



# PARX MINMAX REPLENISHMENT

## FUNCTIONAL DESIGN & USER GUIDE

### LANDMARK GROUP

#### PLANNING **A**LLLOCATION, **R**EPLENISHMENT & **E**XECUTION

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Creation Date: Oct 04, 2017

Last Updated: Apr 24, 2018

Document Template Version: 2.6

## 1.1. Document Control

### Change Record

Date	Author	Version	Change Reference
4-Oct-17	LMIT	V1.0	Initial Draft
8-Nov-17	LMIT	V2.1	Included recent changes.
10-Jan-18	LMIT	V2.2	Included Jan Release Changes
24-Jan-18	LMIT	V2.3/2.4	Included Feb Release Changes
03-Mar-18	LMIT	V2.5	Included March Release Changes
23-Apr-18	LMIT	V2.6	Included Functional Design

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## 1.2. Introduction

This document describes the functional process of LMG MinMax Store Replenishment system (PARX) which is an integrated system for **Planning, Allocation, Replenishment** and **eXecute** the user approved replenishment definition and min-max parameters.

The application is integrated with Planning applications(AP), analytical system(Netezza) and merchandising system(RMS) to provide end to end solution for driving Store Min-Max Replenishment for Fashion and Basic Items.

The application can be used for,

- 1) Define /Review/Approve Master Data for Supply chain processes.
- 2) Define/review/Approve Replenishment Definition Parameters.
- 3) Define/Review/Approve Replenishment/Logistics Parameters.
- 4) Review actual Item/Option performance at Trading Stores.
- 5) Review Planned attributes and RMS Min/Max Setup.
- 6) Review/Plan item performance for specific time and approve Min/Max.
- 7) Auto- approve Min-Max parameters post launch based on sytem calculated Exit strategy.
- 8) Review Aut-Cut Off eligible items-stores and extend MinMax if required.
- 9) Auto Cut Off MinMax based on Scarcity rules and thesholds defined.
- 10) Review Review Time and Lead Time for MinMax calculations and Warehouse deliveries.
- 11) Handle Exceptions and review the currently active RMS MinMax on the system

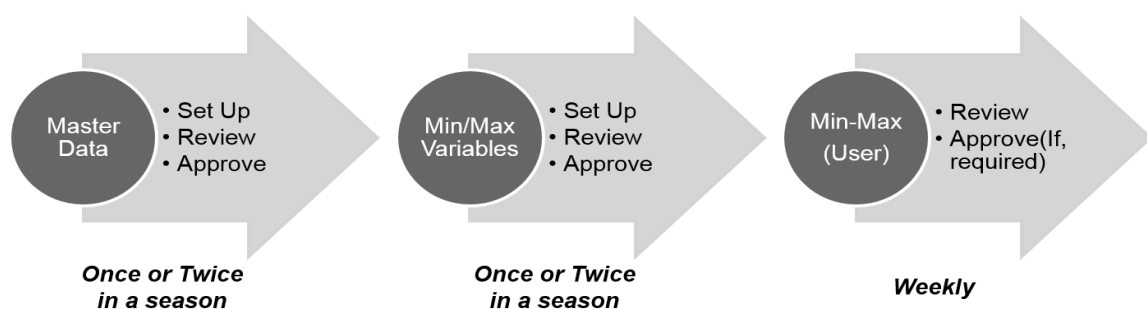
## 1.3. Scope

This document describes the process flow and functional design of the system with end to end user processes supported by relevant screenshots and explanations wherever required.

## 1.4 High Level Process

Replenishment parameters set up process using LMGSCP application has been broadly divided into 3 step processes - Master Data SetUp, Replenishment Definition and Approve Min-Max.

As part of Pre-season process, Concept Planners can define Master Data like MDQ (Presentation Stock), Shelf Capacity, at Option or SKU level for planned launch stores and approve Min Max definition to calculate the min/max. During Launch on In-season, inventory controllers can review the Min/Max, item-performance and manage paremeters on need basis.



**Master Data Set Up/Review/Approval:** Pre-Season review starts with defining **MDQ/Shelf-Capacity/Eligibility-Exceptions** at Option/Store level and reviewing the SKU level parameters at ranged stores. MDQ/Shelf-Capacity can be defined in the following ways.

- 1) Upload MDQ/Shelf-Capacity at Option/Store level through Excel and review/change SKU level distribution based on pre-calculated size profiles in application.
- 2) Plan MDQ/Shelf-Capacity at Option/Store level in the system and review/change SKU level distribution based on pre-calculated size profiles in application.
- 3) Plan MDQ/Shelf-Capacity at SKU/Store level and Approve MDQ for Min/Max calculations.

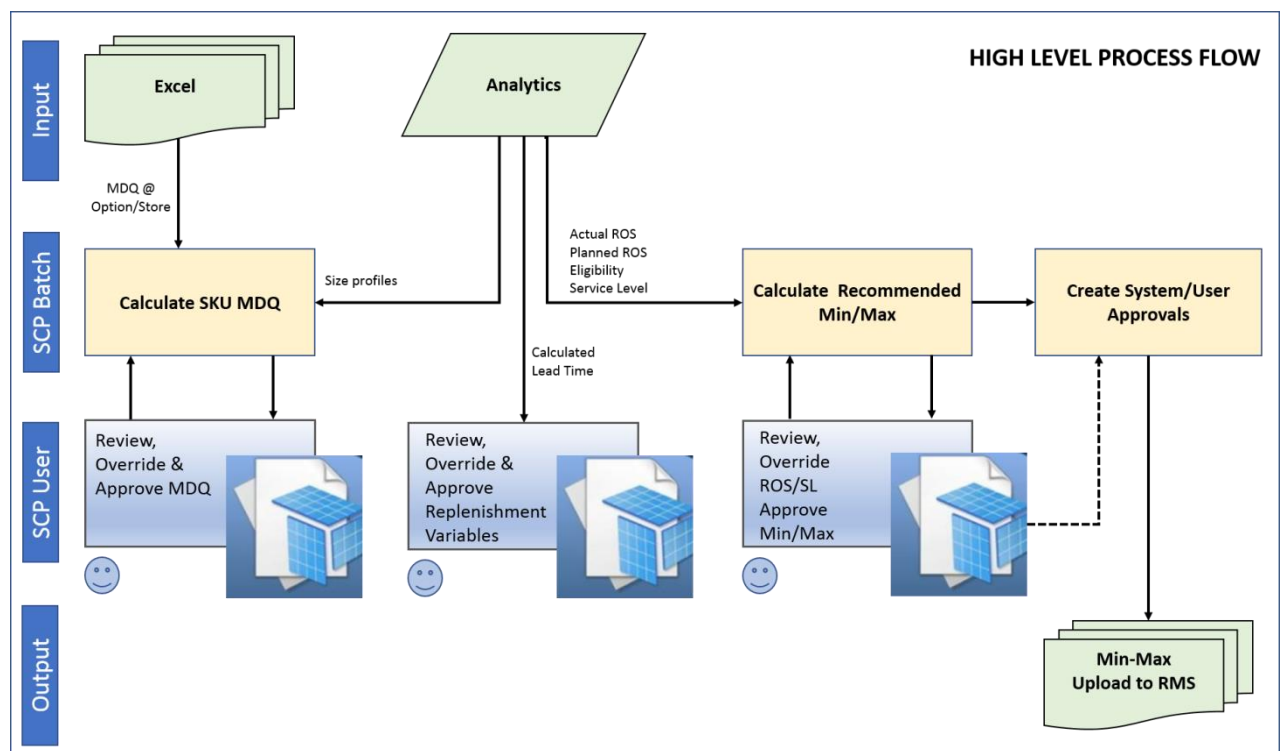
Planned/Calculated MDQ will be approved by Users to be used in next processes. In addition to this, users will be also defining the “**Eligibility Exceptions**” at Option/Store level to set exceptions for eligible Stores. This will ensure that system recommendations are not executed for defined exceptions even if they are “**Eligible as per Rules**”.

**Min/Max Variables Setup/Review/Approval:** This process will define the Min/Max formula, Review/Manage LeadTime/ReviewTime and setup to include Safety Stock in calculations at higher level.

- 1) Store Replenishment Variables (Min/Max definition Setup) will be at available for setup at **Season/Class/StoreCluster/ProductCluster** Level and will be managed through Manager approval process.
- 2) **Store Review Time/Lead Time** will be available for setup at **Store level** and will be managed through Manager approval process.
- 3) **Threshold variables setup** will be required for driving auto cut off on MinMax Replenishment which are active in RMS. **DC Scarcity Threshold** and **Tolerance Level** will drive the ROS Cut Off algorithm defined in Netezza to identify stores/items to be cutoff followed by deactivation from PARX.

**Min/Max Approval:** This will be semi-automated process in which system will suggest recommended Min/Max based on Launch and Exit Dates provided there is no User approved Min/Max for the same period/overlapped period.

In this workflow users will be able to review end to end item/store performance, replenishment related attributes and MinMax Category.



## 1.5 Master Data Setup

### 1.5.1 MDQ and Shelf Capacity

Pre-season master data setup is a key step to start replenishment process as output of this step will be used in replenishment calculations. Users will be able to plan MDQ (presentation stock) and Shelf Capacity at store level which are key variables in calculations of Min Max.

**MDQ** – Minimum Display Quantity is the planner defined minimum quantity to be available in Store at Option/Store level.

**Shelf Capacity** – Maximum Capacity of an Option/Item defined by Planners for a store that can be displayed at Shelves.

MDQ and Shelf Capacity can be managed by Users in the following ways,

- 1) Upload MDQ/Shelf-Capacity at Option/Store level through Excel and review/change SKU level distribution based on pre-calculated size profiles in application.
- 2) Plan MDQ/Shelf-Capacity at Option/Store level in the system and review/change SKU level distribution based on pre-calculated size profiles in application.
- 3) Plan MDQ/Shelf-Capacity at SKU/Store level and Approve MDQ for Min/Max calculations.

In April 18 release for PARX, approved MDQ of 0 or higher values will be mandatory to calculate Min and Max for eligible item-stores. This implies that **MDQ approval will be a “MANDATORY” step** to enable MinMax calculations from PARX. **If approved MDQ at SKU/Store level is  $\geq 0$** , recommended Min Max will be calculated as per definitions.

**Note:** Users are expected to share MDQ and Shelf Capacity at Store/Option level in PARX uploadable format with the support team with name as **MDQ\_<dept>\_<terr>\_<date>.xls** and **ShelfCapacity\_<dept>\_<terr>\_<date>.xls**

A sample file format for MDQ and Shelf Capacity Upload are as follows,

	B	C	D	E	F	G	H	I	J
MDQ	01_10003	01_10004	01_10005	01_10006	01_10007	01_10008	01_10009	01_10010	01_10011
01_160165040_BLUE_DARK	8	8	8	8	8	8	8	8	8
01_160165041_WHITE_LIGHT	8	8	8	8	8	8	8	8	8
01_160165042_BLUE_DARK	8	8	8	8	8	8	8	8	8
01_160165043_WHITE_LIGHT	8	8	8	8	8	8	8	8	8
01_160165044_GREY_DARK	8	8	8	8	8	8	8	8	8
01_160165075_BLUE_DARK	8	8	8	8	8	8	8	8	8
01_160165076_BLUE_DARK	8	8	8	8	8	8	8	8	8
01_160165077_WHITE_LIGHT	8	8	8	8	8	8	8	8	8
01_160165078_GREEN_MEDIUM	8	8	8	8	8	8	8	8	8
01_160165079_GREEN_MEDIUM	8	8	8	8	8	8	8	8	8
01_160165116_BLUE_DARK	8	8	8	8	8	8	8	8	8

	B	C	D	E	F	G	H	I	J	K	L
Shelf Capacity	01_10003	01_10004	01_10005	01_10006	01_10007	01_10008	01_10009	01_10010	01_10011	01_10013	01_10014
01_160165040_BLUE_DARK	24	24	24	24	24	24	24	24	24	24	24
01_160165041_WHITE_LIGHT	24	24	24	24	24	24	24	24	24	24	24
01_160165042_BLUE_DARK	24	24	24	24	24	24	24	24	24	24	24
01_160165043_WHITE_LIGHT	24	24	24	24	24	24	24	24	24	24	24
01_160165044_GREY_DARK	24	24	24	24	24	24	24	24	24	24	24
01_160165075_BLUE_DARK	24	24	24	24	24	24	24	24	24	24	24
01_160165076_BLUE_DARK	24	24	24	24	24	24	24	24	24	24	24
01_160165077_WHITE_LIGHT	24	24	24	24	24	24	24	24	24	24	24
01_160165078_GREEN_MEDIUM	24	24	24	24	24	24	24	24	24	24	24

### 1.5.2 MDQ Status Filter

Users are expected to make use of MDQ Status Filters and select data as per requirement. Available MDQ Status are,

1. MDQ Approved
2. MDQ Not Approved
3. MDQ Partially Approved
4. MDQ Not Available

The above filters are derived based on the following definitions and data availability. The filter selected in the 2<sup>nd</sup> step, filters the Option and Store in the next step.

- ✓ **MDQ Approved** – If **Option\_MDQ was uploaded** and **all SKU\_MDQ under the Option was approved** by the Users at the store level.
- ✓ **MDQ Not Approved** – If **Option\_MDQ was uploaded** and **all SKU\_MDQ under the Option are not yet approved** by the Users at the store level.
- ✓ **MDQ Partially Approved** – If **Option\_MDQ was uploaded** and **few SKU\_MDQ under the Option are not yet approved** by the Users at the store level.
- ✓ **MDQ Not Available** – If **Option\_MDQ was not uploaded** by the Users at the store level.

