S43200

Preventive Maintenance in SAP S/4HANA

EXERCISES AND SOLUTIONS

Course Version: 26
Exercise Duration: 6 Hours 20 Minutes
Material Number: 50165829

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Typographic Conventions

American English is the standard used in this handbook.

The following typographic conventions are also used.

This information is displayed in the instructor's presentation	
Demonstration	
Procedure	
Warning or Caution	
Hint	
Related or Additional Information	
Facilitated Discussion	
User interface control	*Example text*
Window title	*Example text*

Contents

Unit 1
Exercise 1

Create Task Lists

UI

Fiori Launchpad

Task 1: Create New Task List

1. Create a new general maintenance task list using the following data:

   Table 1: Create General Maintenance Task List

Field	Value
Task List Type	**General Maintenance Task List**
Task List Group	**PM-##**
Planning Plant	**1010**
Group Counter	**1**
Overall Status	**Released (General)**
Profile	**Z-EN-01**
Work Center	**T-ME##**
Usage	**Plant Maintenance**
Planer Group	**F##**
Assembly	**T-PM1000**

2. Create three operations.

Task 2: Assign Required Material

1. Assign a rubber seal (part of BOM T-PM1000) to one of your operations.

Task 3: Create an Operation with Service Package

1. Create an operation with a service package for hydraulic pump inspection.

Task 4: Find Task Lists

1. Find your newly created task list, and create a selection variant V## using the Planner Group **F##** as selection criterion.

Unit 1
Solution 1

Create Task Lists

UI

Fiori Launchpad

Task 1: Create New Task List

1. Create a new general maintenance task list using the following data:

Table 1: Create General Maintenance Task List

Field	Value
Task List Type	**General Maintenance Task List**
Task List Group	**PM-##**
Planning Plant	**1010**
Group Counter	**1**
Overall Status	**Released (General)**
Profile	**Z-EN-01**
Work Center	**T-ME##**
Usage	**Plant Maintenance**
Planer Group	**F##**
Assembly	**T-PM1000**

a) Navigate to *Task Lists*.

b) Choose *Create Task List*.

Table 2: Header: Field and Value

Field/Data Type	Value
Task List Type	**General Maintenance Task List**
Task List Group	**PM-##**
Planning Plant	**1010**
Group Counter	**1**
Overall Status	**Released (General)**
Profile	**Z-EN-01**
	Press Continue.

Field/Data Type	Value
Description	**Pump Maintenance Group ##**
Work Center / Work Center Plant	**T-ME##/1010**
Maintenance Strategy	**A**
Planner Group	**F##**
Assembly	**T-PM1000**

2. Create three operations.
   a) Go to tab *Operation Data*.
   b) Choose *Variant Internal*.
   c) Description: OP1.
   d) Select *Enter*.
   e) In field *Work*, enter **60** (min).
   f) Do the same for operations OP2 and OP3.

Task 2: Assign Required Material

1. Assign a rubber seal (part of BOM T-PM1000) to one of your operations.
   a) Select checkbox in front of op 0020 (OP2).
   b) In *Details* view, choose tab *Materials*.
   c) Choose *Select* from Structure List.
   d) Select *T-PM2300 (Rubber seal)*, and *select* OK.

Task 3: Create an Operation with Service Package

1. Create an operation with a service package for hydraulic pump inspection.
   a) In Operations, choose variant *External*.
   b) Select checkbox in front of 0030 (OP3), and deselect checkbox of op 0020.
   c) Enter control key **PM03**, and select *Enter*.
   d) In *Details* view, navigate to *Service Packages*. Choose *Service Selection*.
   e) In field *Model Service Spec*, enter T-PM-SRV. Choose *OK*.
   f) Expand top node as far as Monthly Inspection Hydraulic Pump.
   g) Select this item, and choose *OK*. Save.

Task 4: Find Task Lists

1. Find your newly created task list, and create a selection variant V## using the Planner Group **F##** as selection criterion.
   a) Navigate to *Task Lists*.
   b) Choose *Find MaintenanceTask List*.

c) Choose *Adapt Filters*, and scroll down to *More Filters*.

d) Activate fields *Task List Group*, *Task List Group Counter*, and *Planner Group*.

Note:
If no task lists are displayed, make sure that the selection criterion *Key Date* is set to today´s date.

Note:
As of SAP S/4HANA 2023 additional fields within the filter are available - f.ex. *Created by*, *Created on*.

e) Enter **F##** into field *Planner Group*, and select *Go*.

f) In the header, choose *Standard* → *Save as* (top left) and save your selection as variant **V##** with the settings *Set as Default* and *Apply Automatically*.

g) In the list, choose display variant *Standard* → *V##* to rearrange your display.

Unit 1
Exercise 2

Create an Order with a Task List

UI

Fiori Launchpad

Task 1: Create Order with Task List

1. Create a new order with the following data:
   - *Order Type: PM01*
   - *Equipment: T-PA##*
   - *Task List: T-PM101E, Group Counter 1*

Unit 1
Solution 2

Create an Order with a Task List

UI

Fiori Launchpad

Task 1: Create Order with Task List

1. Create a new order with the following data:
   - *Order Type: PM01*
   - *Equipment: T-PA##*
   - *Task List: T-PM101E, Group Counter 1*

   a) Navigate to *Notification & Orders*.

   b) Choose *Create Maintenance Order*.

   c) Select *Order Type PM01*.

   d) Select *Priority Medium*.

   e) In field Technical Object, enter **`T-PA##`**.

   f) Select Enter.

   g) In the General Data tab, choose *Assign Task List*.

   h) In the popup, select *Task List Type General Maintenance Task List*.

   i) Enter Task List Group **`T-PM101E (EN)`**, Group Counter 1.

   j) Select *OK*. Navigate to tab *Operation Data*.

   k) Change Current Variant from Standard to *Internal Training*.

   l) Check the operations of the order.

   m) Choose *Operation 60*, and navigate to tab *Materials* and check *Materials*.

   n) Result: All operations/materials were copied from task list.

   o) Choose *Save* (bottom right).

   p) Note down your order number.

   q) Close tab Maintenance Order in FLP.

Unit 1
Exercise 3

Use SAP GUI-Based Functions for Task Lists

UI

SAP GUI

Task 1: Check Where-Used Lists

1. Generate a where-used list for material *T-PM2300* and determine in which task lists the material is used.

Result

All task lists which use material T-PM2300 will be displayed.

Task 2: Include Task List in Order

1. Include your task list in a newly created order. Use the following data:

   Table 3: Create Order including a Task List

Field/Data Type	Value
Order Type	**PM01**
Equipment	**T-PA##**
Planning Plant	**1010**
Task List	**PM-##**
Group Counter	**1**

   Note down your order number: _____

Task 3: Use Object Overview

1. Check the structure of your task list using the object overview.

Task 4: Perform Cost Analysis

1. Perform a cost analysis for your task list.

Unit 1
Solution 3

Use SAP GUI-Based Functions for Task Lists

UI

SAP GUI

Task 1: Check Where-Used Lists

1. Generate a where-used list for material *T-PM2300* and determine in which task lists the material is used.
   a) Log on to the backend system via SAP GUI.
   b) Start transaction **IP62**.
   c) Keep radio button for *General Task List* active.
   d) Enter material **T-PM2300**.
   e) Press F8 - or the *Execute* button.

Result

All task lists which use material T-PM2300 will be displayed.

Task 2: Include Task List in Order

1. Include your task list in a newly created order. Use the following data:

   Table 3: Create Order including a Task List

Field/Data Type	Value
Order Type	**PM01**
Equipment	**T-PA##**
Planning Plant	**1010**
Task List	**PM-##**
Group Counter	**1**

   Note down your order number: _____

   a) Start transaction **IW31**.
   b) Enter Order Type **PM01**.
   c) Enter *Priority Medium*.
   d) Enter Equipment **T-PA##**.
   e) Select *Enter*.

f) In field Description, enter Pump Maintenance – Group **##**.

g) Select *Enter*.

h) Choose *Extras* → *Task List Selection* → *Direct Entry*.

i) Enter your Group *PM-##* and Group Counter 1.

j) On the resulting popup, confirm work center T-ME## by pressing All.

k) On the second popup, choose all to copy all operations.

> Note:
> Remember that the displayed popups are caused by a customizing setting or user setting.

l) To show user setting, choose *Extras* → *Setting* → *Default Values* or transaction Code: *EAM_User*.

m) Navigate to tab Control, and check settings for Task List Transfer.

n) Activate Operation Selection / Work Cntr. Selection.

o) Save.

Task 3: Use Object Overview

1. Check the structure of your task list using the object overview.
   a) Start transaction: **IA06**.
   b) Enter Group **PM-##** and Group Counter 1.
   c) Choose *Goto* → → *Object Overview*.
   d) Choose *Settings* → *Color Legend*, and check different objects.
   e) Bear in mind that the object overview is based on a customizing setting.

Task 4: Perform Cost Analysis

1. Perform a cost analysis for your task list.
   a) Start transaction **IA16**.
   b) On the *Task list costing* screen, enter the data in the following table:

Table 4: Cost Analysis for Task List

Field/Data Type	Value
Group	**PM-##**
Group Counter	**1**
Order Type	**PM02**

   c) Choose *Execute*.
   d) Choose *Copy All* if a pop-up window appears.

e) Cost is displayed on the *Display Itemization* screen.

f) Choose *Exit* to return to the *SAP Menu* screen.

Unit 1
Exercise 4

Plan Inspection Rounds

UI

SAP GUI

Task 1: Create a Task List for an Inspection Round

1. Create a Task List for Functional Location ## and create an operation for equipment T-MT## and T-PA## respectively. Assign the measuring point of the equipment to each operation as a PRT (Production/Resource/Tool).

