ERP – PROJECT

UJVNL

END USER DOCUMENT

FOR

PLANT MAINTENANCE

MASTER DATA CREATION

TABLE OF CONTENTS

1 DOCUMENT CONTROL

This is a controlled document and will be maintained on UJVNL portal.

Changes to this document will be recorded below and must be published to all interested parties.

1.1 DOCUMENT HISTORY

Version	Date	Author	VERSION DETAILS
V01	06-02-2018	Nimish Agrawal	First ISSUE

1.2 DISTRIBUTION

Date	Name	Purpose
	Mandeep Singh	For Information
	Brijesh Yadav	For Information

2   BUSINESS PROCESS

2.1   PROCESS NAME

Create Functional Location

2.2   OVERVIEW

This document describes the process of Creating Functional Location.
The business object "Functional location" is an organizational unit within Logistics that structures the Maintenance objects of a company according to functional, process-related or spatial criteria.
A Functional location represents the place at which a maintenance task is to be performed.

- A Functional location represents the system area at which an object can be installed. The objects that can be installed at Functional locations are called pieces of equipment.
- You define and manage each Functional location in the Plant Maintenance (PM) component in a separate master record.
- You can build up a separate maintenance history for each Functional location.

 This is useful in maintaining technical structure and identifying maintenance objects located to functional locations.

2.3   PROCEDURAL STEPS

This scenario shows you how to create functional location in the SAP System

2.4   CREATE FUNCTIONAL LOCATION

Menu Path	SAP Menu → Logistics → Plant Maintenance → Management of Technical Objects → Functional Location → Create
Transaction Code	IL01
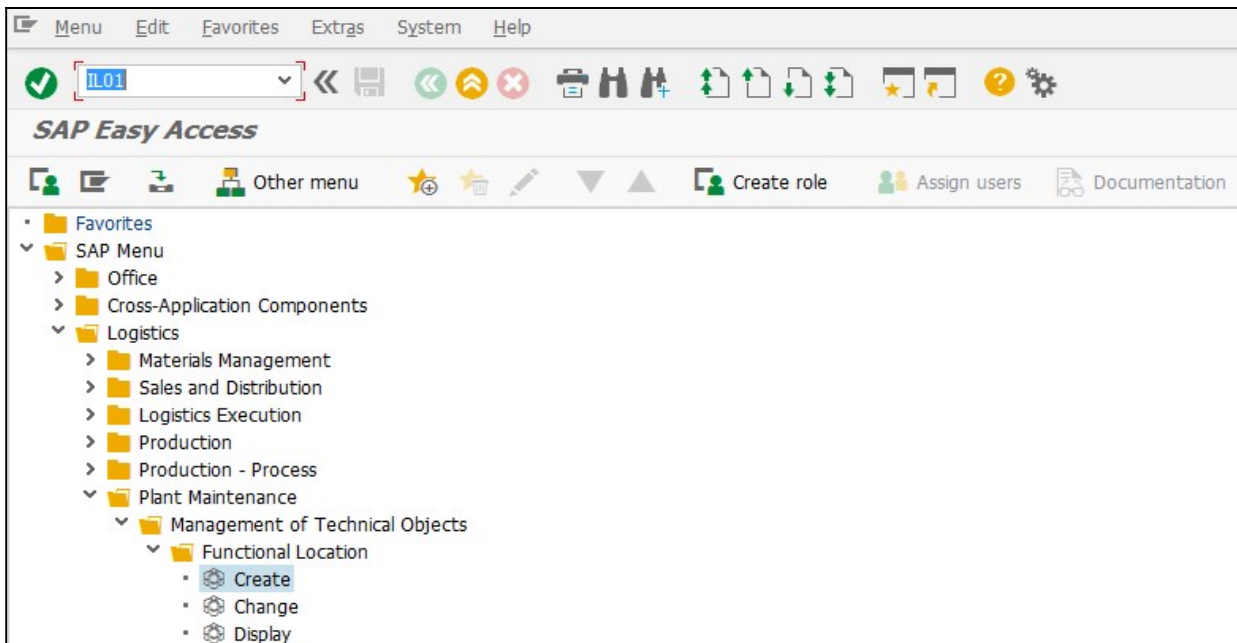
2.5 INPUT FIELDS

On running IL01, we get the initial screen as shown below:

Enter the following data in the Input screen to create Functional location

Step No	Field Name	Description	User Action and Values
1	Functional Loc. Category	Select categories of Functional Location as per requirement	Enter Category - P – Plant & Machinery
2	Structure Indicator	UJVNL specific FL hierarchy. Description for Structure Indicator (Functional Location Hierarchy is made uniform through this Indicator.)	Enter Structure Indicator - UJVNL
3	Functional Location	Code of functional location	Enter the label you wish to give for new machine or location following the edit mask format.

Press "Enter" key or select "Enter" icon
Create Functional Location: Master Data screen is open.

Step No	Field Name	Description	User Action and Values
1	Description	Functional Location Name / Description	Enter Functional Location Name / Description

Change Functional Location: Master Data

i		Classification	Measuring points/counters	Data origin...	

Functional loc.	1305-COM-AICR-AICS	Cat. P Plant & Machinery
Description	AIR CONDITIONING SYSTEM	
Status	CRTE	i

General	Location	Organization	Structure

Location data

MaintPlant	1305	Khatima
Location	COM-AICR	AIR CONDITIONING ROOM
Room		
Plant section	COM	Khatima Common
Work center		
ABC indic.		
Sort field		

Address

Name		
Street		
Location		
Telephone		Fax

Step No	Field Name	Description	User Action and Values
1	Maint plant	Maintenance plant in which maintenance tasks are planned and executed	Enter a maintenance plant - 1305

Step No	Field Name	Description	User Action and Values
1	Company code	Enter company code	1000
2	Cost centre	Enter Cost Centre	Select from drop down. Enter the company code. Automatically derived once Maint plant is populated.
3	Planning plant	Maintenance planning plant in which maintenance tasks are planned and executed	Enter a maintenance planning plant – 1305. Can be determined from Maint plant entered in location tab
4	Planner Group	Group responsible for planning tasks	Enter a department
5	Mn.wk.ctr/Plnt	Main work center responsible for the completion of the maintenance tasks	Enter a main work center
6	Catalogue profile	We can assign technical object wise Catalogue profile for individual functional location through this field	Select from drop down. This is used for failure analysis in Notification.

Step No	Field Name	Description	User Action and Values
1	Equi-Installation allowed	Check the box if equipment installation allowed	Check or un check the box. Check this to allow Equipment installation.

Click button to save Functional Location

 Created.

System will give a message in the message bar that your functional location created as shown above.

3   BUSINESS PROCESS

3.1   PROCESS NAME

Create Equipment Master

3.2   OVERVIEW

This BPP describes the process of creating Equipment Master.

The business object "Equipment Master" is an organizational unit within Logistics that structures the Maintenance objects of a company according to functional, process-related or spatial criteria.

An Equipment Master represents the place at which a maintenance task is to be performed.

- Equipment Master represents the system area at which an object can be installed. The objects That can be installed at Equipment Masters are called pieces of equipment.
- You define and manage each Equipment Master in the Plant Maintenance (PM) component in a Separate master record.
- You can build up a separate maintenance history for each Equipment Master

This is useful in maintaining technical structure and identifying maintenance objects located to Equipment Masters.

