



TFS 2012 Upgrade...

Upgrade TFS 2010 to TFS 2012
with Migration to a New Hardware



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Mohamed Radwan is a Senior ALM Consultant focusing on providing solutions for the various roles involved in software development and delivery to enable them build better software using Agile Methodologies and Microsoft Visual Studio ALM Tools & Technologies.



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Upgrade TFS 2010 to TFS 2012 with Migration to a New Hardware



Watch the

Video

<http://youtu.be/b3rWOYnzxOk>

Chapter 1: Introduction

As we may already know, there are 3 scenarios for upgrade TFS 2012:

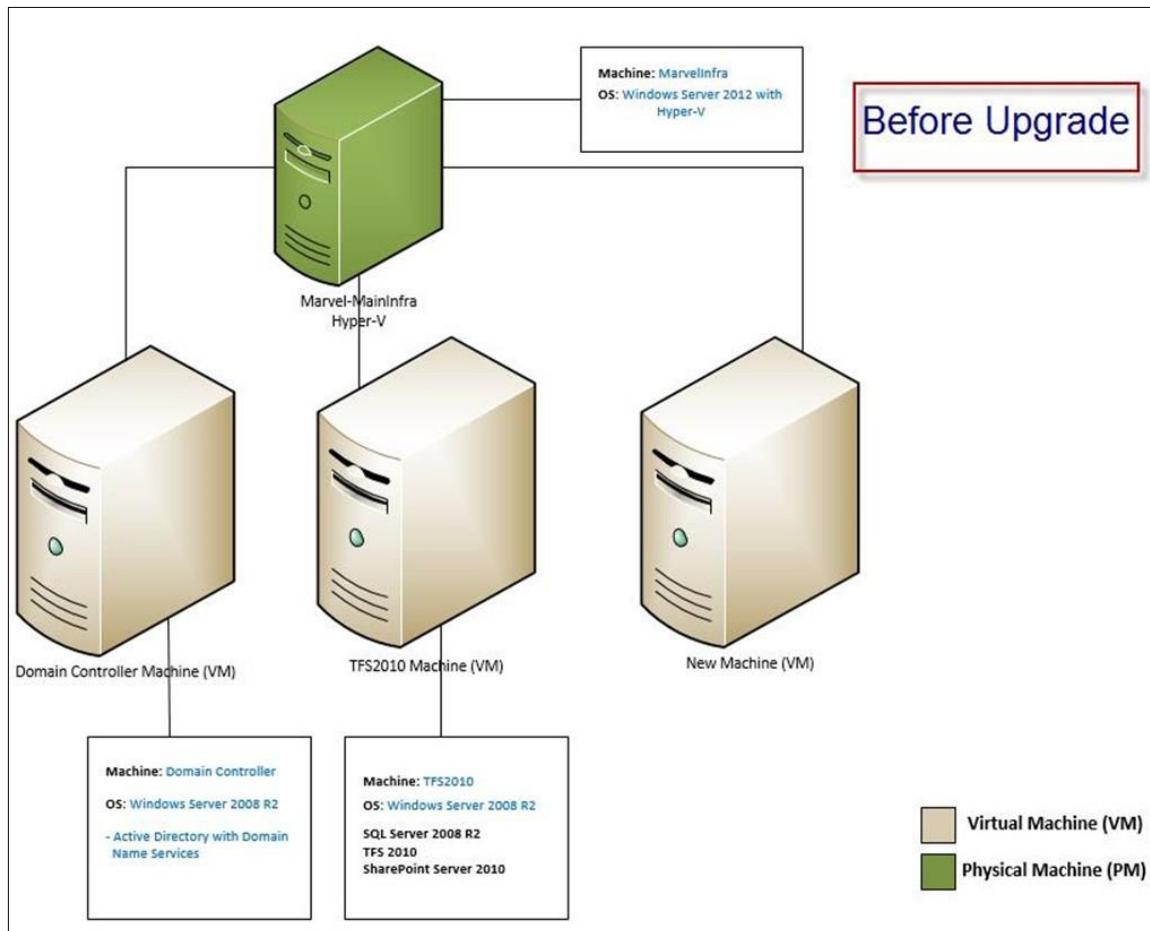
- Upgrade TFS Basic or Express (Basic upgrade)
- TFS Use the Same Hardware (Standard upgrade)
- TFS Use Different Hardware (Advanced upgrade)

I choose to explain the most complex one which is the 3rd one, so there are a lot of alternative paths for this scenario, I choose a specific path to simplify the guide and I will try to mention any alternative path needed as we go throughout the chapters. This guide is step-by-step with videos and images and at the last chapter I will put one video for all parts and summary the whole guide, I will try to mention some considerations that you could take care of them while you are upgrading. Let's start by examine the table of content for this guide in details:

- **Chapter 1 – Introduction.**
 - Introduction.
- **Chapter 2 – Prepare SharePoint for the new system.**
 - Examine the existing TFS 2010 system and the new machine.
 - Uninstall all TFS 2010 components.
 - Install and configure TFS 2012 Remote SharePoint Extensions.
- **Chapter 3 – Prepare the new machine and install SQL Server.**
 - Prepare the new machine (DNS, Join Domain, .NET 3.5).
 - Install MS SQL Server 2012 SP1 Enterprise Edition.
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 - Install TFS 2012 Update 1 and run windows update.
 - Run TFS 2012 Backup Tool and backup the old DBs.
 - Backup the old Reporting Service Encryption Key.
- **Chapter 5 – Restore DBs and Reporting Encryption Key.**
 - Run TFS 2012 Restore Tool and restore old DBs to the new SQL server 2012.
 - Change Reporting DB and restore Reporting Encryption Key.
- **Chapter 6 – Configure TFS 2012**
 - Configure TFS 2012 using Upgrade wizard.
- **Chapter 7 – Verify upgrade success and other configuration.**

- Verify the success of the upgrade and complete other configuration.
- **Chapter 8 – Upgrade TFS 2012 Build Service.**
 - Upgrade TFS 2012 Build Service.
- **Chapter 9 – Summary.**
 - Summary.

The chosen upgrade scenario is consistent of 3 machines, one as **Domain Controller**, the second as **TFS 2010** that contain most components of TFS and the third machine is a new **Empty Machine**, see the following image:



Machine 1: Domain Controller

- Windows 2008 R2 SP1 with latest update
- Active Directory and DNS

Machine 2: TFS2010

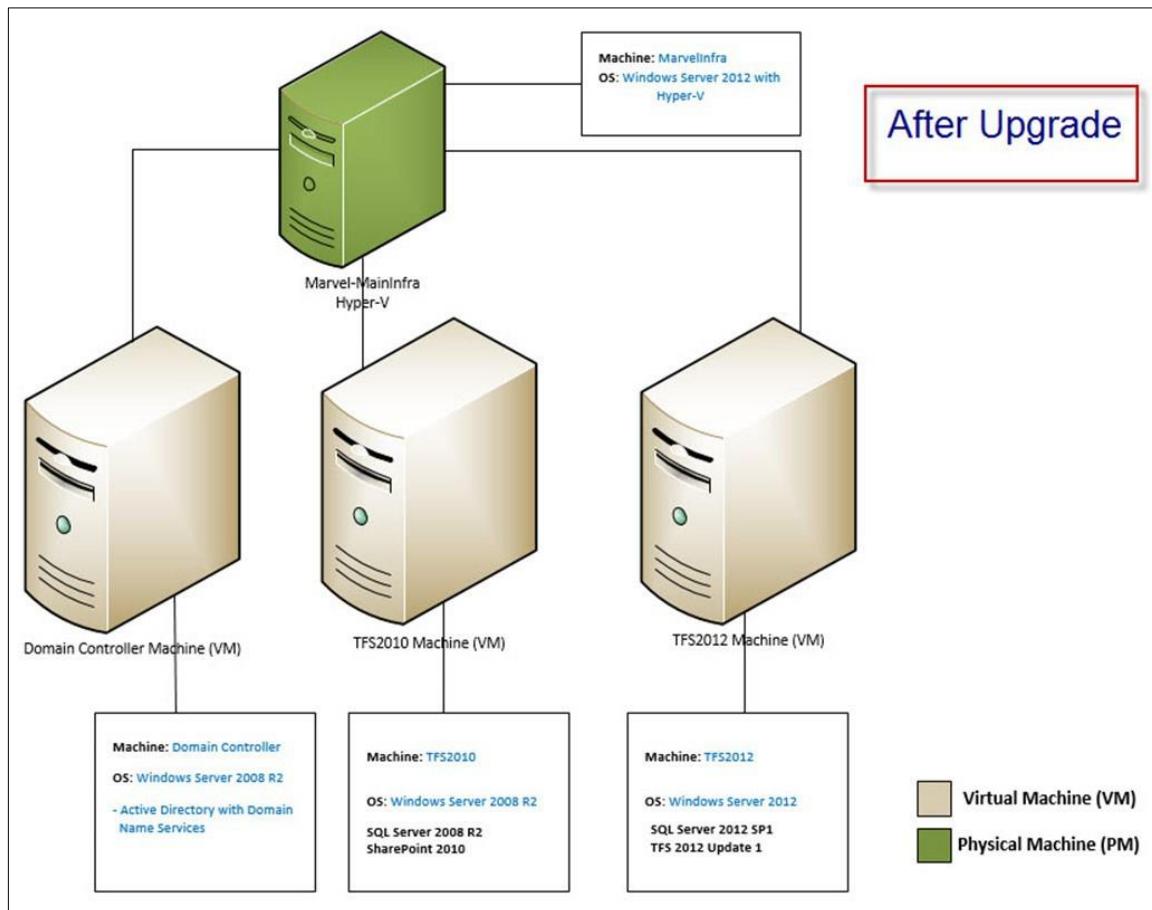
- Windows 2008 R2 SP1 with latest update
- MS SQL Server 2008 R2 SP1
- MS SQL Server Analysis Service 2008 R2 SP1
- MS SQL Server Reporting Service 2008 R2 SP1

- TFS 2010 SP1
- TFS Build Service 2010
- MS SharePoint Server 2010 SP1

Machine 3: New machine

- Nothing

In this upgrade scenario I will use the existing domain controller, I will also leave the SharePoint 2010 on the old TFS 2010 machine and use that machine as SharePoint server for the new environment, the new system will use Windows Server 2012 and SQL Server 2012 as well, see the following image:



Machine 1: Domain Controller

- Windows 2008 R2 SP1 with latest update
- Active Directory and DNS

Machine 2: TFS2010

- Windows 2008 R2 SP1 with latest update
- MS SQL Server 2008 R2 SP1
- MS SQL Server Analysis Service 2008 R2 SP1
- MS SQL Server Reporting Service 2008 R2 SP1
- MS SharePoint Server 2010 SP1

Machine 3: TFS 2012

- Windows Server 2012 with latest update
- MS SQL Server 2012 SP1 Enterprise
- MS SQL Server Analysis Service 2012 SP1
- MS SQL Server Reporting Service 2012 SP1
- TFS 2012 Update 1
- TFS Build Service 2012



Watch the

Video

<http://youtu.be/G4pGqHAfH9M>

Chapter 2: Prepare SharePoint for the new system.

- Examine the existing TFS 2010 system and the new machine.
- Uninstall all TFS 2010 components.
- Install and configure TFS 2012 Remote SharePoint Extensions.

2.1 Examine the existing TFS 2010 system and the new machine.

In this section we will just examine the old system to review its current state. We will see that, there are three machines for our scenario, **TFS2010**, **TFS2010-DC**, this is the **Domain Controller** machine and **TFS2012-Upgrade**, and this is the new machine that will be used to migrate and upgrade TFS 2010, see the following image.

| Name | State | CPU Usage | Assigned Memory | Uptime |
|------------------------------------|---------|-----------|-----------------|------------|
| TFS2010 | Running | 0 % | 8000 MB | 00:23:12 |
| TFS2010-DC | Running | 0 % | 2000 MB | 1:04:53:15 |
| TFS2012-Upgrade | Running | 0 % | 10000 MB | 00:23:55 |
| Visual Studio 2012 Update1-RTM-ALM | Running | 0 % | 12000 MB | 1:02:58:31 |
| VSS-Win2008 | Off | | | |

NOTE: **TFS2010**, this is the TFS machine with all TFS components.

Chapter 2: Prepare SharePoint for the new system.

The first machine has the following information, VM name (**TFS2010-DC**), computer name**DC08.com**, it has **Active Directory** and **DNS**, it also has the needed **TFS Service Accounts** configured with all settings and needed permission for all TFS configuration.

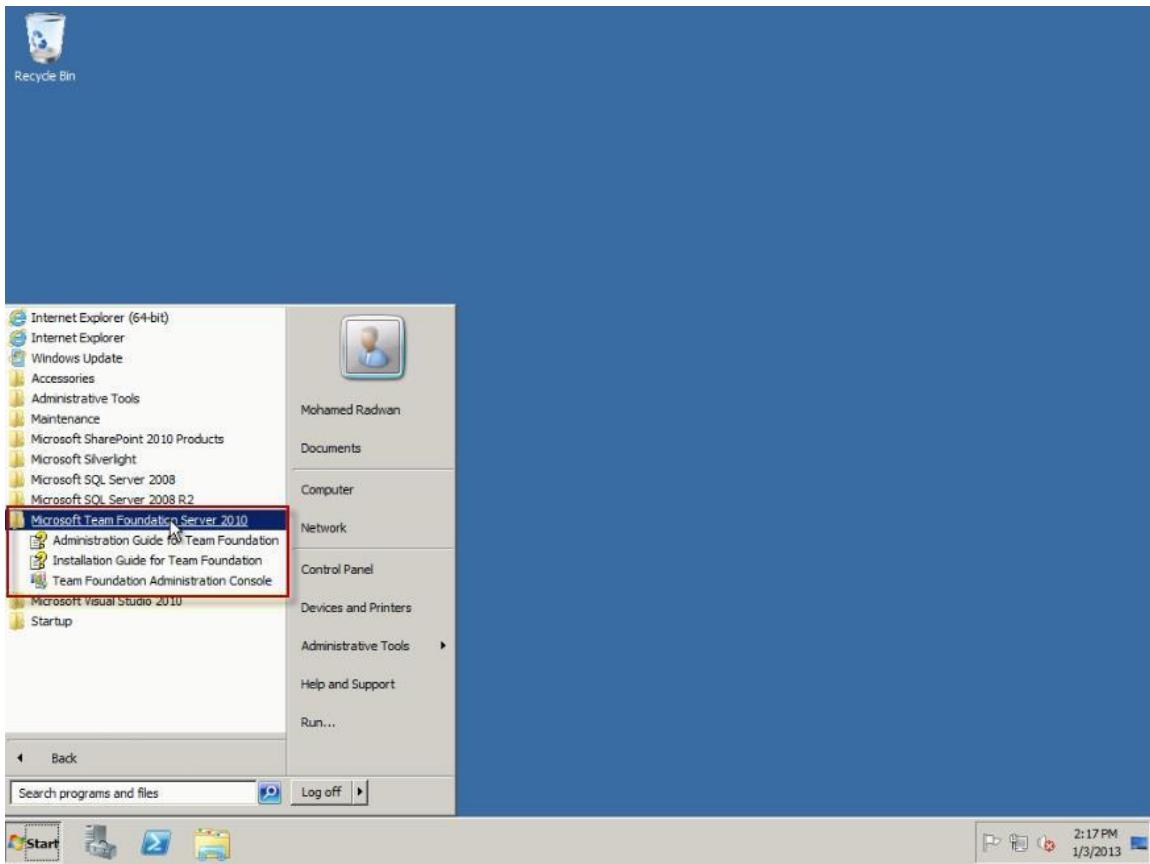
The screenshot shows the Windows Active Directory Users and Computers interface. The left pane displays the organizational structure under 'DC08.com'. The right pane is a table showing user and group details. Several users are highlighted with red boxes: 'Mohamed Ra...', 'TFSBuild', 'TFSLab', 'TFSProxy', 'TFSReports', 'TFSService', and 'TFSTest'. These are the TFS service accounts mentioned in the text.

| Name | Type | Description |
|------------------|--------------------|---------------------------------|
| Administrator | User | Built-in account for admin... |
| Allowed ROD... | Security Group ... | Members in this group can... |
| Cert Publishers | Security Group ... | Members of this group are... |
| Denied ROD... | Security Group ... | Members in this group can... |
| DnsAdmins | Security Group ... | DNS Administrators Group |
| DnsUpdatePr... | Security Group ... | DNS clients who are perm... |
| Domain Admins | Security Group ... | Designated administrators... |
| Domain Com... | Security Group ... | All workstations and serve... |
| Domain Cont... | Security Group ... | All domain controllers in th... |
| Domain Guests | Security Group ... | All domain guests |
| Domain Users | Security Group ... | All domain users |
| Enterprise A... | Security Group ... | Designated administrators... |
| Enterprise R... | Security Group ... | Members of this group are... |
| Group Policy ... | Security Group ... | Members in this group can... |
| Guest | User | Built-in account for guest ... |
| Mohamed Ra... | User | |
| RAS and IAS ... | Security Group ... | Servers in this group can ... |
| Read-only D... | Security Group ... | Members of this group are... |
| Schema Admins | Security Group ... | Designated administrators... |
| SharePointUs... | Security Group ... | |
| TFSBuild | User | |
| TFSLab | User | |
| TFSProxy | User | |
| TFSReports | User | |
| TFSService | User | |
| TFSTest | User | |

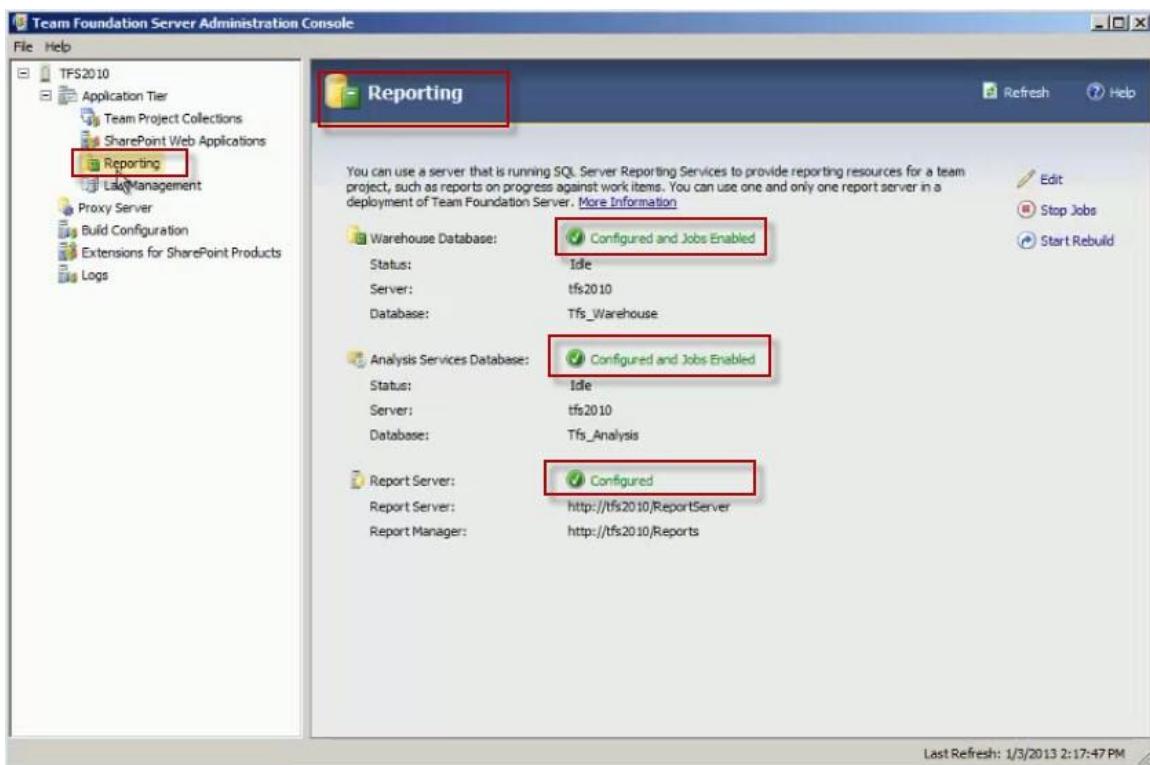
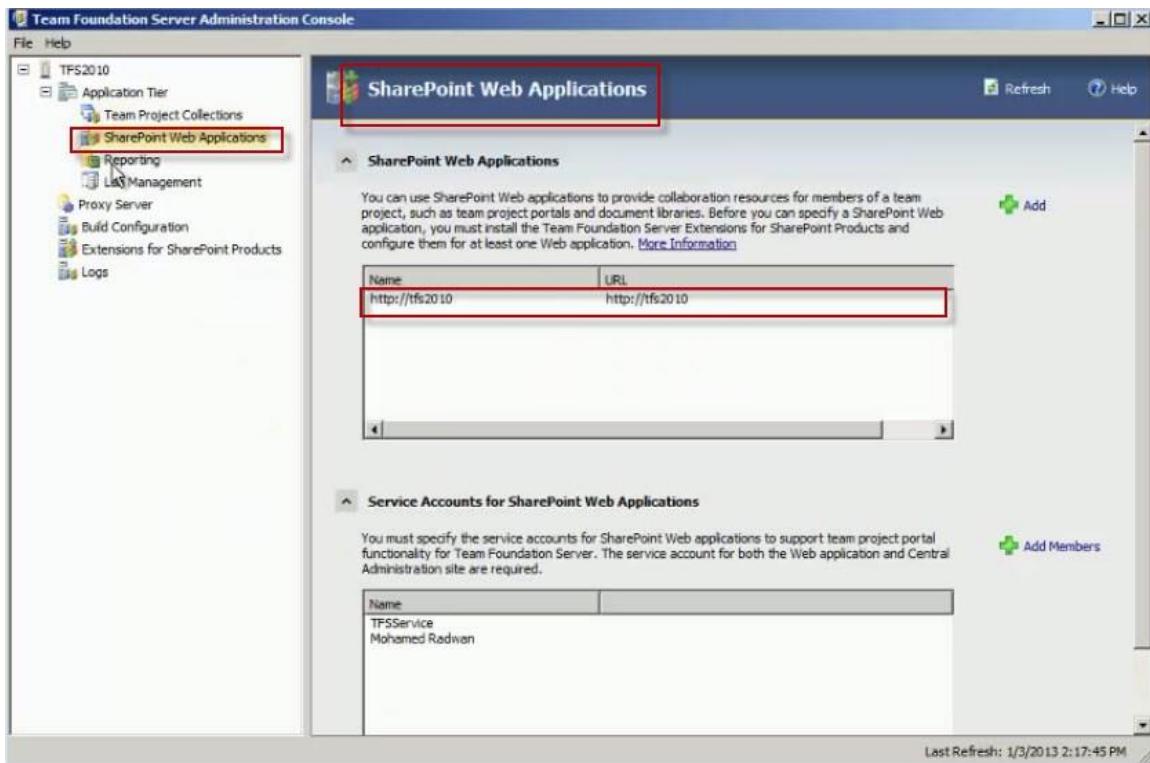
TIP: for more information about how to create TFS service accounts, [click here](#).

The second machine has the following information, VM name (**TFS2010**), computer name**TFS2010**, it has **MS SQL Server 2008 R2 SP1 Enterprise Edition**, with **Analysis Service** and **Reporting Servers**, it also has **MS SharePoint Server 2010** and it is configured with Excel service for reporting, see the following images.

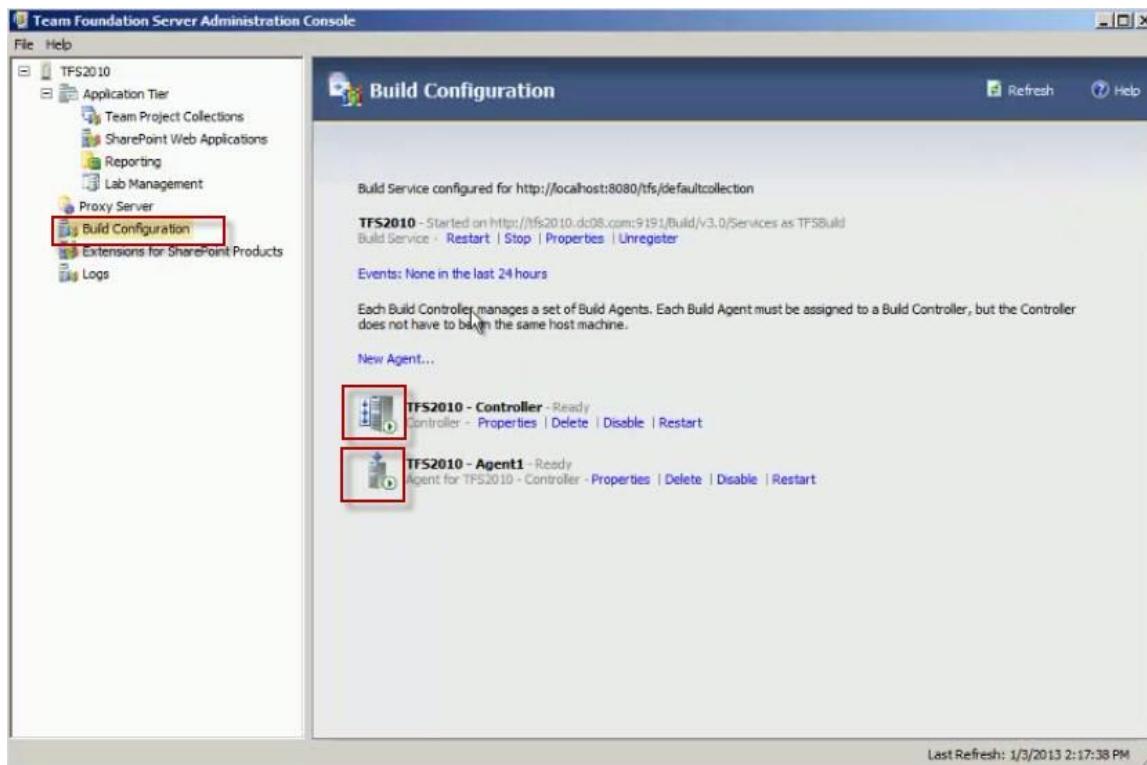
TFS 2010 configured with SharePoint 2010, Reporting Service and Build Serversies 2010.



