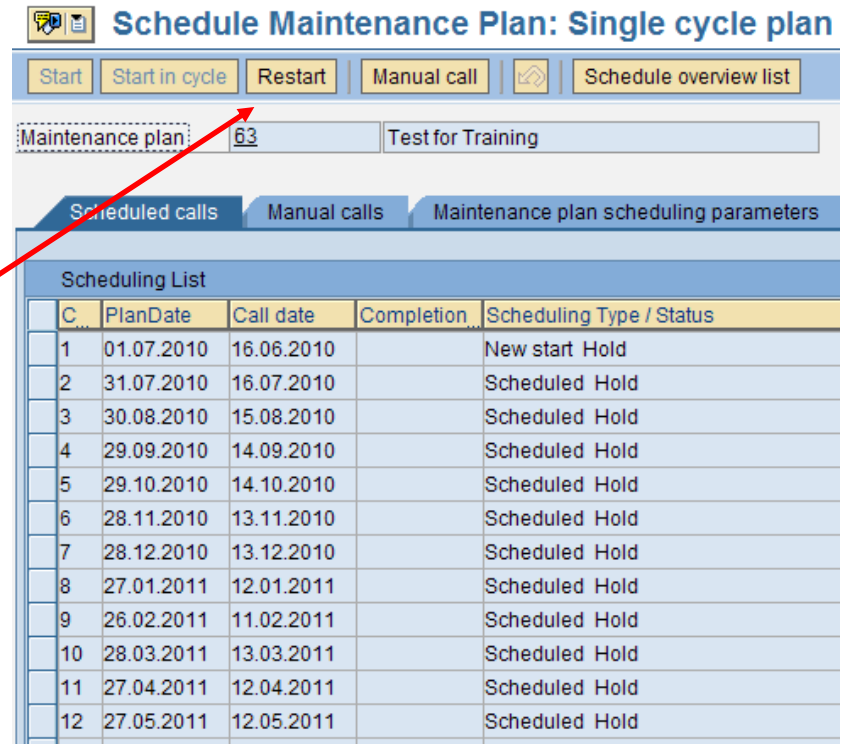
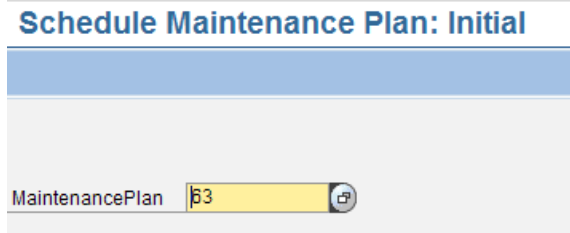
The start date from the maintenance plan you get as value for the start date.

Save now.

Screenshot of the SAP R/3 PM 'Schedule Maintenance Plan: Single cycle plan 000' interface showing the 'Scheduling List' table. The table contains 12 rows of data, including columns for C, PlanDate, Call date, Completion, Scheduling Type / Status, and Act. v.

C	PlanDate	Call date	Completion	Scheduling Type / Status	Act. v
1	01.07.2010	16.06.2010		New start Hold	
2	31.07.2010	16.07.2010		Scheduled Hold	
3	30.08.2010	15.08.2010		Scheduled Hold	
4	29.09.2010	14.09.2010		Scheduled Hold	
5	29.10.2010	14.10.2010		Scheduled Hold	
6	28.11.2010	13.11.2010		Scheduled Hold	
7	28.12.2010	13.12.2010		Scheduled Hold	
8	27.01.2011	12.01.2011		Scheduled Hold	
9	26.02.2011	11.02.2011		Scheduled Hold	
10	28.03.2011	13.03.2011		Scheduled Hold	
11	27.04.2011	12.04.2011		Scheduled Hold	
12	27.05.2011	12.05.2011		Scheduled Hold	

SAP R/3 PM Restart Schedule




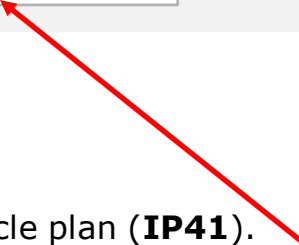
Press the button: **Restart**

You can edit a new start date.

SAP R/3 PM Maintenance Plan with Items

Create Maintenance Plan: Initial

Maintenance plan	<input type="text"/>
Maint. plan cat.	Maintenance Order 



Create now a new single cycle plan (**IP41**).

You can put on maintenance plans with more than one position. This can make sense if you must carry out maintenance work on different technical objects by the same date.

Then the system generates from a maintenance plan per position a call (order or notification)

SAP R/3 PM Maintenance Plan with Items

Create Maintenance Plan: Single cycle plan

Maintenance plan:

Maint. plan head...

