

# PRECISION Web UI Release Notes

**October 2016**

These release notes include information about the latest PRECISION Web UI fixes and changes.

These changes may affect the way that you implement and use PRECISION. Review this document before proceeding with any changes to your installation.

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## Overview

**Current PRECISION/QAD TMS Version:** 16.1

**Current PRECISION Web UI Version:** 5.2

**Release Date:** October 2016

### Related Documentation

User and administration guides for this release will be available later. Existing user and administration guides are available in the QAD Document Library:

<http://www.qad.com/documentlibrary>

## Web UI 5.2

The current Web UI version is 5.2. It contains a number of enhancements.

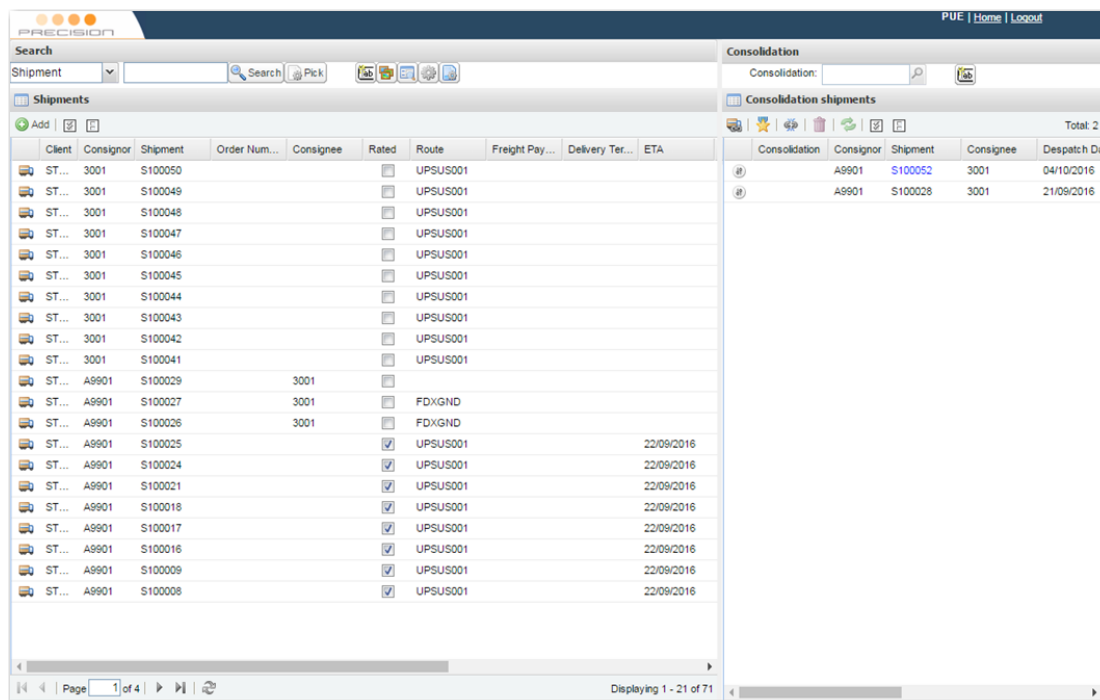
**Note** For detailed information on these new features, see *PRECISION Web UI 5.2 – Net Change Guide*, which is included with the PRECISION Web UI v5.2 release.

### Base

#### Consolidations

New consolidation-building functionality in the Web UI supports the setup of multiple consolidation options, which you can access through a stand-alone page, as workflow tasks, and using workflow toolbar options.

**Fig. 1**  
Shipment Consolidation



Client	Consignor	Shipment	Order Num...	Consignee	Rated	Route	Freight Pay...	Delivery Ter...	ETA
ST...	3001	S100050			<input type="checkbox"/>	UPSUS001			
ST...	3001	S100049			<input type="checkbox"/>	UPSUS001			
ST...	3001	S100048			<input type="checkbox"/>	UPSUS001			
ST...	3001	S100047			<input type="checkbox"/>	UPSUS001			
ST...	3001	S100046			<input type="checkbox"/>	UPSUS001			
ST...	3001	S100045			<input type="checkbox"/>	UPSUS001			
ST...	3001	S100044			<input type="checkbox"/>	UPSUS001			
ST...	3001	S100043			<input type="checkbox"/>	UPSUS001			
ST...	3001	S100042			<input type="checkbox"/>	UPSUS001			
ST...	3001	S100041			<input type="checkbox"/>	UPSUS001			
ST...	A9901	S100029		3001	<input type="checkbox"/>				
ST...	A9901	S100027		3001	<input type="checkbox"/>	FDXGND			
ST...	A9901	S100026		3001	<input type="checkbox"/>	FDXGND			
ST...	A9901	S100025			<input checked="" type="checkbox"/>	UPSUS001			22/09/2016
ST...	A9901	S100024			<input checked="" type="checkbox"/>	UPSUS001			22/09/2016
ST...	A9901	S100021			<input checked="" type="checkbox"/>	UPSUS001			22/09/2016
ST...	A9901	S100018			<input checked="" type="checkbox"/>	UPSUS001			22/09/2016
ST...	A9901	S100017			<input checked="" type="checkbox"/>	UPSUS001			22/09/2016
ST...	A9901	S100016			<input checked="" type="checkbox"/>	UPSUS001			22/09/2016
ST...	A9901	S100009			<input checked="" type="checkbox"/>	UPSUS001			22/09/2016
ST...	A9901	S100008			<input checked="" type="checkbox"/>	UPSUS001			22/09/2016

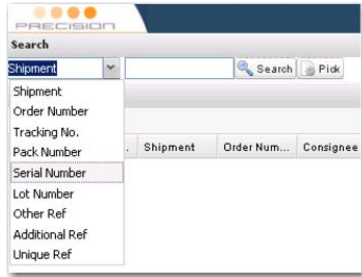
  

Consolidation	Consignor	Shipment	Consignee	Dispatch Date
#	A9901	S100052	3001	04/10/2016
@	A9901	S100028	3001	21/09/2016

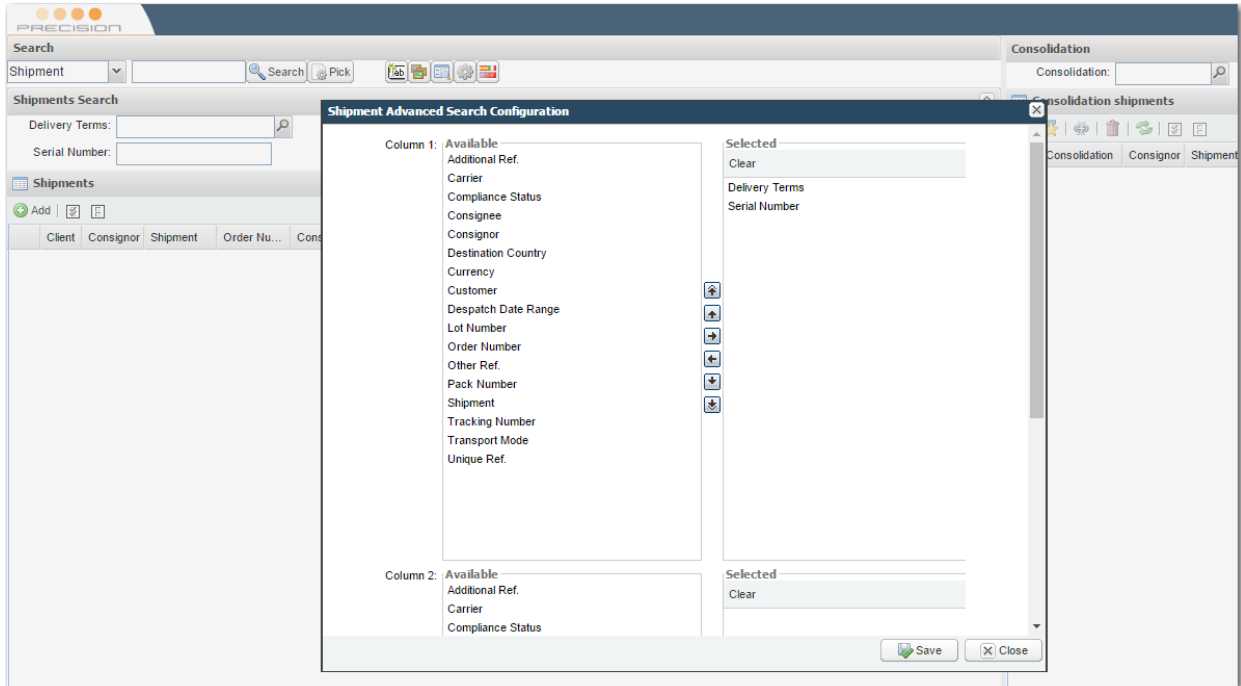
This functionality includes the ability to:

- Include different types of transactions in a single consolidation.
- Configure the data that is copied to a consolidation.
- Use an auto-packing option when appending a transaction to a consolidation.
- Configure transaction search criteria and advanced search criteria in the Shipment Consolidation page.

**Fig. 2**  
Shipment Consolidation Search Criteria



**Fig. 3**  
Advanced Search Criteria for Shipment Consolidations



- Configure auto-filtering and mandatory and recommended consolidation-building restriction criteria. With filtering, only transactions that match characteristics of the selected consolidation are displayed for consolidating.

If you try to add a shipment to a consolidation and that shipment does not meet the mandatory consolidation-building conditions, then red failure information displays in the conflict listing for the consolidation, as shown in Figure 4.

Similarly, when you try to add a shipment to a consolidation and that shipment does not meet the recommended consolidation-building conditions, blue conflict warnings display in the conflict listing for the consolidation, as shown in Figure 4.

**Fig. 4**  
Consolidation Conflict Listing

Shipment	Shipping Data	Shipment	Consolidation	Conflict Ty...	Conflict Note
6253837	Despatch Date	30/06/2016	05/10/2016	●	Despatch date conflict - Expected ...
6254837	Ultimate consignee		QATSCNSE13B Fa. Edgar Empfae... 0123-4567890123... 0123-4567890123... Empfaengerort 66666	●	Ultimate consignee conflict
6254837	Customer	Business World 2391 L STREET SAN JOSE, US, C... CA US 95106	Business World 2391 L STREET Castlewood Ave, ... SAN JOSE, US, C... CA US 95106	●	Customer conflict
6254837	Ship Method		BLUAPEX BlueDart Air/Apex ...	●	Ship Method (Route) conflict
6254837	Payment Method	1	8	●	Payment method conflict
6254837	Delivery Terms	DES DEST	CPT Carriage Paid To	●	Delivery terms conflict
6254837	Already Consolidated	Yes		●	The shipment (6254837) is already...
6254837	Despatch Date	27/04/2016	05/10/2016	●	Despatch date conflict - Expected ...
6253837	Despatch Date	30/06/2016	05/10/2016	⚠	Despatch date conflict - Expected ...
6254837	Deliver to		FMAAS Frans Maas b.v. BRUSSELS	⚠	Deliver-to conflict
6254837	Despatch Date	27/04/2016	05/10/2016	⚠	Despatch date conflict - Expected ...
6254837	ETA Date Range	27/04/2016	08/04/2016	⚠	ETA date range conflict - Expe...

- Store bar code information in a bar code scanner so that you can process this information later.

**Fig. 5**  
Batch Barcode Scan

Barcode Scan	Status	Message	Description
6253836			
6254839			
6254837			

- Access new default consolidation options from the GO menu:
  - BUILDA—Shipment Consolidation, which allows you to build consolidations (X) from shipments (S)
  - BUILDB—Order Consolidation, which allows you to build shipments (S) from orders (O)
  - BUILDA—Zone Skip Consolidation

### Feature Configurator

Four new configuration screens, accessible through GO options, allow you to configure system values for particular functionality.

**Important** The screens allow you to save system values at a global level. To set system values at a user or client level, use option Y3.

**Table 1**  
Configuration Screens

QuickPath Option	Functionality
CFGBA	Configure Shipment Consolidation
CFGBB	Configure Order Consolidation
CFGBZ	Configure Zone Skip Consolidation
CFGML	Configure Mailing Lists

**Fig. 6**  
Shipment Consolidation Configurator

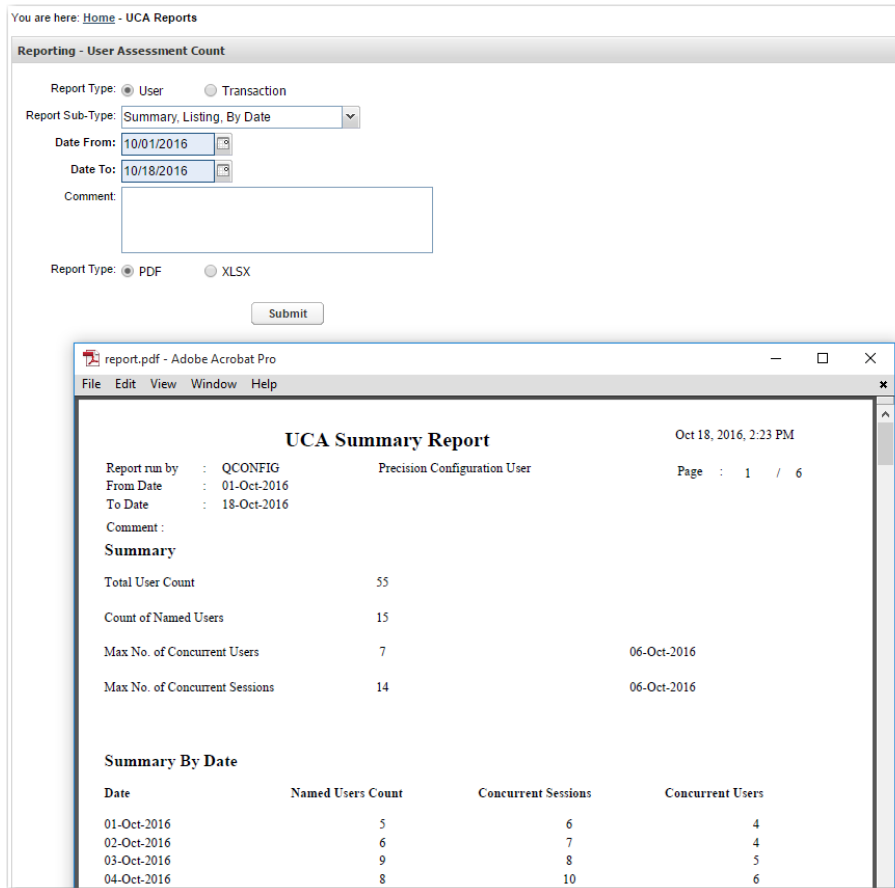
Each of these configuration screens is based on metadata in an XML file, which details the system values for the particular functional area. The XML file also contains lookup and help details for the screen, and determines the appearance of the fields based on the type of data that the field contains. The XML metadata is located in the `conf` folder under the PRECISION Web UI root folder.

## UCA Report

A new UCA (User Count Assessment) option allows you to produce user and transaction reports:

- The user report provides the named user, concurrent session, and concurrent user count for each day in the date range, along with total values for the report period. It also includes a list of all users who logged in to the system during the report period, and records the last time that each user logged in to the solution.
- The package exception management report details the number of PEM transactions created on each day of the report period.
- The trade compliance report details the number of compliance transactions created on each day of the report period.

**Fig. 7**  
UCA Option and User Report

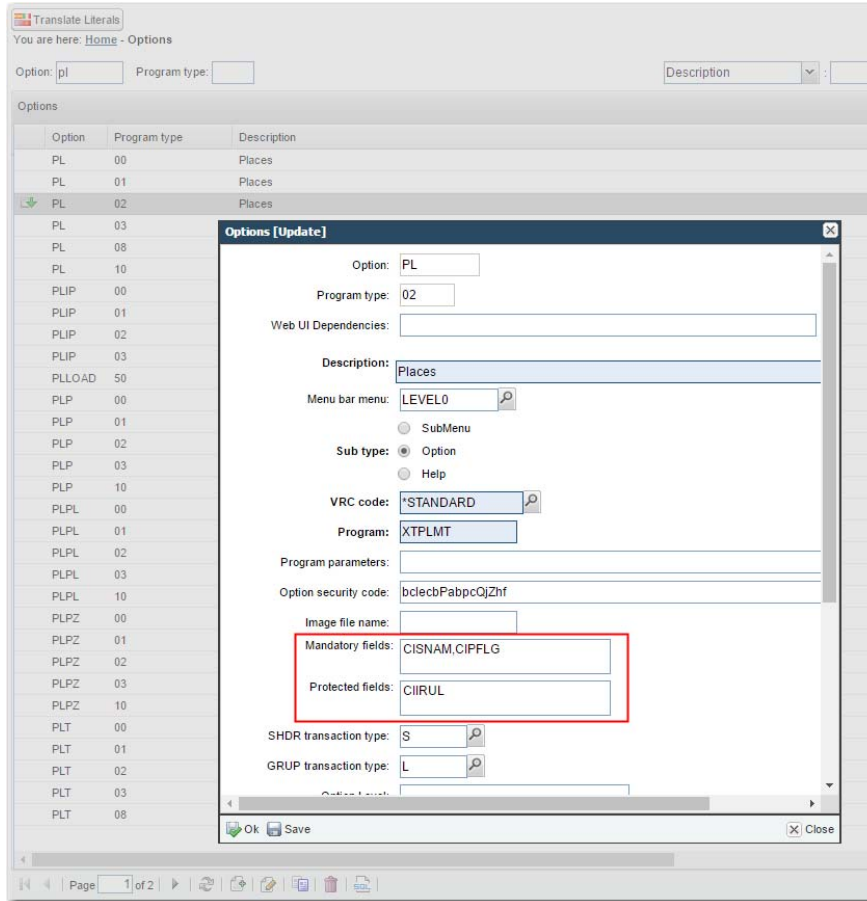


## Master Maintenance

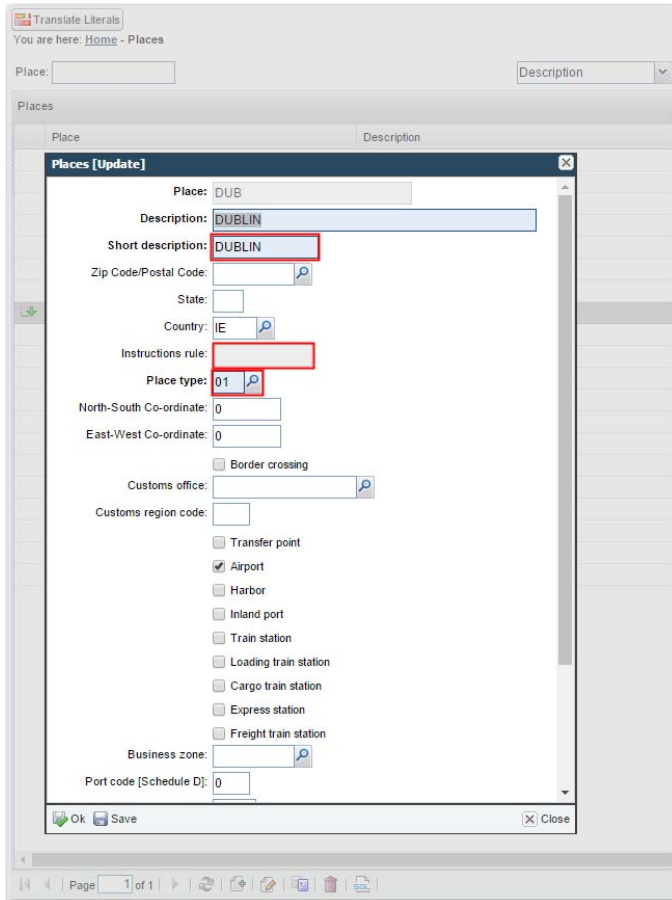
- In the GO option, you can now use records of program type 02 to specify that a maintenance field is required or disabled. Use the Mandatory Fields field to specify a comma-separated list of mandatory fields. Use the Protected Fields field to specify a comma-separated list of disabled fields.

Figure 8 shows a list of mandatory and disabled fields for the PL maintenance screen. In this example, the fields are taken from the Place—XMCITY01—table fields listed in option TB. The fields in Figure 9 reflect this configuration.

**Fig. 8**  
Configuring the PL Maintenance Fields in the GO Option

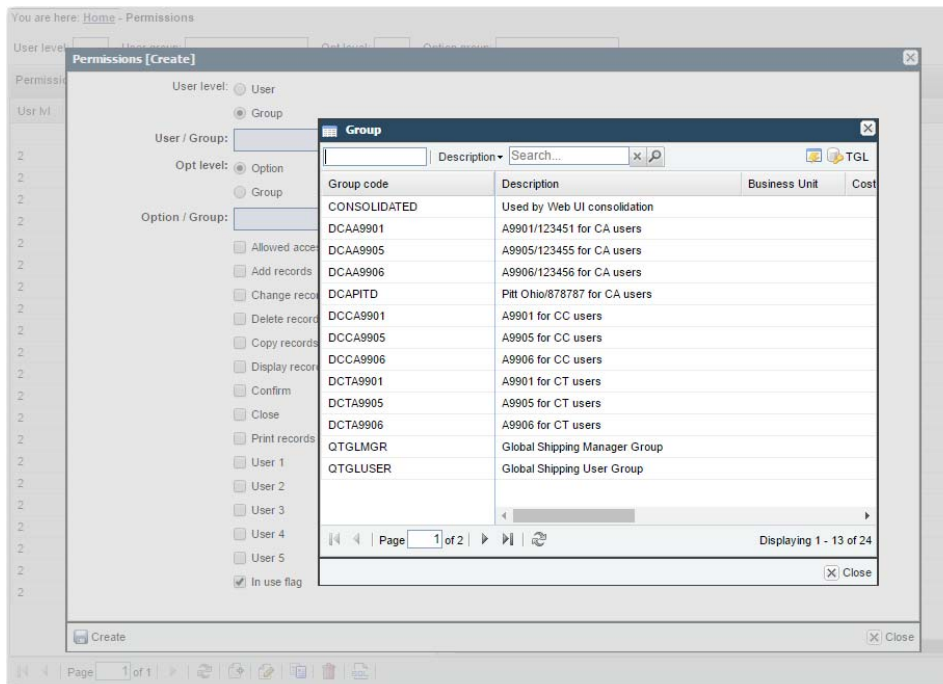


**Fig. 9**  
PL Maintenance with Mandatory and Disabled Fields



- You can now access the ZP option in the Web UI to maintain permissions.

**Fig. 10**  
ZP Option



- The following maintenance options have been reviewed and issues with lookups and with deleting, adding, updating, and validating content have been corrected: DO, DO02, DO03, DO04, DODD, DODH, DODL, DODN, DODP, DODQ, DODR, DODS, DODZ, DOUD, Z9, and ZP.
- The case data for the following maintenance options has been reviewed and issues with lookups and with deleting, adding, updating, and validating content have been corrected AGV, CLCD, CTGM, DODL, GOOH, NR, PR, RTRL, RUDL, RUR8, SHSS, and Z9.
- The following list panels now show description information:
  - Agreements - Carriers
  - Agreements - Equipment Types
  - Agreements - Freight Classes
  - Agreements - Freight Classes X Product Groups
  - Agreements - Legs
  - Documents - Line Filter Information
  - Documents - Charge Summary Group Charges
  - Groups - Group Transaction Types
  - Options - Modules
  - Services - Service/Rating Association

### Workflow

- In the FLOW option, you can now configure the workflow transaction grid to dynamically display additional transaction columns based on the FLOW DYNAMIC GRID FIELDS system value.

**Table 2**  
FLOW DYNAMIC GRID FIELDS System Value

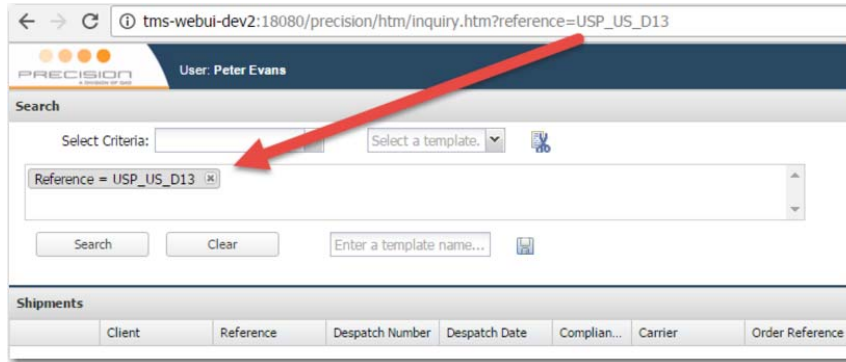
Category	Key	Description
ITRAX	FLOW DYNAMIC GRID FIELDS	A comma-separated list of additional columns that display in the Workflow transaction grid.  Example: userDefinedField3,userDefinedField4,taxCode,flag4,bankDate

- In the FLOW option, you can now configure the workflow search area to dynamically display additional transaction fields for inclusion in the search criteria.
- The workflow maintenance screen, accessible through option WF, has been updated to fix issues when creating pre- or post requisite records.

### Inquiry (REPORT option)

- You can now open the Inquiry screen with a particular shipment reference specified in the search criteria by including the reference in the URL for Inquiry. You can then click Search to conduct a search based on this reference number.

**Fig. 11**  
Inquiry Screen with Reference Search Criterion

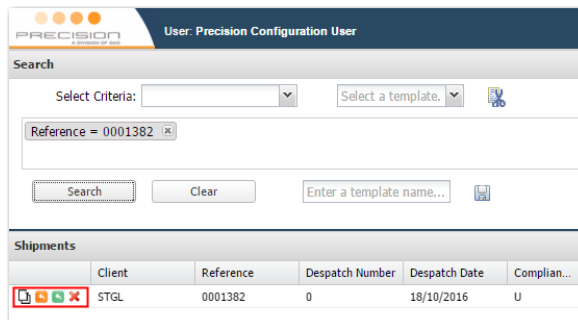


- You can use this screen to copy, recall, and return shipments.

**Table 3**  
Actions Available in the REPORT Option

Action	Description
Copy	Copy the details of a shipment into Desktop Shipping to create a new shipment.
Recall	Load the details of a shipment into Desktop Shipping so the shipment can be completed and processed.
Return	Copy the shipment details into Desktop Shipping but reverse the direction so the new shipment represents a return shipment.

**Fig. 12**  
Inquiry Screen with Copy, Recall, Return, and Cancel Options



- A new Carrier Tracking link allows you to view PEM information about the selected shipment.
- Two new tabs in the line details section—Child Transactions and Consolidations—provide information about the transactions that are consolidated in the selected transaction and the consolidations that the selected transaction are part of.
- The last search that you performed in this screen displays the next time that you visit the screen.
- You can now limit the number of rows that you can export from the search results using the REPORT: MAX EXPORT SIZE system value.

**Table 4**  
REPORT: MAX EXPORT SIZE System Value

Category	Key	Description
ITRAX	REPORT: MAX EXPORT SIZE	Specify the maximum number of rows that it is possible to export to Excel from the Inquiry search results grid. Example: 100000

- You can now configure the shipments grid to dynamically show additional transaction columns based on the INQ DYNAMIC GRID FIELDS system value.

**Table 5**  
INQ DYNAMIC GRID FIELDS System Value

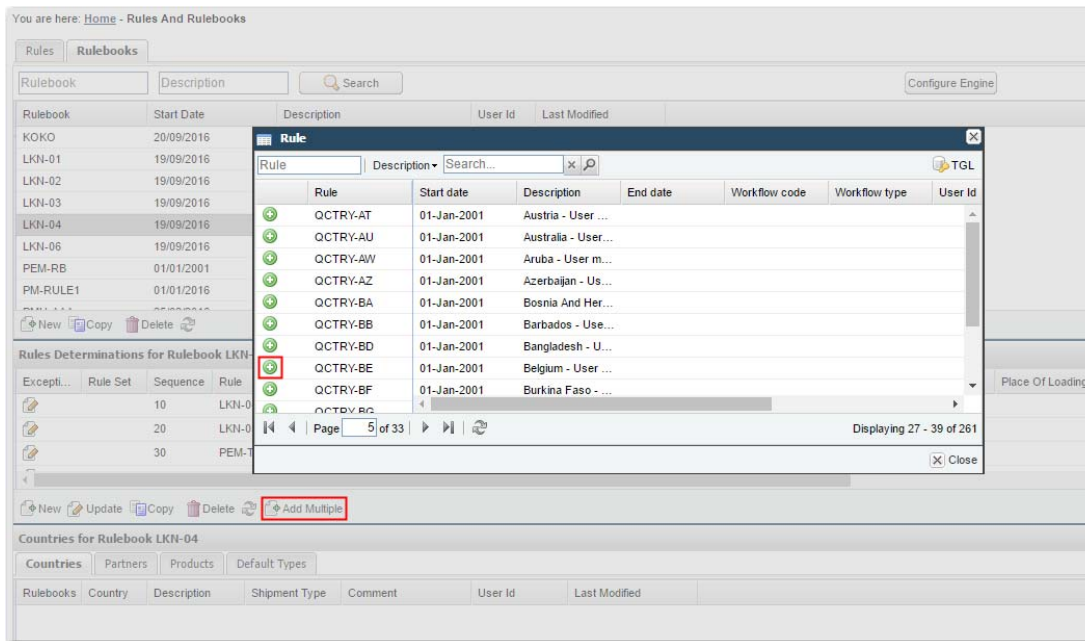
Category	Key	Description
ITRAX	INQ DYNAMIC GRID FIELDS	A comma-separated list of additional columns that display in the Inquiry results grid.  Example: userDefinedField3,userDefinedField4,taxCode,...,flag4,bankDate  Possible values: See Table 2 on page 10, which describes the FLOW DYNAMIC GRID FIELDS system value.