3.3   PROCEDURAL STEPS

This scenario shows you how to create Equipment Master in the SAP System

3.4   CREATE EQUIPMENT

Menu Path	SAP Menu → Logistics → Plant Maintenance → Management of Technical Objects → Equipment Master → Create
Transaction Code	IE01
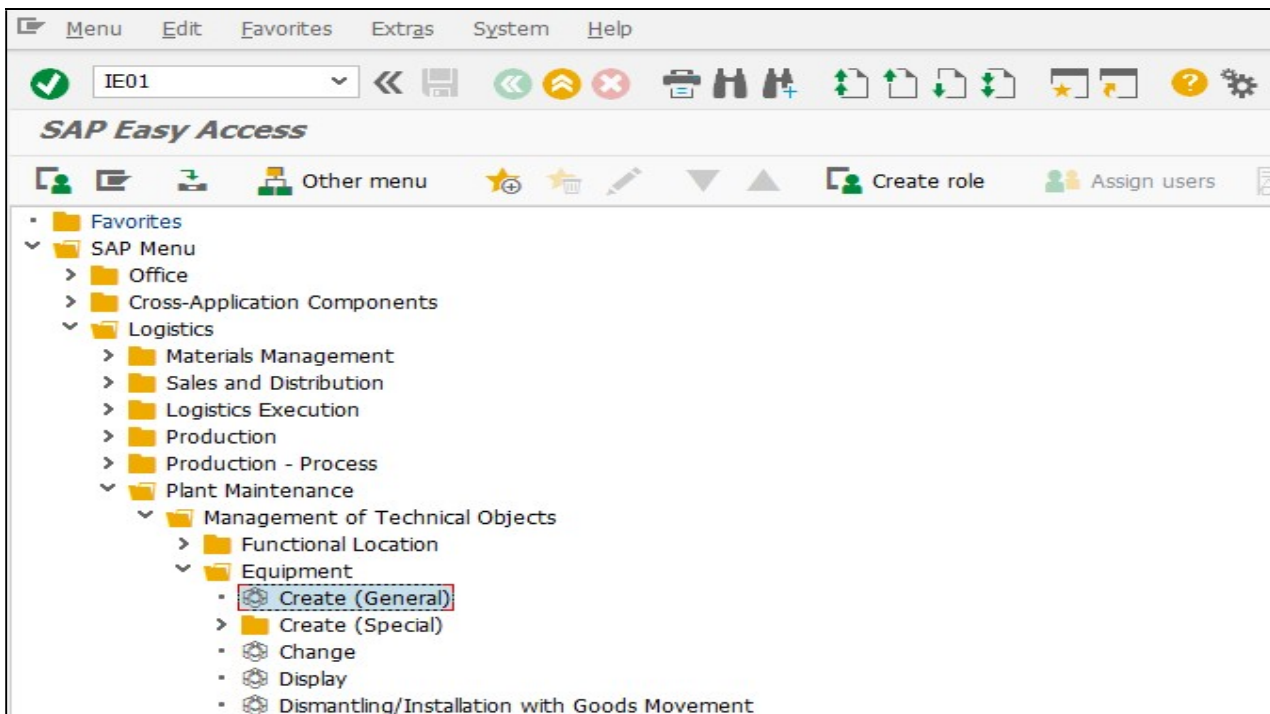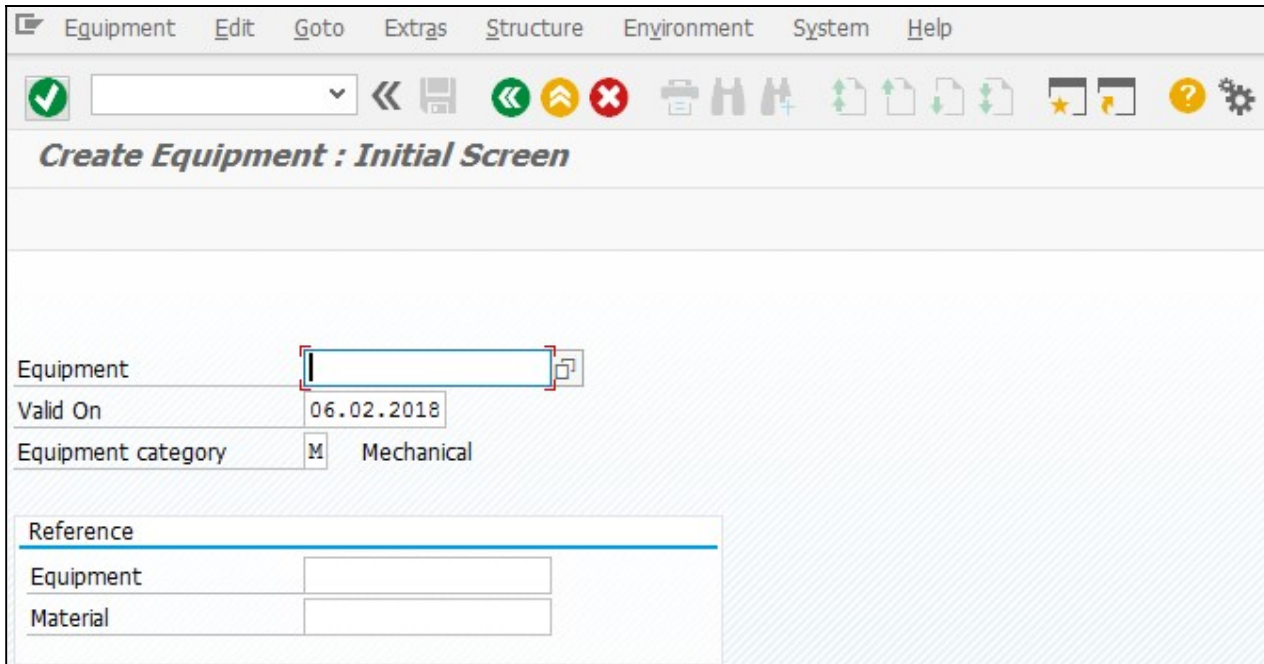
3.5 INPUT FIELDS

On running IE01, we get the initial screen as shown below:

Enter the following data in the Input screen to create Equipment

Step No	Field Name	Description	User Action and Values
1	Equipment Category	Enter Category	M – Mechanical Equipment. Select categories of Equipment as per requirement
2	Valid On date	Equipment data valid date.	Date will be current date.

Press "Enter" key or select "Enter" icon . Create Equipment : Master Data screen is open.

Step No	Field Name	Description	User Action and Values
1	Description	Equipment Name / Description	Enter Equipment Name / Description
2	Start-up-date	Date for Equipment start in use	Enter date of Equipment started in use- current date. System starts up date. (It is the date from which the system is in Operational) The content of the field is used by the system - when calculating the mean time between failures - to calculate the length of time without malfunctions occurring during operation until the First breakdown.

Step No	Field Name	Description	User Action and Values
1	Maint plant	Maintenance plant in which maintenance tasks are planned and executed	Enter a maintenance plant - 1305

Create Equipment : Organization

Class overview   Measuring points/counters

Equipment	TM0000000001IE	Category	M	Mechanical
Description	COMPRESSOR-1 OF AIR CONDITIONER -1			Intern.note
Status	AVLB			
Valid From	06.02.2018	Valid To	31.12.9999	

General | Location | Organization | Structure | Warranty

Account assignment

Company Code	1000	UJVN Limited	Dehradun
Business Area			
Asset		/	
Cost Center	13050101	/ 1000	Machine 1
WBS Element			
StandgOrder			
SettlementOrder			

Responsibilities

Planning plant	1305	Khatima	
Planner group	001	OPH & ELE Maint	
Main WorkCtr	E&M_PH1	/ 1305	ELECTRICAL MAINTENANCE-1
Catalog profile	UJVNL		UJVNL Catalog Profile

Step No	Field Name	Description	User Action and Values
1	Company code	Enter company code	1000
2	Cost centre	Enter Cost Centre	Select from drop down. Enter the company code. Automatically derived once Maint plant is populated.
3	Planning plant	Maintenance planning plant in which maintenance tasks are planned and executed	Enter a maintenance planning plant – 1305. Can be determined from Maint plant entered in location tab
4	Planner Group	Group responsible for planning tasks	Enter a department
5	Mn.wk.ctr/Plnt	Main work center responsible for the completion of the maintenance tasks	Enter a main work center
6	Catalogue profile	We can assign technical object wise Catalogue profile for individual functional location through this field	Select from drop down. This is used for failure analysis in Notification.

Click on Change InstLoc [icon] button

Step No	Field Name	Description	User Action and Values
1	Functional Loc.	Enter superior FL	Enter Superior Functional Location. Automatically derived if the hierarchy is maintained based on the structure indicator.

Click on [icon] button to save Equipment ✓ Equipment created with the number 11000742

System will give a message in the message bar that your Equipment created as shown above.

4   BUISNESS PROCESS

4.1   PROCESS NAME

Create Work Center

4.2   OVERVIEW

This document describes the process of creating Work Center.

A work center is used where an operation or activity is carried out within a maintenance plant. A work center can represent a machine or a group of machines as well as a person or a group of people. Work centers can be structured hierarchically. Work centers contain data used in production/maintenance such as:

- Costing
- Scheduling

4.3   PROCEDURAL STEPS

This scenario shows you how to create Work Center Master in the SAP System

4.4   CREATE WORK CENTER

Menu Path	SAP Menu → Logistics → Plant Maintenance → Management of Technical Objects → Environment → Work Centers → Work Center → Create
Transaction Code	IR01
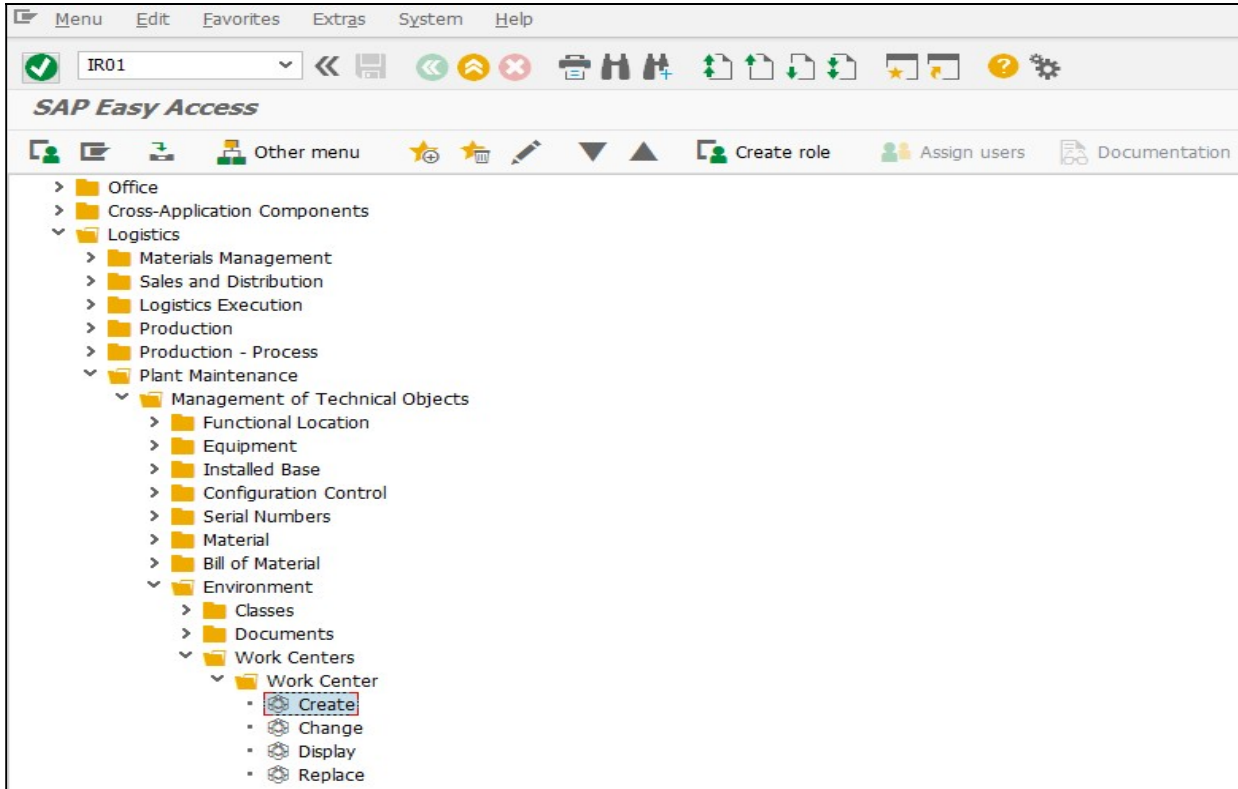
4.5 INPUT FIELDS

