

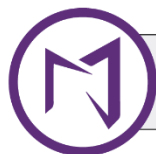


Modern Requirements⁴DevOps

Installation Guide

Version 5.3.1





Document Revision History

Rev. #	Date	Details	Revised By	Approved By
Version 5.3.1	21 st September, 2022	<ul style="list-style-type: none"> Added Supported Microsoft Word versions for Word Import 	Syed Hammad	Hira Sharif
Version 5.3.0	24 th February, 2022	<ul style="list-style-type: none"> Patch Version Info has been added 	Syed Hammad	Hira Sharif
Version 5.2.0	23 rd September, 2021	<ul style="list-style-type: none"> Design/Formatting of the document has been changed 'Document Revision History' has been added 	Syed Hammad	Hira Sharif
Version 2.0.0	4 th July, 2017	<ul style="list-style-type: none"> TOC has been added 	Ubaid Ullah	Hira Sharif
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INTRODUCTION

This Installation Guide describes the installation/upgradation* of Modern Requirements4DevOps using detailed steps. The guide is divided into the following three sections:

1. System requirements
2. Installation process
3. Activation

The first section describes the prerequisites for installing the application. The second section deals with the installation procedure while the third section describes the process of activation after a successful installation.

The guide describes the embedded and standalone versions of Modern Requirements4DevOps. Normally, a section is applicable to both installation types. However, if a section is valid only for a particular type, that type is mentioned at the end of the section heading.

- For configurations; refer to the **Admin Configuration Guide**.
- For user customizations; refer to the **Customization Guide**.

* The Installation and upgradation process is virtually the same, hence the guide can also be used if users intended to upgrade an existing installation of the application.

SYSTEM REQUIREMENTS

GENERAL SOFTWARE REQUIREMENTS

1. Operating System: Windows Server 2008 R2 or higher / Windows 7 or higher
2. Browser: Microsoft Edge, Internet Explorer 10 or higher, Chrome, Mozilla Firefox 47.0.1 or higher
3. Screen resolution: 1280 x 960 or higher
4. IIS 7 or higher
5. Microsoft .Net Framework 4.7.2 or higher
6. ASP.NET 4.5
7. Multilingual Support – Language Pack for IE & Save as word
- 8.

*Note: Both the 32-bit and 64-bit versions of the operating systems are supported.

The credentials required for installing Modern Requirements4DevOps should include administrator rights on the machine. In other words, users installing Modern Requirements4DevOps on their machine should use admin credentials (or credentials that have admin rights) for proper installation.

For regular team projects, the user of a machine on which Modern Requirements4DevOps is deployed must have admin rights on the TFS Collection (or added in the application domain in IIS).

**Note: To access GIT-enabled team projects, logged-in domain user of a machine on which Modern Requirements4DevOps is deployed must have authenticated rights on the TFS Collection (or added in Application Domain in IIS).*

For using Modern Requirements4DevOps on HTTPS the application should be bound with a Trusted CA Signed SSL Certificate and not with a Self-Signed Certificate. Modern Requirements4DevOps is not compatible with the Self-Signed certificate and the user would be unable to proceed with it.

SUPPORTED MICROSOFT WORD VERSIONS FOR WORD IMPORT

- Microsoft Word 2010 or higher (With the .docx, .dotx, .docm, .dotm file extensions)

TEAM FOUNDATION SERVER REQUIREMENTS

EMBEDDED BUILD VERSIONS

Standard

TFS 2015 update 2+ and higher

Single Sign-On

TFS 2017 update 3, TFS 2018 update 1 and higher

HARDWARE REQUIREMENTS

1. RAM: At least 12 GB, but higher storage capacity is required if executing TFS work item queries greater than 100,000.
2. Hard drive space: 500 MB

MINIMUM HARDWARE REQUIREMENTS FOR REDIS

According to Modern Requirements4DevOps, approx. memory usage per user is 477.8495 KB (0.4666 MB).

The maximum hard drive space required is 1.5 * (memory size).

For instance, in the case of 8 GB of RAM, the maximum hard drive space occupied by Redis would be 12 GB.

A user should make sure his machine has sufficient hardware requirements for Redis.

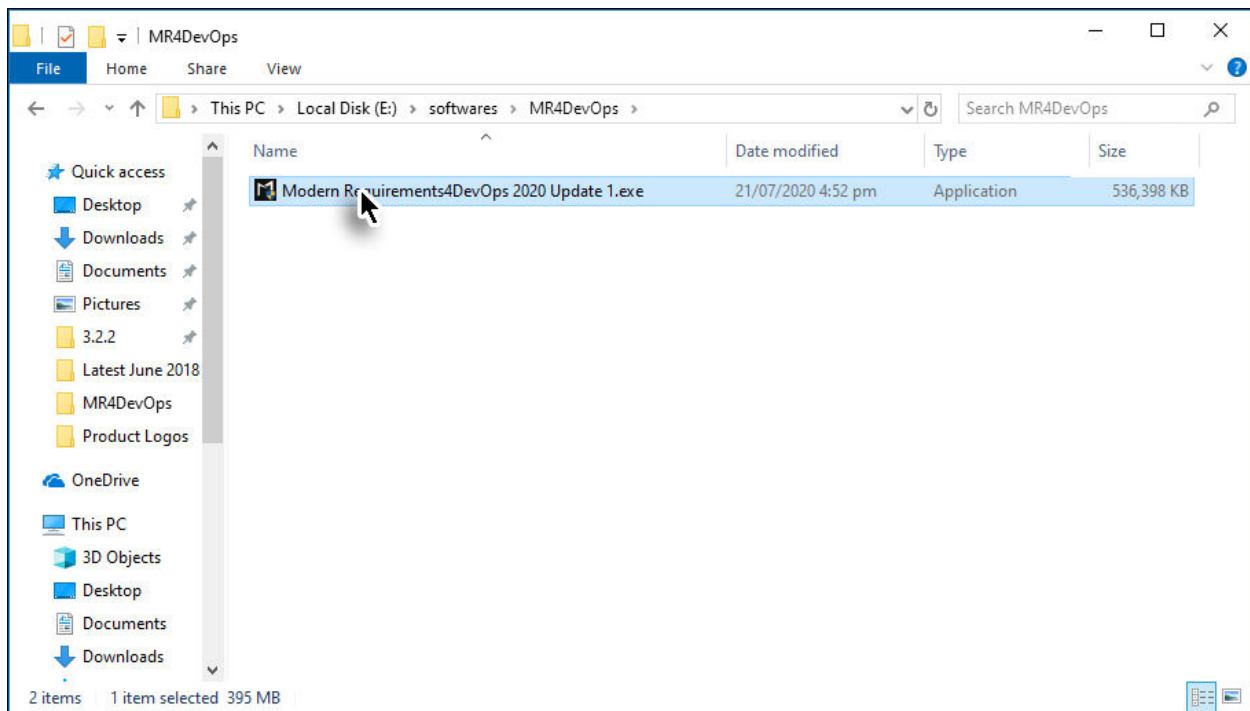
INSTALLATION PROCESS

INSTALLATION GUIDELINES

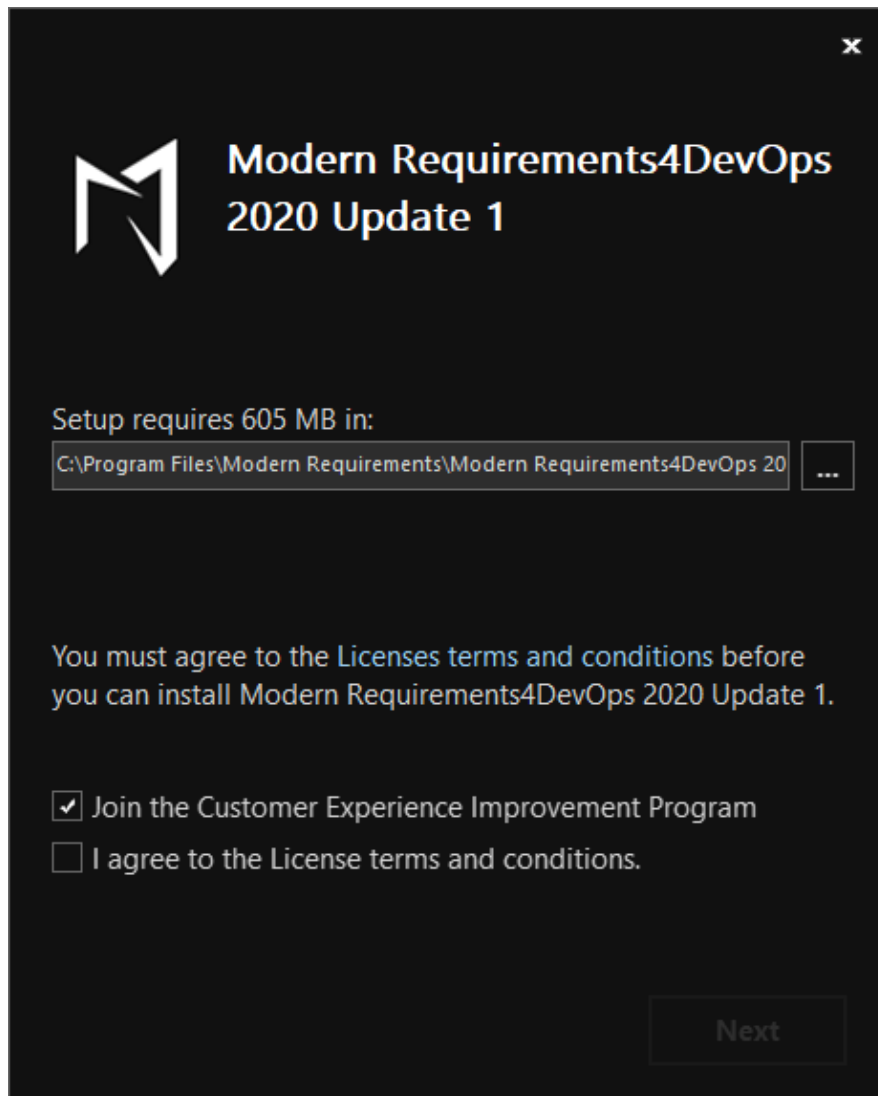
- Users are provided with a single installation file i.e. **Modern Requirements4DevOps 202x.exe**
- Since Modern Requirements4DevOps is a web-based application, it's preferable to install the file on a server. However, any machine with IIS 7 installed would suffice, as would any other more recent IIS web server.
- Installation is required only once. After the installation, all the users with proper access rights can use the application, even if they haven't installed any of the installation files on their local machine.

INSTALLING MODERN REQUIREMENTS4DEVOPS

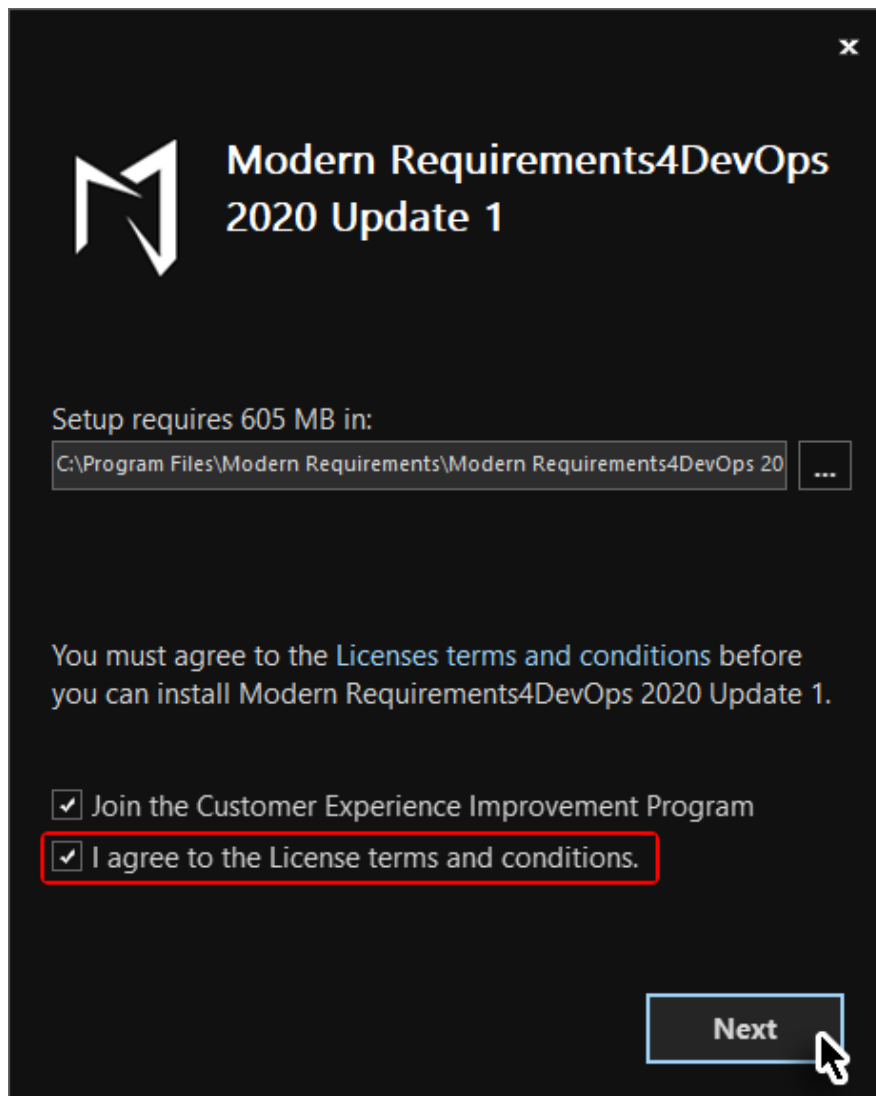
1. Double click the **Modern Requirements4DevOps 202x Update 1.exe** file to start the installation process.



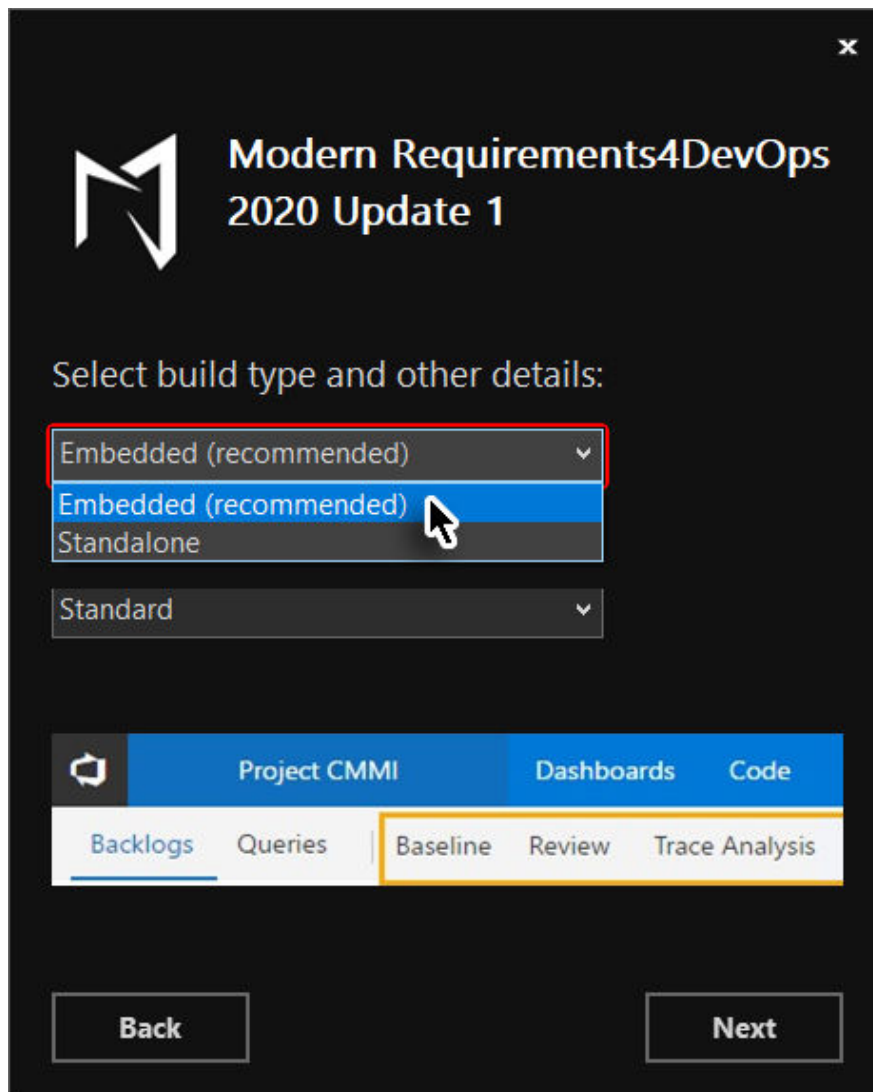
The initial installation screen appears, asking the user to accept the terms and conditions for using the application.



