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## Workflow Manager

# Workflow Manager 2015
# Release Notes

10 September 2015

# Introduction

Workflow Manager helps enterprises efficiently manage the application readiness and software license optimization processes to streamline the procurement, preparation, deployment, and ongoing management of applications. Workflow Manager maximizes productivity of the IT team by automating change management, asset management, and other ITIL processes as part of the enterprise application lifecycle.

When IT-wide processes such as preparing application for deployment, migrations, and license optimization are managed poorly, expensive errors can occur, resulting in costly delays, lost productivity, and overspending. Workflow Manager standardizes, coordinates, and streamlines the management of applications through the entire enterprise lifecycle, reducing costs and maximizing productivity.

Workflow Manager supports both AdminStudio Suite and FlexNet Manager Suite for Enterprises. IT teams of every size use Workflow Manager to coordinate software asset management-from application packaging and deployment, though software licensing and optimization after deployment. Workflow Manager can manage desktop management processes, such as preparing for Windows migrations and application virtualization, as well as procurement, auditing, and retirement of software assets.

## Streamline the Application Readiness Processes

Workflow Manager enables you to streamline the application readiness process:

- Give end users an easy way to submit requests for new software packaging services and initiate IT projects

- Assign requests to the packager with the most bandwidth and monitor progress in real time

- See assigned tasks in an easy-to-follow graphical workflow, eliminating the need for ad-hoc guesswork

- Generate detailed management reports on every aspect of the software packaging process

- Track and manage SLAs (service level agreements) to ensure compliance

## Coordinate Software License Optimization

Workflow Manager helps you coordinate software license optimization:

- Collects data from other IT systems necessary for next generation software asset management

- Real time updates increase data accuracy of procurement and receiving of new software and contracts

- Coordinate audit reviews of contract obligations and current compliance

- Ensures collaboration of cross-functional teams involved in the management of software assets

- View the real-time status of every project, who is working on it, and any issues that arise

### Tightly Integrate Management of the Application Lifecycle With Existing IT Processes

Using Workflow Manager, you can integrate the management of the application lifecycle with your existing IT processes:

- Exposed APIs enable integration with help desk tools and processes including incident, change, and release management from leading vendors including BMC Remedy® and ServiceNow

- Share package files, metadata, licensing information and other application lifecycle data with IT systems like the CMDB to simplify ITIL or Microsoft BDD implementations

- Provides connectivity to HR, Active Directory, procurement, ERP and other systems for user, computer, purchasing and organizational data

# New Features in Workflow Manager 2015

Workflow Manager 2015 includes the following new features:

- Completely Redesigned User Interface

- Improved Search Engine

- Enhanced Reporting with New Dashboard

- New Configuration Wizard

## Completely Redesigned User Interface

Workflow Manager is used by many different users (software licensing experts, application readiness engineers, business users requesting new software) and is designed to be integrated with AdminStudio Inventory and Rationalization, FlexNet Manager, and App Portal, which all have a consistent web based user interface.

To enhance integration with these applications, Workflow Manager 2015's user experience has been completely redesigned to ensure it is easy to navigate, and consistent with these other Flexera solutions.

Workflow Manager 2015 now has a consistent user experience that is intuitive to use standalone, or when integrated with other Flexera Software applications.

- New Horizontal Navigation Bar

- All Panels Redesigned to Enhance Customer User Experience

- Redesigned Workflow Progress Page

- Redesigned Template Details Page

- Improved Report Access and Creation

# New Horizontal Navigation Bar

Workflow Manager 2014 had a vertical navigation bar on the left side of the screen, which sometimes would require you to scroll down in order to view all menu items. In Workflow Manager 2015, you navigate through the screens by clicking on logically grouped menu items in the navigation bar at the top of the page.
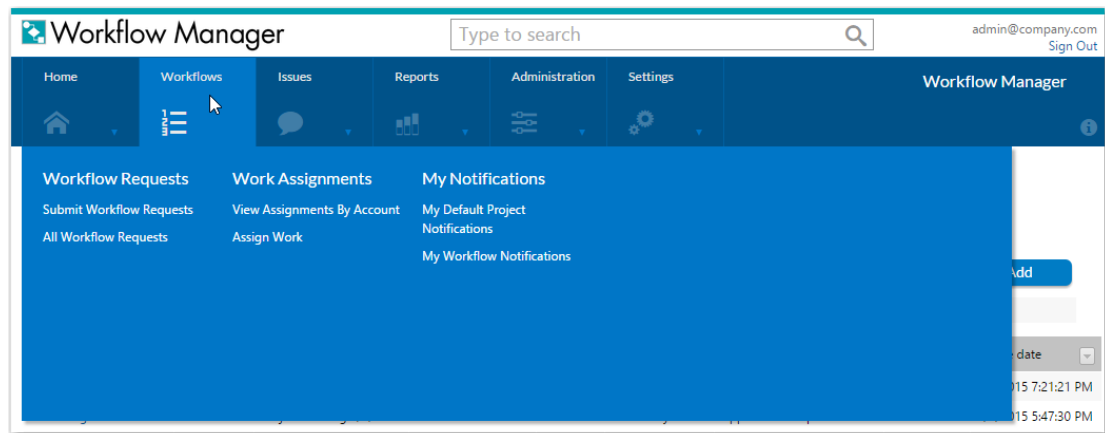


**Figure 1:** Workflow Manager Navigation Bar Menu

The items which appear on the navigation bar menus vary according to your permissions and whether you are a workflow administrator or consumer. The Workflow Manager navigation bar menus contain the following selections:

**Table 1 •** Navigation Bar Selections

| Menu | Heading | Menu Selection |
|------|---------|----------------|
| **Home** | **Options** | Dashboard |
| | | Getting Started |
| **Workflows** | **Workflow Requests** | Submit Workflow Requests |
| | | All Workflow Requests |
| | **Work Assignments** | View Assignments By Account |
| | | Assign Work |
| | **My Notifications** | My Default Project Notifications |
| | | My Workflow Notifications |