Maintenance plan cycle | Maintenance plan scheduling parameters | Maintenance plan additional data

Cycle/Unit: MON

Cycle text:

Offset/Unit: MON

Counter:

Item | Object list item | Item location

Maintenance Item:

Reference object

Functional loc.: SMT 1

Equipment:

Assembly:

Planning data

Planning plant: P&S Industrie

Order Type: preventive maintenance

Main WorkCtr: / Group of electrician

Priority:

Sales Document: /

Maint. Planner Group:

MaintActivityType: single order

Business area:

Settlement Rule:

Item overview | Item | Object list item | Item location

Maintenance Item: 2 / 2

Reference object

Functional loc.: SMT 2

Equipment:

Assembly:

Planning data

Planning plant: P&S Industrie

Order Type: preventive maintenance

Main WorkCtr: / Group of electrician

Priority:

Sales Document: /

Maint. Planner Group:

MaintActivityType: single order

Business area:

Settlement Rule:

At the initial screen you see the first Item. Edit here the required fields for the first technical object.

Create now a new item by click on the Icon:




REMARK:

The scheduling parameters are relevant for all items. On due-date the system generate for each item one order.

SAP R/3 PM

Create Maintenance Plan with Objects

Create Maintenance Plan: Initial

Maintenance plan	<input type="text"/>
Maint. plan cat.	Maintenance Order 

Create Single Cycle Plan (**IP41**).

SAP R/3 PM

Create Maintenance Plan with Objects

Create Maintenance Plan: Single cycle plan

Maintenance plan

Maint. plan head...

Maintenance plan cycle | Maintenance plan scheduling parameters | Maintenance plan additional data

Cycle/Unit MON

Cycle text

Offset/Unit MON

Counter

Item | Object list item | Item location

Maintenance Item

Reference object

Functional loc. SMT 1

Equipment

Assembly

Planning data

Planning plant P&S Industrie

Order Type preventive maintenance

Main WorkCtr / Group of electrician

Priority

Sales Document /

Maint. Planner Group

MaintActivityType single order

Business area

Settlement Rule

The first object to be maintained is put down as had on the first position.

REMARK:

The costs for maintenance activities are extrapolated only for the object registered on the first item!

To assign now other objects, but to create only one order, use the object list to item.

SAP R/3 PM

Create Maintenance Plan with Objects

Create Maintenance Plan: Single cycle plan

Maintenance plan

Maint. plan head...

Maintenance plan cycle Maintenance plan scheduling parameters Maintenance plan additional data

Cycle/Unit MON

Cycle text

Offset/Unit MON

Counter

Item **Object list item** Item location

Maintenance Item

Sort	Material Description	Equipment	Equipment descriptn	Functional loc.	FunctLocDescrip.
				2000-10-10-010	SMT 1
				2000-10-10-020	SMT 2

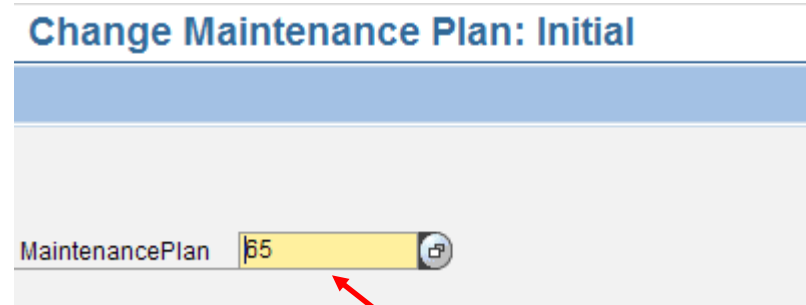
Click on register:

Object list item

At this table you can select all relevant technical objects.

The result of these maintenance plan are one work order with an object list.

SAP R/3 PM Allocation to Cost Center



Start the last created maintenance plan at the change mode (**IP02**).

If you create a maintenance plan for more than one object, but only one order is generated, you should already put in the maintenance plan the account regulation. The originating costs can be thereby split.

SAP R/3 PM Allocation to Cost Center

Change Maintenance Plan: Single cycle plan 00000000065

Maintenance plan

Maint. plan head...

