

Workflow Manager 2018 Update 1 Release Notes

February 2019

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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, through 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.

New Features in Workflow Manager 2018 Update 1

In Workflow Manager 2018 Update 1, the following new features were included:

- [Additional Selection List Items Added to an Approval Status Data Element Are Now Displayed](#)
- [New Option to Assign Permissions to Existing Templates When Creating a New Role](#)



Note • *In addition to these new features, several additional customer issues were addressed. For more information, see [Resolved Issues](#).*

Additional Selection List Items Added to an Approval Status Data Element Are Now Displayed

When you add a workflow step with a step type of **Approval Task**, a data element named **Approval Status** is automatically created which, by default, contains the choices of **Approved** and **Rejected**. However, you can edit the **Approval Status** data element to add additional **Selection list items**, as shown in the following image.

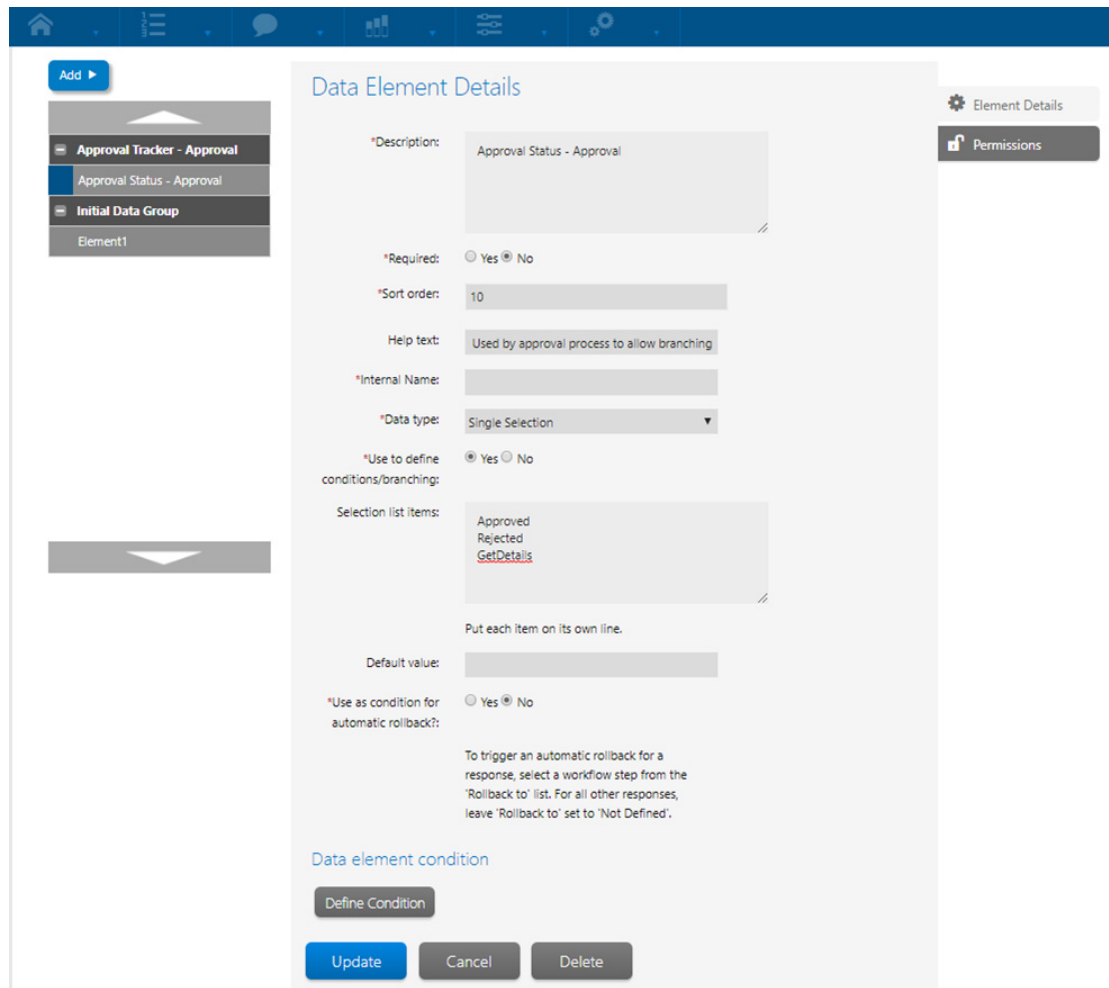


Figure 1: Adding an Additional Item in the Selection List Items for an Approval Status Data Element

In previous releases, even after adding additional items to the **Selection list items** of an Approval Status data element, only **Approved** and **Rejected** would be displayed to the user when they open the Approval workflow step on the Workflow Request page.

