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INTRODUCTION

This Installation Guide elaborates the installation of Modern Requirements4TFS using detailed steps. The guide is divided into the following three sections:

1. System Requirements
2. Installation Process
3. Activation

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

The guide elaborates both the embedded and standalone flavors of Modern Requirements4TFS. Normally a section is applicable to both types of installation, however if a section is valid only for a particular type, that type is mentioned at the end of the section heading.

The document also has an appendix that explains additional information deemed necessary for installation and proper working of Modern Requirements4TFS.

SYSTEM REQUIREMENTS

SOFTWARE REQUIREMENTS

1. Operating System: Windows Server 2012, 2008 R2 or Windows 7, 8, 8.1,10
2. Internet Explorer 10 or above, Chrome, Mozilla Firefox 47.0.1 or above
3. IIS 7 or above
4. Microsoft .Net Framework 4.5 or above
5. ASP.NET 4.5

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

Credentials required for installing Modern Requirements4TFS should have Administrator rights on Machine. In other words, user installing on his/her machine should use admin credentials (or credentials which have administrator rights on it) for proper installation.

For regular Team Projects, the user of a machine on which Modern Requirements4TFS is deployed must have administrative rights on TFS Collection (or added in Application Domain in IIS).

Note: To access GIT enabled team projects, logged-In Domain User of a machine on which Modern Requirements4TFS is deployed must have authenticated rights on TFS Collection (or added in Application Domain in IIS).

HARDWARE REQUIREMENTS

1. RAM: At least 4GB (higher required if executing TFS Work Item Queries greater than 100,000)
2. Hard Drive Space: 200 MB
HARDWARE REQUIREMENTS FOR REDIS

According to Modern Requirements4TFS, approx. memory usage per user = 477.8495 KB (0.4666 MB)

Maximum Hard Drive Space Required = 1.5 * (Memory Size)

For instance in case of 8 GB Ram, maximum Hard Drive space occupied by Redis would be = 12GB

INSTALLATION GUIDELINES

- Users are provided with a single installation file i.e. Modern Requirements4TFS 2017 Update 4.exe
- Since Modern Requirements4TFS is a web-based application, it is preferable to install the file on a server; however any machine with IIS 7 or later installed would suffice.
- The Installation is required only once. After 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 REQUIREMENTS4TFS

1. Double click on the Modern Requirements4TFS 2017 Update 4.exe file to start the installation process.
The initial installation screen appears requiring the user to accept the terms and conditions for using the application.
2. Select the terms and conditions agreement check box and then click the **Next** Button.
3. Select type of installation (Standalone or embedded).
4. Click the **Next** button.
5. Enter Windows credentials* (for user login for the PC where the Services are being installed) and then click the **Next** Button.

* Application would be installed, even if incorrect windows credentials entered during the installation, however user will not be able to login into the application. An error message would show up on Sign-in page. Refer to [Appendix section](#), to find out how to update the windows credentials.
6. Configure **Redis Installation** options* and click the **Install** Button.

- **Auto Install Redis** option is the recommended option if Redis is not already installed on the target machine.
- In case Redis is already installed, then the users has to provide the name (or IP address) of the machine where Redis is installed.
- Similarly if Modern Requirements4TFS is being installed on a load balancing server, then the relevant details are to be provided here.
- The default port for Redis is 6379 however user can give another port number if he is installing Redis independently of Modern Requirements4TFS. Now at the time of Modern Requirements4TFS installation, same Port number should be given that was used during the Redis installation.
- Refer to your network department to get the value of Redis Password (if there is one).
- Use SSL option should be enabled where required. Refer to your network department in this regard as well.
- Both the Password and Use SSL options are optional, however their use mainly depends upon the procedures followed in any particular organization.
7. Click **Yes** Button in the warning message box.

The relevant files are installed.
8. Complete the Installation of Modern Requirements4TFS by clicking the Finish or Run Button.