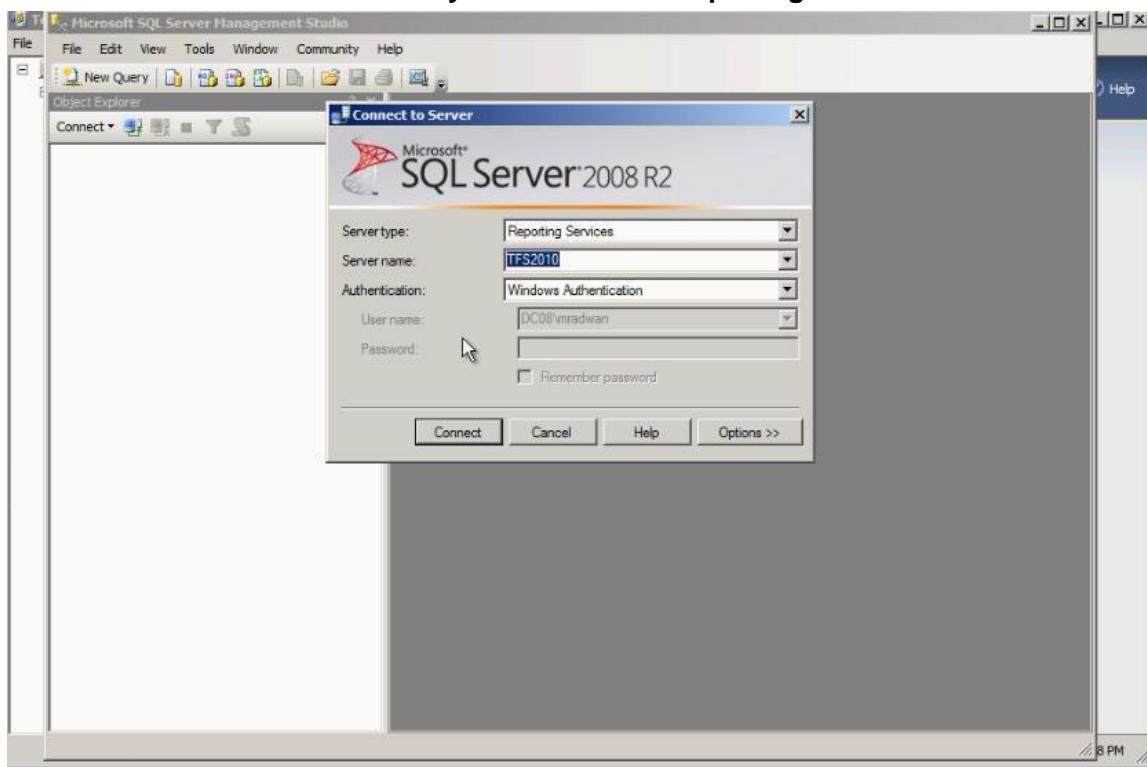
Chapter 2: Prepare SharePoint for the new system.



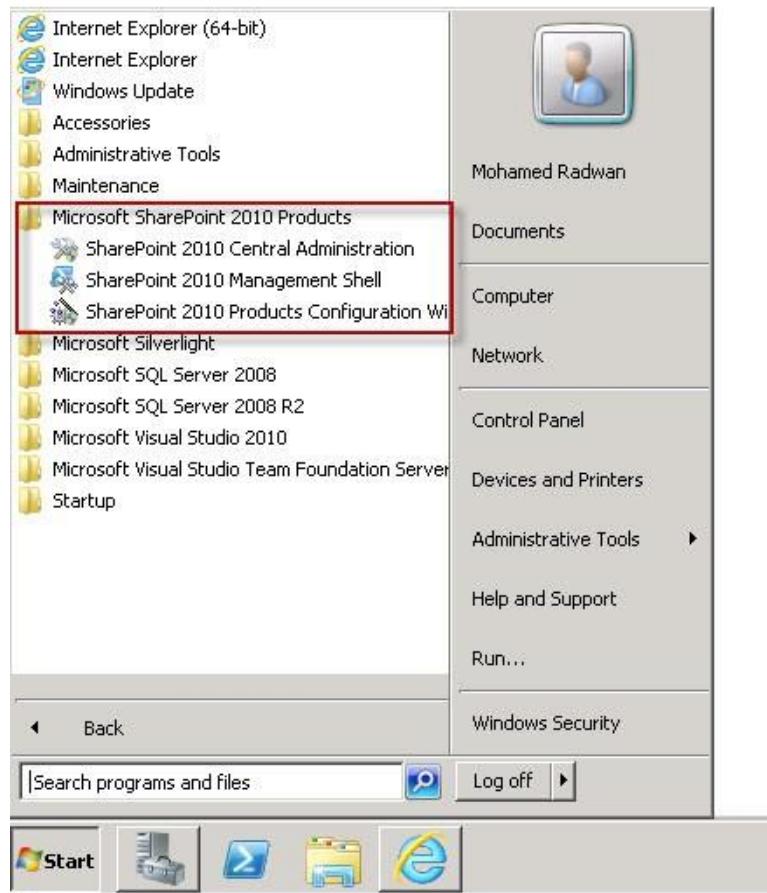
Chapter 2: Prepare SharePoint for the new system.



MS SQL Server 2008 R2 with Analysis Service and Reporting Service.

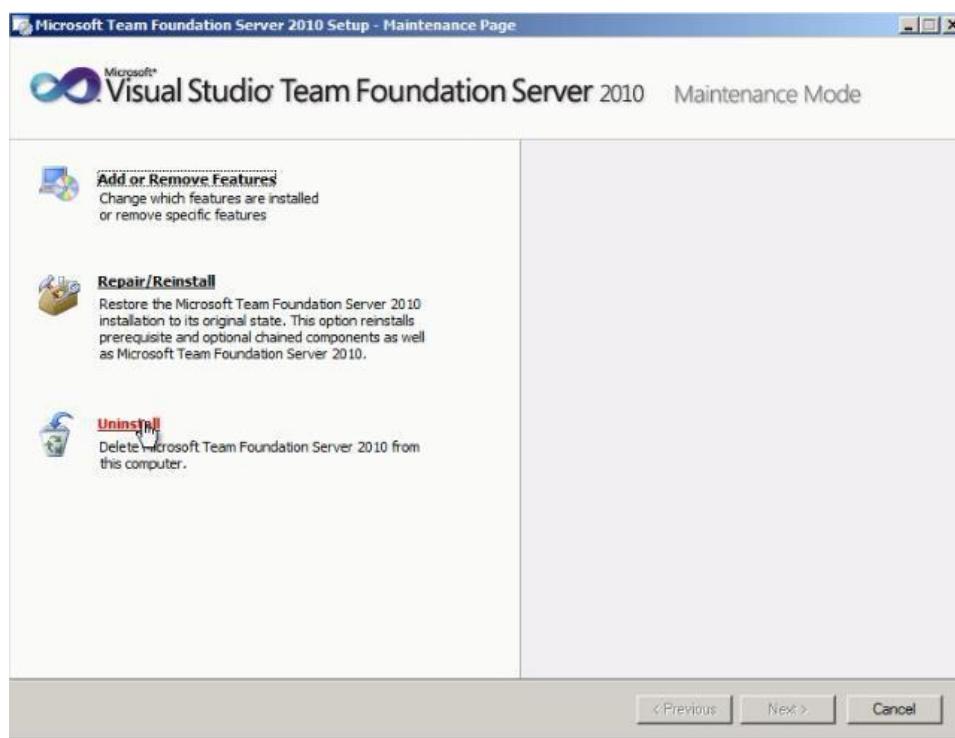
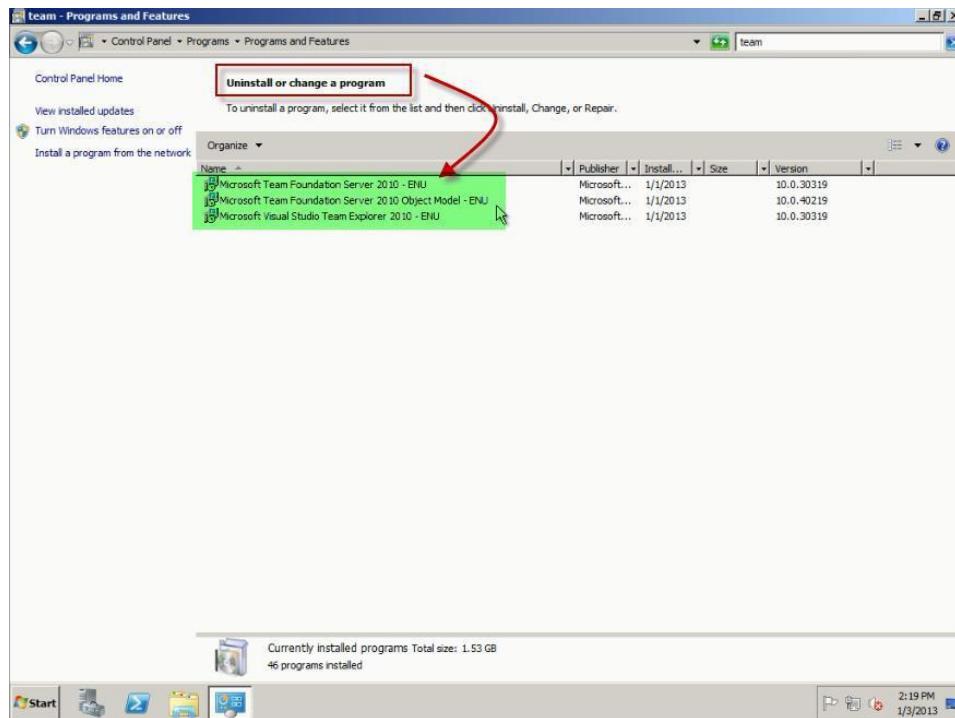


MS SharePoint Server 2010 with Excel Service.



2.2 Uninstall all TFS 2010 components.

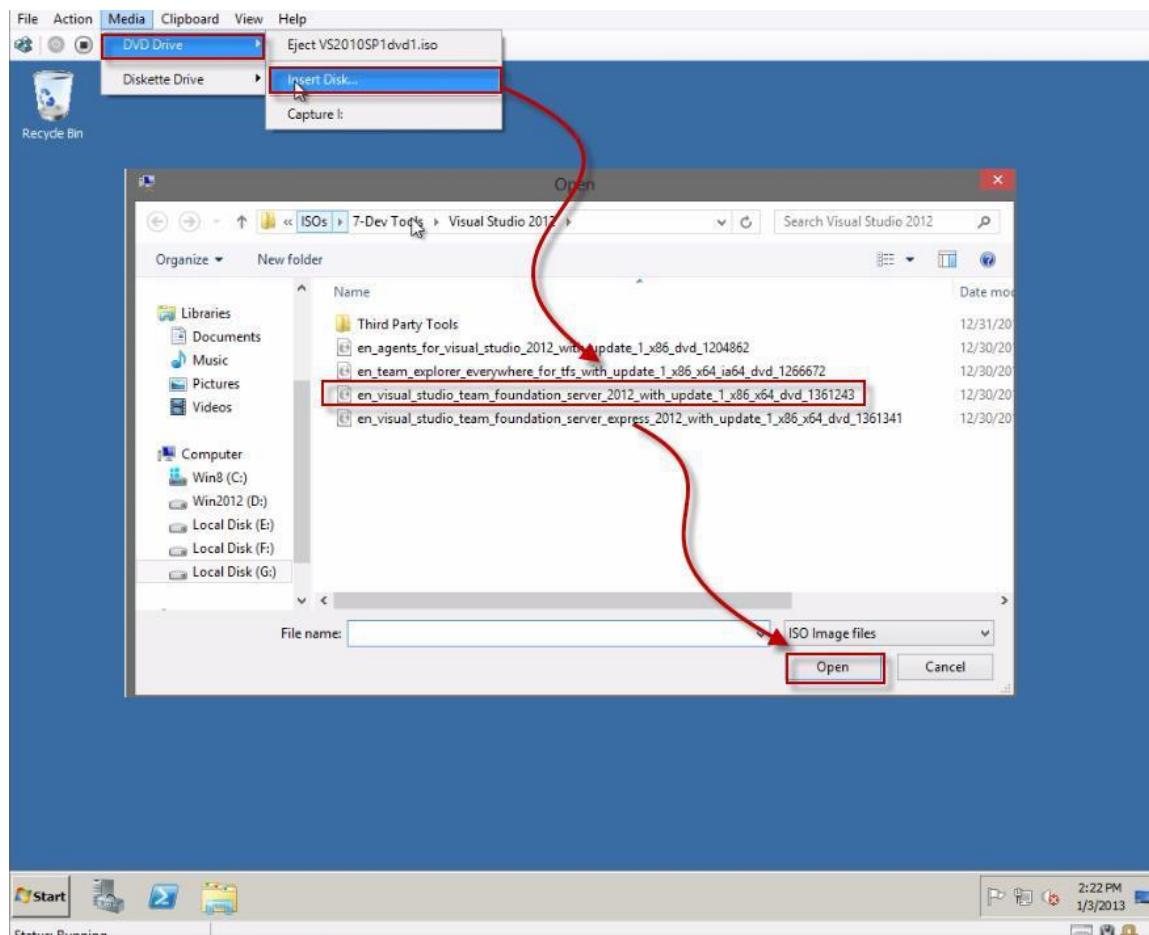
In this section I will uninstall all TFS components.



2.3 Install and configure TFS 2012 Remote SharePoint Extensions.

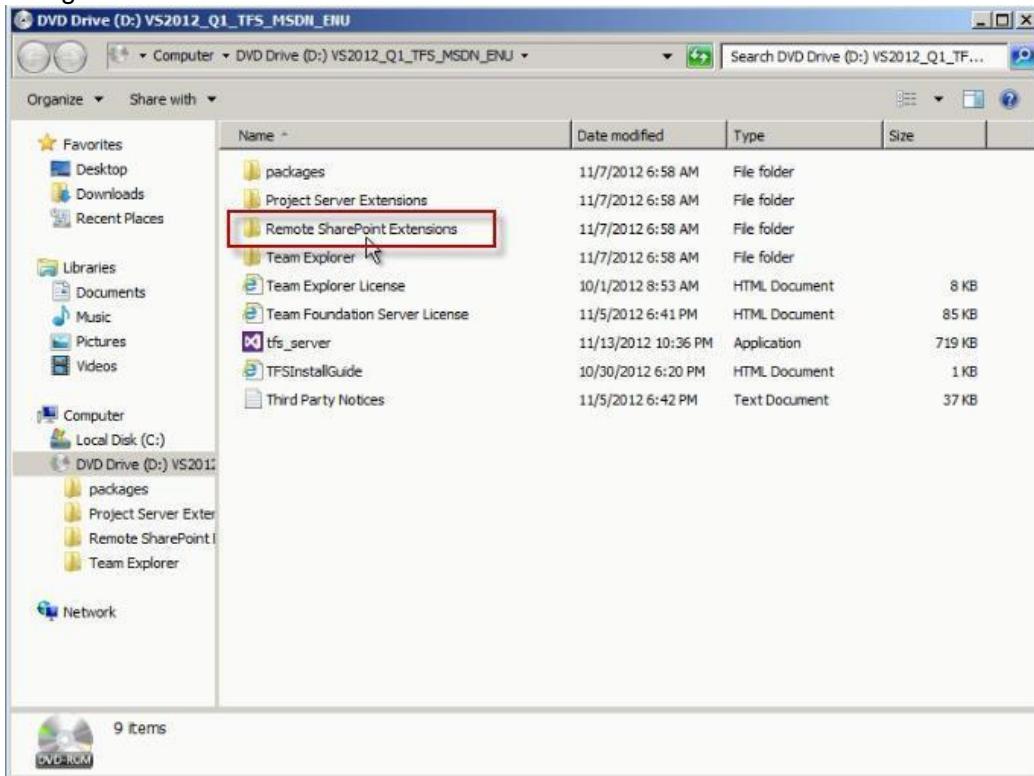
In this section I will install **Remote SharePoint Extensions** from the **TFS 2012 Update 1 DVD**, because we will use this machine as a **SharePoint Server** to work with the new environment.

Insert **TFS 2012 Update 1 DVD** into your driver.

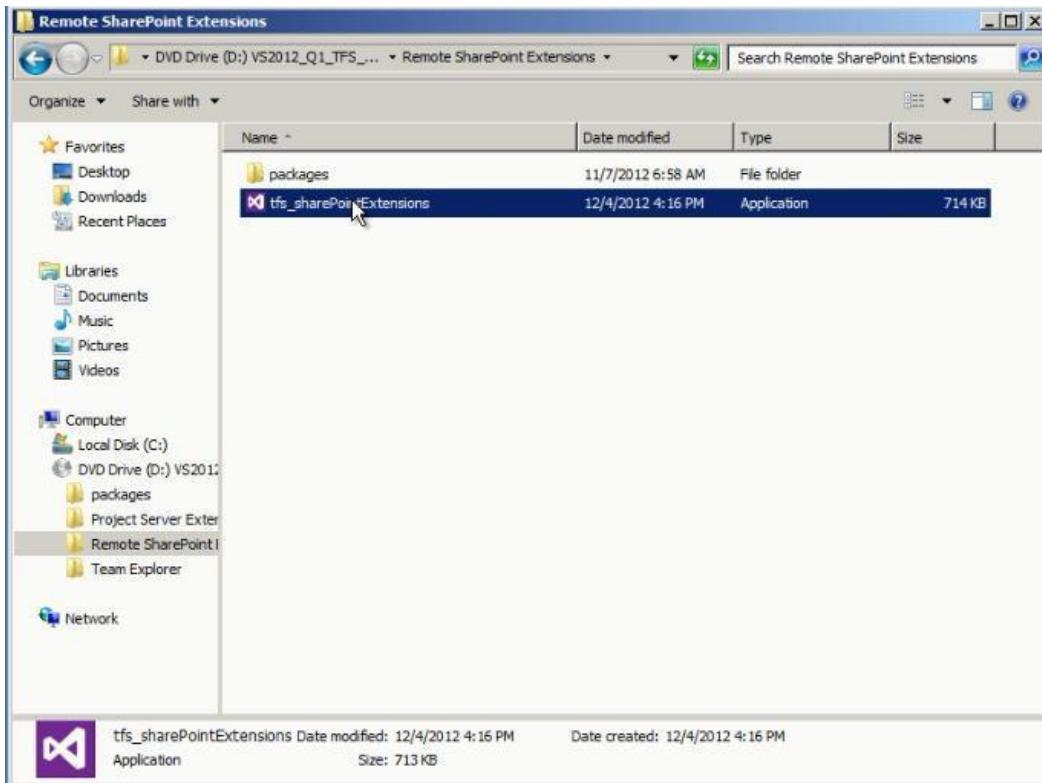


Chapter 2: Prepare SharePoint for the new system.

Navigate to **Remote SharePoint Extensions** folder on the DVD.

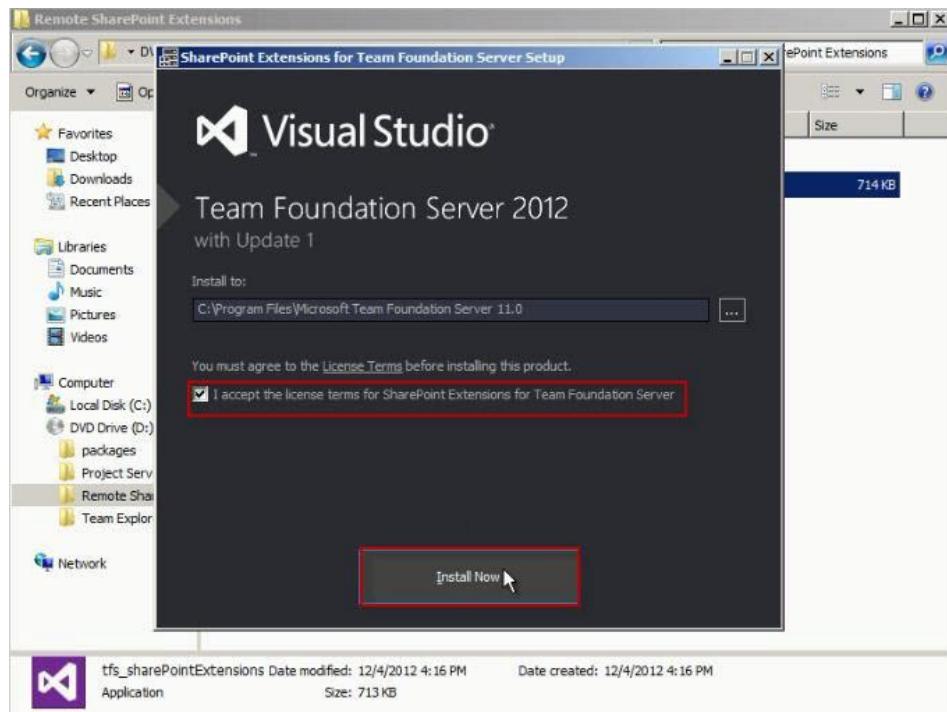


Double click on the **SharePoint Extension** installation file.

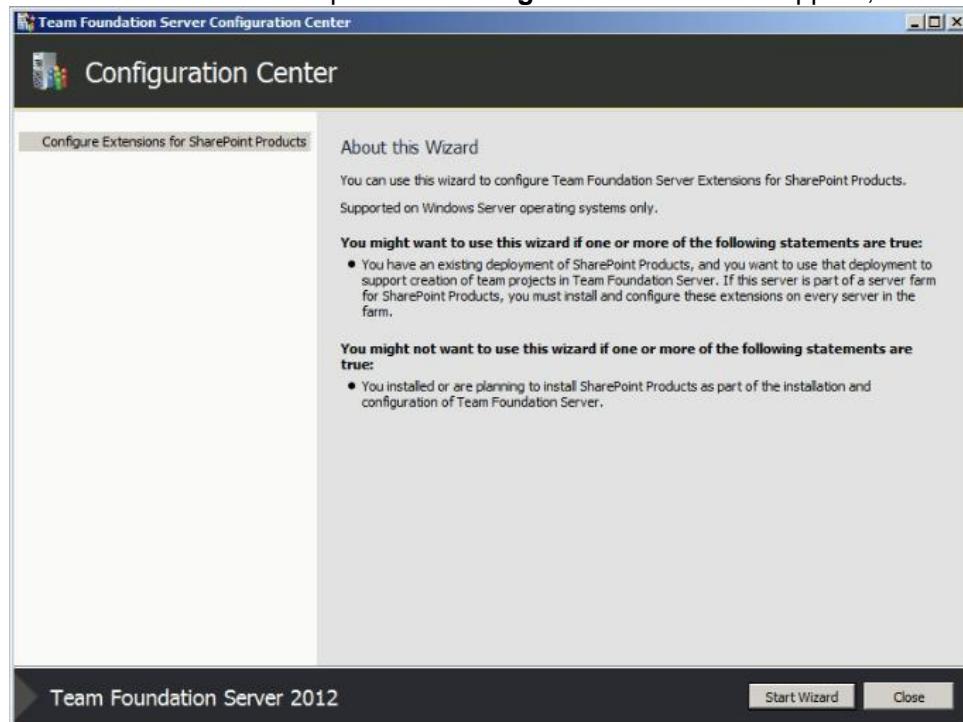


Chapter 2: Prepare SharePoint for the new system.

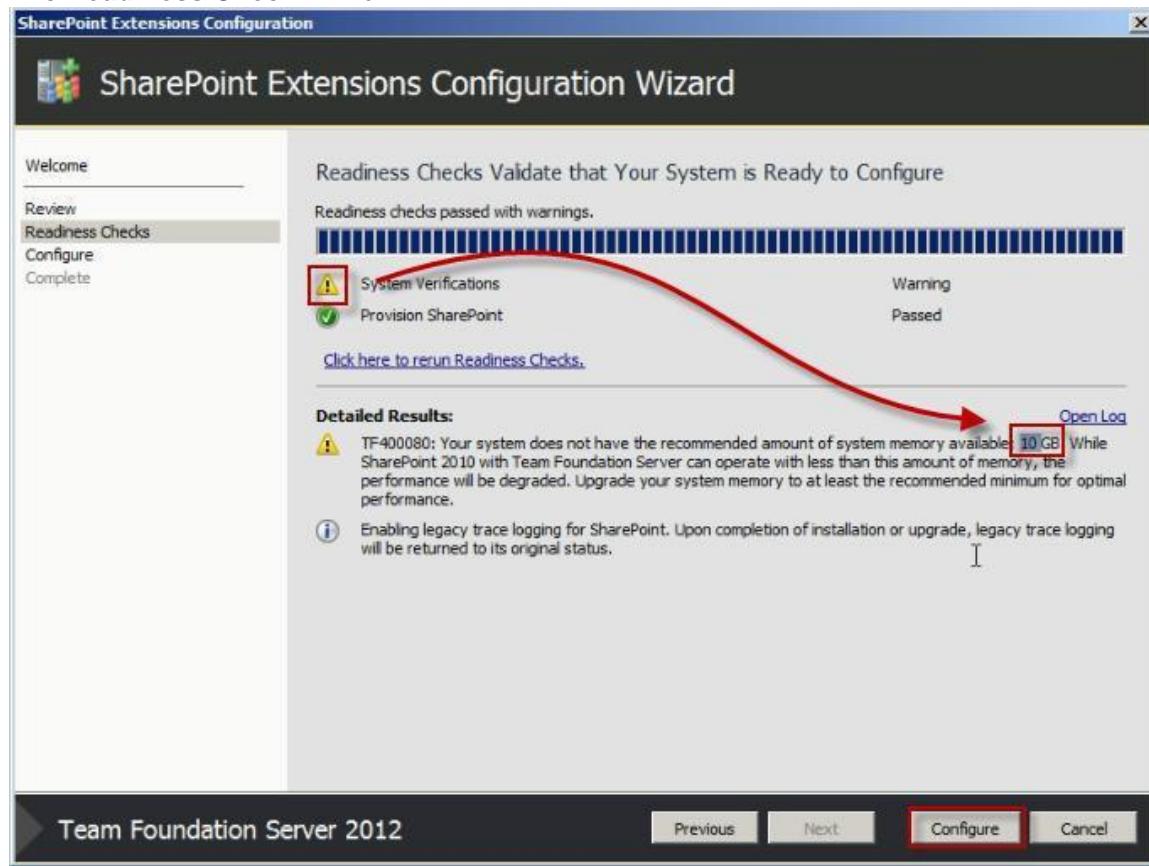
Select the check-box **I accept the license and condition** after that click **Install Now**.



When the installation complete the **Configuration Center** will appear, click on **Start Wizard**.

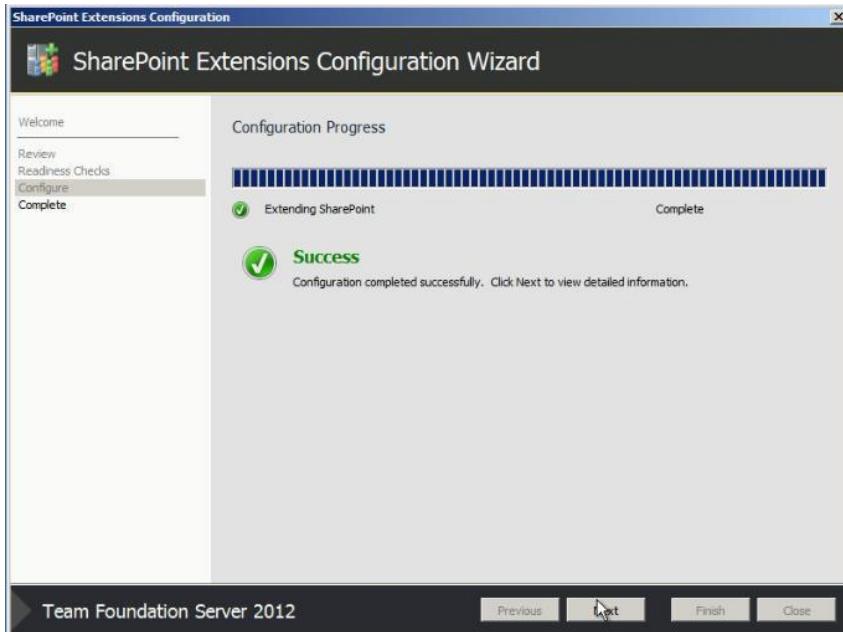


The **Readiness Check** will run.

