

Workflow Manager 1.0 CU 2 Installation guide for SharePoint 2016.

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Introduction

As we all know, with the release of SharePoint 2013 Microsoft introduced the workflow manager for it. With the help of workflow Manager, we will get two workflow platform SharePoint 2010 Workflow and SharePoint 2013 workflow. When we install the SharePoint, 2010 platform installed with it but for 2013 platform we have to perform extra steps, which involve from Installation to configuration of Workflow Manager 1.0.

Same thing applies to SharePoint 2016, no change in term of workflow platform title (in SharePoint 2016, it is still called SharePoint 2013 workflow).

In this chapter, we will walk through all the steps involved in a successfully installation and configuration of Workflow Manager 1.0 for SharePoint 2016.

Let us explain little bit about the core definition of the component involve in this configuration.

Workflow Manager 1.0

Workflow manager is not new for SharePoint, it 1st introduced with SharePoint 2013. Workflow Manger 1.0 is host and process all the workflows which are based on 2013 Workflow Platform.

Workflow Manager 1.0 provides the capability to host workflows in a high scale, high density, and multi-tenant environment. Workflows are authored using a fully declarative model, using Microsoft .NET Framework 4.5 and Windows Workflow Foundation (WF45). (Ref: [MSDN](#))

Workflow Manager brings a lot of advantaged to SharePoint Server. It's take off the workflow processing load from SharePoint and process it on Workflow Manager server. User will get fast response on the workflow, as we have dedicated resource for processing. SharePoint overall performance improved due to offloading the workflow processing to workflow manager server. Workflow Manager use the Service bus (messaging platform) as a core state management and messaging layer. Workflow Manager and SharePoint communication based on the message.

Workflows built by using Workflow Manager can take advantage of several new capabilities. These include enterprise features such as:

- High Density and Multi-Tenancy
- Elastic Scale
- Activity / Workflow Artifact Management
- Tracking and Monitoring
- Instance Management
- Fully Declarative Authoring
- REST and Service Bus Messaging

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- Managed Service Reliability

Workflow Manager Client

Workflow Manager Client allow the communication between SharePoint Server and Workflow Manager. Workflow Manager Client 1.0 contains the core assemblies and client API for Workflow Manager 1.0.

Workflow Tools

Tools which will be used to develop the workflow.

- SharePoint Designer 2013(Microsoft is not releasing new version of SharePoint designer for the 2016 but SPD 2013 still supported with SharePoint 2016.)
- Visual Studio

Workflow Manager Requirement

Before start, we will take a look what are the software requirement for Workflow Manager 1.0 CU2. Here are the minimum requirements for each server in the Workflow manager 1.0 farm.

Operating System:

- Windows Server 2008 R2 SP1, Windows Server 2012, Windows Server 2012 R2

Database Server

- SQL Server 2008 R2 SP1, SQL Server 2012 R2, SQL Server 2014 SP1
- TCP/IP connections or named pipes must be configured in SQL Server.
- Default Collation
- SP Collation
- Binary Collation
- Clustering
- Mirroring
- Windows authentication
- SQL Server Authentication

Prerequisites

1. NET Framework 4 Platform Update 3 or .NET Framework 4.5
 2. Service Bus 1.0
 3. Workflow Client 1.0
- PowerShell 3.0

Firewall

If firewall enabled on the server then make sure the following Ports are not blocked.

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- For WfManager: Ports 12290 and 12291 must be available.
- For Service Bus:

Service Account.

- Run As account for Workflow Manager Farm, it can be domain account or local account. But should have access to the SQL server instance.
- Run As account for Service Bus Farm, a domain account and should have access to the SQL server instance.
- Install Account, Account under which Workflow Manager setup and configuration will run. It should be local admin on WF manager server and Have DB creator and Security admin on the SQL Server.
- Admin Group, the group which will manage the Workflow Manager and Service Bus databases. All the users in this group will get the access to the all 6 databases.

Certificate:

If you using the auto generated Certificate, then it will be fine but if you using the existing certificate then make sure following things.

- The certificate must have a subject name, a subject alternative name, and both the private and public key.
- The certificate is also installed in the personal store of all computers in the farm or any computer that intends to join the farm.
- The certificate must be valid with respect to:
 - The start date.
 - The end date.
 - The trust chain.
- The certificate must have AT_KeyExchange set.
- The certificate can be used as a server certificate.
- The corresponding CRL list for the signing authority must be present.

Scenario

Krossfarm has multiple SharePoint farms (1 single server, 1 Multi Server) and now they want to configure a dedicated Workflow Manager Farm for all farm. They want to use the Custom Settings with Default Ports.

Tasks:

- Install the Microsoft Web Platform Installer 5.0
- Install Workflow Manager
- Apply Cumulative Update 3.0 for Workflow Manager 1.0
- Configure the Workflow Manager

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- Install the WorkFlow Manager Client on SharePoint Server
- Register Workflow Proxy for SharePoint Servers
- Verify the Installation.

Checklist:


Please complete this checklist.

Item	Descriptions	Values
WF manager Server Name	Name of WF server	Kf-SPw
Farm Type	Is it Dedicated WfManager Farm or Part of SharePoint Farm	Dedicated WfManager Single Server Farm.
Allow Http	Is this farm use the http for communication or Https	WfManager use the https for server communication
Install Account	Account under which you install the WF manager	krossfarm\Kfinst
WF Admin account	Account under which WF services will run, if different then Instal Account	krossfarm kfwfm
WF Configuration Type	Do you want Default Settings or Custom	Custom
DB Server Name	Name of SQL Server Name	Kf-SQL
Database Names	If Custom Settings, then you have to Name All 6 DB names(3 WF farm and 3 for Service Bus)	WfManagementDB WfInstanceManagementDB WfResourceManagementDB SbGatewayDatabase SBContainer01 SBManagementDB
Certification Key	Certification Key is kind of passphrase,	W0kfl)WM

	this required if new server joins the farm	
SSL Certs	If not using the auto generated Certificates then you need it.	Auto-Generated Certs
Firewall	Firewall Enabled or Disabled	Disabled
WF Ports	Ports for the workflow Manager, Https: 12290. Http: 12291	https: 12290 http: 12291
Service Bus Port	Ports for the Service Bus, Https 9355, TCP 9354, MB Port 9356, Internal Communication Port 9000	https:9355 TCP:9354 MB PORT:9356 Internal Com: 9000
Admin Group	User in this group will access all WF Database	Default Group(Built-in Administrator)
Internet Access to server	Make Sure Server connected to Internet	Enabled
SharePoint Server	List All Server in the SharePoint Farm	Kf-SP
SharePoint Site Collection URL	Site Collection URL which will be used for registering workflow proxy.	http://kfsp:9101/sites/workflow

Tips for Successful installation

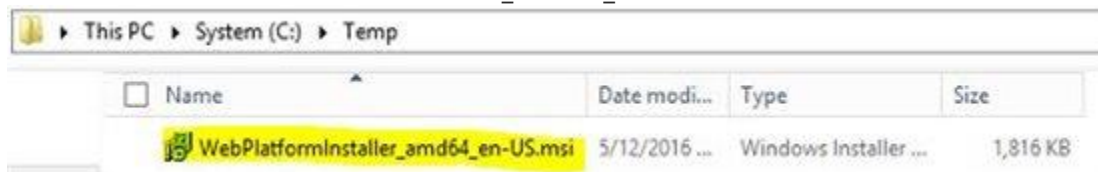
1. Make Sure the Run the Workflow Manager with a **domain account**.
2. Login with an account which has **DB creator and Security admin** on the SQL Server and **local admin** on the WFM server.
3. Run As account should be in **proper format** i.e **domain\username or username@domain.com**.
4. Account Running the **Register-SPWorkflowService** command should have access to the **WorkFlow Databases**.
5. Add the Workflow Manager **Certs** into **SharePoint Trust**.

6. Make Sure the **Workflow client install** on all server in the farm(if workflow manager not installed on them).
7. Make sure **Bypass proxy server for local addresses option is enabled.**
8. Make sure **App Management Service** and **Subscription Settings Service**, as Workflow Manager has some hidden dependencies on these services. These services required when you try to publish SharePoint 2013 Designer Workflow then this error will happen "The workflow files were saved but cannot be run".
9. Install the [Service Bus 1.1 Hotfix](#)  before register the workflow proxy. **This fix is required for .net 4.6.**
10. Make Sure Firewall is not blocking following **Ports**
 - a. WorkFlow Manager Ports **12290 & 12291**
 - b. Service Bus Ports
 - A. Https **9335**
 - B. TCP **9354**
 - C. Message Broker Port **9356**
 - D. Internal Communication Port Range **9000 - 9004**

Install the Microsoft Web Platform

In this article, I will walk through the steps to install the Web Platform Installer 5.0.

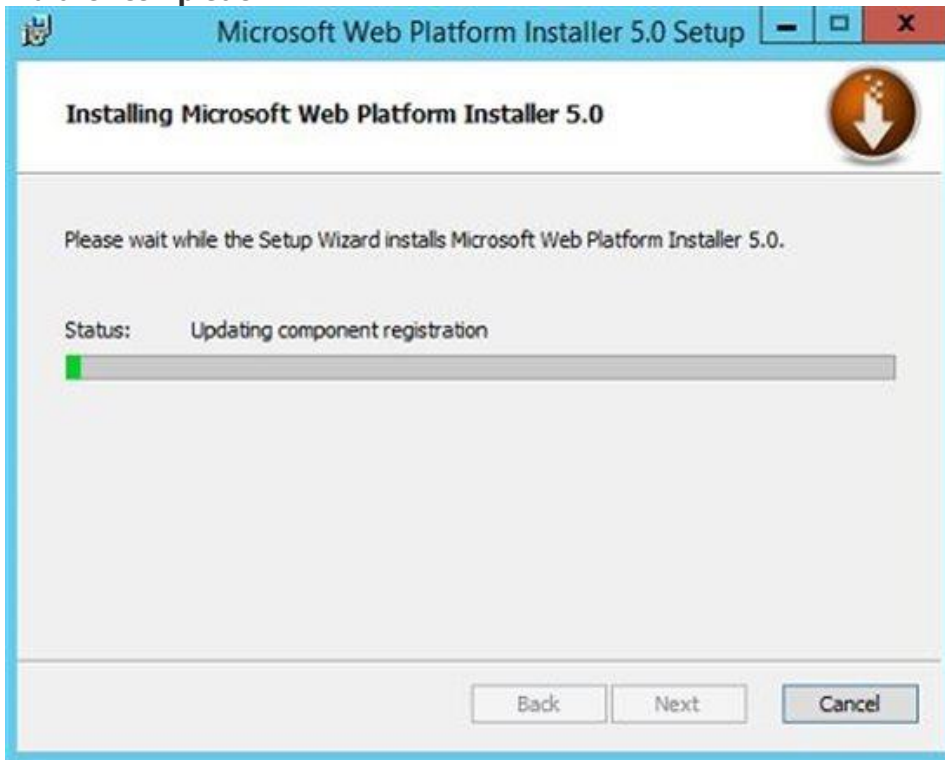
- Go the following link" <https://go.microsoft.com/?linkid=9737537>  " to download the WebPlatformInstaller
- Double click on "**WebPlatformInstaller_amd64_en-US.msi**"



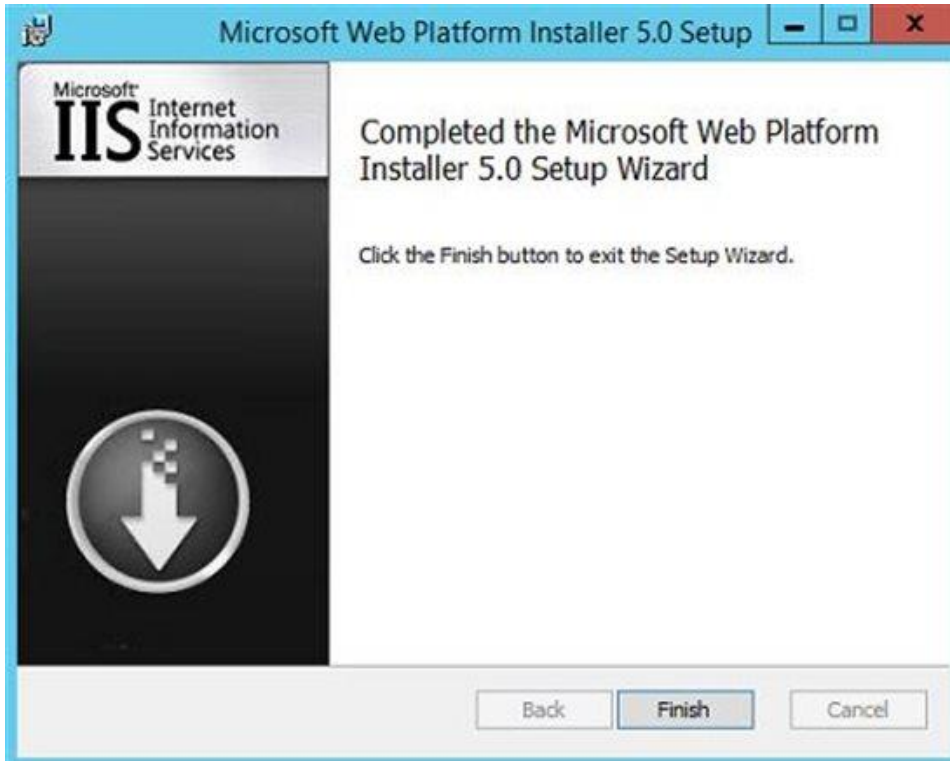
- **Accept the Agreement** and Click **Next**



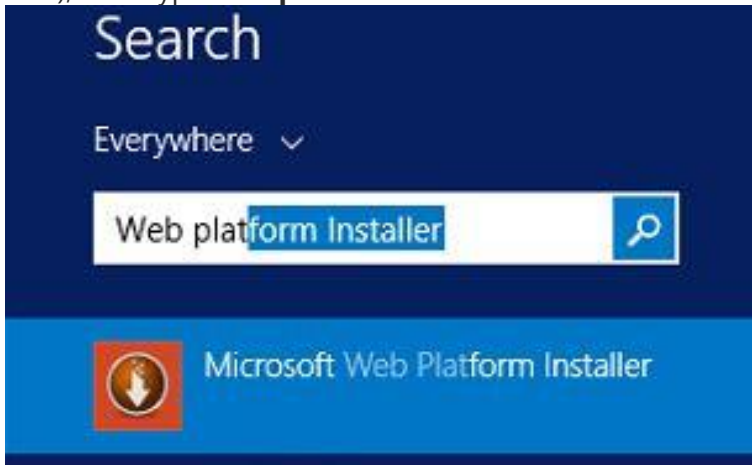
- **Wait for completion**



- Click **Finish**



- To validate successful installation, go to the Start  and click on Search(top Right Hand Side), Then type **Web platform**



This will conclude the installation of Web Platform Installer 5.0

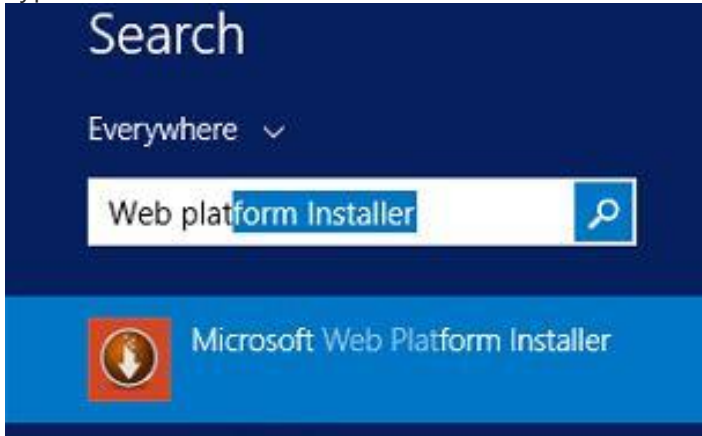
Installation of Workflow Manager 1.0

Now, we will install the Workflow Manager 1.0 using the Web platform installer 5.0.