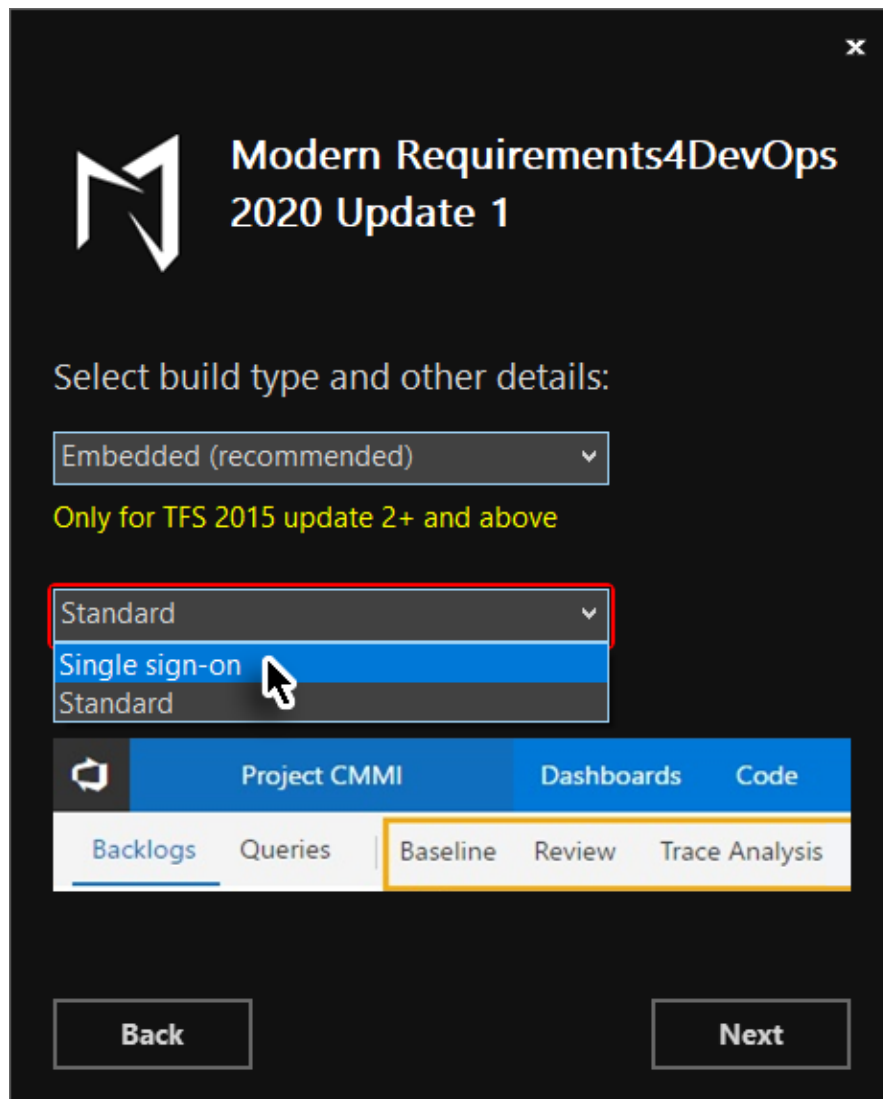
2. Select the terms and conditions agreement checkbox and click **Next**.



3. Select the desired build type (embedded or standalone).

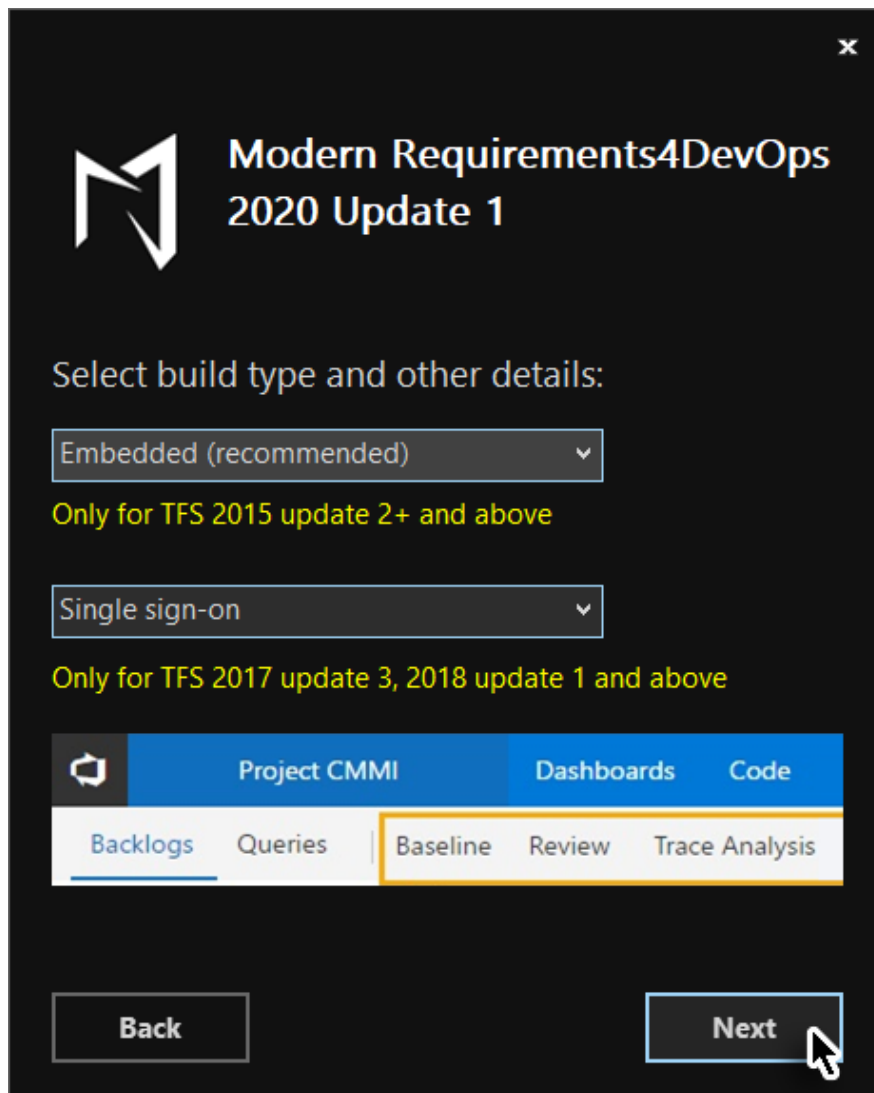


4. Select the desired installation type (Single sign-on* or Standard)



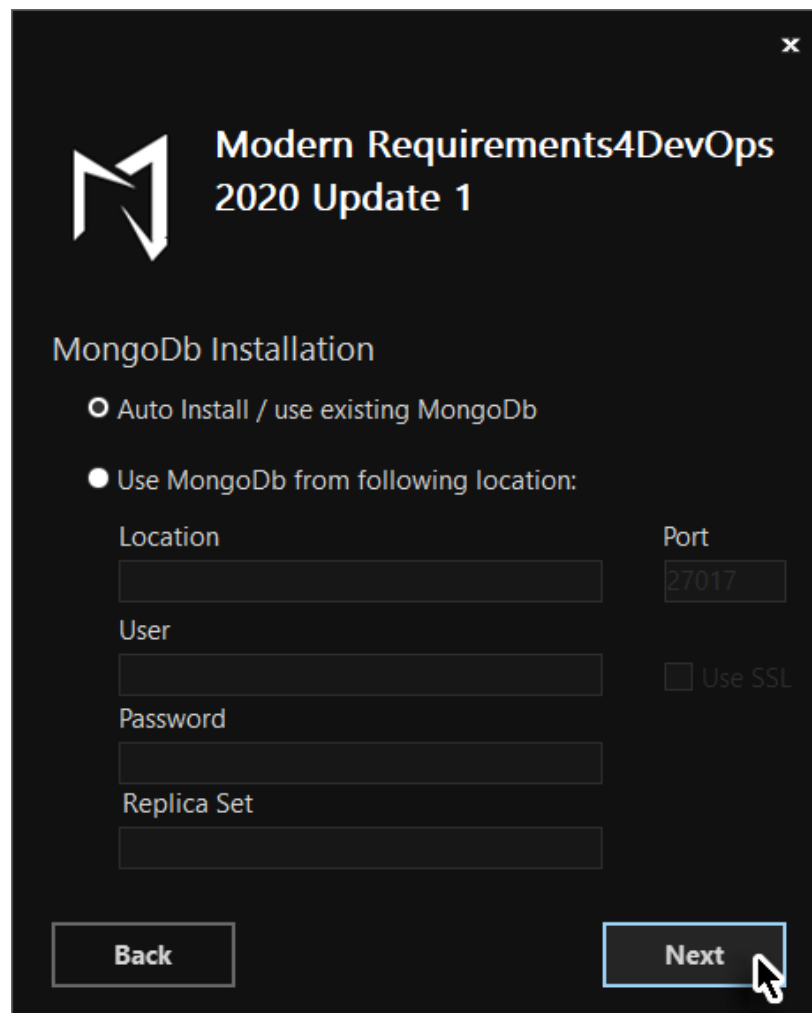
*If **Single sign-on** option is selected, it saves the users from entering login credentials every time they intend to use the application.

5. Click **Next**.



The prerequisites for **Embedded** build and **Single sign-on** appear on the screen in Yellow text, once these options are selected. Users are advised to make sure their systems fulfill these prerequisites before installing the application with these options.

6. Configure the “MongoDb” installation options and click **Install**.



Modern Requirements4DevOps
2020 Update 1

MongoDb Installation

☐ Auto Install / use existing MongoDB

☒ Use MongoDB from following location:

Location

Port

User

Use SSL ☐

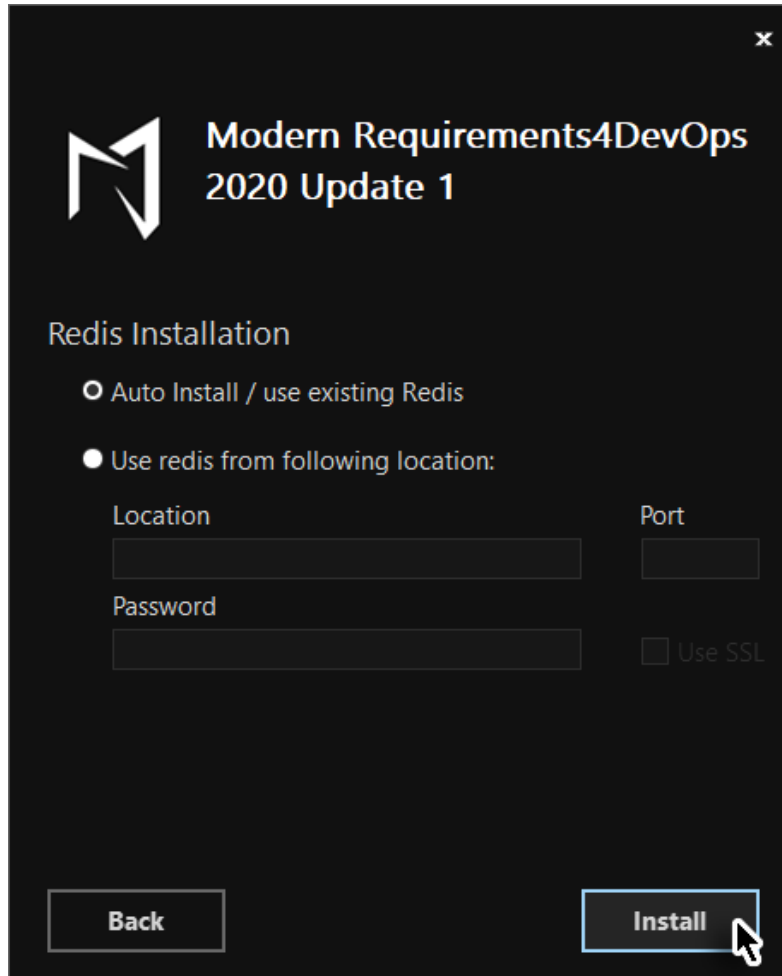
Password

Replica Set

Back Next

- The **Auto Install MongoDB** option is the recommended option if MongoDB isn't already installed on the target machine.
- If MongoDB is already installed, you must provide the name (or IP address) of the machine where MongoDB is installed.
- Similarly, if Modern Requirements4DevOps is being installed on a load balancing server, the relevant details should be provided here.
- The default port for MongoDB is 27017, but you can give another port number if you're installing MongoDB independently of Modern Requirements4DevOps. At the time of the Modern Requirements4DevOps installation, you should give the same Port number used during the MongoDB installation.
- Refer to your network department to get the value of the MongoDB User/password (if there is one).
- The Replica Set information is used for data replication/mirroring.

7. Configure the “Redis Installation” options and click **Install**.



Modern Requirements4DevOps
2020 Update 1

Redis Installation

☐ Auto Install / use existing Redis

☐ Use redis from following location:

Location

Port

Password

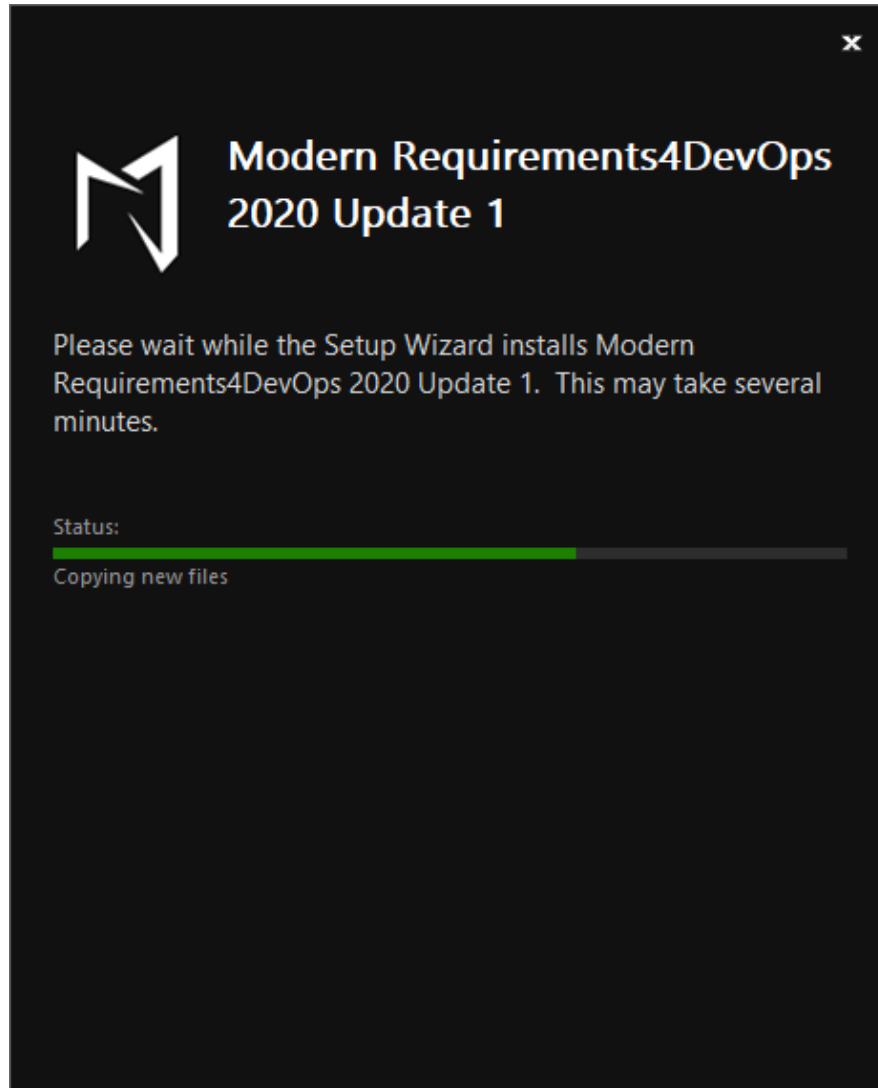
☐ Use SSL

Back **Install**

- The **Auto Install Redis** option is the recommended option if Redis isn't already installed on the target machine.
- If Redis is already installed, you must provide the name (or IP address) of the machine where Redis is installed.
- Similarly, if Modern Requirements4DevOps is being installed on a load balancing server, the relevant details should be provided here.
- The default port for Redis is 6379, but you can give another port number if you're installing Redis independently of Modern Requirements4DevOps. At the time of the Modern Requirements4DevOps installation, you should give the same Port number used during the Redis installation.
- Refer to your network department to get the value of the Redis password (if there is one).
- The use SSL option should be enabled where required. Refer to your network department for this as well.
- The password and Use SSL options aren't mandatory, but their use mainly depends on the procedures followed in your organization.