### 1.5.3 MDQ for MinMax Recommendation

From Apr 18 release for PARX, **approved MDQ of '0' or 'greater value'** will be mandatory to calculate recommended Min Max. This means that if users have not approved SKU MDQ for a store there will not be any recommended MinMax available for approval.

Note :

- ✓ To distinguish '0' and non availability, non available MDQ(SKU & Option) will be formatted to show blank values.
- ✓ Users can also opt to receive the MDQ Status Report published twice a week at Concept/Season/group level which lists all the option/stores for the season.

### 1.5.4 Eligibility Exceptions Review

The option/store which are not eligible for Min Max calculations as defined by Users in Excel Uploads. The features will help planners to exclude item/locations from MinMax approval as this will override the calculated "Eligibility" based on pre-allocation, sales, receipts, consolidation.

Users can defined "N" in uploads at Option/Store level as shown in the sample upload below.

EGD_XLS Continuity_Home_LS - Excel											
File Home Insert Page Layout Formulas Data Review View Font PDF Tell me what you want to do											
G12											
	A	B	C	D	E	F	G	H	I	J	K
1		05_20162	05_21001	05_21002	05_21004	05_21005	05_21006	05_21007	05_21008	05_21011	05_21012
2	05_137142093_MULTICOLOR_C-SHADE	N	N	N	N	N	N	N	N	N	N
3	05_137142114_MULTICOLOR_C-SHADE	N	N	N					N	N	N
4	05_137286273_MULTICOLOR_C-SHADE	N	N	N	N	N	N	N	N	N	N
5	05_141132980_MULTICOLOR_C-SHADE	N	N	N	N	N	N	N	N	N	N
6	05_143266762_MULTICOLOR_C-SHADE	N		N					N	N	N
7	05_143266789_MULTICOLOR_C-SHADE	N		N					N	N	N
8	05_150343308_MULTICOLOR_C-SHADE	N		N					N	N	N
9	05_150968674_MULTICOLOR_C-SHADE	N	N	N	N				N		N
10	05_152437287_MULTICOLOR_C-SHADE	N	N	N	N	N	N	N	N	N	N
11	05_153040976_MULTICOLOR_C-SHADE	N	N	N	N	N	N	N	N	N	N
12	05_153040977_MULTICOLOR_C-SHADE	N	N	N	N	N	N	N	N	N	N
13	05_153048186_MULTICOLOR_C-SHADE	N	N	N	N	N	N	N	N	N	N
14	05_153048191_MULTICOLOR_C-SHADE	N	N	N	N	N	N	N	N	N	N

## 1.5.5 Workbook Details: Master Data Setup Workbook

### User Roles: Concept Admin, Concept Supply Planner

Master data setup workbook will be used for managing MDQ and Shelf Capacity at SKU/Store level. The key inputs to this workbook will be the Planned Option/Store MDQ uploaded via Excel Sheet. The uploaded Option/Store level MDQ will be distributed to SKU level based on pre-calculated subclass/store/season level size profiles applied to the option.

Alternatively, users can also plan Option/Store level MDQ in the workbook and request for SKU distribution online.

As another option. Users will be also able to enter the SKU level MDQ at required stores and approve the same.

Post review, users will be expected to approve the SKU/Store level MDQ which can be done at a higher level.

### KEY MEASURES IN THE WORKBOOK

#### TAB: SCP OPTION PARAMETERS

**Planned MDQ:** Excel Upload/AP interfaced MDQ at Option/Store level. Refer to sample upload file in “Appendix” section. This is a read only measure.

**Override MDQ:** Users can override Option Level MDQ. This data will be defaulted to Planned MDQ if available.

**Planned Shelf Capacity:** Excel Upload/AP interfaced Shelf Capacity at Option/Store level. Refer to sample upload file in “Appendix” section. This is a read only measure.

**Override Shelf Capacity:** Users can override Option Level Shelf Capacity. This data will be defaulted to Planned Shelf Capacity if available.

#### TAB: SCP OPTION PARAMETERS

#### WORKSHEET: ELIGIBILITY EXCEPTIONS

**Eligibility Exceptions:** The option/store which are not eligible for Min Max calculations as defined by Users in Excel Uploads. The features will help planners to exclude item/locations from MinMax approval as this will override the calculated “Eligibility” based on pre-allocation, sales, receipts, consolidation.

#### TAB: SCP SKU PARAMETERS

**SKU MDQ:** System calculated MDQ based on subclass/store/size\_range profiles which are pre-calculated in “Analytics”. Refer to the “Appendix” section for more details.

**Override SKU MDQ:** Users can override SKU level MDQ distribution after entering Option level MDQ and requesting for MDQ at SKU level.

**SKU Shelf Capacity:** System calculated MDQ based on subclass/store/size\_range profiles which are pre-calculated in “Analytics”. Refer to the “Appendix” section for more details.

**Override SKU Shelf Capacity:** Users can override SKU level MDQ distribution after entering Option level MDQ and requesting for MDQ at SKU level.

**Approve:** “Check Box” to approve final MDQ. Users have to invoke “Planning Actions→ Approve” to approve the final MDQ values.

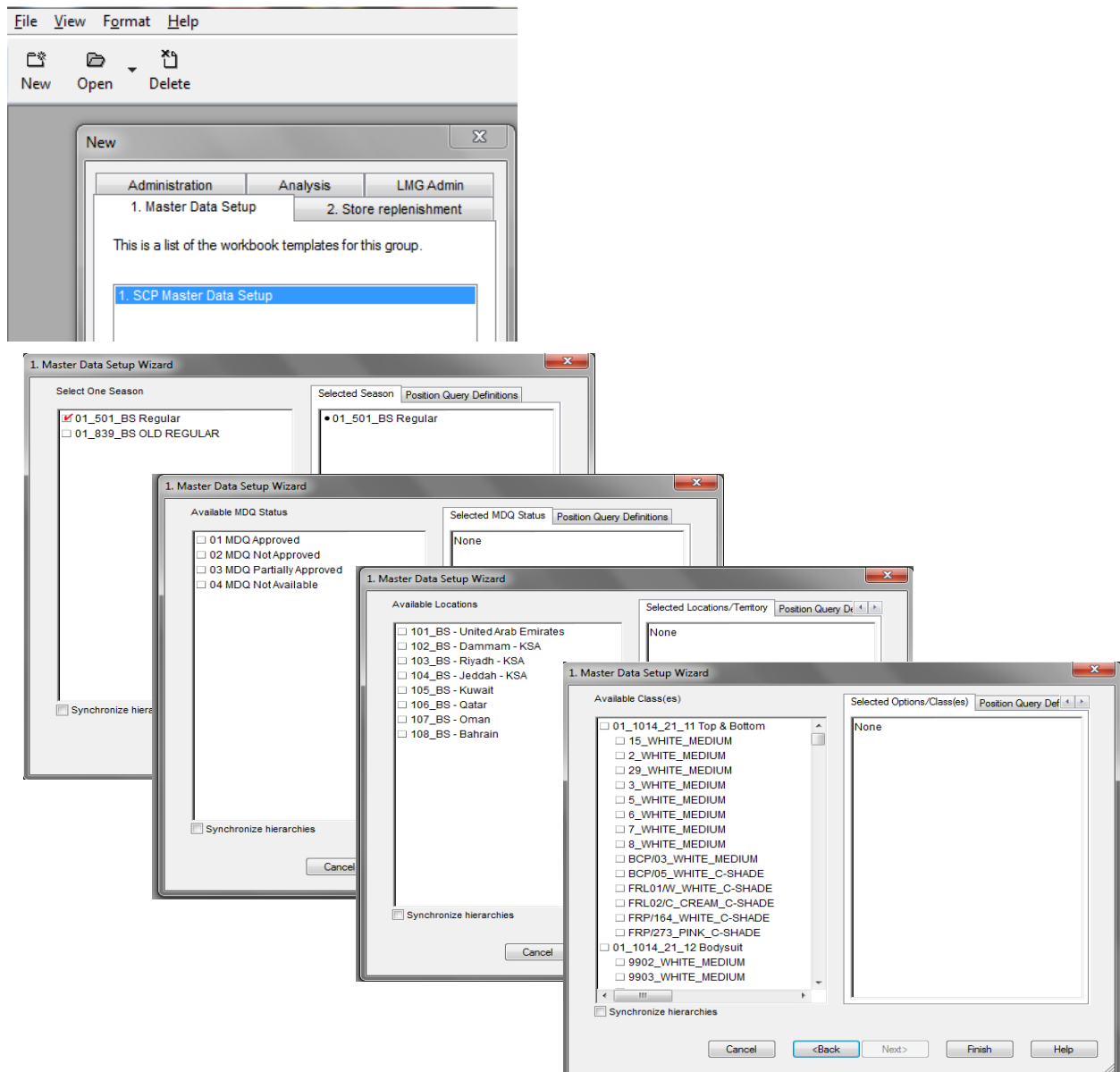
**Approved By:** user name who has last approved the MDQ

**Approved Date:** Last captured date when SKU MDQ was approved.



**Step 1:** Login to the respective local domain/Group, Click “New” and under the tab **1. Master Data SetUp**, Open **1.SCP Master data SetUp Workbook**.

**Step 2:** Select data as per Wizard , Season(One)→ MDQ Status(es)→ Territories->Classes/Packgroups.



Options/SKU will be included in the workbook as per Season/Class selected. Similar stores will be included based on selected Store selected.

**Step 3:** In **Master Data setup workbook**, there are two tabs available to Plan Option level and approve SKU level data respectively.

Navigate to **“SCP Option Parameters”** Tab and review the uploaded(via Excel) **“Planned MDQ”** at Option/Store level. The batch calculated SKU level MDQ (based on subclass/store size profiles) will be available under the **“SCP SKU Parameters”** tab. Users can navigate to this tab and review **“SKU MDQ”** and make changes in **“Override SKU MDQ”** if required.

**Excel Upload**

Option Parameters		SKU Parameters	
Seasons	Location	Store Cluster Map	MDQ Status
01_501_BS_Regular	01_10003_BS - AI Qasnia SHJ		
		Planned MDQ	Override MDQ
SB-12_PINK_C-SHADE	unassigned	01 MDQ Approved	12
SB-11_C-COLOR_C-SHADE	unassigned	01 MDQ Approved	12
QZ0054D17_GREY_C-SHADE	unassigned	01 MDQ Approved	12
QZ0053D17_BEIGE_C-SHADE	unassigned	01 MDQ Approved	12
QZ0052D17_PINK_C-SHADE	unassigned	01 MDQ Approved	12
QZ0051D17_CREAM_C-SHADE	unassigned	01 MDQ Approved	12
QZ0050D17_PINK_C-SHADE	unassigned	01 MDQ Approved	12
QZ0043D17_C-COLOR_C-SHADE	unassigned	01 MDQ Approved	12
QZ0033D17_C-COLOR_C-SHADE	unassigned	01 MDQ Approved	12
QZ0031D17_BROWN_C-SHADE	unassigned	01 MDQ Approved	12

Option Parameters		SKU Parameters	
Seasons	Location	Planned Launch	Ranged
01_501_BS_Regular	01_10003_BS - AI Qasnia SHJ		
		Option MDQ	SKU MDQ
		Option Shelf Capacity	SKU Shelf Capacity
		Override SKU Shelf Capacity	Override SKU Shelf Capacity
01_110127061	Strapy Vest-White-24-36M_SZAP-3Y		
01_110128013	S/S T Shirt-White-24-36M_SZAP-3Y		
01_110128427	L/S T Shirt-White-24-36M_SZAP-3Y		
01_110128451	O/F Pyjama-White-24-36M_SZAP-3Y		
01_110129024	Soaker Panty-White-24-36M_SZAP-3Y		
01_110129083	Regular Panty-White-24-36M_SZAP-3Y		
01_110131010	Vest-White-24-36M_SZAP-3Y		
01_110134114	Shorts 0-3 M_SZAP-0-3M		
01_110134421	Shorts 3-6 M_SZAP-3-6M		
01_118541902	TRAINER PANTY PVC/CTN-LEMON-18 M_SZAP-18M		
01_129209981	Cap-White_C-SZAPPL		

If any changes are required at Option level MDQ, users can change **“Override MDQ”** or **“Override Shelf Capacity”** at Option level, execute **Planning Actions -> “Request Size MDQ/Shelf Capacity”** and review **“SKU MDQ”** and **“SKU Shelf Capacity”** in SCP SKU Parameters tab.

