Oracle® Retail MICROS Retail-J

Inventory Management Store To Store Transfer
Release 12.1

March 2015

ORACLE

Oracle® Retail MICROS Retail-J Inventory Management Store To Store Transfer, Release 12.1

Primary Author: David Nixon

MICROS Retail-J
Inventory Management
Store To Store Transfer

Revisions

1.1	March, 2015	Added Oracle cover and copyright page.
1.0	April 30, 2013	First published.

Contents

Note: The rebranding for the latest version of this documentation set is in development as part of post MICROS acquisition activities. References to former MICROS product names may exist throughout this existing documentation set.

1.0 Introduction

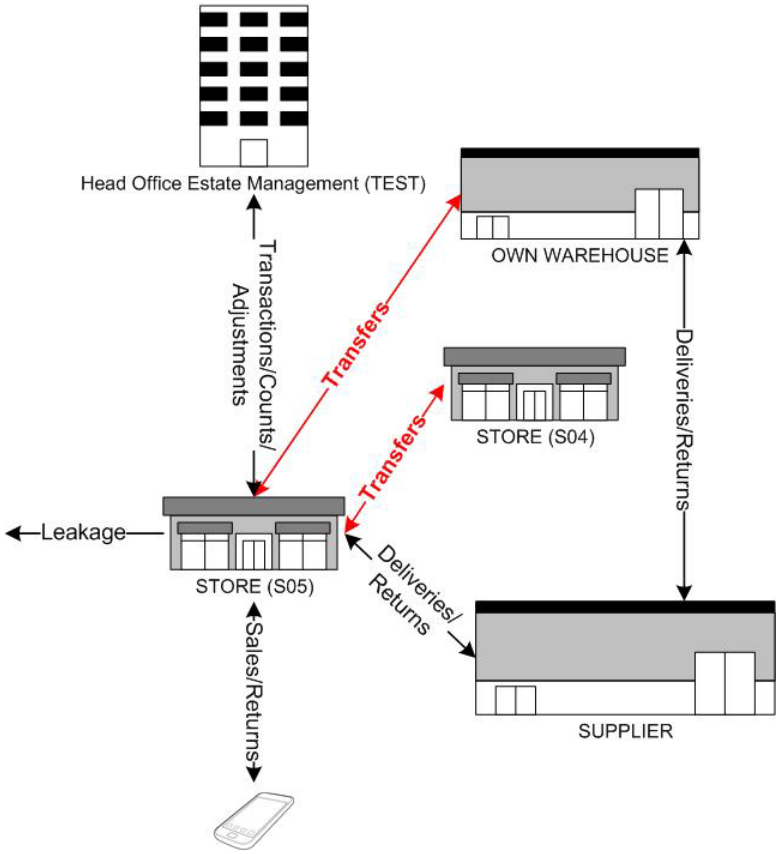
This document comprises:

- A context definition
- Supporting concepts
- XML message format definition
- Configuration details
- A workflow definition
- User interface map
- Worked example
- Comprehensive summary and break-out process diagrams including error conditions

2.0 Context

An overview of physical inventory flows through a retail estate is shown in the diagram below.

Physical Inventory Flows Through the Sample Estate



Inventory enters a store from external suppliers, own warehousing and other stores and is augmented by customer returns. Inventory leaves the store through sales, internal transfers between stores, returns to suppliers and leakage.

Stock is replenished from deliveries prompted by purchase orders and manual or automated replenishment requests.

Retail-J inventory management provides the following functions:

- Product Search
- Stock Enquiry
- Expected Deliveries by Item
- Expected Deliveries by Delivery
- Product Enquiry
- Product Exporter (optional)
- Goods In
- Goods Out
- Product Inventory Requests
- Purchase Orders
- Stock Adjustments
- Stock Counting
- Replenishment
- Inventory Reconciliation Reporting

This document describes store-to-store transfers of stock as highlighted in the previous diagram. Store-to-store stock transfers use a number of system functions and these are highlighted in the list of stock management functions above. In practice, product search and stock enquiry functions would also be used for reference.These are not described in this document.

2.1 Retail-J Sample Estate

Retail-J supports part of the sample estate above with three machines: the Estate Manager (TEST); a thick POS in Store 4 (S04) and a thick POS in Store 5 (S05). In this example, each machine supports its own operational database and is capable of running the POS and all the back office applications that make up Retail-J.

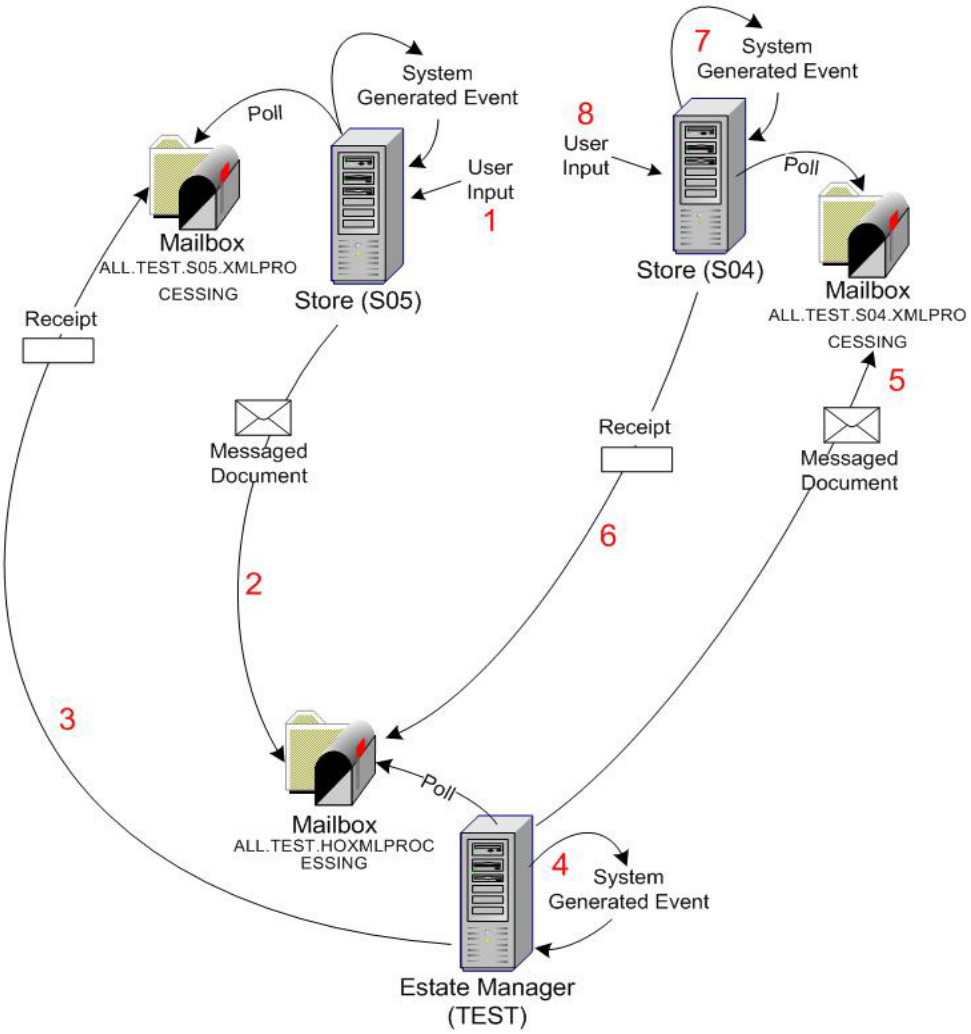
This document uses running examples from the Retail-J sample estate. The examples are highlighted like this.

3.0 Supporting Concepts

Retail-J communicates internally by means of XML documents contained inside messages; passed from mailbox-to-mailbox.

The diagram below shows the sample estate in the form of a message flow.

Message Flow



Taking a request from Store 5 to Store 4, for a transfer of stock, as an example:

1. An authorised user in Store 5 creates a transfer request for one or more products from Store 4.
2. The request document is sent in a message from Store 5 to the Estate Manager's mailbox.
3. On the arrival of the message, the Estate Manager sends a Receipt to Store 5's mailbox.
4. The Estate Manager part processes the transfer.
5. The Estate Manager forwards a Goods Out to Store 4's mailbox.
6. On the arrival of the message, Store 4 sends a Receipt to the Estate Manager's mailbox.
7. Store 4 part processes the Goods Out.
8. The user in Store 4 reviews the Goods Out.

The process continues with the user in Store 4, for example, authorising and then dispatching the delivery. This is just an example to illustrate message flows. The complete process is described in "Worked Example" on page 19.

3.1 Messaging

In the sample estate, the following mailboxes are used by the Estate Manager, Store 4 and Store 5.

3.1.1 Estate Manager

Mailbox	Address	Description
Local Entity Repository	ALL.TEST.LER	The Local Entity Repository stores all the reference data to support XML processing and receives reference data updates through this mailbox.
XML processing	ALL.TEST.HOXMLPROCESSING	XML documents to be processed are placed in this mailbox

3.1.2 Store 4

Mailbox	Address	Description
Default	ALL.TEST	Unroutable messages are sent to the Estate Manager.
Local Entity Repository	ALL.TEST.S04.LER	The Local Entity Repository stores all the reference data to support XML processing and receives reference data updates through this mailbox.
XML processing	ALL.TEST.S04.XMLPROCESSING	XML documents to be processed are placed in this mailbox.

3.1.3 Store 5

Mailbox	Address	Description
Default	ALL.TEST	Unroutable messages are sent to the Estate Manager.
Local Entity Repository	ALL.TEST.S05.LER	The Local Entity Repository stores all the reference data to support XML processing and receives reference data updates through this mailbox.
XML processing	ALL.TEST.S05.XMLPROCESSING	XML documents to be processed are placed in this mailbox.

3.2 Processes

In the example estate, the following processes need to be running on the Estate Manager and on the thick clients in the two stores.

Process	Notes
Entity Updater	The Entity Updater process is part of the replication system and is responsible for applying changes received by the messaging system to the local database.
HTTP Messenger Connector	The HTTP Messenger Connector process continually checks to see if there are any messages for the store or terminal to be collected from the Estate Manager or Store BackOffice server. It also sends any waiting data at the same time. It uses a listener servlet on the web server. It sends and receives messages in a single HTTP request/response call. There are a number of message connectors available, enhanced, HTTPS, file, email.

Process	Notes
Inventory Task Runner	The Inventory Task Runner job processes a specified number of expected deliveries with or without the Auto_Receive flag set. An Expected Delivery Status called Auto_Receive is available in the ExpectedDeliveries table. The Estate Manager automatically Accepts any Expected Delivery which carries this flag. The Inventory Task Runner process imports an Expected Delivery, processes it, and in turn creates a Goods In event. The Goods In event updates the stock quantities in ProductInventories and also updates the relevant Reporting tables.
Messenger Document Transporter	The Messenger Document Transporter process sends or receives any documents to Documents In or from Documents Out using the Micros Retail-J messaging system. It reads documents from the configured import mailbox using the Micros Retail-J messaging system, and sends documents from Documents Out to the given export address. This is the most commonly used mechanism for feeding data to the XML Document Processor. In addition, there are alternative processes to optimise processing for incoming and outgoing messages.
Queued Job Feeder	The Queued Job Feeder process runs queued jobs that accumulate as the result of fixed processes or user interaction.
XML Document Processor	The XML Document Processor uses XML documents in the Documents In database table. When processed, these documents are written to the Documents Out database table in order for them to be sent onwards.

3.3 Product Definitions

The inventory system can be used with any type of product. The following table defines product terminology from a Retail-J perspective.

Term	Definition
Composite Product	Products which consist of more than one product, for example a mobile phone and an accessory pack could be sold as a single option.
Coupon Product	A product representing a money off a transaction.
Loose Items	Items not shipped in a container.
Options Product	Products that have a number of options associated with them. These could be priced options such as products or just attributes which provide extra details against the product when it is sold, for example preparation or fabrication options. These options will appear at the POS when the product is being sold. The different options are organised into sets. Each set is presented to the user when the item is sold and an appropriate option is selected.
Promo Voucher Product	This type of product usually has a positive value but when sold (added to the basket) has a zero retail value.
Serial Number Product	High value item individually identified and tracked by an associated serial number
Style Colour Size Product	Products which can have specific styles, colours or sizes associated with them.
Top Up Voucher Product	This type of product implements a mobile phone top up voucher product.

4.0 Messaged XML Documents Data Formats

For store-to-store transfers, the main XML documents messaged around the estate are:

- Product Inventory Request
- Goods Out
- Expected Delivery
- Goods In

Pseudo XML Schema Definitions (XSD) are available with the release. These list the content to be expected in the above, and the other, XML documents generated by the application. The PIR XML document format is described below.

4.1 Product Inventory Request

A PIR XML document comprises:

- ProductInventoryEvent (the base PIR document)
- ProductInventoryEventItem (loose products included in the PIR)
- ProductInventoryEventContainer (containers included in the PIR)

4.1.1 ProductInventoryEvent

Field	Type	Comments
ID	String	Comprises “PIR” Location ID and incremented number. For example, PIR12319 (the nineteenth PIR from Location ID 123)
Status	Integer	Status of the product inventory request, namely: 1 = new 2 = approved 3 = submitted 4 = cancelled 5 = partially complete 6 = complete 7 = closed. Status is displayed as its corresponding description.
TimeZoneOffset	Integer	The UTC offset, in minutes, of the location associated with the PIR. For example, London daylight saving time is 60.
CreationDate	ISO 8601 Date	Date and time at which the product inventory request was created.
Notes	String	Any notes to be associated with the PIR. Notes will be seen by the source stock holding location when they review the PIR.
Instructions	String	Any instructions to be associated with the PIR. Instructions will be seen by the source stock holding location when they review the PIR.
UserID	String	ID of the User who raised the PIR.
AuthorisingUserID	String	ID of the User who authorised the PIR.
LocationID	String	ID of the location associated with the PIR.
LocationType	Integer	Type of the stockholding location associated with the PIR, namely: 0 = None, 1 = Warehouse, 2 = Store, 3 = Distribution Centre, 4 = Office, 5.= Supplier. Status is displayed as the corresponding description.
GeneratedAtID	String	ID of the location where the PIR was generated.

Field	Type	Comments
GeneratedAtType	Integer	Type of the location where the PIR was generated.
SequenceDeviceID	String	Device ID of the device raising the PIR.
SequenceNumber	Long	Sequence number of the device in the previous field, rolls over when it reaches 99999999.
TotalRetailValue	Long	Total retail value of all the items in the PIR.
SourceID	String	The ID of the stockholding location from which the PIR is to be fulfilled.
SourceType	Integer	The type of the stockholding location from which the PIR is to be fulfilled.
WriteProductAllocationForUndeliveredItems	Boolean	Write undelivered items to the product allocations table.
TotalQuantityOnOrder	Float	The total quantity on order including this PIR
TotalQuantityAllocated	Float	The total quantity allocated at the source store.
GoodsOutID	String	ID of the corresponding Goods Out at the source location.

4.1.1.1 ProductInventoryEventItem

Field	Type	Comments
ID	String	ID of the product inventory event item.
ProductID	String	ID of the product associated with the event item
MMGroupID	String	ID of the MM Group to which the product belongs.
RangeID	String	ID of the range associated with the event item.
ImageFilePath	String	The full filepath (including filename) of the product's image.
InventoryType	Integer	The inventory type of the item namely: 0 = none 1 = available 2 = reserved 3 = returned 4 = damaged 5 = in transit 6 = customer ordered 7 = sold 8 = sold pending (sold before goods in performed) 9 = in transit pending (transferred before goods in performed) 10 = disposal 11 = display 12 = available for loan 13 = on loan 14 = storage
LineNumber	Integer	Unique number identifying the item within the event.

Field	Type	Comments
Type	Integer	The type of event item, namely: 0 = product 1 = serial tracked product 2 = unexpected product 3 = unknown product
Quantity	Float	The description of the product.
Description	String	The quantity of the item, range -99999.9999 to 99999.9999.
ItemUnits	Integer	The item units of the product, namely: 1 = unit 2 = weighed 3 = liquid 4 = length 5 = set 6 = gedeck (place setting)
RetailPrice	Long	Retail price of the item, range 0-999999999999.
UnknownProduct	Boolean	When set this flag indicates that the product is unknown. This is a product that has not been entered properly into the system, but is nevertheless physically present, for example. has been received in a delivery.
AllowNegativeStock	Boolean	When set, this flag indicates that negative stock is allowed for this item.
CostPriceItem		List of cost price items included in the PIR.
SerialNumberItem		List of serial number items included in the PIR.

4.1.1.2 ProductInventoryEventContainer

Field	Type	Comments
ID	String	ID of the container associated with the delivery.
ContainerType	Integer	The type of container, namely: 1 = box 2 = small box 3 = crate 4 = pallet 5 = cage
Received	Boolean	When set this flag indicates that the container has been received as part of a goods in.
ProductInventoryEventItem		Products in the container
ContainerBarcode	String	The barcode of the container

5.0 Inventory Configuration

There are inventory configuration options at the following organisational levels:

- Organisation

- Location
- Product
- Store Product

The visibility of configuration options is governed by role and associated permissions.

5.1 Organisation Inventory Configuration

5.1.1 Organisation Registration

The following organisation-wide options can be set using check boxes on the Organisation Registration page.

- Should all inventory levels to be held centrally?
- Should containers be tracked?
- Does a receiving location own items in transit?

5.1.2 Containers

Containers are configured from Data Maintenance > Product Inventory > Containers

From here you can set the type of configured container; this might be: box; small box; crate; pallet; cage and its dimensions: height; width and depth.

5.1.3 Delivery Charge

You can define the following details at the organisational level:

- Delivery Type – select from a predefined list that is also configured at the organisational level. The delivery type is chosen based on the country zone and whether the goods are perishable. Delivery types are listed and displayed to the operator based on these facts. If there is only one delivery type that meets the criteria then it will be automatically selected. For example, if this is a UK delivery and there are perishable goods and there is only one UK perishable delivery type then it will be automatically selected.
- Country Zone – select from a predefined list that is configured in Data Maintenance > Company Structure > Country Zone. If any of the items in the basket are non exportable a message is shown to the POS operator.
- Postcode Zone – select from a predefined list that is configured in Data Maintenance > Company Structure > Postcode Zone.
- Charge – currency amount representing the charge for the delivery made by an in-house (contract) carrier. If the delivery type is value or (volumetric) weight based, then the charge is calculated from summing the value/weight of all items. The calculated delivery charge can be overridden or a delivery charge can be entered whether or not an in-house carrier is used.
- Admin Fee Percentage – Percentage oncost to add to the delivery charge.
- Force Manual Quote – If the force manual quote flag is set, then the POS operator is prompted to enter a delivery charge and a reference number.

5.1.4 Delivery Package

The Delivery Package screen defines the volumetric weight and description of delivery packages; for example a standard carton with a volumetric weight of 600.

5.1.5 Delivery Types

The Delivery Type screen defines for this delivery type:

- Expected delivery time
- Whether or not this delivery type handles perishable goods.
- Soft format styles for documentation produced with the delivery namely: Dispatch Receipt; Dispatch Docket; Dispatch Chit; Dispatch Stored Transaction Receipt; Dispatch Combined Card Voucher Receipt.
- Delivery Type Destination Zone (not configured in the standard release)
- Delivery Note Header text and format

5.1.6 Suppliers and Supplier Products

From an inventory perspective, suppliers and products are defined in the context of orders and goods received.

5.2 Location Inventory Configuration

The following inventory management details are set on each Location's maintenance page.

Field/Option	Description
Inventory Management Details	• Choose an alternate delivery location type from the Location Type drodown. The available options are maintained in Location Type Hierarchy. • Enter an alternate delivery location ID in the Location ID field. Alternatively, choose an ID from the drop-down. The available options are maintained in Locations. • Choose a home delivery inventory source location type from the Location Type drop-down. • Enter a home delivery inventory source location ID in the Location ID field. Alternatively, choose an ID from the drop-down. • Choose a default inventory source location type from the Location Type drop-down. • Enter a default inventory source location ID in the Location ID field.
Edit Default Invoice Address	Standard address maintenance screen.
Is Stock Holding Location	Select the *Is Stock Holding Location* check box if stock will be held at the location.
Hold Customer Orders Centrally	Select the *Hold Customer Orders Centrally* check box if customer orders will be held at a central location.
Inventory Reservation Request Method	Choose an Inventory Reservation Request Method from the drop-down. The available options are automatic and manual.
Show Expected Stock Values in Stock Count	Select the *Expected Stock Values in Stock Count* check box to show expected stock values in stock counts. For a blind stock take, that is where staff in store do not know the expected stock values, do not select this check box.
Perform Stock Count by Location Zone	Select the *Perform Stock Count by Location Zone* check box to perform stock counts by location zone This enables you to split up a location into smaller virtual or physical sections, that is zones. This means that a stock count can be performed on a zone rather than at the whole location.
Treat Uncounted Values in Stock Count as Zeros	Select the *Treat Uncounted Values in Stock Count as Zeros* check box to exclude uncounted stock from stock counts.
Ignore Movements in Stock Count	Select the *Ignore Movements In Stock Count* check box to ignore stock movement in stock counts.
Maximum Number of Stock Count Items to Display	Enter the Maximum Number of Stock Count Items to Display. The default is 1000.

