

Workflow Manager 2020 Release Notes

May 2020

Introduction	2
New Features.....	2
Introducing Edit Functionality for Data Types.....	2
Ability to Change the Data Type of a Data Element.....	2
Documentation Enhancements for Editing a Template That is in Use.....	3
New Reset Days In Phase on Rollback Option	5
Data Groups Can Be Collected in Work Assignment and Approval Task Step Types	7
Introducing New Data Elements	9
Upgrading Workflow Manager Older Version to Workflow Manager 2020	13
Resolved Issues.....	14
System Requirements	15
Workflow Manager Web Server	15
Workflow Manager / AdminStudio Database Server	16
File Share Server	17
Workflow Manager End User Computers.....	18
Portal Web Server for Intranet Clients.....	18
Portal Web Server for Internet Clients.....	18
Workflow Manager System Account Requirements.....	19
Legal Information	19

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 Test.

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

Workflow Manager 2020 includes the following new features:

- [Introducing Edit Functionality for Data Types](#)
- [New Reset Days In Phase on Rollback Option](#)
- [Data Groups Can Be Collected in Work Assignment and Approval Task Step Types](#)
- [Introducing New Data Elements](#)

Introducing Edit Functionality for Data Types

In Workflow Manager 2020, the following features are enhanced:

- [Ability to Change the Data Type of a Data Element](#)
- [Documentation Enhancements for Editing a Template That is in Use](#)

Ability to Change the Data Type of a Data Element

In previous versions of Workflow Manager, you were not permitted to change the data type once it was set to a certain type.

In Workflow Manager 2020, you will be able to change the data type for the one that is already set to another from the list of data types supported in Workflow Manager.

However, there will be some restrictions for the Data Types **Single Selection** and **Radio Button**, which are explained in the following section.

Documentation Enhancements for Editing a Template That is in Use

In Workflow Manager 2020, a new section has been added to the user documentation that explains in more detail which fields of an in-use template are editable.

The following sections explain which fields on the **Template Details** page are editable for in-use templates:

- [Template Tab on the Template Details Page](#)
- [Data Groups Tab on the Template Details Page](#)
- [Data Element Details](#)

Template Tab on the Template Details Page

On the **Template** tab of the **Template Details** page, you are permitted to change/edit the **Name**, **Folder**, **Status**, and **Global template** properties for templates that are in-use.

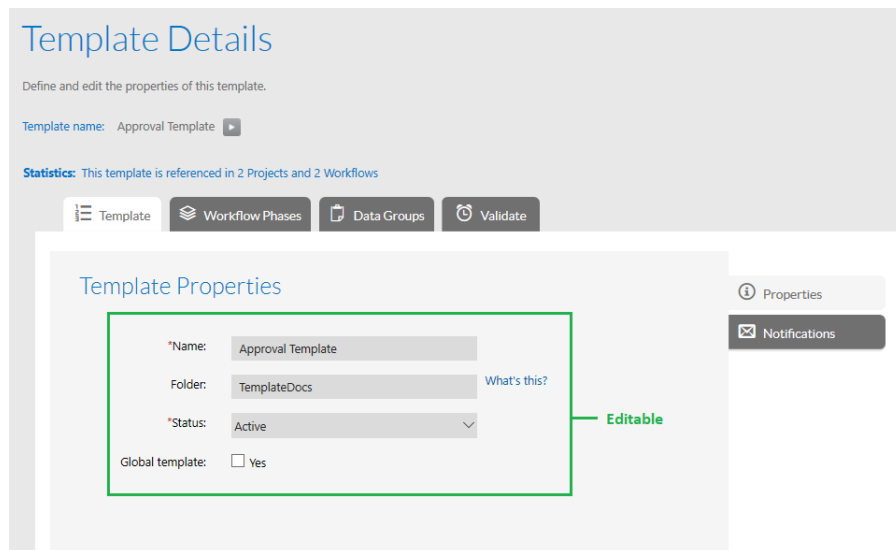


Figure 1: Editable Fields on Template Tab of In-Use Template

Data Groups Tab on the Template Details Page

On the Data Group Details tab of the Template Details page, you are permitted to add a new Data Element to the existing Data Group. You are also permitted to edit the existing Data Element properties such as **Name**, **Data type**, and **Sort order**. You are not permitted to change the **When collected?** property only when your creating first Data Group.