Task 2: Create Order for an Inspection Round

1. Create a maintenance order for functional location **##** with order type **`PM01`** using the previously created task list.
2. Create a confirmation with actual times and counter readings using the *Overall Completion Confirmation*. Use profile *T-PM01* (Asset Management) and enter the following data:

   Table 7: Confirmation for Inspection Round

Field/Data Type	Value
Actual Work (both operations)	**`1 hour`**
MeasRdg / CtrRdg (both counters)	**`100 hours`**
Date for Counter Readings (both counters)	**`Yesterday`**

Unit 1
Solution 4

Plan Inspection Rounds

UI

SAP GUI

Task 1: Create a Task List for an Inspection Round

1. Create a Task List for Functional Location ## and create an operation for equipment T-MT## and T-PA## respectively. Assign the measuring point of the equipment to each operation as a PRT (Production/Resource/Tool).

   a) Start transaction **IA11**.

   b) Choose *System* → *User Profile* → *User Data*.

   c) On the *Maintain User Profile* screen, choose the *Parameters* tab.

   d) Enter the profile in the user parameters using the data in the following table:

   Table 5: Parameter ID and Profile

Field/Data Type	Value
Set/get parameter ID	**PIN**
Parameter value	**0000001**

   e) Choose *Enter* and *Save*.

   f) Restart transaction IA11; the field *Profile* should contain value *0000001*.

   g) On the *Create Functional Location Task List: Initial* screen, enter **##** in the *Functional Location* field.

   h) Choose *Enter*.

   i) On the *Create Functional Location Task List: Header General View* screen, choose the *Operation* button.

   j) On the *Create Functional Location Task List: Operation Overview* screen, enter the data in the following table:

   Table 6: Functional Location Operation Details

Operation	Operation Description	Equipment
0010	Visual check and counter reading Object 1	T-MT##

Operation	Operation Description	Equipment
0020	Visual check and counter reading Object 2	T-PA##

k) Choose *Enter*.

l) Select the operation rows.

m) Choose *PRT*.

n) On the *Create Functional Location Task List: PRT New Lines* pop-up window, choose *Measuring Point*.

o) In the *Measuring Point* field, select F4.

A pop-up window appears, giving a list of possible measuring points for the first piece of equipment.

p) Select the first entry on the list.

This may be the only entry.

q) Choose the green arrow *Copy* icon.

r) On the *Create Functional Location Task List: PRT New Lines* screen, choose *Continue*.

s) On the *Create Functional Location Task List: PRT Overview* screen, choose the right arrow on the *Applications toolbar* to move to the next measuring point.

t) Repeat steps o) to t) for other measuring points.

u) Choose *Back*.

v) On the *Create Functional Location Task List: Operation Overview* screen, choose *Save*.

On the *Create Functional Location Task List: Initial* screen, a message at the bottom indicates that the task list for the functional location has been saved.

Task 2: Create Order for an Inspection Round

1. Create a maintenance order for functional location **##** with order type **`PM01`** using the previously created task list.

a) Start transaction **IW31**).

b) Double-click *Create (General).*

c) On the *Create Maintenance Order: Initial* screen in the *Order Type* field, enter **`PM01`** and in the *Func. Loc* (Functional Location) field, enter **`##`**.

d) Choose *Enter*.

e) On the *Create Maintenance Order: Central Header* screen, enter the short text **`Inspection Round Group ##`**.

f) Choose *Extras* → *Task List Selection* → *To Reference Object.* Result: The previously created task list is copied to the order.

g) Release the order (choose *green flag*) and save. Note down the order number.

2. Create a confirmation with actual times and counter readings using the *Overall Completion Confirmation*. Use profile *T-PM01* (Asset Management) and enter the following data:

Table 7: Confirmation for Inspection Round

Field/Data Type	Value
Actual Work (both operations)	**1 hour**
MeasRdg / CtrRdg (both counters)	**100 hours**
Date for Counter Readings (both counters)	**Yesterday**

a) Start transaction **IW42**.

b) Choose *Extras* → *Settings*.

c) Enter **T-PM01**.

d) Choose *Save*.

e) Choose the *Measurement/Counter Readings* button. If an *Information* pop-up window appears stating *Notification screens are not ready for input*, choose *Continue*.

f) Choose the *Meas. Points Inspection Planning* tab at the bottom of the window. The system displays the measuring points which you assigned as PRTs to the order operations.

g) In the *MeasRdg/Ctr Rdg* column, enter **100** (hours) for each counter.

h) Scroll to the right and enter **Yesterday** as the date.

i) Select *Choose*.

j) In the *Act. Work* column, enter **10** min to reflect the actual amount of time expended to perform the reading.

k) Choose the first operation.

l) In the *Application Toolbar*, choose the *Notification for Operation* icon.

m) In the *Notifictn type* field, enter **M3**.

n) Choose *Continue*.

o) On the *Create PM Notification: Activity report* screen, choose *Back*.

p) On the *Overall Completion Confirmation* screen, repeat sub-steps j–n for the second operation.

q) Choose *Save*.

r) Choose *Exit* to return to the *SAP Menu* screen.

Unit 2
Exercise 5

Create a Single Cycle Maintenance Plan with Order

UI

Fiori Launchpad

Task 1: Create Single Cycle Plan with One Item

The hydraulic pumps in your plant **##** are to be maintained at regular intervals.

1. Create a single cycle plan with one item.

   Table 8: Create Single Cycle Plan with One Item

Field/Data Type	Value
Maintenance Plan for	**Maintenance Order**
Maintenance Plan type	**Single Cycle (Time-based)**
Equipment	**T-PA##**
Description	**Pump maintenance - order (1)**
Cycle / Unit	**1 / Mon**

   Note down your maintenance plan number: _____

Task 2: Create Single Cycle Plan with Two Items

1. Create a single cycle plan with two items.

   Table 9: Create Single Cycle Plan with Two Items

Field/Data Type	Value
Maintenance Plan for	**Maintenance Order**
Maintenance Plan type	**Single Cycle (Time-based)**
Description	**Pump maintenance - order (2) - Item 1**
Equipment (1st maintenance item)	**T-PA##**
Description	**Motor maintenance - order (2) - Item 2**
Equipment (2nd maintenance item)	**T-MT##**
Cycle / Unit	**1 / Mon**

Note down your maintenance plan number: _____

Task 3: Find and Edit Maintenance Items

1. Find your maintenance items using app *Manage Maintenance Items* .
   Activate field *Maintenance Planner Group* for selection.
2. Save a selection variant **S##**.
3. Save a display variant **D##**.
4. Check the editing functions of the app.

Task 4: Find and Edit Maintenance Plans

1. Now, find your maintenance plans using app *Manage Maintenance Plans*.
   Activate field *Created by* for selection.
2. Check the editing functions of the app.

Unit 2
Solution 5

Create a Single Cycle Maintenance Plan with Order

UI

Fiori Launchpad

Task 1: Create Single Cycle Plan with One Item

The hydraulic pumps in your plant **##** are to be maintained at regular intervals.

1. Create a single cycle plan with one item.

   Table 8: Create Single Cycle Plan with One Item

Field/Data Type	Value
Maintenance Plan for	**`Maintenance Order`**
Maintenance Plan type	**`Single Cycle (Time-based)`**
Equipment	**`T-PA##`**
Description	**`Pump maintenance - order (1)`**
Cycle / Unit	**`1 / Mon`**

   Note down your maintenance plan number: _____

   a) Navigate to *Maintenance Plans*.

   b) Choose *Create Maintenance Plan*.

   c) In field Maintenance Plan For, choose *Maintenance Order*.

   d) In field Maintenance Plan Type, choose *Single Cycle* (Time-based).

   e) Leave field Maintenance Plan empty.

   f) Choose *Continue* (bottom right).

   g) In field Item Description, enter **`Pump maintenance - order (1)`**.

   h) Enter **`T-PA##`** as Technical Object.

   i) Select *Enter*, and scroll down to the bottom.

   j) Choose *Assign Task List*.

   k) Choose *Task List Type General Maintenance Task List*.

   l) In field Task List Group, enter **`T-PM1010 (DE)`** or **`T-PM101E (EN)`**.

   m) Enter Group Counter 1, and select *OK*.

n) Navigate to *Planning Data*.

o) Scroll down to bottom.

p) In fields Cycle/Unit, enter **1** and **mon**. Select *Enter*.

q) Choose *Save*.

r) Note down the number of your maintenance plan.

Note:
You can copy an existing maintenance plan - use *Additional Functions >Allow as Copy Template* within the maintenance plan to allow it as template.

If you want to copy any maintenance plan - **without** using *Allow as Copy Template*, use the following special customizing setting:

In the IMG under *Maintenance Plans*:

Configure Special Functions for Maintenance Planning → Enable Non-template-based Copying.

Task 2: Create Single Cycle Plan with Two Items

1. Create a single cycle plan with two items.

Table 9: Create Single Cycle Plan with Two Items

Field/Data Type	Value
Maintenance Plan for	**Maintenance Order**
Maintenance Plan type	**Single Cycle (Time-based)**
Description	**Pump maintenance - order (2) - Item 1**
Equipment (1st maintenance item)	**T-PA##**
Description	**Motor maintenance - order (2) - Item 2**
Equipment (2nd maintenance item)	**T-MT##**
Cycle / Unit	**1 / Mon**

Note down your maintenance plan number: _____

a) Navigate to *Maintenance Plans*.

b) Choose *Create Maintenance Plan*.

c) In field Maintenance Plan For, choose *Maintenance Order*.

d) In field Maintenance Plan Type, choose *Single Cycle* (Time-based).

e) Leave field Maintenance Plan empty.

f) Choose *Continue* (bottom right).

g) In field Item Description, enter **`Pump Maintenance - order (2) - Item 1`**.

h) Enter **`T-PA##`** as Technical Object.

i) In field Item Description, enter: **`Motor Maintenance - order (2) - Item 2`**.

j) Enter **`T-MT##`** as Technical Object.

k) Select *Enter*, and scroll down to the bottom.

l) Choose *Assign Task List*.

m) Choose *Task List Type General Maintenance Task List*.

n) In field Task List Group, enter **`T-PM1010 (DE)`** or **`T-PM101E (EN)`**.

o) Enter Group Counter 1. Select *OK*.

p) Scroll up again, and select your second item (set radio button).

q) In field Task List Group, enter **`T-PM1030 (DE)`** or **`T-PM103E (EN)`**.

r) Navigate to *Planning Data*.

s) Scroll down to the bottom.

t) In fields Cycle/Unit, enter **`1`** and **`mon`**. Select *Enter*.

u) Choose *Save*.

v) Note down the number of your maintenance plan.

