



QAD Adaptive ERP with Adaptive UX 2024 Release Notes

March 2024

Contents

Introduction	6
Upgrading and Backwards Compatibility Improvements	6
Installation and Configuration Information	6
Versions Requirements and Dependencies	7
QAD Adaptive ERP and QAD Enterprise Applications Versions	7
Enterprise Edition Operation Patches	7
QAD Financials Versions	7
QAD Reference Architecture (QRA) Version	7
Your Application Builder (YAB) Version	7
QAD Enterprise Platform Version	7
Web UI Version	7
.NET UI Versions	7
QXtend Versions	7
Enterprise Asset Management (EAM) Versions	8
QAD Production Execution Versions	8
Production Orders Versions	8
Alerts	8
Trade Activity Management (TAM) Version	8
Action Center Mobile App Versions	8
QAD Adaptive ERP Mobile App Versions	8
Web Browsers Supported	8
Tablets Supported	9
Technology Versions	9
Minor Version Update Policy for Third-Party Products	10
Installation Considerations	10
BPM Security Configuration	11
OpenEdge TLS Version for Segregation of Duties	11
Web UI Tomcat Maintenance Mode	11
Enterprise Asset Management Part Location Reconciliation	11
Tablet Usage Guidelines	11
Tablet Interaction Guidelines	11
Tablet Performance Guidelines	12
Mobile App	12
Online Help Location	12
Guide Me	13
Information on Prior Releases	13
Caveats	13
End-Of-Life (EOL) Considerations	13

Functionality Gaps	14
Performance	14
Extensions	14
Security	14
New Features	14
User Experience Highlights	14
Updated Look and Feel	14
View a Screen's Properties	14
Mark a Field as Required without a Default Value in the Design Layout	15
Complex Filtering in Advanced Browse Search	15
Action Center Updates	15
Action Center Enhancements	15
KPIs View Enhancements	16
KPI Visuals Gallery Enhancements	16
New Action Centers	16
Updated Action Centers	16
Deleted Action Centers	16
Customer Management	16
Field Service Management	16
Service Support User Preferences	16
On-Call Maintenance	16
Engineer Master Schedules	17
End User Master Schedules	17
Service Routings	17
Service Standard Operation	17
Service Pending Invoices	17
Engineer Scheduled Visits	17
Service Labor	18
Financials	18
Alternate COA Structure	18
Alternative Control Accounts	18
Avatax Connector	18
Customer Invoices	18
eDocument Configuration	19
Journal Entry Approvals	19
ERS Tax by Total	19
Withholding Taxes in Journal Entries	20
Golden Tax	20
1099 Reporting	20
Manufacturing	20
Logistics	20

Non-Sales Shippers	20
Inventory	21
Serialized Physical Inventory	21
Production Execution	21
Routing Interlock Setup	21
Production Options	21
PE API Errors	22
Site Security	22
Supply Chain	22
Requisitions and Requisition Lines	22
Requisition Routing and Approvals	23
Purchase Requisition Control	23
Planned Orders	23
Purchasing Orders	24
Blanket Orders and Blanket Order Lines	24
PO Shippers	24
Purchase Order Receipts and Returns	25
Sourcing Request	25
SM Integration Control	25
Purchasing Control	26
Enterprise Asset Management (EAM)	26
Actions	26
Asset Work Orders	26
Job Control	26
Job Program	26
Stock Replenishment	26
Tool Serials	27
Tool Serials Readings	27
New Abilities	27
Jobs	27
Asset Work Order	27
Browses	27
Indirect Supplier Cost History	27
New Browses	27
Drilldowns	28
Indirect Inventory	28
Sites	28
System Control	28
Revisions	28
Factory Tickets	28
Base Data	29

Items	29
Item Site Indirect	29
Security	29
Role Permission Tree Structure	29
Role Permission Tree Search	29
Elasticsearch	29
Languages and Locales	29
QAD Enterprise Platform	30
Analytics	30
Visualization	30
Extensibility	30
Services	30
Interoperability	31

QAD Adaptive ERP with Adaptive UX 2024

Introduction

QAD is pleased to announce the availability of QAD Adaptive ERP 2024, the latest version of QAD's next-generation ERP solution that includes the Adaptive User Experience (UX) and the QAD Enterprise Platform.

This release is available as a General Availability (GA) release in the cloud. With this release, QAD has delivered new adaptive manufacturing capabilities to better address tomorrow's challenges and rapidly respond to disruption in the marketplace.

Every QAD Adaptive ERP release is filled with enhancements and updates that address the agility and adaptability required by manufacturers. Many of these improvements are based on customer and user feedback. Additionally, our partners, business consultants, industry experts, and other contributors play a key role in our product development efforts by sharing ideas and affirming the business benefits for new capabilities.

For this release, customers are encouraged to work closely with their QAD account manager or partner to learn more about the selection, implementation, and use of new and upgraded capabilities for their specific business requirements.

These release notes include technical information about QAD Adaptive ERP 2024 with Adaptive UX 2024, including the Web UI and the QAD Enterprise Platform, March 2024. Review this document before proceeding with any phase of an implementation.

Upgrading and Backwards Compatibility Improvements

This release introduces key improvements that will improve the upgrade process for this release and in future releases.

Important: The technical aspects of these improvements require that before upgrading to this version, on-premise customers must coordinate with QAD Service Delivery to run diagnostic tools that identify the optimal upgrade path.

Cloud customers will be guided through the upgrade process by QAD.

Installation and Configuration Information

The following summarizes installation and configuration changes for this version of QAD Adaptive ERP with Adaptive UX.

The QAD Document Library (<https://documentlibrary.qad.com>) offers a complete set of all QAD user guides, training guides, and other materials.

