Oracle® Retail Allocation Cloud Service/Allocation

Implementation Guide

Release 19.0

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Value-Added Reseller (VAR) Language

Oracle Retail VAR Applications

Applications. For purposes of this section, "alteration" refers to all alterations, translations, upgrades, enhancements, customizations or modifications of all or any portion of the VAR Applications including all reconfigurations, reassembly or reverse assembly, re-engineering or reverse engineering and recompilations or reverse compilations of the VAR Applications or any derivatives of the VAR Applications. You acknowledge that it shall be a breach of the agreement to utilize the relationship, and/or confidential information of the VAR Applications for purposes of competitive discovery.

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Please give your name, address, electronic mail address, and telephone number (optional).

If you need assistance with Oracle software, then please contact your support representative or Oracle Support Services.

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Preface

This Implementation Guide describes the requirements and procedures to install this Oracle Retail Product release.

Audience

This Implementation Guide is for the following audiences:

- System administrators and operations personnel
- Database administrators
- System analysts and programmers
- Integrators and implementation staff personnel

Documentation Accessibility

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- Screen shots of each step you take

Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 19.0) or a later patch release (for example, 19.0.1). If you are installing the base release and additional patch releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch releases can contain critical information related to the base release, as well as information about code changes since the base release.

Improved Process for Oracle Retail Documentation Corrections

To more quickly address critical corrections to Oracle Retail documentation content, Oracle Retail documentation may be republished whenever a critical correction is needed. For critical corrections, the republication of an Oracle Retail document may at times not be attached to a numbered software release; instead, the Oracle Retail document will simply be replaced on the Oracle Technology Network Web site, or, in the case of Data Models, to the applicable My Oracle Support Documentation container where they reside.

This process will prevent delays in making critical corrections available to customers. For the customer, it means that before you begin installation, you must verify that you have the most recent version of the Oracle Retail documentation set. Oracle Retail documentation is available on the Oracle Technology Network at the following URL:

http://www.oracle.com/technetwork/documentation/oracle-retail-100266.html

An updated version of the applicable Oracle Retail document is indicated by Oracle part number, as well as print date (month and year). An updated version uses the same part number, with a higher-numbered suffix. For example, part number E123456-02 is an updated version of a document with part number E123456-01.

If a more recent version of a document is available, that version supersedes all previous versions.

Oracle Retail Documentation on the Oracle Technology Network

Oracle Retail product documentation is available on the following web site:

http://www.oracle.com/technetwork/documentation/oracle-retail-100266.html

(Data Model documents are not available through Oracle Technology Network. You can obtain these documents through My Oracle Support.)

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.

Convention	Meaning
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

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Allocation Overview

Allocation is a critical link in the supply chain process, which presents the final chance to distribute products efficiently. The challenges facing retailers for allocating product are the same, whether they sell fashion items, groceries or hard lines. Allocators want an efficient, accurate method of translating their merchandise plans into location level allocations. Effectively allocating products is a critical step in product life cycle management and is the last chance the retailer has to get the right product to the right location in the right quantity.

Allocation enables you to take advantage of the most current, up-to-date sales and inventory information. The solution also has the flexibility to allow allocations to be calculated months in advance for vendor commitment purposes. It has been designed to address the following challenges (among others) related to the correct allocation of product:

- How to put a variety of merchandise plans into action.

- How to allocate products to support diverse marketing efforts and selling profiles.

- How to effectively and accurately allocate products without increasing headcount while continuing to grow the business.

- How to streamline the training process for allocators.

If these challenges are not met, the wrong product can be sent to the wrong location in the incorrect quantity at the wrong time. The net result is higher markdowns and lower profits.

The logic of Allocation is based on establishing need at the item/location level. The allocator influences the determination of need by choosing a rule and rule modifiers and then setting optional quantity limits. Then, Allocation determines gross need values based on the demand sources selected and applies constraints to the data and determines the net need for each store or warehouse on the allocation. At this point, an algorithm determines how to spread the available inventory across all of locations, based on net need. Then, the allocation is created.

Allocation Methods

There are three different ways that Allocation can create allocations - standard, what-if, and scheduled.

Standard Allocations

This type of allocation is created manually by selecting the items to be allocated, the source of the inventory, and the locations where the items should be sent. The allocator

will also select the rules to be applied in order to determine gross and net need for the item/locations and apply any constraints for efficient distribution.

What-if Allocations

What-if allocations allow allocators to create hypothetical allocation and provide the flexibility to create purchase orders based upon the allocation calculated quantities. The process is exactly the same as a standard allocation except that the user starts with an infinite available number of the selected product or a user-specified quantity and determines their actual demand at the destination locations. The results of the what-if allocation are sent in the form of a purchase order to Merchandising for approval.

What-if allocations utilize the primary supplier's primary origin country's inner, case, and pallet size only. If an allocator wants to adjust these for the purchase order, the recommended approach is to make this update once the order has been created in Merchandising for the resultant purchase order.