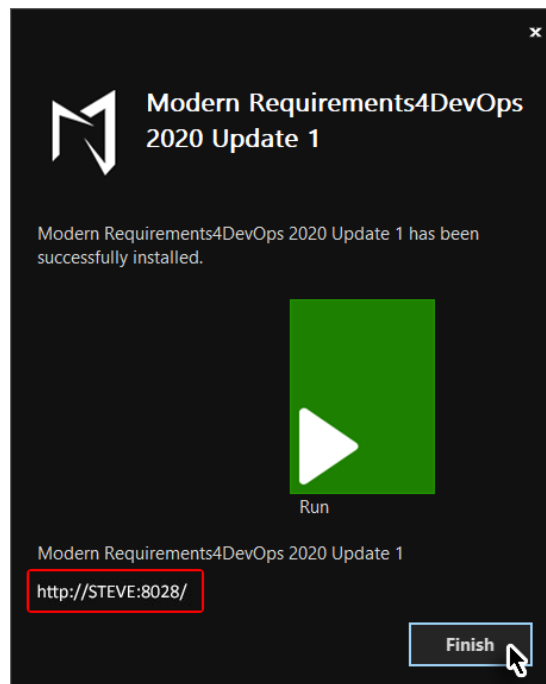
8. Click **Yes** in the warning message box.

The relevant files are installed.

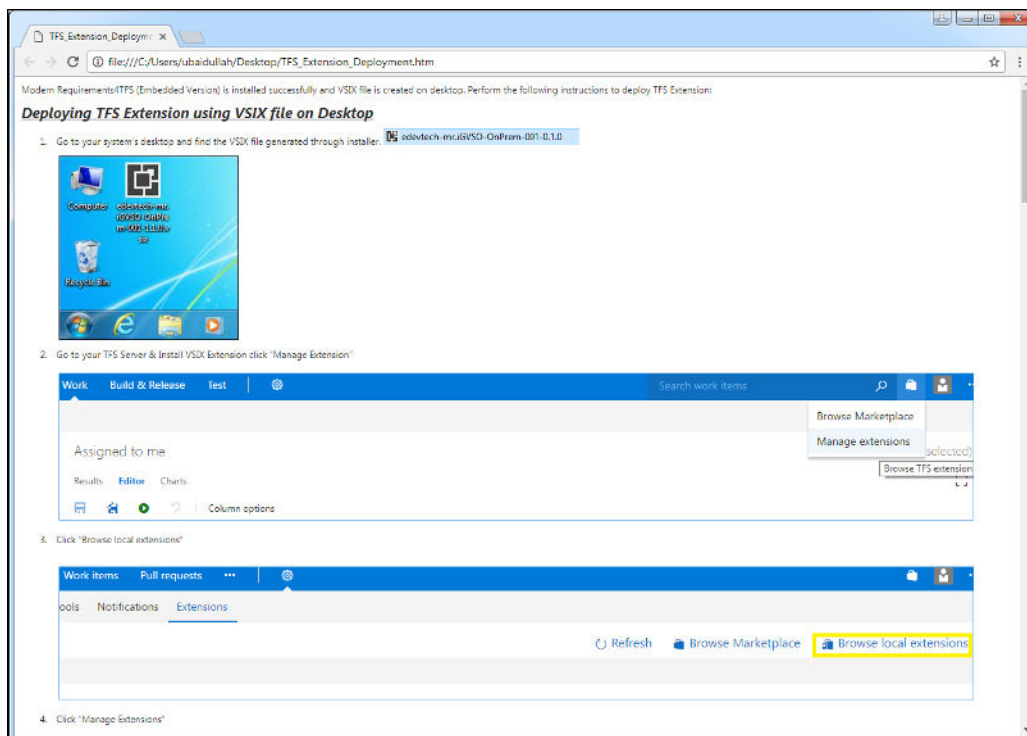


9. Complete the installation of **Modern Requirements4DevOps** by clicking **Finish** or **Run**.

This is the last installation step for the standalone version. Additional steps for the embedded version are described below.



For the embedded version, the TFS deployment instruction page is displayed in the default browser window. Follow the steps described on the page to obtain the VSIX file.



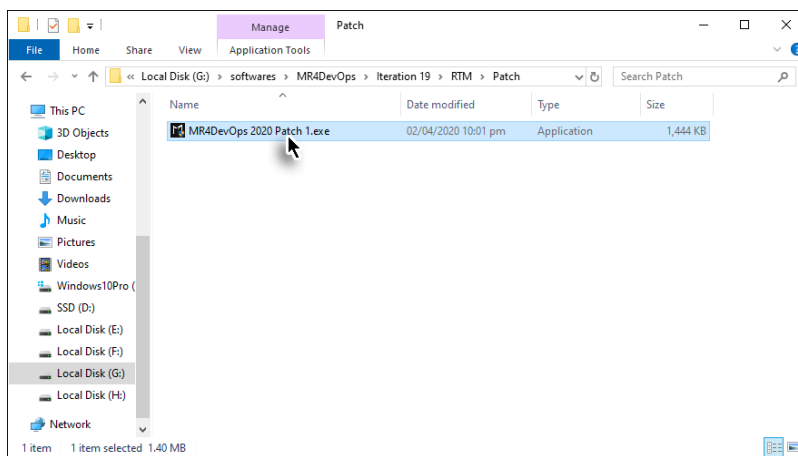
INSTALLING MODERN REQUIREMENTS4DEVOPS PATCH

From time to time, patches are released for ModernRequirements4DevOps, including important updates. For these patches to work as intended, ModernRequirements4DevOps core release must have been installed before a user proceeds with the installation of the patch.

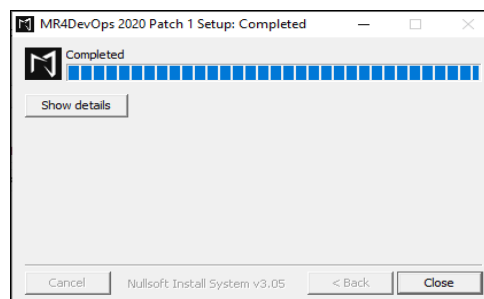
For Modern Requirements4DevOps 2020, there may be more than one patch available. Presuming that Patch 1 was released first and then Patch 2; In such a case, Patch 2 would include all the functionality of Patch 1, so if the user has not installed Patch 1 then he can simply proceed by just installing Patch 2. Installing Patch 1 would not be necessary.

Follow these steps to install the patch.

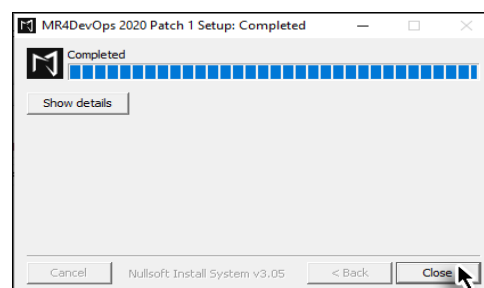
1. Navigate to the relevant folder and double-click the patch exe file.



The patch is installed.



2. Click the **Close** button to complete the patch installing process.



PATCH VERSION INFO

A change to the fourth digit indicates a patch which includes bug fixes has been released on a build. There can be multiple patches in a build which is represented by the respective patch number, as shown in the image below.

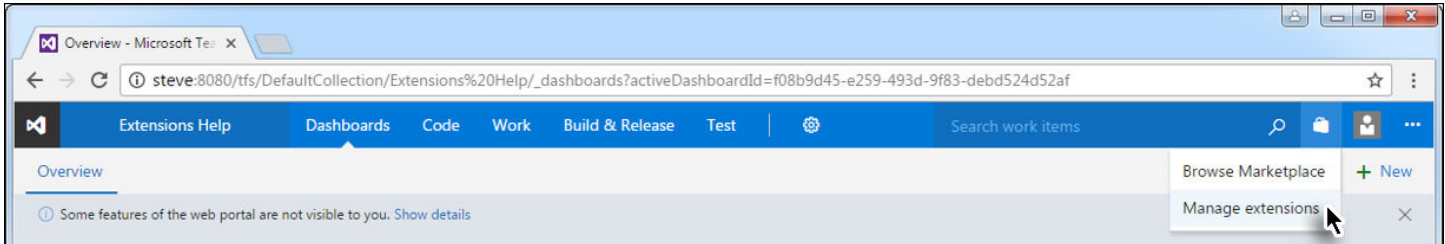
The screenshot shows the Azure DevOps interface for the 'INTERNAL_Collection'. The left sidebar lists various settings categories: General, Projects, Global notifications, Extensions, Analytics, Security, Boards, Process, Pipelines, Agent pools, Deployment pools, Retention, OAuth configurations, and Extensions. The 'Modern Requirements4DevOps...' extension is selected under the 'Extensions' category.

The main panel displays the 'Modern Requirements4DevOps 2021 Update 1' build version: 23.7.1.4. An orange arrow points to the '4' in the version number, indicating a patch. Below the version information, there are tabs for 'Licensing', 'General', 'Smart Docs', 'Review', 'Baseline', and 'Services'. The 'Licensing' tab is active, showing the 'LICENSE STATUS' section.

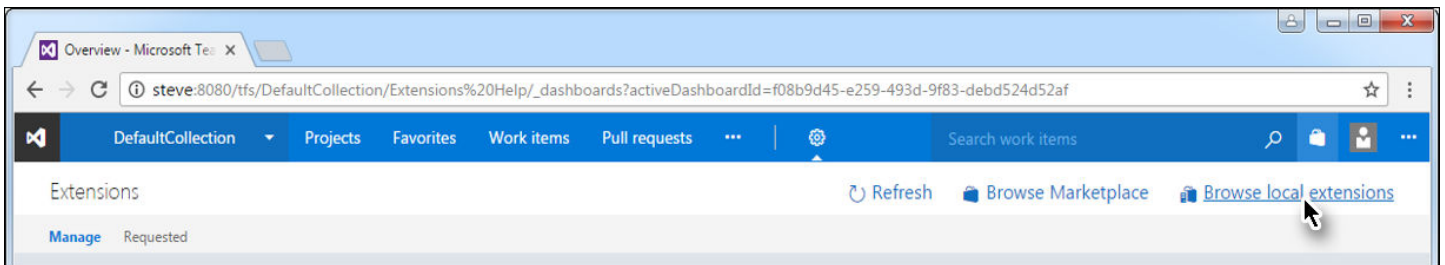
The 'LICENSE STATUS' section indicates that the product is ACTIVATED, the license type is ONLINE, and the license duration is PERMANENT. There are two buttons: 'Sync License' and 'Clear License'.

DEPLOYING TFS EXTENSION USING THE VSIX FILE

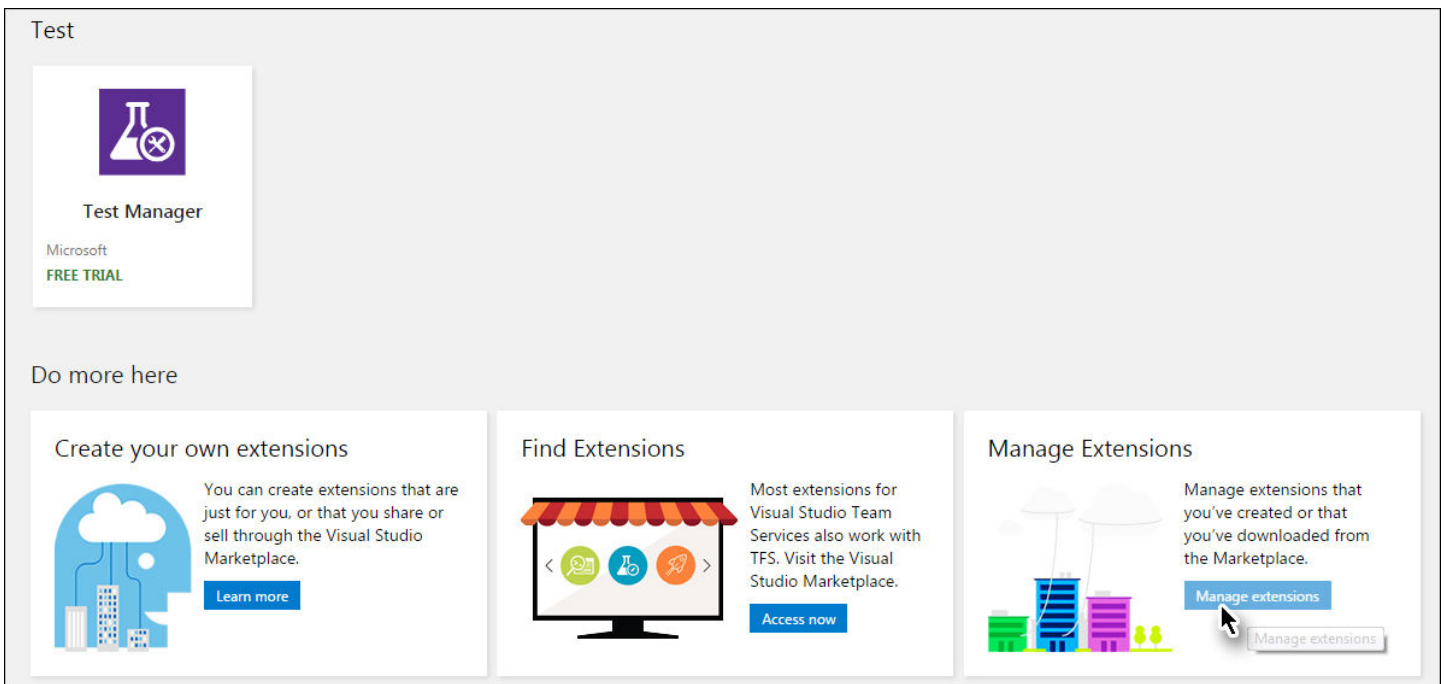
1. Log into your TFS.
2. Click the **Marketplace** icon and then select the **Manage extensions** option from the drop-down menu.



