

# Oracle® Retail Reference Model

*User Guide*  
*Release 14.1.1*

*June 2015*



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# Preface

This document provides information on the Oracle Retail Reference Model (RRM) process modeling standards and style.

## Audience

The intended audience is C-level decision makers (such as Chief Executive Officer/Chief Information Officer/Chief Technology Officer) through system users, depending on the level of the model.

For more information on the intended audiences of the Level 0 through Level 3 models, see [Process Modeling Standards](#).

## Related Documents

For more information, see the following documents in the Oracle Retail Reference Library Release 14.1.1 documentation set:

- *Oracle Retail Reference Library Release Notes*
- *Oracle Retail Reference Model Installation Guide*

The following documentation is available in the My Oracle Support Knowledge Base (<https://support.oracle.com>). To download the documentation, use the following Knowledge Base article numbers:

- 1617507.1 for the 14.x Retail Reference Library files
- 1564821.1 for the 13.x Retail Reference Library files

## Conventions

The following text conventions are used in this document:

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

The Retail Reference Model is one component of the Retail Reference Library. It is a comprehensive collection of established, industry-leading business processes that guide the retailers and implementers on the use of Oracle Retail solutions. The Retail Reference Model is based on the input and experience that Oracle Retail and its partners have gained in working with a wide range of retail customers. The processes align with Oracle solutions, leverage industry standards, and help business units communicate with IT. Process flows are created using Microsoft Visio. This enables retailer-specific business processes to be managed and maintained.

Retailers can use process models as a starting point for implementations, to understand the context and value that the business is trying to achieve during the implementation of the software, and to understand and tailor the baseline process that will be used going forward. Processes are the setup to understanding further levels of detail. They can also be used to identify and prioritize scenarios or paths for testing and user training.

There are many challenges to business process modeling. While there are industry standards to use common symbols, there are still challenges on how to model a process to meet the defined objectives. This guide explains the methods in which the Retail process models are depicted. It describes the design patterns and ensures consistency of modeling in the Retail Reference Model. This guide is divided into the following chapters:

- [Process Modeling Standards](#)
- [Process Modeling Styles](#)

## Web Browser Requirement

The Oracle Retail Reference Model navigator tree points to the Microsoft Visio source versions of models. The navigator and Visio source work best with Internet Explorer 8.0. The source is built using Microsoft Visio 2007 and Microsoft Visio 2010 software.

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**Note:** The source files have not been tested with older or newer versions of Visio.

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A Visio plug-in Viewer is available from Microsoft for use with Internet Explorer. If you do not have either Microsoft Visio 2007 or 2010 software, you can download the Visio Viewer from <http://www.microsoft.com/en-us/download/details.aspx?id=21701>.

You cannot either read or update the models without Microsoft Visio, Visio Viewer, or any another tool that can read .vsd files.

The other modeling tool used to read .vsd files is OmniGraffle Pro version 5.4.3 on the Macintosh Operating System.

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**Note:** You cannot read .vsd files if Visio or the Visio Viewer is not installed on your computer.

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## Web Browser Support

The following sections explain the browser support functionality for Microsoft Visio.

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**Note:** The navigator works differently with different browsers.

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### Microsoft Internet Explorer

With Microsoft Visio 2007 or 2010 installed, Internet Explorer has the options to Open, Save, or Cancel the files. If either Microsoft Visio 2007 or 2010 is not installed and with only Visio Viewer installed, Internet Explorer navigates to the view-only version of the Visio file.

### Google Chrome

With Microsoft Visio 2007 or 2010 installed, Chrome has the options to either Keep or Discard the Visio file. Without Microsoft Visio 2007 or 2010, Chrome navigates to the file location folder.

### Mozilla Firefox

With Microsoft Visio 2007 or 2010 installed, Firefox has the options to either Save File or Cancel access to the Visio file. Without Microsoft Visio 2007 or 2010, Firefox navigates to the file location folder.

### Safari

The Safari installed on MAC OS navigates to the file location folder.

To read, view, and edit .vsd files, you must have OmnigrafflePro installed on your computer.

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**Note:** OmnigrafflePro does not support the hyperlinks within the Visio source files..

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## Index to Business Processes

The Index to Business Processes in Retail Reference Model N.N.xls, or Excel Index.xlsx in the collection, lists all offered models. Use Excel's Filter functionality to locate models by application or group (folder), or the Find functionality to look for specific words or phrases in the names of models. The Index to Business Processes is located under the Link section of the RRM user interface.

## Vertical Process

In the Index to Business Processes in Retail Reference Model N.N.xls or Excel Index.xlsx in the collection, see the Applicable to Verticals columns on the far right. Fashion, Hardlines, Grocery, and Telco indicators are included in the index

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## Process Modeling Standards

The process modeling standards explain the methods in which the Retail Reference Models are depicted. The following are the three goals of process modeling:

- **Adds business value:**
  - Significant to business to have impact (breadth and depth)
  - Additional value not usually obtained through standard software package
- **Improves return on investment:**
  - Lower total cost of ownership
  - Lower implementation cost
  - Speed implementation
  - Speed organizational adoption
  - Standardize most business processes
- **Actionable:**
  - Target right people
  - Target different groups
  - Be used at right time
  - Have correct breadth and depth

## Process Groups

This table explains the different models and uses for the primary audience.

Name	Description	Primary Audience	When to Use
Retail Industry Models (L0)	A collection of functional areas to describe the retail enterprise as a whole.	<ul style="list-style-type: none"> <li>▪ Executives</li> </ul>	Sales Cycle: <ul style="list-style-type: none"> <li>▪ Support Insight Driven and Value sales engagements.</li> <li>▪ Show value and best practices that Oracle supports.</li> <li>▪ Support the pre-sales demo, by first showing process and then executing in the system.</li> </ul>
Business Process Areas Models (L1)	Conceptual representation of one major business process area.	<ul style="list-style-type: none"> <li>▪ Executives</li> <li>▪ Directors</li> <li>▪ Senior Managers</li> </ul>	
Organizational Business Process Flows (L2)	Representation of logical part of an end-to-end business.	<ul style="list-style-type: none"> <li>▪ Directors</li> <li>▪ Senior Managers</li> <li>▪ Managers</li> </ul>	Implementation (Analysis and Design Phase): <ul style="list-style-type: none"> <li>▪ To understand the context and value that the business is trying to achieve during the implementation of the software.</li> <li>▪ Processes are the setup to understanding the next level of detail.</li> </ul>
Business/System Process Flows (L2.5/L3)	Represent the activities and tasks that are executed by actor and system to complete the process.	<ul style="list-style-type: none"> <li>▪ Implementers</li> <li>▪ Team Leads</li> <li>▪ Users</li> </ul>	Sales Cycle: <ul style="list-style-type: none"> <li>▪ To show the additional value and details that Oracle brings to the table.</li> <li>▪ A detailed process evaluation workshop is not appropriate during the sales cycle. (That is an Implementation task).</li> </ul> Implementation (Analysis and Design Phase): <ul style="list-style-type: none"> <li>▪ To understand the baseline process that will be used going forward.</li> </ul>

## Standards Used

Two standards are used for depicting process designs. The right standards and symbols are used to complete the business goals. Event-driven Process Chains (EPC) symbols are leveraged for the Business Process Area Models (L1) and Business Process Flows (L2). Object Management Group: Business Process Model and Notation (BPMN) is used to describe the Business/System Process Flows (L2.5/L3).

The [Symbols Used](#) section explains the symbols that are used. This is by choice to simplify the design patterns and to make them more widely actionable to the many different business process skill levels across retailers.

For more information on BPMN, see the following web site: [www.bpmn.org](http://www.bpmn.org).

## Symbols Used

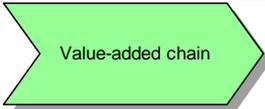
The Oracle Retail Reference Model uses the following types of models and symbols.

### Retail Industry (Level 0)

In this level, a collection of functional areas are used to describe the retail enterprise as a whole.

#### Symbol for Level 0

A single symbol is used for each area on the Level 0.

Symbol	Description	Used in Process Groups			
		0	1	2	3
	The Value-added chain denotes the business process grouping and value area.	✓			

### Business Process Areas (Level 1)

In this level, one major business process is represented in a conceptual way.

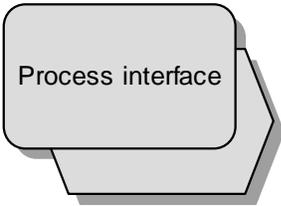
### Organizational Business Process Flows (Level 2)

This level represents the logical part of an end-to-end business process.

#### Symbols for Levels 1 and 2

A subset of Event-driven Process Chains (EPC) symbols are leveraged at Level 1 and Level 2.

Symbol	Description	Used in Process Groups			
		0	1	2	3
	The group within the business that is responsible for carrying out the task. Some examples include: Merchandising, Warehouse Operations, In Store Operations, and Pricing.		✓	✓	
	The person is represented through the role responsible for carrying out the task. Some examples include: Allocator, Planner, Buyer, and Store Manager.		✓	✓	
	The conceptual process step. Textbox of free-form text may be placed underneath and grouped to functions, to add clarification.		✓	✓	

Symbol	Description	Used in Process Groups			
		0	1	2	3
	<p>The conceptual process step that is important to the process but not categorized within the current context of the design (that is, within the immediate folder/ value-added chain structure). For example, Replenishment processes create orders. When speaking of replenishment, the create order processes will be <i>process interfaces</i> because they are stored under the Purchasing Management area.</p>		✓	✓	
	<p>The Link to Visio shape used within the flow represents a hyperlink to another process model within the collection.</p> <p>The Link to Visio shape at the upper right hand corner of the flow represents a hyperlink to the Visio version of this flow itself, when Visio is installed but the user is browsing in the HTML version.</p>	✓	✓	✓	✓
	<p>In some cases, a manual step is used to denote that the conceptual step is always performed outside of any application software.</p>		1	1	✓

### Business/System Process Flows (Level 3)

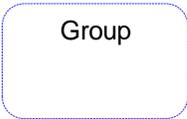
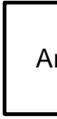
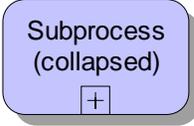
This level represents the activities and tasks that are executed by a person/role and system to complete the process.

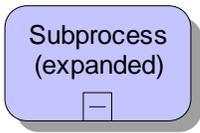
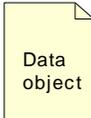
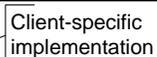
#### Symbols for Level 3

A subset of Business Process Modeling Notation (BPMN) symbols is used for Level 3.

Symbol	Description	Used in Process Groups			
		0	1	2	3
 User Interaction Function  Manual task  Notification Function  Automated Function	<p>Business process steps could be one of the following types:</p> <ul style="list-style-type: none"> <li>▪ Activity where the user must interact with the system to continue the process.</li> <li>▪ Manual activity performed outside the system.                         <ul style="list-style-type: none"> <li>○ Manual may also be used on Level 1 and 2 to indicate tasks that are completely manual, such as a human decision, discussion, or agreement step, which would never be performed in a system (Oracle or otherwise).</li> </ul> </li> <li>▪ Activity where the user must notify others of a request or outcome.</li> <li>▪ Automated activity executed by the system.</li> </ul>		1	1	✓
<b>Pool</b> 	<p>A Pool represents a Participant in a Process. Also acts as a <i>swim lane</i> and a graphical container for partitioning a set of activities from other Pools, usually in the context of B2B situations. Examples of pools include: Vendor, Enterprise (for example, a retail enterprise), and Customer.</p>				✓
<b>Lane</b> 	<p>A Lane is a sub-partition within a Pool and extends the entire length of the Pool, either vertically or horizontally. Lanes are used to organize and categorize activities. The Lane name is the <i>Actor</i> who carries out the activities.</p>				✓

Symbol	Description	Used in Process Groups			
		0	1	2	3
	<p>Application system is the product. Thus, with the lane name, a lane is specific by the actor and the product in which the activities are performed. One application system is usually applied to a lane, but exceptions may exist, such as where multiple applications use the output of another lane (for example, a demand forecast may be used by multiple applications).</p>				✓
	<p>A Gateway is used to control the divergence and convergence of multiple sequence flows. Thus, it determines branching, forking, merging, and joining of paths. Gateways need not be questions, but can be OR, AND/OR, or AND too.</p> <p>OR- One path can be taken  AND/OR- One or multiple paths can be taken. One need not be taken before another.  AND- Both paths must be taken. One path need not be taken before another.</p> <p>While there are different BPMN accepted gateway symbols for OR, AND/OR, and AND. The Retail Reference Model uses the generic symbol and text to denote the type of gateway. It does not expect every end user to know the BPMN standards.</p>			✓	✓
 <p>Start event</p>  <p>Timer (start event)</p>	<p>An event is something that <i>happens</i> during the course of a business process. These events affect the flow of the process and usually have a cause (trigger) or an impact (result). There are three types of Events, based on when they affect the flow:</p> <ul style="list-style-type: none"> <li>▪ Start</li> <li>▪ Intermediate</li> <li>▪ End</li> </ul>				✓