Field/Option	Description
Stock Count Quantity Method	Choose a Stock Count Quantity Method method from the drop-down menu. The available options are: Adjust; Adjust (Differences Only); Overwrite
Overwrite Stock Count During CSV Import	Select this check box if the stock count is to be overwritten when importing a CSV file.
Stock Count View MMGroup URL	Enter a URL in the Stock Count View MMGroup URL field.
Enter Serial Numbers for Expected Deliveries	Select the *Enter Serial Numbers for Expected Deliveries* check box to force serial numbers to be entered for any serial tracked item contained in an expected delivery.
Enter Serial Numbers for PIRs	Enter serial numbers for the requested stock items.
Validate Serial Numbers	When this check box is selected the serial number must be validated.
Match Ad hoc Deliveries	Select the *Match Ad hoc Deliveries* check box to enable ad hoc deliveries to be matched to Goods In events where applicable in stock counting.
Force Single Drop Delivery	If this flag is set, then processing of goods in, in response of an expected delivery, will close that delivery regardless of whether there are containers/items still outstanding.
Maximum Number of PIRs Submitted in a Day	Enter the maximum number of requests per day in the *Maximum Number of Product Inventory Requests Submitted in a Day* field.
Partially Accept Delivery Containers	Select the check box to partially accept delivery containers.
Consolidated Item Checking	Consolidated Item Checking for Goods Outs generated from PIRs and for Goods Ins generated from Expected Deliveries uses the following functionality. If the Consolidated Item Checking check box is selected, then for a Goods Out which is generated from an original PIR: • If a container is added to the Goods Out which was not in the original PIR, the "Unexpected Container" message is not displayed. • When deciding whether to show the "Expected Qty Exceeded" message for the item entry, the total quantity of the item (whether loose or in containers) is taken into account against the total requested quantity of the item (whether loose or in containers). This applies when adding the item in a container or loose. When deciding whether the original PIR has been fulfilled, the application does not try and match items against containers, it just compares the total quantity of each item (whether loose or in a container) against the total requested quantity of the item from the PIR. The above flag also controls whether the above functionality is switched on for a Goods In which is generated from an original Expected Delivery (which may in turn be generated from an original PIR).
Remove Zero Quantity Lines from Deliveries	When selected, when a Goods Out is submitted, any product lines with a quantity of zero will be removed from the Goods Out. The same applies for Goods In (using the same flag).
Use FIFO Costing	Select the Use FIFO Costing check box to force product inventory to use first in first out costing.
Goods Out Print Consignment URL	Enter a URL in the Goods Out Print Consignment URL field.
Inventory Server URL	Enter a URL in the Inventory Server URL field.
Product Lookup Web Service	Select a web service from the drop down list.

Field/Option	Description
Process Inventory Transactions using Registered Device	Allow the inventory processors to use registered device ID instead of server device ID.
Item Scanning Options	Select the Item Scanning Options for Goods Out, Goods In, Product Inventory Requests, Stock Counts and Stock Adjustments. The available options are: • *Standard Entry*: the item is scanned and added to the list. • *Batch Entry*: the item is scanned but not added to the list until the end. • *Non-Incremental Entry*: the item is scanned, but the quantity is not increased and is not added to the list.
Stock Count Item Display Options	Click the required button to group stock count items by Department or Range.
Edit Stock Transfer Options	To configure the stock transfer options: 1. For each of the location types in the Stock Transfer Options column, select the Allow Transfer In check box to allow deliveries from this type of location. 2. For each of the location types in the Stock Transfer Options column, select the Allow Transfer Out check box to allow deliveries to this type of location. 3. For each of the required Permitted Location Regions, choose a region from the drop-down and click the Add icon. Click the Remove icon to delete any regions added in error. Alternatively, choose All Regions from the drop-down to enable stock transfer across all regions. 4. For each of the required Permitted Location Types, choose a type from the drop-down and click the New icon. Click the Remove icon to delete any types added in error. Alternatively, choose All Types from the drop-down menu to enable stock transfer across all location types. 5. For each of the required Permitted Location Locales, choose a locale from the drop-down and click the Add icon. Click the Remove icon to delete any locales added in error. 6. For each additional country besides the default country, select the required check boxes to enable stock transfer between Warehouses, Stores and DCs. 7. Click the Back icon to return to the previous pane.
Options	Click the Save icon to save your changes. Alternatively, click the Cancel icon to abandon your changes and return to the previous screen.

5.3 Product Inventory Configuration

The following inventory management configuration is available for individual products.

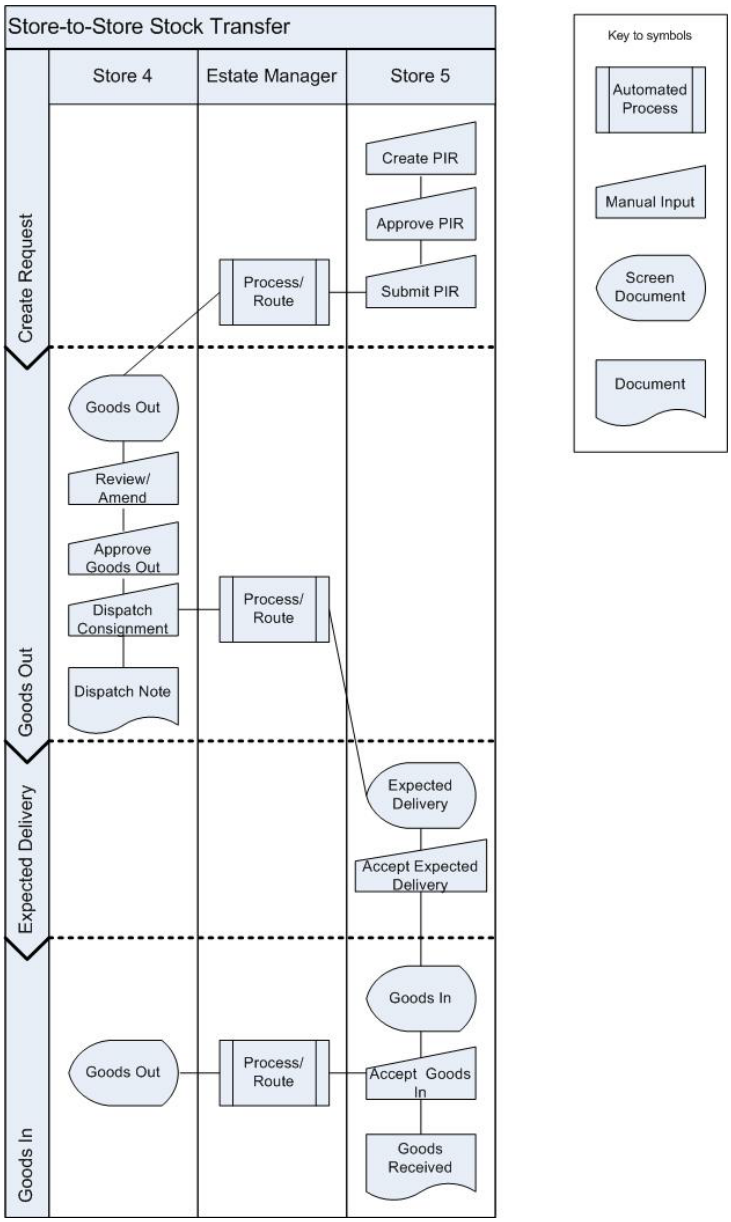
Field/Option	Description
Stock Details	
No Inventory Tracking	When this check box is selected there will be no inventory tracking on the selected product, that is stock levels will not update when the item is sold.
Allow Negative Stock	When this check box is selected negative stock values are allowed for the selected product. This means that sales of the product will be allowed at the POS regardless of the stock level.
Track Serial Numbers	When this check box is selected the product will be tracked by its serial number.
Force Check of Inventory Level	When this check box is selected a check of inventory level will be carried out when the selected product is sold, and it cannot be sold if there is insufficient stock. When this is set, the Allow Negative Stock flag becomes active.

Field/Option	Description
Locate Inventory	At the POS locate alternative stock holding locations.
Picked Inventory	That is, not held on the sales floor.
Product Replenishment Details	
Minimum Stock Level	Replenishment calculation variable
Maximum Stock Level	Replenishment calculation variable
Number of Weeks Cover (weeks)	Replenishment calculation variable
Average Sales Period (weeks)	Replenishment calculation variable
Slow Movers Period (weeks)	This is a replenishment variable available for use in customised replenishment algorithms
Must stock	Centrally allocated product. Selecting this check box restricts the ability of store level users to change store product replenishment options and variables.
Allow Replenishment	This check box controls whether an item can be ordered by the store during a Purchase Order, Product Inventory Request or when running the replenishment plug-in. The flag is only editable against store product if the product is not marked as Must Stock'.

6.0 Store-to-Store Inventory Transfer Workflow

The following diagram traces the progress of an inventory transfer from inception to fulfilment.

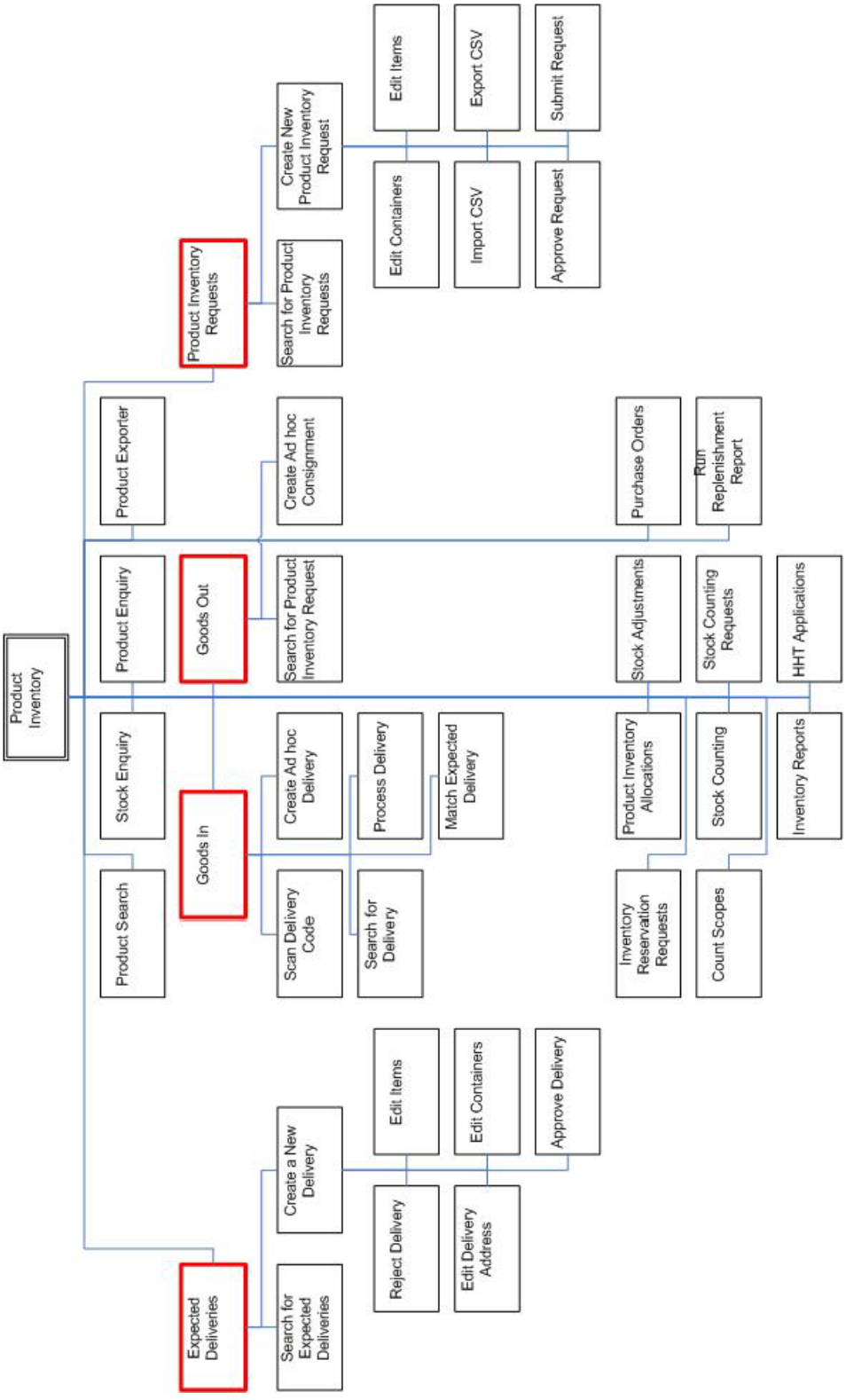
Store-to-Store Inventory Transfer Summary



In this example, an authorised operator at Store S05 makes the request for items of stock from Store S04. The request, and all subsequent processing, is routed via the Estate Manager.

7.0 User Interface

The Product Inventory user interface is mapped in the diagram overleaf. The elements of the user interface used in store-to-store transfers are highlighted in the diagram and described in more detail in the worked example below.


Product Inventory
Product Enquiry
Stock Enquiry
Product Search
Product Exporter
Goods Out
Goods In
Expected Deliveries
Product Inventory Requests
Create New Product Inventory Request
Search for Product Inventory Requests
Edit Items
Edit Containers
Export CSV
Import CSV
Submit Request
Approve Request
Create Ad hoc Consignment
Search for Product Inventory Request
Create Ad hoc Delivery
Process Delivery
Match Expected Delivery
Scan Delivery Code
Search for Delivery
Create a New Delivery
Search for Expected Deliveries
Edit Items
Edit Containers
Approve Delivery
Reject Delivery
Edit Delivery Address
Purchase Orders
Run Replenishment Report
Stock Adjustments
Stock Counting Requests
HHT Applications
Product Inventory Allocations
Stock Counting
Inventory Reports
Inventory Reservation Requests
Count Scopes

7.1 Worked Example

This worked example follows the progression of the workflow described in “Store-to-Store Inventory Transfer Workflow” on page 17.

7.1.1 Product Inventory Request

The initiating mechanism used to request an internal transfer of stock between stockholding locations is a Product Inventory Request (PIR).

You can select from existing Product Inventory Requests or you can create a new one.

PIRs allow a store to make manual or automatic requests from another stock holding location within the organisation. Manual requests can be made through the application, typically for a small range of items, or replenishment requests can be generated automatically from current stock levels and projected sales.

Partially complete requests can be stored and revisited.

A request moves from created to submitted to partially complete to complete.

The request is passed to where the stock is being sourced. An expected delivery is then created in response to the request.

In the example Retail-J estate used in this document, Store 5 requests a transfer of stock from Store 4 using a Product Inventory Request. Screenshots from Store 5 are in greyscale while screenshots from Store 4 are in blue.

Product Inventory Requests

Product Inventory Requests allows you to request items from another stock holding location within your organisation..

Select a location:	Type Store		Name	UK Store 5
Status	(All)			
Start Date	18/04/13			
End Date	24/04/13			
Apply Filter				

All product inventory requests which meet the criteria are listed below.

Options	Request ID	Source Name	Status	Date Requested	Products Requested	Quantity Requested	Location
New	PIR00524	UK Store 4	Cancelled	24/04/13 14:21	1	2	UK Store 5
New	PIR00517	UK Store 4	Cancelled	18/04/13 14:49	1	2	UK Store 5
New	PIR00514	UK Store 4	Submitted	18/04/13 14:41	1	6	UK Store 5
New	PIR00513	UK Store 4	Submitted	18/04/13 11:29	2	9	UK Store 5
New	PIR0059	UK Store 4	Submitted	18/04/13 10:00	2	5	UK Store 5

New Request

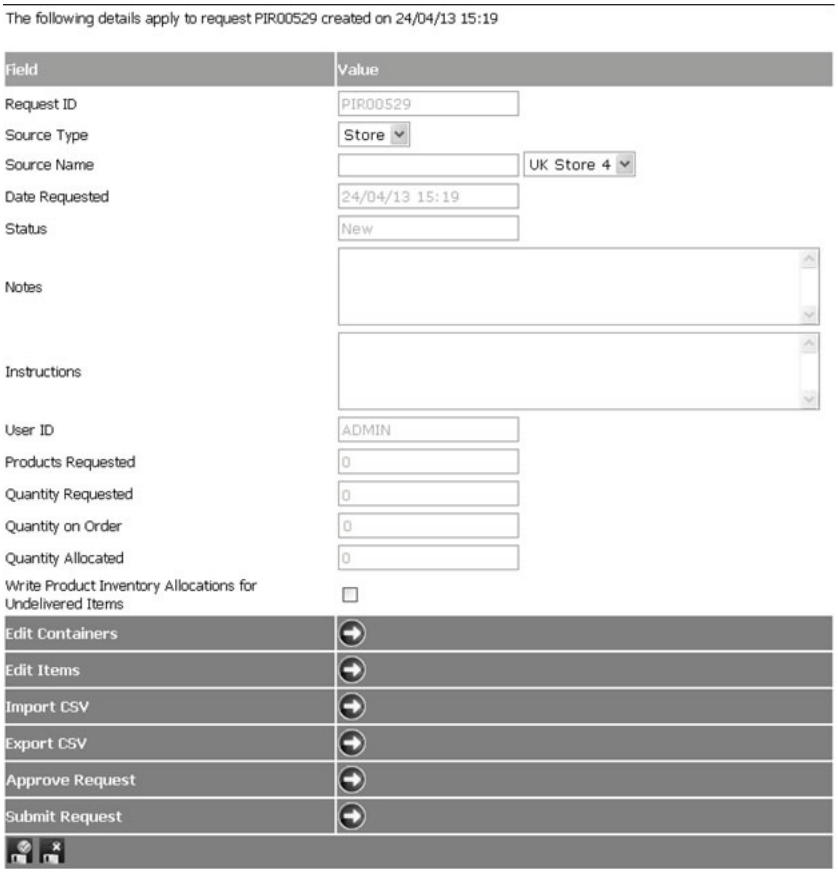
The top part of the screen allows you to review PIRs, for a selectable location, made between a start and end date.

In this case, there have been a number of previous product inventory requests submitted to Store 4.

To create a new PIR you can either use the *New* option alongside an existing PIR to minimise data entry for repeat transfers or you can create a New *Request*.

Using the *New Request* option, the PIR creation screen is displayed. The PIR ID is automatically generated.

PIR00529 is displayed as a blank form ready for items to be added.



The following options are available to create or export the PIR.

Option/field	Description
Edit Containers	Container dimensions are configured in Data Maintenance > Product Inventory > Containers. The options are box, small box, crate, pallet, cage. You can create a container and add items from this option. Already created containers are available for editing.
Edit Items	Use this option to add loose items to PIR, for example serial number or cash items.

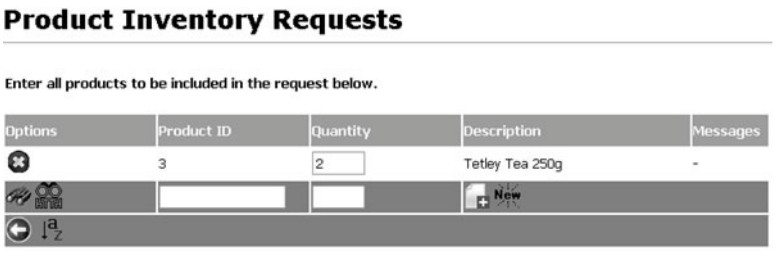
Option/field	Description
Import CSV	Using this option you can import a CSV file containing a list of items. After importing the CSV file, all the items are included in either Edit Containers or in Edit Items with their respective quantities. If the items in the CSV file are specified with a Container ID they are listed under Edit Containers, if the items are specified in CSV without a Container ID then these items will be listed under Edit Items. If the CSV file consists of items which have already added in Edit Containers/Edit Items, the existing Items are updated with the imported quantity. The file name of the PIR file for import is: `XXX.csv` where `XXX` is the `Product Inventory Request ID`. The format of Import CSV file is: `PIRID, Container ID, Product ID, Quantity` The file should be placed in: `Org_Home\Org_ID\ProductInventoryRequest\Import` folder. Following a successfully import, the CSV file is moved to the `Processed` folder in the `Import` directory
Export CSV	Use this option to export the items included in PIR to a CSV file. After export, the CSV file is stored in the `Org_Home\Org_ID\ProductInventoryRequest\Export` folder. with a file name of `XXX.csv` where `XXX` refers to `Product Inventory Request ID`. The file format is: `PIRID, Container ID, Product ID, Product Description, Price, Quantity`

After adding container/loose items, the values of Products Requested, Quantity Requested and Quantity on Order fields are updated.