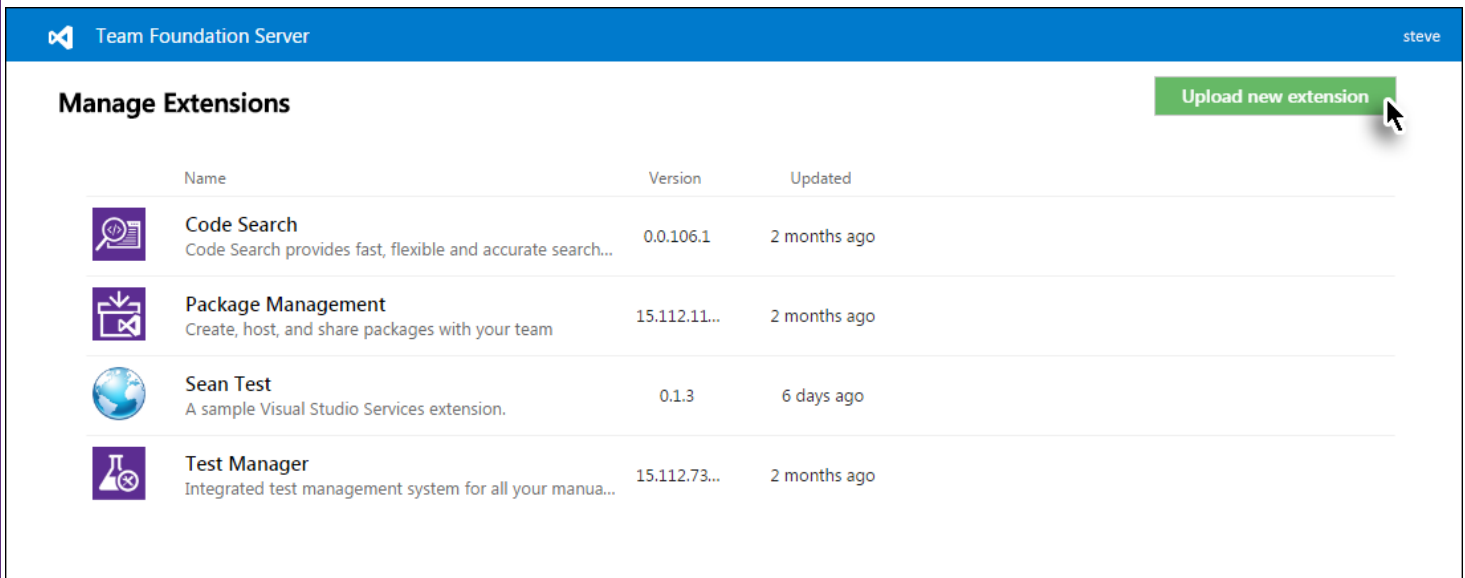
3. Click the **Browse local extensions** link.



4. Click **Manage extensions**.



5. Click **Upload new extension**.







Team Foundation Server

steve

Manage Extensions

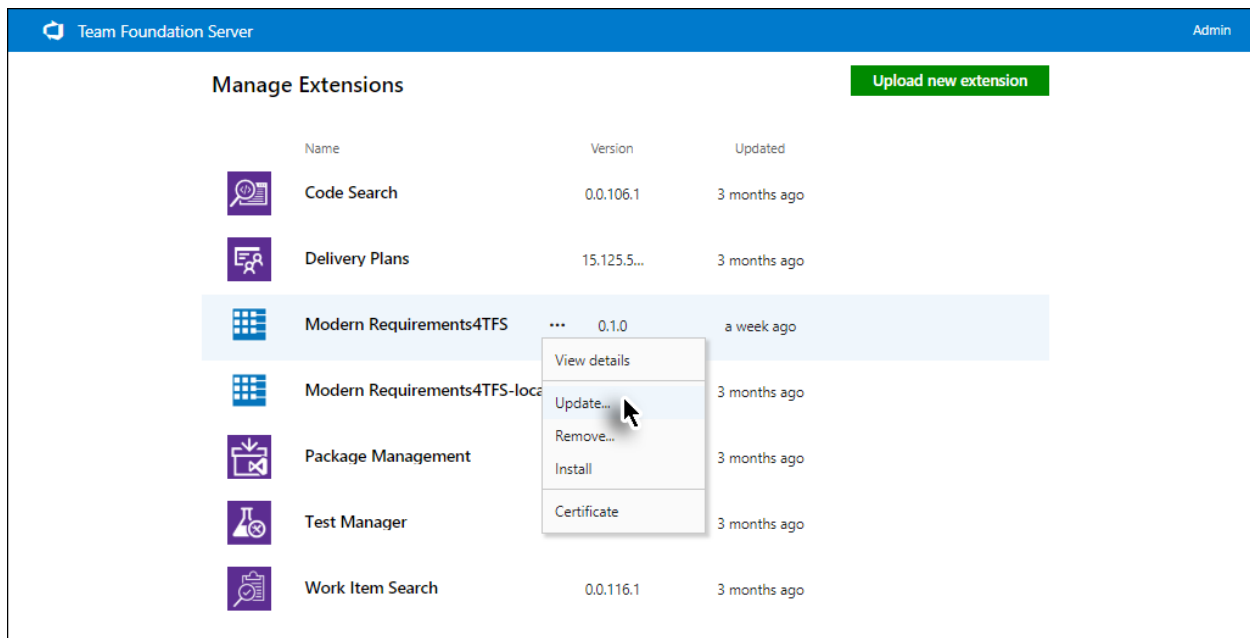
Upload new extension

Name	Version	Updated
 Code Search Code Search provides fast, flexible and accurate search...	0.0.106.1	2 months ago
 Package Management Create, host, and share packages with your team	15.112.11...	2 months ago
 Sean Test A sample Visual Studio Services extension.	0.1.3	6 days ago
 Test Manager Integrated test management system for all your manua...	15.112.73...	2 months ago

OR

In case Modern Requirements4DevOps extension already exists and needs to be updated then:

5. Right click on the Modern Requirements4DevOps extension → select **Update...** option.










Team Foundation Server

Admin

Manage Extensions

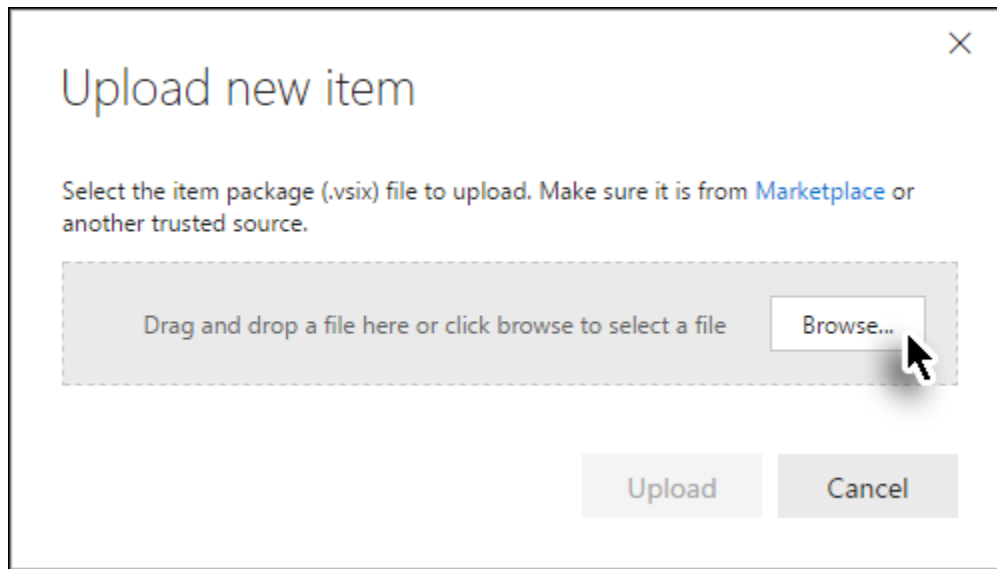
Upload new extension

Name	Version	Updated
 Code Search	0.0.106.1	3 months ago
 Delivery Plans	15.125.5...	3 months ago
 Modern Requirements4TFS	0.1.0	a week ago
 Modern Requirements4TFS-loc		3 months ago
 Package Management		3 months ago
 Test Manager		3 months ago
 Work Item Search	0.0.116.1	3 months ago

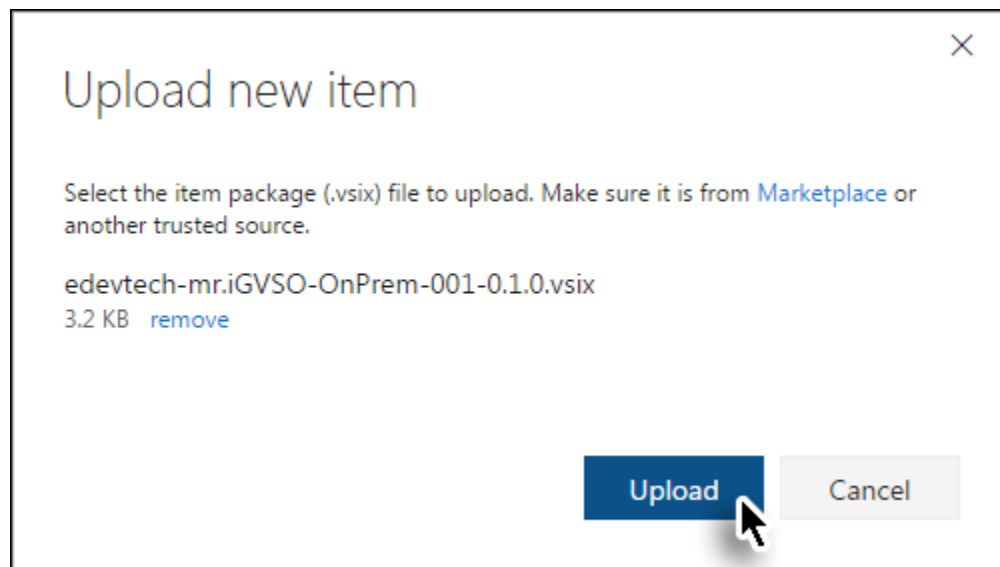
This would update the Modern Requirements4DevOps extension in all DevOps collections simultaneously, without the need to update each one individually by the user.

For new installations continue with step # 6.

6. Click the **Browse...** button.



7. Navigate and select the relevant VSIX file (created at the end of the installation in the last section).
8. Click **Upload**.



9. Select the desired collection and click **Continue**.

Modern Requirements4DevOps

by edevtech-mr

Select team project collection

Server: **steve**

Collection:

Continue

Confirm

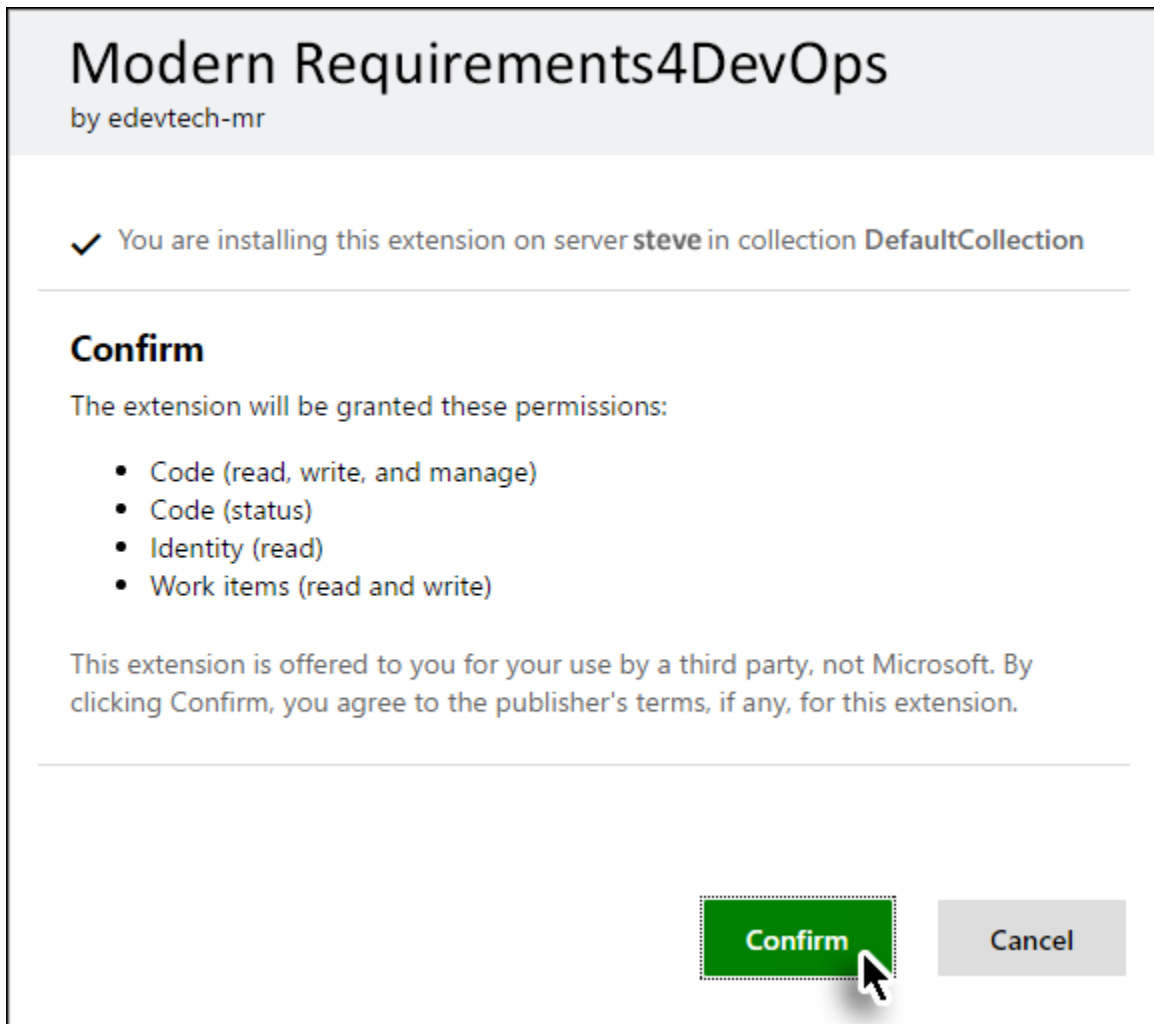
The extension will be granted these permissions:

- Code (read, write, and manage)
- Code (status)
- Identity (read)
- Work items (read and write)

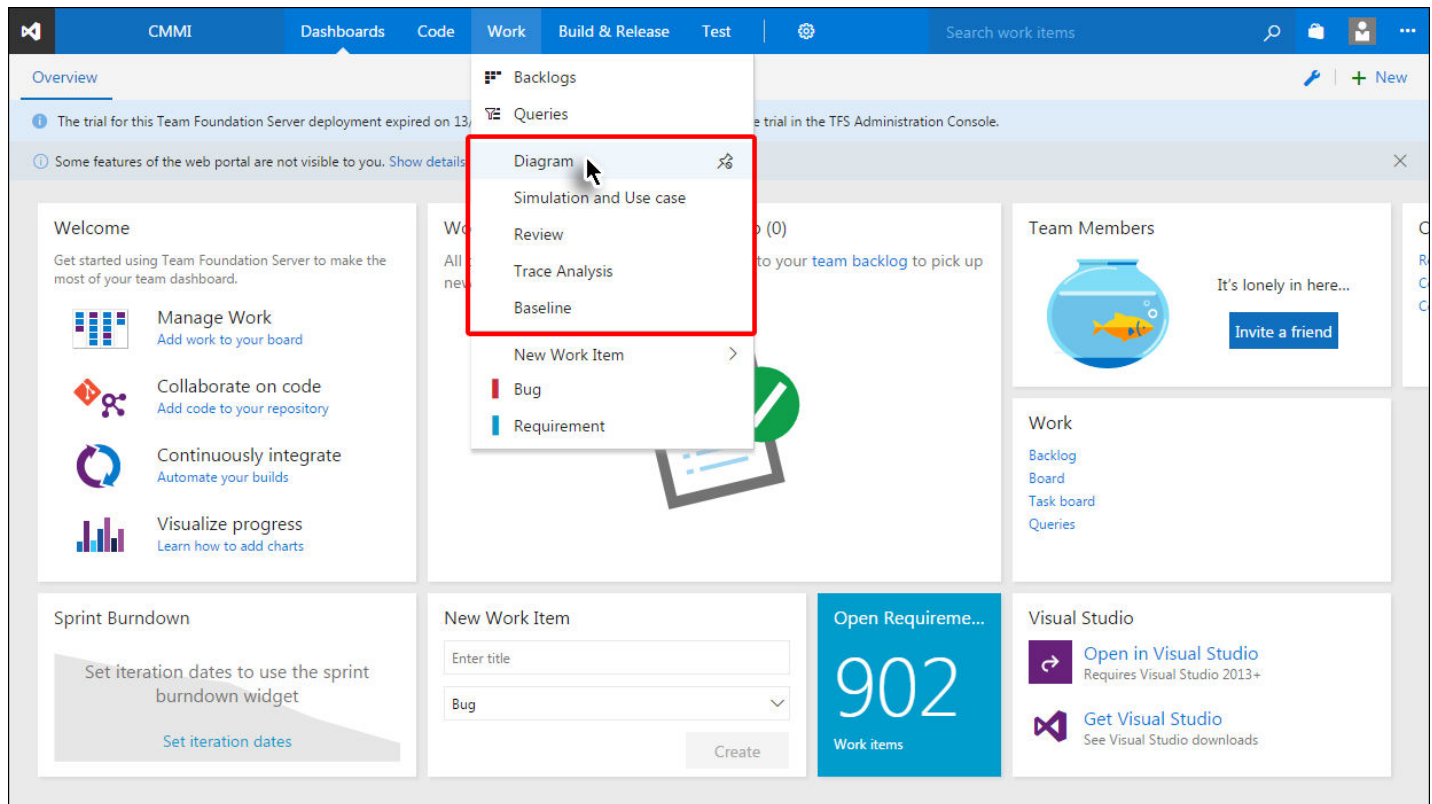
This extension is offered to you for your use by a third party, not Microsoft. By clicking Confirm, you agree to the publisher's terms, if any, for this extension.