(Refer to Next Page)

SCP Options Parameters		SCP SKU Parameters	
Seasons	Location	Planned Launch	Planned Buy Qty
03_218_SP-B -AIS	03_21001 CP - Fujairah		
		Planned MDQ	Override MDQ
8600870	FOR617TRS04_BROWN_MEDIUM	0	16
8600869	FOR617TRS03_GREY_MEDIUM	0	16
6910218	S1ES18TRS05 GREY_MEDIUM	0	16

File	Edit	View	Format	Window	Planning Actions	Help
Previous	Next	New	Open	Refresh	Close	

SCP Options Parameters		SCP SKU Parameters	
Seasons	Location	Planned Launch	Ranged
03_218_SP-B -AIS	03_21001 CP - Fujairah		
		SKU MDQ	Override SKU MDQ
8600870	FOR617TRS04_BROWN_MEDIUM	16	20
03_159983107	TROUSERS_SZAP-30	1	3
03_159983108	TROUSERS_SZAP-32	3	3
03_159983109	TROUSERS_SZAP-34	3	3
03_159983110	TROUSERS_SZAP-36	5	3
03_159983111	TROUSERS_SZAP-38	2	3
03_159983112	TROUSERS_SZAP-40	1	3
03_159983113	TROUSERS_SZAP-42	1	2

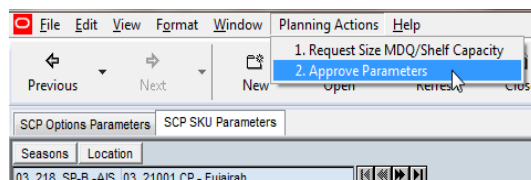
Alternatively, users can also override SKU MDQ at SKU level

SCP Options Parameters		SCP SKU Parameters	
Seasons	Location		
03 218 SP-B -AIS	03_21001 CP - Fujairah		
	Planned Launch	Ranged	SKU MDQ
8600870 FOR617TRS04_BROWN_MEDIUM			16
03_159983107 TROUSERS_SZAP-30			1
03_159983108 TROUSERS_SZAP-32			3
03_159983109 TROUSERS_SZAP-34			3
03_159983110 TROUSERS_SZAP-36			5
03_159983111 TROUSERS_SZAP-38			2
03_159983112 TROUSERS_SZAP-40			1
03_159983113 TROUSERS_SZAP-42			1

**Step 4:** In this step, once SKU MDQ/Shelf Capacity are finalised, users should approve the MDQ/Shelf Capacity (Lower/Higher) level. The system will maintain the history of Approved MDQ/Approved Shelf Capacity as shown below.

Click “Approve” Boolean → Planning Actions (Approve Parameters). Users will be able to see approved MDQ, Approved By and Approved date in respective Measures.

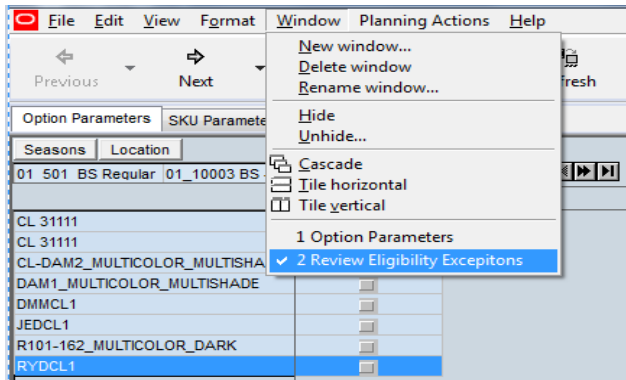
Option Parameters		SKU Parameters	
Seasons	Location		
01 501 BS Regular	01_10003 BS - Al Qasbia SHJ		
	Planned Launch	Ranged	Option MDQ
01_110127061 Strapy Vest -White 24-36M_SZAP-3Y			50
01_110128013 S/S T Shirt-White-24-36M_SZAP-3Y			50
01_110128427 L/S T Shirt-White-24-36M_SZAP-3Y			50
01_110128451 O/F Pyjama-White-24-36M_SZAP-3Y			50
01_110129024 Soaker Panty-White-24-36M_SZAP-3Y			50
01_110129083 Regular Panty-White-24-36M_SZAP-3Y			50
01_110131010 Vest-White-24-36M_SZAP-3Y			76
01_110134114 Shorts 0-3 M_SZAP-0-3M			35
01_110134421 Shorts 3-6 M_SZAP-3-6M			15
01_118541902 TRAINER PANTY PVC/CTN-LEMON-18 M_SZAP-18M			12
01_129209981 Cap-White_C-SZAPPL			25
01_130498951 FRILL PANTY-WHITE-0-3M_SZAP-0-3M			8
01_130498960 FRILL PANTY-WHITE-3-6M_SZAP-3-6M			3



Option Parameters		SKU Parameters	
Seasons	Location		
01 501 BS Regular	01_10003 BS - Al Qasbia SHJ		
	SKU MDQ	Override SKU MDQ	Option Shelf Capacity
01_110127061 Strapy Vest -White 24-36M_SZAP-3Y	50	50	0
01_110128013 S/S T Shirt-White-24-36M_SZAP-3Y	50	50	0
01_110128427 L/S T Shirt-White-24-36M_SZAP-3Y	50	50	0
01_110128451 O/F Pyjama-White-24-36M_SZAP-3Y	50	50	0
01_110129024 Soaker Panty-White-24-36M_SZAP-3Y	50	50	0
01_110129083 Regular Panty-White-24-36M_SZAP-3Y	50	50	0
01_110131010 Vest-White-24-36M_SZAP-3Y	76	76	0
01_110134114 Shorts 0-3 M_SZAP-0-3M	35	35	0
01_110134421 Shorts 3-6 M_SZAP-3-6M	15	15	0
01_118541902 TRAINER PANTY PVC/CTN-LEMON-18 M_SZAP-18M	12	12	0
01_129209981 Cap-White_C-SZAPPL	25	25	0

Approved MDQ and Shelf Capacity will be fed to MinMax calculation Engine for computing Recommended Min Max values.

**Step 5 (Optional):** Navigate to the Option Parameters tab and select Window → Review Eligibility Exceptions. In this step users can setup Option/Store as “Uneligible for Replenishment” if required. The setup is available as excel upload and Boolean setup in the workbook.



“Eligibility exceptions” are defined by users to override the “System Eligibility” for calculating MinMax during approval process. This setting can be proactively used by the planners to avoid calculating system recommended MinMax and approving the same during masss approval.

This feature is available at Option/Store level and will be available in MinMax approval workbook for user review.

## 1.6 Replenishment Variables SetUp & Approval

Replenishment Variables SetUp/Approval workbook will be used to setup Min/Max definition, Review and change Lead Time/Review Time through an Approval process. These workbooks will be loaded with default Min/Max formula and calculated Lead Times for user review.

### 1.6.1 Min Max Calculations

High level Min/Max calculation can be described as follows

Min = MDQ+ Demand Over Lead Time  
Max = Min + Demand Over Review Time

For system calculations, the below MinMax formula has been configured.

**Min =MinDQ+ ROUND(DoLT)+<SS>**  
**Max = Min+Max(DoRT,1)**

Where,

**MDQ** = Approved MDQ

**Demand Over Lead Time (DoLT)** = Planned Daily ROS \* Approved RDC to Store Lead Time

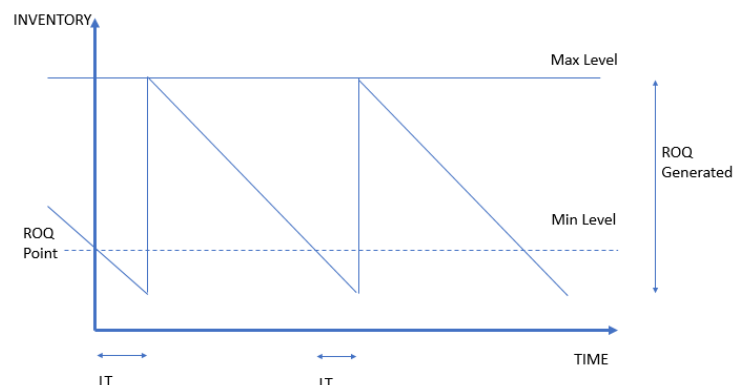
**Demand Over Review Time(DoRT)** = Planned Daily ROS \* Approved Review Time for the Store

**Safety Stock <SS>** = Additional but Optional Stock calculated based on Store service level to cover the variability in demand and Lead Time.

If **Shelf Capacity(SC)** is defined , both Min and Max will be capped by Shelf Capacity as follows,

**Min=MIN (MDQ+ROUND(DoLT)+<SS>,SC-1)**  
**Max= MIN (Min+MAX(DoRT,1),SC)**

- ✓ **Safety stock <SS>** will be present as optional variable which can be included in Min/Max calculations at Class/Season/Store Cluster level in this workbook. Though Safety stock service levels will be recommended via Analytics at SKU/Store level, Concept Planners will be able to set Service level at Class/Seas/Store Cluster Levels in this workbook.
- ✓ If Safety stock is included in calculations with no pre-defined service levels, safety stock will be calculated based on analytics interfaced recommended service levels (will be available in Min/Max Approval workbook, Refer section 1.7).
- ✓ All changes made to Min/Max definition, suggested Lead Times will go through approval process with last approval details.



### 1.6.1 ROS Cut Off Criteria and SetUp

This Change has been included in Jan 18 release to stop Min Max in RMS for an Option which “**Qualify**” for Cut Off based on RDC Stock Availability (Shortage). Based on potential to sell and expected Lifespan, stores be categorized for final cut Off.

PARX will auto-stop replenishment if an Option/Store is eligible for “Auto Cut Off”. This indicator will be interfaced daily from Netezza to PARX at Option/Store level with expected Planned Exit Date. If an Option/Store is eligible for “Auto Cut Off”, system will generate files to stop RMS Min-Max replenishment for the Planned Exit date.

Currently the planned exit date is defaulted to “Today”.

Below parameters are required for setup to calculate the “auto cut off indicator”

**DC Scarcity Threshold:** what % of stock left in DC should trigger the Option level ROS Cut Off. This is compared to WH Stock or Wh Receipt. Defined at Terr/Class/ Product Cluster level, the % will trigger the MinMax Cut Off calculations for Options in the territory.

**Tolerance Threshold:** To what %, the actual remaining warehouse stock should be inflated to cover the need of territory stores.

- ✓ Users will be responsible to setup first MinMax for any Product Type. In case, an Item is eligible for replenishment, but Users have not approved MinMax, system will not auto approve any MinMax parameters.
- ✓ Auto Cut Off will happen only once for any Option/Store. If User decides to extend/reapprove MinMax after auto cutoff is generated and uploaded in RMS, system will not cutoff the replenishment again. Warehouse shortage and tolerance parameter should be defaulted to 0%.

## 1.6.2 Workbook Details: Replenishment Variables SetUp

User Roles: Concept Admin, Concept Supply Planner

### KEY MEASURES IN THE WORKBOOK

#### TAB: SCP REPLENISHMNT VARIABLES

**Min-MinDQ** – Boolean Measure to include MinDQ in Min Calculations.

**Min- Safety Stock** – Boolean Measure to include Safety Stock in Min Calculations.

**Min- Demand Over Lead Time** – Boolean Measure to include Demand over Lead Time in Min Calculations.

**Max- Demand Over Review Time** – Boolean Measure to include Demand Over Review Time in Max Calculations.

**Submit for Approval** – Boolean Measure to be selected if users want to submit definition for approval.

**Submitted Min Definition** – Submitted Min Definition by user

**Submitted Max Definition** – Submitted Max Definition by User

#### TAB: STORE LEAD TIME & REVIEW TIME

**Avg Lead Time** – Calculated Lead Time from Analytics based on last 6 months shipments from RDC to Store.

**Override Lead Time** – User Override option if there are any changes required form calculated Lead Time.

**Review Time** – Default review Time of 1 day

**Override Review Time** – User Override option if there are any changes required in review Time.

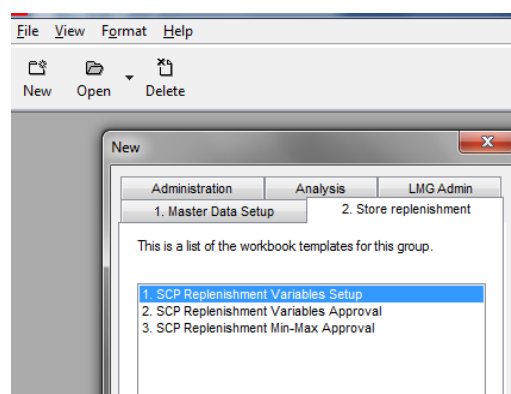
**Submit for Approval** – Boolean Measure to be selected if users want to submit definition for approval.

#### TAB: THRESHOLD VARIABLES

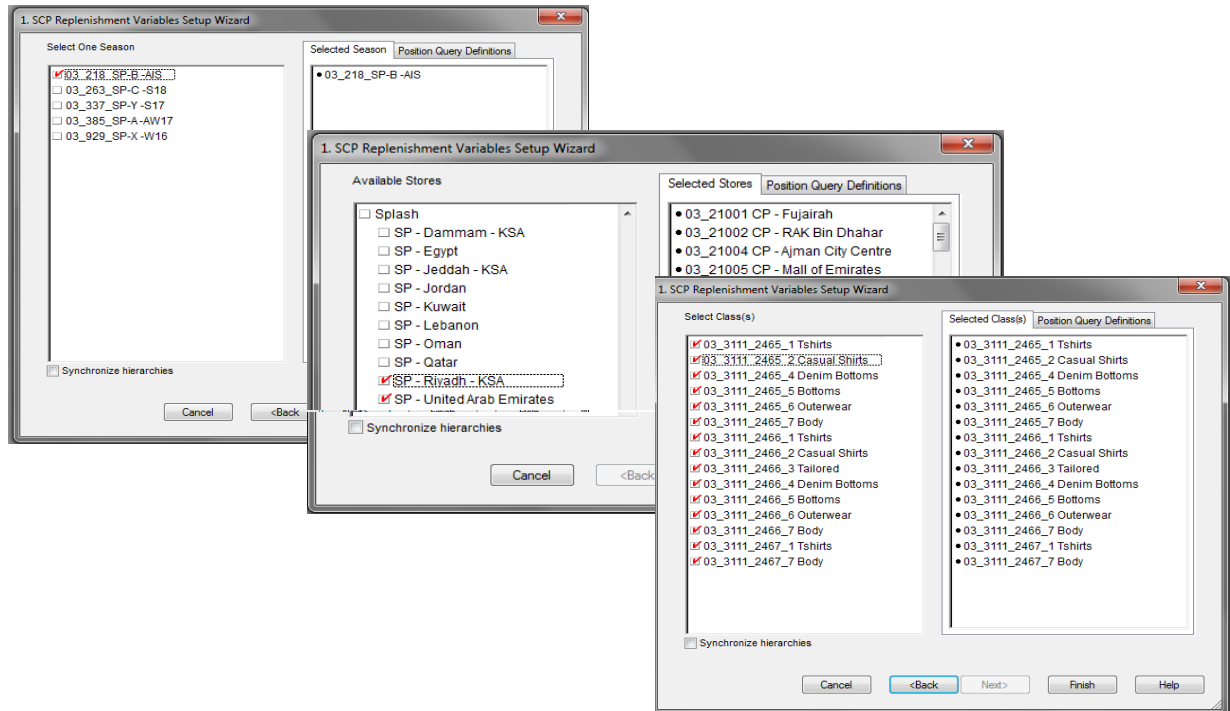
**DC Scarcity Threshold** : what % of stock left in DC should trigger the Option level ROS Cut Off. This is compared to WH Stock/Wh Receipt. Defined at Terr/Class/ Product Cluster level, the % will trigger the MinMax Cut Off calculations for Options in the territory.