**Table 1 •** Navigation Bar Selections (cont.)

| Menu | Heading | Menu Selection |
|---|---|---|
| **Issues** | **Open Issues** | All Open Issues |
| | | Recently Created Issues |
| | | Recently Created Critical Issues |
| | | Recently Responded Issues |
| | **Closed Issues** | Recently Closed Issues |
| **Reports** | **Standard Reports** | All Reports |
| | | Request Detail Report |
| | | Project SLA Report |
| | | Projects Report |
| | | Workflow Request Summary Report |
| | | Workflow Steps SLA Report |
| | **Custom Reports** | Create Custom Workflow Manager Report |
| | | Create Workflow Manager Activity Report |
| | | Create Custom SQL Query Report |
| | | Create Custom Stored Procedure Report |
| | **AdminStudio Reports** | Search Packages |
| | | Application Catalog Reports |
| **Administration** | **Design** | Projects |
| | | Templates |
| | | Approvals |
| | **Configuration** | Workflow Status |
| | | External Email Addresses |
| | | Calendar Settings |

**Table 1 •** Navigation Bar Selections (cont.)

| Menu | Heading | Menu Selection |
|------|---------|----------------|
| **Settings** | **Configuration** | Accounts and Groups |
| | | Roles |
| | | Email Templates |
| | | Companies |
| | | Directory Services |
| | | External Web Services |
| | | External Data Sources |
| | | Directory Service Attributes |

When you scroll down on a page, the navigation bar remains visible, but only the icons are displayed. This helps you conserve vertical space in your browser window.



**Figure 2:** Icon Only View of Navigation Bar
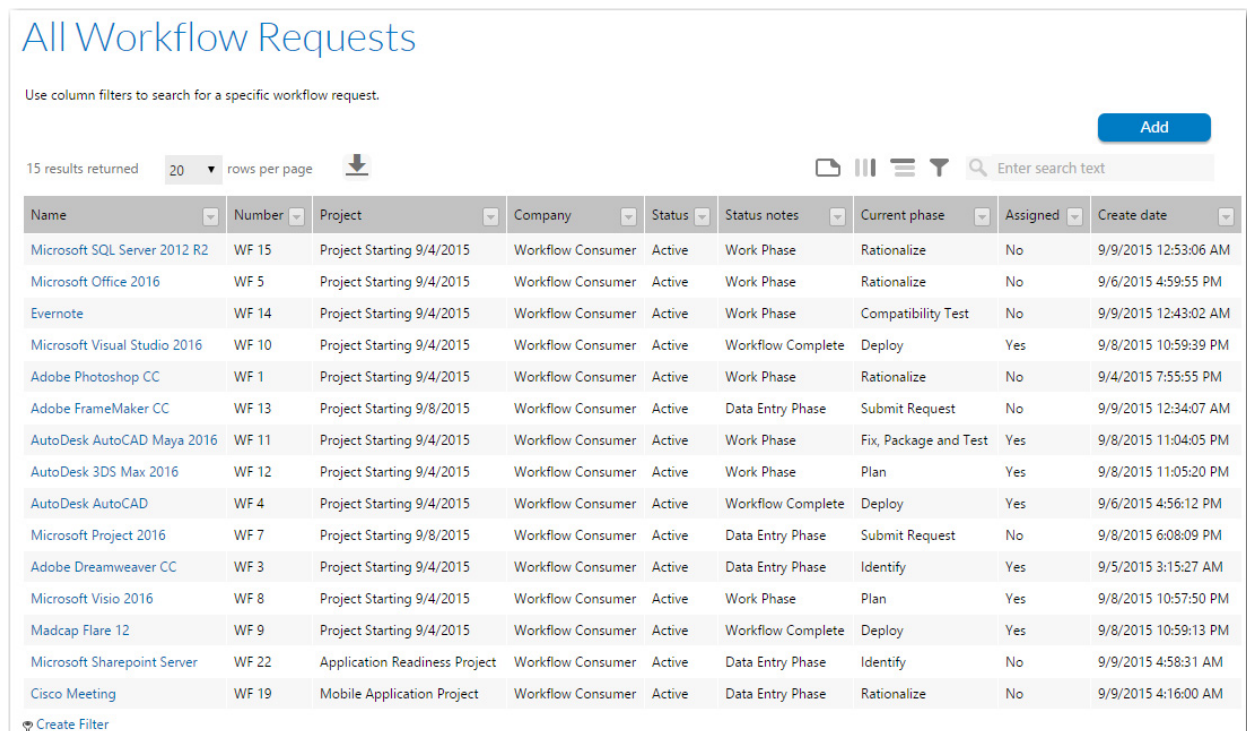
# All Panels Redesigned to Enhance Customer User Experience

All of the screens where a consumer or administrator interacts with Workflow Manager have been redesigned to enhance the customer user experience. Consistent fonts, colors, and controls have been implemented throughout. Buttons are large and easily visible.

- Consistent List Presentation

- Lengthy Pages Have Been Grouped Into Subtabs

- Use of Pop-Ups Has Been Minimized

## Consistent List Presentation

All lists in Workflow Manager now use the same controls, which have extensive searching, filtering, and grouping capabilities.



**Figure 3:** Typical List in Workflow Manager

## Lengthy Pages Have Been Grouped Into Subtabs

In Workflow Manager 2014, pages that contained a large number of entry fields made it necessary to scroll down to see all of the fields, or required expand/collapse controls. In Workflow Manager 2015, lengthy pages are now displayed using subtabs, each of which contains a logical grouping of fields. On each of the tabs, an icon is displayed to help you quickly identify its purpose.



**Figure 4:** Subtab Interface of Project Details Page

## Use of Pop-Ups Has Been Minimized

In Workflow Manager 2014, pop-ups were often used when you were completing a workflow step, searching for a user, or upload files. In Workflow Manager 2015, these pop-ups have been replaced by temporary areas that open on a page when an action is initiated. As soon as the action is completed, these areas close.