The screenshot displays the 'Data Group Details' tab in the Workflow Manager interface. The sidebar on the left shows a tree view with the following items: 'Approval Data group', 'Approval Tracker - Approval step 2.1', and 'Purchase'. The main content area is titled 'Data Group Details' and contains a form for editing the 'Approval Data group'. The form includes the following fields and sections:

- Name:** Approval Data group
- Data type:** WorkflowManager Data Type
- Sort order:** 10
- When collected?:** ☒ At initial submission, ☐ Later in the workflow
- Data items:** 1
- Data group condition:** Define Condition

Annotations on the image indicate that the Name, Data type, and Sort order fields are 'Editable', while the When collected? section is 'Not Editable when creating first Data Group'.

Figure 2: Editable Fields on Data Groups Tab of In-Use Template

Data Element Details

You are not permitted to change or edit a data element's data type if the following two conditions are true:

- Data type is **Single Selection** or **Radio Button** and **Use to define conditions/branching** is set to **Yes**.

AND

- The template (which has such data type as explained in above point) has an active workflow request submitted.

You are permitted to edit the rest of the properties of a data element for an in-use template.

Figure 3: Editable Properties on Data Element Details View

New Reset Days In Phase on Rollback Option

In Workflow Manager 2020, a new property named **Reset Days In Phase on Rollback Option** has been added.

The **Days in Phase** column on the **All Workflow Requests** page lists the number of days worked on each workflow phase.

All Workflow Requests

Use column filters to search for a specific workflow request.

6 results returned 20 rows per page

Add

Enter search text

Name	Number	Project	Company	Status	Status notes	Current phase	Assigned	Create date	Days in Phase	Assignee	Submitter
Adobe Photoshop CC	WF 21	Project Starting 4/14/2020	Workflow Consumer	Active	Data Entry Phase	Starting Form	No	4/14/2020 12:21:20 AM	14		admin@servicor.com
Estimation request	WF 58	Estimation Data	Workflow Consumer	Active	Workflow Complete	Phase 3	No	4/21/2020 2:36:35 PM	6		admin@servicor.com
Workflow Permission	WF 40	Project Permission	Workflow Consumer	Active	Data Entry Phase	Template Phase 2	No	4/15/2020 3:05:34 PM	12		admin@servicor.com
WFM 12	WF 57	Purchase	Workflow Consumer	Active	Data Entry Phase	Approval 2	No	4/21/2020 1:46:09 PM	6		admin@servicor.com
Sample test	WF 53	Project Starting 4/20/2020	Workflow Consumer	Active	Data Entry Phase	sample4	No	4/20/2020 5:53:44 PM	7		admin@servicor.com
Test	WF 5	WFM_test1	Workflow Consumer	Active	Data Entry Phase	as	No	4/7/2020 5:07:10 PM	12		admin@servicor.com

Create Filter

Figure 4: Days In Phase Column on the All Workflow Requests Page

If you want to reset the **Days in Phase** value to 0 when you roll back to any phase/step during the workflow process, you can now select the new **Reset Days in phase on Rollback** option on the **Company Preferences** page.

Company Preferences

Edit Company Preference settings and click Save.

