

Master Data Packages

The **Master Data Package** entity is used to load data into a Critical Manufacturing MES environment using packages, allowing any authorized user to bulk load data into the system. This entity helps to retrieve configurations and characteristics defined in an Excel file and upload them into the Critical Manufacturing MES.

For the initial master data loading (**Facilities, Areas, Products, Flows, Steps**, and other fundamental MES entities) we can create a model using the actual Critical Manufacturing GUI. However, the process can become tiresome for an abundant quantity of data and objects.

As an alternative, we can use the [Master Data Packages](#) functionality for bulk data loading, using a spreadsheet of interconnected entities that can be loaded without the need for user interaction.

```
graph LR
    Excel[MasterDataOne.xlsx] -. -> MD[Master Data Package]
    subgraph Master Data Loading
        MD[Master Data Package] --> MES[Critical Manufacturing MES]
    end
    Excel2[MasterDataTwo.xlsx] -. -> MD
    Excel3[MasterDataThree.xlsx] -. -> MD
    Other[MaintenanceManual.pdf] -. -> MD
    Other2[WorkInstruction.mp4] -. -> MD

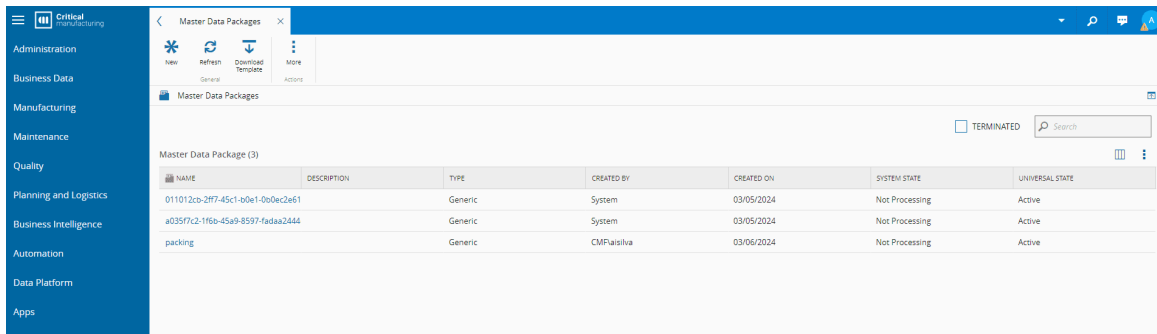
classDef mermaid_title color:#000, fill:#fafafa, stroke:#fafafa, stroke-width:0x, font-size:100%, font-weight:200;
classDef mermaid_start color:#000, fill:#fafafa, stroke:#fafafa, color:#fafafa, stroke-width:0x, font-size:100%, visibility: hidden;
classDef mermaid_businessdata color:#000, fill:#65CDE8, stroke:#65CDE8, stroke-width:0px, font-size:100%;
classDef mermaid_nonbusinessdata color:#000, fill:#B7DEE8, stroke:#B7DEE8, stroke-width:0px, font-size:100%;
classDef mermaid_entity color:#000, fill:#FB9F53, stroke:#FB9F53, stroke-width:0px, font-size:100%;
classDef mermaid_entitylinked color:#000, fill:#FCD5B5, stroke:#FCD5B5, stroke-width:0px, font-size:100%;
classDef mermaid_context color:#000, fill:#B9CDE5, stroke:#B9CDE5, stroke-width:0px, font-size:100%;
classDef mermaid_optional color:#000, fill:#B7DEE8, stroke:#65CDE8, stroke-width:1px, font-size:100%, stroke-dasharray: 5 5;
classDef mermaid_state color:#000, fill:#d7e4bd, stroke:#000, stroke-width:1px, font-size:100%, font-weight:300;
class Excel,Excel2,Excel3,Other,Other2 mermaid_entity
class MD,MES mermaid_businessdata
```

Master Data File

This approach uses an Excel file following a pre-defined structure that loads **Master Data Package** entities into the system. The pre-defined template has multiple sheets, each representing one Object Instance with a sequential order provided. The Master Data Template is available on the **Master Data Packages** page in the Administration page group.

Info

Selecting **Download Template** on the top ribbon of the [Master Data Packages](#) page provides direct access to an empty Master Data Template but you can download the **Master Data Package** template here: [MasterData.xlsx](#).



The screenshot shows the 'Master Data Packages' page in the Critical Manufacturing 11.1 application. The left sidebar contains a navigation menu with categories like Administration, Business Data, Manufacturing, Maintenance, Quality, Planning and Logistics, Business Intelligence, Automation, Data Platform, and Apps. The main content area has a header with 'Master Data Packages' and a sub-header with 'New', 'Refresh', 'Download Template', and 'More' buttons. Below this is a table titled 'Master Data Package (3)' with columns: NAME, DESCRIPTION, TYPE, CREATED BY, CREATED ON, SYSTEM STATE, and UNIVERSAL STATE. The table lists three packages: '0110132b-2ff7-45c1-a0e1-0e0e2a61', 'a035f7c2-1f6b-45a9-8597-fadaa2d444', and 'packing'. The 'packing' package is highlighted. A 'TERMINATED' checkbox and a search bar are also visible.

NAME	DESCRIPTION	TYPE	CREATED BY	CREATED ON	SYSTEM STATE	UNIVERSAL STATE
0110132b-2ff7-45c1-a0e1-0e0e2a61		Generic	System	03/05/2024	Not Processing	Active
a035f7c2-1f6b-45a9-8597-fadaa2d444		Generic	System	03/05/2024	Not Processing	Active
packing		Generic	CMFAlaisiva	03/06/2024	Not Processing	Active

Where to start

We recommend you start this deep dive by understanding the structure of the Excel template in [Excel Template](#) and continue with a tutorial to have a feel on how to create your own model in [Creating a Model](#). Follow the index on the [landing page](#) of this deep dive for the best experience.