Scheduled Allocations

Scheduled allocations are created similar to standard allocations, but have a schedule assigned to it. The schedule allows you to define a template with the start and end dates for review, the frequency for reviewing, and, when need is determined to exist, the action that should be taken (e.g. Create and Approve). This template is referred to as the parent allocation. Any allocations created based on the scheduled batch runs are called child allocations.

Item Sources

Item sources represent the physical inventory that can be used for allocation. Allocation allows you to allocate based upon the following:

- Advanced shipping notifications (ASN)

- Transfers

- Bills of lading (BOLs)

- Purchase Orders

- Warehouse-sourced inventory

- Approved allocations to a warehouse

Allocators are given more access to and control of existing transactions because of these item sources, which increases supply chain efficiencies. As a result, the next inventory movement can be communicated to the distribution center before the inventory arrives and is put on the shelf as warehouse stock.

Policy Templates

Allocation allows multiple parameters to be selected when creating an allocation. These parameters are used to determine the store or warehouse level need based on metrics that fit the product, location characteristics, and product life cycle. This results in allocations based on individual location need, which is the key to maximizing sales and profits.

These parameters can also be pre-defined as policy templates to simplify the creation of allocations. Policy templates act only as a default template when applied to allocations, as the parameters that are covered by the template can be updated on each

allocation, as needed. The major components of a policy template include the demand source details, inventory parameters, and calculation parameters.

Demand Sources

Gross Need is the need that is calculated for an item/location based on the demand source information applied to the allocation. This includes selecting a rule for determining demand, indicating the merchandise level for the demand, and then a date range. The rules supported include:

Sales History

History uses historical store sales and warehouses issues from Merchandising for a date range to determine the gross need for an item on an allocation. History can be used at an item level, or level of the merchandise hierarchy - department, class, or subclass. Hierarchy levels may be helpful for cases where the actual item doesn't have sufficient sales history.

Forecast

Uses forecasted demand for a date range to determine the gross need of an item on an allocation. Allocation gets forecast details from Merchandising, but Merchandising sources this data from an external source, like Oracle Retail Demand Forecasting Cloud Service. Forecasted sales can also be used at the department, class, subclass, or item level.

Plan

Uses plan data - usually sales plan data - for a date range to determine the gross need of an item on an allocation. Plan data is at a store/week level and can be for a department, class, subclass, style, style/color, or SKU. Allocation gets this data directly from a planning solution. This type of plan is usually used for in-season allocating. For more information on plan data, see the Allocation Dependencies - Planning section.

Receipt Plan

Uses receipt plan data for a date range to determine the gross need of an item on an allocation. Allocation gets this data directly from a planning solution. Receipt plan data is at a store/week level and can be for a department, class, subclass, style, style/color, or SKU. This type of plan is generally used for pre-season allocating. For more information on plan data, see the Allocation Dependencies - Planning section.

History and Plan

This method combines the Sales History and Plan methods to determine gross need for an item on a location based on the date range selected. This method is helpful for in season allocating.

Plan Re-project

Compares an item's actual sales to the plan and then re-forecasts the plan based on performance for the date range selected, This re-projected plan is then used to determine the gross need of the item on the allocation.

Corporate

This method allows you to use custom pre-defined rules for determining the need of an item on an allocation by housing any specific demand data at the department, class, subclass, style, style/color or SKU level that could not be determined using any of the other rule types. This data is non-time based, but could be used for certain allocations

that are less time specific. For example, initial allocations to a new store based on ideal weeks of supply.

> **Note:** This method is not supported in a cloud service implementation of Allocation, as there is not a way to load the data into the table for this method.

Manual

If you want to create an allocation where you manually enter the quantities to allocation for each item/destination location, then this is the method that should be selected.

Although these rules are detailed, occasionally the allocator needs to base allocations upon like items. The User Merchandise Level Selection option allows allocators to select any combination of like data on which to base allocations. They may choose a merchandise hierarchy level, a combination of merchandise hierarchy levels, individual items, or merchandise hierarchy levels combined with individual items. Each combination of data may be weighted. For example, an allocation may require the input of Subclass Z's sales history to be weighted at 50% and item A's sales history to be weighted at 75%. The values selected by the allocator are applied to each item on the allocation.

Inventory Parameters

Inventory parameters for an allocation help define how the gross need calculated by the demand source information will be reduced to net need. These parameters include the ability to calculate the inventory buckets to consider in the calculation, selection of inventory dates to look at future available inventory, and the ability to use rule level on hand. Rule level on hand (RLOH) is summed up inventory at the selected rule level. For example, if you are allocating an item based on class level sales history, the RLOH value will be the total stock for all items belonging to the class of the item being allocated.

Calculation Parameters

Lastly, the calculation parameters in this section allow you to configure the results of the net need calculation across locations on the allocation. For example, these parameters allow you to determine how to spread available inventory when there isn't enough to meet the demand of all location and to set size profiles.

For more details on creating and using Policy Templates, see the *Allocation Foundation Data User Guide*.