Company Name for Emails : Workflow Administrator

Email Address : noreply@MyCompany.com

Send Email To Auto Imported Users : ☐

Send Email To Requester : ☐

Include User Name In Email Subject : ☐

Product Name : Workflow Manager

Send Email As BCC : ☐

Send One Email To All Users : ☒

Send Email To Users With Edit Privileges : ☐

AdminStudio Url : http://localhost:8086/

AdminStudio Import Base Directory : C:\AdminStudioWebComponents_2016\SHAF

AdminStudio Import Formats : msi, exe, ipa, apk, appx, xpf, sft, appv, profile

Release AdminStudio Receipt : ☒

Sync Folder structure as per Workflow Manager : ☐

Role That will be shown in Workflow Lists : Project Manager

Custom table pattern to search : AMS_

Specify Workflow Folder Name : ☐

Reset Days in phase on Rollback : ☒

Save Cancel

Figure 5: New Reset Days in Phase on Rollback Option

Data Groups Can Be Collected in Work Assignment and Approval Task Step Types

In Workflow Manager 2020, data groups can now be collected in **Work Assignment** and **Approval Task** workflow step types.

- [Collecting Data Group for Work Assignment in a Workflow Step](#)
- [Collecting Data Group for Approval Task in a Workflow Step](#)

Collecting Data Group for Work Assignment in a Workflow Step

When you create a workflow step with a step type of **Work Assignment**, you can select the data group that you want to display for the workflow step.

During the workflow step, set **Collect a data group in this workflow step?** option to **Yes**, and then choose a data group from the **Select the data group** list.

Workflow Step Details

*Description: Step 2

*Step type: Work Assignment

*Track for workflow SLA: ☐ Yes ☒ No

*Track for workflow step SLA: ☐ Yes ☒ No

Limit To Assigned Users: ☐

Due period (days): 0

Risk period (days): 0

*Sort order: 10

Please Select a Role:

Select Role	Role Name
<input type="checkbox"/>	Application User
<input type="checkbox"/>	Configuration Manager
<input type="checkbox"/>	License Manager
<input type="checkbox"/>	Project Manager
<input type="checkbox"/>	Project Manager
<input type="checkbox"/>	Repackager
<input type="checkbox"/>	SCAdmin
<input type="checkbox"/>	System Administrator
<input type="checkbox"/>	Tech Lead
<input type="checkbox"/>	UA Tester
<input type="checkbox"/>	User

*Collect a data group in this workflow step?: ☒ Yes ☐ No

Select the data group: Approval Tracker - Step 4 Estimation 2

Figure 6: Selecting a Data Group on a Work Assignment Workflow Step

When a work assignment workflow step is displayed in a workflow request, you will see the data information field. This data field populates with respect to the selection of the data group in the workflow step.

1. Phase 1

Step 1
Updated on 4/21/2020 11:59:22 AM
(9,400,000,000)

Step 2

Assign Work

After assigning work please click "OK" to go to next step

Estimation 2

Mouse: Logitech
Price: \$50

Role Name	Assigned To	Next Time Off	Actions
Application User	Not Assigned		Assign Clear assignment
Configuration Manager	Not Assigned		Assign Clear assignment
License Manager	Not Assigned		Assign Clear assignment
Project Manager	Not Assigned		Assign Clear assignment
UX Tester	Not Assigned		Assign Clear assignment
User	Not Assigned		Assign Clear assignment
Project Manager	Not Assigned		Assign Clear assignment
Researcher	Not Assigned		Assign Clear assignment
SCAdmin	Not Assigned		Assign Clear assignment
System Administrator	Not Assigned		Assign Clear assignment
Tech Lead	Not Assigned		Assign Clear assignment

Time Off Window: 3 Months

Role: Application User

Name or Username: user@requestor.com

Account Name	Full Name	Next Time Off	Account Type	Workflows
user@requestor.com	user@requestor.com		Database	0

Assign Cancel

OK

Figure 7: Data Information Field on Work Assignment Workflow Step

Collecting Data Group for Approval Task in a Workflow Step

During the workflow step, set the **Collect a data group in this workflow step?** option to **Yes**, and then choose a data group from the **Select the data group** list.