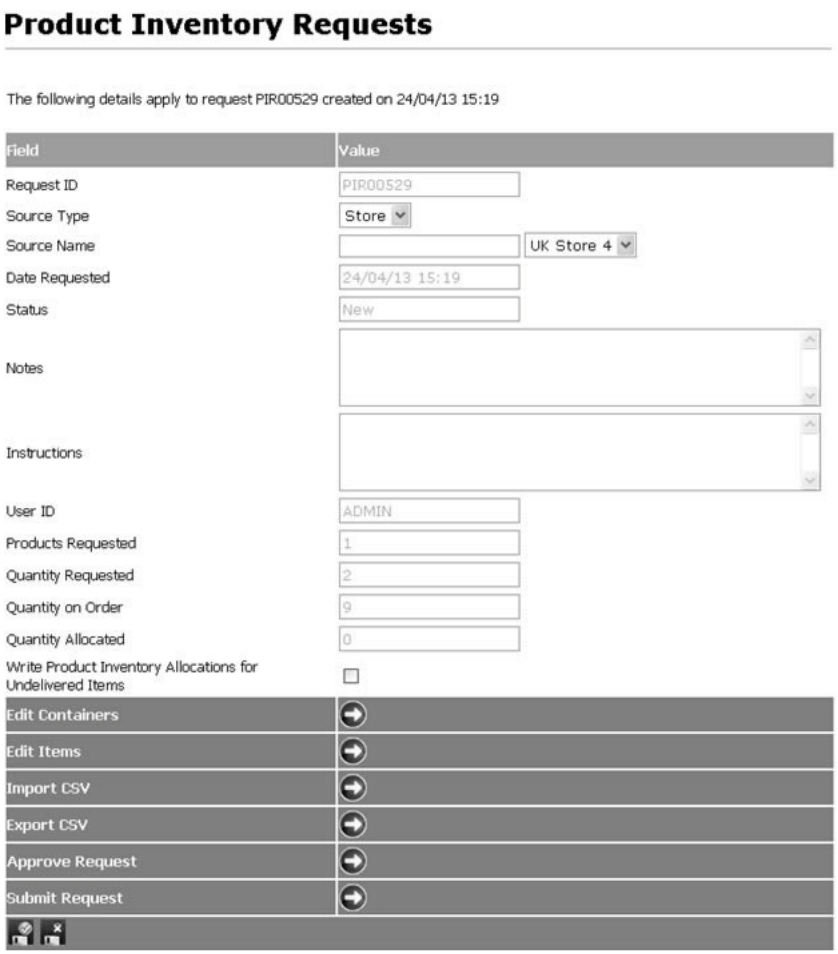
In this example, select Edit Items.

The PIR product entry screen is displayed.

In this case, 2 boxes of tea bags are ordered.



Return to the PIR creation screen.



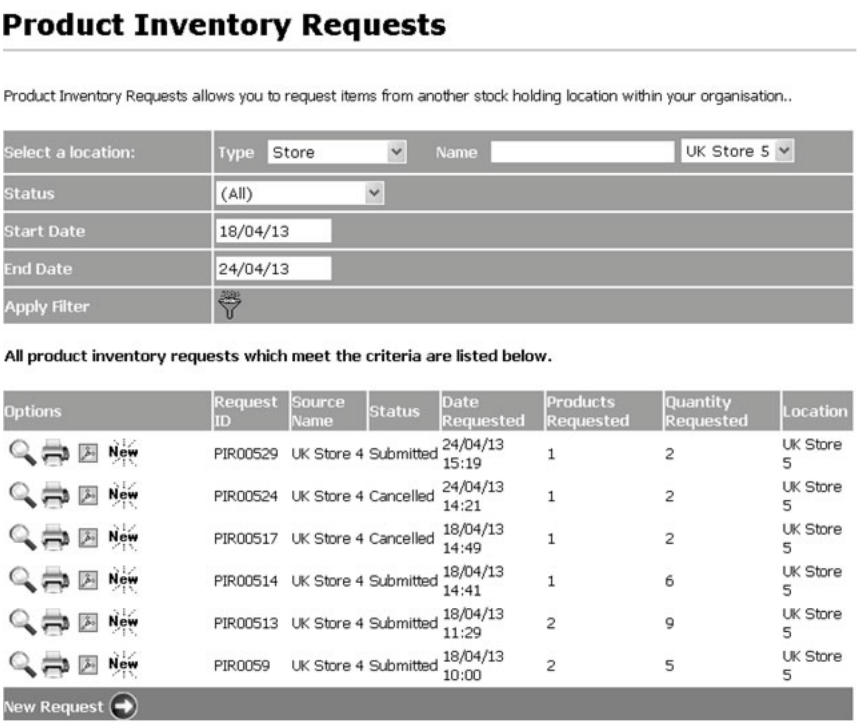
Approve the PIR.

The PIR summary and search screen is displayed with the *Approved* status noted against the PIR.

Submit the PIR.

If you try to submit more PIRs than value specified in the *Maximum Number of PIRs Submitted in a Day (Location Maintenance)* the message *You can only submit X PIR/s per day. Please submit this order again tomorrow* is displayed.

Following successful submission, the PIR summary and search screen is displayed with the *Submitted* status noted against the PIR.



Product Inventory Requests

Product Inventory Requests allows you to request items from another stock holding location within your organisation..

Select a location:	Type Store	Name	UK Store 5	
Status	(All)			
Start Date	18/04/13			
End Date	24/04/13			
Apply Filter				

All product inventory requests which meet the criteria are listed below.

Options	Request ID	Source Name	Status	Date Requested	Products Requested	Quantity Requested	Location
New	PIR00529	UK Store 4	Submitted	24/04/13 15:19	1	2	UK Store 5
New	PIR00524	UK Store 4	Cancelled	24/04/13 14:21	1	2	UK Store 5
New	PIR00517	UK Store 4	Cancelled	18/04/13 14:49	1	2	UK Store 5
New	PIR00514	UK Store 4	Submitted	18/04/13 14:41	1	6	UK Store 5
New	PIR00513	UK Store 4	Submitted	18/04/13 11:29	2	9	UK Store 5
New	PIR0059	UK Store 4	Submitted	18/04/13 10:00	2	5	UK Store 5

New Request

PIR00529 is listed with a status of *Submitted*.

The PIR will appear briefly in Administration > Messages > Outstanding Message Bundles, as in the example below, before the document is messaged to the Estate Manager.

Message Maintenance

Message Maintenance will allow you to view bundles and individual messages and allow you to resend failed broadcasts.

All messages details are shown below.

Field	Value
Message ID	60bd4341c8b6e1e7:-3b3b27da:13e178c0e83:-7709
Sender	ALL.TEST.S05
Recipient	ALL.TEST.S04.XMLPROCESSING
Collected From	
Bundle ID	Product Inventory Request - 24 April 2013
Compressed	false
Time To Live	168 hours (7 days)
Time Posted	24-Apr-2013 15:22:19
Time Elapsed	0 hours (0 days)
Percent Complete	50%
Message Length	995 bytes (0 kb)
Message	<ProductInventoryRequest><ID>PIR00529</ID><Status>3</Status><TimeZoneOffset>-60</TimeZoneOffset><CreationDate>2013-04-24T15:19:56+01:00</CreationDate><ProcessedDate>2013-04-24T15:22:19+01:00</ProcessedDate><Notes></Notes><Instructions></Instructions><UserID>ADMIN</UserID><AuthorisingUserID>ADMIN</AuthorisingUserID><LocationID>5</LocationID><LocationType>2</LocationType><GeneratedAtID></GeneratedAtID><GeneratedAtType>0</GeneratedAtType><SequenceDeviceID>ALL.TEST.S05</SequenceDeviceID><SequenceNumber>102</SequenceNumber><ProductInventoryRequestItem><XMLSchemaVersion>1</XMLSchemaVersion><ID>3</ID><ProductID>3</ProductID><MMGroupID>ROOT</MMGroupID><ImageFilePath></ImageFilePath><InventoryType>1</InventoryType><Type>0</Ty

Mailbox	Status
ALL.TEST	Sent

The message format is described in “Messaged XML Documents Data Formats” on page 8.

7.2 Goods Out

The next series of user actions takes place at the source stock location; in this example Store 4.

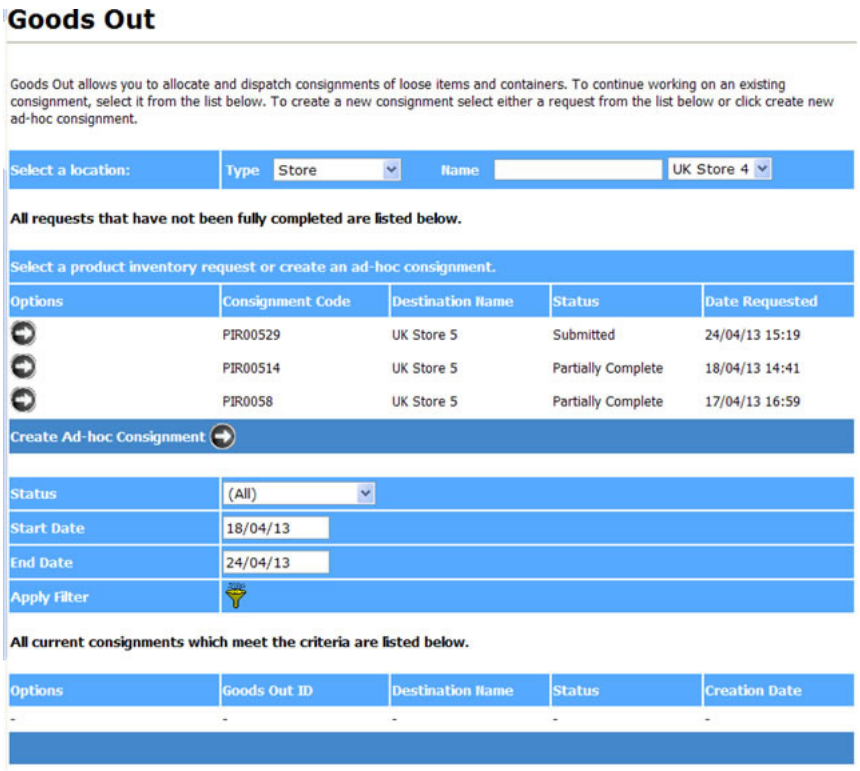
Goods Out allows all stock leaving the store to be recorded and accounted for. This could be an ad hoc return to a supplier or distribution centre or in response to a transfer request as in this case.

Goods Out:

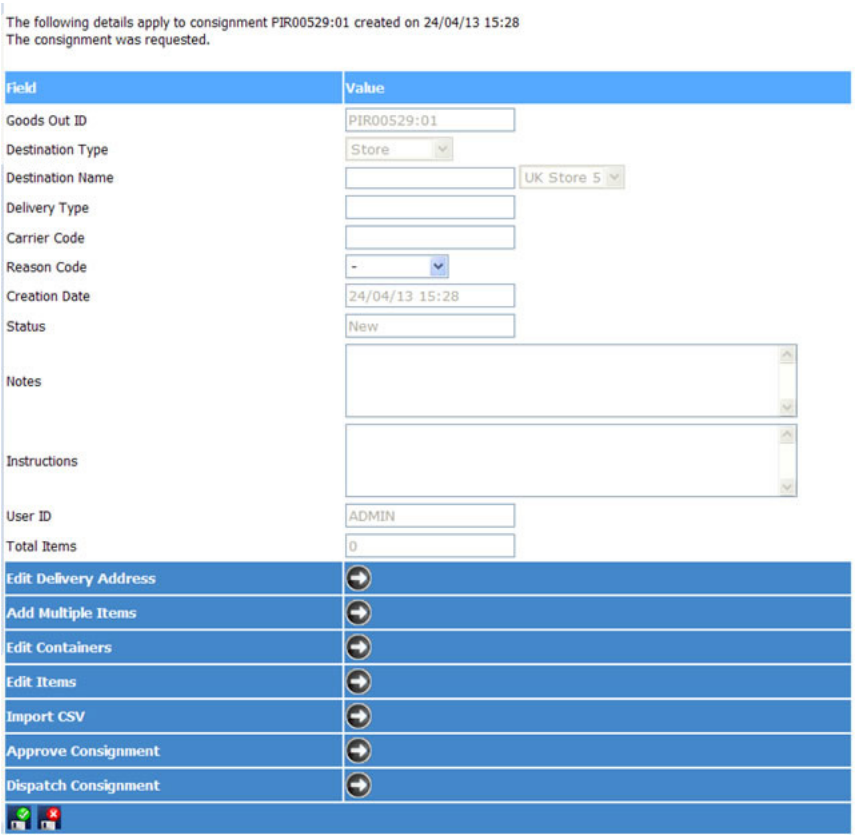
- Allows you to allocate and dispatch consignments of loose items and containers
- Partially complete consignments to be revisited later
- Record items by quantity or serial number
- Raise an ad hoc consignment

The Goods Out select screen enables you to select the shipment required. It shows all Inventory Requests that have not been fully completed. You can continue to change the details by selecting the request from the list.

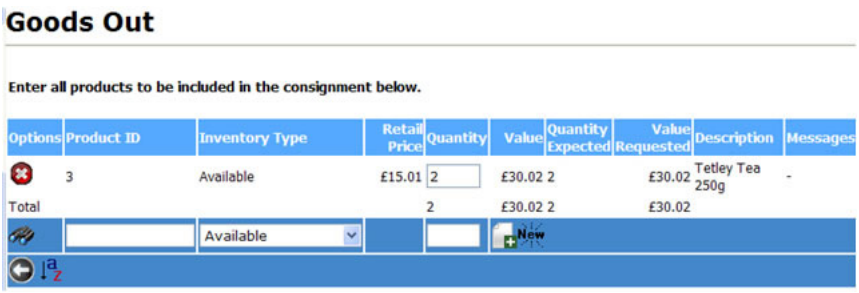
PIR00529 is listed with a status of submitted.



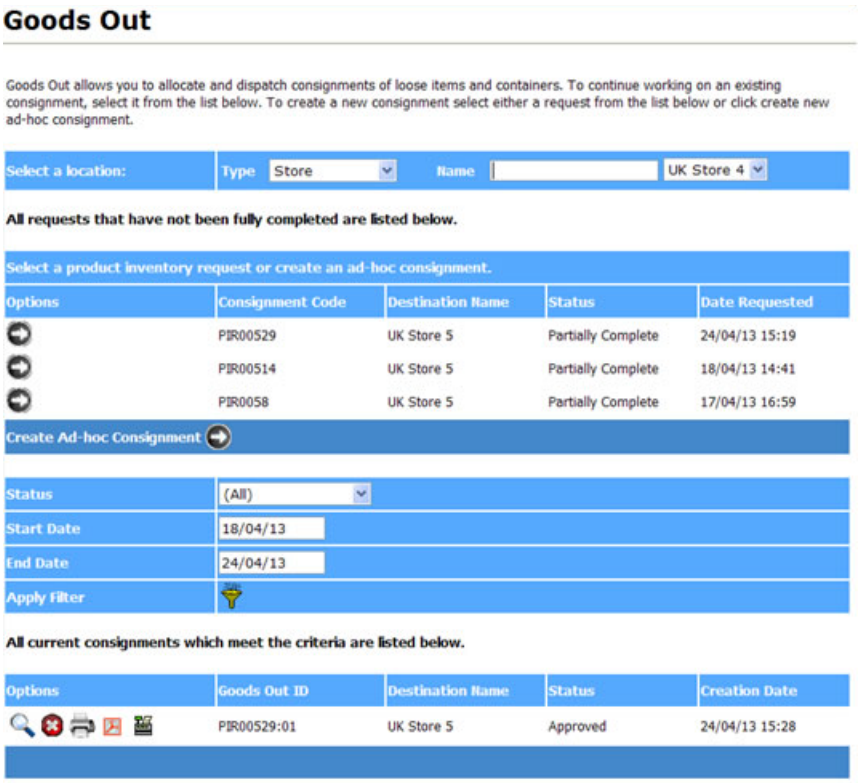
Select a PIR/Consignment.



Review and modify the consignment as required.



Return to the main Goods Out screen and *Approve* the consignment.



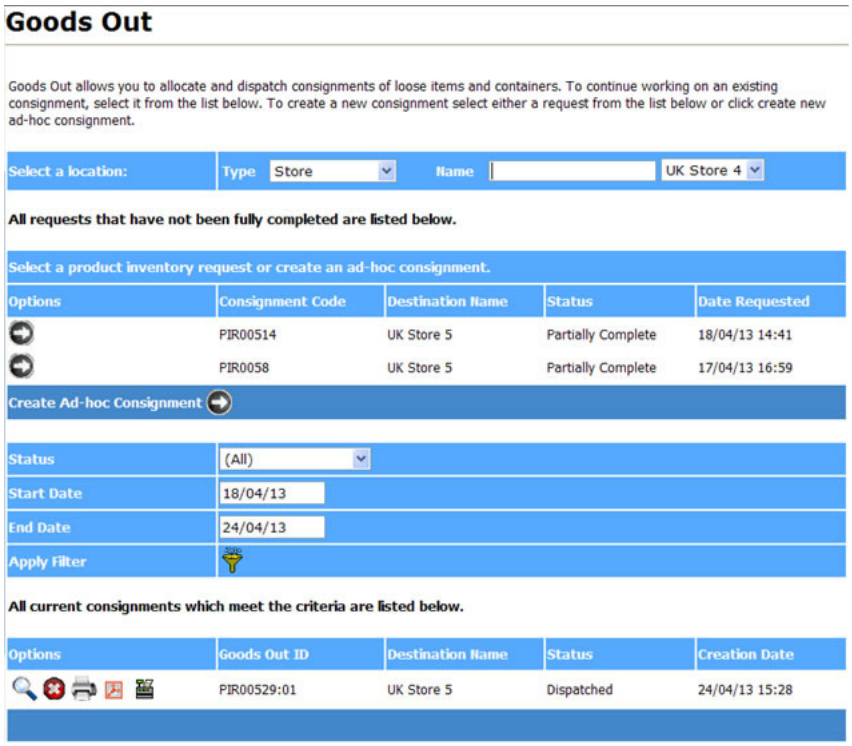
Goods Out ID PIR00529:01 is listed with a status of approved.

Select the relevant Goods Out ID and Dispatch the consignment.

A bar coded Dispatch Note is displayed.

Print and/or dismiss the Dispatch Note.

The main Goods Out screen is displayed.



Goods Out ID PIR00529:01 is listed with a status of dispatched.

7.3 Expected Deliveries

The Expected Deliveries feature allows external systems or the Retail-J head office system to indicate the future dates and contents of deliveries to the stores. Expected Deliveries can be for a Warehouse, DC, Supplier or another Store.

Expected Deliveries can be automatically created when processing purchase orders or, as in this example, product inventory requests

Purchase orders raised to suppliers directly from a store can be set up to create local expected deliveries automatically. As well as the basic contents of a delivery, the expected delivery details can include a list of containers and loose items to expect and their contents and, depending on the type of product, also a list of item serial numbers.

Expected deliveries move from created, to partially complete, to complete. A delivery can be completed over multiple goods in operations.

Items can be recorded by quantity or serial number.

You can download a PDF document containing the expected delivery details for use with Adobe Acrobat.

When creating a new expected delivery you can use your own delivery code or let the application create one for you.

From here you can:

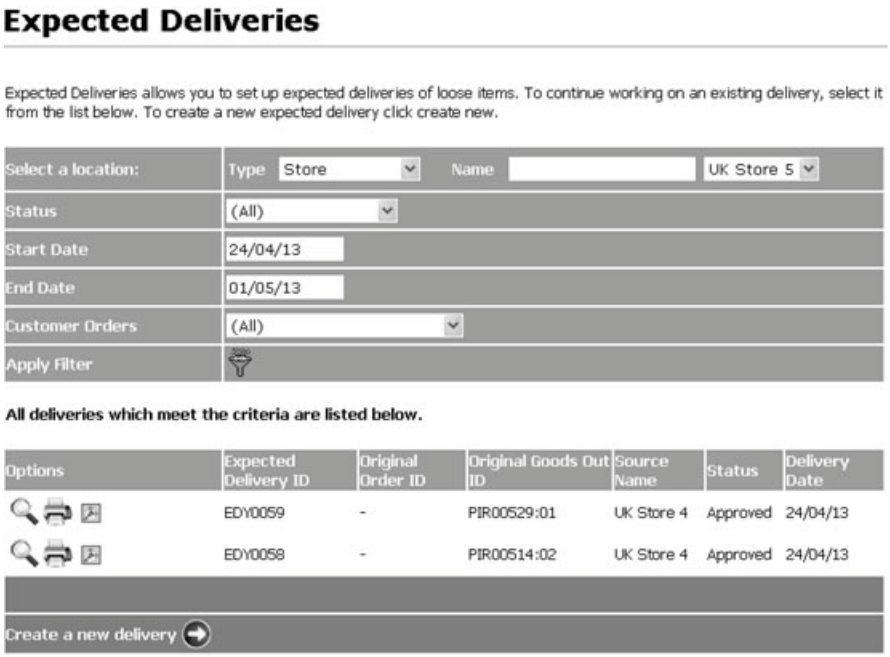
1. Edit the Delivery Address
2. Edit Containers
3. Edit Items

4. Approve the Delivery

5. Reject the Delivery

In this case, the consignment/expected delivery appears in the Expected Deliveries screen for Store 5.

Expected delivery EDY0059 is listed with its original Goods Out ID PIR00529:01 is listed with a status of approved.



Select a consignment/expected delivery for processing.

You are transferred to the Goods In screen.

Accept the delivery.

You are transferred to the Goods In screen.

7.4 Goods In

Goods in allows you to receive and record deliveries of loose items and containers. Both expected and ad hoc deliveries can be recorded. Goods can be received from a store, distribution centre, warehouse or supplier

Goods In is used to book all physical deliveries into a store. Deliveries can be in two or more stages, for example where first containers are checked in, then loose items and then the container contents. The system allows expected deliveries to arrive over a period of time in separate consignments and will link back to original orders and requests. Goods In where the expected delivery information has not been received can be received and matched retrospectively

Items can be recorded by quantity or serial number. Serial numbered items are tracked into the store and monitored until sold.