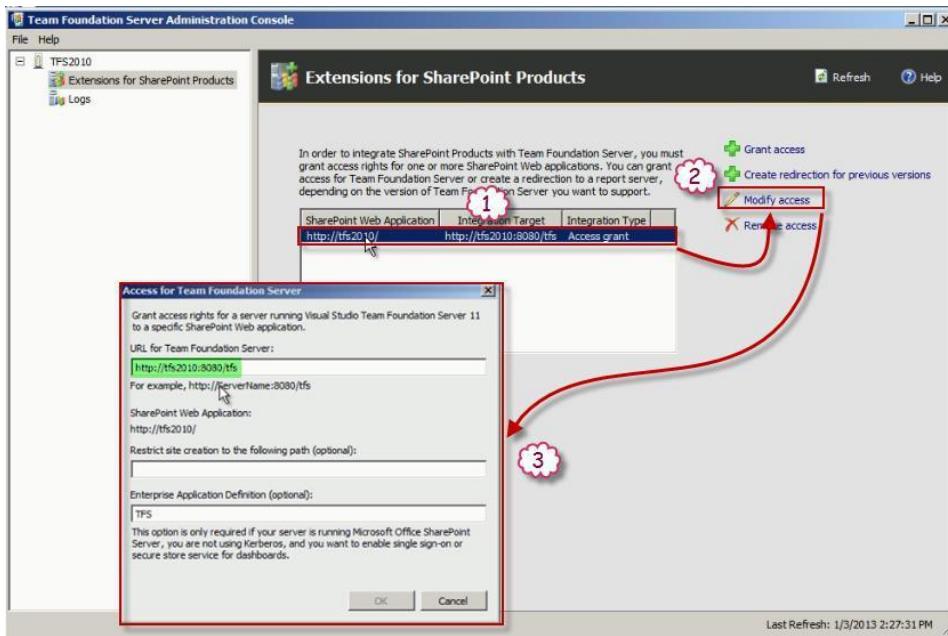


NOTE: You may find warning like it needs **10 GB** of RAM, it's OK, it can work with less RAM especially it's not on the same machine with TFS, but of course it's always better to have 10 GB of RAM.

Review the success of the configuration.



In the **TFS Administration Console**, click on **Extension for SharePoint Products**, select the existing TFS and click **Modify access**.



NOTE: we will not change anything now but remember that we will change that after we configure the new server (TFS 2012). Review the success of the configuration.



Watch the
Video

<http://youtu.be/hsaTHlkNjVY>

Chapter 3 – Prepare the new machine and install SQL Server.

- Prepare the new machine (DNS, Join Domain, .NET 3.0).
- Install MS SQL Server 2012 SP1 Enterprise Edition.
- Share a Folder on the new server.

3.1 Prepare the new machine (DNS, Join Domain, .NET 3.5).

In this section I will explain how to prepare the new machine for **TFS 2012**, so after install the Windows and install all latest update, we will change the DNS to point to the domain controller (**TFS2010-DC**), this is very important so we can join this domain, after that we will install **.NET 3.5** as a windows server 2012 feature.

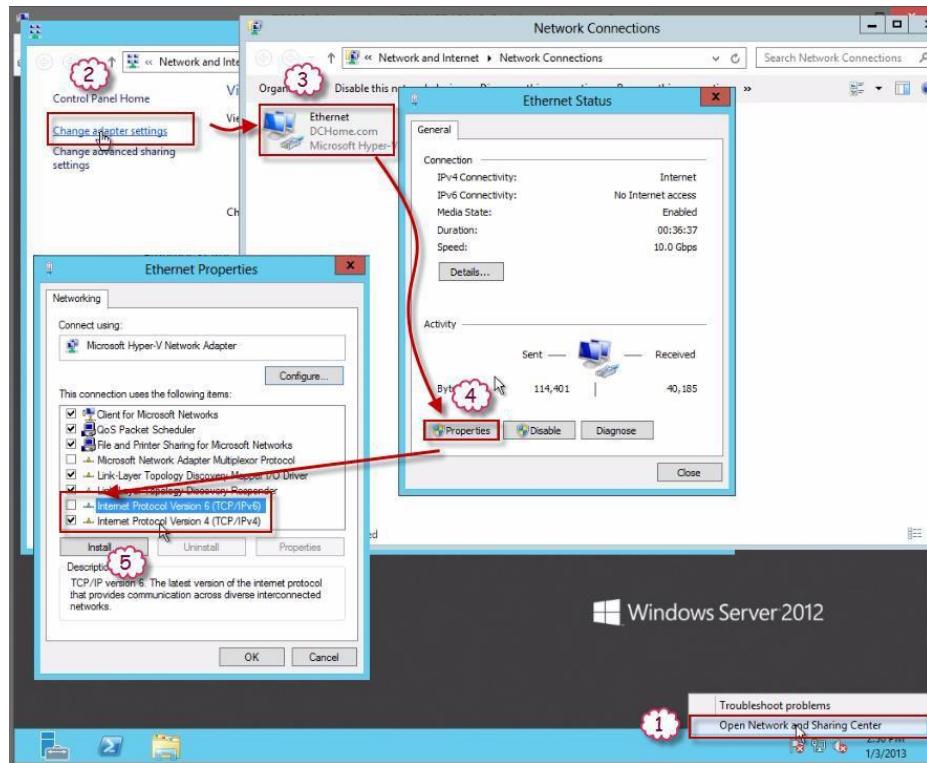
 **TIP:** for more information about how to install **windows sever 2012**, [click here](#)

 **TIP:** SQL Server 2012 install all its pre-request like .NET Framework automatically but we install .NET Framework to explain that we could manually install it.

 **NOTE:** we will change the DNS to point to the domain controller (**TFS2010-DC**), this is very important so we can join this domain

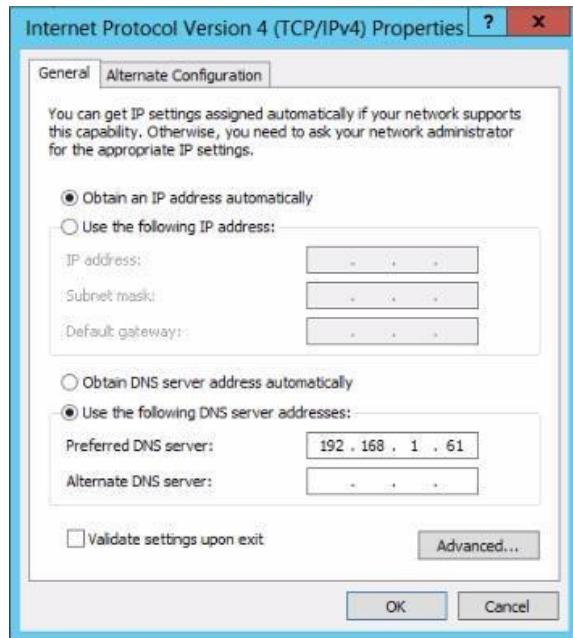
Chapter 3 – Prepare the new machine and install SQL Server.

Open **Network and Sharing Center** and open **IPV4 configuration** as the following.

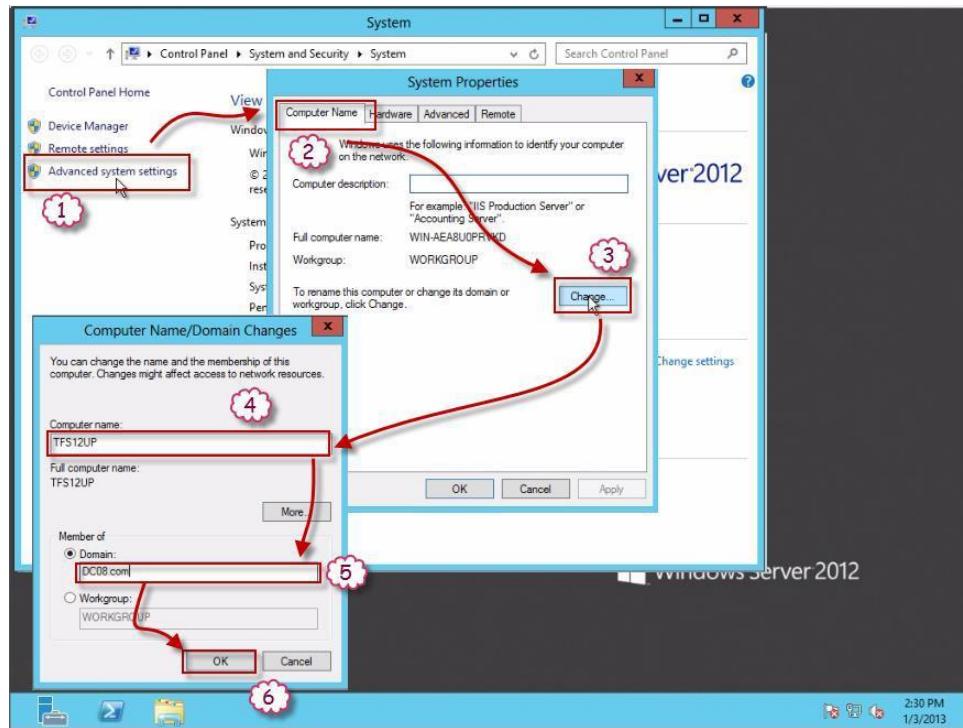


Chapter 3 – Prepare the new machine and install SQL Server.

In the **DNS**, type the **IP** of the **Domain Controller** of the current domain.

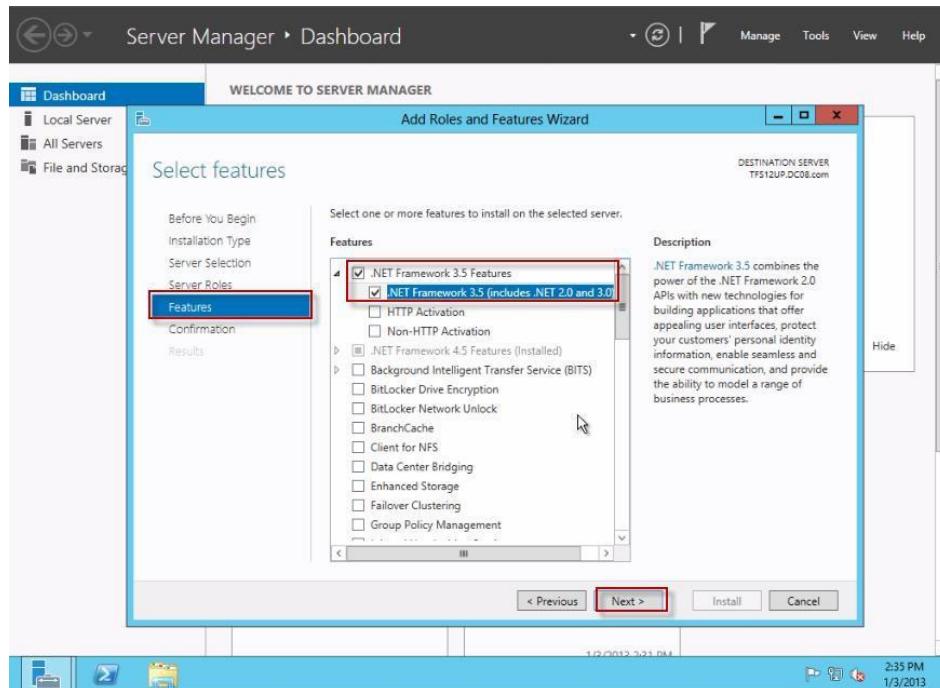


Navigate to **System** and click on **Advanced System Settings**, change the name of the machine to be **TFS12UP** and the domain is **DC08.COM**, restart the machine and log-in using a domain admin account, in my case (**MRadwan**).

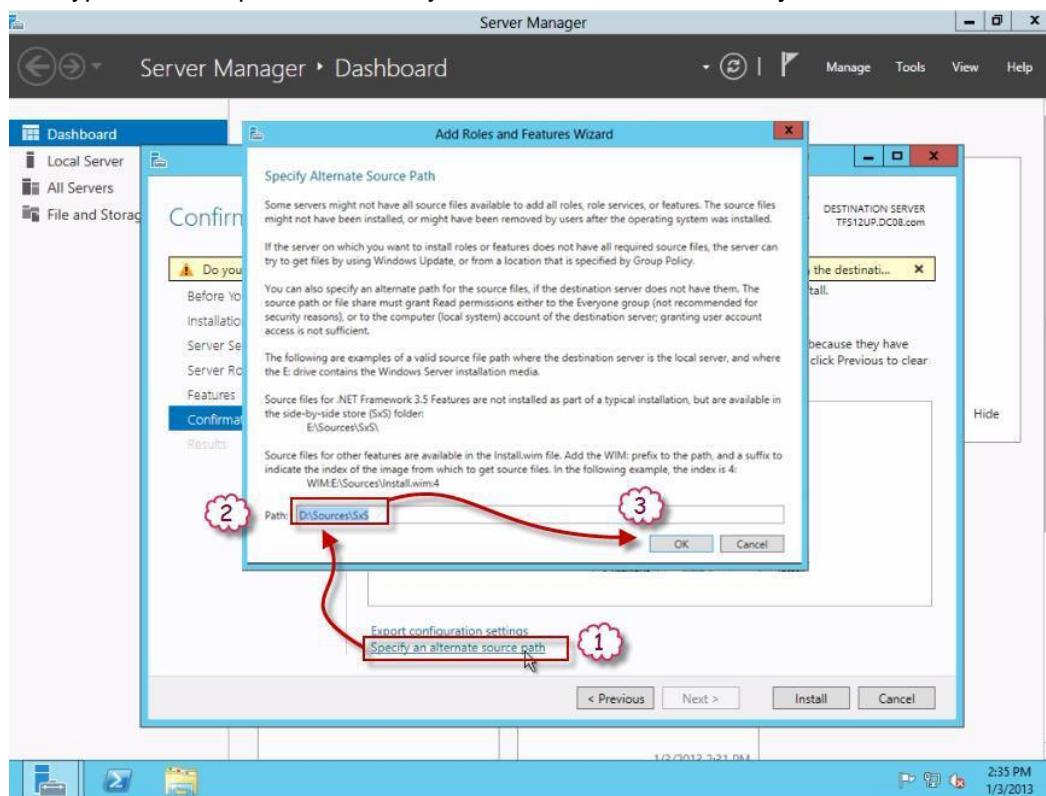


Chapter 3 – Prepare the new machine and install SQL Server.

From the **Server Manager** click **Add Role**, click on next till you reach the **Features** and select **.NET Framework 3.5** after that click **Next**.

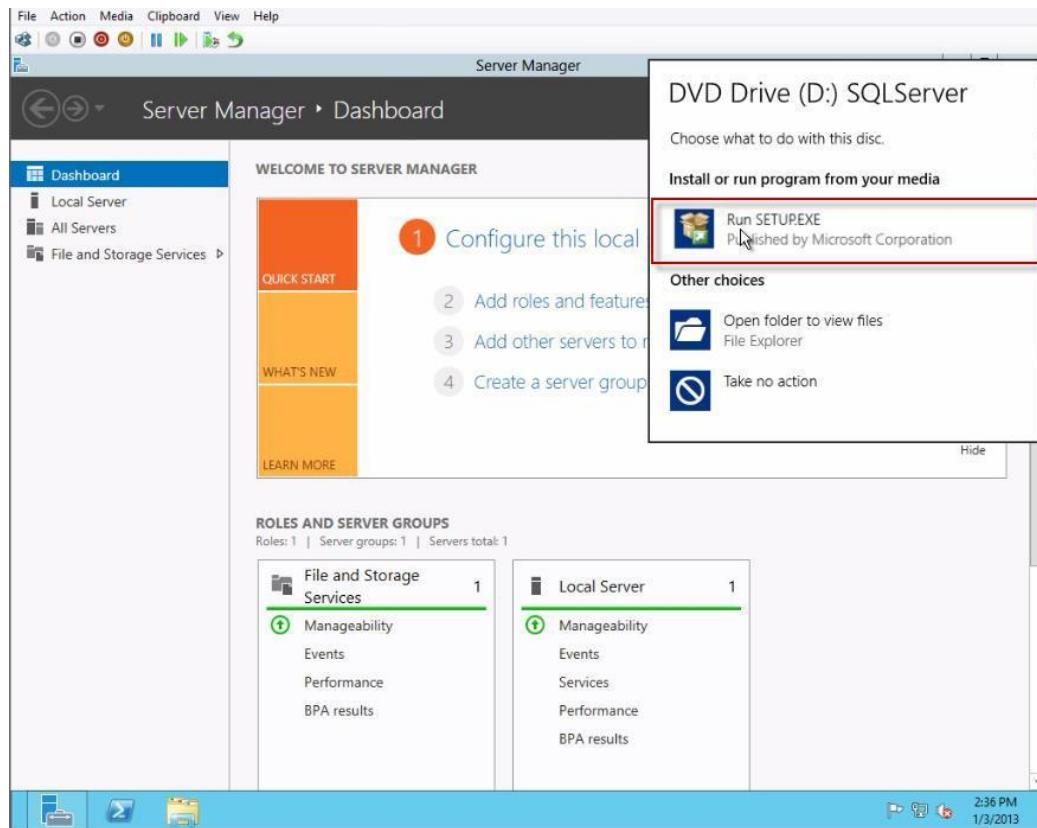
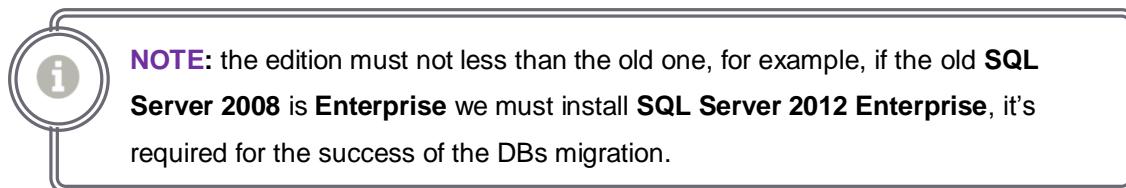


Insert **Windows Server 2012 DVD** in your drive and click on **Specify alternate source path** and type the drive path followed by the source of the files in my case “**D:\Sources\Sxs**”.



3.2 Install MS SQL Server 2012 SP1 Enterprise Edition.

Insert **MS SQL Server 2012 SP1 Enterprise Edition** DVD into your drive, click on **Run SETUP.EXE**,





Watch the
Video

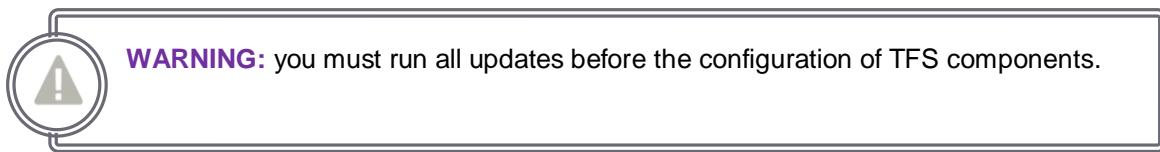
http://youtu.be/rxTyLH_3A6o

Chapter 4 – Install TFS 2012 Update 1 & Backup DBs and Reporting Key

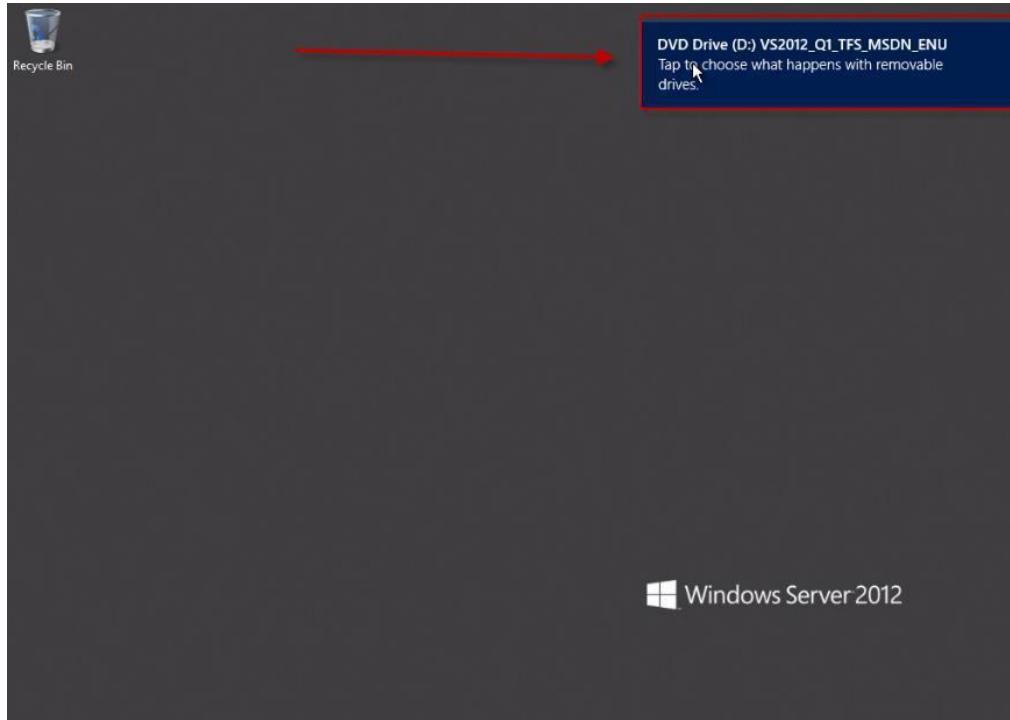
- Install TFS 2012 Update 1 and run windows update.
- Run TFS 2012 Backup Tool and backup the old DBs.
- Backup the old Reporting Service Encryption Key.

4.1 Install TFS 2012 Update 1 and run windows update.

In this section I will explain how to install **TFS 2012 Update 1** on a new machine, I will also make sure to run windows update for **Windows** and other **Microsoft Products**

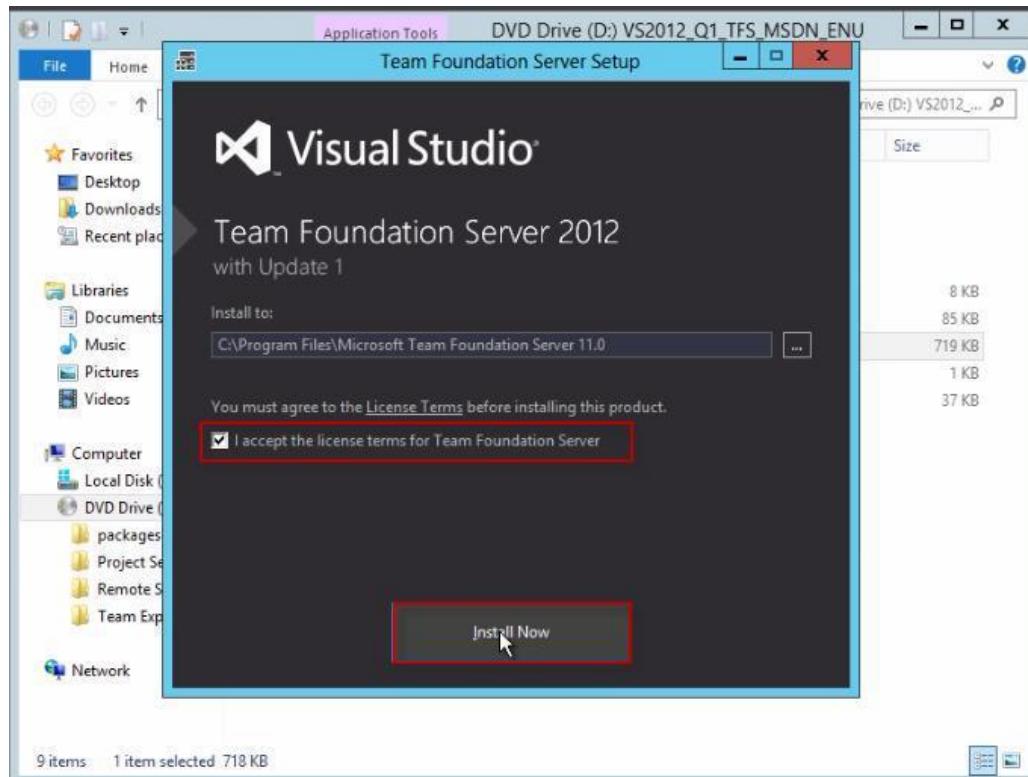


Insert the **TFS 2012 Update 1 DVD** into your driver.

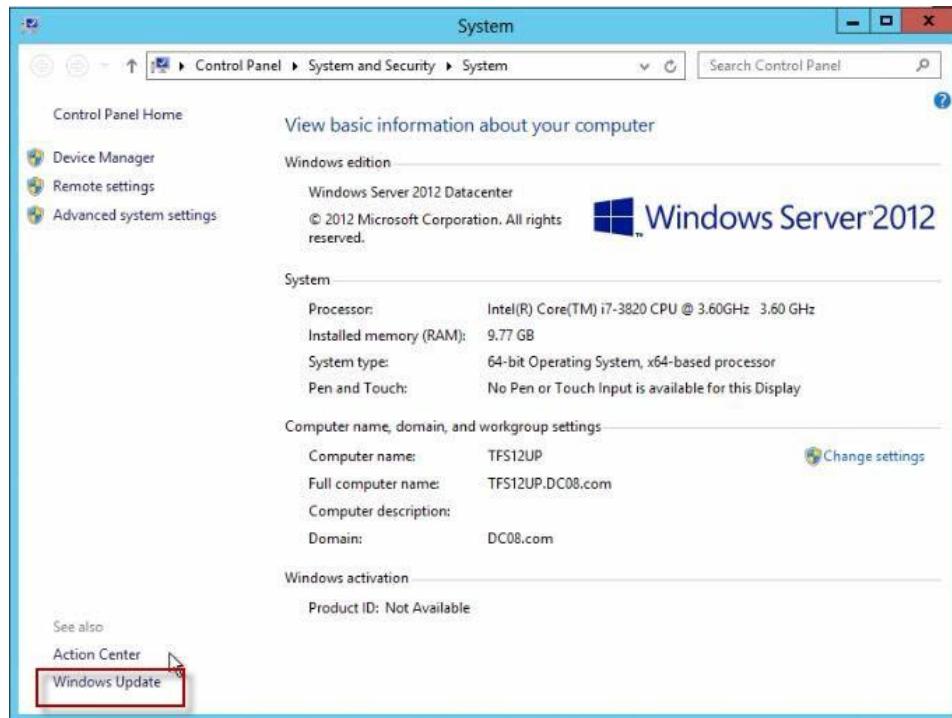


Chapter 4 – Install TFS 2012 Update 1 & Backup DBs and Reporting Key

Select **I accept the license and terms** and click **Install Now**.