In Workflow Manager 2018 Update 1, if additional items are added to the **Selection list items** of an Approval Status data element, those additional items are displayed on the Approval workflow step on the Workflow Request page.

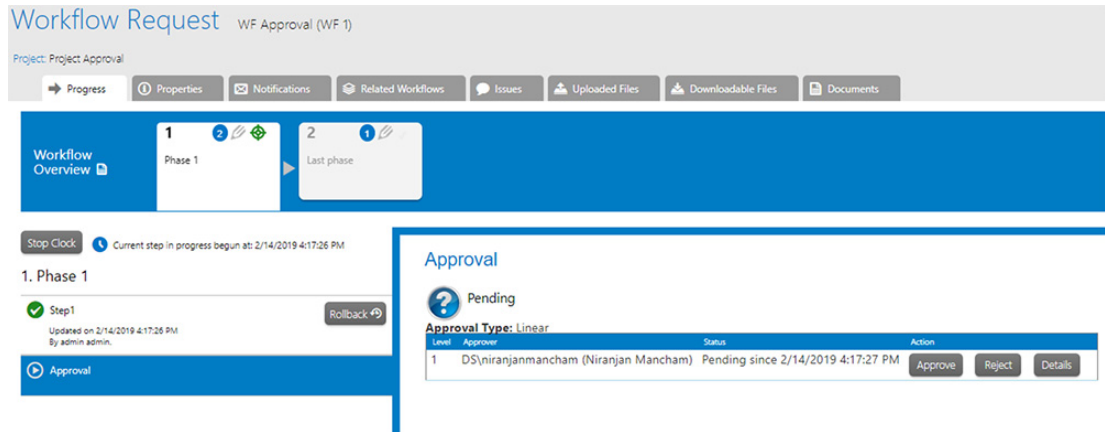


Figure 2: Additional Option (Details) Displayed on an Approval Workflow Step

If a user selects one of these custom Approval Status options, the status of the Workflow Step will be set to pending, because it is expected that additional actions would need to be taken to request more details before the user could make a decision on approval or rejection.



Note • This feature was tracked in issue IOJ-1899545.

New Option to Assign Permissions to Existing Templates When Creating a New Role

In previous versions of Workflow Manager, when you created a new role, that role would automatically be given **View** and **Edit** permissions on all existing templates and projects.

In Workflow Manager 2018 Update 1, when administrators create a new role, they can now decide which permissions to be given to existing templates by setting the **Apply permission to Templates** option to **None**, **Read**, or **Write**.

