



How Oracle Global Order Promising Cloud Sources Supply for Your Orders

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Introduction

Oracle Global Order Promising Cloud checks supply availability and schedules orders as they arrive. But how does it decide exactly which supply to use for your orders? The answer is – it depends. To source supply, Oracle Global Order Promising Cloud can:

- » Choose among multiple fulfillment locations
- » Consume existing on hand supply, in transit inventory, purchase orders, transfer orders or even planned orders for the ordered item that are due by the requested date
- » Use capable to promise (CTP) to plan manufacturing, purchasing or transfers to satisfy the order
- » Substitute the ordered item with an equivalent

Finally, if there's not enough supply of a particular item in any one place by the requested date, Global Order Promising Cloud can split the order line by location, time or substitute item to meet the demand.

With all these alternatives, it's important to understand how Global Order Promising Cloud chooses what to do, and what control you have over those decisions.

A Day-in-the-Life Example

It's March 5th, and a big customer just placed an order for 1000 tablet computers that they need by March 10th. In your Atlanta facility, you have 200 on hand, 200 more in transit due tomorrow, and 200 units on order from your contract manufacturer scheduled to arrive day after tomorrow. Meanwhile, at your secondary facility in Memphis, the situation is similar, but you only have 100 units each day.

Looking further ahead, you have 200 more units for Atlanta and 100 for Memphis that you're planning for delivery three days from now that you haven't yet released to production. Finally, the plant that services Atlanta has 200 units per day of available production capacity starting four days from now, while the one that services Memphis has 500 units of capacity.

It's clear that you have enough supply to fulfill the order on time; the key is to choose supply sources that are most aligned with your business objectives. GOP Cloud can automate the process using the right combination of sourcing rules, ATP rules and assignment sets.

Global Order Promising Cloud Sourcing Priorities

As a starting point, Global Order Promising Cloud summarizes this supply picture into ATP and CTP supplies as follows.

		5-Mar	6-Mar	7-Mar	8-Mar	9-Mar	10-Mar
Atlanta	ATP	200	200	200	200		
	CTP					200	200
Memphis	ATP	100	100	100	100		
	CTP					500	500

It then applies a set of business rules that prioritize competing sources of supply to fulfill your orders.

Rule 1: Meet demands on time

GOP Cloud's highest priority is to find sources that meet the customer's request date, or failing that, the closest date to the request date.

- » You can override GOP Cloud's default sourcing selection during what-if promising by selecting an alternative that delivers later.

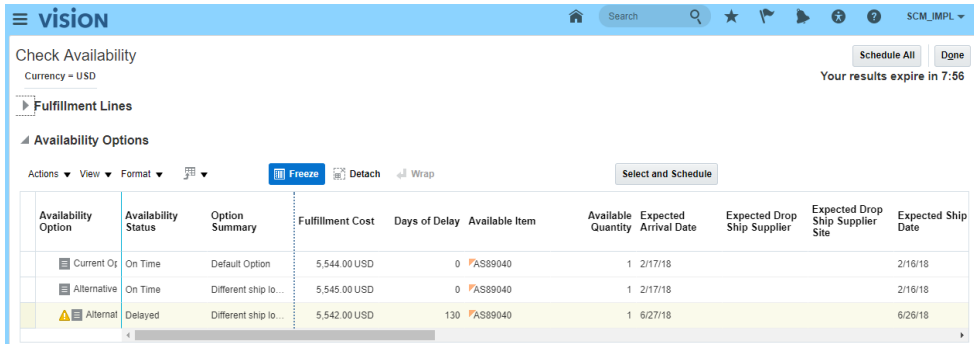


Figure 1 Selecting an alternate availability option

Rule 2: Consume existing supply (ATP) before generating new supply (CTP)

If supply for an ordered item is already available, GOP Cloud will use it. If not, GOP Cloud will leverage capable-to-promise to consume any available materials, resources and supplier capacity needed to make, buy or transfer goods to meet demand.