Please note down the Service URL (highlighted in the above images). This would be helpful later on.

For users installing the Embedded version, TFS Extension is the next phase of installation (see next section). However for Standalone version this completes the installation process of Modern Requirements4TFS.
When user **runs** the above service URL in a browser, he will be taken to the following page:

![TFS Extension Maker](image.png)

The page shows images/steps to create and deploy TFS Extension. The following section deals with this process in detail.
CREATING AND DEPLOYING TFS EXTENSION

1. Unzip the installer zip file it will contain “TFSExtensionMaker.exe”.
2. Double-click the “TFSExtensionMaker.exe” file.
3. Enter the service URL (provided during installation) and Output folder and then click the Generate Button.
4. Click the OK Button to close the Extension VSIX message box

5. Log into your TFS Server.
6. Click Marketplace icon and then select the Manage extensions option from the drop-down menu.

7. Click the Browse local extensions link.
8. Click the **Manage extensions** Button.
9. Click the **Upload new extension** Button.

10. Click the **Browse...** Button.
11. Navigate and select the relevant VSIX file.
12. Click the **Upload** Button.
13. Select the desired collection and click the **Continue** Button.
14. Click the **Confirm** Button.

---

**inteGREAT4TFS (Local)**

by edevtech-mr

- You are installing this extension on server **steve** in collection **DefaultCollection**

**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.
The Modern Requirements4TFS Embed options become accessible through the **Work** tab.
ACTIVATION (EMBEDDED)

Most of the activation process for embedded version is similar to that of the standalone version however some early steps are unique to embedded version. These are described below:

1. Access your TFS Server using a browser and select the Modern Requirements4TFS embedded tab.

In case the product has not been activated; following message is displayed:
2. **Click the Activation Button.**

The user is taken to the License Activation Page.

![License Activation Page](image)

Proceed to User Based Activation section (elaborated below) to complete the activation process.
ACTIVATION (STANDALONE)

1. Open a browser window and enter the path shown at the end of installation followed by a colon and 8028/User/SignIn e.g. “http://steve:8028/User/SignIn”.
2. Click the Sign In Button on the Sign In Page.

Refer to the end of Appendix section if an “unexpected error” message is shown on the Sign In page.
If Modern Requirements4TFS has not been activated yet; the user is taken to the License Activation Page.

**USER BASED ACTIVATION**

3. Select **User Based** type of license.
4. Enter relevant license key and click the **Activate** Button.

On successful activation, the user is taken to the Browse Page, from where the desired Team Project can be opened.
FLOATING ACTIVATION

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

4. Enter the Floating URL and click the **Activate** Button.

On successful activation, the user is taken to the Browse Page, from where the desired Team Project can be opened.
OFFLINE ACTIVATION

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

4. Follow the given instructions to activate.

On successful activation, the user is taken to the Browse Page, from where the desired Team Project can be opened.
ACTIVATION UNSUCCESSFUL ERROR

Very rarely a user can come across the Activation Unsuccessful Error as described in the above image. 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 should ask them to allow it:

https://modernrequirements.compliance.flexnetoperations.com:443/deviceservices
APPENDIX: USER CONFIGURATIONS

ENABLING WINDOWS FEATURES MANUALLY

In case an organization has restrictions in working environment, which do not permit users you to enable or modify the “Windows Feature” settings; the users can follow these instructions to enable the window features manually.

1. Open the Control Panel and change the View by field value to “Category” (if not selected by default).

2. Click on the Programs option.
3. Select the “Turn Windows features on or off” option, under the ‘Programs and Features’ category.

![Windows Feature screen]

The **Windows Feature** screen would be displayed.