- The Inquiry screen also allows filtering over the dynamic columns that are added to the grid.

### Rules and Rulebooks Maintenance (RULES option)

- In the Rulebooks tab, you can now add multiple rules to a rulebook by clicking the Add Multiple button and selecting from a list of rules that are not in the selected rulebook. Click the plus sign for each rule that you want to add to the rulebook.

**Fig. 13**  
Rules and Rulebooks, Adding Multiple Rules to a Rulebook



### Procedure Notes

- The Documents workflow task now displays mandatory procedure notes every time that you select the preview document or print document option.
- The Inquiry screen, accessible through the REPORT option, now displays mandatory procedure notes every time that you select the preview document or print document option.

### Applets

You can now use system values to configure the codebase URL location for the Print and Weight Scales applets.

**Table 6**  
System Values for Print Applet and Weight Scales Applet Codebase URL

Category	Key	Description
APPLET	CODEBASE_JZEBRA	Specify the codebase URL for the jZebra applet Example: https://.../jzebra/v1_4_8
APPLET	CODEBASE_JWEIGHT	Specify the codebase URL for the jweight applet Example: https://...precision/applet
APPLET	CODEBASE_JPRINT	Specify the codebase URL for the jprint applet Example: https://...precision/applet

- An issue running the jZebra applet, whereby the browser reported a *Can't execute code from a freed script* JavaScript error, is resolved.

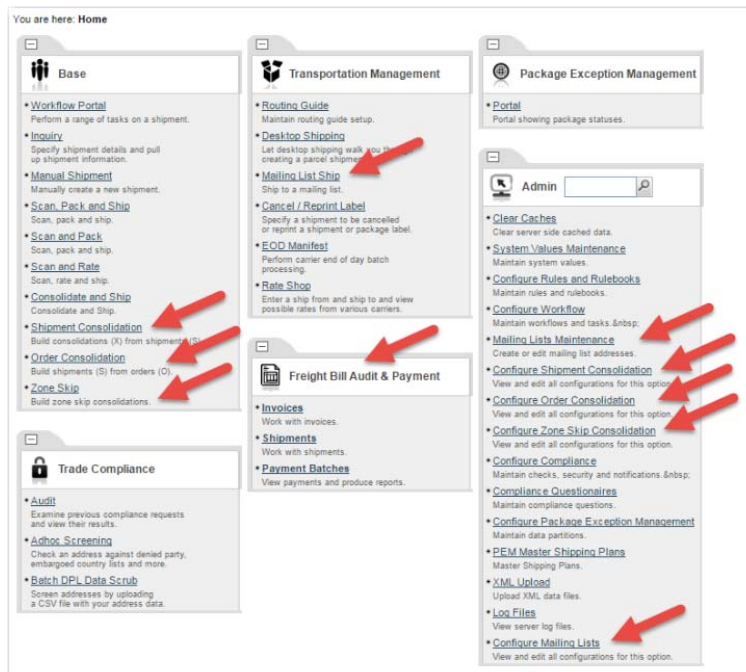
## Authentication

- Web UI 5.2 now supports:
  - NTLM v2.
  - SAML with full SHA-256 hashing in the SAML XML response.
  - SAML single logout (SLO).
- The JAAS logic has changed as a result of the change in version of the Spring framework in use. However, the JAAS configuration used in Web UI 5.1 is compatible with this version of Web UI.
- The LDAP configuration has changed as a result of the change in version of the Spring framework in use. If you use JAAS authentication, then you may need to review your setup as part of moving to Web UI 5.2.

## Main Menu

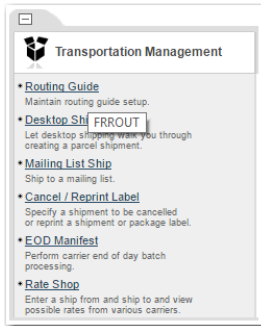
- The default home page contains new options in the main menu, as in Figure 14.

**Fig. 14**  
Home Page Main Menu



- Links on the main menu now have tool tips that detail the option code to launch the page.

**Fig. 15**  
Menu Option Tool Tip



## Transportation Management

### Mailing Lists Edit

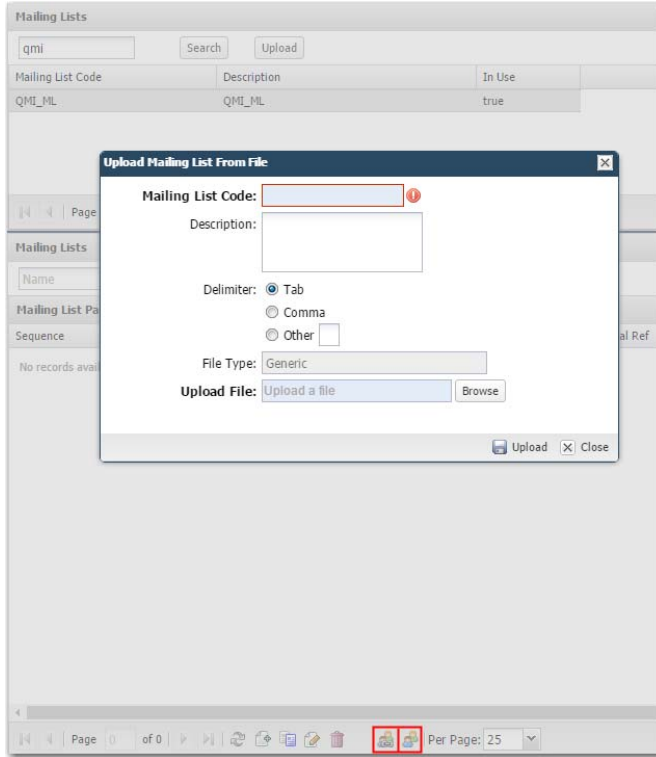
A new option, MLEDIT, offers an alternative way to define mailing lists. You can create a mailing list header and then associate partners or addresses with it.

The option allows you to:

- Create a mailing list by uploading a spreadsheet file containing a list of names and addresses.
- Link a partner to a mailing list. There are two options:
  - Copy the partner name and address with no history link to the partner record.
  - Copy the partner name and address, and copy the partner code onto the mailing list party detail.

In this case, it is not possible to modify the mailing list address. In a future release, it may be possible to refresh such links from the partner information.

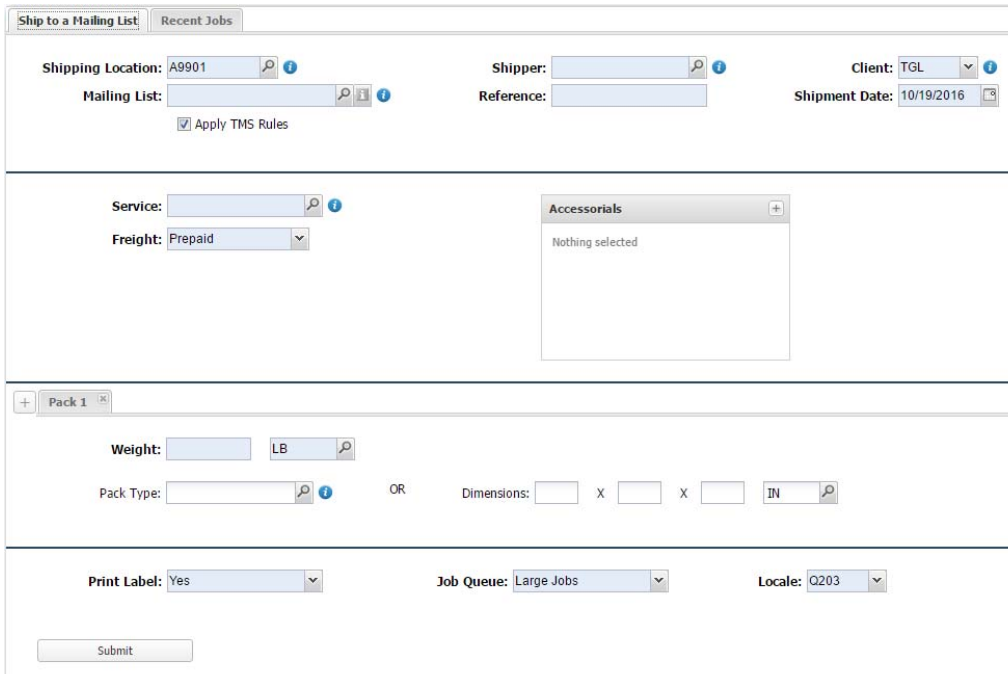
**Fig. 16**  
 Edit Mailing Lists Screen with Upload Mailing List and Copy Options



### Mailing Lists Ship

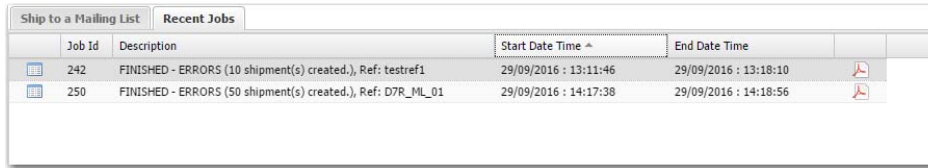
A new option, **MLSHIP**, allows you to ship to a mailing list. It captures basic shipment details that you can use in conjunction with the mailing list to create shipments in **PRECISION**—one for each address on the mailing list.

**Fig. 17**  
 Ship to a Mailing List Screen



Creating and processing shipments is a background process. You can specify the queue that the job is assigned to, so that different types of requests are processed independently of each other. Use the Recent Jobs tab to view the progress of your jobs.

**Fig. 18**  
Recent Jobs Information in the Ship to a Mailing List Screen



Job Id	Description	Start Date Time	End Date Time
242	FINISHED - ERRORS (10 shipment(s) created.), Ref: testref1	29/09/2016 : 13:11:46	29/09/2016 : 13:18:10
250	FINISHED - ERRORS (50 shipment(s) created.), Ref: D7R_ML_01	29/09/2016 : 14:17:38	29/09/2016 : 14:18:56

**Important** This new mailing list functionality is not compatible with previous desktop shipping mailing lists. The desktop shipping mailing list feature is still available.

### Workflow – Manifest Task

You can now assign a chargeable route to a shipment using the additional tab on the manifest task.

### Carrier Logos

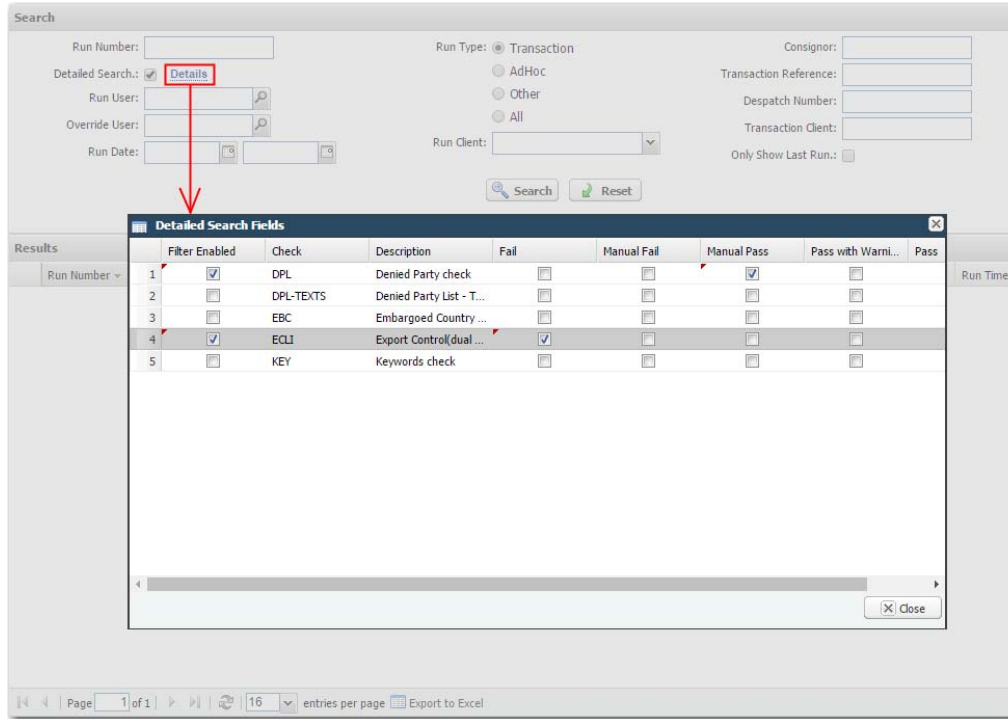
A number of new carrier logos appear on the rate shop pages.

### Trade Compliance

#### Audit/History Search (CKHIST)

- You can now use the history search feature—also known as the audit feature—to search based on the results of individual checks; for example, you can search for manually passed DPL checks or failed ECLI checks.

**Fig. 19**  
Audit/ History Search



Use the SEARCH CHECKS system value to specify the checks that are available for detailed searching.

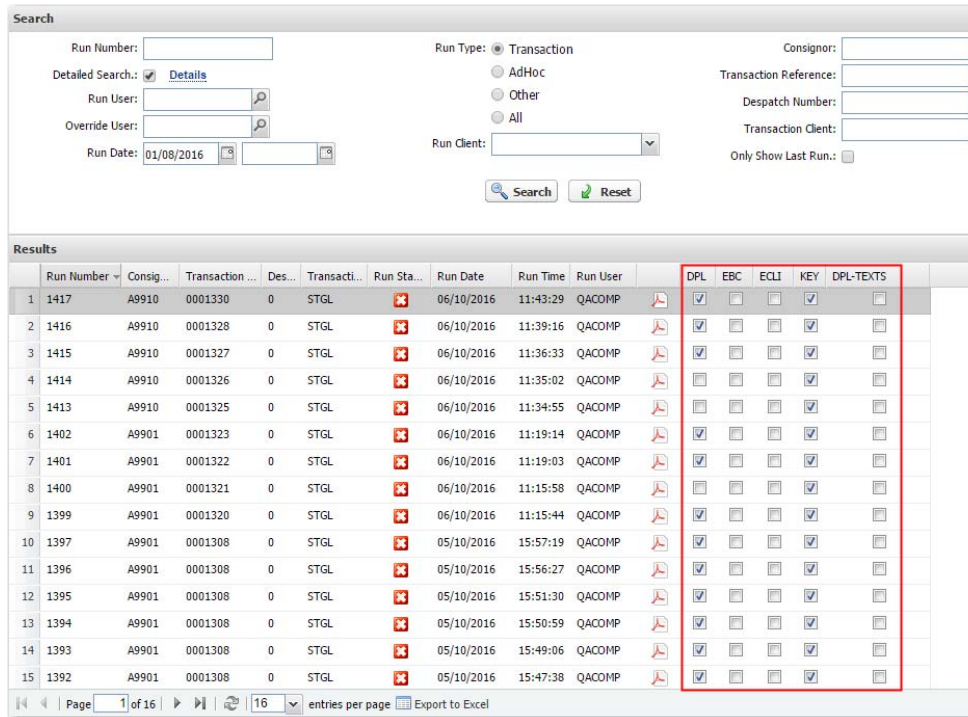
**Table 7**  
SEARCH CHECKS System Value

Category	Key	Description
COMPLIANCE	SEARCH CHECKS	Specify the list of compliance checks that you want to make available for detailed searching in the Compliance History screen. Example: DPL,EBC,ECLI,...

If you select the Detail field to conduct a detailed history search, then the Run Status search field is removed.

The results grid includes information about the compliance check that matched the detailed search criteria.

**Fig. 20**  
Compliance History Search Grid Columns



**Note** These grid columns are currently only available for Oracle and MS SQL Server database platforms. OpenEdge implementations do not show these additional columns.

- The history search queries have been adjusted to correct Only Show Last Run issues that occur when the queries are run on an OpenEdge database. The queries have also been reworked to run as a single query.
- You can now export compliance history search results to an Excel spreadsheet using the Export to Excel link below the search results grid.
- The most recently used search criteria now populates the screen on your next visit. The reset button allows you to reset the search criteria to the default criteria.

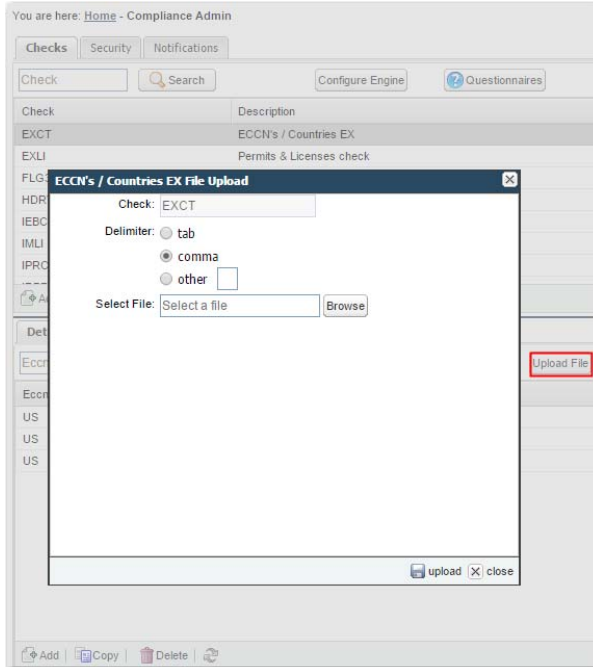
### Configure Compliance (CK)

- Instead of manually inputting information using the CK option, you can now import data—in CSV or TXT format—for the checks listed in Table 8. Use the Delimiter field in Figure 21 to specify the value separator in the file that you are uploading.

**Table 8**  
Compliance Checks that Support Data Upload from a File

Check	Description
PRCT	Product to Countries of Destination
PRNR	Product to Partners
RPRC	Permitted Products to Countries
CITC	Commodities to Countries of Destination
CITP	Commodities to Partners
EXCT	ECCN to Countries of Destination

**Fig. 21**  
File Upload for a Compliance Check



- You can now configure the checks listed in Table 9 so that they apply to groups of countries. This allows you to set up restrictions for a group of countries or for all countries except a particular country; for example, you can specify a country group that a restriction applies to.

**Table 9**  
Compliance Checks that are Configurable by Country Group

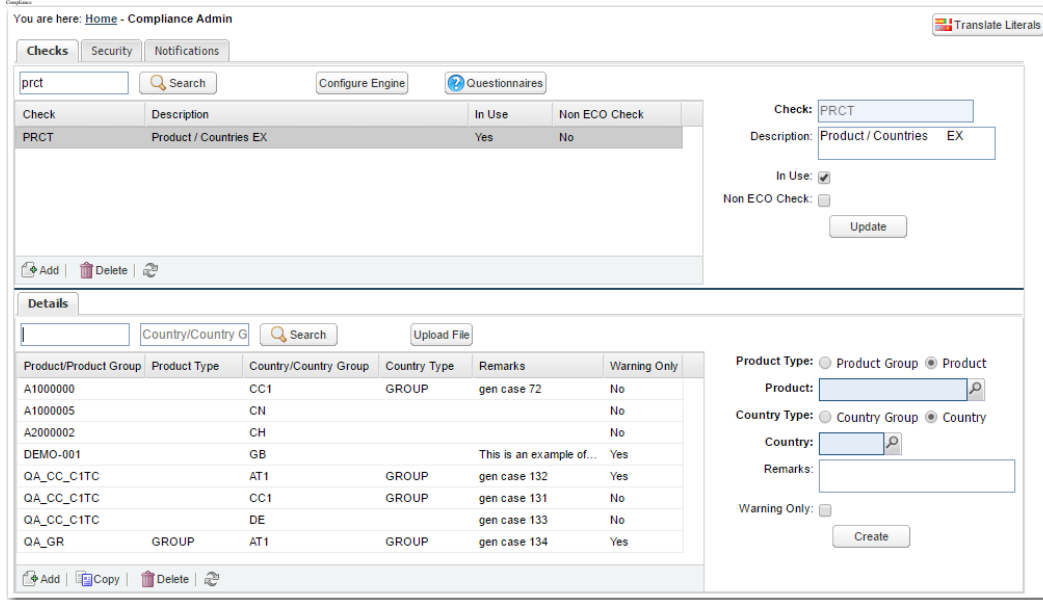
Check	Description
CITC	Commodities to Countries of Destination
EXCT	ECCN to Countries of Destination
PRCT	Product to Countries of Destination
RPRC	Permitted Products to Countries

- You can now configure the checks listed in Table 10 so that they apply to groups of products. This allows you to set up restrictions for a group of countries or for all countries except a particular country; for example, you can specify a country group that a restriction applies to.

**Table 10**  
Compliance Checks that are Configurable by Product Group

Check	Description
EXCT	ECCN to Countries of Destination
PRCT	Product to Countries of Destination
RPRC	Permitted Products to Countries

**Fig. 22**  
PRCT Check Configured for Product and Country Groups



## Results Screen

You can now copy text from the grids in Compliance Results.

## DPL Cache

The DPL cache has been modified to take into account the fact that the data consists of many common words. These words are now handled differently so that the cache memory footprint is reduced in the region of 10%.

## Run Number Generation

By default, the RUN-NUMBER system value stores the last compliance run number.

You can now use a database sequence—TC\_RUNNUMBER\_SEQ—to generate the next run number to use when generating a new compliance result. The sequence can provide a performance improvement in certain high volume environments.

The USE RUN-NUMBER SEQUENCE system value specifies whether a sequence or system value is used to track run numbers.

**Table 11**  
USE RUN-NUMBER SEQUENCE

Category	Key	System Value
COMPLIANCE	USE RUN-NUMBER SEQUENCE	<p>Possible values:</p> <p>Yes – The TC_RUNNUMBER_SEQ database sequence is used to generate the next compliance run number</p> <p>No – The TC_RUNNUMBER_SEQ database sequence is used to generate the next compliance run number. Instead, based on the current default behavior, the RUN-NUMBER system value is incremented to generate the next compliance run number</p>

## Notifications

- A number of issues with compliance notifications are now resolved.  
Previously, when an ECO system value was defined and a manual action on a check was performed, the ECO was always notified even though the final status of the check line, check, or overall compliance status of the transaction was not defined as a status requiring notification. This issue is resolved.
- You can now customize the e-mail subject line using system values.

## Compliance SOA

- Ultimate Consignee is now supported as a valid partner role that can be set in the `ProcessComplianceRequest` XML request. The XSD and WSDL files have been updated.
- You can now specify the state code in the `ProcessComplianceRequest` XML request. The XSD and WSDL files have been updated.

## Package Exception Management

### New Integrations

- PRECISION now supports tracking updates from PostNord. This carrier can now provide EDI (IFTSTA:04A:UN) status messages to PRECISION.
- PRECISION now supports tracking updates from DPD. This carrier can now provide a proprietary XML status message to PRECISION.

### EDI

Version 5.2 includes:

- Improved ability to capture ship-from information from EDI messages received.
- Improved light shipment creation by using receiver or third-party billing account information in addition to shipper account information. This change applies to status updates from UPS.

### Performance

- For the MS SQL Server database platform, the following changes were made to the PEM portal exceptions search and explicit search:
  - Removed index hints.
  - By default, the search query now prevents record locking using the `SEARCH WITH LOCK` system value. By default, the system value is set to No.

**Table 12**  
SEARCH WITH LOCK System Value

Category	Key	Description
PEM	SEARCH WITH LOCK	Possible values: <ul style="list-style-type: none"><li>• Yes – Run the PEM portal query with record locking.</li><li>• No – Run the PEM portal query without record locking.</li></ul> Default value: No

- You can limit explicit searches in the PEM portal to packages with a despatch date that is within the last 3 months. By default, this capability is turned off.

**Table 13**  
SEARCH LAST 3 MONTHS ONLY

Category	Key	Description
PEM	SEARCH LAST 3 MONTHS ONLY	Possible values: <ul style="list-style-type: none"> <li>• Yes – Run the PEM portal explicit search query on packages with a despatch date that is within the past 3 months.</li> <li>• No – Do not restrict the PEM portal explicit search to packages with a despatch date that is within the past 3 months.</li> </ul> Default value: No

## Freight Bill Audit and Payment

Web UI 5.2 introduces a new Freight Bill Audit and Payment (FBAP) module to manage supply chain costs.

### Noteworthy Features

- Shipment cost extraction from TMS and upload to FBAP
- Invoice file upload
- Invoice entry, matching, review, and approval
- Payment approval
- Reporting

### FBAP UI Portal

Web UI 5.2 includes a Freight Bill Audit and Payment user interface, which allows you to view and work with carrier invoices.

**Fig. 23**  
Freight Bill Audit and Payment Portal

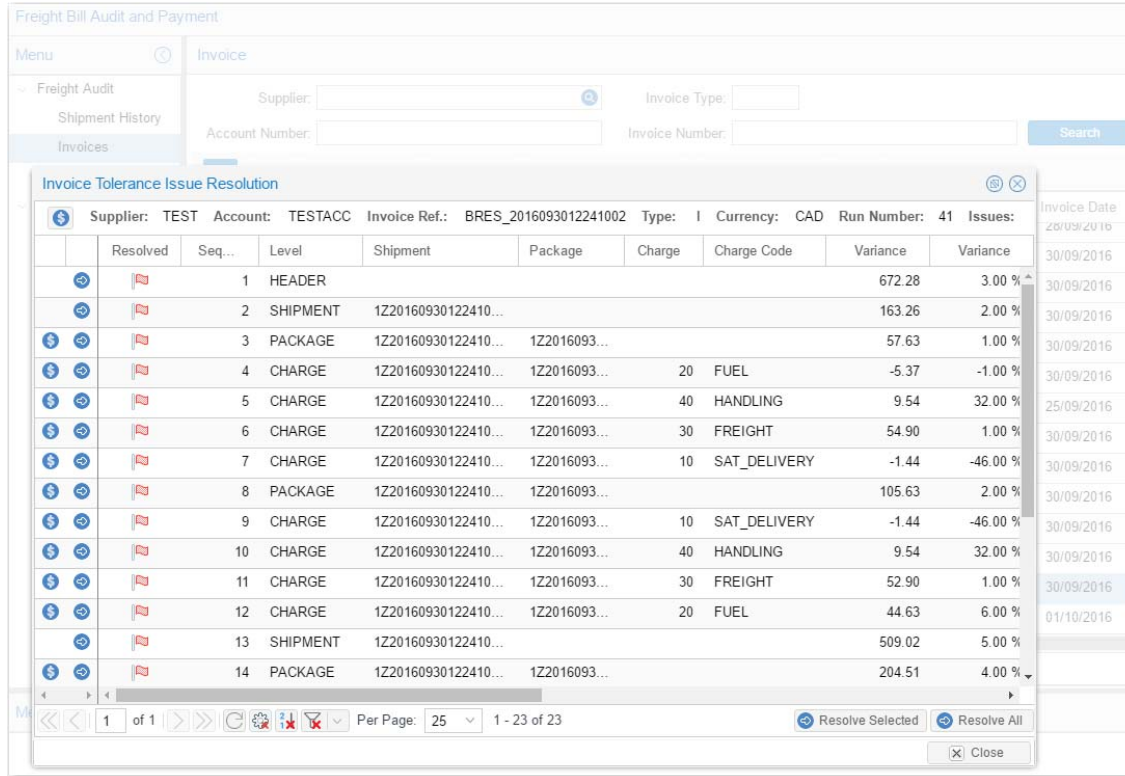
The screenshot shows the 'Freight Bill Audit and Payment' portal. On the left is a navigation menu with categories like Freight Audit, Configuration, and Settings. The main area is titled 'Invoice' and contains search filters for Supplier, Account Number, Invoice Type, and Invoice Number. Below the filters is a table with columns: Matched (%), Status, Issues, Supplier, Account Number, Invoice Number, and Invoice Date. The table lists various invoices with their respective match percentages and statuses. At the bottom, there is a 'Message Area'.