Task 3: Find and Edit Maintenance Items

1. Find your maintenance items using app *Manage Maintenance Items* .
   Activate field *Maintenance Planner Group* for selection.
   a) Navigate to *Maintenance Plans* → *Manage Maintenance Items*.
   b) Choose *Adapt Filters*.
   c) Activate field *Maintenance Planner Group*. Choose *OK* and *Go*.
   d) Enter your planner group **`P##`**, and choose *Go*.
2. Save a selection variant **`S##`**.
   a) To save a new selection variant under **`S##`**, choose *Select View* (top left - button Standard*).
   b) Choose *Save as*, enter **`S##`**, and select *Set as Default* and *Apply Automatically*. Choose *Save*.
3. Save a display variant **`D##`**.
   a) Choose *Settings* to adapt display variant. Choose *Save as* and enter **`D##`**; activate *Set as Default*, save.

b) You can access the maintenance item either by clicking on the hyperlink (which starts the Web Dynpro app) and then using the different links - or by simply clicking into the line of the item (which starts the Fiori view).

Note:
As an alternative you can use apps *Find Maintenance Item* and *Find Maintenance Plans*. However, these apps do not have the same functionality.

4. Check the editing functions of the app.
   a) You can *Create* an item, perform a *Mass Change* or *Remove from Plan*.

Note:
You can also add **Object List Entries** (= several technical objects which must undergo the same maintenance) to the maintenance item within this app.

Within the item list click into the line of an item (not the hyperlink) to display the detail view. Then. choose *Edit* and navigate to *Object List*. Use the *Add* function.

Task 4: Find and Edit Maintenance Plans

1. Now, find your maintenance plans using app *Manage Maintenance Plans*.
   Activate field *Created by* for selection.
   a) Navigate to *Maintenance Plans* → *Manage Maintenance Plans*.
   b) Choose *Adapt Filters*.
   c) Activate field *Created by*. Choose *OK* and *Go*.
   d) Enter your user **`S43200-##`**, and choose *Go*.

Note:
The list of maintenance plans contains different views. Use view **Created** to find maintenance plans which have not been scheduled yet. The default view when displaying the list is **Scheduled**.

2. Check the editing functions of the app.
   a) You can *Create* a plan, perform a *Mass Change*, *Deactivate* or *Set Deletion Fag*.

Unit 2
Exercise 6

Schedule a Single Cycle Plan with Order

UI

Fiori Launchpad

Task 1: Set up scheduling parameters

1. Set up scheduling parameters for your first maintenance plan. Leave all fields unchanged except the ones provided in the following table:

   Table 10: Scheduling Parameters

Field/Data Type	Value
Start Date for Scheduling	**Today's date**
Scheduling indicator	**Time** (calendar)
Scheduling period	**1 YR** (1 year)
Call horizon	**90 %**
Cycle / Unit	**1 MON**

2. Set up scheduling parameters for your second maintenance plan. Leave all fields unchanged except the ones provided in the following table:

   Table 11: Scheduling Parameters

Field/Data Type	Value
Start Date for Scheduling	**Today's date**
Scheduling indicator	**Time** (calendar)
Scheduling period	**1 YR** (1 year)
Call horizon	**0 %**
Cycle / Unit	**1 MON**

3. Check the effect of scheduling parameters *Call Horizon* and *Scheduling Period*.

Task 2: Schedule Maintenance Plans

1. Start the first single cycle plan.
2. Start the second single cycle plan.
3. Locate and process the maintenance orders generated.

Unit 2
Solution 6

Schedule a Single Cycle Plan with Order

UI

Fiori Launchpad

Task 1: Set up scheduling parameters

1. Set up scheduling parameters for your first maintenance plan. Leave all fields unchanged except the ones provided in the following table:

   Table 10: Scheduling Parameters

Field/Data Type	Value
Start Date for Scheduling	**Today's date**
Scheduling indicator	**Time** (calendar)
Scheduling period	**1 YR** (1 year)
Call horizon	**90 %**
Cycle / Unit	**1 MON**

   a) Navigate to *Maintenance Plans*.

   b) Choose *Change Maintenance Plan*.

   c) Enter number of your first maintenance plan.

   d) Navigate to *Planning Data*.

   e) Check Scheduling Indicator: Time means normal calendar days.

   f) Set Scheduling period to *1 YR*.

   g) Set Call Horizon to *90%*.

   h) Enter today's date as Start Date for Scheduling.

   i) Save.

2. Set up scheduling parameters for your second maintenance plan. Leave all fields unchanged except the ones provided in the following table:

   Table 11: Scheduling Parameters

Field/Data Type	Value
Start Date for Scheduling	**Today's date**
Scheduling indicator	**Time** (calendar)

Field/Data Type	Value
Scheduling period	**1 YR** (1 year)
Call horizon	**0 %**
Cycle / Unit	**1 MON**

a) Navigate to *Maintenance Plans*.

b) Choose *Change Maintenance Plan*.

c) Enter number of your second maintenance plan.

d) Navigate to *Planning Data*.

e) Check Scheduling Indicator: Time means normal calendar days.

f) Set Scheduling period to *1 YR*.

g) Leave Call Horizon at *0%*, that is, don't make any entry.

h) Enter today's date as Start Date for Scheduling.

i) Save.

3. Check the effect of scheduling parameters *Call Horizon* and *Scheduling Period*.

a) The Call Horizon ...

- determines when the order is generated with reference to the calculated planned date:
- 0% = Order is created immediately at start of maintenance plan.
- 100% = Order is created exactly on planned date.

b) The Scheduling Period ...
indicates the period of time for which the planned dates are calculated.

Task 2: Schedule Maintenance Plans

1. Start the first single cycle plan.

a) Navigate to *Maint. Plan Scheduling*.

b) Choose *Schedule Maintenance Plan*.

c) Enter the number of your first maintenance plan.

d) Choose *Start*, and confirm popup.

e) Save.

f) On the Schedule Maintenance Plan screen, select *Enter* to reopen scheduling and display the result.

g) Result: plan dates are calculated and the maintenance order isn't called yet – due to call horizon 90%. Status of first date: New Start Hold.

2. Start the second single cycle plan.

a) Navigate to *Maint. Plan Scheduling*.

b) Choose *Schedule Maintenance Plan*.

c) Enter the number of your second maintenance plan.

d) Choose *Start*, and confirm popup.

e) Save.

f) On the Schedule Maintenance Plan screen, select Enter to reopen scheduling and display the result.

Result

Plan dates are calculated and a call was created – due to call horizon 0%. Status of first date: New Start Called.

g) Select first date and choose *Display Call Object*. Two maintenance orders were called, one for each maintenance item. Note down the numbers of the two orders.

3. Locate and process the maintenance orders generated.

a) Navigate to the start page.

b) Navigate to *Notifications & Orders*.

c) Choose *Find Maintenance Orders*.

d) Enter Order Type: **`PM02`**.

e) In field Technical Object, select the double squares on the right.

f) Select *Define Conditions*.

g) Enter **`T-PA##`** in first line.

h) Add a second line by selecting the + sign, and enter **`T-MT##`**.

i) Choose *OK*, then *Go*.

Result

The newly created maintenance orders are displayed.

j) Open first order by selecting the hyperlinked text.

k) Choose *Change Maintenance Order*.

l) In the order header, choose *Set System Status → Complete (Technically)*.

m) Confirm popup, select *Save*, and close tab.

n) Do the same for the second order.

o) Navigate to *Home*, then to *Maint. Plan Scheduling*.

p) Choose *Schedule Maintenance Plan*, and enter the number.

Result

The first call is marked as complete – with a negative actual variance that corresponds to your cycle. The order was completed one cycle before reaching the plan date.

Unit 2
Exercise 7

Create and Schedule a Single Cycle Plan with Notification

UI

Fiori Launchpad

Task 1: Create a Maintenance Plan with Notification

1. Create a maintenance plan with notification.

Table 12: Single Cycle Plan: Field and Value

Field/Data Type	Value
Maintenance Plan for	**Inspection (Only Notification)**
Maintenance Plan type	**Single Cycle (Time-based)**
Equipment	**T-PA##**
Description	**Pump inspection - notification**
Notification Tpye	**M1**
Task List Group / Counter	**T-PM101E / Counter 1**
Cycle / Unit	**1 / Mon**

Note down your maintenance plan number: _____

Note:
It is possible to assign a task list to a maintenance notification.

However, this is only meaningful, if an order is created based on this notification (or: several notifications) in which the task list (or: several task lists) is used.

Examples:

- Combination of serveral notifications in one order (so-called work list for notifications)
- Revisions / Shutdowns using the *Maintenance Event Builder*: a pool of notifications with automatically created orders - and in addition with automatic assignment to a project.