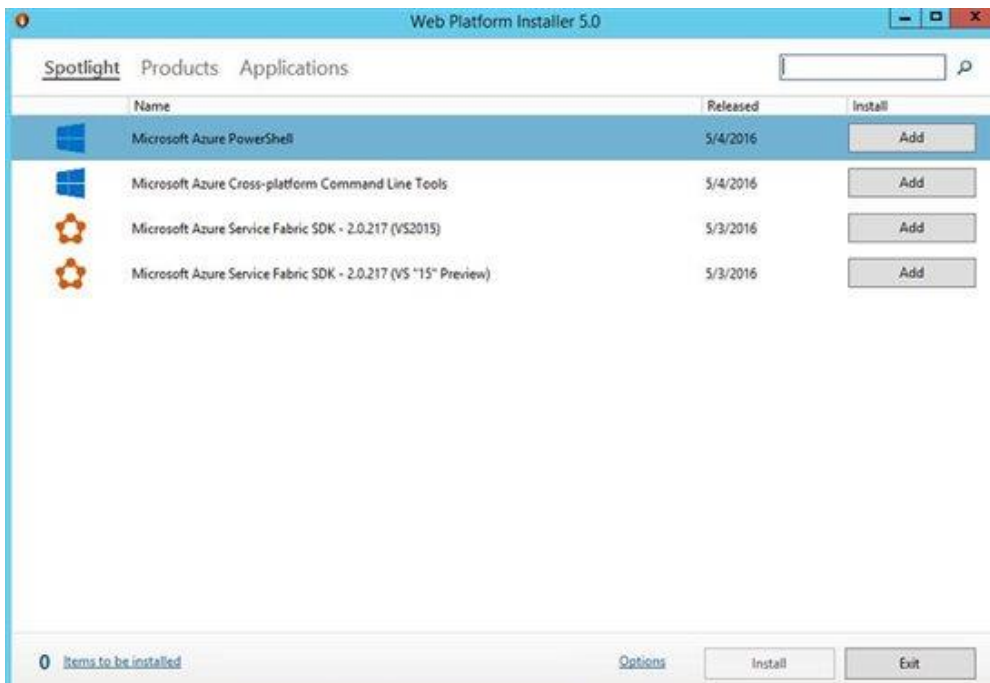
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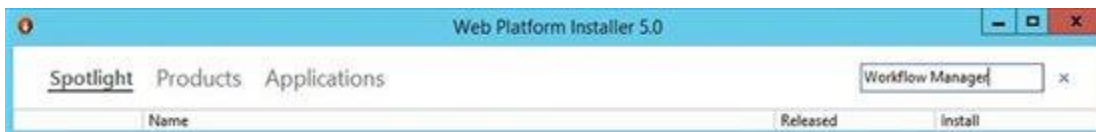
- Go to **Start** and on **top Right** click on **Search Icon**
- Type the **Web Platform Installer** in the **Search Box** and click it.



- It will load the **Web Platform Installer** like this.

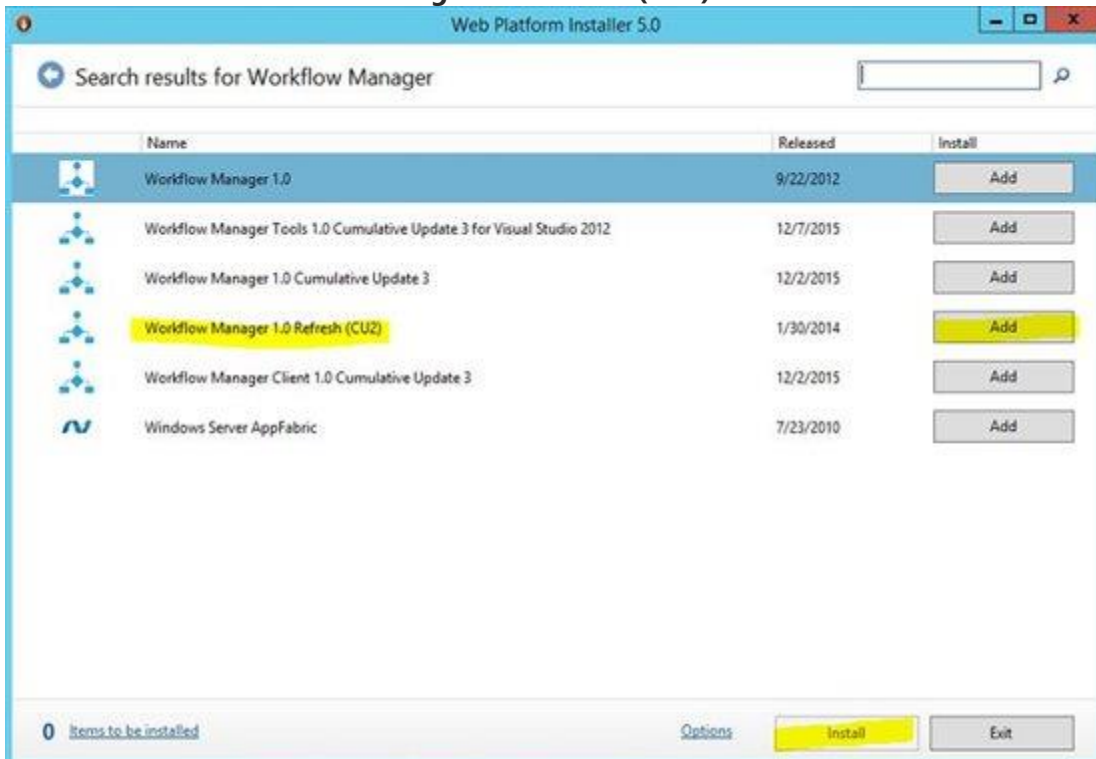


- On this page type **Workflow Manager** on top right hand.

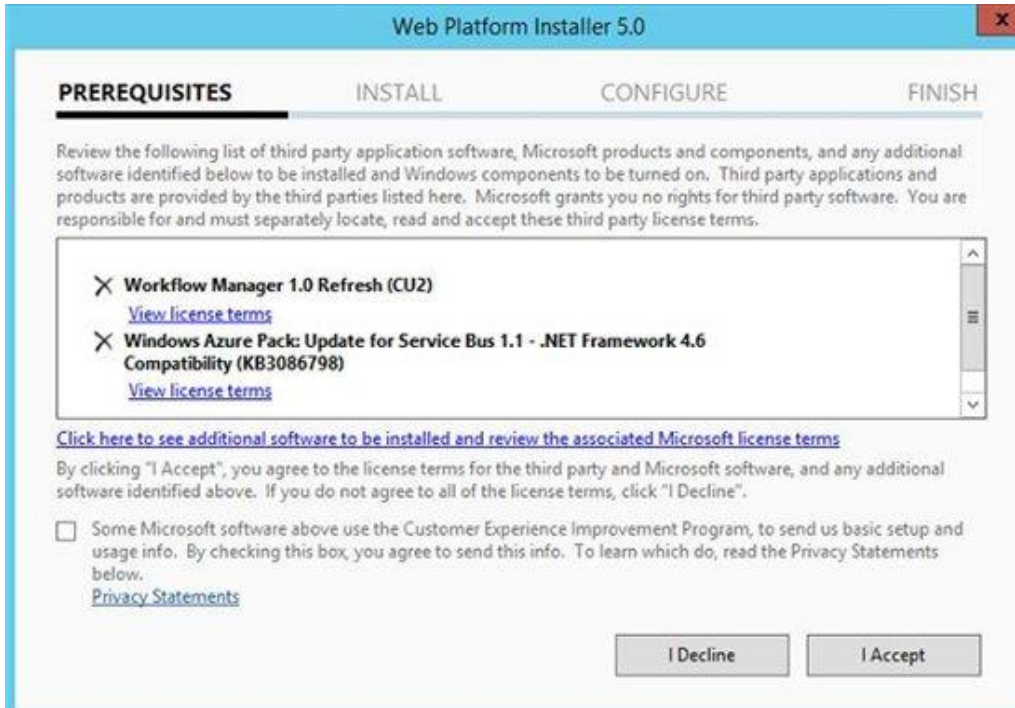


Workflow Manager Installation Guide

- Click **Add** on the **Workflow manager 1.0 Refresh (CU2)** and Click **Install**.

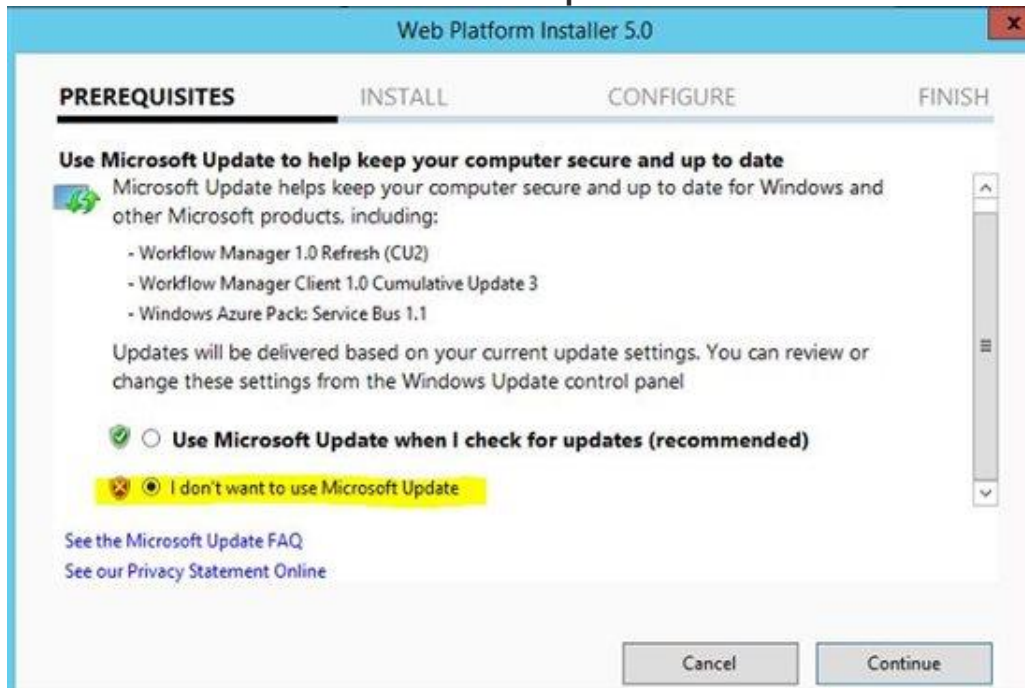


- Click **I Accept**



Workflow Manager Installation Guide

- Check the **I don't Want to user Microsoft Update** and click **Continue**.

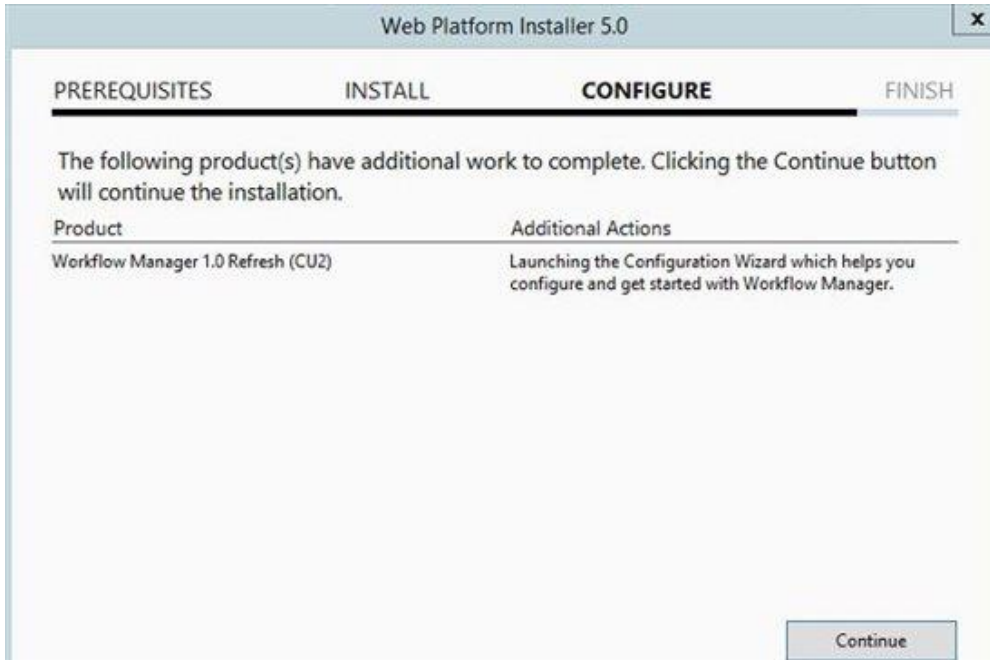


- Now sit back and relax, **wait for successful installation message**.