4. Select the highlighted features required for Modern Requirements4TFS. (refer to image below)

![Selected features]

To turn a feature on, select its check box. To turn a feature off, clear its check box. A filled box means that only part of the feature is turned on.
5. If Win8 or a higher version is installed on the machine; please also enable the features highlighted in the following image

![Windows Features](image)

**ADDING IIS BINDING INFORMATION IN CONFIG FILES**

If a user has bound any IP on the system then the web config file needs to be updated using the following steps:

1. Invoke `inetmgr` through Windows’s Run command/Start Menu.
2. Expand the node in the left-side panel of the Internet Information Services (IIS) Manager.

3. Click the **Application Pools** option.
4. Right click on Modern Requirements4TFS 2017 Update XX and select the Edit Binding option

The Site Bindings window will be displayed. The “IP Address” field would display which IP has been bound (if any).

5. Note the IP Address value e.g. 10.0.0.20 (in the above image) and go to the installation directory i.e. 
   <Default Installation Drive>:\Program Files (x86)\Modern Requirements\Modern Requirements4TFS 2017 Update 4\User Interface

6. Select the Web.config file among the list displayed in folder. (Highlighted in the above image).
7. Open the file in Notepad.

8. Search for the tag `<add key="ServiceAddress" value="......"/>` (selected in the following image) and update its value to `http://<machine name>:8027/` with IP address bound and noted above. i.e. value=`http://10.0.0.20:8027/`.

9. Save the file and close it.

   In case the user is not allowed to save the notepad file with changes on same directory then save it on the desktop first. Then copy it back to this directory i.e. location and replace.

10. Switch back to IIS Manager window and restart both inteGREAT services under “Sites” folder.
EMAIL CONFIGURATION FOR FEEDBACK OPTION

The email configuration is essential if the user wants to use the Feedback option in Simulation Module. This is because Modern Requirements4TFS automatically sends out emails to concerned stakeholders to get their feedback. If the email settings are not properly configured then these emails can’t be sent out and the feedback option cannot function properly. Following steps should be taken to configure the email settings for Modern Requirements4TFS:

1. Navigate to the following location on your computer: “C:\Program Files (x86)\Modern Requirements\Modern Requirements4TFS 2017 Update 4\Service”.

![Image showing file location]
2. Copy the “Web.config” file to another location (e.g. desktop) for editing.

3. Open the file using a text editor (e.g. Notepad).

Note: The highlighted section in the above image shows the section of the file that needs to be configured properly.
4. Now open your email client / email reader (e.g. Microsoft Outlook).

Note: The following steps show the process for Microsoft Outlook. If you are using another email reader then refer to its documentation for relevant steps.

5. Click on **File → Account Settings → Account Settings....**

6. Double-click on the desired email account from the list.
7. Note down the information highlighted in the window.

8. Click the More Settings ... Button.
9. Click the **Advanced** Tab.

![Image of Internet Email Settings window](image)

10. Note down the SMTP port highlighted in the window.

![Image of Internet Email Settings window](image)

11. After noting down all the required information; close down all the windows in Microsoft Outlook.

13. Update the **mail settings** section using the information gathered from Microsoft Outlook.

![Web.config file](image.png)

14. Save the **“Web.config”** file and replace the older version with this updated version at its original location (i.e. “C:\Program Files (x86)\Modern Requirements\Modern Requirements4TFS 2017 Update 4\Service”)

This completes the Email configuration process for the Feedback Option.
FIX FOR ACTIVATION LOST AFTER VM MACHINE RESTART (STANADALONE)

For any general Virtual Machine (of any O.S):

1. After Activation of License, if user is navigated to Activation page again (as shown below):

   OR following error page occurs with error message “An error occurred while processing your request.”