Add

Testing 1
flow 1
flow 2
Testing 2
flow 3
Testing 3
flow 4

Workflow Step Details

*Description: flow 5

*Step type: Approval Task

*Track for workflow SLA: ☐ Yes ☒ No

*Track for workflow step SLA: ☐ Yes ☒ No

Limit To Assigned Users: ☐

Due period (days): 5

Risk period (days): 2

*Sort order: 20

Custom site URL: http://localhost:81/customworkflow/approva

Approval Template: Template permission

*Collect a data group in this workflow step?: ☒ Yes ☐ No

Select the data group: Approval Tracker - flow 3

Select Data Group in Workflow Step

Figure 8: Collecting a Data Group in an Approval Task Workflow Step

In the workflow request, the approval dialog box opens, prompting the requester to approve this workflow step. The approver will approve or reject the workflow step with respect to the data that is displayed.

The screenshot shows a workflow interface with three phases. Phase 2 is active, and Step 4 is the current step. The step is titled 'Estimation 2' and contains two input fields: 'Mouse' with the value 'Logitech' and 'Price' with the value '\$50'. Below these fields, there is a 'Pending' status indicator and an 'Approval Type: Linear' label. A table shows the approval history with one entry: 'admin@servicer.com' pending since 4/21/2020 5:34:00 PM. At the bottom of the table are 'Approve' and 'Reject' buttons.

Figure 9: Data Displayed on an Approval Task Workflow Step

Introducing New Data Elements

In Workflow Manager 2020, the below Data Elements are introduced:

- [Upload Folder Content](#)
- [AdminStudio Package Content Upload](#)

Upload Folder Content

You can now add a data element with a data type of **Upload Folder Content** to a workflow template, which gives requesters the ability to upload the entire contents of a selected folder and all of its subfolders to a workflow request. After the folder content is uploaded, you can upload additional files (if required).

When the requester clicks the **Upload Folder content** button, the Upload dialog box opens.

The screenshot shows a 'Step 1' data entry form titled 'Data Entry'. It prompts the user to 'Enter or review the data that is submitted as part of this workflow step.' The current page is 'Estimation'. The form contains three data elements: 'Computer' with a dropdown menu showing 'Dell', 'Price' with a text input field showing '\$1000', and 'Software' with a dropdown menu showing 'Upload Folder content'. Below the 'Software' dropdown, there are two input fields: 'Package File' and 'Transform file', both with file selection icons. At the bottom left is a 'Submit' button. A red box highlights the 'Package' dropdown menu, which also shows 'Upload Folder content' as an option.

Figure 10: Prompt to Upload Folder Content

The requester would then click **Browse**, select the specific folder from the preferred location, and then click **Upload**.

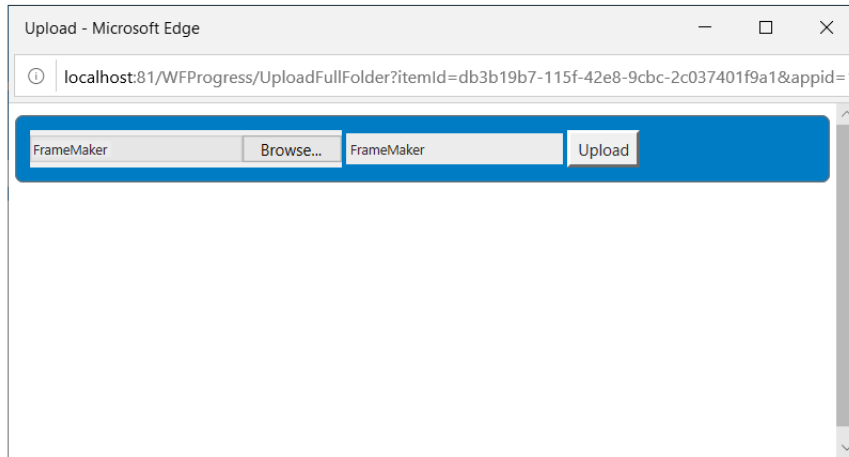


Figure 11: Upload Dialog box

Once the folder is uploaded, the sub-folders will be listed in a tree.