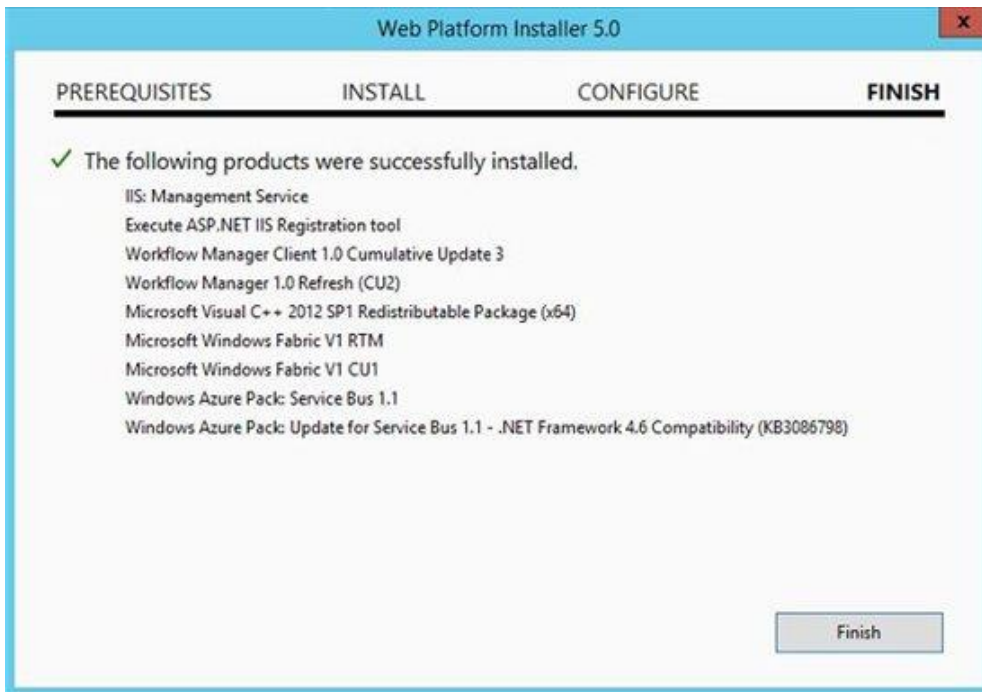


- Click **Continue**

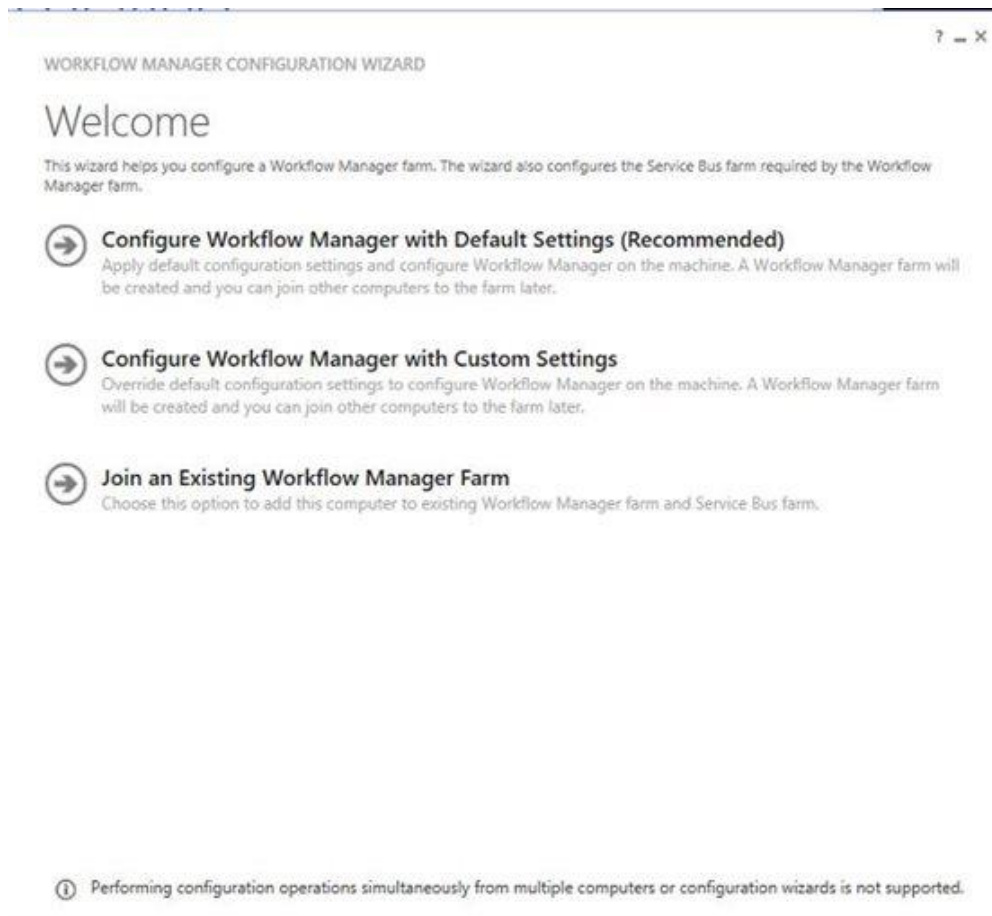
Workflow Manager Installation Guide



- Click **Finish**



- **Cancel the Wizard**



Now we have to Apply the Update to Workflow Manager 1.0.

Apply CU3 to Workflow Manager 1.0 CU2

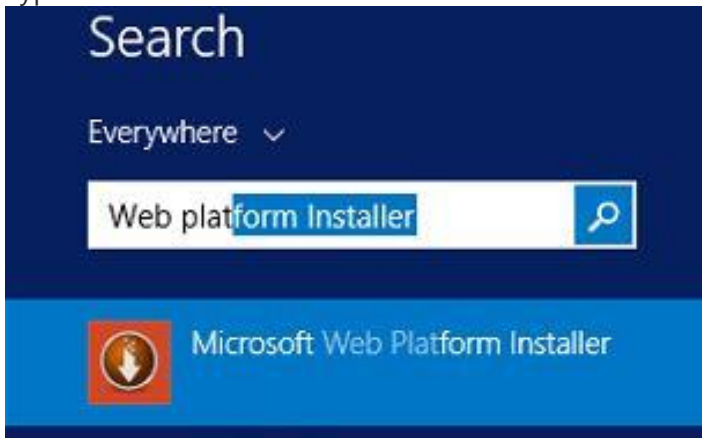
Now, we will install the **CU 3** for **Workflow Manager 1.0** using the Web platform installer 5.0.

Note: CU3 is the latest CU for the Workflow Manager 1.0, In future may be you have to apply latest CU.

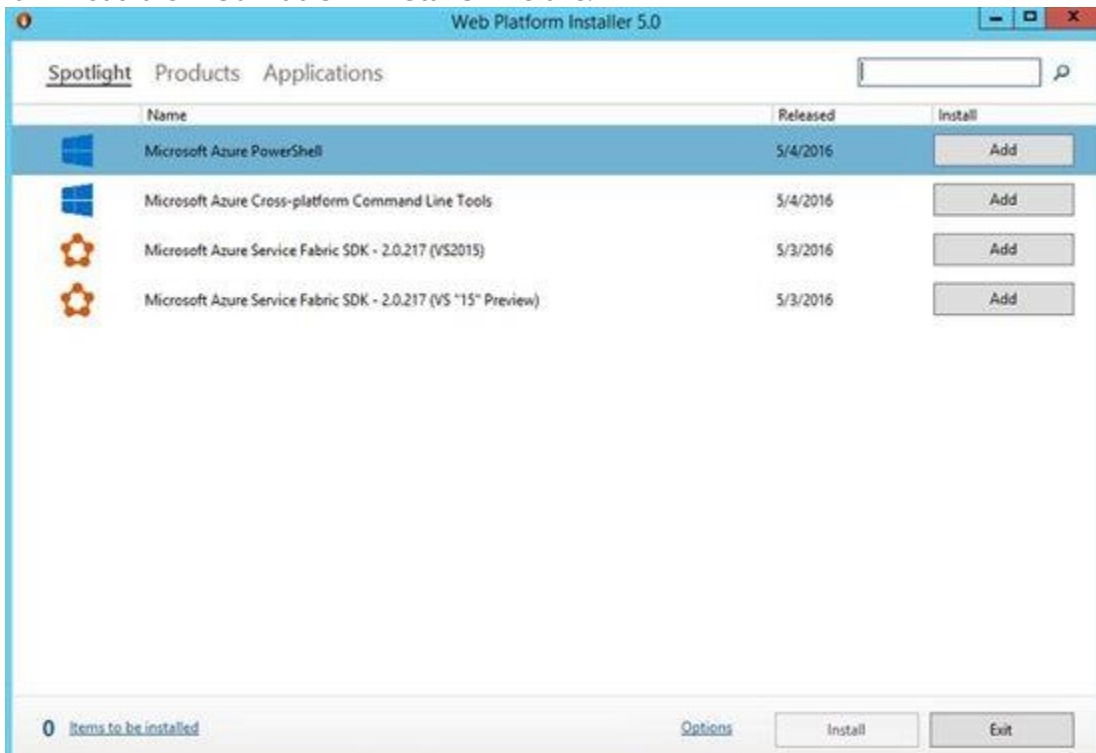
- Go to **Start** and on **top Right** click on **Search Icon**

Workflow Manager Installation Guide

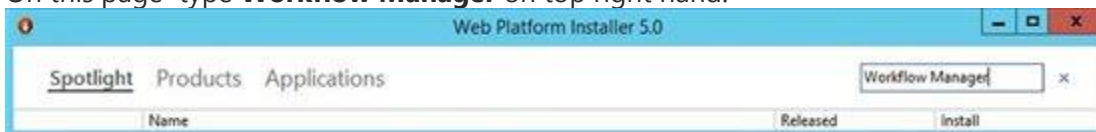
- Type the **Web Platform Installer** in the **Search Box** and click it.



- It will load the **Web Platform Installer** like this.

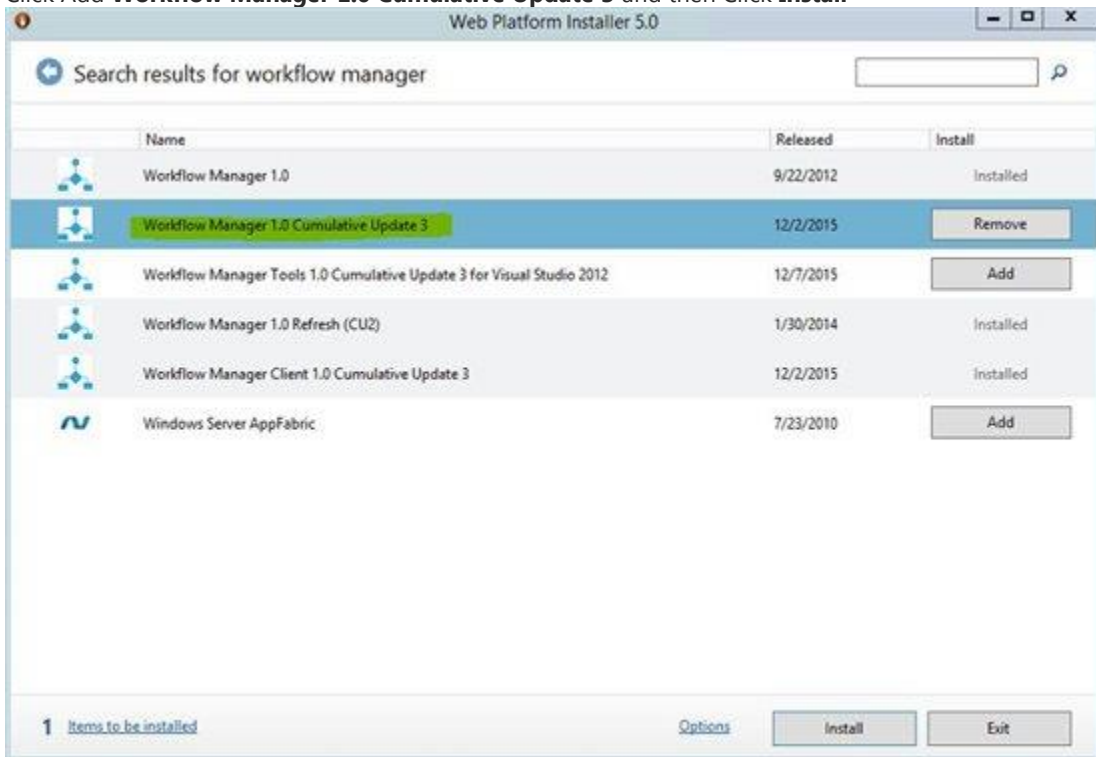


- On this page type **Workflow Manager** on top right hand.



Workflow Manager Installation Guide

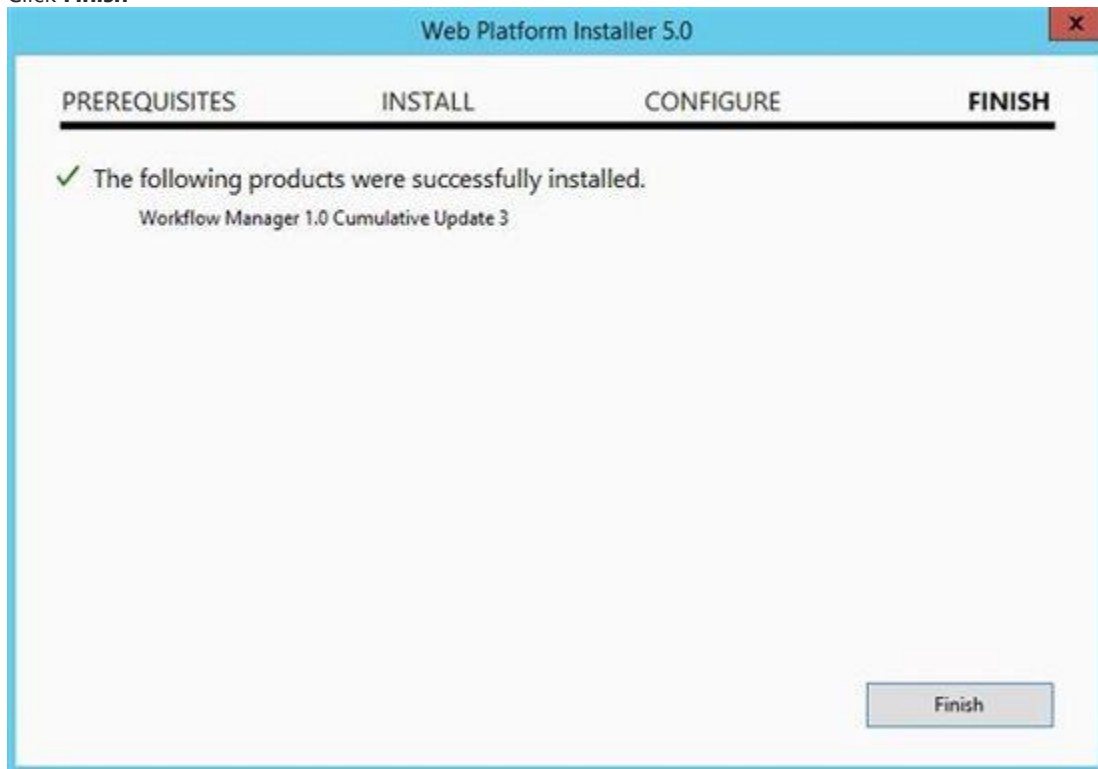
- Click Add **Workflow Manager 1.0 Cumulative Update 3** and then Click **Install**



- Wait for the Installation to be completed



- Click **Finish**

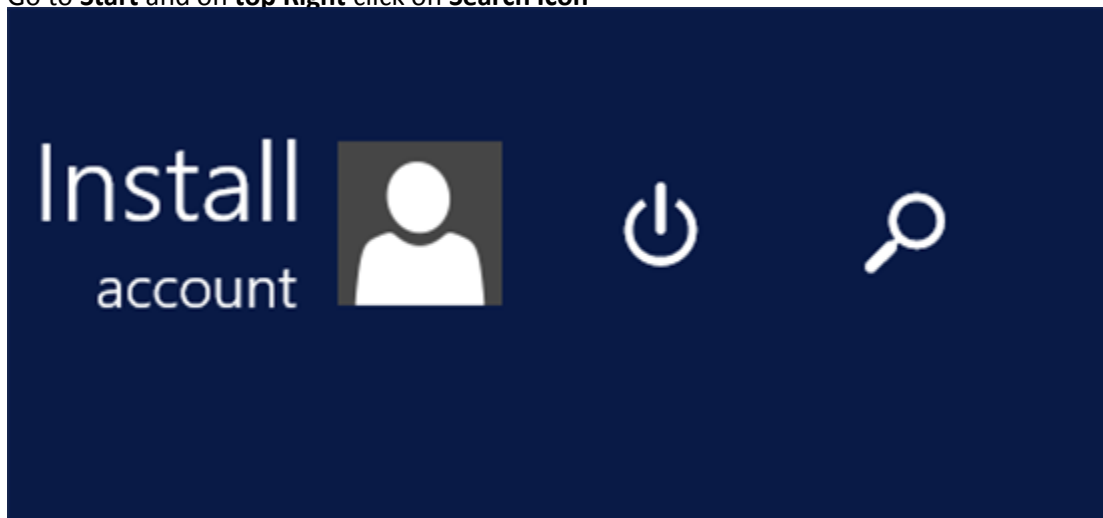


This will complete the Installation process of the Workflow manager and Updates.