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For more details on creating and using Policy Templates, see the *Allocation Foundation Data User Guide*.

Allocation Statuses

There are two different sets of statuses that are used for allocations - an overall status and a processing status. The overall status determines whether or not the allocation has reserved inventory or been sent onto Merchandising for execution; whereas the processing status indicates where the allocation is in the calculation process or approval. The table below explains the different statuses in more detail.

The processes of approving and calculating allocations are asynchronous. This allows the allocator to work on other allocations while one is being processed in the background. In addition, the validation ensures that all inventory quantities are up to date at the time approval occurs, including the item source quantities. This validation prevents Allocation from creating an allocation against quantities that were available at the time of calculation but have since been claimed by another allocation, process or system.

Overall Status

Status	Description	Code
Worksheet	Initial status for the allocation.	0
Submitted	Allocation is moved to this status when it is ready for approval by the allocation manager.	1
Approved	Indicates the allocation has been successfully approved and has been sent to Merchandising and other downstream systems for processing.	2
Processed	Once the warehouse starts working on the allocation, it moves to this status and can no longer be updated.	3
Closed	Indicates the allocation has been shipped by the warehouse. The allocation can no longer be updated in this status.	4
Cancelled	Indicates the allocation was cancelled by an external system, usually the warehouse management system when sufficient inventory is not available to fulfill the allocation. The allocation can no longer be updated in this status.	5
Reserved	Indicates that the allocation has been sent to Merchandising and inventory has been reserved against this allocation, but not yet sent to downstream systems like the warehouse or store for processing.	6
Deleted	Indicates a user has chosen to delete the allocation from the user interface. Allocations in this status are not visible via the user interface.	7
Approval in Process	This status isn't currently used.	8
Reservation in Process	This status isn't currently used.	9

Status	Description	Code
PO Created	Used only for what-if PO type allocations, this indicates that a purchase order has been created based on the allocation. Allocations in this status cannot be edited.	10
Scheduled	Used for scheduled allocations only, this status indicates that the parent allocation has been successfully scheduled and a child allocation will be created based on the template definition.	11

Processing Status

Status	Description	Code
Not Calculated	The allocation has not been calculated.	1
Calculation Waiting	The allocation is waiting to be processed by the algorithm. Allocators cannot access allocations with this status.	2
Calculating	The system is in the process of calculating this allocation. Allocators cannot access allocations with this status.	3
Calculated	The allocation has been calculated successfully.	4
Calculation Error	An error was encountered during calculation. An overview of the error will be provided on hovering on this text in the Allocation Maintenance workflow.	6
Size Profile Missing	The size profile was not found for all parent/diff combinations on the allocation.	7
Ideal Weeks of Supply Calculation Error	Allocation weeks of supply data was not sufficient for the algorithm requirement for the Plan Re-project rule.	8
Quantity Limits Conflict	This status isn't currently used.	9
Status Error	An error was encountered when submitting, reserving, or approving the allocation.	10
Status Waiting	This status isn't currently used.	11
Status Processing	Allocation is in the process of submitting, reservation or approval. Users cannot access allocations with this status.	12
Status Processed	The allocation has been approved, reserved, or submitted successfully.	13
Available Inventory Error	Inventory quantities that the allocation was based on have increased or decreased since the time of calculation. The allocation must be recalculated and approved based on current inventory.	14
Scheduled	The scheduled allocation has been created successfully.	18
Schedule Error	One or more errors occurred when the schedule allocation was created.	19

Closing Allocations

There are three different methods that are used for closing allocations. The closure of an allocation uses "all or nothing" processing logic - either the whole allocation is closed or it remains open.

Warehouse and Store Initiated Closure

This method of closure is based on standard business processes of shipping and receiving the allocation. Once all line items have been full shipped and received, the allocation will be marked for closure. This may also occur even if lines are not fully shipped but a stock order status update is sent from the warehouse to indicate full or partial cancellation of the allocation, usually due to insufficient inventory.

Automated Closure

After so many days, defined by Merchandising system options, purchase orders, transfers, and allocations can be automatically closed to free up inventory reservations and more correctly reflect on order. If a transaction that an allocation is tied to is cancelled then the allocations are also cancelled if not executed.

Manual Closure

Purchase orders and transfers can also be manually closed in Merchandising. If this occurs, then the associated allocations would also be cancelled. The exception to this is for purchase orders where users are given the option to leave allocations open even if the PO is cancelled.

Other Key Notes

- In order to increase the efficiency of the allocation process, Allocation has the ability to split allocations. By splitting an allocation, the allocator has the option of selecting the product hierarchy and location combinations that they would like to remove from the original allocation.

- Allocators are allowed to copy an existing allocation, resulting in the creation of a new one with the same item/location combinations and other parameters as the source.

- Allocation assumes that all the transaction items under a parent have the same store order multiple.

- In some cases, orders are placed with a case size that differs from the standard case size held in Merchandising. When this occurs, rounding by inners for the allocation may have issues if the new case size is not evenly divisible by the standard definition of inner.