Versions Requirements and Dependencies

This section lists the product and technology versions required for QAD Adaptive ERP — March 2024.

QAD Adaptive ERP and QAD Enterprise Applications Versions

QAD Adaptive ERP: QAD Adaptive ERP March 2024 in the cloud requires:

- QAD Enterprise Applications – Enterprise Edition (EE) 2022.

For more information on these releases, see the QAD Enterprise Edition Release Notes.

Enterprise Edition Operation Patches

QAD Enterprise Applications – Enterprise Edition Operation Patches:

- 2022 EE – Operations Patch 1

QAD Financials Versions

- 2024 QAD Financials is required and is automatically installed.

Note: QAD Financials was previously called Enterprise Financials.

QAD Reference Architecture (QRA) Version

The QAD Reference Architecture included with QAD Adaptive ERP March 2024 is QRA 3.32.

Your Application Builder (YAB) Version

YAB 1.18

QAD Enterprise Platform Version

The QAD Enterprise Platform is included with this release, accessible directly from the Web UI.

Web UI Version

The Web UI is the web-based user interface for QAD Adaptive ERP with Adaptive UX, March 2024.

.NET UI Versions

.NET UI, latest patches recommended, mandatory cumulative patches as follows:

- 3.8.3 for 2022 EE (netui-cumulative-3.8.3.40)

QXtend Versions

- QXtend 2.0 is required

Enterprise Asset Management (EAM) Versions

During installation, you have the option to enable EAM Requisitions Integration, which will integrate EAM with the requisitions, purchasing, and asset management capabilities in the Web UI. Using the asset management capabilities in the Web UI can change how you use EAM in the .NET UI. Further, system configuration changes are required for using the asset management capabilities in the Web UI. Be sure to work with QAD regarding the necessary configuration changes for using asset management in the Web UI.

EAM version required:

- EAM 2017:1 (13.3.0.6). Customers will not be allowed to install subsequent EAM patches.

QAD Production Execution Versions

QAD Production Execution 4.0.1 or higher is required if Production Execution is in use/installed.

Production Orders Versions

For Production Orders, Production Orders 3.2.15 is required and includes MSW/PSW 4.4.0.x.

Production Orders 3.2.15 or higher is required if 2022 EE is in use/installed.

Alerts

If Alerts is in use, Alerts 1.4.0 is required.

Trade Activity Management (TAM) Version

Important: TAM 3.5 is included in this release but must be enabled using TAM Control. To find the TAM Control menu, the TAM app must be added in the Users > Applications panel for the signed-in user.

Important: TAM installation, conversion, and implementation information is included in the QAD Adaptive UX Implementation Guide, available in the QAD Document Library.

Action Center Mobile App Versions

The QAD Action Center Mobile App was retired in the 2020.1 release.

QAD Adaptive ERP Mobile App Versions

The QAD Adaptive ERP mobile app 1.4 is now available on Apple App Store and Google Play App Store: check for the most recent version available.

Web Browsers Supported

Web browsers supported for use with the Web UI:

- The user interface is only supported on current versions of the Chrome, Safari, and Edge web browsers (Chrome 91+, Safari 12+, Edge 97). Although other web browsers can be used, you may experience differing levels of performance and user experience.
- To make sure you have the latest security updates, browsers can be updated automatically.

Tablets Supported

For tablet use, the user interface is only supported on iPad Pro (or newer equivalent) running iOS 11+. Although other tablets can be used, you may experience differing levels of performance and user experience.

Technology Versions

Technology	Version
Progress OpenEdge	Minimum Version: 11.7.17
Oracle Java Runtime	Not supported
OpenJDK Runtime	1.8.0_322 (8u322-b06) 11.0.5 17.0.7
Tomcat	9.0.71
Logi Platform Services	3.3 SP12
Apache Spark	3.4
Ionic Framework	5.7.0
Kendo UI	2022.1.119
WINEHQ	5
Python	Minimum Version: 3.8 Supported: 3.8+ Recommended: 3.12
Nifi	1.16.3
Mobile Framework	Cordova 10.0.0
Server Operating System	Minimum Version: RH 8.0 Recommended: RH 8.0+ Supported: RH 8.x
Angular JS	1.6.1

Technology	Version
TypeScript	3.5.3
Google V8 Engine	7.2
Spring Framework	5.3
Spring Security	5.5.2
Kafka	2.8
Cassandra	3.11.2
MongoDB	4.2.28
Node.js	8.11.4
Elastic Search	7.17.3
Log Stash	7.13.3
Kibana	7.13.3
Apache Web Server	2.4.53
Postgres	12.11
Logi Composer	2023.2

Minor Version Update Policy for Third-Party Products

QAD will automatically support minor version changes to third-party products without official certification—for example, Tomcat 7.0.96 to Tomcat 7.0.109. However, anything beyond that—for example, an upgrade from Tomcat 7 to Tomcat 9—will not automatically be supported. Customers who choose to make such an upgrade will be on their own unless they set up a Services engagement.

Installation Considerations

When installing QAD Adaptive Applications — Enterprise Edition for use with this release of QAD Adaptive UX, please note the following.

BPM Security Configuration

BPM currently does not support SSL or database security.

OpenEdge TLS Version for Segregation of Duties

Adaptive UX requires OpenEdge TLSv1.2 for segregation of duties. To ensure that the proper TLS version is enabled, enter the following two settings in the `configuration.properties` file:

```
openedge.env.pscsslclient.key=PSC_SSLCLIENT_PROTOCOLS  
  
openedge.env.pscsslclient.value=TLSv1.2
```

If you do not include these settings during initial installation and activate segregation of duties at a later time, ensure that you perform this step and then run a `yab update`.