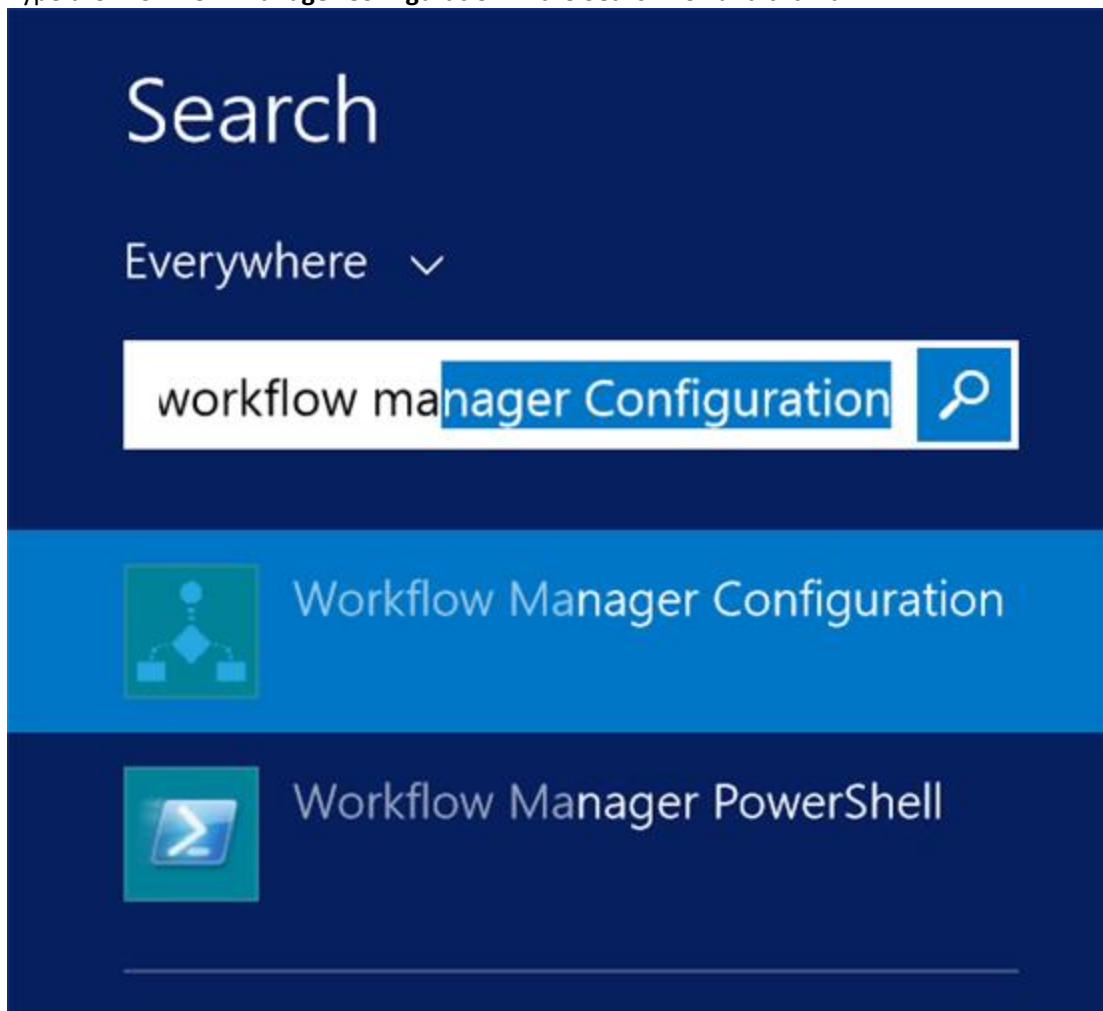
Configuration of Workflow Manager.

In this wiki, I will walk through the steps for Installation of Workflow Manager 1.0 cu2.

- Go to **Start** and on **top Right** click on **Search Icon**



- Type the **Workflow Manager Configuration** in the **Search Box** and click it.



- Open the **Workflow Manager 1.0 config wizard**, Click on Using Custom settings

Workflow Manager Installation Guide

- on Workflow Manager Configuration page, Please provide the below information
 1. In the **Configure Farm management Database** Section, Please Enter the **SQL Server Name And DB name**
 - a. Check this **"Use the Above SQL Server Instance Settings for All Database."** If you want to use same settings for all DBs. As per our settings, we are using same settings.
 2. In the **Configure Instance management Database** Section, Please Enter the **SQL Server Name And DB name**
 3. In the **Configure Resource management Database** Section, Please Enter the **SQL Server Name And DB name**
 4. In the **Configure the Service Account**, Please provide the **Service account**(Account will run the Worklfow Services) and **password**.

Configure Service Account

User account under which the services will run (RunAs Account) using the format 'domain\user' or 'user@domain'. Credentials for the same account are required every time you join a computer to the Workflow Manager farm.

USER ID

PASSWORD
 5. In the **Configure Certificate Sections**, Please provide the following information
 - a. As per our requirement,we are selecting **Auto-Generated Certificate**.If you want different then Uncheck it and provide your custom certificates.
 6. In **Certificate Generation Key Section**. Please provide the Key(which is very much important in case you want to join another server on this farm).
 7. In **Configure ports section**, please provide the **Http** and **https** Port. if you want to use the custom ports then provide here but as per our requirement, we will use default ports.
 - a. Https: 12290
 - b. HTTP: 12291
 - c. If you want communication over HTTP then Select "Allow Workflow management over HTTP on this Computer"
 - d. If you have a firewall on the server, Please Check "enable firewall rules on this computer".

Configure Ports

WORKFLOW MANAGER MANAGEMENT PORT
Port on which Workflow Manager listens for management requests.

HTTP PORT
The unsecured HTTP port on which Workflow Manager listens for management requests. Note that this feature should not be enabled in production deployments.

Allow Workflow management over HTTP on this computer

Enable firewall rules on this computer

8. In **Configure Admin Group Section** Please Provide the User Group which will manage the Workflow farm.

Configure Admin Group

This user group will be granted access to all the databases configured as part of the Workflow Manager farm. You must restart this computer if an administrators group is created as part of this configuration.



9. Click Next.
- On the Service Bus Configuration Page, Please Provide the following information.

Service Bus Configuration

Workflow Manager runs on a Service Bus deployment. Service Bus uses the following da have been provided.

1. In the **Configure Farm management Database** Section, Please Enter the **SQL Server Name** And **DB name**

Configure Farm Management Database

SQL SERVER INSTANCE

DATABASE NAME

2. In the **Configure Gateway management Database** Section, Please Enter the **SQL Server Name** And **DB name**

Configure Gateway Database

SQL SERVER INSTANCE

DATABASE NAME

3. In the **Configure Message Container Database** Section, Please Enter the **SQL Server Name** And **DB name**

Configure Message Container Database

SQL SERVER INSTANCE

DATABASE NAME

4. **In Configure Service Account Section,** Please Provide the **Service Account** Under Which Service Bus will run.

- a. **As we want to use the Same account so we Selected "Use the Same Service Account credentials as provided for Workflow Manager Configure Service Account**

User account under which the services will run (RunAs Account) using the format 'domain\user' or 'user@domain'. Credentials same account are required every time you join a computer to the Service Bus farm.

- Use the same service account credentials as provided for Workflow Manager

5. In the Configure Certificate Sections, Please provide the following information
 - a. As per our requirement, we are selecting **Auto-Generated Certificate**. If you want different then Uncheck it and provide your custom certificates.

Configure Certificate

Service Bus requires a farm certificate. To provide a custom certificate, uncheck the Auto-generate option.

- Auto-generate

6. In Certificate Generation Key Section. Please provide the Key(which is very much important in case you want to join another server on this farm).

CERTIFICATE GENERATION KEY

This key is required every time you join a computer to the Service Bus farm.

- Use the same certificate generation key as provided for Workflow Manager

7. **In the Configure Ports Section. Please provide Following information.**
 - a. HTTPS PORT: **9355**
 - b. TCP PORT : **9354**
 - c. MESSAGE BROKER PORT: **9356**
 - d. INTERNAL COMMUNICATION PORT RANGE: **9000**
 - e. IF You have firewall on the server, Please Check "**enable firewall rules on this computer**".

Configure Ports

HTTPS PORT

SSL accessible port for a Service Bus deployment

TCP PORT

Network-accessible port for a Service Bus deployment

MESSAGE BROKER PORT

This port is used for message broker port communication

INTERNAL COMMUNICATION PORT RANGE

Port range used for communication between Service Bus computers in the farm. The port configured here is the starting port for a range of 5 ports.

Enable firewall rules on this computer

f. **Please enter the group**

Configure Admin Group

This user group will be granted access to all the databases configured as part of the Service Bus farm. You must restart this computer if an administrators group is created as part of this configuration.



8. **Click Next**

- **On the Summary Page, please verify the settings before start the installation. Click ^ Configuration for Workflow Manager**

Management Database SQL Instance	Kf-SQL
Enable SSL connection with SQL Server instance Authentication	False Windows Authentication
Management Database Name	WFManagementDB
Instance Management Database SQL Instance	Kf-SQL
Enable SSL connection with SQL Server instance Authentication	False Windows Authentication
Instance Management Database Name	WFInstanceManagementDB
Resource Management Database SQL Instance	Kf-SQL
Enable SSL connection with SQL Server instance Authentication	False Windows Authentication
Resource Management Database Name	WFResourceManagementDB
RunAs Account	KROSSFARM\kfwfm
RunAs Password	*****
Certificate Generation Key	*****
Workflow Manager Outbound Signing Certificate	Auto-generated
Service SSL Certificate	Auto-generated
Encryption Certificate	Auto-generated
Workflow Manager Management Port	12290
HTTP Port	Disabled
Enable firewall rules on this computer	True
Administrators Group	BUILTIN\Administrators

Next

Workflow Manager Installation Guide

^ Configuration for Service Bus

Management Database SQL Instance	Kf-SQL
Enable SSL connection with SQL Server instance Authentication	False
Management Database Name	Windows Authentication
Gateway Database SQL Instance	SbManagementDB
Enable SSL connection with SQL Server instance Authentication	Kf-SQL
Gateway Database Name	False
Message Container SQL Instance	Windows Authentication
Enable SSL connection with SQL Server instance Authentication	SbGatewayDatabase
Message Container Database Name	Kf-SQL
RunAs Account	False
RunAs Password	Windows Authentication
Certificate Generation Key	SbMessageContainer01
Farm Certificate	KROSSFARM\kfwfm
Encryption Certificate	*****
HTTPS Port	*****
TCP Port	Auto-generated
Message Broker Port	Auto-generated
Internal Communication Port Range	9355
Enable firewall rules on this computer	9354
Administrators Group	9356
	9000 - 9004
	True
	BUILTIN\Administrators

- **Wait for several Minutes**

WORKFLOW MANAGER CONFIGURATION WIZARD

Configuration progress

Applying configuration. This may take up to 10 minutes to complete.

Create a new Service Bus farm.



Create a new Workflow Manager farm.

Add host to Service Bus farm.

Create Service Bus service namespace.

Get Service Bus client configuration.

Add host to Workflow Manager farm

Details:

[\(View Log\)](#)

Starting



- **Once it successfully installed then Click Yes.**

Now Workflow Manager 1.0 successfully configured. let's move to the next step.

Installation of Workflow Manager Client

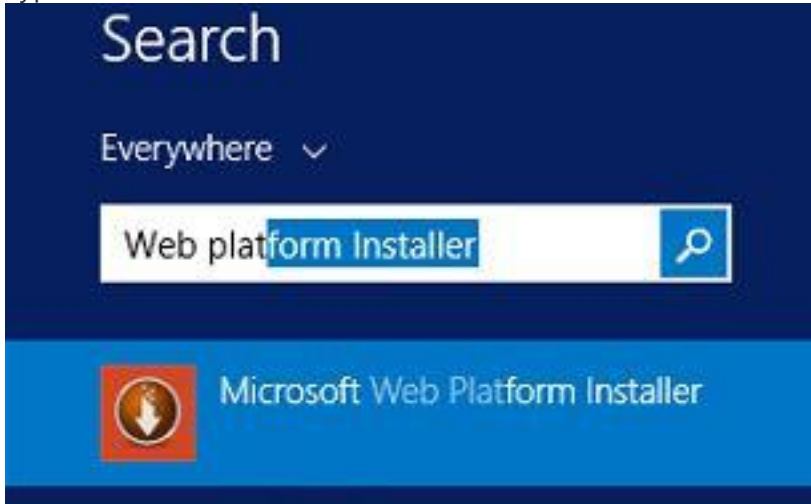
Now Install the Workflow Manager Client 1.0 CU 3 on the All SharePoint Servers.

- Login on the SharePoint Server with Install account,
- Open the Microsoft Web Platform Installer 5.0, if not installed on the server then follow this
- Now start

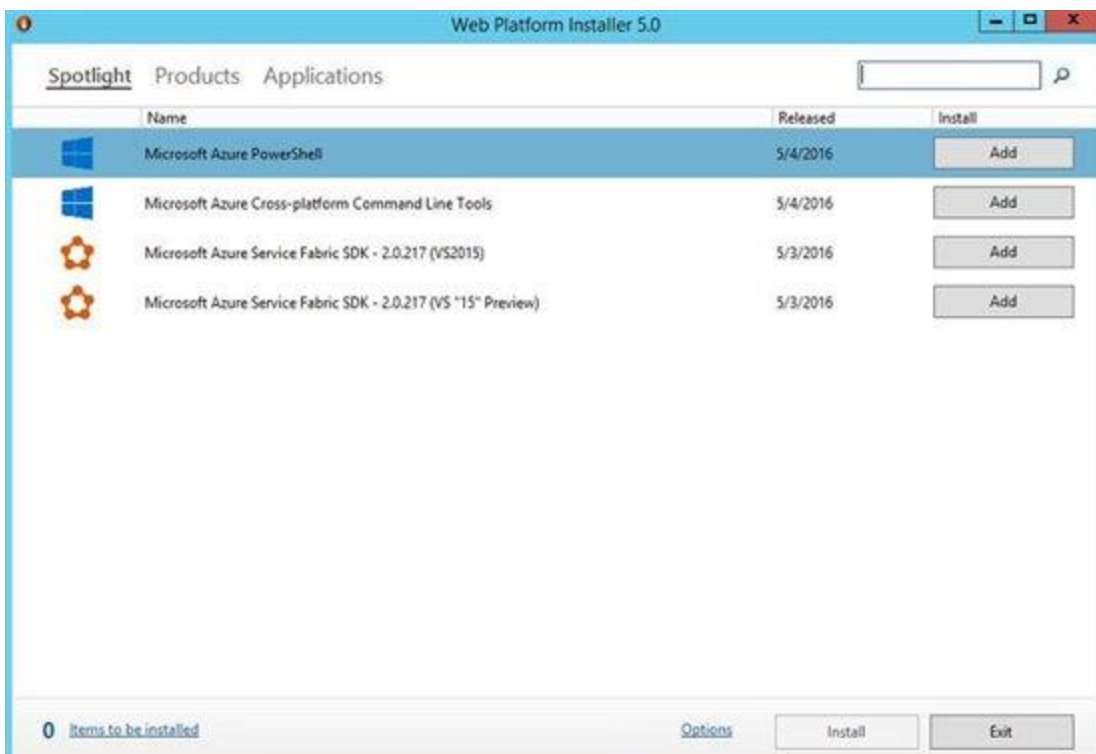
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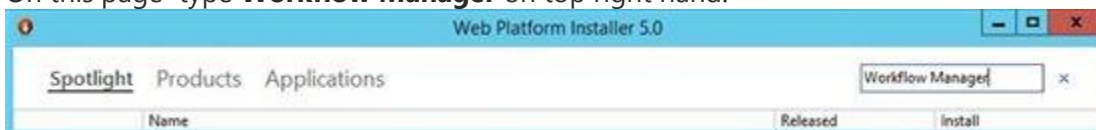
- Go to **Start** and on **top Right** click on **Search Icon**
- Type the **Web Platform Installer** in the **Search Box** and click it.



