

# X-BOM CONNECTOR FOR ORACLE MANUFACTURING

## OBJECTIVE

**X-BOM Connector for Oracle Manufacturing** provides real-time collaboration and bi-directional data exchange between Oracle Manufacturing and Product Engineer and Manufacturing BOM Manager to share part, bill-of-material, operational, manufacturing cost, and inventory data.

## OVERVIEW

Most companies have standardized on Product Lifecycle Management (PLM) systems for product planning and product engineering and Enterprise Resource Planning (ERP) systems for managing manufacturing and financial operations. Both types of systems rely on product information typically represented in the form of a bill-of-material (BOM). It is also typical for both systems to allow data modifications to be made at different stages of the product lifecycle. As such, companies need both a process and technology strategy to keep product information synchronized without impacting product development innovation and manufacturing operations efficiency. **X-BOM Connector for Oracle Manufacturing** enables companies to realize this vision.

## HIGHLIGHTS

### Technology Overview

**X-BOM Connector for Oracle Manufacturing** places few restrictions on the PLM data model and may be configured to handle a variety of data. **X-BOM Connector for Oracle Manufacturing** utilizes only standard available application programming interfaces (APIs) to ease future upgrades and insure Oracle data integrity. **X-BOM Connector for Oracle Manufacturing** allows for both on-demand and process-driven data transfer.

**X-BOM Connector for Oracle Manufacturing** uses password encryption to provide a secure communication channel between the **3DEXPERIENCE**® platform and Oracle Manufacturing. Data access is controlled through role privileges and synchronization of data lifecycles between the **3DEXPERIENCE** platform and Oracle Manufacturing.

### Part Data Transfer

**X-BOM Connector for Oracle Manufacturing** allows for both on-demand and process-driven part transfers. If necessary, it can be mandatory to use a Change Order (CO) for the part transfer. Supporting multiple plant locations with the unique metadata associated with each location and ERP instance is necessary in today's world of acquisitions where companies have manufacturing locations around the world. It is possible to create and update Oracle items and item masters including all attributes and "flexfields," item revisions, manufacturing part numbers, categories and category sets, and routings. Both real-time and batch Oracle item APIs are supported. Users can view and retrieve part information from Oracle Manufacturing while in the **3DEXPERIENCE** platform to assist in design decisions. Examples of Oracle Manufacturing data available in the **3DEXPERIENCE** platform include basic item data, pricing information and specific revision levels with effectivity cut-in/out dates.

### Bill of Material Data Transfer

**X-BOM Connector for Oracle Manufacturing** fully supports the transfer of BOM information from the **3DEXPERIENCE** platform to Oracle Manufacturing without manual intervention. This increases accuracy and throughput to production systems. **X-BOM Connector for Oracle Manufacturing** allows for the transfer of a common or plant-specific BOM. The transfer can be controlled via a formal change process or performed as needed by a user with appropriate permissions. A single level BOM with associated metadata can be transferred.

**X-BOM Connector for Oracle Manufacturing** provides pre-transfer checks that allow specific business process protocols to be enforced and the ability to automatically instantiate parts into Oracle Manufacturing. X- BOM Connector for Oracle Manufacturing supports BOM alternatives and quantity rollup as well as reference designators for electronics.

**X-BOM Connector for Oracle Manufacturing** can transfer just BOM changes to Oracle. These changes can be computed either by comparing ENOVIA BOM revisions, or by comparing to the latest Oracle ERP BOM.

## Views and Reports

With Product Engineer and Manufacturing BOM Manager, users may query for and display a variety of information about bills of material stored in Oracle Manufacturing. Users may select a plant location and revision level to display the single-level BOM with associated BOM alternatives.

**X-BOM Connector for Oracle Manufacturing** has the following BOM reporting capabilities:

- Display single level Oracle Manufacturing BOM.
- Compare EBOM with the Engineering or Production BOM from Oracle Manufacturing.
- Display all revision levels of a BOM in Oracle Manufacturing with effectivity dates.

## Change Management Data Transfer

**X-BOM Connector for Oracle Manufacturing** controls the release of information from an engineering design environment to manufacturing production. Engineering and manufacturing change data associated with the transfer of parts and BOM, such as effectivity and cut-in/out dates can be transferred on the change order release. Manufacturing change order start date and status can be sent back to the **3DEXPERIENCE** platform when updated in Oracle Manufacturing.

**X-BOM Connector for Oracle Manufacturing** supports the following ENOVIA® data transfer scenarios:

- EC Part transfer to Oracle ERP
- ECO based BOM transfer to Oracle ERP
- Formal CO based BOM transfer to Oracle ERP
- Fast Track CO based BOM transfer to Oracle ERP
- CA based BOM transfer to Oracle ERP
- MCO based BOM transfer to Oracle ERP

## Key Benefits:

- Provide seamless collaboration and data sharing between product engineering and manufacturing operations for speedier time-to-market.
- Ensure that critical design changes are visible throughout the design and manufacturing processes regardless of the system that initiates the change.
- Eliminate re-work and late-cycle change notices due to improved BOM accuracy from automatic data transfers.
- Reduce product delays by providing manufacturing with early visibility for long lead-time items and potential manufacturing issues with designs.
- Provide product engineering resources with early access to manufacturing operations data in real time and in the context of their work.
- Enable end-to-end data and process management without disruption to established system capabilities.
- Eliminate unnecessary duplication of work and improve reuse by providing access to data from each system.

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