Confirm **Cancel**

10. Click **Confirm**.



The *Modern Requirements4DevOps Embed options* become accessible through the **Work** tab.



IN CASE USER CAN'T FIND VSIX FILE

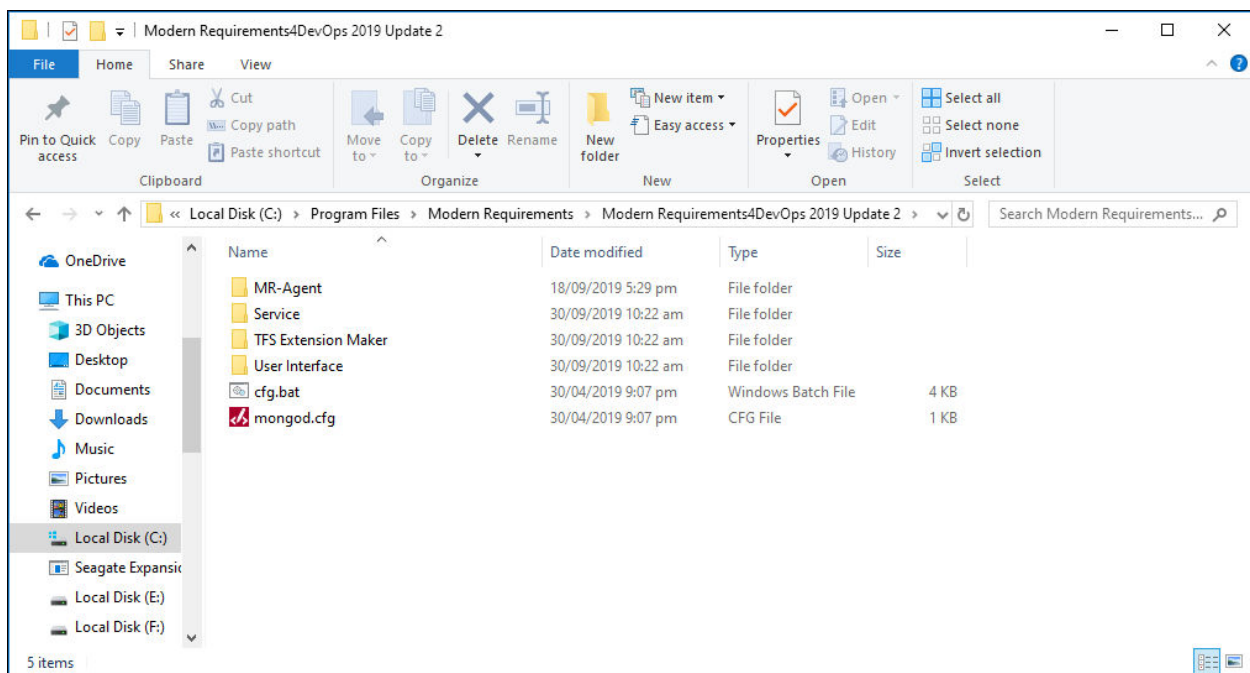
In case a user does not find the VSIX, User can generate and deploy the extension in two ways:

1. Using Windows GUI Environment
2. Using Windows Command Prompt

USING GUI ENVIRONMENT

In case of GUI following deployment Instructions are to be followed, to create and deploy TFS Extension:

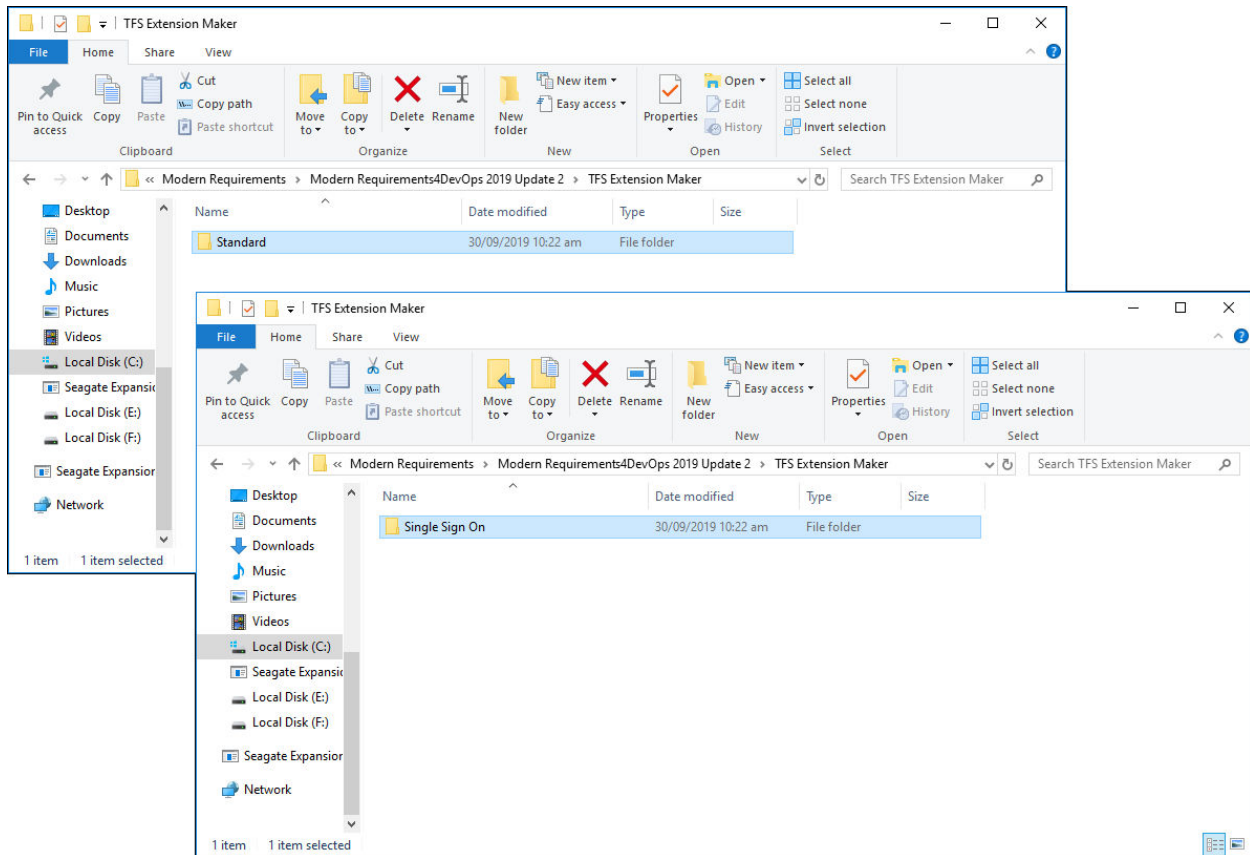
1. Go to the installation folder of Modern Requirements4DevOps e.g. C:\Program Files (x86)\Modern Requirements\Modern Requirements4DevOps 2019 Update 2



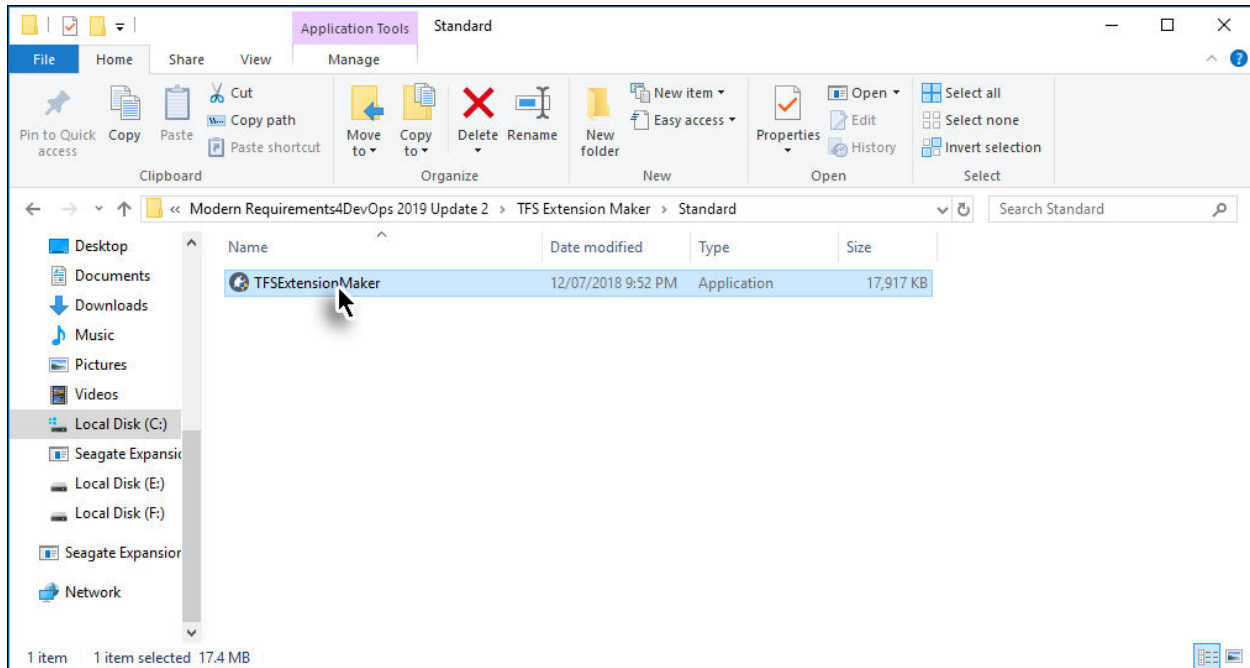
2. Further navigate inside **TFS Extension Maker** folder.

Depending upon the selected type of installation; there would a folder named:

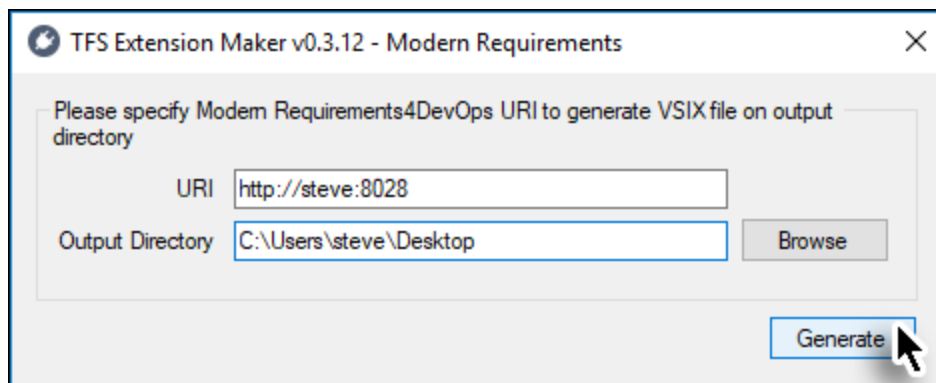
- **Standard** (for standard installation)
- OR
- **Single Sign On** (for Single Sign On installation)



3. Navigate inside the folder (whichever is present in the **TFS Extension Maker** folder) and double-click the file **"TFSExtensionMaker.exe"**

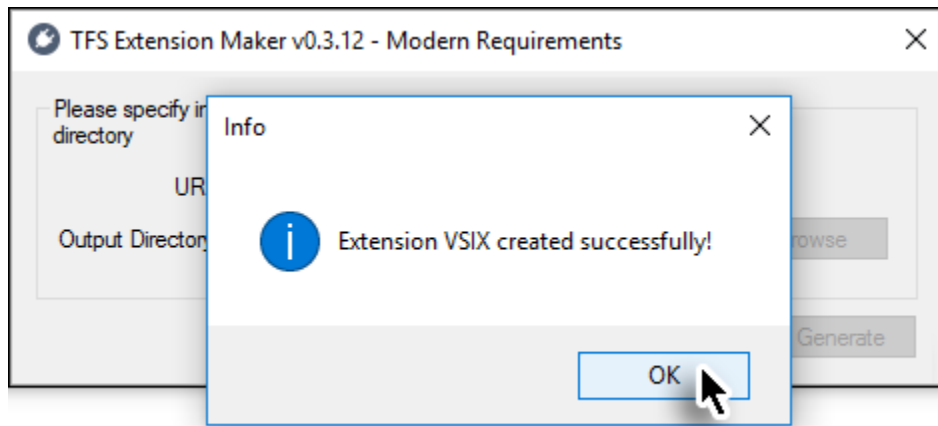


4. Provide required information: (i.e. URI and Output folder) and click the **Generate** button.



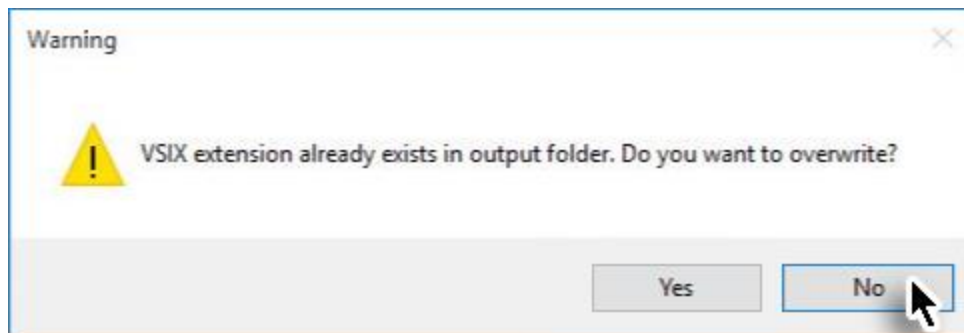
VSIX file will be generated at the desired location.

5. Click **OK** button to close the confirmation message box.



VSIX overwrite warning appears.

