

QAD Automation Solutions: Label Printing Services Release Notes

March 2019

These release notes include information about enhancements and fixes related to the 3.1.2 release of QAD Label Printing Services.

Use the following list to find a specific release:

<i>Release Notes for Current Release</i>	2
<i>Release Notes for Version 3.1.1</i>	4
<i>Release Notes for Version 3.1</i>	6
<i>Release Notes for Version 3.0</i>	8
<i>Release Notes for Version 2.0.1</i>	11
<i>Release Notes for 1.2</i>	19
<i>Release Notes for Version 1.1.30.0</i>	23
<i>Release Notes for Version 1.1.20.0</i>	25
<i>Release Notes for Version 1.1.4.0</i>	28
<i>Release Notes for Version 01.0</i>	30

Release Notes for Current Release

Label Printing Services Version: 3.1.2

QAD Enterprise Edition: 2015 Enterprise Edition and higher

Release Date: March 2019

Prerequisites: Refer to the *QAD Label Printing Services Installation Guide*, version 3.1.2, dated March 2019 for information on compatibility and prerequisites.

Conversion Information: Conversion information is included in the *QAD Label Printing Services Installation Guide* for March 2019.

User Information: User information is included in the *QAD Label Printing Services User Guide*, version 3.1.2, dated March 2019.

Entity Diagrams: Entity diagrams for Automation Solutions: Label Printing Services are included in the *QAD Entity Diagrams Technical Reference*, Revision 2, dated March 2019.

Enhancements

The following topics discuss enhancements for this release.

LPS Labels Included in Package

With this release, the Label Printing Services package includes a set of labels that you can import; then, use as templates. The following labels are included in the 3.1.2 package:

Labels that are provided as out-of-the box with Label Printing Service 3.1.2 or higher include the following:

- Customer Item
- Purchase Order
- Serial
- Master
- Mixed
- Container
- Destination
- Serial Detail
- Truck

A new chapter was added to the *QAD Automation Solutions: Label Printing Services User Guide* for the labels. The chapter includes configuration information and an illustration of each label. The illustration includes numbered areas for each part of the label that map to Label Printing Services fields and other field-related data.

Important When changes to the labels are required, please contact QAD Services for help in personalizing the labels for your business requirements. The labels provided are templates, and they are not supported by QAD.

New Field Length for Variables

The Variable Value field in Ad Hoc Label Generation (36.13.16.2.19) and Label Reprint/Ad Hoc Generation (36.13.16.2.29) now lets you enter up to 500 characters in length. Now, when you enter the field to enter new values or edit existing value, the system displays a separate frame for better visibility for longer values. Previously, the field let you enter only 50 characters.

Fixes

You can find a list of fixes that apply to this version by visiting the www.qad.com site. You should have a valid QAD login to enter the site. From there, you select Support > Store > Product Changes > Automation Solutions > [LPS version]. Or, you can use the following URL:

https://tools.qad.com/product_changes/index.php

Release Notes for Version 3.1.1

Label Printing Services Version: 3.1.1

QAD Enterprise Edition: 2015 Enterprise Edition and higher

Release Date: December 2018

Prerequisites: Refer to the *QAD Label Printing Services Installation Guide*, version 3.1.1, dated March 2019 for information on compatibility and prerequisites.

Conversion Information: Conversion information is included in the *QAD Label Printing Services Installation Guide* for March 2019.

User Information: User information is included in the *QAD Label Printing Services User Guide*, version 3.1.1, dated March 2019.

Entity Diagrams: Entity diagrams for Automation Solutions: Label Printing Services are included in the *QAD Entity Diagrams Technical Reference*, Revision 2, dated March 2019.

Enhancements

The following topics discuss enhancements for this release.

Copy Label Data from Existing Labels to Save Time

You can now copy data from an existing label to a new label to be generated. The new functionality displays in Ad Hoc Label Generation (36.13.16.2.19). Previously, when you wanted to print labels that you generated in the program, you had to manually enter the data; copying the data saves you time and effort.

Once you select a label format, the system prompts you to copy data from an existing label ID. When you choose Yes, the system displays a frame that lists all label master records that were previously generated using the label format you specified. You can optionally apply a filter to find the label to copy, using the fields Label Keys 1, 2, and 3. For information on Label Keys, refer to *QAD Label Printing Services User Guide*.

Once you select the label to copy, the system prompts you to enter the printer and number of copies. When the system copies data to a new label, the system populates the fields in the Value column, using the data from the label ID you selected. You can optionally modify the data. You can enter a value since the value is blank; when you do not enter a value, the label prints with a blank value.

When you retain the original label data, the system executes a reprint of the label. When you modify data, the system prints the new label.

When you choose not to copy a label, the system continues through normal processing.

Delete Records within Label Format Maintenance

You can delete records from within Label Format Maintenance (36.13.16.1.9) without leaving orphaned records in configuration tables that are related to label content routing or label printer routing.

Previously, when you deleted label format records, references to the formats remained in the label content routing or label printer configuration tables, creating orphaned records.

Fixes

You can find a list of fixes that apply to this version by visiting the www.qad.com site. You should have a valid QAD login to enter the site. From there, you select Support > Store > Product Changes > Automation Solutions > [LPS version]. Or, you can use the following URL:

https://tools.qad.com/product_changes/index.php

Release Notes for Version 3.1

Label Printing Services Version: 3.1

QAD Enterprise Edition: 2015 Enterprise Edition and higher

Release Date: September 2018

Prerequisites: Refer to the *QAD Label Printing Services Installation Guide*, version 3.1, dated September 2018 for information on compatibility and prerequisites.

Conversion Information: Conversion information is included in the *QAD Label Printing Services Installation Guide* for September 2018.

Fixes

The following table describes fixes that were made for this release.

QAD Ticket Number	Description
LPSPD-92	The system no longer lets you delete a queue in Print Queue Maintenance (36.13.16.1.4) when the queue is in a generated state in Label Maintenance (36.13.16.2.5). When you try, the system now displays an error, informing you that a label queue record exists and the deletion is not possible. Previously, in this scenario, the system let you delete a queue without validating the queue state.
LPSPD-105	The LPS routing print engine no longer stops processing, no longer displays an error, and now correctly generates a label when you run the Label Printing Service from a .NET UI session. Previously, in this scenario, the system displayed an error, even though it found a correct format and printer routing.
LPSPD-107	Label Content Routing Configuration (36.13.16.1.16) now correctly deletes detailed data in child records when you delete parent label content routing data. Previously, when you deleted the data, deleted detail child records remained, and the system displayed a message, warning you that data will be deleted; however, the detail records were still visible in the Label Format Router (.NET UI) browse.
LPSPD-123	Label Format Maintenance (36.13.16.1.9) no longer displays a Delete button when you move the cursor to the Merge Program field. Previously, the button wrongly displayed and use of it resulted in a clearing of data in all frames.
LPSPD-124	The .NET UI Label Printer Router Browse collection now displays the Dataset column in a new position so that it is initially visible to you. Previously, the column with key field data was positioned so that its data was difficult to discern.
LPSPD-125	The Label Type field in Label Type Maintenance (36.13.16.3.1) now has additional validation. Previously, the program did not validate for spaces and special characters, resulting in errors when you attempted to generate the label.
LPSPD-126	Label Event Processing (36.13.16.3.14) now clears out fields when you scroll to a different ID in the Event ID field. Previously, other fields in the frame retained their values from the last entry when you scrolled on the Event ID field.
LPSPD-127	Manual Label Reprint (36.13.16.2.14) now: <ul style="list-style-type: none">• Lets you run the report with a filter of any field on the menu• Lets you print• Displays the correct From App Request and To App Request IDs correctly Previously, the From and To App request IDs were switched and attempting to manually print from the Label Reprint menu did not result in printing, even when values displayed.
LPSPD-128	Label Event Type Criteria Maintenance (36.13.16.3.15) now correctly deletes criteria value records. Previously, the program did not delete the records when you deleted a Group Type record in Label Group Maintenance; then, re-added that record to use the same Label Type as before. In this instance, Label Event Type Criteria Maintenance considered the record configured with the previously specified value(s), indicating that the system did not delete the criteria value record when you deleted the Group Type record.