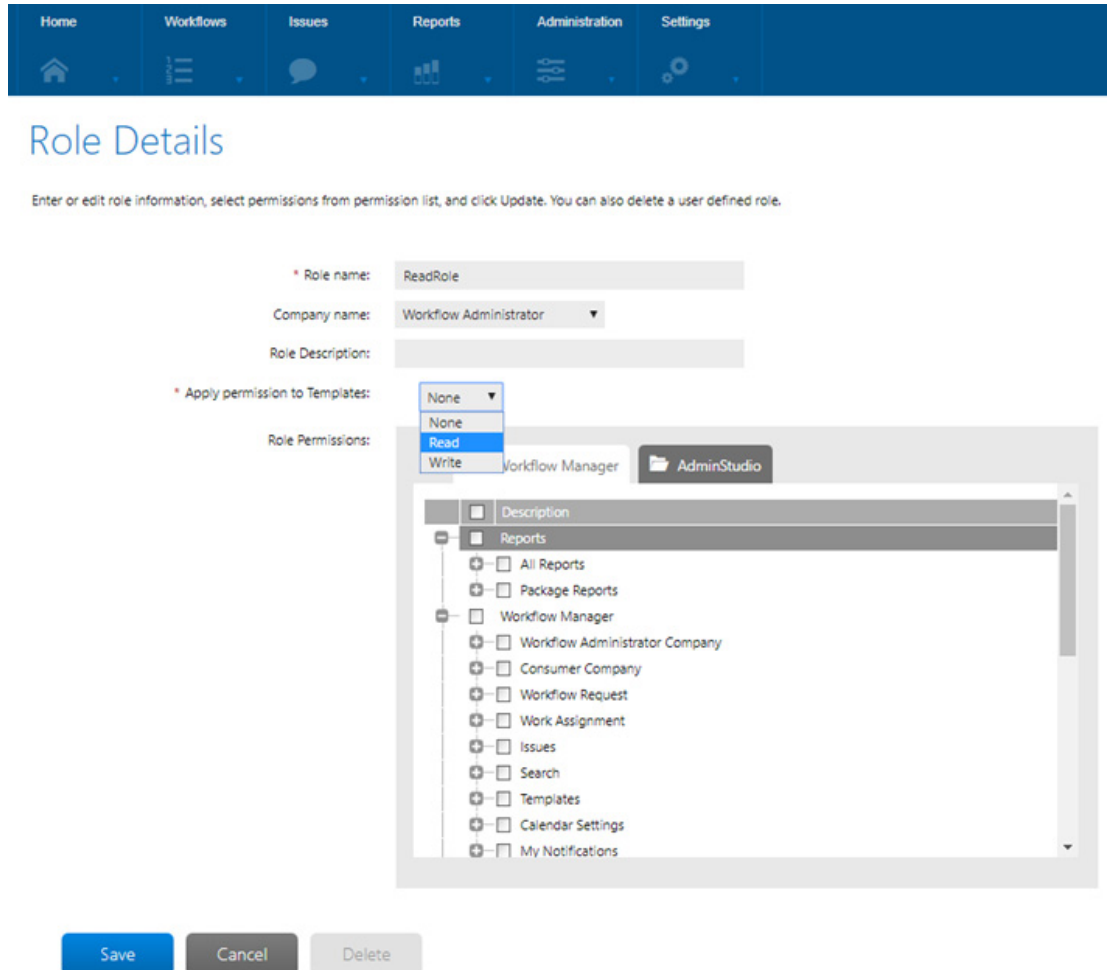


Figure 3: Apply Permission to Templates Option on Role Details Page

The permissions you specify on the **Role Details** page will be visible on the **Permissions** tab of the **Template Details** page.