On running IR01, we get the initial screen as shown below:
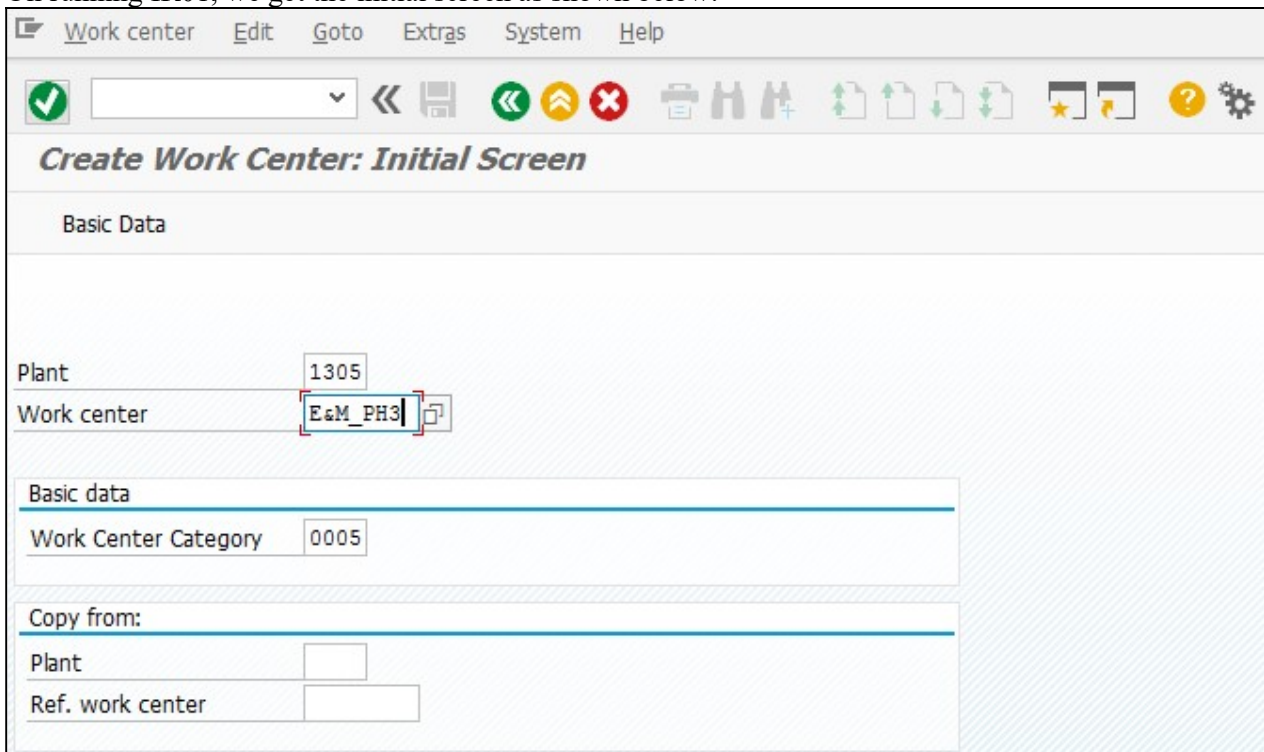
Step No	Field Name	Description	User Action and Values
1	Plant	Enter Plant number. Select from pull down menu if required	1305 This is the plant for which the new Work Center is being created.
2	Work center	Enter New Work Center identifier	E&M-PH3 Can be a numeric or alphanumeric identifier, or a combination of both.
3	Work center category	Enter work center type from drop down box. (Ex-Plant Maintenance = 0005)	0005 Determines which data can be maintained in the work center's master record.
4	Copy from: Plant	Plant associated with the work center from which data is to be copied. Enter existing plant number	Using this feature generally expedites work center creation. To be used in conjunction with Ref. Work center field below.

Press "Enter" key or select "Enter" [✓] icon. Create Work Center: Master Data screen is open

Work center   Edit   Goto   Extras   System   Help

Create Work Center: Basic Data

Template

| Plant | 1305 | Khatima |
| Work center | E&M_PH3 | ELECTRICAL MAINTENANCE-3 |

| Basic Data | Default Values | Capacities | Scheduling | Costing | Technology |

General Data

Work Center Category	0005	Plant maintenance
Person responsible	001	JE Electrical Maintenance 1
Location		
QDR system		
Supply Area		
Usage	004	Only maintenance task lists
☐ Backflush		

Standard Value Maintenance

| Standard value key | SAP0 | No standard values |

Standard Values Overview

Key Word			Description	

Step No	Field Name	Description	User Action and Values
1	Description	Description of the Work Center	This is an alphanumeric field.
2	Work Center Category	Enter Category	0005 – Plant Maintenance. Select categories of Equipment as per requirement
3	Person Responsible	The person maintaining the work center master files in the system.	Field values are maintained in Configuration.
4	Usage	Identifies types of task lists with which the work center may be associated	Use 004 unless there is a business reason not to use it.

5	Standard Value Key	Key defining and giving a dimension (for example, time or area) to one of up to six standard values.	Choose the key whose values most closely approximate business needs. (e.g., SAP0 – No standard values).

Step No	Field Name	Description	User Action and Values
1	Control Key	Determines which business transactions should be executed for the object that belongs to the task list or order (e.g., scheduling or costing)	Select from the pull down list. Selecting the control key indicator prevents changes to the control key in a task list. "PM01" Control key selections are configured.

Create Work Center: Capacity Overview

🏭 HRMS   Hierarchy   Template

Plant	1305	Khatima
Work center	E&M_PH3	ELECTRICAL MAINTENANCE-3

| Basic Data | Default Values | Capacities | Scheduling | Costing | Technology |

Overview

Capacity category 002

		Control CapacityReduction
Pooled capacity		
Setup formula		0 Formula-Related
Processing formula		0 Formula-Related
Teardown formula		0 Formula-Related
Other formula	SAP004	
Distribution		
Int. dist. key		

Capacity category

		Control CapacityReduction
Pooled capacity		
Setup formula		0 Formula-Related
Processing formula		0 Formula-Related
Teardown formula		0 Formula-Related
Other formula		
Distribution		
Int. dist. key		

Step No	Field Name	Description	User Action and Values
1	Capacity Category	Identifies the type of capacity (machine, labor)	Can be set to default from the default work centre. Enter- 002-Person
2	Other Formula	Formula used to calculate capacity requirements for other types of internal processing (for example, in networks).	Select desired formula when needed. Formulas can be customized in the IMG. Used only if needed.

Create Work Center Capacity: Header

Intervals and Shifts ✏ Intervals 🔍 Available Capacity Profile ✏ Reference Available Capacity ✏ Short Texts 🔗 HRMS

Plant	1305	Khatima
Work center	E&M_PH3	ELECTRICAL MAINTENANCE-3
Capacity category	002	

General data

Capacity planner grp	001
☐ Pooled capacity	Grouping

Available capacity

Factory calendar ID	
Active version	
Base unit of meas.	HR

Standard available capacity

Start	00:00:00		
Finish	24:00:00	Capacity utilization	100
Length of breaks	00:00:00	No. of indiv. cap.	12
Operating time	0.00	Capacity	0.00
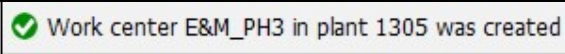
Planning details

☐ Relevant to finite scheduling   Overload [ ] %
☐ Can be used by several operations   ☑ Long-term planning

Step No	Field Name	Description	User Action and Values
1	Capacity Planner Group	Person or group responsible	Select from pull down menu. Default is dependent on the plant selected. Configuration required (plant specific).
2	Grouping	Groupings for shift definitions and shift sequences	Use pulldown menu to find selection if needed. Configuration required (plant specific).
3	Factory Calendar	Identifies available production dates for entire year. Can differ by work center.	Select calendar id from pulldown list if different from standard factory calendar. Defaults to factory calendar if blank.
4	Active Version	Used as the basis for scheduling	Enter version number (if applcable).
5	Base Unit of Measure	UOM in which available capacity is maintained (usually in hours).	Must be the same as the default for activity. Defaults are set in the IMG.
6	Start	Beginning of shift or availability start.	Enter start time. Required for capacity availability calculation. Defaults are set in the IMG.
7	Finish	End of shift or availability end.	Enter ending time. Required for capacity availability calculation. Defaults are set in the IMG.

8	Length of Breaks	Total break time per shift / availability time period.	Enter where applicable. Defaults are set in the IMG.
9	Capacity Utilization	Actual capacity vs. theoretical capacity expressed as a %.	Enter actual availability %. Default is set at 100%. Defaults are set in the IMG.
10	No. of indiv. Cap.	Number of machines or people making up work center capacity.	Enter number of machines or people. Default is set at "1". Default is set at "1" in the IMG.
11	Relevant to finite scheduling	Identifies Work Center capacities to be used in calculating available capacity during finite scheduling.	Select depending on business need.
12	Can be used by several Operations	Allows multiple operations to use this capacity. If not set, only 1 operation will access this capacity, even if partially consumed.	Select if only one operation is expected to use this capacity at a time.
13	Overload %	Used to define % of over scheduling allowed	Leave blank unless over scheduling is desired
14	Long Term Planning	Allows this work center to be used for capacity during long term planning	Should be selected unless a specific business need determines otherwise. Selected by default.

Note: From this screen, you have now set up all your capacity requirements and can proceed with creating the work center record. Click on the green back arrow. The system reverts to the "**Create Work Center: Capacity Overview**" screen.

Step No	Field Name	Description	User Action and Values
1	Capacity Category	Key which describes capacity in more detail. For example, it enables you to determine whether it is machine or labor capacity.	Select from the pull down list. 002-Person Capacities of different categories can be allocated to a work center.
2	Capacity	Description or name of the capacity that identifies it to the system.	Select from the pull down list. E.g., Machine or labor capacity
3	Other Formula	Formula used to calculate capacity requirements for other types of internal processing (for example, in networks).	Select desired formula when needed. Formulas can be customized in the IMG. Used only if needed.
4	Work Dimension	Dimension of work in Project System	Select from pull down list. Values configured in IMG.
5	Work Unit	Specific UOM of work in Project System	Select from pull down list. Optional

Step No	Field Name	Description	User Action and Values
1	Validity Start date	Identifies the beginning of a validity period	Defaults to today's date. Can be changed
2	Validity End date	Identifies the end of the a validity period	Defaults to 31.12.9999. Can be changed.
3	Cost Center	Key that identifies the cost center	Click on the pull down list to select or to search (click on the green check again) for the correct cost center.