QAD Ticket Number	Description
LPSPD-129	When you print multiple labels without leaving Label Reprint Maintenance (36.13.16.2.7) or Ad Hoc Label Generation (36.13.16.2.19), the program no longer loops causing an incremental printing of the labels. Previously, in this scenario, the system printed the labels incrementally; that is, the first time, you invoked printing, only the first label printed, and the second time you invoked, the second label printed, and so on.
LPSPD-132	<p>You can now remove reprint labels that Label Ad Hoc Generation or Manual Label Reprint generates from Label Queue Monitor (36.13.16.2.3) when you also release from Label Manual Release (36.13.16.2.13).</p> <p>Previously, the system did not display or release reprint labels in Label Queue Monitor even after you created the labels.</p>
LPSPD-133	<p>Label Reprint Maintenance and Ad Hoc Label Generation now have additional validation on the Printer field to determine when:</p> <ul style="list-style-type: none"> • You have defined syntax for the printer • There is a label format detail record for this format/syntax combination. <p>The system prompts you for re-entry when you enter an invalid value. Previously, the system only validated the Printer field.</p>
LPSPD-134	The delete function in Label Format Maintenance (.NET UI) now functions correctly, and the program now correctly displays expected errors and messages. Previously, when you tried to delete, the delete function did not work, and expected errors and messages did not display.
LPSPD-135 LPSPD-137	<p>Label Template Maintenance (36.13.16.1.7) now lets you delete, has an expanded Template Name field, and no longer deletes variables when you access a template.</p> <p>Previously, when you tried to delete the template definition for the selected printer syntax type and template name, the system prompted to delete, but did not prompt for a Yes or No response. Since the default to the confirm delete prompt is No, you could not delete.</p> <p>The Template Name field was expanded, allowing for more characters when you specify the path to the template file name. Previously, the field only allowed a maximum of 70 characters.</p> <p>The program no longer deletes all variables when you access a template. Previously, the program deleted them; then, recreated them from the template you defined in the Template File Name field.</p>
LPSPD-136	Label Request History Browse (.NET UI) no longer generates an error when null characters are in the label and the label contains an image. Previously, in this scenario, the system displayed an error, informing you that invalid characters were replaced with blanks.
LPSPD-145	The system no longer displays a Progress error and now correctly prints multiple copies of labels when you define a printer with a Transmission Control Protocol (TCP) type connection. Previously, in this scenario, the system displayed a communication error and prevented printing.

Release Notes for Version 3.0

Label Printing Services Version: 3.0

QAD Enterprise Edition: 2016 Enterprise Edition and higher

Release Date: March 2018

Prerequisites: Refer to the *QAD Label Printing Services Installation Guide*, version 3.0, dated March 2018 for information on compatibility and prerequisites.

Conversion Information: Conversion information is included in the *QAD Label Printing Services Installation Guide* for March 2018.

Enhancements

Label Format Maintenance Improvements

Improvements were made to Label Format Maintenance (36.13.16.1.9) that reduce processing time:

- Validations were removed from fields that did not require validation, such as Description fields.
- When field values are not required, the fields can now be blank.

Additionally, the program now validates illegal or invalid characters in file name prefixes and suffixes when the system generates file names. The system now displays an error message when file name prefixes and suffixes contain a space or special characters, such as the following:

,	:	#
<	"	!
>	[^
?]	*
/	{	(
;	})
'	`	+
=	\	

New Utility to Delete Label History Records

A new Delete Label Format History (36.13.16.4.13) lets you delete label history records for all label formats. When you use the utility, it prompts you to enter the number of days of history to preserve in the system.

Use the Days of History to Retain field to specify any number of days between 0 and 999; the default is 7. When you press Go, the utility deletes label history data that is not specified in the preservation days.

Use the Simulate field to simulate the deletion first; the system displays records it intends to delete. When you uncheck Simulate, then press Go, the system deletes the records.

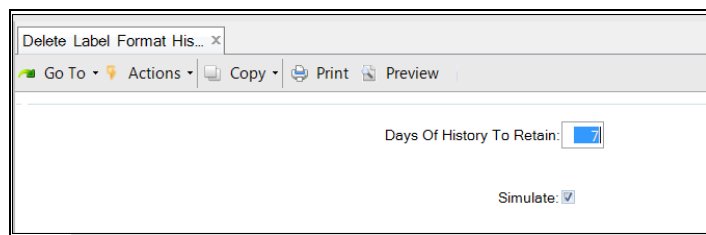
The utility uses the following formula to calculate the preservation date:

*Delete dates = add-interval (today, (-1 * <number of days to retain>), day)*

Since the history dates are based on date and time, the system sets the delete dates time to 23:59:59:999 so that it can pick up all history records for that day. The system deletes the following tables:

labelMstr	labelDet
labelPrntQue	labelReprint
responseHstD	requestHist
requestHstRsp	sourceMsg

Fig. 1
Delete Label Format History (36.13.16.4.13)



Fixes

The following table describes fixes that were made for this release.

QAD Ticket Number	Description
LPSPD-56	Label Content Routing Configuration (36.13.16.1.16) no longer loops printer and format data setup screens once you select to set up a printer in the lower-level configuration screens and do not enter data. Previously, when you selected the Printer check box in a lower-level configuration screen, you could not exit the configuration screen until you entered values.
LPSPD-58	See “Label Format Maintenance Improvements” on page 8.
LPSPD-60	Label Printer Routing Setup (36.13.16.1.17) no longer displays a Progress error informing you that a label printer routing setup exists when you exit the first frame.
LPSPD-89	The system no longer displays a system error due to programmatic issues. Previously, issues in the label print service engine caused Progress errors to display.
LPSPD-90	See “New Utility to Delete Label History Records” on page 8
LPSPD-93	You can now correctly specify the number of labels to print when you create a label in Ad Hoc Label Generation (36.13.16.2.19). Previously, the program would not let you specify the number of labels to print, requiring you to use Label Maintenance (36.13.16.2.5) to specify the number of labels to print for Ad Hoc Label Generation records.
LPSPD-95	The system no longer creates a dummy dataset when you create a label in Ad Hoc Label Generation. Previously, when you loaded a dataset using Label Dataset Import (36.13.16.1.11), then used the data in Ad Hoc Label Generation to create the label, the system created a dummy dataset.
LPSPD-96	The mandatory Copies and Delete Labels before Month fields in Label Format Maintenance are now validated for a numeric value, and both fields now include default values. Additional corrections were made to both fields. When you enter a zero (0) value in the Copies field, the system now displays an error in the same frame. Previously, the field was not validated for a value and when you entered a zero, the error displayed in the next frame. When you press Enter in Label Format field to select a format, the system no longer resets the Delete Labels before Month field.
LPSPD-97	Label Format Maintenance now correctly clears fields when you add records. Previously, when you added a new format, the system did not clear the values in the Dataset and Pause Between Label Generation (ms) fields.
LPSPD-100	Label Template Maintenance (36.13.16.1.7) no longer prints templates that contain characters with NULL characters (characters set to zero). The program now verifies that NULL characters do not exist when you import templates. When they do, the program exchanges the characters for standard variables for printing.
LPSPD-101	See “Label Format Maintenance Improvements” on page 8.