Matched (%)	Status	Issues	Supplier	Account Number	Invoice Number	Invoice Date
100%	✓	0	LIGHT...	TESTACC	LIGHTSHP_20160929082205103	29/09/2016
100%	✓	0	TEST	TESTACC	DELTEST_2016092816241102	28/09/2016
100%	✓	0	TEST	TESTACC	DELTEST_2016092907240602	29/09/2016
100%	✓	0	MANM...	TESTACC	PAYMENTTST_2016093011432601	30/09/2016
100%	✓	0	TEST	TESTACC	PAYMENTTST_2016100516384703	05/10/2016
100%	✓	0	TEST	TESTACC	DELTEST_2016093006282802	30/09/2016
100%	✓	0	TEST	TESTACC	PAYMENTTST_2016093011432602	30/09/2016
100%	✓	0	TEST	TESTACC	PAYMENTTST_2016093011432603	30/09/2016
100%	✓	0	MANM...	TESTACC	PAYMENTTST_2016100516384701	05/10/2016
100%	✓	0	TEST	TESTACC	PAYMENTTST_2016100516384702	05/10/2016
97%	✗	21	TEST	TESTACC	BRES_2016092816315602	28/09/2016
0%	✗		TEST	TESTACC	MANTEST20160930035539_01	30/09/2016
0%	✗		TEST	TESTACC	DELTEST_20160930061544C01	30/09/2016
100%	✓		LIGHT...	TESTACC	LIGHTSHP_20160930070644102	30/09/2016

### FBAP Engine

Web UI 5.2 includes a Freight Bill Audit and Payment processing engine, which supports the electronic upload of invoices from carriers and the upload of shipment details from TMS solutions. The engine can then examine this data and match invoices with a shipment history, raise tolerance issues, and produce a payment and remittance output.

**Fig. 24**  
**Invoice Tolerance Issue Resolution in the Freight Bill Audit and Payment Portal**



**Table 14**  
**Freight Bill Audit and Payment Web UI Options**

Option	Description
FAIN	Freight Audit (Invoices)
FASH	Freight Audit (Shipment History)
FAPB	Freight Audit (Payment Batches)
FACC	Freight Audit (Code Conversions)
FAFF	Freight Audit (Feed Format)
FAIF	Freight Audit (Import Files)
FARC	Freight Audit (Reason Codes)
FARO	Freight Audit (Roles)
FASC	Freight Audit (System Codes)
FASU	Freight Audit (Suppliers)
FATO	Freight Audit (Tolerances)
FATS	Freight Audit (TMS Sources)
FAUR	Freight Audit (User Roles)
FAY3	Freight Audit (Settings)

## Web UI 5.1 Patches

The fixes listed in this section were made since Web UI 5.1 was released and are included in Web UI 5.1 as a patch and in Web UI 5.2.

### Address Verification

- An issue with the FedEx registration page is now resolved.

- Issues with Loqate address verification are resolved.
- PRECISION now supports the FedEx address verification web service using AVS v4.
- There is now a minimum threshold pass value for Loqate address verification, along with improved validation of state information.
- Loqate address verification now provides better support for state codes outside of the USA.
- The Loqate residential status is now set correctly.

## Authentication

- With SAML authentication, if the logout URL contains a ? character, & is now used before adding the targetUrl parameter.
- An issue whereby the SAML user was not being used to correctly determine the system value groups associated with the user is now resolved.
- Previously, there was a SAML regression issue that caused a blank page to display when you clicked Logout. This issue is resolved.
- Minor issues with SAML have been resolved.
- Enhanced SAML functionality includes an SP-initiated logout.
- A new property, `login.saml.approvedaudience`, enables checking of the AudienceRestriction assertion. This property helps with SAML testing and the new SAML test page (`/html/test_samllogin.html`).
- The Remember me cookie is no longer written when the `precision.login.rememberme` property is set to no.
- A number of CSRF issues are resolved.
- A number of potential XSS issues are resolved.
- The encrypt/decrypt logic has been updated to use CBC rather than ECB encryption mode.

## Compliance

### Batch DPL Data Scrub

- An issue with the date selection criteria in the results tab is resolved.
- Partners added to option NR through CSV file upload are now assigned roles.

### Compliance History Search/Audit

Previously, the incorrect Run Status displayed in the search results when the Only Show Last Run field was selected. This issue is resolved.

### Compliance Admin

The Remarks field can contain a maximum of 4000 characters. Previously, entering more than 4000 characters resulted in an unclear error message. This issue is resolved, and the error message now clearly explains the character limit.

### Compliance Results

By default, for a failed ECLI, EXLI, or Questionnaire check, when you add a license or answer a question in the Compliance Results screen to pass the check, the check then shows as passed. You can configure system values so that the check shows as passed manually instead of passed. Similarly, the same

system values determine whether removing a license or submitting a different answer causes the check to show as failed or failed manually.

## E-Mail Notifications

An issue with the compliance link in a notification e-mail is resolved.

## Database Connection Pool

A new document is available that describes how to enable pool logging when working with the Apache DBCP (DB connection pool).

## Desktop Shipping

- Changes were made to how the template functionality works when the system value HIDE MAILING LIST is set to true.
- Desktop Shipping now provides improved log output when errors occur.
- Desktop Shipping now supports 99 templates; previously, it supported ten templates.

## Accessorials Step

- Previously, when the Freight Payment Method field was set to 3rd Party, the Carrier A/C Number field sometimes displayed as an optional field. This issue is resolved, and the Carrier A/C Number field is now mandatory in this circumstance.
- You can now use the Duty A/C Number field to link the duty payment method to an account number.

## Confirmation Step

A number of issues with client-side printing of labels to the PRECISION Print applet are now resolved.

## Origin/Destination Step

- The maximum length of the Ship To and Ship From address fields has increased to reflect the database field lengths.
- You can now hide the Provide a Return Label field at the template level.
- Previously, when you selected the Provide a Return Label field on a shipment and later recalled the shipment, the Provide a Return Label field did not show the correct value. Now, recalled shipments show the correct value for the Provide a Return Label field. The virtual field RETURNLABELTYPE stores the correct value for the field and recalled shipments display this information.
- You can now use the DTS - DISABLE CRT OVERRIDE system value to specify that if address details are the same as those on the partner record, then the system no longer creates shipment override address records; to specify this behavior, set DTS - DISABLE CRT OVERRIDE to Yes.

If the shipment is a one-time shipment then the override address information will continue to be created regardless of how the DTS - DISABLE CRT OVERRIDE system value is set.

## Products Step

You can use the PR CUSTOMS VALUE REQUIRED system value to specify whether the Customs Value field on the Products step is required for the shipment that you are creating.

## Services Step

An issue whereby the cheapest service warning was displayed even when the cheapest service was selected is now resolved.

## End of Day Manifest

- You can now use the new `eod` value in the `precision.login.packinglocation.list` property when there are a large number of packing locations to pick from.
- An issue with viewing batch errors from the end of day manifest page is resolved.
- An issue with the EOD batch constraints is resolved.
- The batch shipments grid contains new columns. An issue where these values were showing no data is resolved.

## Home Page

The packing location now updates correctly when the client is changed from the Session Details section.

## Inquiry

- The REPORT option now has translation support. However, the English language remains hard-coded until the 5.1 language pack is released.
- The contents of the Select Fields To Hide field in the Shipment Details pop-up window are now translated.
- Previously, the *ends with* operator in the selection criteria did not behave as expected. This issue is resolved.
- Links to carrier tracking sites are now behaving correctly.

## Load Test

The Load Test page now works when HTTPS is used without the need to configure trust stores for the WildFly JVM.

## Maintenance

### Partners

Records with the `&` character in the partner id are now permitted. Previously, records containing this character caused an error.

### Products

The `#` character is now permitted in the product code.

### Rules

- An issue with maintaining the Partner Ref field on the Rule/document/distribution maintenance form is resolved.
- The information button that identifies what Rulebooks apply to a specific partner, country, or product now works correctly.
- An issue with running the Rule Exception button from the Rulebooks tab is now resolved.

- Previously, a JavaScript error occurred when creating new records in the Commodity Descriptions and Vessels/Legs rule sub-options.

### Shipment Lines

The Items [Update] pop-up window for a shipment now displays descriptions next to the commodity code and hazmat class fields.

### System Values

- Issues with group-level system values are resolved.
- A number of system value calls are now updated to use the new group logic.

### UN Number (Hazardous Materials)

Previously, the grid of UN numbers in option UN and the lookup fields in the Item [Update] pop-up window for a shipment did not display UN class or division information; this issue is resolved.

### Users

An issue with maintaining clients that a user can work with is resolved.

### Workflow

A number of usability and field validation issues have been resolved.

### Password

You can now use the asterisk character when updating a password.

### PEM

- The PEM portal now provides improved query performance.
- Previously, there was an issue running the explicit search for a tracking number when the Status field in the search criteria was set to Both. This issue is resolved.
- With EDIFACT feeds, the system now processes reference data (RFF) available in the EDIFACT 96A message onto the light shipment created in PRECISION.
- The system now captures PO numbers from an EDI file (L11 Segments) and populates the buyers reference field on the shipment (XMSHDR0.SHBREF). In the case of multiple L11 segments, the first occurrence for each qualifier is used.
- PEM-LIGHT system values are no longer cached because there can be a large amount of this transactional data, which can affect performance.
- A PEM Query Response XSD issue related to the <ClosedShipment> field is resolved; the maximum length of this field is now set to 5.
- An issue with the use of time zone information in an EDI 214 message is resolved.
- An issue with the EDIFACT IFTSTA D96A integration, whereby it was not interpreting the CNI segment correctly, is resolved. A new system value, [SCAC:] B1002SHIPIDENTNUMBER, has been introduced.
- In the PEM Portal, the History task has been enhanced to include the event location state and country.
- In the PEM engine, the light shipment despatch date is now set to the first event date and time.

- In the PEM engine, a location country code mapping with the FedEx integration has been fixed.
- The QueryPEMResponse sender reference id is now set to QRYPEMRESP. Previously, this was set to QUERYPEMRESPONSE, which exceeded 10 characters.
- In the PEM engine, issues with the light shipment default Ship To and Bill To account information are resolved.
- In the PEM portal, a possible performance issue when using explicit search is resolved. The fix involves a query change to use “shadow columns” when deployed against an Oracle database.
- A performance issue with the PemQuery XML request is now resolved.
- There is now improved the handling of LightShipment XML requests.
- Issues processing EDIFACT status updates from carriers are now resolved.
- The Workflow Jump To menu no longer appears on PEM tasks.
- The PEM CSV Status Upload option is now restricted to CSV files.
- In the PEM tracking history, locations now show city, state, and country details.
- A possible IndexOutOfBoundsException error is now fixed.
- The tracking number is stored differently for DHL Time Definite shipments as opposed to Day Definite shipments. Changes have been made to address possible issues with this difference.
- A new query based solely on the tracking number is now available; this query reduces the time taken for the search return results. To enable this new functionality, set the PEM system value PEM QUERY TRACKING NUMBER ONLY to YES.
- The status update pop-up window available with first mail and last mile tracking now uses a FedEx bar code value differently; the tracking number is now extracted from the FedEx bar code value and used in the creation of the light shipment.
- The PEM engine has been enhanced to process feeds successfully for receiver and third-party accounts.
- An issue in the PEM Portal whereby the Pickup Date was not displaying correctly on the PEM page is resolved.

## Reports

A validation issue in the reporting option is now resolved.

## Scan, Pack and Ship

After rating a shipment using the ship manifest task and closing the task window, the cursor focus is now returned to the bar code scanner field so that the next shipment can be processed without the need to click into the bar code scanner field.

## Workflow

- A number of issues with the new Copy option, including validation, resizing, display of item data, and the ability to update items before copying, are resolved.
- Previously, the Web UI did not allow you to use the K transaction type at load level. You can use the new DEFAULT CONSOLIDATION TYPE system value to avoid the default K transaction type being used for consolidations (pouching).

## Assigned Rules Task

- A paging issue is resolved.

## Charge Entry Task

- Previously, there were issues when running the SPS - Cost and Revenues task as a Workflow task in the Web UI; this issue is resolved.

## Create Shipment

- Previously, partner records were being deleted unexpectedly; this issue is resolved.
- It is no longer possible to create or update a partner in the database if the Overwrite Address field is not selected.
- Previously, the Domestic/Foreign field value was not saved correctly for all user updates; this issue is resolved.
- A JDBC issue when adding partners during the shipment creation process is now resolved.
- Previously, adding items to a shipment did not set the Domestic/Foreign field based on the country of origin; this issue is resolved.
- The Customs Value field is changed to the Total Value field to match the Windows UI and address validation errors.
- An issue where the page does not display data from the product record is resolved. Also, the Domestic/Foreign field is now set according to the AES system value.
- A new system value allows you to choose a prefix for a partner created during shipment creation.

## Documents Task

- Previously, the distribution list history date showed an invalid date. This issue is resolved.
- Previously, the Select All/De-Select All icons did not display correctly in one browser. This issue is resolved.

## Document Text IDs Task

- An issue with marking the Document Text ID task as complete when it is run from the Documents task is resolved.

## Mailroom Consolidations

- This task now shows open shipments available for consolidation only.
- Shipments recently added to a consolidation are no longer shown when using grid paging buttons on the Pick From grid.
- The consolidation despatch date now remains unchanged when all shipments are removed from the consolidation.
- An issue whereby a warning message repeatedly displayed and could not be closed is resolved.
- You can now remove all shipments from a consolidation using the Web UI.
- The Item Allocations Comment now copies to the consolidation correctly.
- Previously, adding an order to (or removing an order from) a consolidation overwrote consolidation header information. This issue is resolved.
- Previously, pack bar codes were not maintained when a shipment was added to a consolidation.
- You now see a warning when you try to remove a packed shipment from a consolidation.
- PRECISION now copies the Item Line Type field from the shipment to the consolidation.
- Previously, the customer's partner id field was not set correctly when creating a consolidation; this issue is resolved.

- PRECISION now ensures that item lines are removed fully when a shipment is removed from a consolidation.

#### Manifest Task

- The UPS Proactive Response field now displays on the Additional tab when the carrier is UPS.
- Previously, when the Packing Location field was clear, the description sometimes showed information about the first packing location in the lookup list. Now, when the Packing Location is not specified, no description is shown.
- The Delivery Terms description now displays correctly when a new value is selected in the Delivery Term field.
- An issue, whereby the Packing Location field was not updating when a location was selected using the lookup, is resolved.
- During rating, all users are now shown a message indicating that a shipment is being processed. Previously, this message did not display for all users.
- A Returns Options field is now available on the Additional tab.
- A Chargeable Route field is now available on the Additional tab panel.
- Previously, the default value for the Freight Payment Method field did not always display correctly. This issue is resolved.

#### Manifest and Rate Shop Tasks

A number of rate shop and manifest tasks now contain additional columns to bring them more in line with the data available in the Windows UI.

#### Route, References and Containers Task

Issues with resizing, shortcut keys and cosmetic issues have been resolved.

#### Standard Packing Task

- A issue with loading the task is now resolved.
- The length of the AJAX timeout is now three minutes, so that the system has more time to process shipments with a high number of packs.
- Previously, selecting multiple packs failed to correctly update the outer pack gross weight; this issue is resolved.
- An intermittent null pointer exception when deleting all packs and then clicking Add to Pack is resolved.
- The packed quantity shown in the unpacked items section is now refreshed after items are added to a pack.

## Highway

A new Highway 4.2.0 release is available for PRECISION v16.1. The Highway database schema has not changed in this release.

- SonarQube code review changes—this is a technical change that includes performance fixes.
- For Web Services, the `ProcessComplianceRequest` message now includes a state code and ultimate consignee.

## Technical

### Multi-Database Support

You can no longer define multiple databases in the `precision.properties` file. Use `db1` properties only. Defining `db2` or higher value properties produces unexpected results.

### Customization Framework

You can now customize the persistence classes from within the Web UI custom project. When the custom project is built it creates two outputs; the Web UI custom EAR file and a custom persistence JAR file.

### New Tables

This Web UI version uses a number of new database tables and sequences, which must be created in the PRECISION database in order for the Web UI to run. SQL scripts have been provided to create these.

### Connection Pool

- The database connection pool (C3P0) now uses the `precision.properties` property `precision.db1.jdbc.test.sql`. This allows the pool to remove stale connections in cases where there has been a connection interrupt.

Previously, this property had no effect. The test SQL executes before a connection is used, so it adds overhead. To revert to Web UI 5.1 behavior, set this property to blank.

- The C3P0 connection pool component version is now 9.5.2.

### Java

Web UI 5.2 requires Java 8 to run.

### Web Cookies

Cookies are now encrypted. The last login info cookie has been renamed to LLINFO.

### Spring

Web UI 5.2 now uses Spring 3.2.16 and Spring Security 3.2.9. This change has resulted in a large number of changes to the web filters and authentication providers.

### Progress 4GL Listener

The listener now supports Java 8. It uses the STOMP protocol to communicate with HornetQ. The `HighwayConnector.ocx` and `HighwayConnector.dll` components are no longer used and are no longer installed or registered by the Web UI installer.

The Highway system value requires a new parameter to specify how to use the new JMS Conn DLL.

**Table 15**  
Highway Listener System Value

Category	Key	Description
Highway	LISTENER_PARAMETERS	Example: ...,TM=Y,RECEIVE=JMSCONN-DLL

## Translations

A new TRANSL option allows you to review and translate literals for new pages using Ext JS 5.

## Install

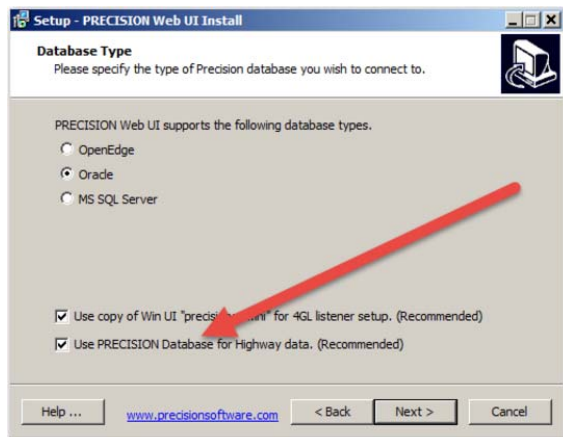
There have been a number of changes to the Web UI installer:

- The installer no longer provides a Java 32 bit option. Web UI 5.2 only ships with the 64 bit version of Java 8.
- A number of new precision.properties entries have been added:
  - `precision.db1.hibernate.dialect`, which has three possible values:
    - `org.hibernate.dialect.ProgressDialect`
    - `org.hibernate.dialect.SQLServerDialect`
    - `org.hibernate.dialect.Oracle10gDialect`
  - `precision.springbatch.threads=2`
  - `precision.springbatch.jobGroups=job1,job2,job3`
- The default value for a number of existing precision.properties entries has changed:
  - `precision.db1.jdbc.test.sql=`
  - `precision.listener.highway.ls1.keepconnectionalive=yes`
  - `precision.listener.highway.ls2.keepconnectionalive=yes`

For OpenEdge databases, the property `precision.db1.defaulttransactionisolation` is now set to 1. Previously, this was set to -1.

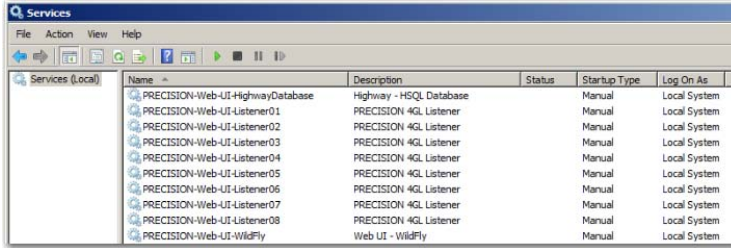
- `precision.db1.defaulttransactionisolation=1`
- The install no longer warns the installer if localhost is used as the server name.
- By default the HSQL Highway database and Windows Service will not be installed. To force the installer to install this part, clear the *Use PRECISION Database for Highway data* field.

**Fig. 25**  
PRECISION Web UI Install Setup



- HighwayConnector DLL and OCX components are no longer installed or registered. In their place a new `xtjmscon.dll` is installed and added to the listener's environment path.
- The installer installs Microsoft Visual C++ 2010 SP1 Redistributable Package (x86).
- Service names have changed; names no longer include brackets or underscores. Listener services now have a description.

Fig. 26  
Services



Name	Description	Status	Startup Type	Log On As
PRECISION-Web-UI-HighwayDatabase	Highway - HSQL Database		Manual	Local System
PRECISION-Web-UI-Listener01	PRECISION 4GL Listener		Manual	Local System
PRECISION-Web-UI-Listener02	PRECISION 4GL Listener		Manual	Local System
PRECISION-Web-UI-Listener03	PRECISION 4GL Listener		Manual	Local System
PRECISION-Web-UI-Listener04	PRECISION 4GL Listener		Manual	Local System
PRECISION-Web-UI-Listener05	PRECISION 4GL Listener		Manual	Local System
PRECISION-Web-UI-Listener06	PRECISION 4GL Listener		Manual	Local System
PRECISION-Web-UI-Listener07	PRECISION 4GL Listener		Manual	Local System
PRECISION-Web-UI-Listener08	PRECISION 4GL Listener		Manual	Local System
PRECISION-Web-UI-WildFly	Web UI - WildFly		Manual	Local System

# Web UI 5.1

The current Web UI version is 5.1. It contains a number of enhancements.

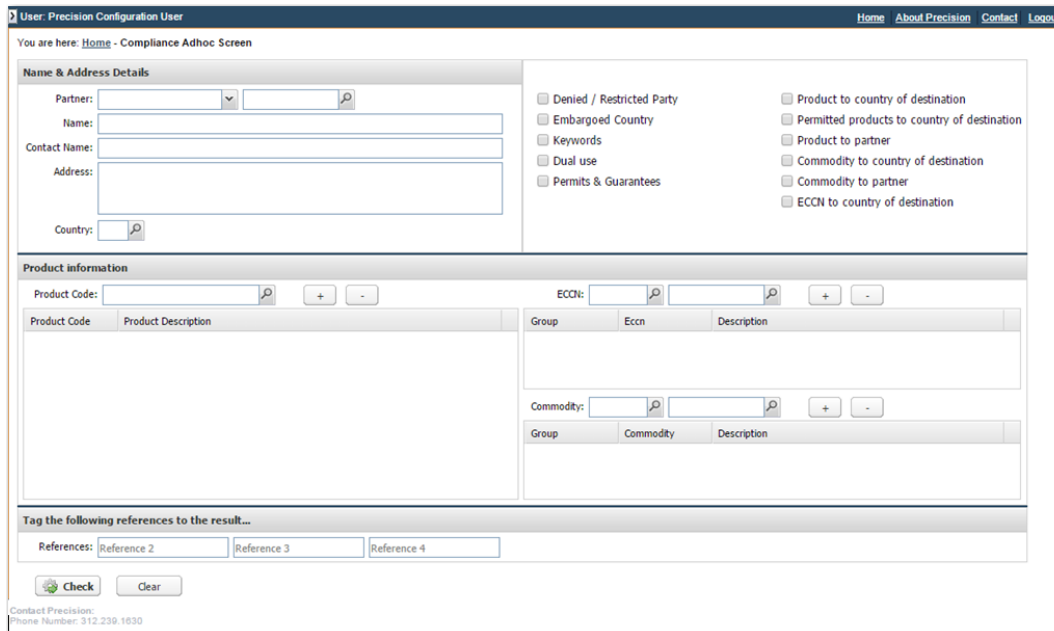
**Note** For detailed information on these new features, see *PRECISION Web UI 5.1 – Net Change Guide*, which is included with the PRECISION v16.1 release.

## Trade Compliance

### Ad Hoc Checking

In the Ad Hoc Compliance Screen page, CKADH, you can now enter additional shipping details and perform a wider number of compliance checks. You can now track shipments from the sender’s desk to the recipient’s desk.

**Fig. 27**  
Ad Hoc Compliance Checking



Previously, it was only possible to specify name and address information and to perform denied party and embargoed country checks. Now, you can also enter product, ECCN, and commodity details. Table 16 displays the checks that you can perform.

**Table 16**  
Available Ad Hoc Compliance Checks

Check	Description
DPL	Denied/Restricted Party
EBC	Embargoed Country
KEYWORD	Keywords
ECLI	Dual use
EXLI	Permits and Guarantees
PRCT	Product to country of destination
RPRC	Permitted products to country of destination
PRNR	Product to partner

Check	Description
CITC	Commodity to country of destination
CITP	Commodity to partner
EXCT	ECCN to country of destination

The Ad Hoc Compliance Screen page allows you to specify reference information to associate with the compliance run; you must enter at least one reference.

Information that you entered in a previous ad hoc check is now remembered and loaded the next time that you use the CKADH option.

A Clear button is now available. When clicked, the button clears all fields and removes any data in the grids.

Depending on the checks that you select, fields become mandatory or remain optional.

### Notifications

Your administrator can configure Compliance to notify you by e-mail when a compliance result is available. This is not a new feature; however, the configuration to define when these notifications occur has changed. The notification configuration for when Compliance runs initially is now separate from the notification configuration for manual override actions, which occur later.

### Compliance Results

You can now answer master partner, commodity, and product questions directly within the Compliance Results page. The results page shows a question mark icon that you can click to access an Answer Question pop-up window.

If a compliance has an ECLI check that fails and you add a license to the line, you can set the line to Passed Manually or Passed. The same feature is also available for EXLI and Questionnaires checks.

You can also set the overall compliance run to Passed Manually.

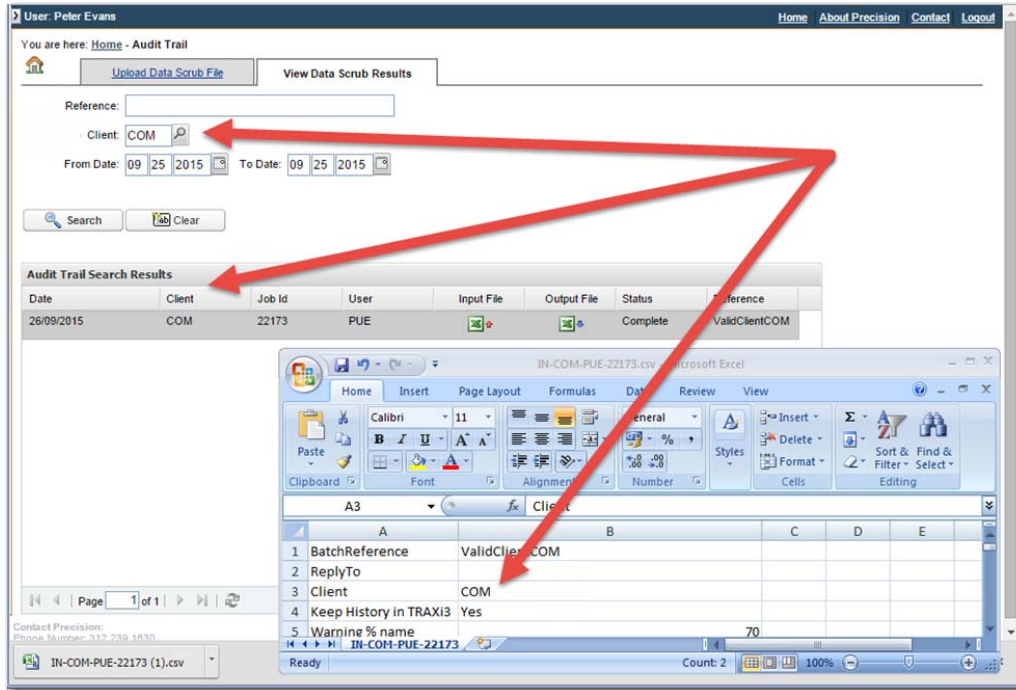
**Table 17**  
Compliance Statuses

Category	Key	Description
COMPLIANCE	ECLI MANUAL STATUS	Possible values: <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>
COMPLIANCE	EXLI MANUAL STATUS	
COMPLIANCE	QE MANUAL STATUS	

### Compliance Data Scrub

It is now possible to specify the client in a data scrub upload file. In the Data Scrub page, you can now search based on the client when viewing data scrub results.