Maintenance plan cycle Maintenance plan scheduling parameters Maintenance plan additional data

Cycle/Unit MON

Cycle text

Offset/Unit MON

Counter

Item Object list item Item location

Maintenance Item

Reference object

Functional loc. SMT 1

Equipment

Assembly

Planning data

Planning plant P&S Industrie Maint. Planner Group

Order Type preventive maintenance MaintActivityType single order

Main WorkCtr / Group of electrician Business area

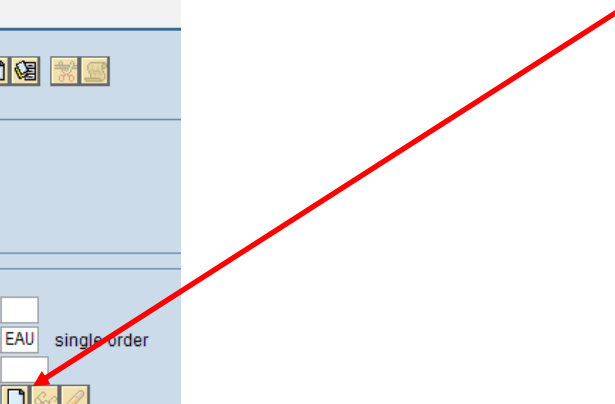
Priority

Sales Document /

Settlement Rule

The last created maintenance plans has in the object list several objects with different cost centers. Because, only one order is generated and the costs, on all involved cost centers should be split, this must be put by hand.

Press the button for Settlement Rule



SAP R/3 PM Allocation to Cost Center

Here you can put too how much percent the concerned cost centers should be loaded.

Simply give all relevant cost centers and the proportional distribution.

For each cost center you must edit the settlement Complete (FUL) and settlement Periodically (PER).

Please check that all costs not more than 100%

Planning data

Planning plant	Z100	P&S Industrie	Maint. Planner Group	
Order Type	Z000	preventive maintenance	MaintActivityType	EAU single order
Main WorkCtr	Z-ELEK	/ Z100 Group of electrician	Business area	
Priority			Settlement Rule	
Sales Document				

Maintain Settlement Rule: Overview



Maintenance item 88 Test for Training with Object List

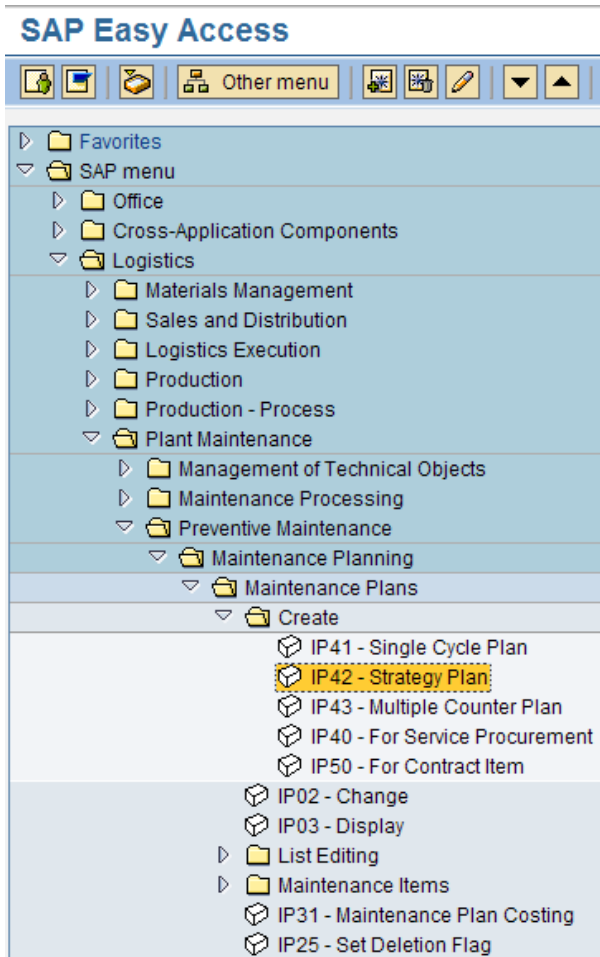
Maint. plan cat. Maintenance Order

Actual settlement

Distribution rules

Cat	Settlement Receiver	Receiver Short Text	%	Sett..	No.	Str..	From..	From..	To P..	To Fis..	First Used	Last Used

SAP R/3 PM Create Strategy Plan



Transaction IP42 – Strategy Plan

Path:

Logistic → Plant Maintenance → Preventive Maintenance → Maintenance Planning → Maintenance Plans → Create → IP42 – Strategy Plan

For this maintenance plan you must select the maintenance plan category and the strategy.

Create Maintenance Plan: Initial

The screenshot shows the 'Create Maintenance Plan: Initial' dialog box. It contains the following fields:

Maintenance plan	<input type="text"/>
Maint. plan cat.	Maintenance Order
Strategy	<input checked="" type="checkbox"/>

A red arrow points from the text above to the 'Maintenance plan' input field.