QAD Ticket Number	Description
LPSPD-102	Label Config Import/Export (36.13.16.4.1) no longer has issues when setup data exists in the system. The program now checks for existing data, such as printers, and when existing data exists, the program replaces duplicate names in the imported data with existing data.
LPSPD-104	Label Printer Routing Configuration (36.13.16.1.18) no longer displays an error message and lets you edit or create a new configuration. Previously, when you entered a database identifier, the system displayed an error informing you that the configuration did not exist and prompted you to re-enter.
LPSPD-108	Label Format Maintenance now correctly populates fields when you manually enter a format in the Label Format field. Previously, all fields populated correctly when you selected a format; however, when you manually entered a format, the system did not correctly populate some fields or pull values in for fields when you maneuvered to succeeding frames. Additionally, the Dataset field is now populated correctly and no longer remains blank when the system retrieves label format data.
LPSPD-109	The Dataset Field Name field in Label Format Maintenance now lets you select a blank dataset field name. Previously, you could not delete tokens when the dataset field name did not exist. Also, when you select or reload a different dataset, the system now considers the token valid and no longer displays an error informing you that the Dataset Field Name is blank.
LPSPD-110	The system no longer continues to print labels when you print multiple labels without exiting Ad Hoc Label Generation Program (36.13.16.2.19). Previously, in this scenario, the system entered a printing loop, printing more labels.
LPSPD-111	You can now delete a format in Label Format Maintenance when the format has either tokens or details. Previously, when you used the Delete Labels Before Month field to delete format data, you were required to delete all token and format details individually before you could delete the format.
LPSPD-112	You can now delete events in Label Event Maintenance (36.13.16.3.13) when the cursor is on the Table Name field. Previously, when you put the cursor on the field, the system would not let you delete the record unless you pressed the F1 key multiple times.
LPSPD-113	You can no longer edit records in Label Request History (36.13.16.2.1). Previously, you could access and edit history records in the program.
LPSPD-114	Duplicate fields no longer display in Ad Hoc Label Generation when you reference the same dataset field in the label template multiple times. Previously, in this scenario, the same dataset field displayed multiple times and you could enter different values for each of the occurrences; however, the system used only one value and populated each occurrence of the field with the single value.
LPSPD-115	Label Content Routing Setup correctly prints all labels when the setup uses multiple label formats. Previously, the system printed only one label, while other labels were placed in the output directory but never printed. Also, all generated labels are now visible in Label Maintenance. Previously, even though the system failed to print all labels, it still generated the labels as files in the output directory; however, the generation of the files was not visible from Label Maintenance and only the last generated label was visible.
LPSPD-116	Fields in Label Printer Routing Setup (36.13.16.1.17) now refresh correctly when you scroll to select a record setup definition. Previously, the system did not refresh the Dataset field when you scrolled, leaving you to enter it manually. Also, the system no longer retains old values in some fields when you edit a different record.
LPSPD-117	Label Template Maintenance (36.13.16.1.7) no longer creates duplicate variables when the system imports or reads a template. Previously, in this scenario, the system created a variable record for each occurrence of the variable in the template.
LPSPD-118	The system no longer displays an error message informing you that the label format does not exist in Ad Hoc Label Generation when you manually enter a format ID. Previously, you could scroll through the format IDs and the system populated data correctly; however, manual entry of the format ID caused the error to display.

Release Notes for Version 2.0.1

Label Printing Services Version: 2.0.1

QAD Enterprise Edition: 2015 Enterprise Edition and higher

.NET UI: 2.9.5 + CP5 (Cumulative Patch #5)

Release Date: September 2016

Prerequisites: Refer to the *QAD Label Printing Services Installation Guide* dated September 2016 for information on compatibility and prerequisites.

Conversion Information: Conversion information is included in the *QAD Label Printing Services Installation Guide* for September 2016.

Enhancements

The following enhancements are included in this release:

- Label Maintenance (36.13.16.2.5) now has improved performance. An index has been added to the temp table that loads a label template.
- Label Content Routine Setup (36.13.16.1.15) has been enhanced so that you can now delete the entire setup from the header frame. Previously, you had to select each child component individually to delete them.
- Ad Hoc Label Generation (36.13.16.2.19) has been enhanced and now prompts users for confirmation that all data is correct before generating the label. Previously, it was possible to leave the program without the label being generated.

The following improvements were made when the system considers entered blanks or processes quotation marks in fields:

- You can now specify blank values in fields. Previously, when you entered a blank value, the system replaced it with an asterisk.
- You can now enter blank values in Label Event Type Criteria Maintenance (36.13.16.3.15) fields. When you do, the system saves the entry and displays the blank value as double quotation marks (“”). Entering either double (“”) or single (“”) empty quotation marks is equivalent to a blank field.
- Event type criteria filtering has been altered in the label event work file subscriber. Now, the double quotation value accepts only an empty string. Previously, it passed the double quotes to the label extraction routine as criteria.
- When you either add a new field or delete a field in Label Event Maintenance (36.13.16.3.13), the program no longer overwrites existing double quotation values with asterisks.

Fixes

The following table describes fixes for this release.

QAD Ticket Number	Description
LPSPD-55	Label Dataset Maintenance (36.13.16.1.12) now displays the dataset when you manually enter the version. Previously, the display would only change when using the up/down arrows while scrolling through the version.
LPSPD-59	The system now formats system-generated IDs as 999999999999999999 to correct the sequence of system-generated IDs. The source application request ID in the label request history table is a character field, and the system generates request IDs as numeric. However, applications can pass IDs as alphanumeric, causing a record with a value 12 to display before a record with a value of 2. Formatting the system-generated IDs with the large numeric value resolves this issue.
LPSPD-61	Label Group Maintenance (36.13.16.3.4) no longer displays the following error message when you delete a group ID: ** input value: should be yes/no (87)
LPSPD-75	Incorrect field naming for the index on the label extraction temp-table definition has been corrected. Previously, the lbGrpTypeOid index was defined to include the lbTypesOid field. This was changed to the correct name of lbGrpTypesOid. The temp-table definition was also moved to its own ttcextract.i file so that you can use references in extraction routines.
LPSPD-76	The system no longer displays a runtime error indicating that the indexes for area 6 have exceeded their limit when processes run continuously without logging out of a session for multiple days. To correct the issue, all temp-table definitions were updated to contain the no-undo clause within the define statement.

Release Notes for 2.0

Label Printing Services Version: 2.0

QAD Enterprise Edition: 2015 Enterprise Edition and higher

.NET UI: 2.9.5 + CP5 (Cumulative Patch #5)

Release Date: March 2016

Prerequisites: Refer to the *QAD Label Printing Services Installation Guide* dated March 2016 for information on compatibility and prerequisites.

Conversion Information: Conversion information is included in the *QAD Label Printing Services Installation Guide* for March 2016.

First Time Users

If you are new to Label Printing Services, you can read an overview and a description of features in “Release Notes for Version 01.0” on page 30.

Early Adopter Users

If you have received previous releases of Label Printing Services, the following topics discuss enhancements in this 2.0 release and fixes for earlier releases.

Enhancements

The following topic describes enhancements for this release.