Web UI Tomcat Maintenance Mode

During environment creation or a YAB update, the Web UI Tomcat server now enters maintenance mode. In order for this process to run and complete successfully, the application user that YAB is configured to use must be assigned to a role that allows the use of the system in maintenance mode. The system checks if the role is set in the following locations in the following order:

- `qad-webshell.tomcat.maintenance.mode.role`
- Administrator role in Security Control
- `qadadmin` or `SuperUser` role

Enterprise Asset Management Part Location Reconciliation

Upgrades of Adaptive UX from March 2020 and earlier that have EAM enabled require the merger of EAM part location IDs with Enterprise Edition part locations. EAM part locations are converted and placed in the EE Parts Location table. EAM legacy location codes allowed up to 16 characters. However, EE location codes only allow up to eight. Any EAM part locations that are longer than eight characters are not converted. The conversion routine outputs an error log of locations that cannot be converted. The customer must review and reconcile these errors.

If before the upgrade EAM has part locations greater than eight characters, please contact QAD or partner services to help reconcile the incompatible location IDs.

Tablet Usage Guidelines

Please note the following guidelines for using the Web UI on a touchscreen tablet.

Tablet Interaction Guidelines

- For tablet use, the user interface is only supported on iPad Pro (or newer equivalent). Although other tablets can be used, you may experience differing levels of performance and user experience.

- The QAD Web UI is optimized for landscape mode: most tablets in portrait mode are not quite wide enough to fit all of our fields and full menu.
- For data-entry tasks, an external keyboard is highly recommended.
- If using the tablet's virtual keyboard, consider using an alternative keyboard app for improved functionality and view area usage.
- If using the tablet's virtual keyboard, use the tablet's settings to make the keyboard smaller so that it does not cover too much of the view area.
- On some tablets, the virtual keyboard can obscure the view area, especially when used in landscape mode.
- On a tablet, QAD Web UI views do not offer a hybrid mode where you can simultaneously access browse and form data.
- Configuring views and stored views is best done on a larger desktop or laptop screen.
- Double-click actions are not supported on tablets.
- Hover events are not supported on tablets.
- The browse grouping (Group By) feature is not yet available for tablet use.
- The Design Layout mode for extending forms is not available on tablets. This feature requires more screen area and so is only available for laptop or desktop use.

Note: Although the Surface Pro has a touchscreen, the Web UI works on the Surface Pro as it does with regular laptop and desktop devices. These interaction guidelines do not apply to the Surface Pro.

Note: Windows 10 can automatically scale displays by 150% for high-resolution screens. For best results, change the automatic 150% scaling factor to be from 125% to 100%.

Tablet Performance Guidelines

On a tablet, for performance reasons, open no more than five levels deep of drill-down modal dialogs. If you need to drill down more than five levels deep, open the next drill-down modal dialog in a new browser tab.

For high-speed broadband connection performance, the following is recommended:

- Minimum download speed 16 mbps
- Maximum latency 150 ms

Mobile App

The Adaptive user experience (UX) includes not only the Web UI but also the QAD Adaptive ERP mobile app. This app is available on Apple App Store and Google Play App Store. With the mobile app, you can access your QAD Adaptive ERP with Adaptive UX environment from your mobile device. For more information on how to configure and use the mobile app, see the mobile app's [online help](#).

Online Help Location

QAD Adaptive ERP with Adaptive UX — March 2024:

https://documentlibrary.qad.com/help/webui/2024_0/en-US/index.html

A system administrator can change the base online help URL setting for the QAD Web UI using Your Application Builder (YAB) commands.

For example, configure the online help to use the base URL for March 2024 as follows:

1. In the installation directory, locate the `/build/config/configuration.properties` file and edit it (for example, using `vi`) to include the following settings:

```
qad-webshell.online-help-url=https://documentlibrary.qad.com/help/webui/2024_0
qad-webshell.help.defaultGroupContext=QAD
qad-webshell.help.supportedLanguages=en-US
```

2. From the command line, reconfigure the environment by entering:

```
yab reconfigure
```

3. Finally, restart the environment by entering:

```
yab stop start
```

Guide Me

Guide Me is an on-screen assistance feature that shows you how to use the Web UI in a step-by-step manner. Guide Me includes many scripts that help you get the most out of the application.

Scripts for the action centers were added after the March 2023 release to cover the new action centers user experience. The updated scripts are as follows:

- Analyze KPIs
- Create an Action Center
- Create KPI
- Create Visuals
- Edit Visuals
- Filter Visuals
- Place Visuals from Gallery

Many existing scripts throughout the system have been updated and improved.

Information on Prior Releases

The QAD Document Library (<https://documentlibrary.qad.com>) offers a complete set of all QAD user guides, training guides, and other materials.

Caveats

End-Of-Life (EOL) Considerations

The QAD Platform currently uses an EOL version of AngularJS (1.6.x).

Functionality Gaps

There are some functional gaps between the .NET UI and the Web UI. For a comprehensive list of these gaps, consult your QAD representative.

Performance

- Platform: There are QAD Platform API performance limitations.
- Manufacturing: In Product Structures & Formulas (and also in 13.5 Product Structure Maintenance), the system takes a long time (many minutes) to return structure components when there is a large BOM volume.
- Customer Management: The performance for large enterprise material transfer (EMT) sales orders is slow and is being worked on by QAD.
- Supply Chain: The performance for confirming, unconfirming, or deleting large shippers or pre-shippers is slow and is being worked on by QAD.

Extensions

Be aware that:

- Customer/Partner-created extension safety (memory leaks, and issues with scripting and formulas) cannot be guaranteed. The extension capability is tested thoroughly for memory leaks but testing cannot be conclusive if new extension code is introduced.
- The safe upgrade of customer-created extensions, artifacts, attachments, and activity feeds pose challenges and require careful planning to maintain backward compatibility.

