Suggested Ordering - Use Timestamps when generating a Suggested Order

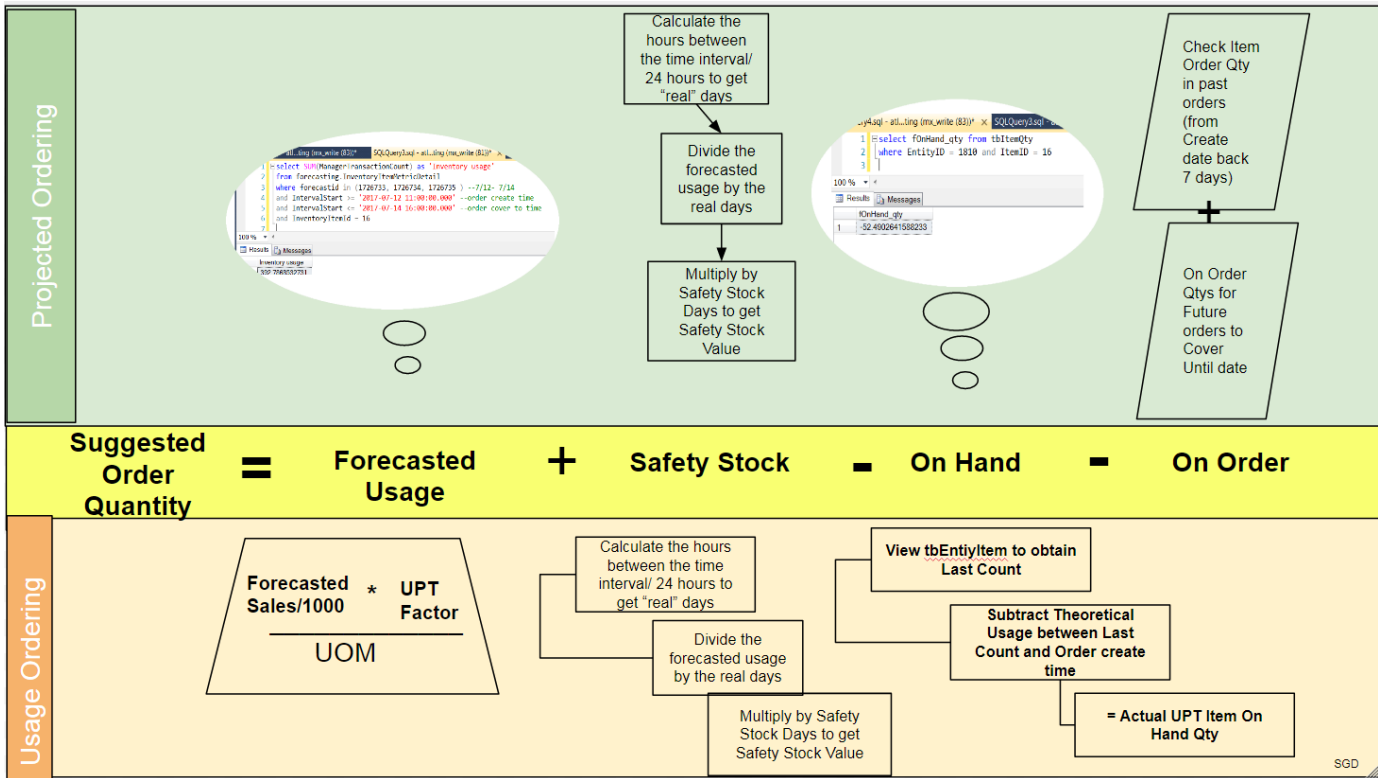| Target Release	2017R5
Feature Request	**INF-9** - Use Order Day & Cover Until Day Timestamp when calculating forecasted usage CLOSED
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Business Requirement

Enhance the Ordering UI and the Suggested Ordering algorithm to take into account the time at which the order is placed and the planned Cover Until date time.