Label Print Status Collection Enhancements

New features were added to the Label Print Status Collection in these areas:

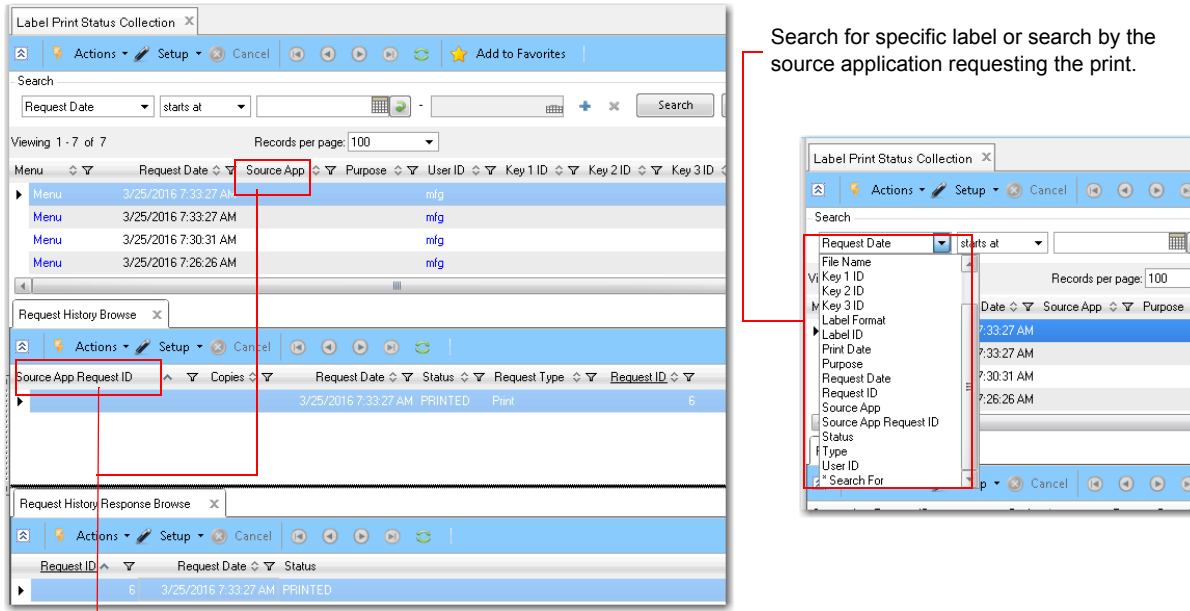
- “New Auditing Tools” on page 13
- “New Functions Available” on page 14

New Auditing Tools

New auditing capabilities were added to the Label Print Status Collection; see Figure 2. Now, the browse collection:

- Stores the name of the module requesting the label print; for example, Data Collection, Serialization and so on
- Lets you search for specific labels
- Displays the application data that was used to generate the label
- Displays the initial prints of a label as well as reprints
- Displays generated data; that is, the content of the label master for the request ID

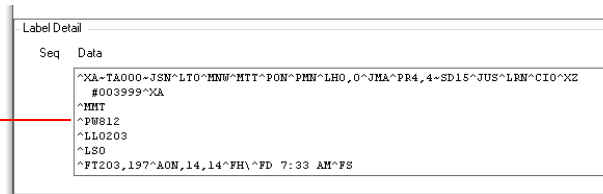
Fig. 2
Label Print Status Collection, Auditing Tools



Search for specific label or search by the source application requesting the print.

View source application data when you right-click, select Menu, then select Request History.

View content data.



New Functions Available

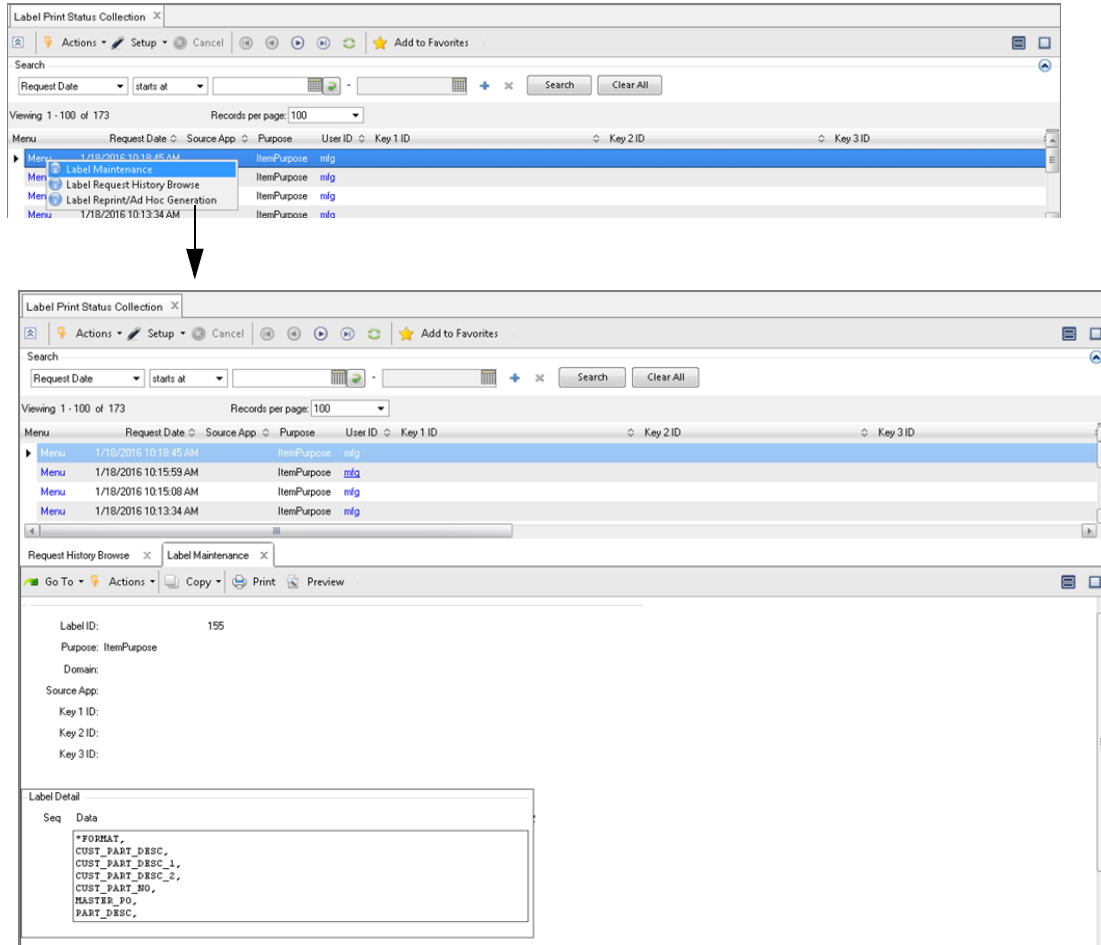
You can now use the Label Print Status Collection to access additional label functions and features through supporting programs, making the collection a one-stop control and monitoring tool. For example, you can access functions that let you view label data, print and reprint labels, or view request history data and drill down into specific request data in supporting sub-browsets.

Now, you can right-click on the new Menu column in the row with the label of interest in the top-level browse to display a menu of the following Label Printing Services programs:

- Label Maintenance
- Label Request History
- Label Reprint/Ad Hoc Label Generation

When you select a program, such as Label Maintenance, the system redirects you to it, displaying it within the browse collection and preselecting the label or request in the program that you selected in the Label Print Status top-level browse.