**Tolerance Threshold** : To what %, the actual remaining warehouse stock should be inflated to cover the need of territory stores.

**Step 1:** Login to the respective local domain/Group, Click “New” and under the tab **2. Store Replenishment**, Open **2.SCP Replenishment Variables SetUp**



**Step 2:** Select data as per Wizard , Season(One)→ Select Territory(s)→ Select Class(es) and click “Finish”.



**Step 3:** Navigate to SCP Replenishment Variables workbook and review the default definition of Min/Max available at Class/Store Cluster/Product Cluster/Season level.

Include Safety Stock (if required) or else submit the default definition for approval. This would be one time pre-season activity however it can be changed any time during the in-season.

Store Replenishment Variables		Store Lead & Review Time		Threshold Variables	
Seasons	Store Cluster	Product Cluster			
01_383_BS_AUTUMN WINTER 2017	A / I				
	Min - Min DQ	Min - Safety Stock	Min - Demand Over Lead	Max - Demand Over Revie	Submit for Approval
01_1011_31_11 Tops	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
01_1011_31_12 Bottoms	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
01_1011_31_14 Outerwear	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
01_1011_31_15 Sets	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
01_1011_31_16 One-piece	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
01_1011_31_17 Accessories	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
01_1011_32_11 Tops	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
01_1011_32_12 Bottoms	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
01_1011_32_14 Outerwear	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
01_1011_32_15 Sets	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
01_1011_32_16 One-piece	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
01_1011_32_17 Accessories	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
01_1011_33_11 Tops	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
01_1011_33_12 Bottoms	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
01_1011_33_14 Outerwear	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Review the definition and submit for approval.

Note- Min/Max Definition to be approved prior the Season Launch.



SCP Replenishment Variables		Store Lead Time & Review Time						
Seasons		Store Cluster						
03_218_SP-B -AIS		all [Store Cluster]						
		<div><div></div><div></div><div></div><div></div><div></div></div>						
		Min - Min DQ	Min - Safety Stock	Min - Demand Over Lead	Max - Demand Over Revie	Min Definition	Max Definition	Submit for Approval
all [Product]		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2465_1 Tshirts		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2465_2 Casual Shirts		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2465_4 Denim Bottoms		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2465_5 Bottoms		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2465_6 Outerwear		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2465_7 Body		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2466_1 Tshirts		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2466_2 Casual Shirts		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2466_3 Tailored		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2466_4 Denim Bottoms		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2466_5 Bottoms		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2466_6 Outerwear		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2466_7 Body		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2467_1 Tshirts		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>
03_3111_2467_7 Body		<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	MinDQ + DOLT	Min + DORT	<div><div></div><div></div><div></div></div>

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SCP Replenishment Variables Store Lead Time & Review Time

Seasons Store Cluster

03\_218\_SP-B -AIS all [Store Cluster]

No Approved Definition yet, requires manager approval

SCP Replenishment Variables

Store Lead Time & Review Time

Seasons

Store Cluster

03\_218\_SP-B-AIS

all [Store Cluster]

14

40

10

20

	Min Definition	Max Definition	Submit for Approval	Submitted Min Definition	Submitted Max Definition	Submitted By	Submit Date	Approved Min Definition	Approved Max Definition	Approved By	Approved Date
all [Product]	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2465_1 Tahirts	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2465_2 Casual Shirts	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2465_4 Denim Bottoms	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2465_5 Bottoms	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2465_6 Outerwear	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2465_7 Body	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2466_1 Tshirts	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2466_2 Casual Shirts	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2466_3 Tailored	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2466_4 Denim Bottoms	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2466_5 Bottoms	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2466_6 Outerwear	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2466_7 Body	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2467_1 Tahirts	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				
03_3111_2467_7 Body	MinDQ + DOLT	Min + DORT		MinDQ + DOLT	Min + DORT	poojas	10/4/2017				

Custom Menu Response

Replenishment Variables Submitted for Approval Successfully

OK

yet, requires manager approval

Note – As per the current process, “submit for Approval” will commit the data and will be available to Manager immediately for approval.

**Step 4:** Navigate to Store Lead Time and Review Time and and review calculated lead time/ Review time. Make any changes if required in Override Lead Time and submit for approval(Boolean). Execute **Planning Actions** → **Submit for Approval**.

Store Replenishment Variables		Store Lead & Review Time		Threshold Variables				
Product		Product Life Cycle Cluster						
SCP Replenishment Variables		Store Lead Time & Review Time						
		Avg Lead Time	Override Avg Lead Time	Review Time	Override Review Time	Submit for Approval	Submitted By	Submitted On
1	SM - Riyadh - KSA	2	2	1	1	<input checked="" type="checkbox"/>		1/21/2018
1	02_20108 Carpisa Al Qasr Mall	0	1	1	1	<input checked="" type="checkbox"/>		1/21/2018
1	02_20130 Stride Rite Sahara Mall	0	1	1	1	<input checked="" type="checkbox"/>		1/21/2018
1	02_20131 Carpisa Sahara Mall	0	1	1	1	<input checked="" type="checkbox"/>		1/21/2018
1	02_20132 Nose Sahara Mall	0	1	1	1	<input checked="" type="checkbox"/>		1/21/2018
1	02_20144 Eyeworks CP-Khuraib Road	0	1	1	1	<input checked="" type="checkbox"/>		1/21/2018
1	02_20205 Eyeworks Oasis Centre-Al Kharj	0	1	1	1	<input checked="" type="checkbox"/>		1/21/2018
1	02_20225 Carpisa Hafir Al Batein	0	1	1	1	<input checked="" type="checkbox"/>		1/21/2018
1	02_20238 Stride Rite Granada Mall Riyadh	0	1	1	1	<input checked="" type="checkbox"/>		1/21/2018
1	02_20243 Shoemart Muzamiya	1	1	1	1	<input checked="" type="checkbox"/>		1/21/2018
1	02_20274 Aerosoles Al Hamra Mall	11	11	1	1	<input checked="" type="checkbox"/>		1/21/2018
1	02_20872 SM-Eyeworks Riyadh office	0	0	1	1	<input checked="" type="checkbox"/>		
1	02_21034 CP - Takasusi	1	1	1	1	<input checked="" type="checkbox"/>		
1	02_21035 CP - Alqassim	2	2	1	1	<input checked="" type="checkbox"/>		
1	02_21036 CP - King Abdulla St	2	2	1	1	<input checked="" type="checkbox"/>		
1	02_21037 CP - Tabuk	2	2	1	1	<input checked="" type="checkbox"/>		
1	02_21039 CP - Hail	3	3	1	1	<input checked="" type="checkbox"/>		

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SCP Replenishment Variables Store Lead Time & Review Time

SCP Replenishment Variables

Store Lead Time & Review Time

	Avg Lead Time	Override Avg Lead Time	Review Time	Override Review Time	Submit for Approval	Submitted By	Submitted On
SM - Riyadh - KSA	2	2	1	1		poojas	10/5/2017
02_20108 Carpisa Al Qasr Mall	0	1	1	1		poojas	10/5/2017
02_20130 Stride Rite Sahara Mall	0	1	1	1		poojas	10/5/2017
02_20131 Carpisa Sahara Mall	0	1	1	1		poojas	10/5/2017
02_20132 Nose Sahara Mall	0	1	1	1		poojas	10/5/2017

Custom Menu Response

SCP Replenishment Variables Approval workbook will be accessed by Concept Supply Manager to approve the submitted definitions by Concept Supply Planner in SCP Replenishment Variables SetUp workbook.

### 1.6.3 Workbook Name : Replenishment Variables Approval

**User Roles:** Concept Admin, Concept Supply Manager

#### KEY MEASURES IN THE WORKBOOK

##### TAB: SCP REPLENISHMNT VARIABLES

**Submitted Min Definition** – Submitted Min Formula by SCP Planner from SCP replenishment Variables SetUp wb.

**Submitted Max Definition** – Submitted Max Formula by SCP Planner SCP replenishment Variables SetUp wb.

**Approve/Reject** – Boolean measure to approve/reject the submitted values . To be selected before Planning action.

**Approved Min Definition** – Approved measures after Manager approval

**Approved Max definition** – Approved measures after Manager Approval

##### TAB: STORE LEAD TIME & REVIEW TIME

**Submitted Avg Lead Time**- Submitted Lead Time by SCP Planner from SCP replenishment variables SetUp wb

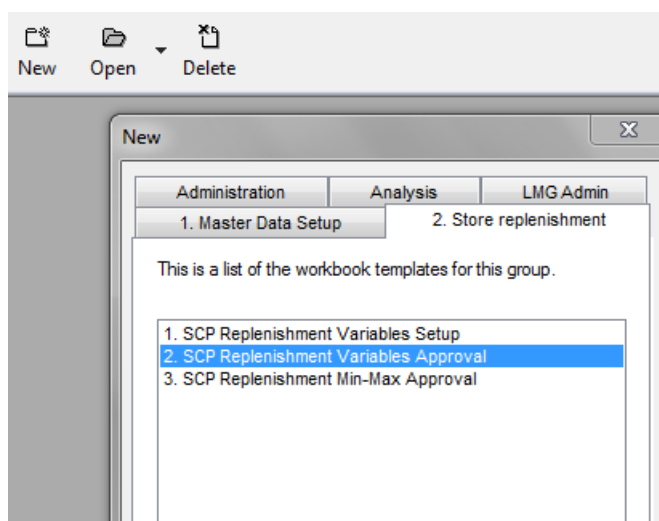
**Submitted Review Time** - Submitted Lead Time by SCP Planner from SCP replenishment variables SetUp wb

**Approve/Reject** – Boolean measure to approve/reject the submitted values . To be selected before Planning action.

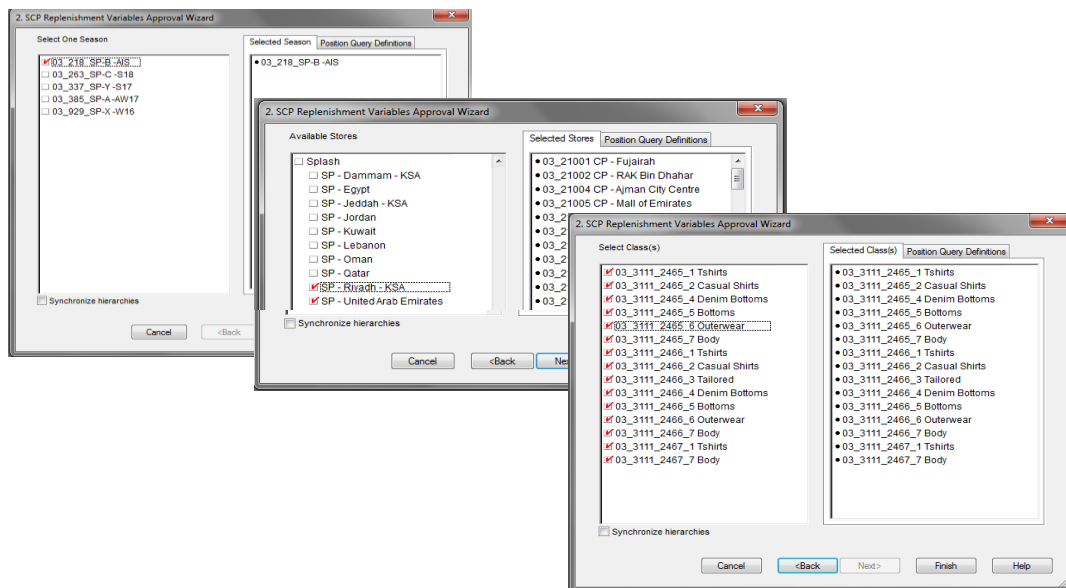
**Approved Lead Time** – Approved measures after Manager approval

**Approved Review Time** – Approved measures after Manager Approval

**Step 1:** Login to the respective local domain/Group, Click “New” and under the tab **2. Store Replenishment**, Open **2.SCP Replenishment Variables Approval**.