Task 2: Schedule Your Maintenance Plan with Notification

1. Set up scheduling parameters.

   Table 13: Scheduling Parameters: Field and Value

Field/Data Type	Value
Scheduling Indicator	**Time**
Scheduling period	**1 year**
Call Horizon	**90%**
Start Date for Scheduling	**Today**

2. Start maintenance plan.
3. Create a call object.
4. Check call object.

Unit 2
Solution 7

Create and Schedule a Single Cycle Plan with Notification

UI

Fiori Launchpad

Task 1: Create a Maintenance Plan with Notification

1. Create a maintenance plan with notification.

Table 12: Single Cycle Plan: Field and Value

Field/Data Type	Value
Maintenance Plan for	**Inspection (Only Notification)**
Maintenance Plan type	**Single Cycle (Time-based)**
Equipment	**T-PA##**
Description	**Pump inspection - notification**
Notification Tpye	**M1**
Task List Group / Counter	**T-PM101E / Counter 1**
Cycle / Unit	**1 / Mon**

Note down your maintenance plan number: _____

Note:
It is possible to assign a task list to a maintenance notification.

However, this is only meaningful, if an order is created based on this notification (or: several notifications) in which the task list (or: several task lists) is used.

Examples:

- Combination of serveral notifications in one order (so-called work list for notifications)
- Revisions / Shutdowns using the *Maintenance Event Builder*: a pool of notifications with automatically created orders - and in addition with automatic assignment to a project.

a) Navigate to *Maintenance Plans*.

b) Choose *Create Maintenance Plan*.

c) In field Maintenance Plan For, choose *Inspection* (Only Notification).

d) In field Maintenance Plan Type, choose *Single Cycle* (Time-based).

e) Leave field Maintenance Plan empty.

f) Choose *Continue* (bottom right).

g) In field Item Description, enter **`Regular Inspection`**.

h) Enter **`T-PA##`** as Technical Object.

i) Enter Notification Type **`M1`**.

j) Select *Enter*, and scroll down to the bottom.

k) Choose General Data.

l) Choose Assign Task List.

m) Choose Task List Type General Maintenance Task List.

n) In field Task List Group, enter **`T-PM1010 (DE)`** or **`T-PM101E (EN)`**.

o) Enter Group Counter **`1`**, and select *OK*.

p) Navigate to *Planning Data*.

q) Scroll down to the bottom.

r) In fields Cycle/Unit, enter **`1`** and **`mon`**. Select *Enter*.

s) Choose *Save*.

t) Note down the number of your maintenance plan.

Task 2: Schedule Your Maintenance Plan with Notification

1. Set up scheduling parameters.

Table 13: Scheduling Parameters: Field and Value

Field/Data Type	Value
Scheduling Indicator	**`Time`**
Scheduling period	**`1 year`**
Call Horizon	**`90%`**
Start Date for Scheduling	**`Today`**

a) Navigate to *Maintenance Plans*.

b) Choose *Change Maintenance Plan*.

c) Enter number of your previously created maintenance plan.

d) Navigate to *Planning Data*.

e) Check Scheduling Indicator: Time means normal calendar days.

f) Set Scheduling period to *1 YR*.

g) Set Call Horizon to *90%*.

h) Enter today's date as Start Date for Scheduling.

i) Save.

2. Start maintenance plan.
   a) Navigate to *Maint.Plan Scheduling*.
   b) Choose *Schedule Maintenance Plan*.
   c) Enter the number of your first maintenance plan.
   d) Choose *Start*, and confirm popup.
   e) Save.
3. Create a call object.
   a) In the Schedule Maintenance Plan screen, select *Enter* to reopen scheduling.
   b) Select first date (call number).
   c) Choose *Release Call*.
   d) Save. Don't close tab.
4. Check call object.
   a) In the Schedule Maintenance Plan screen, select *Enter* to reopen scheduling.
   b) Select first date (call number).
   c) Choose *Display Call Object*.
      Result
      The notification call object is displayed.
   d) Navigate to tab *Maintenance plan*.
   e) The task list from the maintenance item is available.

Unit 2
Exercise 8

Use SAP GUI-Based Functions for Single-Cycle Plans

UI

SAP GUI

Task 1: Create Single Cycle Plans

1. Create a single cycle plan with the following details:

   Table 14: Single Cycle Plan: Field and Value

Field/Data Type	Value
Maint. plan cat.	**Maintenance Order**
Description	**Fork Lift maintenance - order (3)**
Cycle/Unit	**1/MON**
Equipment	**T-PA##**
Task List Type	**A**
Task List Grp	**T-PM1010 (DE) T-PM101E (EN)**
Grp Cr	**1**

2. Create a single cycle plan with object list.

   Table 15: Single Cycle Plan with Object List

Field name or data type	Values
Maint. plan cat.	**Maintenance Order**
Description	**Pump maintenance (Obj. List) - order (4)**
Functional Location	**M1**
Cycle/Unit	**3 MON**
Task List (*Item* tab)	**A / T-PM102E /1 or A / T-PM1020 / 1**

Task 2: Change Maintenance Plans via List Editing

1. Check both your maintenance plans via the list editing transaction.
2. Set the scheduling parameters via mass change.

Table 16: Scheduling Parameters

Field/Data Type	Value
Call horizon	**0 %**
Scheduling indicator	**Time**
Scheduling period	**1** (1 year)
SchedIntervalUnit	**YR**
MaintPlan sort field	**1000**

Task 3: Perform Scheduling of Maintenance Plans

1. Schedule your maintenance plans via transaction IP30H.

Task 4: Perform Cost Estimate

1. Perform a cost estimate for your maintenance plans.

Use SAP GUI-Based Functions for Single-Cycle Plans

UI

SAP GUI

Task 1: Create Single Cycle Plans

1. Create a single cycle plan with the following details:

   Table 14: Single Cycle Plan: Field and Value

Field/Data Type	Value
Maint. plan cat.	**Maintenance Order**
Description	**Fork Lift maintenance - order (3)**
Cycle/Unit	**1/MON**
Equipment	**T-PA##**
Task List Type	**A**
Task List Grp	**T-PM1010 (DE) T-PM101E (EN)**
Grp Cr	**1**

   a) Start transaction **IP41**.

   b) Select *Maintenance Order* as *Main. plan. cat.* from the dropdown menu and choose ENTER..

   c) Enter the data from the table above.

> Hint:
> Checkbox *Do Not Rel. Immediately.* prevents the order from being released automatically - even if the order type has the default setting *Release immediately*.
>
> In order to use this functionality, activate business function LOG_EAM_CL_3 in the Switch Framework.

   d) Choose *Enter*, save and confirm the popup.

   e) Note down the number of your maintenance plan.

2. Create a single cycle plan with object list.

Table 15: Single Cycle Plan with Object List

Field name or data type	Values
Maint. plan cat.	**Maintenance Order**
Description	**Pump maintenance (Obj. List) - order (4)**
Functional Location	**M1**
Cycle/Unit	**3 MON**
Task List (*Item* tab)	**A / T-PM102E /1 or A / T-PM1020 / 1**

a) Start transaction **IP41**.

b) Double-click *Single Cycle Plan*.

c) On the *Create Maintenance Plan: Initial* screen, in the *Maint. plan. cat.* field, select **Maintenance Order** from the dropdown list.

Leave the maintenance plan number field blank (this entry is assigned internally, but can also be assigned externally).

d) Choose *Enter*.

e) On the *Create Maintenance Plan: Single cycle plan* screen, enter the data provided in the following table:

Field Name or Data Type	Values
Maintenance plan (description)	**Pump maintenance (Obj. List) - order (4)**
Functional Location	**M1**
Cycle/Unit	**3 MON**
Task List (*Item* tab)	**A / T-PM102E /1 or A / T-PM1020 / 1**

f) Choose *Enter*.

g) Choose the *Object list item* tab.

h) At the bottom of the screen, choose *Equipment (Selection Equipment)*.

i) In the *Equipment Selection* area, in the *Equipment* field, enter **F-***.

j) In the *Maintenance Data* area, in the *Functional Location* field, enter **M1***.

k) Choose *Execute*.

l) On the *Display Equipment:Equipment List* screen, choose *Edit* → *Select All*, and select the *Choose* icon

The fork lifts are copied into the object list.

m) Choose *Save*.

n) In the *Start Date* pop-up window, in the *Cycle Start* field, enter the current date.

o) Choose *Continue*.

p) On the *Create Maintenance Plan: Initial* screen, note the number assigned to the maintenance plan created.

Task 2: Change Maintenance Plans via List Editing

1. Check both your maintenance plans via the list editing transaction.
   a) Start transaction **IP15**.
   b) Scroll down; in field *Created by*, enter your user, and execute.
   c) Choose *Execute*.
      Result
      Your maintenance plans are displayed.
   d) Stay in this list for next step.
2. Set the scheduling parameters via mass change.

   Table 16: Scheduling Parameters

Field/Data Type	Value
Call horizon	**0 %**
Scheduling indicator	**Time**
Scheduling period	**1** (1 year)
SchedIntervalUnit	**YR**
MaintPlan sort field	**1000**

   a) In the maintenance plan list, select all relevant maintenance plans via button *Select all*.
   b) Choose *Go to* → *Carry out a mass change*.
   c) Select all required fields from the right-hand column via double-click.
   d) Close popup, and enter new values in field *New value*.
   e) Choose *Execute (F8)*.

Task 3: Perform Scheduling of Maintenance Plans

1. Schedule your maintenance plans via transaction IP30H.
   a) Start transaction **IP30H**.
   b) For *Server Group for Parallel Proc*, enter **PUBLIC**.
   c) To enter Maintenance Plans, choose *Multiple Selection*.
   d) Enter your maintenance plan numbers on tab *Select Single Values*.
   e) Choose *Execute (F8)*.

Result

A protocol is displayed which also can contain potential error messages.

Task 4: Perform Cost Estimate

1. Perform a cost estimate for your maintenance plans.
   a) Start transaction **IP15**.
   b) Choose *Multiple Selection*.
   c) Enter your maintenance plan numbers of task 1 into tab *Select Single Values*.
   d) Choose *Execute (F8)*.
   e) Select both maintenance plans, and choose *Cost estimate*.
   f) Confirm popup.

      Result

      The cost estimate is displayed in different item categories (f.ex. material, internal work) and cost elements.