- It will load the **Web Platform Installer** like this.

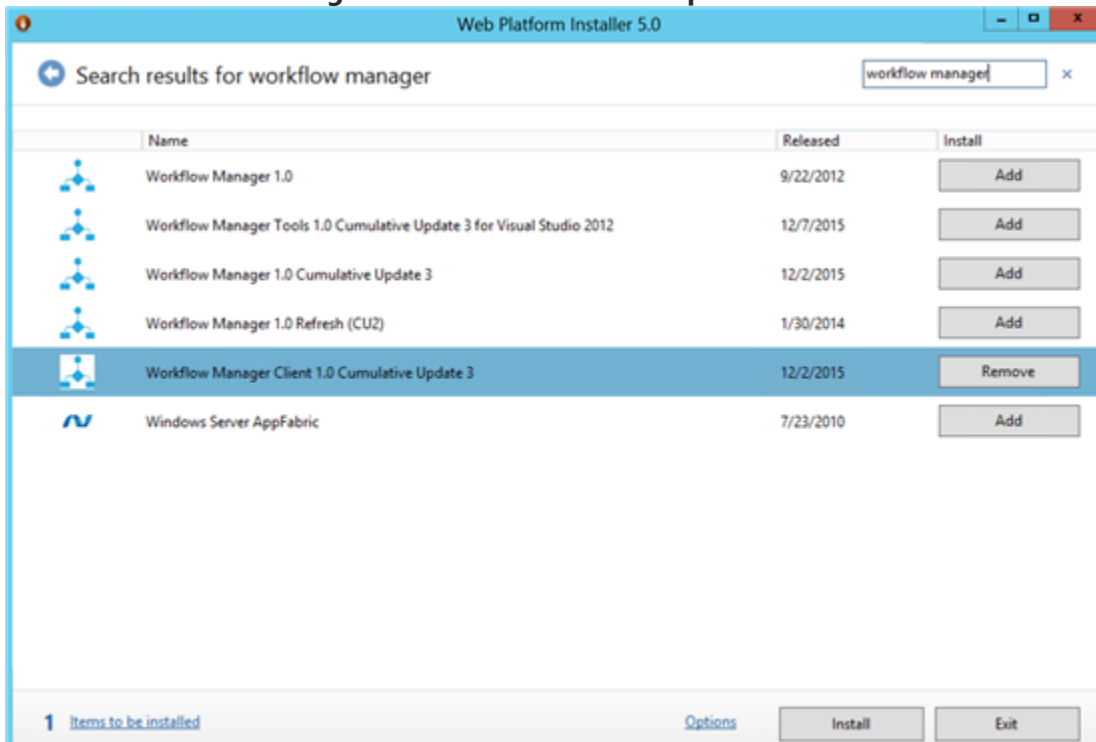


- On this page type **Workflow Manager** on top right hand.

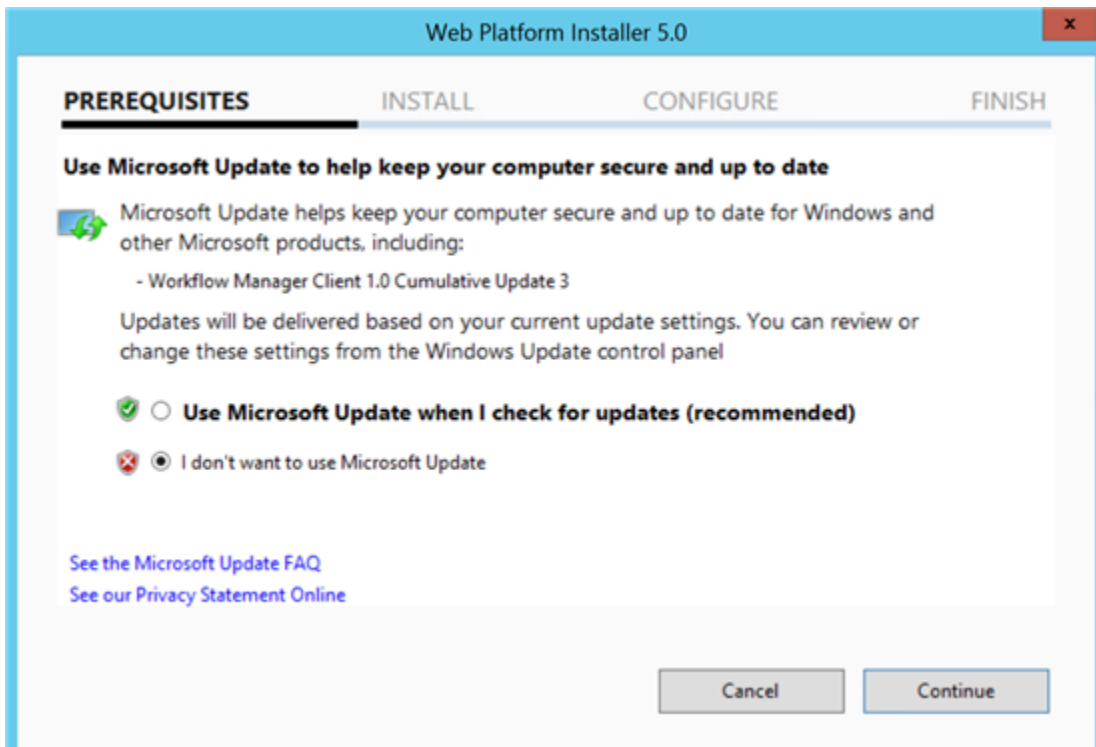


Workflow Manager Installation Guide

- Click On **Workflow Manager Client 1.0 Cumulative Update 3** and Click **Add**

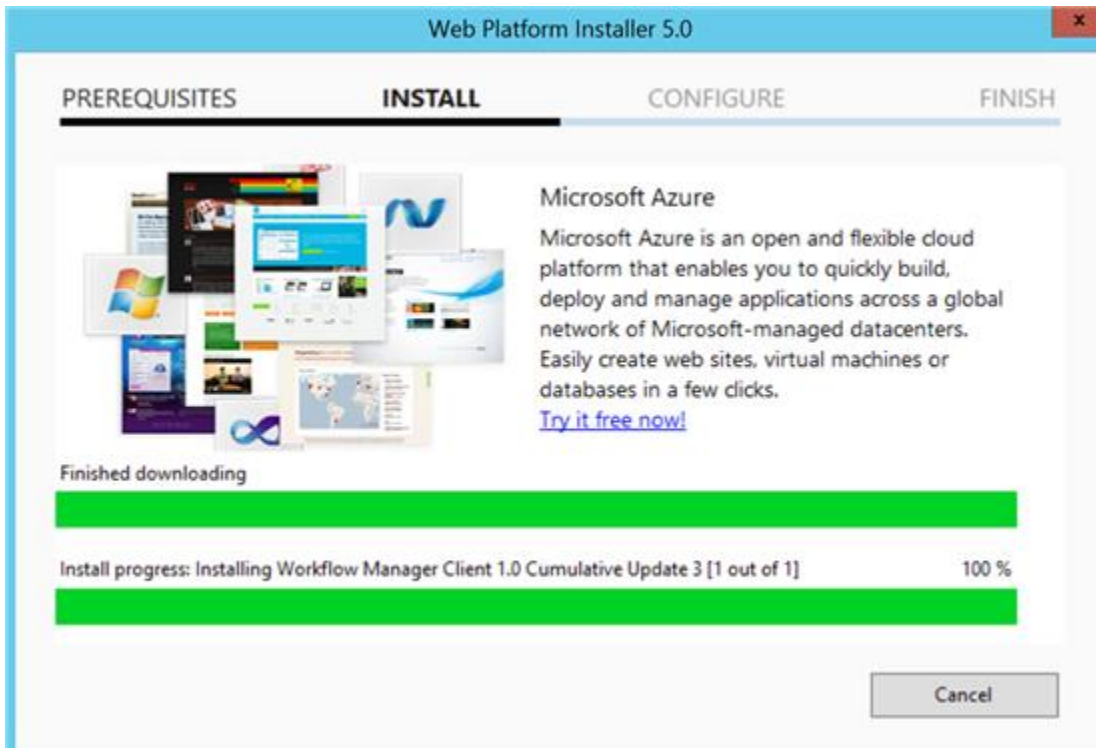


- Click on **I Accept**

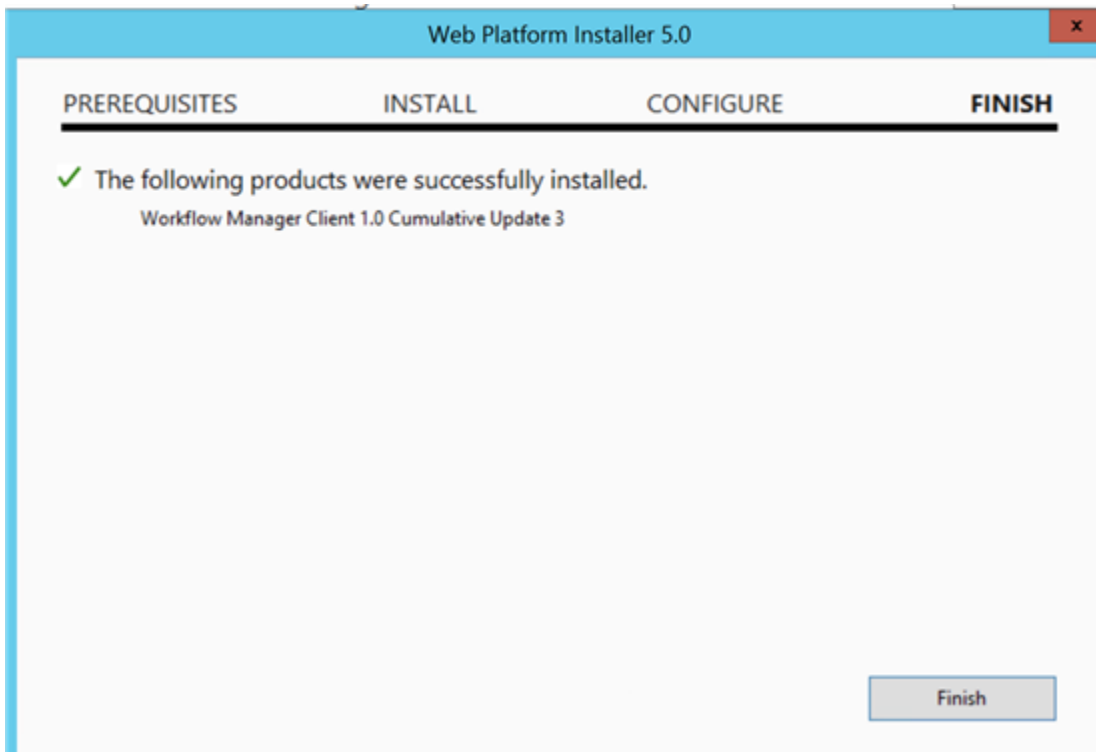


Workflow Manager Installation Guide

- Wait for Several Minutes



- On Successful page, Please Click **Finish**



Now **Repeat** the Same Steps for **All remaining SharePoint 2016 Server In the Farm**. If you missed a single server in the farm then Workflow's will see the difficulties.

Add Workflow Manager Certificate into SharePoint

Now, In this wiki article, we will add the Workflow Manager 1.0 Certificate into SharePoint trust. After this step, we will avoid almost all the errors related to certificate.

This is 2 step process, in step 1, we will export the certificate from Workflow Manager server and in 2nd step, we will import that certificate into SharePoint and build a trust.

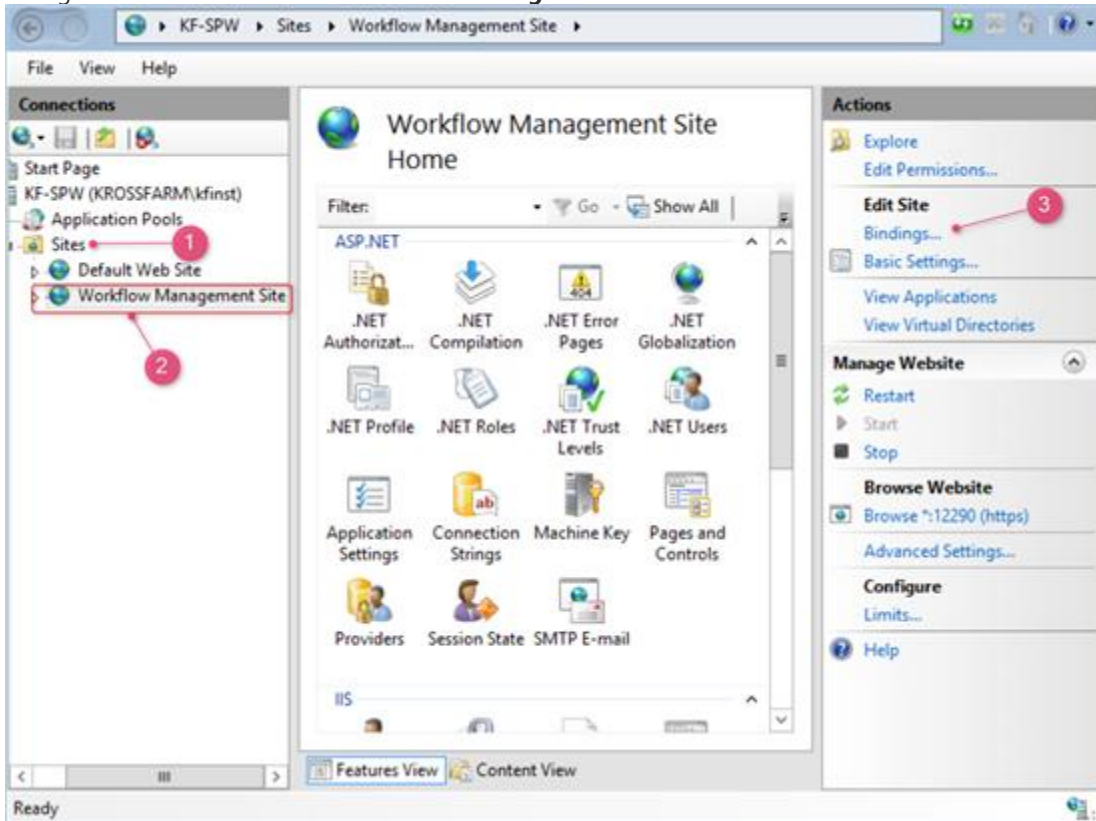
Please make sure you login on the server where workflow Manager Installed with Install Account.