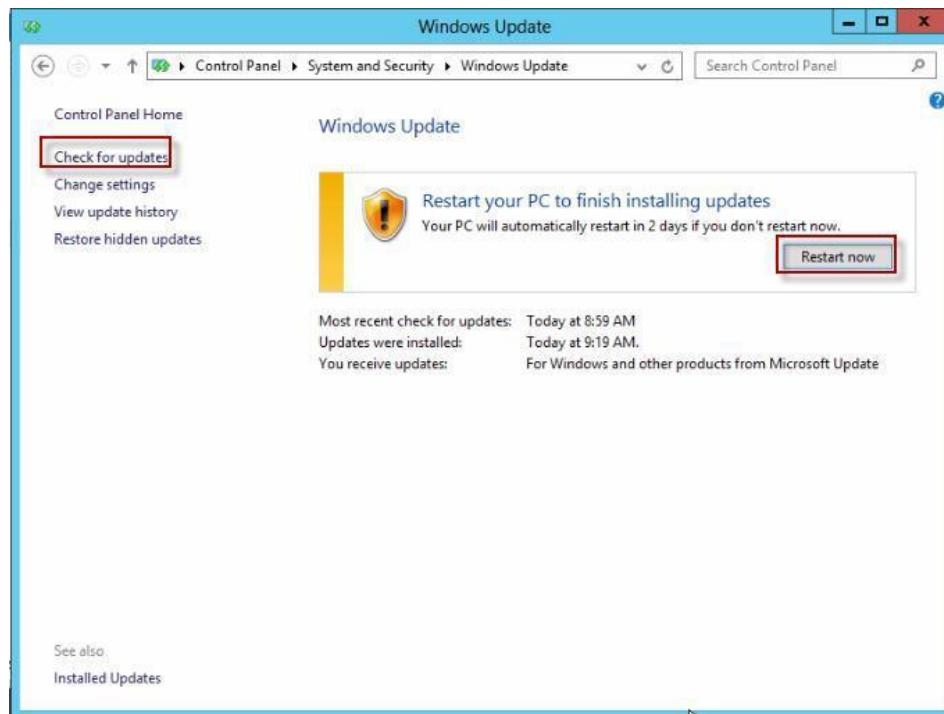


After the installation complete close **Configuration Center** and navigate to **System** and click **Window Update**.



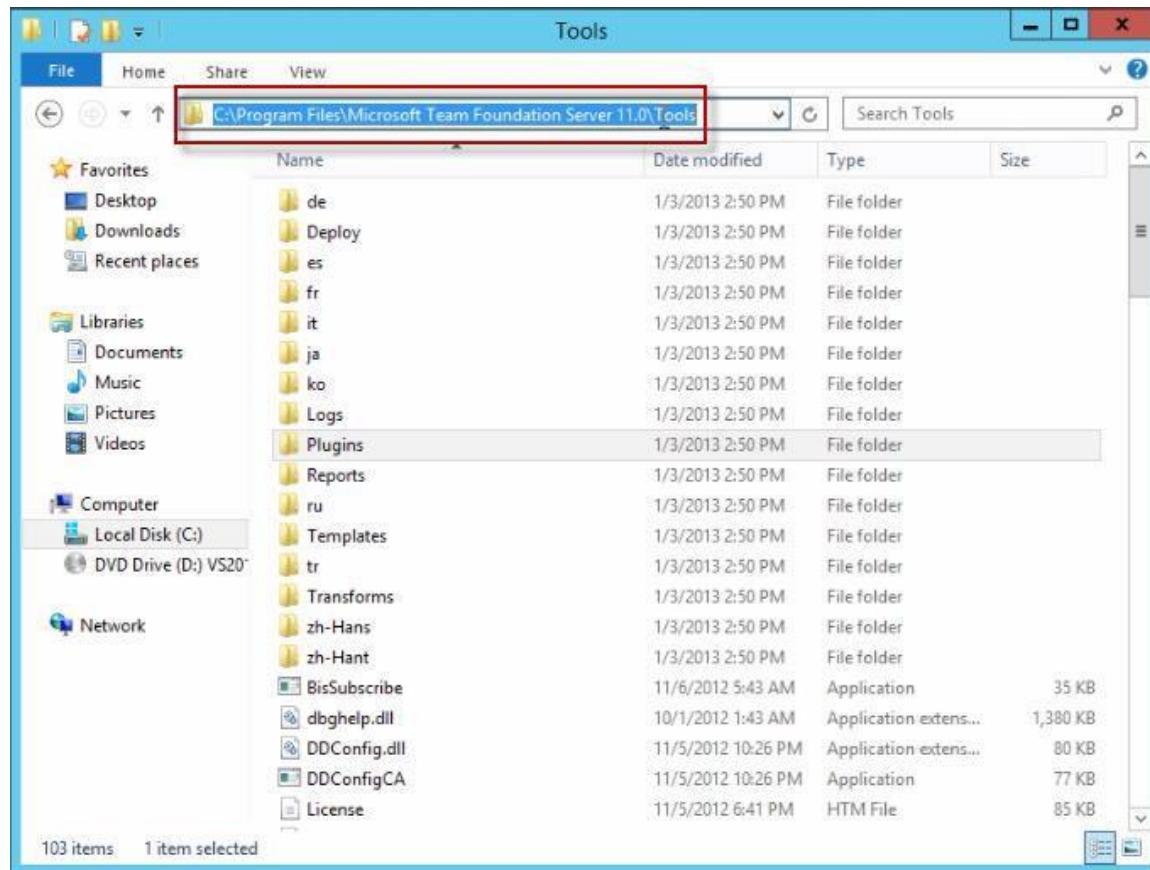
Chapter 4 – Install TFS 2012 Update 1 & Backup DBs and Reporting Key

Install all available update and restart the machine if needed.

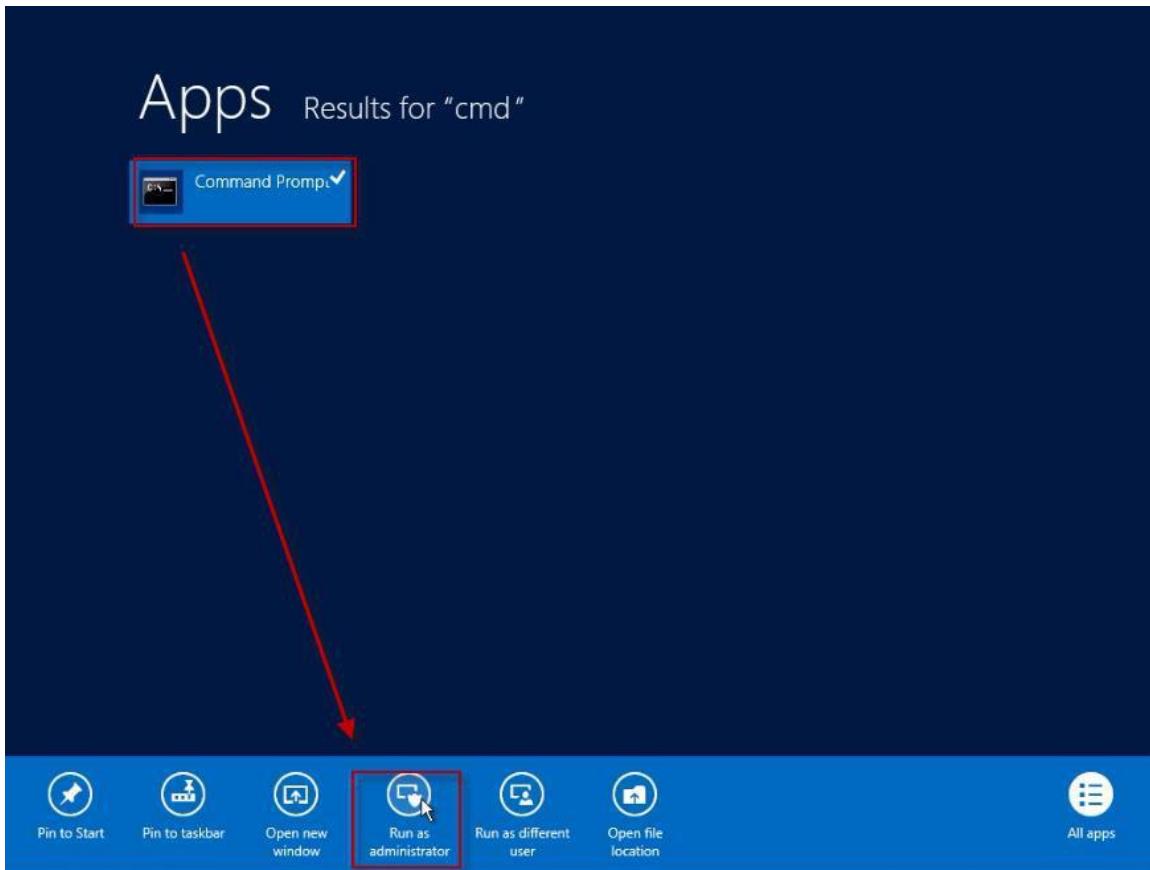


4.2 Run TFS 2012 Backup Tool and backup the old DBs.

There are some new tools come with **TFS 2012** that used to Back up and Restore Data for TFS, so we will navigate to the folder of the tools and copy that path. “**Program Files\Microsoft Team Foundation Server 11.0\Tools**”.



Open the command line as administrator.

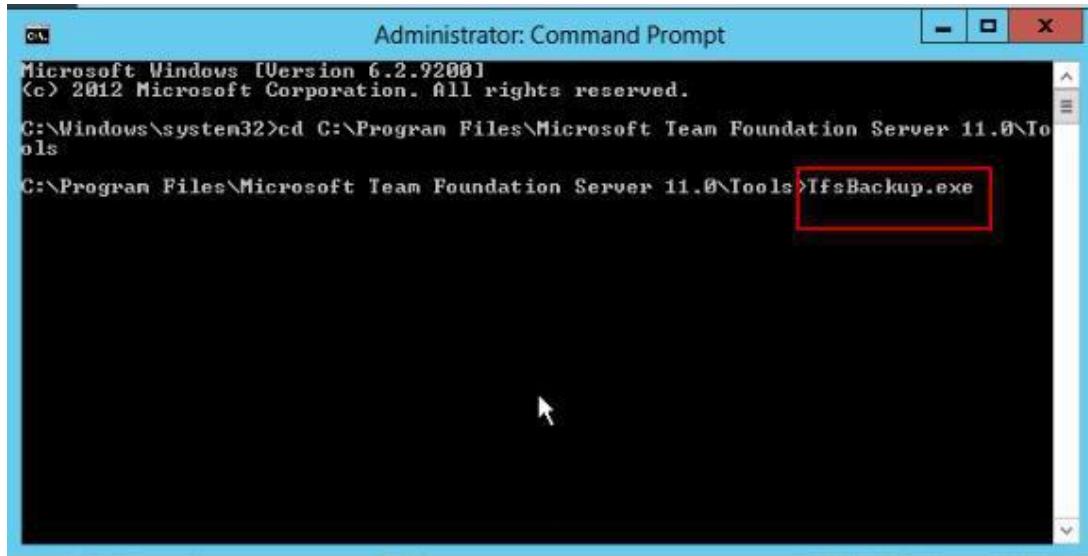


Type **cd** and paste the copied path.

```
Administrator: Command Prompt
Microsoft Windows [Version 6.2.9200]
(c) 2012 Microsoft Corporation. All rights reserved.

C:\Windows\system32>cd C:\Program Files\Microsoft Team Foundation Server 11.0\Tools
```

Type **TFSBackup** and press enter.

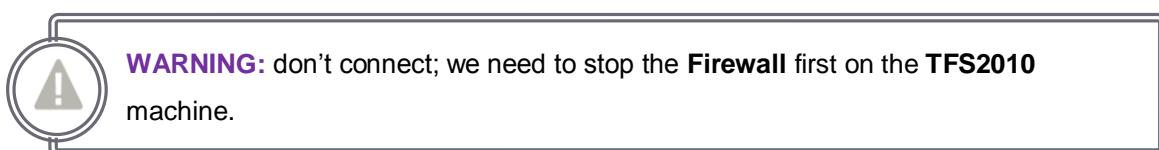
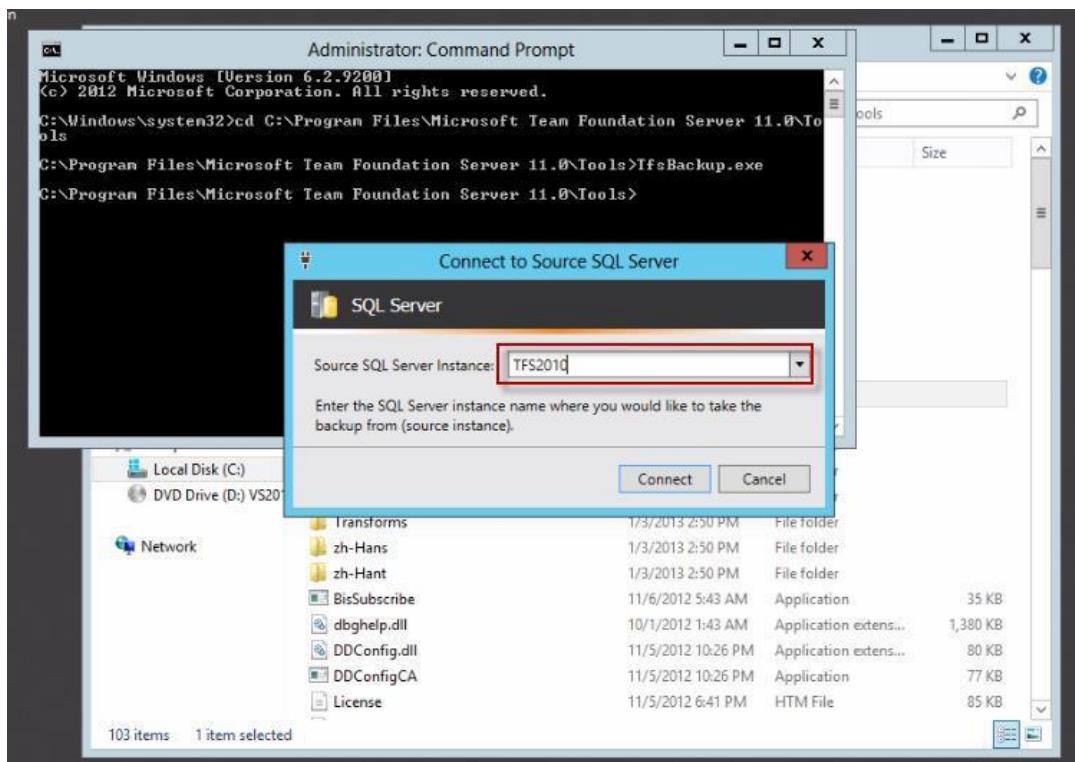


```
Administrator: Command Prompt
Microsoft Windows [Version 6.2.9200]
(c) 2012 Microsoft Corporation. All rights reserved.

C:\Windows\system32>cd C:\Program Files\Microsoft Team Foundation Server 11.0\Tools

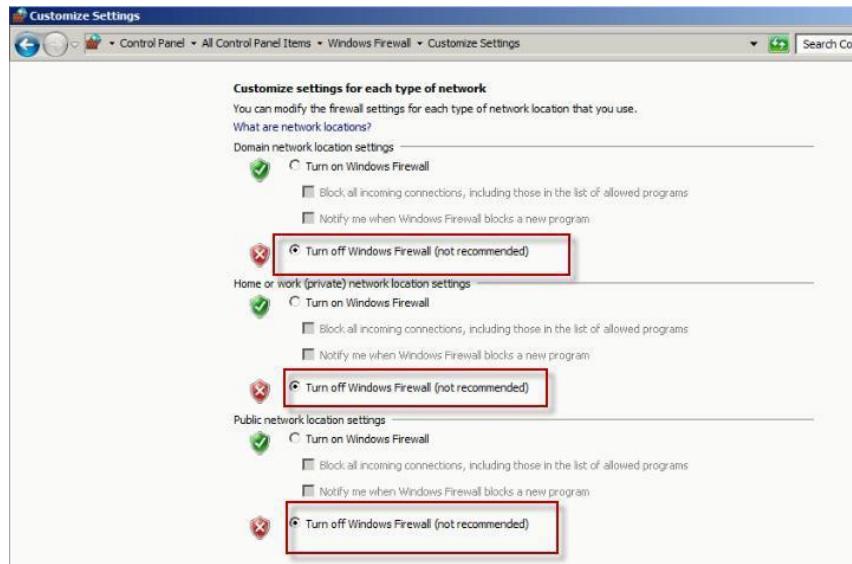
C:\Program Files\Microsoft Team Foundation Server 11.0\Tools>TfsBackup.exe
```

The **TFSBackup** tool will launch, type the name of the old server (**TFS2010**),

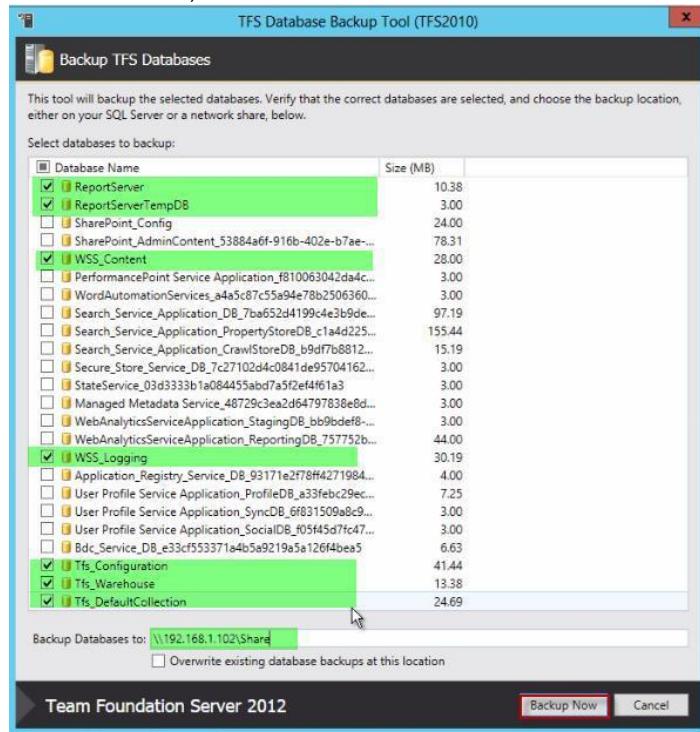


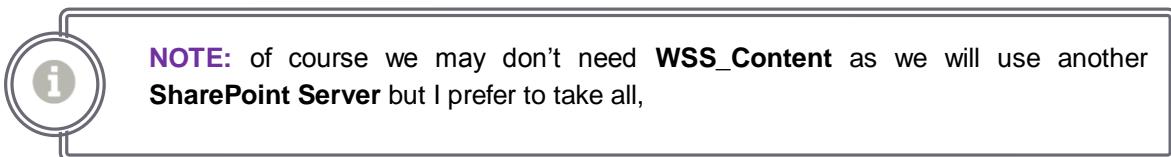
Chapter 4 – Install TFS 2012 Update 1 & Backup DBs and Reporting Key

Go to the **TFS2010** machine and temporary stop the **Firewall** so the **TFSSBackup** tool can connect to SQL Server DB.

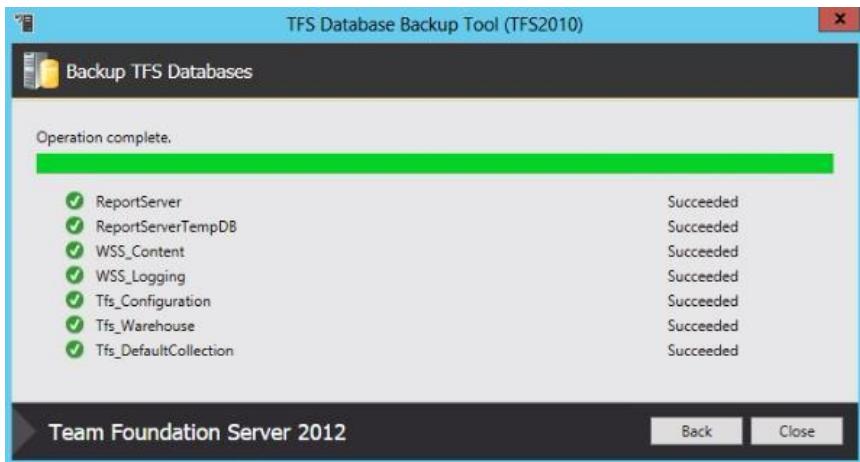


Get back to **TFS12UP machine** and click **Connect**, the tool will retrieve and select by default all needed DBs, in the **Backup Database to**, type the path of the shared folder that we created earlier, review that there are 7 DBs selected as the following image.



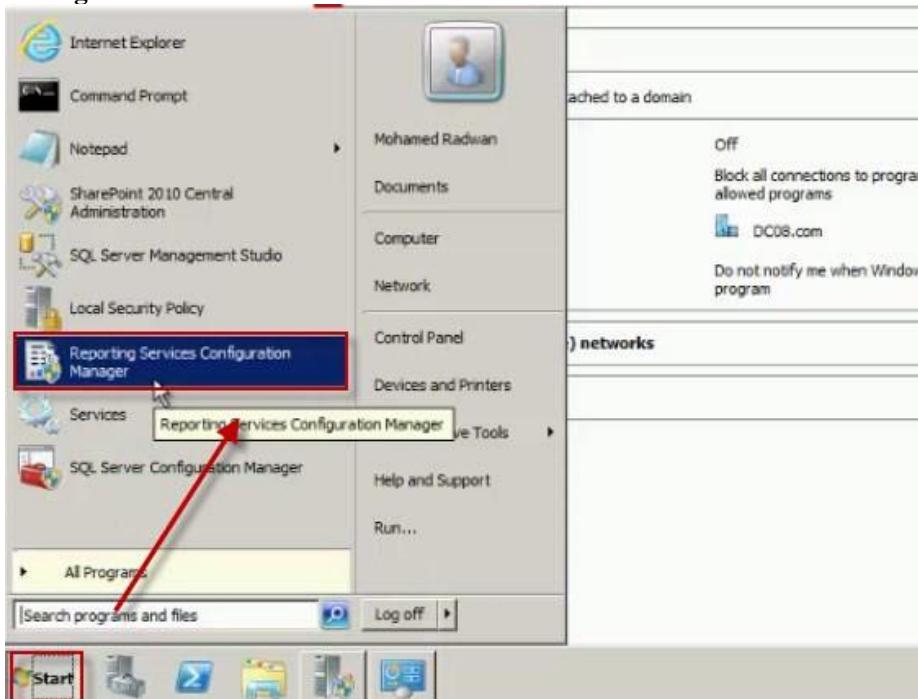


Review the success of the backup.

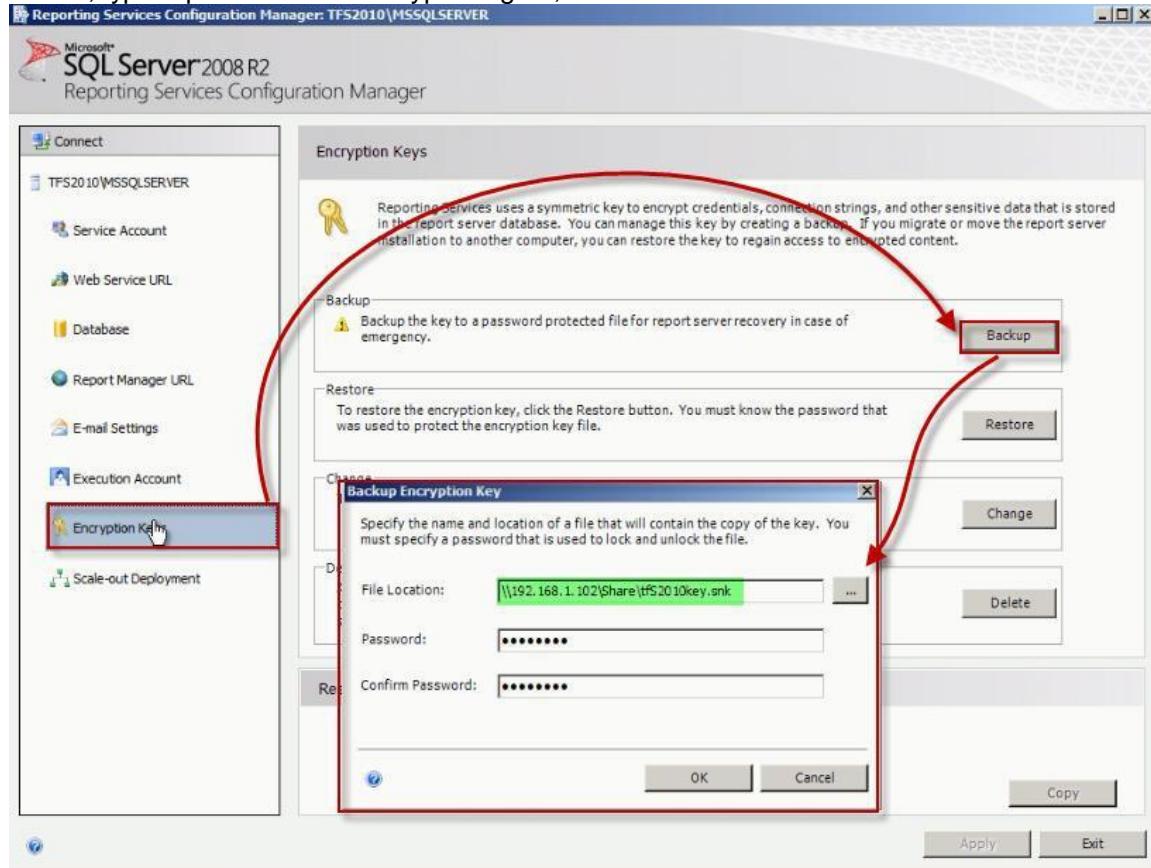


4.3 Backup the old Reporting Service Encryption Key.

Go to the **TFS2010** machine and click **Start** and navigate to **Reporting Service Configuration Manager**.