Click [icon] button to save ✅ Work center E&M_PH3 in plant 1305 was created

System will give a message in the message bar that your work center created as shown above.

5 BUSINESS PROCESS

5.1 PROCESS NAME

Create Characteristics

5.2 OVERVIEW

Philosophy of Characterization

Characteristics are used to store information on the attributes of an object (such as length, weight, basic material etc.). Although characteristics are typically used to describe physical traits of an object, there may be a business need to also characterize traits that do not pertain to the object directly. (EG. operating conditions).

In Plant maintenance characteristics will be used to define measuring point, to classify functional location and to classify equipment master.

Timing of Value Assignment for Characteristics

It is during creation of classes that values will be assigned to characteristics. Value assignment can take place at many various times in the process but there are implications involved with each possibility as detailed as follows:

- Values can be assigned when the "Characteristic" is created.

IMPLICATIONS: If values are assigned at the time the characteristic is created, then whenever the characteristic is allocated to a class it will already have these values attached. Since there are a lot of common characteristics (any dimensional ones) this means that each time one of these characteristics is used, it will have those same values.

- Values can be assigned to the characteristic when the characteristic is allocated to the class (class is created). It should be noted that the characteristic must be created before it can be allocated.

IMPLICATIONS: Characteristic values are specific to the class you are creating and or changing.

- Values can be assigned when you create a material. This is only available if the "Additional Values" flag is "on" in the characteristic.

IMPLICATIONS: If values (that are not on the allowable values list) are assigned to a characteristic when a material is created, they are not reflected in the characteristic itself. That is, if you look at the characteristic display in the classification system, you will not see this new value as an allowable value. The implication is that when a search for an object is done using the classification system, you will not see this value against the characteristic and hence will not know that a material exists with this different value.

5.3 PROCEDURAL STEPS

This scenario shows you how to create Characteristics in the SAP System

5.4 CREATE CHARACTERISTICS

Menu Path	SAP Menu → Logistics → Plant Maintenance → Management of Technical Objects → Environment → Classes → Master Data → Characteristics
Transaction Code	CT04
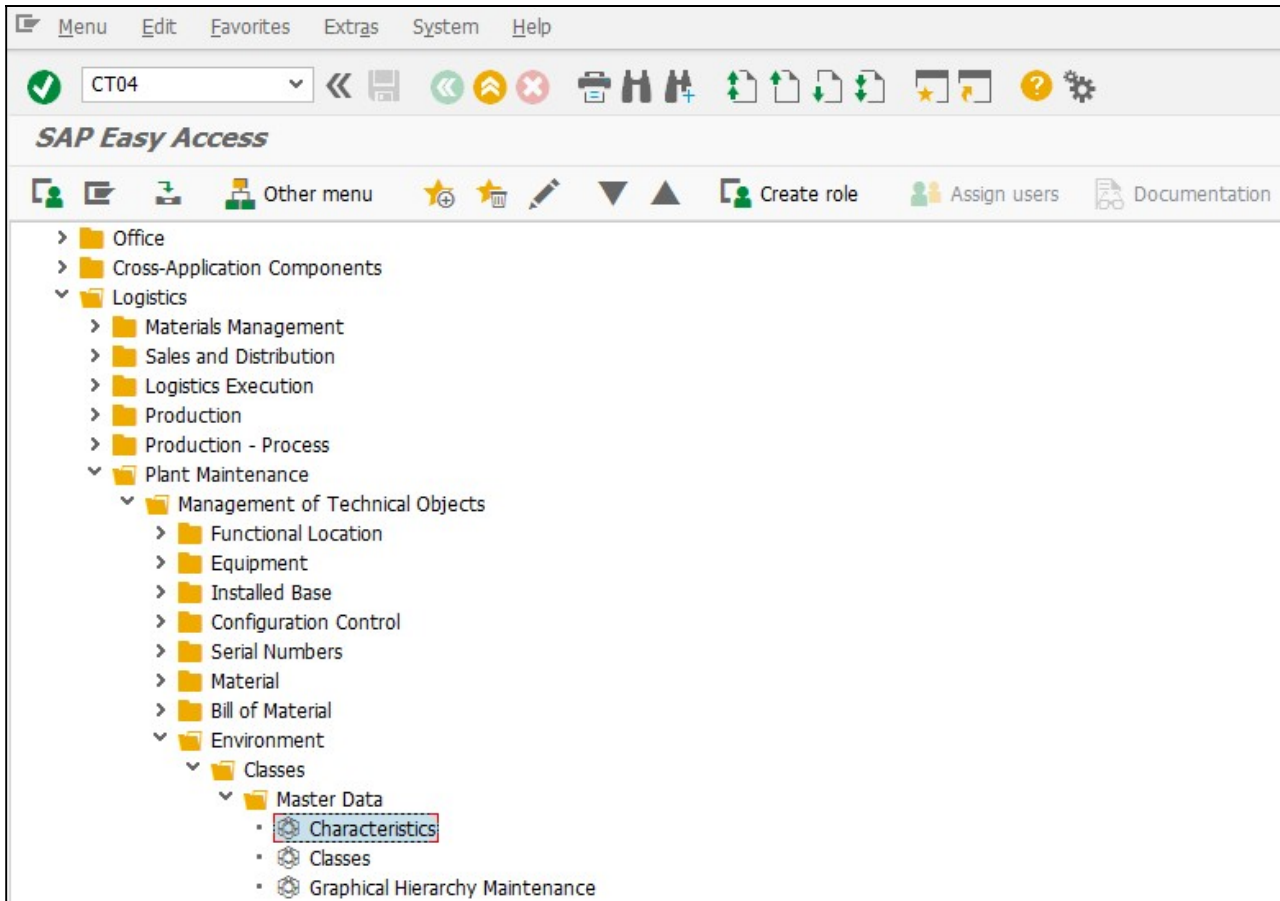
Characteristics management

After initial creation of characteristics, maintenance and changes are done.

- **Numbering of Characteristics -** There are no visible numbers assigned to characteristics so they are not identified in this way. The system does however assign an internal number to each characteristic which it uses for tracking and reporting purposes.
- **Data Type (Characteristic Value Format) -** The data type categorizes a characteristic and shows the format for entering characteristic values. There are different formats that can be used for characteristic values. These determine how entries must be made for the characteristic. The formats are as follows. Use the possible entries to select one of the following predefined data types (the abbreviations used in Customizing are shown in parentheses):

  Character format (CHAR): for characteristic values that consist of a character string
  Currency format (CURR): for characteristic values that are entered in a currency
  Date format (DATE): for characteristic values that represent a date
  Numeric format (NUM): for numeric characteristic values
  Time format (TIME): for characteristic values that represent a time
  User-defined data types: you can define these in characteristics management by choosing:
  " Extras -> More functions -> User-defined data type."
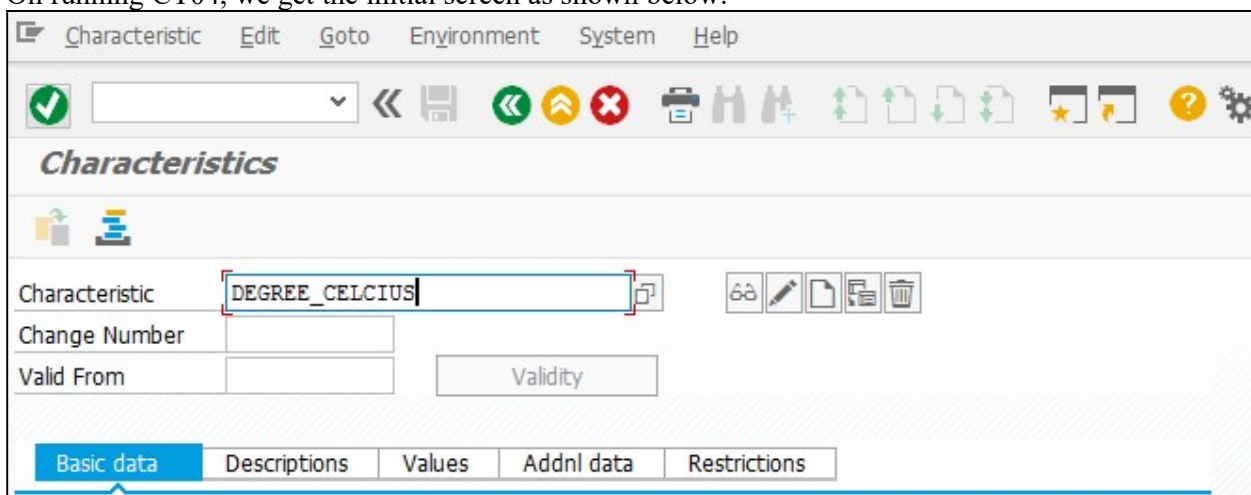- **Characteristic Name Format -** The Characteristic Name is the name which uniquely identifies the characteristic. When creating characteristic names it is important to remember a few things:
- It should be a concise and specific noun. (e.g. size, outside_diameter, etc.). The SAP field for characteristic name does not accept spaces or special characters with the exception of underscore(_). Thus for multiple word characteristics use underscores between the words (e.g. End_Connection).

You can enter the name in either upper or lower case or a combination of both, but the system will automatically convert them to all upper case letters.

- **Characteristic Text Format -** The Characteristic Text is the language dependent description of the characteristic.Copy from Characteristic
If the characteristic being created is similar to an existing characteristic, then the 'copy from' functionality will save time. You can choose which blocks of data to copy from the existing characteristic.

5.5   INPUT FIELDS

On running CT04, we get the initial screen as shown below:

Step No	Field Name	Description	User Action and Values
1	Characteristic	Name of the Characteristic	Enter meaningful name with no spaces. Separate sections of the name with underscores (_)

Click on create ⬜ button. Create Characteristics: Master Data screen is open.

