Critical manufacturing
an ASM PT company

Creating a Model

11.2

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Creating a Model

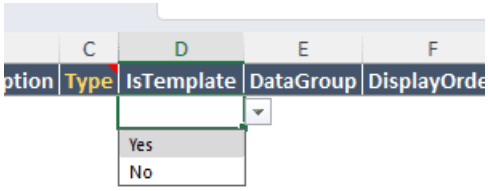
In this tutorial you will learn by example as we show you how to load different **Maintenance Plans** into Critical Manufacturing MES using **Master Data Packages**. Let's start by filling in the model in the Excel file and then load it into the system.

Modeling Sequence

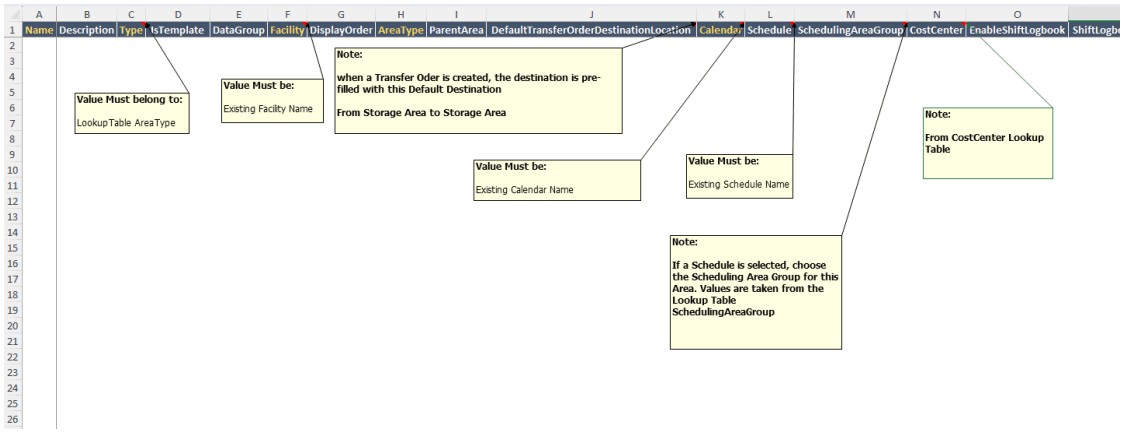
As discussed before, it is vital to maintain an appropriate modeling sequence to prevent precedence errors. Let's start by filling the properties for the entities, following the proper sequence. See Modeling Sequence for more information.

Note

Whenever you are filling cells that have specific enumeration options, those options will be shown in the form of a dropdown selection box to prevent typing errors.



There are also comments in most of the columns (that, if you recall, represent the entity properties) to help you with information as well as an indication of whether the properties are mandatory.



Roles

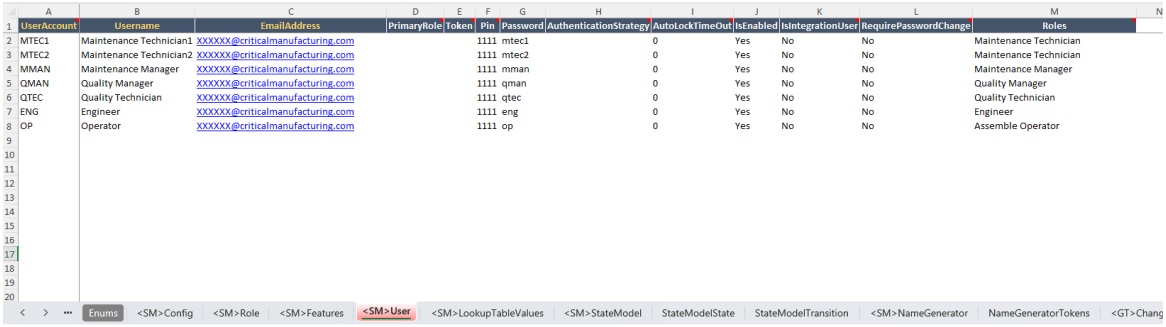
First, let's create different **Roles** for the operators of the **Maintenance Plans**.

Name	Description	AutoLockTimeOut	DistributionList	IsActiveDirectoryGroup	IsScope	ChildRoles
Maintenance Manager		0				
Maintenance Technician		0				Maintenance Manager
Quality Manager		0				
Quality Technician		0				Quality Manager
Engineer		0				
Operator		0				

> **Info**
>
> For more information, see Security.

Users

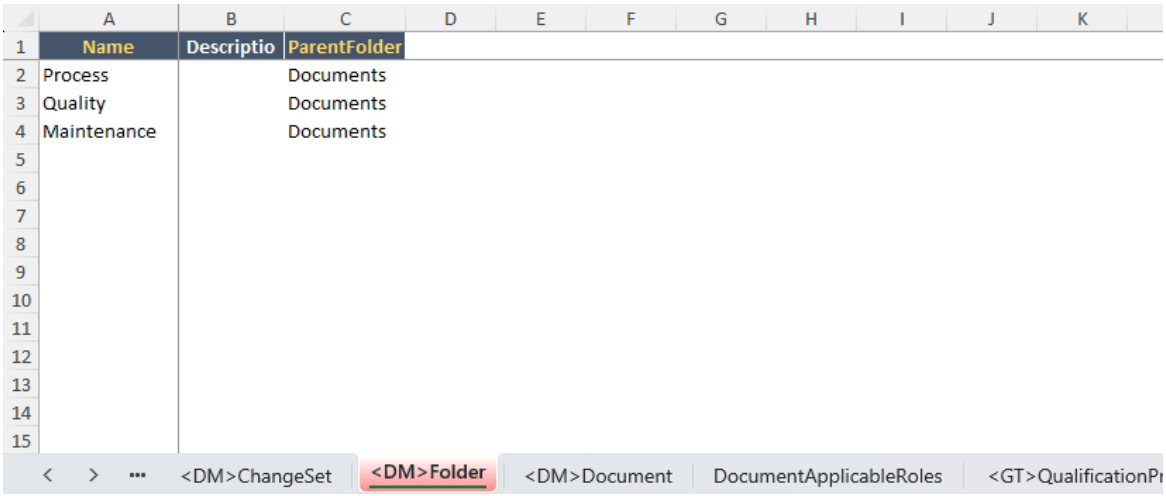
Following the rules of precedence, you can then use these same **Roles** in the **Users** sheet.



UserAccount	Username	EmailAddress	PrimaryRole	Token	Pin	Password	AuthenticationStrategy	AutoLockTimeOut	IsEnabled	IsIntegrationUser	RequirePasswordChange	Roles
MTEC1	Maintenance Technician1	XXXXXX@criticalmanufacturing.com			1111	mtec1		0	Yes	No	No	Maintenance Technician
MTEC2	Maintenance Technician2	XXXXXX@criticalmanufacturing.com			1111	mtec2		0	Yes	No	No	Maintenance Technician
MMAN	Maintenance Manager	XXXXXX@criticalmanufacturing.com			1111	mman		0	Yes	No	No	Maintenance Manager
QMAN	Quality Manager	XXXXXX@criticalmanufacturing.com			1111	qman		0	Yes	No	No	Quality Manager
QTEC	Quality Technician	XXXXXX@criticalmanufacturing.com			1111	qtec		0	Yes	No	No	Quality Technician
ENG	Engineer	XXXXXX@criticalmanufacturing.com			1111	eng		0	Yes	No	No	Engineer
OP	Operator	XXXXXX@criticalmanufacturing.com			1111	op		0	Yes	No	No	Assemble Operator

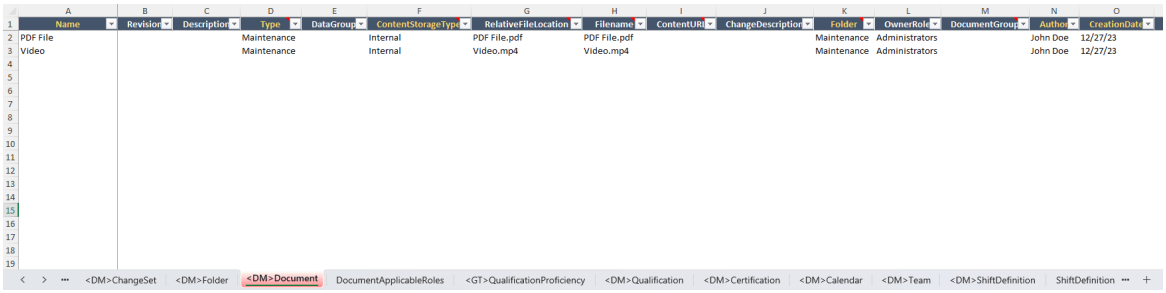
Documents and Folders

Let's add **Documents** (that you will later upload) to show on the **Maintenance Plans** as information files for the actual Maintenance process. First we need to create **Folders** where the **Documents** will be stored in the MES.



Name	Descriptio	ParentFolder
Process		Documents
Quality		Documents
Maintenance		Documents

Moving to the **Document** tab, the filename must match the names of the documents in the `.zip` file that you are going to load into the system.