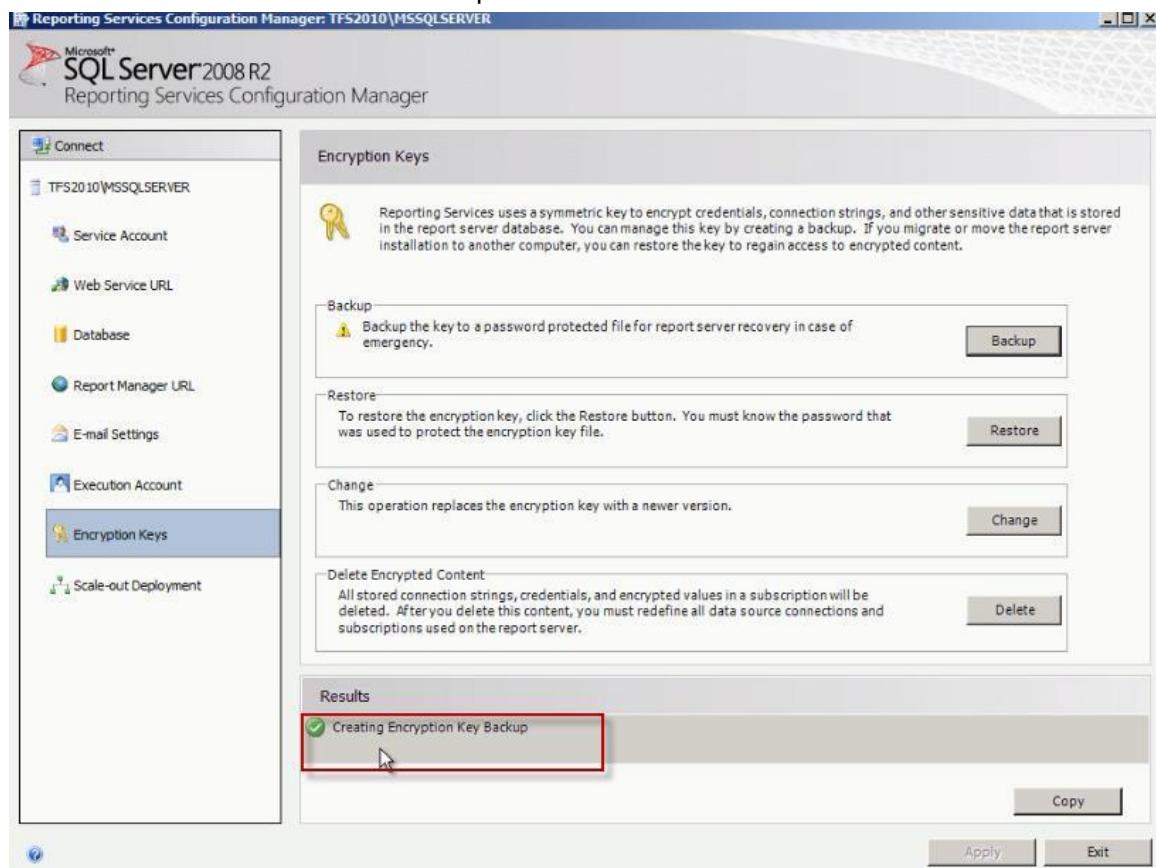
Click connect to the **TFS2010** and then click on **Encryption Key** tab, after that click on **Backup** button, in the **File Location**, type the path of the shared folder that we created earlier, type a password and re-type it again,



NOTE: remember you will use this password when we you restore the key to the new server.

Chapter 4 – Install TFS 2012 Update 1 & Backup DBs and Reporting Key

Review and make sure that the backup success.



Chapter 5 – Restore DBs and Reporting Encryption Key



Watch the
Video

<http://youtu.be/shBsgJrFp34>

- Run TFS 2012 Restore Tool and restore old DBs to the new SQL server 2012.
- Change Reporting DB and restore Reporting Encryption Key.

5.1 Run TFS 2012 Restore Tool and restore old DBs to the new SQL server 2012.

In this section I will explain how to restore the backup DBs to the new **SQL Server 2012** using the new tools **TFSRestore.exe**.

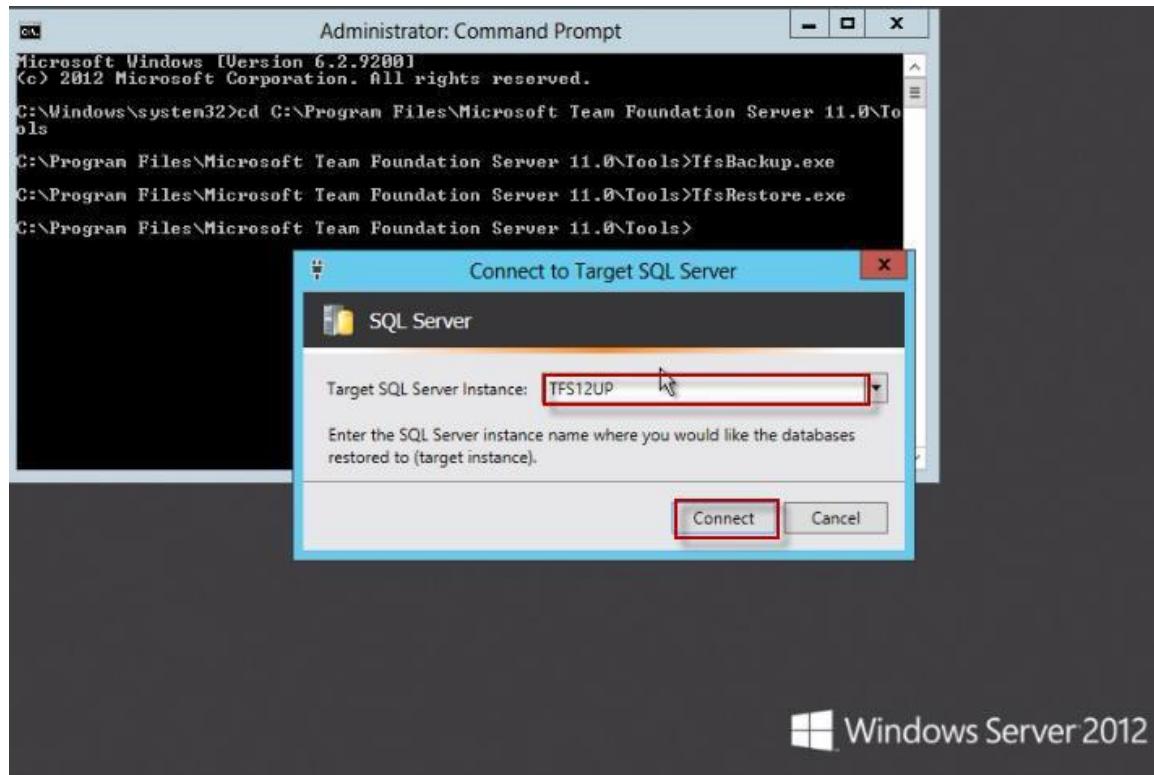
Get back to the command line on the new machine (**TFS 2012**), type **TFS Restore** and then enter.

```
Administrator: Command Prompt
Microsoft Windows [Version 6.2.9200]
(c) 2012 Microsoft Corporation. All rights reserved.

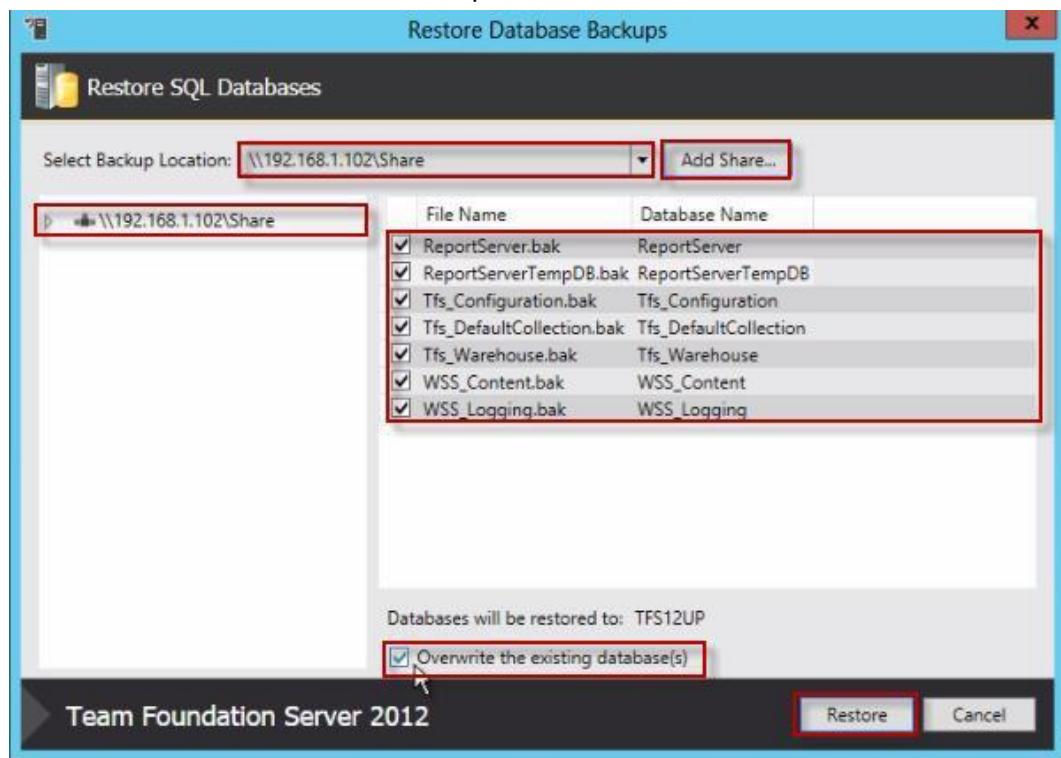
C:\Windows\system32>cd C:\Program Files\Microsoft Team Foundation Server 11.0\Tools

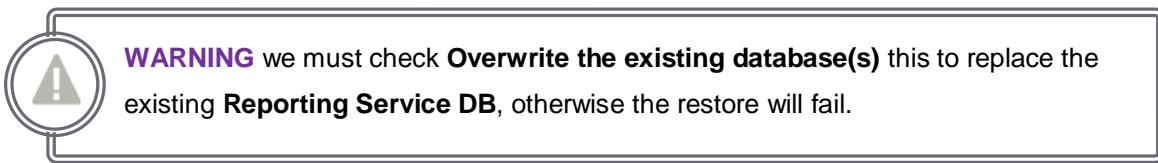
C:\Program Files\Microsoft Team Foundation Server 11.0\Tools>TfsBackup.exe
C:\Program Files\Microsoft Team Foundation Server 11.0\Tools>TfsRestore.exe
```

The TFS restore tool will launch.

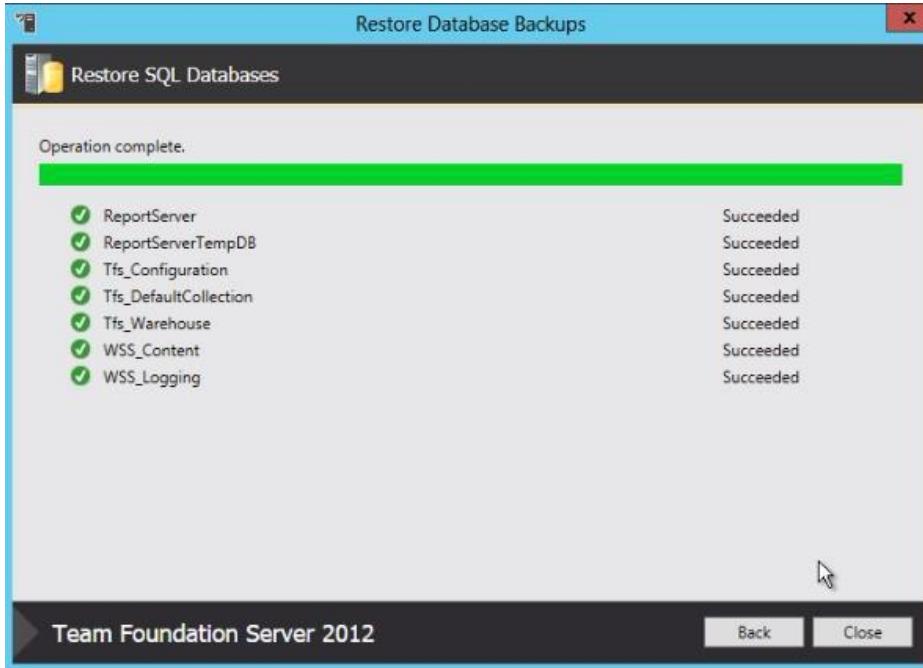


Click **Connect** and in the **Select Backup Location**, add the shared folder that has created earlier and now has all backup files, select all DBs.



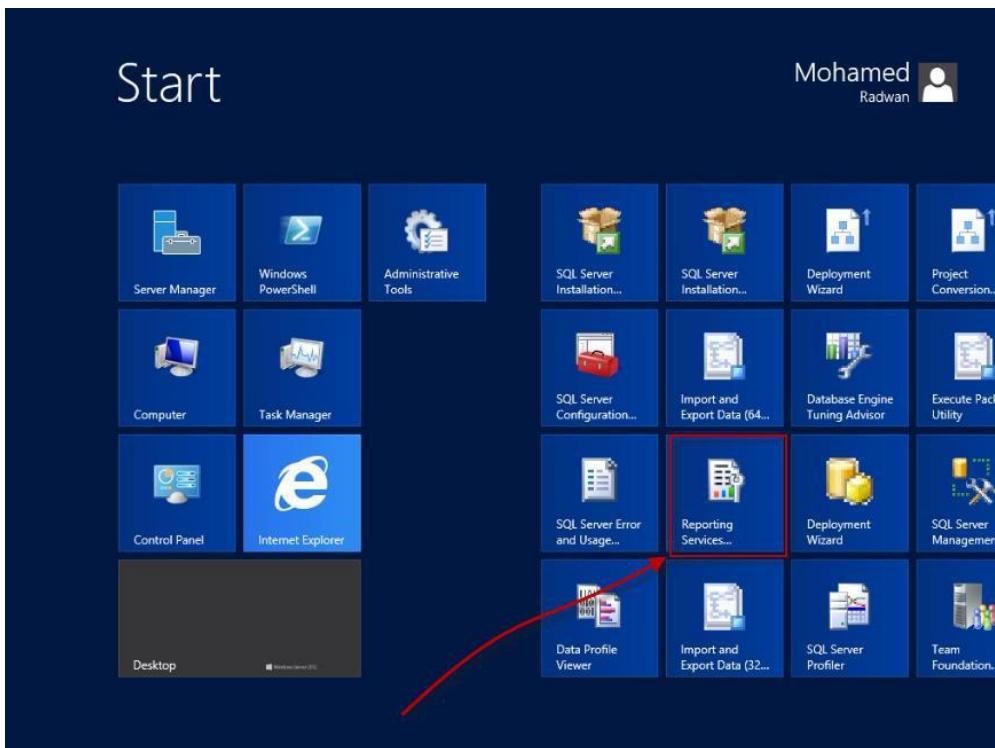


Review the success of the restore.

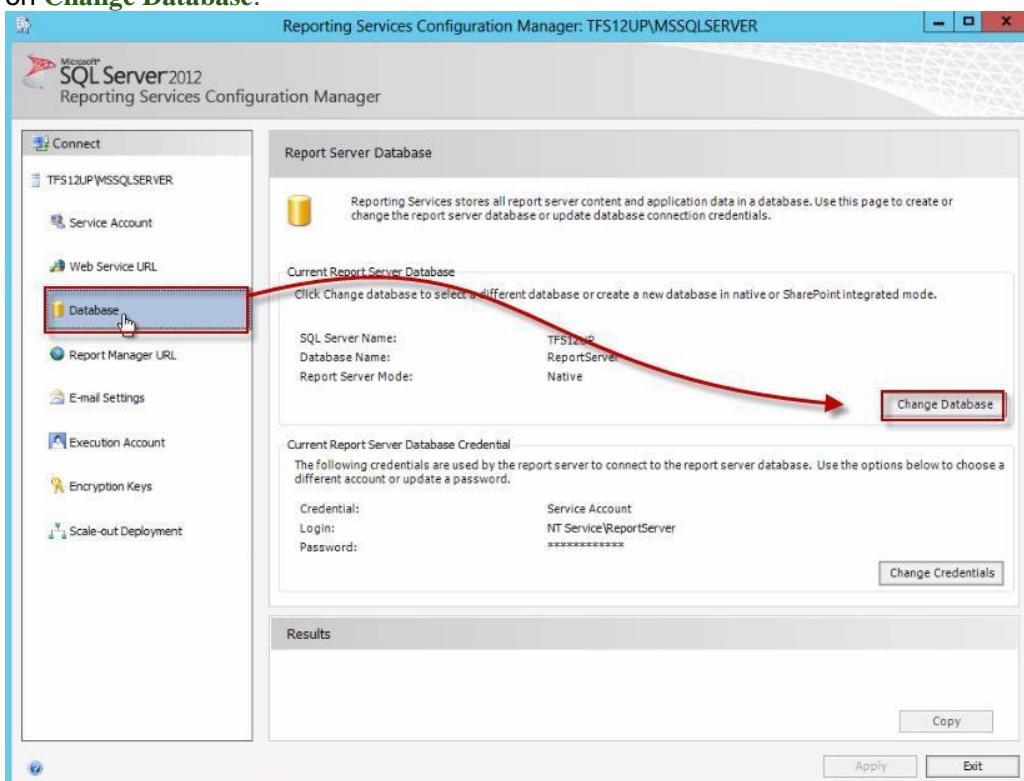


5.2 Change Reporting DB and restore Reporting Encryption Key.

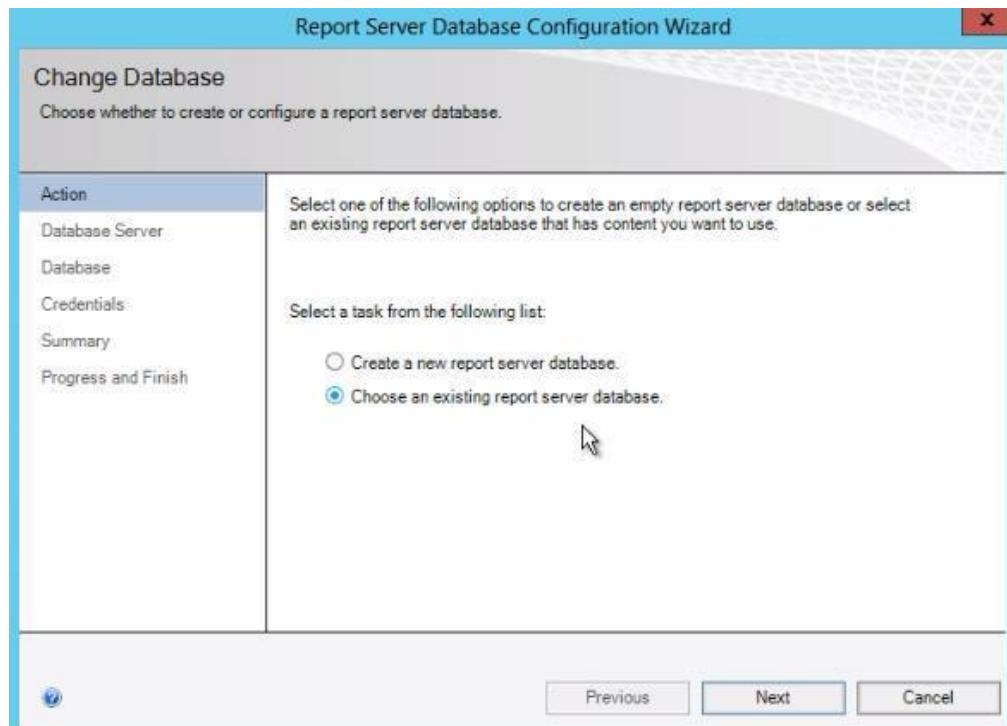
Open the **Reporting Service Configuration Manager**.



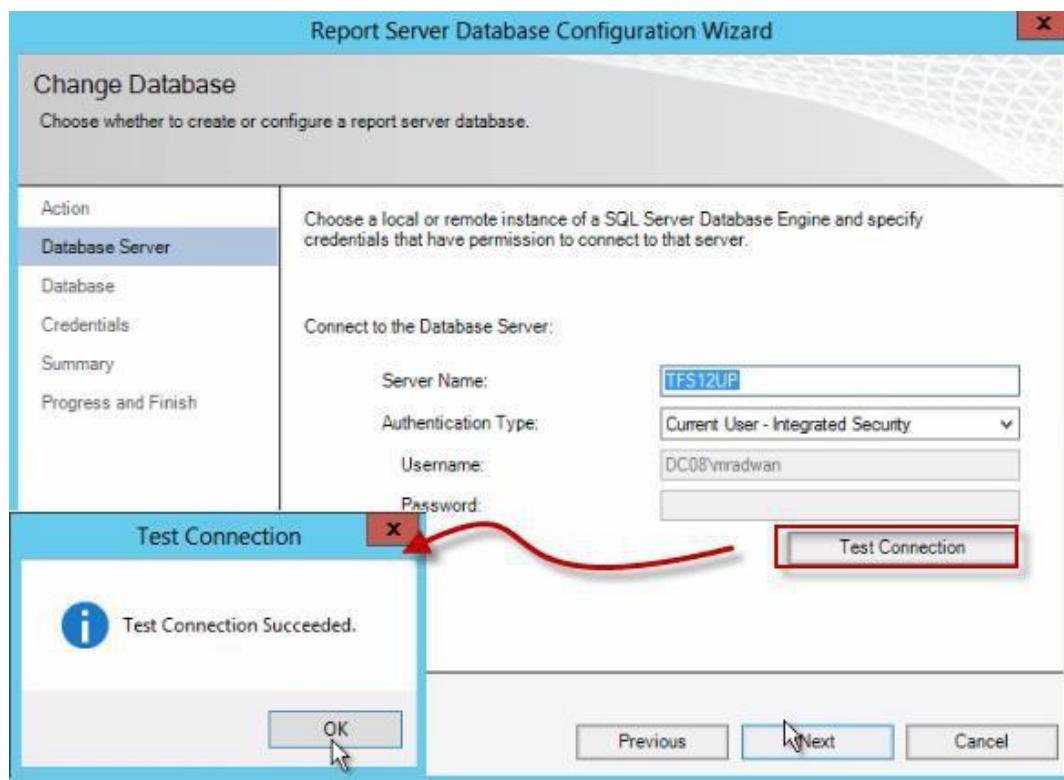
Click **Connect** to the new server (**TFS12UP**), after that click on **Database** tab and then click on **Change Database**.



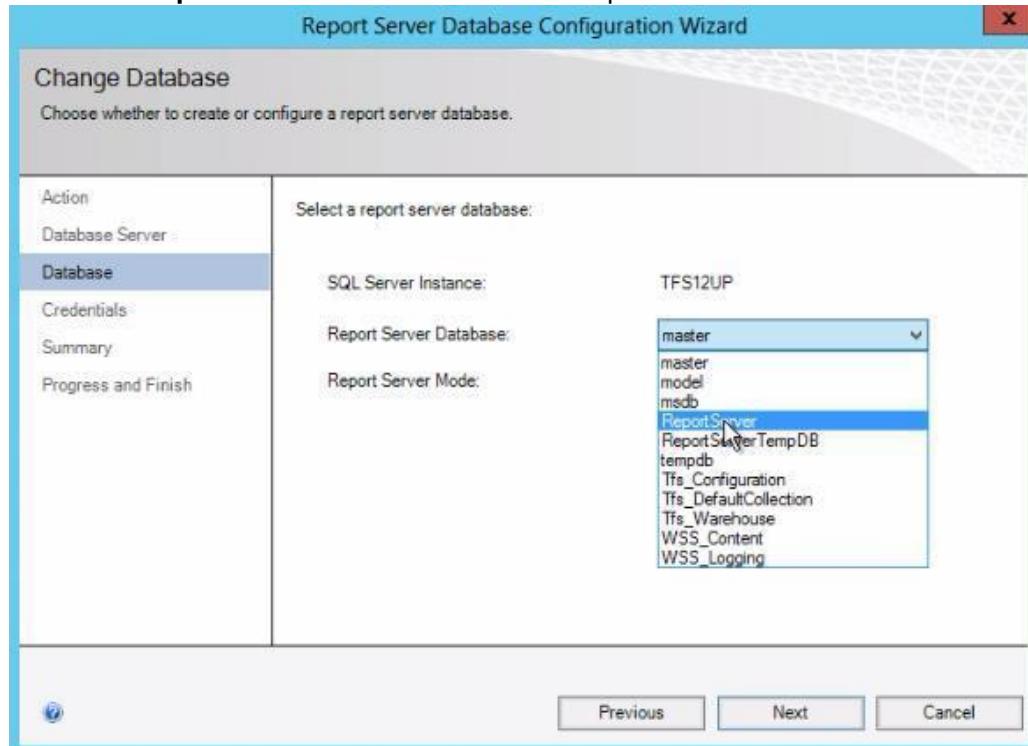
Select **Choose an existing report server database** and then click **Next**.



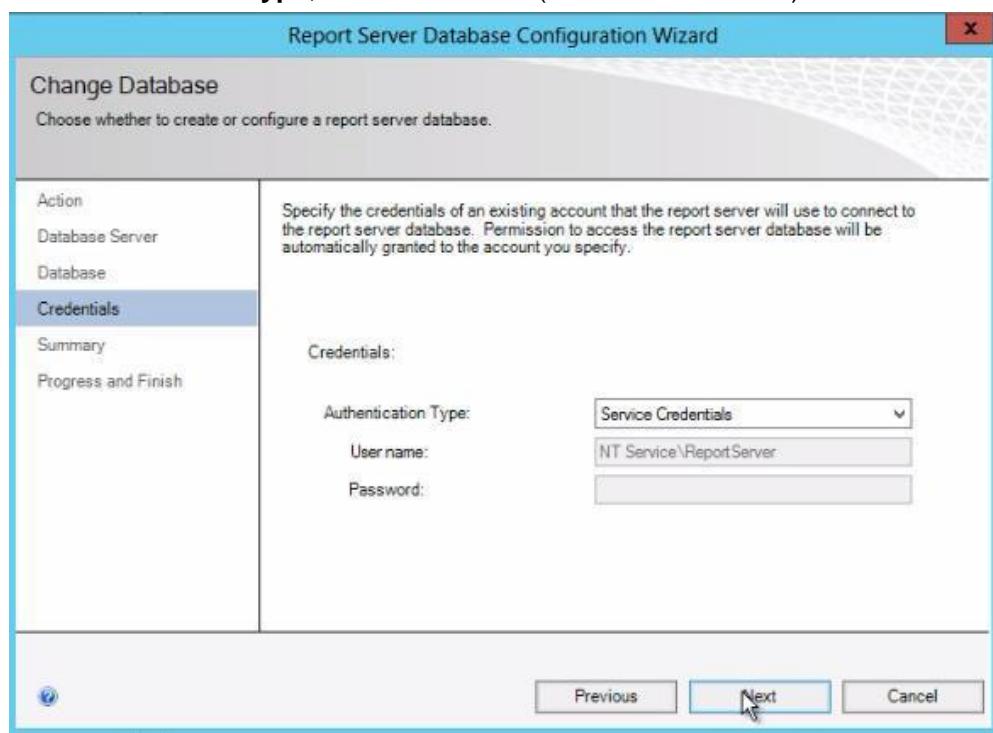
Test the connection to server and then click **Next**.