For more information on using Allocation, see the white papers found in the Merchandising Functional Library found on My Oracle Support at 1585843.1.

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Getting Started

System Options

System options are used to control behavior in Allocation, configure the duration that historical events will be retained, and provide some defaulting for new events. The first time that Allocation is opened after provisioning, these options should be configured in order to ensure that the solution works with the desired behavior.

Foundation

System Option	Optional?	Re-configuration Restricted?	Default Value	Description
End of Week Day	No	No		Indicates the day to be treated as the end of the week. Any weekly rollups performed during need calculations are based on this setting. For accurate results, this needs to be in sync with the setup within the Merchandising system. Valid values are Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, or Saturday.
Display Item Location Warning	No	No	Checked	Indicates whether a warning message needs to be displayed when the user selects an invalid item/location combination. Usually, notifying an allocator about invalid item/locations combinations is important so that they can take necessary steps to rectify them before proceeding with the workflow. Valid values are checked or unchecked.
Auto Update Location Group	No	No	Checked	Indicates whether location groups need to be updated for worksheet allocations. In cases where a location group undergoes modifications within the Merchandising system, for example stores that were added to or deleted from the group, the allocator would be alerted of such changes on accessing an allocation making use of the modified location group. Valid values are checked or unchecked.
Size Profile Validation Levels	No	No		Indicates the levels at which the validation should be done. One or more of the following can be selected for this option: department, class, subclass, parent, and/or parent/diff. This should be set to the merchandise hierarchy levels where you are managing size profile data.

System Option	Optional?	Re-configuration Restricted?	Default Value	Description
Use Sister Store Demand	No	No	Checked	Indicates whether the need of a like store can be used during the allocation calculation. If this is set to checked, then Allocation will use the sister store's need when the records don't exist for a store. If this is set to unchecked, Allocation uses the sister store's need when the records don't exist for a store or when there are existing records but with zero need. This provides the allocator with the option to use item sales data from a like store in case of no existing records or for a new store that may not have sufficient demand history.
Consider On Order In Stock Calculation	No	No	Checked	Indicates whether on order against open purchase orders are considered while calculating item stock on hand. If this option is checked, then on order quantities against open purchase orders are considered while calculating stock on hand for the items in the order. This setting is taken into consideration while analyzing the net need quantity generated for a store by the calculation algorithm.
Location Statuses to Exclude	No	No		Indicates the item/location relationship statuses that should be excluded from allocations. Check those statuses that you wish to have included, in addition to active, which is always included. Valid values are Inactive, Non-Ranged, Deleted, and/or Discontinued. Defining the set of invalid relationship status through this system option removes an additional overhead of having to individually examine each allocation and manually remove invalid item location combinations.

Pricing (Foundation)

System Option	Optional?	Re-configuration Restricted?	Default Value	Description
Link Promotions	No	No	Unchecked	Indicates whether or not allocators can link promotions with an allocation during the creation process. Valid values are checked or unchecked.
Display Future Retail	No	No	Unchecked	Indicates if allocators will be allowed to view the future unit retail for items present in an allocation. Valid values are checked or unchecked.

What If

System Option	Optional?	Re-configuration Restricted?	Default Value	Description
What If Summary Default Action	Yes	No	Create PO	Indicates the default action on the What If Summary workflow. Valid values are Create PO or Update PO.
Location Statuses to Exclude	No	No		Indicates the item/location relationship statuses that should be excluded from What If type allocations. Check those statuses that you wish to have included, in addition to active, which is always included. Valid values are Inactive, Non-Ranged, Deleted, and/or Discontinued. Defining the set of invalid relationship status through this system option removes an additional overhead of having to individually examine each allocation and manually remove invalid item location combinations.
Default Import Warehouse	Yes	No		Indicates the default warehouse to use for import-based purchase orders created out of What If allocations. This should be a non-finisher virtual warehouse. It needs to be noted here that this warehouse would be considered only in cases where the destination stores do not have a designated default delivery warehouse in the Merchandising.

System Option	Optional?	Re-configuration Restricted?	Default Value	Description
Import Warehouses	Yes	No		Indicates the set of warehouses to be used for import based purchase orders. If there is more than one What If import warehouse, you can separate multiple warehouse IDs by comma. Valid warehouses are non-finisher virtual warehouses.
Default Warehouse for Bulk Orders	Yes	No		Indicates the non-finisher virtual warehouse ID for bulk non-import PO creation in What If allocations. It needs to be noted here that this warehouse would be considered only in cases where the destination stores do not have a designated default delivery warehouse in the merchandising system.
Item Source Query Level	Yes	No		Indicates the item source tier query level used for What If allocations. Valid values are Department (D), Class (C), Subclass (S), or Item (I). This system option should be set to the highest level that you will be doing item queries while creating a What If allocation.
Consider Future Available	No	No	Unchecked	Indicates whether or not to consider future available inventory for What If allocations, or current stock on hand only. Setting this value to checked gives allocators the ability to see inventory likely to be delivered within the time horizon of the allocation at the locations being covered by the allocation. The order quantity is optimized as a result of this. It also attempts to safeguard against over-allocation and markdown scenarios. Valid values are checked or unchecked.