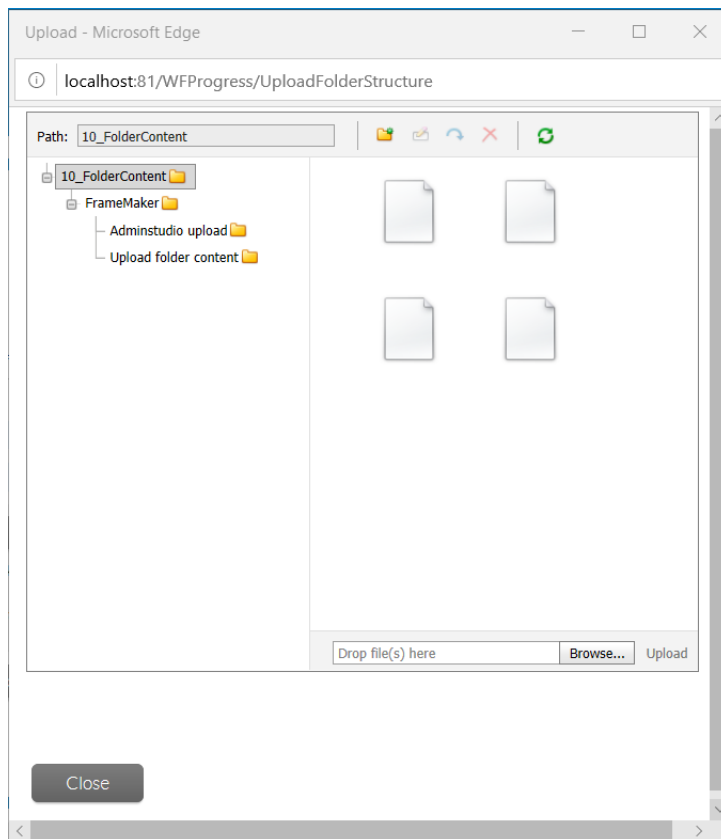


Figure 12: Upload Dialog Box with Folders Listed

The requester would click **Browse** at the bottom and upload the additional files (if required), and then click **Upload**. The requester would then click **Close** to return to the workflow step.

AdminStudio Package Content Upload

You can now add a data element with a data type of **AdminStudio Package Content Upload** to a workflow template, which gives requester the ability to upload the entire contents of a selected folder and all of its subfolders to a workflow request. After the folder content is uploaded, you can upload additional files (if required).

When the requester clicks the **Upload Folder content** button, the Upload dialog box opens.

Data Entry

Enter or review the data that is submitted as part of this workflow step.

Current Page: Estimation

Computer • : Dell

Price • : \$1000

Software • : Upload Folder content

Package File: [input field] X

Transform file: [input field] X

Submit

Figure 13: Prompt to Upload Folder Content

The requester would then click **Browse**, select the specific package folder from the preferred location, and then click **Upload**.