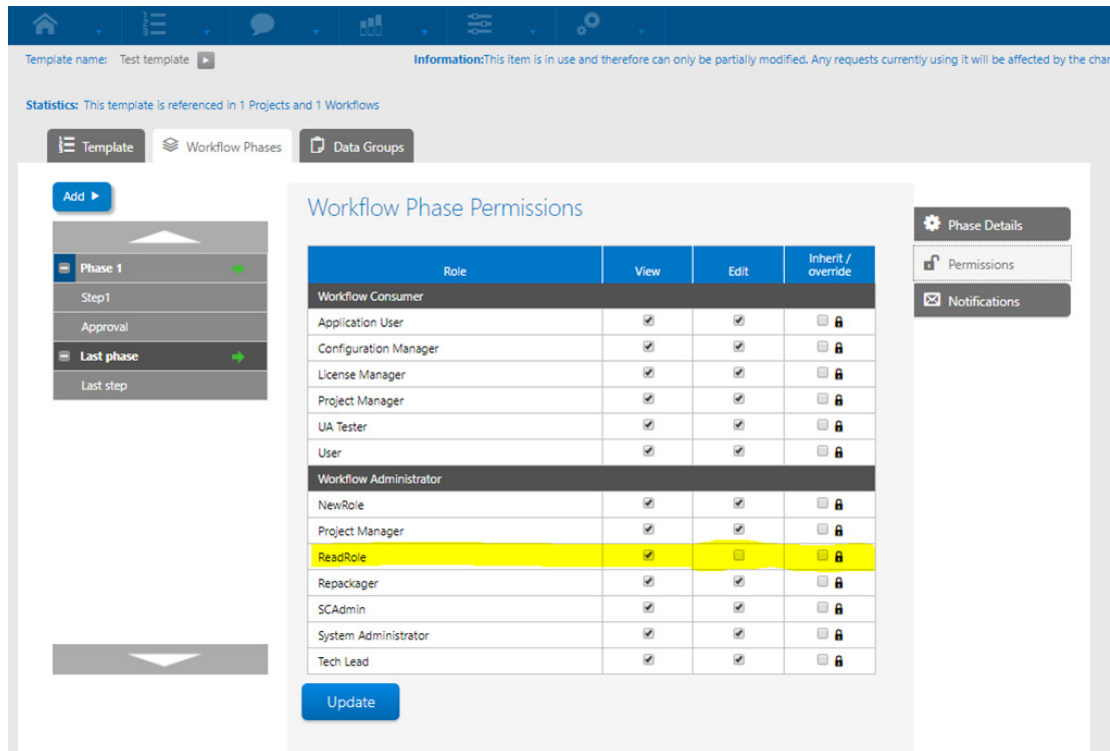


Figure 4: Role Permissions on the Permissions Tab of the Template Details Page



Note • This feature was tracked in issue IOJ-1900672.

New Features in Workflow Manager 2018

In Workflow Manager 2018, the following new features were included:

- [New Option to Track Workflow Phases for SLA Status](#)
- [Click-Through Reporting on Dashboard](#)
- [Validation on Contact Email and Contact Phone Number Data Elements](#)
- [Official Support for Microsoft Edge Browser](#)

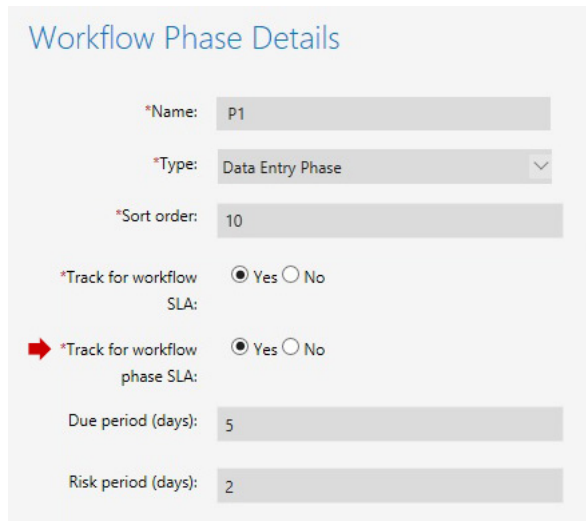


Note • In addition to these new features, several additional customer issues were addressed. For more information, see [Resolved Issues](#).

New Option to Track Workflow Phases for SLA Status

In previous releases, you were able to track the SLA (Service Level Agreement) status of workflow requests and individual workflow steps, so that you know which ones are proceeding on schedule (as per their service level agreement), and which ones are late or at risk of being late.

In Workflow Manager 2018, you can now also track the SLA status of individual workflow phases. To enable this feature, select the new **Track for workflow phase SLA** option on the **Workflow Phase Details** view of the **Template Details** page.



The screenshot shows the 'Workflow Phase Details' form with the following fields:

- *Name: P1
- *Type: Data Entry Phase
- *Sort order: 10
- *Track for workflow SLA: Yes No
- ➔** *Track for workflow phase SLA: Yes No
- Due period (days): 5
- Risk period (days): 2

Figure 5: New “Track for Workflow Phase SLA” Option on Workflow Phase Details View

Workflow Manager 2018 also offers reporting on workflow phase SLA status, including a new **Workflow Phase SLA Report** available on the **Reports > Standard Reports** menu.



Note • This feature was tracked in issue IOJ-1744385.

Click-Through Reporting on Dashboard

On the Workflow Manager dashboard, extensive click-through reporting is now available. For example, in previous releases the tiles listing the number of open, late, at risk, and on time requests listed a number, but there was no easy way to access a list of the items in that category.



Figure 6: Workflow Manager Dashboard Tiles

In Workflow Manager 2018, you can click on these tiles to display a report on each individual category. For example, when you click on **Open Requests**, you will see a report that lists all open requests.

Open Requests

Use column filters to search for a specific workflow request.

10 results returned 20 rows per page 

Name	Number	Project	Company	Status	Status notes
Trans10	WF 10	Transforms	Workflow Consumer	Active	Data Entry Phase
testapp	WF 19	Approvals	Workflow Consumer	Active	Work Phase
Test	WF 11	ARP	Workflow Consumer	Active	Data Entry Phase
Trans001	WF 7	Transforms	Workflow Consumer	Active	Data Entry Phase
Trans1	WF 4	Transforms	Workflow Consumer	Active	Data Entry Phase
testu	WF 20	Approvals	Workflow Consumer	Active	Data Entry Phase
Tar2	WF 8	Transforms	Workflow Consumer	Active	Data Entry Phase
cd	WF 12	ARP	Workflow Consumer	Active	Data Entry Phase
Upload1	WF 6	Upload	Workflow Consumer	Active	Data Entry Phase
Transforms2	WF 16	ARP	Workflow Consumer	Active	Merging Workflow Steps

 Create Filter

Figure 7: Open Requests Report

Other areas of the dashboard are also linked to these new click-through reports.