Thresholds (What if)

System Option	Optional?	Re-configuration Restricted?	Default Value	Description
Location List Threshold	Yes	No	99	Indicates the maximum number of location lists that will be returned in a list of values.
Item Search Maximum Row Count	No	No	300	Indicates the maximum number of items that will be returned by an item search.

System Option	Optional?	Re-configuration Restricted?	Default Value	Description
Allocation Retention	No	No	50	Indicates the number of days that allocations not linked to an allocation in Merchandising will be retained in Allocation based on the last modified date of the allocation.
Worksheet Retention	No	No	50	Indicates the number of days worksheets that are not linked to an allocation in Merchandising will be retained in Allocation.
Calculation Log Path	Yes	No		Indicates the directory path that holds calculation .dat files used by Allocation. Changes to this system option will require a restart of Allocation to take effect.

Functional

System Option	Optional?	Re-configuration Restricted?	Default Value	Description
Bayesian Sensitivity Factor for Plan Re-project	No	No	0.3	Indicates the plan sensitivity value used while using the Plan Re-project policy. Valid values are any number between 0-1, with one digit of decimal precision.
Default Release Date	No	No		Indicates whether or not a default release date will be calculated on an allocation. Valid values are checked or unchecked.
Default Auto Quantity Limits	No	No	Unchecked	Indicates whether or not a default auto quantity limit will be used when calculating allocations. Valid values are check or unchecked.
Display Secondary Description	No	No	Unchecked	Indicates whether to display a secondary description for a store or supplier. This is intended to be used for supplemental information about these entities to assist in sorting a list or searching. It is commonly used for Japanese language speakers. Valid values are checked or unchecked.

System Option	Optional?	Re-configuration Restricted?	Default Value	Description
Allocate Across Legal Entities	No	No	Unchecked	Indicates whether or not an allocation will be allowed to cross legal entities. If checked, then an allocation cannot cross legal entities, based on either transfer entity or set of books, based on the Merchandising configuration. If unchecked, then an allocation can cross legal entities.
Enforce Break Pack Functionality	No	No	Checked	Indicates whether or not allocations can break packs in the warehouse. Valid values are checked or unchecked.
Default Presentation Minimum	No	No	Checked	Indicates whether or not presentation minimums, or the minimum amount of stock that should be on the sales floor at a store, should be defaulted into the Quantity Limits setup page. This also impacts the default setting of the Auto Quantity Limits check box in the Quantity Limits tab on the Policy Maintenance page. Valid values are checked or unchecked.
Limit SKU Overage	Yes	No		Indicates the Limit SKU Overages value This value is used in Fashion allocations to limit the maximum number of SKU's that the calculation engine can allocate on a per SKU basis.
Default Calculation / Order Multiple	No	No		Indicates the default store calculation multiple used when allocating. Valid values are Each (EA), Inner (IN), Case (CA), or Pallet (PA).
Default Source Type for Item Search Page	No	No	Warehouse	Indicates the item sources that will be checked by default in the Item Search page. Valid values are Allocation (A), Bill of Lading (B), Purchase Order (P), Advanced Shipping Notification (S), Transfer (T), or Warehouse (W).
Rule Type for Need Display in Allocation Maintenance	Yes	No	Plan	Indicates the rule type for which the need value is displayed in the Allocation Maintenance page. Valid values are Plan of Forecast.
Distribution Method for Quantity Limits in Location Groups	Yes	No	Copy	Indicates the method of splitting quantity limits across individual stores in a location group. Valid values are Spread or Copy.

System Option	Optional?	Re-configuration Restricted?	Default Value	Description
Validation Level Pack Ranging	Yes	No		Indicates the level at which pack ranging to destination locations is performed - Pack (P) or Component (C). If Pack is selected, then you can plan and execute pack ranging at the pack level. If Component is selected, then each unique component of the pack must be ranged to the location on the allocation in order for the pack to be allocated.
Prioritize Default Sourcing Location	No	No	Unchecked	Determines whether or not the default sourcing locations for the set of destination stores/warehouses should be considered while fulfilling demand.

Thresholds (Functional)

System Option	Optional?	Re-configuration Restricted?	Default Value	Description
Days Before Release Date	No	No	3	While creating a purchase order from a What If allocation, this option defines the number of days before the release date on the allocation as the not before date on the purchase order.
Days Before Release Date for Scheduled Allocation	No	No		Indicates the number of days beyond the current date that would be set as the release date of a child allocation. While creating a child allocation during the schedule batch run, the system adds this defined day count to the current date to determine the release date on the child allocation.
Maximum Item Description Display Length	Yes	No	30	Indicates the maximum length to be used for display of item descriptions in the Allocation user interface.
Maximum Item for Display in User Selection	No	No	300	Indicates the maximum number of items that would get displayed per alternative hierarchy selected by the user.