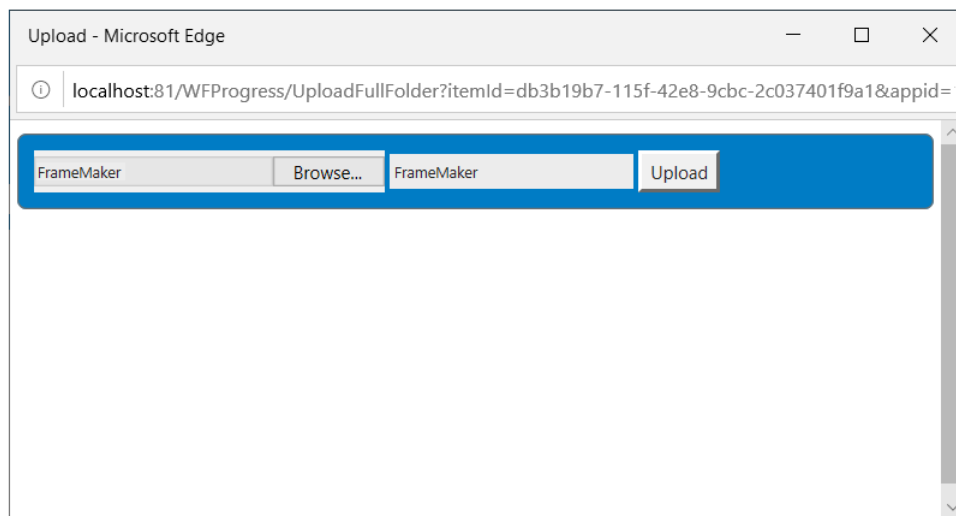


Figure 14: Upload Dialog box

Once Uploaded, All uploaded files will be moved to the selected folder structure. Select the **Package File** radio button, and select an application file which you want to import into the AdminStudio catalog.

Select the **Transform File** radio button, and select the relevant supporting file which has to be imported along with a selected application file into the AdminStudio catalog.

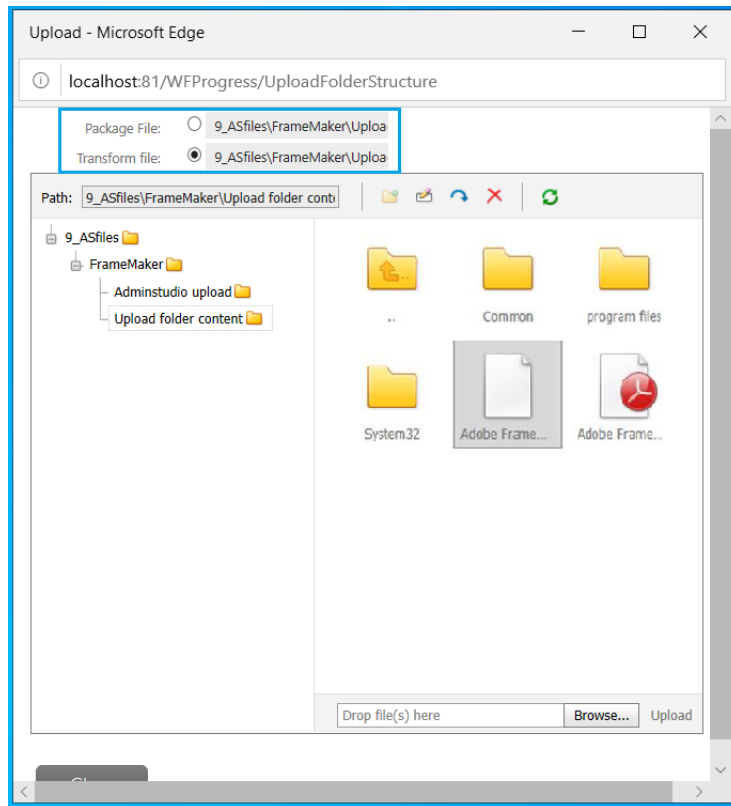


Figure 15: Dialog Box with Package List

The requester would click **Browse** at the bottom and upload the additional files (if required), and then click **Upload**. The requester would then click **Close** to return to the workflow step.

Upgrading Workflow Manager Older Version to Workflow Manager 2020

To upgrade an installation of Workflow Manager 2019 Update 2 or older to Workflow Manager 2020, you must first uninstall the older version of Workflow Manager.