Name	Revision	Description	Type	DataGroup	ContentStorageType	RelativeFileLocation	Filename	ContentURI	ChangeDescription	Folder	OwnerRole	DocumentGroup	Author	CreationDate
PDF File			Maintenance		Internal	PDF File.pdf	PDF File.pdf			Maintenance	Administrators		John Doe	12/27/23
Video			Maintenance		Internal	Video.mp4	Video.mp4			Maintenance	Administrators		John Doe	12/27/23

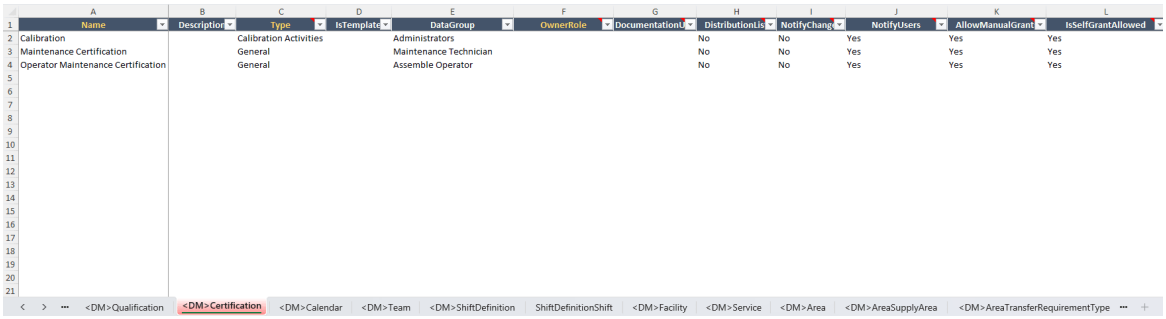
<DM>ChangeSet | <DM>Folder | <DM>Document | DocumentApplicableRoles | <GT>QualificationProficiency | <DM>Qualification | <DM>Certification | <DM>Calendar | <DM>Team | <DM>ShiftDefinition | ShiftDefinition

Info

For more information, see Document.

Certifications

Now, let's create **Certifications** to ensure that employees with the proper knowledge are used for the Maintenance procedures. These **Certifications** are used in the Personnel Requirements of the Resource and are validated when executing the **Maintenance Plans**.



Name	Description	Type	IsTemplate	DataGroup	OwnerRole	DocumentationU	DistributionLis	NotifyChange	NotifyUsers	AllowManualGrant	IsSelfGrantAllowed
Calibration		Calibration Activities		Administrators			No	No	Yes	Yes	Yes
Maintenance Certification		General		Maintenance Technician			No	No	Yes	Yes	Yes
Operator Maintenance Certification		General		Assemble Operator			No	No	Yes	Yes	Yes

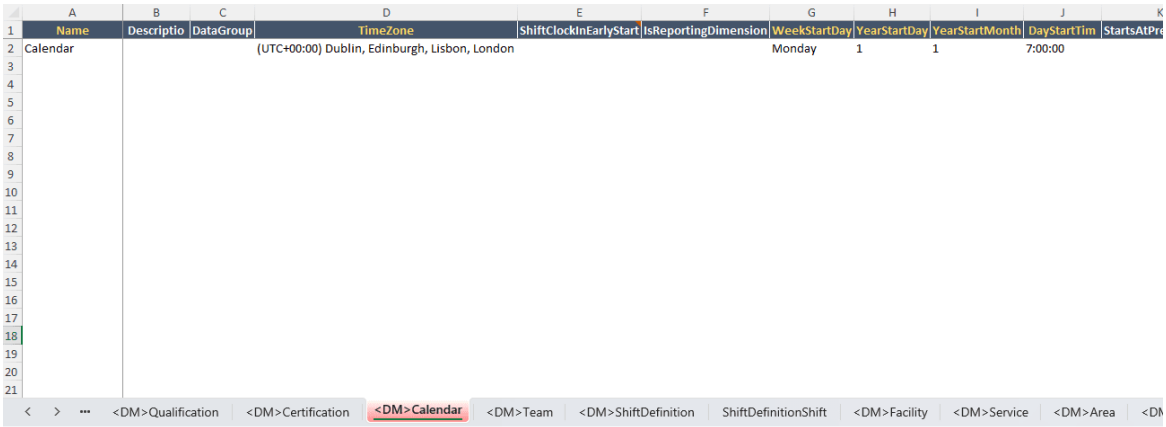
<DM>Qualification | <DM>Certification | <DM>Calendar | <DM>Team | <DM>ShiftDefinition | ShiftDefinitionShift | <DM>Facility | <DM>Service | <DM>Area | <DM>AreaSupplyArea | <DM>AreaTransferRequirementType

Info

For more information on **Certifications**, see Certification.

Calendar

Let's continue focusing on the modeling sequence precedence, which dictates that you must create a **Calendar** before you can create the rest of the entities that depend on it.



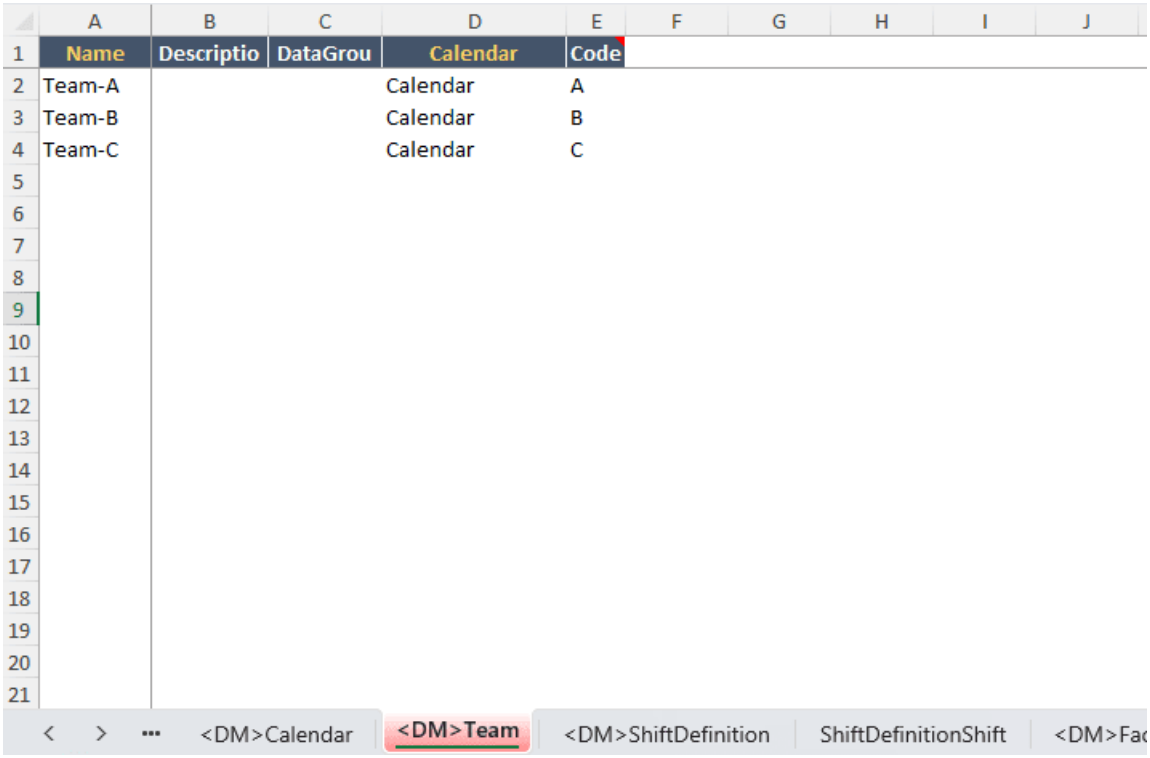
Name	Descriptio	DataGroup	TimeZone	ShiftClockInEarlyStart	IsReportingDimension	WeekStartDay	YearStartDay	YearStartMonth	DayStartTim	StartsAtPre
Calendar			(UTC+00:00) Dublin, Edinburgh, Lisbon, London			Monday	1	1	7:00:00	

<DM>Qualification | <DM>Certification | <DM>Calendar | <DM>Team | <DM>ShiftDefinition | ShiftDefinitionShift | <DM>Facility | <DM>Service | <DM>Area | <DM

> **Info**
>
> For more information, see Calendar.

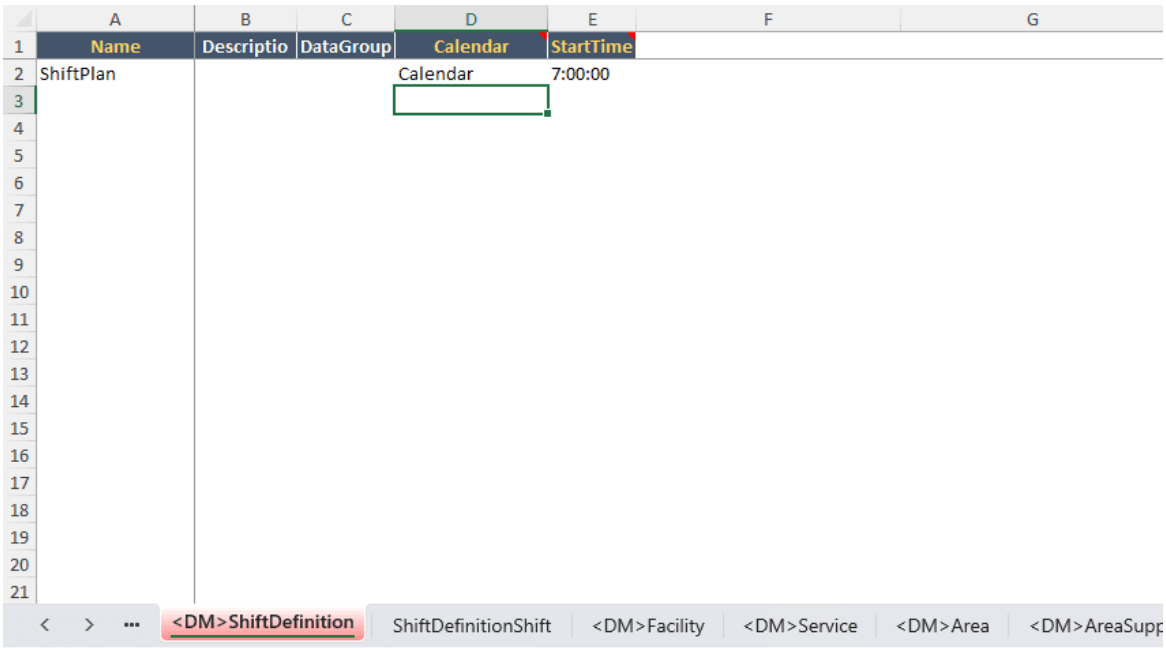
Teams and Shift Definitions

In this case there are several entities that you need to create. Let's start with **Teams** and **Shift Definitions**.