- » You can change this default behavior by setting an ATP time fence. Orders with request dates that are beyond the ATP time fence will consume capable-to-promise supply and resources before they look at existing finished goods supply.

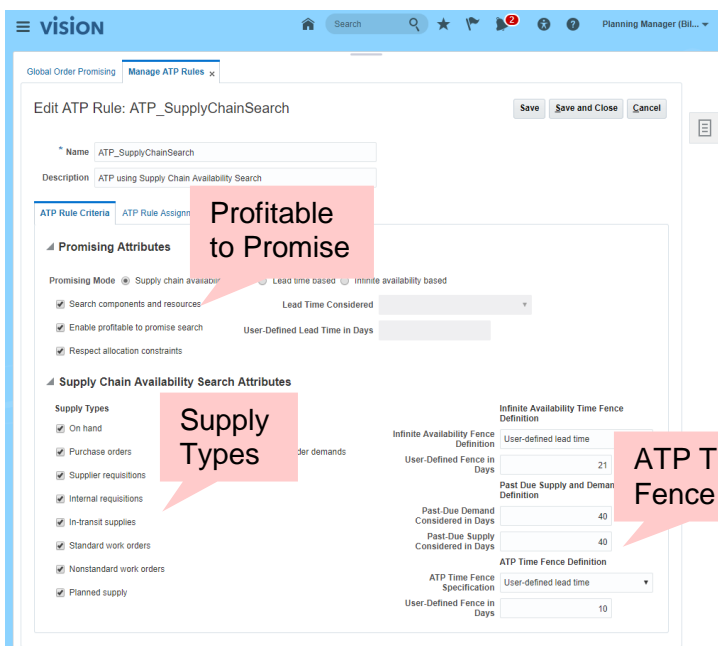


Figure 2 Defining an ATP rule

Rule 3: Choose the lowest-cost available supply source

GOP Cloud supports “profitable-to-promise” sourcing that prioritizes the location and transit mode combination with the lowest cost that meets the request date. In the case of CTP, that includes a calculation of component and resource costs.

- » You can control whether GOP Cloud uses profitable to promise via an ATP rule checkbox.

Rule 4: Source from the priority location for the item

When there are multiple sourcing locations with available supply, and profitable-to-promise is not set (or the costs are the same for multiple combinations), GOP Cloud will select locations in the priority order set on the sourcing rule.

- » You can vary the location preference order by sourcing rules, and assign them to customer, zone, category, item or demand class via assignment sets. You can also override the source selection on the order line.

Rule 5: Deliver the item the customer ordered

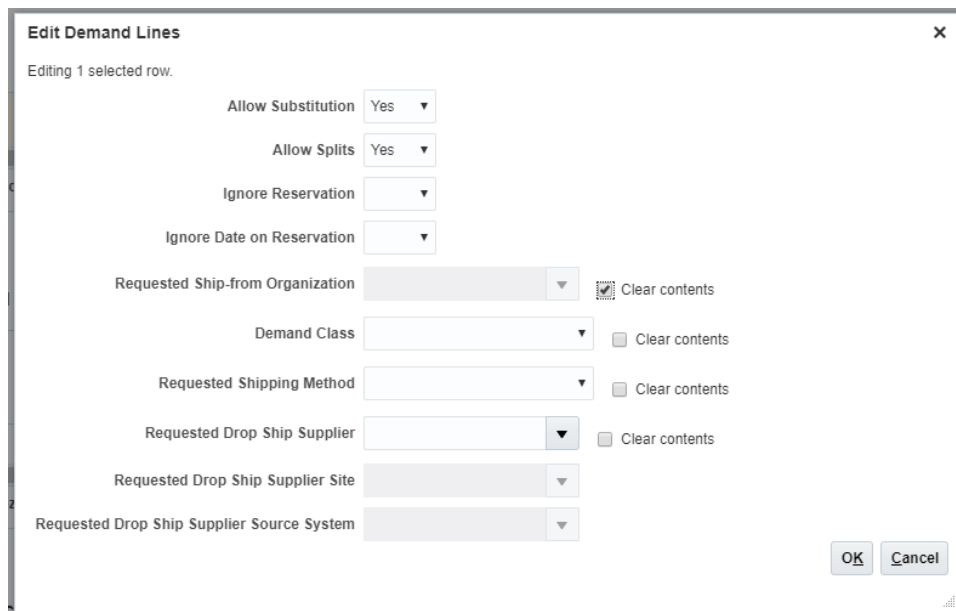
GOP Cloud can substitute items if a substitute is defined in the item master, or a customer-specific substitute has been assigned. It can even substitute a component if the part is truly generic (i.e., can be used in place of the original in any context, without creating dependencies on other components). However, GOP Cloud will not substitute by default if another sourcing location has enough supply of the ordered item by the request date.