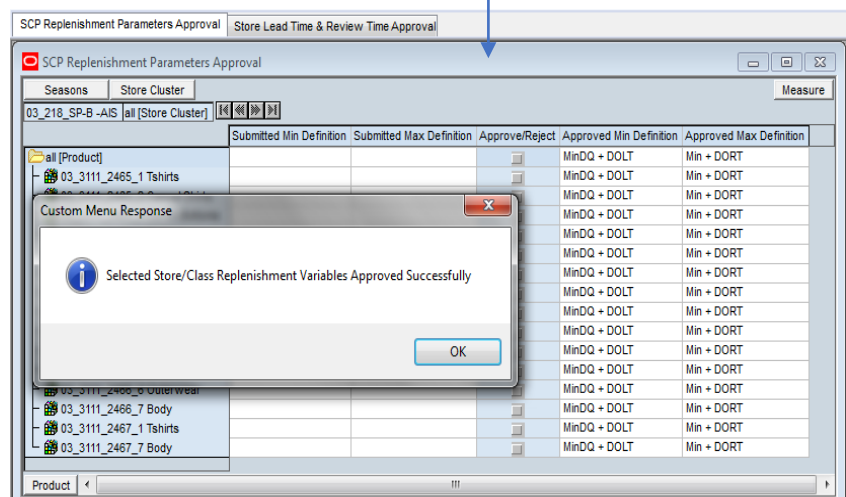
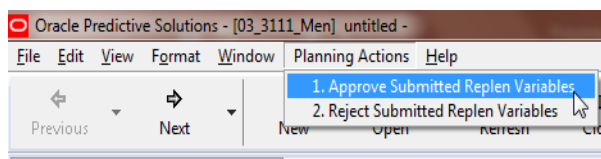
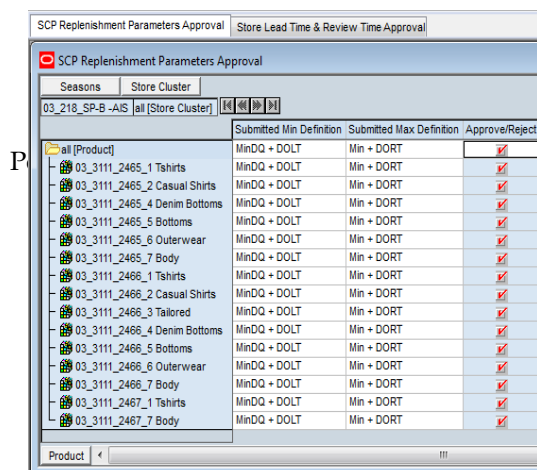


**Step 2:** Select data as per Wizard , Season(One)→ Select Territory(s)→ Select Class(es) and click “Finish”



**Step 3:** Navigate to tab “ SCP Replenishment Parameters Approval” and review the submitted Min/Max definition for Approval.

To approve the submitted values, select **Planning Actions**→ **Approve Submitted Replen Variables**



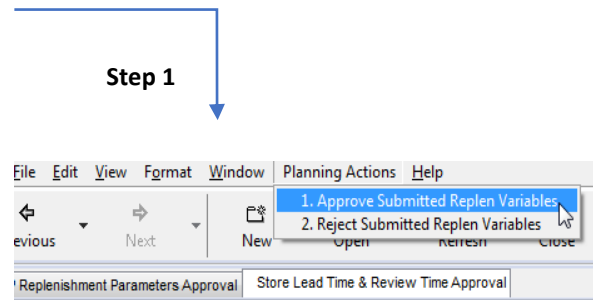
Post completion, approved Min/Max definition will be shown for reference.

**Step 4:** Navigate to Store Lead Time and Review Time and review submitted Lead Time and Review Time if any, Execution **Planning Actions** → **“Approve Submitted Repln Variables”** and submitted lead time and review time will appear in the approved measures.

Manager can also reject the submitted Lead Time using the **Planning Actions-> Reject Submitted Repln Variables**.

Post Planning action completion, note the approved values.

SCP Replenishment Parameters Approval		Store Lead Time & Review Time Approval		
		Submitted Avg Lead Time	Submitted Review Time	Approve/Reject
SP - United Arab Emirates		2	0	✗
03_21001 CP - Fujairah		0	0	✗
03_21002 CP - RAK Bin Dhahar		1	1	✗
03_21004 CP - Ajman City Centre		1	1	✗
03_21005 CP - Mall of Emirates		3	1	✗
03_21006 CP - Sky Garden		1	1	✗
03_21007 CP - Breakwater Marina Mall		1	1	✗
03_21008 CP - Jimmi Mall		1	1	✗
03_21010 CP - Oasis Centre		0	1	✗
03_21011 CP - Bawadi Mall		2	1	✗
03_21012 CP - Ras Al Khaima		1	1	✗
03_21013 CP - Dana Mall		0	1	✗
03_21014 CP - Dalma Mall		1	1	✗
03_21015 CP - Mirafra City Centre		2	1	✗
03_21016 CP - Bawadi Store		1	1	✗
03_21017 CP - Fujera City Centre		1	1	✗
03_21032 CP - Deerfields Mall		1	1	✗
03_21150 MCP-Ruwais Mall		1	1	✗
03_21168 CP - Al Ghurair Centre		1	1	✗



SCP Replenishment Parameters Approval		Store Lead Time & Review Time Approval				
		Submitted Avg Lead Time	Submitted Review Time	Approve/Reject	Approved Avg Lead Time	Approved Review Time
SP - United Arab Emirates		0	0	☐	2	0
03_21001 CP - Fujairah		0	0	☐	0	0
03_21002 CP - RAK Bin Dhahar		0	0	☐	1	1
03_21004 CP - Ajman City Centre		0	0	☐	1	1
03_21005 CP - Mall of Emirates		0	0	☐	3	1
03_21006 CP - Sky Garden		0	0	☐	1	1
03_21007 CP - Breakwater Marina Mall		0	0	☐	1	1
03_21008 CP - Jimmi Mall		0	0	☐	1	1
03_21010 CP - Oasis Centre		0	0	☐	0	1
03_21011 CP - Bawadi Mall		0	0	☐	2	1
03_21012 CP - Ras Al Khaima		0	0	☐	1	1
03_21013 CP - Dana Mall		0	0	☐	0	1
03_21014 CP - Dalma Mall		0	0	☐	1	1

**Step 2**

## 1.7 Replenishment Min/Max Approval

PARX Replenishment Min/Max approval workbook will be the main workbook accessed by Inventory Controller to review system calculated "**Recommended Min/Max**", item's performance at a store, change service levels and review calculated safety stock (optional), approve Min/Max for a specific date range on requirement basis.

Users will be also able to change ROS using "ROS Multiplier" and approve New Min/Max as and when required. They will be also able to directly define Min/Max and approve a date range.

All changes to Item/Location (system approved/userapproved) will be maintained and refreshed on daily basis.

### 1.7.1 Recommended Min Max

Based on pre-requisite data (MDQ and Shelf Capacity) and approved Min Max definition in previous steps, PARX will recommend Min and Max values for user review and approvals. The recommended MinMax will be based on the approved formula as discussed in section 1.5.1

$$\text{Min} = \text{MinDQ} + \text{ROUND}(\text{DoLT}) + \text{SS}$$

$$\text{Max} = \text{Min} + \text{MAX}(\text{DoRT}, 1)$$

Where,

**MDQ** = Approved MDQ

**Demand Over Lead Time (DoLT)** = Planned Daily ROS \* Approved RDC to Store Lead Time

**Demand Over Review Time (DoRT)** = Planned Daily ROS \* Approved Review Time for the Store

**Safety Stock <SS>** = Additional but Optional Stock calculated based on Store service level to cover the variability in demand and Lead Time.

If **Shelf Capacity (SC)** is defined, both Min and Max will be capped by Shelf Capacity as follows,

$$\text{Min} = \text{MIN}(\text{MDQ} + \text{ROUND}(\text{DoLT}) + \text{SS}, \text{SC} - 1)$$

$$\text{Max} = \text{MIN}(\text{Min} + \text{MAX}(\text{DoRT}, 1), \text{SC})$$

In addition to the above definition, the system recommendation will be driven by the "Eligibility Criteria" and "Eligibility Exceptions". System will recommend Min Max only if,

**Eligibility Criteria = 'True' and Eligibility Exceptions ≠ 'N'**

Seasons	Location						
06 748 MX-SS18	06 60055 Max Ajman						
		RMS Min	RMS Max	RMS Eff From	RMS Eff To	Recommended Min	Recommended Max
06_160060791	Rib corsette with lace	7.00	7.00	4/6/2018	9/30/2018	7	7
06_160060792	Rib corsette with lace	6.00	6.00	4/6/2018	9/30/2018	6	6

### 1.7.2 Eligibility Criteria

Eligibility Criteria is a pre-calculated indicator for each item-location based on several factors like pre-allocation, store receipts or store sales along with ROS cutoff and consolidation.

In summary the eligibility criteria can be defined as follows,

- Item to be eligible
  - ✓ Item should be ranged to any of the configured season for Min Max interface
  - ✓ Item should be part of an Order raised for a RDC with ordered\_qty > 0
  - ✓ and estimated\_in\_stock\_Date / latest shipment date should fall after previous trading year start date ( 2016-07-03 )

- Item, Location - Store Eligibility

For an item / Location ( stores ) to be eligible there should be

- ✓ (
- ✓ An ASN / BOL based allocation to store with allocated units > 0
- ✓ Or A transfer to a store from warehouse with transfer units > 0
- ✓ Or a receipt at store from warehouse or a sale transaction after previous trading year start date ( 2016-07-03 )
- ✓ )
- ✓ And the item should not be part of substitute item(child item) configuration
- ✓ And the item, location (store) should not be part of consolidation.
- ✓ And the item should be ranged to the default\_wh of the store in consideration.

The above pre-checks ensure that no ineligible stores-items are setup on MinMax during User approvals.

Store Replenishment Min-Max		Store Min-Max Upload Review				
Seasons	Location					
06 748 MX-SS18	06_60059 Max Bur Dubai					
	Eligible for Replenishment	Replenishment Status	Ranged	Option Str Rcv Dt	Option Sls Start Dt	
06_160526598 Ivory tee with beaded	✓	2 Min Max Not Set	✓	4/11/2018	4/18/2018	
06_160526597 Ivory tee with beaded	✓	2 Min Max Not Set	✓	4/11/2018	4/18/2018	
06_160526596 Ivory tee with beaded	✓	2 Min Max Not Set	✓	4/11/2018	4/18/2018	
06_160526595 Ivory tee with beaded	✓	2 Min Max Not Set	✓	4/11/2018	4/18/2018	
06_160526594 Ivory tee with beaded	✓	2 Min Max Not Set	✓	4/11/2018	4/18/2018	
06_160526593 Ivory tee with beaded	✓	2 Min Max Not Set	✓	4/11/2018	4/18/2018	

### 1.7.3 Eligibility Exceptions

The option/store which are not eligible for Min Max calculations as defined by Users in Excel Uploads. The features will help planners to exclude item/locations from MinMax approval as this will override the calculated “Eligibility” based on pre-allocation, sales, receipts, consolidation.

In simple words, even if an item-store “Eligibility Criteria” is true as per rules in the section 2, if users define “Eligibility Exception as “N”, system will not recommend Min Max.

Seasons	Location					
06 748 MX-SS18	06_60059 Max Bur Dubai					
	Eligible for Replenishment	Replenishment Status	Ranged	Option Str Rcv Dt	Option Sls Start Dt	Eligibility Exception
06_160060933 Jacket with down	✓	2 Min Max Not Set	✓	1/23/2018	1/26/2018	✓
06_160060932 Jacket with down	✓	2 Min Max Not Set	✓	1/23/2018	1/26/2018	✓
06_160060931 Jacket with down	✓	2 Min Max Not Set	✓	1/23/2018	1/26/2018	✓
06_160060930 Jacket with down	✓	2 Min Max Not Set	✓	1/23/2018	1/26/2018	✓
06_160060929 Jacket with down	✓	2 Min Max Not Set	✓	1/23/2018	1/26/2018	✓
06_160060928 Jacket with down	✓	2 Min Max Not Set	✓	1/23/2018	1/26/2018	✓
06_160060927 Jacket with down	✓	2 Min Max Not Set	✓	1/23/2018	1/26/2018	✓

### 1.7.4 Min Max Category

Min Max category are available in the workbook wizard to help users to select the right combinations of Item/Stores as per requirement.

The categories are as follows,

1. Min Max Active
2. Min Max Not Set
3. Min Max Expiring
4. Min Max Stopped
5. Min Max Ready for Auto Cut Off
6. Min Max Auto Cut Off Executed.

The Business rules for Min Max Categories are as per the below description.

1. **Min Max Active:** If Item/store is currently active on RMS Min Max, which means that as today's date falls between Active and Deactivate date in RMS. This is applicable to all uploads i.e Mass Upload or PARX approvals.
2. **Min Max Not Set:** If Item/store is currently not on RMS MinMax setup and or was present but with deactivate date earlier than 2 months.
3. **Min Max Expiring:** If the item/store is currently active on RMS Min Max but the Deactivate date is within the next 10 days. Such combinations will be categorized as Min Max Expiring.
4. **Min Max Stopped:** If the MinMax was ever active on RMS but the deactivate date falls within the last 2 months.
5. **Min Max Ready for Auto Cut Off:** If the current running Min Max is identified as "Eligible for Auto Cut Off" based on scarcity rules defined in section.
6. **Min Max Auto Cut Off Executed:** These item/store combinations are either deactivated due to ROS Cut Off or Consolidation (In RMS).