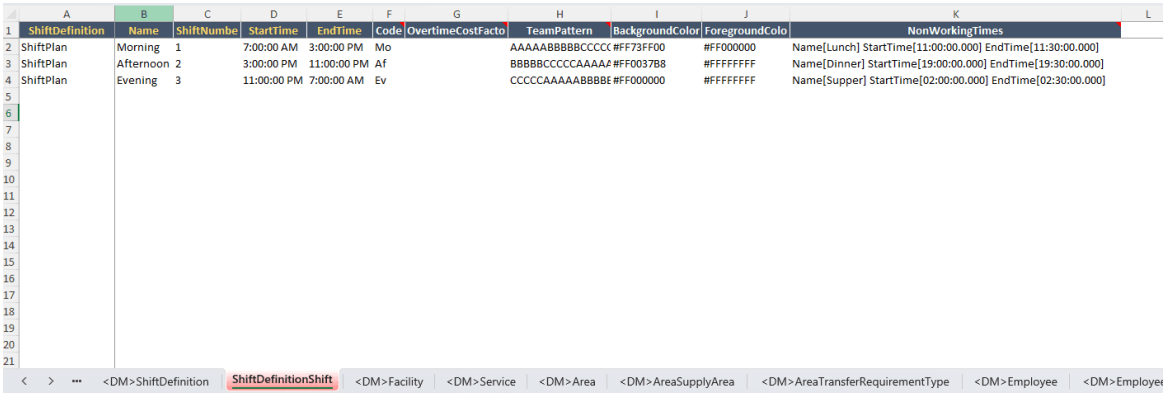
	A	B	C	D	E
1	Name	Descriptio	DataGrou	Calendar	Code
2	Team-A			Calendar	A
3	Team-B			Calendar	B
4	Team-C			Calendar	C

<DM>Calendar | <DM>Team | <DM>ShiftDefinition | ShiftDefinitionShift | <DM>Fac



	A	B	C	D	E
1	Name	Descriptio	DataGroup	Calendar	StartTime
2	ShiftPlan			Calendar	7:00:00
3					

<DM>ShiftDefinition | ShiftDefinitionShift | <DM>Facility | <DM>Service | <DM>Area | <DM>AreaSupp



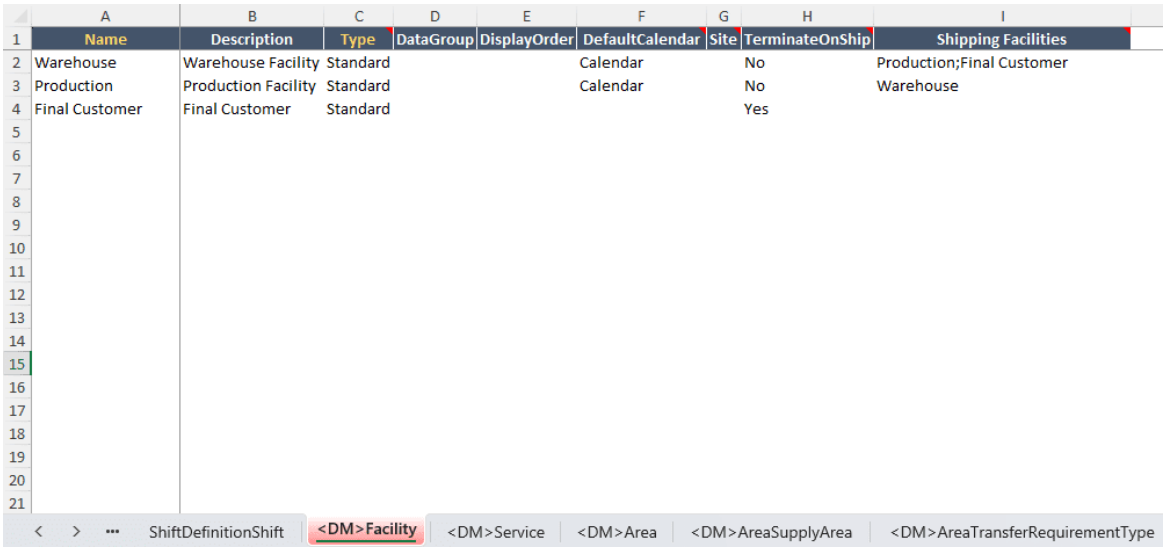
ShiftDefinition	Name	ShiftNumbe	StartTime	EndTime	Code	OvertimeCostFacto	TeamPattern	BackgroundColor	ForegroundColo	NonWorkingTimes
ShiftPlan	Morning	1	7:00:00 AM	3:00:00 PM	Mo		AAAAABBBBBCCCCC	#FF73FF00	#FF000000	Name[Lunch] StartTime[11:00:00.000] EndTime[11:30:00.000]
ShiftPlan	Afternoon	2	3:00:00 PM	11:00:00 PM	Af		BBBBBCCCCCAAAAA	#FF0037B8	#FFFFFFFF	Name[Dinner] StartTime[19:00:00.000] EndTime[19:30:00.000]
ShiftPlan	Evening	3	11:00:00 PM	7:00:00 AM	Ev		CCCCCAAAAABBBBB	#FF000000	#FFFFFFFF	Name[Supper] StartTime[02:00:00.000] EndTime[02:30:00.000]

Info

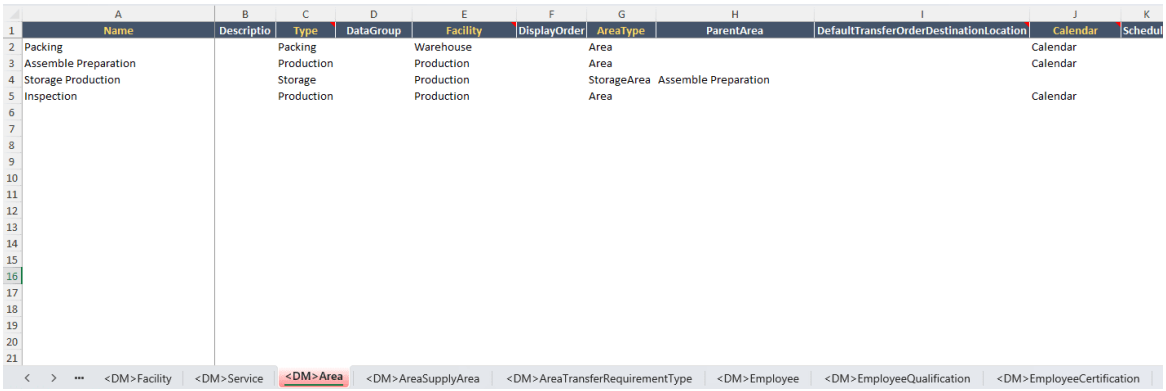
For more information, see Shift Definition.

Facilities and Areas

And let's continue with **Facilities** and **Areas**. Remember that the creation of the **Facility** takes precedence over the creation of the **Areas** and the other entities.



Name	Description	Type	DataGroup	DisplayOrder	DefaultCalendar	Site	TerminateOnShip	Shipping Facilities
Warehouse	Warehouse Facility	Standard			Calendar		No	Production;Final Customer
Production	Production Facility	Standard			Calendar		No	Warehouse
Final Customer	Final Customer	Standard					Yes	

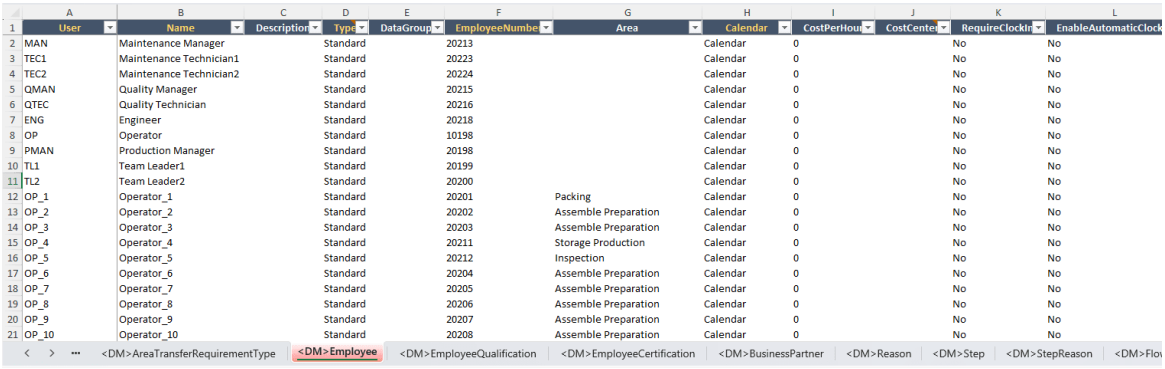


Name	Descriptio	Type	DataGroup	Facility	DisplayOrder	AreaType	ParentArea	DefaultTransferOrderDestinationLocation	Calendar	Schedul
Packing		Packing		Warehouse		Area			Calendar	
Assemble Preparation		Production		Production		Area			Calendar	
Storage Production		Storage		Production		StorageArea	Assemble Preparation			
Inspection		Production		Production		Area			Calendar	

> **Info**
>
> For more information, see Facility and Area.

Employees

In the **Employee** sheet, define the **Calendar** and the **Area** for each **Employee**. Since the Employee Number is a mandatory field, you must use unique values for different employees, which should be a fairly typical situation in most production environments.