In the following example, when you click **Assign Administrator Contact**, the area in gray opens, which provides the fields required to search for a user account.



**Figure 5:** Temporary User Search Area on Project Details Page

# Redesigned Workflow Progress Page

In Workflow Manager 2015, a redesigned **Progress** tab for Workflow Requests page is introduced. This new **Progress** tab implements a phase navigation bar, informational icons, and the ability to enter workflow step completion information without the use of pop-ups.

The following screen capture displays a six-phase workflow request. The current phase is **5. Fix Package, and Test**, and the current workflow step is **Package and test application**:
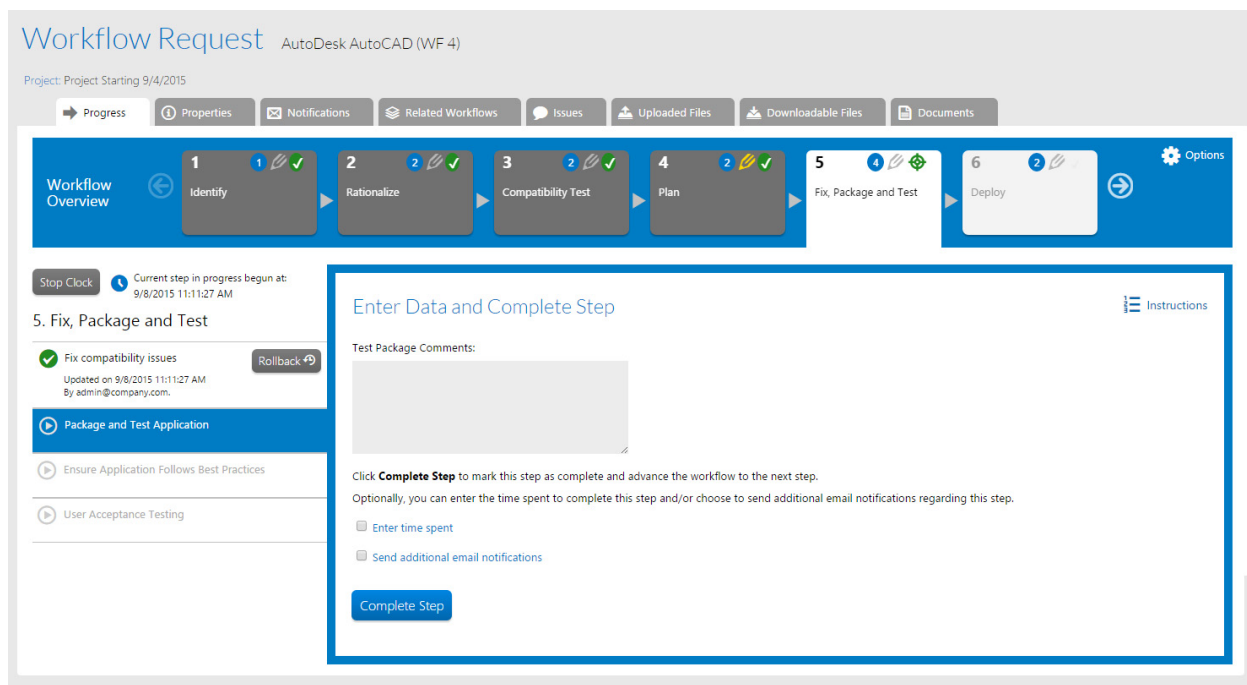


**Figure 6:** Workflow Request Page / Progress Tab

The new **Progress** tab consists of several distinct areas and uses icons to communication information about the workflow request.

- Phase Navigation Bar
- Workflow Step Area
- Workflow Step Completion Panel
- Icons Used in on Workflow Progress Tab

## Phase Navigation Bar

You can switch between the current and completed phases by clicking in the phase navigation bar:
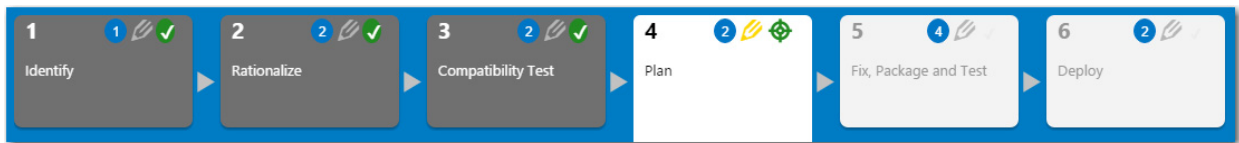


**Figure 7:**  Phase Navigation Bar

Completed phases are have a dark gray background. The background of the current phase is white, while future phases have a light gray background. You can scroll through any completed phase or the current phase. However, you cannot view future phases.

If the workflow template uses branching condition, the branch location has a yellow background:
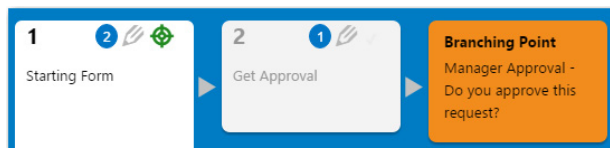


**Figure 8:**  Phase With a Branch Point

When the branching question is answered, the rest of the phases in the chosen branch are then displayed in the phase navigation bar.

## Workflow Step Area

A list of the workflow steps of the selected workflow phase are listed on the left side of the page.



**Figure 9:**  Workflow Step Area

Completed steps are indicated by a green check mark, and lists the time it was completed and the user who completed it. The current step is highlighted in blue.

When you select a completed or current step, that step's workflow step completion panel is displayed on the right. You cannot select a future step.