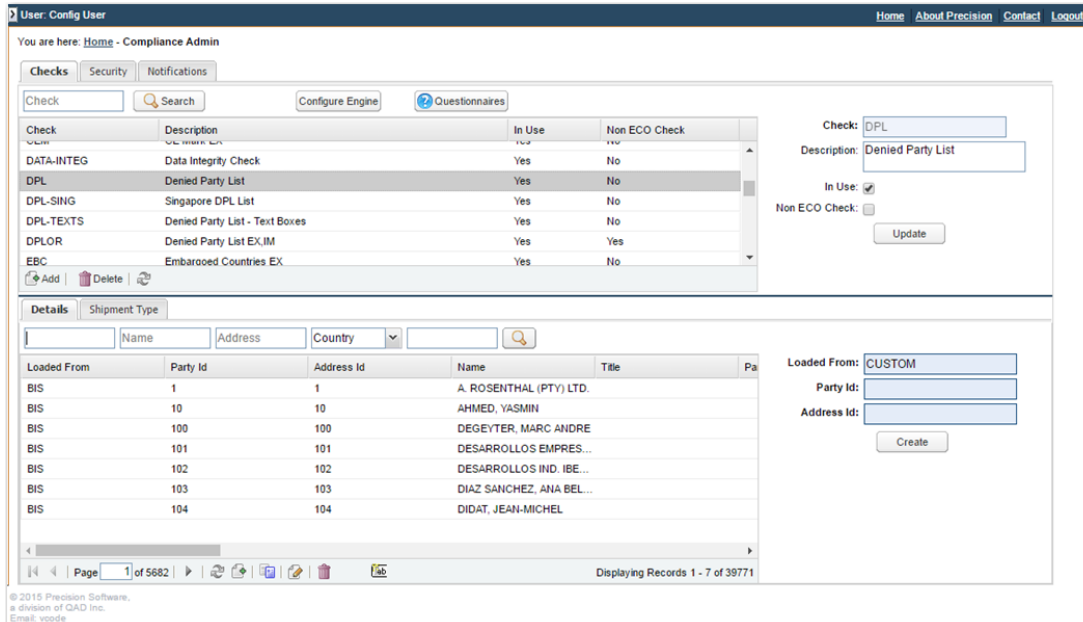
**Fig. 28**  
Data Scrub Upload File



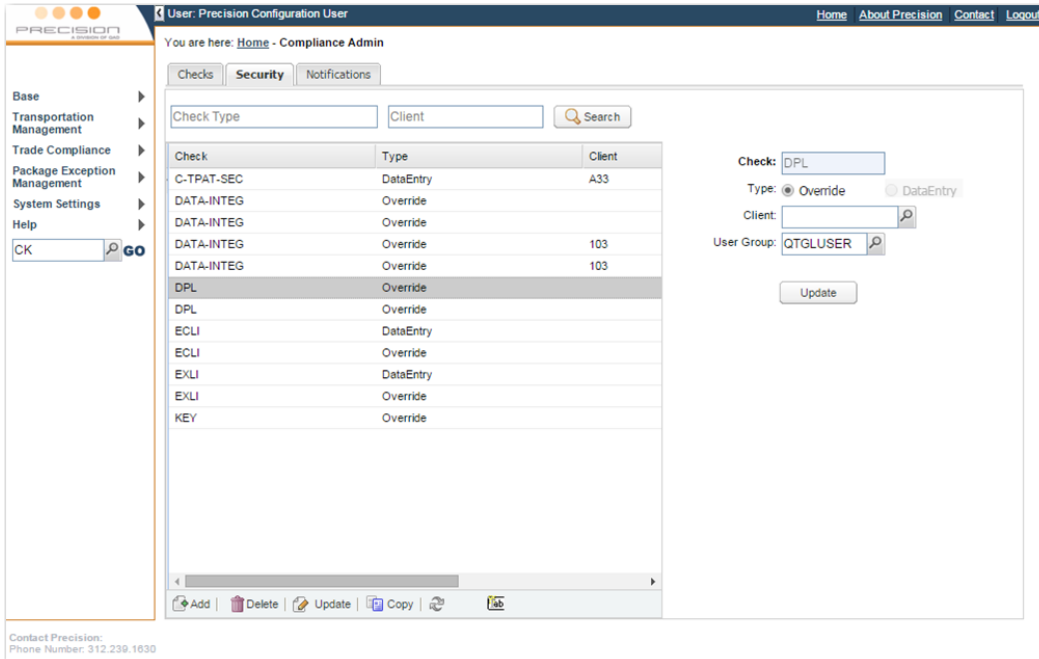
## Configuring Compliance Checks

The Compliance Admin page (CK) has been enhanced to allow administrators to configure all supported compliance checks, define security privileges, and set up result notifications from a single page.

**Fig. 29**  
Compliance Admin Page



**Fig. 30**  
Compliance Security



The Compliance Admin pages now provide the facility to quickly jump to:

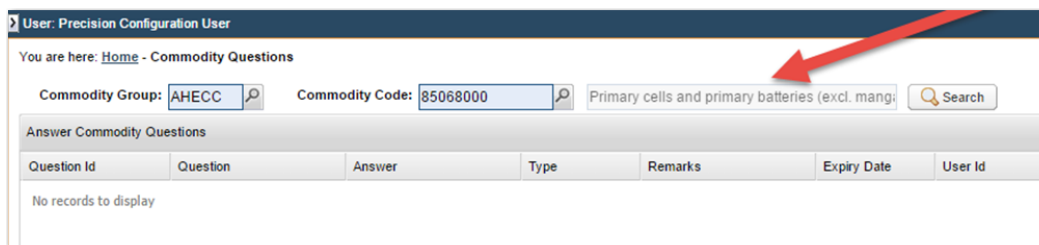
- The System Values page (Y3) to view and maintain compliance engine specific system values.
- The Questionnaires page (QE) to view and maintain questions and questionnaires.

Depending on the check you select, the bottom section of the page changes to accommodate the data associated with the check.

### Configuring Questions and Questionnaires

The option to specify commodity questions (CMAN) has been enhanced to include the commodity description for which questions are being answered.

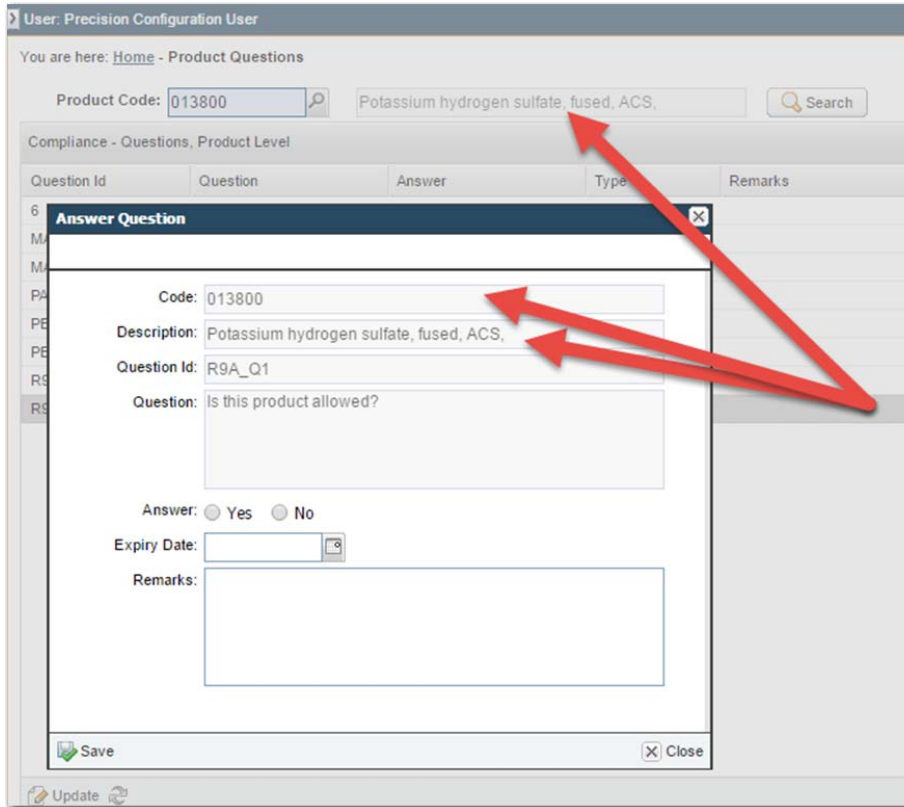
**Fig. 31**  
Configuring a Commodity Question



The commodity code and description are now also shown in the Answer Question pop-up.

The option to specify product questions (PRAN) has been enhanced to include the product description for which questions are being answered. The product code and description show in the Answer Question pop-up.

**Fig. 32**  
Question with Description



Similarly, the option to specify partner questions (NRAN) has been enhanced to include the partner name for which questions are being answered. The partner code and name are now also shown in the Answer Question pop-up.

The last modified date, time, and user are now displayed on the PRAN, NRAN, and CMAN pages to clearly indicate when a question was last answered and by whom.

The search fields on the NRAN, PRAN, and CMAN pages are now mandatory. If a search field is empty, this means that, for example, the partner reference search field is now mandatory on the Partner Questions (NRAN) page.

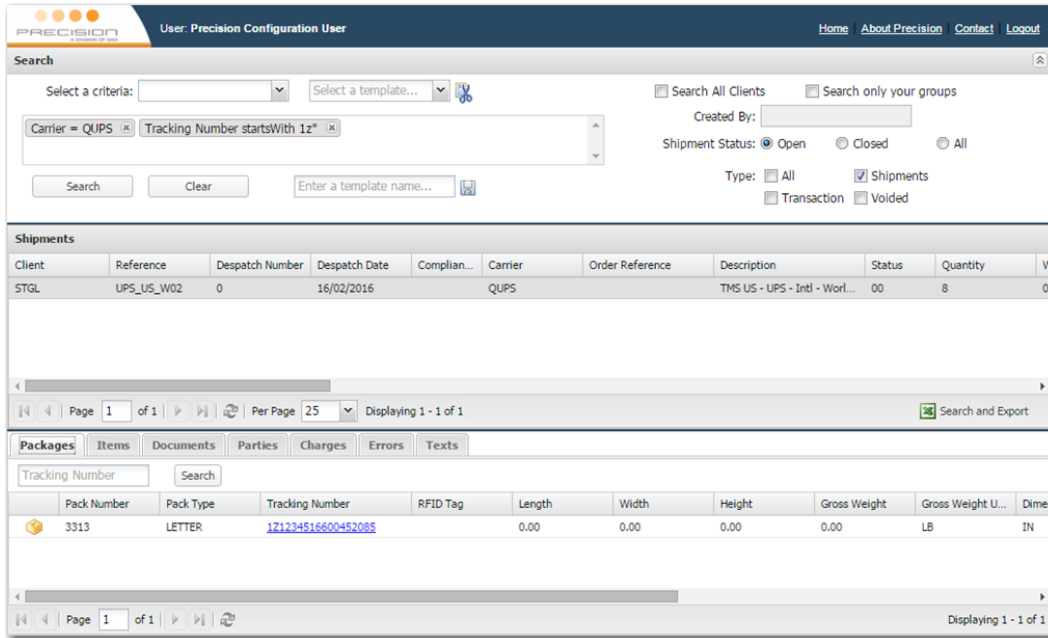
In addition, improvements and corrections were made to the maintenance of questions at specific role levels, as well as for all roles.

## Base

### Inquiry

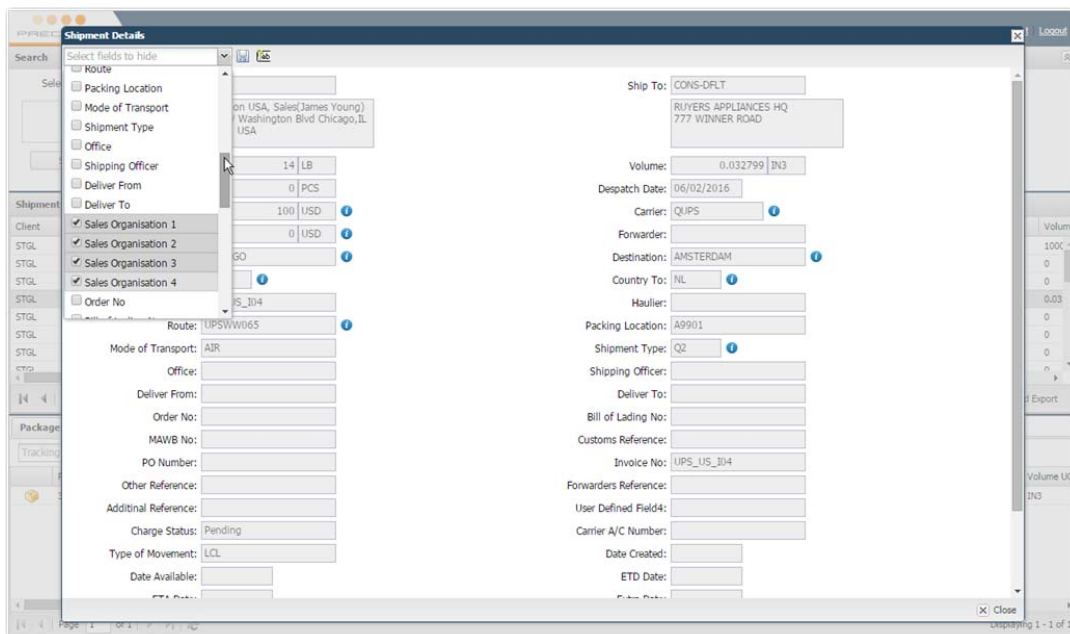
A new inquiry REPORT option is available that allows you to search for transactions in the application.

**Fig. 33**  
New Inquiry REPORT Option



The search area uses tags that you can pull into a search area and define with search criteria. You can now save search information as a search template, which you can pull up at a later time. Double-click on a shipment to open a pop-up with shipment header details, which you can configure.

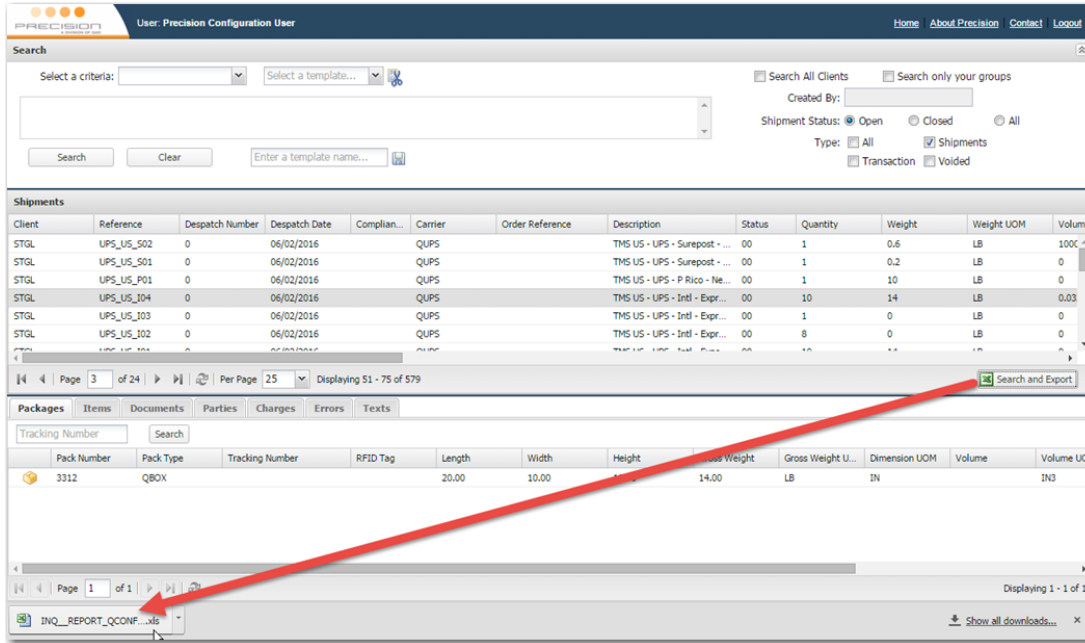
**Fig. 34**  
Shipment Details



Select a shipment to populate the bottom section of the page with package, item, document, charge, address, error, and shipment text details.

You can export all information in the Shipments grid to an Excel file, as shown in Figure 35.

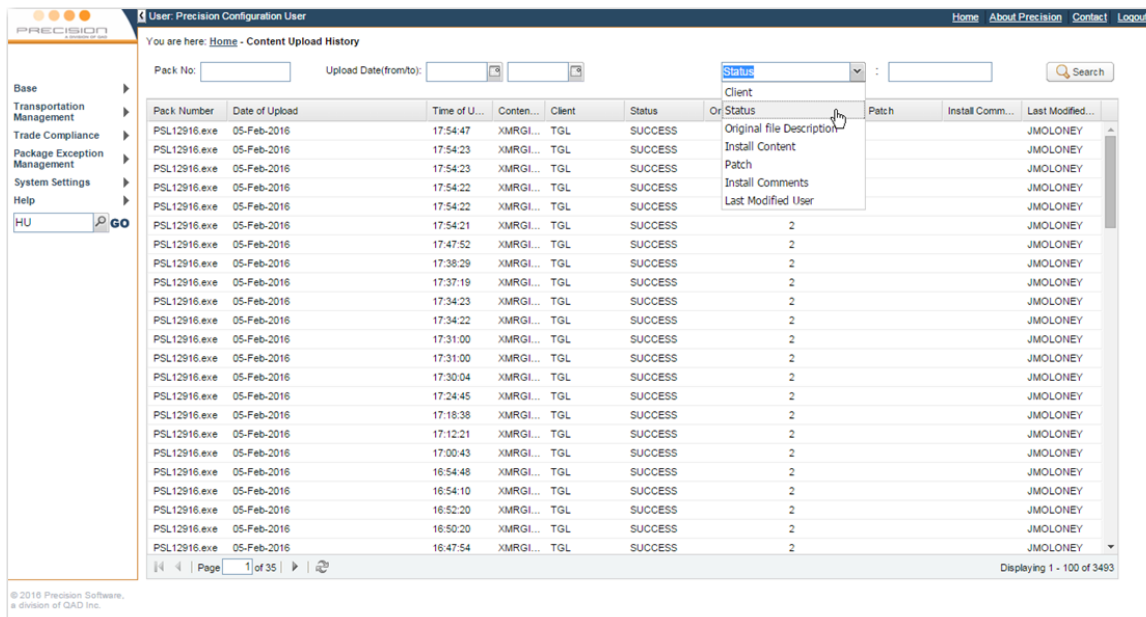
**Fig. 35**  
Shipments Grid, Export to Excel Option



### Automatic Content Updates

A new HU option is available that allows administrators to view content packs that have been automatically uploaded into PRECISION.

**Fig. 36**  
Content Upload History



- Data is automatically sorted in descending order by date of upload.
- You can filter data by pack and by uploaded date range.
- The data on the page is read only.

## Load Building

The ability to work with loads from within the Workflow portal is now available. You can view loads, query load information, and view tasks for a specific load.

From the Workflow toolbar, you can create a new load, reopen a load, delete a load, and run rules against a load.

You can also link a task to the Create option to ensure that the task is run automatically when a load is created using the Create pop-up.

You can add the following load-level tasks to the load workflow:

- Load Header (GR)
- Update Load Shipment (WFTLOA)
- Documents (WFTDOC)
- Print Document (BBSVRT)
- Close Load (CLOSGR)

When you update a load, bear the following in mind:

- You can use a multi-create shipment selection list.
- You can only add open shipments to a load.
- Loads added to a shipment are closed.
- Shipments removed from a load are reopened.
- Updates affect gross weight and volume totals.
- When you make updates, the application ensures that the Workflow Close task is synchronized with the shipment's opened or closed status.
- The Load Document task only allows you to add load-level documents to a load.

Fig. 37  
Load Document Task

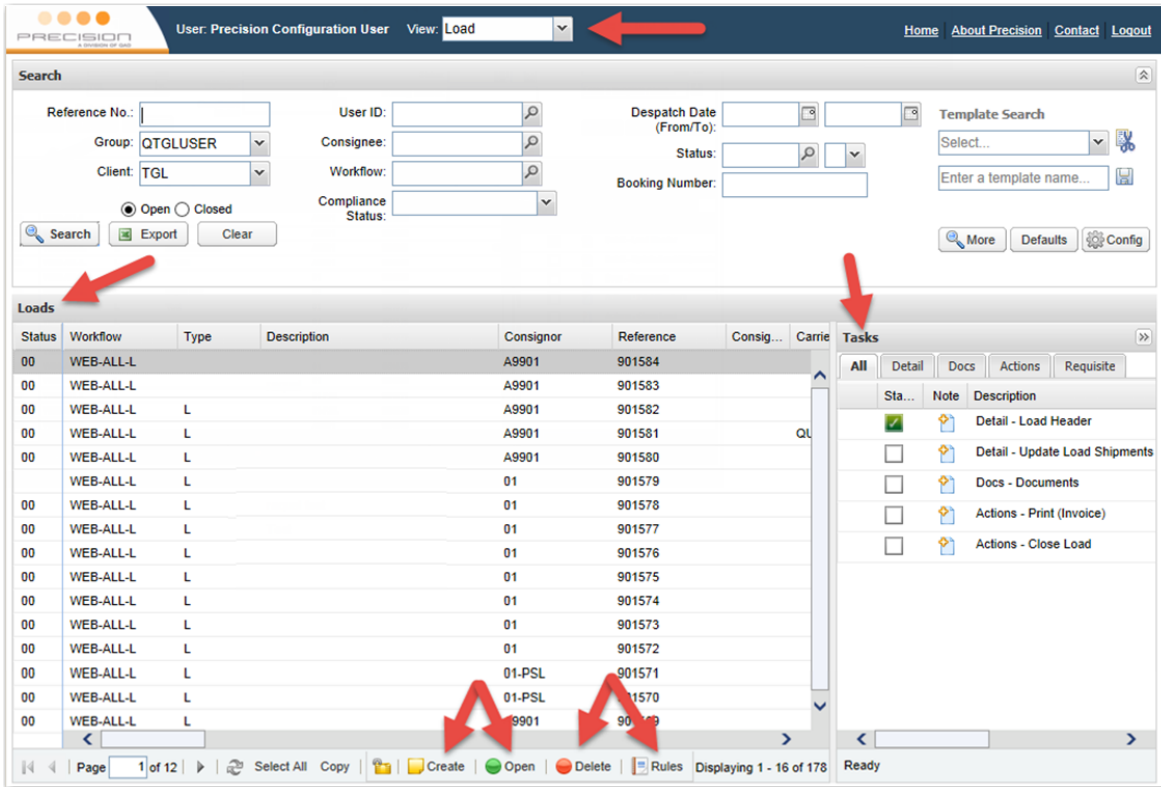
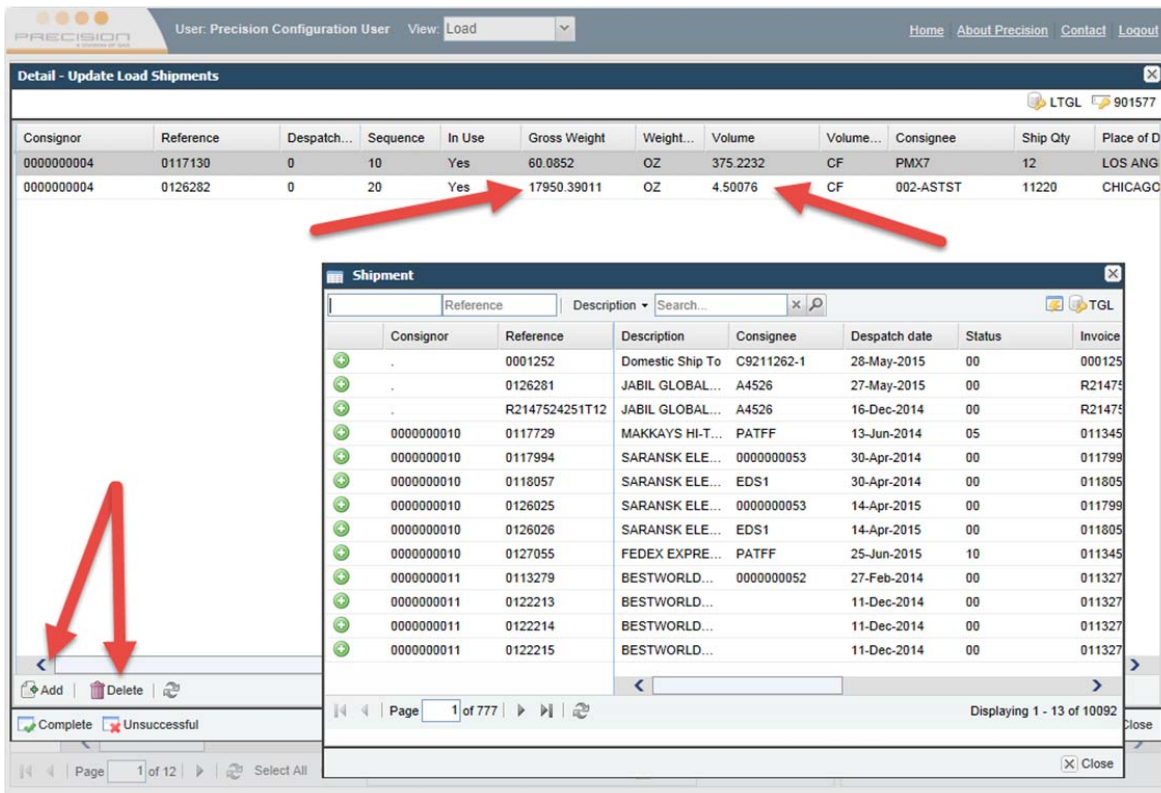


Fig. 38  
Update Load Shipments



## Workflow

The search template feature on the Workflow Portal page has been enhanced to support global templates. You can now create a search template for a given user using the Workflow page and then copy the generated user-level system value to define it at a global level for all to use. You can also copy the values to be group-level system values, if required.

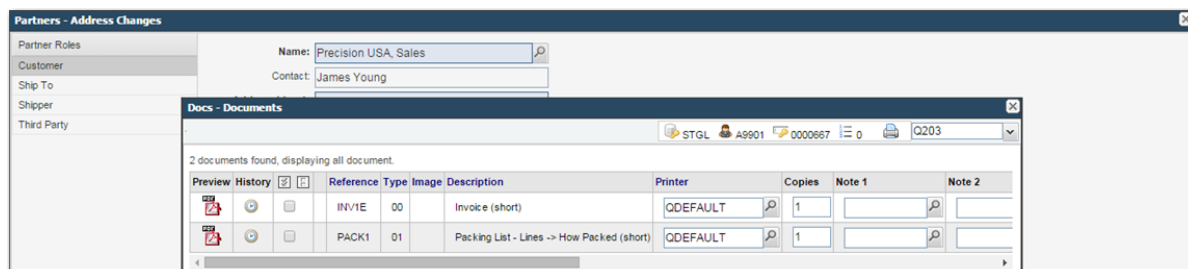
If you change a template value, it is saved as a user-level system value.

When you run a Workflow task, you now have the option to jump to another task, while keeping the existing task open. A new drop-down menu is available in the top left area of the task window. Select another task from this menu to open the new task pop-up over the existing one.

**Fig. 39**  
Jump to Task, Document Task Selected



**Fig. 40**  
Document Task Pops Up with Address Task Remaining Open Behind



You cannot jump to more than one task at a time.

The logic that locks a shipment when a task is run against it has changed. If the user requesting a lock on a shipment is different to the user deemed to be using the shipment, Workflow raises an “already in use” error.