Symbol	Description	Used in Process Groups			
		0	1	2	3
 Intermediate event   Timer (intermediate event)	While there are several variations on start, intermediate, and end events for BPMN, not all symbols are used. The generic start, intermediate, and end events (no middle symbol) can always be used with a description. Some symbol events are allowed to give visual representation to some of the events as well as to take advantage of some active BI modeling.				✓
 End event	Start Timer and Intermediate Timer are used to precede steps that must be periodic or that involve a wait, such as for a periodic/timed update of inventory positions, a nightly upload of sales data, or a wait to count stock until all receiving tasks have finished.  [The other sub-shapes are removed although the edit does not show clearly.]				✓
 Group	Grouping of activities is done to provide additional information about the specific group.				✓
 Annotation	Text Annotations are a mechanism for a modeler to provide additional information for the reader.  A Textbox of free-form text may also be placed underneath and grouped to functions, to add clarification.				✓
 	This is used either to reference an outside process held in another drawing or it can reference an expanded subprocess within the same drawing. It will usually be the former.  The LinktoVisio hyperlink shape is used to enter the link to the other process.				✓

Symbol	Description	Used in Process Groups			
		0	1	2	3
	<p>For a process that is repeated several times within the same process, an expanded subprocess can be used. The expanded process will have an entire process located within itself. Expanded processes are located on the same drawing (but in a reference area, like a <i>key</i>) as the collapsed process.</p> <p>The LinktoVisio hyperlink is not used, to distinguish that the detail is found within this flow.</p> <p>Place a Group around the subprocess expanded steps, and use a Start and End as appropriate for the subprocess.</p>				✓
	<p>Data Objects are considered Artifacts because they do not have any direct effect on the Sequence Flow or Message Flow of the Process, but they do provide information about what activities require to be performed and/or what they produce. Some examples include a report, a paper Purchase Order, Bill Of Lading, or invoice.</p>				✓
	<p>The Link to Visio shape used within the flow represents a hyperlink to another process model within the collection.</p> <p>The Link to Visio shape at the upper right hand corner of the flow represents a hyperlink to the Visio version of this flow itself, when Visio is installed but the user is browsing in the HTML version.</p>	✓	✓	✓	✓
	<p>Denotes a customization that must be examined with the retailer.</p>		✓	✓	✓
	<p>An out-of-the-box integration that can be enabled in the field by an implementer, from or to a Retail Global Business Unit (RBU) application. Appears in the Integration Layer swimlane, and hyperlinks to an integration solution catalog entry.</p>				✓
	<p>An integration that must be enabled or customized in the field by an implementer. Appears in the Integration Layer swimlane, and hyperlinks to an integration solution catalog entry.</p>				✓

Symbol	Description	Used in Process Groups			
		0	1	2	3
	Integration Guide Link shapes are placeholders for future links to entries in the Retail Reference Architecture Integration Guide. The Integration Guide Link shapes will appear in Integration Layer swimlanes on Level 3 process flows in conjunction with Automated process steps.				✓

## Examples of Processes

The following sections provide examples of how a few processes are modeled. This provides guidance when creating the models.

The sections do not explain how all the symbols listed above should be used or when to use them. For more information on symbol usage and examples, especially for level 3, see the following web site: [www.bpmn.org](http://www.bpmn.org).

Not all BPMN symbols are used. This is to simplify the design patterns and to make them more widely actionable to the many different business process skill levels across retailers.

## Retail Industry Model (Level 0)

The Retail Industry Model (Level 0) is a high-level picture of the business processes within a retail industry. The model is a high-level grouping and categorization of processes. There is only one level 0 for the entire retail industry. It categories processes that are unique for retail, for example, retail store operations.

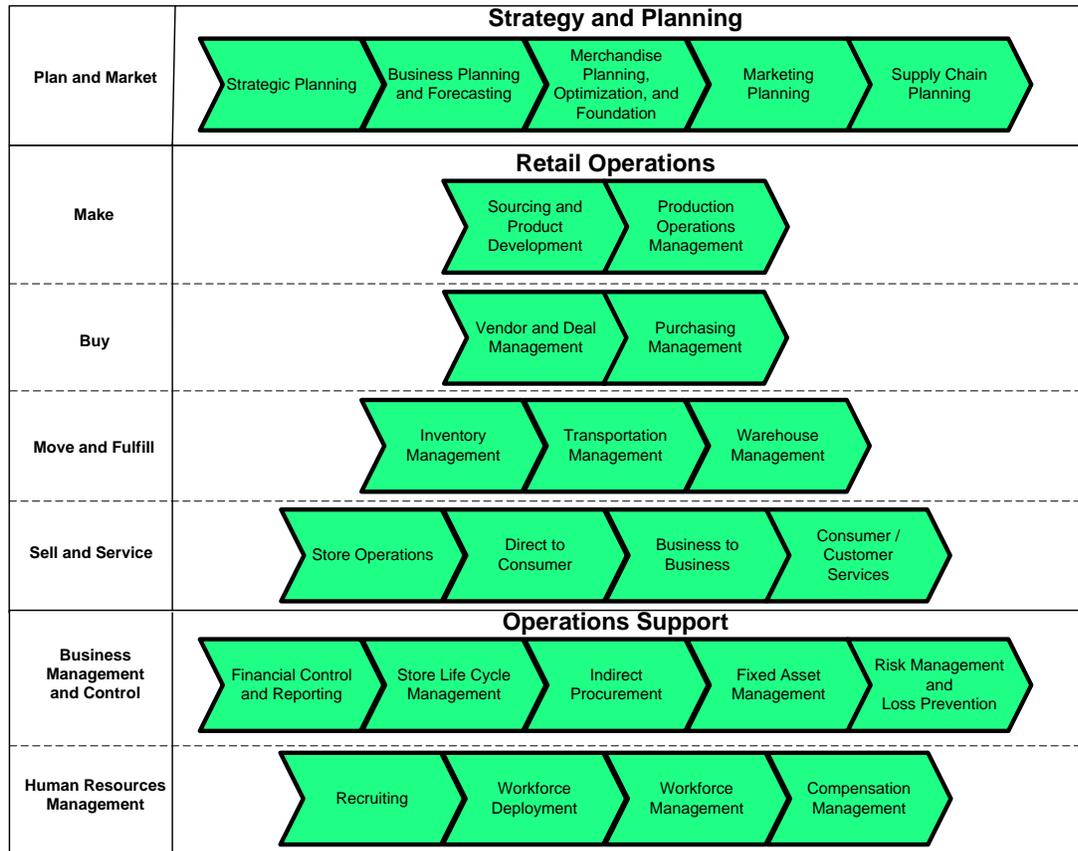
The processes that are found in every business (for example: human resources, strategic planning), as well as processes that are found in every industry but have a unique aspect within retail (for example: workforce scheduling).

The following is the summary for the Retail Industry Level 0:

- Only one level exists for the Retail Industry
- Grouping of Processes
- Covers the Entire Retail Enterprise

## Level 0 - Retail Industry

A collection of functional areas to describe the retail enterprise as a whole, using Value Added Chain notation.



Level 0 – Retail Industry

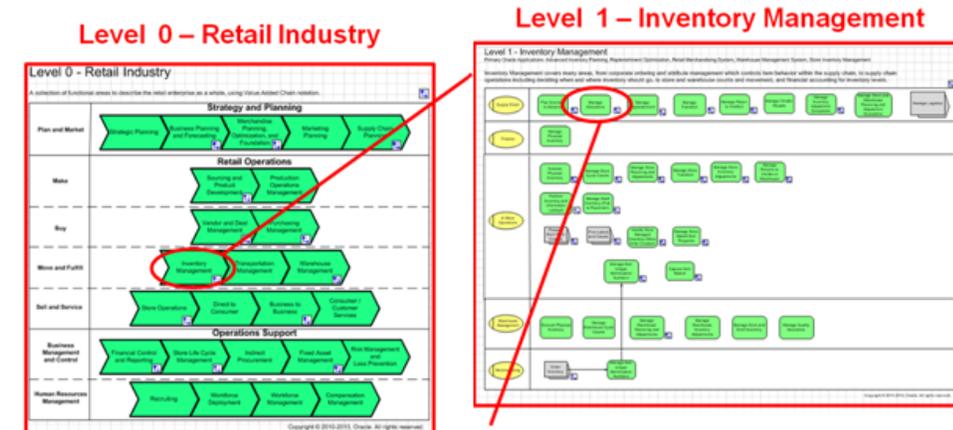
## Business Area Process Models (Level 1)

Like the Retail Industry model (L0), a Business Process area model is a grouping of processes. The differences between the two breadths are:

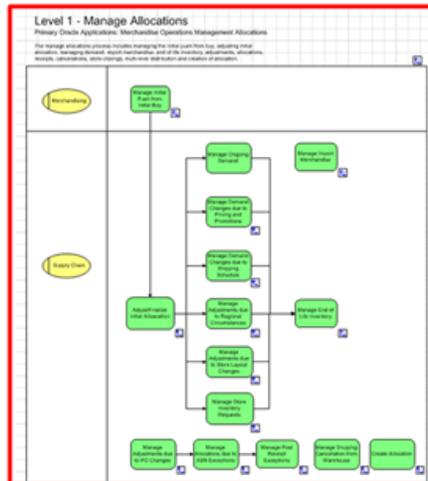
- L0 Retail Industry Models covers the entire retail industry.
- L1 Models cover a business area.

Since business area is abstract, and there are business areas within business areas, there can be several level 1 models for a particular business area. In addition, a L1 (Business Area Model) assigns the process to an organizational area. For example, within the Retail Industry Model is a box/symbol representing Inventory Management.

When expanding the process, it has several business areas, such as Manage Allocation, Manage Replenishment, Manage Warehouse Receiving, and others. The Inventory Management is a Level 1. Manage Allocations has several process groupings within itself, such as Create Allocation, Allocate Inventory for New Store, Manage End of Life Inventory, and others. Manage Allocations is another Level 1 design. It is a business process area. For more information, see the diagram [Retail Industry, Inventory Management, and Manage Allocations](#).



### Level 1 – Manage Allocations



### Retail Industry, Inventory Management and Manage Allocations

The diagram [Retail Industry, Inventory Management, and Manage Allocations](#) shows how multiple level 1s exist in a drill-down capability. This is to highlight a key point of the modeling; the *levels* are not levels in a hierarchy, but levels of information.

A Level 1 is a business process area. It is a logical grouping of business processes assigned to an organizational unit. It does not matter that a level 1 drills down to another level 1, if it is being done to represent logical groupings of business processes.

There are two other key factors within a level 1. Some processes have multiple owners. For example, the process Manage Physical Inventory Counts is assigned to the Financials group in the Level 1 Inventory Management Model. But still Warehouse Operations and Store Operations are very much involved in the process.

## Multiple Groups

The rule is that when multiple groups are involved, the overall owner of the process is assigned. As the process area is broken down, the other owners are assigned to their processes. So for Manage Physical Inventory Counts, Financials is the overall owner. When it is drilled down into, the execution processes are owned by the Store and Warehouse groups.

Another key point of level 1s is their representation. A level 1 does not need have a process flow, but the process flow is expandable. For example, the **Inventory Management Process Area** represents every piece as a single box and the **Manage Allocations Level 1** has one section that flows and which contains many sections of single boxes. Again, the purpose of the level 1 is a collection of processes within a particular area. If those processes have a logical sequence between them, then they represent with it; otherwise they will not.

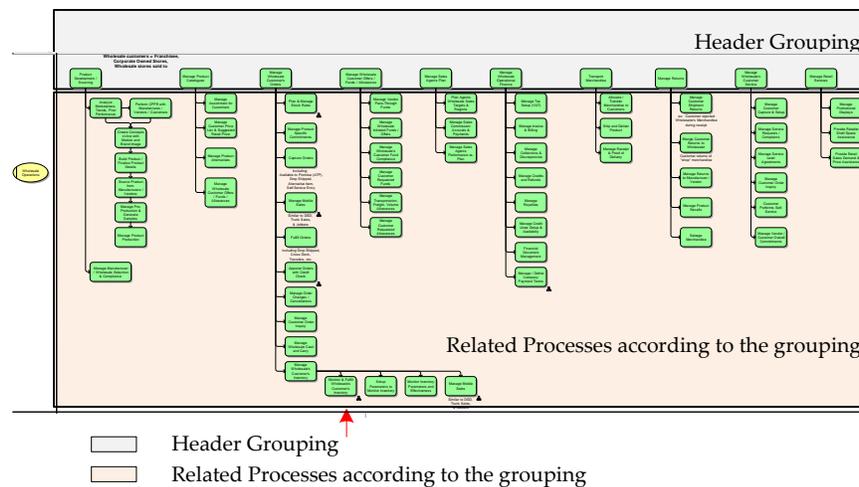
## Other Alternative Drawings

The other alternative drawings are explained in the following sections:

- [Header and Related Process Grouping](#)
- [Entire Process](#)
- [Pick Right Drawing Pattern](#)

### Header and Related Process Grouping

The point of a level 1 visually depicts the business process area. There are numerous ways to achieve this. The following diagram shows the header grouping and related processes for other processes.