2. Remote desktop the Modern Requirements4TFS Deployed VM Machine.

3. Go to run window (by pressing Keyboard shortcut: [<windows key> + ‘R’]) and type “gpedit.msc”. Refer the screen shot below:

5. Select “Do not forcefully unload the user registry at user logoff” (highlighted below).

6. Change the setting from “Not Configured” to “Enabled”, and click Apply once done; Restart the VM machine and check it should resolve the issue.
If VDI (Virtual Desktop Infrastructure) has been implemented, follow these steps:

1. Remote desktop the Modern Requirements4TFS Deployed VM Machine.
2. Go to run window and Type %public%.
3. Select “Public Documents” folder and confirm “username.bin” (In case of OFFLINE Activation) OR “username.orf” (In case of ONLINE Activation) is present in folder.
4. If Yes; Kindly mention this in your email along with log files (<Default Drive>:\inetpub\wwwroot\walog) at: support@edevtech.com
5. If No; please ask VDI administrator to share Image of VM after activating license from all users. That image would persist all licensing information.
HOW TO UPDATE THE WINDOWS CREDENTIALS FOR MODERN REQUIREMENTS4TFS

During the installation of Modern Requirements4TFS, user login credentials are provided. These Windows credentials are saved in Modern Requirements4TFS settings and are used while running the application. If a user changes his Windows’ password after the installation of Modern Requirements4TFS then these settings become obsolete and the user may face problem running the application. For seamless working of Modern Requirements4TFS, the saved settings of the Windows Credentials should be consistent with the current Windows Credentials. In case a user has changed his password after installing Modern Requirements4TFS then the following steps should be taken to make the saved settings up-to-date:

1. Invoke `inetmgr` through Windows’s Run command/Start Menu.
2. Expand the node in the left-side panel of the Internet Information Services (IIS) Manager.

3. Click the **Application Pools** option.
4. Select inteGREAT4TFSsrv option (center-pane) and then click on **Advanced Settings...** under **Edit Application Pool** in right-side pane.

5. Select **Identity** option under **Process Model** section and then click the **Identity** Button.
6. Select **Custom account** option and then click the **Set**... Button.

7. Enter the latest Windows Credentials* and click the **OK** Button.

* The User name should be given in the format of `<Domain\Username>` as shown in the image.

Clicking the **OK** Button would save the settings.
8. Start the inteGREAT4TFSsrv by clicking the Start option under the Application Pool Tasks in the right-side pane.

Close all open windows to complete the process.

**HOW TO UPDATE WORK ITEM TYPE FOR SIMULATION, DIAGRAM AND USECASE**

A default mapping is embedded in application to support ‘Work Item to File Type’ functionality. So that when user creates new file, a page work item get created in connected team project according to the work item type stated in this file.

Complete the following steps to Update Work Item Type of a Page Work item:

1. Access the following path: `<Windows installation folder>\Program Files (x86)\Modern Requirements\Modern Requirements4TFS 2017 Update 4\Service\App_Data`
2. Look for the XML file ‘WIToFileTypeMapping’ in folder and open it.
3. Look for the field `<WorkItem id=’<WI Type>’ />` in respective module section and then update "<WI Type>" value accordingly.

4. Save as the file at some other location (e.g. Desktop).
5. Copy file from saved location and paste it in same installation folder (as mentioned above in Point # 1)
6. Restart application Service from IIS (Internet Information Services) Manager. (Refer to Appendix to see the process details)
7. Logon to the application.
8. Type text ‘inetmgr’ on Run Command.
9. Internet Information Service Manager Window will open.
10. In IIS Manager Window, select ‘Modern Requirements4TFS 2017 Service’ option from left panel.

11. Look for the section ‘Manage Web Site’ in Right side panel. First click on ‘Stop’ and then ‘Start’ the Service.

HOW TO CONFIGURE LOAD BALANCING FOR MODERN REQUIREMENTS4TFS

This section elaborates the configuration process of load balancing for Modern Requirements4TFS using detailed steps. It acts only as a framework to show how to configure load balancing for Modern Requirements4TFS. Installation steps are not covered here. For installation steps of individual applications, refer to their respective section in the guide.
The configuration process consists of the following seven steps:

1. Setup/Install the desired load balancing environment.
2. Install Modern Requirements4TFS on all servers.
3. Configure shared network drive for shared workspace.
4. Install/configure shared Redis server.
7. Repeat step 5 and 6 for all server on which Modern Requirements4TFS has been installed (for load balancing).