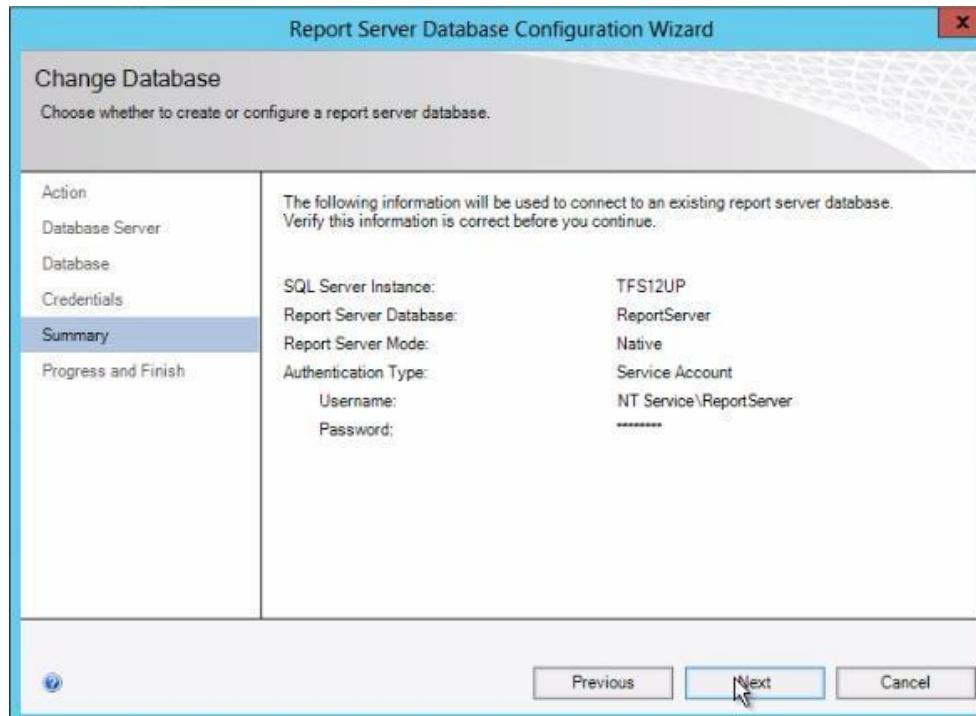
Select the **Report Server** database from the drop down and then click **Next**.



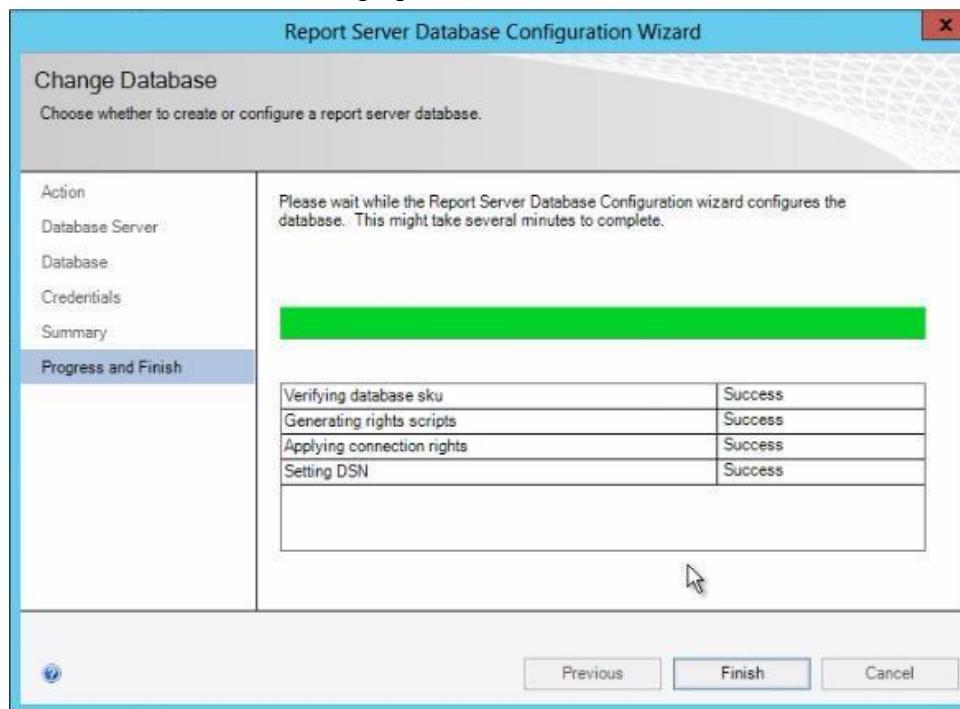
In **Authentication Type**, leave the default (**Service Credential**) and then click **Next**.



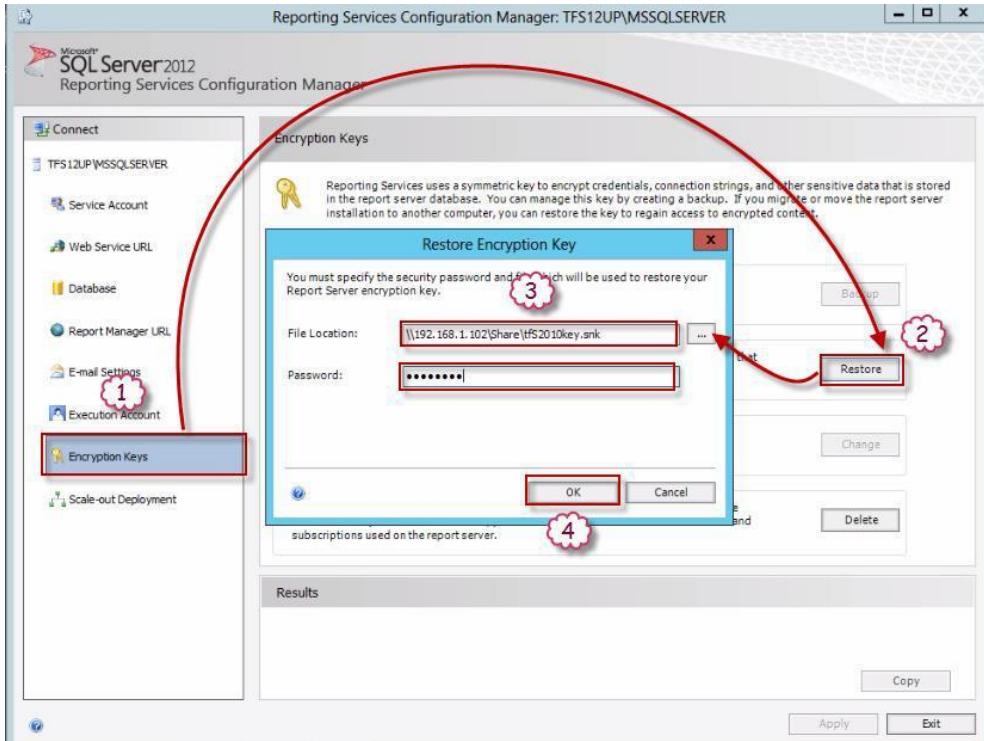
In **Summary**, review and click **Next**.



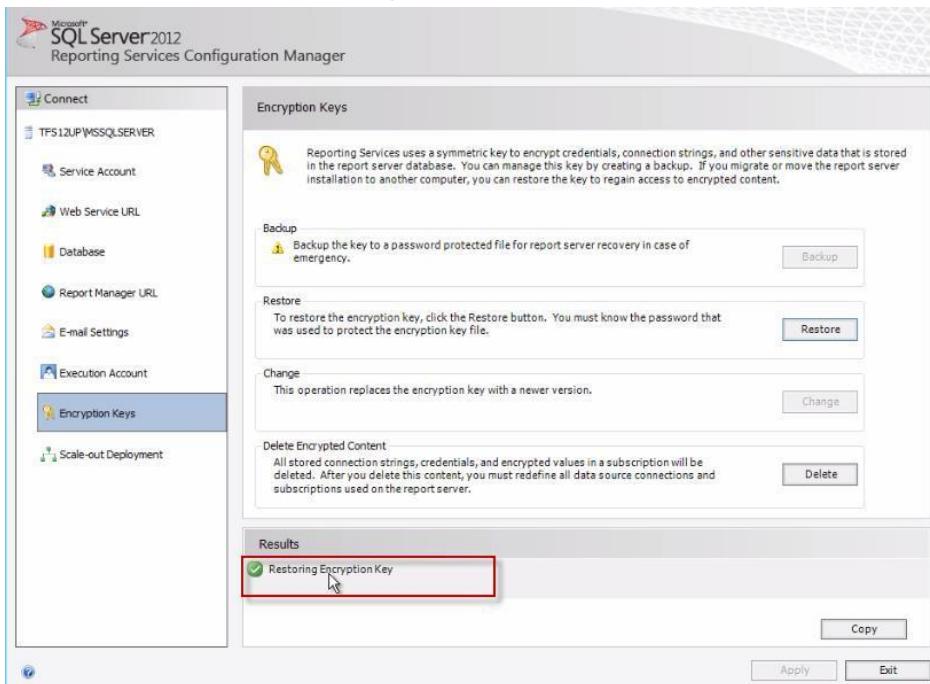
Review the success of changing the DB.



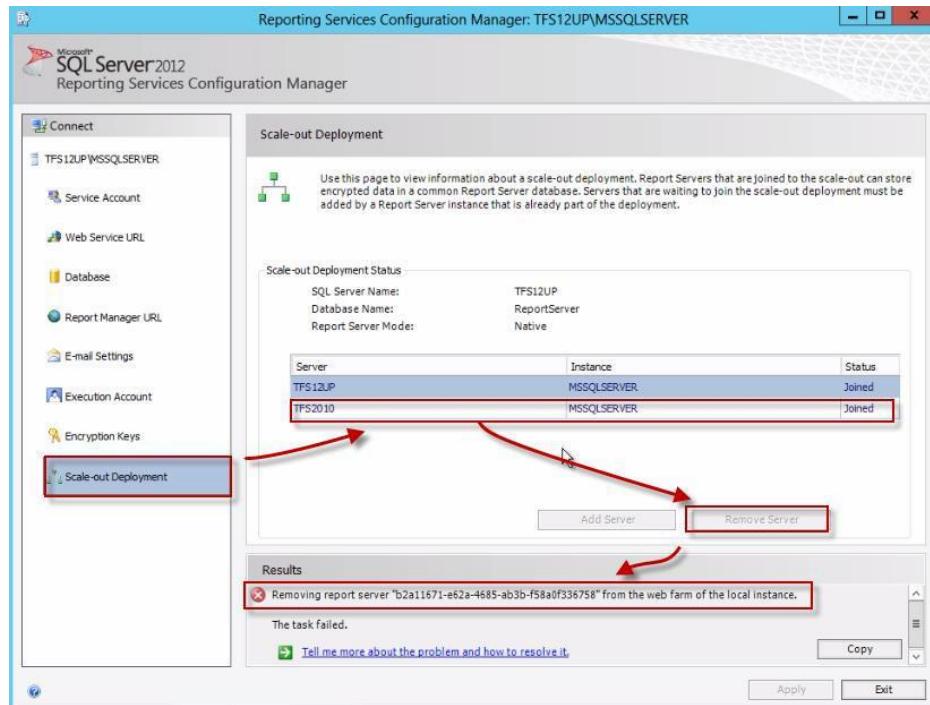
Click on **Encryption keys** tab and then click on **Restore** button, select the shared folder path that has the backup key, type the password that we used during the key backup and click **OK**.



Review the success of restoring the key.

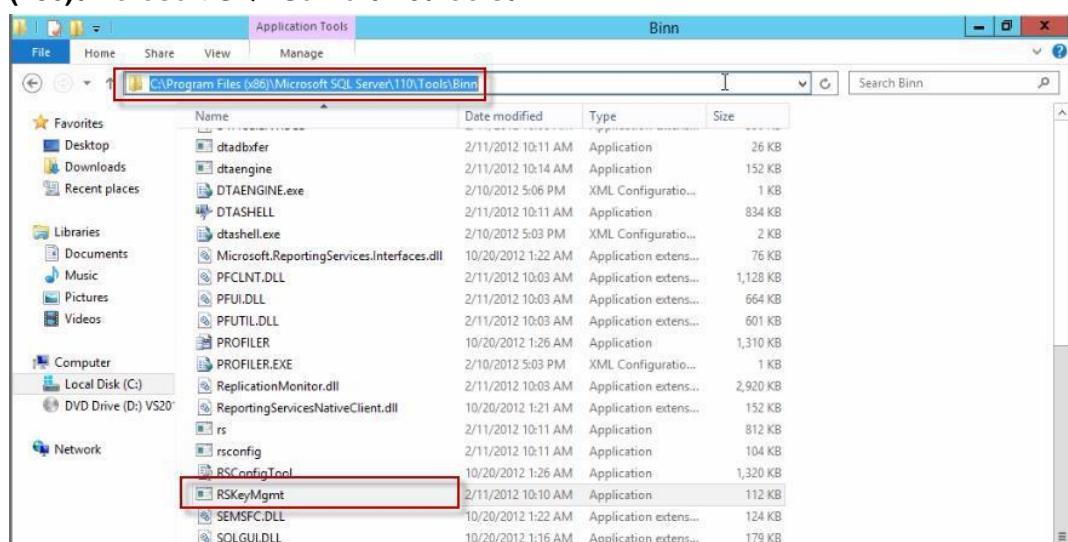


Click on **Scale-out Deployment**, select the old TFS machine (**TFS2010**) and click on **Remove Server**.



NOTE if you have the same error as me, you will need to remove that manually.

Go to the SQL Server **RSKeyMgmt** Tool folder and copy the path “**C:\Program Files (x86)\Microsoft SQL Server\110\Tools\Binn**”.





Watch the
Video

<http://youtu.be/lwdXNqaO2Dw>

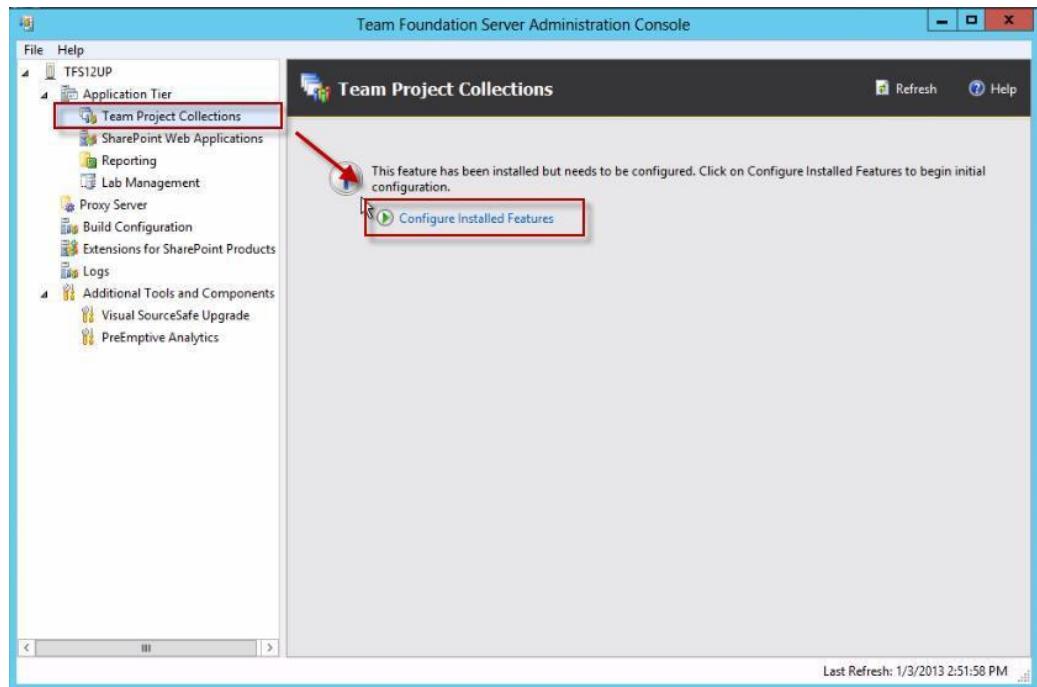
Chapter 6 – Configure TFS 2012.

- Configure TFS 2012 using Upgrade wizard.

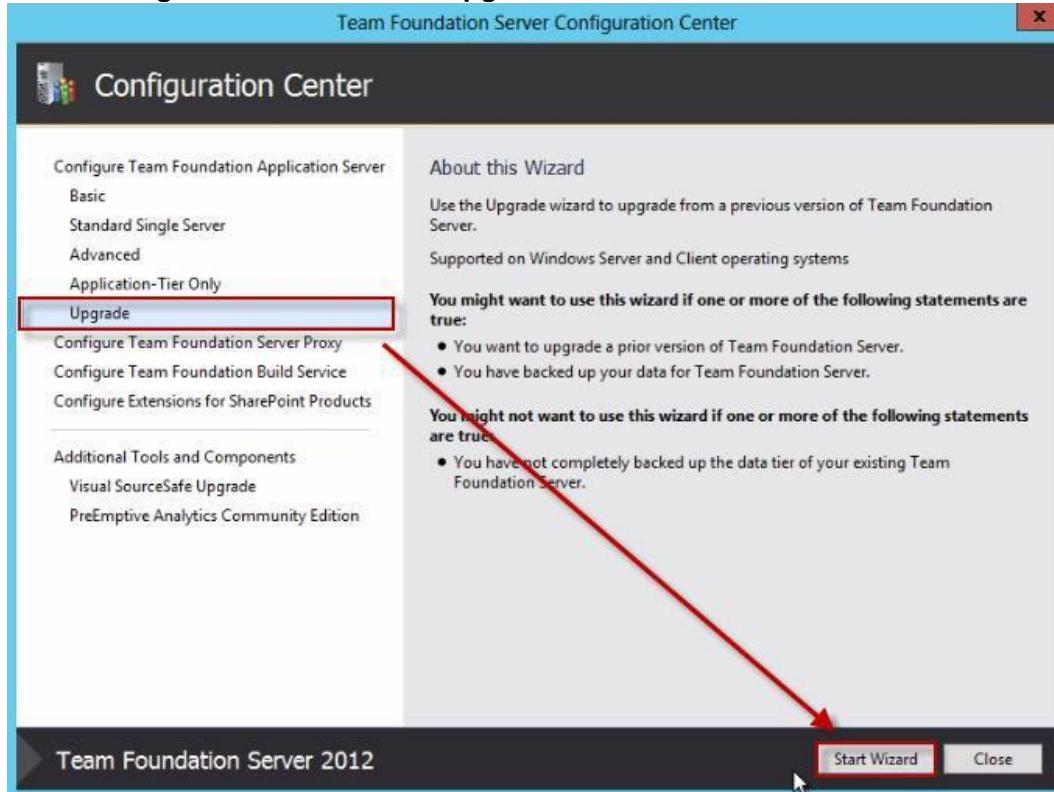
6.1 Configure TFS 2012 using Upgrade wizard.

In this section I will explain how to configure **TFS 2012 Update 1** using the upgrade wizard or in other word how to **Run the TFS Upgrade Wizard** that will upgrade old and restored DBS, it will also use the pre-configured Remote SharePoint 2012 for SharePoint 2010.

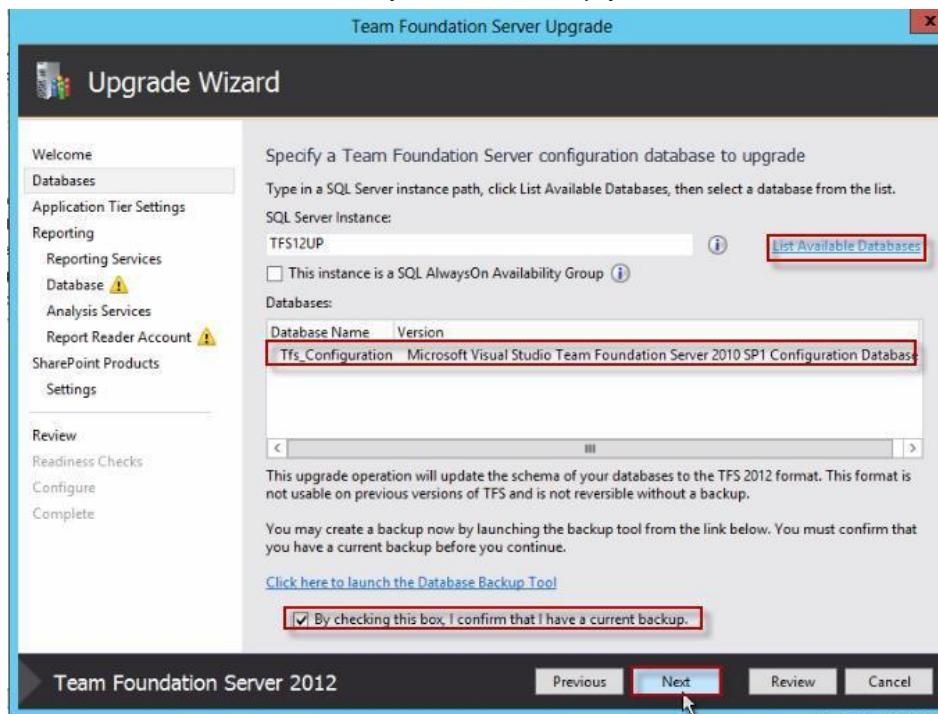
Open **Team Foundation Server Administration Console**, click on **Team Project Collection** and then click on **Configure Installed Features**.

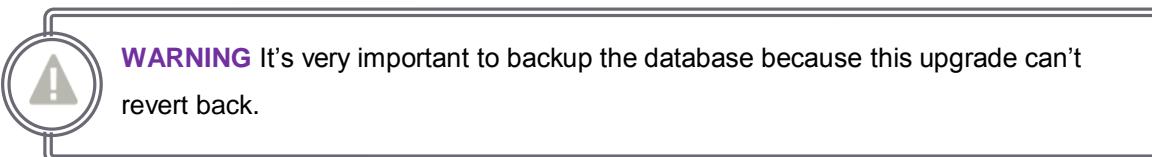


In the Configuration Center, click Upgrade and then click Start Wizard.

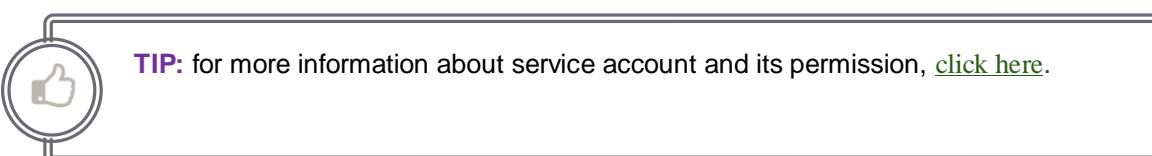
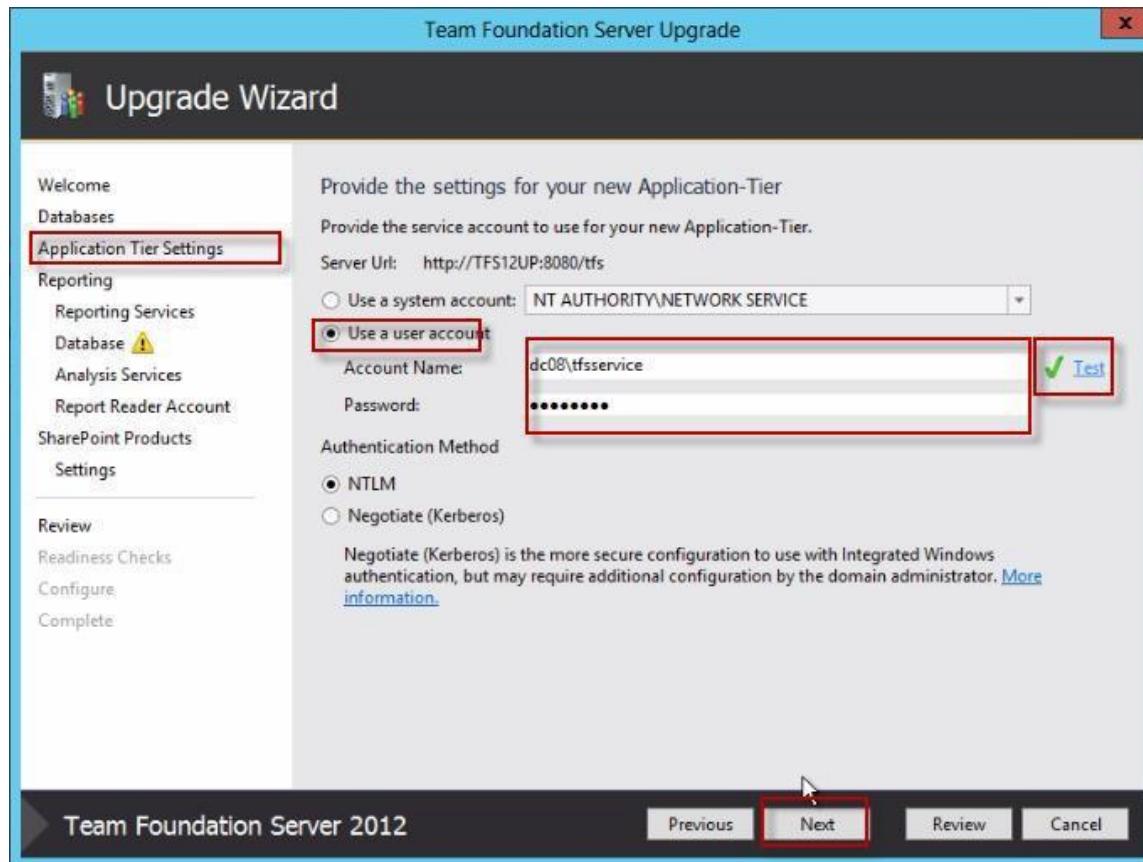


In Database, click on **list Available Database** to retrieve the restored DB of old TFS, select the checkbox that confirm that you have backup your DB and then click **Next**.