Fig. 3
Label Print Status Collection, Label Maintenance



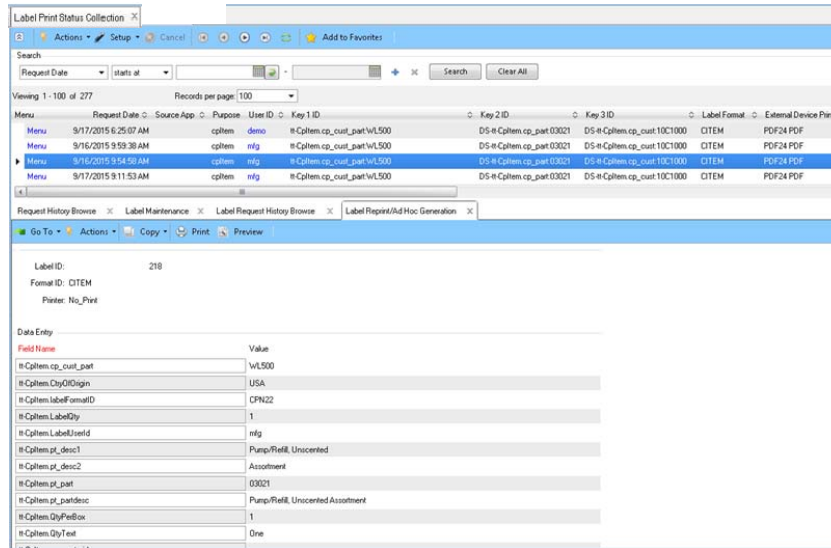
You can now access Label Reprint/Ad Hoc Label Generation from the Label Print Status Collection to reprint or create new labels based on existing ones. When you keep original label values, the system reprints them. When you modify values, the system creates a brand new label.

Note As of this release, you can no longer change label data in Ad Hoc Label Generation (36.13.16.2.19).

The following graphic depicts the program when you access it from within the Label Print Status Collection. See Figure 4 on page 16.

You can access Label Request History from Label Print Status Collection to view data about the request for a label print or reprint. Refer to your user guide documentation for more information on data that displays in Label Request History.

Fig. 4
Label Print Status Browse Collection, Label Reprint/Ad Hoc Label Generation



Automatic Deletion of Label Data

You can have the system automatically delete old labels that are based on unused or outdated formats. When you specify the number of months of label data you want to preserve in Label Format Maintenance (36.13.16.1.9) in the Delete Labels Before Month field, the system invokes an auto-cleaning function built into Label Printing Services that has been enhanced for this release.

Now, the system also automatically deletes any old labels that fall before the date you enter as it generates new labels that are based on the format. For example, you enter 1 (one) in the Delete Labels Before Month field. Tomorrow you enter the system and you no longer have to delete records older than one month. The system deletes the old labels as you create new labels based on the format.

The system determines the preserve date range based on the following formula:

$$\langle \text{CurrentDate} \rangle \text{ and } (\langle \text{CurrentDate} \rangle \text{ minus } \langle \text{Value-In-DeleteLabelsBeforeMonth} \rangle)$$

The system deletes data from the following Label Printing Services-related tables:

requestHist	labelMstr
labelDet	responseHstD
requestHstRsp	sourceMsg
labelReprint	labelPrntQue

When you enter a value in the Delete Labels Before Month field, the system displays a message confirming the deletion. When you confirm, the system deletes the label transaction data between the date range in the formula.

You can run the feature when the system generates all labels and sends them for printing. Since the system stores the generated labels in Label Printing Services tables, performance can be affected over time with an accumulation of stored label data. This feature auto-cleans Label Printing Services-related transaction type tables, thereby improving Label Printing Service performance.

Use Custom Merge Programs

Besides the standard Label Printing Services merge program and label mapping, you can now use a custom program to merge the extracted data with the label template. For example, when you use QAD Data Collections, you can use this feature to call the QAD Reporting Framework from Label Printing Services to print a report.

Fixes

The following table describes fixes for this release.

QAD Ticket Number	Description
LPSPD-21	The system now correctly validates the format ID you enter in Label Event Type Criteria Maint (36.13.16.3.15). Previously, the field could be blank, but entered IDs were not validated against labels previously defined in Label Format Maintenance.
LPSPD-22	The missing fields from Label Print Status Browse Collection have been added: Label Format and Printer ID. These fields were added as part of the new auditing features in the browse collection; see “New Auditing Tools” on page 13.
LPSPD-24	The system no longer displays a Progress error when LPS is called from the QAD Serialization, Item Attributes, or Quality Control (SAQ) products.
LPSPD-25	You can now load a dataset into LPS. Previously, when you uploaded an XML schema using Label Dataset Import (36.13.16.1.11), the system did not import the dataset properly.
LPSPD-28	<p>You can now import LPS configuration setup using Label Config Import/Export (36.13.16.4.1). Now, when you set Overwrite field to Yes in the program, you can import configuration setup when you have one server with two environments.</p> <p>Previously, when you had one physical server housing two environments, the template, dataset and label output directories were accessible from both environments. When you attempted to export from one environment and import into the other, the import portion of the program checked for the existence of the template that existed in the XML file being imported. If that directory existed, it would not import. The Overwrite field option corrects this situation.</p>
LPSPD-29	Calls from QAD Data Collection to LPS no longer cause the system to pause on RF devices. Previously, when Data Collection made a call to LPS, it caused the RF system to pause and users had to press the space bar to continue.
LPSPD-31	<p>Label-subscriber programs now perform the correct label event type criteria selection. Previously, with the correct setup in Label Event Type Criteria Maintenance (36.13.16.3.15), label subscribing programs did not follow this selection criteria order when looking for records to print:</p> <ol style="list-style-type: none">1. Specific value2. Partial value3. Catch all <p>Instead, the subscriber programs incorrectly used the catch-all search, even though you entered a partial value.</p>
LPSPD-32	A no-lock is no longer missing in the Content Routing Label Merge program. No-lock programming conventions can help avoid deadlocks when other queries are run against the same data.
LPSPD-33	<p>Error messages are now created in temp_err_msg since the c-application-mode is API when the Label Event Subscriber program is called; this lets the calling module collect the error messages from temp_err_msg and react accordingly.</p> <p>Previously, the Label Event Subscriber program checked for certain error conditions and returned the error condition to the calling program, causing an inability to track the error condition in which the failure occurred.</p>
LPSPD-34	Label Content Routing Configuration (36.13.16.1.16) now correctly examines multiple criteria when you set up label format/printer routing with multiple levels. Previously, the program did not look beyond the first level and ignored subsequent levels.

QAD Ticket Number	Description
LPSPD-35	<p>You can now load templates that have only fixed text to be printed on the label into Label Template Maintenance (36.13.16.1.7) because the system now also loads label templates without token variables. Previously, the system could not import label templates that contained only fixed text to be printed (such as Handle With Care text) and instead, displayed an error message stating that no tokens could be found.</p>
LPSPD-36	<p>Label Config Import/Export (36.13.16.4.1) no longer displays a Progress error when importing label format and printer configuration data. Previously, in this scenario, a Progress error stated that there was an issue with the Label Map table.</p>
LPSPD-37	<p>The system no longer displays a Progress error when you generate labels that use the European numeric format. Previously, when calling programs such as QAD Data Collection used this numeric format, the system displayed a Progress error in the calling program.</p>
LPSPD-39	<p>Label Event Type Criteria Browse Collection now correctly filters criteria values. Previously, the browse collection did not respond when you tried to filter data for the browse.</p>

Release Notes for 1.2

Label Printing Services Version: 1.2

QAD Enterprise Edition: 2012.1 Enterprise Edition and higher

.NET UI: 2.9.5 + CP5 (Cumulative Patch #5)

Release Date: April 2015

Prerequisites: Refer to the *QAD Label Printing Services Installation Guide* dated April 2015 for information on compatibility and prerequisites.

Conversion Information: Conversion information is included in the *QAD Label Printing Services Installation Guide* for April 2015

Enhancements

The following topic describes enhancements for this release.