While most of the steps are quite straightforward, steps 5 and 6 are further elaborated below. Also note that both these steps refer to different files albeit with same name.

**CHANGE USER INTERFACE CONFIGURATION FILE**

The location of this file in Program Files (x86) is highlighted in the following image:

To complete this step; carry out the following elementary steps:

1. Open the Web.config file (as mentioned above), in editable mode.
2. Edit the following, to set the shared drive path *: `<add key="AppContentPath" value="<shared drive path>" />`
   
   *Note: The shared drive path is setup in step #3 of overall configuration process (mentioned in previous section)*

3. Comment the **SessionState timeout** command as following: `<!--<sessionState timeout="40" />-->

4. Uncomment the following section:

   ```
   <!--
   <sessionState timeout="40" mode="Custom" customProvider="localRedisCacheWithSSL"/>
   
   <add name="localRedisCacheWithSSL" type="Microsoft.Web.Redis.LocalMachineRedisSessionStateProvider" host="blue-session.redis.cache.windows.net" port="6388" accessKey="dkj..." />
   
   <add name="localRedisCacheWithSSL" type="Microsoft.Web.Redis.LocalMachineRedisSessionStateProvider" database="0" host="127.0.0.1" port="6379" ssl="false" accessKey="" />
   
   <sessionState/>
   -->
   ```

5. In the above section, set **customProvider** value to "RedisCacheAzure01". 
6. Comment the following line in above section:
   `<add name="LocalRedisCacheAzure01" type="Microsoft.Web.Redis.Redis.........">

7. Set Redis host, port and access key(password) value in the following line in above section:
   `<add name="RedisCacheAzure01" type="Microsoft.Web.Redis.Redis.........">

## CHANGE SERVICE CONFIGURATION FILE

The location of this file in Program Files (x86) is highlighted in the following image:

![Service Configuration File](image)

To complete this step; carry out the following elementary steps:

1. Open the **Web.config** file (as mentioned above), in editable mode.
2. Set shared drive path for workspace folder key (Same path assigned in Step #3)
   `<add key="WorkspaceFolder" value="%public%Documents">
3. Set **EnableLoadBalancer** key value to "true"
   `<add key="EnableLoadBalancer" value="true">
4. Set Redis storage value host, port and password
   `<add key="Persistence.RedisCache.ConnectionString" value="localhost:6379,DefaultDatabase=2,Password=ssl=false" />

*Note:* The values for these attributes are determined while installing Redis Server in Step 4 of overall configuration process (mentioned at the beginning of this section)

## HOW TO CHANGE THE LOCATION OF THE BASELINE FILE

Modern Requirements4TFS creates a local working folder on the machine where Modern Requirements4TFS is installed. The path can be changed but it is recommended when you are installing and using Modern Requirements4TFS for first time.

By doing this with existing installation; all existing created project data and files would be inaccessible. This approach will not be going to work for the existing projects by just copying existing content to new location. Once any existing file is changed or removed from location it might corrupt the whole project data.
Following steps needs to be performed to update the location:

1. Go to the location: <Modern Requirements4TFS Installation Drive>:\Program Files (x86)\Modern Requirements\Modern Requirements4TFS 2017 Update 4\Service
2. Open “web.config” file, Find tag: <add key="WorkspaceFolder" value="%public%/Documents"/>
3. Update value of “Workspace Folder” with the required location**.
4. Save the web.config file.
5. restart the IIS service.

**Location can be a shared Data Drive, or separate drive/folder.

P.S: By doing this with existing installation; all existing created project data and files would be inaccessible.
HOW TO DELETE OBSOLETE NFR TEMPLATES FROM FAQ MODULE

The obsolete NFR templates of the FAQ module appear when users try to create a new topic in the FAQ Module.