6. Click **No** button to close the warning box.



Refer to point # 2 (in Deploying TFS Extension using VSIX file on Desktop section) onwards to deploy TFS Extension

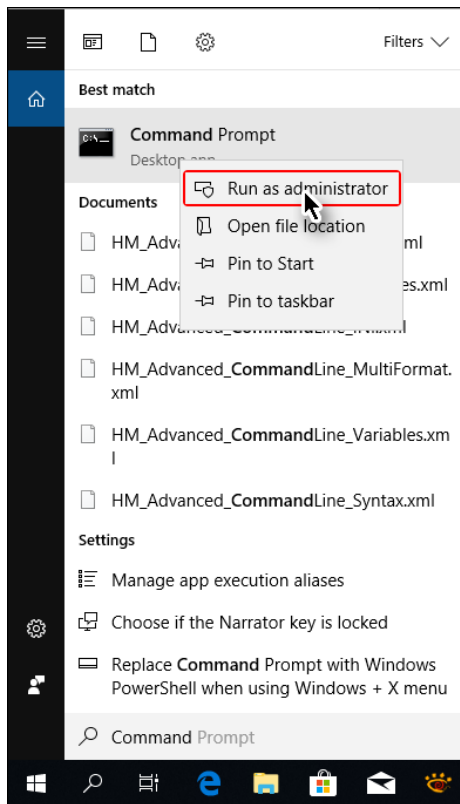
USING COMMAND PROMPT

The command used at the command prompt has the following structure:

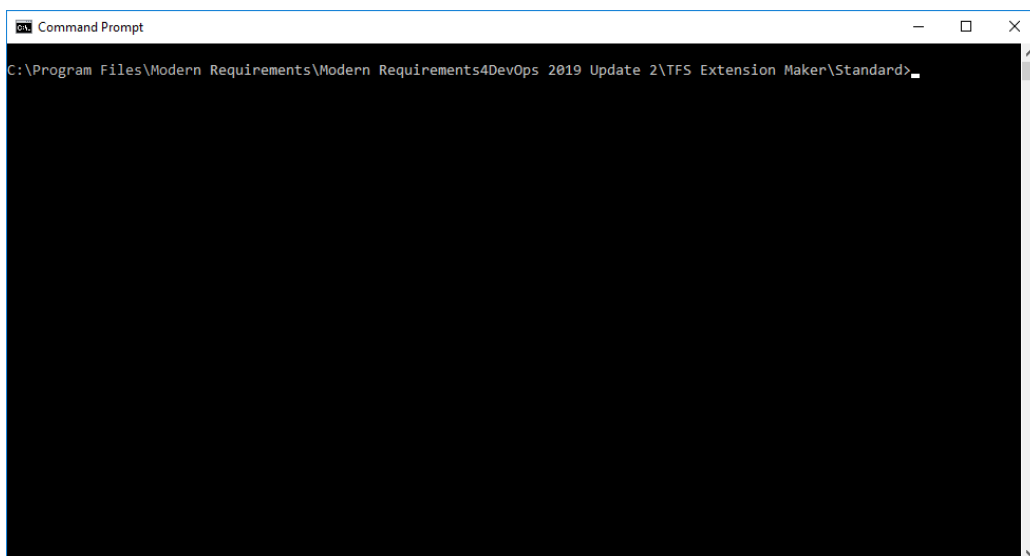
```
TFSExtensionMaker.exe --baseuri <Base URI> --out <VSIX Output Path> [--override] <true|false> [--publisher] <Publisher Name[default:edevtech-mr]> [--version] <VSIX Version[default:0.1.0]> [--scope] <full|less> [--exttype] <default|project|user>
```

Following deployment instructions are to be followed, to create and deploy TFS Extension using Command Prompt:

1. Open command prompt using **Run as administrator** option.

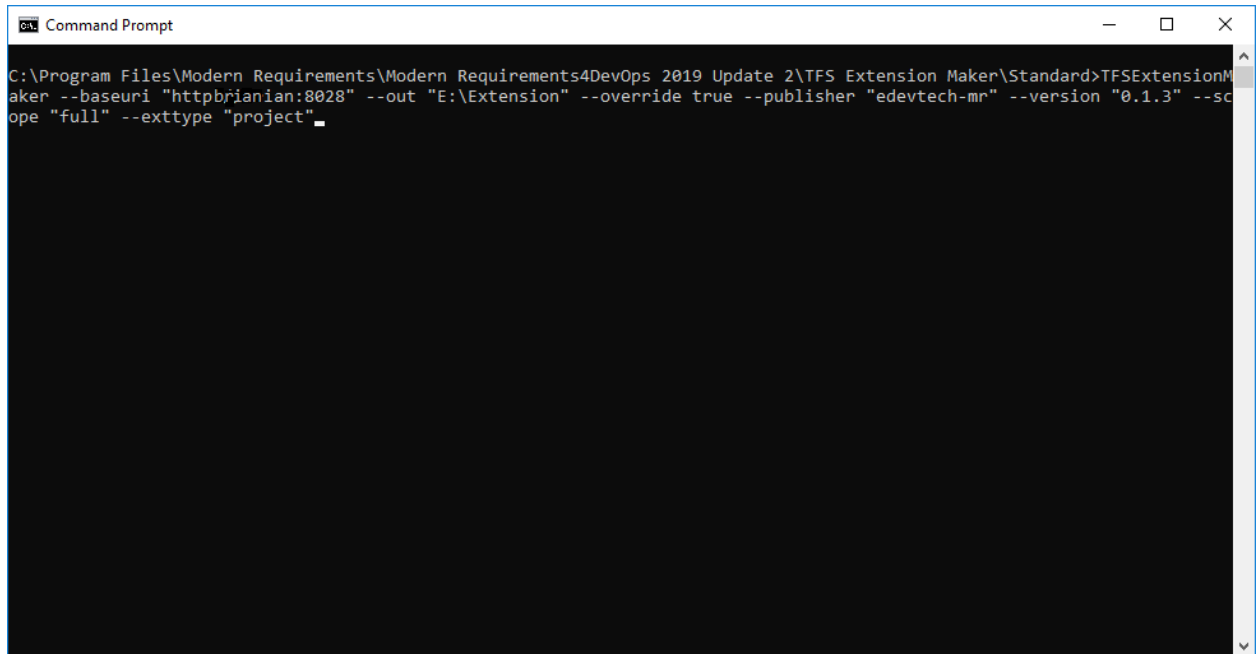


2. Navigate to the **TFS Extension Maker** folder within the installation folder (i.e. <Installation drive>:\Program Files\Modern Requirements\Modern Requirements4TFS 2018 Update 3\TFS Extension Maker\Standard)



3. Enter the following command:

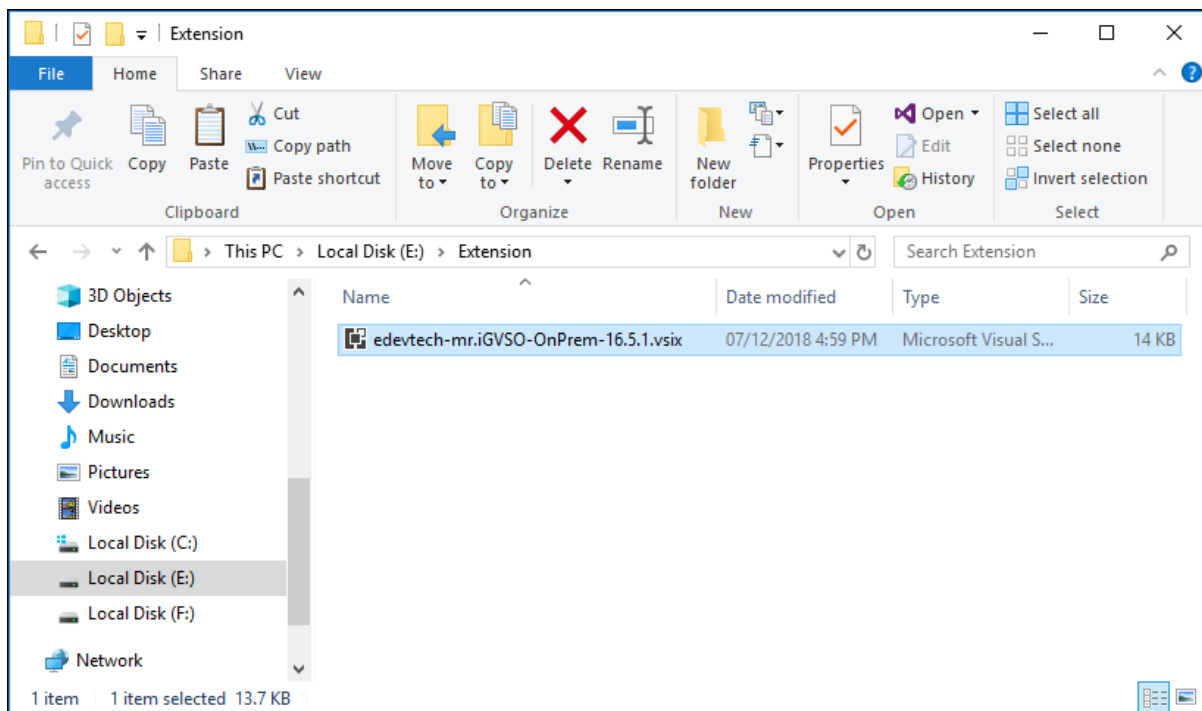
TFSExtensionMaker.exe --baseuri "<http://<server name>:8028>" --out "<Output directory path>" --override true --publisher "edevtech-mr" --version <TFS Extension maker version> --scope "full" --exttype "project"



```
Command Prompt

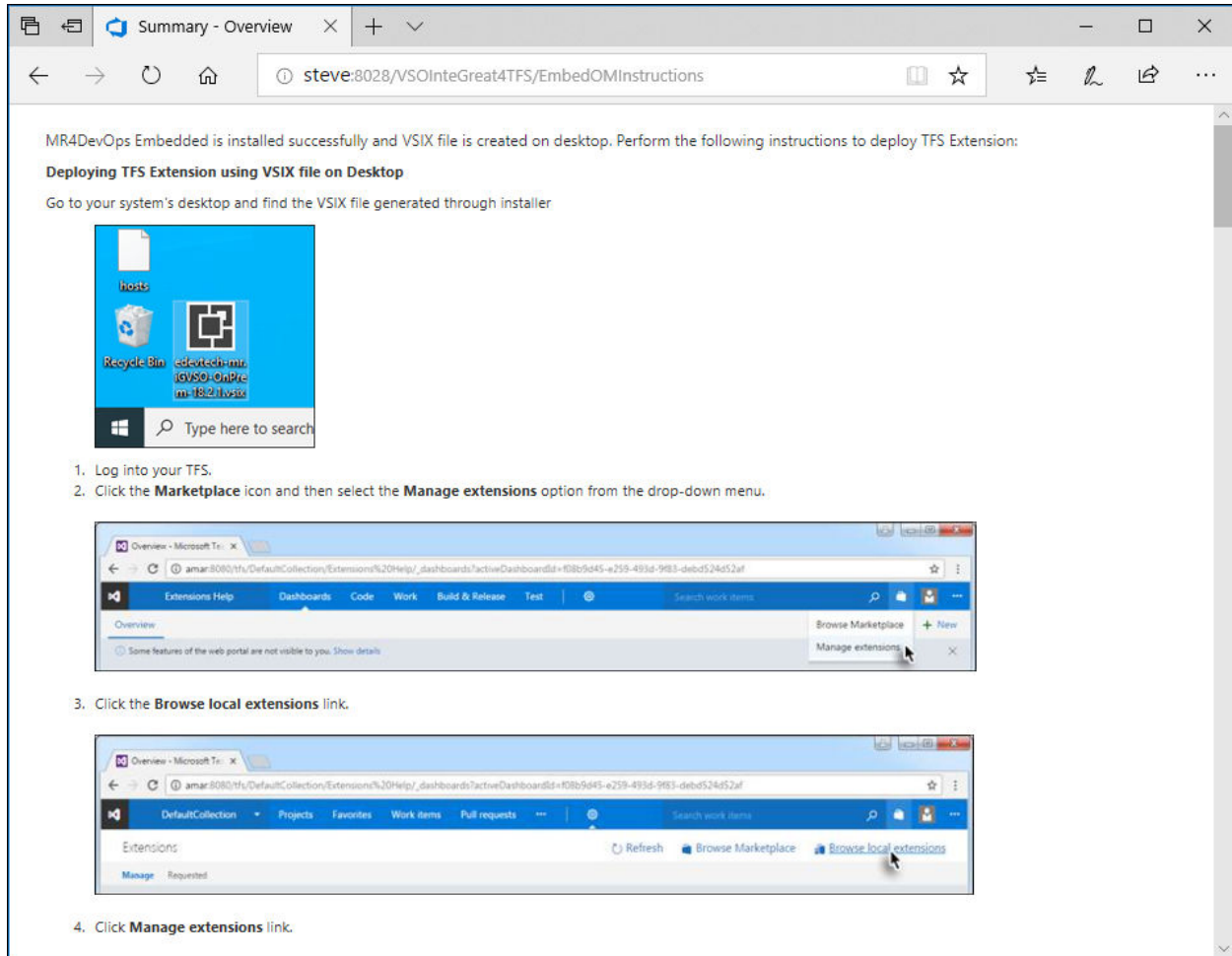
C:\Program Files\Modern Requirements\Modern Requirements4DevOps 2019 Update 2\TFS Extension Maker\Standard>TFSExtensionM
aker --baseuri "httpbrianian:8028" --out "E:\Extension" --override true --publisher "edevtech-mr" --version "0.1.3" --sc
ope "full" --exttype "project"
```

4. Check the provided location in command.



5. Type this address with the server name, in a web browser:

<http://<server name>:8028/VSOInteGreat4TFS/EmbedOMInstructions>



MR4DevOps Embedded is installed successfully and VSIX file is created on desktop. Perform the following instructions to deploy TFS Extension:

Deploying TFS Extension using VSIX file on Desktop

Go to your system's desktop and find the VSIX file generated through installer

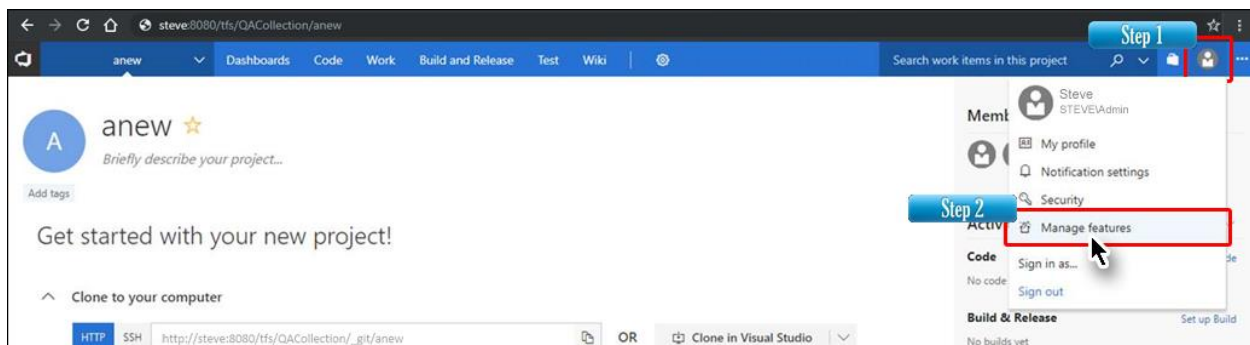
1. Log into your TFS.

2. Click the **Marketplace** icon and then select the **Manage extensions** option from the drop-down menu.

3. Click the **Browse local extensions** link.

4. Click **Manage extensions** link.

6. Follow the instructions and install the extension.
7. To enable features, go to the desired project and select **Manage Features / Preview Features** option.