Step No	Field Name	Description	User Action and Values
1	Description	Language dependent description	Enter description. Suggest using name of characteristic as description
2	Chars Group	Characteristic Group - Key (defined in config.) that facilitates look up by grouping similar characteristics	Select appropriate group from pull down list
3	Status	Current status of characteristic	Set to released when maintenance completed. Defaults to "In Process". Must be released to allocate to class
4	AuthGrp	Authorization group for characteristics maintenance	Set to released when maintenance completed
5	Data Type	Defines characteristic as numeric, character, time, etc.	Authorization must be defined in the user master record

6	Entry Required	Defines whether values must be assigned to a characteristic.	
7	Value Assignment	Indicator that determines whether only one or multiple values can be assigned to this characteristic.	

Characteristic   Edit   Goto   Extras   Environment   System   Help

Create Characteristic

Characteristic	DEGREE_CELCIUS
Change Number	
Valid From	06.02.2018 Validity

Basic data   Descriptions   **Values**   Addnl data   Restrictions

☐ Additional Values   Unit of Measure   °C   Other Value Check

Allowed Values

Char. Value	D	O	
25.00 °C	☐	☐	
90.00 °C	☐	☐	
150.00 °C	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	

Entry   1   of   3

Click on save [icon] button to save Characteristics   ✓ Characteristic DEGREE_CELCIUS saved

System will give a message in the message bar that your characteristics saved as shown above.

6   BUSINESS PROCESS

6.1   PROCESS NAME

Create Equipment BOM

6.2   OVERVIEW

This document describes the process of creating Equipment BOM.
The business object "Equipment BOM" is an organizational unit within Logistics that structures the
An Equipment BOM represents the components are fitted in the machinery or this may need while
executing maintenance activity (maintenance order). These component would be require getting issued
from store or procure from outside.

You define and manage each Equipment BOM in the Plant Maintenance (PM) component in a
separate master record. This is useful in maintaining technical structure and identifying maintenance
objects located to Equipment BOMs

6.3   PROCEDURAL STEPS

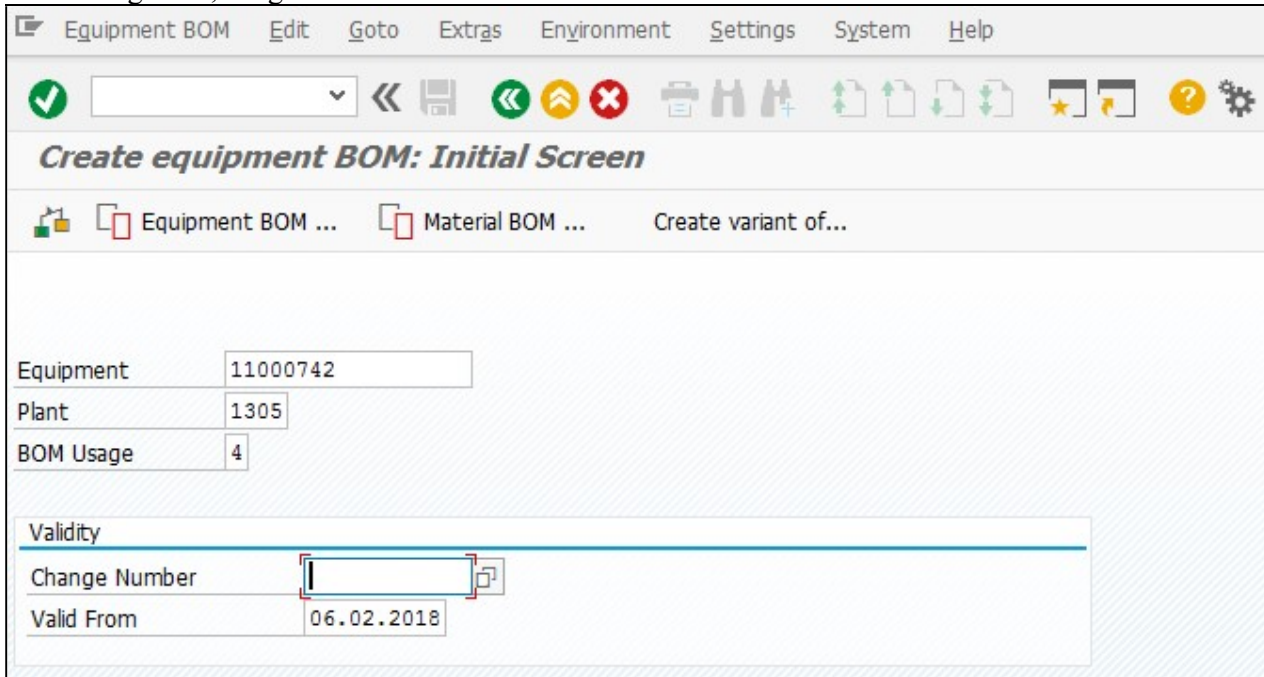This scenario shows you how to create Equipment BOM in the SAP System

6.4   CREATE EQUIPMENT BOM

Menu Path	SAP Menu → Logistics → Plant Maintenance → Management of Technical Objects → Bill of Materials → Equipment BOM → Create
Transaction Code	IB01
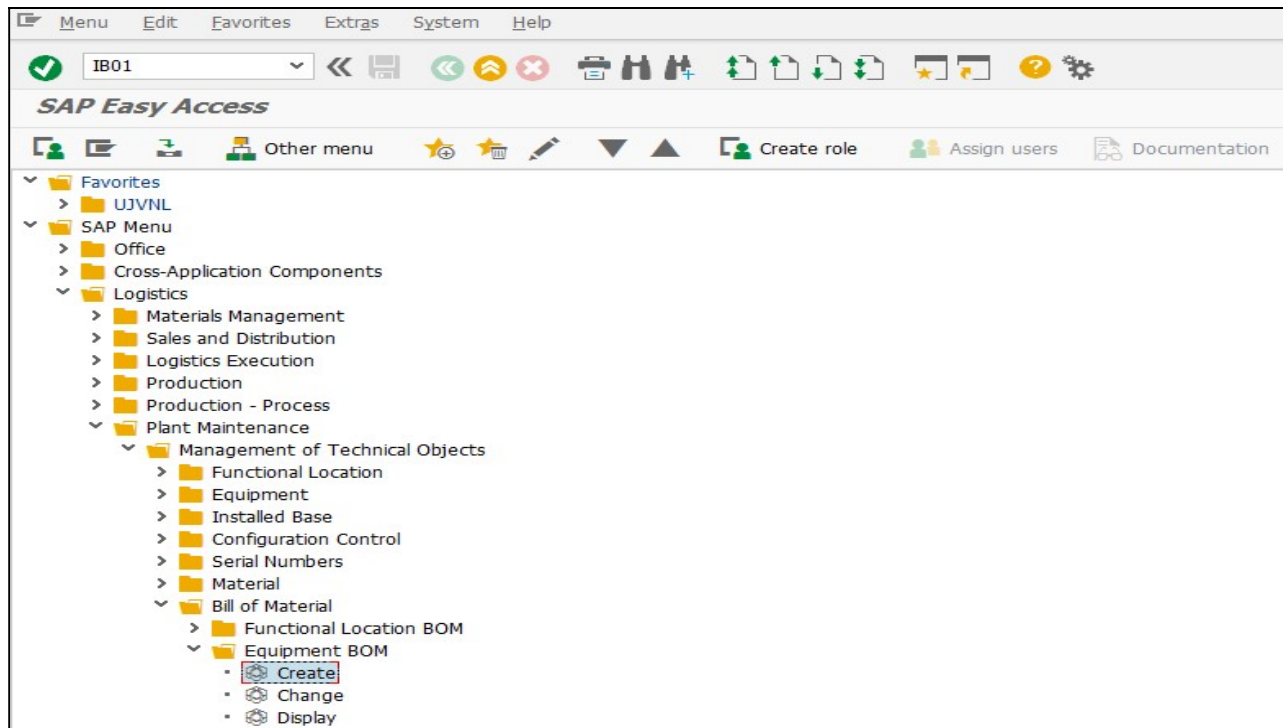
6.5 INPUT FIELDS

On running IB01, we get the initial screen as shown below:

Step No	Field Name	Description	User Action and Values
1	Equipment	Equipment Identification number	Enter Equipment number
2	Plant	Plant in which this BOM is valid	Enter plant 1305 If left blank, this becomes a group BOM. Be sure to enter a plant
3	BOM Usage	The business area in which this BOM is to be used (Production, Cost, Engineering, etc.)	Enter BOM usage category. For PM enter "4"
4	Valid From	Date from which change is effective	

Press "Enter" key or select "Enter" [✓] icon. Create Equipment BOM: Master Data screen is open.

Step No	Field Name	Description	User Action and Values
1	Item	Item number for this component	Automatically assigned by system. Renumber if necessary to resequence and / or insert new items
2	ICt	Item Category	Select appropriate code from drop down list. For stock : L
3	Component	material number	Enter material number
4	Quantity	Quantity of the component required to make the base quantity of the material	Enter the required quantity. Negative quantities indicate By-products or co-products.
5	Un	Unit of Measure	Defaults from Material master. Enter if different from base UOM.

Click ![save] button to save Equipment BOM   ✅ BOM created for equipment 11000742

System will give a message in the message bar that your Equipment BOM saved as shown above.

7 BUSINESS PROCESS

7.1 PROCESS NAME

Create Measuring Point

7.2 OVERVIEW

This document describes the process of creating Measuring Point.

If you want to use counter-based maintenance for a technical object or regularly check the condition of a technical object using measurement values, you must be able to take counter readings and enter measurement values for these objects. To perform these actions, you must name the location in the system at which you can enter measurement values or counter readings for the objects in question. These locations are called measuring points in the system, irrespective of whether they are used for entering measurement values or counter readings.

A counter is a means of representing the level of wear and tear, consumption, or reduction of useful life for a technical object. The counter can run forward or backward. It can be used to measure things like no of hours used, Kilometers, no of punching of a press etc.

