



Supply Model

[CONCEPT]

This document explains the concept and the scope of the supply model and its relation to the M3 global capable-to-promise (CTP) concept.

The global CTP concept and the supply model support the supply and order promise process. The global CTP concept is an advanced alternative to using traditional available-to-promise (ATP).

The supply model is comprised of the primary rules for how to source a specific demand. It includes the prioritized source as well as a set of alternatives to use in case of shortage. In addition to specifying how to source and from where, the supply model also includes rules for what kind of capabilities to check, including materials, manufacturing capacity, etc. Another set of rules defines how to control the delivery of one or more order lines taking back orders, partial delivery, etc. into account.

The Global in Global CTP, refers to the abilities created by the supply model's flexible rules. A single demand may be checked against a number of different alternatives in order to find the most appropriate one. These alternatives may cover delivery from any warehouse, manufacturing unit or external supplier. A rule, containing a set of alternative ways of fulfilling a specific demand, may look like this:

- 1 Check Warehouse L1 (local warehouse)
- 2 Check Warehouse L2 (another warehouse that carries the specific item)
- 3 Check Warehouse DC (the distribution center that supplies the other warehouses)
- 4 Check availability at the manufacturing unit M1, check production capacities and materials availability
- 5 Check for an item that could replace the item requested by the customer.

Global CTP will run through the rules from 1 to 5 in order to find the goods for the customer. It will help you propose the best alternative to your customer.

Results

Outcome

The supply model provides:

- A description of your supply network from an order promising point of view and
- The rules that control the supply and order Promise Process where the supply model and M3 global CTP have been activated.



Uses

- You can use the supply model when the relation between external customer nodes and the supply nodes becomes complex, that is, a customer may be supplied in many ways and from many places for a single product.
- The supply model and the global CTP concept automate the whole procedure for promising customer orders.
- The rules within the supply model are executed online during customer order entry in order to find the best possible alternative.
- The supply model is comprised of the rules that control the entire global CTP concept. The result from the global CTP and the execution of the supply model rules can be viewed in 'Supply Alternative Management' (CTS100).

How the System Is Affected

When defining the supply model in 'Supply Model. Open' (MMS056), the following files are updated:

- Supply model header (MSPLMO)
- Supply model line (MSPLMX).

Description

Supply Model

It is possible to define a number of supply models within your company. On the other hand, many companies could do with just one. Reasons for having multiple supply models include:

- To reduce complexity in the setup of a single supply model or
- To define a specific version for simulation or test purposes.

The supply model is connected to a customer order through default rules set up in 'CO Type. Update Field Selection' (OIS014). The following sources can be used to retrieve the supply model identity:

- The address file
- The customer file
- The customer order type file.

See Also

Instructions

- [Create a Customer Order Simulation](#)

Concepts

- [Distribution Chain](#)

Settings

- [Define Supply Model](#)
- [Define Distribution Chain](#)