Operational Insights

System Option	Optional?	Re-configuration Restricted?	Default Value	Description
Order Allocation Time Threshold	No	No	0	Indicates the number of days before the not after date on a purchase order that you expect to have your orders allocated. Orders not fully allocated by this number of days will display a warning symbol next to the purchase order number indicating urgency and helping the allocator organize their work.
Order Threshold	No	No	0	Indicates the percentage of a purchase order that must be allocated in order for the purchase order to be considered fully allocated. For example, if this is set to 80%, then it will be shown as fully allocated in the Purchase Order Arrivals report tiles if at least 80% of the order has been allocated. Any value less than 100% would be assumed to be a standard warehouse hold back quantity for purposes of this report.
Need Calculation Type	No	No	F	Determines whether the Allocated to Plan/Forecast Need contextual report displays plan or forecast data. Valid values are Plan (P) or Forecast (F).

3

Foundation Data

Location Groups

Location groups in allocation are similar to location lists in Merchandising, but are an Allocation specific concept. Location groups allow you to create groupings of destination locations, adding locations by location trait, location list, individually, and so on. This allows for a quick way to add destination locations onto an allocation for cases where you have a common set of locations you are allocating to.

For more information on creating and maintaining location groups, see the *Allocation Foundation User Guide*.

Auto Quantity Limits

Quantity limits allow allocators to limit the quantity allocated to a location for an item on a location. Allocation supports several types of quantity limit constraints: Minimum Net Need, Maximum Net Need, Threshold, Weeks of Supply, Trend, and Minimum Gross Need. For example, if an allocator wanted to ensure that at least 2 units of an item are allocated to each store, assuming inventory is available, a minimum quantity limit could be defined. When using Pack Distribution mode as part of your allocation policy, two other types quantity limits can be defined - Minimum Pack and Maximum Pack. These can also be defined in Simple mode, but only in cases where the allocation contains only pack items that have been selected to be allocated as a single entity.

Auto quantity limits functionality provides allocators a way to pre-define quantity limits for multiple merchandise hierarchy levels, including item, style diff, style, department, class, and subclass levels. Then, these pre-defined quantity limits can be applied to an allocation. If you would like to default auto quantity limits onto every allocation created, then the Default Auto Quantity Limits system option should be checked.

Key Assumptions

- When applied to an allocation, will automatically use the lowest available hierarchy level to apply to each item location.

- Changes to auto quantity limits will not impact allocations where they were previously applied. Only allocations created or updated after the change.

- Overlapping dates for a particular hierarchy level/location are not supported.

For more information on how quantity limits are used on allocations, see the Allocation white paper found on My Oracle Support in the Merchandising Functional Library (`ID 1585843.1`).

For more information on creating and maintaining auto quantity limits, see the *Allocation Foundation User Guide*.

Size Profiles

Size profile refers to the ratio derived out of historical sales or forecast figures to give an accurate estimate of the number of items of different sizes to allocate to destination locations. In Allocation, this applies only to fashion items.

One of the sources of this data is the Oracle Retail Size Profile Optimization (SPO), which optimal profiles of size distribution both by merchandise category and store. Multiple size profiles can be sent to Allocation to represent profiles by season, which are stored by generation IDs (or GIDs) in Allocation. These profiles or GIDs are displayed as an option in the Policy Maintenance window and they can be used while performing a fashion allocation depending on the items being allocated and their expected date of arrival at stores. For example, a fashion item may have different summer and fall profiles defined, and this will allow you to select the appropriate profile based on the time period of the year when the item is being allocated.

All fashion, fashion pack, and fashion group allocations need to have size profile information to spread the quantity being allocated from Style/Color down to the SKU level. If an item / destination location does not have size profile information, it is excluded while performing the calculations. Allocation will allow you to select a specific GID to be applied during the allocation process.

> **Note:** The GID option applies only to stores and cannot be used for a fashion allocation involving destination warehouses.

If you do not have a solution that can provide size profile information, you can use the Allocation UI to enter your profiles. For more details on this, see the *Oracle Retail Allocation Foundation User Guide*.

Merchandising Dependencies

Allocation relies on Merchandising for the following data elements:

- **Foundation Data**, including valid locations to allocate to and from, location groupings, valid merchandise hierarchies to allocate within, suppliers, and so on.

- **Items** - approved, inventoried transaction-level and parent items. For more on items, see the section below on Allocation Item Types.

- **Item/Location** - the item/location combinations in Merchandising are used to determine valid destination locations on allocations. For default sourcing locations, the Merchandising defined Source Warehouse for an item/location or the Default Warehouse defined for a store are used. This can be influenced by the Use Default Sourcing Location Only checkbox in Allocation Maintenance.

- **Purchase Orders and ASNs** - purchase orders and their advanced shipping notices that you receive from your suppliers can both be used as the sources of allocations.

- **Transfers and BOLs** - transfers and their associated bills of lading can both be used as the sources of allocations.