Seasons	Location		
06 748 MX-SS18	06 60059 Max Bur Dubai	⏮ ⏪ ⏩ ⏭	
		Eligible for Replenishment	Replenishment Status
06_159984169 studs all over mom		✓	2 Min Max Not Set
06_159984170 studs all over mom		✓	2 Min Max Not Set
06_159984171 studs all over mom		✓	2 Min Max Not Set
06_159984369 Brushed hooded jacket with		✓	7 Min Max Auto Cut Off Executed
06_159984370 Brushed hooded jacket with		✓	7 Min Max Auto Cut Off Executed
06_159984371 Brushed hooded jacket with		✓	7 Min Max Auto Cut Off Executed
06_159984372 Brushed hooded jacket with		✓	7 Min Max Auto Cut Off Executed
06_159984373 Brushed hooded jacket with		✓	7 Min Max Auto Cut Off Executed
06_159984374 Brushed hooded jacket with		✓	7 Min Max Auto Cut Off Executed
06_159984375 Brushed hooded jacket with		✓	7 Min Max Auto Cut Off Executed
06_159984376 Brushed hooded jacket with		✓	2 Min Max Not Set
06_159984377 Brushed hooded jacket with		✓	2 Min Max Not Set
06_159984378 Brushed hooded jacket with		✓	2 Min Max Not Set
06_159984379 Brushed hooded jacket with		✓	2 Min Max Not Set

### 1.7.5 Eligible for Auto Cut Off

This Change has been included in Jan 18 release to stop Min Max in RMS for an Option which "Qualify" for Cut Off based on RDC Stock Availability (Shortage). Based on potential to sell and expected Lifespan, stores be categorized for final cut Off.

PARX will auto-stop replenishment if an Option/Store is eligible for "Auto Cut Off". This indicator will be interfaced daily from Netezza to PARX at Option/Store level with expected Planned Exit Date. If an Option/Store is eligible for "Auto Cut Off", system will generate files to stop RMS Min-Max replenishment for the Planned Exit date.

Currently the planned exit date is defaulted to "Today". This cutoff is executed every week on Sunday and Thursday at 4:30 pm. Please refer to section 1.5.1 for more details.

For activating this feature, users are expected to request for the below setup at Group/Territory level.



Connection String

ReS Auto Cutoff Activation

Sys MIMx Approval Activation

Measure

RoS Auto Cutoff Activation

101\_BS - United Arab Emi

102\_BS - Dammam - KSA

103\_BS - Riyadh - KSA

104\_BS - Jeddah - KSA

105\_BS - Kuwait

106\_BS - Qatar

01_1011 Clothing Boys						
01_1011 Clothing Boys						
01_1011 Clothing Boys						
01_1012 Clothing Girls						
01_1012 Clothing Girls						
01_1012 Clothing Girls						
01_1013 Clothing Essentials						
01_1014 Basics Apparels						
01_1015 Basics Non Apparels						

Store Replenishment Min-Max

Store Min-Max Upload Review

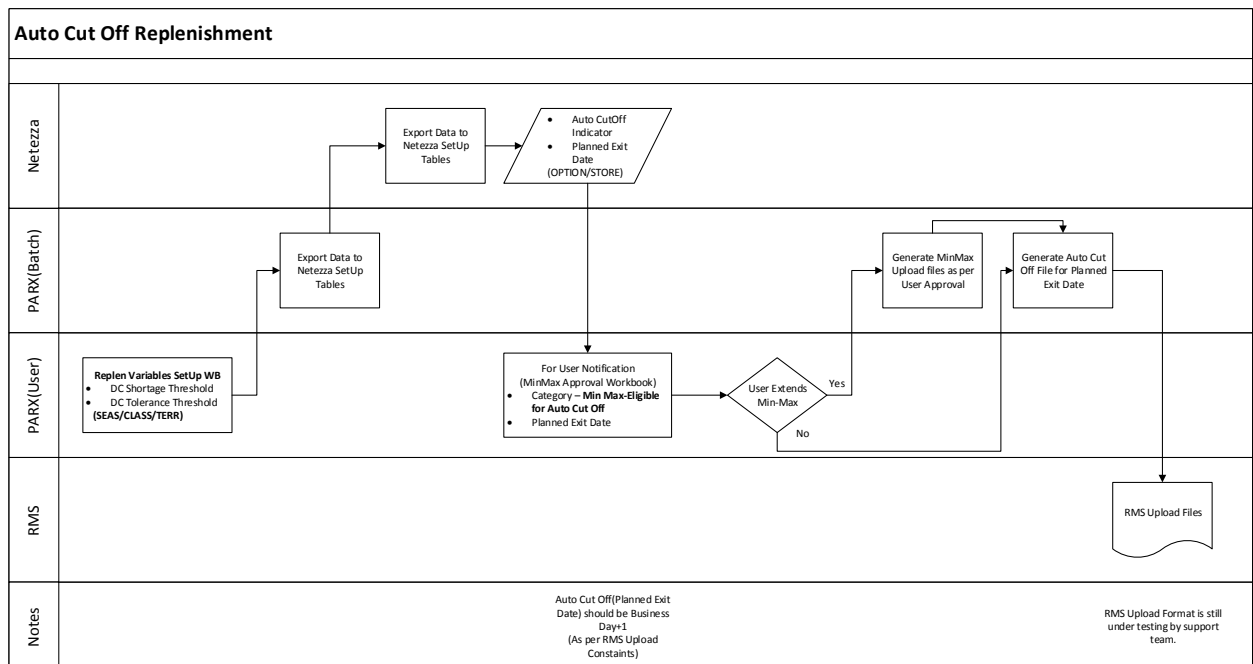
Seasons

Location

06 748 MX-SS18 06\_60233 MX -Yas Mall

	Eligible for Replenishment	Replenishment Status	Auto Cutoff Reason
06_160335955 WOVEN TOP WITH RUFFLE		7 Min Max Auto Cut Off Executed	ROS Cut Off
06_160335954 WOVEN TOP WITH RUFFLE		7 Min Max Auto Cut Off Executed	ROS Cut Off
06_160335953 WOVEN TOP WITH RUFFLE		7 Min Max Auto Cut Off Executed	ROS Cut Off
06_160335952 WOVEN TOP WITH RUFFLE		7 Min Max Auto Cut Off Executed	ROS Cut Off
06_160335951 WOVEN TOP WITH RUFFLE		7 Min Max Auto Cut Off Executed	ROS Cut Off
06_160335950 WOVEN TOP WITH RUFFLE		7 Min Max Auto Cut Off Executed	ROS Cut Off
06_160335949 WOVEN TOP WITH RUFFLE		7 Min Max Auto Cut Off Executed	ROS Cut Off
06_160309561 Denim bottom_SZAP-20		7 Min Max Auto Cut Off Executed	ROS Cut Off
06_160309560 Denim bottom_SZAP-18		7 Min Max Auto Cut Off Executed	ROS Cut Off
06_160309559 Denim bottom_SZAP-16		7 Min Max Auto Cut Off Executed	ROS Cut Off
06_160309558 Denim bottom_SZAP-14		7 Min Max Auto Cut Off Executed	ROS Cut Off

Below is the high level process flow for the Auto cut off replenishment process.





## 1.7.6 Min Max Exceptions

These item-store combinations are on RMS Min Max even when they are not eligible for replenishment as per section 1.7.2. These are simple for user review and take appropriate actions , if required.

Store Replenishment Min-Max		Store Min-Max Upload Review				
Seasons	Location					
06 748 MX-SS18	06_60053 Max Abudhabi					
		MDQ Days of Cover	Approved Shelf Capacity	Approved LT	Approved RT	Min Max Exceptions
SP18ESK10DCL_BLUE_MEDIUM		22.96	17	1	1	<input type="checkbox"/>
06_159984164 Embroidery knee length		57.00	1	1	1	<input type="checkbox"/>
06_159984163 Embroidery knee length		14.25	2	1	1	<input type="checkbox"/>
06_159984162 Embroidery knee length		28.50	2	1	1	<input type="checkbox"/>
06_159984161 Embroidery knee length		14.25	3	1	1	<input type="checkbox"/>
06_159984160 Embroidery knee length		16.29	4	1	1	<input type="checkbox"/>
06_159984159 Embroidery knee length		19.00	3	1	1	<input type="checkbox"/>
06_159984158 Embroidery knee length		11.40	2	1	1	<input type="checkbox"/>
SP18FD112D_BLUE_DARK		21.19	17	1	1	<input type="checkbox"/>

## 1.7.7 ROS Multiplier & Impact on Min Max

One of the key functionalities in PARX, ROS multiplier helps to plan Min Max based on expected ROS during events such Ramadan or Back to School.

Users can edit the multiplier upto 5 times to derive “Calculated ROS” based on “Actual ROS” and hence Min Max to be approved in the next step. The Min Max in such cases are calculated as ,

**Min = MinDQ + ROUND(Actual ROS \* Multiplier \* Approved Lead Time) + <SS>**

**Max = Min + Max(Actual ROS \* Multiplier \* Approved Review Time, 1)**

If **Shelf Capacity(SC)** is defined, both Min and Max will be capped by Shelf Capacity as follows,

**Min = MIN (MDQ + ROUND(Actual ROS \* Multiplier \* Approved Lead Time) + <SS>, SC - 1)**

**Max = MIN (Min + MAX(Actual ROS \* Multiplier \* Approved Review Time, 1), SC)**

## 1.7.8 RMS Min Max (For Review)

This workbook also shows the current running RMS Min Max with active and deactive dates so that users can review the current min max and take decisions accordingly.

Store Replenishment Min-Max		Store Min-Max Upload Review				
Seasons	Location					
06 748 MX-SS18	06_60053 Max Abudhabi					
		On RMS Min-Max	RMS Min	RMS Max	RMS Eff From	RMS Eff To
SP18FD312D_WHITE_LIGHT		<input checked="" type="checkbox"/>	2.29	2.29	?	?
06_160281358 White rinse with raw		<input checked="" type="checkbox"/>	1.00	1.00	4/6/2018	9/30/2018
06_160281357 White rinse with raw		<input checked="" type="checkbox"/>	2.00	2.00	4/6/2018	9/30/2018
06_160281356 White rinse with raw		<input checked="" type="checkbox"/>	2.00	2.00	4/6/2018	9/30/2018
06_160281355 White rinse with raw		<input checked="" type="checkbox"/>	3.00	3.00	4/6/2018	9/30/2018
06_160281354 White rinse with raw		<input checked="" type="checkbox"/>	3.00	3.00	4/6/2018	9/30/2018
06_160281353 White rinse with raw		<input checked="" type="checkbox"/>	3.00	3.00	4/6/2018	9/30/2018
06_160281352 White rinse with raw		<input checked="" type="checkbox"/>	2.00	2.00	4/6/2018	9/30/2018
06_160281351 White rinse with raw		<input type="checkbox"/>	0.00	0.00		

### 1.7.9 Approved Variables and Performance

There are number of measures included in the workbook to allow users to track the item-store performance and review the approved replenishment variables.

**Option Store Rcv Dt** – Date of Receipt for the Option at the store

**Option Sls Start Dt** – Date of sales trigger at Option level

**Actual ROS** – Actual ROS is calculated based on the last 8 weeks average daily sales.

**MDQ Days of Cover** – This measure will show the project days of cover based on the approved MDQs.

**Approved MDQ – SKU level MDQ approved by the Users**

**Approved Shelf Capacity** – SKU level Shelf Capacity approved by the Users

**Approved Lead Time** – Approved Lead Time by the Users at store level.

**Approved Review Time** – Approved Review Time by the Users at store level.

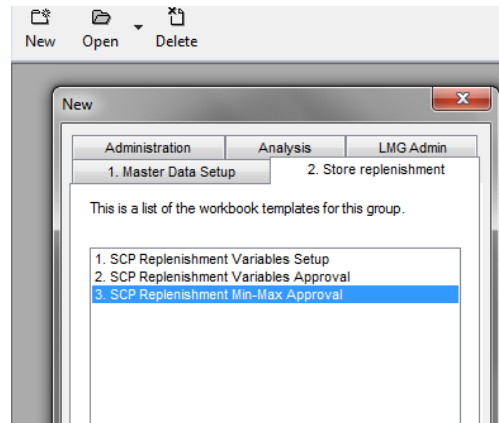
Seasons Location													Measure	
06_748 MX-SS18 06_60053 Max Abudhabi														
	Eligible for Replenishment	Ranged	Option Str Rcv Dt	Option Sla Start Dt	Planned Exit Date	Actual ROS	Planned ROS	MDQ Days of Cover	Approved MDQ	Approved Shelf Capacity	Approved LT	Approved RT M		
ACT11HS_BLACK_DARK			12/3/2017	12/23/2017	9/1/2018	0.13	0.13	26.16	22	28	1	1		
06_160086665 Basic activeveer capri with			12/3/2017	12/23/2017	9/1/2018	0.11	0.11	19.00	2	2	1	1		
06_160086663 Basic activeveer capri with			12/3/2017	12/23/2017	9/1/2018	0.09	0.09	32.57	4	6	1	1		
06_160086662 Basic activeveer capri with			12/3/2017	12/23/2017	9/1/2018	0.02	0.02	34.20	3	4	1	1		
06_160086660 Basic activeveer capri with			12/3/2017	12/23/2017	9/1/2018	0.14	0.14	5	5	28.50	1	1		
06_160086658 Basic activeveer capri with			12/3/2017	12/23/2017	9/1/2018	0.14	0.14	21.37	3	4	1	1		
06_160086656 Basic activeveer capri with			12/3/2017	12/23/2017	9/1/2018	0.21	0.21	19.00	4	5	1	1		
06_160086654 Basic activeveer capri with			12/3/2017	12/23/2017	9/1/2018	0.07	0.07	28.50	2	2	1	1		
06_160086651 Basic activeveer capri with			12/3/2017	12/23/2017	9/1/2018	0.00	0.00			0	1	1		