7.3 PROCEDURAL STEPS

This scenario shows you how to create Measuring Point in the SAP System
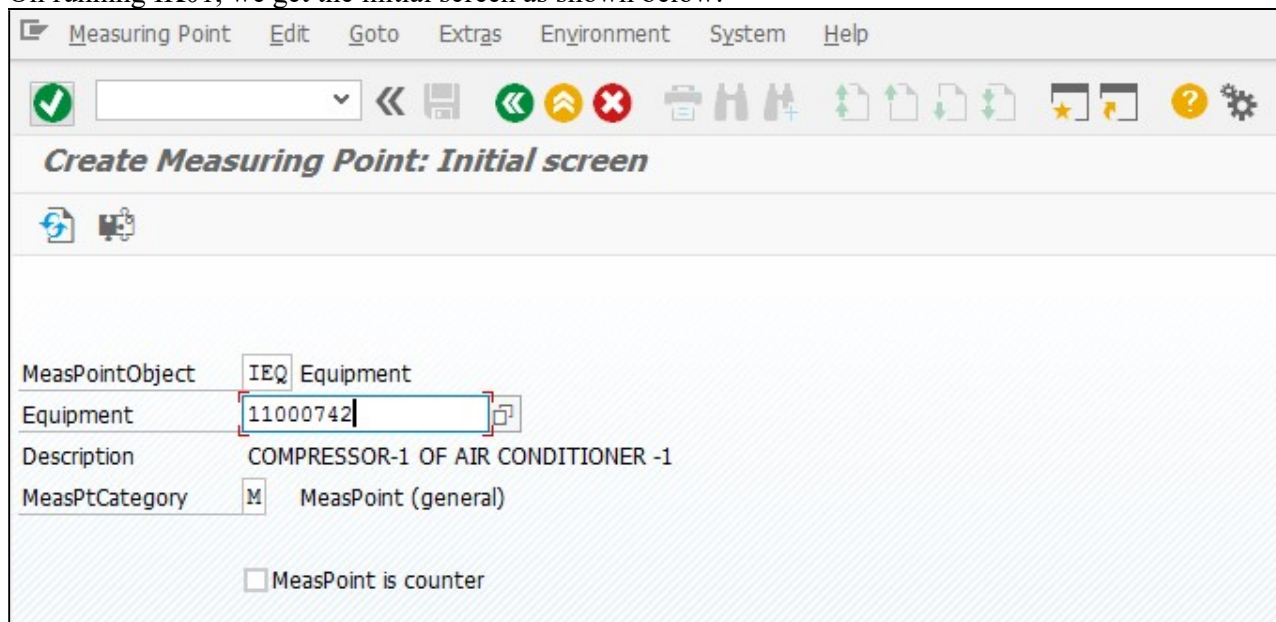
7.4 CREATE MEASURING POINT

Menu Path	SAP Menu → Logistics → Plant Maintenance → Management of Technical Objects → Environment → Measuring Point → Create
Transaction Code	IK01
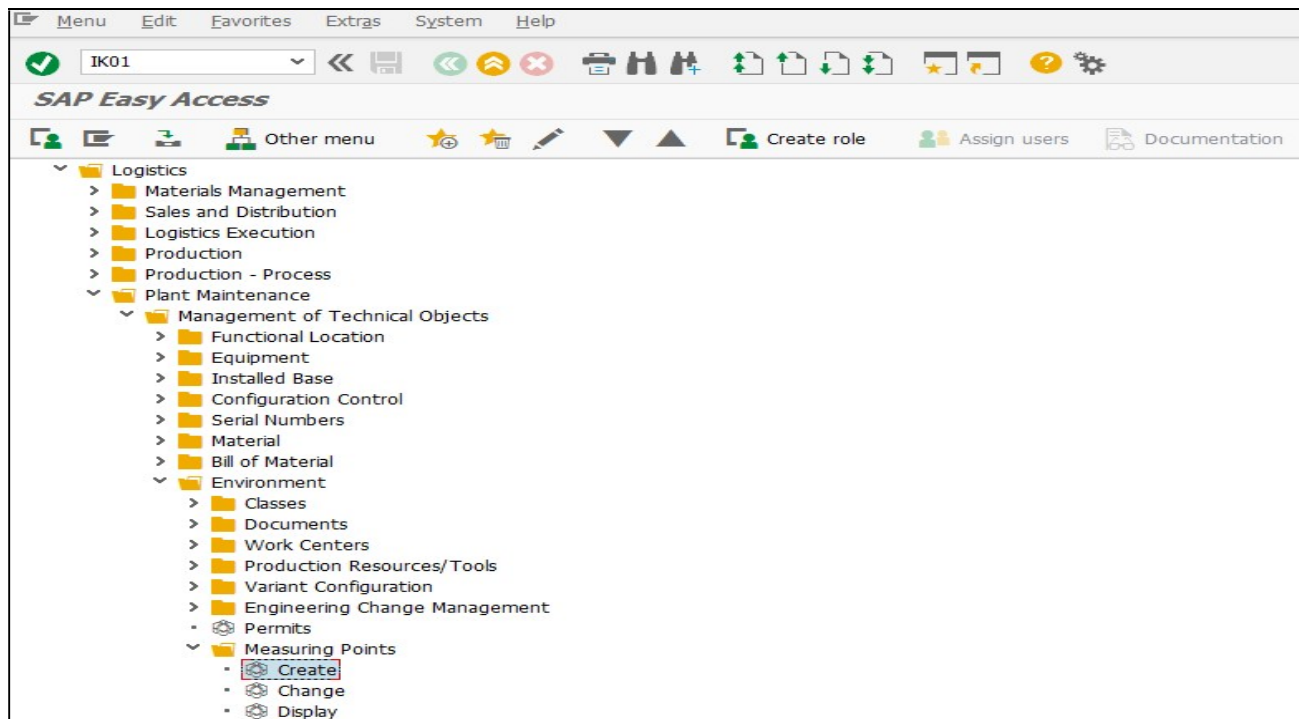
7.5 INPUT FIELDS

On running IK01, we get the initial screen as shown below:

Step No	Field Name	Description	User Action and Values
1	MeasPointObject	Measuring point object.	Enter Measuring point object. IEQ- for equipment
2	Equipment	Equipment number	Enter Equipment number 11000742
3	Description	Description	Short text description of the equipment is selected
4	MeasPt. Category	Identifies the category of the object that has the measuring point.	Enter M for general
5	MeasPoint is Counter	Indicates if the measuring point is a counter	

Press "Enter" key or select "Enter" icon ✓ .Create Measuring Point: Master Data screen is open

accenture

UJVNL

| Measuring Point | Edit | Goto | Extras | Environment | System | Help |

Create Measuring Point: General Data

Additional Data...   Last Measurement Document...

Measuring point   132   Cat. M MeasPoint (general)
MeasPosition   AIR CONDITIONING SYS
Description   COMPRESSOR-1 OF AIR CONDITIONER -1
Equipment   11000742
Description   COMPRESSOR-1 OF AIR CONDITIONER -1

General data
Characteristic   DEGREE_CELCIUS   Temperature
CharactUnit   °C   Degrees Celsius   ☐ MeasPoint is counter
Decimal places   2   FloatPointExp.
Code group   ☐ ValCode sufficient
Assembly
AuthorizGroup
MeasReadTransf.   ☐ Supported   Transfer of

Target value
Target value   95.00 °C
Text

Step No	Field Name	Description	User Action and Values
1	Meas. Position	Measuring Point's Position at equipment	Enter position code for The measuring point
2	Description	Description of Measuring Point's Position at equipment	Enter description
3	Characteristic	characteristics	Entre characteristics DEGREE_CELCIUS
4	Code group	Valuation codes for the measurement readings.	Enter valuation code
5	Target Value	Target value of measuring reading for smooth running of equipment.	Enter target value of reading 95
6	Text	Text for target value	
7	In case of counter CntrOverReadg	Measuring point overflow reading	
8	AnnualEstimate	Used with maintenance plans to calculate the maintenance intervals (counter-based maintenance). For a counter. Enter estimated annual miles, gallons, or hours. The cursor can be placed anywhere in the field to begin typing. The reading will be right justified during 'save'.	

Click on [Additional Data...] Button.

Step No	Field Name	Description	User Action and Values
1	Upper limit	Upper limit for reading where equipment can run	100
2	Lower limit	Upper limit for reading where equipment can run	90

Click [save icon] button to save Measuring Point   ✅ Measuring point 132 created

System will give a message in the message bar that your Measuring Point saved as shown above.

8   BUSINESS PROCESS

8.1   PROCESS NAME

Create Task list

8.2   OVERVIEW

This document describes the process of creating General task List.

8.3   PROCEDURAL STEPS

This scenario shows you how to create General Task List in the SAP System
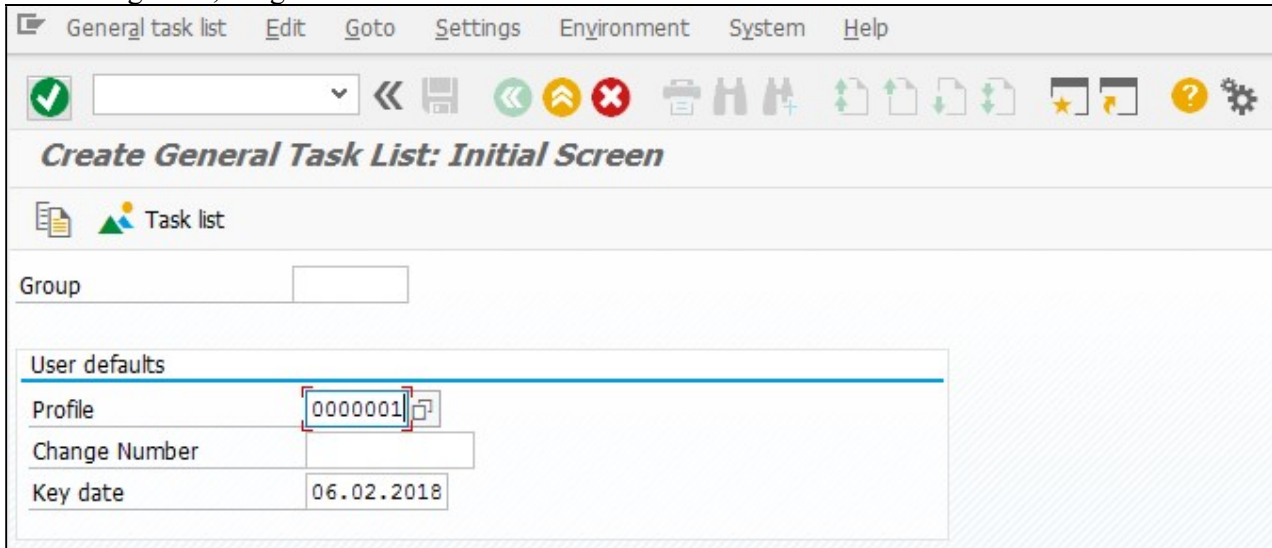
8.4   CREATE TASK LIST