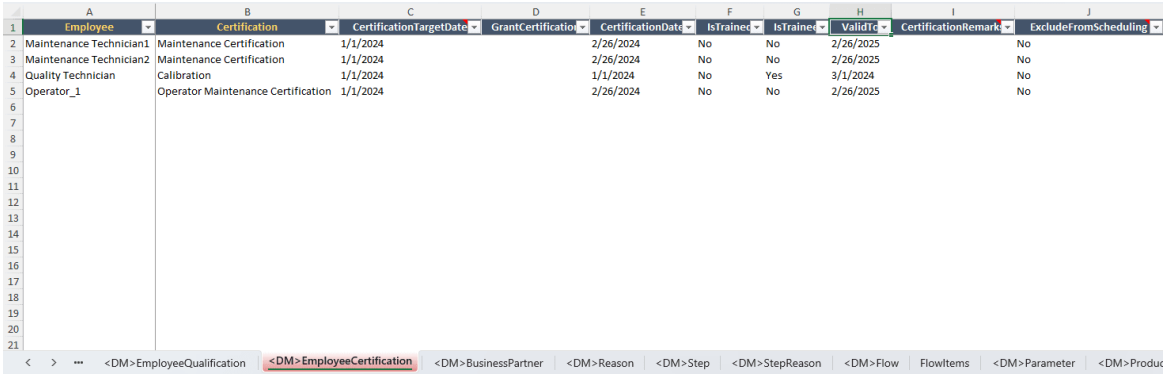


	A	B	C	D	E	F	G	H	I	J	K	L
1	User	Name	Description	Type	DataGroup	EmployeeNumbe	Area	Calendar	CostPerHour	CostCente	RequireClockin	EnableAutomaticClock
2	MAN	Maintenance Manager		Standard		20213		Calendar	0		No	No
3	TEC1	Maintenance Technician1		Standard		20223		Calendar	0		No	No
4	TEC2	Maintenance Technician2		Standard		20224		Calendar	0		No	No
5	QMAN	Quality Manager		Standard		20215		Calendar	0		No	No
6	QTEC	Quality Technician		Standard		20216		Calendar	0		No	No
7	ENG	Engineer		Standard		20218		Calendar	0		No	No
8	OP	Operator		Standard		10198		Calendar	0		No	No
9	PMAN	Production Manager		Standard		20198		Calendar	0		No	No
10	TL1	Team Leader1		Standard		20199		Calendar	0		No	No
11	TL2	Team Leader2		Standard		20200		Calendar	0		No	No
12	OP_1	Operator_1		Standard		20201	Packing	Calendar	0		No	No
13	OP_2	Operator_2		Standard		20202	Assemble Preparation	Calendar	0		No	No
14	OP_3	Operator_3		Standard		20203	Assemble Preparation	Calendar	0		No	No
15	OP_4	Operator_4		Standard		20211	Storage Production	Calendar	0		No	No
16	OP_5	Operator_5		Standard		20212	Inspection	Calendar	0		No	No
17	OP_6	Operator_6		Standard		20204	Assemble Preparation	Calendar	0		No	No
18	OP_7	Operator_7		Standard		20205	Assemble Preparation	Calendar	0		No	No
19	OP_8	Operator_8		Standard		20206	Assemble Preparation	Calendar	0		No	No
20	OP_9	Operator_9		Standard		20207	Assemble Preparation	Calendar	0		No	No
21	OP_10	Operator_10		Standard		20208	Assemble Preparation	Calendar	0		No	No

> **Info**
>
> For more information on **Employees**, see Employee.

Personnel Requirements

For Personnel Requirements, use the **Certification** entities created above and fill in the information for each **Certification** in the **EmployeeCertification** sheet.



	A	B	C	D	E	F	G	H	I	J
1	Employee	Certification	CertificationTargetDate	GrantCertificatio	CertificationDate	IsTrained	IsTrainee	ValidTo	CertificationRemark	ExcludeFromScheduling
2	Maintenance Technician1	Maintenance Certification	1/1/2024		2/26/2024	No	No	2/26/2025		No
3	Maintenance Technician2	Maintenance Certification	1/1/2024		2/26/2024	No	No	2/26/2025		No
4	Quality Technician	Calibration	1/1/2024		1/1/2024	No	Yes	3/1/2024		No
5	Operator_1	Operator Maintenance Certification	1/1/2024		2/26/2024	No	No	2/26/2025		No

> **Info**
>
> For more information, see Manage Personnel.

Products

Now let's focus on the **Products**, a vital part of the model. For each **Product** you need a **FlowPath**. Considering the modeling sequence, for a **FlowPath** to be created you first need to create the **Steps**,

followed by the **Flows**. After setting up both **Steps** and **Flows**, you can populate the **FlowItems** sheet to create (and subsequently load) the desired **Flow** structure. This process establishes the proper sequence necessary for the creation of **FlowPaths**.

Steps and Flows

Name	Description	Type	IsTemplate	DataGroup	ProcessingType	DisplayOrder	StepViewSortRuleSet	SortRuleSet	LotTraveler	MaterialLabel	IsPassThroug
Components Reception		Logistic			Logistic						Yes
Incoming		Metrology			Metrology						Yes
Incoming Complete		Logistic			Logistic						Yes
Warehouse Store		Logistic			Logistic						Yes
Warehouse Parts Store		Logistic			Logistic						Yes
Production Parts Store		Logistic			Logistic						Yes

<DM>BusinessPartner | <DM>Reason | <DM>Step | <DM>StepReason | <DM>Flow | FlowItems | <DM>Parameter | <GT>MoistureSensitivityLevel

Name	Revision	Description	Type	DataGroup	IsNonSequentialBlock	IsAlternate	IsLineFlow	AlternateFlowSelectionType	IsEnabled
Flow_Warehouse_Store			Components		No	No	No		Yes
Flow_Production Raw Material			Components		No	No	No		Yes
Flow_Warehouse_Parts			Parts		No	No	No		Yes
Flow_Production Parts			Parts		No	No	No		Yes

<DM>Step | <DM>StepReason | <DM>Flow | FlowItems | <DM>Parameter | <DM>ProductGroup | <GT>MoistureSensitivityLevel

Flow	Type	Target	IsOptional	Reworks	IsLine	IsSkippable	LineFlows	LogicalName	OnEnterRule	OnExitRule	ConditionType
Flow_Warehouse_Store	Step	Incoming	No		No	No					
Flow_Warehouse_Store	Step	Incoming Complete	No								
Flow_Warehouse_Store	Step	Warehouse Store	No		No	No					
Flow_Warehouse_Parts	Step	Incoming	No		No	No					
Flow_Warehouse_Parts	Step	Incoming Complete	No								
Flow_Warehouse_Parts	Step	Warehouse PartsStore	No								
Flow_Production Raw Material	Step	Components Reception	No		No	No					
Flow_Production Parts	Step	Production Parts Store	No								

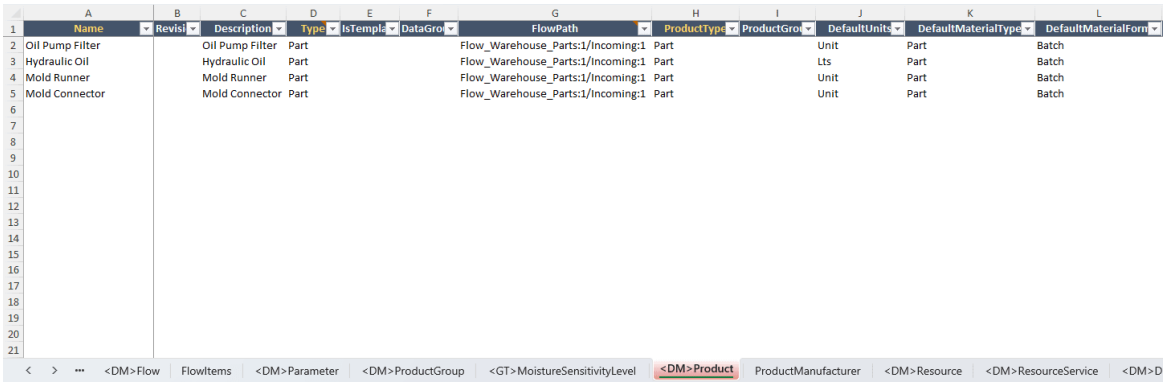
<DM>Flow | FlowItems | <DM>Parameter | <DM>ProductGroup | <GT>MoistureSensitivityLevel | <DM>Product | ProductParameters | Produc

> **Note**
>
> As a fresh reminder, **Steps** must be created before **Flows**. For more information, please see Flow Modeling.

Product

We can now create the **Products**, using the entries created in the **FlowStructures** sheet and strictly following the **FlowPath** notation used throughout the system:
`Flow:RevisionName:CorrelationId/Flow:RevisionName:CorrelationId/.../Step:CorrelationId`.

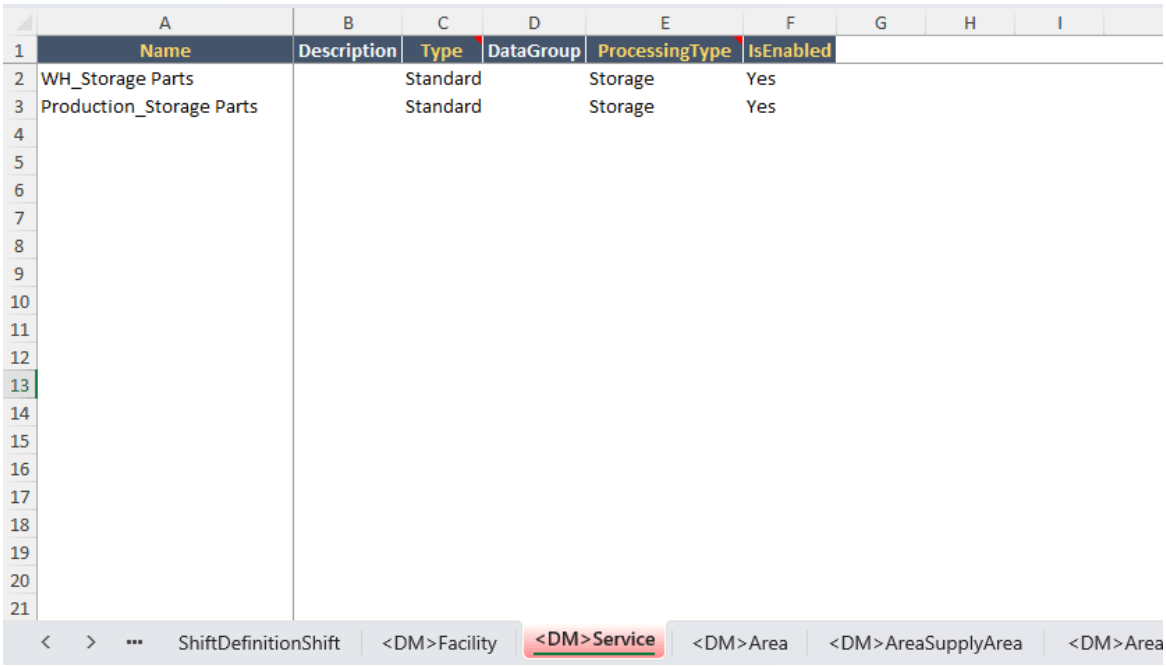
> **Info**
>
> For more information, see Flow.