## Workflow Step Completion Panel
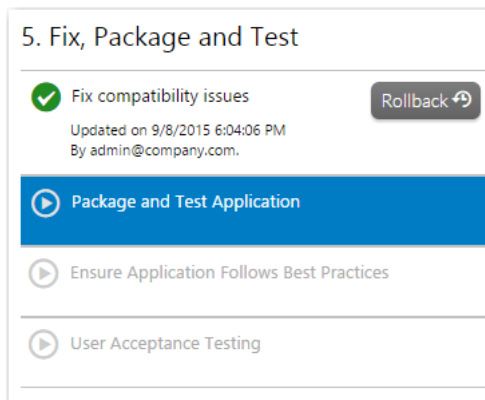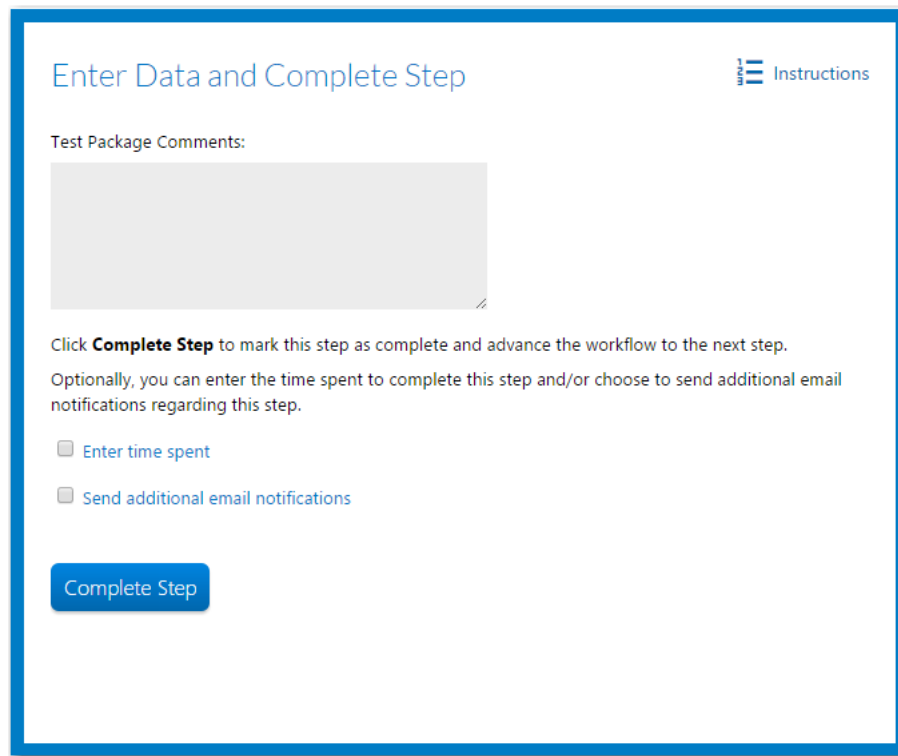
The middle portion of the page displays the step completion fields for the selected workflow step.



**Figure 10:** Workflow Step Completion Panel

When you enter the required information and click **Complete Step**, the step is marked as complete. When data entry is required for a workflow step, the data entry fields are displayed in this area.

## Icons Used in on Workflow Progress Tab

The following icons are used on the **Progress** tab to provide information on the state of each workflow phase and workflow step:



**Figure 11:** Icons Used on Workflow Progress Tab

# Redesigned Template Details Page

The **Template Details** page has also been redesigned to incorporate the same consistent user experience that is easy to navigate, and consistent with these other Flexera Software solutions.

The workflow phase views appear on the **Workflow Phases** tab, while the data group views are on the **Data Groups** tab. Navigation trees are displayed along the left side.

Role permissions and email notifications fields are displayed on the **Permissions** and **Notifications** subtabs.



**Figure 12:** Workflow Template Details Page

A combo **Add** button is used to add workflow phases/steps and data groups/elements:
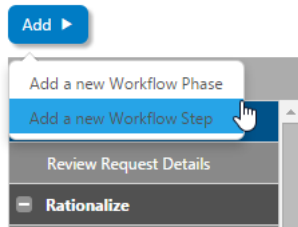


**Figure 13:** Combo Add Button

# Improved Report Access and Creation

Workflow Manager 2015 includes a redesigned **All Reports** page which lists current reports in either card or list view. To open any of these reports, just click on the icon.
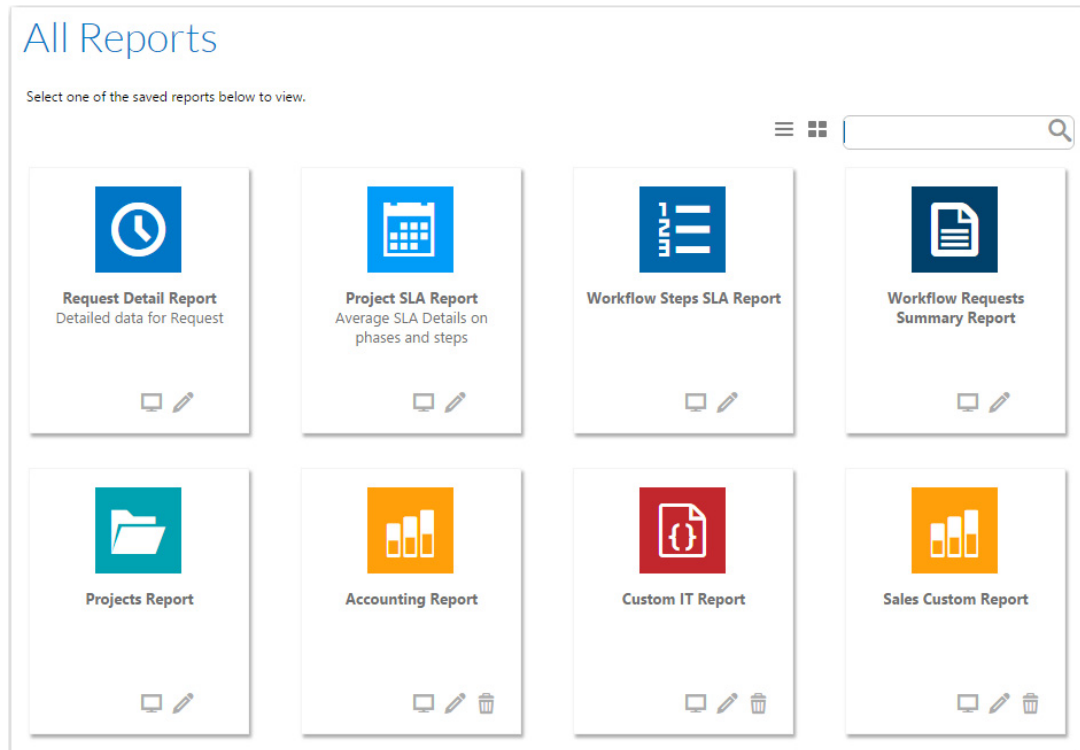