Note • This feature was tracked in issue IOJ-1763363.

Validation on Contact Email and Contact Phone Number Data Elements

In Workflow Manager 2018, you can now specify that the contact email and phone number data elements be validated upon submission.

If the e-mail address or phone number is invalid (meaning that it does not meet the specified validation rules), a message will be displayed stating that the entry is invalid, and prompting the user to correct the entry.



Note • These features were tracked in issues IOJ-1857008 and IOJ-1857011.

Official Support for Microsoft Edge Browser

Workflow Manager 2018 now officially supports the Microsoft Edge browser.



Note • This feature was tracked in issue IOJ-1869662.

Ability to Specify Different Authentication Types when Connecting to a Directory Service Using SSL

In Workflow Manager 2018, you can specify different authentication types when establishing a connection to a Directory service using SSL.

To specify authentication types, use the following new option in the `web.config` file:

```
<add key="AuthenticationTypes" value=""/>
```

In the value field, use commas to specify multiple values such as:

```
value="FastBind,ReadOnlyServer"
```

Possible values for the value field are:

- Anonymous
- Delegation
- Encryption
- FastBind
- None
- ReadOnlyServer
- Sealing
- Secure
- SecureSocketsLayer
- ServerBind
- Signing

If no value or an invalid value is specified, defaults will be used to establish the connection:

- **Defaults for SSL**—SecureSocketsLayer, ReadOnlyServer, d3FastBind
- **Defaults for non-SSL**—ServerBind, ReadOnlyServer, FastBind

For more details, see the [AuthenticationTypes Enum](#) topic in the Microsoft .NET Framework 4.7.2 documentation.



Note • This feature was tracked in issue IOJ-1888169.

Upgrading Workflow Manager 2018 to Workflow Manager 2018 Update 1

To upgrade an installation of Workflow Manager 2018 to Workflow Manager 2018 Update 1, you must first uninstall Workflow Manager 2018.

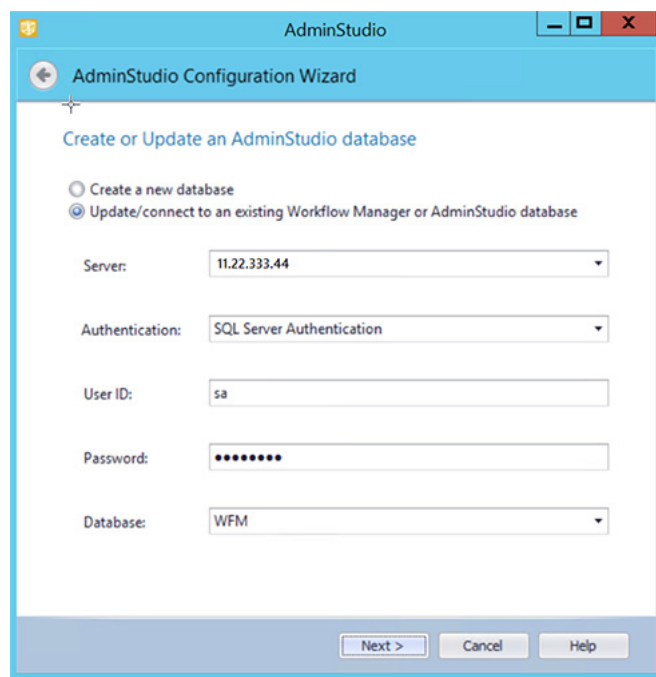
However, if you are upgrading an installation of Workflow Manager 2017 or older to Workflow Manager 2018 Update 1, uninstallation is not required.

To upgrade an older version of Workflow Manager to Workflow Manager 2018 Update 1, perform the following steps.