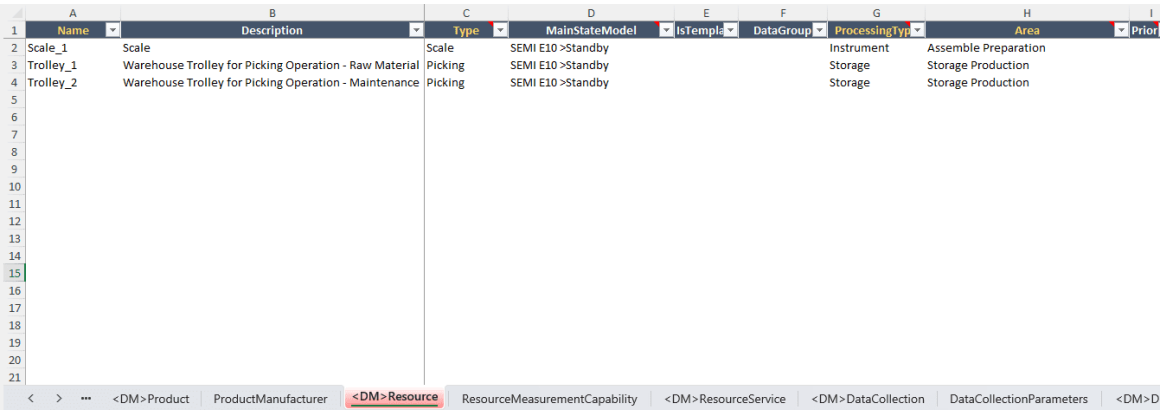
	A	B	C	D	E	F	G	H	I	J	K	L
1	Name	Revisi	Description	Type	IsTempla	DataGro	FlowPath	ProductType	ProductGro	DefaultUnits	DefaultMaterialType	DefaultMaterialForm
2	Oil Pump Filter		Oil Pump Filter	Part			Flow_Warehouse_Parts:1/Incoming:1	Part		Unit	Part	Batch
3	Hydraulic Oil		Hydraulic Oil	Part			Flow_Warehouse_Parts:1/Incoming:1	Part		Lts	Part	Batch
4	Mold Runner		Mold Runner	Part			Flow_Warehouse_Parts:1/Incoming:1	Part		Unit	Part	Batch
5	Mold Connector		Mold Connector	Part			Flow_Warehouse_Parts:1/Incoming:1	Part		Unit	Part	Batch

Services and Resources

Continuing to follow the modeling sequence, let's create the **Services** followed by the **Resources**.



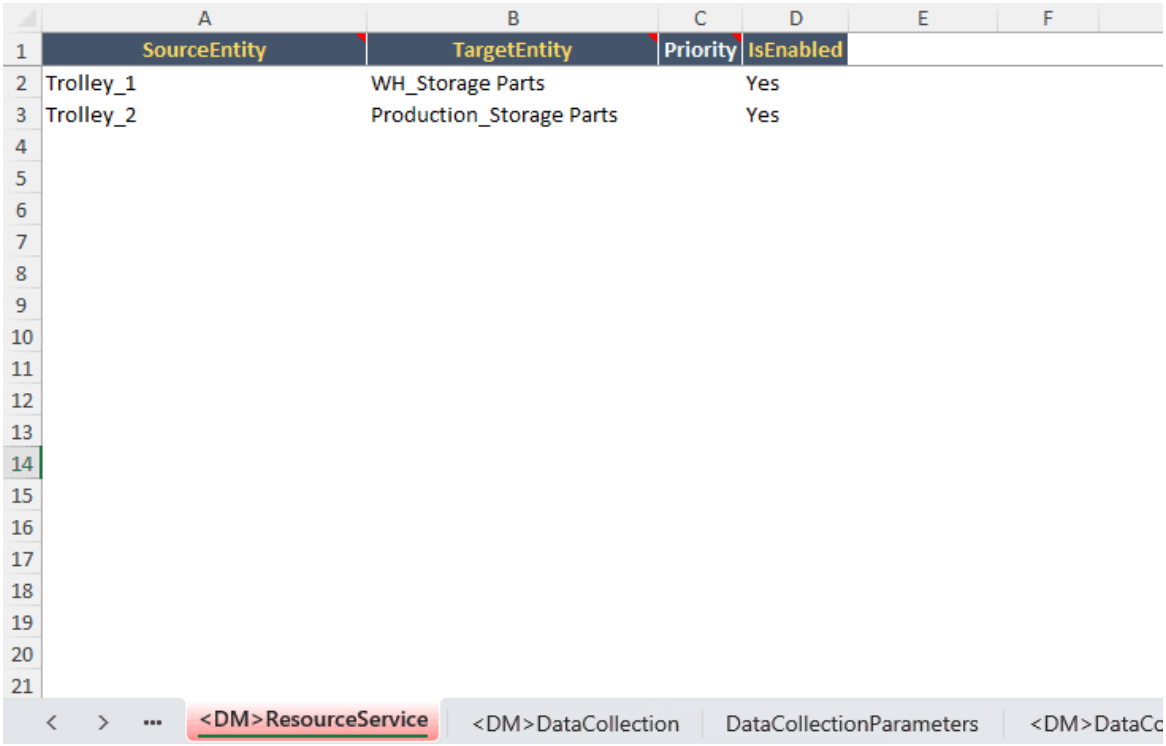
	A	B	C	D	E	F
1	Name	Description	Type	DataGroup	ProcessingType	IsEnabled
2	WH_Storage Parts		Standard		Storage	Yes
3	Production_Storage Parts		Standard		Storage	Yes



Name	Description	Type	MainStateModel	IsTempla	DataGroup	ProcessingTyp	Area	Prior
Scale_1	Scale	Scale	SEMI E10 >Standby			Instrument	Assemble Preparation	
Trolley_1	Warehouse Trolley for Picking Operation - Raw Material	Picking	SEMI E10 >Standby			Storage	Storage Production	
Trolley_2	Warehouse Trolley for Picking Operation - Maintenance	Picking	SEMI E10 >Standby			Storage	Storage Production	

<DM>Product | ProductManufacturer | <DM>Resource | ResourceMeasurementCapability | <DM>ResourceService | <DM>DataCollection | DataCollectionParameters | <DM>D

After these two entities are created, let's proceed in creating the link between **Resources** and **Services** in the **ResourceService** sheet.



SourceEntity	TargetEntity	Priority	IsEnabled
Trolley_1	WH_Storage Parts		Yes
Trolley_2	Production_Storage Parts		Yes

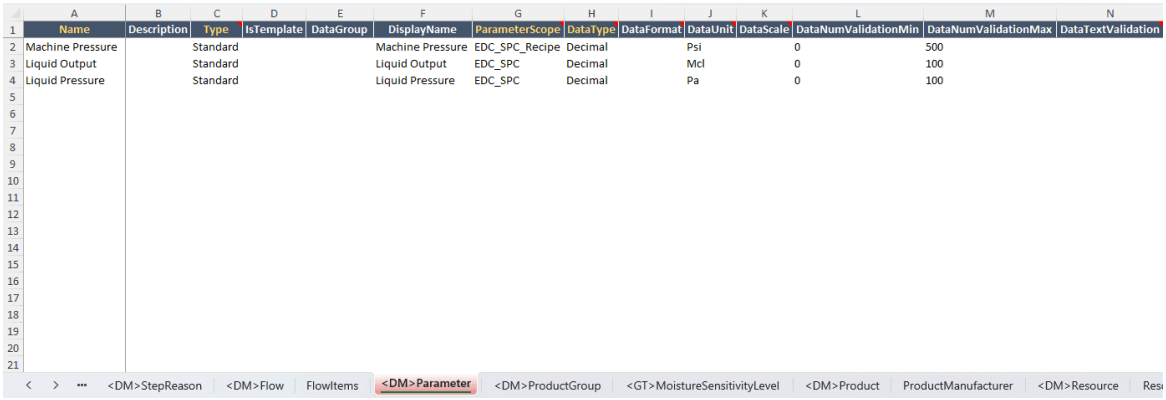
<DM>ResourceService | <DM>DataCollection | DataCollectionParameters | <DM>DataCc

Data Collection

We want to add a **Data Collection** to measure some parameters during the quality control phase of the process. Before adding any **Parameters** to a **Data Collection**, create the **Parameters** it will use when recording data.