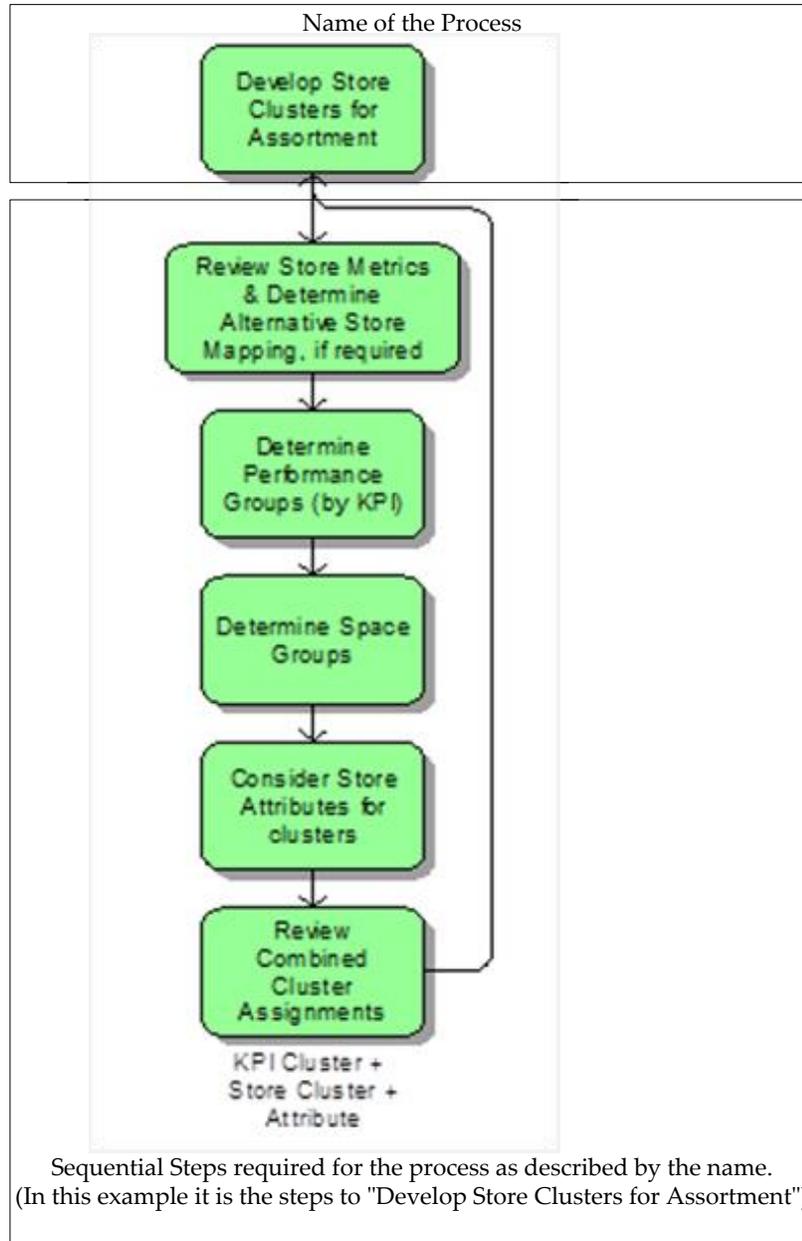
### Header and Related Grouping

### Entire Process

In other situations, there are instances where the entire conceptual process is shown. In this case the level 1 and level 2 are grouped together to show the entire process. This type of drawing only works given two conditions:

1. The entire level 1 is a sequential flow.
2. The entire level 1 and all level 2s are owned by the same organizational unit.





#### Details of Level 1 Process

#### Pick Right Drawing Pattern

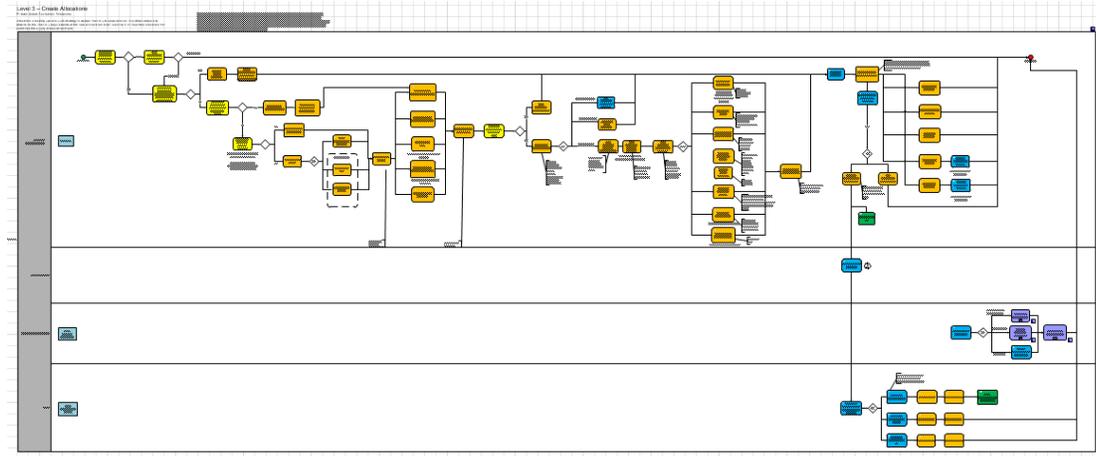
To pick the right drawing pattern is not possible to achieve and a single drawing pattern may not fit all process areas within a collection of models. The approach for drawing a level 1 is to ensure it logically depicts all the business processes that are involved in the area. The number of different drawing patterns allows the modeler to pick the most appropriate pattern for the process area.



The diagram [Business/System Process Flow](#) explains the details for Create Allocations.

## Business/System Process Flow

The following diagram shows the business/system process flow.



### Business/System Process Flow

Also, a Business/System Process Flow uses a different standard than the L1 and L2. This uses Pools and Lanes as defined by BPMN. A single lane is unique by the system/actor(role). The Pool of the design is the participant of the process. The retail enterprise or *Enterprise* is considered one participant. Others include Vendor, Customer, Finisher, Bank, or those other outside entities.

## Business/System Process Flow (Level 2.5/3)

The following is the summary for business/system process flow (Level 2.5/3):

- Business Process aligned to a role and system.
- Parallel Process, not a drill down.
- Designed to show more detail, but show the entire process.

## Relationship of Level 2s to Level 3s

A Level 2 (higher/lower Level) does not need to be 1:1 with a Level 3 (supporting/complimentary). Varying relationships may exist depending on the perspective from which each level is drawn. Any combination can be used, to best represent the considerations involved for the organizational unit and that particular area of business processes.

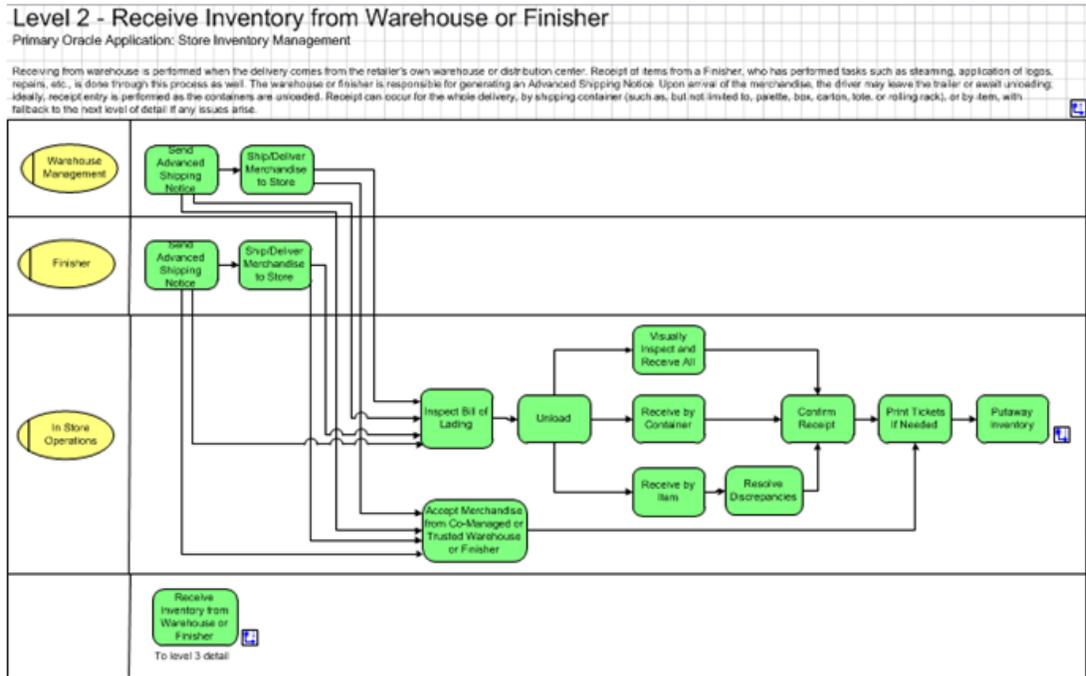
- A Level 2 Organizational Business Process Flow *may* be a higher level (1:1) depiction of a Level 3 Business/System Process Flow (Example 1).
- A Level 2 may use *one or more* Level 2s or Level 3s as the supporting detail for accomplishing the process flow—almost a *day in the life* of the organizational unit or role with regards to that business area (Example 2).

### Example 1: 1:1 Higher/Lower Level

The Level 3 Receive Inventory from Warehouse is a more detailed perspective of the Level 2 Receive Inventory from Warehouse. In this case, a 1:1 relationship between the Level 2 and Level 3 exists. There are also assignments to more flows that support resolution of the inventory receipt, such as labeling and put away.

## Receive Inventory from Warehouse or Finisher (Level 2)

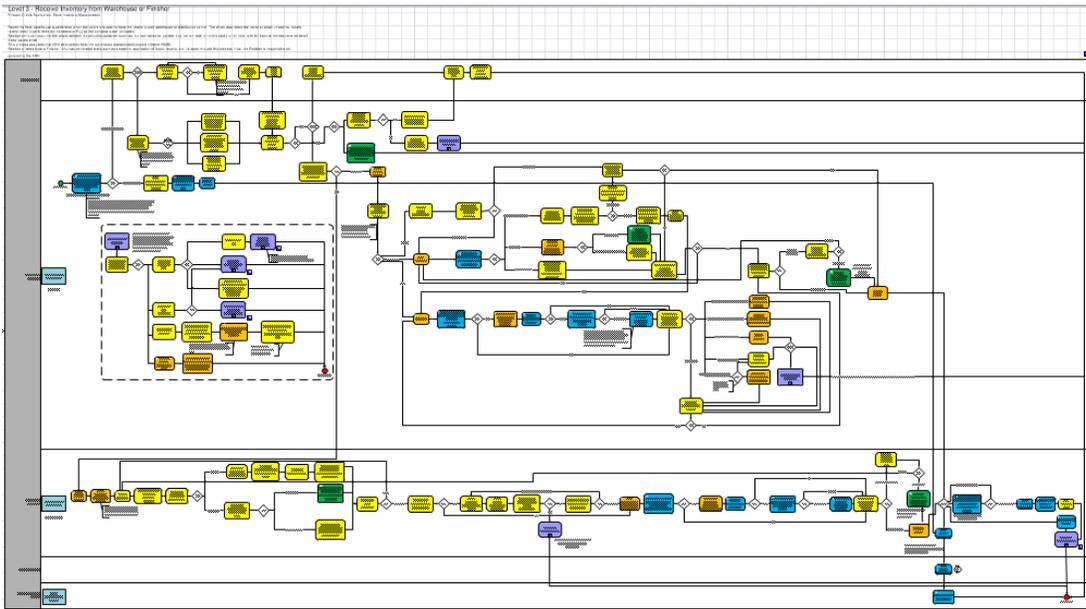
The diagram below represents receive inventory from warehouse or finisher (level 2).



Receive Inventory from Warehouse or Finisher (Level 2)

## Receive Inventory from Warehouse (Level 3)

The diagram below represents receive inventory from warehouse or finisher (level 2).



Receive Inventory from Warehouse (Level 3)

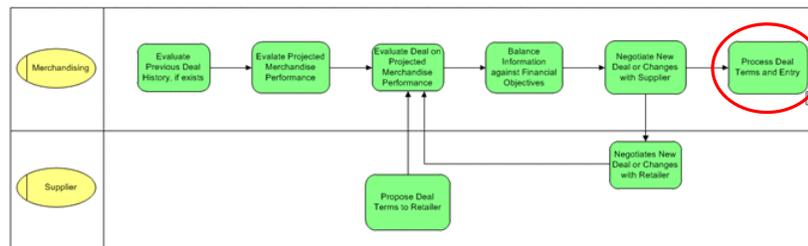
## Example 2: Supporting/Complimentary/Day in the Life

Level 2s may provide a different perspective on the high level functions involved in a business process area, with other Level 2s or Level 3s serving as supporting detail, for a *day in the life* perspective of the organizational unit or role.