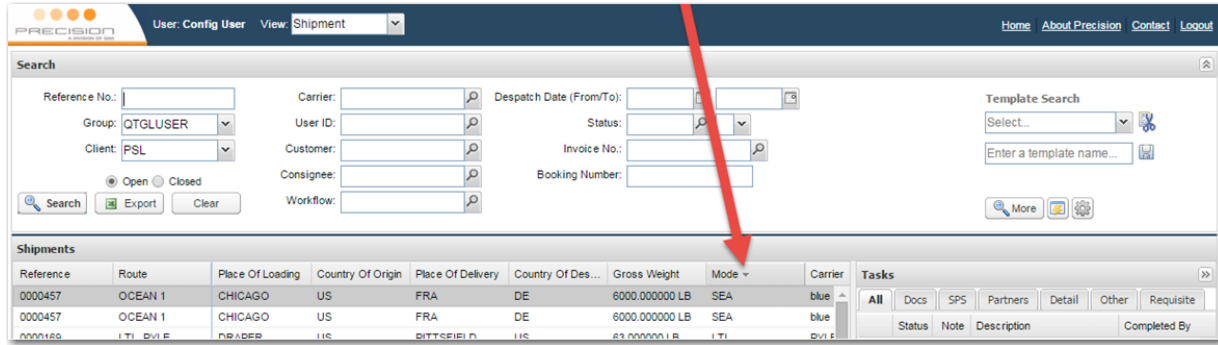
Tasks listed in the Jump menu are configured using the Show on Jump menu flag on the Workflow Task definition record. Tasks marked as Windows UI only tasks are not included.

You can now sort the transaction data in the Workflow grid. Click the column header area to sort the data in descending order. Select the column again to change the sort order to ascending. Select another column to switch the data to sort by that column.

You can only sort by a single column. Sorting by a second column within an initial sort is not possible.

The sort column is identified by a triangle icon.

**Fig. 41**  
Sorting Transaction Data

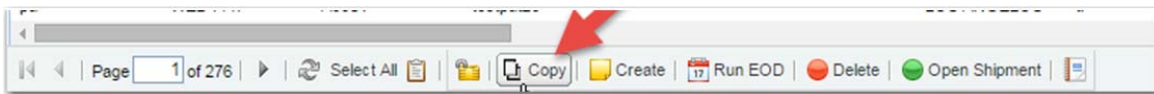


The functionality that runs a check prior to running the selected Workflow task is now more consistent with Windows UI behavior. Now, the following happens:

- When a prerequisite check is of type ERROR and the check fails, an alert pop-up with an OK button is displayed. Click OK to close the pop-up. You are prevented from running the task.
- When a prerequisite check is of type WARNING and the check fails, an alert pop-up with an OK button is displayed. Click OK to continue running the task.
- When a prerequisite check is of type WARNING, Allow Cancel is set to True, and a check fails, an alert pop-up opens with both an OK and a CANCEL button. Click OK to continue running the task. Click CANCEL to close the pop-up and to cancel the task.

You can now configure the Workflow toolbar to include a Copy button, which allows you to copy a selected transaction.

**Fig. 42**  
Copy Button

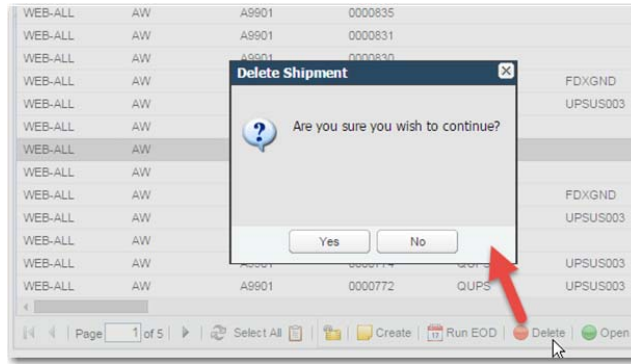


Click the Copy button to open a Copy pop-up window similar to that of the Create pop-up, which allows you to view and modify data prior to creating a shipment.

The clipboard Copy button is no longer labeled Copy. Instead, it just shows a clipboard image icon.

You can now configure the Workflow toolbar to ensure that users must register their confirmation prior to performing an action. This facility is useful if users must confirm the Delete action after they click the Delete button.

**Fig. 43**  
Delete Shipment Confirmation Pop-up

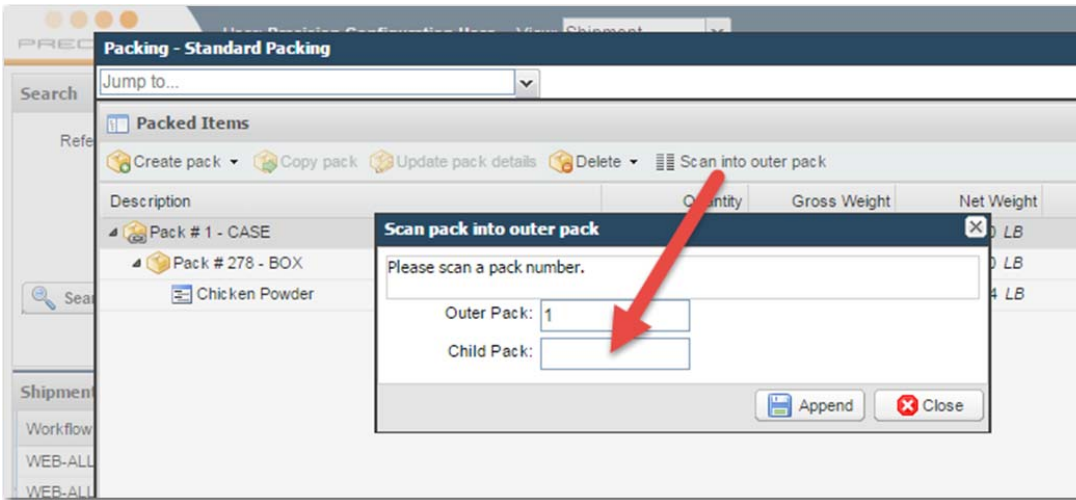


Y3      WORKLOAD      TOOLBAR – S      ...,label:Delete;tooltip:Delete  
Shipment;option:BBSDEL;transaction:Yes;icon:icon54;confirm: Yes,...

**Workflow Tasks**

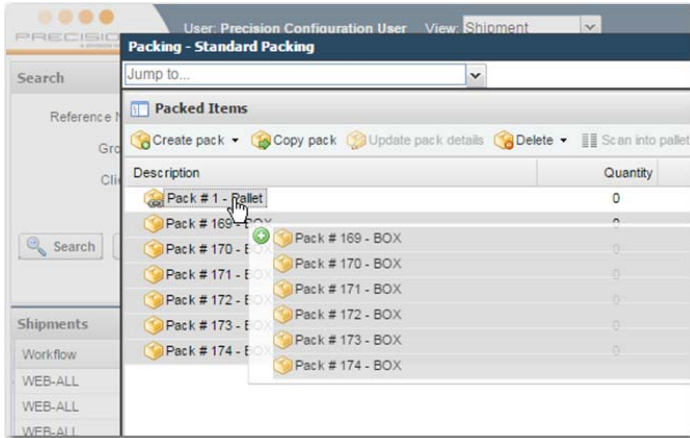
The Standard Packing task has been enhanced to allow you to scan pack numbers to quickly add packs to an outer pack. Select the outer pack, and then click the Scan to Outer Pack button. Enter the first pack number, press F2, and repeat the process until all required packs are added to the outer pack.

**Fig. 44**  
Scan Pack into Outer Pack



The Standard Packing task has been enhanced to allow you to select multiple packs and drag them onto an outer pack.

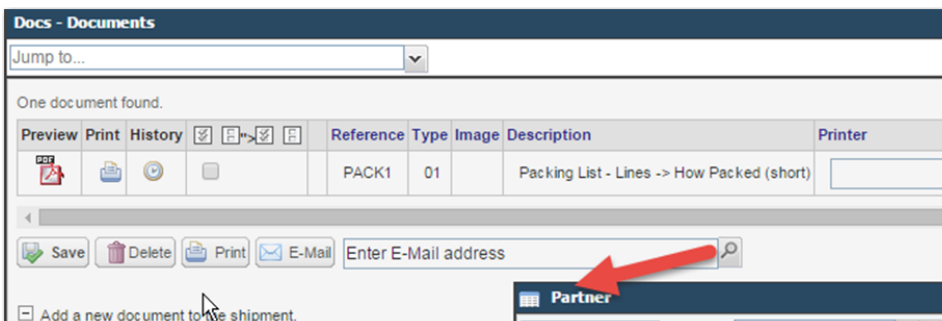
**Fig. 45**  
Standard Packing, Drag and Drop



The Manifest task has been enhanced to warn you if you have updated data and risk losing the data unless you opt to save the changes.

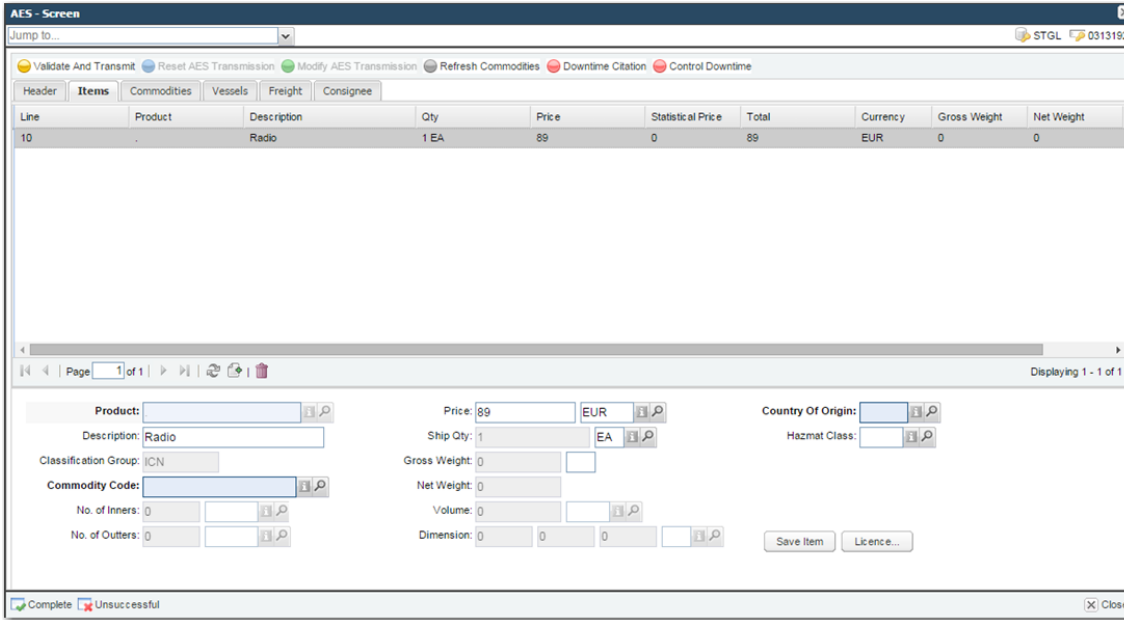
The Documents task has been enhanced to allow you to pull in an e-mail address from the Partner lookup.

**Fig. 46**  
Documents Task, Partner Lookup



The AES task has been enhanced to take advantage of the screen space available to better display the data in the grids and forms. When you resize the window, the page elements are sized to the best fit.

**Fig. 47**  
AES Screen



The following ATLAS 2.3 updates and fixes were made:

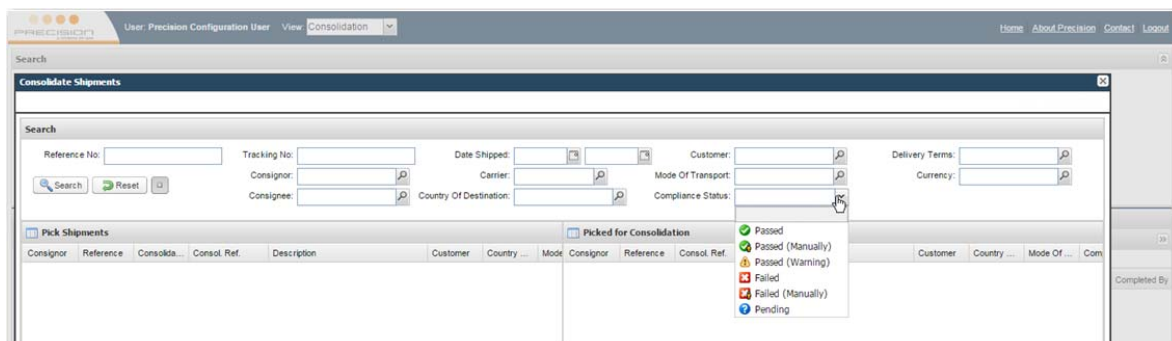
- New XSL style sheets were added.
- ATLAS validation errors were resolved
- The Declaration type field size was changed to 5 instead of 3 on the EU Customs Shipment Header task.

The End User field was removed from the EU Customs Shipment Header task, and the Process Owner (role 11) and Special Event Indicator fields were added.

### Workflow Pouching (Consolidations)

The Search feature has been enhanced to include additional shipment criteria.

**Fig. 48**  
Additional Shipment Criteria



You can now specify the following new criteria:

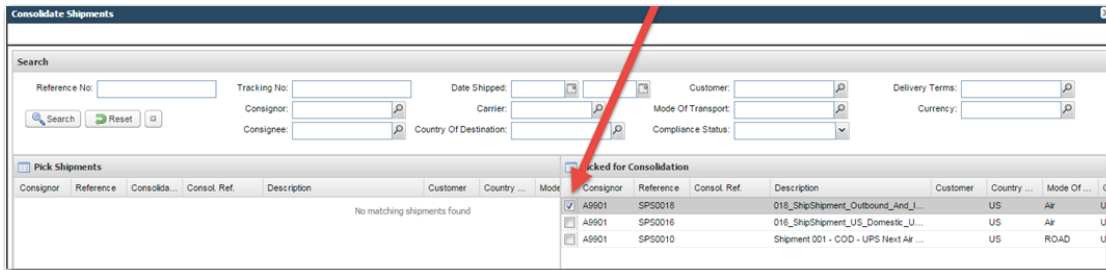
- Customer
- Country of Destination
- Delivery Terms

- Mode of Transport
- Currency
- Compliance Status

The additional shipment data is now also displayed in the Pick and Picked grids.

You can now mark one of the shipments to be consolidated as the lead shipment. The lead shipment is used as the primary source of data to copy to the consolidated shipment.

**Fig. 49**  
Consolidate Shipments



The validation that checks if the selected shipments can be consolidated has been modified to include additional shipment fields that must be matched. You can now prevent shipments from being consolidated if they have failed compliance or have had details transmitted to AES.

**Note** The system values that control consolidation have changed and you must review the existing system value CONSOL:SKIP VALIDATION CHECKS as part of any upgrade.

The Compliance task can now automatically be run against a newly created consolidation.

You can now prevent a user from deleting a consolidation if it has been submitted to AES.

The toggle button that allows you to switch between adding a shipment to the picked grid automatically when a search is performed or adding the shipment to a pick grid first has changed. The pop-up alert now clearly indicates if the feature has been enabled or disabled.

When a shipment is added to or removed from a consolidation, the action has the following effects:

- A closed shipment does not show in the Pick Shipments grid.
- A shipment that is already consolidated does not show in the Pick Shipments grid.
- A shipment is now closed once it is consolidated.
- A shipment that is removed from a consolidation is reopened.

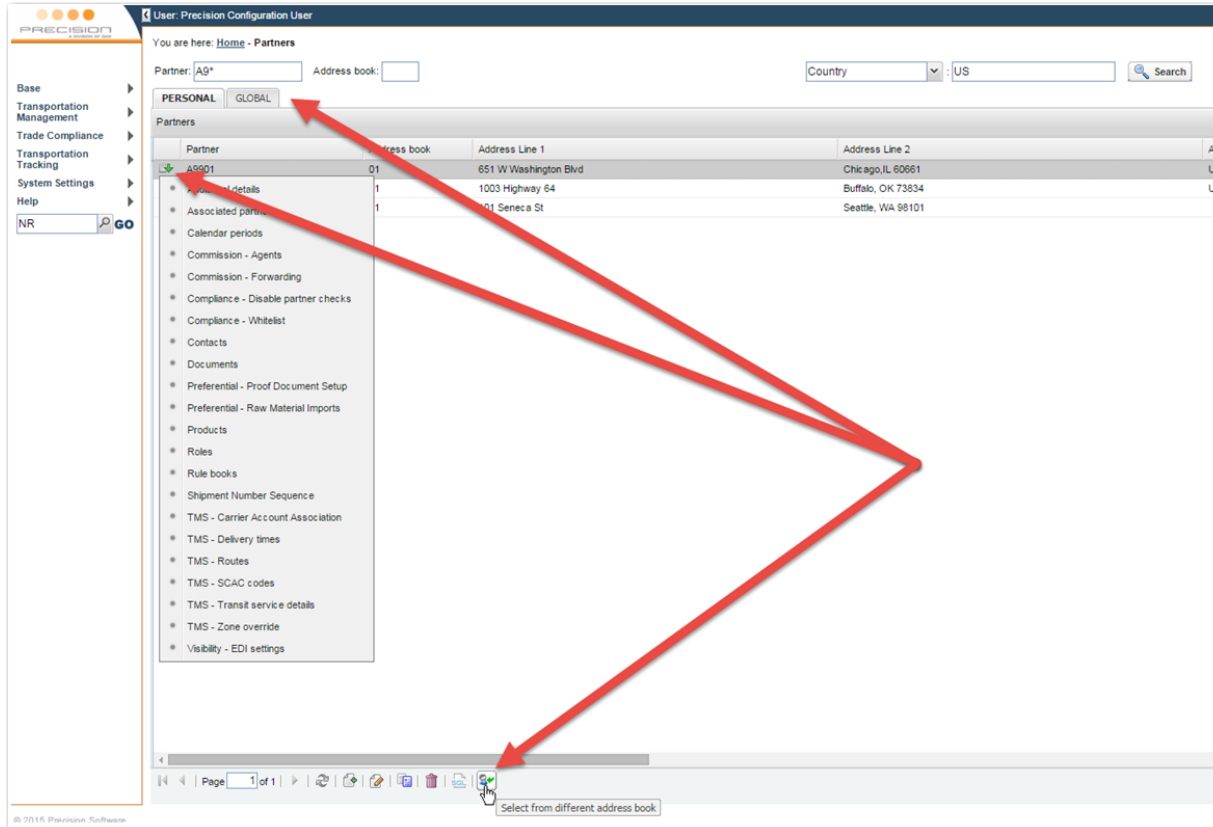
### Scan, Pack Ship

Scan, Pack Ship was modified to fix an issue where the net weight was not updated on changing the tare weight if the gross weight has been overridden.

### Master Maintenance

The Partner Maintenance page (NR) has been updated to include the tabbed view features of the old NR page and to provide a full set of partner sub-options.

**Fig. 50**  
Partner Maintenance

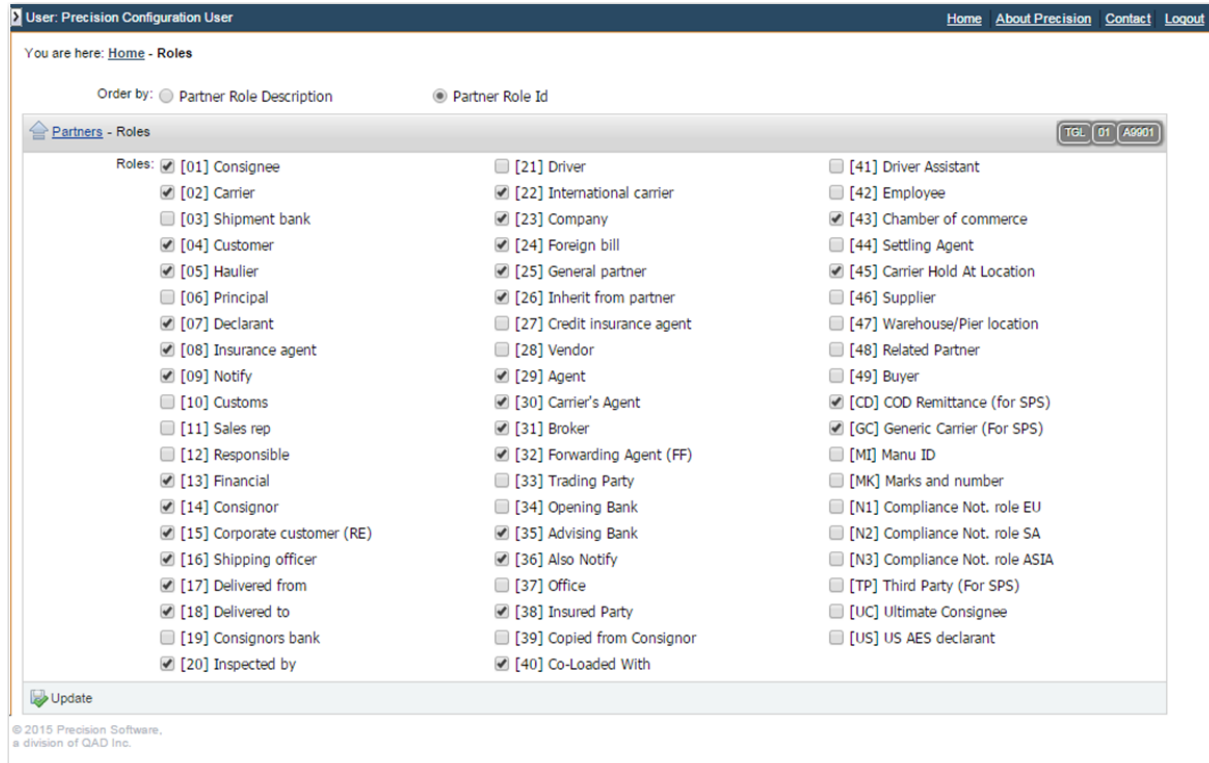


The old Partner Maintenance page is still available using the new option code, NRDTs.

The ability to maintain roles for a selected partner using option NR has been enhanced to provide similar functionality to that available in the Windows UI. A Roles sub-option opens a new page that allows you to maintain roles for a given partner record.

The ability to sort by role or by role description is now available.

**Fig. 51**  
Roles, Sort by Role ID or Role Description



Improvements were made to the:

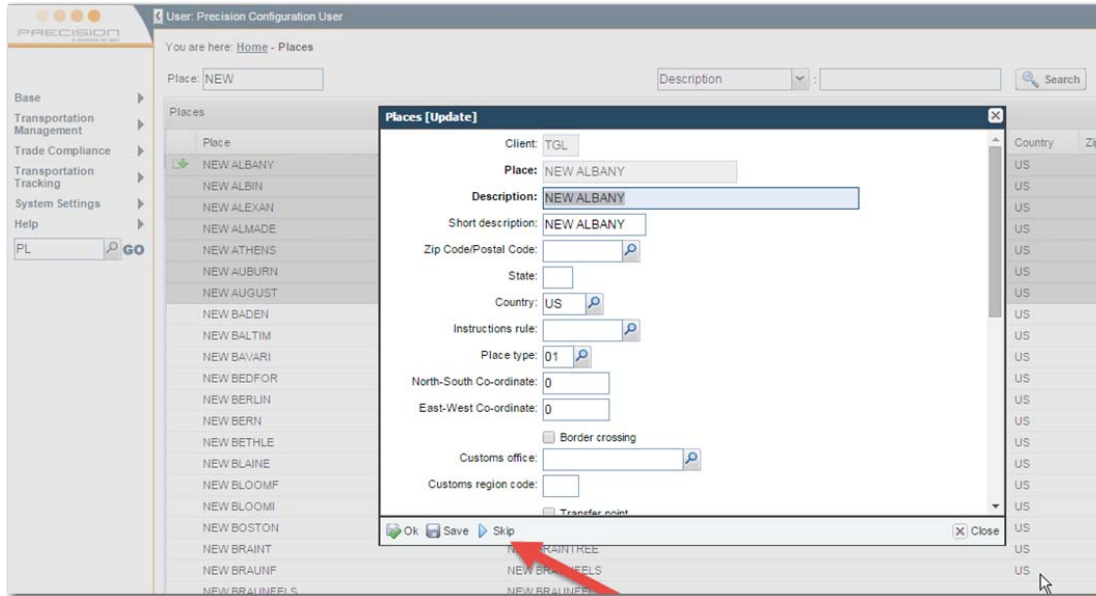
- Workflow Maintenance page (WF)
- Validation performed when creating a new workflow record
- Sorting by sequence functionality in the task grid

The following additional changes were made:

- The page now sizes to fully use the screen size available to it.
- The Update Transaction button now blocks the user from using the page until all shipment workflows have been updated.

In the General Maintenance list pages, you can now perform multi-selects when you update or delete records.

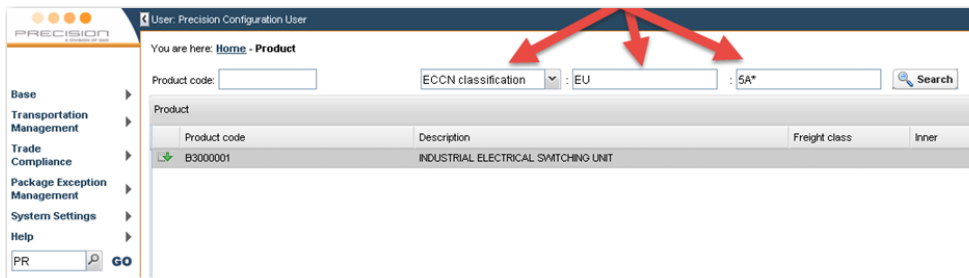
**Fig. 52**  
Multi-Select



**Note** The multi-select feature is not available when working with sub-options.

- For the wild card functionality for the RULES, PEMCFG, WF, and Y3 pages; you are no longer required to specify a trailing asterisk. This change makes the pages more consistent with other maintenance pages.
- You can now select multiple rule records within the RULES option and then delete the selected records in one transaction.
- The RULES page has been enhanced to allow you to save grid layout information using a Save Layout grid menu item.
- The validation of numeric fields on the General Maintenance pages now uses the correct case tool data that details the numeric length.
- The Time fields on the General Maintenance pages now use the format hh:mm.
- The Master Product List page (PR) now allows you to search for products using child Commodity/ECCN information.

**Fig. 53**  
Search Using ECCN



The following maintenance options have been reviewed, and issues with lookups, deletions, additions, updates, and validations were corrected.

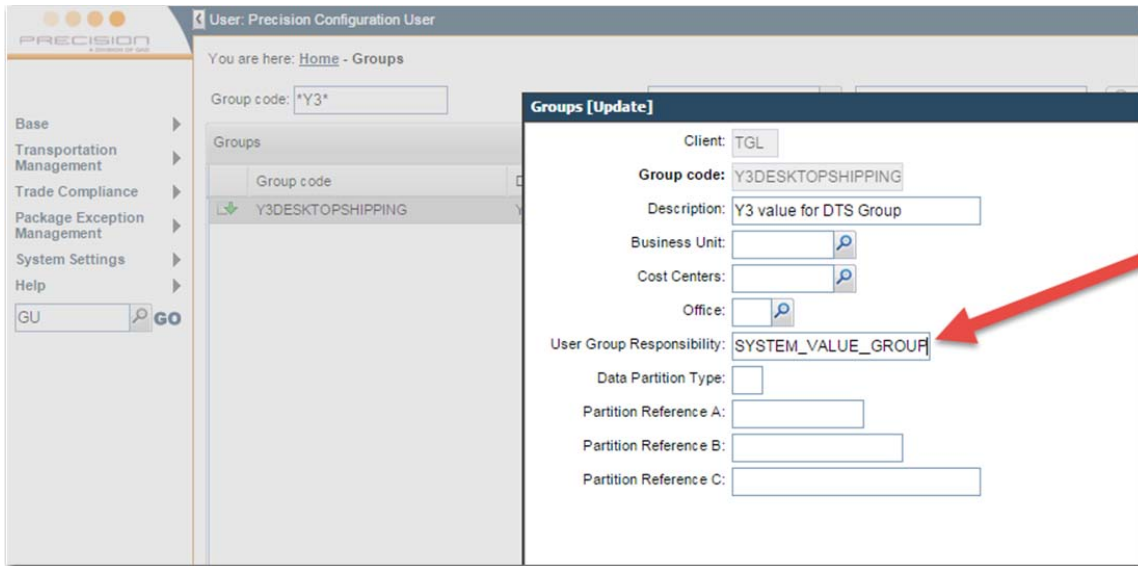
NR, NRND, NRNA, NRCF, NRC7, NRNG, NRXC, NRNL, NRAN, NRCK, NRNC, NRCD, NRDO, NRNT, NRNF, NRNH, ORC, ORR, NRNP, NRNI, NRNB, NRNO, NRCR, NRPD, NRRP, NRSC,

NRNAW, NRTRS, NRNZ, NRTP, UO, UOUF, UA, UAUH, ZR, MK, CTXL, CTIL, CTG, CTGM, BU, BUCG, ZBTX, ZBZD, GU, GUGO, GUSG, GUUR, GUUG, GO

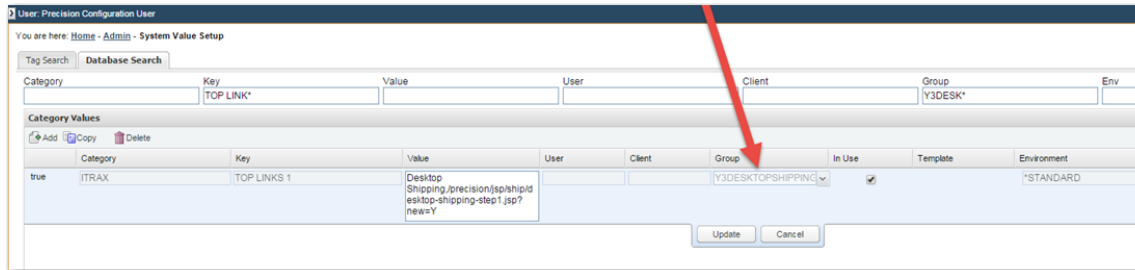
## System Values

You can now configure groups of responsibility type `SYSTEM_VALUE_GROUP` and add users to these groups using the option `GU`. You can then define system values at a group level. The value applies to users belonging to the group, provided that the same value is not defined at user or user client level.