Security

Veracode identified vulnerabilities in the QAD Platform. Steps have been taken to mitigate these risks.

New Features

User Experience Highlights

Updated Look and Feel

To reflect our new brand identity, the Adaptive UX user interface has received a refresh, including an updated logo and styling.

View a Screen's Properties

Now, you have the ability to explore the properties of the current screen that you are viewing. This feature closely mirrors the Properties feature found in the .NET UI. Simply navigate to a screen and click More > Properties. This action opens a dialog that displays the view's properties, including the Resource URI, App URI, Browse Label, Relationships, and more.

Mark a Field as Required without a Default Value in the Design Layout

We've added a new form layout property, Required, to Design Layout. This property can be configured as either Inherit or Yes. When set to Yes, the field becomes required without necessitating a default value.

Complex Filtering in Advanced Browse Search

We've introduced a new feature that allows you to define complex filter statements for browse searches. This feature includes the ability to combine criteria with AND/OR conditions and group criteria using parentheses. The Preview feature allows you to then visualize the browse search construction. Finally, you can then save your complex filter statements as stored searches or with stored views, as well as apply bulk actions to them.

Action Center Updates

Action centers new features include the following:

Action Center Enhancements

- In the action center icon bar and the Adaptive UX menu search, there is a new Add to Favorites icon. Use the icon to save an action center to your favorites and quickly access it from the menu bar.
- New error messages within action centers indicate if the analytics platform is unavailable.
- The default color palette for visuals and text within visuals is updated with the new QAD colors.
- Aggregate functions in custom metrics have been added, including median, variance, standard deviations, and more.
- Flexibility and functionality in filter snippets is enhanced.
- To optimize data presentation, there are new conditional formatting options for visuals.
- Responsive layout conversion for action centers is available. On action centers where the conversion is available, the following message is displayed in a green box at the top of the screen:
Meet responsive action center layout. Organize your widgets: resize by rows and columns, use simplified drag and drop, lock columns.
To update the action center to the responsive layout, in the message box, click Convert Now.
- New options and visual enhancements are available for pivot table and table visuals.

KPI Validation

- If you delete a business component, the business component is now validated to check if it is being used as a data source for a KPI. If it is being used as a data source for a KPI, a warning message is displayed. You must delete the KPI and its associated visuals before you can delete the business component.
- Access to domains and entities for batch users is now validated during KPI creation. If a batch user does not have access to the selected domain or entity in a KPI, an error message is displayed. The administrator must give the batch user access to the domains and entities that are listed in the error message.

KPIs View Enhancements

- A new Where Used panel is available. On the panel, you can view the action centers and Insights in which the selected KPI is used.
- Advanced filtering has been added to the search panel. On the Advanced drop-down panel, you can apply advanced filters for a KPI with AND and OR operators. The complex filter is added to the Criteria field in the KPIs view.
- Use the Details button to preview details about the action centers where the selected KPI is used.
- The Filter By Current Workspace checkbox is now available for KPIs that are based on site data. Previously, this checkbox was only available for system-, domain-, and entity-based KPIs.

KPI Visuals Gallery Enhancements

- On the new Where Used panel, you can view the action centers and Insights in which the selected visual is used.
- Use the Details button to preview details about the action centers where the selected visual is used.

New Action Centers

There are no new action centers in the 2024 release.

Updated Action Centers

There are no updated action centers in the 2024 release.

Deleted Action Centers

There are no deleted action centers in the 2024 release.

Customer Management

Adaptive UX capabilities within the Customer Management area are listed below.

Field Service Management

Service Support User Preferences

You can now use Service User Preferences to set up values preferred by the user that help determine defaults used in service order tracking functions.

On-Call Maintenance

You can now use On-Call Maintenance to determine who is available outside of normal working hours. The user can designate some engineers as being on call during various hours using On-Call Schedules.

Engineer Master Schedules

You can now use the Engineer Master Schedules to specify the hours when engineers and support services are available. You can define engineer master schedules as the basis for on-call schedules for individual engineers, and you can set them up for specific time periods.

End User Master Schedules

You can now use End User Master Schedules to define the availability of a specific end user when scheduling appointments. You can create default schedules for a specific company, ensuring that engineer visits are scheduled at times that suit the end user. When an End User Master Schedule is defined, you can associate it to a specific end user and customize the default days and times to accommodate the unique needs of that particular end user.

Service Routings

You can now use Service Routings to define a detailed set of procedures to follow or in case you require detailed control of repair operations.

A service routing defines the sequence of steps required to complete a service activity. This sequence can include any number of standard operations, or it can use operations defined for this service routing only.

Service Standard Operation

Use the Service Standard Operation function to maintain operations like disassembly, cleaning, overhaul of specific components, and filter changes. You can use these operations when setting up service routings or directly in Service Activity Reports.

Service Pending Invoices

Service Pending Invoices are generated from Service Activity Reports. It is a complementary function to Service Activity Reports. It uses the same setup codes and service type information as Service Activity Reports or any other service order management activity.

Use Service Pending Invoices to modify and review invoice details for services orders. A general overview of the totals by charge code and invoice sort is also available. Labor, expense, and item costs are displayed along with pricing, the line total, total cost, and margin percent.

Engineer Scheduled Visits

You can now use Engineer Scheduled Visits to efficiently oversee and manage the start times, dates, and hours dedicated by an engineer to a specific service order. It provides a convenient tool for controlling and optimizing the scheduling aspects of service operations.

Service Labor

You can now use Service Labor to log any repair or service labor activities. Engineers can use this functionality to record labor activities both after evaluating a returned item and upon completing the necessary repairs to the item.

Financials

Alternate COA Structure

The existing .NET Alternate COA functionality is now available in this Adaptive UX release.

New functionality includes the Import and Export options for Excel files.