[Export the Workflow Certificate.](#)

- Login on the Server with Install account(krossfarm\kfinst)
- Open Internet Information Services(IIS), By typing the Inetmgr in the search window

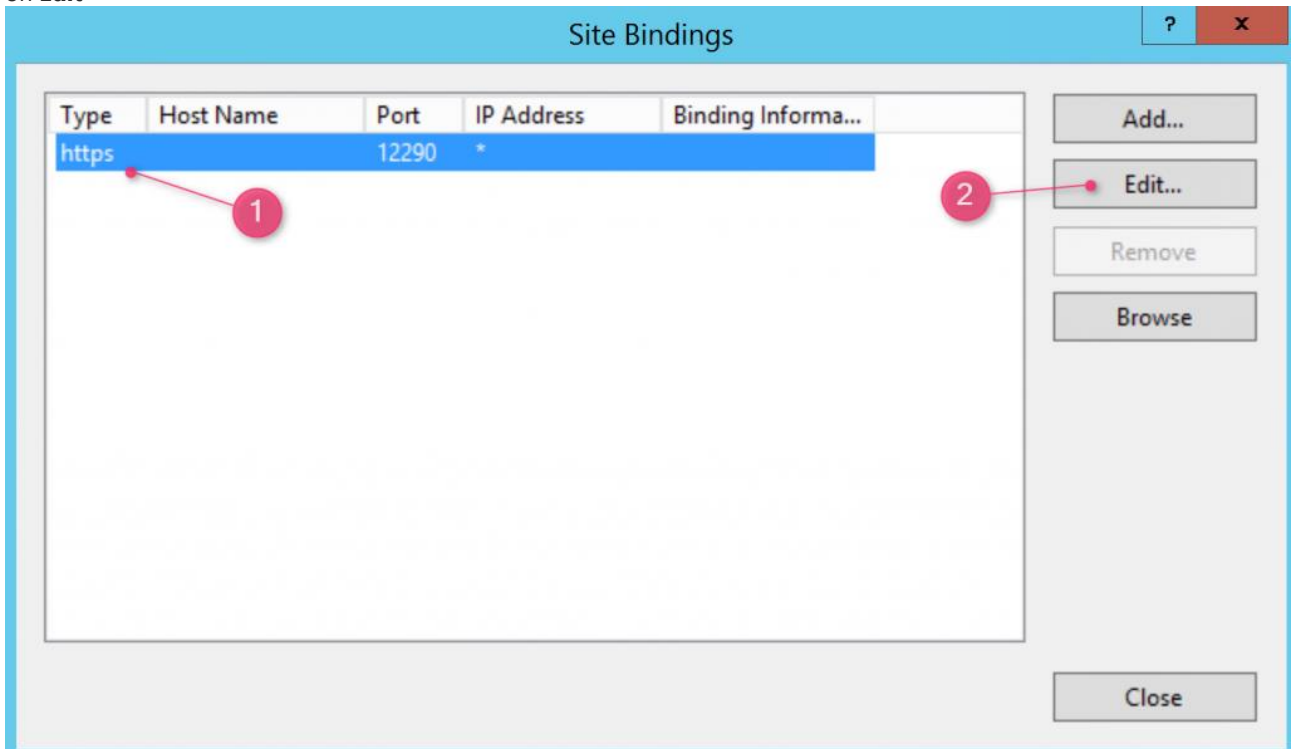
Workflow Manager Installation Guide

- In the **Internet Manager expands** the Sites (on **left-hand** side), Click on **Workflow Manager Site** and On right-Hand side under **Actions** click on **Bindings**

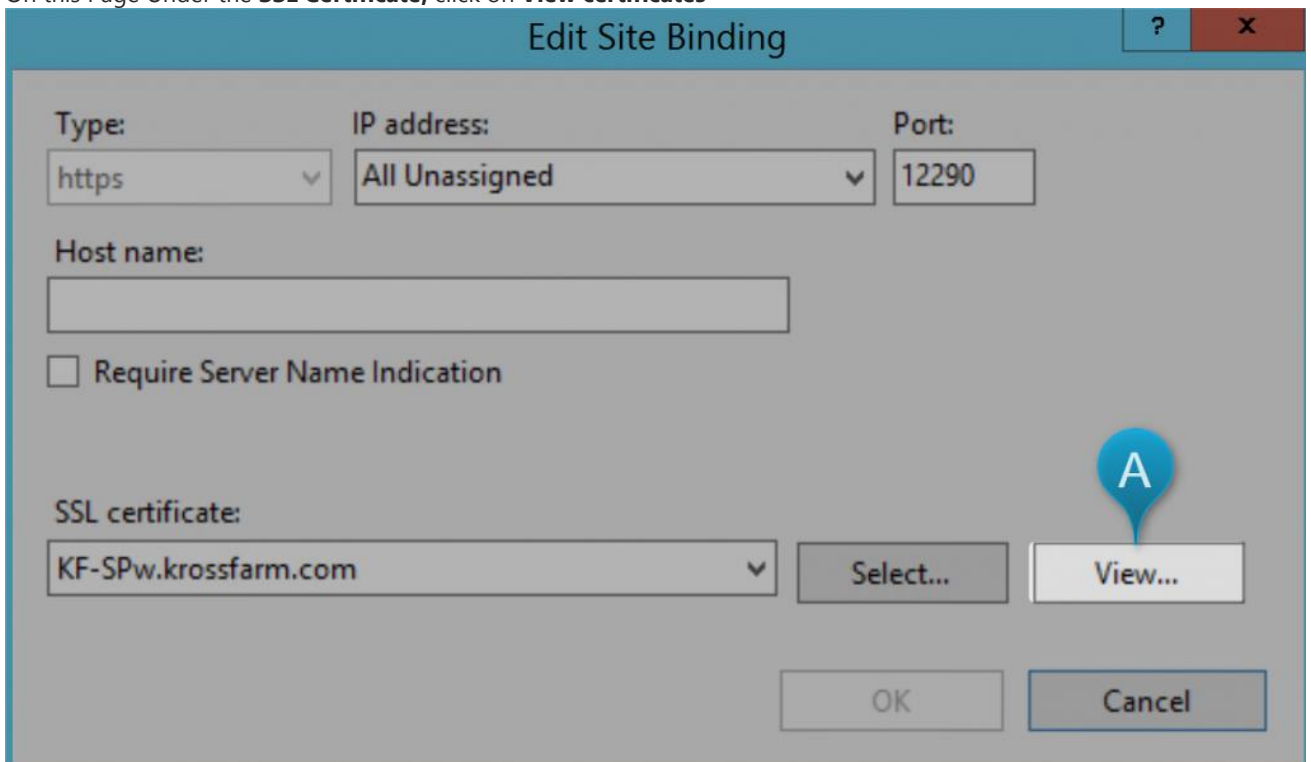


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- On this Page, Select **Https** and Click on **Edit**

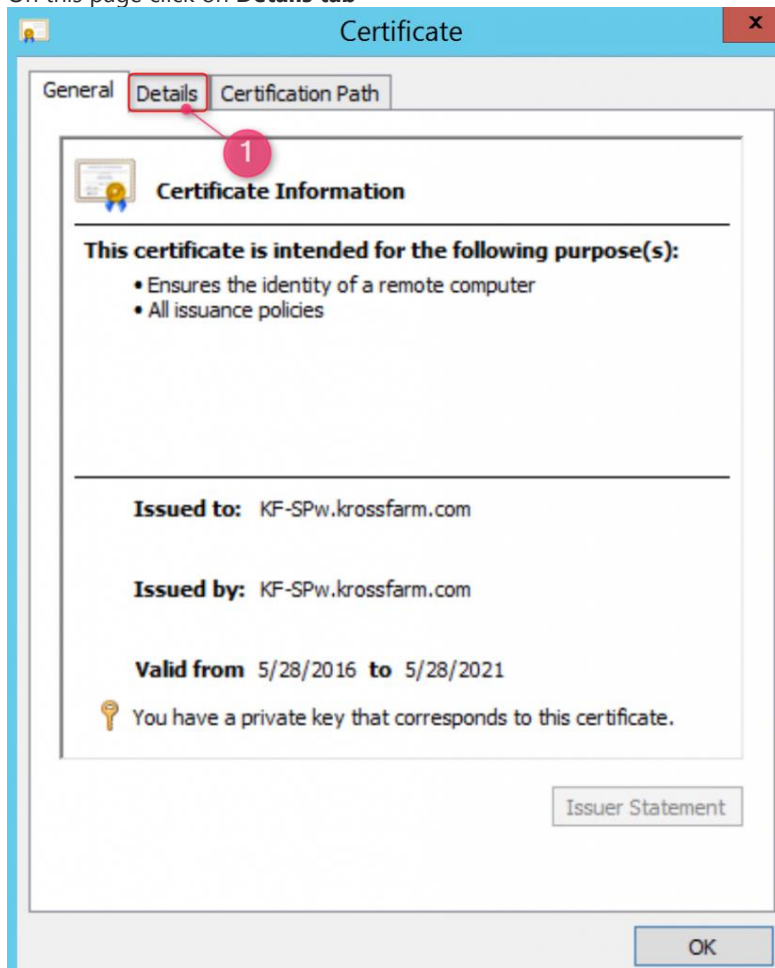


- On this Page Under the **SSL Certificate**, click on **View certificates**



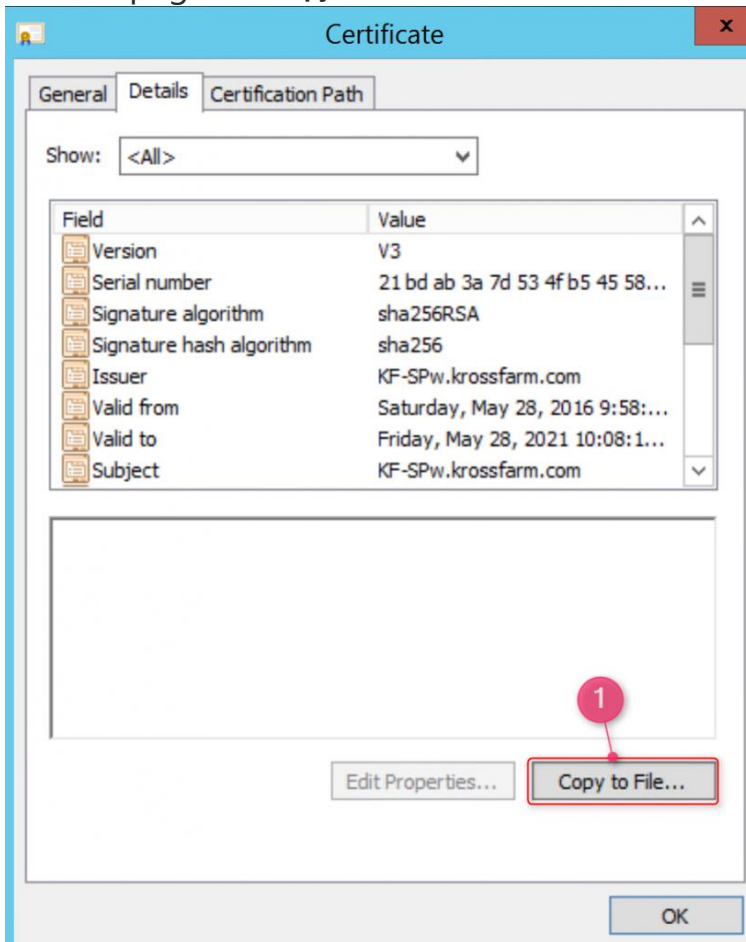
Workflow Manager Installation Guide

- On this page click on **Details tab**



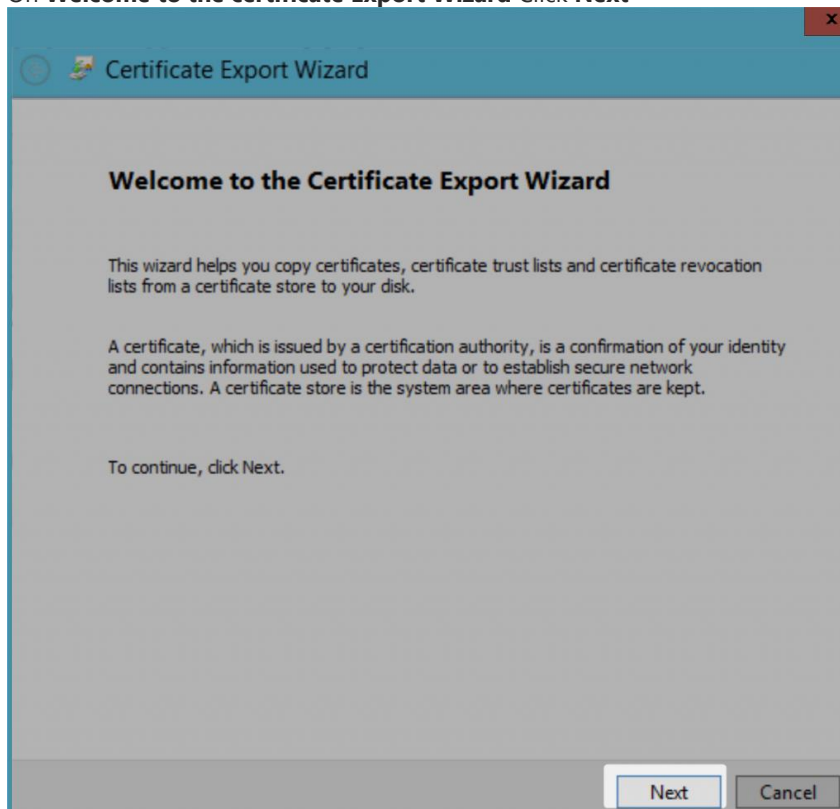
Workflow Manager Installation Guide

- On this page Click **Copy to File**



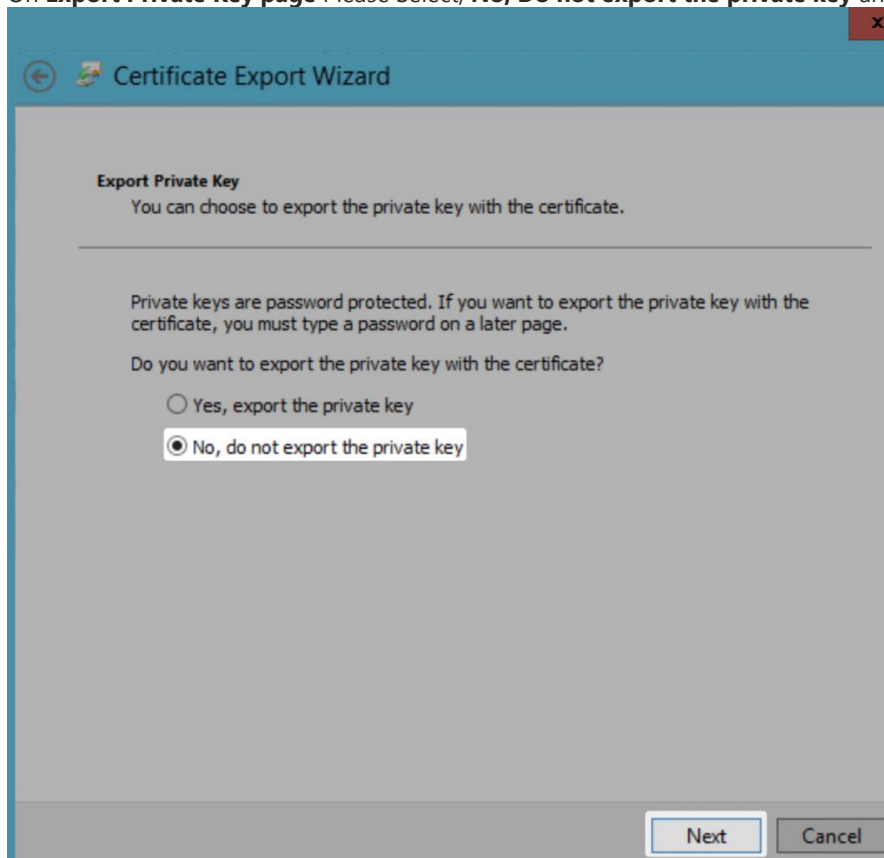
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- On **Welcome to the certificate Export Wizard** Click **Next**