**Figure 14:** All Reports Page

For custom reports, the wizard interface has been redesigned to improve ease of use.



**Figure 15:**  Create Custom Workflow Manager Report / Step 2: Select report fields

# Improved Search Engine

Workflow Manager 2015 includes a new search engine that makes it easy to search through workflow requests that are open, and those that have been completed, as well as search through historical issues. The search engine easily locates open and completed requests, projects, and issues, which can help you find information that can expedite related requests.

To perform a search for a workflow request, project, or issue, you enter a search term in the search box above the navigation bar. When you put your cursor in the search box, the **Filter Your Search** menu opens to enable you to focus your search to specific portions of the available data.
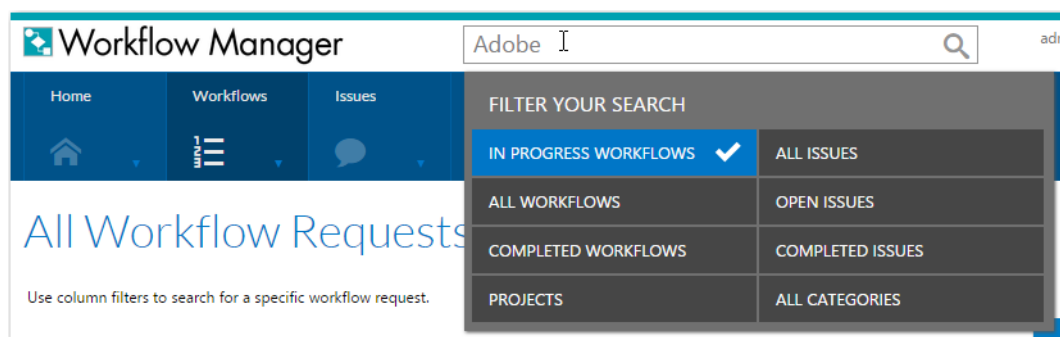


**Figure 16:** Search Box and Filter Your Search Menu

In the Filter Your Search box, just select the categories that you want to include in the search, and click enter. The results are listed by category.
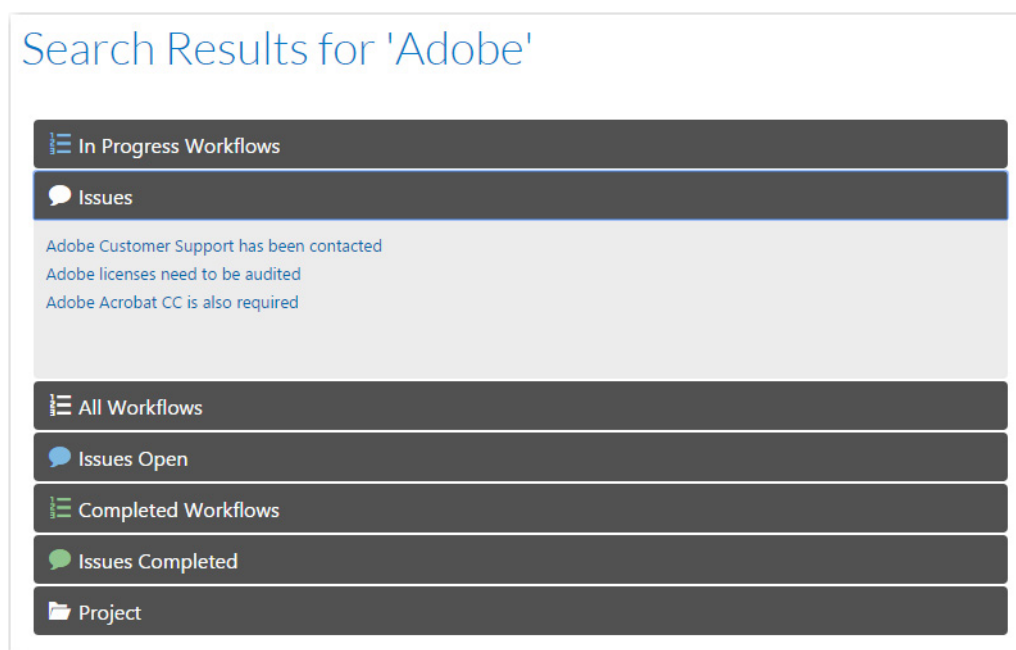


**Figure 17:** Search Results Page

On the **Search Results** page, you can click on a category name to expand/collapse the listing, and can click on a result link to open that page.

# Enhanced Reporting with New Dashboard

Workflow Manager 2015 provides quick access to metrics and reporting on the quality and speed of service delivery on the new **Dashboard** reports.

These reports include summary information about workflow requests, relevant work assignments, and issues. The dashboard information is tailored to each user, based on their permissions and displays at glance information about the projects they contribute to.