SAP R/3 PM Create Strategy Plan

Create Maintenance Plan: Initial

Maintenance plan

Maint. plan cat. Maintenance Order

Strategy Z_CE02

Maintenance strategy (2) 6 Entries found

Restrictions

Strat.	StratD.	S	Un	Cal
A	Scheduling by calendar			MON
B	Scheduling by key date	1	MON	01
C	Scheduling by factory calendar	2	DAY	01
D	Performance-based sched. (KM)	3	KM	
QSTABI	Stability Study			MON
Z_CE02	Time	1	MON	W8

By click on



You can select one strategy.

REMARK:

The strategy for the maintenance plan and the used task list must be the same .

SAP R/3 PM Create Strategy Plan

Wartungsplan Bearbeiten Springen Zusätze Umfeld System Hilfe

Wartungsplan anlegen: Strategieplan

Wartungsplan

Wartungsplankopf

Zyklus Wartungsplan 20.06.2008 Terminierungsparameter Wartungsplan Zusatzdaten Wartungsplan

Zyklus	Einheit	Text Wartungszyklus	Offset
1 MON	monatlich		0
3 MON	Quartal		0
6 MON	halbjährlich		0

Position Objektliste Position Standard Position Zyklen Position 20.06.2008

Wartungsposition

Bezugsobjekt

Techn. Platz Siebdruckmaschinen
 @equipment Siebdruckmaschine I
 Baugruppe

Planungsdaten

Planungswerk Werk 0001 Planengruppe
 Auftragart Wartungsauftrag IH-Leistungart Wartung
 Verantw.ArbPl. / Interner Service (D) Geschäftsbereich
 Priorität Abrechnungsvorschiff

Verkaufsbeleg /

Arbeitsplan

Typ	Plangruppe	PlGrZ	Beschreibung
A / 71		1	zyklische Wartungen E-Anlagen

Edit on this screen the required information.

WARNING:

The item text becomes later the order short text. Because, however, all cycles not always seem, but in this example only once a year, it is more sensible to edit the text without information of cycles.

They recognize that the cycles are automatically put down, as soon as a task list is put down.


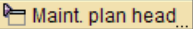
REMARK:

If no cycles are indicated, you have assigned to the task list in the flow chart no packages.

SAP R/3 PM

Create Strategy Plan

Create Maintenance Plan: Strategy plan

Maintenance plan		Test for Training strategy plan		
				
Maintenance plan cycle 01.06.2010		Maintenance plan scheduling parameters		Maintenance plan additional data
Date determination Shift Factor Late Compl. <input type="text"/> % Tolerance (+) <input type="text"/> % Shift Factor Early Compl. <input type="text"/> % Tolerance (-) <input type="text"/> % Cycle modification factor <input type="text" value="1,00"/> Factory calendar <input type="text"/>		Call control parameter Call horizon <input type="text" value="50"/> % Scheduling period <input type="text" value="12"/> MON <input type="checkbox"/> Completion Requirement		Scheduling indicator <input checked="" type="radio"/> Time <input type="radio"/> Time - key date <input type="radio"/> Time - factory caldr
		Start scheduling Start of cycle <input type="text"/>		

Edit on this screen the required information.

REMARK:

Provided that in the selected strategy scheduling parameters are put down, here these are offered as proposal values and can be changed when required.

Call after saving the transaction „IP10“ and schedule the maintenance plan.

SAP R/3 PM Schedule Strategy Plan

Schedule Maintenance Plan: Strategy plan 0000

Start Start in cycle Restart Manual call Schedule overview list

Maintenance plan 66 Test for Training strategy plan

Scheduled calls Manual calls Maintenance plan scheduling parameters

Scheduling List

C...	PlanDate	Call date	Completion...	Due packag...	Scheduling Type / Status
1	01.07.2010	16.06.2010		1M	New start Hold
2	31.07.2010	16.07.2010		1M	Scheduled Hold
3	30.08.2010	15.08.2010		1M	Scheduled Hold
4	29.09.2010	14.09.2010		1M	Scheduled Hold
5	29.10.2010	14.10.2010		1M	Scheduled Hold
6	28.11.2010	13.11.2010		1M 6M	Scheduled Hold
7	28.12.2010	13.12.2010		1M	Scheduled Hold
8	27.01.2011	12.01.2011		1M	Scheduled Hold
9	26.02.2011	11.02.2011		1M	Scheduled Hold
10	28.03.2011	13.03.2011		1M	Scheduled Hold
11	27.04.2011	12.04.2011		1M	Scheduled Hold
12	27.05.2011	12.05.2011		1M 6M	Scheduled Hold

You receive an overview of the scheduled calls, now with due packages (cycles).

SAP R/3 SM Maintenance Plans

Tutorial

Create Single Cycle Plan

Scheduling of Single Cycle Plan

Restart of existing Scheduling

Create Maintenance Plan with Items

Create Maintenance Plan with Object List

Settlement Rule, split to different Cost Centers

Create Strategy Plan

Thank you



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