Menu Path	SAP Menu → Logistics → Plant Maintenance → Preventive Maintenance → Maintenance Planning → Work Scheduling → Task Lists → General Maintenance Task List → Create
Transaction Code	IA05
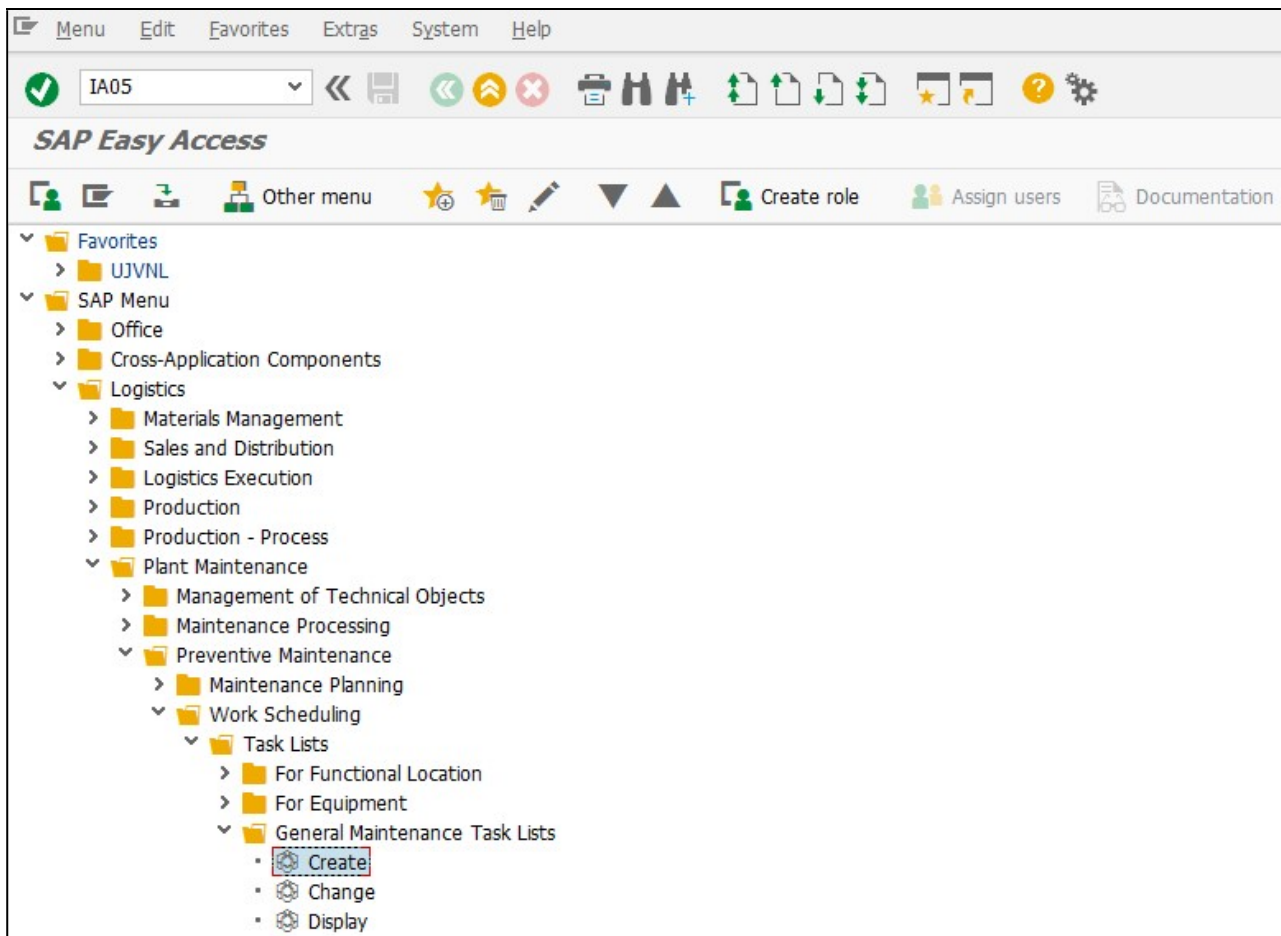
8.5   INPUT FIELDS

On running IA05, we get the initial screen as shown below:

Step No	Field Name	Description	User Action and Values
1	Group	Key identifying a task list group.	Leave blank
2	Profile	A profile is a collection of default values and settings for task list maintenance. You will need the information entered in the profile time and again when maintaining routings or standard networks.	
3	Change Number	Number used to uniquely identify a change master record.	
4	Key Dates	Date on which the standard task list is edited or displayed. All objects (for example, header or operation) that are valid on this key date are displayed.	Default Value

Press "Enter" key or select "Enter" icon . Create General Task List: Header General view screen is open

Step No	Field Name	Description	User Action and Values
1	Group	Key identifying a task list group.	System Generated number
2	Group Counter	This key and the task list group uniquely identify a standard task list.	System Generated number
3	Plant	Number uniquely identifying a plant.	Default Value
4	Work Center	Key identifying the work center.	Select from List
5	Usage	Key specifying the areas in which the standard task list can be used (for example, in production or plant maintenance).	Select from List
6	Planner Group	Key which identifies the planner group responsible for maintaining the standard task list.	Select from List

7	Status	You use the status key to indicate the processing status of a standard task list. For example, you can indicate whether the task list is still in the creation phase or has already been released.	Select from list
8	System Condition	Key for the system condition of an operational system	Select from List
9	MaintStrategy	Key identifying a preventive maintenance strategy	Select from list
10	Assembly	Number which uniquely identifies an assembly	Select from List
11	Deletion Flag	You use this indicator to specify that the task list will be deleted with a deletion program during the next archiving run if you selected deletion flags as a selection criterion for the archiving run. You can reset the deletion flag anytime before the next archiving run.	Check Box

Step No	Field Name	Description	User Action and Values
1	Act	Number that identifies an activity.	System generated
2	SbOp	Number which identifies the sub-operation of an operation.	Insert operation if required
3	Work ctr	Key identifying the work center.	Defaults from previous screen

4	Ctrl	Key specifying the business transactions to be carried out for the respective object of a standard task list or an order, such as scheduling or costing.	Select from list
5	Description	First line of the descriptive text.	Enter meaningful operation
6	LTx	Long Text	Check Box Indicates long text exists
7	Work	Amount of work involved in carrying out the activity.	Numeric entry
8	Un.	Unit for work	Select from list
9	No	Number of the capacity required of the capacity category to carry out the operation.	Numeric entry
10	Duratn	The normal duration required to carry out the activity.	Numeric entry
11	Un.	Unit for work	Select from list
12	Calc	Calculation key for duration, work or number of required capacities in the activity.	Select from list
13	Fct	Number of times the processing of an operation or sub-operation is repeated during order processing.	Numeric input
14	Std txt	Key which identifies text that is frequently used to describe processes (for example, turning or milling).	Select from list
15	C	Key for the system condition of an operational system	Select from list

Click [save icon] button to save Task List [✓ General task list 23 saved]
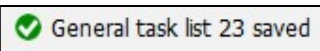
System will give a message in the message bar that your Task List saved as shown above.

9 BUSINESS PROCESS

9.1 PROCESS NAME

Create Single Cycle Maintenance Plan

9.2 OVERVIEW

This document describes the process of creating Single Cycle Maintenance Plan.

To plan maintenance events to occur in a regular, periodic manner based on one cycle parameter. Maintenance plans merge the records of specific strategies, task lists, items and measuring points (when necessary) to generate a recurring maintenance schedule for the resultant orders which are copied from the task lists. In addition, they can be used for condition-based maintenance which can generate notifications or orders based on pre-established performance parameters. There can be multiple maintenance items in a maintenance plan. A separate order/Notification will be generated from the plan for each item.

9.3 PROCEDURAL STEPS

This scenario shows you how to create Single Cycle Maintenance Plan in the SAP System