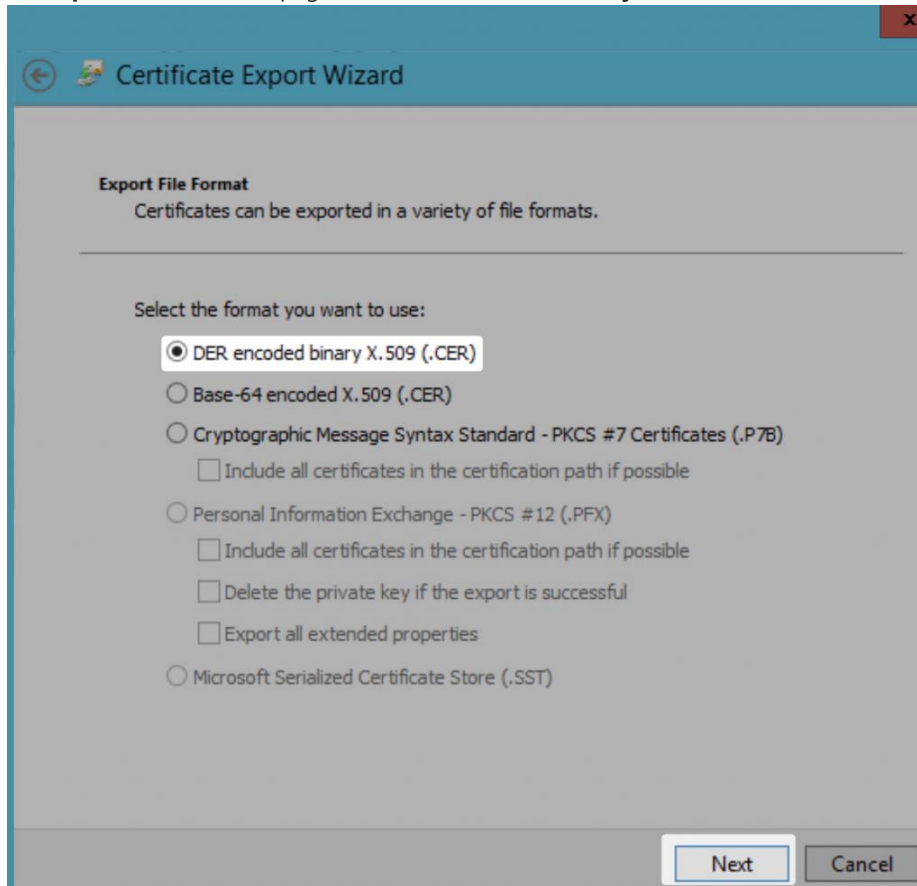
Workflow Manager Installation Guide

- On **Export Private Key** page Please Select, **No, Do not export the private key** and click **Next**



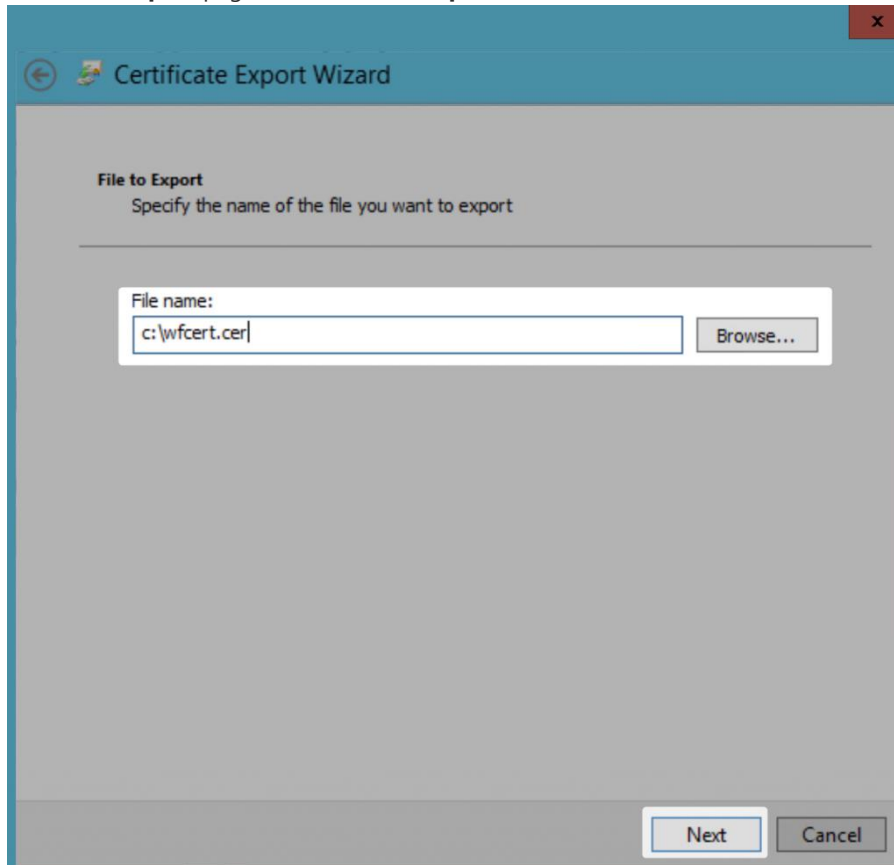
Workflow Manager Installation Guide

- On **export File Format** page, Select **Der encoded binary X.509(.cer)** and click **Next**



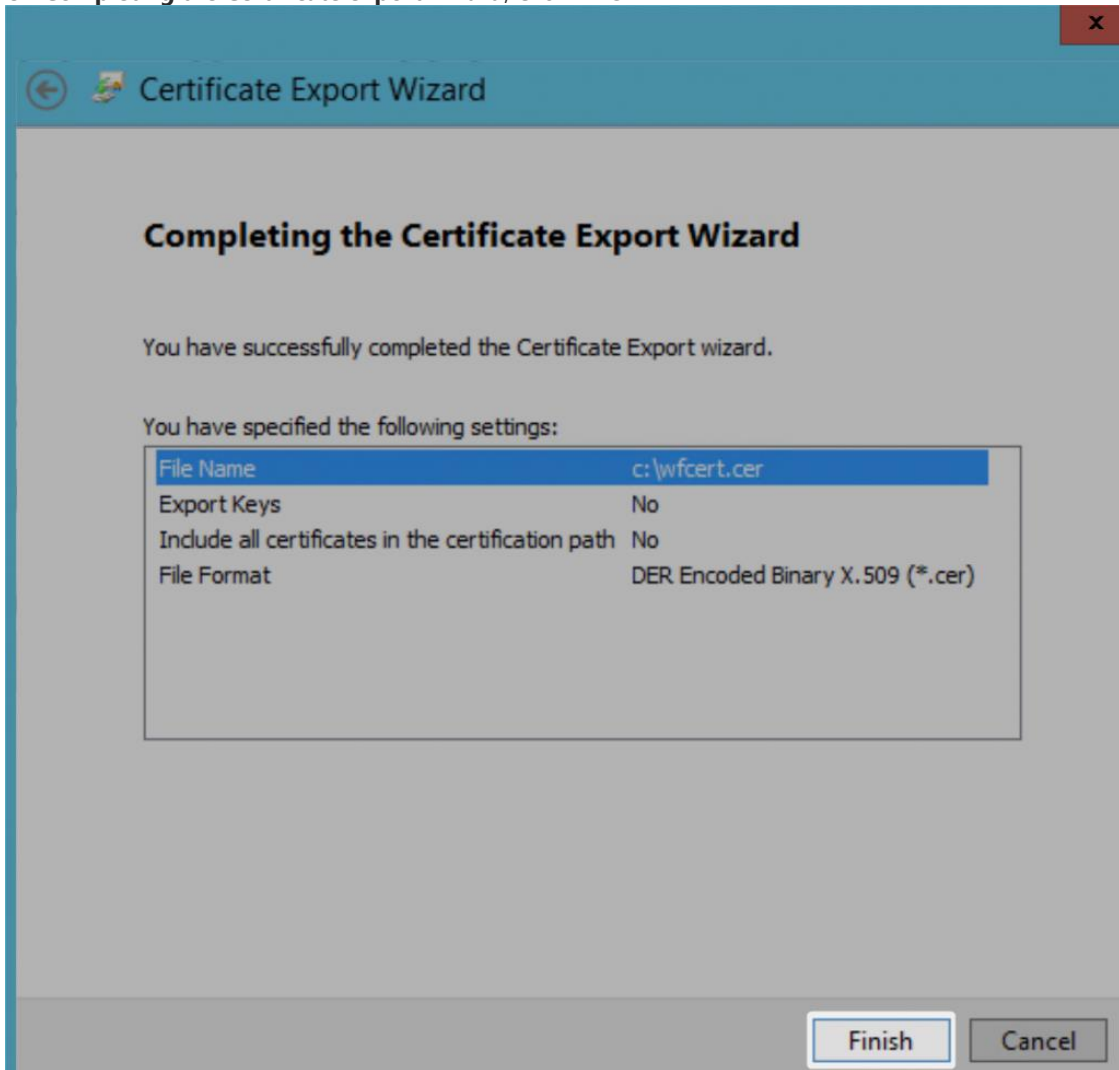
Workflow Manager Installation Guide

- On **File to export** page, Please select the **path** where certificate will be save and Click **Next**



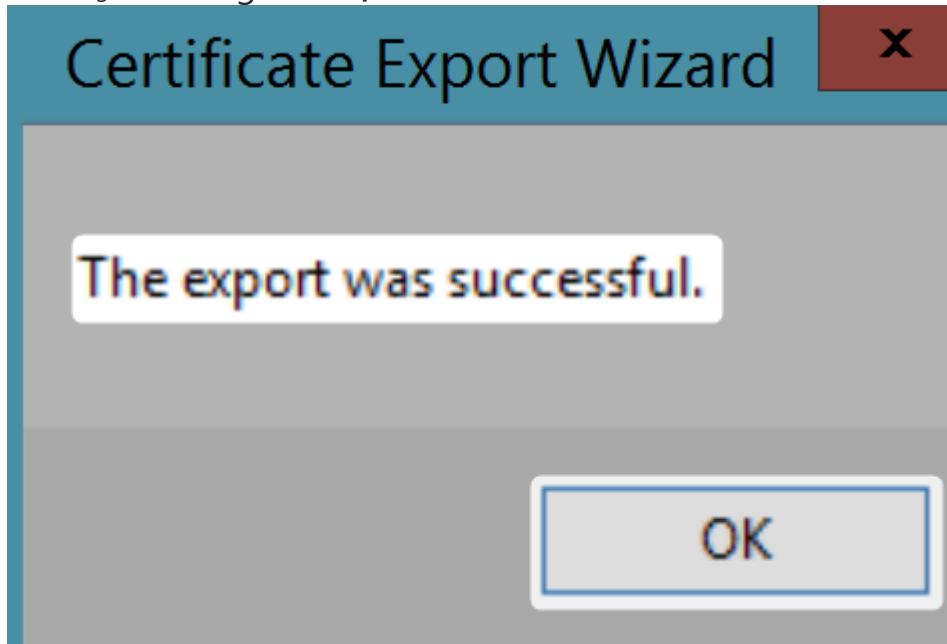
The screenshot shows a window titled "Certificate Export Wizard" with a close button (X) in the top right corner. The main area is titled "File to Export" and contains the instruction "Specify the name of the file you want to export". Below this is a text input field labeled "File name:" containing the text "c:\wfcert.cer". To the right of the input field is a "Browse..." button. At the bottom right of the window are two buttons: "Next" and "Cancel".

- On **Completing the Certificate export wizard**, Click **Finish**



Workflow Manager Installation Guide

- You will get message "the export was **successful**". and click **ok**

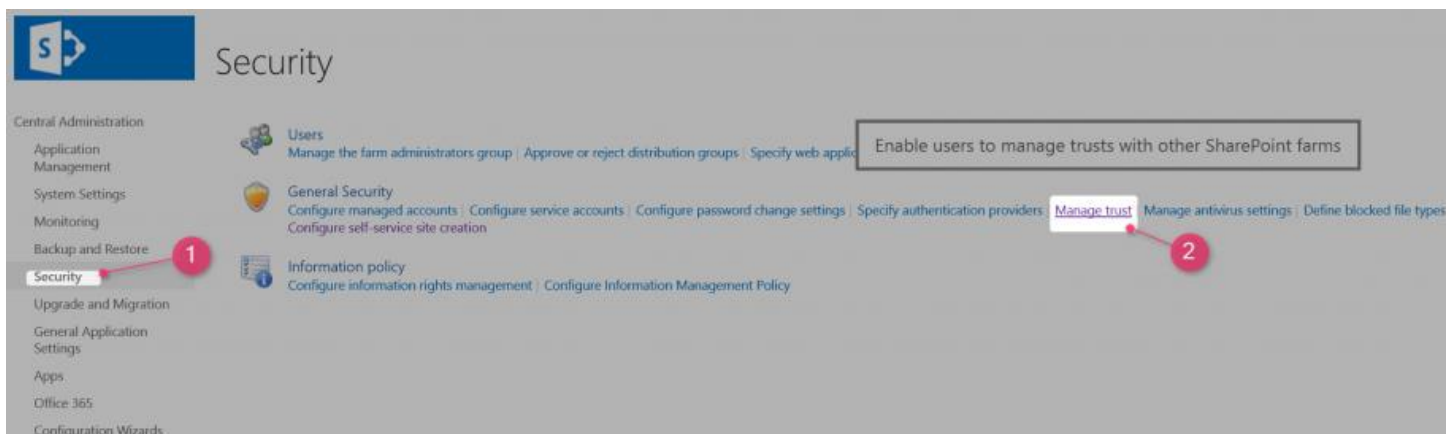


Move the File

Now move the **Certificate to the SharePoint Server.**

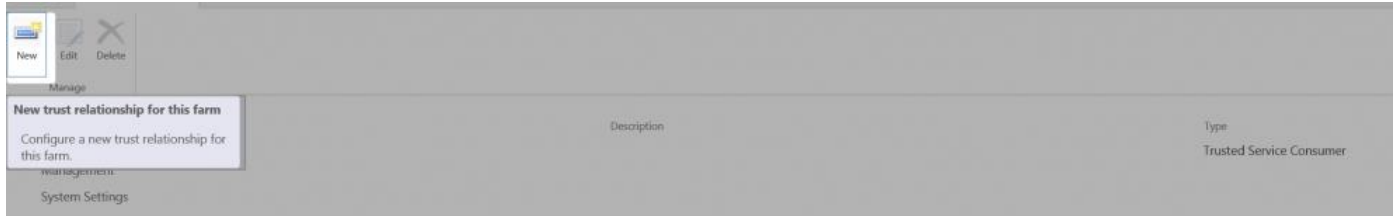
Import Certificate into SharePoint.