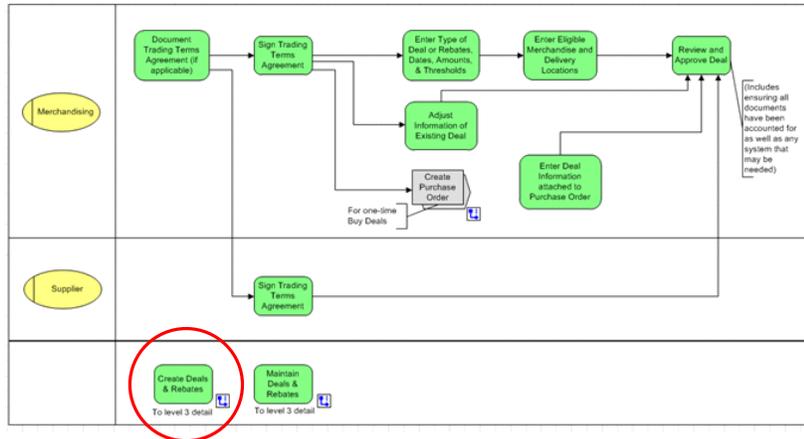
For example, Vendor and Deal Management level 2s also represents a breadth of Merchandising considerations when managing deals and rebates:

- Negotiate Long Term (Annual) Deals.
- Negotiate Short Term (Promotion or One-Time Buy) Deals.
- Negotiate Funds for Promotions - Supplier Initiated.
- Negotiate Funds for Promotions or Markdowns - Retailer Initiated.
- Process Deal Terms and Entry.
- Process Supplier funded Promotion Entry.
- Process Supplier funded Markdown Entry.
- Process Rebates.
- Execute Pass-Thru Amounts for Franchisers/Wholesalers.

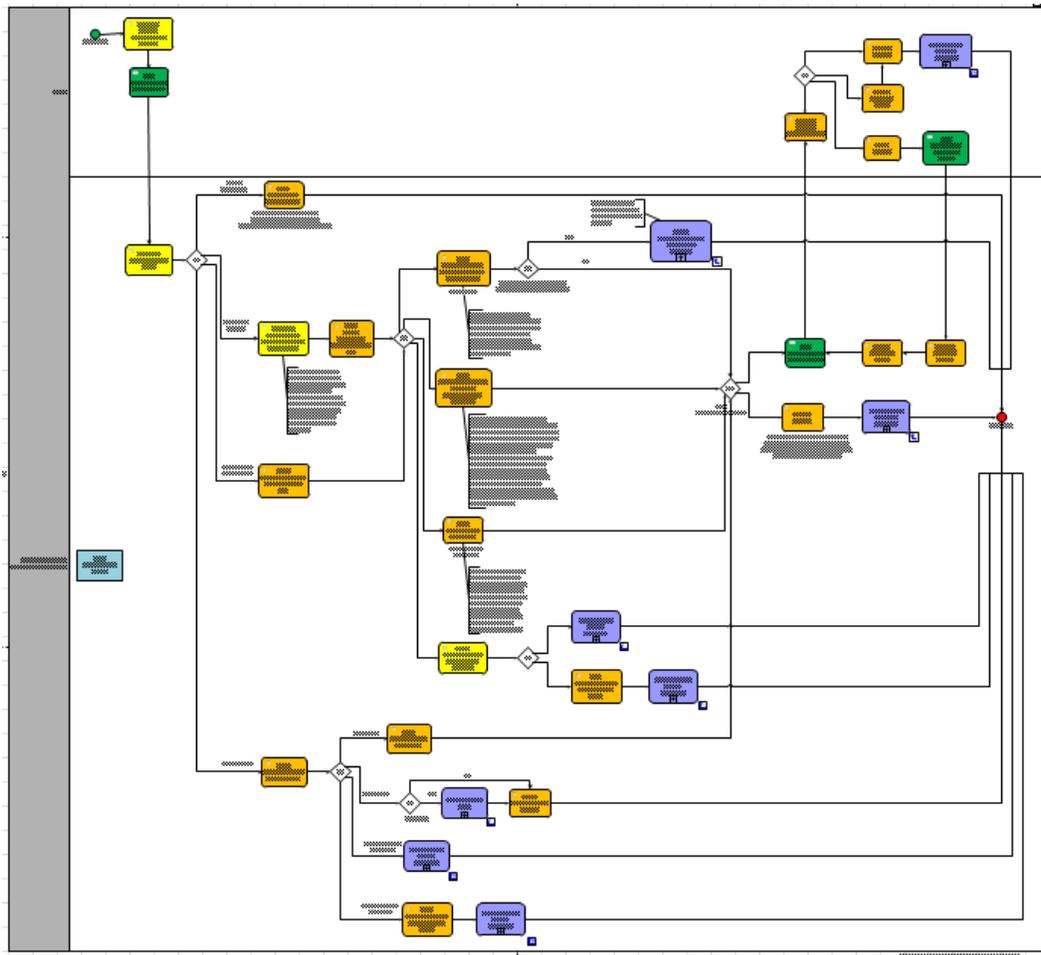
Level 2 [Negotiate Long Term \(Annual\) Deals](#) points to the [Level 2 Process Deal Terms and Entry](#), which points to [Level 3 Create Deals and Rebates](#) and Level 3 Maintain Deals and Rebates. All of these flows help the audience understand the set of considerations involved in negotiating, setting up, and maintaining deals and rebates, both from the business *system hands off* approach, and the system steps that support the business process.



### Level 2 Negotiate Long Term (Annual) Deals



**Level 2 Process Deal Terms and Entry**



**Create Deals and Rebates**



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## Process Modeling Styles

This chapter provides instruction for generating a Retail Reference Model (RRM). It provides the steps for using the Microsoft Visio templates and shape stencils to generate Visio models.

### Visio Templates and Shape Stencils

The Retail Reference Model utilizes specific Visio templates and stencils in order to maintain its process and visual standards. To edit existing process flows or to create new ones that comply with the Oracle Retail standards, the templates and stencils must be available on the individual's computer.

The templates and stencils are available within the Supporting Collateral folder in the Retail Reference Model folder of the RRL download.

To access the templates, download the RRL using the following, use the following link: <https://support.oracle.com>.

### Templates

The following templates are used to create models in Visio using the Oracle Retail styles and methodology:

- **EPC\_RGBU\_TemplateDDMMYY.vst**: With this Oracle Retail template, you can create Level 1 and Level 2 process flows.
- **BPMN\_RGBU\_TemplateDDMMYY.vst**: With this Oracle Retail template, you can create Level 1 process flows.

You can also save the existing model to a new model:

- All shapes are sampled on each page of the .vst, so that you can copy and paste instead of drawing.
- If you want to create a completely new drawing using Microsoft Visio, select **File** menu, **New**, and then **Business**.

Use the following templates:

- For Level 1 and Level 2 use **EPC Diagram (Metric)**
- For Level 3 use **Basic Flowchart (Metric)**

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**Note:** An option is set for you to choose your own template. In order to import the template, you must be aware of the Business Process Model and the Business Process Architecture.

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#### Local Directory for Template

Save the templates (.vst) to your local drive along with your other Visio templates in a location on your computer. You can save under Libraries>Documents>Templates or C:\Documents and Settings\*<userid>*\Templates.

If Template folder does not exist, either create one or place the file in any another directory (for example, Libraries>Documents>My Shapes).

### Access the Template

To access the template in Microsoft Visio, select **File** menu, **New** and then **New Drawing from Template**. Select Template from Location in which it was placed.

## Stencils

A Visio stencil holds a collection of shapes that are common in use (that is, all of the Oracle Retail Business Process shapes):

- **EPC\_RGBU\_Stencil\_[Date].vss**: Use this template to create Level 1 and 2 process flows.
- **BPMN\_RGBU\_Stencil\_[Date].vss** : Use this template to create Level 3 process flows.

### Local Directory for Stencils

Save the stencils (.vss) to your local drive with your other My Shapes in a location on your computer. For example, **Libraries>Documents>My Shapes** or C:\Documents and Settings\*<userid>*\My Documents\My Shapes.

### Access the Stencil

From the **File** menu, select **Shapes** and then select the desired Stencil.

### Setting for Stencils

Follow the instructions to set up the options for the stencils:

1. From the **File** menu, select **Shapes** and then select **My Shapes**.
2. Select the desired StencilVisio Snapping and Gluing.
3. Turn off the **Snap** **be** option to align shapes.
4. Turn off the **Glue** **be** option to keep lines straighter.

### Naming the Page Within Your Visio File

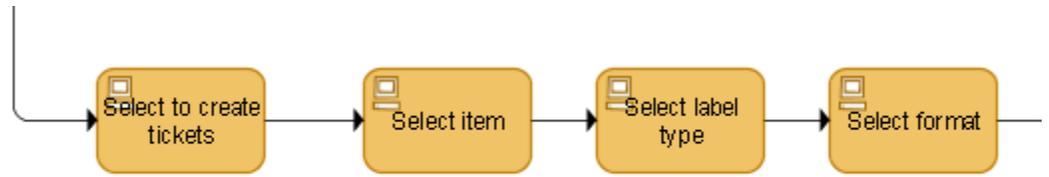
Enter the flow name in the Visio page tab. This makes it identifiable when imported into Business Process Architect and Business Process Management Composer.

## General Drawing Shapes

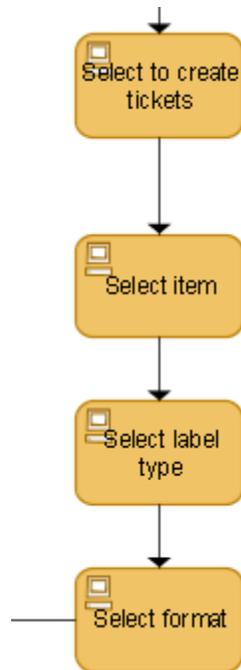
This section provides the instructions for drawing the shapes in Microsoft Visio.

### Drawing Models

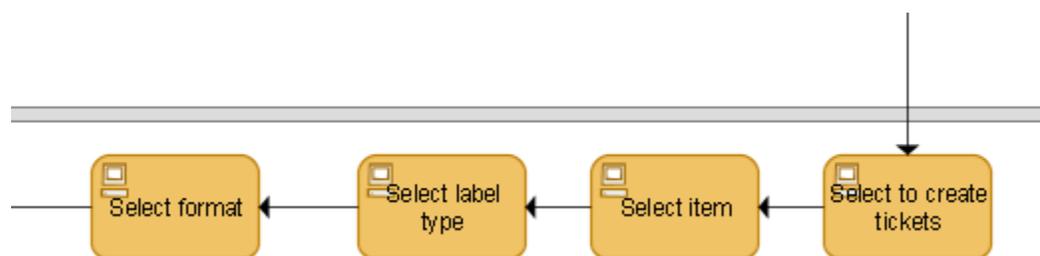
Flows should move from left to right and from the top to bottom direction. You can also draw steps in other directions, connect in a wrapping fashion to the beginning of the next line of steps, or connect to preceding steps, but no steps should read from backwards direction. You must follow the western style of reading, which is left to right and top to bottom.



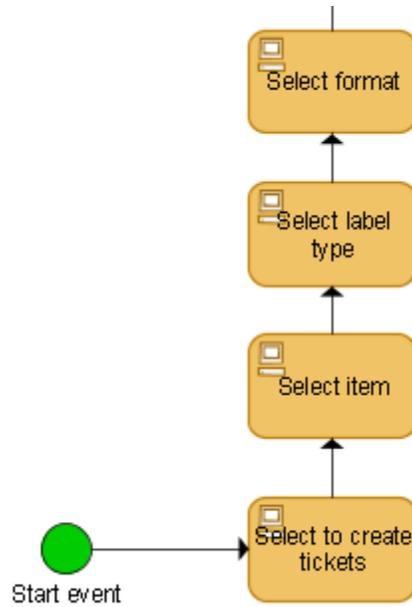
**Left to Right Reading Style**



**Top to Bottom Reading Style**



**Swimlane**



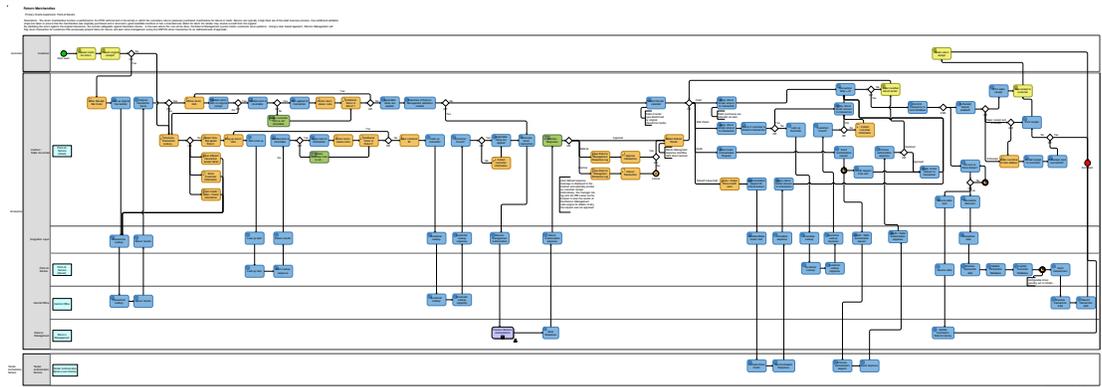
**Swimlane - Bottom and Upwards**

There will be occasions, particularly in crossing swimlanes, where the flow goes up to a preceding swimlane, but the flow should not start from the bottom and read upwards.