9.4 CREATE MAINTENANCE PLAN

Menu Path	SAP Menu → Logistics → Plant Maintenance → Preventive Maintenance → Maintenance Planning → Maintenance Plans → Create → Single cycle plan
Transaction Code	IP41
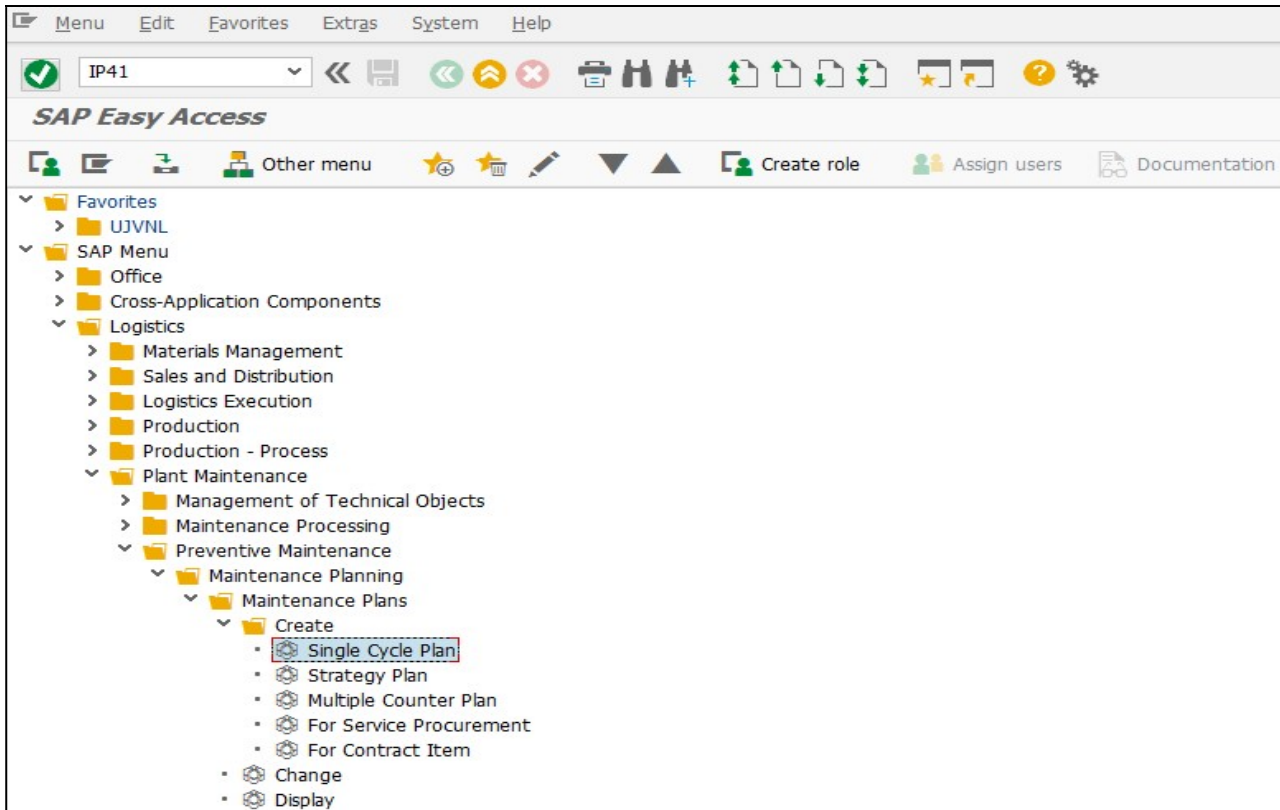
9.5   INPUT FIELDS

On running IP41, we get the initial screen as shown below:

| Maintenance plan | Edit | Goto | Extras | Environment | System | Help |

Create Maintenance Plan: Initial

Maintenance plan [   ]

Maint. plan cat. [PM Preventive Maintenance ▼]

Step No	Field Name	Description	User Action and Values
1	Maintenance plan	The number assigned to this maintenance plan to locate it within SAP	Unless external number assignment is being used, this field will be automatically filled in when the record is saved. Internal Numbering
2	Maint. plan cat	Determines what document will be created by the maintenance call	Select the maintenance plan category. Choices are orders, notifications.

Press "Enter" key or select "Enter" icon ✅ . Create Create Maintenance Plan: Single Cycle Plan Master Data screen will open

| Maintenance plan | Edit | Goto | Extras | Environment | System | Help |

Create Maintenance Plan: Single cycle plan

Maintenance plan [   ] [Preventive Maintenance of Compressor]

▸ Maint. plan hea...

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

Cycle/Unit   [30] DAY
Cycle text   [Monthly   ]
Offset/Unit   [0] DAY

Counter   [   ] 🔍 ℹ

Step No	Field Name	Description	User Action and Values
1	Maintenance plan	A concise description in the header for the maintenance plan	Enter a description of the plan.
2	Cycle/Unit	The cycle length or frequency which the plan will be based on. A basic label to describe the numeric data in a field	Enter a number for the cycle length and select a unit of measure
3	Cycle text	A concise description of the cycle	Add a free text description
4	Offset/unit	A one-time waiting period before starting the cycle length of the package	Enter a number to be multiplied by the strategy unit, which the plan will wait before the first order will be automatically called
5	Counter	A performance monitoring gauge attached/linked to a piece of equipment or functional location	Enter a counter number which is linked to the reference object.
6	FunctLocation	Functional Location Identifier of technical object assigned to plan	Enter Functional Object Identifier
7	Equipment	Equipment Identifier of technical object assigned to plan	Enter Equipment Identifier
8	Assembly	Assembly Identifier of technical object assigned to plan	Enter Assembly Identifier
9	Planning plant	Identifier for Plant where technical objects and planning object are defined	Enter Planning Plant if different from default from technical object
10	Planner group	Identifier for persons responsible for maintaining plan profiles	Enter Planner Group if different from default from technical object

11	Order type	Identifier for Order type. Different order types may have different options	Enter Order Type if different from default from technical object
12	MaintActivityType	Identifier for Maintenance Activity Type	Enter Maintenance Activity Type if different from default from technical object
13	Main WorkCtr	Identifier for Work Center which has responsibility for maintenance of technical object	Enter Main Work Center if different from default from technical object
14	(Main WorkCtr) / Plant	Identifier for Plant that Main Work Center is assigned to	Enter Main Work Center Plant if different from default from technical object
15	Business area	Identifier for Business Area organizational unit	Enter Business Area if different from default from technical object
16	Priority	Importance level for processing	Enter Priority if different from default from technical object
17	Task list / General task list	Section Header	Select the Task List to be assigned to orders via this plan
18	Object list item	Tab Strip	Used to assign multiple technical objects to the plan
19	Item Location	Tab Strip	Displays location information of technical objects

Step No	Field Name	Description	User Action and Values
1	Maintenance plan scheduling parameters	Tab Strip	
2	SF later confirmation	Modifies future scheduled call dates by the indicated percentage should the completion of the original call date is late by more than the tolerance	Accept the default or modify
3	Tolerance (+)	The percentage work can be completed in advance of the scheduled call date and not change shift the call dates of future work	Accept the default or modify
4	SF earlier confirmation	Modifies future scheduled call dates by the indicated percentage should the completion of the original call date be earlier by more than the tolerance	Accept the default or modify
5	Tolerance (-)	The percentage work can be completed after the scheduled call date and not change shift the call dates of future work	Accept the default or modify
6	Cycle modification factor	Used in maintenance plans, it allows the planner the ability to multiply cycle length of all the packages used in the plan by a certain factor to n the maintenance show up more or less frequently.	Accept the default or modify
7	Call horizon	Call horizon is how much of the cycle length you want to wait before S creates the next order automatically	Accept the default or modify
8	Scheduling P	Used to determine the length of time for which the system creates maintenance calls during scheduling of a maintenance plan.	Accept the default or modify
9	Requires confirmation	The next call is generated only when the previous one has been closed.	Put a check in the box if this is desired.
10	Time	A maintenance strategy based on the 12-month calendar. Ex: A 30-day maintenance package will be due every 30 days, 7/1, 7/31, 8/29, etc	Accept the default or modify. Used with time based plans
11	Time-key date	A maintenance strategy based on the 12-month calendar, which allows the planner to select a specific date the maintenance will be performed on, regardless of the day of the week. Ex: every 20th of the month.	Accept the default or modify. Used with time based plans
12	Time-factory caldr	A maintenance strategy based on the 12 months calendar which only takes working days into consideration. Ex: A 30-day maintenance package will have maintenance due ever 30 working days (usually 6 calendar weeks)	Accept the default or modify. Used with time based plans

Click ⊞ button to save Maintenance Plan ✅ Maintenance plan 100000000020 created
System will give a message in the message bar that your Maintenance Plan created as shown above.

10 GLOSSARY

Activities	Components of a SAP Network that describe the work that needs to be completed in support of a project
CO	Controlling "module" in SAP – Controlling provides you with cost information for management decision-making
Company code	SAP term for legal entity for which a complete self-contained set of accounts can be drawn up for external statutory reporting
Controlling Area	SAP organization element used to cover those company codes that share common cost accounting principles and processes
Cost Element	Cost elements classify an organization's valuated consumption of production factors within a controlling area. A cost element corresponds to a cost-relevant item in the chart of accounts.
Network	SAP term for a group of activities that represent the sequence of activities (or single activity) within a project
Plant	In Logistics, a plant is an organizational unit for dividing an enterprise according to production, procurement, maintenance, and materials planning. A place where materials are produced, or goods and services are provided.
PO	Purchase Order
Profit Centre	A profit center is a SAP organizational unit in accounting that reflects a management-oriented structure of the organization for internal Management Accounting controls
Project definition	The SAP term for a binding framework covering all organizational elements created within a project
PS	Project Systems - a "module" within the SAP-ERP central component (ECC) that handles projects
SAP	Systems, Applications and Products (in data processing) The name of the software vendor selected to provide the base application for Project STA
SAP ERP Central Component (ECC)	The "brand" name of the SAP application that delivers integrated business solutions. This solution contains a breadth of applications that support both specific industries and functional departments. This solution is broken into a series of logically defined modules (e.g. PS or Finance) each consisting of a series of components
WBS	Work breakdown structure - a work breakdown structure is a model of the work to be performed in a project organized in a hierarchical structure. Specifically, in SAP terminology WBS are master data elements used in PS to structure and collect costs on projects

11 APPENDIX

11.1 T - CODES FOR REOPRTS

T-Code	Description
IH01	Functional Location Structure
IH04	Equipment Structure
IH06	Functional Location List Display
IH08	Equipment List Display
IK07	Measuring Point List Display
IK08	Measuring Point List Change
IA08	Tasklist List Change
IA09	Tasklist List Display
IP15	Maintenance Plan List Change
IP16	Maintenance Plan List Display

11.2 T - CODES FOR PM

T-Code	Description
IL01	Create Functional Location
IL02	Change Functional Location
IL03	Display Functional Location
IE01	Create Equipment
IE02	Change Equipment
IE03	Display Equipment
IR01	Create Work Center
IR02	Change Work Center
IR03	Display Work Center
CT04	Create/Change/Display Characteristics
IB01	Create Equipment BOM
IB02	Change Equipment BOM
IB03	Display Equipment BOM
IB11	Create Functional Location BOM
IB12	Change Functional Location BOM
IB13	Display Functional Location BOM
CS01	Create Material BOM
CS02	Change Material BOM
CS03	Display Material BOM
IK01	Create Measuring Point
IK02	Change Measuring Point
IK03	Display Measuring Point
IA05	Create General Tasklist
IA06	Change General Tasklist
IA07	Display General Tasklist
IP41	Create Maintenance Plan (Single Cycle)
IP02	Change Maintenance Plan
IP03	Display Maintenance Plan