## Viewing a Summary Dashboard Report of All Workflow Requests

On the **Dashboard** page of the **Home** menu, color-coded boxes display the total number of workflow requests that are open, and also breaks down the total number by current SLA status: Late, At Risk, or On Time. It also lists a bar and line chart that, by default, provides status summary information for all of workflow requests.
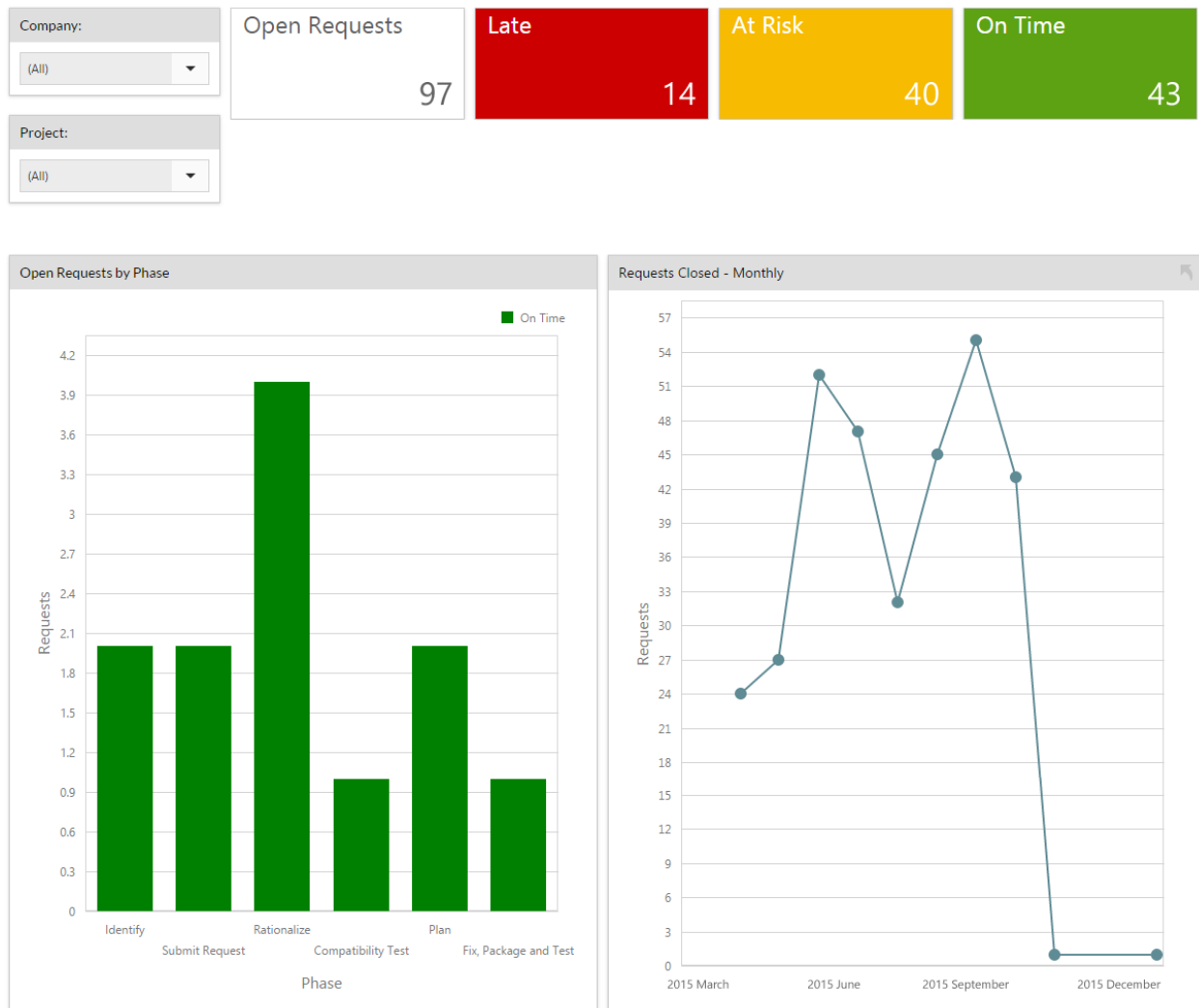


**Figure 18:** Dashboard Report

The lower portion of the dashboard report includes the following additional information:

- **Request Assignments**—Total number of workflow request assignments broken down by user.

- **Open Issues**—List of all open issues.

## Viewing Dashboard Reports for an Individual Project

If you make a selection from the **Company** and **Project** list, the report will be filtered to display information only about the selected product.
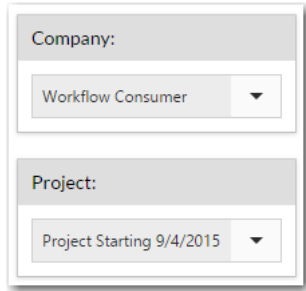


**Figure 19:** Company and Project Selection List

# New Configuration Wizard

With Workflow Manager 2015, you can now use the AdminStudio Configuration Wizard to create the Workflow Manager database, activate the product, connect to the Flexera Service Gateway, and perform other configuration tasks which were formerly made by editing the `web.config` file.
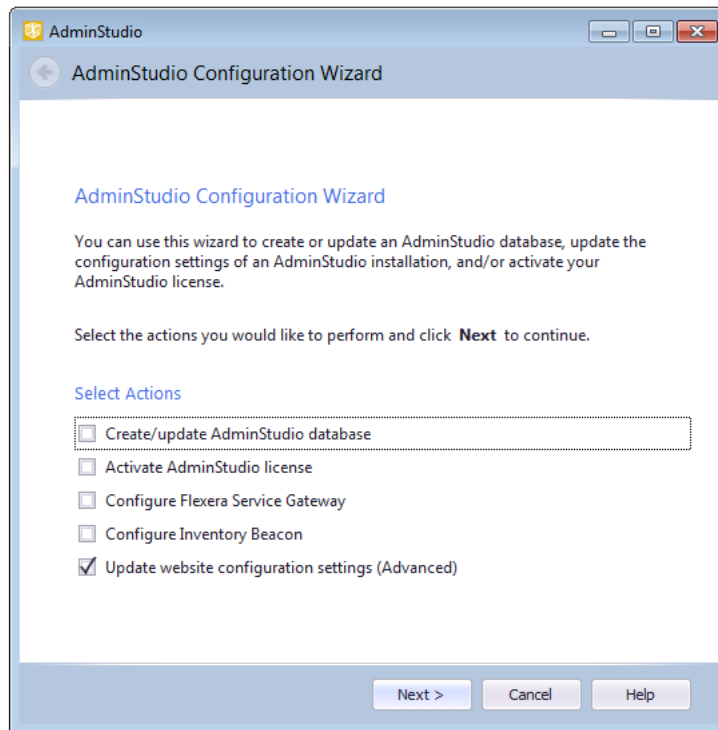