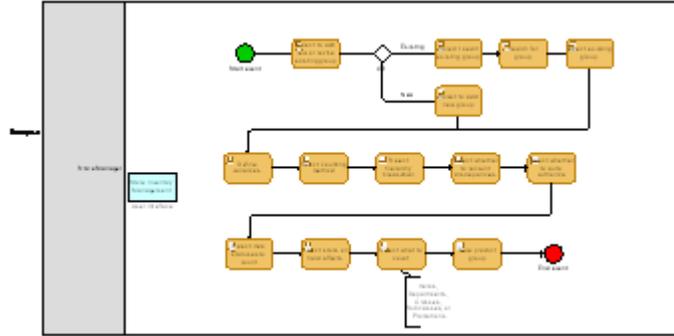
**Preferred Shape of Models**

Models should generally read longer to the right, than taller, particularly where the subject matter is transaction oriented. This makes the model read more like a timeline.

If the reader scrolls more than two pages to the right in order to read the model, or two pages down, consider dividing the model where appropriate.



**Preferred shape**



Less Desirable Shape (wrapping flow should proceed to right instead)

**Points to Remember**

The following points must be considered while drawing:

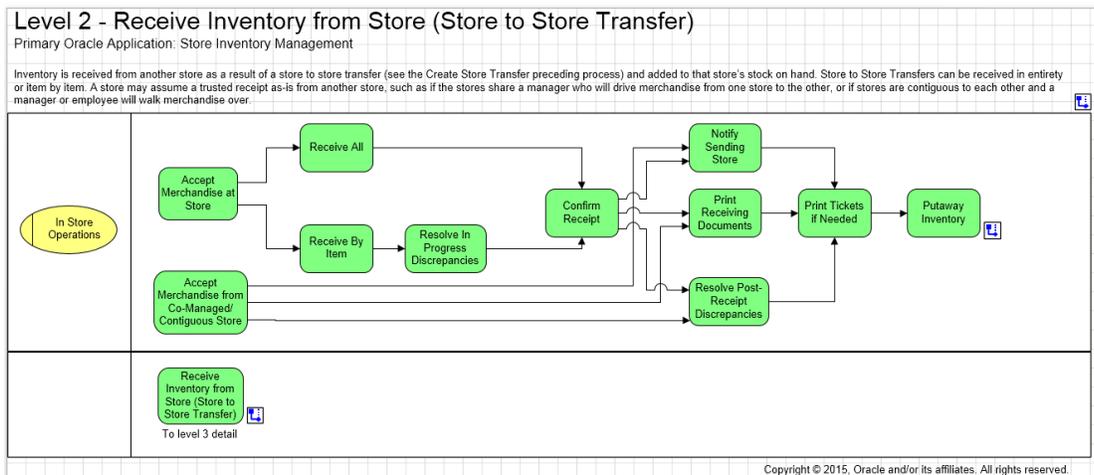
- Is the model visually useful and legible?
- Does it need dividing into more than one model for readability?

**Appropriate Levels of Information**

This section explains on the appropriate information to be given at each of the levels.

**Appropriate Information for Level 2 Functions**

The function should be what the organizational unit does with the information, not what a user does with the software, not how the user interacts with the software, and not how the information is used by the software.



**Level 2 – Store to Store Transfer**

**Points to Remember**

The following points must be considered while drawing:

- Focus must be given on what is required and not what is the system doing.
- Use business process terms, not system terms.
- What business step does the software enable, that might not otherwise be possible? Such as, Allocate from purchase order prior to merchandise receipt.

Correct	Incorrect
Load data	Determine source of data Obtain most recent sales data
Preprocess data	Cleanse/prepare data
Generate alerts	Correct discrepancies Identify anomalies
Auto approve	Review and approve

## Organizational Units on a Level 2 Swimlane

If multiple organizational units *own* or *share* the information and process steps, they can each be modeled on the Level 2 Swimlane.

The Organizational Unit should never be a system. For example, Forecast Engine should be Forecasting Group or other appropriate group of personnel within the retail enterprise.

### Points to Remember

The following points must be considered while drawing:

- Who owns the information that is being worked on, in the functions?
- What people are responsible for its creation, management, validity?

## Avoid Gateways on Level 2s

These are allowed by Event-Driven Process Chain notations, but are not part of the Oracle standards. For clarity, label the function's connections.

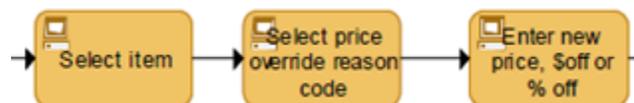
## Appropriate Level of Information for Level 3 Functions

The function should be what the user does with the software, not how the user interacts with it. Appropriate functions are Modify price, Modify quantity, Remove item, and others. The steps do not need to be detailed to the point of key presses.

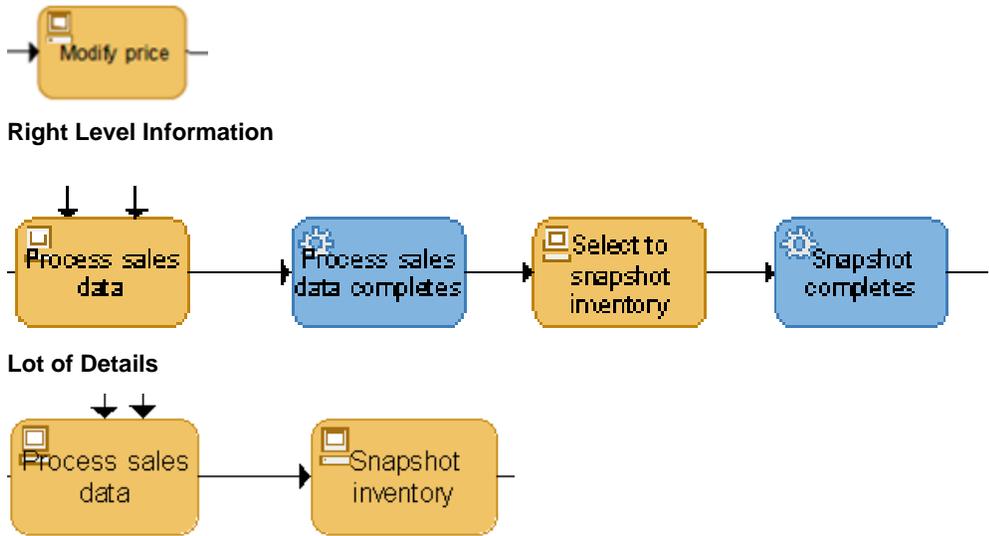
### Points to Remember

The following points must be considered while drawing:

- If you were doing the task on another presentation device, an Iphone, or by voice, or on a handheld unit. The appropriate level of information is the steps needed to accomplish the whole task. The order or details may be different if the screen or interface is different.
- A function should have meaning as a standalone description.
- A function should represent what's going on in the business, not what the steps are in the application. For example, see the following diagrams.



### Avoid Excess Information



**Right Level of Details**

Major steps should be modeled. Issues or problems should not be modeled.

Correct	Incorrect
Flush the RIB Snapshot sales data in RMS Snapshot sales data in SIM	Process sales data

**Checklist for Appropriate Level of Detail**

Maintain the following checklist to maintain appropriate level of details in the flow process.

**Points to Remember**

The following points are used to remember while deciding the process flows.

- Does the model accomplish the business process?
- Does it show how the process is executed within the confines of the system?
- Do I believe that it is effectively designed? Is there a way it could be streamlined outside the system?
- Does it effectively show the business process within the enterprise?
- Is it negatively limiting the enterprise in any way? (If so, revise.)

**Sending Information to Other Applications**

To send information to other applications through the interface layer, draw a function for each lane (sending application, integration layer, and receiving application). This helps identify where an interface exists or may be needed.

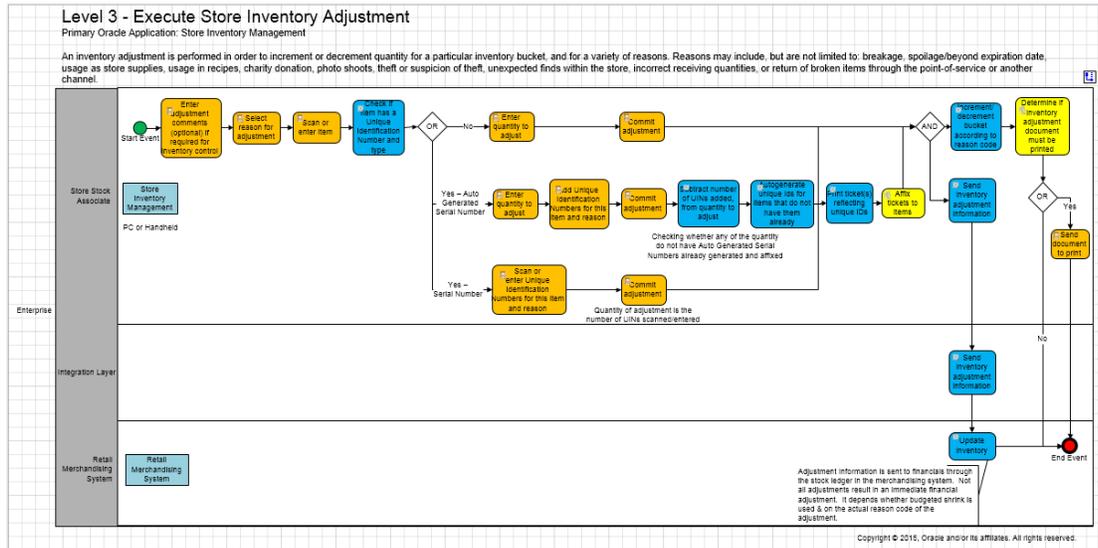
Do not name the specific application in the functions themselves. The application is already labeled on each swimlane in each model, and the retailer might have a different application that would need to perform the same function, in which case they would only need to change the application on the swimlane rather than check for the application named within each function.

**Correct**

- Send inventory adjustment to RMS
- Record inventory adjustment in RMS
- Update inventory in SIM

**Incorrect**

- Send inventory adjustment information
- Record inventory adjustment
- Update inventory



**Level 3 – Execute Store Inventory Adjustment**

**Note:** RPM, MOM, and Merchandising are all on the same database; therefore, data does not transfer through the integration layer. If applications are on the same database, do not model an Integration Layer between them, because the integration is direct.

**Indicating Custom Integrations**

If a customized integration is required, indicate with an Annotation stating “Client specific implementation” on the function in the Integration Layer lane.



**Labeling Applications Outside the Immediate Application**

For the applications outside the *immediate* application (for example, if working on SIM flows and SIM needs to send information to RPM/Retail Price Management/Merchandise Operations Pricing Management), do name the specific Oracle application (in the application box on the swimlane) rather than generalizing such as “enterprise price management tool.” Even if the solution is not Oracle’s, similar processes must be occurring in order to run the retail business and provide the needed information. The retailer could choose to reflect a different solution in their own customized copy of the processes if needed.

## Naming Functions

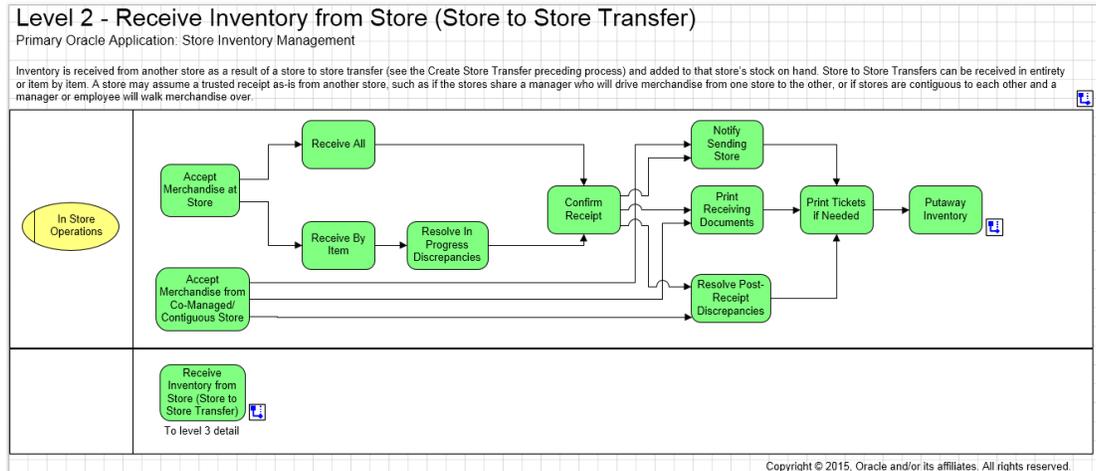
Each function should start with a verb.