QAD ICT No Longer Required for Label Printing Services Calls

QAD Integrated Customization Toolkit (ICT) is no longer required to call Label Printing Services via the workfile since the Label Printing Services trigger file is built into the Label Printing Services caller program.

Label Template Maintenance New Fields and Functions

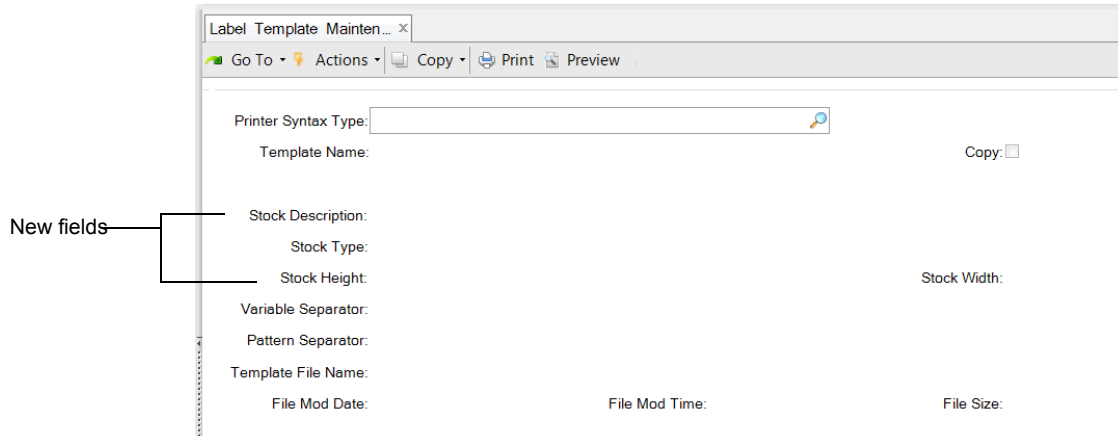
Label Template Maintenance (36.13.16.1.7) now includes new Stock Description and Stock Type fields to accompany the existing Stock Height and Stock Width fields.

Also, the program now includes a new Copy function. When you set the Copy field to copy a template, a new floating frame lets you modify the following fields:

- Template Name
- Stock Description
- Stock Type
- Stock Height
- Stock Width

Once the system completes the copy, you return to the original screen in .NET UI or press F4 in character mode. You can continue to copy an existing setup and just change Stock Description, Type, Height, and Width to base the new template on a current template.

Fig. 5
New Label Template Fields and Functions



New Delete Feature for Label Printing Services Data

You can now have the system delete label data by specifying the number of months of label data you want to preserve in Label Format Maintenance (36.13.16.1.9). A new Delete Labels before Month field in Label Format Maintenance lets you enter the number of months to preserve data. With this auto-cleaning function built into the Label Printing Services program, you do not need to run a separate delete/archive utility.

When you specify the number of months of label data that you want to preserve, the system uses that number to calculate a date that serves as the beginning date for which it deletes label data.

Example Today is 4/13/2015 and you set Delete Labels before Month to 2. The system calculates a beginning date of 2/13/2015 and deletes all data prior to 2/13/2015.

When you enter a value, the system prompts you to confirm the data deletion. The confirmation includes the starting date of the deletion. When you respond with Yes, the system deletes label records and displays a message indicating that label records have been successfully deleted. When you respond with No, the system does not delete data and displays a message indicating that label records were not deleted.

You can run the feature when the system generates all labels and sends them for printing. Since the system stores the generated labels in Label Printing Services tables performance can be impacted over time with an accumulation of stored label data. This feature auto-cleans Label Printing Services-related transaction type tables, thereby, improving Label Printing Services performance.

Fig. 6
Label Format Maintenance Enhancement

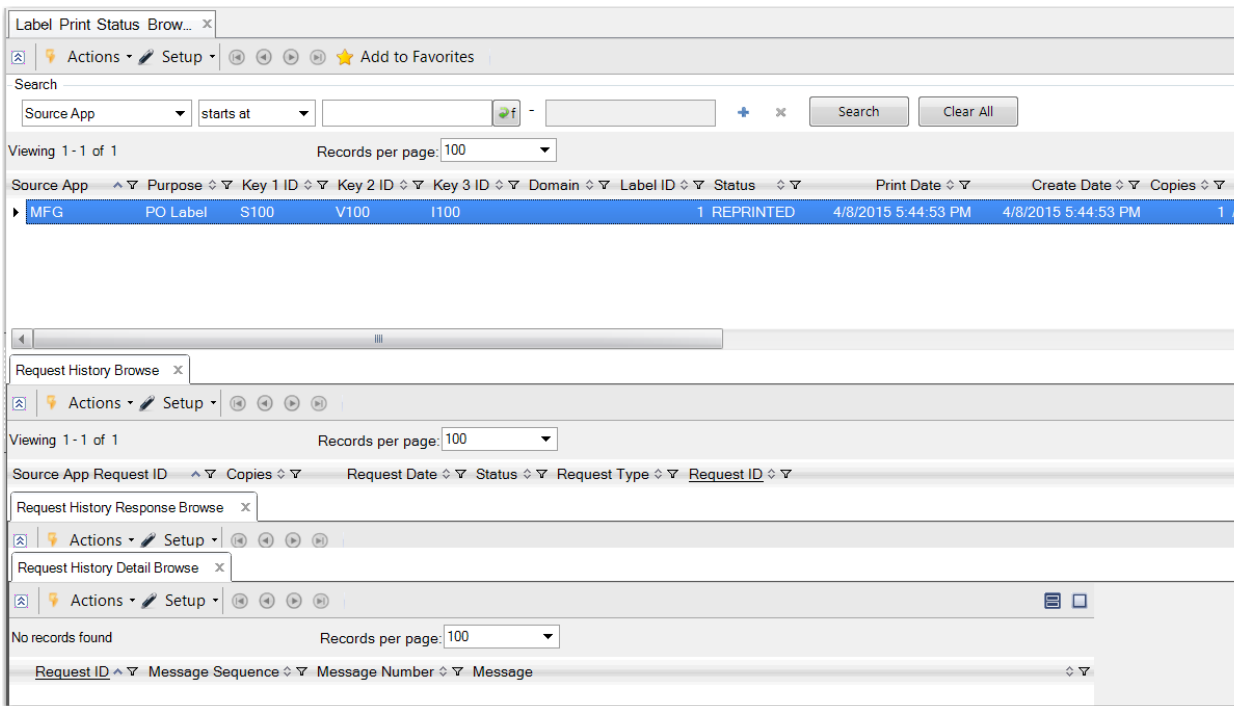


New Label Print Status Browse Collection

A new Label Print Status browse collection displays the status of labels generated by printer, date, and time based on business needs. The browse collection displays the status of label requests, regardless of whether you choose to store the label data. More specifically, the browse collection:

- Displays the name of the QAD module requesting label print; for example, QAD EAM or QAD Serialization
- Lets you search for specific labels
- Lets you view the application data that generated the label
- Lets you view the content of the label master particular to the request ID when tracking is enabled and label master data exists

Fig. 7
New Label Print Status Browse Collection



New Import/Export Features

You can now import or export label, printer, and routing setup data from Label Printing Services to the environment of your choice using the new programs in a new Label Printing Utility Menu (36.13.16.4). The menu includes the following new programs:

Menu Number	Program Label	Program Name
36.13.16.4.1	Label Config Import/Export	lbcrgie.p
36.13.16.4.2	Label Extraction Import/Export	lbexcfie.p

Refer to the QAD Label Printing Services user documentation, dated April 2015, for information on the programs in the new menu.