**Figure 20:** AdminStudio Configuration Wizard

The AdminStudio Configuration Wizard is automatically launched after Workflow Manager installation, and can also be launched at any time after installation. Standard panels are displayed during installation, and additional advanced panels can be displayed after installation.

Using the AdminStudio Configuration Wizard, you can:

- Create or update a new Workflow Manager database.
- Set the default connection for web site users.
- Activate by uploading a license file.
- Connect to the Flexera Service Gateway.
- Specify the file share directory.
- Disable step-level SLA so that all workflow steps are included in SLA calculations.
- Specify the login page timeout value.

You can launch the Configuration Wizard at any time by opening the following file that is installed with Workflow Manager:

`C:\AdminStudioWebComponents_2015\Support\Config\Config.exe`

# System Requirements

This section lists the system requirements for Workflow Manager / AdminStudio Enterprise Server.

- Workflow Manager Web Server / AdminStudio Enterprise Server

- Workflow Manager / AdminStudio Database Server

- File Share Server

- Workflow Manager End User Computers

- Portal Web Server for Intranet Clients

- Portal Web Server for Internet Clients

- Workflow Manager System Account Requirements

# Workflow Manager Web Server / AdminStudio Enterprise Server

The following table lists the system requirements for the Web server that hosts the Workflow Manager Data Web service and the actual Workflow Manager Web site and/or AdminStudio Enterprise Server.

| Item | Description |
|------|-------------|
| **Processor** | 32-bit or 64-bit processor at 2 GHz or greater. <br><br> *Note • AdminStudio Enterprise Server / Workflow Manager runs in 32-bit mode on a 64-bit OS.* |
| **RAM** | 4 GB or greater (8 GB preferred) |
| **Hard Disk Space** | 100 GB or greater |
| **Operating System** | Windows Server 2008 R2 or later / English base language (Windows Server 2012 preferred) |
| **IIS** | IIS 7.0 or later |
| **.NET Framework** | .NET Framework 4.5.2 or later |
| **ASP.NET** | ASP.NET 4.0.30319 or later |
| **MSXML** | MSXML 4.0 |

# Workflow Manager / AdminStudio Database Server

This following table lists the recommended system configuration for a Workflow Manager/AdminStudio Application Catalog database server:

| Item | Description |
|------|-------------|
| **Processor** | 32-bit or 64-bit processor at 2 GHz or greater |
| **RAM** | 4 GB or greater (8 GB preferred) |
| **Hard Disk Space** | 80 GB or greater |
| **Operating System** | Windows Server 2008 R2 or later (Windows Server 2012 preferred) |
| **Database Software** | SQL Server 2008 R2 or later databases, including SQL Server 2012 and SQL Server 2014 (latest version preferred) <br><br> • **Dictionary sort order**—SQL Server must be installed with case-insensitive dictionary sort order 52 on Code Page 1252 for non-Unicode data. For more information, use the `sp_helpsort` T-SQL command, which returns the following: <br><br> `Latin1-General, case-insensitive, accent-sensitive, kanatype-insensitive, width-insensitive for Unicode Data, SQL Server Sort Order 52 on Code Page 1252 for non-Unicode data` <br><br> • **Collation setting**—`SQL_Latin1_General_CP1_CI_AS` is the required collation setting for AdminStudio database server. It is the only supported collation. <br><br> *Note • Before attempting to connect to an existing Microsoft SQL Server, open SQL Server Configuration Manager and make sure that the following three protocols are enabled:* <br> • *Shared Memory* <br> • *Named Pipes* <br> • *TCP/IP* |

# File Share Server

This following table lists the system requirements for the machine that stores Workflow Manager's uploaded source files and the repackaged output files:

| Item | Description |
|------|-------------|
| **Processor** | 2 GHz or greater |
| **RAM** | 2 GB or greater |
| **Hard Disk Space** | 1 TB or greater |
| **Operating System** | Windows Server 2008 R2 or later |

# Workflow Manager End User Computers

This following table lists the recommended system configuration for a Workflow Manager 2015 end user machine:

| Item | Description |
|------|-------------|
| **Browser** | • Microsoft Internet Explorer 9.0 or later<br>• Chrome for Windows 33.0 or later<br>• Firefox for Windows 25.0 or later<br>• Safari for Mac OS X and iOS |

# Portal Web Server for Intranet Clients

In previous releases of Workflow Manager, if you wanted to use Windows NT authentication for intranet clients, you were required to set up a portal web server. Starting with Workflow Manager 5.6, a portal is no longer required to support Windows NT authentication. You can enable Windows NT authentication directly on the web site.

Single Sign On is only supported when the user that logs into IIS has been imported into the Workflow Manager database using Active Directory. The administrator can either import the complete group or only one user. If a complete group is imported, then all the members of the group can be logged into Workflow Manager using Single Sign On.

The system requirements for this machine are the same as for the Workflow Manager Web Server / AdminStudio Enterprise Server.

# Portal Web Server for Internet Clients

For better security and to manage access to the Workflow Manager Web Server, it is recommend to also set up a portal Web server for Internet clients.