- The algorithm for generating a suggested quantity for a specific item is:
- Suggested Quantity = Forecast Usage + Safety Stock - On-Hand - On-Order

As a part of this requirement, each of the inputs into the algorithm will be updated, as detailed below.

Implementation

Suggested Quantity = Forecast Usage + Safety Stock - On-Hand - On-Order

Projected Ordering

Calculate the hours between the time interval/ 24 hours to get "real" days

Divide the forecasted usage by the real days

Multiply by Safety Stock Days to get Safety Stock Value

Check Item Order Qty in past orders (from Create date back 7 days)

On Order Qtys for Future orders to Cover Until date

| Suggested Order Quantity | = | Forecasted Usage | + | Safety Stock | − | On Hand | − | On Order |

Usage Ordering

$$\frac{\text{Forecasted Sales}/1000 \; * \; \text{UPT Factor}}{\text{UOM}}$$

Calculate the hours between the time interval/ 24 hours to get "real" days

Divide the forecasted usage by the real days

Multiply by Safety Stock Days to get Safety Stock Value

View tbEntiyItem to obtain Last Count

Subtract Theoretical Usage between Last Count and Order create time

= Actual UPT Item On Hand Qty

SGD

Forecast Usage

Order Create Date/Time = 1:09 PM Saturday

Sunday

Monday

Order Cover Until Date/Time = 11 AM Tuesday

"Real Days" used in Safety Stock calculation = (Total # of hours between Saturday at 1PM to Tuesday at 11 AM - Closed hours)/ 24 hours

For Usage Ordering, forecasted usage = forecasted sales between 1PM on Saturday to 11AM on Tuesday
Example: ($7K of sales for item/1K) * UPT Factor

For projected ordering forecasted usage = Inventory level metric details from 1 PM (current 15 minute interval) on Saturday to 11 AM (current 15 minute interval) on Tuesday

Safety Stock

This is an extra quantity of an item that is included in the Order Quantity calculation.

1. Safety Stock is configured on a per item/per restaurant basis.
2. There are three methods to configure Safety Stock
   a. Percentage
      i. A percentage of the forecast usage
      ii. When entered into the system 0.5 = 50%, 1 = 100%, etc
   b. Inventory Units
      i. This is the number of inventory that should be retained, to maintain a Safety Stock
      ii. Keep in mind the Inventory Units are not always the same as Purchase Units
      iii. For Example: Purchase Unit = Case-36, Inventory Unit = Each => One Case-36 = 36 Each's
   c. Days
      i. If it is set to 0.5 days then this means 0.5 days worth of the daily projected quantity calculated (forecasted usage divided by 'Real days').
      ii. (total projected qty / 'real days' for projection) * 0.5

There is an import (Inventory Entity Item Import) to support setting the Safety Stock from a third party system, this was delivered under INF-3983.

- Maintain Inventory Items:
- Auto Calc check box
  - When this is selected, and the item is included in the Safety Stock Import for that store, the Safety Stock Number is updated
  - When this is not selected (unchecked by the Operator) the Safety Stock Value should not be updated, for the item, and the value of the flag should remain unchecked
- Once a restaurant is sent via the import, the Rules (to calculate Safety Stock) will be set from the rule using UPT, to a zone that has no rules configured.
  - This means that the Safety Stock values of the restaurant/items, will not be updated when the weekly Safety Stock job runs
- Note: In calculation the "Real Days" for the safety stock, not only are **closed days excluded** from the calculations, but **days without forecasts** (Manager transaction count needs to be greater than 0 in the forecast header table, forecasting.forecast)

RawSales	SystemTransactionCo...	SystemSal...	ManagerTransactionCount	ManagerSa...
12961.3655	1385.71085459207	12961.3655	1385.71085459207	12961.3655
12434.2134	1335.2072011516	12434.2134	1335.2072011516	12434.2134
13741.2074	1404.02403766259	13741.2074	1404.02403766259	13741.2074
14292.1132	1336.81871609446	14292.1132	1336.81871609446	14292.1132
0.00	0	0.00	0	0.00

On- Hand Quantity

For Projected orders, the perpetual On Hand quantity is determined through sales, transfers, discounts/giveaways and wasting of items. This On Hand value is stored in table tbItemQty and displayed on the Maintain Inventory Items page.

