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CPSQL 839 Preview

- Forecasted Replenishment
- POS Exceptions Report

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POS Exceptions Report

- Exceptions and Stats by User
 - by Store / POS User
 - Detail List of Exceptional Activity
- Exceptions by Overriding User
 - by Store / Overriding User
 - Detail List of Exceptional Activity

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Forecasting and Replenishment

Stock level

Time

max - min = OQ

Order quantity

Safety stock

Reorder point

Time between order and receipt

Lead time

Expected inventory when order arrives

- Handled demand variability
- Determines service level

Equivalent to min

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Forecasted Replenishment Algorithm

- Balances service levels against costs to produce optimal min/max values
- Factors considered
 - Lead Time
 - How long after an order is placed does the merchandise arrive?
 - CP SQL can calculate this number using historical data.
 - It can also be set manually in [Purchasing / Vendor Items]
 - Holding costs
 - How much does it cost to hold this item in inventory?
 - Merchant supplied value set at [Inventory / Inventory] or [Setup / Inventory / location]
 - Expected sales
 - Time series analysis of historical sales data to predict future sales
 - Accounts for seasonal effects and trending
 - Ordering costs
 - How much does it cost to place an order, (usually a shipping cost)
 - Merchant supplied value set at [Inventory / Inventory]
 - Service levels
 - Likelihood an item will be in stock when the customer attempts to purchase.
 - Currently hard coded at 95%
 - Can be very expensive (in terms of inventory carrying costs) to go much higher.

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Forecasted Replenishment Process

Live Tickets

Historical Tickets

POST

USP_FORCAST_TAGS... (see DM_AGG)

DM_TRX_LOC_ITEM_SEAS

USP_IM_CREATE

USP_IM_CREATE_DYNAMICMAX

IM_INV

Purchase Advice

Purchase Request

IM_FORCAST_SEAS...

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Forecasting is Not for Every Item

- What makes a good candidate for forecasting?
 - Items that are restocked (men's white dress shirt, peanut butter)
 - Items with consistent, not necessarily steady, demand (sports drinks)
- What makes a bad candidate for forecasting?
 - Items that are not restocked (fashion)
 - Items that have very low / inconsistent demand