- On Level 1s and 2s, use Title Case. The initial capital letters for each significant word.

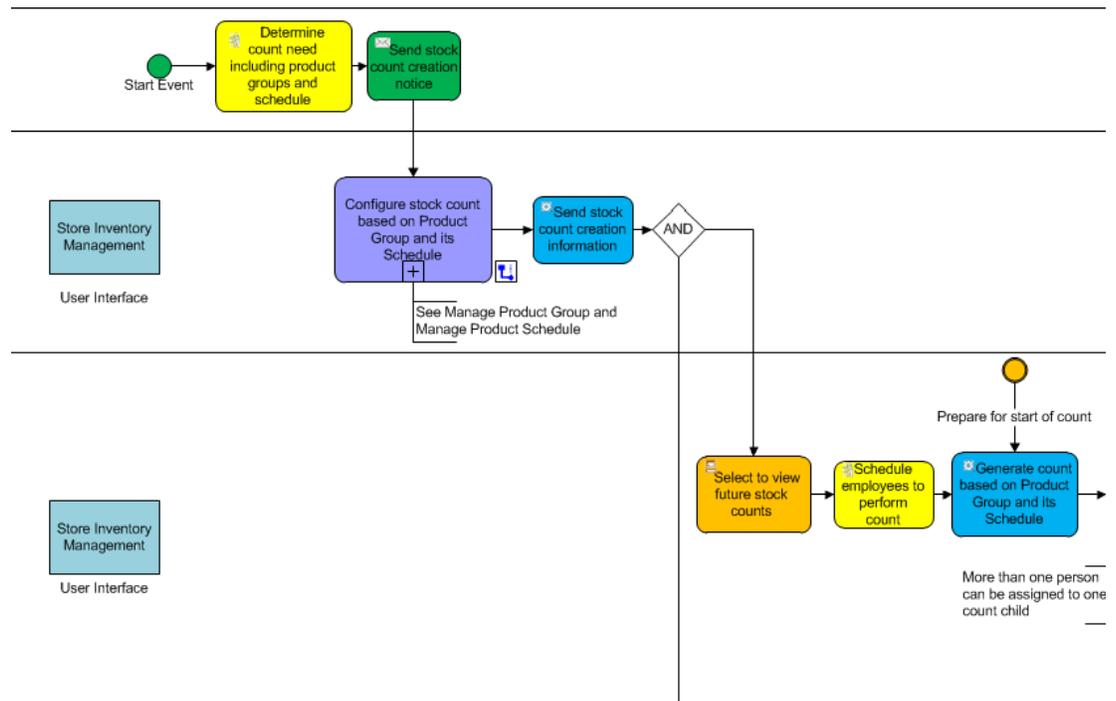
**Note:** That the rule was introduced in 2011; updates to match this style are ongoing.

- On Level 3s, only the first letter of each function should be capitalized, unless referring to a proper name, acronym, or another flow title.

The Save/Write/Selection functions do not need to include "in database." (This is implied by automated or UI function).



### Level 2 – Receive Inventory from Store



### Level 2 Process Flow

## Connecting from One Flow to Another

The following sections explain about connecting from one flow to another with assignments.

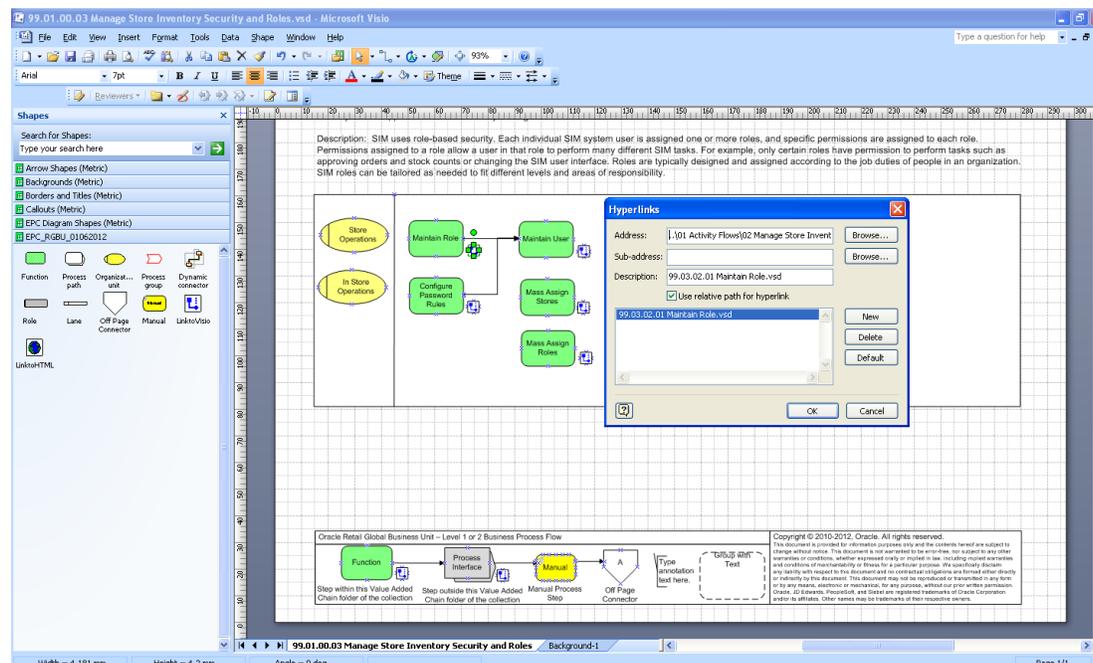
### Appropriate Function Shapes for Assignments

When the process needs to go from one flow to another, draw as the function with a Hyperlink (LinktoVisio).

- The Collapsed Sub Process shape (sample labeled Call Process) has a sample hyperlink on it in the BPMN\_RGBU\_TemplateDDMMYY.vst. (Level 3).
- In the EPC\_RGBU\_TemplateDDMMYY.vst. (Levels 1 and 2) contains sample hyperlinks on them in Steps 7 and 9 functions.

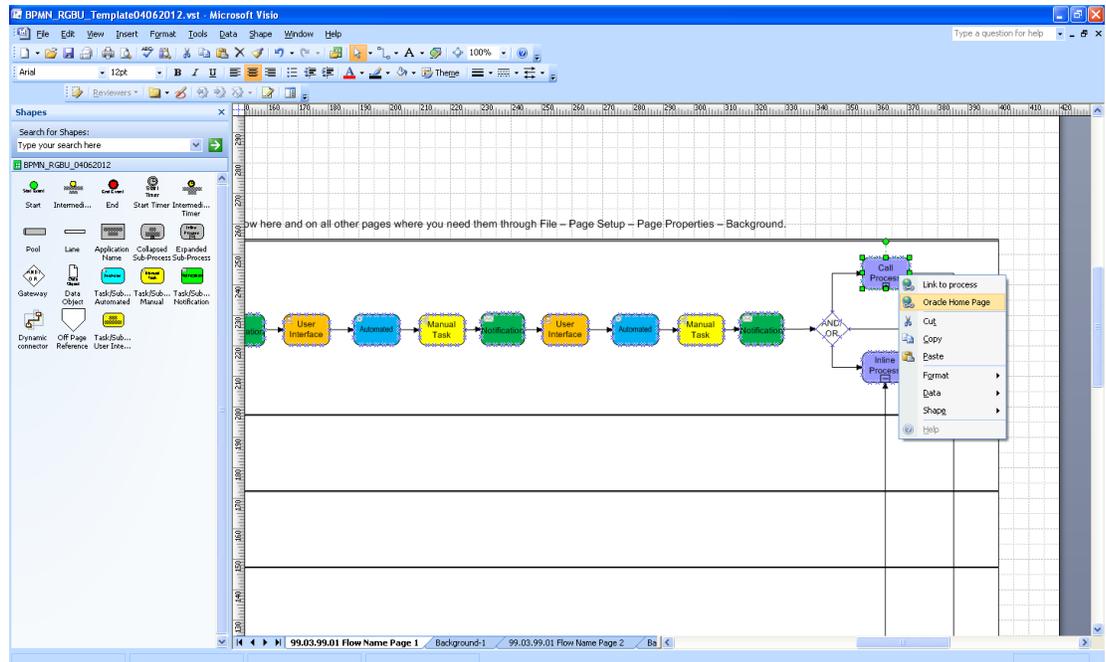
#### Instructions to Update the Hyperlink:

1. Add a LinktoVisio shape to the desired shape (Collapsed Subprocess on Level 3, Function or Process Interface on Level 1 or 2).
2. Click the **LinktoVisio** shape you want to link.
3. From the **Insert** menu, click **Hyperlinks (Ctrl + K)**. The Hyperlink window appears.
4. In the **Address** text box, browse through the Address.
5. Enter a **Description** (used in W3C readability standards for HTML).
6. Check the **Use relative path for hyperlink** option.
7. Repeat (with an additional LinktoVisio shape) to add a link to a second model (such as a Level 3 in addition to a Level 2).



#### HyperLinks Window

8. To navigate to the links, move over the shape and right-click. You should see the linked pages in the pop-up list. Icon and label show when you hover over a shape that has a Hyperlink.
9. Right-click to see the labeled Hyperlink.
10. Click **Hyperlink** to navigate to it.

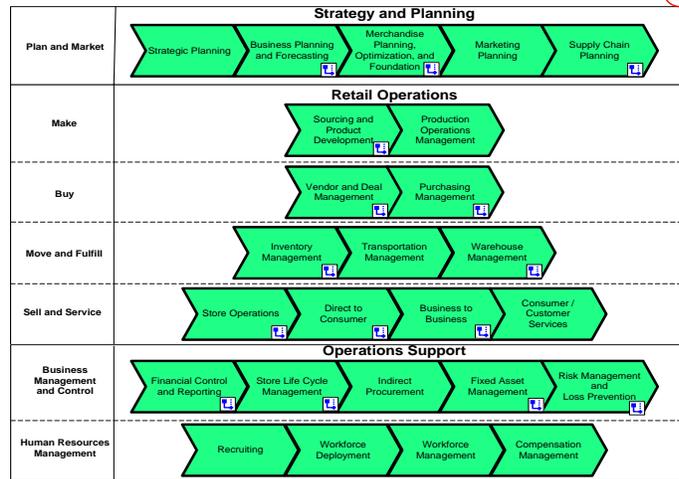


### Hyperlink Page

Include one link to the Visio source document at the upper right of the flow pool background.

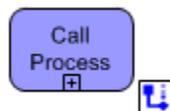
#### Level 0 - Retail Industry

A collection of functional areas to describe the retail enterprise as a whole, using Value Added Chain notation.



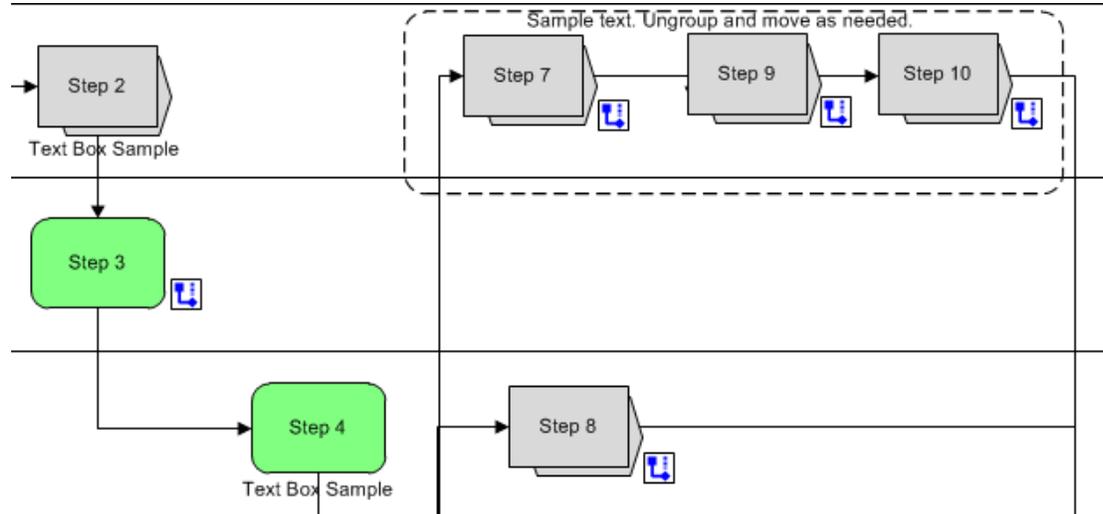
#### Level 0 – Retail Industry

On a Level 3, the Hyperlink appears on a Collapsed Process shape.



### Collapsed Process Shape

On a Level 1 or Level 2, the Hyperlink goes on the Function (if the flow is within the *same* folder/group in the Retail Reference Model) or Process Interface (if the flow is within *another* folder/group in the Retail Reference Model).