Alternative Control Accounts

A new panel, Alternative Control Accounts, has been added to Domains to enable the setup of Alternative Customer Control Accounts and Alternative Supplier Control Accounts.

After the fields have been selected in Domains, the Alternative Control Accounts panel will be enabled in Customers and Suppliers, allowing you to configure the alternative control accounts by type and daybook set.

After the setup is complete, the operational sales and purchasing flows will use this configuration.

Avatax Connector

The Avatax integration has been upgraded from using the SOAP APIs to using the latest version of the Avatax REST APIs. There are two versions of the REST APIs. This enhancement makes use of the version 2 APIs to make the Avatax integration as modern as possible.

The difference in the way the Avatax integration works with the QAD ERP software is largely unnoticeable. When creating a sales order that uses Avatax to calculate taxes, calculations will occur and taxes will be used on the sales order in the same way as before the upgrade.

A system administrator will need to make changes to the control file setup in order to make use of the new integration.

There is a conversion that will update the control file automatically. This conversion can be run using YAB.

Note: It will not be possible to choose whether or not to use SOAP APIs or the REST APIs. The QAD ERP 2024 release will automatically use the REST APIs.

Customer Invoices

Updates have been made to the Customer Invoices functionality. These include:

- eInvoice Status field:
 - A new eInvoice Status field in the browse displays the eInvoice status of the selected customer invoice. The options include Error, Pending with Update, Processing, Rejected, and Received.

- eInvoicing Panel:
 - A new panel, eInvoicing, has been added to Customer Invoices to support future submissions of eInvoices based on varying global requirements/compliances.
 - The eInvoicing option is only clickable if setup has been completed in eDocument Configuration. When selected, various subpanels will appear.
 - The eInvoicing panel displays eInvoice details, receiving details, and the eInvoice history status, allowing relevant changes to be made.

eDocument Configuration

The menu previously named Customer eInvoicing Configuration has been updated to eDocument Configuration.

Journal Entry Approvals

This release includes a newly developed version of journal entry approvals, which uses the Adaptive ERP standard generic approvals. Generic approvals were previously available only for supplier invoices and payment selections in Web UI Financials. In contrast to the functionality in previous .NET versions, journal entries will only affect account balances after being approved.

The configuration of this new functionality can be done using the standard generic approvals configuration and approval routes.

To enable the functionality, a new field, Enable Journal Entry Approval Workflow, has been added to the Approvals panel in Entities.

A new panel, Approvals, has been added to Daybooks. Configure the settings on this panel to identify which transient daybooks require approvals and which is the destination daybook in which the journal entries will be transferred to after being approved.

Finally, several updates have been made to Journal Entries to support the new functionality:

- A new column, Approval Status, has been added. This column will display the approval status of the selected journal entry. The options are Initial, Submitted, Approved, Denied, and Pending Changes.
- A new field, Submit for Approval, allows users to indicate that a transient journal entry is now ready to start the approval process.
- A new panel, Approval History, in Journal Entries tracks the changes to the approval status over time for the selected journal entry.

ERS Tax by Total

Updates have been made to the ERS process. You can now calculate supplier invoice taxes by invoice totals. Previously, you could only calculate supplier invoice taxes by lines.

Withholding Taxes in Journal Entries

You can now enter supplier withholding taxes generated directly from manual journal entries without having to create a supplier invoice.

Golden Tax

The Golden Tax panel in Financials Control is only available if you have the China Internationalization Extension license registered in the QAD Adaptive ERP application. Previously, this panel was visible even if you did not have the China Internationalization Extension license registered.

1099 Reporting

The following reports are only available if you have the United States package installed for the QAD Adaptive ERP application:

- 1099 Paper Declaration - United States
- 1099 Report - United States
- 1099 Electronic Decl - United States

Manufacturing

Logistics

Non-Sales Shippers

In some business environments, formal shipping documents must accompany any movement of goods, even when goods are merely transferred and not sold. Whenever goods are transferred between distinct sites or physical locations, Global Shipping assesses the need for a shipping document. If a shipper is required and the essential shipping and inventory groups are configured, an additional panel named Shipping Documents will be displayed, allowing the creation of a shipping document. This panel will appear if the system identifies a configured shipping group for the entered site/location combination. The Non-Sales Shippers functionality includes the following enhancements, which allow you to:

- Create non-sales shippers in the following transactions:
 - Bulk Transfer action in the Inventory Detail browse
 - Transfer Pack action in the Serials browse
- Create non-sales shippers using Location/Address:
 - Non-sales shippers are now generated when a location has a defined physical address. This physical address should be set up as either a source address or a destination address on the Shipping Groups screen.
- Add notes to transactions in Non-Sales Shippers Confirm:
 - A Notes panel is now available in Non-Sales Shippers Confirm action. This enhancement enables the user to add notes to the transaction, and these notes will be included in the printed Shipper.

Inventory

Serialized Physical Inventory

The Inventory Tags view has been enhanced to support the count of serialized inventory:

- Two new actions, Count Pack Tags and Recount Pack Tags, have been added for customers who use serialization to enter their counts.
 - Customers who do not use serialization should use the existing Count Tags and Recount Tags to enter their counts.
- The Create Tags action has been enhanced to add a tag type called Pack & Item, which should be selected if serialization is in use. This enhancement will allow the creation of both Pack & Item tags for serialized and non-serialized inventory in a Site/Location.
 - Customers who do not use serialization should use the existing Item Tag type.
- A new action, Create Untagged Inventory Tags, will automatically generate bulk tags for all untagged inventory, including both non-serialized and serialized items.

Production Execution

Routing Interlock Setup

Routing Interlock Setup is a new hybrid view within the QAD Adaptive UX. It provides configurable settings that enable you to define the order of operational phases within PE work centers. This setup ensures sequential and interconnected progression within the operational phases, establishing a structured workflow where subsequent phases cannot proceed until their preceding phases are completed.