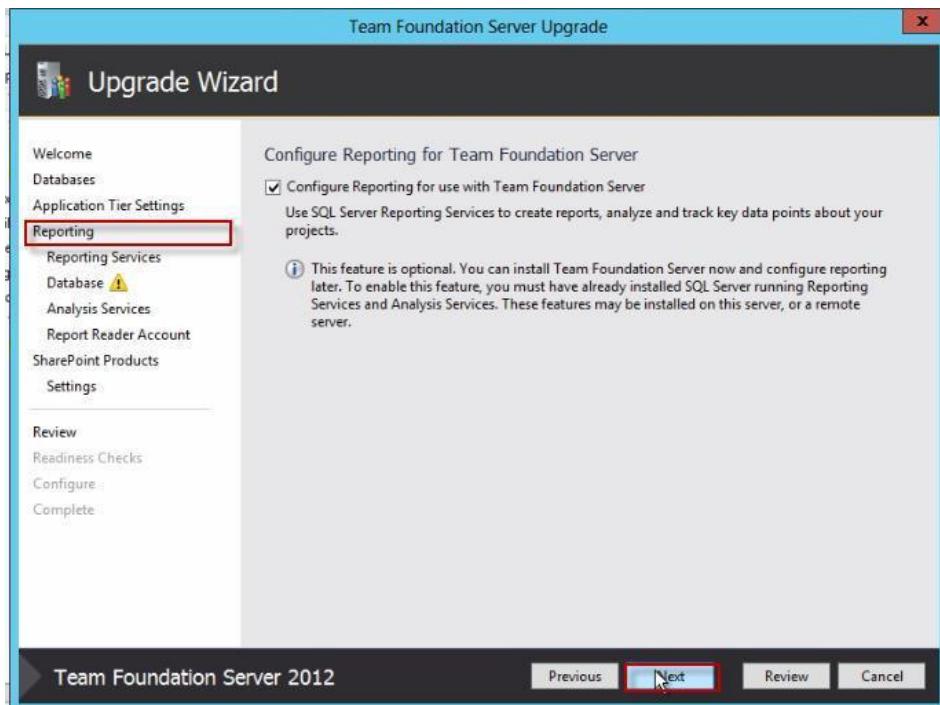




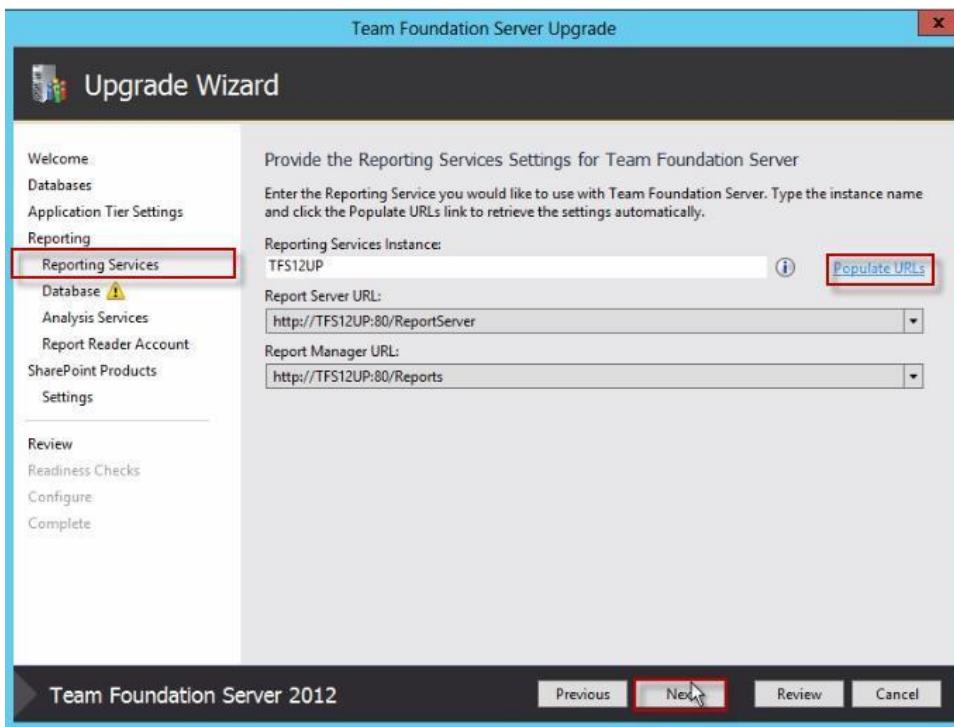
In the **Application Tier Settings** select **Use a user account** and type the service account that will be used for TFS, I prefer to use the recommended **TFS Service Accounts**, so type **DC08\TFSService** and type its password then click **Test** to make sure the correction of the account.



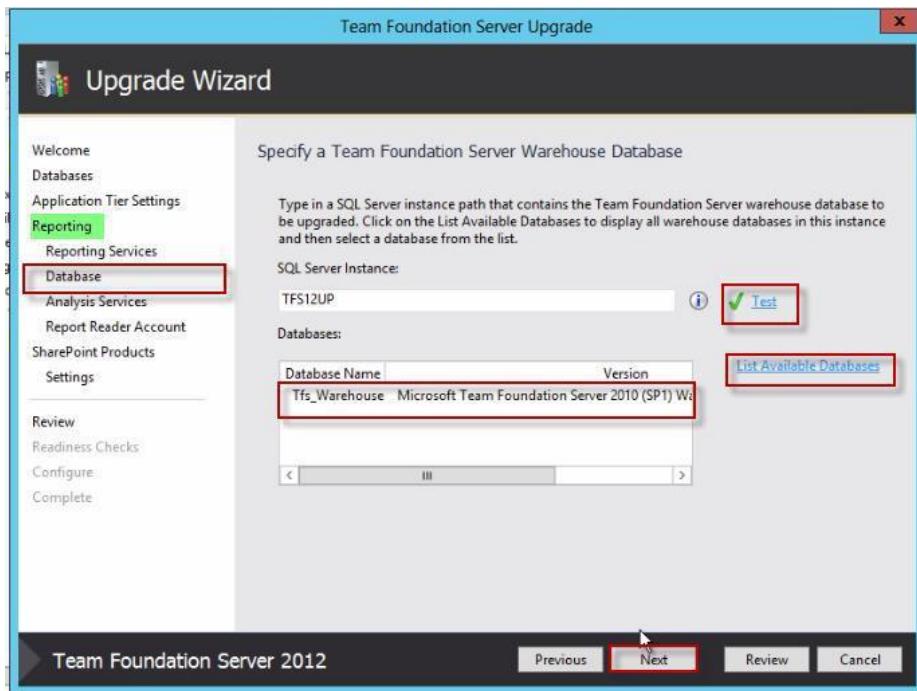
In the **Reporting**, select **Configure Reporting for Team Foundation Server** and then click **Next**.



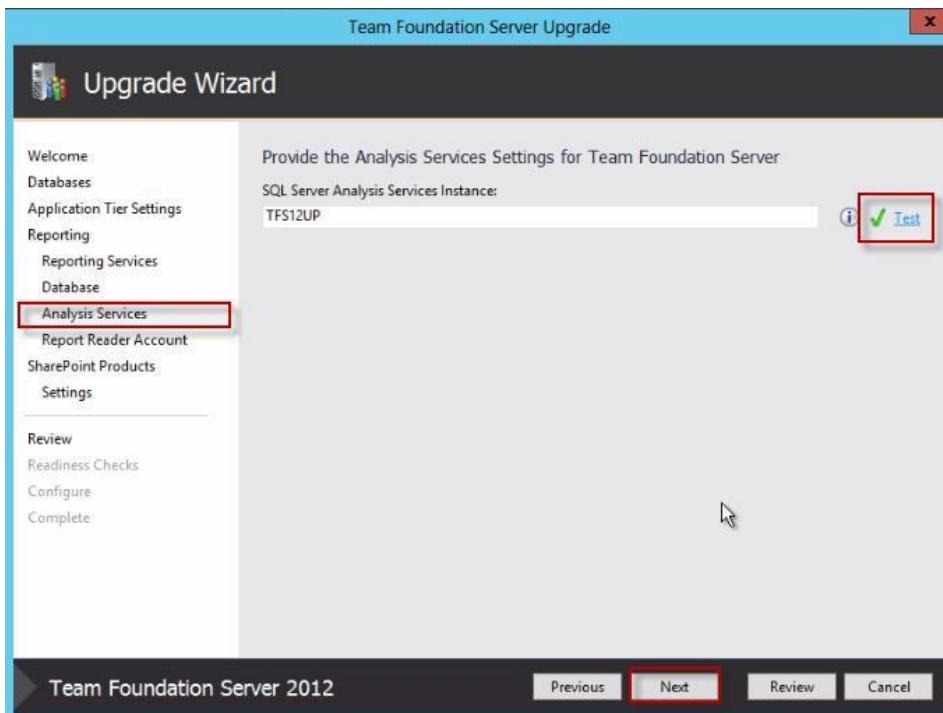
In **Reporting Service**, click **Populate URLs** to make sure it retrieves the available URLs, after that click **Next**.



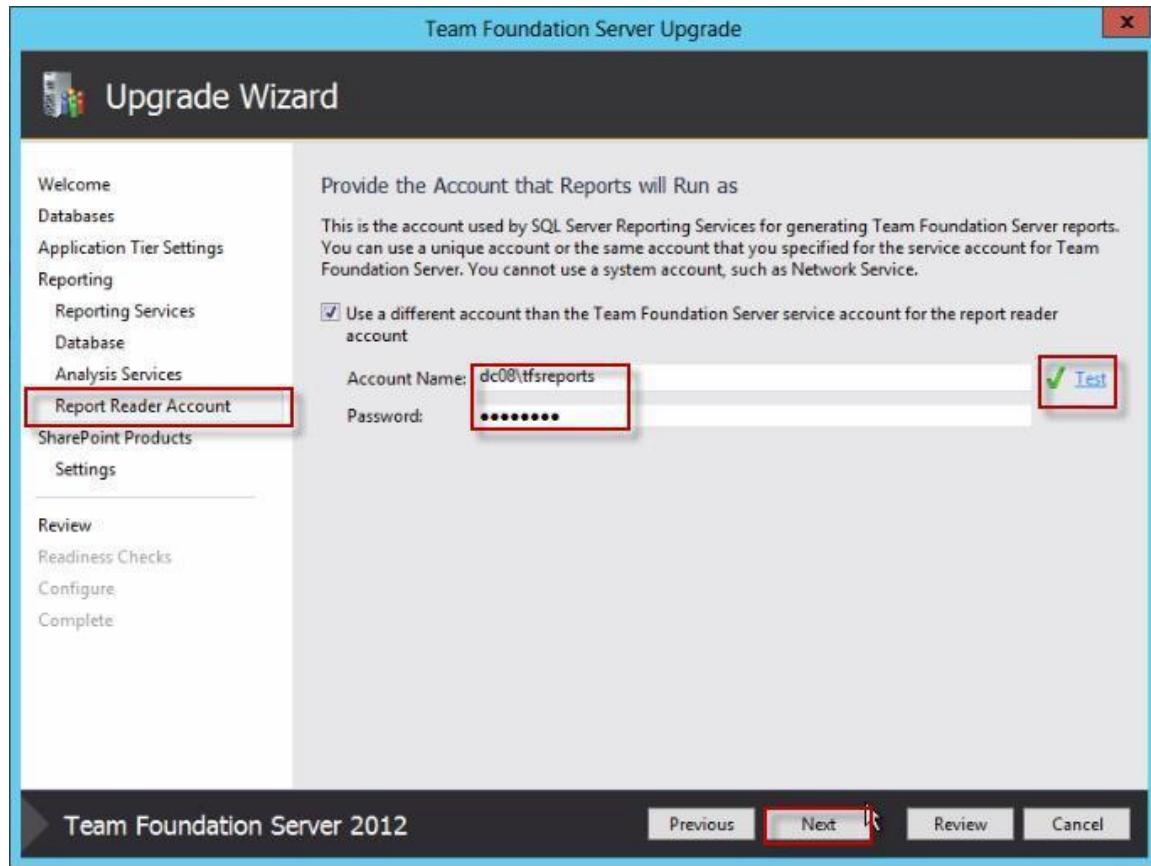
In **Database** under **Reporting**, click on **Test**, to test the existing of the SQL Server and then click on **List Available Database** to retrieve the restored warehouse of old TFS, after that click on **Next**.



In the **Analysis Service**, click on **Test** to test the existing of SQL server and the service after that click **Next**.



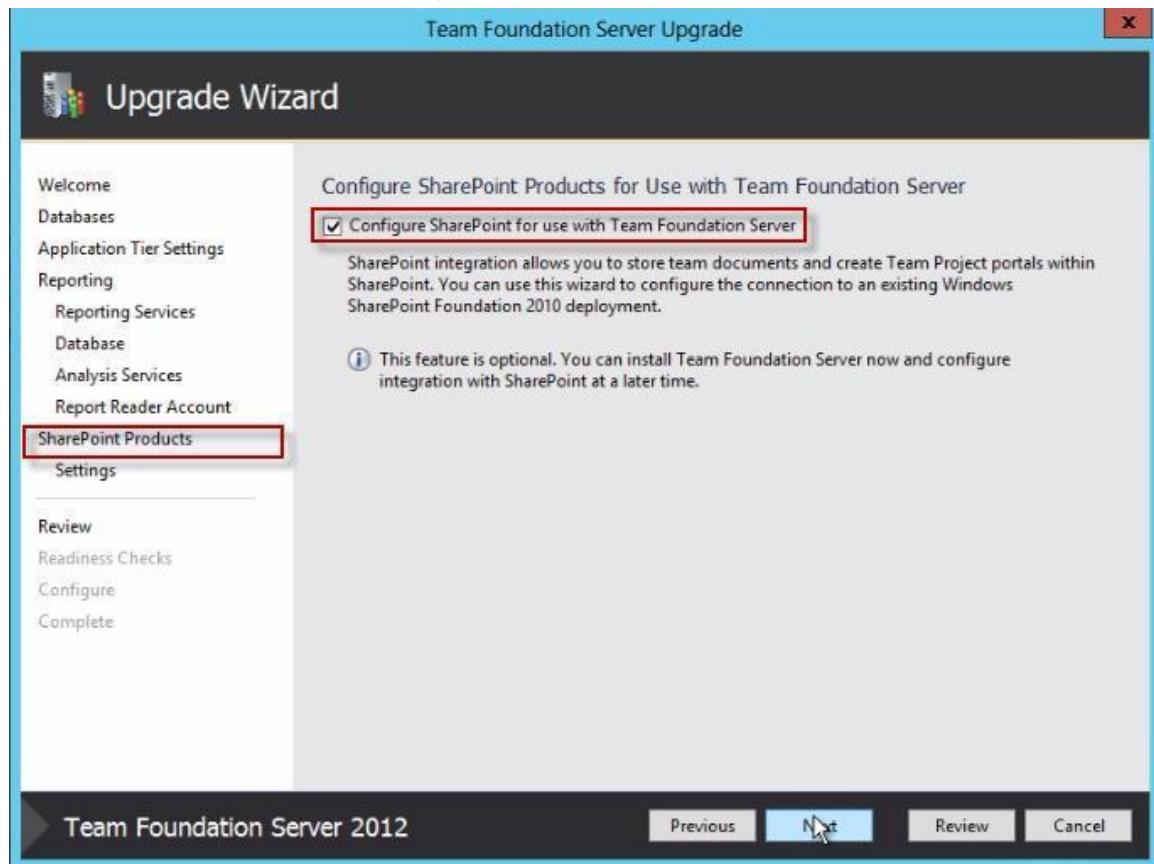
In **Report Reader Account**, select **Use different account**, type the service account that will be used for reports.



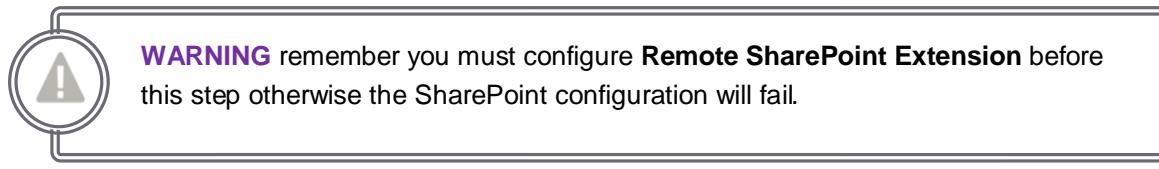
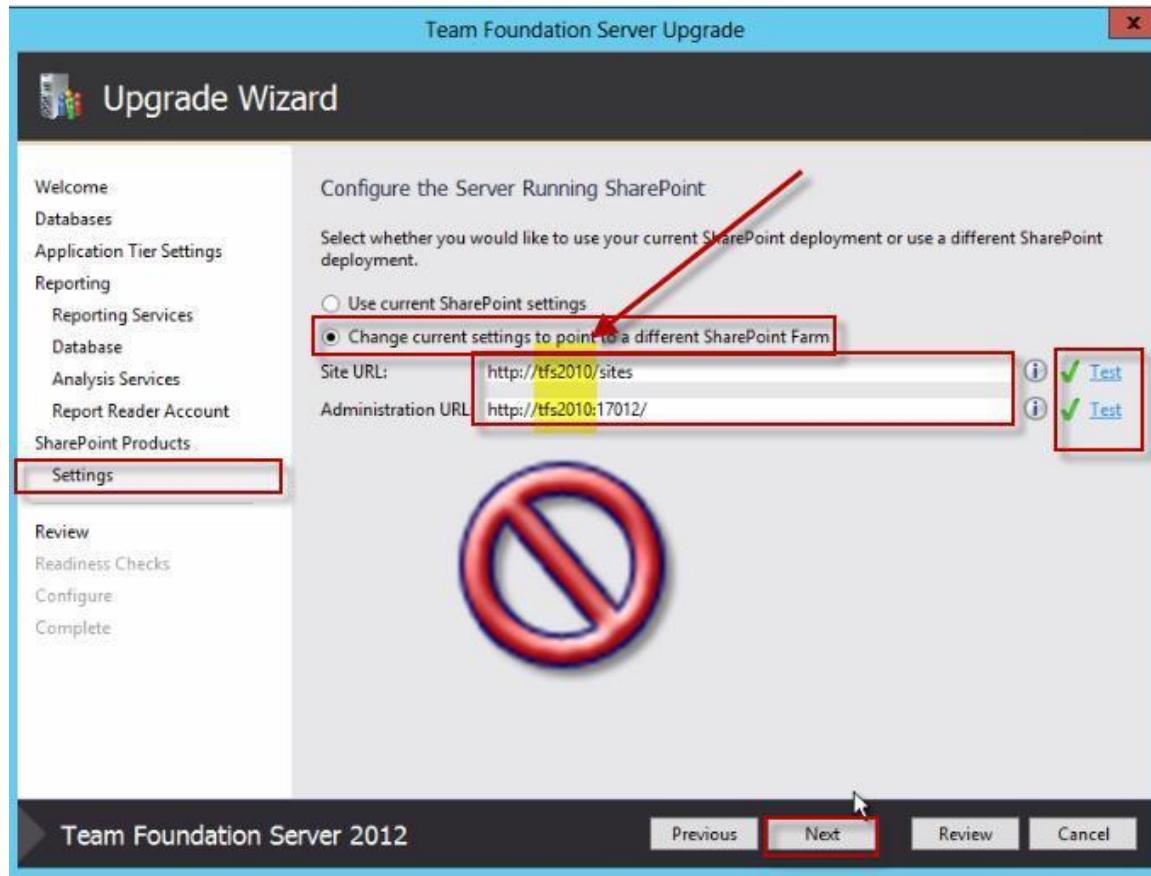
TIP: for more information about service account and its permission, [click here](#).

NOTE: I prefer to use the recommended **TFS Service Accounts**, so type **DC08\TFSReprot**s and type its password then click **Test** to make sure the correction of the account, remember that you will need to make this account as **Log On Locally** permission,

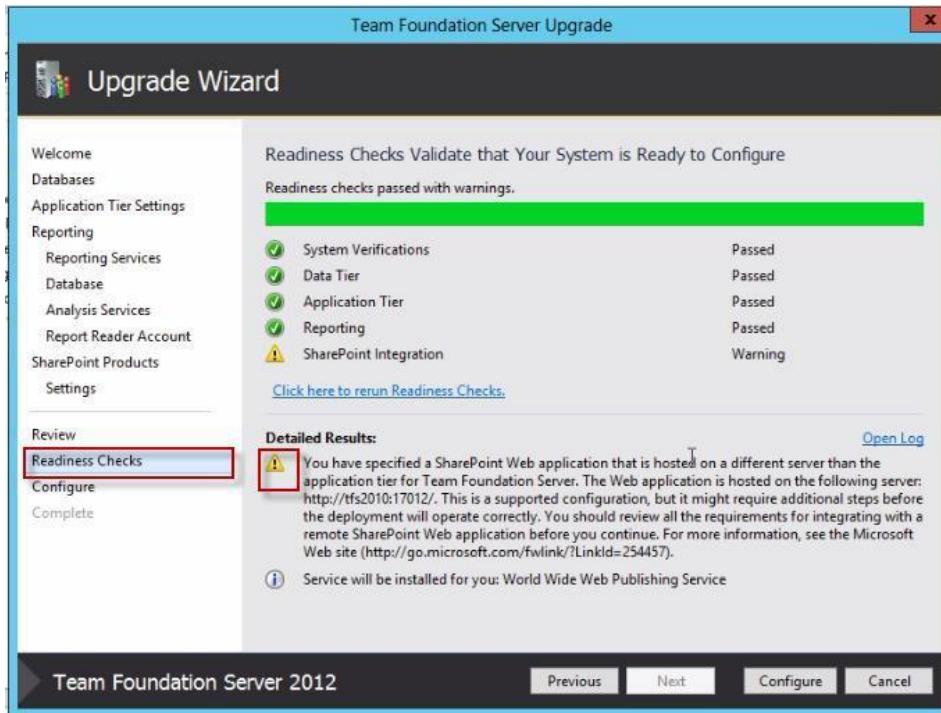
In **SharePoint Product**, select **Configure SharePoint for use with Team Foundation Server** to enable SharePoint configuration, after that click **Next**.



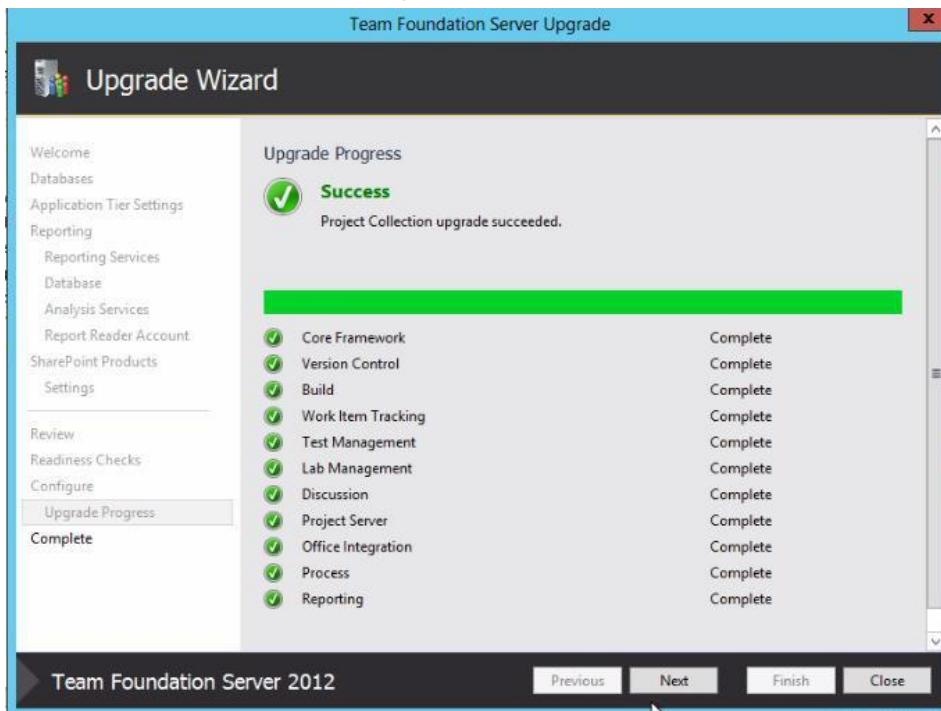
In **Settings** under **SharePoint Product**, select **Change current settings to point to a different SharePoint Farm**, type the name of the SharePoint server, in our scenario (**TFS2010**), click **Test** to test its existing and configuration, after that click **Next**.



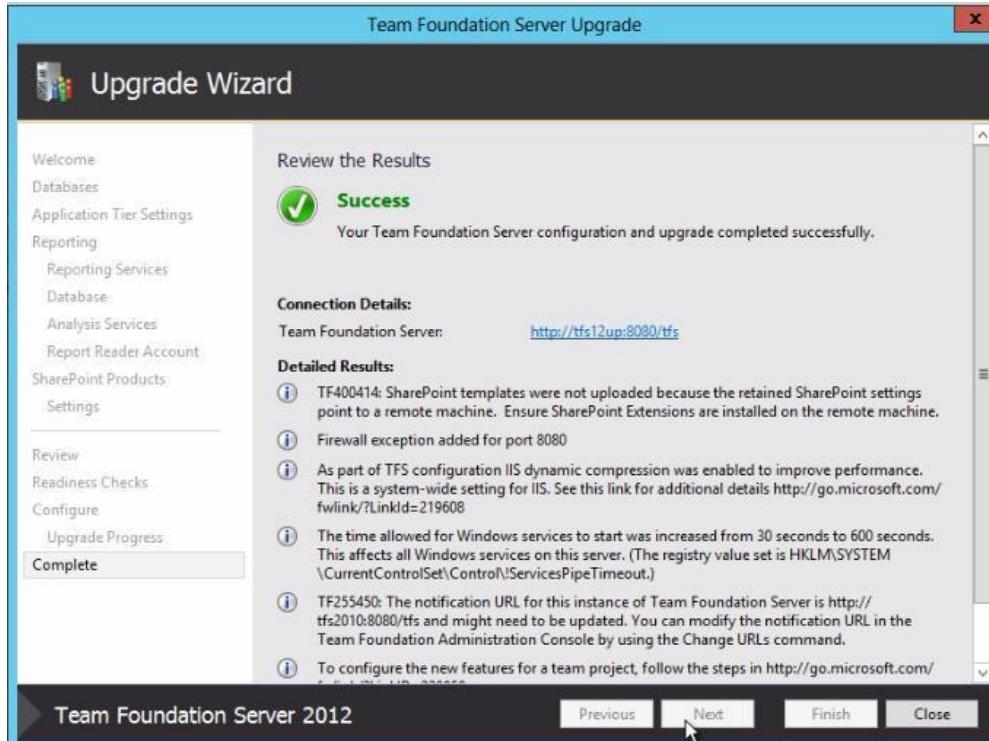
Run the **Readiness Checks**, it will give you a warning that SharePoint still need to be configured on the other machine, we will do that configuration after we complete the current one, after that click on **Configure**.



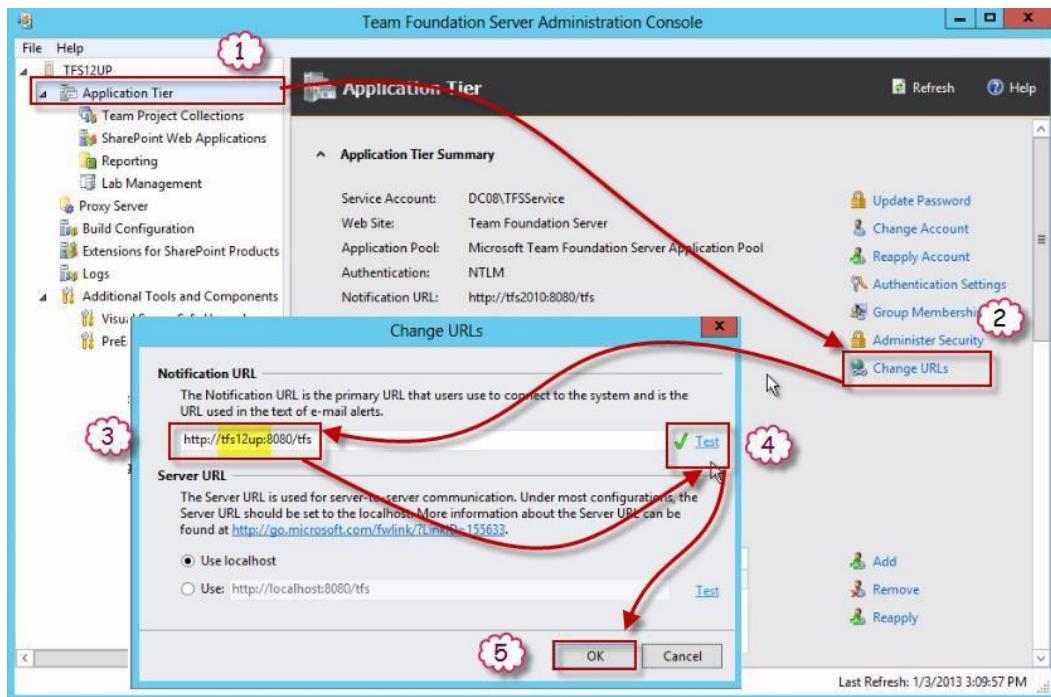
Review the success of the configuration and click **Next**.