These templates appear due to a folder created during the installation of older versions of Modern Requirements4TFS (at that time named as inteGREAT4TFS). The following folder needs to be manually deleted by the users to get rid of these obsolete templates:

C:\Users\Public\Documents\inteGREAT4TFS\QWizard Templates\NFR
After deleting the folder user should re-sign in or refresh the application to confirm the disposition of the obsolete templates.

HOW TO PRE-FILL A SPECIFIC FIELD WHILE COPYING THE BASELINE USING MODERN REQUIREMENTS4TFS

You can prefill a specific field (s) of a work item when it is copied from one of the baseline to same or another project by changing in the IG4TFSUserSetting file in the Modern Requirements4TFS installation file. Following steps have to be performed

1. Close Modern Requirements4TFS application
2. Go to the location <Modern Requirements4TFS Installation Drive>:\Users\Public\Documents
3. Open the file IG4TFSUserSetting in the notepad.
4. Search for the below contents
a. Enter the name of the field within the ‘’ in the name field
b. Enter the Value to be pushed within the ‘’ in the Value field

```
'ConfigField': [
  {
    'Name': '',
    'Value': ''
  }
]
```

Basically, there are two approaches that user can do EITHER set a static value into the target project field

For example: User want to populate the ‘Description’ field of target project with value ‘login details’

(static text):

Name: ‘Description’
Value: ‘login details’

OR

Get value from source project field and set into the target project field For example: User want to populate the ‘Description’ field of target project with value of ‘Area Path’ field of source project:

Name: ‘Description’
Value: ‘@Area Path’ [Please note that to get value of a specific field, <Field name> must be mentioned with ‘@’ character]
5. If you want to add more than one field perform the following steps otherwise skip this step.

```json
'ConfigField': [
    {
        'Name': '',
        'Value': ''
    },
]
```

6. Save the file, if you don’t have the admin rights save the file on desktop and then replace it in the same folder with the existing file.
HOW TO DEFINE THE LINK TYPE RELATION WITH THE SOURCE WORKITEM WHILE COPYING THE BASELINE USING MODERN REQUIREMENTS4TFS

When you copy the work items from baseline using Modern Requirements4TFS to same or other project you can select the option of Link with the source Work Item. If you check this box (shown in the image below) by default it will create “Related” Relationship in the target project.

This can be changed to any relationship type defined in your process template by making the following changes

1. Go to the location <Modern Requirements4TFS Installation Drive>:\Program Files (x86)\Modern Requirements\Modern Requirements4TFS 2017 Update 4\Service\App_Data
2. Open the file `IG4TFSUserSetting` in the notepad.

3. Search for the below contents
   
   a. Replace the relation `Related` with the desire one

   ```json
   'RelationLinkType': [],
   'Name': 'LinkToSourceRelation',
   'Value': 'Related'
   ```

4. Save the file, if you don’t have the admin rights save the file on desktop and then replace it in the same folder with the existing file.

5. Restart IIS.
HOW TO CHANGE THE COLOR (RGB) VALUE FOR A WORK ITEM

The color for a Work item can be changed by performing the following steps:

1. Go to the location <Modern Requirements4TFS Installation Drive>:\Program Files (x86)\Modern Requirements\Modern Requirements4TFS 2017 Update 4\User Interface\App_Data
2. Open the file ColorCodeMapping.xml in the notepad.

3. Change the desired color code for a Work Item.
4. Save the file, if you don’t have the admin rights save the file on desktop and then replace it in the same folder with the existing file.
5. Restart IIS.
HOW TO CONFIGURE RULES SECTION OF REVIEW MANAGEMENT IN MODERN REQUIREMENTS4TFS

In the Review module of Modern Requirements4TFS when you set up the review you may define the rules.

This rule section can be configured. There are two things that can be done.

1. Individual Rules* may or may not show up in the window
2. Rules with checkboxes can be set as checked by default

* The rules with checkboxes are individually controlled while the rules with dropdown boxes are controlled as a whole, to appear or not.