**Fig. 54**  
System Value Group



**Fig. 55**  
System Value Group in Read-Only Format



The system value hierarchy logic is now as follows:

- 1 Session client and session user
- 2 Session user
- 3 Group and session client
- 4 Session client
- 5 Group
- 6 Global (that is, where the group, session user, and session client values are all blank)

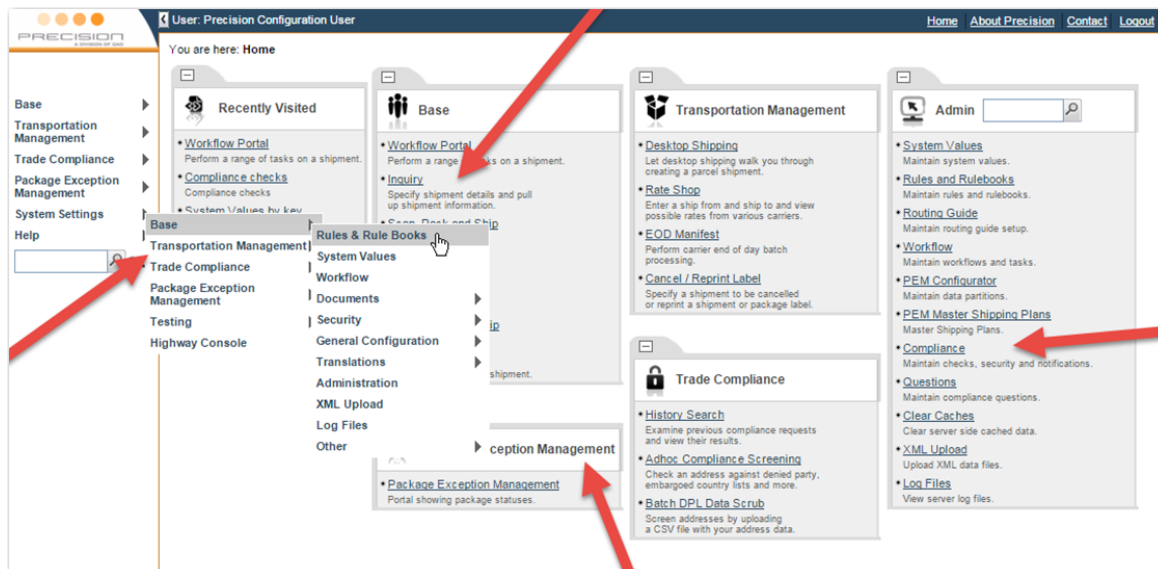
An issue, where the System Value Maintenance page (Y3) was unable to maintain data in JSON format, was fixed. This issue affected system values used by the Scan Pack Ship page.

## Home Menu

The links on the main page (HOME), as well as the left hand side menu, have changed.

- The Inquiry link now points to the new REPORT option.
- Compliance (CK) has been added to the Admin section of the Home page.
- The Transportation Tracking menu item has been changed to Package Exception Management.
- The System Settings sub menu now includes new Base, TMS, Trade Compliance, and PEM admin options.
- The order of the Trade Compliance links and menu items has changed.

**Fig. 56**  
Updated Menu Order



## Authentication

JAAS authentication has been enhanced to work with the target URL parameter.

## Charge Entry

A new Shipment Charges page (QSHSO) allows you to quickly enter basic charge information against a shipment.

**Fig. 57**  
Shipment Charges Page

Code	Description	Buying charge	Currency	Code	Description	Selling charge	Currency
QFRT	Freight Charge	74.3	USD				
QFUELS	Fuel	8.92	USD				
400	Late payment interest	0	USD				
300	Export taxes	0	USD				

You can:

- Define expected charges so that the page automatically lists these changes in the charges grid.
- Pair charges together as buying and selling charges.
- Enter extended charge information by selecting the Addition Details link, which opens a pop-up window with additional fields.
- Run the page as a workflow task using the option WFTSSO.

## PEM

### PEM Config Page

The PEM Configuration page (PEMCFG) has been enhanced to allow one prompt on the Packing Location field.

### Web UI 5.0 Patches

The fixes listed in this section were made since Web UI 5.0 was released and are included in Web UI 5.0 as a patch and in Web UI 5.1.

#### Desktop Shipping

##### Compliance Step

An issue, where shipments failed the DPL compliance check after an address was white listed, was fixed.

##### Desktop Shipping Step 1

- The application now clears the Inter Office Details details if the ship to partner is flagged as new.

- If you select the Product/Commodities option, the Description field is now hidden.

### References Step

- You can no longer enter dispatch or promise dates that are in the past.
- The validation that required you to set the Promise Date field was removed.

### Desktop Shipping

An issue, where customer rates were displayed instead of company rates, has been fixed.

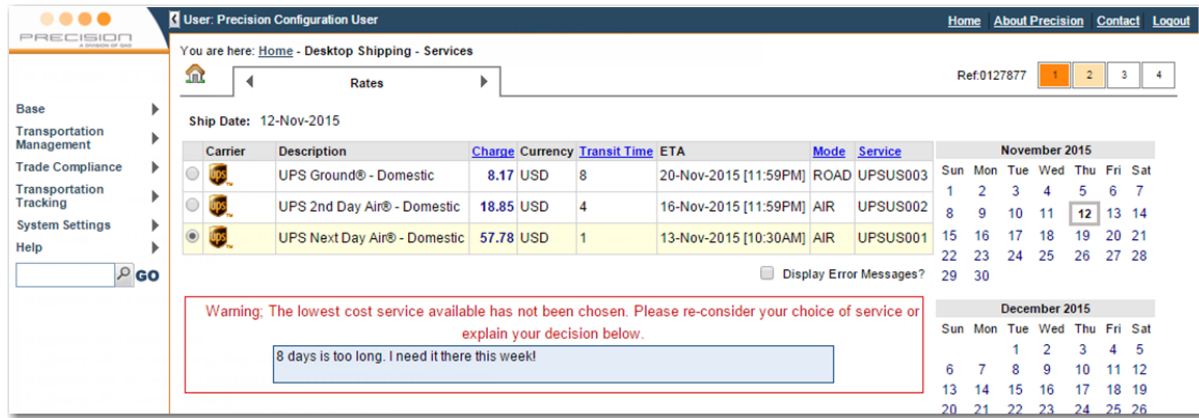
### Address Validation

An issue, where the Accept and Save buttons did not appear on the Address Validation pop-up window, was fixed.

### Rate Shop Step

- Invalid rates are now excluded when determining if the cheapest rate has been selected.
- An issue, where the expected delivery date could not be used for the subset of services shown, was fixed.
- An issue, where not all FedEx rate shop services were displayed, was fixed.
- As shown in Figure 58, you can now specify a rationale for not selecting the cheapest service available.

**Fig. 58**  
Desktop Shipping



ZBTX          DTSR          Desktop Reason Text

### Accessorials Step

You can now hide non-service-specific accessorials.

### Product Step

- When a product lookup is performed, the application now pulls in the product Net Weight, Volume, and Volume UOM.
- When a product code is entered, the associated product information now populates the item fields.
- An issue, where the entered product information became corrupt when multiple products were specified, was fixed.

## Method/References Step

An issue, where the specific service did not default from the template wizard value, was fixed.

## Confirmation Step

Document generation has been enhanced and you can now merge PDF labels produced by external integrations with documents created by PRECISION.

## Desktop, Miscellaneous

- A possible null pointer exception when working with mailing lists was fixed.
- Issues with ship to information for recalled shipments were corrected.
- Unexpected alert pop-ups are now prevented from appearing when you use IE8.
- You can now configure the Custom Value field as required using the system value DTS PR CUSTOMS VALUE REQUIRED.
- If the address verification plug-in is not configured for a given ship to country, the application does not verify addresses, instead of performing the verification and generating an error.
- Issues were fixed where:
  - The ability to retrieve the last shipment from details used did not work as expected.
  - Some fields listed in the Wizard configuration could not be hidden.
- If you are shipping documents and the DTS DEFAULT DOCUMENT SIZE setting is set to DIMENSIONS, the application auto-selects the Specify Size Using setting as Entered Dimensions.
- The DTS SHIPTO VERIFY ALLOWED system value is no longer case sensitive.
- The spelling of “Products/Commodities” on steps 1 and 2 of Desktop Shipping was fixed.
- The product information is now reset when the Package Contains value is changed.

## Workflow, Consolidations

- The Reset button now clears the Carrier Search field.
- Sporadic issues, where the page did not always show the orders added to the consolidation, were fixed.
- Some of the search fields were moved.
- The consolidation logic that updates a shipment when it is added to or removed from a consolidation was corrected. Previously, the consolidation was not updated and a “closed shipments cannot be added” message was displayed.
- The application now reopens or closes shipments if they are added to or removed from consolidations.
- An issue with the display of the consolidation reference number for shipments added to consolidations was resolved.
- When you remove a shipment from a consolidation, all the shipment header packs for that shipment are now removed.
- The application now ensures that the original shipment packing is preserved after the shipment is deleted from a consolidation.
- The application now copies the Deliver To (18) information from the shipment to the consolidation.
- A duplicate pack number issue, encountered when working with extended packs, was fixed.
- The logic now takes account of extended packing.
- A lookup for Consignee/Consignor search fields was fixed.

- The default value for the CONSOL:PACK PRORATE METHOD system value was changed to None, which needs to be explicitly specified before you prorate pack information from a consolidation to a child shipment.
- An intermittent issue, where consolidation updates did not always display correctly, was fixed.
- The error message that is displayed when a consolidation contains packs was updated to: “The shipment cannot be deleted as it has packed items. Please unpack the shipment first.”
- The item XBL Order Line Number, item XBL Order Number, item Order Quantity, and item Country of Origin are now copied to new consolidations.

## Compliance

### Engine

- An issue, where the KEY check crashes when keywords are passed manually, was fixed.
- The DPL Check % match Fail/Warning message was updated to be consistent.
- Exception checking was added to the compliance logic to correct an issue that occurred when there were no results to save.

### History Search

- An issue with the record count, which occurred when the Only Show Last Run flag was checked, has been fixed.
- Database queries were changed to improve performance in listing matching compliance runs.
- A possible timezone usability issue was fixed. The issue occurred if you entered the Tested Date From/To in local time (Web form) but the search used UTC.

### Results

- New lock functionality was added to the Compliance History screen. Lock details are set in the compliance header PSL01/PSL02 fields. The logic is activated when the system value COMPLIANCE /LOCK WEBUI COMPLIANCE HISTORY is set to Yes.
- The History menu now shows the local client time rather than the database UTC time.

### SOAP Request

An issue, where the return endpoint was not stored in the database, was fixed.

### ECLI Check

The license purchaser must now match the shipment customer rather than the consignee.

### Compliance, Miscellaneous

- An issue, where the commodities questionnaires showed incorrect header information, was fixed.
- An issue, where the maximum value for a single use license was not taken into account, was fixed.
- Alternate party logic that caused the matches for the same address to disappear was corrected.
- A Unicode issue with the batch data scrub functionality was fixed.

### Weighing Scales Applet, USB Device

- An issue with the default UoM flag mapping values was fixed.

- The Applet Formula system parameter was enhanced and can now contain the UoM flag indicators received from the scale. For example: `a+b*256;a=5;b=6|pounds_indicator=11;grams_indicator=2.`

#### Rule Maintenance

- You can now update a rule and set its end date to be blank.
- After you add rule documents using the Multi-create button, the documents are displayed correctly on the Document sub-option.
- When you copy a rulebook, the application now correctly copies the associated rule information onto the new rulebook.

#### PEM

- Issues were fixed with:
  - The Both status in PEM.
  - The export functionality in PEM.
  - The capture of Ship From information from an EDI feed.
  - The explicit search, which occurred when the ETA or dispatch date were specified.
  - Inbound and outbound shipments with the same tracking number. If more than one shipment has the same tracking number, the shipment with the internal carrier has lower precedence.
  - Reference numbers from an EDI feed not displaying correctly on the PEM screen.
  - Transaction type values used in certain ProcessShipment XMLs generated by PEM.
  - The status scan process, which sometimes stopped working.
  - A light shipment mapping issue with the Consignee State field.
- The application now includes additional mappings for the Customer References to the PEM UPS integration.
- The ETA date is no longer displayed as the last system update date if no ETA date is available.
- The application now avoids a possible null pointer error when notifying a party whose e-mail details are blank. Improvements were made to error handling, logging, and memory usage.
- Certain logged errors have been reclassified as warnings.

#### Book a Messenger

An issue that occurred when the cost contained a decimal point was fixed.

#### Update UPS Turkey JAR Files

A number format exception was corrected.

#### DHL Integration

The buyerReference field is now mapped to ShipmentReference1.

#### Inquiry, NQ

- An issue, where the results did not match the dispatch date criteria after moving from the first page, was fixed.
- The dispatch date on old draft shipments is reset to today's date if a shipment is recalled.

## Rate Shop

Dummy address lines 2 and 3 were removed from rate shop requests.

## Workflow, Maintenance

- The validation applied to the creation of new workflows has changed.
- The Workflow type field is now editable.
- Correct sort by task sequence functionality is now available in the Workflow Tasks grid.
- The notification pop-up no longer shows an alert icon when the message is informational.

## Workflow, Portal

Issues were fixed where:

- The compliance status search criteria was not used in the query.
- The Copy to Clipboard button did not work for certain browsers. The button is now shown as a clipboard image rather a button with text.
- The Task Status column in the task grid was removed inadvertently.
- Problems occurred if you searched for shipments using an order date.
- PEM added the ALL client, which sometimes displayed in the Workflow portal. The ALL client was removed from the workflow client search listing.

## Workflow, Create Shipment

- An issue that occurred if the item description contained semicolon (“;”) or ampersand (“&”) characters was fixed.
- You can now save ship-to address information to the Partner table for future use.
- The Partner Code fields can now accommodate 20 character codes.
- The Create Shipment screen now contains a Dangerous Goods flag.
- An issue was fixed where the ship to phone number entered on the form was not saved to the database.
- An issue that occurred when creating a shipment from a template with two items defined was fixed.

## Workflow, AES Task

- An issue, where you could not enable the Save button for the AES Header form even when the relevant permissions were defined, was fixed.
- The spelling in a warning message shown to users was corrected.
- The Weight UOM was set to be read only rather than disabled. This change rectifies a “Failed to find unit of measure for conversion” error.
- An IE9 issue, where some fields on the Vessels panel did not always render correctly, was fixed.

## Workflow, Document Task

- An issue, where the document table rendered incorrectly if there were document image records, was corrected.
- An issue, where you could not send multiple attachments in an e-mail, was fixed.

## Workflow, Route References Task

The Place of Loading is no longer mandatory.

## Workflow, Manifest Task

- Issues were fixed where:
  - The Surcharges, Parties, and Additional tabs could not be accessed if using IE9.
  - Certain carrier error messages were not fully displayed.
  - The Carrier A/C field was populated incorrectly when using PrePaid.
  - The duty payment method shown was incorrect.
  - The tasks suspects address data changed but was not saved and the application warned the user incorrectly.
  - The carrier account number was displayed incorrectly.
  - The freight class information displayed incorrectly.
  - The DELIVERY TERMS TO PAY METHODS system value caused problems.
- The Freight Payment Method now defaults to Prepaid when this is a valid option.
- The Neutral Delivery flag is now available for DHLX.
- Default accessorials associated with a service are now set when you select the Surcharges tab.
- The Main tab now contains a Duty Account Country field.
- The COD party role was changed from CP to CD.

## Workflow, Standard Packing

Issues were fixed with:

- The quantity set when copying a pack.
- The shortcut keys not working until a window received focus. The initial focus field is now the search field in the Unpacked Items grid.
- The task when there was a large number of packages on the shipment.

## Workflow, Shipment Items Task

Fixed an issue where SIGROUP and SIHGROU data was not shown when columns were added to the shipment item list panel.

## Scan, Pack and Ship

A concurrency issue that caused the auto-packing feature to create duplicate packs was rectified.

The minimum height of the bottom panel (Items to be Packed) was increased to correct a display problem.

## Selection Lists

- The logout option has been removed from pages opened as a result of clicking the Maintain button from a selection list.
- An issue where duplicate elements were shown was resolved.

## Maintenance, XL

An ECLI license creation and ECCN group issue was fixed.

## Maintenance, NRDTS

- Issues were fixed:
  - With creating a new partner record. Previously, after validation errors, roles were not reloaded and the Create button changed to Update.
  - With a search problem that occurred when the Enter key was pressed.
  - Where a search followed by paging caused duplicate values to be submitted.
  - Where the Partner Id field was disabled if left blank and the Create button was selected.
- Standard validation and lookup functionality was added to the Consignee Type field that appears in Partner Maintenance and in Address Override forms.
- The maximum length of the Partner Id field was increased to 20 characters.

## Maintenance, System Values (Y3)

- An issue was fixed where the Desktop Shipping Wizard Maintenance window did not parse the system value data correctly, resulting in the text “Object” appearing in accessorial fields.
- After a workflow update, the application now remembers the workflow selected and keeps it selected after reloading the grid.

## Rule Maintenance

### Rule Maintenance, General

- A Note validation issue concerning the maintenance of rule documents was fixed.
- An issue, where a copied rule did not also copy sub-option details, was fixed.
- An issue with the maintenance of the rule book shipment types was fixed.

### Master Maintenance, WF

You can search on the Task Description field.

### Address Verification

The address verification has been updated to handle cases where the address country code used is a non-ISO two-character code.

### Persistence

Additional framework support for customizing the DAO and MetaData resources was added.

## General Maintenance

- An issue was fixed where the Activity field (permission option) on a user-defined lookup domain record was not always saved.
- The Save and OK buttons on the Maintenance panel now show on the bottom left, rather than the bottom right.
- EOD:[Carrier] OPTION system value for the EOD Manifest now works at a packing location level.
- An issue with the address validation logic was fixed.
- The logic used to generate Create Shipment XML messages for the Black Box Engine was modified.
- A number of integration issues with the Loqate API were corrected.
- An IE 8 JS issue that occurred when prompting on Partner lookup fields was corrected.

- The digital signature used to sign the print applet was updated.
- HTTPS now works with JBoss 7 and WildFly 8.
- An XSS vulnerability on the Admin Cache clearing page was addressed.
- `HighwayService.sendToHighway()` is now a public method and can be reused elsewhere.
- The customization framework now works with WildFly. A classloader and URL mapping issue was corrected, where the custom resource could not be used over the base resource.
- A general issue was fixed, where the Calendar pop-up did not always show when prompted.
- The WildFly deployment now records logging messages when invalidating a session that has been already invalidated, rather than raising an error with exceptions.

## Highway

The Highway version released with PRECISION v16.1 is 4.1.0. The Highway database schema has not changed in this release.

The PRECISION 16.1 database now includes the Highway tables.

- The Java listener can now be configured to keep its connection to the JMS queue open. By default, every time the listener checks for messages, Highway creates a new connection. In environments where there is a high volume of messages or a large number of listeners configured, this can place a high demand on ephemeral ports.

This functionality is controlled by the new `precision.properties` property:

```
precision.listener.highway.lsl1.keepconnectionalive=yes
```

- An XML import issue with payload types, where the extension information was saved in the Format field, was fixed.

The set of `/http/SubmitMessageAuth` URLs are now associated with a security realm of `highway-xml`. WildFly is now correctly configured to use `highway-xml-roles.properties` and `highway-xml-users.properties` to secure access to the `SubmitMessageAuth` URL.

- You can now configure the URL used by the Load Test page in the Web UI. Previously, the server and port were determined from the request made to submit the test. You can set two new properties in the `precision.properties` file:

```
precision.sps.loadtestpage.server=localhost
```

```
precision.sps.loadtestpage.port=8080
```

Previously, the protocol used by the test was fixed as HTTP. The protocol is now set as HTTPS if the port is 8443 or 443.

- The Highway WSDL now takes account of Address Validation and Compliance sections added to the `ProcessShipmentResponse` message.
- All `System.out` statements and `e.printStackTrace()` statements were replaced in the Highway code with `log4j` statements.

## JMS Endpoint

- The cluster logic was enhanced to remember the last connection to an active JMS server. New connections are more likely to connect to the active server first.
- The message property `MessageId` is now set to a default value of `_HIGHWAY_MSG_ID` when writing messages to a JMS queue. This fixes an issue with the new JMS DLL Connector that occurred when a message with an empty `MessageId` was sent directly to the queue where the connector read messages.

## JMS

- An issue, where Highway was unable to count messages on a clustered queue, was fixed.
- An issue was fixed where the logic that counts messages on a Hornet JMS queue failed to display the number on the Highway Console status page.

## Web Services

- Short compliance responses to a compliance Web Service request are now supported.
- An issue with making ProcessComplianceRequest SOAP calls was fixed.
- Web services can now be secured using HTTP Basic Authentication.

## WildFly

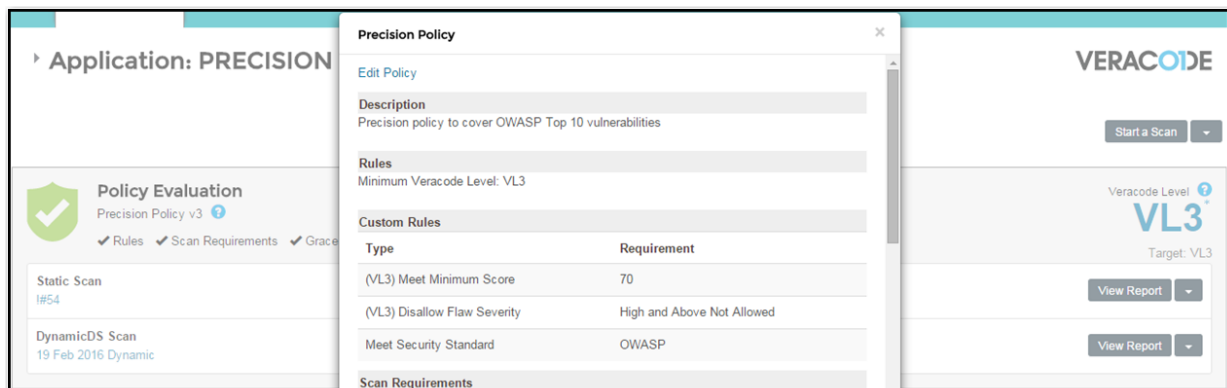
- The WildFly 8.2.1 client jar file is now included with Highway. By default, the file is stored in the folder: C:\Precision\WebUI\highway\connectors\jre\1.7.0\_80\lib\ext.
- The <distributable> tag was removed from web.xml, which enables Highway to deploy in WildFly.
- An issue, where queries did not always find endpoint details due to new domain functionality, was fixed.

## Technical

### Web Security

The application has been tested for possible OWASP Top 10 flaws by performing both Veracode static and dynamic scans on the PRECISION Web UI. Potential vulnerability flaws were reviewed and corrected or mitigated. Veracode test reports are available, upon request.

**Fig. 59**  
Veracode



- The password encryptor class is now obfuscated by ProGuard.  
The key used to encrypt the data can now be externalized.
- A new precision.properties parameter allows the Web UI to log the user ID in all application output:  
`precision.security.log.sessioninfo=yes`  
For example:  
`2016-03-11 09:42:39,297 ERROR`  
`[com.precisionsoftware.trax.app.controller.workflow.base.WorkflowBaseContro`

```
l1er:172] (default task-41) [User: QCONFIG] Transaction client could not be set ; Client code = null
```

- Inquiry (NQ) queries are now executed as prepared statements, removing the risk of SQL injection vulnerabilities.

## Caches

It is now possible to configure the Web UI to ensure that, if caches are cleared using the ADMIN page of a Web UI instance, this action is broadcast to other Web UI instances. This feature is useful where there are multiple Web UI instances running on different application servers, all fronted by a load balancer and connected to the same PRECISION database.

An issue with the Clear All Caches link on the ADMIN page was resolved. Clear All Caches now also includes the Clear Cached Maintenance Information action.

## Ext JS Framework

- The Ext JS versions have been updated to 3.4.3 and 5.1.2.
- A new `sencha-extjs-5.1.2.war` file is deployed that contains the Ext JS 5.1.2 JavaScript resources. This file introduces a new `/precision-extjs` context that may require you to review your fronting Apache or load balancer configuration.

## Persistence Data Chunking

- It is now possible to configure the default chunking size using a new `precision.properties` parameter:  
`precision.persistence.defaultchunksize=500`
- The unique key used by persistence to page through the `InterfaceControlShipmentHeader` records (XMINHD0 table) was corrected.

## Install

The application server installed by default is now WildFly 8.2.1.

Java JRE 1.7.0\_80 is now the Java version used by WildFly, Highway DB, and the Progress 4GL listeners to connect to the JMS queues.

The WildFly version was updated to include:

- Undertow 1.2.9
- Logmanger 1.1.2

The MS SQL Highway SQL was modified to fix an issue where the domain was not included in some create index statements.

WildFly is now configured correctly to auto deploy exploded WAR files such as skins and translation resources.

## Web UI 5.0

The current Web UI version is 5.0. It contains a number of enhancements.

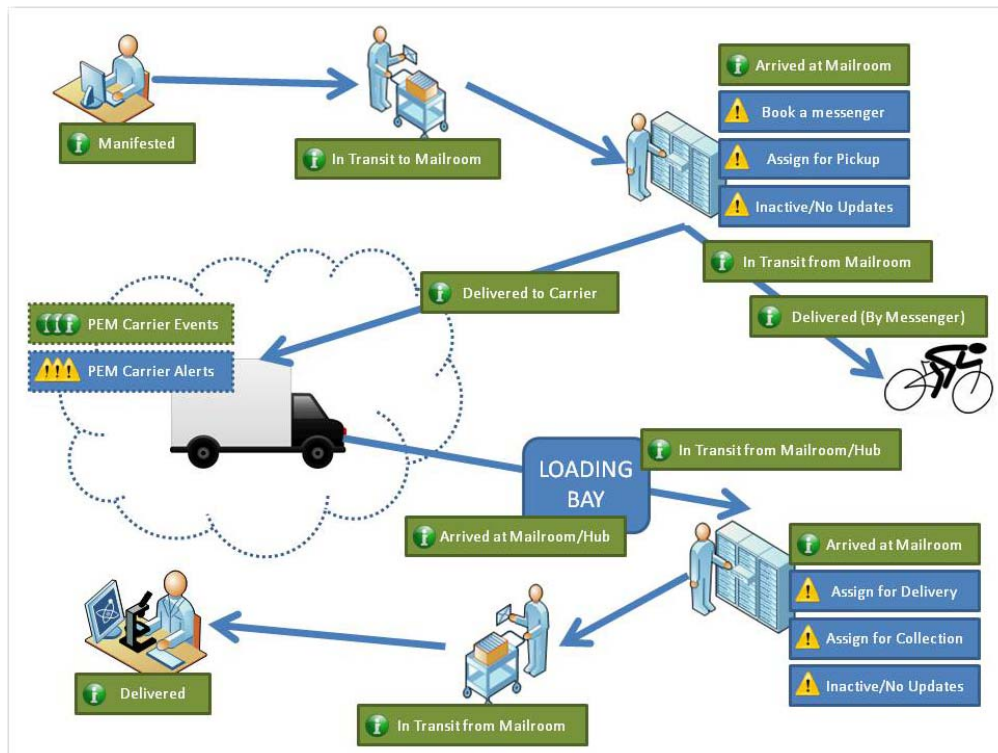
**Note** For detailed information on these new features, see *PRECISION Web UI 5.0 - Net Change Guide*, which is included with the PRECISION v16.0 release.