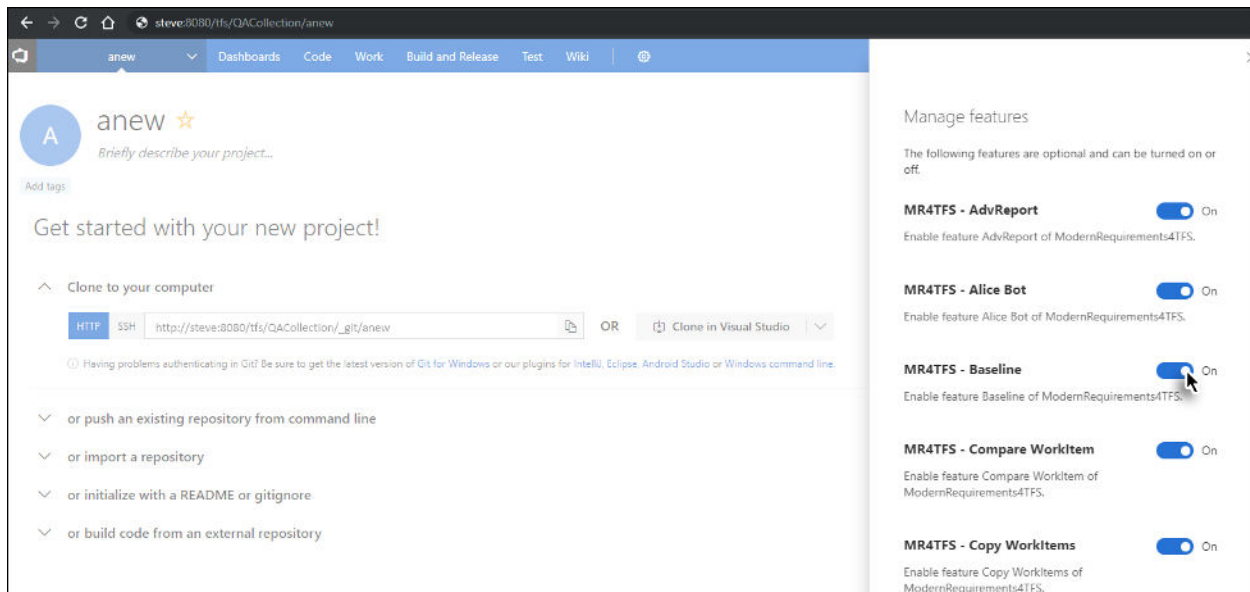


Step 1

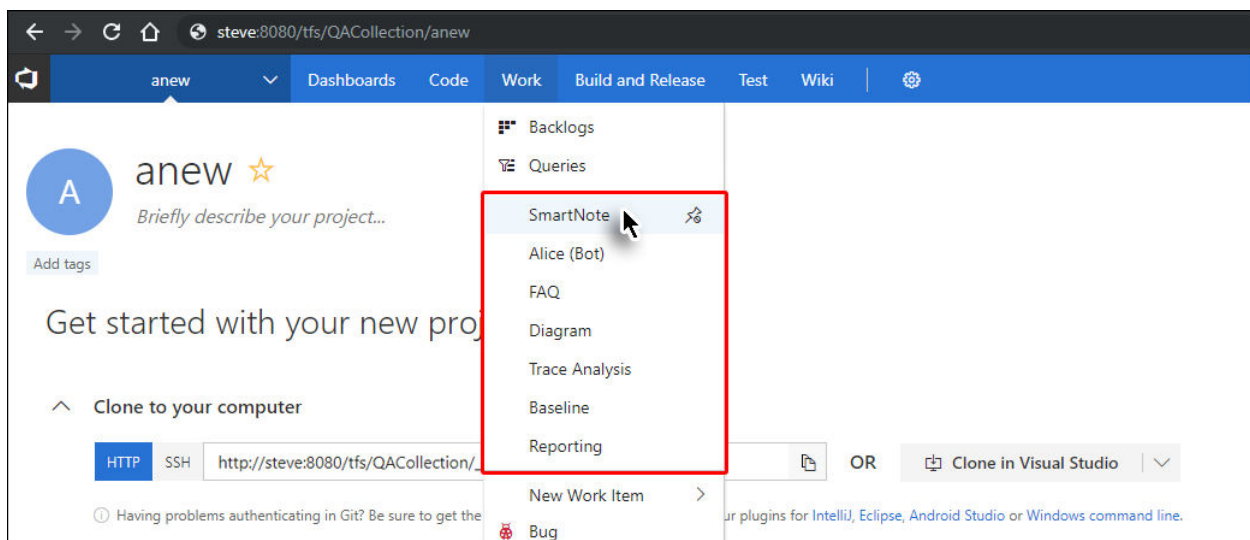
Step 2

Manage features

8. Select and enable the desired modules/features.



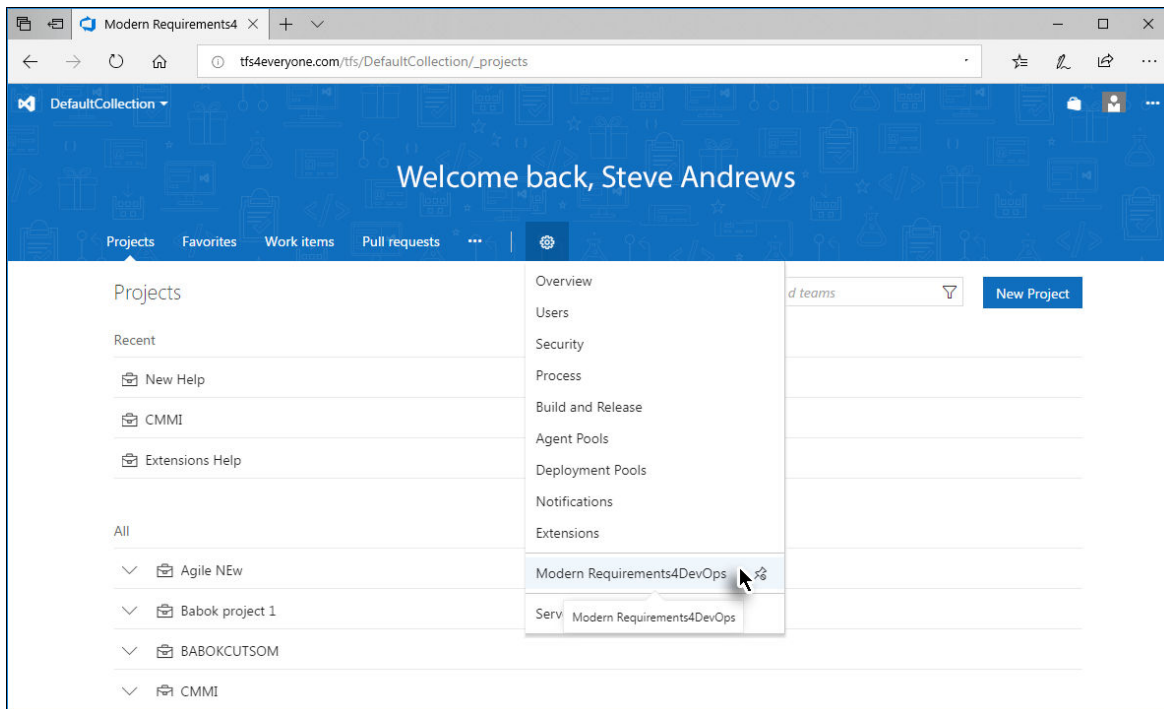
The enabled features will become accessible under the **Work** option.



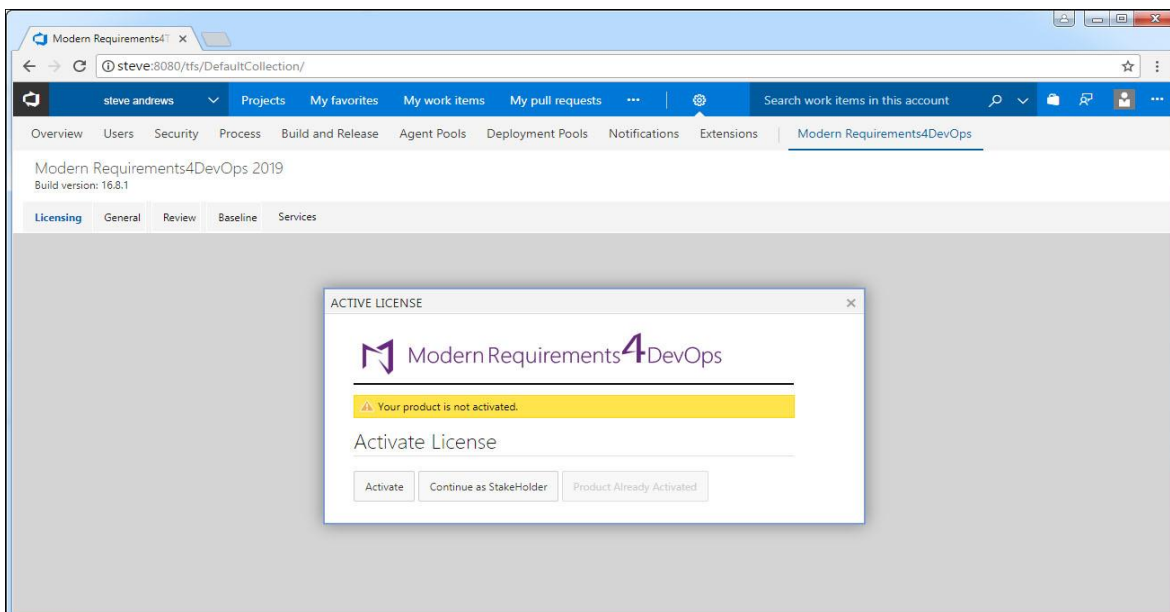
ACTIVATION (EMBEDDED)

To activate the embedded version, you need to follow the steps as described below:

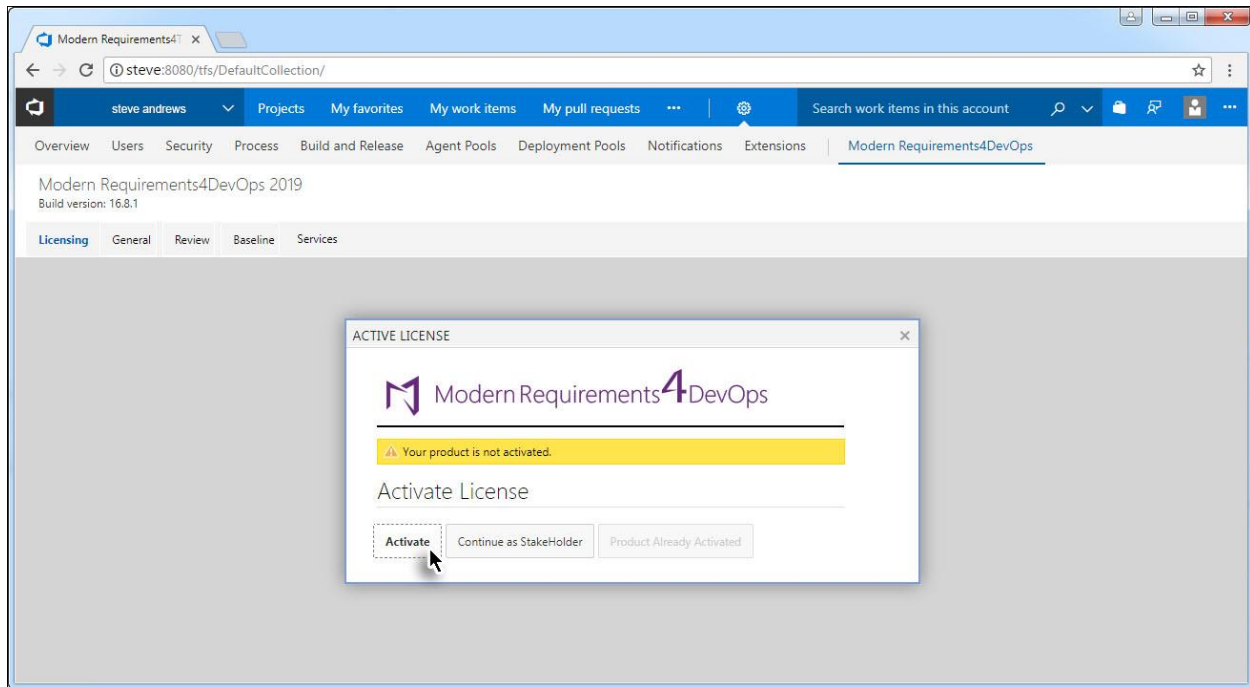
1. Access your TFS using a browser and select the **Modern Requirements4DevOps** option under the **Settings** tab.



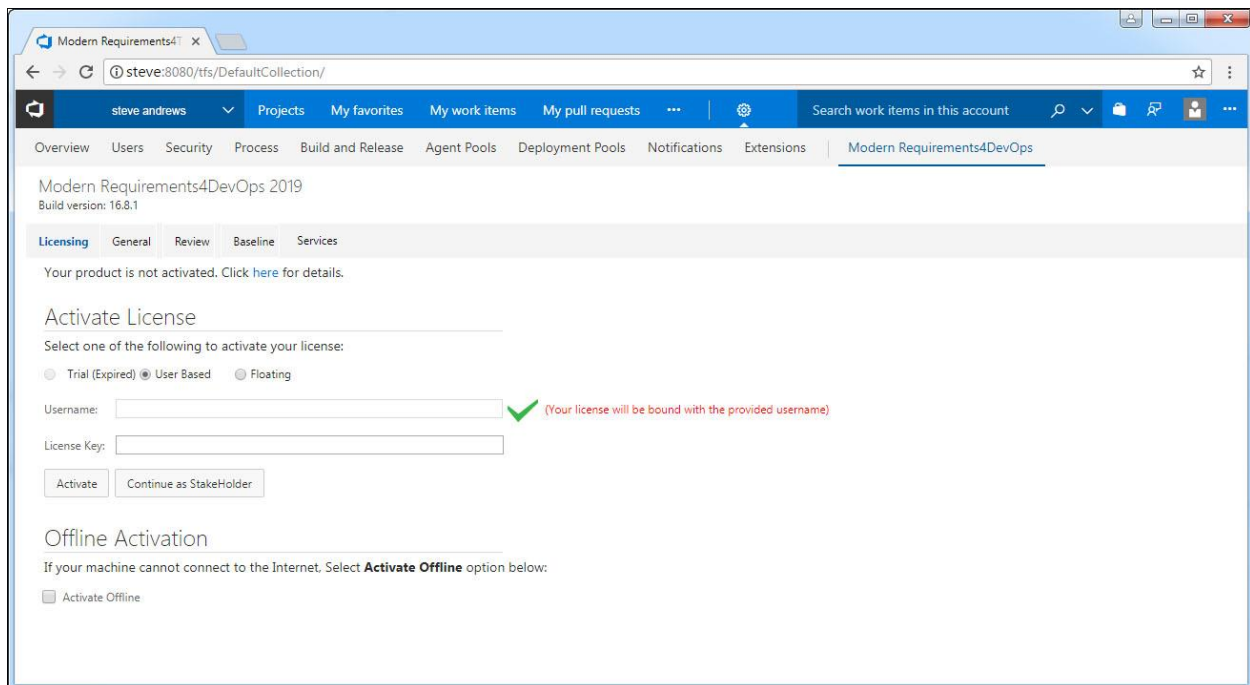
2. If the product has not been activated the following message will be displayed:



3. Click **Activate**.



4. You are taken to the License Activation Page.



Proceed to the User Based Activation section below to complete the activation process.

USER BASED ACTIVATION

1. Select the **User Based** type of license (if not already selected).

usteamqa / Settings / Modern Requirements4Dev...

Modern Requirements4DevOps 2021 Update 1
Build version: 23.7.1.1

Licensing

Your product is not activated. Click [here](#) for details.

Activate License

Select one of the following to activate your license:

☐ Trial (Expired) ☒ **User Based** ☐ Floating

Username: (Your license will be bound with the provided username)

License Key:

Offline Activation

If your machine cannot connect to the Internet, Select **Activate Offline** option below:

☐ Activate Offline

2. Enter the relevant license key and click **Activate**.

Modern Requirements4DevOps 2021 Update 1
Build version: 23.7.1.1

Licensing

Your product is not activated. Click [here](#) for details.

Activate License

Select one of the following to activate your license:

☐ Trial (Expired) ☒ User Based ☐ Floating

Username: (Your license will be bound with the provided username)

License Key:

Offline Activation

If your machine cannot connect to the Internet, Select **Activate Offline** option below:

☐ Activate Offline

On successful activation, you'll be taken to the Browse Page, where you can open the team project of your choice.

FLOATING ACTIVATION

1. Select the **Floating** type of license.

Modern Requirements4DevOps 2021 Update 1
Build version: 23.7.1.1

Licensing

Your product is not activated. Click [here](#) for details.

Activate License

Select one of the following to activate your license:

☐ Trial (Expired) ☐ User Based ☒ Floating

Username: ✓ (Your license will be bound with the provided username)

Floating Uri:

2. Enter the Floating URL and click **Activate**.

Modern Requirements4DevOps 2021 Update 1
Build version: 23.7.1.1

Licensing

Your product is not activated. Click [here](#) for details.