Label Request History Enhancement

Label Request History (36.13.16.2.1) now displays source data in readable form, making it easier to monitor and analyze label data. Previously, the system displayed data in an XML form, which was difficult to read.

Fixes

The following table describes fixes for this release.

QAD Ticket Number	Description
LPSPD-19	The system now clears local handles that were not in use and caused memory leaks.
LPSPD-18	Label Request History (36.13.16.2.1) now displays source data in readable form, making it easier to monitor and analyze label data. Previously, the system displayed data in an XML form, which was difficult to read.
LPSDS-13	Label Print Status Browse Collection now correctly displays the status of label requests, regardless of whether you choose to store the label data or not. Previously, when you did not choose to store the data you could not view the status of the label requests.
LPSPD-8	Label Printing Services printer routers now select the correct printer.
LPSPD-6	The system no longer displays a Progress error when you set up a new label format.
LPSPD-2 and LPSPD--3	Code master data that the system references in Label Printing Services programs now correctly matches the actual code_mstr table data, so error messages that result from the mismatched data no longer display.

Release Notes for Version 1.1.30.0

Label Printing Services version: 1.1.30.0.

QAD Enterprise Edition: 2012.1 Enterprise Edition and higher

.NET UI: 2.9.5 + CP5 (Cumulative Patch #5)

Release Date: December 2014

Prerequisites: 2012.1 EE and higher release and NET UI 2.9.5 CP5 installed

Conversion Information: Conversion information is included in the *Label Print Services Installation Guide* for April 2014.

Enhancements

The following topic describes enhancements for this release.

New Label Printing Service Program

This version includes a new `lbcalllps.p` program that lets external modules such as QAD EAM, QAD Warehousing, and so on, make calls to Label Printing Services via different protocols. The program lets the programs make direct calls without considering the environment's `PROPATH` where Label Printing Services is installed. The program includes a procedure for calls coming via different protocols.

The `lbcalllps.p` contains a `PrintLabelViaAppServer` procedure that can be used when calling Label Printing Services via the Appserver. The contents of the program are as follows:

```
/* lbcalllps.p - Wrapper program to call any LPS Program */
/* Copyright 1986 QAD Inc. All rights reserved. */
/* $Id:: $: */
/*
/* Program for mng via different protocols (AppServer, Webservice, etc */
/*
/*****
/* All patch markers and commented out code have been removed from the source */
/* code below. For all future modifications to this file, any code which is */
/* no longer required should be deleted and no in-line patch markers should */
/* be added. The ECO marker should only be included in the Revision History. */
/*****
{mfsubdirs.i}
{{&US_BBI}mfdeclre.i }
{{&US_PX}pxttmsg.i}
/* Call via AppServer */
procedure PrintLabelViaAppServer:
  define input parameter pcPurpose as character no-undo.
  define input parameter dataset-handle phDataSet bind.
  define output parameter table for temp_err_msg.

  {{&US_BBI}gprun.i "lbcrrp.p"
    "(input pcPurpose,
     input 0,
     input dataset-handle phDataSet by-reference,
     output table temp_err_msg)"
end procedure.
```

Fixes

The following table describes fixes for this release.

QAD Ticket Number	Description
LPSPD-8	Label Printer Routing Configuration (36.13.16.1.18) now lets you select the label printer based on the right business keys. Previously, when you set up Label Printer Maintenance (36.13.16.1.5) for a specific printer, the label assigned to the printer used the printer from Label Content Routing Configuration (36.13.16.1.16).
LPSPD-6	The system no longer displays a Progress error when you set up a new label format in Label Format Maintenance (36.13.16.1.9). Previously, when you set up the new label format in the program, the system displayed a Progress error informing you that source label records could not be found when you did not enter a dataset name and the cursor was in the dataset version field.
LPSPD-2	The code master data that LPS programs reference now correctly matches the actual code in the master data table (mstr data). Previously, when some LPS programs queried the code_mstr table for values, the actual code_mstr record did not match these values, resulting in error conditions.
CRMFG-8453	The system now captures the user ID (Userrid) in both Label Request History (36.13.16.2.1) and when creating label master records. Capturing the user ID lets Label Print Status Browse collection successfully filter data.
CRMFG-6355 and CRMFG-9445	The system now prints labels in a set order. Previously, the labels did not always print in the same order each time you printed them because the system ignored the second and millisecond specifications, resulting in a random selection of files within the directory to print. Also, a new single pass file is now in use so that labels that you create in Label Printing Services no longer print out of sequence and print in the order in which you request them to print.
CRMFG-9446	To accommodate Label Printing Services use in both SE and EE environments, references to the include file in the .P program are no longer hard coded. Specifically, hard-coded references for <code>us/bbi</code> were changed, letting the program work in both SE and EE.
CRMFG-8838	Label Printer Routing Config (36.13.16.1.18) no longer lets you leave the Printer field blank. It is now mandatory for you to specify a printer in the field.
CRMFG-8452	The system no longer uses only the default printer when you set up label format/printing routing. Previously, when you set up exception routing in Label Content Routing Setup (36.13.16.1.1) or Label Content Routing Configuration (36.13.16.1.16), the system set up the default printer for the dataset and purpose.
CRMFG-6780	Label Format Maintenance (36.13.16.1.9) now correctly lets you assign dataset fields to tokens. Previously, when you entered a version in the Token frame of the program, then clicked Enter, the system did not correctly assign fields to the dataset.

Release Notes for Version 1.1.20.0

Label Printing Services version: 1.1.20.0.

QAD Enterprise Edition: 2012.1 Enterprise Edition and higher

.NET UI: 2.9.5 + CP5 (Cumulative Patch #5)

Release Date: April 2014

Prerequisites: 2012.1 EE and higher release and NET UI 2.9.5 CP5 installed

User Guide: *Label Printing Services User Guide* for April 2014

Conversion Information: Conversion information is included in the *Label Print Services Installation Guide* for April 2014.

Enhancements

The following topics describe enhancements for this release.

Ability to Specify Label Format Prefix/Suffix

You can now specify a label format prefix and suffix in Label Printer Maintenance (36.13.16.1.5). Two new fields were added to the program:

- Format Prefix

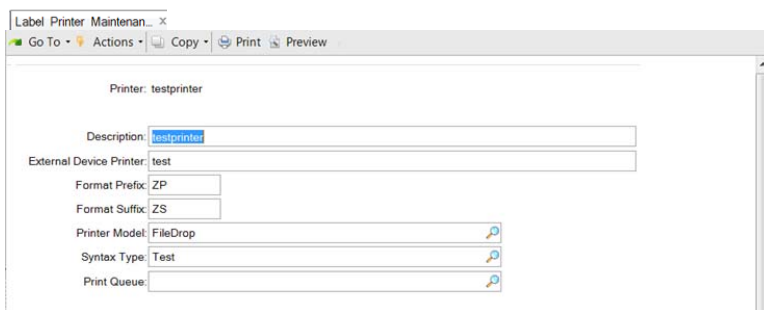
Enter characters to attach to the label as a prefix. For example, if you enter *ZP*, and the labels are set up as numbers starting from 00001, the system reports and prints *ZP-00001*, and so on.

- Format Suffix

Enter characters to attach to the label as a suffix. For example, if you enter *ZS*, and the labels are set up as numbers starting from 00001, the system reports and prints *00001-ZS*, and so on.

Fig. 8

Label Printer Maintenance New Fields



New Label Event Criteria Browse

You can now displays label event criteria in a browse in a new .NET UI Label Event Criteria Browse. The data that displays in the browse is based on data you enter in Label Event Type Criteria Maint (36.13.16.3.15).