- » You can control whether GOP Cloud is allowed to substitute items via an order line attribute.

Rule 6: Only split lines to prevent delays

GOP Cloud can split an order line into two if necessary to meet the request date. The first preference is a split across locations. If a location split would not meet demand, then GOP Cloud will split the line across the primary item and a substitute. Finally, if no split meets the date, GOP Cloud can split across time – delivering a partial quantity on time (or with minimal delay).

- » You can control whether splitting is allowed by setting a flag on the order line.



The screenshot shows a dialog box titled "Edit Demand Lines" with a close button (X) in the top right corner. Below the title bar, it says "Editing 1 selected row." The dialog contains several fields for editing demand line attributes:

- Allow Substitution: Yes (dropdown)
- Allow Splits: Yes (dropdown)
- Ignore Reservation: (dropdown)
- Ignore Date on Reservation: (dropdown)
- Requested Ship-from Organization: (dropdown) with a "Clear contents" button (checkbox)
- Demand Class: (dropdown) with a "Clear contents" button (checkbox)
- Requested Shipping Method: (dropdown) with a "Clear contents" button (checkbox)
- Requested Drop Ship Supplier: (dropdown) with a "Clear contents" button (checkbox)
- Requested Drop Ship Supplier Site: (dropdown)
- Requested Drop Ship Supplier Source System: (dropdown)

At the bottom right of the dialog are "OK" and "Cancel" buttons.

Figure 3 Editing order line attributes

Rule 6: Use up available supply in just-in-time (JIT) fashion

Regardless of whether GOP Cloud is prioritizing ATP or CTP, it will consume the cumulative supply on the latest possible date that meets the customer's request date. This preserves near-term supply for short-horizon orders.

- » You can control which types of supply GOP Cloud will consider in your ATP rule. For example, if expected purchase order receipt dates are not reliable for a category of items, you can exclude them, and rely solely on on-hand and in-transits.

Fulfilling the Sample Order

So now let's return to the example order to see how GOP Cloud applies these rules. If you don't impose any constraints on its selection, GOP Cloud will consume available-to-promise supply from the shaded cells from the priority location (Atlanta) and then begin to consume the capable-to-promise supply to meet demand in just-in-time fashion.

		5-Mar	6-Mar	7-Mar	8-Mar	9-Mar	10-Mar
Atlanta	ATP	200	200	200	200		
	CTP					200	200
Memphis	ATP	100	100	100	100		
	CTP					500	500

But if you set the ATP Time Fence to 3 days, GOP Cloud will prefer capable-to-promise supply, preserving the 200 units of ATP on March 5th.

		5-Mar	6-Mar	7-Mar	8-Mar	9-Mar	10-Mar
Atlanta	ATP	200	200	200	200		
	CTP					200	200
Memphis	ATP	100	100	100	100		
	CTP					500	500

Next let's enable profitable-to-promise. If the transit cost from Memphis is less than from Atlanta, and the item costs are the same, GOP Cloud will source from Memphis.