Activate License

Select one of the following to activate your license:

☐ Trial (Expired) ☐ User Based ☒ Floating

Username: ✓ (Your license will be bound with the provided username)

Floating Uri:

On successful activation, you'll be taken to the Browse Page, where you can open the team project of your choice.

OFFLINE ACTIVATION

1. Select the **Activate Offline** check box.

Modern Requirements4DevOps 2021 Update 1
Build version: 23.7.1.1


Licensing

Your product is not activated. [Click here](#) for details.

Activate License

Select one of the following to activate your license:

☐ Trial (Expired) ☒ User Based ☐ Floating

Username:  (Your license will be bound with the provided username)

License Key:

Offline Activation

If your machine cannot connect to the Internet, Select **Activate Offline** option below:

☒ **Activate Offline**

2. Follow the given instructions to activate.

Modern Requirements4DevOps 2021 Update 1
Build version: 23.7.1.1


Licensing

Your product is not activated. [Click here](#) for details.

Activate License

Select one of the following to activate your license:

☐ Trial (Expired) ☒ User Based ☐ Floating

Username:  (Your license will be bound with the provided username)

License Key:

Offline Activation

If your machine cannot connect to the Internet, Select **Activate Offline** option below:

☒ **Activate Offline**

Follow the below steps to activate product:

1. Click on **Generate Request File** button.
2. Send Generated Request File to <mailto:support@modernrequirements.com>
3. Click on **Apply License File** button to apply offline.

Drop files here to upload

On successful activation, you'll be taken to the Browse Page, where you can open the team project of your choice.

ACTIVATION UNSUCCESSFUL ERROR

Modern Requirements4DevOps 2021 Update 1
Build version: 23.7.1

Licensing

Your product is not activated. Click [here](#) for details.

✖ Activation is unsuccessful. Cannot connect to server. Please check your internet connection settings. Click [here](#) to view error details.

Activate License

Select one of the following to activate your license:

☐ Trial ☒ User Based ☐ Floating

Username: ✓ (Your license will be bound with the provided username)

License Key:

Offline Activation

If your machine cannot connect to the Internet, Select **Activate Offline** option below:

☐ Activate Offline

Very rarely, a message will pop up saying that the activation has been unsuccessful, as seen in the image above. In most cases, this error is due to problems in Internet connectivity. Users have to resolve their connectivity problems themselves in order to successfully activate the application.

This message is also displayed when secured environment is blocking proxy from firewall, or due to applied network policy. To resolve the problem in this case, users have to provide their network department with the following URL and ask the department to enable it:

<https://modernrequirements.compliance.flexnetoperations.com:443/deviceservices>

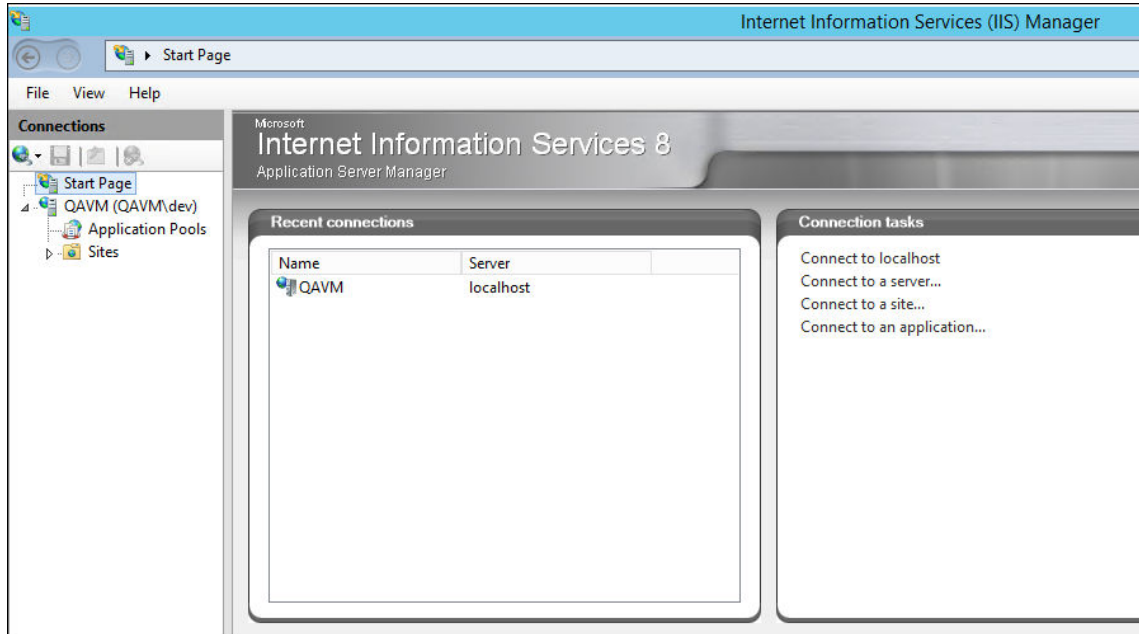
APPLICATION SETTINGS OF UI FOR MR CREDENTIALS (AZURE DEVOPS SERVICES ONLY)

After installing the build on Azure DevOps (VSTS), the user needs to update '**redirectURI**' property in configuration to the URL of UI Deployment for ModernRequirement4DevOps (MR) credentials to work for review approval.

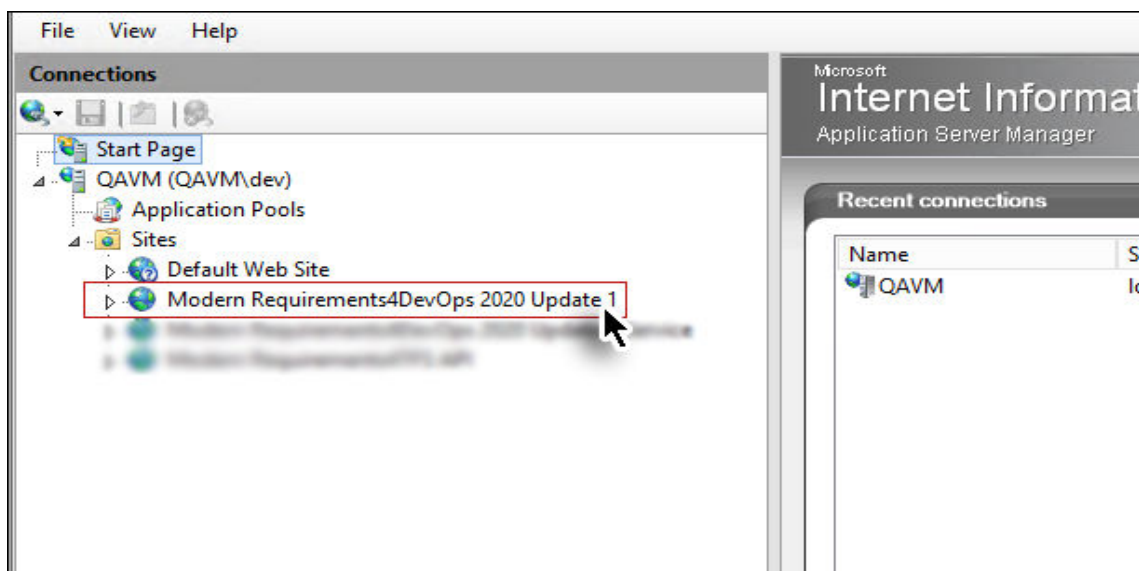
Note: This is only for those users who use **Modern Requirements4DevOps on Azure DevOps (VSTS)**. This doesn't apply to users who have installed the application on their machine as an Embedded or Standalone version.

This is how it can be done:

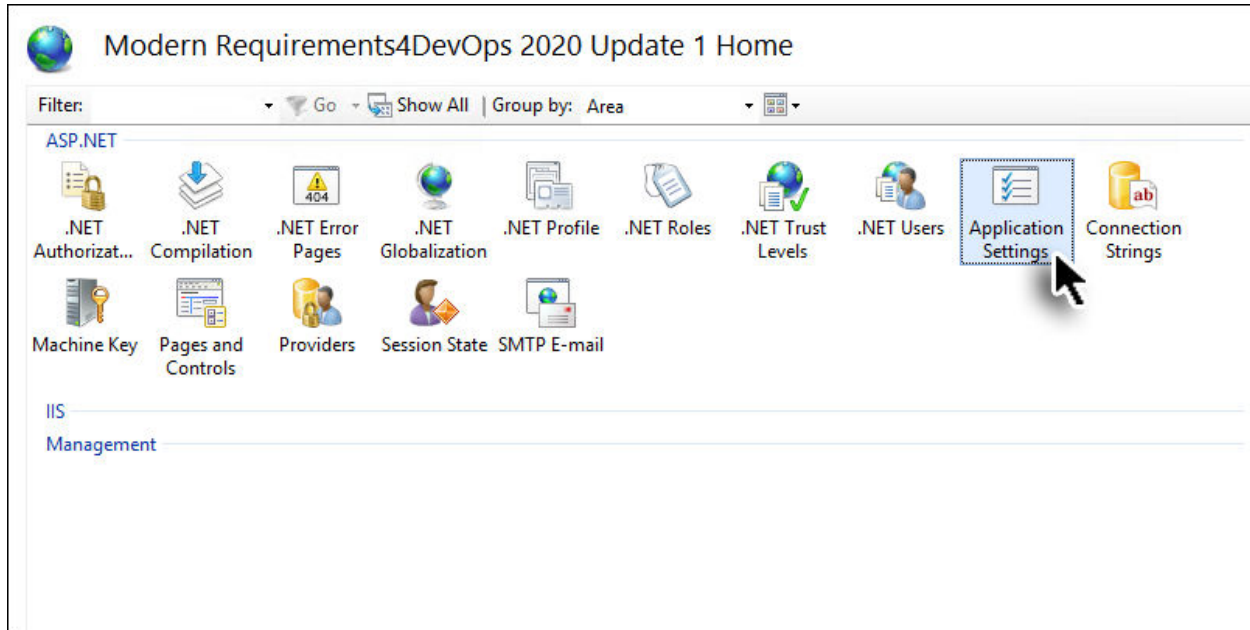
1. Open "IIS Manager".



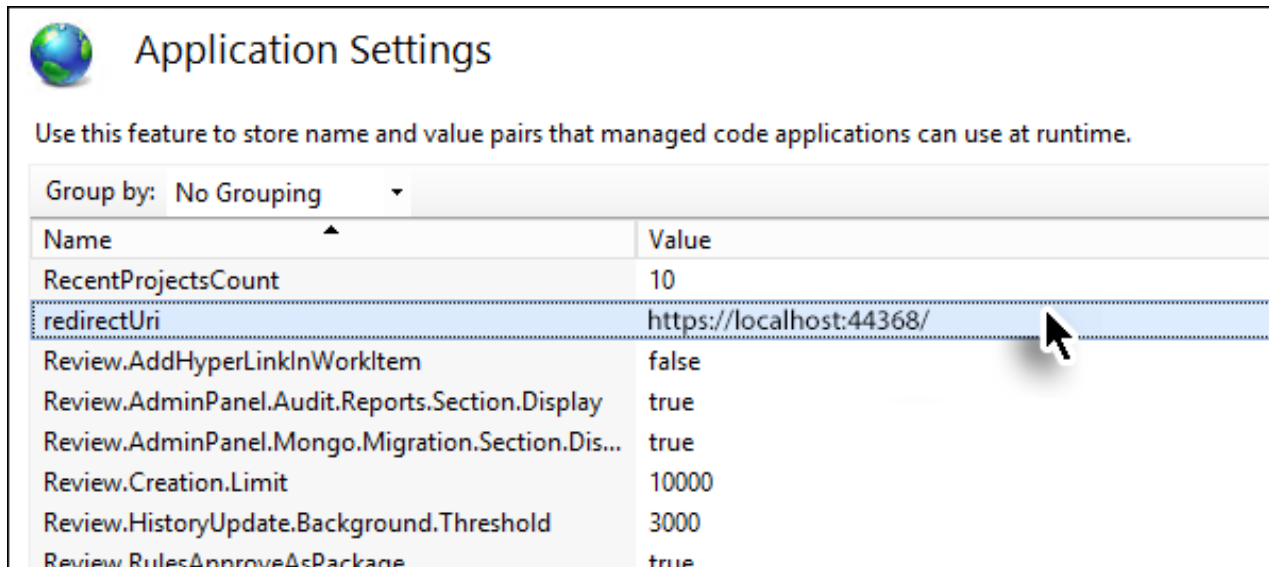
2. Select **ModernRequirements4DevOps UI** under 'Sites' folder.



3. Open 'Application Settings'



4. Scroll down to "redirectUri" field and double click on it to edit.



- In the 'Value' field, provide the base URL and port. For example, <https://steve:8028/>

Review.AdminPanel.Audit.Reports.Section.Display	true
Review.AdminPanel.Mongo.Migration.Section.Dis...	true
Review.Creation.Limit	10000
Review.HistoryUpdate.	
Review.RulesApproveA	
Review.RulesApproveA	
Review.RulesReenterPa	
Review.RulesReenterPa	
Review.RulesStatesVisib	
ReviewMapping	
ServiceAddress	
SessionRefreshTime	
ShowAnalysisTab	
ShowBackwardUtilityC	
ShowCopyBaseline	true
ShowRenameBaseline	true
ShowRollBackWorkItem	true
ShowScenario	false
ShowTreeGridControl	true

Edit Application Setting
?
X

Name:

Value:

- Press "OK" to save the changes.

Review.AdminPanel.Audit.Reports.Section.Display	true
Review.AdminPanel.Mongo.Migration.Section.Dis...	true
Review.Creation.Limit	10000
Review.HistoryUpdate.	
Review.RulesApproveA	
Review.RulesApproveA	
Review.RulesReenterPa	
Review.RulesReenterPa	
Review.RulesStatesVisib	
ReviewMapping	
ServiceAddress	
SessionRefreshTime	
ShowAnalysisTab	
ShowBackwardUtilityC	
ShowCopyBaseline	true
ShowRenameBaseline	true
ShowRollBackWorkItem	true
ShowScenario	false
ShowTreeGridControl	true

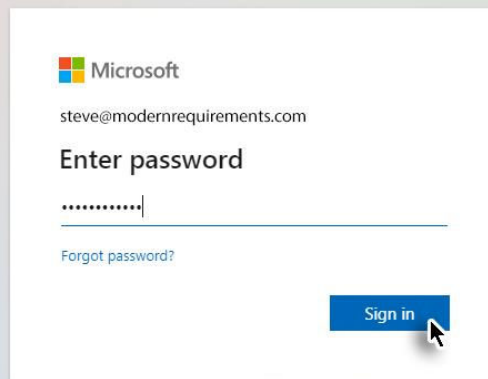
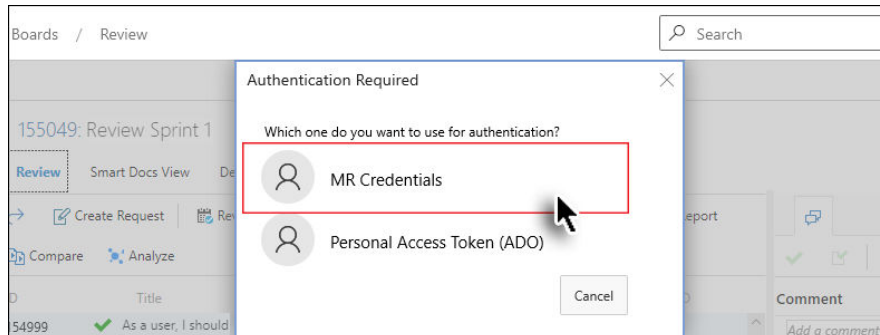
Edit Application Setting
?
X

Name:

Value:

MR CREDENTIALS REGISTRATION ERROR

Please note that the above configuration is necessary for **MR Credentials** to work. If you do not deploy the above configuration, you will get the following error message during MR Credentials registration process while doing the approval of a work item using E-Signature in the Review module.



To avoid this error, you need to deploy the above [configuration settings](#) for MR Credentials to work