QAD Ticket Number	Description
CRMFG-5879	Label Request History (36.13.16.2.1) now correctly displays label requests created in descending order of the RequestID (newest to oldest).
CRMFG-5878	Label Maintenance (36.13.16.2.5) now correctly displays labels created in descending order of the LabelID (newest to oldest).

Release Notes for Version 1.1.4.0

Label Printing Services version: 1.1.4.0.

QAD Enterprise Edition: 2012.1 Enterprise Edition and higher

.NET UI: 2.9.5 + CP5 (Cumulative Patch #5)

Release Date: March 2014

Prerequisites: 2012.1 EE and higher release and NET UI 2.9.5 CP5 installed

User Guide: *Label Printing Services User Guide* for March 2014

Conversion Information: Conversion information is included in the *Label Print Services Installation Guide* for March 2014.

Enhancements

New Browse

A new Label Printer Router Browse (36.13.16.1.14) was added to the Label Printing Configuration Menu (36.13.16.1).

New Contextual Printer Routing

Two new programs were added to the Label Printing Configuration Menu:

- Label Printer Routing Setup (36.13.16.1.17)
- Label Printer Routing Configuration (36.13.16.1.18)

These programs work much like the two contextual routing programs that let you set up a specific purpose, like a specific shipper or label, then set up the system to use the format first, then decide upon the printer to use. The two new programs, however, let you specify a format ID and dataset, then set up a printer to use for the format and dataset. The advanced setup programs let you build levels of configuration based on field data, such a site, production line, and receiver.

Wildcards

You can now use wildcards when you set up data in label printing services menu programs. You can specify full wildcard use using only an asterisk (*) to specify that the system search for all in the category (for example, specify an * for a site, and the system searches for all sites) or specify partial wildcard use by entering an asterisk before or after characters or letters, such as 10-*, where the system searches for values that begin with 10-.

New Label Menu for QAD ICT MiddleWare Setup

You can now request printing Label Printing Service labels through QAD's Integrated Customization Toolkit (ICT), a middleware product that ships with QAD EE 2012.1 EE and higher. Using QAD Integrated Customization Toolkit (QAD ICT), you can design and develop customizations in a non-intrusive way, so, you can use the ICT middleware to set up printing of labels from any EE menu without making customizations into the EE program source code. Using ICT, you can set up an extraction process so that ICT triggers the data extraction for labels, determines the labels to print, and calls Label Printing

Service. You use QAD ICT's functions and procedures to register definitions or values in ICT, retrieve values or records that were previously registered in QAD ICT, manipulate the screen, and more. Refer to *User Guide: QAD Integrated Customized Toolkit* for more information.

A new Label Extraction Configuration Menu (36.13.16.3) adds new programs that you use to set up interaction with QAD ICT:

- Label Type Maintenance (36.13.16.3.1)
- Label Group Maintenance (36.13.16.3.4)
- Label Event Maintenance (36.13.16.3.13)
- Label Event Processing (36.13.16.3.14)
- Label Event Criteria Maintenance (36.13.16.3.15)

Refer to *User Guide: Label Printing Service* for March 2014 for more information.

Fixes

The following table describes fixes for this release.

QAD Ticket Number	Description
CRMFG-5311	Hard-coded error messages were removed from Label Printing Services code for translation purposes.
CRMFG-4348	Corrected the conflict with message number 10193, which was previously reserved for other purposes.
CRMFG-5505	Changed uppercase Progress keywords so that all keywords now reflect QAD standards.

Release Notes for Version 01.0

Label Printing Services version: 01.0

QAD Enterprise Edition: 2012.1 Enterprise Edition

.NET UI: 2.9.5 + CP5 (Cumulative Patch #5)

Release Date: November 2013

Prerequisites: 2012.1 EE release and NET UI 2.9.5 CP5 installed

User Guide: *Label Printing Services User Guide* for October 2013

Conversion Information: Conversion information is included in the *Label Print Services Installation Guide* for version 010.

Overview

Previously, various modules within QAD EE provided the ability to print labels to Windows-based printers and through various menu functions. QAD EE modules that provide serialization capabilities, for example, had no separate QAD EE label print module to call when printing serial ID labels from the PC or from RF devices. Further, there was no means to set up the labels and printers so that specific label formats, printers, and so on could be configured.

Additionally, there was no means within QAD EE to interact with third-party label-printing or label-design software. Typical third-party label-design software generates the actual barcode representation for the printer. The label-design software usually offers many different syntax types—such as XML, CSS, and flat text files as well as control codes for specific barcode printers. There was no way for QAD programs to make use of the syntax templates provided by the third-party label-design software packages. Finally, there was no record of the actual barcode label except in the barcode label printer system.

The new QAD label printing service capability is integrated into QAD EE and other QAD EE products and lets you print labels directly from the various business process transactions to barcode printers. It is a single instance framework that lets you print the barcode labels that emanate from different applications, using a variety of printers and several different formats.

Features

Using QAD EE label printing service programs, you can:

- Use and edit third-party label templates that are merged into the label printing services module.
- Receive and process print requests from various QAD EE programs.
- Print labels immediately, manually, or queued labels when released by a polling process using an appserver.
- Monitor and track label printing data.
- Configure:
 - Connections and syntax types
 - Templates
 - Label formats and label mapping
 - Imported datasets for mapping and routing

- Basic contextual routing or advanced contextual routing to get the Printer and Label Format and determine the printer
- Which applications are allowed to send requests to print labels
- Appserver connections for queued labels
- Printers

Additional features include the following:

- Third-party interaction

The label-printing module can interact with third-party label-design and printing software or directly with printers. It lets you print on PC (Windows) printers, too. QAD EE applications can use the label-printing functions to generate and print barcode labels when the printers support symbologies and fonts for the label format.

You can use third-party templates from outside label design software within QAD EE label printing functions. The system generates the actual barcode representation for the printer. There are many different syntax types that you can use for the label design software templates, including, XML, CSS, PAS, flat file, and others.

- Barcode labeling service

The label print service provides full-featured barcode label functionality without burdening QAD applications. The barcode architecture lets you create and maintain the tables required to configure the label printing service; generate, track, and print barcode labels; and create a specific printer for label printing. You can use new programs in the Label Printing menu to create groups of labels to be processed together or to separate labels into groups to be queue and printed at a later time.

- Configurable syntax types and format

You can use the new Label Printing Syntax (36.13.16.1.2) to configure the various syntax types. The system combines the syntax and label format to make a specific combination to find the specific label detail to use when generating the contents of the labels. You use Label Format Maintenance (36.13.16.1.9) to set up a generic name for the label and specify label attributes. The combination of the label format and the syntax is a unique combination when determining the label printing capabilities.

- Monitor and track label-printing data

You can use several browse and reports to monitor and track label printing status. You can also use the Label Print Status Browse Collection as one-stop view to the status. The browse collection includes supporting browses; you can select a print job in the top browse, then drill down to detailed information about the printed labels in the supporting browses.

Label Printing Services Programs

The solution provides support for QAD EE users who use third-party barcode label printing software. A new Label Printing menu (36.13.16) now resolves label-printing requirements. Two main menus—Label Printing Configuration (36.13.16.1) and Label Printing Operations (36.13.26.2)—have several programs and functions that provide:

- Barcode label printing from QAD modules
- Configuration of label printing
- Support for both barcode printers and PC printers
- Label format design and modification capabilities
- Label inquiries and label reprint capabilities
- Ad hoc label printing

- Integration with third-party label-design software

Programs within the configuration menu let you set up the following to support the seamless printing of barcode labels:

- Printers
- Label types
- Label format definition.
- Label template definitions
- Variable data field definitions
- Print queues and destinations
- Label restrictions
- Content routing setup and configuration