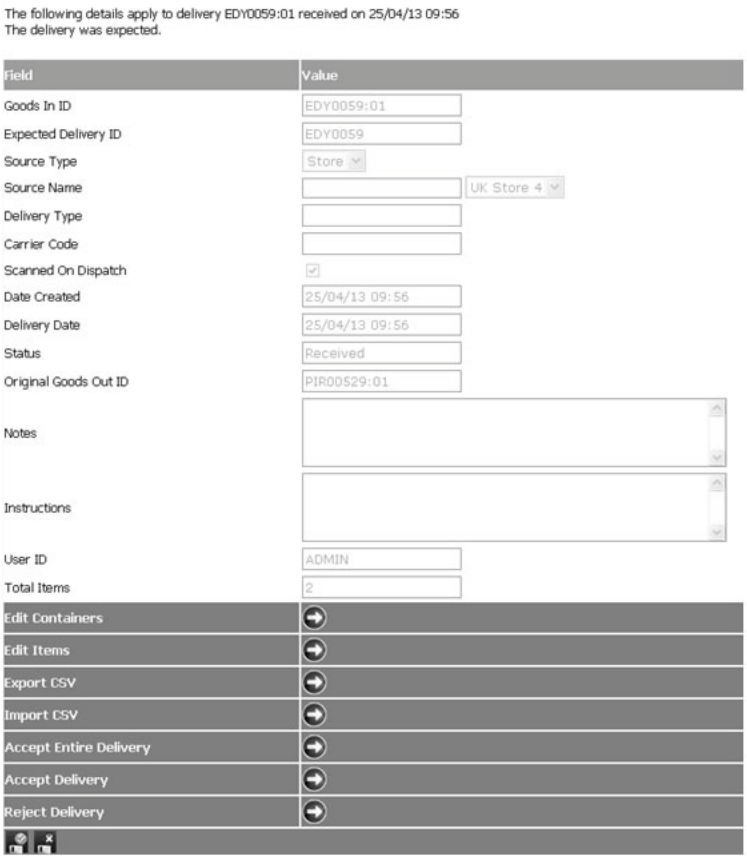
Containers and individual items can be checked in using wireless HHTs.

Products not within the product catalogue can be recorded.

To continue working on an existing delivery, select it from the list. To create a new delivery select an expected delivery from the list or select *Create Ad hoc Delivery*.

The goods in record that is created represents the delivery exactly. If the delivery is short of that which is expected, then the expected delivery will be marked as partially completed. Otherwise the expected delivery will be marked as complete.

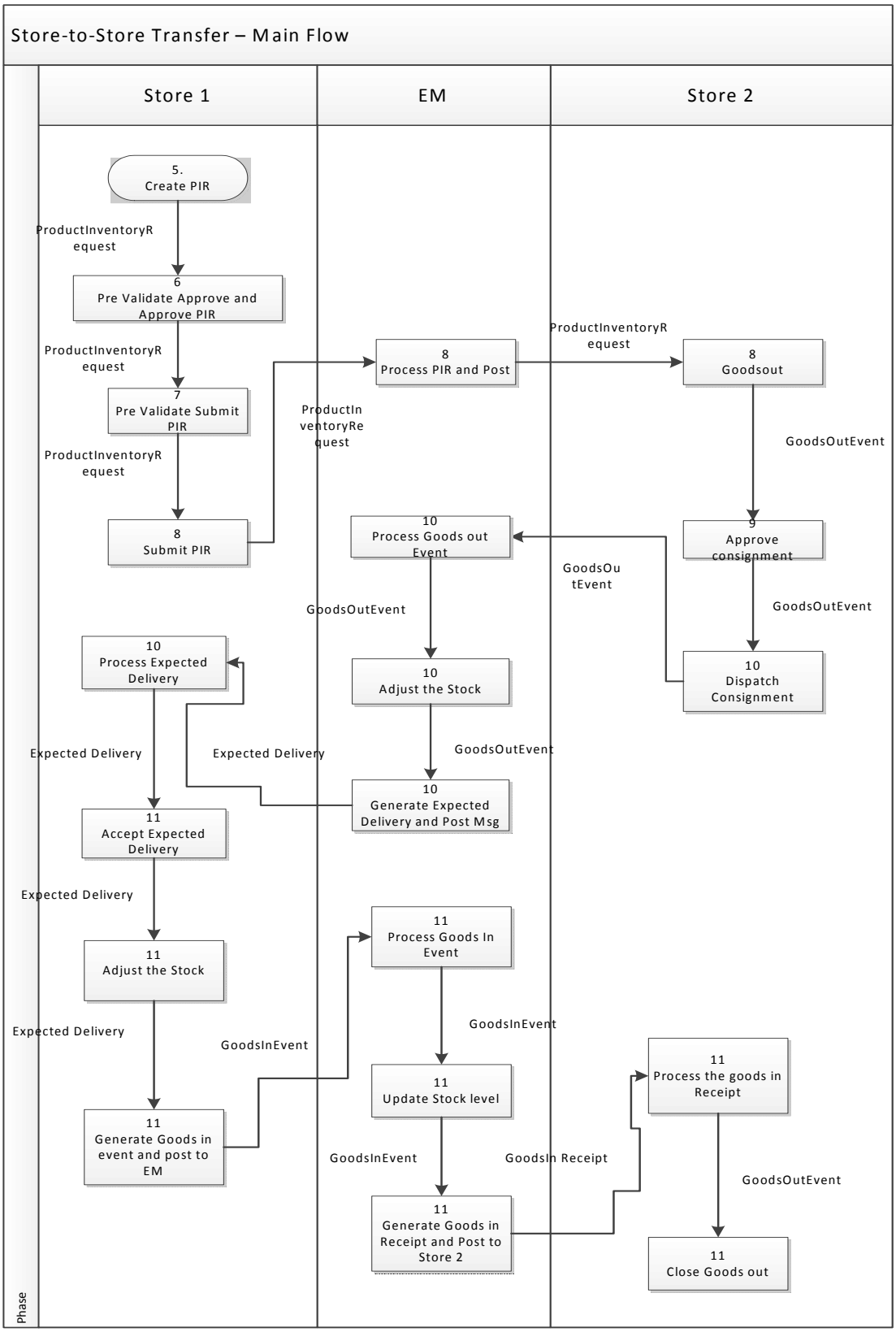
You can select the Goods In screen directly or select an expected delivery from the Expected Delivery screen.



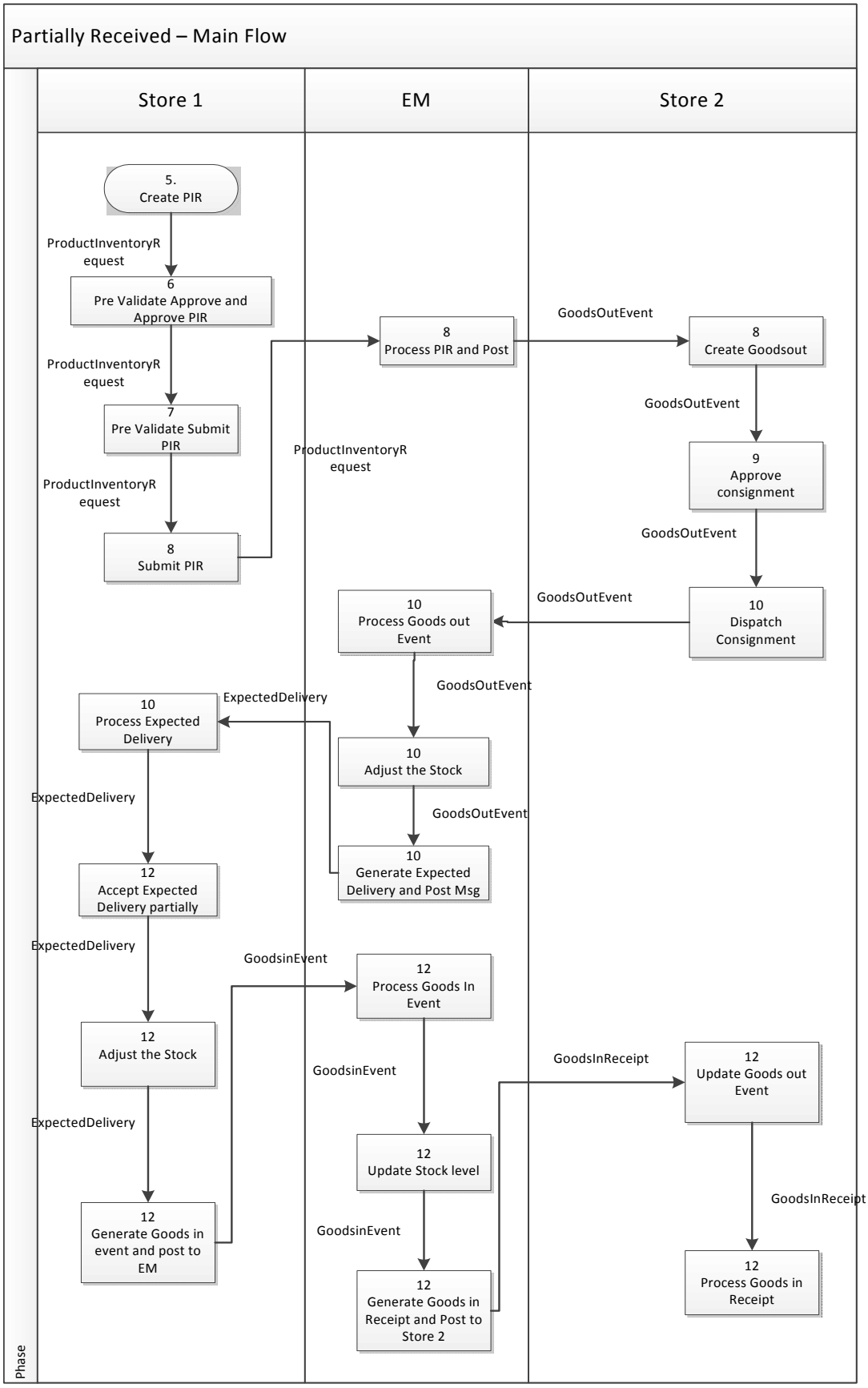
You are now able to edit, accept all or part of the delivery or reject the delivery.