Production Options

The following production options are new in the 2024 release:

- LimitLabelPrintingQuantity is a new production option to limit the number of labels that can be printed while reporting production orders. You can specify the maximum number of labels that can be printed in production orders using the integer value setting in the LimitLabelPrintingQuantity setting on the Production Option screen.
- The NonProdReason production option allows you to record the Non-Productive Labor Time field under the respective department in EE.
- The NonProdPaycode production option allows you to record the Non-Productive Labor Time field under the assigned paycode in EE. When left blank, the first paycode available in the system is used for non-productive labor time reporting.
- The BackflushComponentsFilter production option allows you to control whether items subjected to backflushing are filtered from the Material Issue screen in PE Ignition. By default, the system does not filter these items. If you want backflushed items to be filtered, you can change this setting to 1 in the production option setting.
- The SubtractRackWeight production option allows you to control whether you want to subtract the pack weight associated with a selected pack code from the reported good quantity of items when reporting production.

- The Site and Role fields in the Production Option now permit the use of wildcard *. It serves as a flexible search or filtering tool, allowing you to broaden your queries or selections by indicating any value or combination of values.

PE API Errors

You can now create alerts for any PE API error transaction using the Alerts screen in the Adaptive UX. Refer to the QAD Production Execution Implementation Guide, available in the Document Library.

Site Security

You can now use Site Security in the Adaptive UX to specify user IDs or roles that can update data associated with a specific site. A site that does not have role restriction provides access to all users.

Supply Chain

Requisitions and Requisition Lines

Enhancements in the requisition and the requisition lines are as follows:

- The Create Sourcing Request action is added to the Actions menu on the Requisitions screen. You can now create sourcing requests for the requisition and requisition lines.
- The Sourcing Status field is added to the Main panel and the lines grid to track the status of the sourcing request related to the requisition or the requisition line items, respectively.
- The Expense Site field is added to the Accounting panel and enabled for memo and subcontract indirect EAM-enabled items. It carries the charges associated with the EAM items. You can now charge the cost associated with the memo and subcontract indirect items to the expense site.
- The Asset Work Order, Equipment, Job, and Project fields on the Charges panel are used to validate the Expense Site field on the Accounting panel.
- The Maximum Unit Price field is added to the Requisition Lines Main panel. It is an extended tolerance amount that a supplier can use for the requisition line if there is a predicted price change due to exchange rate fluctuations, inflation, or the market situation. You can use the maximum unit price to increase the unit price for the requisition to avoid out-of-tolerance rejections and all the related processes. To use the maximum unit price for any requisition line calculations, select the Use Maximum Unit Price checkbox.

The Maximum Unit Price field is used to derive the requisition costs mentioned below:

- Maximum Total Price: Added to the summary panel in the requisition.
- Maximum Base Total Price: Added below the lines grid in the requisition.
- Line Maximum Total Price: Added to the summary panel in requisition lines.

These prices can further be used by the approver to approve the requisition.

- If you are using the Maximum Unit Price functionality, it is taken into account during the following Requisition actions:
 - Copy Requisition: Copies all the Maximum Unit Price data and recalculates the Maximum Total Price field.
 - Route Requisition: Routes requisitions with Maximum Total Price and Maximum Base Total Price calculations derived from the Maximum Unit Price field.
 - Release To Purchase Order (Bulk Action): The requisition is released to the purchase order along with Maximum Unit Price information.
 - Firm Purchasing: Maximum Unit Price is considered for the new requisition and requisition lines.

Requisition Routing and Approvals

Enhancements in the requisition routing and approvals include:

- The GRS requisition routing process now allows both the alternate and the original approver to get an approval Inbox task simultaneously. To route the requisition to an alternate approver, enable the Create Task for Alternate Approver field on the GRS Requisitions Setup screen. If either of the approvers approves the task, the system closes the requisition routing step.
- The system now enables automatic approval of the requisition without the need for routing if the signed-in user is both the requisition creator and an approver.
- The EAM requisition routing process now allows you to route the requisition to an alternate or substitute approver if an alternate approver is configured in the Routing Substitution view. Only the alternate or substitute approver can approve the EAM requisition.
- Requisition Approvals, Purchase Orders Approval, Details form, and Inbox tasks include the following details in the notifications:
 - Maximum Unit Price and related calculations
 - Expense Site Details
 - Account
 - Sub-Account
 - Cost-Center

Purchase Requisition Control

The Buyer Tolerance Limits panel on the Purchase Requisition Control screen now calculates the out-of-tolerance costs based on the maximum unit price setup in the GRS requisition lines. The maximum unit price is only considered for out-of-tolerance calculations when you increase the unit price in the requisition before releasing it to the purchase order.

Planned Orders

All the requisitions and requisition lines created in the Planned Orders Firm Purchasing action now consider the maximum unit price based on the settings in Purchase Requisition Control. The maximum unit price is an extended tolerance amount that a supplier can use for the requisition line if there is a predicted price change due to exchange rate fluctuations, inflation, or the market situation.

Purchasing Orders

Enhancements to Purchase Orders include:

- The Expense Site field is added to the Accounting panel and enabled for memo and subcontract indirect EAM-enabled items. It carries the charges associated with the EAM items. You can now charge the cost associated with the memo and subcontract indirect items to the expense site.
- The Notes grid displays any existing supplier-related notes from the Supplier Domain settings when the PO is created from the requisitions.
- The Terms of Trade field is added to the Shipping panel. It displays the terms of trade statements from the Supplier Domain settings. The field also appears on the Blanket Orders and Supplier Scheduled Orders screens.

