

# OMS Get ATP by TAG/LOT Number

Use Case : 1800 Flowers brands (Organization) on IBM OMS want to sell items on the order capturing channels and want to promise to the customer only if inventory & its corresponding tag/lot number is available.

**Business Impact** - Overselling of Items on the website and call Center.

## Details /Background :

**Item Inventory Set up** – 18F brands item are singles and Bundles, where Sellable Items on the Web are tied to a GTIN Item against which inventory is maintained. GTIN items are Tag/lot controlled.

Order Capturing Channels call a OMS web service that gives them the ATP based on onhand or PO supply. In the web service we are presently calling findInventory API to get the availability of the Item/Gtin Item. There is a custom logic as well on the zip code and Lot/Tag requested.

| YFS_ITEM.ITEM_ID | YFS_ITEM.GLOBAL_ITEM_ID | YFS_INVENTORY_TAG.LOT_NO |
|------------------|-------------------------|--------------------------|
| 32533            | 32533                   | H32533-0000, E36-004533  |
| 32533X           | 32533                   | H32533-0000, E36-004533  |
| 32533XA          | 32533                   | H32533-0000, E36-004533  |
| 30991            | 30991                   | H30991-W000, H30991-S000 |

**Challenge with findInventory:** findInventory API does not consider the unassigned demand while calculating the availability, which results in oversells.

So we explored using GetAvailabaleInventory API which considers unassigned demand as well as assigned demand during ATP calculations. However, this API does not support multiple - LOT/TAG Number. We are seeing performance degradation if with this API.

Here are the results of a test that we ran in Preprod 2:

**Item Set up:**

| ITEM_ID          | GlobalItemID | SKU_1019.1X                               |
|------------------|--------------|-------------------------------------------|
| 1019.1X          | 1019.1X      | H00001-C000<br>H00001-D000<br>H00001-Y000 |
| 1019.33152X      | 1019.1X      |                                           |
| 1019.1XY         | 1019.1X      |                                           |
| 1019.VSTEST_4XY  | 1019.1X      |                                           |
| 1019.VSTEST_9TY  | 1019.1X      |                                           |
| 1019.35718X      | 1019.1X      |                                           |
| 1019.VSTEST_10TY | 1019.1X      |                                           |
| 1019.VSTEST_1VY  | 1019.1X      |                                           |
| 1019.1XA         | 1019.1X      |                                           |
| 1019.35718XB     | 1019.1X      |                                           |
| 1019.35718XA     | 1019.1X      |                                           |
| 1019.35718XC     | 1019.1X      |                                           |
| 1019.1XF         | 1019.1X      |                                           |
| 1019.1XZ         | 1019.1X      |                                           |
| 1019.1XB         | 1019.1X      |                                           |
| 1020.1W          | 1019.1X      |                                           |
| 1019.1XC         | 1019.1X      |                                           |
| 1019.1XR         | 1019.1X      |                                           |
| 1019.1Q          | 1019.1X      |                                           |
| 1019.1XD         | 1019.1X      |                                           |
| 1019.1DP         | 1019.1X      |                                           |
| 1019.21771X      | 1019.1X      |                                           |
| 1019.1XS         | 1019.1X      |                                           |
| 1019.1XL         | 1019.1X      |                                           |
| 1019.35660X      | 1019.1X      |                                           |
| 1019.1XN         | 1019.1X      |                                           |
| 1019.1XP         | 1019.1X      |                                           |
| 1019.1XX         | 1019.1X      |                                           |
| 1019.1SF         | 1019.1X      |                                           |
| 1019.1XO         | 1019.1X      |                                           |
| 1019.33152XR     | 1019.1X      |                                           |
| 1019.35660XK     | 1019.1X      |                                           |
| 1019.35660XR     | 1019.1X      |                                           |

**Results:**

| API Time Taken                   | TimeTaken(with time andSql trace on)               |
|----------------------------------|----------------------------------------------------|
| getAvailableInventory            | 6 sec                                              |
| findInventory(suggested options) | 4sec //probably the cache was build during the run |

SQL Timer Logs for findInventory and getAvailableInventory will be attached to the IBM Ticket (PMR).

**Requirement** - OMS API that can give us availability at LOT/TAG Number level considering the assigned as well as unassigned demand.