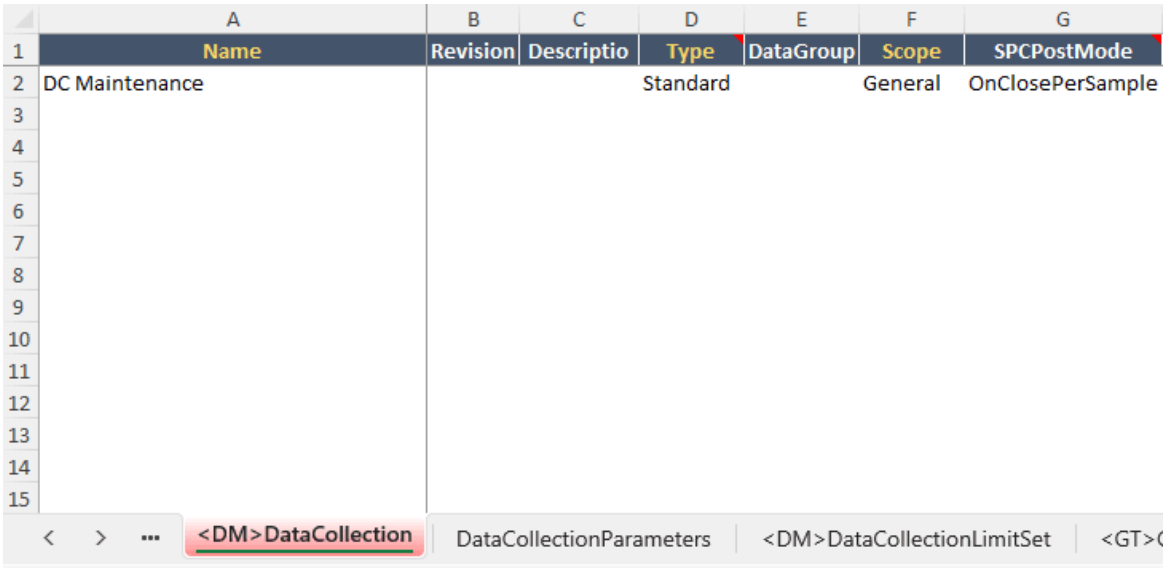
> **Info**
>
> For more information, see Data Collection.

Parameters



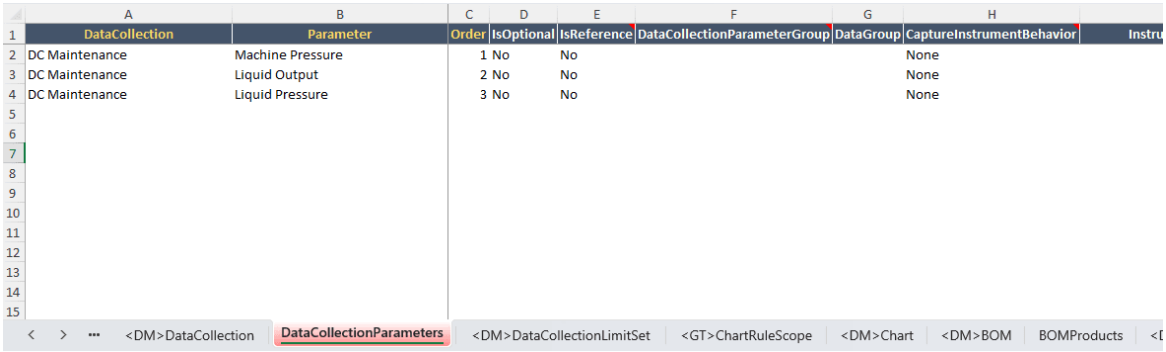
Name	Description	Type	IsTemplate	DataGroup	DisplayName	ParameterScope	DataType	DataFormat	DataUnit	DataScale	DataNumValidationMin	DataNumValidationMax	DataTextValidation
Machine Pressure		Standard			Machine Pressure	EDC_SPC_Recipe	Decimal		Psi		0	500	
Liquid Output		Standard			Liquid Output	EDC_SPC	Decimal		Mcl		0	100	
Liquid Pressure		Standard			Liquid Pressure	EDC_SPC	Decimal		Pa		0	100	

Let's create the **Data Collection**.



Name	Revision	Descriptio	Type	DataGroup	Scope	SPCPostMode
DC Maintenance			Standard		General	OnClosePerSample

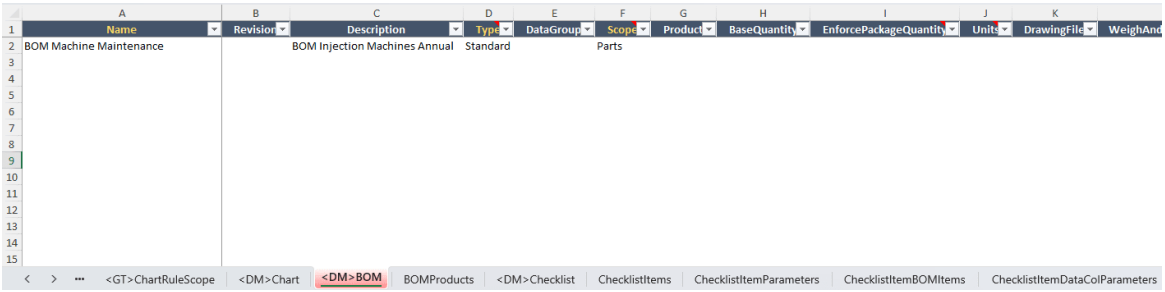
And now we can use those **Parameters** and add them to the **Data Collection** using the **DataCollectionParameters** sheet.



DataCollection	Parameter	Order	IsOptional	IsReference	DataCollectionParameterGroup	DataGroup	CaptureInstrumentBehavior	Instru
DC Maintenance	Machine Pressure	1	No	No			None	
DC Maintenance	Liquid Output	2	No	No			None	
DC Maintenance	Liquid Pressure	3	No	No			None	

BOM

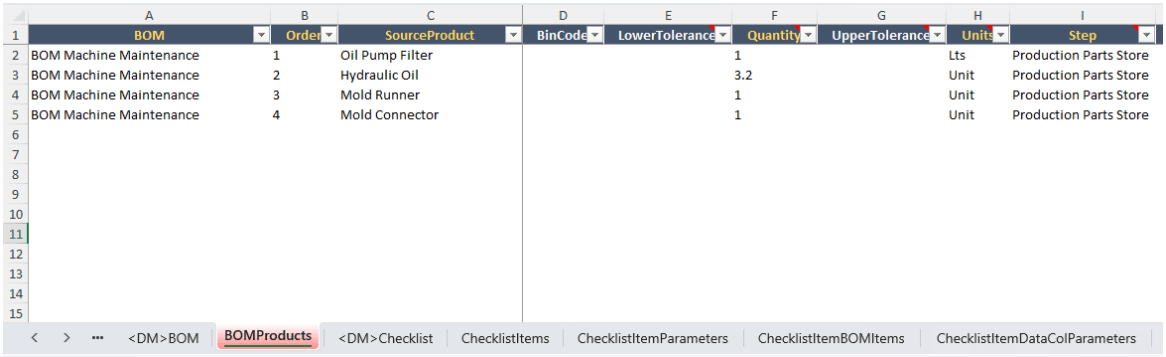
The maintenance process typically requires a **BOM** (Bill-of-Materials) to replace faulty parts in the processing **Resources**. Let's start with creating the base **BOM**.



Name	Revision	Description	Type	DataGroup	Scope	Product	BaseQuantity	EnforcePackageQuantity	Units	DrawingFile	WeighAnd
BOM Machine Maintenance		BOM Injection Machines Annual	Standard		Parts						

BOM Items

With the **BOM** created, we can add the **Products** that will be used as **BOM Items**.



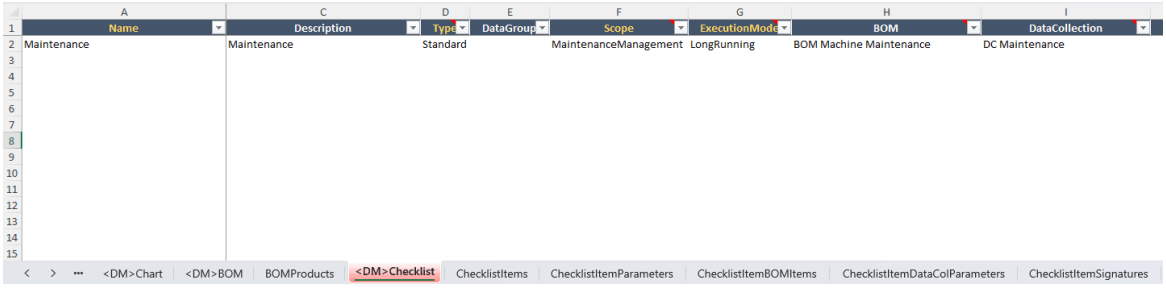
BOM	Order	SourceProduct	BinCode	LowerTolerance	Quantity	UpperTolerance	Units	Step
BOM Machine Maintenance	1	Oil Pump Filter			1		Lts	Production Parts Store
BOM Machine Maintenance	2	Hydraulic Oil			3.2		Unit	Production Parts Store
BOM Machine Maintenance	3	Mold Runner			1		Unit	Production Parts Store
BOM Machine Maintenance	4	Mold Connector			1		Unit	Production Parts Store

Note

For more information, see Bill-Of-Materials (BOM).

Checklist

To list all the work that will be done during this maintenance process, we can add a **Checklist** to our model to help our maintenance technician. Let's start by creating the base **Checklist** object.



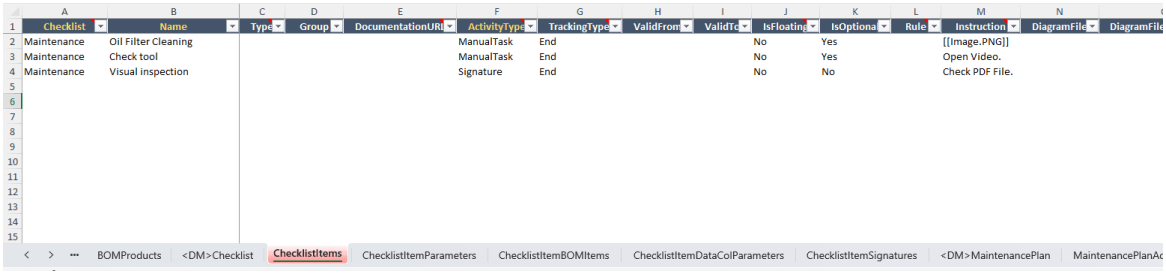
Name	Description	Type	DataGroup	Scope	ExecutionMode	BOM	DataCollection
Maintenance	Maintenance	Standard		MaintenanceManagement	LongRunning	BOM Machine Maintenance	DC Maintenance

Note

For more information, see Checklist.