Blanket Orders and Blanket Order Lines

The Requisition and Requisition Line fields are added to the Main panel on the Blanket Orders screen and to the Order Lines grid on the Blanket Order Lines screen. This enhancement enables you to create blanket orders based on approved GRS requisitions. Within these blanket orders, modifications to quantity and pricing information are restricted, reinforcing the concept of blanket orders as a contract.

PO Shippers

- The Pack Structures or Loose Lines grid on the PO Shipper Lines panel now allows multi-level packaging lines in the grid. You can add any level of packaging lines with pack codes that are linked to an inventory item. Memo pack codes that are not linked to an inventory item are not supported in this release.

The multi-level packaging lines that are entered in the grid are validated against the following pack code configurations:

- Single item and single lot, which allows the inclusion of the same item with a single lot
 - Single item with different lots, which allows the inclusion of a single item with different lots
 - Multiple different items, which allows the inclusion of different items with different lots
- All the matching levels are now available on the Matching subpanel within the Inventory panel of the Unload action. The matching levels are as follows:
 - Master Pack - the system validates the Unload action by comparing the serial IDs of the master pack with the Advance Shipping Notices (ASNs).
 - Entire Pack - the system validates the Unload action by comparing the serial IDs of the entire pack (assembly and unit packs) with the ASNs.
 - Automatic Unload - the system automatically populates the Unload action with the PO shipper line serial IDs.
- The Add Shipper Lines button is added to the Contents panel within the Unload action. It improves efficiency by enabling you to add all the records from the PO Shipper Lines lookup to the Content grid at once. This enhancement allows you to work on large packaging structures. You can only add two packing levels to the Content grid in the release.
- You can create PO shippers using the EDI Document Import function.

- If the Ship-From (supplier) and Ship-To (site) fields are set up on the Match Levels screen, the EDI document import creates the PO Shippers using pack code definitions for the following pack structures and loose items:
 - Loose lines with non-serialised items
 - Loose lines with serialized items, without serials information
 - Loose lines with non-serialized items and serialized items
- If a match level setup is not found for the Ship-From (supplier) and Ship-To (site) fields, the EDI document import creates .NET UI PO Shippers for the container structures and loose items.
- New grid Pack Structures or Loose Lines on the PO Shippers screen allow you to review, add, and modify serial information on the Item Serials screen for the serialized items defined as “Mandatory” Serial Control. The Item Serials column will indicate if item serial information is mandatory for the serialized items defined with the mandatory serial control field.
- You can track and trace item serial information when the ASN is received from the supplier.
- Automation Solution (AS) Inbound Serialization now correctly processes the PO Shipper Lines created using the Pack Codes setup or item serials information.

Purchase Order Receipts and Returns

The PO Receive and Return action is now updated with a Notes grid on the Lines panel, enabling you to manage and modify PO notes during the process of receiving and returning either the PO or the PO item.

The Lines panels within the PO receive and return actions are updated with the following grids:

- An Order Lines subpanel displays a grid with the notes from the PO header.
- A Line Notes subpanel displays a grid with notes from the PO lines.

The Notes grid is designed with the Master Note button that lets you insert standardized note text or add attachments about the purchase order.

Sourcing Request

Enhancements to the Sourcing Request screen include:

- The Item Source panel identifies the origin of the sourced item. This allows the awarding information to be communicated back from the Sourcing application to the sourcing requester.
- The Cancel Sourcing Request action allows canceling of sourcing requests when required.

In addition, the Create Sourcing Request action is added to the Actions menu on the Requisitions screen. You can now create sourcing requests for the requisition and requisition lines.

SM Integration Control

The SRM Control screen is renamed to SM Integration Control to support only the controls related to the supplier management integrations. All the sourcing functional settings from the SRM Control screen are moved to the Purchasing Control screen.

Purchasing Control

The Sourcing panel on the SRM Control screen is moved to the Purchasing Control screen with the following enhancements:

- Two new fields, Indirect Material Group and Direct Material Group, allow you to identify the type of item (ERP or EAM) in sourcing requests.
- The new Require Material Group field allows you to ensure that the user selects an indirect material group option when creating sourcing requests.

Enterprise Asset Management (EAM)

The following topics discuss features and functions that migrated to the QAD Adaptive UX in this release.

Actions

Asset Work Orders

In the Asset Work Orders process, the Issue Parts action is modified to support Consignment parts.

Job Control

The Job Control Application module is used to set up and schedule routine EAM functions as customized jobs. When these procedures or jobs are scheduled, they are automatically run in the background at the appointed time by the Job Controller process.

Two new actions are added to the Job Control module:

- Stop Job Controller - The Job Controller ceases to read a list of jobs to run from the EAM database, and no longer spawns the jobs as stand-alone Progress sessions.
- Start Job Controller - The Job Controller resumes its functionality.

Job Program

Two actions are modified within the Job Program process:

- Reset Job - Changes the job status from Running to Error. This allows the job controller to begin the job again at the next scheduled start time.
- Test Connection - Loads the parameters for the highlighted job and attempts to connect to the AppServer with the login information. If it is successful, the job status is Tested. If it is not successful, the job status is Error. The Job Log contains all of the information regarding the parameters and any possible errors that might occur during the Job Connection Test.

Stock Replenishment

A new action named Cancel Stock Run is added to the Stock Replenishment module. When creating a Stock Replenishment Run, users can now cancel stock replenishments, whereas previous functionality only allowed deletions.

This functionality ensures that canceled stock runs are not taken into consideration when calculating the quantity needed in a new stock run. Additionally, allowing stock replenishments to be canceled prevents gaps in the number sequencing.

Tool Serials

A new action named Attachments, which grants users the ability to add attachments, is added to the Tool Serials module. The Attachments action is critical to support gauge calibration between EAM Tool Serials and EQMS. This action only exists in the Adaptive UX.