- **Approved Allocations and Shipments** - once an allocation has been approved in Allocation, it is sent to Merchandising for execution. The Merchandising version of the allocation can be used as a source for further allocations, as well as its shipments.

- **Inventory** - current on hand and available inventory information is used to determine the need for destination locations.

- **Sales and Forecasts** - historical sales and forecasted sales can be used to determine the need at an item/location level for an allocation.

Pricing Dependencies

Allocation also gets two pieces of information from Pricing. The future retail, to indicate the retail price of items on an allocation at the time that the allocation will occur, and promotional information, so that an allocation can be manually associated with the correct promotion for reporting purposes.

Planning Dependencies

Allocation has the ability to take in plan data in order to use as the demand source on an allocation. Usually the source of this plan data is an Assortment Planning solution, like Oracle Retail Assortment and Item Planning Cloud Service. There are two types of plans that can be used as demand source by Allocation. See the Demand Source section for more on the plan types. For information on this integration, see the Oracle Retail Allocation Operations Guide.

4

Allocation Item Types

The way items are classified in Allocation is different than in Merchandising, but is based on the setup and configuration that is defined in Merchandising. You will see this item type referred to in the search results in the Manage Allocations page, amongst other areas of the solution. Below the way that item types are classified in Allocation based on the Merchandising configuration is described in more detail.

> **Note:** This is not the exhaustive list of possible combinations, but is instead an illustration of possibilities.

Staple Items

There are two different configurations that can be considered staple items by Allocation. Both definitions will have their Allocation Item Type set to Staple (ST). The first is a one-level transaction item that is not related to any other items.

Item	Item Parent	Item Grandparent	Item Level	Transaction Level	Diff 1	Diff 2	Item Aggregate
182920285			1	1	Null	Null	N

The other is a multi-level item family that has the item aggregate indicator set to No in Merchandising. These items may or may not use differentiators.

Item	Item Parent	Item Grandparent	Item Level	Transaction Level	Diff 1	Diff 2	Item Aggregate
100001828	100001393		2	2	Red	Small	N
100075034	100075026	100075018	3	3			N

Fashion Item Families

These are item families where the transaction level is 2 and the aggregation indicator at level 1 is Y. The level 1 item is called a Style (STYLE) by Allocation, while the level 2 item is called a Fashion SKU (FASHIONSKU).

Styles

Item	Item Parent	Item Level	Transaction Level	Diff 1	Diff 2	Item Aggregate	Diff 2 Aggregate	Diff 2 Aggregate
100001393		1	2	Color	Size	Y	Y	N

Fashion SKUs

Item	Item Parent	Item Level	Transaction Level	Diff 1	Diff 2	Item Aggregate	Diff 2 Aggregate	Diff 2 Aggregate
100001828	100001393	2	2	Red	Small	N	N	N
100001561	100001393	2	2	Red	Large	N	N	N
100001465	100001393	2	2	Blue	Small	N	N	N
100001721	100001393	2	2	Blue	Large	N	N	N

Fashion Items

Allocation also has the ability to use an item level that is between the level 1 and 2 item, based on the use of the aggregate flags. This type is called Fashion Item (FA) and allows you to work at a Parent/Diff level when allocating. These items are displayed as a concatenation of the parent item number, diff number that has been flagged as the aggregate, and the differentiator ID. From the above example, an example of this would be 100001393 1~RED. If instead diff 2 had been flagged as the aggregate, an example would be 100001393 2~SMALL.

Pack Items

Sellable Packs

All pack items that have their sellable flag set to Yes are classified with the Allocation Item Type of Sellable Pack (SELLPACK).

Item	Item Level	Transaction Level	Pack?	Sellable?
110919650	1	1	Y	Y

Non-sellable Staple Simple Pack

Items with an Allocation Item Type of non-sellable staple simple pack (NSSSP) are packs with their sellable flag set to No and that contain only one component item. The component item must have the allocation item type of Staple.

Item	Item Level	Transaction Level	Pack?	Sellable?	Simple Pack?
110919650	1	1	Y	N	Y

Non-sellable Fashion Simple Pack

Items with an allocation item type of non-sellable simple packs (NSFSP) contain only one component item that has an allocation item type of Fashion SKU. The pack itself must be flagged as non-sellable.

Item	Item Level	Transaction Level	Pack?	Sellable?	Simple Pack?
110919650	1	1	Y	N	Y

Non-sellable Staple Complex Pack

Items with an allocation item type of non-sellable staple complex pack (NSSCP) contain more than one component item, all of which have an allocation item type of Staple. The pack itself must be flagged as non-sellable.

Item	Item Level	Transaction Level	Pack?	Sellable?	Simple Pack?
110919650	1	1	Y	N	N

Non-sellable Fashion Single Color Pack

Items with an allocation item type of non-sellable fashion single color pack (NSFSCP) contain more than one component item, all of which are considered fashion SKUs and have the same parent item and the same aggregate diff value. Generally, this is referred to as a single style/single color pack. The pack itself must be flagged as non-sellable.