8.0 Process and Data Flows

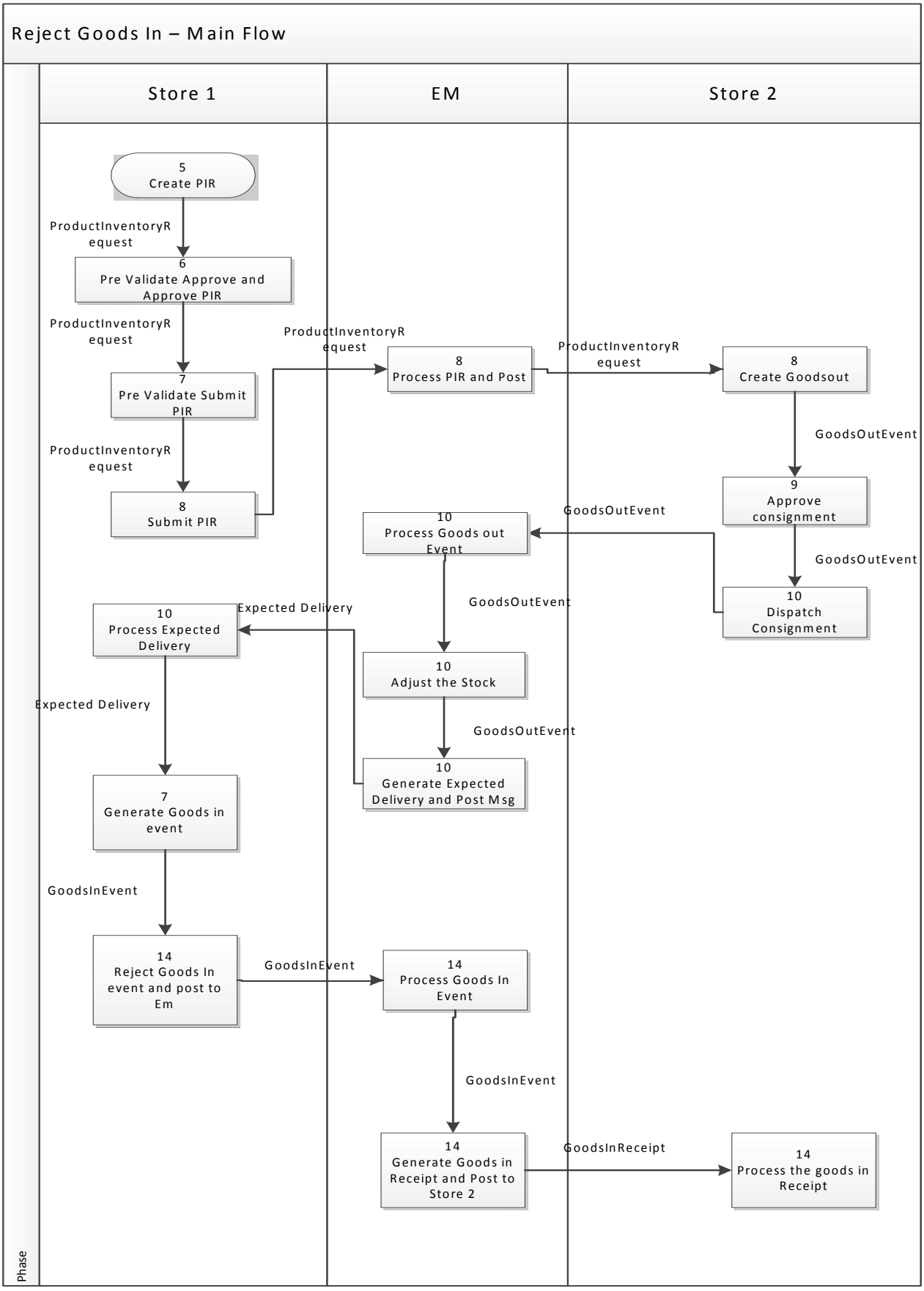
8.1 1. Main Flow



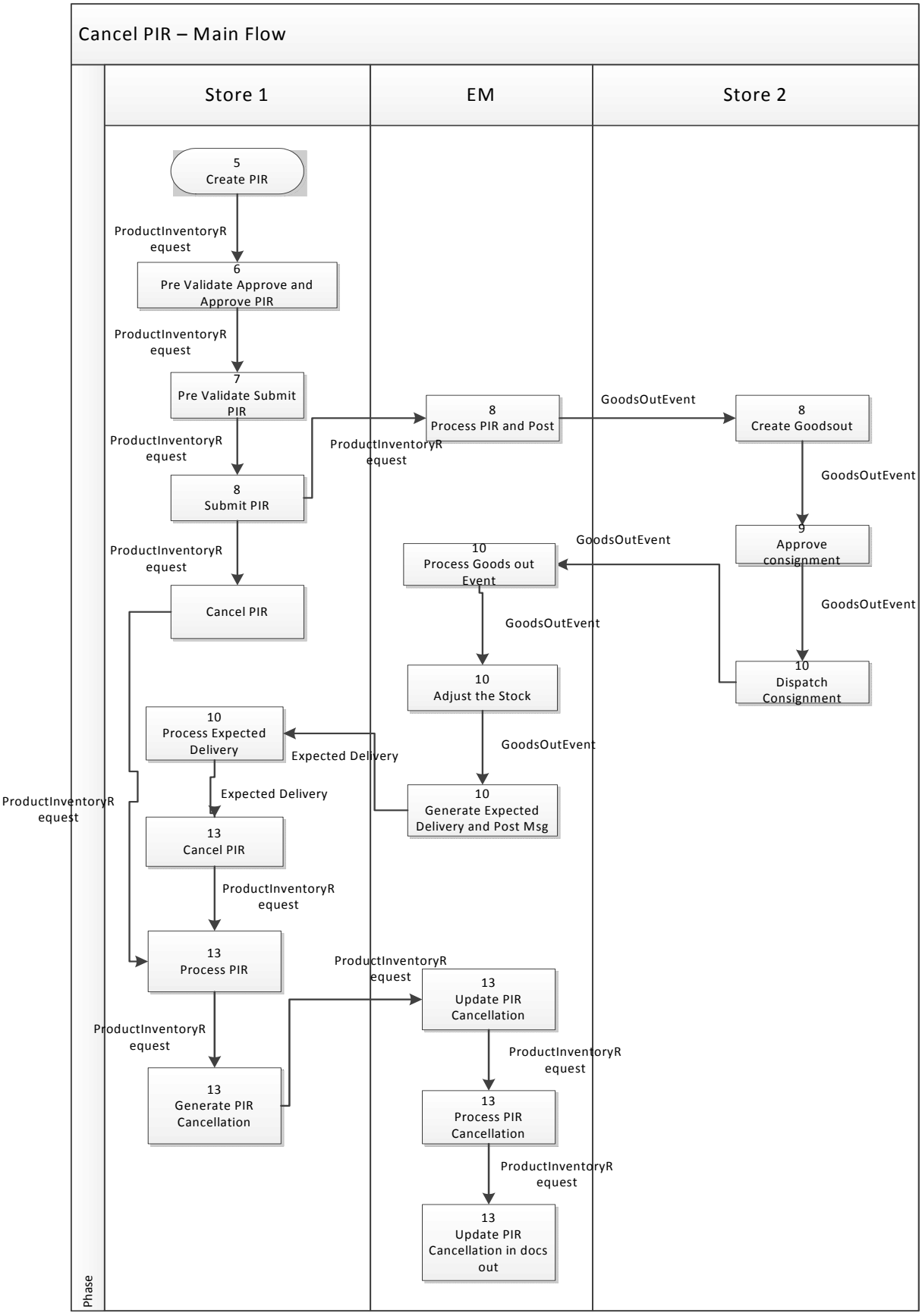
8.2 2. Main Flow - Partially Received



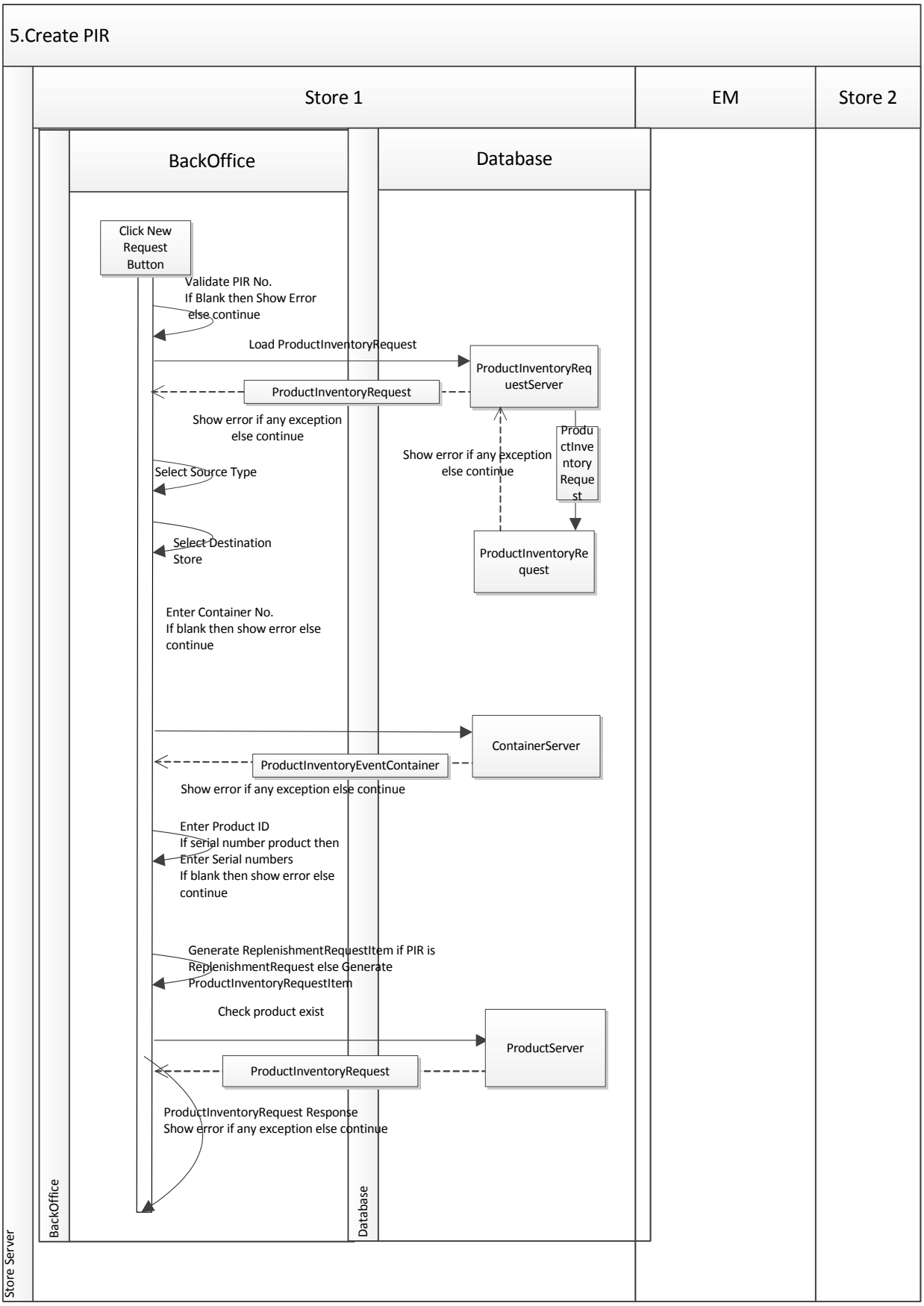
8.3 3. Main Flow - Reject Goods In



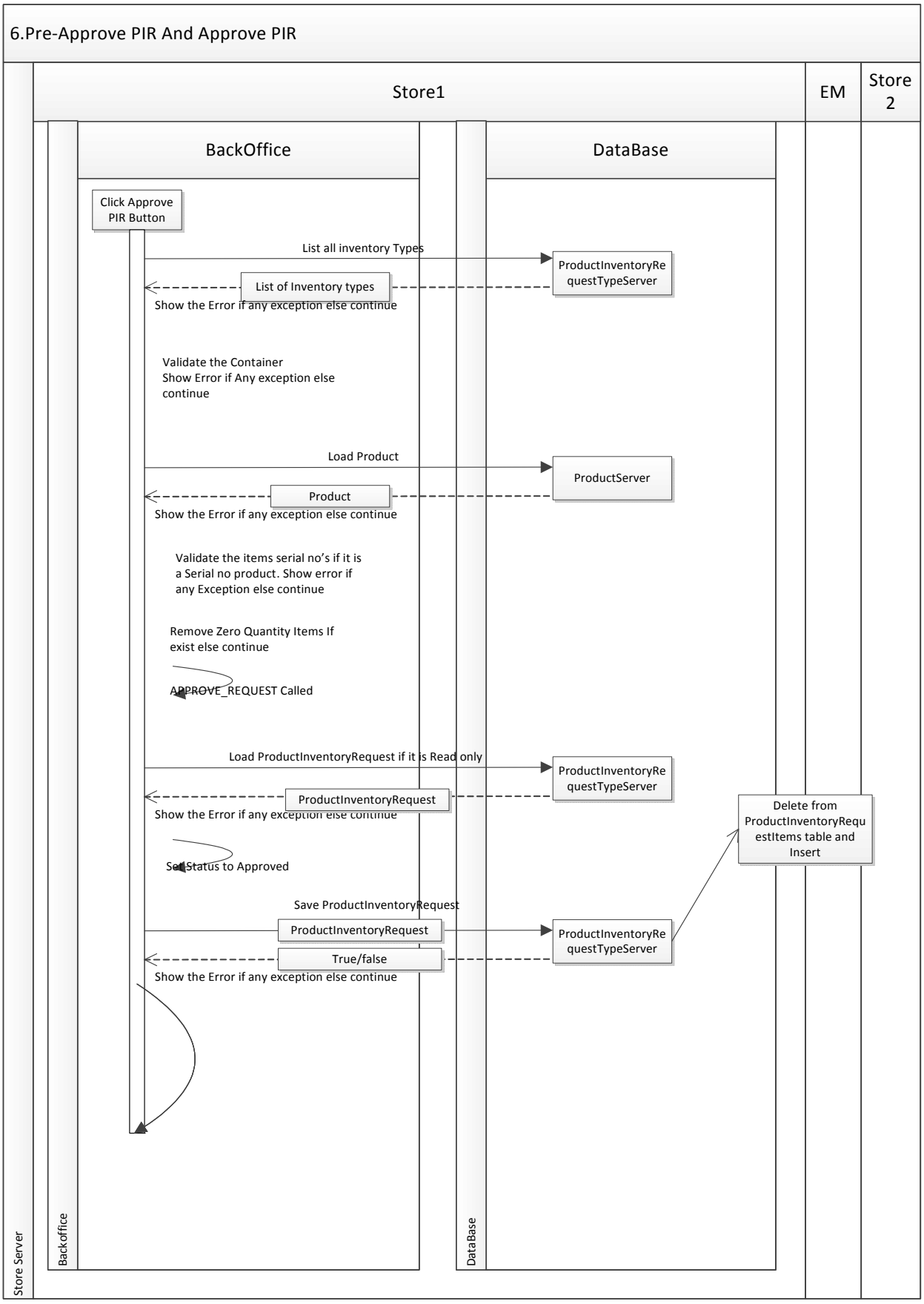
8.4 4. Main Flow - Cancel PIR



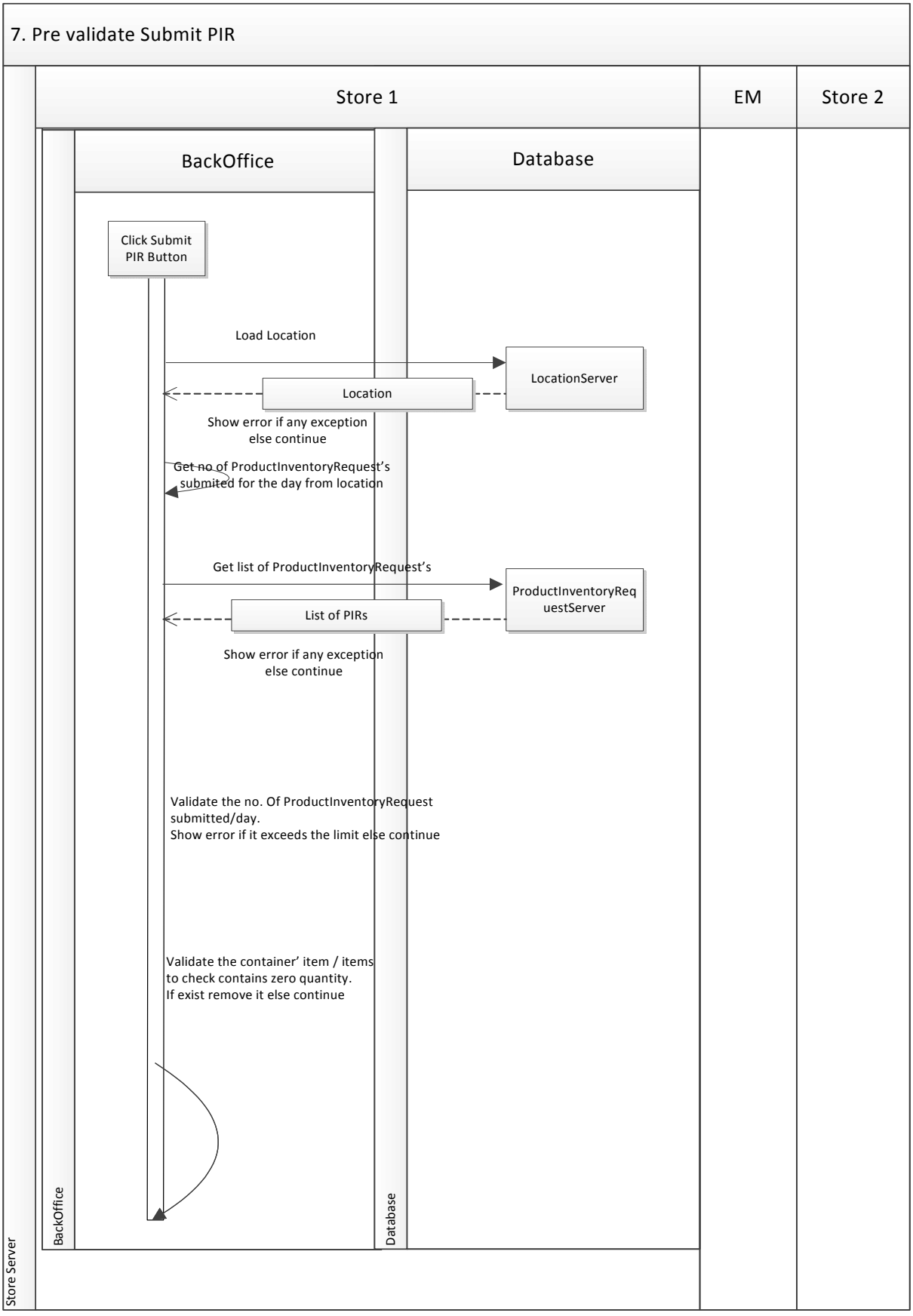
8.5 5. Create PIR



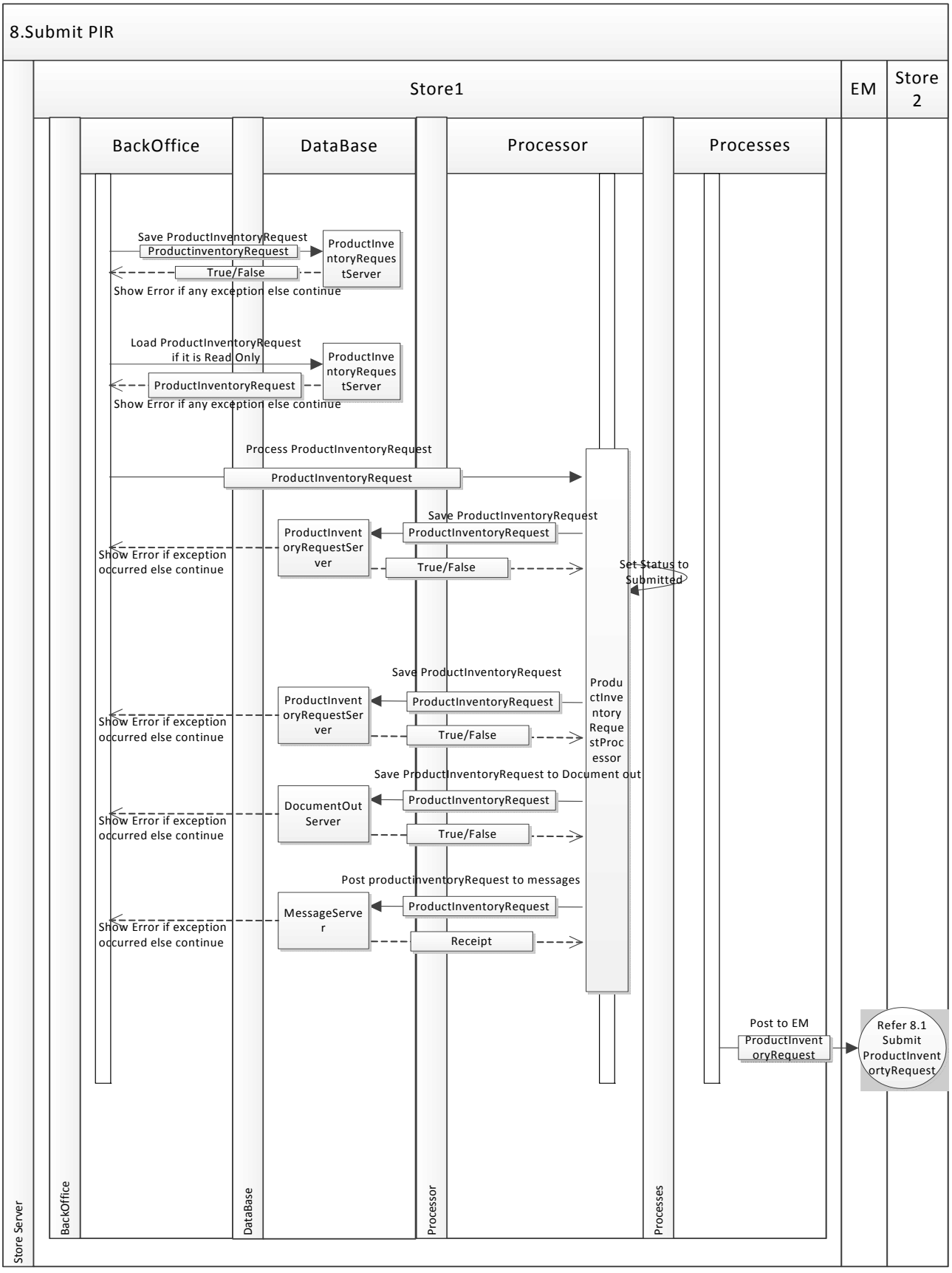
8.6 6. PreValidate Approve and Approve PIR