However, for Usage ordering, the On Hand Qty = Opening On Hand + Receivings (Truck Orders) + Transfers In - Transfers Out - (Total Sales between the **Last count and the order create date-time**/1000*UPT Factor). This calculation is available in a report format by selecting the "UPT Item On Hand values" Help Desk Script and the Time Interval within which the order was placed.

Help Desk Support

Store	00440 - Colony Square ▾
Date	7/25/2017 📅
Script	UPT Item On Hand values ▾
Description	Shows UPT Item On Hand values for a store at a date and time
Time	09:30 PM 🕐

The following fields are required: Time [Review]

Sample Report:

Results

Item Code	Item Description	Opening Count Date	Opening Count Qty	Adjust Qty	Total Sales	UPT Factor	UPT Quantity	On Hand Qty	Unit	Stocktake Box Qty	Stocktake Box Unit
007872	APRON, DISPOSABLE	7/25/2017 2:00:28 AM	156.6756	-50	$7,921.14	1.2905	10.2219	96.4537	1 Pack	0.9645	100 Ct Case
016749	TOWEL, ROLL	7/25/2017 2:00:28 AM	-114093.6169	0	$7,921.14	0.0782	0.6193	-114094.2362	Each	-9507.853	12 Ct Case
019758	CLEANER, GLASS/MSURF 1.5OZ	7/25/2017 2:00:28 AM	0	0	$7,921.14	0	0	0	Each	0	40 Ct Case
025258	HAIRNET	7/25/2017 2:00:28 AM	12913.6245	0	$7,921.14	1.0309	8.1655	12905.4589	Each	89.6212	144 Ct Case
030082	TOWEL, CHIX PLUS	7/25/2017 2:00:28 AM	0	0	$7,921.14	0	0	0	Each	0	50 Ct Case
030160	CLEANER, SIZZLE GRILL	7/25/2017 2:00:28 AM	-46152.7821	0	$7,921.14	0.0118	0.0933	-46152.8754	Quart Fluid	-7692.1459	6/1 Qt Case
030336	TOOTHPICKS, SQUARE ROUND	7/25/2017 2:00:28 AM	0	0	$7,921.14	0	0	0	Each	0	24 Ct Case
032530	GLOVE, POLY M	7/25/2017 2:00:28 AM	-18842879.8676	0	$7,921.14	0	0	-18842879.8676	Each	-3768.576	10/500 Ct Sleeve Case
032531	GLOVE, POLY LG (CS-10/500)	7/25/2017 2:00:28 AM	0	0	$7,921.14	0	0	0	Each	0	10/500 Ct Sleeve Case
032687	WET NAP	7/25/2017 2:00:28 AM	0	0	$7,921.14	0	0	0	One Box	0	10/100

⏮ ◀ 1 2 3 4 5 6 7 8 9 10 … ▶ ⏭   10 ▾ items per page   1 - 10 of 179 items

On-Order

The On Order quantities of a projected or usage ordering items are determined the same way. From the order create date/time, we look at all active orders(that are not cancelled or invoiced) from seven(7) days back until the cover until date/time for the on order quantity of that item.

User Interaction

Configuration

 Any steps related to the configuration of this feature

Rollout Related

- Document any steps that relate to the roll out of this feature.

Talent, Learning and Communication Information

User Impact

- Who does this change need to be communicated to (e.g. Service Desk, Operators, both, neither)?
    - TBD

- Why was this change needed or how does it benefit the impacted user(s)?
  - TBD

Recommended Verbiage (for both)

"TBD."

Knowledge Base Article Impact

- Does a new knowledge base article need to be created?
  TBD
- Does an existing knowledge base article need to be updated?
  TBD

Training

- Are there any specifics that will be needed with regards to training?