- Now Login on the SharePoint Server with **Farm Admin account**
- Open the **Central Admin Site**
- Click on **Security** and Click on **Trust** on **right-hand side**



- on **Trust page** Click on **New**

Workflow Manager Installation Guide



- On **Establish Trust Relationship** Page enter the following information
 - **Name of the Certificate**
 - **Path of Certificate**(where you save the certificate)
- Click **Ok**.

Establish Trust Relationship

General Setting

The name for this trust relationship.

Name: Workflow Manager

Learn about trusts.

Root Certificate for the trust relationship

This is mandatory regardless of whether you want to provide to or consume trust from the other farm. Please add the Root Certificate for the other farm with which you want to establish a trust relationship.

Learn about certificates.

Security Token Service (STS) certificate for providing Trust

This step is optional. Only add this certificate if you want to provide trust to another farm.

Provide Trust Relationship

Token Issuer Description:

Token Issuer Certificate

OK Cancel

- You will see your **certificate added**.



That's it, we successfully build the trust. Now move to the next Step and register the workflow Proxy.

Register Workflow Service Proxy

In this Wiki article, we will walk through the Steps to register workflow Service Proxy with SharePoint Server 2016.

- Please, login on the SharePoint Server (I picked the App server where Central admin Hosted).
- Open the SharePoint PowerShell window
- In the PowerShell console type this command.

```
Register-SPWorkflowService -SPSite  
"http://kfsp.krossfarm.com:9101/sites/workflow" -WorkflowHostUri "http://kf-  
spw.krossfarm.com:12291"
```

- **-SPSite** : URL of Site collections.
- **-WorkflowHostURI**: Workflow Host URI is the url of the Workflow site.

```
PS C:\> Register-SPWorkflowService -SPSite "https://kfsp.krossfarm.com:9101/sites/workflow" -WorkflowHostUri "https://kf-spw.krossfarm.com:12291"
```

This completes the configuration of the Workflow Manager and let's move to verification step

Validation of Configuration of Workflow Manager 1.0

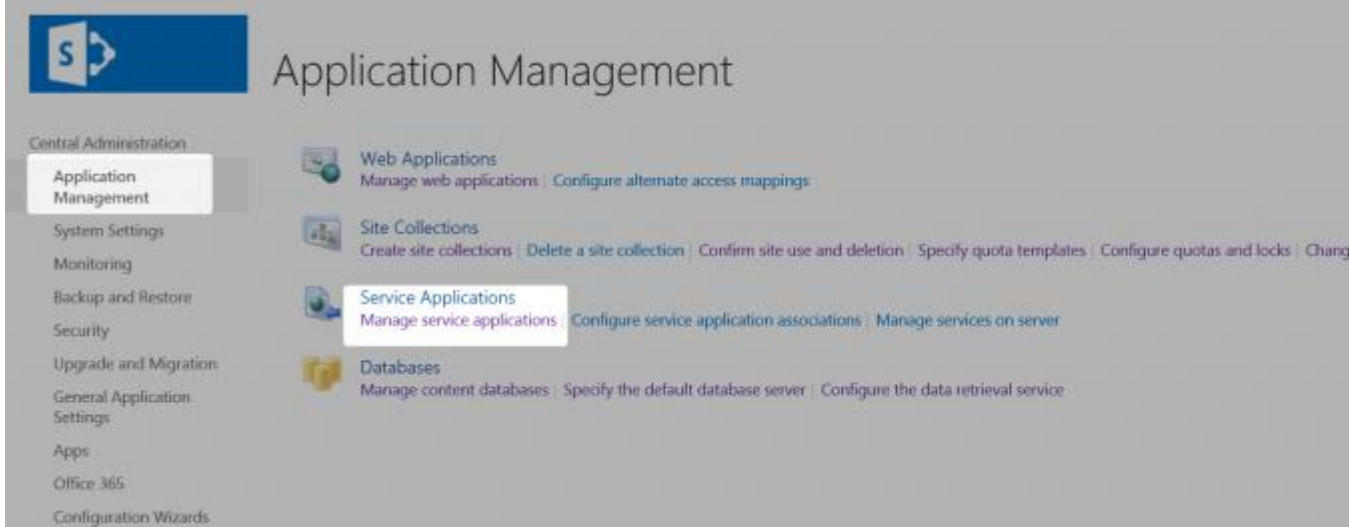
In this wiki, we will go through the steps to verify the installation and configuration of the Workflow Manager for SharePoint 2016. We will test it from Central admin of SharePoint then open the site (any site collection) in the SharePoint Designer and verify that SharePoint 2013 Workflow

Verify from Central Admin

- Login on SharePoint Central Admin with farm Admin account

Workflow Manager Installation Guide

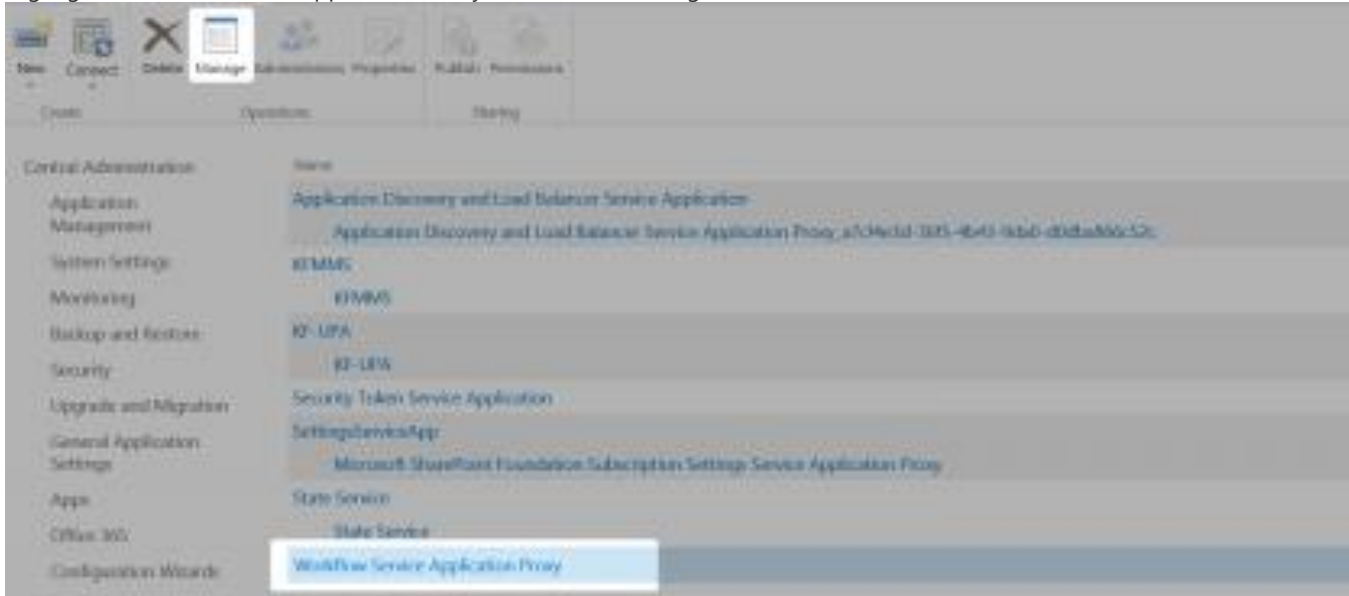
- Click on Application Management > Under Service Application Click on Manager Service Application



- On this Page you will see Workflow Service Application proxy



- Highlight Workflow Service Application Proxy and Click on Manage



- On this Page, You will see the message" Workflow is Connected"

Workflow Service Status

Workflow is Connected

- Now Go to Application management > under Service Application > Click on Configure service application associations
- On this page Make Sure Workflow Service Application proxy is associated with all required Web Application.

Verify Using the PowerShell

Let's Check the Status of Workflow Manager Service Application status using the PowerShell.

Open the SharePoint PowerShell console on the SharePoint Server. Run the Below Command.

```
Get-SPWorkflowServiceApplicationProxy | Select *
```

Workflow Manager Installation Guide

Output will be likely this.

```
PS C:\Users\kfinst> Get-SPWorkflowServiceApplicationProxy | Select *

Partitioned                : False
IsClientValid              : True
QueueMaxMessageConcurrency : 20
QueueMaxRetry              : 5
QueueRetryMaximumPause    : 200
QueueRetryInitialPause    : 20
AllowQueue                 : True
WorkflowServiceRequestTimeout : 00:00:20
WorkflowServiceDeploymentRequestTimeout : 00:03:20
TypeName                   : Workflow Service Application Proxy
ManageLink                 : Microsoft.SharePoint.Administration.SPAdministrationLink
PropertiesLink              :
CanUpgrade                 : True
IsBackwardsCompatible     : True
NeedsUpgradeIncludeChildren : False
NeedsUpgrade               : False
UpgradeContext             : Microsoft.SharePoint.Upgrade.SPUUpgradeContext
ShouldDeferUpgradeActions  : False
Name                       : Workflow Service Application Proxy
DisplayName                 : Workflow Service Application Proxy
Id                          : fbff443e-c35e-46b1-987d-be4668fdee4e
Status                     : Online
Parent                     : WorkflowServiceProxy
Version                    : 25531
DeploymentLocked           : False
Properties                  : {}
Farm                      : SPFarm Name=SharePoint_Config
UpgradedPersistedProperties : {}
SolutionProviderFactory    : Microsoft.SharePoint.WorkflowServices.FabricSolutionProviderFactory
CanSelectForBackup         : False
DiskSizeRequired           : 0
CanSelectForRestore        : False
CanRenameOnRestore         : False

PS C:\Users\kfinst>
```

Verify from SharePoint Designer 2013

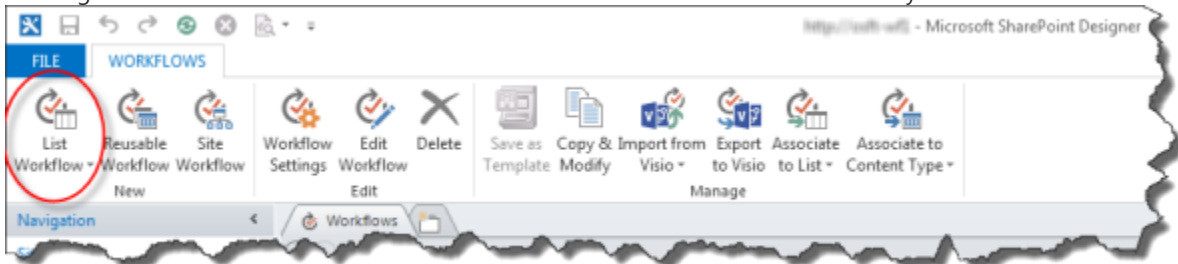
Now we will use the SharePoint Designer and verify the configuration,

Note: We don't have SharePoint Designer version for Server 2016, as per MSFT SharePoint Designer 2013 still works with Sharepoint 2016. Also in the workflow platform it is still saying SharePoint 2013 Workflow platform.

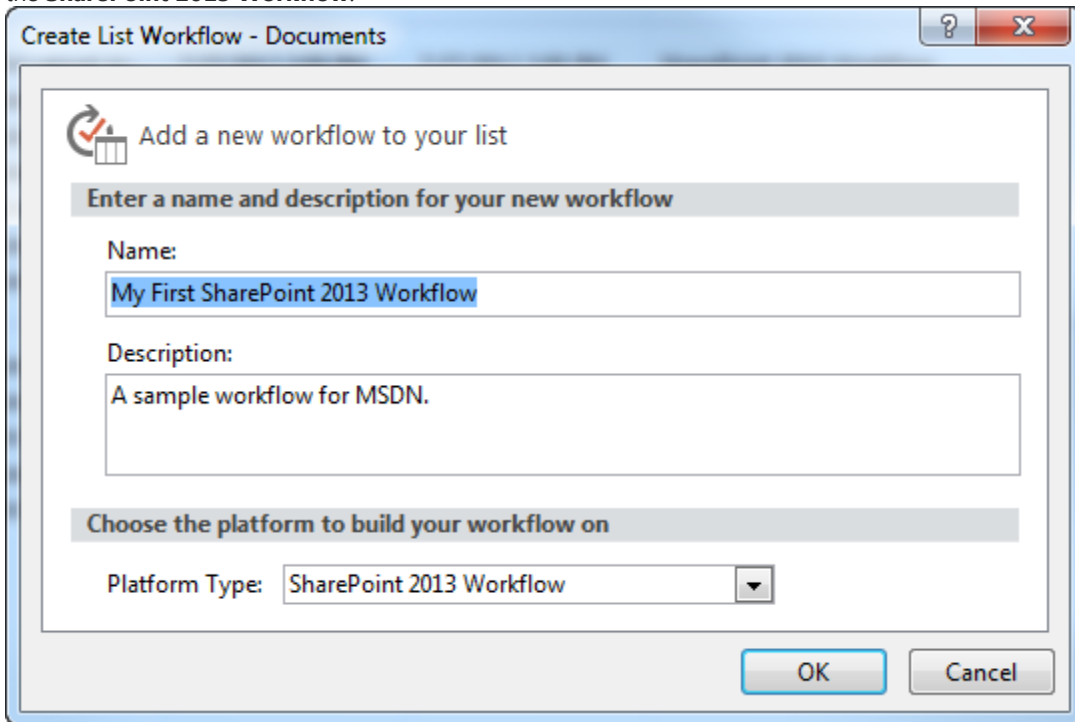
1. Open SharePoint Designer 2013 by selecting it on the **Start** menu. Click **Start** icon, click **All Programs**, click **Microsoft Office 2013**, and then click **SharePoint Designer 2013**.
2. Click **Open Site** on the SharePoint Designer 2013 start page.
3. Enter the SharePoint 2013 site that you want to connect to. For example, **http://www.contoso.com/sites/a-sharepoint-site**.
4. Click **Open** to open the site.
5. Enter your credentials, if prompted. (If security is not integrated with the computer you signed in on then you are prompted to enter your credentials.) Make sure to use credentials that have access to the SharePoint 2013 site.

Workflow Manager Installation Guide

6. In Designer Click on Workflows and from Ribbon Click on List Workflow and select any one



7. On the **Create List Workflow** dialog box, Click on **Platform Type** drop down and you will see the **SharePoint 2013 Workflow**.



This will complete our testing / validation of the Installation and configuration. Now we can create the 2013 Platform workflows.

Reference:

<https://msdn.microsoft.com/en-us/library/jj193528.aspx?f=255&MSPPError=-2147217396>