Unit 3
Exercise 9

Use Standard Service (PM03)

Task 1: Check Task List

UI

Fiori Launchpad

1. Open general maintenance task list T-PM101E, Group Counter 5.
2. Check the operation for service procurement.
   Determine the control key, the services package and the vendor/supplier.

Task 2: Create Single Cycle Plan

1. Create a single cycle plan for service procurement and assign task list T-PM101E, group counter 5.

   Table 17: Single Cycle Plan

Field/Data Type	Value
Maintenance Plan for	**Maintenance Order**
Maintenance Plan type	**Single Cycle (Time-based)**
Equipment	**T-PA##**
Description	**Service for Pump ##**
Cycle / Unit	**1 / Mon**

   Note down your maintenance plan number: _____

Task 3: Schedule Maintenance Plans

1. Start your single cycle plan.
2. Locate and check the maintenance order generated.
3. Check your purchase requisition.

Task 4: Create a Purchase Order

1. Create a purchase order for your purchase requisition.

Task 5: Create a Service Entry Sheet

UI

SAP GUI

1. Create a service entry sheet for the purchase order.

Use Standard Service (PM03)

Task 1: Check Task List

UI

Fiori Launchpad

1. Open general maintenance task list T-PM101E, Group Counter 5.
   a) Go to *Task Lists*.
   b) Choose *Display Task List*.
   c) Choose the *General Maintenance Task List* task list type.
   d) Enter Task List Group **`T-PM101E`**.
   e) Enter Group Counter**`5`**.
2. Check the operation for service procurement.
   Determine the control key, the services package and the vendor/supplier.
   a) Go to *Operation Data*.
      Result
      The control key is PM03.
   b) Mark the operation and choose *External Data*.
      Result
      The vendor is T-PM01.
   c) Mark the operation and choose *Service Packages*.
      Result
      A service package T-PMSRV1000 (Monthly Inspection Hydraulic Pump) is assigned.

Task 2: Create Single Cycle Plan

1. Create a single cycle plan for service procurement and assign task list T-PM101E, group counter 5.

   Table 17: Single Cycle Plan

Field/Data Type	Value
Maintenance Plan for	**`Maintenance Order`**
Maintenance Plan type	**`Single Cycle (Time-based)`**
Equipment	**`T-PA##`**
Description	**`Service for Pump ##`**

Field/Data Type	Value
Cycle / Unit	**1 / Mon**

Note down your maintenance plan number: _____

a) Navigate to *Maintenance Plans*.

b) Choose *Create Maintenance Plan*.

c) In field Maintenance Plan For, choose *Maintenance Order*.

d) In field Maintenance Plan Type, choose *Single Cycle* (Time-based).

e) Leave field Maintenance Plan empty.

f) Choose *Continue* (bottom right).

g) In field Item Description, enter **Service for Pump ##**.

h) Enter **T-PA##** as Technical Object.

i) Select *Enter*, and scroll down to the bottom.

j) Choose *Assign Task List*.

k) Choose *Task List Type General Maintenance Task List*.

l) In field Task List Group, enter **T-PM101E**.

m) Enter Group Counter **5**, and select *OK*.

n) Navigate to *Planning Data*.

o) Scroll down to bottom.

p) In fields Cycle/Unit, enter **1** and **mon**. Select *Enter*.

q) Choose *Save*.

r) Note down the number of your maintenance plan.

Task 3: Schedule Maintenance Plans

1. Start your single cycle plan.
   a) Navigate to *Maint. Plan Scheduling*.

   b) Choose *Schedule Maintenance Plan*.

   c) Enter the number of your first maintenance plan.

   d) Choose *Start*, and confirm popup.

   e) Save.

   f) On the Schedule Maintenance Plan screen, select *Enter* to reopen scheduling and display the result.

   Result

   For the first plan date a maintenance order has been created.
2. Locate and check the maintenance order generated.

a) Navigate to start page by selecting *Home* symbol.

b) Navigate to *Notifications & Orders*.

c) Choose *Find Maintenance Orders*.

d) Enter Order Type: **`PM02`**.

e) In field Technical Object, enter **`T-PA##`**.

f) Choose *OK*, then *Go*.

Result

The newly created maintenance order is displayed.

g) Open your order by selecting the hyperlinked text.

h) Choose *More Links*, set flag for *Change Maintenance Order* and choose OK.

i) Choose *Change Maintenance Order*.

j) Navigate to *Operation Data*.

3. Check your purchase requisition.
   a) Mark your operation and choose *External Data* (lower half of the screen).
   b) On the bottom right within screen *External Data* , you'll find the number of the **Purchase Requisition as a hyperlink**.

Task 4: Create a Purchase Order

1. Create a purchase order for your purchase requisition.
   a) Navigate to *Purchaser / Warehouse*.
   b) Start *Create Purchase Order (Advanced)*.
   c) First, close the help screen for *User Interface for the Purchase Order* using the *Close* button.
   d) Then, open document overview via button *Document Overview On*.
   e) Choose Selection Variant → My Purchase Requisitions.
   f) Drag and drop your purchase requisition to the shopping cart - make sure you use *Standard PO*.
   g) Complete the data and save.
   h) Note down your purchase order number: _____ .

Task 5: Create a Service Entry Sheet

UI

SAP GUI

1. Create a service entry sheet for the purchase order.
   a) Start transaction ML81N.
   b) Choose *Other Purchase Order* and enter the purchase order number.
   c) Choose *Create Entry Sheet.*

d) Enter a short text of your choice.

e) Choose *Service Selection* and confirm purchase order number.

f) Select service and choose *Adopt Services*.

g) Choose *Accept* (green flag).

h) Choose *Save*.

Unit 3
Exercise 10

Using Lean Services

UI

Fiori Launchpad

> Note:
> This example shows a directly created order. However, you can also create the order via a maintenance plan.

Task 1: Create Maintenance Order

1. Create a new order in which you order a lean service. Use the data in the following table:

Field	Value
Order Type	**PMEP**
Technical Object	**T-PA##**
Priority	**Medium**
Description	**Regular Maintenance 1 (GR##)**
Control Key (in Operation)	**PM02**
Product (Service)	**PM-LEAN-SERVICE01**
Item Category	**Non-stock item**
Quantity	**1 Day**
Purchasing Group	**Z40**
Purchasing Organization	**101C**
Supplier	**T-PM01**

> Note:
> Order type PMEP has the Enhanced Procurement Mode activated.

2. Add an external operation with lean service. **PM-LEAN-SERVICE01**.

Task 2: Create a Purchase Order

1. Create a purchase order based on the purchase requisition of the maintenance order.

Task 3: Create a Service Entry Sheet (for Lean Service)

1. Create a service entry sheet for your purchase order.
2. Check your service entry sheet.

Unit 3
Solution 10

Using Lean Services

UI

Fiori Launchpad

> Note:
> This example shows a directly created order. However, you can also create the order via a maintenance plan.

Task 1: Create Maintenance Order

1. Create a new order in which you order a lean service. Use the data in the following table:

Field	Value
Order Type	**PMEP**
Technical Object	**T-PA##**
Priority	**Medium**
Description	**Regular Maintenance 1 (GR##)**
Control Key (in Operation)	**PM02**
Product (Service)	**PM-LEAN-SERVICE01**
Item Category	**Non-stock item**
Quantity	**1 Day**
Purchasing Group	**Z40**
Purchasing Organization	**101C**
Supplier	**T-PM01**

> Note:
> Order type **PMEP** has the **Enhanced Procurement Mode** activated.

a) Navigate to *Notifications & Orders*.

b) Choose *Create Maintenance Order*.

c) Enter the data of the table.

2. Add an external operation with lean service. **PM-LEAN-SERVICE01**.

a) Within the order navigate to view *Operation Data*.

b) Enter *Description* to **Lean Service Group ##**, set control key to **PM02**and enter purchasing organization **101C**.

c) In the Details view choose view **Services**.

d) In field *Product* enter **PM-LEAN-SERVICE01**, choose item category **Non-Stock Item** and set quantity to **1** (Day).

e) Scroll to the right and check Purchasing Group (Z40), Purchasing Organization (101C) and enter supplier **`T-PM01`**.

f) Choose *Set System Status >Release*, then Save.

> Note:
> You will find your purchase requisition number in the *Services* detail screen of the operation - in the same line where you entered the lean service.

g) Navigate back to the top level.

Task 2: Create a Purchase Order

1. Create a purchase order based on the purchase requisition of the maintenance order.
   a) Navigate to *Purchaser / Warehouse*.
   b) Start *Create Purchase Order (Advanced)*.
   c) First, close the help screen for *User Interface for the Purchase Order* using the *Close* button.
   d) Then, open document overview via button *Document Overview On*.
   e) Choose Selection Variant → My Purchase Requisitions.
   f) Drag and drop your purchase requisition to the shopping cart - make sure you use *Standard PO*.
   g) Check the data and save.
   h) Take a note of your purchase order number: _____ .

Task 3: Create a Service Entry Sheet (for Lean Service)

1. Create a service entry sheet for your purchase order.
   a) Navigate to *Purchaser / Warehouse*.
   b) Choose *Manage Service Entry Sheets*.
   c) Choose **Create**.
   d) Enter **`Service Entry Group ##`** as the name of the sheet.
   e) Enter your (reference) purchase order number (use F4 help).

Note:
On entering the purchase order number, the purchase order item should be offered automatically in a popup.

If the purchase order item does not come up automatically and an error is shown, you can choose one of the following options:

i. Discard the draft (button bottom right) and start again - or

ii. Navigate back one step and choose *Keep Draft*; then refresh the screen using *Go*, click the draft and choose *Add* → *Item from Purchase Order*.

f) Select the purchase order item and choose *Add*.

g) Scroll down to your item and click into the line of the item (on the white background) to display the detail view.

h) Enter *Stated Quantity* `1` and *Performance Period*: either **`Today's Date`** or the **`next possible working day`**; choose *Apply*.

i) Mark the item and choose **Create**.

j) Navigate back one step to the list view of service entry sheets and refresh the list by pressing *Go*.