### Package Exception Management

#### First Mile/Last Mile Tracking

You can now track shipments from the sender's desk to the recipient's desk.

**Fig. 60**  
First Mile/Last Mile Tracking



This functionality includes new PEM tasks, a new workflow option, and changes to the PEM engine to cater for new events and alerts.

**Note** Sample shipping plans, shipment types, rules, and desktop shipping templates are available in the data folder: C:\Precision\WebUI\data\precision-xml\5.0\precision-xml\First Mile - Last Mile (OPTIONAL)

#### PEM Engine

- New alerts:
  - Ready for Pickup from the User's desk
  - Messenger To Be Booked by Mailroom/Messenger Center
  - Ready for Collection by the Recipient from the mailroom
  - Ready for Delivery to the Recipient's desk

After the appropriate action is completed by the user, these alerts no longer appear.

- The following new events can now be captured by PEM:
  - First Mile Manifested
  - First Mile In Transit To Mailroom
  - First Mile Arrival At Mailroom
  - First Mile In Transit From Mailroom
  - First Mile Delivered
  - Last Mile Manifested
  - Last Mile In Transit To Mailroom
  - Last Mile Arrival At Mailroom
  - Last Mile In Transit From Mailroom
  - Last Mile Delivered
- You can associate new shipping plans with PEM transactions:
  - PEM - Mailroom - External Carrier (Outbound)
  - PEM - Mailroom - Ext. Carrier (Outbound) - Ready For Pickup alert
  - PEM - Mailroom - Pouch Child (Outbound)
  - PEM - Mailroom - Pouch Child (Outbound) - Ready For Pickup alert
  - PEM - Mailroom - Pouch Master (Outbound)
  - PEM - Mailroom - Book Messenger (Outbound)
  - PEM - Mailroom - Book Messenger (Outbound) - Ready For Pickup alert
  - PEM - Mailroom - Book Messenger (Outbound) - Outside Pickup
  - PEM - Mailroom - General Plan (Inbound) - Ready For Delivery alert
  - PEM - Mailroom - General Plan (Inbound) - Ready For Collection alert
  - PEM - Mailroom - All Milestones - For reference only

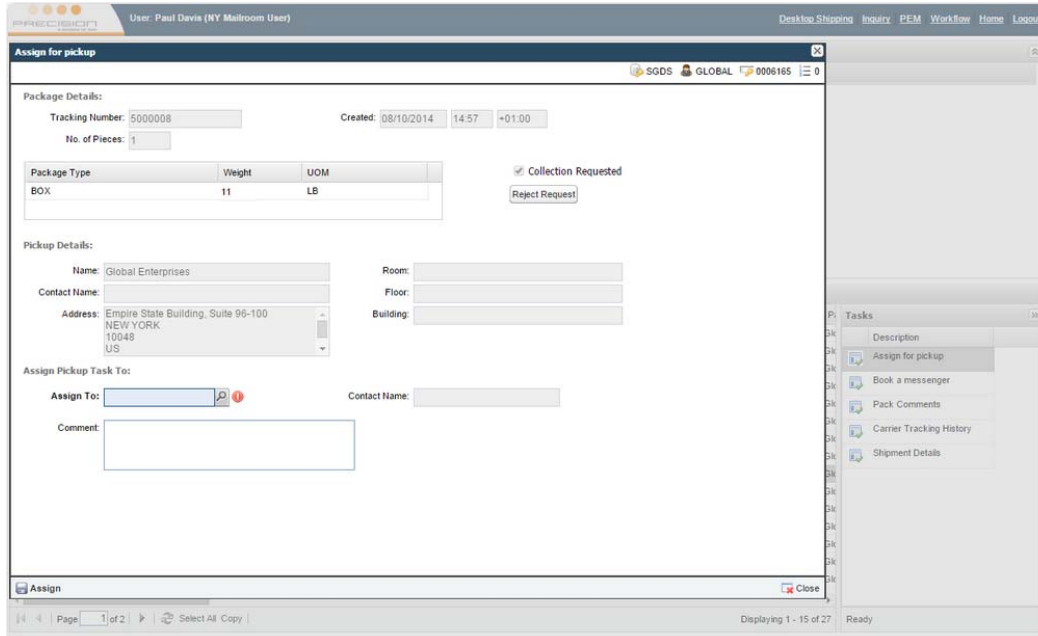
To view master shipping plans, use option MPH.

- Light shipments allow you to track inbound shipments from the mailroom to the recipient's desk. If available, these light shipments contain default information from the associated outbound shipment.
- The PEM engine was modified to ensure that, in cases where carrier and mailroom updates occur out of synch, status updates for a given tracking number are applied to the correct transaction in PRECISION.
- When first mile/last mile setup is enabled, the consolidation (pouching) process is:
  - When a shipment is added to a consolidation, its shipping plan is now closed.
  - When a consolidation is created, a shipping plan is now immediately added to the consolidation.
  - After the shipping plan is added, the plan is immediately evaluated.

#### PEM Portal

- The new Assign for Pickup task allows a mailroom user to assign a package to a member of the mailroom for collection from, or final delivery to, a user's desk.

**Fig. 61**  
Assign for Pickup Task

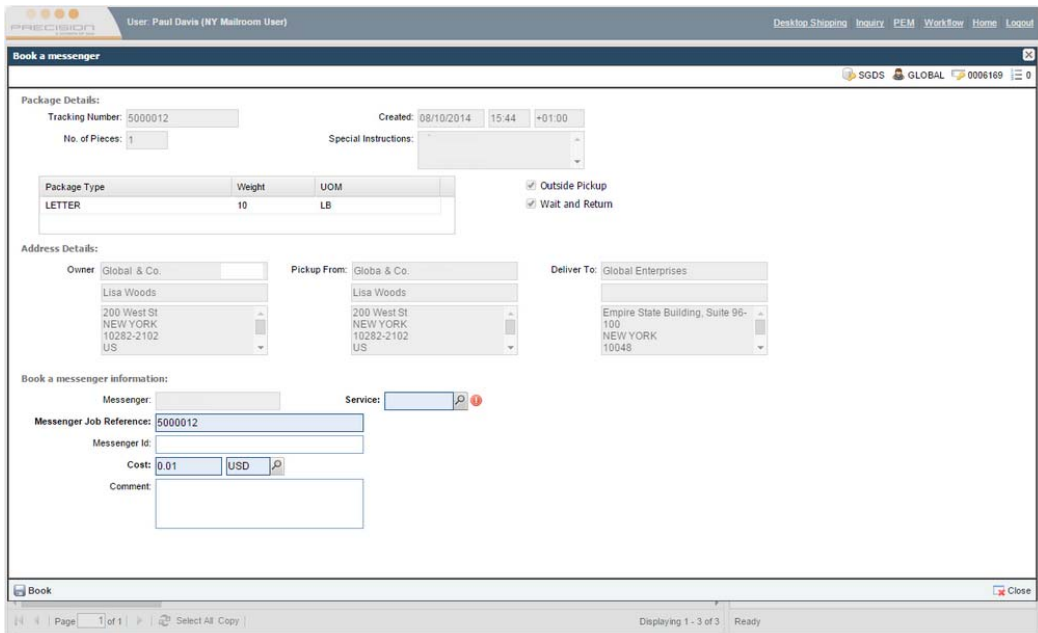


The Assign for Pickup task lets you select multiple packages prior to running the task. The task then iterates through the packages, moving to the next package each time you click Assign.

You can also cancel a request to pick up a package and close the assign alert, so that it no longer appears on the PEM screen.

- The new Book a Messenger task lets a mailroom user book a pickup with a messenger service.

**Fig. 62**  
Book a Messenger Task



- The new Evaluate Plan task lets you evaluate the shipping plan associated with the selected package.
- Fixes:
  - The Master Shipping Alerts tab now lists all alerts that apply to a shipping plan.

- The text '\\\' no longer appears by default in the MPH search fields.
- Any column displayed in the packages grid can now be color coded based on value.

### Workflow - Status Scan Option

- The new Status Scan option and associated PEM Status Update task allow you to manually update a shipment's shipping plan with event information. You can use the **FIRST LAST MILE UPDATE EVENTS** system value to configure the events that appear in the PEM Status Update task.

**Fig. 63**

PEM Status Scan Option and PEM Status Update Task

The fields in the PEM Status Update task depend on the selected event. This task is typically used by mailroom users, and allows you to:

- Add PEM comments as part of an event update.
- E-mail a package recipient about a pending delivery, or prompt the recipient to collect the package. Standard e-mail text can be pulled from application templates that can be defined by administrators.
- Update the packing location of shipments that arrive at the mailroom; the package continues to be visible in PEM under the updated packing location.
- Sign for a package using the Signed by User field when a shipment status is set to Last Mile Delivered. This field is used to update the shipment's shipping plan with a signature of delivery.
- Manually update events that may typically be updated via the PEMCarrierStatusUpdate Web service. It can also be used to update carrier events, when required.
- Batch event updates for certain events through multiple barcode scans; for example, receiving multiple shipments into the mailroom.
- Scan FedEx barcodes so that PEM logic can use the enclosed tracking number in transaction queries.
- A last mile delivery label has been added as a base document. This label can be used for inbound delivery of a package to a recipient's desk. Support for client-side ZPL printing has been included. This allows a user to print the mailroom label on a networked or non-networked ZPL printer.

- The default event location displayed on the PEM Status Update task can be set to the user’s session packing location or the place associated with the user’s session packing location.

## Web Services

- Web Service for Carrier Tracking Status Feeds

This is a new Web service that allows you to push tracking status updates to PEM; for example, you can push tracking statuses from a handheld device to track the movement of packages within a department or building.

- Web Service for Package Status Request

This is a new Web service that allows you to request the current status of one or more packages; for example, you can request the status of all packages that are Ready for Collection, or check the status of a particular package.

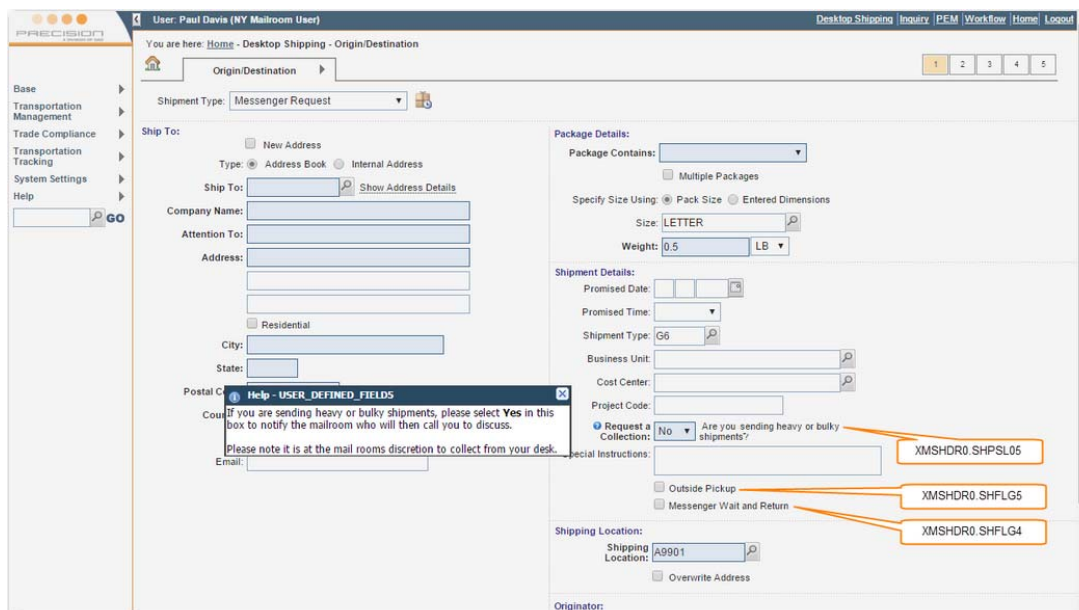
- Web Service for Master Data Request

This is a new Web service that allows an external application to request data from a specific PRECISION table. The response includes a list of records. You can use this service to request the master data of different tables and then populate an external application, such as a mobile device, with this data. The external application specifies a message type in the input message, which identifies the criteria applicable to the message. The response returns the name of the field, which can be different to the PRECISION database field name, and the value.

## Desktop Shipping

- You can now invoke the PEM evaluation method immediately after the confirmation step. This allows the PEM engine to add the appropriate shipping plan to the shipment and then raise alerts regarding collection or booking when applicable.
- You can use the user flag fields on the first step of Desktop Shipping, Origin/Destination, to specify messenger and collection shipment details.

**Fig. 64**  
User Flags in the Origin/Destination Step



- You can now configure Desktop Shipping to determine an appropriate shipment type, based on certain shipment fields. You can then use the shipment type to determine the rule and associated shipping plan to apply to the shipment.

## Inquiry

The Inquiry page now provides full end-to-end tracking visibility for a shipment. The page presents tracking details for the outbound (desk to mailroom), carrier, and inbound (mailroom to desk) stages. If the shipment was consolidated, then the tracking information for the consolidation is also shown.

**Fig. 65**  
Inquiry

The screenshot shows the Desktop Shipping Inquiry page for a carrier tracking result. It displays details for an inbound package and an outbound package, both with tracking number 1000002232.

Pack Number	Priority	Pack Type	Tracking Number	Length	Width	Height	Dim UOM	Gross Weight	Weight UOM
1000002232		LETTER	5000012	0.0	0.0	0.0	IN	10.0	LB

Update Event Date	Location	Description	Revised ETA Date	Carrier Scan Description	Notification Date
09-Oct-2014 13:23:11-04:00	NEW YORK	Last Mile Arrival At Mailroom		Received By Mailroom (Inbound)	09-Oct-2014 14:23:11-04:00

Comment	Updated By	Update Date	Reason Code
comment	PDAVIS	Thu Oct 09 13:23:26 BST 2014	

Pack Number	Priority	Pack Type	Tracking Number	Length	Width	Height	Dim UOM	Gross Weight	Weight UOM
1000002232		LETTER	5000012	0.0	0.0	0.0	IN	10.0	LB

Update Event Date	Location	Description	Revised ETA Date	Carrier Scan Description	Notification Date
08-Oct-2014 15:44:25+01:00	NEW YORK	Available (Outbound)			

## PEM Configuration

The PEM Configuration page, option PEMCFG, contains a number of improvements:

- On the Enable Packing Locations tab, you can now limit the carriers available for selection to a subset of the list of carriers configured for a location.
- System values used to configure this page are now part of the system value metadata that is used when the Web UI Y3 option is run.
- An issue with the grid titles is now resolved. If a search is performed and no results are returned, then the grid titles correctly reflect this result.
- A number of translation fixes have been made.

## PEM Portal

You can now configure the PEM page so that the transactions shown in the Packages grids are automatically refreshed at regular intervals.

## PEM Integration

With the new Purolator integration, PEM and Highway can now be configured to pull in status updates for packages shipping with Purolator and to update the shipping plans on the PRECISION transactions.

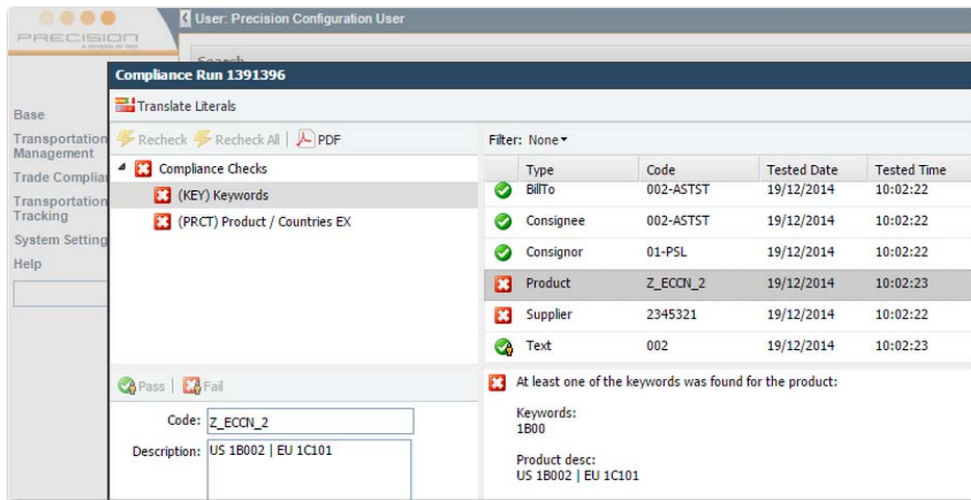
# Trade Compliance

## Compliance Checks

The compliance engine includes a number of new compliance checks and enhancements to existing checks.

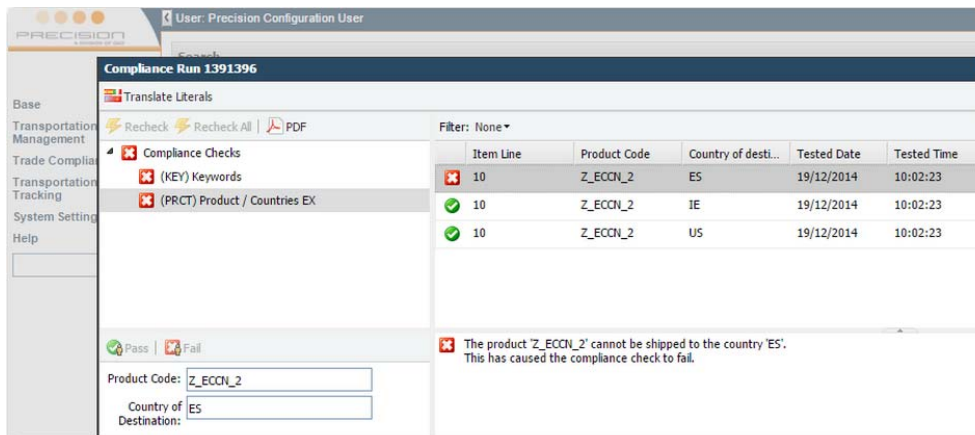
- You can now configure the compliance engine to perform keyword checking on shipment product descriptions and shipment texts. Previously, keywords were only checked against shipment addresses.

**Fig. 66**  
Keywords Check



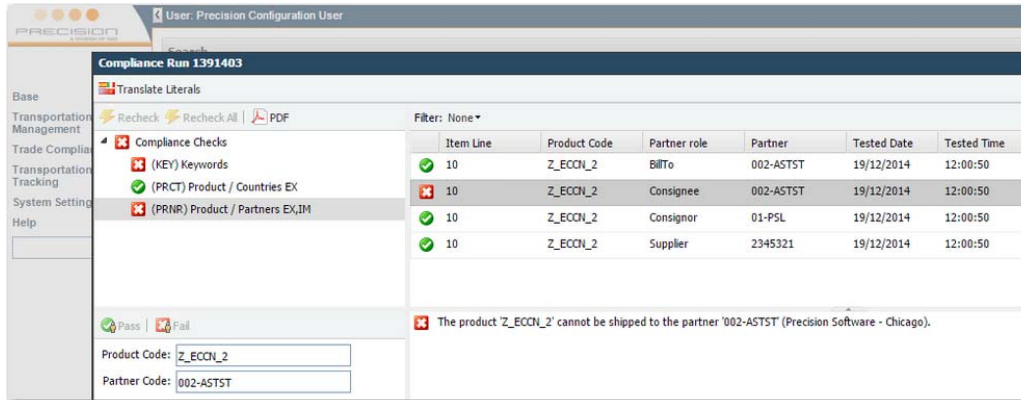
- The new Product to Country of Destination (PRCT) check is similar to the ECLI check, and examines a number of countries on the transaction:
  - Transaction country of destination
  - Transaction country of ultimate destination
  - Item country of destination
  - Item country of ultimate destination
  - Consignee country

**Fig. 67**  
Product to Country of Destination Check



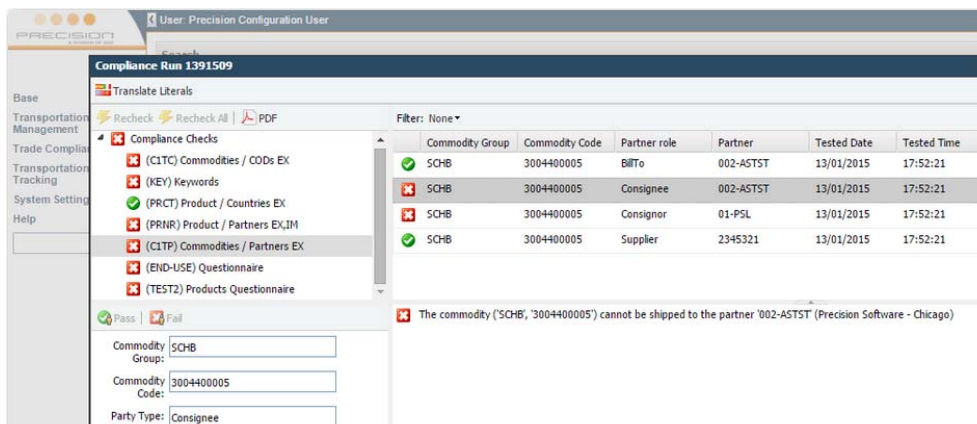
- The new Product to Partner (PRNR) check screens all the parties in the transaction and parties that are associated with an item.

**Fig. 68**  
Product to Partner Check



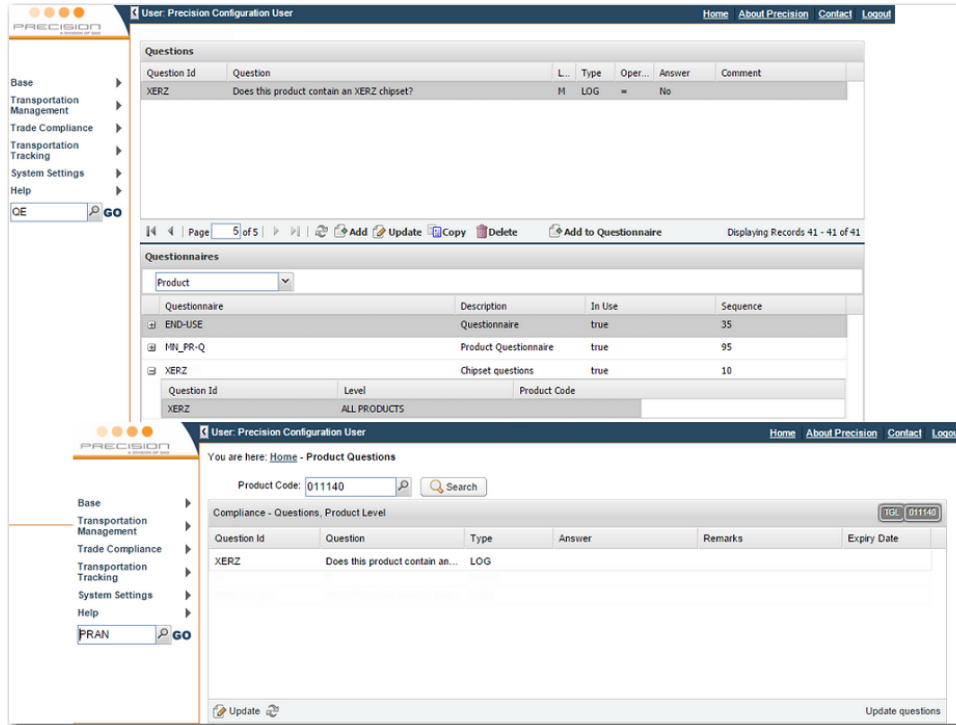
- The new Commodities to Country of Destination (C1TC) check screens the same attributes as the Product to Country of Destination check.
- The new Commodities to Partners (C1TP) check tests whether any of the commodities on the transaction are paired with a specified partner on the transaction. If they are, then the check fails.

**Fig. 69**  
Commodities to Partners Check



- The new ECCN to Countries (EXCT) check tests whether any of the ECCNs on the transaction are paired with a specified country. If they are, then the check fails. This check tests the same countries as the Product to Country of Destination check.
- The new Permitted Products to Countries check examines any products on the transaction that have the inclusion flag set to True. If these products are not on the permitted list for the country of destination, then the check fails. This check tests the same countries as the Product to Country of Destination check.
- You can now screen shipment texts against denied party lists. The shipment text must have the name on the first line and the address on subsequent lines. Specify the shipment texts for screening using the DPL-TEXTS check type in option CK.
- You can now configure a URL that links the data source displayed on the Compliance Results page with an external Web page. The link displays in the Source column of the check results.
- Option QE now allows you to define product, partner, and commodity-level questions. Answering the questions at the master record level is now possible. The compliance engine has been updated to check that the relevant master-level questions have been answered correctly.

**Fig. 70**  
Question Levels



- In the workflow search templates, you can now retrieve the Compliance Status search field value from a saved template.
- Previously, clicking the Clear button cleared the text in the Compliance Status field, but not the related icon. This issue is now resolved.

## Transportation Management

### Desktop Shipping

- Origin/Destination step: When you click Next and there is a validation error, the Desktop Shipping page reloads. Previously, some data entered did not display after the page reload. This issue is now resolved.
- Origin/Destination step: Previously, when you updated the partner code in the Deliver To field, the associated address fields did not populate with information. This issue is now resolved.
- Rate Shop step: Your administrator can configure the Rate Shop step to display a warning message when you select a service that is not the cheapest service available.
- Rate Shop step: Previously, some Rate Shop results included an ETA time of 24:00. This issue is resolved, and these results now include an ETA time of 23.59.
- Confirmation step: Desktop Shipping collates the shipping documents into one PDF file. Your administrator can now configure PRECISION to insert blank pages on the even page numbers of this PDF document. You can then print the generated PDF to a printer that is configured to duplex print automatically; you do not need to disable duplex printing. This feature prevents a carrier label from appearing on one side of a printed page and a commercial invoice appearing on the other side of the page.

## Base

### Workflow Maintenance

- You can now maintain workflows in the Web UI. The new WF option allows your administrator to review and update workflows, workflow tasks, and any prerequisite and postrequisite task configuration.

**Fig. 71**  
Workflow Tasks Configuration

The screenshot shows the 'Workflow Tasks Configuration' web interface. It is divided into three main sections:

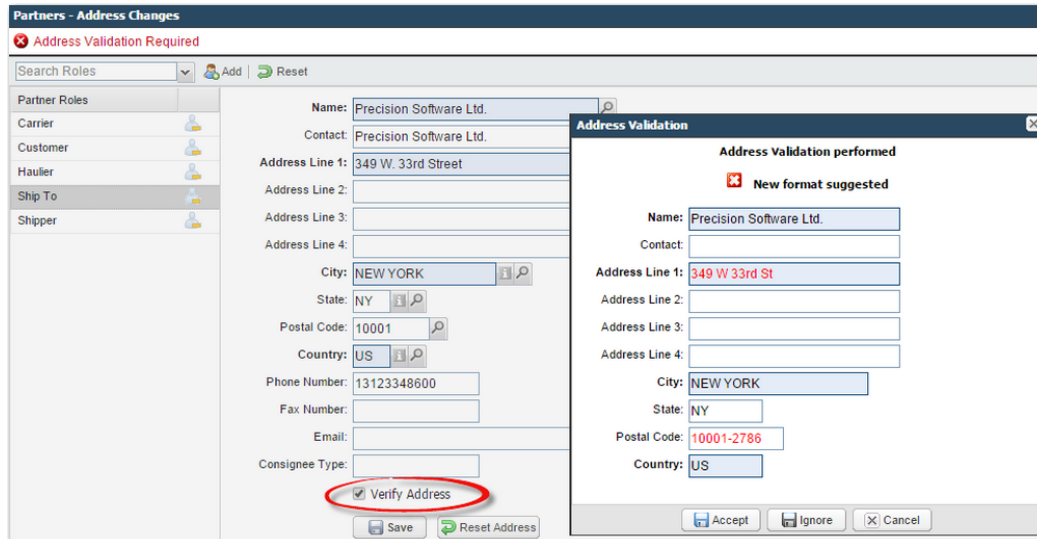
- Workflow:** A search area with fields for 'Workflow Code', 'Type', and 'Description'. Below is a table listing workflows. The 'WEB-ALL' workflow is selected. To the right, there are input fields for 'WorkFlow: WEB-ALL', 'Type: S', 'Description: Workflow (ALL Web UI Tasks)', 'Initial Owner: QTGLUSER', and 'Initial Status: 00'. An 'Update' button is present.
- Tasks for Workflow WEB-ALL:** A search area with fields for 'Task Sequence', 'Description', and 'Key ID'. Below is a table with columns: Sequence, Description, Key ID, Option, Task Progra..., Categories, Required Status, Success Status, and Succ. The table contains four rows of task data.
- Pre & Post Requisite for Workflow Tasks 100 [WFTDTI50]:** A search area with fields for 'Sequence' and 'Requisite ID'. Below is a table with columns: Sequence, Requisite ID, Description, and In U. The table shows one row with Sequence 10 and Requisite ID WFTMAN50. To the right, there are input fields for 'Sequence: 10' and 'Requisite ID: WFTMAN50', and checkboxes for 'In Use', 'Pre', and 'Post'. There are also radio buttons for 'CheckFail Action: Warn' and 'Error', and checkboxes for 'Always Cancel' and 'Always Run'. An 'Update' button is at the bottom.