Item	Item Level	Transaction Level	Pack?	Sellable?	Simple Pack?
110919650	1	1	Y	N	N

Parent and Component Items

For the above example, here's what the components may look like, along with their parent item.

Item	Item Parent	Diff 1	Diff 2	Diff 1 Aggregate	Diff 2 Aggregate
110912345		Color	Size	Y	N
110912346	110912345	Black	Small	N	N
110912347	110912345	Black	Medium	N	N
110912348	110912345	Black	Large	N	N

Non-sellable Fashion Multi Color Pack

Items with an allocation item type of non-sellable fashion multi-color pack (NSFMCP) contain more than one component item, all of which are considered fashion SKUs. These component items also have all the same parent, but have more than one value for the aggregate diff. Generally, this is referred to as a single style/multi-color pack. The pack itself must be flagged as non-sellable.

Item	Item Level	Transaction Level	Pack?	Sellable?	Simple Pack?
110919655	1	1	Y	N	N

Parent and Component Items

For the above example, here's what the components may look like, along with their parent item.

Item	Item Parent	Diff 1	Diff 2	Diff 1 Aggregate	Diff 2 Aggregate
110912345		Color	Size	Y	N
110912346	110912345	Black	Small	N	N
110912347	110912345	Black	Medium	N	N
110912348	110912345	Black	Large	N	N
110912349	110912345	White	Small	N	N
110912350	110912345	White	Medium	N	N
110912351	110912345	White	Large	N	N

Items Not Supported by Allocation

The following items are not supported by Allocation:

- Below transaction level items - this level generally represents the bar code for an item and cannot be used for allocations.
- Non-sellable complex packs that contain a mix of fashion and staple components
- Non-sellable complex packs that contain fashion items with different parent items
- Non-inventoried buyer packs

5

Globalization

Translation

Allocation supports operating the user interface in 19 languages, including English. As part of the install options for Merchandising, you'll designate one language as "primary", which also applies for Allocation. This primary language is what is loaded as a default for all screen labels and error messages in Allocation at the time of installation. By default, only the primary language you indicated at installation is loaded, but if you wish to have more languages loaded, then you can request to have the language strings loaded for these languages as well.

Supported Languages

- Arabic
- Chinese (Simplified)
- Chinese (traditional)
- Croatian
- French
- German
- Greek
- Hungarian
- Italian
- Japanese
- Korean
- Polish
- Portuguese
- Russian
- Spanish
- Swedish
- Turkish

This means that all screen labels, error messages, and menu options are supported out of the box in these languages and users are able to select from these languages as their preferred language.

> **Note:** Data translation is not supported for any Allocation owned entities.

Translate Labels and Seeded Data

If you would like to modify the translations for labels and error messages, or add translations for other languages[1] that are not included in the list above, then this can be done by updating the resource bundles, which contain the screen labels, menus, and messages. For details on how to make updates to resource bundles see the Resource Bundles section in the *Oracle Retail Merchandising Customization and Extension Guide*.

Configure User Language

Users can choose their preferred language to have the user interface displayed as part of setting up their user preferences. As noted above, the values loaded in the base table of an entity are always maintained in the primary language. And as such all users, irrespective of their configured language, will see the primary language in the screens where an entity is created and maintained, and translations (including their preferred language) are shown in separate translation screens. However, if that same screen is accessed in view mode the description will be shown in their preferred language. Similarly, if viewing the entity in another UI - for example, viewing the item description in the purchase order details screen - the description will be shown in their preferred language.

Not Translated

The following information is available in English only:

- Documentation, including online help, release notes, and product guides
- Batch programs and messages
- Log files
- Configuration tools
- Demonstration data
- Training Materials

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[1] Additional support is also available for the following languages by adding your own translations using the tools described in this section for adding your own translations: Czech, Danish, Finnish, Hebrew, Norwegian, Thai, Albanian, Latin Bosnian, Bulgarian, Estonian, Latvian, Cyrillic Serbian, Lithuanian, Romanian, Slovakian, and Slovenian.

6

Data Access Schema Configuration

The Data Access Schema (DAS) is a way for certain tables in the production database for the Merchandising suite, including Allocation, to be replicated to an on-premise or hosted environment to provide you with more direct access to your production data in order to build extensions, integration, custom reporting, and so on. The DAS uses Oracle GoldenGate, which is a comprehensive software package for real-time data integration and replication in heterogeneous IT environments. If you purchased the subscriber license for using GoldenGate as part of your subscription, then once you have installed and configured your target environment, you can configure which of the tables available for replication you want replicated to your target database. All tables in DAS are accessed via database views. Views are used to ensure that, even if a column it dropped from a base table or no longer used, the view continues to include all columns, so that any integrations or other extensions built using the data will not fail. Although they may need to be altered to remain functionally correct.

The list of tables that are available to be replicated are found in the DAS data model, which can be downloaded from My Oracle Support by accessing note 2200398.1. For details on configuring your target environment and adding tables to DAS, see the My Oracle Support note 2283998.1.