The above can be setup as follows

1. Go to the location <Modern Requirements4TFS Installation Drive>:\Program Files (x86)\Modern Requirements\Modern Requirements4TFS 2017 Update 4\User Interface
2. Open the file `web.config` in the notepad.
3. Search for the tag keys starting with “Review.Rules”

```xml
<add key="IsTfsEmbed" value="false"/>
<add key="Baseline.ShowSmartWordReport" value="false"/>
<add key="ASWNetWebOptimisation.Enabled" value="true"/>
<add key="AppContentPath" value="/temp"/>
<add key="ShowBackwardUtilityCreatedReviews" value="false"/>
<add key="RecentProjectsCount" value="10"/>
<add key="Embed.OM" value="false"/>
<add key="Embed.ShowLoginDialog" value="false">
<add key="Baseline.ShowGenerateBaselineReport" value="false"/>
<add key="ShowRollBackWorkItem" value="true"/>
</add>
<!-- Start :: Bing API credentials -->
<add key="BingAPIKey" value="5e731fa30694e0a4f19324546rde74"/>
<!-- Start :: Bing API Service Endpoint -->
<add key="BingAPIServiceEndpoint" value="https://api.cognitive.microsoft.com/bing/v5.0"/>
<!-- Start :: Review Management Rules Configuration keys -->
<add key="Review.RulesApproveAsPackage" value="true"/>
<add key="Review.RulesApproveAsPackageChecked" value="false"/>
<add key="Review.RulesReenterPassword" value="true"/>
<add key="Review.RulesReenterPasswordChecked" value="false"/>
<add key="Review.RulesStatesVisible" value="true"/>
<!-- Start :: Review Management Rules configuration keys -->
<add key="OAuth.VSO.UserTokens.File" value="VSUserTokens_dev.json"/>
<add key="OAuth.VSO.UserTokens.File" value="VSUserTokens_qa.json"/>
<add key="OAuth.VSO.UserTokens.File" value="VSUserTokens_rom.json"/>
```

By default some values are set to “True”, while others are set to “False”.
The relation between the fields displayed in Review Request window and corresponding tag keys is shown in the following image:

### Web.config file

```xml
<add key="Review.RulesApproveAsPackage" value="true"/>
<add key="Review.RulesApproveAsPackageChecked" value="false"/>
<add key="Review.RulesReenterPassword" value="true"/>
<add key="Review.RulesReenterPasswordChecked" value="false"/>
<add key="Review.RulesStatesVisible" value="true"/>
</add>
```

4. Set the values as required using the following table serving as a guide:

<table>
<thead>
<tr>
<th>Key</th>
<th>Set Value as</th>
</tr>
</thead>
<tbody>
<tr>
<td>RulesApproveAsPackage</td>
<td>True: if Approve as package rule is to be shown in the section</td>
</tr>
<tr>
<td></td>
<td>False: if Approve as package rule is to be omitted from the section</td>
</tr>
<tr>
<td>RulesApproveAsPackageChecked</td>
<td>True: if Approve as package checkbox is to be shown selected by default</td>
</tr>
<tr>
<td></td>
<td>False: if Approve as package checkbox is to be shown unchecked by default</td>
</tr>
<tr>
<td>RulesReenterPassword</td>
<td>True: if Password on approval rule is to be shown in the section</td>
</tr>
<tr>
<td></td>
<td>False: if Password on approval rule is to be omitted from the section</td>
</tr>
<tr>
<td>RulesReenterPasswordChecked</td>
<td>True: if Password on approval checkbox is to be shown selected by default</td>
</tr>
<tr>
<td></td>
<td>False: if Password on approval checkbox is to be shown unchecked by default</td>
</tr>
<tr>
<td>RulesStatesVisible</td>
<td>True: if the Pre state, Post state and Change state rules are to be shown in the section</td>
</tr>
</tbody>
</table>
False: if the **Pre state**, **Post state** and **Change state** rules are to be omitted from the section

5. Save the file, if you don’t have the admin rights save the file on desktop and then replace it in the same folder with the existing file.
6. Restart IIS.
HOW TO CONFIGURE THE ACTIONS FOR A REVIEW RESPONSE IN MODERN REQUIREMENTS4TFS

The actions for the review response can be configured so that the desired values can be added.