		5-Mar	6-Mar	7-Mar	8-Mar	9-Mar	10-Mar
Atlanta	ATP	200	200	200	200		
	CTP					200	200
Memphis	ATP	100	100	100	100		
	CTP					500	500

Finally, imagine that the customer placed the order with only a three-day lead time (March 8th), instead of five days (March 10th). If you enable splitting, GOP Cloud will schedule it on-time by taking all the available supply from the primary location, and the remainder from the alternate.

		5-Mar	6-Mar	7-Mar	8-Mar	9-Mar	10-Mar
Atlanta	ATP	200	200	200	200		
	CTP					200	200
Memphis	ATP	100	100	100	100		
	CTP					500	500

However, if splitting were disallowed, it would schedule the order one day late (March 9th), using supply from the primary location.

		5-Mar	6-Mar	7-Mar	8-Mar	9-Mar	10-Mar
Atlanta	ATP	200	200	200	200		
	CTP					200	200
Memphis	ATP	100	100	100	100		
	CTP					500	500

Expanding Your Options Further with Batch Promising

This is not the end of the discussion, however. Let's assume that the order is for 3000 tablets instead of 1000. Looking across both facilities, there are only 2600 units available over the next week, so will it be delayed?

Not necessarily. Global Order Promising Cloud initially schedules orders line-by-line as they arrive, limiting its sourcing to the supply that's available at that point in time. But it also has a batch promising capability that can prioritize and reschedule groups of orders according to business objectives. To access this mode, simply click on the Order Promising icon in the Supply Chain Planning cluster of the SCM Cloud springboard. You'll see a high-level summary of order promising performance, which you can drill through to groups of related order lines.

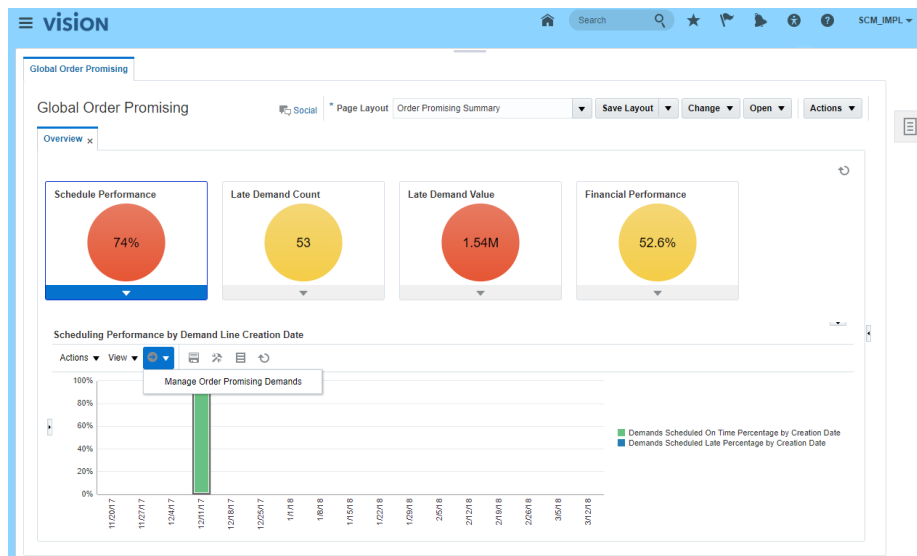


Figure 4 Batch order promising - summary view

Using batch promising, you may be able to use supplies that were previously assigned to lower-priority orders to fulfill high-priority orders that were delayed. So if 400 units of supply was previously assigned to another pending order, we may have the opportunity to reschedule it to free up supply for our 3000 tablet order.

Conclusion

Oracle Global Order Promising Cloud taps all available sources of supply to give you broad range of fulfillment options. You can adjust sourcing rules ATP rules, assignment sets and order line attributes to align the system's sourcing selection with your business objectives. Please consult Oracle documentation for further information about these Oracle Global Order Promising Cloud features.







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