2. Check your service entry sheet.

a) In the list view click into the line of your service entry sheet (on the white background).

b) Choose **Process Flow**; choose **Send for Approval**.

Unit 4
Exercise 11

Manage a Maintenance Strategy

UI

Fiori Launchpad

Task 1: Display a Maintenance Strategy

1. Display maintenance strategy A, and check maintenance packages and scheduling parameters.
2. What is the effect of the lead float and follow-up float within strategy A?
3. Display maintenance strategy D and check the maintenance packages.
4. What is the effect of the hierarchy within strategy D?

Unit 4
Solution 11

Manage a Maintenance Strategy

UI

Fiori Launchpad

Task 1: Display a Maintenance Strategy

1. Display maintenance strategy A, and check maintenance packages and scheduling parameters.
   a) Navigate to *Strategies & Cycle Sets*.
   b) Choose *Maintenance Strategies*.
   c) Select strategy *A*.
   d) Double-click folder *Packages*.
   e) Packages are: 1 MON, 3 MON, 12 MON.
   f) Double-click folder *Maintenance strategies*.
   g) Select strategy *A* again.
   h) Choose *Details*.
      Result
      - Scheduling indicator: Zeit
      - Strategy unit: MON
      - Eröffnungshorizont: 90%
      - Shift Factor for Late Completion: 100%
      - Shift Factor for Early Completion: 100%
      - Factory Calendar: empty
   i) Choose *Package Sequence*, and check effect of parameter Hierarchy.
2. What is the effect of the lead float and follow-up float within strategy A?
   a) The **lead float** is part of a maintenance package and will determine the **basic start date** of the resulting maintenance order. It's specified in days and will be subtracted from the plan date.
   b) The **follow-up float** is part of a maintenance package and will determine the **basic end date** of the resulting maintenance order. It's specified in days and will be added to the plan date.
3. Display maintenance strategy D and check the maintenance packages.

a) Navigate to *Strategies & Cycle Sets*.

b) Choose *Maintenance Strategies*.

c) Select strategy *D*.

d) Double-click folder *Packages*.

e) Check packages:

Result

- Paket 1: 1 DAY
- Paket 2: 1 WK
- Paket 3: 1 MON
- Paket 4: 3 MON
- Paket 5: 6 MON
- Paket 6: 1 YR

f) Choose *Package Sequence*.

4. What is the effect of the hierarchy within strategy D?

a) In strategy D packages 1 DAY, 1 WK, and 1 MON have the same hierarchy value (= 1), that is, the same priority. For the 1 DAY and 1 WK packages this means that both will be executed after every 7 days and the 1 DAY and 1 MON packages after every 30 days. The 1 WK and 1 MON packages will never occur on the same date and therefore can't be controlled via the hierarchy.

b) Packages 3 MON and 6 MON have hierarchy value 2 – and therefore will deactivate packages 1 DAY and 1 MON after every 90 and 180 days respectively. They can't deactivate package 1 WK as it never occurs on the same date.

c) Package 1 YR has hierarchy value 3 and will be due after 365 days. Therefore, it can only deactivate package 1 DAY based on its higher hierarchy value.

Note:
12 months (= 360 days) isn't the same as 1 year (= 365 days).

Unit 4
Exercise 12

Assign a Maintenance Strategy to a Task List

UI

Fiori Launchpad

Task 1: Assign a Maintenance Strategy

1. Create a new general maintenance task list in task list group PM-##, and assign maintenance strategy A.Create a four operations (OP1 - OP4).
2. Make the following package assignment:
   - Operations OP1 and OP2: Monthly Package.
   - Operation OP3: 3-Monthly Package.
   - Operation OP4: 12-Monthly Package.

Unit 4
Solution 12

Assign a Maintenance Strategy to a Task List

UI

Fiori Launchpad

Task 1: Assign a Maintenance Strategy

1. Create a new general maintenance task list in task list group PM-##, and assign maintenance strategy A.Create a four operations (OP1 - OP4).
   a) Navigate to *Task Lists*.
   b) Choose *Create Task List*.
   c) Choose Task List Type: *General Maintenance Task List*.
   d) Enter Task List Group: **`PM-##`**.
   e) Enter Planning Plant: **`1010`**.
   f) Enter Group Counter: **`2`**.
   g) Set Overall Status to: released (general).
   h) Enter Profile: **`Z-EN-01`**.
   i) Select *Continue*.
   j) In view *General Data* enter the following data:
      - Description: **`Pump maintenance - strategy A`**
      - Work Center: **`T-ME##`**
      - Work Center Plant: **`1010`**
      - Maintenance Strategy: **`A`**
      - Planner Group: **`F##`**
      - Assembly: **`T-PM1000`**
   k) Choose view *Operation Data*.
   l) Choose variant *Internal*.
   m) Create the four operations as required.
   n) Assign a value for work for each operation: 1 / 2 / 3 / 4 hours.
2. Make the following package assignment:

- Operations OP1 and OP2: Monthly Package.
- Operation OP3: 3-Monthly Package.
- Operation OP4: 12-Monthly Package.

a) Navigate to *Maintenance Packages*.

b) Activate the checkboxes for the corresponding operations and packages.

c) Choose *Save*, and close tab.

Unit 4
Exercise 13

Create a Time-Based Strategy Plan

UI

Fiori Launchpad

Task 1: Create a Time-Based Strategy Plan

1. Create strategy maintenance plan.

   Table 18: Strategy Plan: Field and Value

Field/Data Type	Value
Maintenance Plan for	**`Maintenance Order`**
Maintenance Plan type	**`Strategy`**
Maintenance Strategy	**`A`**
Equipment	**`T-PA##`**
Task List Group / Counter	**`PM-## / Counter 2`**

   Note down your maintenance plan number: _____

2. Set scheduling parameters: choose a scheduling period of one year. Check parameters coming from strategy A.

Unit 4
Solution 13

Create a Time-Based Strategy Plan

UI

Fiori Launchpad

Task 1: Create a Time-Based Strategy Plan

1. Create strategy maintenance plan.

   Table 18: Strategy Plan: Field and Value

Field/Data Type	Value
Maintenance Plan for	**`Maintenance Order`**
Maintenance Plan type	**`Strategy`**
Maintenance Strategy	**`A`**
Equipment	**`T-PA##`**
Task List Group / Counter	**`PM-## / Counter 2`**

   Note down your maintenance plan number: _____

   a) Choose to *Maintenance Plans* → *Create Maintenance Plan*.

   b) Select Maintenance Plan For *Maintenance Order*.

   c) Choose Maintenance Plan Type *Strategy*.

   d) Enter Maintenance Strategy: **`A`**.

   e) Leave Maintenance Plan empty.

   f) Choose *Continue*.

   g) Enter Item Description **`Strategy Maintenance ##`**.

   h) Enter Technical Object **`T-PA##`**. Select *Enter*.

   i) Scroll down, and choose *Assign Task List*.

   j) Task List Type: *General Maintenance Task List*

   k) Task List Group: **`PM-##`**.

   l) Group Counter: **`2`**.

   m) Save; note your maintenance plan number: _____ .

2. Set scheduling parameters: choose a scheduling period of one year. Check parameters coming from strategy A.

a) Navigate to *Planning Data*.

b) Check default values coming from strategy A:

- Shift Factor: both 100%
- Call Horizon: 90%.

c) Set Scheduling Period to 1 YR.

d) Scroll down, and check packages.

e) Save.

f) Note down the number of your maintenance plan: _____ .

g) Close tab.

Unit 4
Exercise 14

Schedule a Time-Based Strategy Plan

UI

Fiori Launchpad

Task 1: Schedule a Time-Based Strategy Plan

1. Perform a normal start of the strategy plan using today's date.
2. Perform a start in cycle of the strategy plan. The fifth monthly package was executed 10 days ago.
3. Create and check the call object.

Unit 4
Solution 14

Schedule a Time-Based Strategy Plan

UI

Fiori Launchpad

Task 1: Schedule a Time-Based Strategy Plan

1. Perform a normal start of the strategy plan using today's date.
   a) Navigate to *Maint. Plan Scheduling*.
   b) Choose *Schedule Maintenance Plan*.
   c) Enter the number of your maintenance plan.
   d) Choose *Start*, and confirm popup.
   e) Choose *Save*.
   f) Choose ENTER to open the maintenance plan again:

      Result

      Plan dates have been calculated - no maintenance order has been created yet (>call horizon 90 %).

      The status of the first date is: *New Start, Hold*.

2. Perform a start in cycle of the strategy plan. The fifth monthly package was executed 10 days ago.
   a) Choose *Start in cyle*.
   b) Choose *Delete* to remove existing dates.
   c) On the following popup, enter completion date: today minus 10 days.
   d) Choose *Select package*.
   e) Select column 5 Mon.
   f) Choose *Set Start Offset*.
   g) Select *F7* function key to navigate back.

      Result

      The first date is set to: completion date + 30 days (= 1 month) and contains packages 1M and 3M, which is the sixth 1M package and the second 3M package.

   h) Save.

3. Create and check the call object.
   a) Select *Enter* to reopen scheduling.
   b) Select first plan date.

c) Choose *Release call* (green flag).

d) Save.

e) Select *Enter* to reopen scheduling.

f) Select first plan date.

g) Choose *Display call object* (glasses).

Result

An order with three operations is displayed – corresponding packages 1M (= Op1, Op2) and 3M (= Op3).