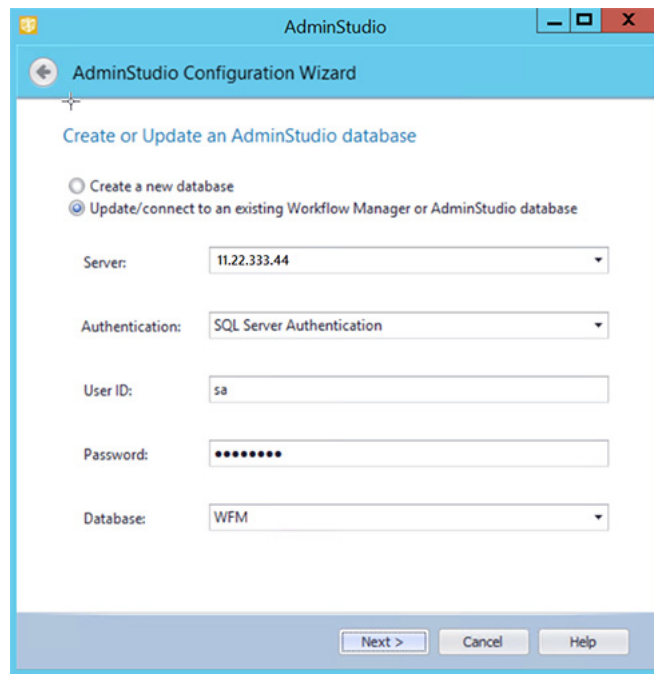
To upgrade an older version of Workflow Manager to Workflow Manager 2020, perform the following steps.



Task

To upgrade an older version of Workflow Manager to Workflow Manager 2020:

1. Download the installer for Workflow Manager 2020 from the Flexera Product and License Center:
<https://flexerasoftware.flexnetoperations.com>
2. If you Workflow Manager 2019 Update 2 or older is 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 Workflow Manager 2020.

Issue	Description
IOJ-1818172	Config.exe should perform an iisreset when using only the Activate AdminStudio License option.
IOJ-1860932	Workflow Manager Installation Guide clarification when installing on a server with a previous version of Workflow Manager installed.
IOJ-1877338	Enhance documentation on Workflow Manager permissions.
IOJ-1885357	Link is missing in the Workflow Manager 2017 User Guide.
IOJ-1885365	Add more examples for gathering data from a web service.
IOJ-1897374	Automatic rollback does not roll back correctly.
IOJ-1897489	Request for an option to prevent folder structure from being created when viewing the Properties tab.
IOJ-1898851	Search on work assignment step does not work when previewing template.
IOJ-1899287	Issue importing a template with an Approval Task workflow step.
IOJ-1900052	Cannot set copied role to notifications in an existing template.
IOJ-2068972	Workflow step details should be displayed in the Workflow Phase SLA report.
IOJ-2069406	In the Workflow Phase SLA Report, the start time, due date and risk date are same for phases even though the due period and risk period are non-zero.
IOJ-2072214	What would cause a Failed to Register Workflow Manager error?
IOJ-2076105	Customizing the Shared Folder Path to Store Uploaded Files returns unknown when configured in web.config.
IOJ-2085105	Request for new data element to upload folder structure.
IOJ-2086440	When a workflow is rolled back to an active step, the days in phase should be reset (to zero days in that particular phase or start fresh).
IOJ-2086681	Request the ability to collect a data group for Work Assignment and Approval Task step types.
IOJ-2087299	The documentation for Editing a Template That is in Use should be more readable and descriptive.

Issue	Description
IOJ-2100442	Request the ability to choose whether to reset Days in phase to zero or not after the workflow is rolled back.


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 • 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 4.6.1 or later
ASP.NET	ASP.NET 4.0.30319 or later

Item	Description
MSXML	MSXML 6.0
	
Note • MSXML is installed by the Workflow Manager installer.	


Workflow Manager / AdminStudio Database Server

This 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 Edge• Microsoft Internet Explorer 9.0 or later• Chrome for Windows 33.0 or later• Firefox for Windows 25.0 or later• Safari for macOS 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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