Checklist Items

Similar to what we did earlier with the **BOM**, let's add **Checklist Items** to indicate what will be done during the execution of the **Checklist**.

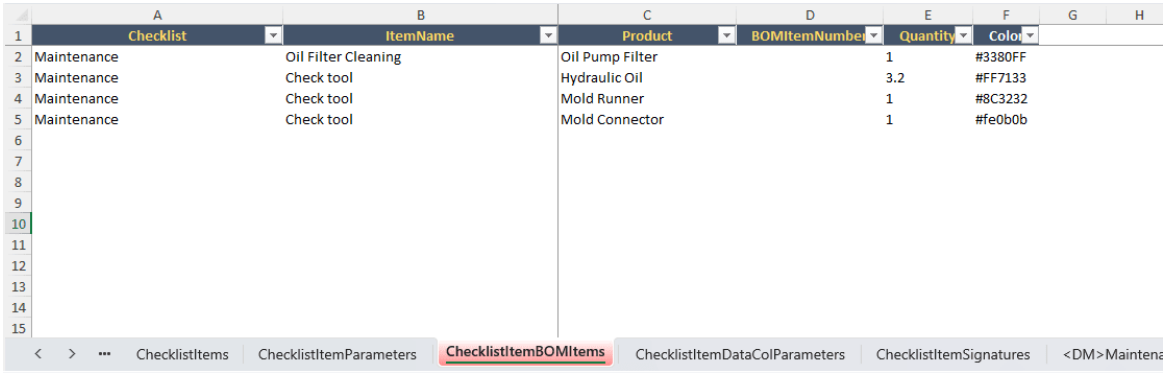


Checklist	Name	Type	Group	DocumentationURL	ActivityType	TrackingType	ValidFrom	ValidTo	IsFloating	IsOptiona	Rule	Instruction	DiagramFile	DiagramFile
Maintenance	Oil Filter Cleaning				ManualTask	End			No	Yes		[[Image.PNG]]		
Maintenance	Check tool				ManualTask	End			No	Yes		Open Video.		
Maintenance	Visual inspection				Signature	End			No	No		Check PDF File.		

BOMProducts | <DM>Checklist | ChecklistItems | ChecklistItemParameters | ChecklistItemBOMItems | ChecklistItemDataColParameters | ChecklistItemSignatures | <DM>MaintenancePlan | MaintenancePlanAc

Checklist Item BOM Items

Since the proper completion of some of the **Checklist Items** require the use of Parts to perform the maintenance activity, let's add those Parts (which are modeled as **BOM Items**) to the **ChecklistItemBOMItems** sheet.

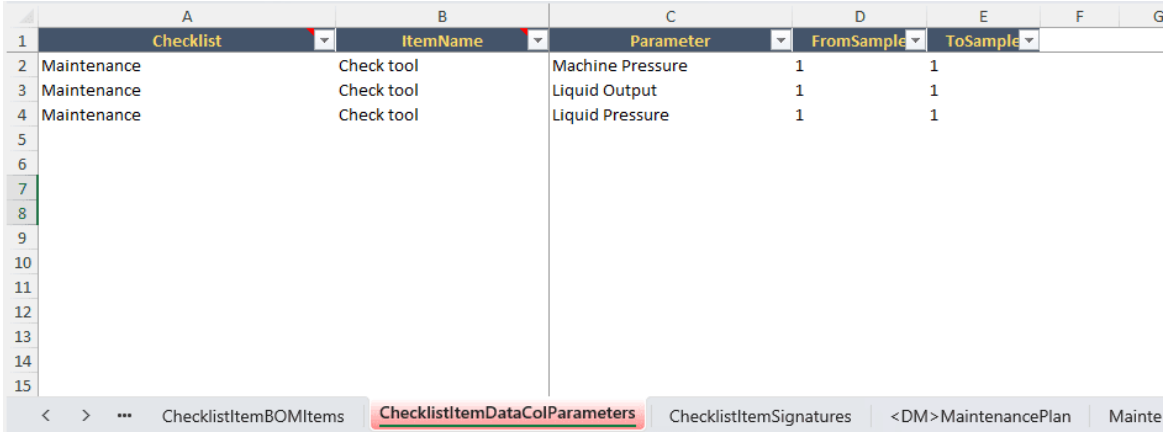


Checklist	ItemName	Product	BOMItemNumber	Quantity	Color
Maintenance	Oil Filter Cleaning	Oil Pump Filter		1	#3380FF
Maintenance	Check tool	Hydraulic Oil		3.2	#FF7133
Maintenance	Check tool	Mold Runner		1	#8C3232
Maintenance	Check tool	Mold Connector		1	#fe0b0b

ChecklistItems | ChecklistItemParameters | ChecklistItemBOMItems | ChecklistItemDataColParameters | ChecklistItemSignatures | <DM>Maintena

Checklist with Data Collection

To gather more data from the process, let's associate a **Data Collection** with the same **Checklist** under the same **Maintenance Plan** by filling the appropriate values in the **ChecklistItemDataColParameters** sheet.

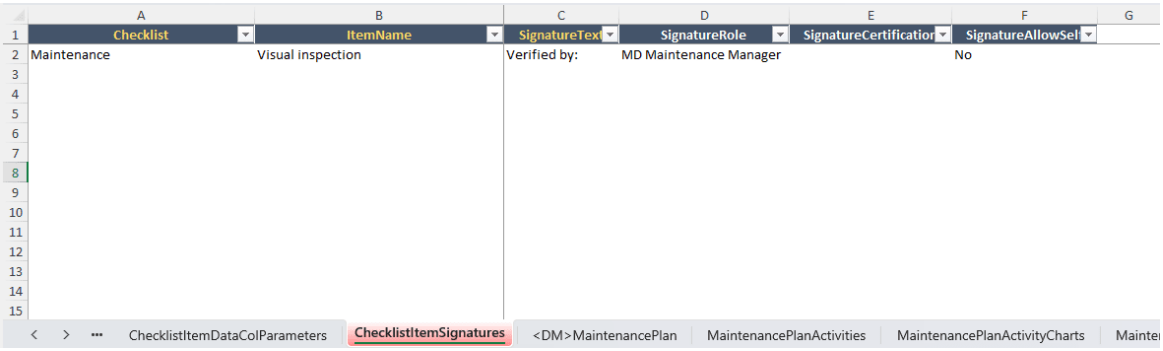


Checklist	ItemName	Parameter	FromSample	ToSample
Maintenance	Check tool	Machine Pressure	1	1
Maintenance	Check tool	Liquid Output	1	1
Maintenance	Check tool	Liquid Pressure	1	1

ChecklistItemBOMItems | ChecklistItemDataColParameters | ChecklistItemSignatures | <DM>MaintenancePlan | Mainte

Checklist Item Signatures

Adding some extra process security and bulking up the approval process, let's add a mandatory signature to one of the **Checklist Items** by using the **ChecklistItemSignatures** sheet.

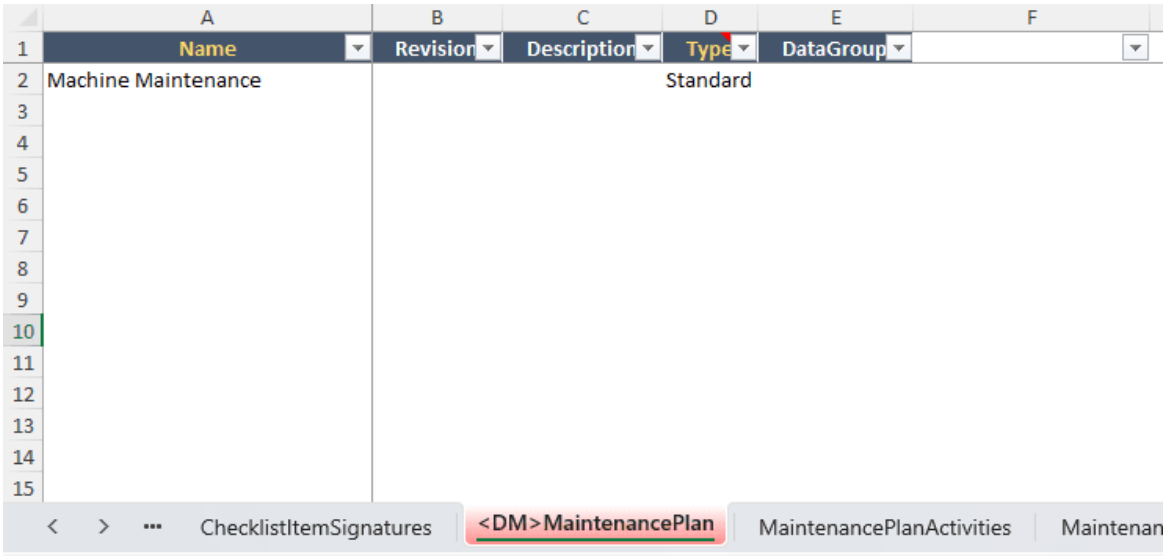


Checklist	ItemName	SignatureText	SignatureRole	SignatureCertification	SignatureAllowSel
Maintenance	Visual inspection	Verified by:	MD Maintenance Manager		No

ChecklistItemDataColParameters | ChecklistItemSignatures | <DM>MaintenancePlan | MaintenancePlanActivities | MaintenancePlanActivityCharts

Maintenance Plan

Finally, after creating all these entities, it's time to create the actual **Maintenance Plan**.