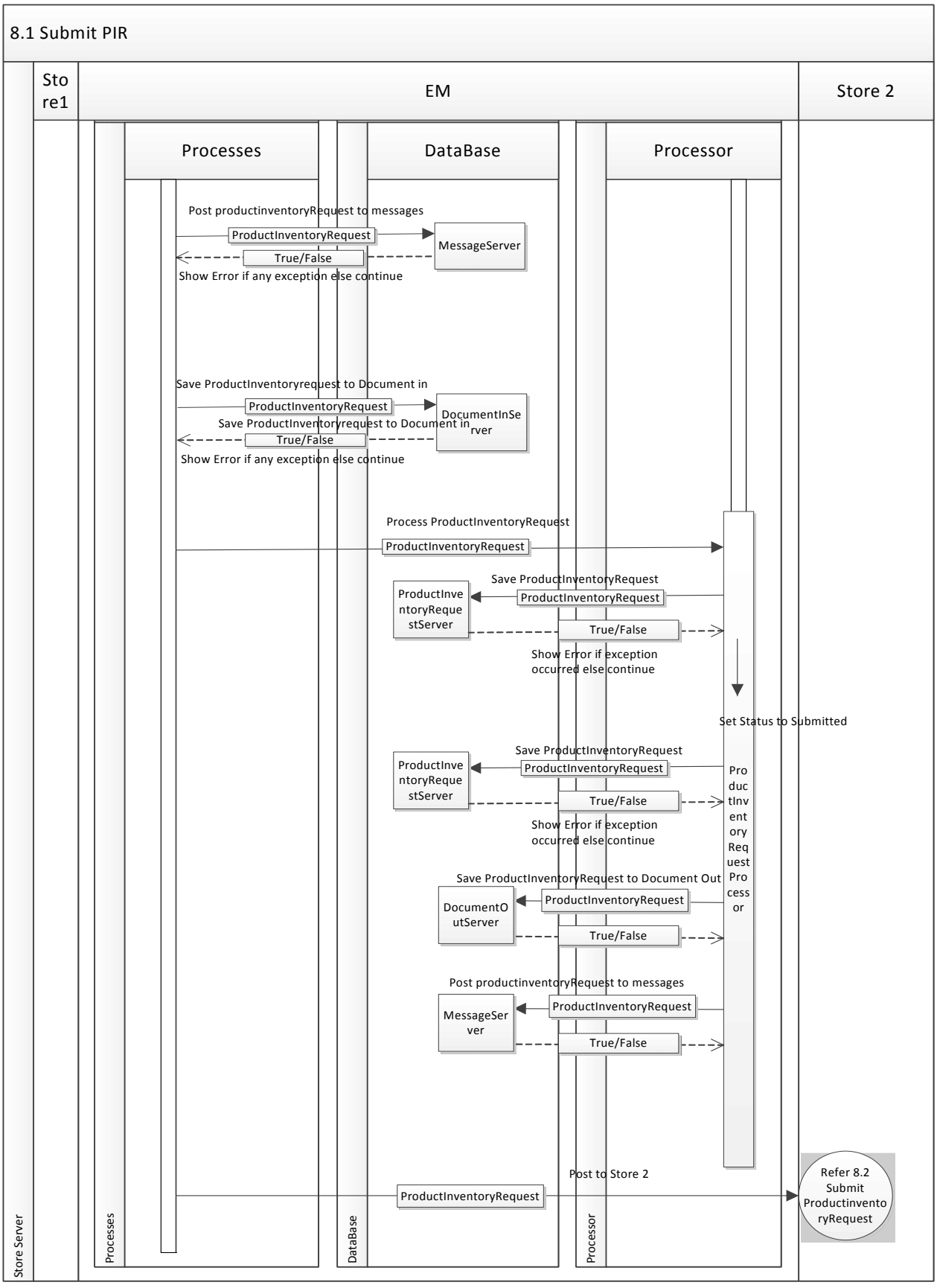
8.7 7. PreValidate Submit PIR



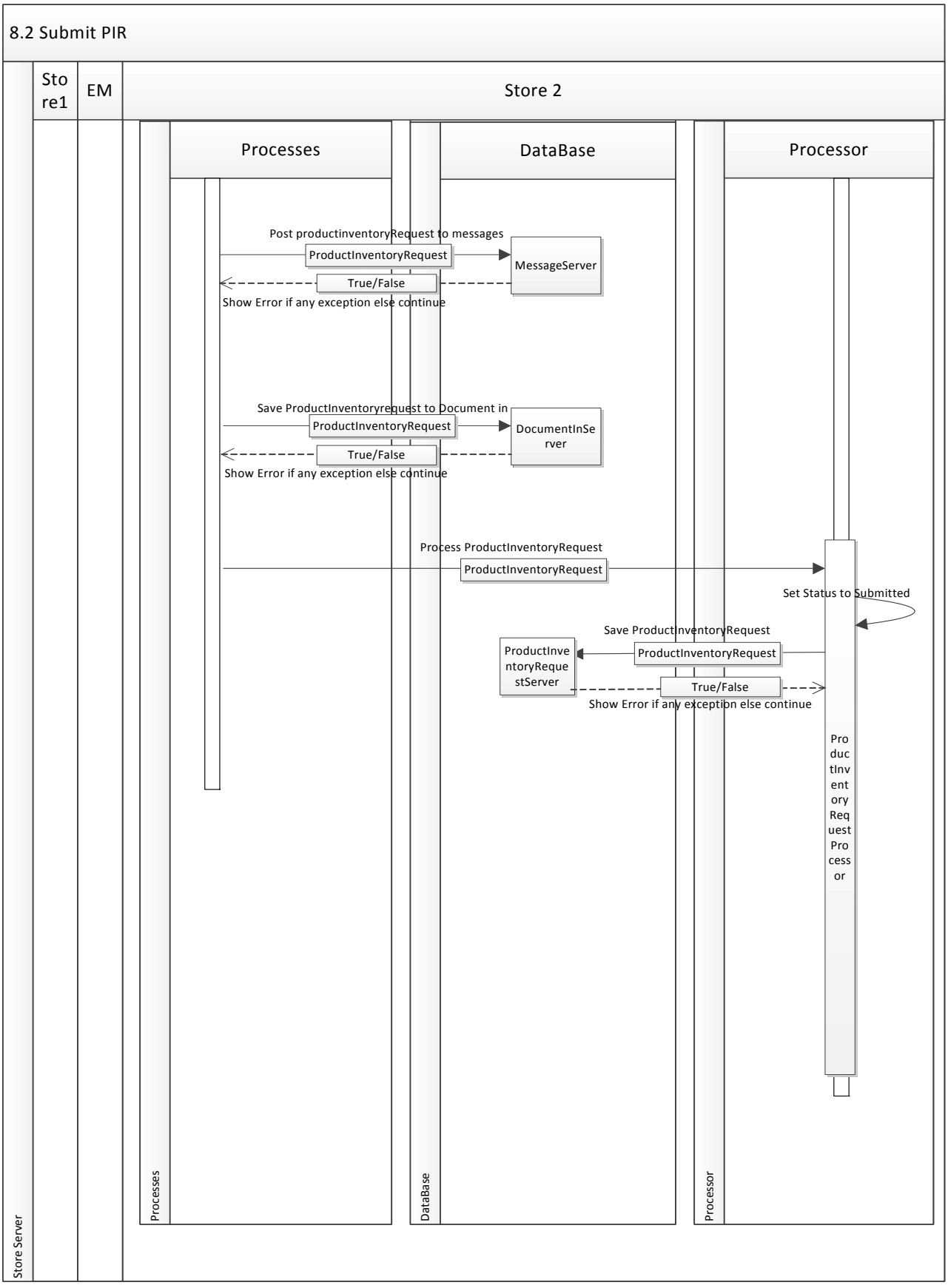
8.8 8. Submit PIR



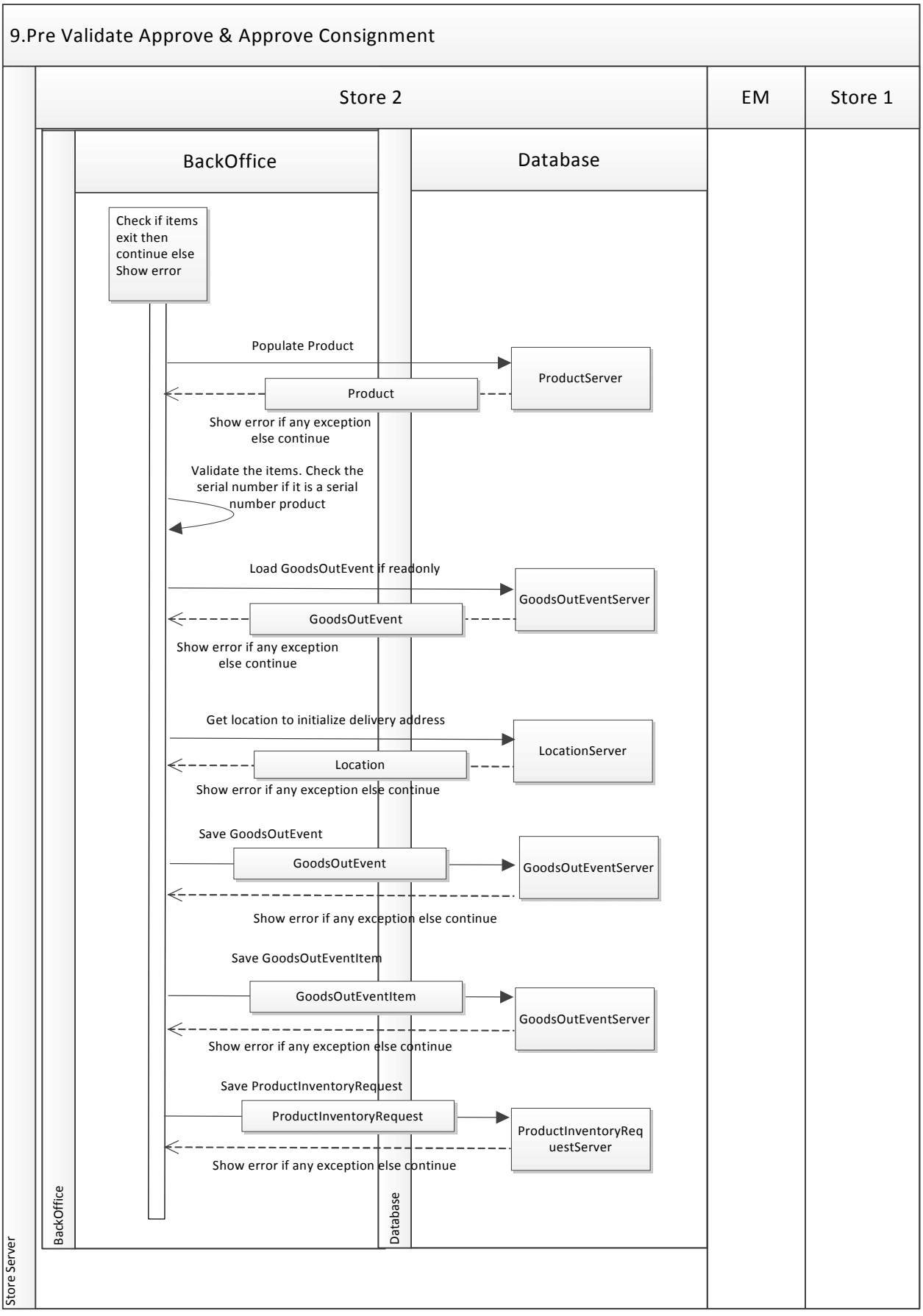
8.9 8.1 Submit PIR



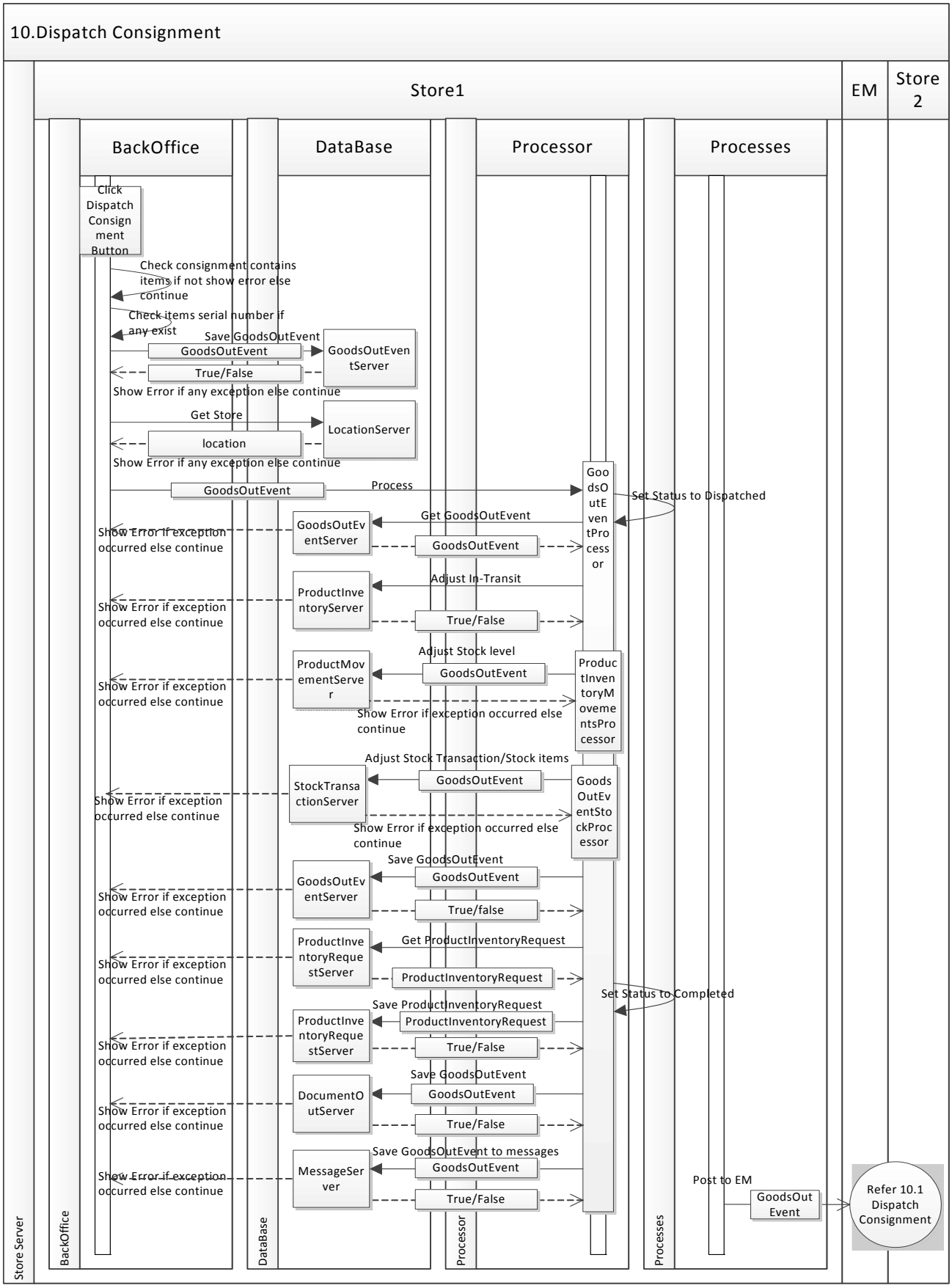
8.10 8.2 Submit PIR



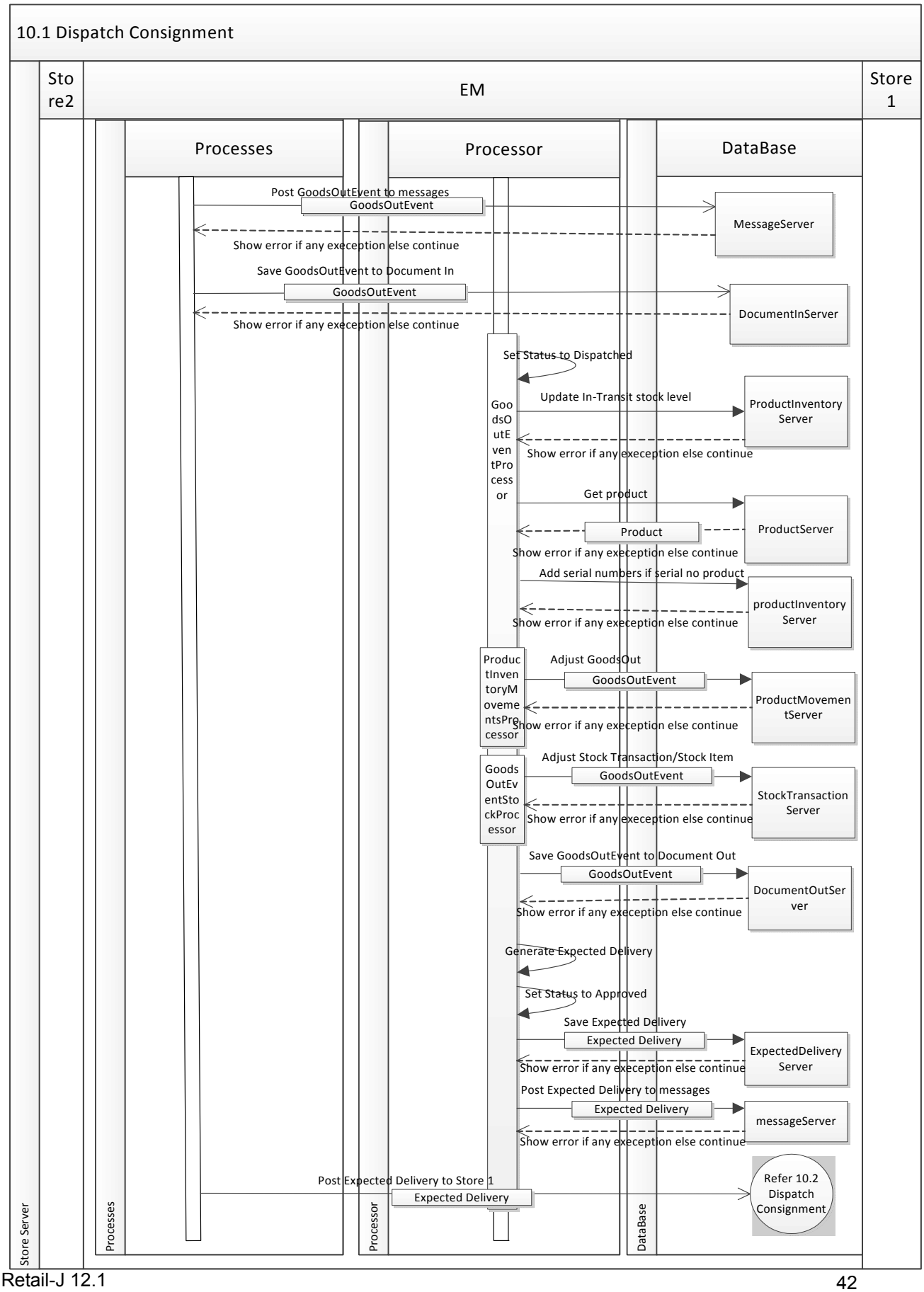
8.11 9. Approve Consignment



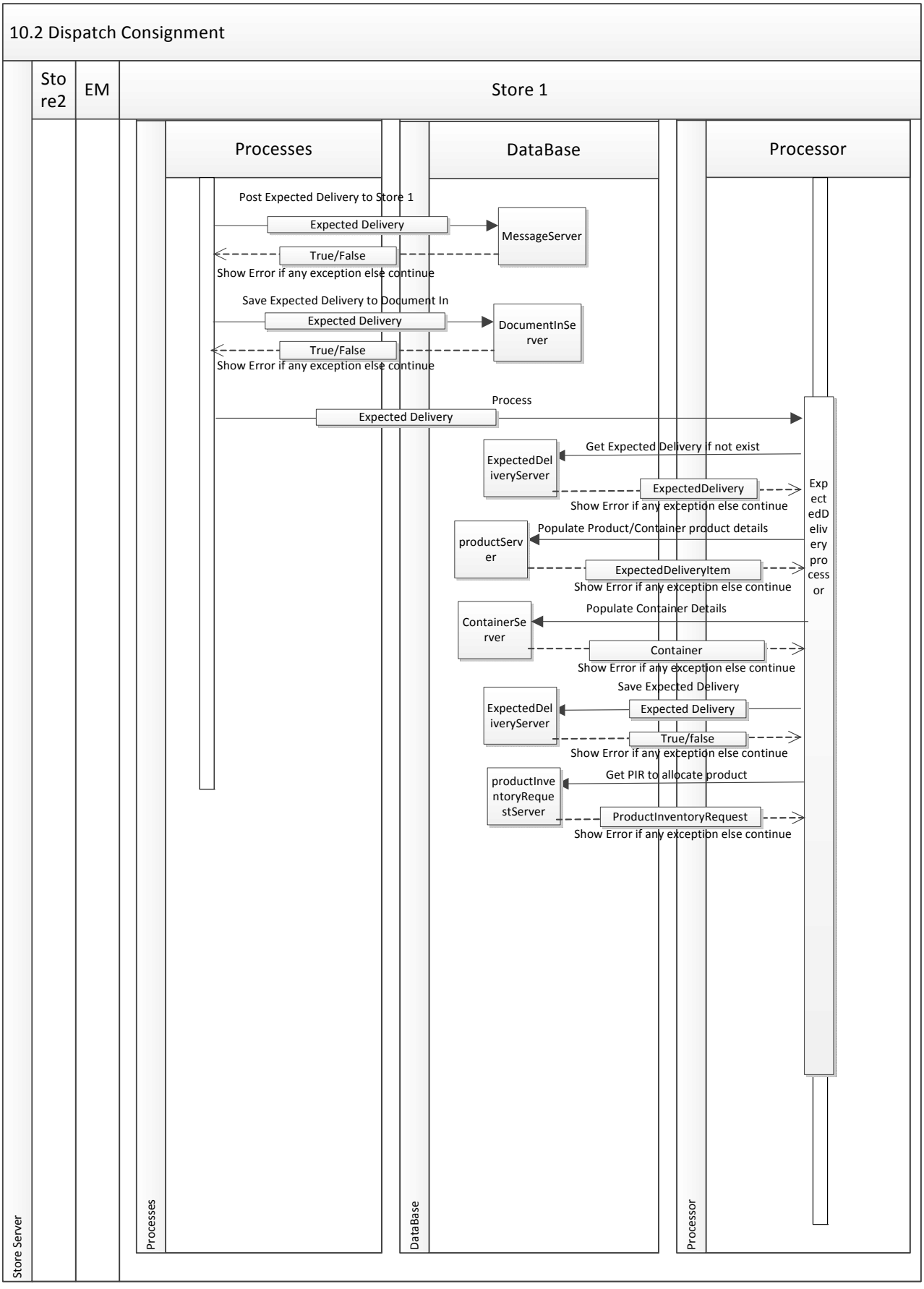
8.12 10. Dispatch Consignment



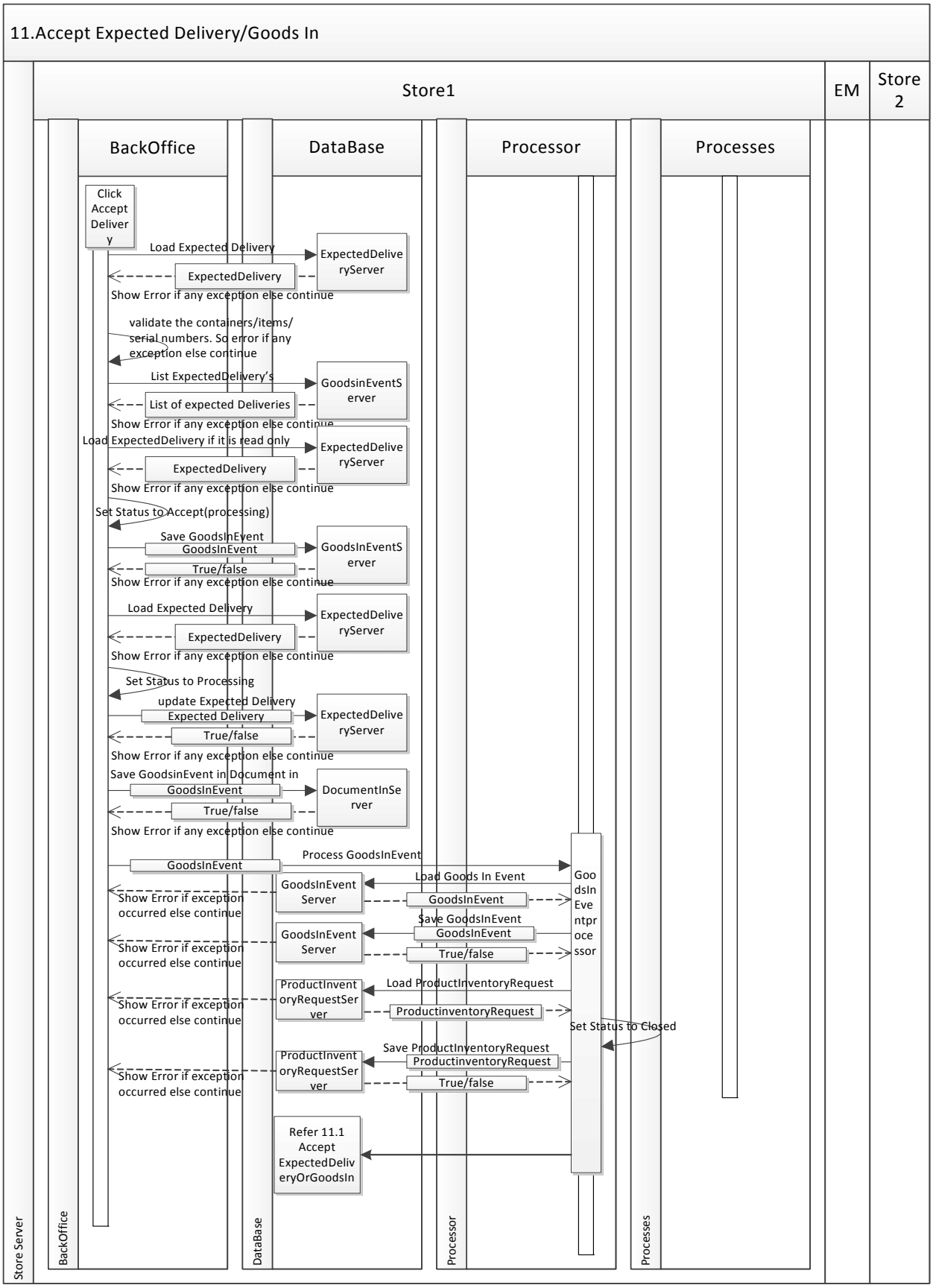
8.13 10.1 Dispatch Consignment



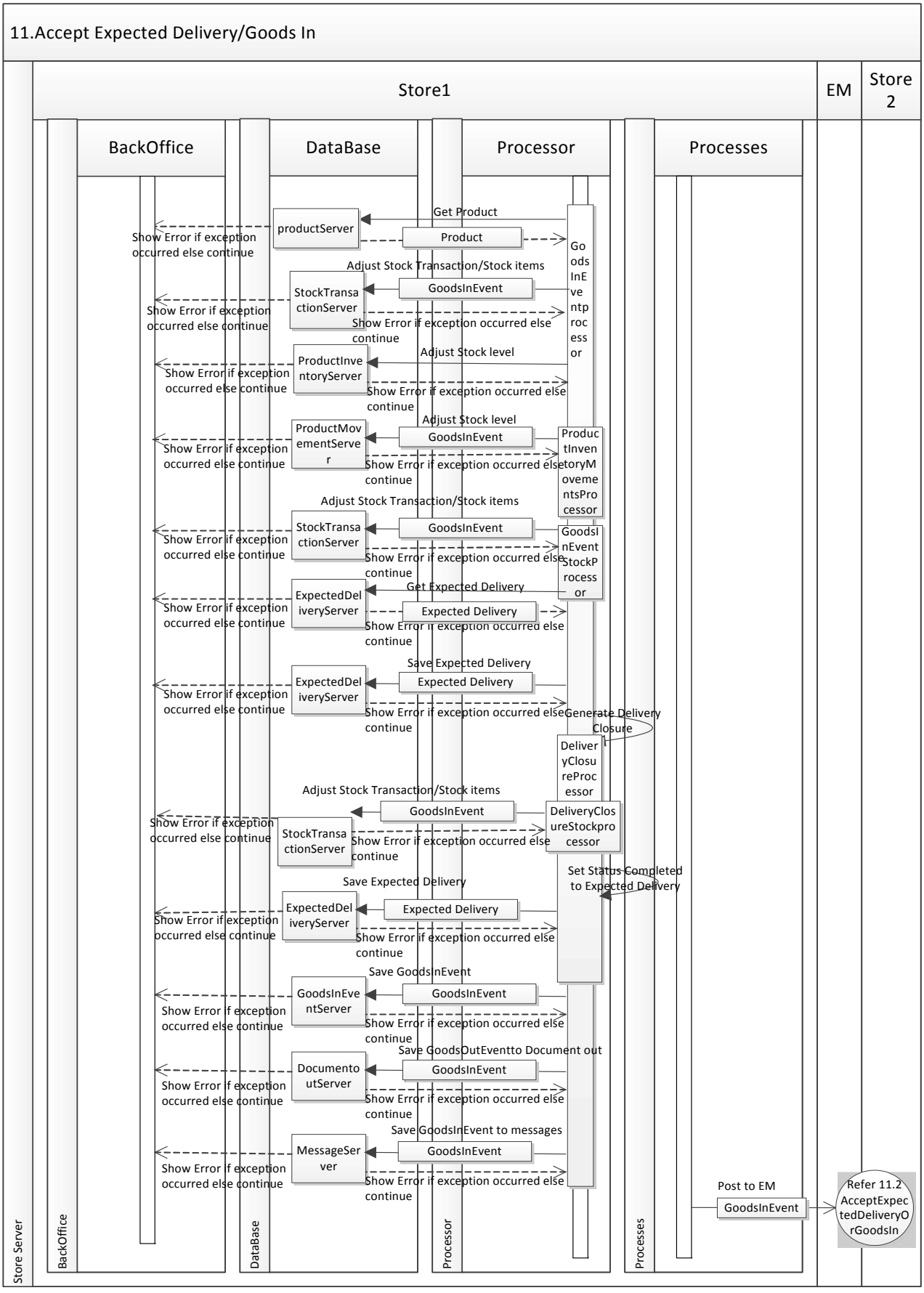