Unit 5
Exercise 15

Create a Counter and a Measurement Document

UI

Fiori Launchpad

Task 1: Create a New Counter

1. Create a new counter.

   Table 19: Measuring Point/Counter: Field and Value

Field/Data Type	Value
Measuring Point/Counter	**Counter**
Reference Object Type	**Technical Object**
Technical Object	**T-PA##**
Description	**Flow Counter**
Measuring Point Category	**M**
Characteristic	**T_PM02 (Flow in Liters – part of characteristic group T_PM)**
Overflow Reading	**1000000**
Annual Estimate	**36500**

   Note down your measuring point (counter) number: _____

Task 2: Create a Measurement Document

1. Create a measurement document with an initial value of 1,500 liters and yesterday as the date.

Unit 5
Solution 15

Create a Counter and a Measurement Document

UI

Fiori Launchpad

Task 1: Create a New Counter

1. Create a new counter.

   Table 19: Measuring Point/Counter: Field and Value

Field/Data Type	Value
Measuring Point/Counter	**Counter**
Reference Object Type	**Technical Object**
Technical Object	**T-PA##**
Description	**Flow Counter**
Measuring Point Category	**M**
Characteristic	**T_PM02 (Flow in Liters – part of characteristic group T_PM)**
Overflow Reading	**1000000**
Annual Estimate	**36500**

   Note down your measuring point (counter) number: _____

   a) Navigate to *Meas.Points*.

   b) Choose *Create Measuring Point*.

   c) In field Measuring Point/Counter, select: *Counter*.

   d) For Reference Object Type, select: *Technical Object*.

   e) In field Technical Object, enter: **T-PA##**.

   f) Choose Continue.

   g) Description: Flow Counter.

   h) Enter Measuring Point Category: **M**.

   i) In field Characteristic, select entry help.

   j) Enter Char. Group: **T_PM**, and choose *Go*.

k) Select *T_PM02 - Flow in Liters*.

l) Scroll down.

m) Enter Overflow Reading: 1000000.

n) Annual Estimate: 36500.

o) Save.

p) Note down number of measuring point.

Task 2: Create a Measurement Document

1. Create a measurement document with an initial value of 1,500 liters and yesterday as the date.
   a) Navigate to *Meas. Points*.
   b) Choose *Create Measurement Document for Technical Object*.
   c) Enter **`T-PA##`** in field *Technical Object*.
   d) Enter reading for new measuring point: **`1500`**.
   e) Enter **`yesterday`** as the date.
   f) Save, and close tab.

Unit 5
Exercise 16

Create a Performance-Based Maintenance Plan

UI

Fiori Launchpad

Task 1: Check Maintenance Strategy and Task List

1. Display performance-based maintenance strategy E, and check maintenance packages and default values.
2. Check maintenance task list with performance-based strategy.

Task 2: Create Performance-Based Maintenance Plan

1. Create strategy maintenance plan.

   Table 20: Performance-Based Maintenance Plan: Field and Value

Field/Data Type	Value
Maintenance Plan for	**`Maintenance Order`**
Maintenance Plan type	**`Strategy`**
Maintenance Strategy	**`E`**
Equipment	**`T-PA##`**
Task List Group / Counter	**`T-PM101E / Group Counter 3`**

   Note down your maintenance plan number: _____

Unit 5
Solution 16

Create a Performance-Based Maintenance Plan

UI

Fiori Launchpad

Task 1: Check Maintenance Strategy and Task List

1. Display performance-based maintenance strategy E, and check maintenance packages and default values.
   a) Navigate to *Strategies & Cycle Sets*.
   b) Choose *Maintenance Strategies*.
   c) Select strategy E.
   d) Double-click folder *Packages*.
   e) Check packages.
      Result
      Package 1:10000 Liters, hierarchy value 1, offset/lead float/follow-up float: 0
      Package 1:50000 Liters, hierarchy value 1, offset/lead float/follow-up float: 0
      Package 1:100000 Liters, hierarchy value 2, offset/lead float/follow-up float: 0
   f) Double-click folder *Maintenance strategies*.
   g) Select strategy *E* again.
   h) Choose *Details*.
   i) Check default values:
      Result
      Call horizon: 90%.
      Shift factors: 100%.
   j) Choose Package Sequence to see effect hierarchy.
      Result
      Packages 10 and 20 have the same hierarchy value (that is, the same priority), package 30 has a higher hierarchy values and therefore will deactivate packages 10 and 20.
   k) Navigate back via *Back* or *F3* and close the tab.
2. Check maintenance task list with performance-based strategy.
   a) Navigate to *Task Lists*.

b) Choose *Display Task List*.

c) Choose Task List Type: *General Maintenance Task List*.

d) Enter Task List Group: **T-PM101E**.

e) Enter Group Counter: **3**.

f) In view *General Data*, check Maintenance Strategy: E.

g) Navigate to *Maintenance Packages*.

h) Check package assignment to operations.

i) Close tab.

Task 2: Create Performance-Based Maintenance Plan

1. Create strategy maintenance plan.

Table 20: Performance-Based Maintenance Plan: Field and Value

Field/Data Type	Value
Maintenance Plan for	**Maintenance Order**
Maintenance Plan type	**Strategy**
Maintenance Strategy	**E**
Equipment	**T-PA##**
Task List Group / Counter	**T-PM101E / Group Counter 3**

Note down your maintenance plan number: _____

a) Navigate to *Maintenance Plans*.

b) Choose *Create Maintenance Plan*.

c) Select Maintenance Plan For: *Maintenance Order*.

d) Choose Maintenance Plan Type: *Strategy*.

e) Enter Maintenance Strategy: **E**.

f) Leave Maintenance Plan empty.

g) Choose *Continue*.

h) Enter Item Description **Strategy Maintenance - Performance ##**.

i) Enter Technical Object **T-PA##**. Select *Enter*.

j) Scroll down, and choose Assign Task List.

k) Task List Type: General Maintenance Task List.

l) Enter Task List Group: **T-PM101E**.

m) Group Counter: **3**.

n) Navigate to Planning Data.

o) Check default values coming from strategy E.

p) Enter your counter (number of your measuring point).

q) Set Scheduling Period to 1 YR.

r) Scroll down and check packages.

s) Save.

t) Note down the number of your maintenance plan.

u) Close tab.

Unit 5
Exercise 17

Schedule a Performance-Based Maintenance Plan

UI

Fiori Launchpad

Task 1: Start Maintenance Plan

1. Start maintenance plan based on the actual counter reading.

Task 2: Create New Counter Reading

1. Create new counter reading of 11,500 liters.

Task 3: Update Scheduling

1. Update scheduling of your maintenance plan, and check the effect of the new counter reading.

Unit 5
Solution 17

Schedule a Performance-Based Maintenance Plan

UI

Fiori Launchpad

Task 1: Start Maintenance Plan

1. Start maintenance plan based on the actual counter reading.
   a) Navigate to *Maint. Plan Scheduling*.
   b) Choose *Schedule Maintenance Plan*.
   c) Enter the number of your maintenance plan.
   d) Choose *Start*, and confirm popup.
   e) Save.
   f) Choose *Enter* to reopen the maintenance plan.
   g) Select first plan date.
   h) Choose *Call Algorithm* (calculator).
   i) Choose *Counter History*.
   j) Here you can check the calculation.
   k) Check the *Offset days*.
   l) Choose *Continue*.
   m) Select *F3* to navigate back to list.
   n) Save.

Task 2: Create New Counter Reading

1. Create new counter reading of 11,500 liters.
   a) Navigate to *Meas.Points*.
   b) Choose *Create Measurement Document for Technical Object*.
   c) Enter **`T-PA##`** in field *Technical Object*.
   d) Enter reading for new measuring point: **`11500`**.
   e) Keep today as the date.
   f) Save, and close tab.

Task 3: Update Scheduling

1. Update scheduling of your maintenance plan, and check the effect of the new counter reading.
   a) Navigate to *Maint. Plan Scheduling*.
   b) Choose *Schedule Maintenance Plan*.
   c) Enter the number of your maintenance plan.

      Result

      The first date has status: *New start – Save to call.* This means that the order will be created due to the planned counter that was reached.

Unit 6
Exercise 18

Create and Schedule a Multiple Counter Plan

UI

Fiori Launchpad

Task 1: Create New Counter Readings

1. Create new counter readings for your equipment T-PA##.
   - Hour Meter: 1,000 hours - using yesterday's date.
   - Flow Counter: 12,000 liters - using today's date.

Task 2: Create Multiple Counter Plan

1. Create multiple counter plan.

   Table 21: Performance-Based Maintenance Plan: Field and Value

Field/Data Type	Value
Maintenance Plan for	**Maintenance Order**
Maintenance Plan type	**Multiple Counter**
Description	**Multiple Counter plan - ##**
Equipment	**T-PA##**
Task List Group / Counter	**T-PM1010 (DE) / T-PM101E / Counter 1**
Lead Float	**5 days**
Scheduling period	**1 year**
Cycles	**10000 liters / 2000 hours**
Operation Type	**OR**

   Note down your maintenance plan number: _____

Task 3: Schedule Multiple Counter Plan

1. Start multiple counter plan.
2. Create new counter reading for flow counter: 22,000 liters.
3. Update scheduling.

Unit 6
Solution 18

Create and Schedule a Multiple Counter Plan

UI

Fiori Launchpad

Task 1: Create New Counter Readings

1. Create new counter readings for your equipment T-PA##.
   - Hour Meter: 1,000 hours - using yesterday's date.
   - Flow Counter: 12,000 liters - using today's date.

   a) Navigate to *Meas.Points*.

   b) Choose *Create Measurement Document for Technical Object*.

   c) In field Technical Object, enter: **`T-PA##`**.

   d) Enter reading for Hour Meter: **`1000`**.

   e) Enter yesterday's date.

   f) Enter reading for Flow Counter: **`12000`**.

   g) Keep today as the date.

   h) Note down numbers of hour meter and flow counter again.

   i) Save, and close tab.