This can be done as follows:

1. Go to the location C:\users\Public\Documents and open the file IG4TFSUserSetting in the notepad.
2. Search for the contents highlighted in the image

```
'ReviewManagementSettings': {
    'ReviewResponse': {
        'ConfigField': [
            {
                'Name': 'ReviewResponseCustomState',
                'Value': 'Accepted, OBS (erivation), Rejected'
            }
        ]
    }
}
```

3. It is used to set action against a review response. By default, it has 3 actions (as shown in xml in 'Value' field).
4. User can only configure 'Value' field i.e. can add more actions, delete or update any existing.
5. User cannot update label of 'Review Action' field, not even can set any action value to appear in dropdown as default.
6. Save the file, if you don’t have the admin rights save the file on desktop and then replace it in the same folder with the existing file.
7. Restart IIS.
CONFIGURING THE REVIEW METADATA IN THE DESIRED FIELD

With each Review Request initiated, a Feedback Request Work Item is created. By default the metadata of the review is saved in the Launch Instruction field of that Work Item. However users could configure it to save the metadata in the field of their choice*, using the following steps:

*Metadata support is reserved for only HTML type fields.

1. Go to the location C:\users\Public\Documents and open the file IG4TFSUserSetting in the notepad.

3. Configure the metadata to the desired field by adding the section highlighted in the following image, where Value = the desired field required to hold metadata.

4. Add reference name of desired field in “Value” tag from the process template as shown in image below.

5. Save the file, if you don’t have the admin rights save the file on desktop and then replace it in the same folder with the existing file.
Occasionally a user may come across the “unexpected error”, as shown in the following image.

The solution to this error starts at the same Sign In page.

1. Click on the “Click here” link, as shown.
The user is taken to the Diagnostics page which briefly describes the precise root cause of the error.

2. Now click on the “click here for solution” link.

The User is redirected to the solutions page, where the user can browse through the detailed solution for the relevant root cause of the error.
3. Follow the solution given in the answer to counter the relevant problem being faced.

“IIS VERSION IS LOWER..” ERROR

During installation if a user encounters the error message “Modern Requirements4TFS cannot be installed on system with IIS Services version lower than 7.0”, there could be multiple reasons for it.

1. IIS is not installed on targeted machine (on which user is trying to install Modern Requirements4TFS).
2. IIS has not been properly/completely installed on machine.
3. Or IIS has been properly installed but version is below 7.0.

In these scenarios it is recommended to install Internet Information System Manager (IIS Mgr.) completely, for the successful installation of Modern Requirements4TFS. Additionally the IIS version installed should be greater than version 7.0.

“400 BAD REQUEST” ERROR (EMBEDDED)

Internet Explorer by default doesn’t allow to store cookies of sites which are inside the IFrame and have different domain from parent site. The embedded version of Modern Requirements4TFS does have an architecture where the parent site is https://*.visualstudio.com and IFrame site used is https://modernrequirements.info. This issue however is limited to Internet Explorer only. Firefox & Chrome do not show any problem in such scenario. To overcome the issue we need to direct IIS to send a custom header with every response it send. This needs to be done on every IIS where Modern Requirements4TFS will be deployed in the Embedded version. Following steps are required to solve the issue:

1. Open IIS Manager.
2. Select the Server Name in Root.
3. Open the **HTTP Response Headers** option by double-clicking.

4. Click the **Add...** option in the Actions panel.
5. Enter the following values and click the OK Button.
   - Name = p3p
   - Value = CAO PSA OUR

6. Again click the Server Name in Root.
7. Restart IIS.