8.14 10.2 Dispatch Consignment



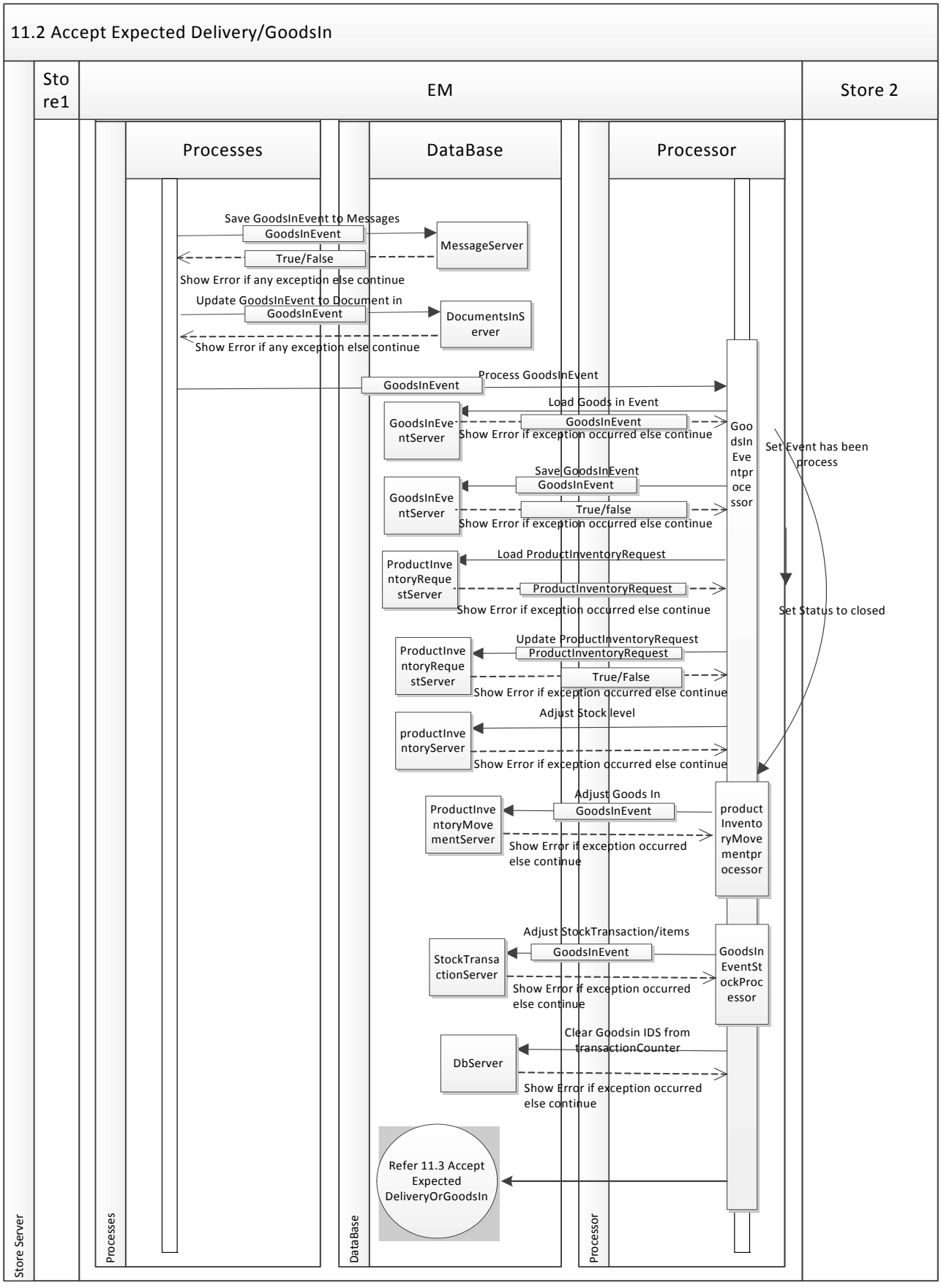
8.15 11. Accept Expected Delivery or Goods In



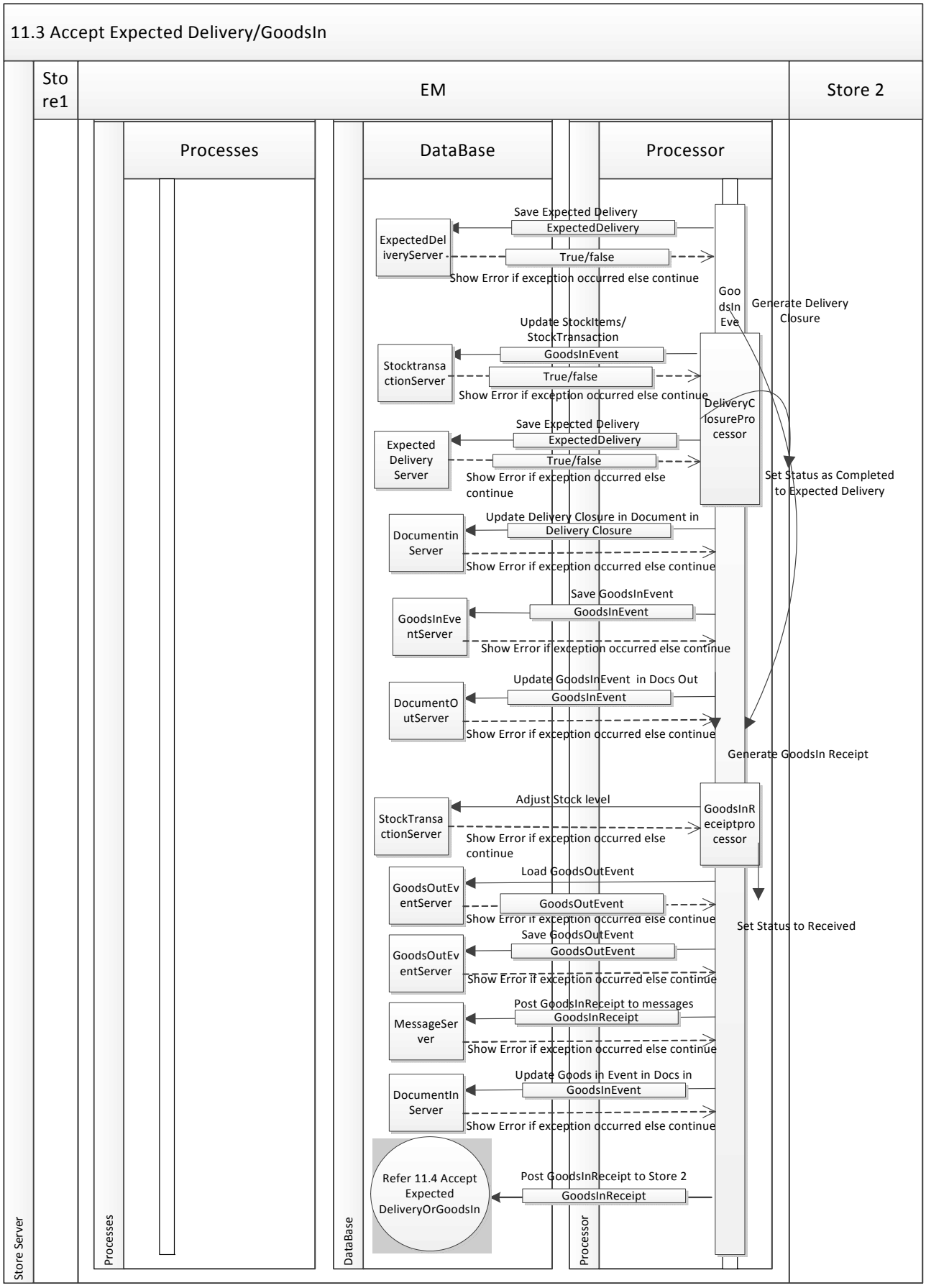
8.16 11.1 Accept Expected Delivery or Goods In



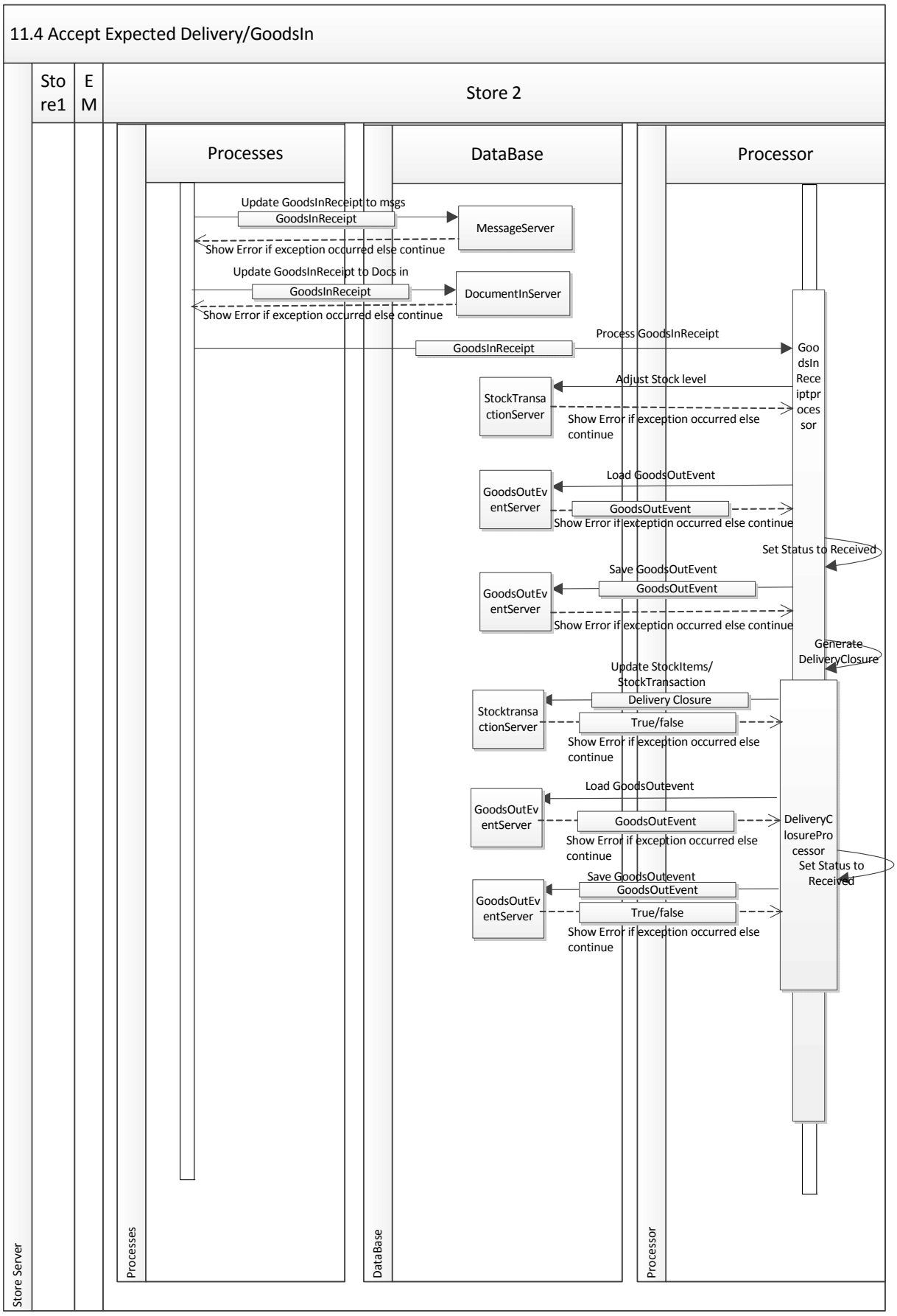
8.17 11.2 Accept Expected Delivery or Goods In



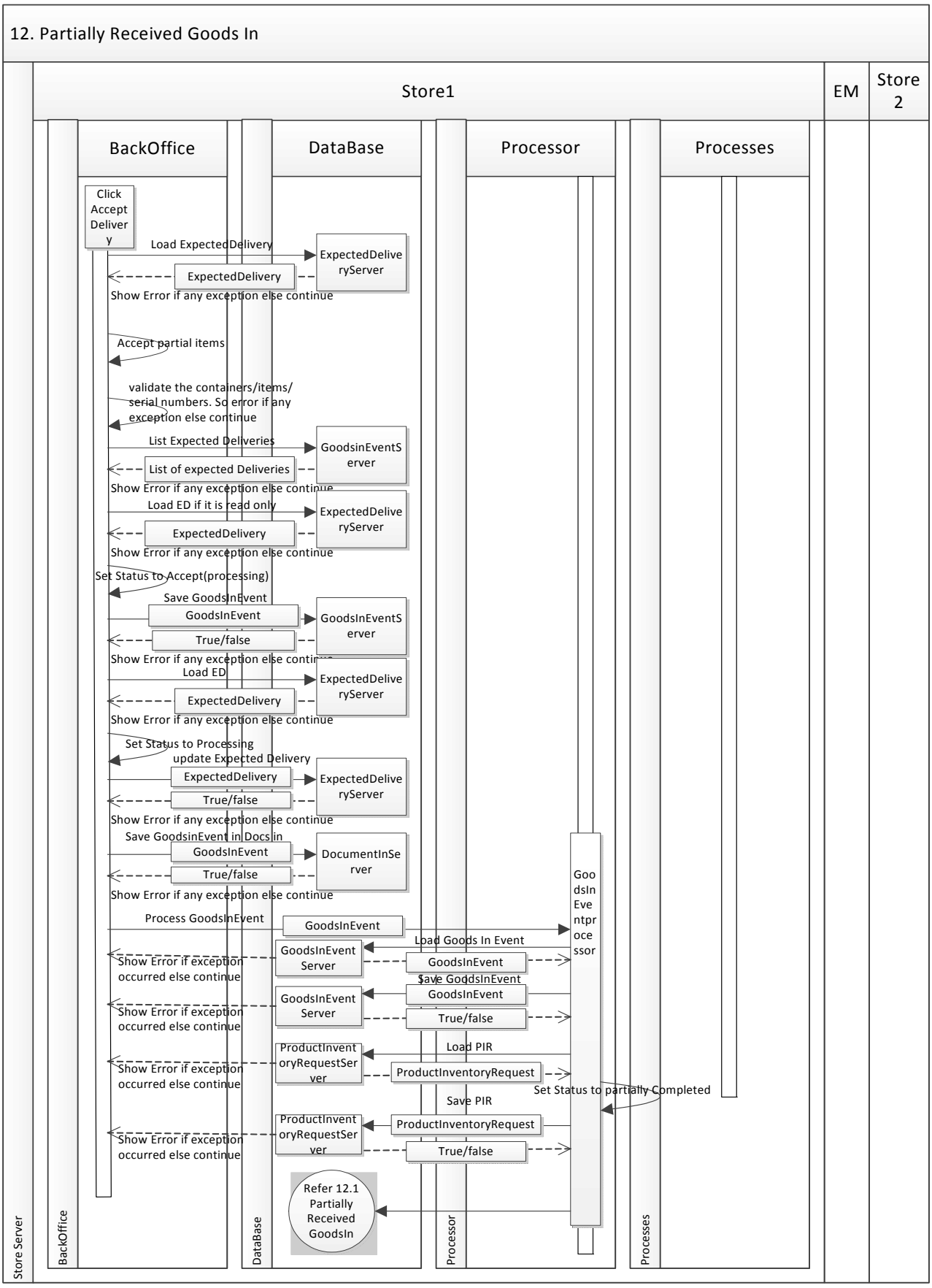
8.18 11.3 Accept Expected Delivery or Goods In



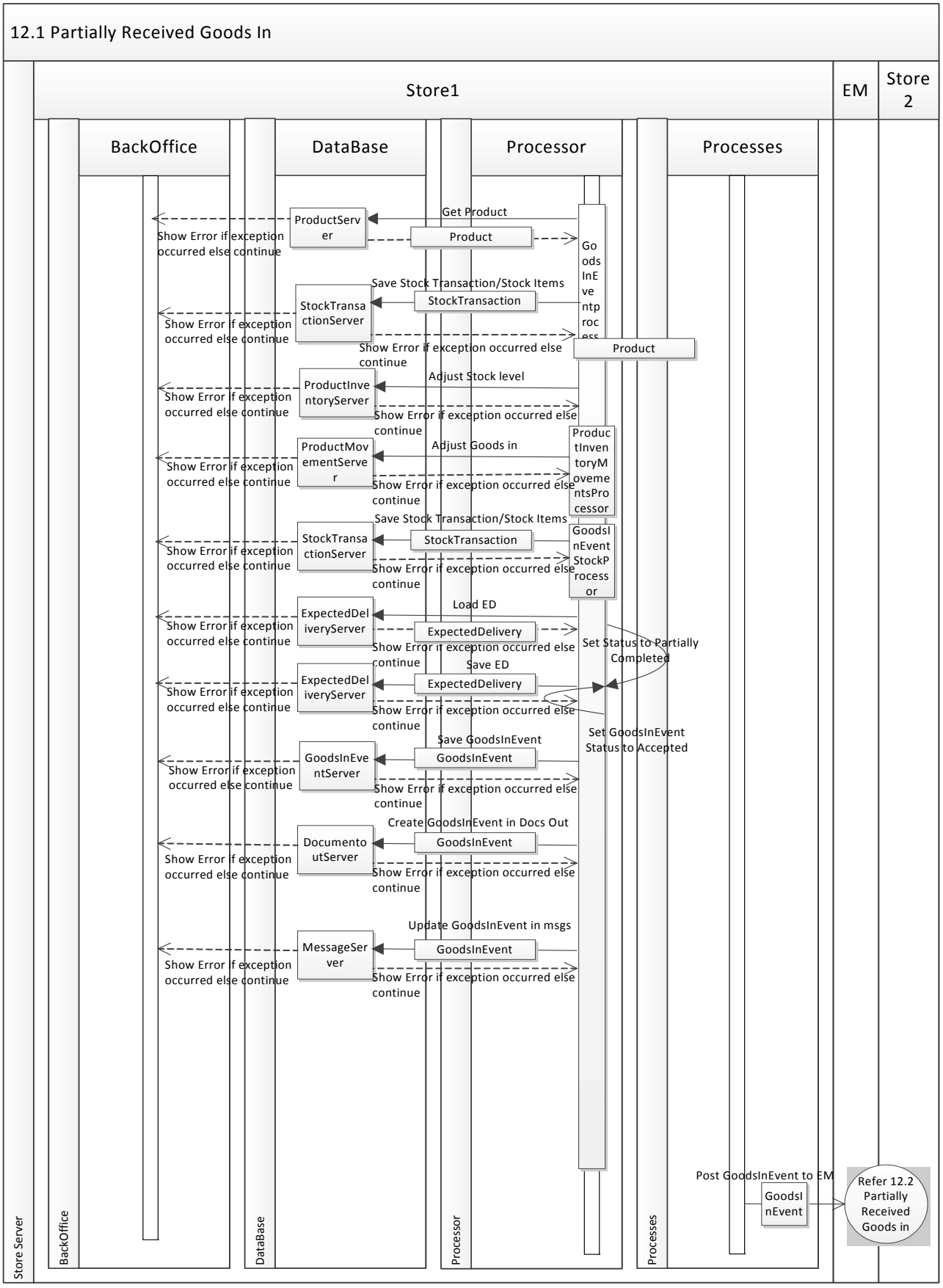
8.19 11.4 Accept Expected Delivery or Goods In