Collapsed Process Shape

### Connecting from One Level 1 or Level 2 Flow to Another

If the related model is within the same high level (0) process area, then draw a Function with a Hyperlink. (LinktoVisio).



#### Maintain Role

If the related model is outside the high level (0) process area (folder group), then draw a Process Interface with a Hyperlink. .



#### Step Folder

#### Points to Remember

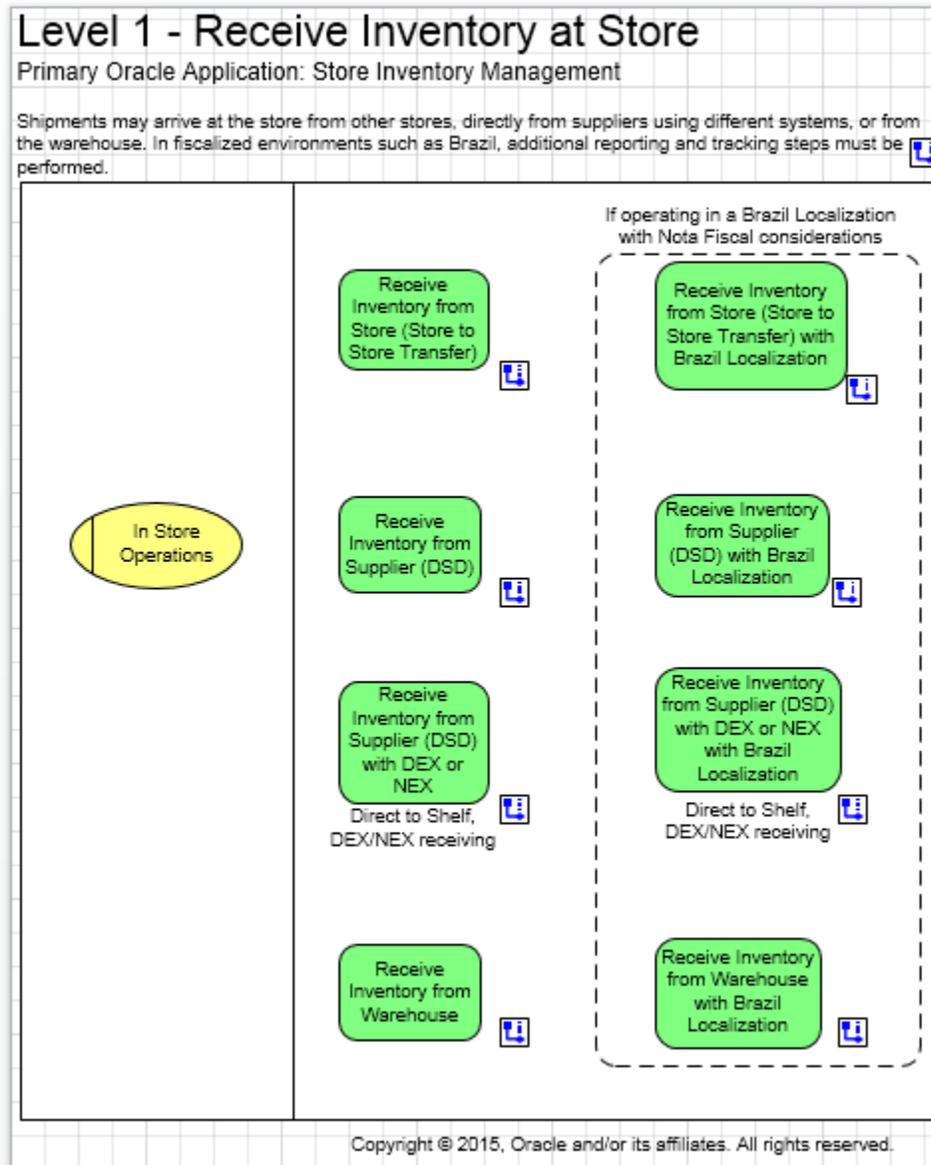
The following points are used to remember while deciding the process flows:

- Does the model accomplish the business process?
- Does it show how the process is executed within the confines of the system?
- Do I believe that it is effectively designed? Is there a way it could be streamlined outside the system?
- Does it effectively show the business process within the enterprise?
- Is it negatively limiting the enterprise in any way? (If so, revise.)

## Connecting a Level 1 to Its Level 2s and 3s

A Level 1 needs to have a function for every Level 2 modeled, even if a Level 2 calls another Level 2.

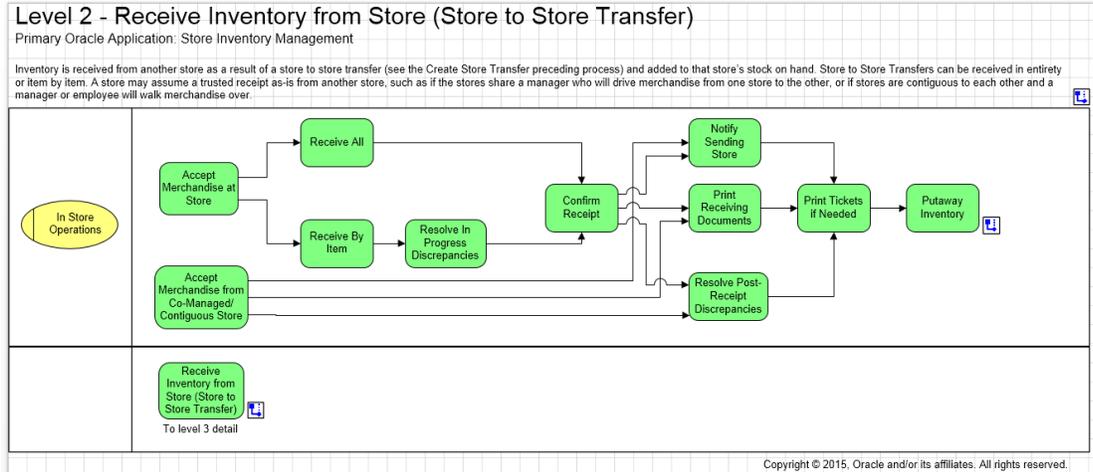
On a Level 1, connect via an Assignment to both the level 2 and level 3 models for each applicable function. For example, Level 1 Manage Store Inventory Counts – the functions that correspond to a model have Assignments to both the Level 2 and the Level 3 versions of the model.



Level 1 – Receive Inventory at Store

## Connecting a Level 2 to its Level 3

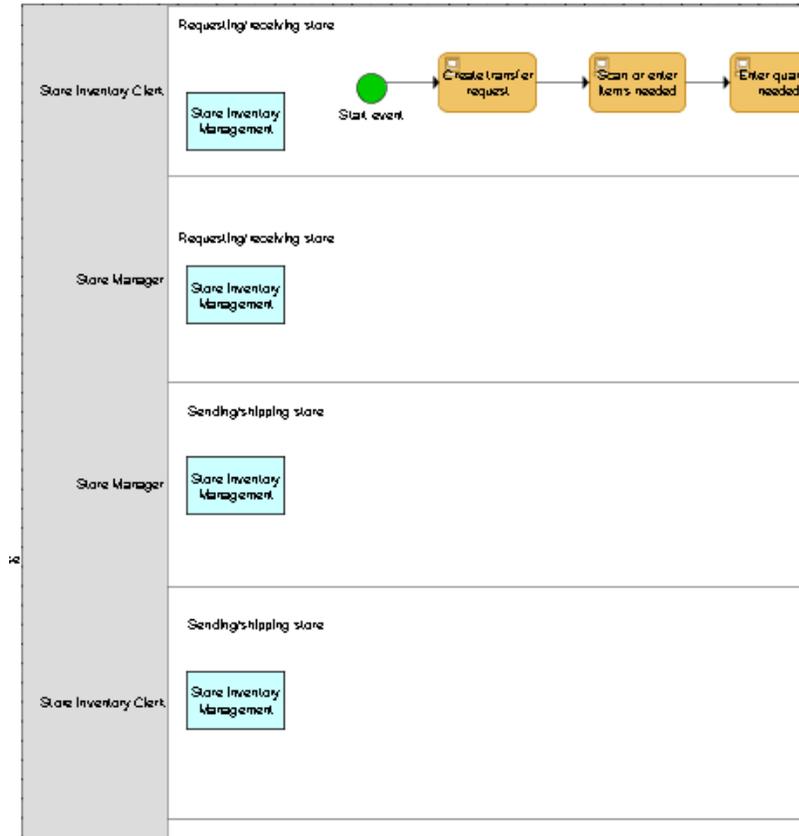
A Level 2 is a higher level depiction of the detail that is in a Level 3. The user may want to view the Level 2 then view the Level 3 for more detail. Since any one function in the level 2 may represent several steps in the Level 3, include a Function with a Hyperlink holding the link to the Level 3.



**Level 2 – Receive Inventory from Store**

## Sending Information from One Store to Another Store

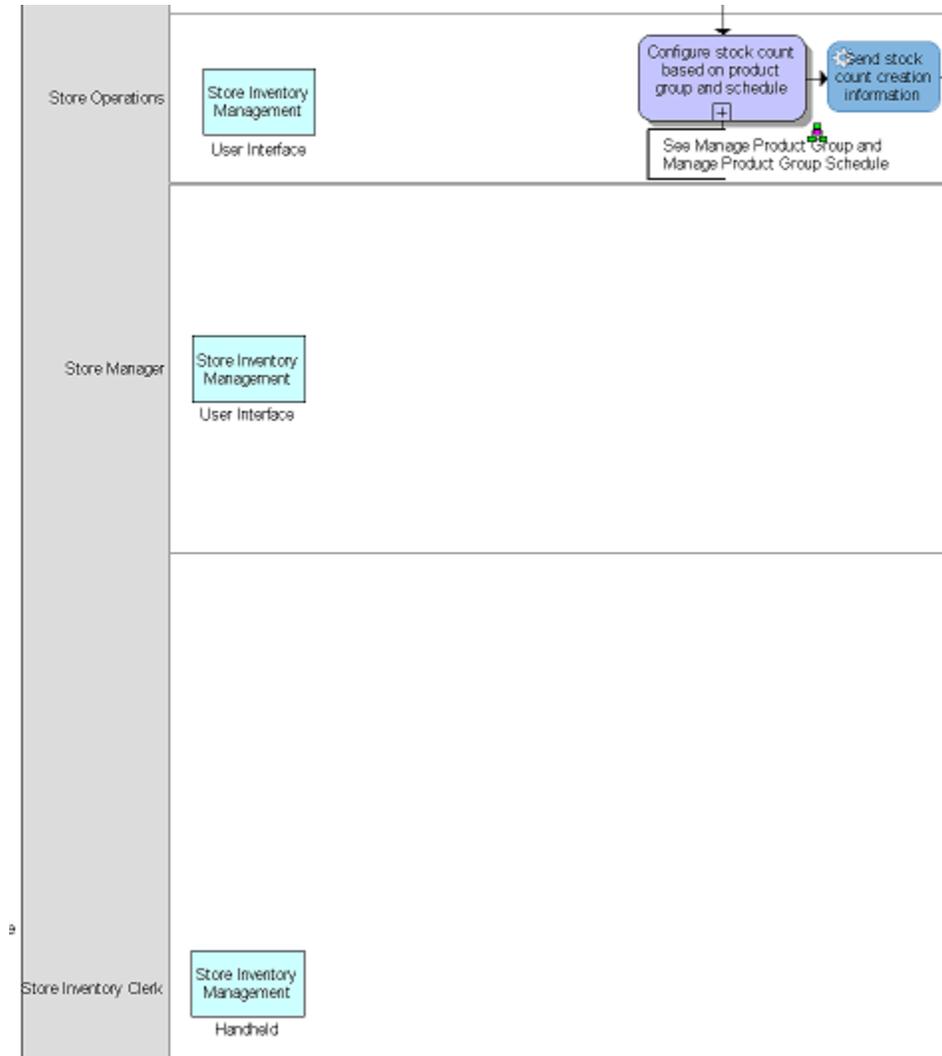
The lanes are: Store 1, Store 2, but the same application and actor. Label the two stores and their lanes appropriately, using Freeform text. Left-align the Freeform text within its boundaries.



Freeform Text

## Depicting Two Versions of One Application

One store, one application, but separate tasks are performed on handheld and user interface. (see Perform Ad Hoc Stock Count; this will also apply for the WMS flows). Label the Application with Freeform Text. Left align the Freeform text within its boundaries.