Tool Serials Readings

The following new actions are added to the Tool Serials Readings process:

- Correct - If a reading was incorrectly entered, use this action to enter the actual reading.
- Replace - Use this action to add new lower/upper limits as well as a new current reading.
- Reset Actuals - Use this action to reset the Actual High and Actual Low fields.
- Update Tolerances - Use this action to set the number and frequency limits for out of tolerance (OOT) readings.

New Abilities

Jobs

In the Jobs process, you can now display a hierarchical browse of Jobs, both within a lookup and directly from the search menu.

Asset Work Order

In the Asset Work Order process, users who are printing the Asset Work Order document can now also print attachments.

Browses

Indirect Supplier Cost History

The Vendor Costs browse is renamed as Indirect Supplier Cost History.

New Browsers

New browse windows are created for the following processes:

- All Indirect Revisions
- Indirect Inventory
- Job Control
- Job Log
- Mandatory Fields
- Systems/Assemblies
- Tool History

Drilldowns

Indirect Inventory

A drill-down is added to the Indirect Inventory process. This drill-down, titled Item Site Indirect, directs users to an item's Site page.

Sites

A drill-down is added to the Sites process. This drill-down, titled Indirect Sites Revision Control, contains a browse with all records associated with a site, so the revisions can be turned on or off.

System Control

A drill-down is added to the Asset Management Control process. This drill-down, titled Revision Control, maintains the Revision Control table. This edit-only table allows users to check or uncheck records; records cannot be created nor deleted.

Revisions

A drill-down titled Revisions is added to several processes. Revisions displays the full revision history for all changes in a selected record. This drill-down is added to the following processes:

- Asset Work Orders
- Master Instruction Lists
- Master Parts Lists
- Master Tool Lists
- PM Templates
- Sites

Factory Tickets

The following processes include minor enhancements; no modifications have been made to functionality.

- All Indirect Supplier Price Agreement Lines
- Descriptor Types
- Equipment Products
- Indirect Exchange Rates
- Languages
- MSDS
- Pay Multipliers
- Physical Inventory Types
- Production Line Mapping to ERP
- Project Status
- Service Types
- Sizes
- Tool Locations

Base Data

Items

Additional fields are added to the Items screen, allowing the user to input the height, length, and weight for each item.

A new field in the Main panel, Material Group, enables you to specify the material group to which the item belongs.

The Intrastat panel is renamed to Fiscal Group and now it is possible to have several control numbers for different authorities.

Item Site Indirect

A new field on the Main panel, Material Group, enables you to specify the material group to which the item belongs.

Security

Role Permission Tree Structure

The Role Permission Tree structure has been simplified. By default, it now displays only the resources that are most relevant to users in their daily work. For more granular permission settings, the tree also contains the Advanced View checkbox. Advanced View allows opening additional resources, such as APIs and Runtime Dependencies, to check the implementation details.

Role Permission Tree Search

The search function for the Role Permission Tree has been improved to align with the Advanced View checkbox selection. The search results are based on the selected view of the permission tree. When the Advanced View checkbox is selected, the search will include business components that are part of the advanced resources, such as APIs or Runtime Dependencies. Otherwise, the search results are based on the resources of the default view.

Elasticsearch

Languages and Locales

To perform searches against different languages, you no longer need to configure any property files. The `qad-qrview.search.languages` property is not used anymore. Instead, the system defines the user locales upon sign in and installs the required language automatically to perform the search.

QAD Enterprise Platform

QAD Enterprise Platform new features in this release include enhancements to several areas.

Analytics

There are a number of enhancements in Analytics. See the [Action Center Updates](#) section for more information.

Visualization

Visualization includes the following enhancements for this release:

- A new keyboard shortcut is added to save the form and navigate to the next record. It is an easy way to allow power users to quickly create lots of records while minimizing keystrokes.
- You can now filter drill downs by search variables. Search variables are the values such as Today or Current User.
- A number of security-related administrative reports are uplifted from the .NET UI to the Adaptive UX.

Also, see the [User Experience Highlights](#) section for additional enhancements.

Extensibility

Extensibility includes the following enhancements for this release:

- You can now create design layouts for Entity and Site when the business component has the entity scope or the site scope, respectively. Note that exporting a design layout with entity or site scope to import it into the March 2023 environment or earlier does not work.
- Now, you do not need to open a design layout to make it active. A new Manage Active Layouts button is included, which provides quick access to Manage Active Layouts.
- The user experience is improved with additional validation and messages for the configuration data import and relationships, including lookup relationships.
- In development environments only, a maximum of 1000 records for the 1-1 embedded business component will be created after the business component is deployed. If the number of records exceeds 1000, you need to generate the rest of the records by clicking the Generate Missing Records button.
- OS script processing error messages are enhanced with more information on the cause of the error. You can also view the error log files on the Attachments panel.

Also, see the [User Experience Highlights](#) section for additional enhancements.

Services

Services include the following enhancements for this release:

- You can now change the Data Type field even when the business component is in the Deployed status. The data types are grouped according to the physical data types and their subtypes and can be changed only within each group. This means you can change, for example, URL -> Character, Character -> Drop Down (Character).

- You can now change the length of character fields even when the business component is in the Deployed status.
- The ability to remove a platform app that was previously installed in an Adaptive UX environment is now available. Administrators must execute a YAB command to uninstall a platform app.
- To have a clear business document structure, you can now associate only the relevant relationships with your business document by using a new Composition Relation checkbox under Relationships.

Interoperability

This release includes an enhancement that will no longer require the user to manually execute the OS script to enable activity tracking. The OS script is now executed automatically. Previously, when activity tracking was enabled for a business component, a form banner was displayed to inform the user that an extra step was required to fully enable activity tracking.