Task 2: Create Multiple Counter Plan

1. Create multiple counter plan.

   Table 21: Performance-Based Maintenance Plan: Field and Value

Field/Data Type	Value
Maintenance Plan for	**`Maintenance Order`**
Maintenance Plan type	**`Multiple Counter`**
Description	**`Multiple Counter plan - ##`**
Equipment	**`T-PA##`**
Task List Group / Counter	**`T-PM1010 (DE) / T-PM101E / Counter 1`**
Lead Float	**`5 days`**
Scheduling period	**`1 year`**

Field/Data Type	Value
Cycles	**10000 liters / 2000 hours**
Operation Type	**OR**

Note down your maintenance plan number: _____

a) Navigate to *Maintenance Plans*.

b) Choose *Create Maintenance Plan*.

c) Select Maintenance Plan For: *Maintenance Order*.

d) Choose Maintenance Plan Type: *Multiple Counter*.

e) Leave field *Maintenance Plan* empty. Choose *Continue*.

f) Description: **Multiple Counter plan - ##**

g) Enter Lead Float: **5 (DAY)**.

h) Scroll down.

i) Enter scheduling period: **1 YR**.

j) Leave Operation Type as: OR Operation.

k) Enter first cycle: 10,000 l, counter: flow counter assigned to *T-PA##*.

l) Enter second cycle: 2,000 hr, counter: hour meter assigned to *T-PA##*.

m) Navigate to Items.

n) Enter Item Description: **Regular Maintenance Multiple Counter ##**.

o) Enter Technical Object: **T-PA##**.

p) Scroll down.

q) Choose Assign Task List.

r) Task List Type: General Maintenance Task List.

s) Task List Group: **T-PM101E**.

t) Group Counter: **1**.

u) Save.

v) Note down the number of your maintenance plan.

w) Close tab.

Task 3: Schedule Multiple Counter Plan

1. Start multiple counter plan.

a) Navigate to *Maint. Plan Scheduling*.

b) Choose *Schedule Maintenance Plan*.

c) Enter the number of your maintenance plan.

d) Choose *Start*, and confirm popup.

e) Save.

f) Select *Enter* to reopen scheduling.

g) Select first plan date.

h) Choose Call Algorithm (calculator).

Result

Both cycles are displayed. The leading cycle is marked.

2. Create new counter reading for flow counter: 22,000 liters.

a) Navigate to *Meas.Points*.

b) Choose *Create Measurement Document for*.

c) In field Technical Object, enter: **`T-PA##`**.

d) Enter reading for flow counter: **`22000`**.

e) Keep today as the date.

f) Save, and close tab.

3. Update scheduling.

a) Navigate to *Maint. Plan Scheduling*.

b) Choose *Schedule Maintenance Plan*.

c) Enter the number of your maintenance plan.

Result

The first date has status: *New start - Save to call.* This means that the order will be created due to the flow counter having reached its planned counter.

Unit 6
Exercise 19

Use Cycle Set Sequences

UI

SAP GUI

Task 1: Check Vehicle

1. Check vehicle counters of your vehicle **`T##`**.
2. Enter a new measurement document for the distance counter.

Task 2: Create Multiple Counter Plan

1. Create a multiple counter plan for your vehicle **`T##`**.

Hint:
You must assign cycle set sequence *1* to the maintenance item **and** to the first two cycles in the maintenance plan header.

Table 22: Distance Counter: Field and Value

Field name or data type	Values
Maintenance plan	**`Leave blank`**
Maintenance plan category	**`Maintenance Order`**
Cycle set	**`S01`**
Maintenance Plan Text	**`Inspection T##`**
Item Short Text	**`Small Inspection`**
Reference object	**`T##`**
Cycle Set Sequence	**`1`**
Task list - Type	**`Leave blank`**
TaskLstGrp	**`Leave blank`**
Task list - GrpCr	**`Leave blank`**

Note:
Both maintenance items for this multiple counter plan will be created without task list assignment as in this example only the sequence of dates matters, not the contents of the orders.

2. Create a second maintenance item for this maintenance plan using the data provided in the following table.

> Hint:
> You must assign cycle set sequence *2* to the maintenance item **and** to the last two cycles in the maintenance plan header.

Table 23: Distance Counter: Field and Value

Field name or data type	Values
Item Short Text	**`Big Inspection`**
Cycle Set Sequence	**`2`**
Equipment	**`T##`**
Task list - Type	**`Leave blank`**
TaskLstGrp	**`Leave blank`**
Task list - GrpCr	**`Leave blank`**

3. Enter repeat factor **2** for cycle set sequence *1*, so that cycle set sequence *1* will be executed twice.
4. Set scheduling period to six years.
5. Save maintenance plan.

Task 3: Schedule Multiple Counter Plan

1. Start the maintenance plan based on the current counter readings.
2. Check calculated planned dates.

Unit 6
Solution 19

Use Cycle Set Sequences

UI

SAP GUI

Task 1: Check Vehicle

1. Check vehicle counters of your vehicle **`T##`**.
   a) Start transaction **IE03**.
   b) Enter equipment **`T##`**.
   c) Choose the *Measuring points/counters* button.
      Result
      On the *Maintain Measuring Points: Overview* screen, you can see a fuel counter and a distance counter.
   d) Note down the numbers of these measurement points: _____
   e) Choose *Back* to return to the *SAP Menu* screen.
2. Enter a new measurement document for the distance counter.
   a) Start transaction **IK11**.
   b) Enter the measuring point number for the distance counter you recorded in step 1.
   c) Enter today's date or earlier.
   d) In the *Counter reading* field, enter a value of **`100`**.
   e) Choose *Save*.
      The *Create Measurement Document: Initial* screen appears with the measurement document number at the bottom of the screen.
   f) Choose *Back*.

Task 2: Create Multiple Counter Plan

1. Create a multiple counter plan for your vehicle **`T##`**.

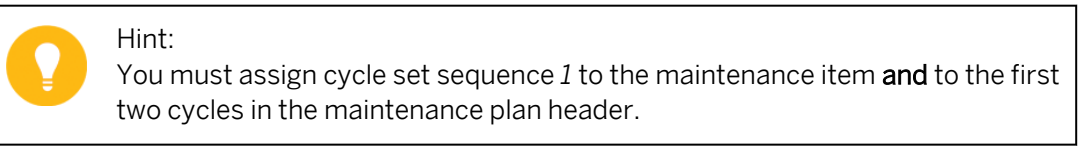

Table 22: Distance Counter: Field and Value

Field name or data type	Values
Maintenance plan	**`Leave blank`**

Field name or data type	Values
Maintenance plan category	**Maintenance Order**
Cycle set	**S01**
Maintenance Plan Text	**Inspection T##**
Item Short Text	**Small Inspection**
Reference object	**T##**
Cycle Set Sequence	**1**
Task list - Type	**Leave blank**
TaskLstGrp	**Leave blank**
Task list - GrpCr	**Leave blank**

Note:
Both maintenance items for this multiple counter plan will be created without task list assignment as in this example only the sequence of dates matters, not the contents of the orders.

a) Start transaction IP43.

b) On the *Create Maintenance Plan: Initial* screen, in the *Maint. plan. cat.* field, enter *Maintenance Order* by selecting it from the dropdown menu.

c) In the *Cycle set* field, enter a value of **S01**.

d) In the *Maintenance Plan Text* field at the top of the screen, enter **Inspection T##**.

e) On tab *Maintenance plan cycle*, enter cycle set sequence **1** for the first two cycles.

f) Enter cycle set sequence **2** for the last two cycles.

g) On tab *Item*, enter text **Small Inspection ##** as description for the maintenance item.

h) Enter **1** in field *Cycle Set Seq.* This will link the first two cycles to the first maintenance item.

i) In the *Equipment* field, enter **T##**.

j) Choose *Enter*.

k) In the Task List area, leave all fields blank.

l) Stay on this screen.
The *Description* field fills automatically.

Note:
Leave this screen open for the next step.

2. Create a second maintenance item for this maintenance plan using the data provided in the following table.

Hint:
You must assign cycle set sequence *2* to the maintenance item **and** to the last two cycles in the maintenance plan header.

Table 23: Distance Counter: Field and Value

Field name or data type	Values
Item Short Text	**Big Inspection**
Cycle Set Sequence	**2**
Equipment	**T##**
Task list - Type	**Leave blank**
TaskLstGrp	**Leave blank**
Task list - GrpCr	**Leave blank**

a) On the *Item* tab, choose the *Create More Items* icon.

This will create a second maintenance item. You can switch between them using the left/right arrows in the top right-hand corner.

b) Enter text **Big Inspection ##** as description for the maintenance item.

c) Enter **2** in field *Cycle Set Seq.* This will link the last two cycles to the second maintenance item.

d) In the *Equipment* field, enter **T##**; choose ENTER.

e) In the Task List area, leave all fields blank.

f) Choose *Enter*.

The system fills the *Description* field.

3. Enter repeat factor **2** for cycle set sequence *1*, so that cycle set sequence *1* will be executed twice.

a) On the *Maintenance plan cycle* tab, choose the *Change Repeat Factor* icon.

b) In the *Repeat Factor Cycle Set Seq.* field, enter **2** for *Cycle Set Seq. 1*.

4. Set scheduling period to six years.

a) Choose tab *Maintenance plan scheduling parameters*,

b) Enter **6 YR** for *SchedPeriod*.

5. Save maintenance plan.

a) Choose *Save*.

b) Confirm the popup containing Today's date..

c) Note down your maintenance plan number: _____ .

Task 3: Schedule Multiple Counter Plan

1. Start the maintenance plan based on the current counter readings.
   a) Start transaction **IP10**.
   b) Enter the maintenance plan number you recorded in step 5.
   c) Choose *Enter*.
   d) In the menu bar, choose *Edit* → *Start* → .
   e) On the *Start* pop-up window, choose *Continue*.
   f) On the *Display logs* pop-up window, choose *Continue*.
   g) Choose *Save*.
2. Check calculated planned dates.
   a) Select *Enter* to re-enter scheduling.

      Result

      The small inspection occurs twice (the next year and the year after), the big inspection occurs once after three years. After this the sequence consisting of two small and one big inspection starts again.