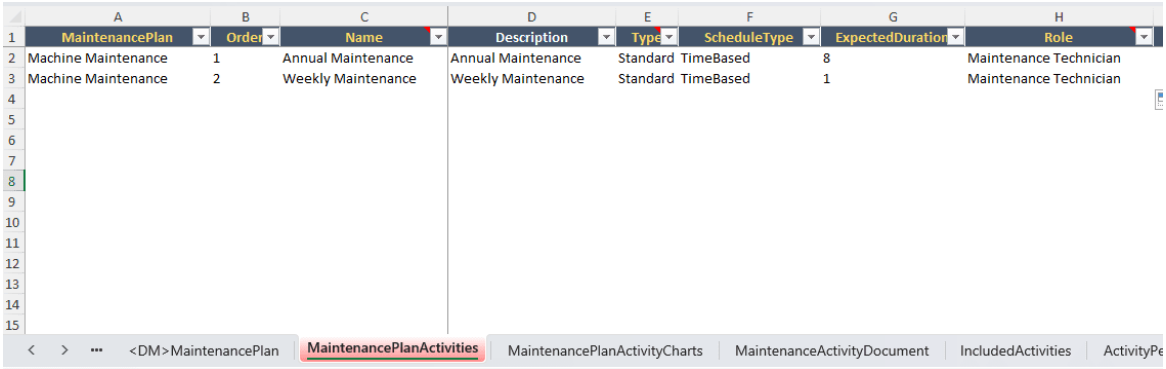
Name	Revision	Description	Type	DataGroup
Machine Maintenance			Standard	

ChecklistItemSignatures | <DM>MaintenancePlan | MaintenancePlanActivities | Maintenan

> **Note**
>
> For more information, see Maintenance Plan.

Maintenance Activities

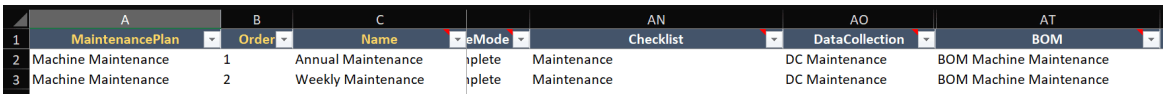
A Maintenance Plan is composed of a number of Maintenance Activities, that you can define in the **MaintenancePlanActivities** sheet.



MaintenancePlan	Order	Name	Description	Type	ScheduleType	ExpectedDuration	Role
Machine Maintenance	1	Annual Maintenance	Annual Maintenance	Standard	TimeBased	8	Maintenance Technician
Machine Maintenance	2	Weekly Maintenance	Weekly Maintenance	Standard	TimeBased	1	Maintenance Technician

<DM>MaintenancePlan | MaintenancePlanActivities | MaintenancePlanActivityCharts | MaintenanceActivityDocument | IncludedActivities | ActivityPe

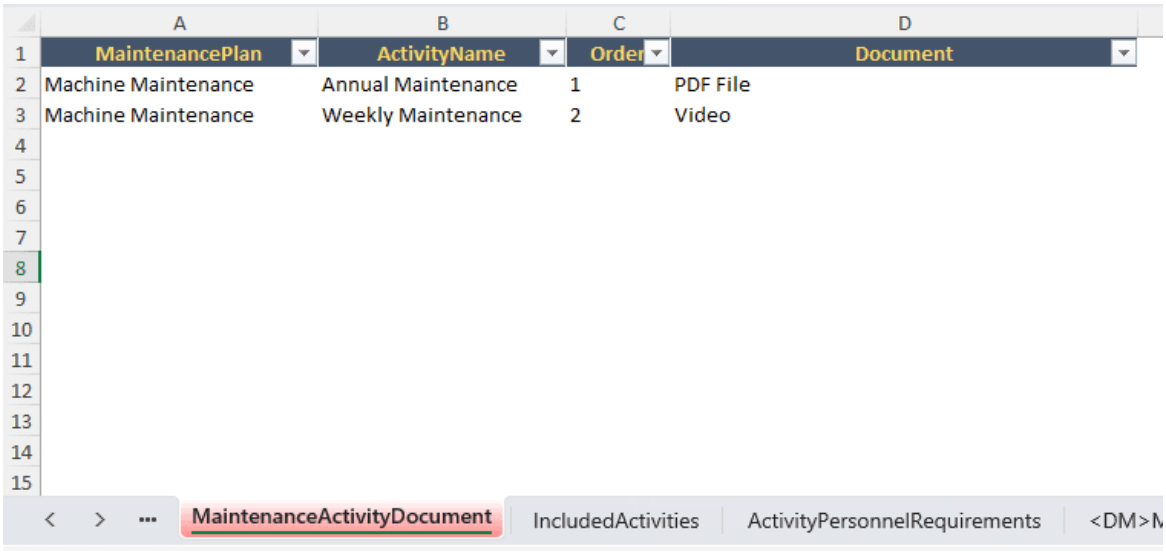
Associating the **Checklist**, **Data Collection** and **BOM** is done in this same **MaintenancePlanActivities** sheet, using the appropriate columns.



	A	B	C		AN	AO	AT
1	MaintenancePlan	Order	Name	eMode	Checklist	DataCollection	BOM
2	Machine Maintenance	1	Annual Maintenance	plete	Maintenance	DC Maintenance	BOM Machine Maintenance
3	Machine Maintenance	2	Weekly Maintenance	plete	Maintenance	DC Maintenance	BOM Machine Maintenance

Maintenance Activity Documents

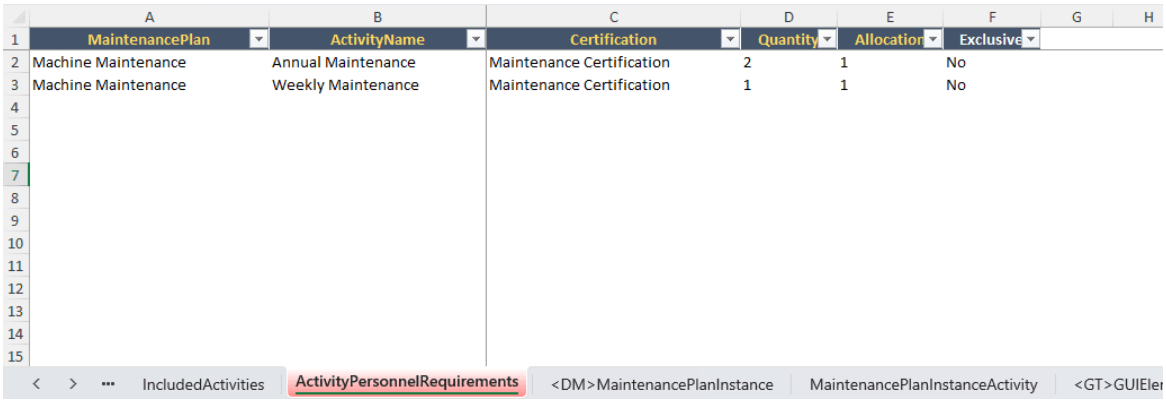
To add a **Document** to a specific Maintenance Activity, use the **MaintenanceActivityDocument** sheet.



	A	B	C	D
1	MaintenancePlan	ActivityName	Order	Document
2	Machine Maintenance	Annual Maintenance	1	PDF File
3	Machine Maintenance	Weekly Maintenance	2	Video

MaintenanceActivityDocument | IncludedActivities | ActivityPersonnelRequirements | <DM>M

Let's also specify the Personnel Requirements for the **Maintenance Activities**.

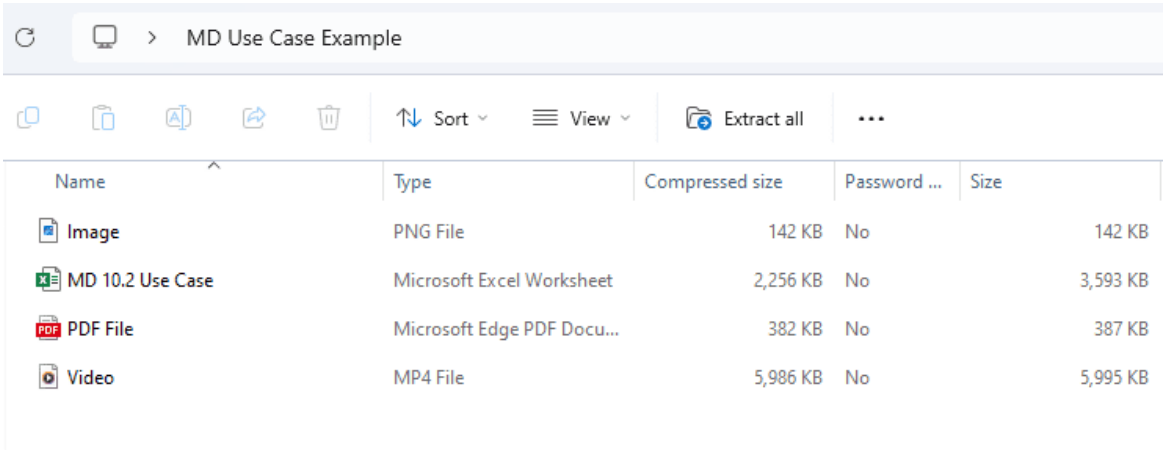


	A	B	C	D	E	F
1	MaintenancePlan	ActivityName	Certification	Quantity	Allocation	Exclusive
2	Machine Maintenance	Annual Maintenance	Maintenance Certification	2	1	No
3	Machine Maintenance	Weekly Maintenance	Maintenance Certification	1	1	No

IncludedActivities | ActivityPersonnelRequirements | <DM>MaintenancePlanInstance | MaintenancePlanInstanceActivity | <GT>GUIEle

Loading the model

With the entire process completed, you just need to compress all the pertinent files, including the Excel template and other images, into a `.zip` file. This is the file you will use to load the data into the system.



To complete the process, see Loading the Model for information on how to load the model.

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