- A multi-create selection list is available for adding prerequisite and postrequisite tasks to a workflow task.
- The Update Transactions button refreshes the workflow transaction data. This step is necessary when tasks are added to, or removed from, an active workflow.

### Address Validation

- You can now request address validation from the Address and Manifest workflow tasks, which provides a similar user experience to that already available in Desktop Shipping.

**Fig. 72**  
Address Validation in the Address Task



- Your administrator can now configure the system to perform address validation only when certain conditions are true.
- Plug-in support for Loqate ([www.loqate.com](http://www.loqate.com)) provides validation feedback on address information. This support is compatible with both Cloud and locally installed Loqate deployment models.
- An issue with the FedEx address verification plug-in is now resolved.
- An issue with the address verification functionality in Desktop Shipping, where the address validation pop-up is shown to a user with no apparent change to the address, is now resolved.

## Workflow

- The list of search fields in the Workflow Search area now includes Country of Destination, Country of Despatch, Country of Origin, Place of Delivery, Final Destination, Place of Loading, Origin, and Description.
- The Default and Config buttons now display as icons.
- The Pouching consolidation option now uses the Transaction Type (Z9) details to determine the From transaction type. The To transaction type is no longer restricted to K; it is determined based on your workflow view.
- The Pouching consolidation option has been modified to only list shipments in the Pick Shipments grid that are not yet consolidated.
- INFO and WARN “errors” from Process Shipment requests no longer result in the task showing a failure status.
- Workflow displays the last used search criteria. In cases where the client that you log in with differs from the last-used search criteria, the last-used criteria is now taken as the session client. This fixes an issue where the client shown on the Workflow page is not the actual session client.
- An issue, where the owner group did not change according to the task configuration when the task (un)successfully completed, is now resolved.

## Rule Maintenance

- The Rules and Rulebooks configuration screen added in Web UI 4.10, RULES has a number of enhancements:

- Additional rule sub-options in the Rules tab:
  - Partners – Trading Internal.
  - Partners – Transport Customs Financial.
  - Route.
  - Product Descriptions.
  - Product Prices.
  - Rule documents; the Documents button remains in place.
- The Texts sub-option now shows a text description similar to that available in the Windows UI.
- The Active field in the Rules Determinations - Create screen is now selected by default.
- Issues with the maximum length validation of fields on the Rules and Rulesbooks tabs are now resolved.
- An issue with the < Rules button is now resolved.
- An issue with the Start Date field in the Documents and Rules Determinations screen has been resolved.
- Usability issues in the Document multi-create window have been resolved. Now, after you click a plus button, the button is hidden.
- Updated the system values metadata used by option Y3 to include rule values.

### General Maintenance

- Enhanced the field search capabilities available on the General Maintenance list pages.
- Resolved issues in the TMS Master Data options. Options now use Ext JS components. The updated options are: PRBM, PPY, AGG, AGO, AGV, AGC, AGT, AGL, AGF, AGI, AL, TA, TATK, ZX, ZXCX, BO, TZ, CJ, CG, GC, TH, THTD, TDTE, TDEX, WC, WL, FC, TC, LE, NM, PB, RT, RTRL, RTRC, RTRS, SE, SESR, ZC, RG, RGRX, PR, PR, PRHZ, BG, and BGDT.
- You can now add a field to the Admin area on the Home page. This feature is useful when the Web UI pages are embedded in the .NET UI, or some other application, and the left side menu area is not available.

### Weighing Scale Integration

- Added USB support to the Web UI so that USB weighing scales can be connected to a client machine using the Web UI in a similar way to that already available for serial port weighing scale devices. USB client files and documentation can be found in: C:\PRECISION\WebUI\webclient\Get Weight and Print Applets
- Tested using DYMO® Postal scale M10 scale.

### System Value Maintenance

- The Include Keys? field allows your administrator to control the tags listed in the Tag Search drop-down menu. By default, system value keys are included in this menu. Tags that group a number of system values appear in bold; system value keys do not appear in bold.

When the page is initially loaded, the tag drop-down menu is automatically expanded and has cursor focus.

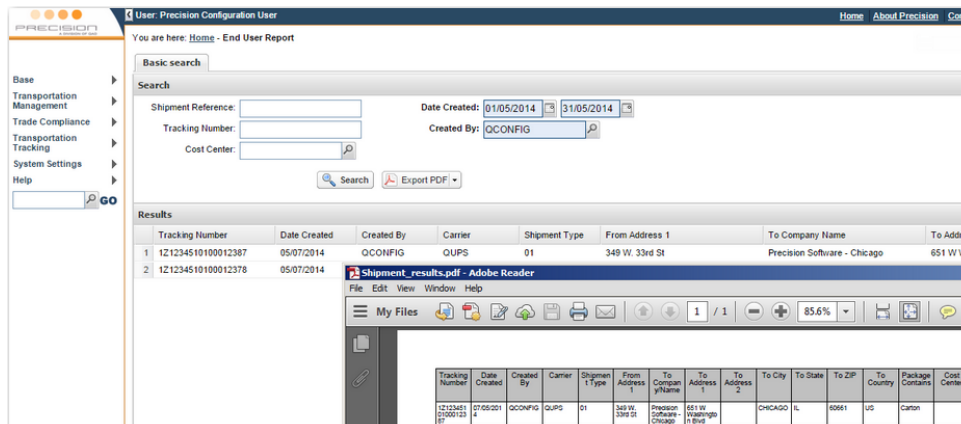
- When you select a tag in the drop-down menu, the grid refreshes automatically; you do not need to click Search.

- The new Cached By column indicates which component will require a cache reset when a change is made to a value.
- Previously, a JavaScript error occurred when the Include Advanced field was not selected for a Rules Engine tag search. This issue is now resolved.

## Other Minor Enhancements and Fixes

- A basic end-user Desktop Shipping report option has been added.

**Fig. 73**  
Desktop Shipping End User Report



- The Standard Packing workflow task now allows you to use the Update pack details button to maintain the following pack information:
  - Pack Type
  - Dimensions
  - Additional Reference
  - Total Volume
  - Total Gross Weight
  - Total Net Weight
  - Total Net Net Weight
  - Tare Weight
  - Marks and Numbers 1 - 5

This task now has improved support for shortcut keys:

- F2 to Save
- ESC to close the pop-up window
- F4 to look up a new pack type
- Your administrator can now configure the Login page to display the User ID field in lower or in upper case. Previously, the user data always showed in upper case, regardless of the Caps Lock keyboard setting.
- The Documents workflow task now shows all documents in the grid, without the need to move through multiple pages. Collating all documents or documents that previously would have been listed on different pages into a single PDF document is now possible. Column sorting is also possible.
- In the Documents workflow task, the multi-create feature now correctly sets the default printer.
- In the Documents workflow task, the Select All grid feature now works as expected.

- In the Manifest workflow task, buttons no longer appear cropped.
- The style used to detail key information on the general maintenance list panel pages is now more subtle.
- The Show Shipments and Show Errors buttons on the End of Day Manifest page now have icons.
- The Workflow, PEM, Routing Guide, Questionnaire, and End of Day Manifest pages now include blue separator lines.

## Web UI 4.10 Patches

Web UI 5.0 includes fixes added in Web UI 4.10 patches.

### Scan, Pack and Ship

- An issue, where the error “Unable to find pack with pack number: 0” displayed when trying to add lines into a newly created pack, is resolved.
- A new \$CONTEXT\_PACK\_BOX\_SCAN\$ scanner context has been added.

### Workflow

- In the Workflow Search - More Dialog window, searches using the Customs Ref field now work as expected.
- An issue with the loading of the Consolidate Shipments task has been fixed.
- In the Consolidate Shipments task, when shipments picked for consolidation do not have the same consignee partner code, a warning appears. Previously, this check was case sensitive, and resulted in warnings appearing when partner codes differed in case only. This issue is resolved.
- Previously, in the Consolidate Shipments task, search results based on the Consignee field that extended to multiple pages did not display correctly. This issue is resolved.
- For consolidations, the shipment client is now stored in XMINHD0.INHWSID and XMINDT0.INDWSID.
- The QAD Pull - Black Box Service task now shows errors returned from Black Box calls.
- Fixed an issue with the Route, References and Container task, where delivery terms were unexpectedly assigned a blank value.
- The system value ADDRESS TASK - RATING ROLES now controls which addresses can be changed in the Manifest task window after a shipment is rated.
- An exception is no longer thrown when running the Documents task in read-only mode.
- Previously, when a maintenance window was invoked as a workflow task, an issue with the ability to save could arise. This issue is resolved.
- An issue, where the Shipment Type lookup did not bring up the expected selection list, has been resolved.
- Fixed a PDF print preview issue in the Print task where only the first document was previewed.
- An issue with deleting a shipment, caused by a workflow task status validation error, is now resolved.

### Desktop Shipping

- An ambiguous error when the shipment weight was less than 0.01 Lb has been corrected.
- An issue with the Non-Regulated Product Confirmation pop-up window on the Products step is resolved.

- A character encoding issue, which can occur when navigating back to the Product step from the next step, is resolved.
- An issue with the Next button on the Compliance step, which was not enabled after a check override, is resolved.
- The creation of multiple unnecessary partner records for each partner role assigned to the partner no longer occurs.
- Endicia and OnTrac are now included in the list of carrier logos available.
- In the Origin/Destination step, the Third Party or Collect Account Number maximum field size is now set to 20 characters.
- An error that occurred when using the Mailing List option in the Origin Destination step is now resolved.
- An issue with viewing the compliance step is now resolved.
- An issue with the DTS Plugin window only showing correctly on its first call is now resolved.
- The Promised Date and the Despatch Date can now have the same value.
- An issue with the Place lookup not populating the Port of Exit value is resolved.

### End of Day Manifest (SPSEOD)

- The batches bottom toolbar is no longer cropped.
- The LAST DATE FROM system value is now created. Also, client DLTD is used instead of DELT for shipments removed from a batch.
- Your administrator can now give you permission to delete shipments from an EOD batch.
- You can now view the batch errors associated with a given batch.
- There have been updates to the error messages displayed when no PDF document is returned as part of creating a new batch.
- Previously, an exception could occur when loading partner matches that were manually failed at an earlier time; this issue is resolved.

### Compliance

- The DPL cache now supports a larger number of entries.
- The History drop-down for ad-hoc results no longer displays.
- Previously, an exception could occur when loading previous manually failed partner matches; this issue is resolved.
- An uppercase/lowercase issue with the Soundex logic is resolved. This fix also provides a slight performance improvement in the matching process.
- XML API support now exists for both the DeniedPartyList and DPL (legacy) check types.
- An issue with %n showing in the matching address detail on the Compliance Result page has been resolved.

### Maintenance

- In the Documents Parameters sub-option of Documents, the Parameter value field is now larger.
- In Documents, option DO, the grid list now shows documents with the In use value set to Yes.
- An issue in selection lists, where data containing semicolons caused the prompting logic to fail, has been resolved.

- An issue with setting up a default text for a Text ID record is resolved.
- In Users, option US, there was an issue with incorrect changes to user groups after the User Clients field in User Update was updated. This issue is resolved.

### **Inquiry (NQ)**

- Fixed an issue with the display of the Recall button.

### **Skins**

- You can now add custom carrier logos to the Desktop Shipping Rate Shop step.

### **Performance**

- Issues with ESAPI redirect validator that caused the Web UI to consume a large amount of CPU time have been resolved.
- Fixed issues with ESAPI redirect validator that can cause the Web UI to hang.

### **PEM**

- The definition of Light Shipment default information for a blank account is now permitted.
- Improvements have been made to the DHL DD PEM integration.

### **Monitor**

- Previously, the FileChanged tests did not fail if the file was not modified in the expected time. This issue is resolved.

### **Log Output**

- Log output no longer shows underscore characters in XML output.

### **Miscellaneous**

- Manually added charges are no longer deleted when you void a shipment.
- Previously, when importing addresses, importing a partner file failed when only one Company Name was specified. This issue is resolved.

## **Highway 4.0.0**

The Highway version released with PRECISION v16.0 is 4.0.0. The Highway database schema has changed in this release. A SQL script is available that will update, in situ, an existing schema.

### **Database Changes**

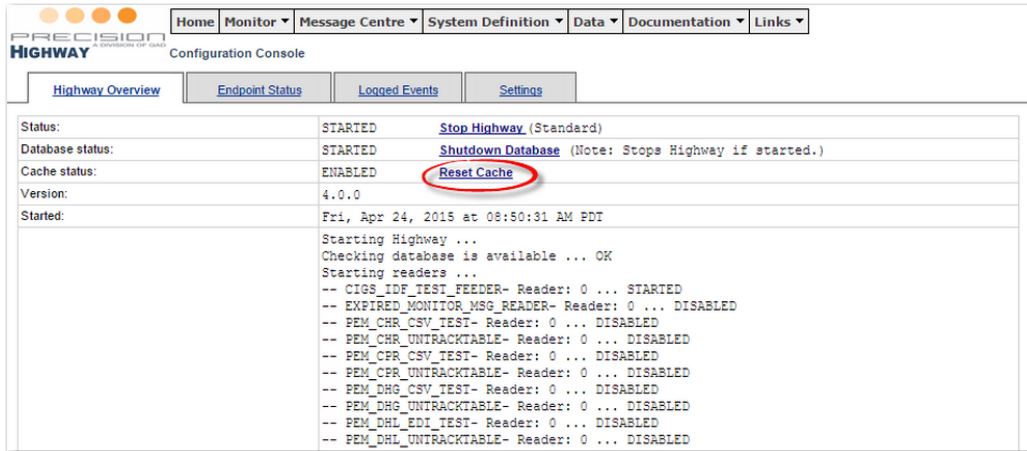
- Multiple Highway instances, each deployed in their own WildFly container, can now use a single database.

A DOMAINID field has been added to each of the Highway database tables. This field is also part of the primary index. Each Highway instance can be configured with a unique domain identifier. This value is used to isolate the data to a particular Highway instance.

- Data exported and imported from the Highway Console is domain independent.

- The Highway login page details the domain in the Domain field. This information is read only.
- The HW\_EVENTLOG table now includes a new THREADID field. This field holds the thread identifier of the thread logging the event. This new field is now part of the primary key, thus helping to ensure record uniqueness and preventing “HW\_EVENTLOG record already exists” errors.
- Certain data in the Highway database is cached. It is now possible to clear this data and reset the cache.

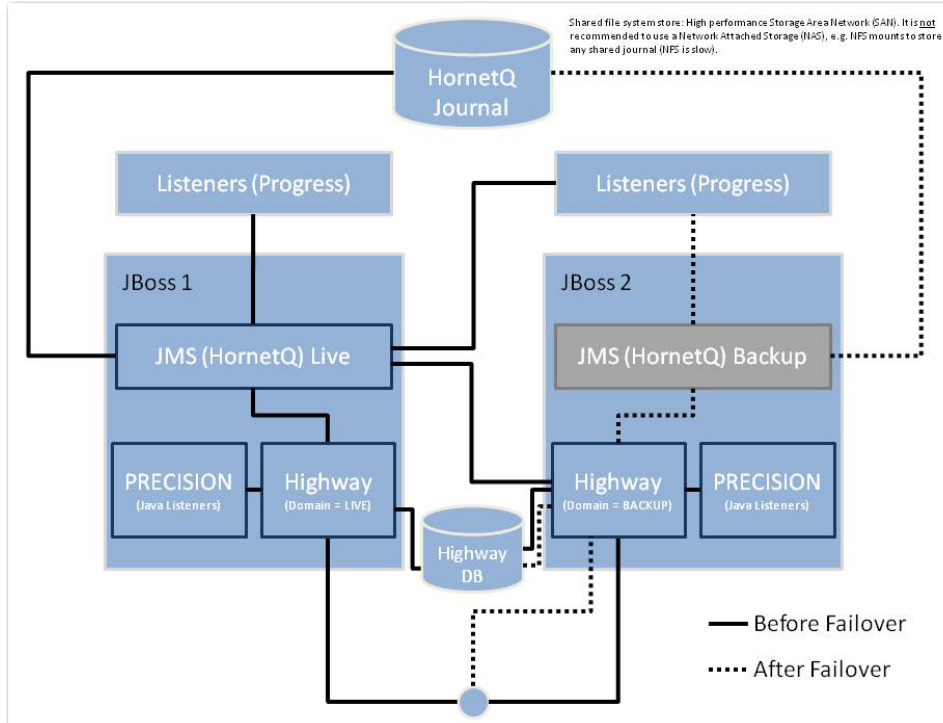
**Fig. 74**  
Reset Cache in Highway



## JMS

- The components in Highway that behave as a JMS client (reading, writing, and counting messages) have been modified to allow them to work with a WildFly JMS cluster. With a JMS cluster, only one WildFly node is running HornetQ at a time. Highway can be configured to discover the “live” WildFly node serving out connections to the queues. This is done through a number of new server properties.
- Added Highway support for a Live/Backup JMS high availability configuration. WildFly 8 should be started using `precision-standalone-full-ha.xml` rather than using `precision-standalone-full.xml`. A number of manual steps are required to configure clustering after the Web UI install is complete.

**Fig. 75**  
JMS Clustering



- HornetQ, the underlying JMS component, provides its own mechanism to count messages on a particular queue. The PERSISTENCE\_TYPE setting can now accept a new value of HORNETQ. The PERSISTENCE\_LOCATION setting is not applicable when the persistence type is set to HORNETQ.

## Web Services

The PRECISION Web service definition (WSDL) has been updated to reflect the new functionality available in the Trade Compliance and Transportation Tracking modules. The following URL gives access to the latest WSDL: <http://localhost:8080/highway/ws/precision?wsdl>

- The BatchShipment and BatchShipmentResponse services have been removed from the PRECISION WSDL.
- The PEMPackagesCurrentStatusResponse web service has changed. The phone Extension field has been extended to a maximum length of 15. The EmployeeAdditionalReferenceId and FaxDetails fields have been added to the partner type.
- Added GetComplianceRequest, which returns ShowComplianceRequest, and GetComplianceResult, which returns ShowComplianceResult.
- ProcessComplianceRequest and ShowComplianceResult now take account of the new checks added to the Web UI compliance engine.

**Table 18**  
PRECISION v16.0 SOAP API Services

consolidateShipments	rateShopShipment
createShipment	reprintShipment
processEOD	shipShipment
processShipment	updateShipment
processShipmentLines	validateShipAddress
queryShipment	voidShipment

## Endpoints

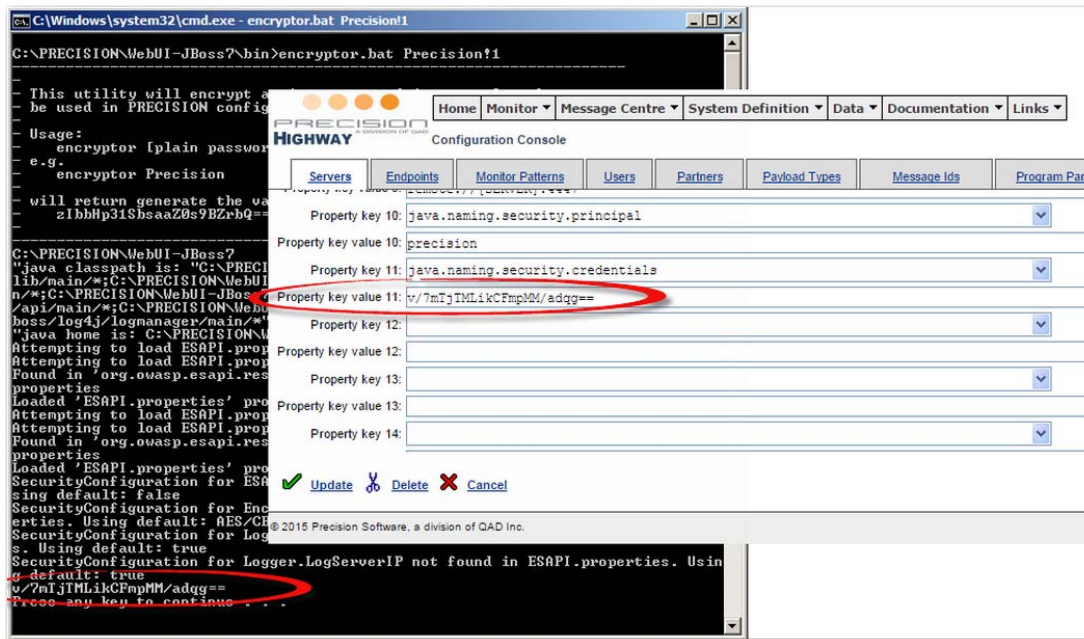
- The FTPS endpoint now supports both implicit and explicit FTPS. Previously, only explicit FTPS was supported. To specify the type of FTPS, set the server property `ftps.type` to `IMPLICIT` or `EXPLICIT`.
- You can now disable the server certificate validation step performed by the FTPS endpoint by clearing the server property `server.cert`.

## Security Updates

- Endpoint and Server property values held in the Highway database can now be encrypted using the `encryptor.bat` utility.

Fig. 76

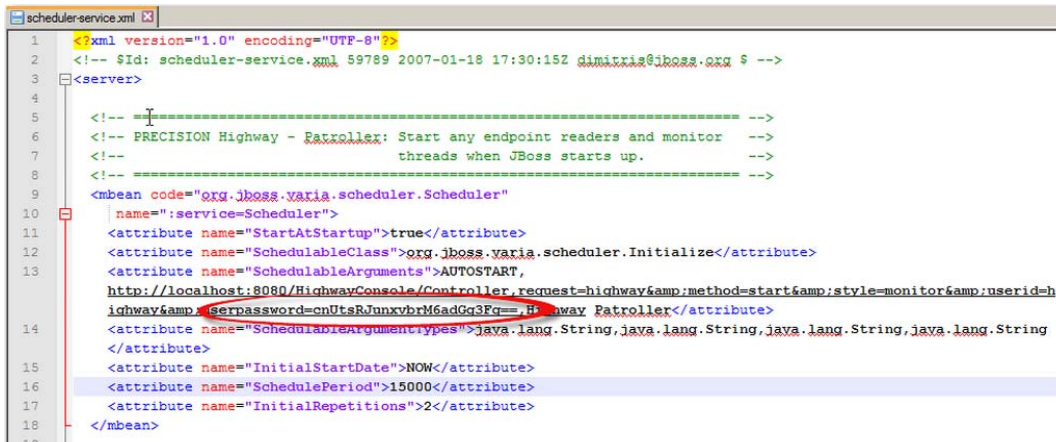
Highway with Encrypted Property Values



- Added support to encrypt the Highway password used by the PRECISION Scheduler and defined in the `\conf\scheduler-service.xml` file.

Fig. 77

Scheduler-Service.XML



## Listeners

The Progress 4GL Windows registry entries have changed to reflect the new version of WildFly and HornetQ.

## Technical

### WildFly

- PRECISION Web UI and Highway can be deployed in WildFly 8. A separate document called *Upgrading to Web UI 5.0 from Web UI 4.10* includes additional information and an upgrade path to follow.

The key changes between JBoss 4.2.3 and WildFly 8.2 are listed in Table 19.

**Note** Support for WildFly requires Web UI 5.0.1 and Highway 4.0.1.

**Table 19**  
Key Differences Between JBoss 4.2.3 and WildFly 8.2

Directory Structure	In the WildFly 8 directory structure, Precision EAR files are deployed from: C:\PRECISION\WebUI\wildfly\standalone\deployments PRECISION application dependencies (jar files) are located at: C:\PRECISION\WebUI\wildfly\modules\apps\precision
Classloader	WildFly 8 expects each application to have its own classpath. Jar files are grouped together in modules and the EAR files detail the modules they need. There are two modules defined for PRECISION EAR file: lib and libpsl These can be found in: C:\PRECISION\WebUI\wildfly\modules\apps\precision\lib\main C:\PRECISION\WebUI\wildfly\modules\apps\precision\libpsl\main A module.xml file is used to define the module.
Configuration	The key configuration file is precision-standalone-full.xml. This can be found in: C:\PRECISION\WebUI\wildfly\standalone\configuration This XML details in one place the ports, log4j, properties, and JMS queues. If JMS clustering is required then precision-standalone-full-ha.xml should be used.
JMS	The JMS component has changed; HornetQ is now used. JMS messages are no longer persisted to a database. Highway JMS setup needs to change to support HornetQ. Data upgrade scripts are available to update existing Highway data to work with WildFly 8 and HornetQ.
Scheduler	There is no WildFly scheduler provided with WildFly 8. A new PRECISION scheduler component has been developed which performs a similar function. This new scheduler will use the same scheduler-service.xml file to determine the requests to kick off when WildFly starts up. The scheduler will look for the XML file in: C:\PRECISION\WebUI\conf
Windows Service	Running WildFly as a Windows Service continues to use the Java wrapper component. Given the directory and classloader changes, this conf file differs from the JBoss 4 one.

- JAAS setup has changed under WildFly 8. Any existing JAAS configuration in place will require review to get it to work with Web UI 5.0.

- Log files generated by WildFly 8 will, by default, be created in C:\PRECISION\WebUI\wildfly\standalone\log. The Log Info page (LI) has been updated to look here by default.
- The Spring XSD files are now embedded in the PRECISION EAR file. This ensures WildFly can deploy the Web UI when it has no access to the Internet.

## Security

The application has again been tested for possible OWASP Top 10 flaws. This was done by performing both Veracode static and dynamic scans on the PRECISION Web UI solution. Potential vulnerability flaws were reviewed and either corrected or mitigated. Veracode test reports are available upon request.

- Added ability to prevent potential cross-site request forgery vulnerabilities.
- Added ability to prevent Cross-Frame Scripting/Clickjacking vulnerabilities.
- Fixed Authenticated Reflected Cross-site Scripting issues.
- Limited accepted file type for Batch Compliance processing upload to CSV. CSV is the suggested file type by default. Logic checks that the file is not binary before processing.
- Auto-complete can now be disabled on the login page.

## Browser Support/User Interface

- All screens now render correctly, even with IE compatibility mode enabled.
- Web UI and Highway support Internet Explorer (9, 10, and 11), Google Chrome (v42.0), and Mozilla Firefox (v37.0).
- The top links system values now accept a <context> token, which is replaced at run time with the actual context type.

**Note** Typically, the context is “/precision”. If the URL specified begins with “/precision/”, the Web UI tries to replace this with the actual context used.

- Support and content for four additional languages has been added. The new languages are Chinese (Traditional), Japanese, Russian, and Spanish.

**Note** The language data pack has been uploaded to the released PRECISION v16.0 Master database. Only languages marked as Web languages (XMDLNG0.DLPSL01) are listed on the Login and Home pages.

## Install

- Application server installed by default is now WildFly 8.
- Java JRE 1.7.0\_75 (32 bit) is now the version of Java used by the Progress 4GL listeners to connect to the JMS queues.

**Note** Installer now leaves the command used to install the Java component used by the Progress listener in a file called `java-install-command.txt`.

- Default passwords suggested by the installer are encrypted by default.
- Highway Database now includes configuration to remove expired messages.
- The JMS queues OUT6 and OUT7 are now defined in WildFly and Highway by default.

There is no longer an option to indicate a JMS clustering requirement. This requires completion of some manual steps after the Web UI install finishes.