Task **To upgrade an older version of Workflow Manager to Workflow Manager 2018 Update 1:**

1. Download the installer for Workflow Manager 2018 Update 1 from the Flexera Product and License Center:
<https://flexerasoftware.flexnetoperations.com>
2. If you have Workflow Manager 2018 installed, open the Control Panel and uninstall it.
3. Launch the installer you downloaded in Step 1. Follow the instructions in the Installation Wizard until installation is completed.
4. After successful installation, AdminStudio Configuration Wizard will automatically launch.



5. On the **Create or Update an AdminStudio database** panel of the **AdminStudio Configuration Wizard**, provide the details and credentials of the SQL Server and database that was used in the older version of Workflow Manager.

6. Follow the instructions in the Configuration Wizard until it is completed. The wizard will upgrade the database and make it compliant with the new version of Workflow Manager.
7. Refresh/restart IIS on the Workflow Manager server.

After performing these steps, you can launch the updated version of Workflow Manager.

Resolved Issues

This section lists the customer issues that were resolved in the following versions of Workflow Manager:

- [Workflow Manager 2018 Update 1](#)
- [Workflow Manager 2018](#)

Workflow Manager 2018 Update 1

This section lists the customer issues that were resolved in Workflow Manager 2018 Update 1:

Issue	Description
IOJ-1835618	Remove button used to clear work assignments displays AdminStudio workflow owner as removed.
IOJ-1864724	Duplicate ItemID for the same ApplicationID in the AMS_ApplicationItem table.
IOJ-1895722	9_ASfiles folder is not used for AdminStudio Package Upload when using the default companies.
IOJ-1899545	You can add additional selection list items to an Approval Status data element, but Workflow Manager does not display them.
IOJ-1900672	Newly created roles are given Edit and View permissions on existing templates.
IOJ-1905901	Clicking on the Approve button more than once in an Approval task freezes the progress of the step, making it look like it remains in the same state.
IOJ-1906520	Changing the workflow step name of an Approval task will automatically change the name of the associated data group and data element. However, if the data element is used in a branch condition, the Select the branching condition list still displays the old/incorrect data element name.
IOJ-1906733	Some users from Active Directory are not listed when searching for an Account Name on the Assignment Details page.
IOJ-1906734	Setting LDAPSearchPageSize in the Web.config file breaks the ability to assign a user to a role on the Assignment Details and Assigning a User to a Role pages.
IOJ-1907410	The processing gear keeps spinning when creating a workflow phase.

Workflow Manager 2018

This section lists the customer issues that were resolved in Workflow Manager 2018:

Issue	Description
IOJ-1866507	The Active Directory search on the Work Assignment view does not return all users in the group.
IOJ-1866831	Active directory authentication fails when the display name attribute for a user in Active Directory is not populated.


System Requirements


This section lists the system requirements for Workflow Manager.

- [Workflow Manager Web 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

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.

Item	Description
Processor	32-bit or 64-bit processor at 2 GHz or greater.  Note • <i>Workflow Manager runs in 32-bit mode on a 64-bit OS.</i>
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)

Item	Description
IIS	IIS 7.0 or later
.NET Framework	.NET Framework 4.6.1 or later
ASP.NET	ASP.NET 4.0.30319 or later
MSXML	MSXML 6.0
	
	Note • MSXML is installed by the Workflow Manager installer.


Workflow Manager / AdminStudio Database Server

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



Note • While minimum requirements are listed below, the recommended system configuration for a database server is dependent upon the number of users and the number of packages that will be imported into the Application Catalog database

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)

Item	Description
Database Software	<p>SQL Server 2008 R2 or later databases, including SQL Server 2012 and SQL Server 2014 (latest version preferred)</p> <ul style="list-style-type: none"> 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 <code>sp_helpsort</code> T-SQL command, which returns the following: 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 Collation setting—SQL_Latin1_General_CP1_CI_AS is the required collation setting for AdminStudio database server. It is the only supported collation.
	 <p>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:</p> <ul style="list-style-type: none"> Shared Memory Named Pipes 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 end user machine:

Item	Description
Browser	<ul style="list-style-type: none">● Microsoft Internet Explorer 9.0 or later● Chrome for Windows 33.0 or later● Firefox for Windows 25.0 or later● Safari for Mac OS X and iOS
Monitor Resolution	1024 x 768 pixels or higher

Portal Web Server for Intranet Clients

A portal is not 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](#).

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,
- gets responses from the Workflow Manager, and
- forwards them to the clients

You can configure the Workflow Manager 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 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](#).

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.

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