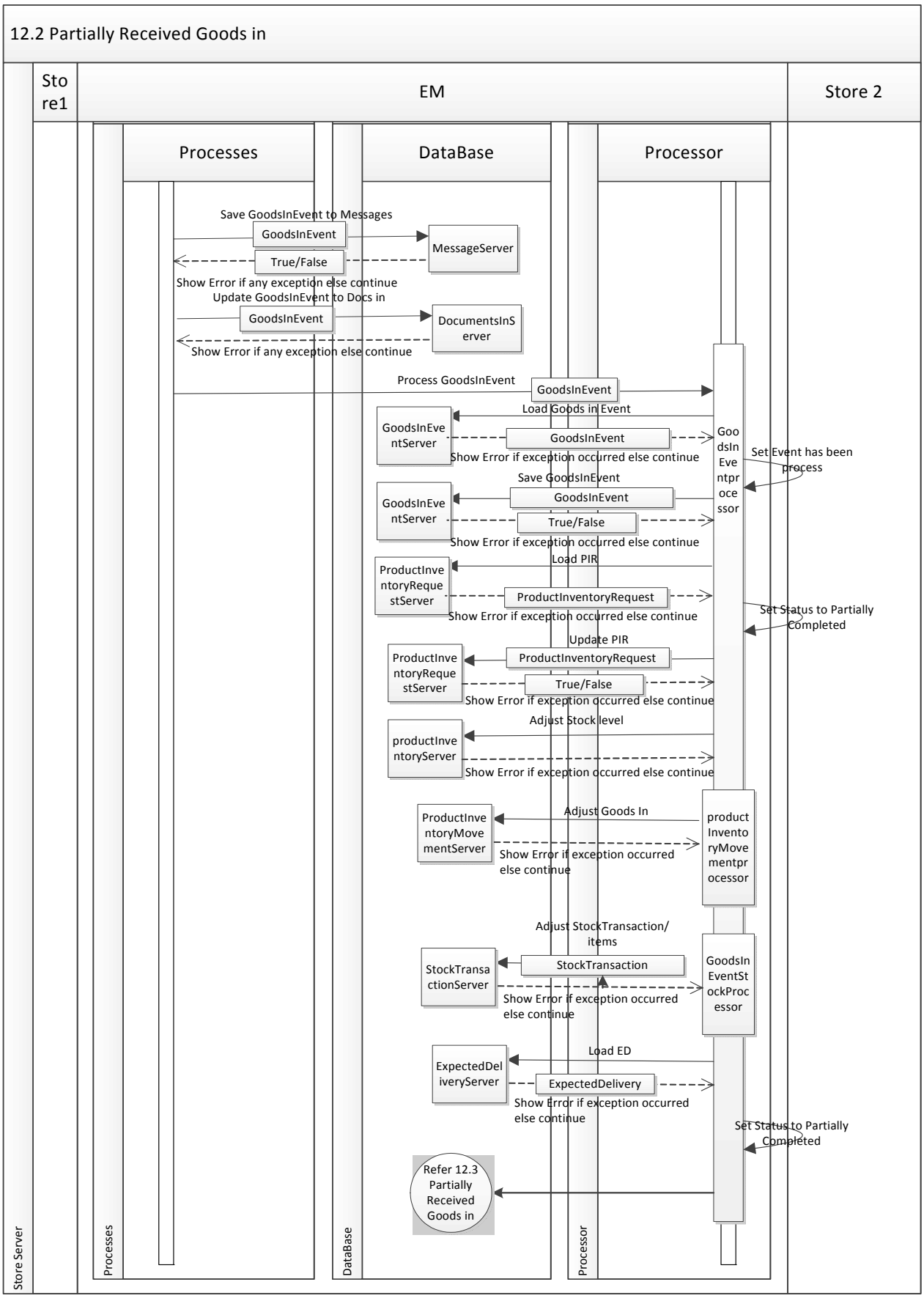
8.20 12 Partially Received Goods In



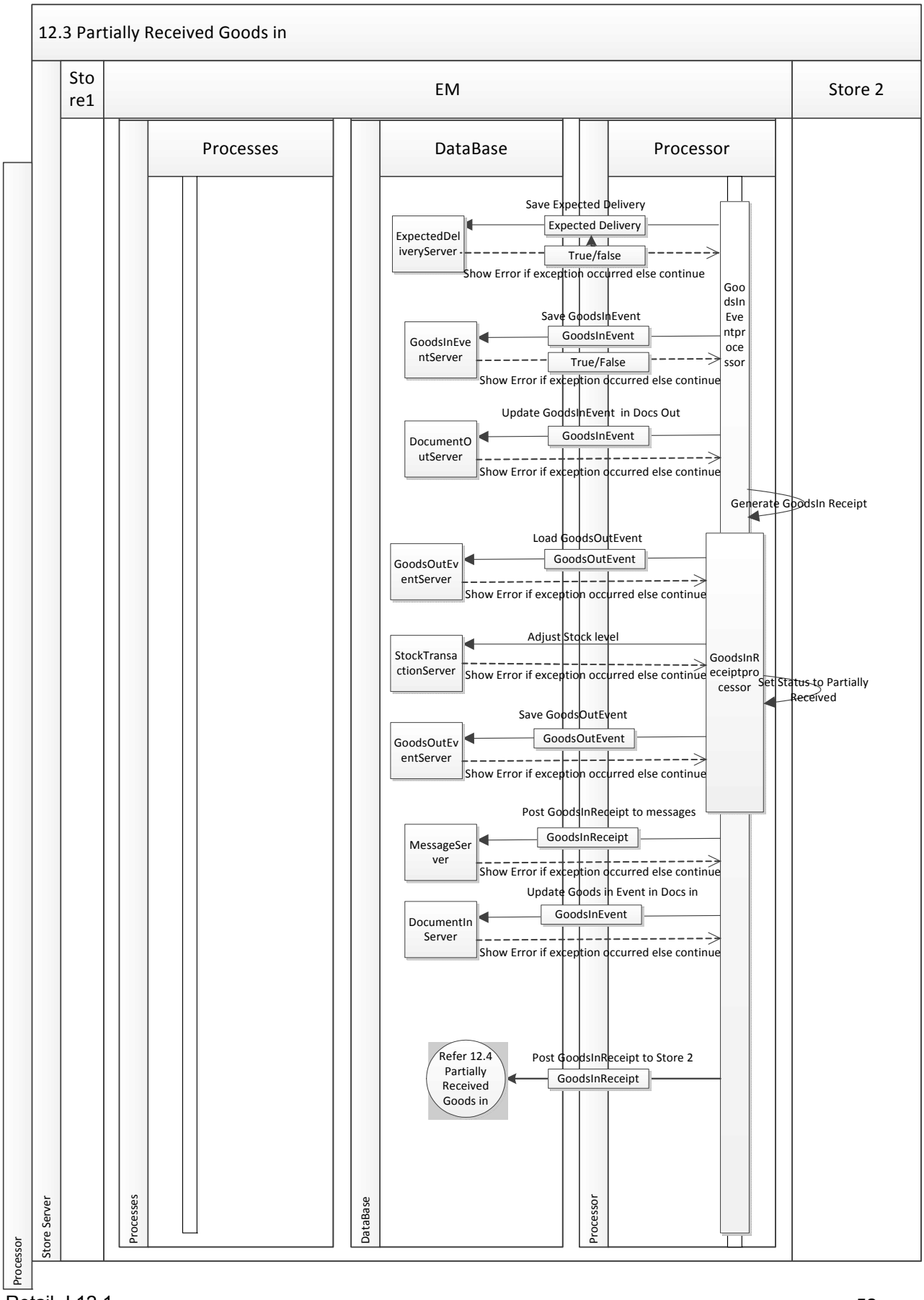
8.21 12.1 Partially Received Goods In



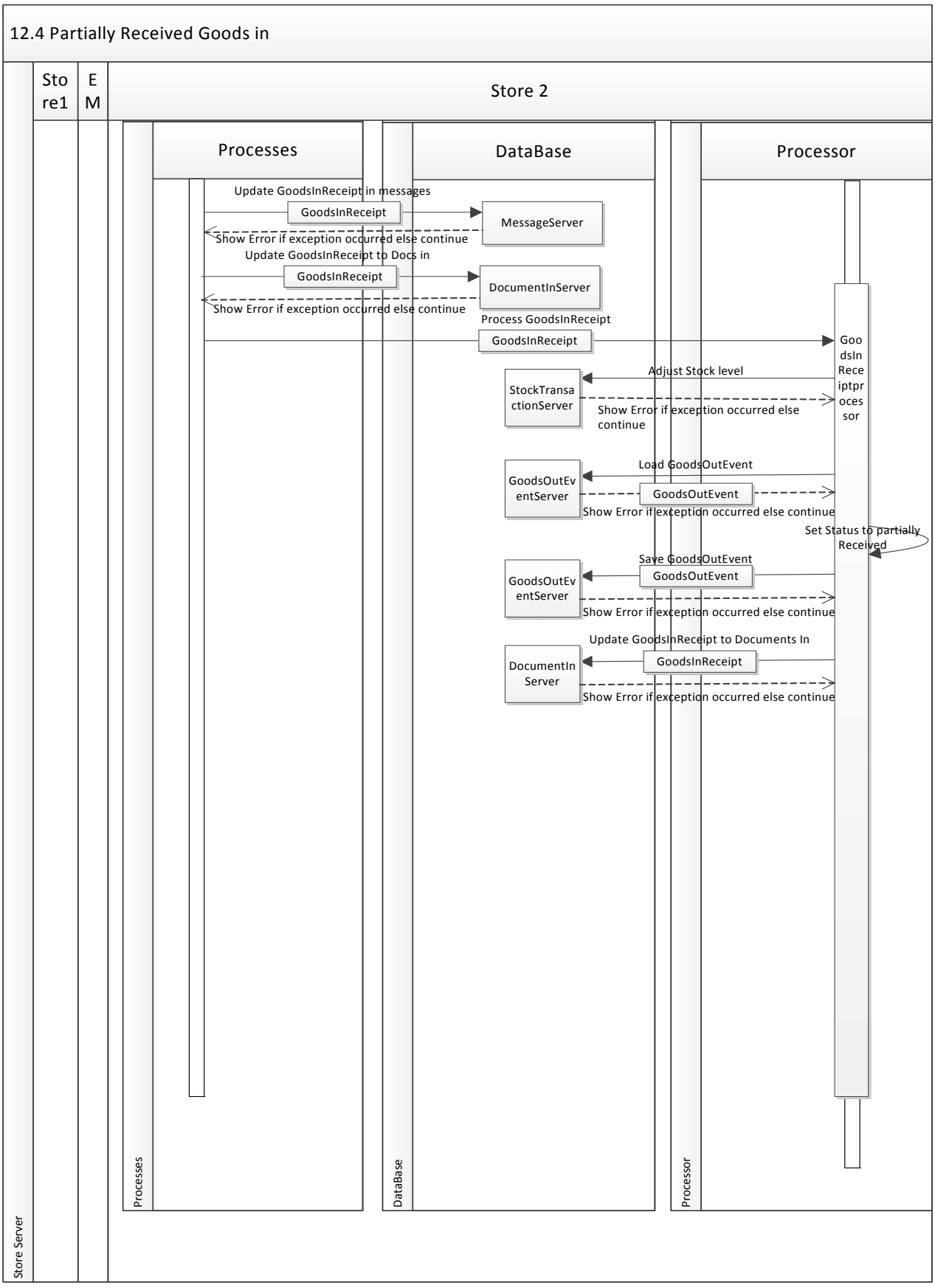
8.22 12.2 Partially Received Goods In



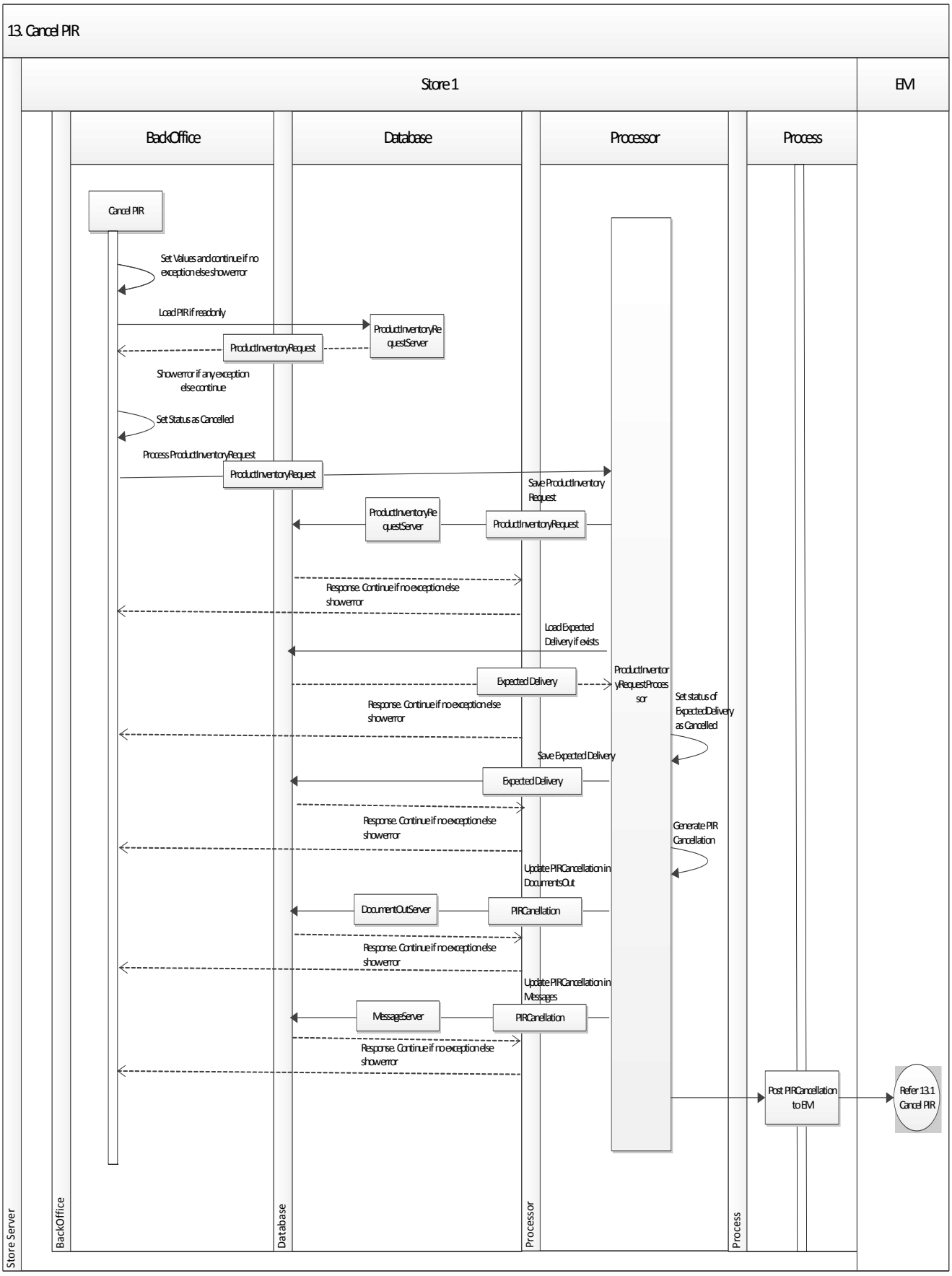
8.23 12.3 Partially Received Goods In



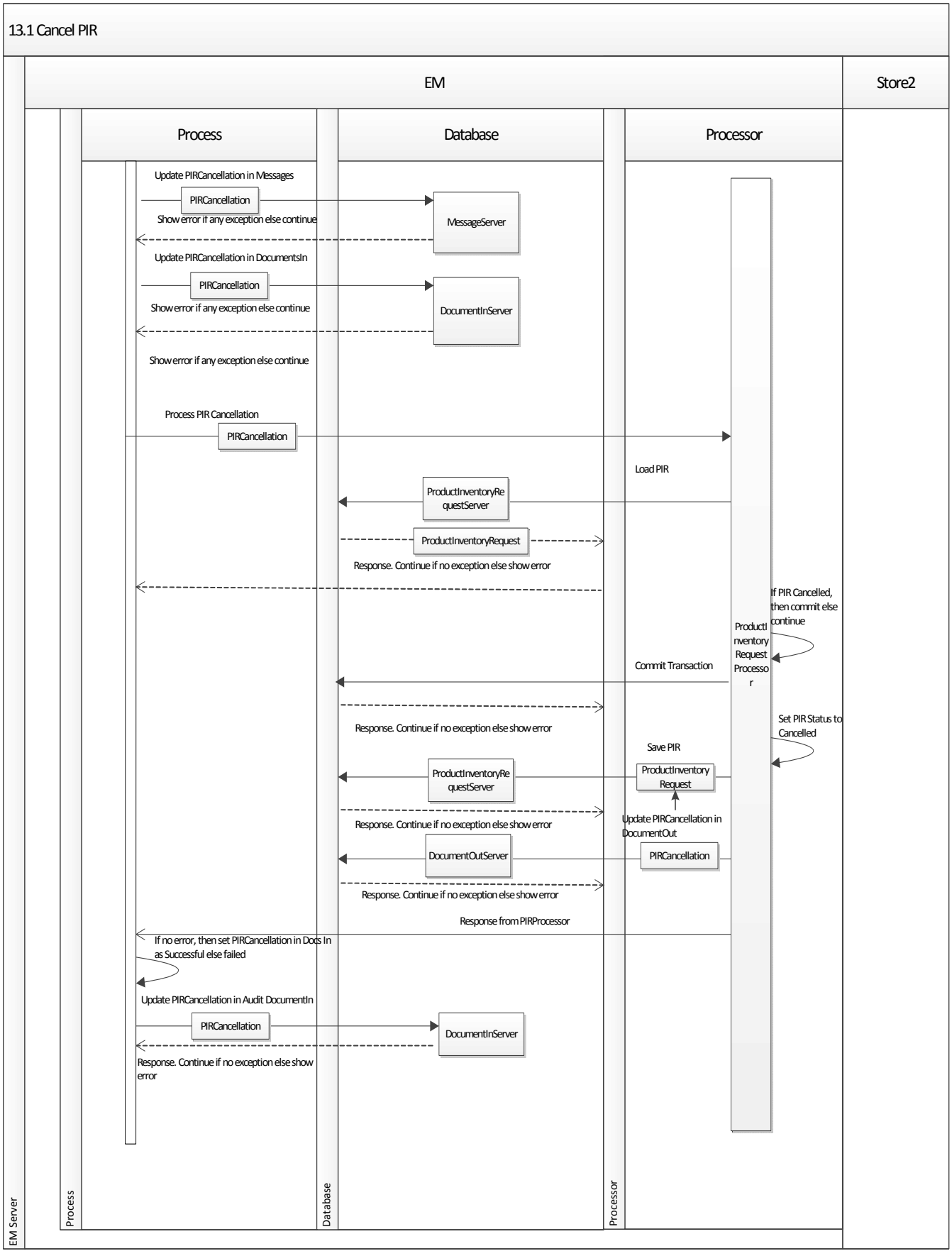
8.24 12.4 Partially Received Goods In



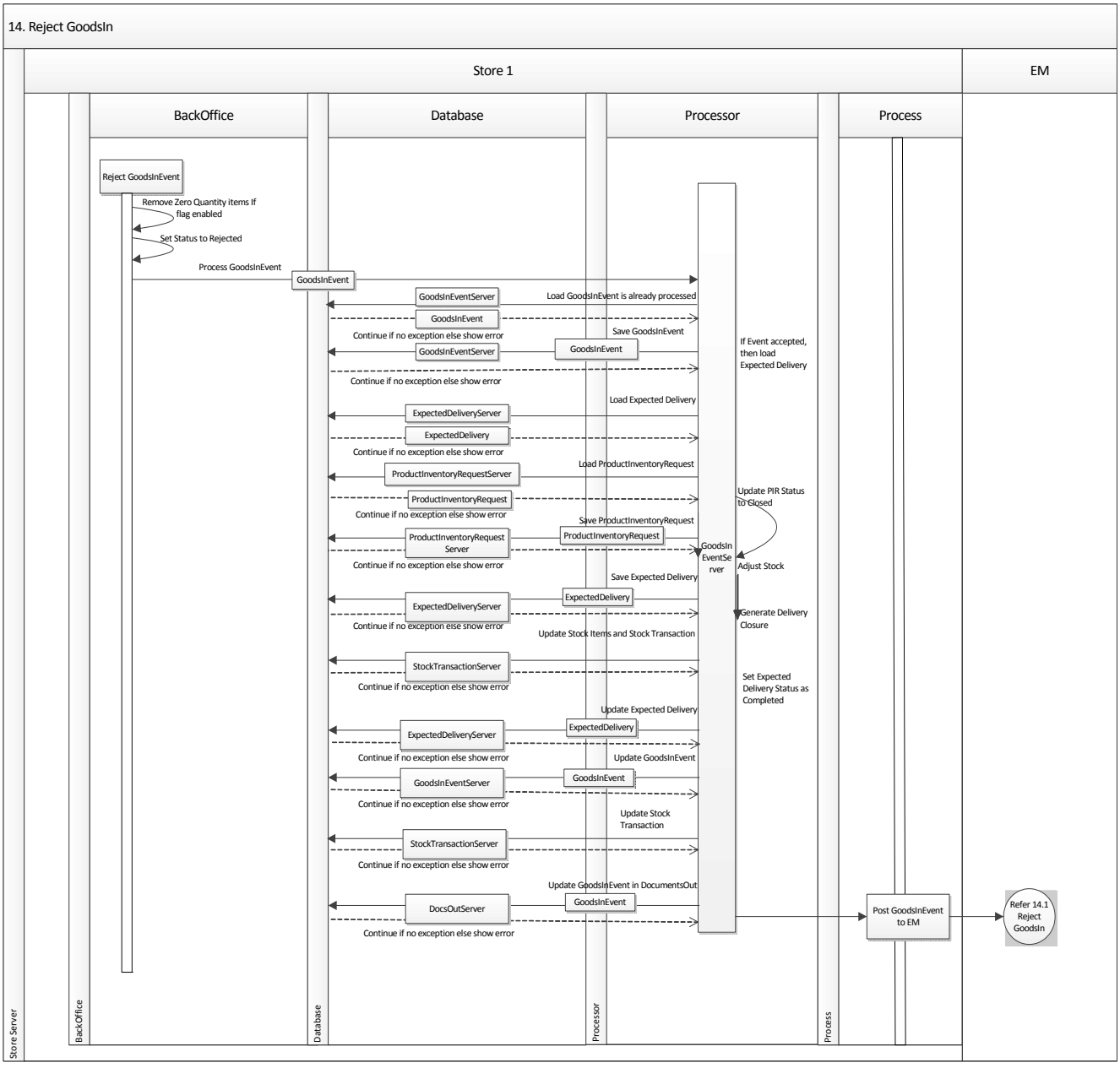
8.25 13 Cancel PIR



8.26 13.1 Cancel PIR



8.27 14 Reject Goods In



8.28 14.1 Reject Goods In