If Workflow Manager needs to be accessed over the Internet, it is recommended to set up a portal Web server, residing in a demilitarized zone (DMZ). This Web server:

- accepts the requests from the Internet clients,

- forwards them to the Workflow Manager / AdminStudio Enterprise Server,

- gets responses from the Workflow Manager / AdminStudio Enterprise Server, and

- forwards them to the clients

You can configure the Workflow Manager / AdminStudio Enterprise Server to entertain the request only if it is coming from the Portal Web server, and otherwise reject the request. The Portal Web server manages access to Workflow Manager / AdminStudio Enterprise Server and ensures that clients are not able to access any data or documents without logging in.

The system requirements for this machine are the same as for Workflow Manager Web Server / AdminStudio Enterprise Server.

# Workflow Manager System Account Requirements

The `AMS_SYSTEM` account on the Workflow Manager server requires the following privileges:

- **IIS_WPG group member**—Must be a member of the local `IIS_WPG` group (or `IIS_USRS`) on the web server.

- **Modify permissions on file share**—Must have "modify" permissions on the Workflow Manager file share.

- **Email permissions**—Must have permission to send e-mail through the SMTP server.

- **Active Directory query permission**—Must have permission to query Active Directory.

- **Local Administrators group member**—If Workflow Manager will be calling any of the AdminStudio Platform APIs in the iPlugin DLL, the AMS_SYSTEM account must be a member of the local Administrators group.

# Resolved Issues

This section lists the customer issues that were resolved in Workflow Manager 2015.

| Issue Number | Issue Summary |
|---|---|
| **IOJ-1523980** | When updating a template that has completed applications, an exception is thrown. |
| **IOJ-1523986** | A list of work orders and enhancements should be included in the Workflow Manager release notes. |
| **IOJ-1523989** | Users unable to login after upgrade. |
| **IOJ-1524011** | Customer requires validation that Workflow Manager allows bidirectional synchronization between regional and corporate application catalogs. |
| **IOJ-1524016** | Dates are calculated incorrectly in the Workflow Request Summary Report. |
| **IOJ-1524035** | Dynamic pick list displays the Workflow Manager login screen. |
| **IOJ-1524083** | Verification on whether disabling ad-hoc query access has any effect on Workflow Manager. |
| **IOJ-1524099** | Changing template breaks completed workflow requests. |
| **IOJ-1524119** | Toggling the project state from Active to Inactive or vice-versa throws a JavaScript error. |
| **IOJ-1524661** | An error is displayed when attempting to edit a project when using the portal. |
| **IOJ-1524664** | Request for a new data type in Workflow Manager called Domain User, which would put a combo box on the data entry screens. The list for the combo box would be populated with the names of all of the users in the domain. |
| **IOJ-1524750** | Opening the Workflow Manager online help via a secured portal displays an error message about non-secure items when accessed. |
| **IOJ-1524764** | When consumers view workflow requests, the project that the workflow request belongs to is not displayed. |
| **IOJ-1524765** | A Windows script host error is generated during setup. |
| **IOJ-1524826** | Request for additional branding documentation. |
| **IOJ-1524979** | Evaluate and tune code and schema to improve performance with large sets of data. |
| **IOJ-1525243** | Improve email notification feature. |

| Issue Number | Issue Summary |
|---|---|
| **IOJ-1525244** | Improve the user experience by introducing My AMS Home page. |
| **IOJ-1525542** | Date picker returns invalid short date format with non-US region settings. |
| **IOJ-1525568** | Date selector in AMS 3.0 returns system short date format instead of in `mm/dd/yyyy` format. |
| **IOJ-1525574** | An error message appears in the data pick list element display |
| **IOJ-1526657** | An AdminStudio phase shows 100% complete, even when it is still incomplete in the AdminStudio client. |
| **IOJ-1526947** | A tool tip does not show up next to the icon for Workflow Manager data elements. |
| **IOJ-1642143** | API calls to set values in a workflow request returns an exception. |
| **IOJ-1660520** | The Issues page is truncated, and using the scroll bar does not reveal the entire screen. |
| **IOJ-1661170** | Regular expressions associated with data elements that are collected later in the workflow are ignored. |
| **IOJ-1663811** | On the Workflow Progress screen, display the Active Directory display name rather than the Active Directory login name. |
| **IOJ-1664695** | Request that assigning a workflow family to a workflow request be optional instead of mandatory. Also, request to hide the Workflow Family selection list. |
| **IOJ-1665977** | User email addresses longer than 40 digits are not accepted. |
| **IOJ-1700371** | Cannot insert notification variables into email subject lines. |
| **IOJ-1700372** | The **DBDriven** data type is converting single vertical quotes into double quotes within the SQL statement. |
| **IOJ-1719964** | Modifying a template that is in use causes the completed workflow requests to break with the following error:<br><br>`This constraint cannot be enabled as not all values have corresponding`<br>`   parent values.` |
| **IOJ-1722087** | Workflow step completion instruction HTML page does not scale. |
| **IOJ-1722626** | List view changes are not permanent. |
| **IOJ-1729980** | When creating a custom report through the Report Wizard, it does not show any Data Element values in the final report. |

| Issue Number | Issue Summary |
|---|---|
| **IOJ-1730004** | Request that the **Company** field drop down list be read-only on the Role Details page so that users cannot change the company of an existing role. |
| **IOJ-1730790** | Workflow Manager does load any data on Chrome v 43.0.2357.65. and all of the lists grids are empty. |
| **IOJ-1731653** | Tool tip does not show up next to the data element when the data for a data group is collected at the later stage of a workflow. |
| **IOJ-1732302** | Consumers are permitted to copy a workflow request even when permission is disabled. |
| **IOJ-1733477** | Rollback behavior loses check box data types. |
| **IOJ-1737164** | Advanced email template shows the body of `NormalStep.txt,` |
| **IOJ-1737171** | A `TemplateTree: Page_Load Unknown CType` error occurs when accessing templates. |
| **IOJ-1738155** | Notification variables are left unresolved in email notifications sent by Workflow Manager. |

# Legal Information

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