## 1.7.10 Workbook Name: Replenishment MinMax Approval

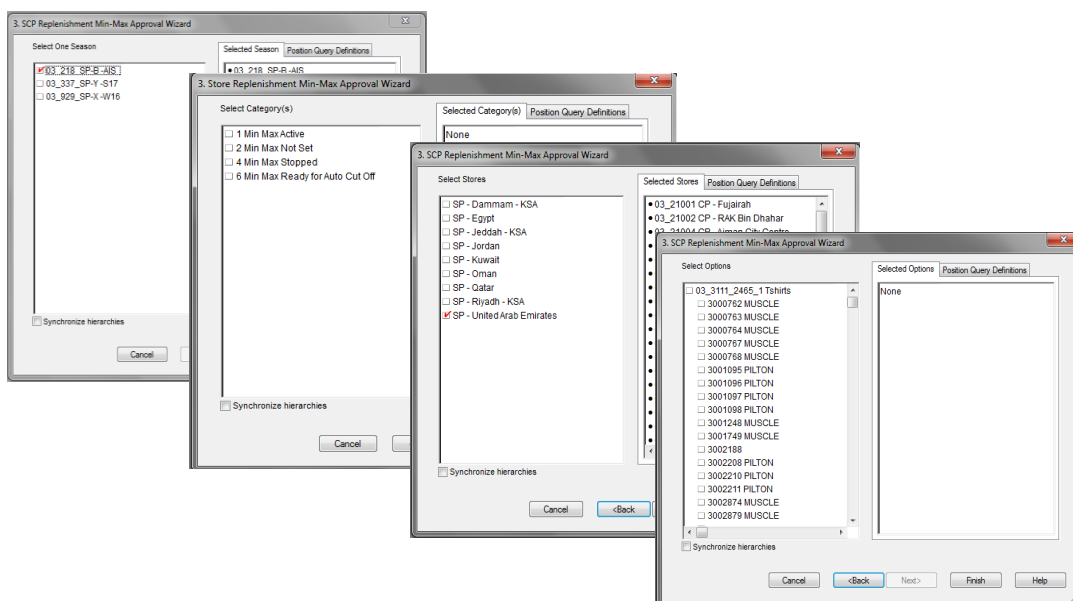
User Roles: Concept Inventory Controller

TAB: SCP REPLENISHMNT VARIABLES

**Step 1:** Login to the respective local domain/Group, Click “New” and under the tab **2. Store Replenishment**, Open **3.SCP Replenishment MinMax Approval**.



**Step 2:** Select data as per Wizard , Season(One)→ Select Territory(s)→ Select Category(s)→Select Option(s) and click “Finish”.



Step 3 in wizard represents the high level category which helps user to select Items in the next step based on category.

This category can be seen in the MinMax approval workbok under hidden measures.

**Step 3:** Navigate to the tab SCP Replenishment Min-Max. The workbook measures can be broadly classied into “review measures” and “ Min-Max approvals.

Review the Item/store launch attributes (Planned Launch Date, Ranged, Store receive date, Sales Start Date, Planned Exit date, Eligible for Replenishment, Approved MDQ, Actual ROS, Planned ROS, Avg Lead Time and Review Time”.

Approved MDQ, Avg Lead Time and Review Time will be based on the process followed in 1.6 and 1.7. Recommended Min/Max will be pre-calculated based on Min/Max definitions and approved values.

SCP Replenishment Min-Max												
Min-Max Upload Review												
Seasons		Location										
03 218 SP-B -AIS 03 21002 CP - RAK Bin Dhahar		<div>⏪ ⏩ ⏴ ⏵</div>										
		Planned Launch	Ranged	Store Receive Date	Sales Start Date	Planned Exit Date	Eligible for Replenishment	Approved MDQ	Actual ROS	Planned ROS	Avg Lead Time	Review Time
03_159805071 SHIRT_SZAP-15			✓	9/8/2017	9/10/2017	10/1/2018	✓	0	0.18	0.18	1	1
03_159330656 TROUSER_SZAP-32			✓	5/12/2017	5/31/2017	10/1/2018	✓	3	0.16	0.16	1	1
03_159572532 SUITTROUSER_SZAP-30			✓	6/23/2017	7/17/2017	10/1/2018	✓	0	0.12	0.12	1	1
03_159330657 TROUSER_SZAP-34			✓	5/12/2017	5/31/2017	10/1/2018	✓	4	0.12	0.12	1	1
03_159330649 TROUSER_SZAP-32			✓	7/19/2017	8/4/2017	10/1/2018	✓	3	0.12	0.12	1	1
03_159805079 SHIRT_SZAP-16			✓	9/8/2017	9/28/2017	10/1/2018	✓	0	0.09	0.09	1	1
03_159805072 SHIRT_SZAP-15.5			✓	9/8/2017	9/10/2017	10/1/2018	✓	0	0.09	0.09	1	1

Navigate to the right to see additional measures , Service level, Safety Stock, Recommended Min and Recommended Max, RMS Min-Max values.

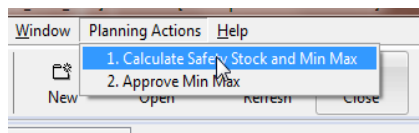
SCP Replenishment Min-Max												
Min-Max Upload Review												
Seasons		Location										
03 218 SP-B -AIS		03 21002 CP - RAK Bin Dhahar										
		⏪ ⏩ ⏴ ⏵										
		Actual ROS	Planned ROS	Avg Lead Time	Review Time	Service Level	Safety Stock	Recommended Min	Recommended Max	On RMS Min-Max	RMS Min	RMS Max
03_159805071 SHIRT_SZAP-15		0.18	0.18	1	1	95.00%	0.00	0	0		0.00	0.00
03_159330656 TROUSER_SZAP-32		0.16	0.16	1	1	95.00%	0.00	0	0		4.00	4.00
03_159572532 SUITTROUSER_SZAP-30		0.12	0.12	1	1	95.00%	0.00	0	0		3.00	3.00
03_159330657 TROUSER_SZAP-34		0.12	0.12	1	1	95.00%	0.00	0	0		5.00	5.00
03_159330649 TROUSER_SZAP-32		0.12	0.12	1	1	95.00%	0.00	0	0		0.00	0.00
03_159805079 SHIRT_SZAP-16		0.09	0.09	1	1	95.00%	0.00	0	0		3.00	3.00
03_159805072 SHIRT_SZAP-15.5		0.09	0.09	1	1	95.00%	0.00	0	0		4.00	5.00
03_159805070 SHIRT_SZAP-14.5		0.09	0.09	1	1	95.00%	0.00	0	0		2.00	2.00
03_159524196 TROUSER_SZAP-30		0.09	0.09	1	1	95.00%	0.00	0	0		2.00	2.00

Navigation to right again and review ROS Multiplier, Override ROS, Min, Max Effective Date from and Effective date To, Approved Min, Max with effective dates.

SCP Replenishment Min-Max														
Min-Max Upload Review														
Seasons		Location		Measure										
03 218 SP-B-AIS 03 21002 CP - RAK Bin Dhahar														

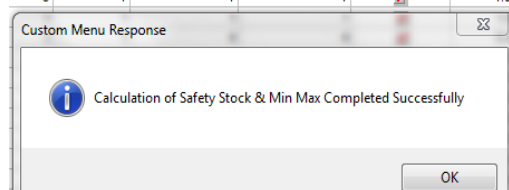
**Step 4: (Optional)** Review the **Actual ROS** and **Planned ROS** and edit “**ROS Modifier**” to recalculate Min/Max based on new ROS. Execute **Planning Actions** -> **Calculate Safety Stock and Min/Max**. Review the new ROS and Calculated Min and Max.

SCP Replenishment Min-Max												
Min-Max Upload Review												
Seasons		Location										
03 218 SP-B -AIS 03		21002 CP - RAK Bin Dhahar										
				⏪ ⏩ ⏴ ⏵								
		Actual ROS	Planned ROS	Avg Lead Time	Review Time	Recommended Min	Recommended Max	On RMS Min-Max	RMS Min	RMS Max	ROS Multiplier	Override RoS
03_159330661	TROUSER_SZAP-42	0.05	0.05	3	1	1	1	✓	1.00	1.00	0	0.00
03_159330654	TROUSER_SZAP-42	0.05	0.05	3	1	1	1	✓	1.00	1.00	4	0.00
03_159122541	TROUSER_SZAP-34	0.05	0.05	3	1	4	4	✓	5.00	5.00	0	0.00
03_158663801	SHIRT_SZAP-42	0.05	0.05	3	1	0	0	✓	0.00	0.00	0	0.00
03_159572500	SUITTROUSER_SZAP-30	0.05	0.05	3	1	0	0	✓	3.00	3.00	0	0.00
03_159572540	SUITTROUSER_SZAP-34	0.04	0.04	3	1	0	0	✓	3.00	3.00	0	0.00
03_159572534	SUITTROUSER_SZAP-34	0.04	0.04	3	1	0	0	✓	3.00	3.00	0	0.00
03_159572526	SUITJACKET_SZAP-36	0.04	0.04	3	1	0	0	✓	2.00	2.00	0	0.00



Note the new ROS and Min/Max

Seasons	Location	Actual ROS	Planned ROS	Avg Lead Time	Review Time	Recommended Min	Recommended Max	On RMS Min-Max	RMS Min	RMS Max	ROS Multiplier	Override RoS	Min	Max
03	218 SP-B -AIS 03 21002 CP - RAK Bin Dhahar													
03_159330661 TROUSER_SZAP-42		0.05	0.05	3	1	1	1	✓	1.00	1.00	0	0.00	1	1
03_159330654 TROUSER_SZAP-42		0.05	0.05	3	1	1	1	✓	1.00	1.00	4	0.21	2	3
03_159122541 TROUSER_SZAP-34		0.05	0.05	3	1	4	4	✓	5.00	5.00	0	0.00	4	4
03_158663801 SHIRT_SZAP-42		0.05	0.05	3	1	0	0	✓	0.00	0.00	0	0.00	0	0
03_159572500 SUITTROUSER_SZAP-30		0.05	0.05	3	1	0	0	✓	3.00	3.00	0	0.00	0	0
03_159572540 SUITTROUSER_SZAP-34		0.04	0.04	3	1	0	0	✓	3.00	3.00	0	0.00	0	0
03_159572534 SUITTROUSER_SZAP-34		0.04	0.04	3	1	0	0	✓	3.00	3.00	0	0.00	0	0
03_159572526 SUITJACKET_SZAP-36		0.04	0.04	3	1	0	0	✓	2.00	2.00	0	0.00	0	0



**Step 5:** Review calculated Min/Max. At this point, user can again override absolute values in re-calculated Min/Max and select Effective Start Date From and Effective End Date To.

Select Boolean “Approval” and execute Planning Action → Approve Min/Max. Review the Approved Min/Max and Effective Date.

At the end of the day, system will auto-generate all the user approvals in RMS Upload Format and the Min/Max values will be integrated in RMS system for execution as per the RMS Min/Max Process. Refer to Appendix for more details.

The screenshot displays the 'SCP Replenishment Min-Max Min-Max Upload Review' window. It features a table with columns: Override RoS, Min, Max, Min-Max Effective Date Fr, Min-Max Effective Date To, and Approval. A 'Planning Actions' menu is open, showing '1. Calculate Safety Stock and Min Max' and '2. Approve Min Max'. A 'Custom Menu Response' dialog box is displayed, stating 'Min Max Approval Completed Successfull'. Red arrows indicate the flow from the 'Approve Min Max' action to the 'Custom Menu Response' dialog.

## 1.8 Appendix

Below are some key calculations with appropriate examples to under the Min-Max generation and approval process.

### 1.8.1 MDQ -Option to SKU level

Below are some key calculations with appropriate examples to under the Min-Max generation and approval process.

Planned MDQ or Override MDQ will be distributed at SKU level based on pre-calculated “Size- Profiles” interfaced to the application at Subclass/territory/Size\_Range level. Currently “Size-Profiles” are based on Purchase Order quantity.

For e.g, Size Range SPSZ-0090a with sizes (szap-30, szap-32, szap-34, szap-36, szap-38, szap-40, szap-42) at store 21060 has the below size profile.