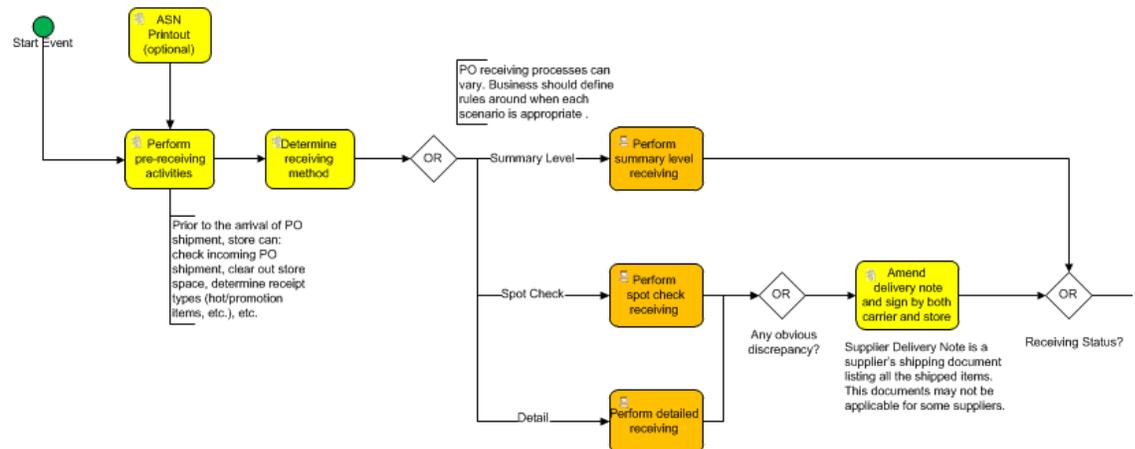


## Drawing a Gateway

The choice indicated by a gateway should be described in the function preceding the diamond, and labeled with a statement rather than a question, such as:

- Determine if
- Select whether
- Check that

The OR, AND/OR, or AND should be in capital letters, and should be placed below the gateway, even if a line intersects it.



### Usage of OR, AND/OR, or AND

## Labeling Connections

If one of the connections is labeled, the other should be labeled, for example, Yes and No, Printed and Not printed, and others. The label should be placed in a legible position along the connector.

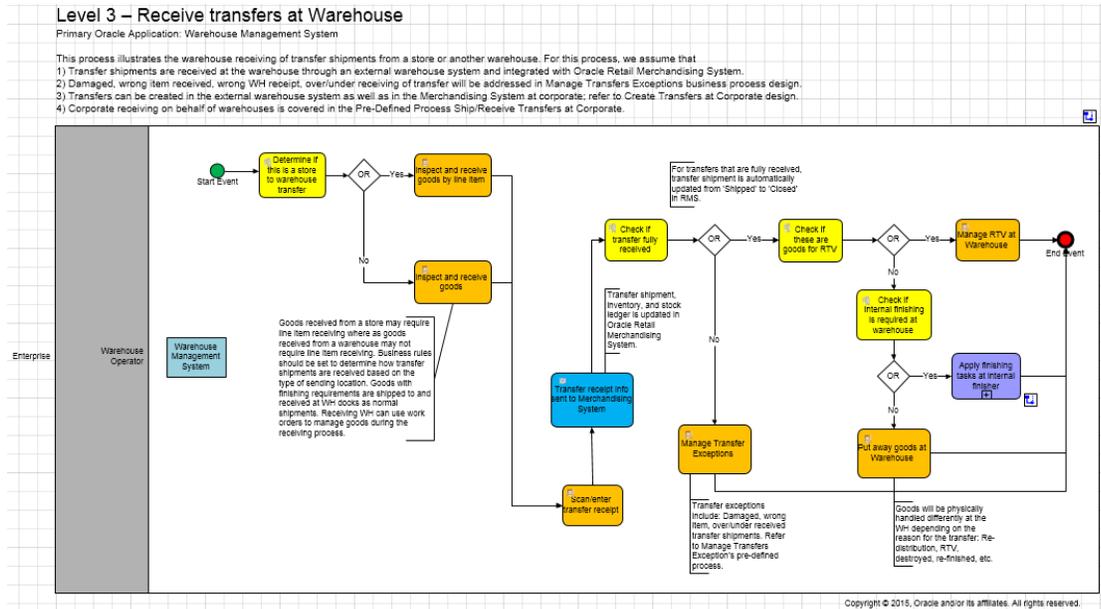
## Drawing the End Event

The End Event should be positioned to the lower right of the model, since this is where the reader will tend to look for completion, according to left-to-right, down-the-page reading.

Even if this model goes to another model for completion of the full process, draw a connector from that function with its Assignment, to the End Event indicator.

If the model spans multiple Pages within Visio, and legibility is improved by having more than one End Event, you can have more than one End Event rather than connecting to another Page in order to end the flow.





Level 3 – Receive Transfer at Warehouse

## Left Align All Text Box text

All Text Box text needs to be left aligned within its boundaries for consistency.

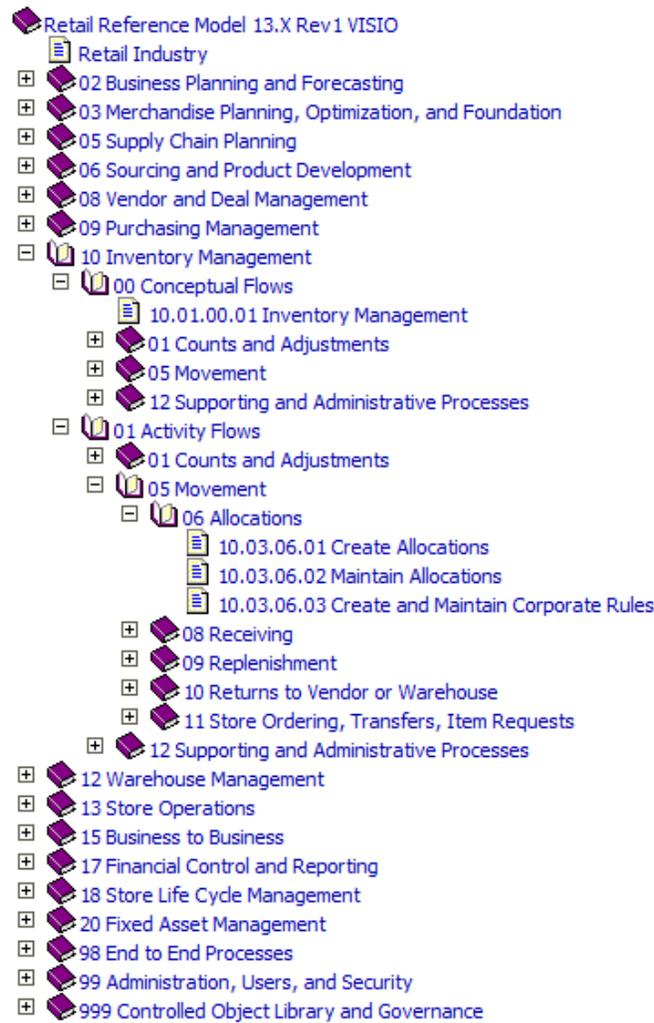
## Create Flows for Administration Data/Parameters/Security

To create flows for the Setup of administrative data, parameters, or security may be modeled but is a low priority, and only where it is critical for solution understanding or setup.

## Numbering and Naming Conventions

The numbering convention used by the RGPU is as follows:

- Functional Domain = 01 and up followed by a decimal point.
- Level of diagram = 01 through 03 followed by a decimal point.
- Folder number within the Functional Domain and Level (Conceptual or Activity) = 00 and up.\*
- Unique diagrams = 01 and up. The number of unique diagrams created at each level.



### Numbering and Naming Conventions

## Notes on Unique Folder Numbering

Subfolders within 00 Conceptual Flows and 01 Activity Flows are numbered such that the superset of subfolders is equal and in the same order, and as if all lower level subfolders are expanded.

- [-] 10 Inventory Management
  - [-] 00 Conceptual Flows
    - 10.01.00.01 Inventory Management
    - [-] 01 Counts and Adjustments
      - 10.01.01.01 Manage Store Inventory Counts
      - + 02 Adjustments
      - + 03 Cycle, Ad Hoc, Problem Line Counts
      - + 04 Physical Counts
    - [-] 05 Movement
      - + 06 Allocations
      - + 08 Receiving
      - + 09 Replenishment
      - + 10 Returns to Vendor or Warehouse
      - + 11 Store Ordering, Transfers, Item Requests
    - [-] 12 Supporting and Administrative Processes
      - + 16 Manage Product Groups and Authorization for Stock Counts
      - + 17 Manage Item Unique Identification Numbers
      - + 18 Perform Inventory and Information Lookups

### Unique Folder Numbering

If a subfolder does not have any flows, the folder numbering may appear to skip.

- [-] 17 Financial Control and Reporting
  - [-] 00 Conceptual Flows
    - 17.01.00.01 Financial Control and Reporting
    - + 03 Invoice Matching
    - + 05 Stock Ledger
    - + 07 Fiscal Management
    - + 08 Financial Integration
  - [-] 01 Activity Flows
    - + 01 Financial Cost Adj
    - + 02 Invoice Matching - Entry, Consignment, and Tolerances
    - + 03 Invoice Matching - Matching
    - + 04 Sales Audit
    - + 05 Stock Ledger Processes
    - + 06 Manage Foundation Data - General Ledger Cross Reference Mapping
    - + 07 Fiscal Management
    - + 08 Financial Integration

### No Flows in the Subfolder

The unique numbering within 00 and 01 folders both starts with folder 01 and count upwards. The number that represents the level of the flow maintains the uniqueness, between Conceptual and Activity flows. Therefore, to ensure this uniqueness, do not place a Level 3 Activity Flow in the 01 Activity Flows folders (root) and also have flow(s) in a subfolder within 01 Activity Flows. This would cause flows at two levels to share the same unique folder ID of 01, and hence the model numbering would not be unique.



### Unique Numbering

## Process Flow and Folder Naming Conventions

Do not use / or \ or ' (apostrophe) in your process flow name or folder name. This causes an error when attempting to export the process flow for publication or for use in the browser-based viewer. Each word in the process or folder name must begin with a CAP, again no special characters, dashes, and so on.

Examples:

Correct: 01.02.03.04\_NegotiateLongTermAnnualDeals

Incorrect: 01.02.03.04\_ NegotiateLongTerm(Annual)Deals

Correct: 02.03.04.05\_CreateAndOptimizePrePack

Incorrect: 02.03.04.05\_Create&OptimizePre-Pack

## Communication When Crossing Lanes

Wherever the flow crosses to another pool that is an actor, there is a communication, such as manually if person to person, or notification by email generation. This helps to delineate where the application informs the user to perform the next step versus a human doing so.

A notification function or automated function can be used for communication:

- If the system generates communication, such as an alert or email, use an automated function.
- If a user must do the notification, such as by sending an email or fax or by placing a phone call, use a notification function.
- An automated function and notification function might occur in parallel, if data or notice is sent by the system, but a recipient user also must be told to check their system for information in order to perform a task.





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## Appendix: Additional Information

This appendix provides additional information regarding the Retail Reference Model and its offering in Microsoft Visio.

### Development of the Models

The models were built with the knowledge gleaned from Oracle Retail's Functional Architects, Product Managers, Strategy, Consulting, and Presales. Partner implementers added their application input and experience during model development. The models are refined from ongoing feedback by all of the above and Oracle customers.

### Maintenance of RRM

Solution Management product managers are responsible to ensure that their associated product process models are updated as needed per release. You can send questions regarding model maintenance to [retailprocess\\_ww@oracle.com](mailto:retailprocess_ww@oracle.com).

### Inaccuracies or Suggestions

For any inaccuracies or suggestions for the updates, corrections, or improvements in RRM, send an email to [retailprocess\\_ww@oracle.com](mailto:retailprocess_ww@oracle.com).

### Business Process Models

The Retail Reference Models are available with the download of the Retail Reference Library. RRL is complimentary to licensed Retail customers and certified partners. My Oracle Support sign-on credentials are required.

To access the RRL, perform a search on My Oracle Support for "Retail Reference Library." You can also submit a question to [retailprocess\\_ww@oracle.com](mailto:retailprocess_ww@oracle.com).

## Modeling Notations used RRM

The notations used are adapted from standards appropriate for the intended audiences, as follows:

- Level 0: The Association of Retail Technology Standards Plan/Buy/Move/Sell representation of Service Oriented Architecture, using value-added chain notations
- Levels 1 and 2: Event-driven Process Chain notation
- Level 3: Business Process Modeling Notation

For more information on the notations used, and the standards and intended usage, see [Process Modeling Standards](#).

## Standard Retail Industry Process Models

There is no widely available, industry standard set of best practices, hence Oracle's creation of the Retail Reference Model. Modelers of the Oracle RRM have participated in the Association of Retail Technology Standards (ARTS) efforts to develop a standard set of retail industry models.

## Release of an Application

For the Retail Reference Model, two release updates are planned throughout the calendar year, reflecting updates for new releases of applications, feedback collected from usage, and addition of new process models. The Retail Reference Model process updates are always published after the General Availability of a new solution or solution release.

## Contact

For additional information and questions, send your request to [retailprocess\\_ww@oracle.com](mailto:retailprocess_ww@oracle.com).

## Oracle Applications Outside the Retail Global Business Unit

There are Oracle applications outside of the Retail Global Business Unit. My Oracle Support's Knowledge Base holds business processes applicable to other Oracle applications. Samples include, but are not limited to the following:

- PeopleSoft business process maps
- EPM business process maps
- Siebel Business Process Documentation Library
- JD Edwards business process models

Use the Search Knowledge Base field to search for applicable processes by name or application name.



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