Size	Size_Range	Profile
szap-30	spsz-0090a	0.0826
szap-32	spsz-0090a	0.1757
szap-34	spsz-0090a	0.1704
szap-36	spsz-0090a	0.2339
szap-38	spsz-0090a	0.1774
szap-40	spsz-0090a	0.08
szap-42	spsz-0090a	0.08

Please refer to the below cases,

Case of Overallocation – Reduce qty post spreading from the SKU with maximum overallocation							
		Planned	Step1-Round	Step2-balance	Step3-Adjust	Final	Comments
		21	23			21	
szap-30	0.0826	1.7346	2	0.2654		2	
szap-32	0.1757	3.6897	4	0.3103		4	
szap-34	0.1704	3.5784	4	0.4216	-1 (Largest)	3	Reduce 1
szap-36	0.2339	4.9119	5	0.0881		5	
szap-38	0.1774	3.7254	4	0.2746		4	
szap-40	0.08	1.68	2	0.32		2	
szap-42	0.08	1.68	2	0.32	-1(Largest)	1	Reduce 1

Case of Underallocation – Add qty, post spreading from the SKU with maximum overallocation							
		Planned	Step1-Round	Step2-balance	Step3-Adjust	Final	Comments
		18	16			18	
szap-30	0.0826	1.4868	1	0.4868	+1	2	Add 1
szap-32	0.1757	3.1626	3	0.1626		3	
szap-34	0.1704	3.0672	3	0.0672		3	
szap-36	0.2339	4.2102	4	0.2102		4	
szap-38	0.1774	3.1932	3	0.1932		3	
szap-40	0.08	1.44	1	0.44	+1	2	Add 1
szap-42	0.08	1.44	1	0.44		1	

## 1.8.2 Safety Stock

Safety Stock is maintained for high priority products to cover for unexpected incidents at stores. As per standard definition, safety stock is calculated as,

Safety Stock = Service Level\* (Stock to Cover for Variability in Demand +Stock to Cover for Variability in Supply)

Based on simulation results, Poisson distribution is used to describe discrete data with variance as large as mean and the following formula is used for calculating the safety stock.

**SafetyStock=Poissoninv(ServiceLevel,  
 $\sigma d^2 * \text{AvgLeadTime} + \text{AvgReviewTime} + \sigma l t^2 * \text{DailyAvgDemand}^2$ )**

Where,

Service Level = Recommended Service Level approved by Manager at Class Level/ Overridden by Planner

$\sigma d^2$  = Variance in actual daily demand

Avg Lead Time = Approved lead Time by Manager

Avg Review Time = Approved Review Time by Manager

$\sigma l t^2$  = Variance in Actual Lead Time derived from last 6 months data

Daily Avg Demand = Actual ROS derived from item-store performance

### 1.8.3 Auto Approvals in PARX

Based on automation requirements, auto approvals were introduced as part of March Release to consider weekly change in ROS and auto approve “Existing Min Max” if the variation is within  $\pm 2$  units.

Below are the Business rules for auto approvals.

- ✓ ROS will be updated on Weekly Basis in PARX during Saturday night Load.
- ✓ **Trigger Point – If This week’s ROS is different from Last Week’s ROS** Check
- ✓ If approved MDQ >0 and If PARX Recommended Min is within  $\pm 2$  units different from current RMS Min value and item/loc is “eligible for replenishment” then auto approve.
- ✓ This will be a weekly approval on Sunday morning at 8:00 am with effective date as of Sunday.
- ✓ Users will be able to see the **approved by** as “System” with respective approval dates.

#### Key Points to Note:

Auto approvals requires setup at Group/territory level and is not auto enabled for all Concepts. Business have to raise request to enable or disable the same.

Connection String	RoS Auto Cutoff Activation	Sys MIMx Approval Activation
Measure		
Sys MIMx Approval Activation		
	101_BS - United Arab Emi	102_BS - Dammam - KSA
	103_BS - Riyadh - KSA	104_BS - Jeddah - KSA
	105_BS - Kuwait	106_BS - Qatar
	107_BS - Oman	108_BS - Ba
01_1011 Clothing Boys		
01_1011 Clothing Boys		
01_1011 Clothing Boys		
01_1012 Clothing Girls		
01_1012 Clothing Girls		
01_1012 Clothing Girls		
01_1013 Clothing Essentials		
01_1014 Basics Apparels		
01_1015 Basics Non Apparels		
01_1016 Toys Educational		
01_1017 Toys Boys & Girls		
01_1018 Toys Back to School		
01_1019 Toys Accessories		
01_1020 Nursery		

### 1.8.4 MDQ Status Email Reports

To track status of MDQ as per section 1.5.2, auto emailer reports are provided twice a week for users to validate and take necessary actions.

The concept admin can do the setup in Master domain for the seasons/groups as per requirement.

#### Sample MDQ Status Report

A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Territory Group	Department	Class	SubClass	Option ID	Option Label	Store	Season	Phase	MDQ Uploaded	MDQ Approved	MDQ Approved	MDQ Approved On
2	301_SP - 03_3113	(03_3113_2471	03_3113_2471	03_3113_2471_1103_156889105	gr6503103	1133V/03_21001 CP - f03_218_Sf03_218_24				0	0	173606	20180312
3	301_SP - 03_3113	(03_3113_2471	03_3113_2471	03_3113_2471_1103_156889105	gr6503103	1133V/03_21002 CP - f03_218_Sf03_218_24				0	0	173606	20180312
4	301_SP - 03_3113	(03_3113_2471	03_3113_2471	03_3113_2471_1103_156889105	gr6503103	1133V/03_21004 CP - f03_218_Sf03_218_24				0	0	173606	20180312
5	301_SP - 03_3113	(03_3113_2471	03_3113_2471	03_3113_2471_1103_156889105	gr6503103	1133V/03_21005 CP - f03_218_Sf03_218_24				0	0	173606	20180312
6	301_SP - 03_3113	(03_3113_2471	03_3113_2471	03_3113_2471_1103_156889105	gr6503103	1133V/03_21006 CP - f03_218_Sf03_218_24				0	0	173606	20180312
7	301_SP - 03_3113	(03_3113_2471	03_3113_2471	03_3113_2471_1103_156889105	gr6503103	1133V/03_21007 CP - f03_218_Sf03_218_24				0	0	173606	20180312
8	301_SP - 03_3113	(03_3113_2471	03_3113_2471	03_3113_2471_1103_156889105	gr6503103	1133V/03_21008 CP - f03_218_Sf03_218_24				0	0	173606	20180312
9	301_SP - 03_3113	(03_3113_2471	03_3113_2471	03_3113_2471_1103_156889105	gr6503103	1133V/03_21010 CP - f03_218_Sf03_218_24				0	0	173606	20180312
10	301_SP - 03_3113	(03_3113_2471	03_3113_2471	03_3113_2471_1103_156889105	gr6503103	1133V/03_21011 CP - f03_218_Sf03_218_24				0	0	173606	20180312
11	301_SP - 03_3113	(03_3113_2471	03_3113_2471	03_3113_2471_1103_156889105	gr6503103	1133V/03_21012 CP - f03_218_Sf03_218_24				0	0	173606	20180312
12	301_SP - 03_3113	(03_3113_2471	03_3113_2471	03_3113_2471_1103_156889105	gr6503103	1133V/03_21013 CP - f03_218_Sf03_218_24				0	0	173606	20180312
13	301_SP - 03_3113	(03_3113_2471	03_3113_2471	03_3113_2471_1103_156889105	gr6503103	1133V/03_21014 CP - f03_218_Sf03_218_24				0	0	173606	20180312
14	301_SP - 03_3113	(03_3113_2471	03_3113_2471	03_3113_2471_1103_156889105	gr6503103	1133V/03_21015 CP - f03_218_Sf03_218_24				0	0	173606	20180312

### 1.8.5 PARX – RMS Integration

Currently PARX files are interfaced to RMS 4 times a day i.e 10:30 am, 1:30 pm, 4:30 pm and 7:30 pm. Since system is available till 6:00 pm Saturday to Thursday, users can approve Min Max during the Business hours starting 8:00 am GST.

Based on the integration timings, the approved Min Max will be interfaced to RMS.

Sample Outbound attached.



4\_15\_minmax\_upload\_imgscp\_01\_1012\_01\_2199001\_160991\_LMGSCP\_20180330003903\_aa.csv.zip

### 1.8.6 Substitute Items and Eligibility

New attribute measures, **Substitute Item** are present in PARX which will be populated as “Parent”/ “Child” or null based on the Substitute items mapping in RMS. While Child items are “**Uneligible for replenishment**”, parent items inherit the properties of mapped Child Items as child are replenished as substitute items based on priority.

- 1) Planned Exit date for Parent item will be calculated as Maximum Planned Exit Date of (Parent Item, Child 1, Child 2 and so on). Hence Planned Exit Date will always refer the biggest lifespan of the substitute items mapping.
- 2) Average ROS and Demand variability will be calculated by considering the last 8 weeks total sales of trading Parent/Child items and calculating the required values.
- 3) PARX will show the calculated Planned Exit Date and ROS Variability/Average ROS as per point 1 and 2.

#### Key Points to Note (Business Rules)

- ✓ Substitute items mapping in RMS is a pre-requisite for the above process. If Child items are not mapped as substitute items, PARX will consider them as regular items.
- ✓ Substitute items are expected to be in the same season. PARX filters are available at season level hence Business should ensure that substitute items mapping is done for items with same Season. However, if an item is mapped as Substitute item, it will remain ineligible for replenishment as long as the RMS mapping is available.
- ✓ Substitute items are considered at Concept level though the RMS mapping is currently done at Territory level, which means that, items marked in RMS substitute settings for one territory are considered as Parent-Child mapping for all.

Users can display the attribute using “**Sort and Display Attributes**” when displaying the Product Hierarchy ( in Wizard or Workbook )



Sort/Display Attributes

Select a dimension to work with:  
SKU

Attributes to Display

Unused display attributes:

- Product Lifespan
- Product Type
- Season
- Size
- Size Range
- Themes

Display attributes:

- Label
- Substitute Item

Attributes to Sort By

Unused sort attributes:

- Product Lifespan
- Product Type
- Season
- Size
- Size Range
- Themes

Sort attributes:

- Substitute Item
- Label

OK Cancel Apply Help

3. Store Replenishment Min-Max Approval Wizard

Select SKUs

<input type="checkbox"/>	Child 158951713	03_159231558 Cotton Knitted Collared Tee Shirt_SZAP-L
<input type="checkbox"/>	Child 159373978	03_159524120 TSHIRT_SZAP-S
<input type="checkbox"/>	Child 159373978	03_159799423 TSHIRT_SZAP-S
<input type="checkbox"/>	Child 159373978	03_159994986 T SHIRT_SZAP-S
<input type="checkbox"/>	Child 159373979	03_159524121 TSHIRT_SZAP-M
<input type="checkbox"/>	Child 159373979	03_159799424 TSHIRT_SZAP-M
<input type="checkbox"/>	Child 159373979	03_159994987 T SHIRT_SZAP-M
<input type="checkbox"/>	Child 159373980	03_159524122 TSHIRT_SZAP-L
<input type="checkbox"/>	Child 159373980	03_159799425 TSHIRT_SZAP-L
<input type="checkbox"/>	Child 159373980	03_159994988 T SHIRT_SZAP-L
<input type="checkbox"/>	Child 159373981	03_159524123 TSHIRT_SZAP-XL
<input type="checkbox"/>	Child 159373981	03_159799426 TSHIRT_SZAP-XL
<input type="checkbox"/>	Child 159373981	03_159994989 T SHIRT_SZAP-XL
<input type="checkbox"/>	Empty Value	03_155405968 SHIRT/YELLOW/BLUE_SZAP-XXL

### 1.8.7 Interface Data

Data	Interface name	Intersection	Description
Hierarchy	Prod Hierarchy	sku	
Hierarchy	Loc Hierarchy	loc	
Hierarchy	DC Hierarchy	wh	
Hierarchy	Season Hierarchy	phase	
Hierarchy	WH Hierarchy	cdc	
Hierarchy	Size Hierarchy	size	
Hierarchy	repl_status	sku/store	1.MinMax Active 2.Min Max not Set (Item-Loc Ranged/Trading but no Min/Max set by Users) 3.MinMax need review ( Current week ROS is higher/Less than last week ROS) 4.MinMax Stopped (Item-loc replenishment stopped due to expired Planned Exit Date/Consolidation)
Store-Size Profile	store-size Profile	season/subclass /store /size_range/size	Store-size profile calculated in Netezza based on PO Ratio
Service level	Service level	sku/store	Recommended service Level based on Sellthorough Index for each SKU/Store
Lead Time	Average Lead Time	store	Average Lead Time for store based on last 6 months transactions interfaced from Netezza

Lead Time	Lead Time Variance	store	Variability in Lead Time for each store based on last 6 months transactions.
Launch Attributes	Ranged( T/F) Value	option/store	sku/store ranging information
Launch Attributes	Store Receive Date Value	option/store	Store receive date in RMS
Launch Attributes	First Sold date Value	option/store	First Sale date in RMS
Launch Attributes	Planned Exit Date Value	option/store	Planned Exit Date -To be calculated in Netezza
MinMax Input	Daily Average ROS Value	sku/store	daily average demand based on actuals - (Last 2 Months for Basics)
Data	Interface name	Intersection	Description
MinMax Input	ROS Variability Value	sku/store	demand variability based on Actual sales data
MinMax Input	Planned ROS Value	sku/store	Forecasted daily average demand.
RMS Min Max	On RMS T/F	sku/store	On RMS Min/Max Indicator
RMS Min Max	RMS Effective Date From	sku/store	RMS Min/Max details
RMS Min Max	RMS Effective Date To	sku/store	RMS Min/Max details
RMS Min Max	RMS Min (100)	sku/store	RMS Min/Max details
RMS Min Max	RMS Max (100)	sku/store	RMS Min/Max details
SKU Attributes	Season	sku	RMS Min/Max details
SKU Attributes	Hit-Phasing	sku	Hit Information
SKU Attributes	Product-Type	sku	Product Type UDA Value
SKU Attributes	All- Product Lifespan	sku	Lifespan UDA Value
SKU Attributes	Size_Range	sku	Size Range lined to the sku
SKU Attributes	Size	sku	Size Information