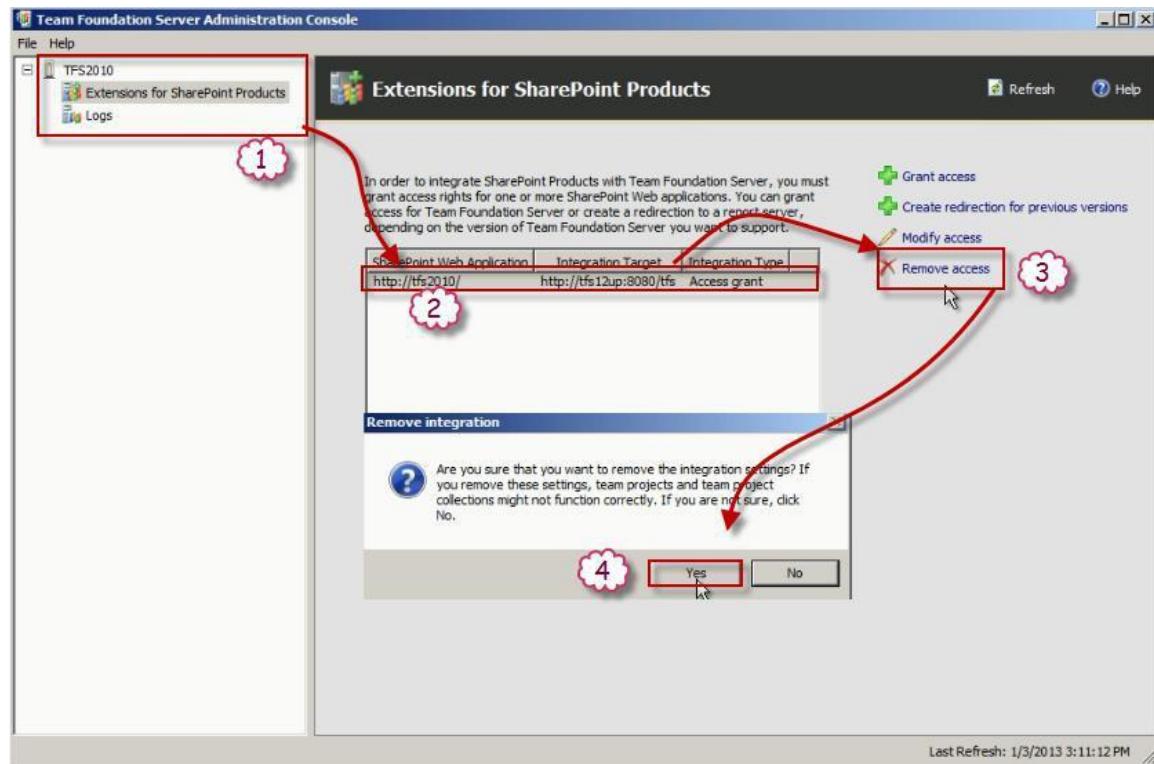
Review the results and click on **Close**.



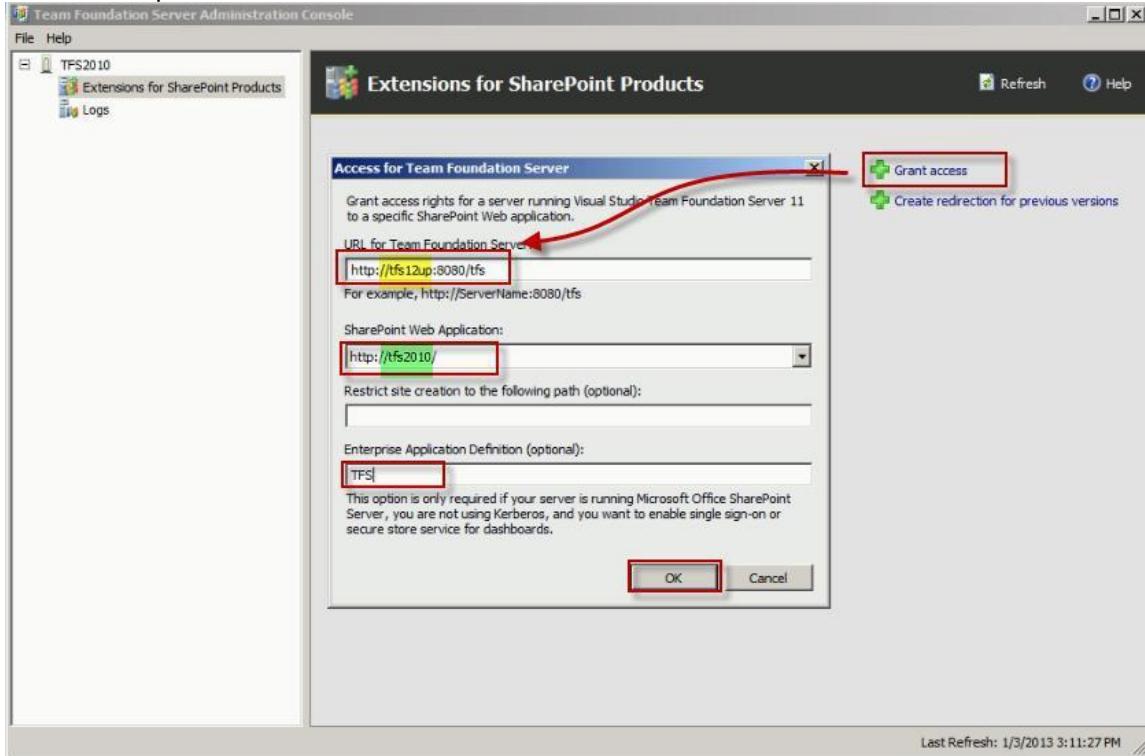
Open the **Team Foundation Server Administration Console** if it's not already opened, click on **Application Tier**, click **Change URLs**, and change the name to point to the new server in our case (**TFS12UP**), click **Test** and then click **OK**.



Navigate to the old server which has SharePoint now, open **Team Foundation Server Administration Console**, click on **Extension for SharePoint Products**, click on the existing TFS integration, click on **Remove access**, in the confirmation click **Yes**.



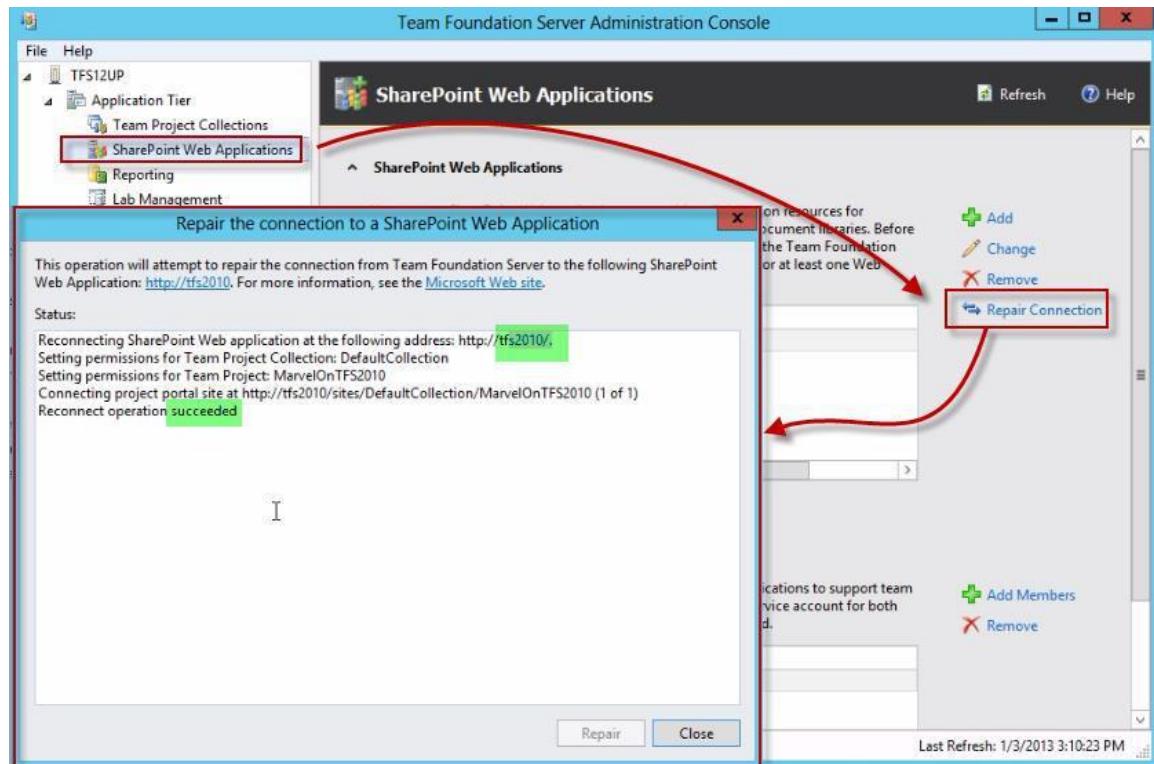
Click **Grant access**, in the **URL for Team Foundation Server**, type the new one which is “<http://tfs12up:8080/tfs>”, in the **SharePoint Web Application** select the existing SharePoint from the drop down which is the old server.



NOTE: in **Enterprise Application Definition** type **TFS**, which is the name of the **Secure Store Target Application** for **Trusted File Location** for Excel Service on the SharePoint Server, you can skip this step if you didn't configure Excel Service.

TIP: for more information about how to configure that, [click here](#).

Get back to the new machine (**TFS 2012**) and in **Team Foundation Server Administration Console**, click on **SharePoint Web Application**, click **Repair Connection**, review the repair and make sure of its success.





Watch the
Video

<http://youtu.be/3SGDHdTougo>

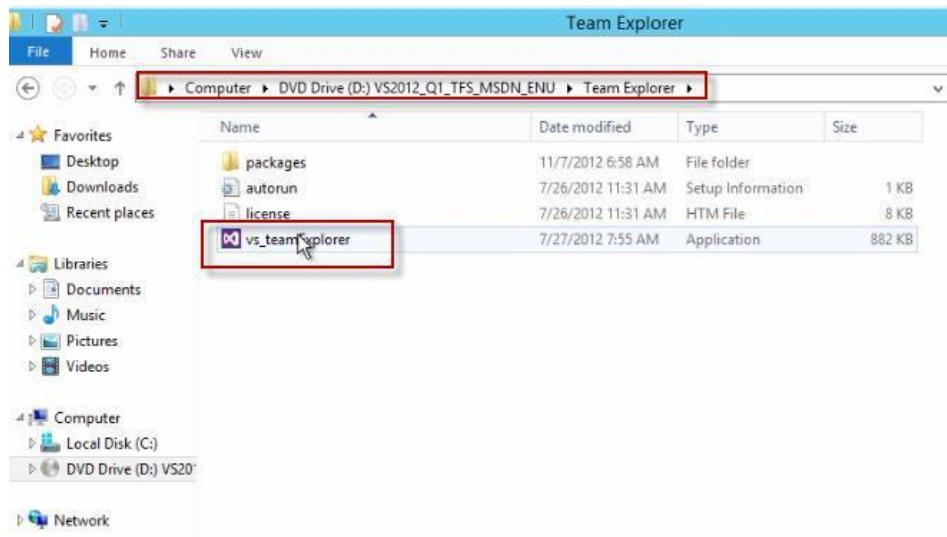
Chapter 7 – Verify upgrade success and other configuration.

- Verify the success of the upgrade and complete other configuration.

7.1 Verify the success of the upgrade and complete other configuration.

In this section I will verify the upgrade of the old projects and review how the old and the new features are working properly, so I will review the migration of the **Source Control**, **SharePoint**, **Reporting**, and also the new features like **Task Board** and **Product Backlog**.

Navigate to the **Team Explorer** folder inside the **TFS 2012** media in your DVD, double click on team explorer installation file.



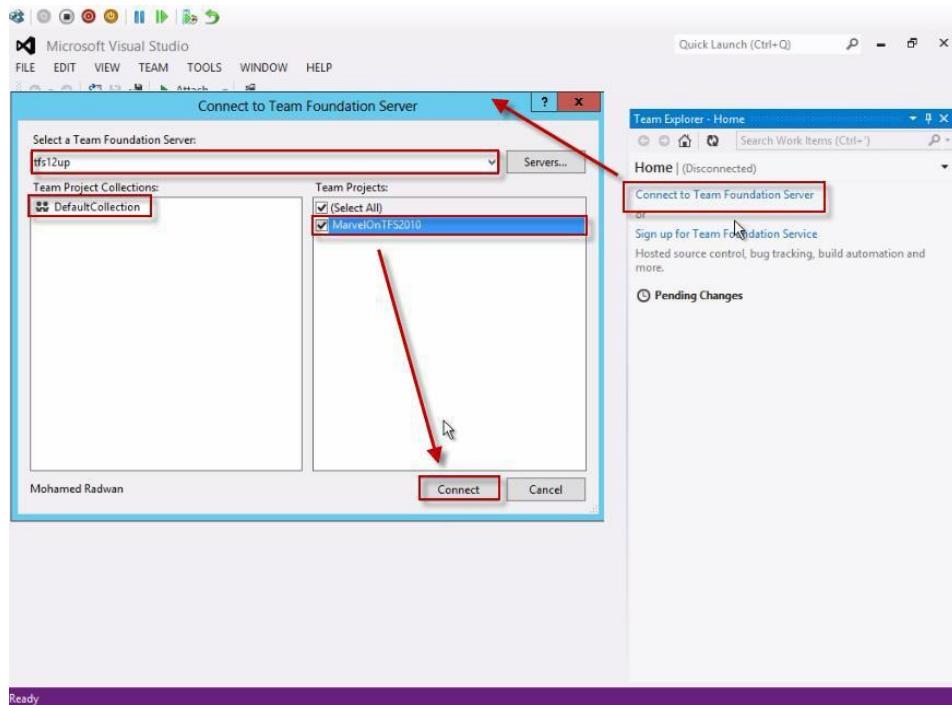
Select **I agree to license and terms and conditions** after that click **INSTALL**.



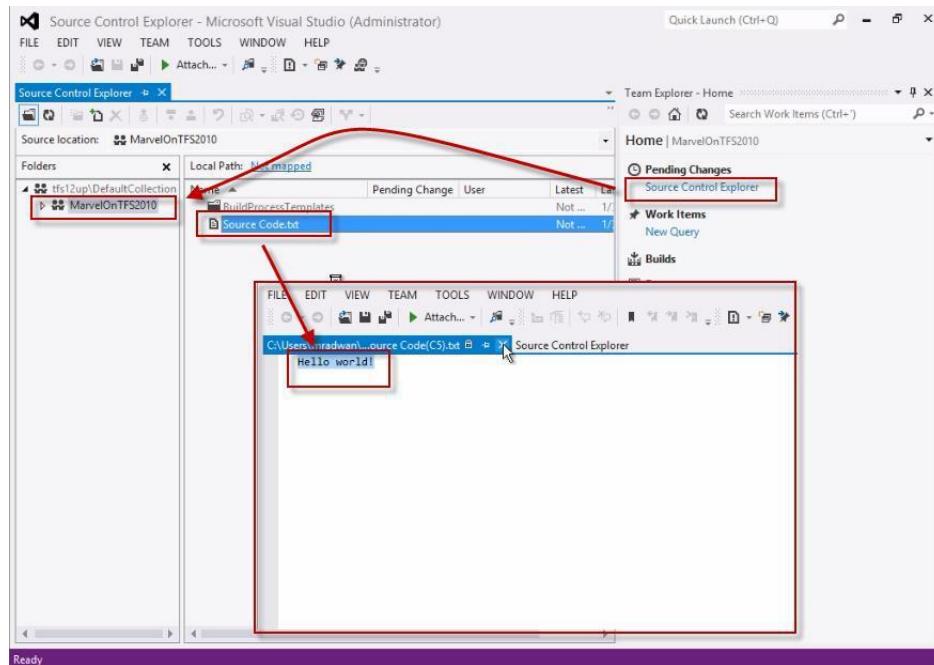
NOTE: it's better to join the customer experience.

After the installation complete, launch **Team Explorer**, click on **Connect to Team Foundation Server**, from the drop down select the current server, in our case (**TFS12UP**) and then select the **Default Collection**, we will find that it retrieves the old project that was on TFS 2010, I will select that project (**MarvelonTFS2010**) and click **Connect**.

Chapter 7 – Verify upgrade success and other configuration.

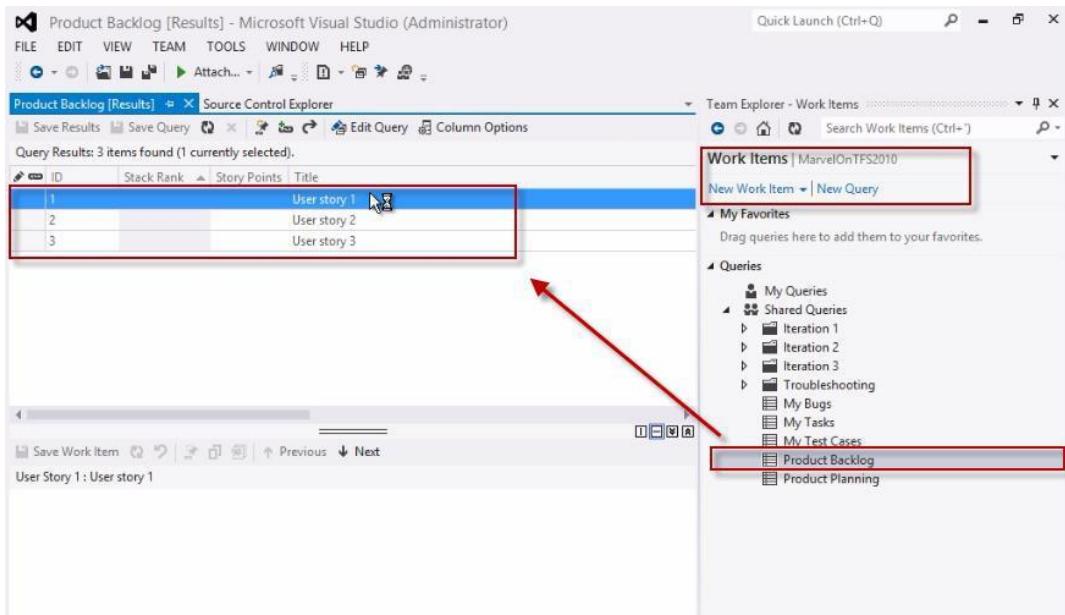


In **Team Explorer** home page, click on **Source Control Explorer**, navigate to the source code and open any source code file to review the code.

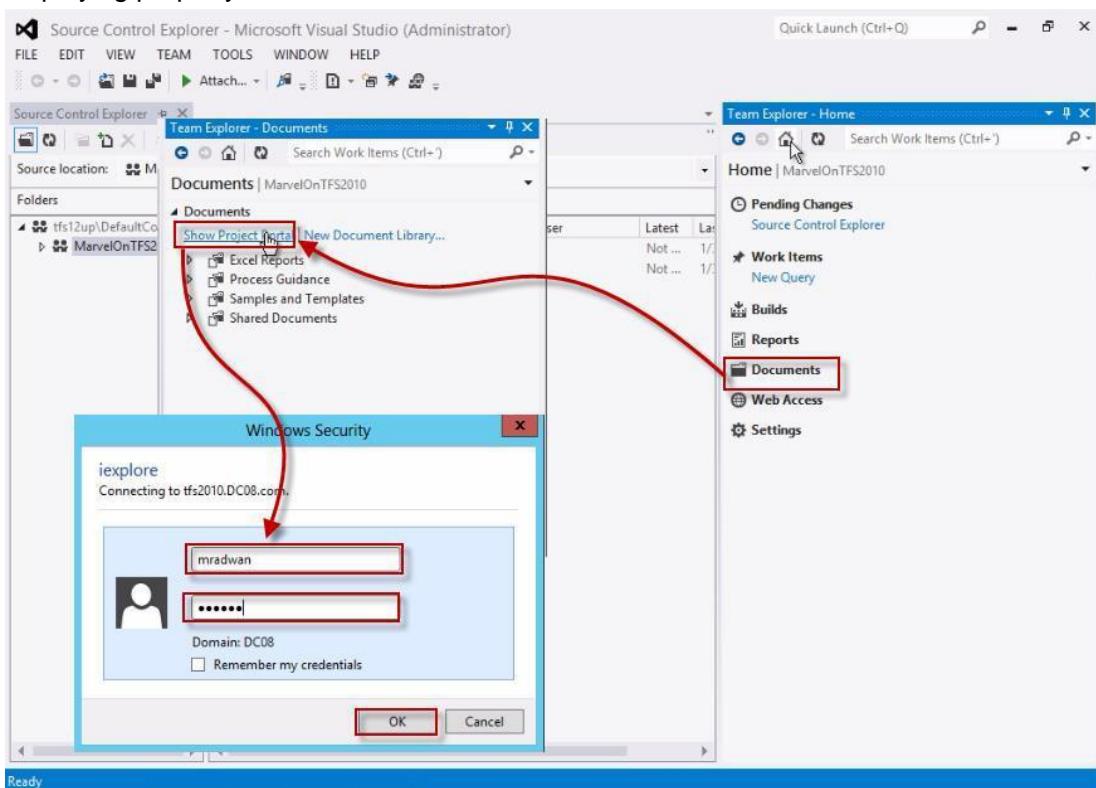


Chapter 7 – Verify upgrade success and other configuration.

In **Team Explorer** home page, click on **Work Items**, double click on **Product Backlog** query and review the existing user stories of the old project.

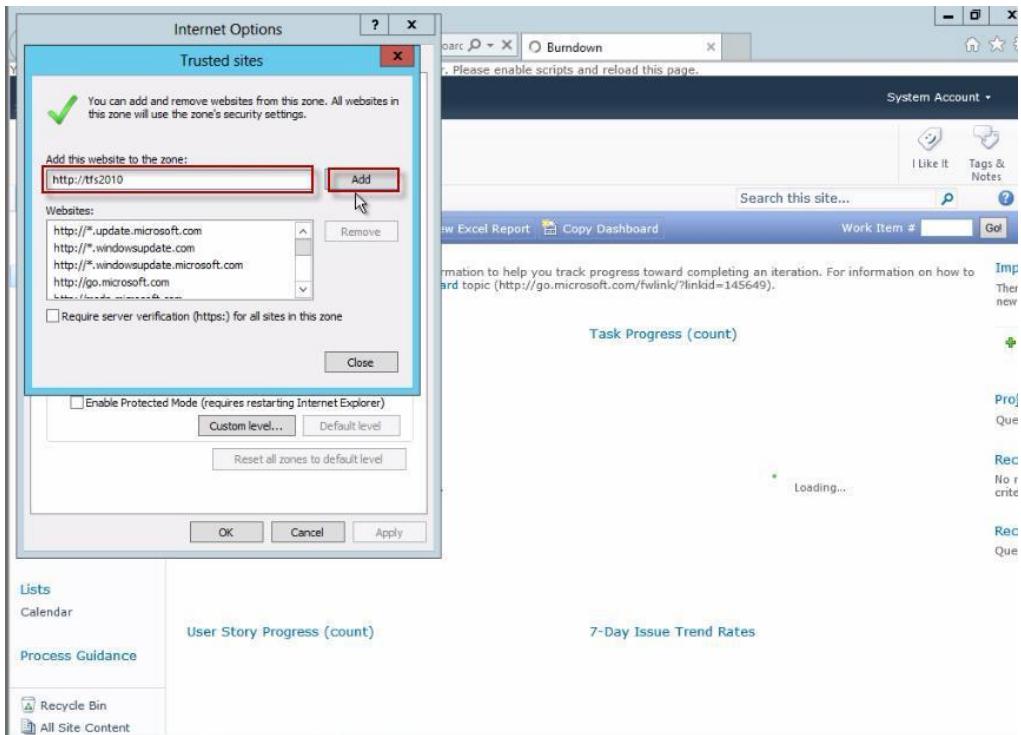


In **Team Explorer** home page, click on **Documents**, click on **Show Project Portal**, type the user name and the password, the **Dashboard** opened successfully but the reports not displaying properly, so we need to add that site to the trusted sites.

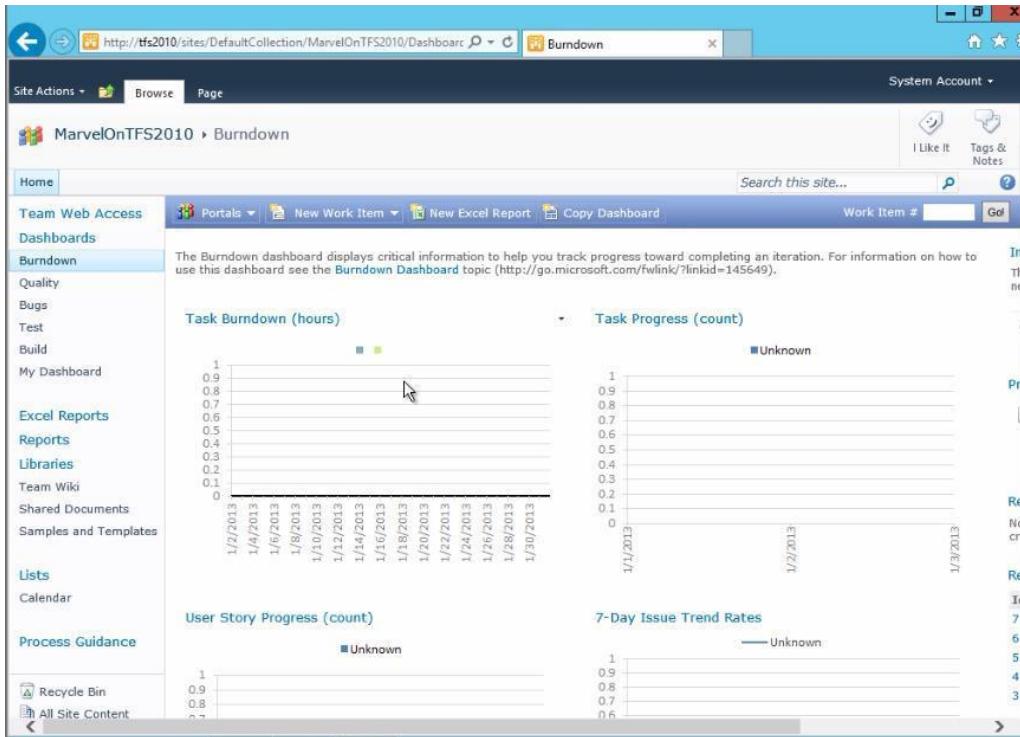


Chapter 7 – Verify upgrade success and other configuration.

In Internet Explorer go to Tools, Internet Option then Security and add the current site to the trusted sites.



Refresh the page, now the reports displayed correctly.



Chapter 7 – Verify upgrade success and other configuration.

We need also to make sure of the report connection, so we will click on **Excel Report**, click on **Bug progress** or any other report.

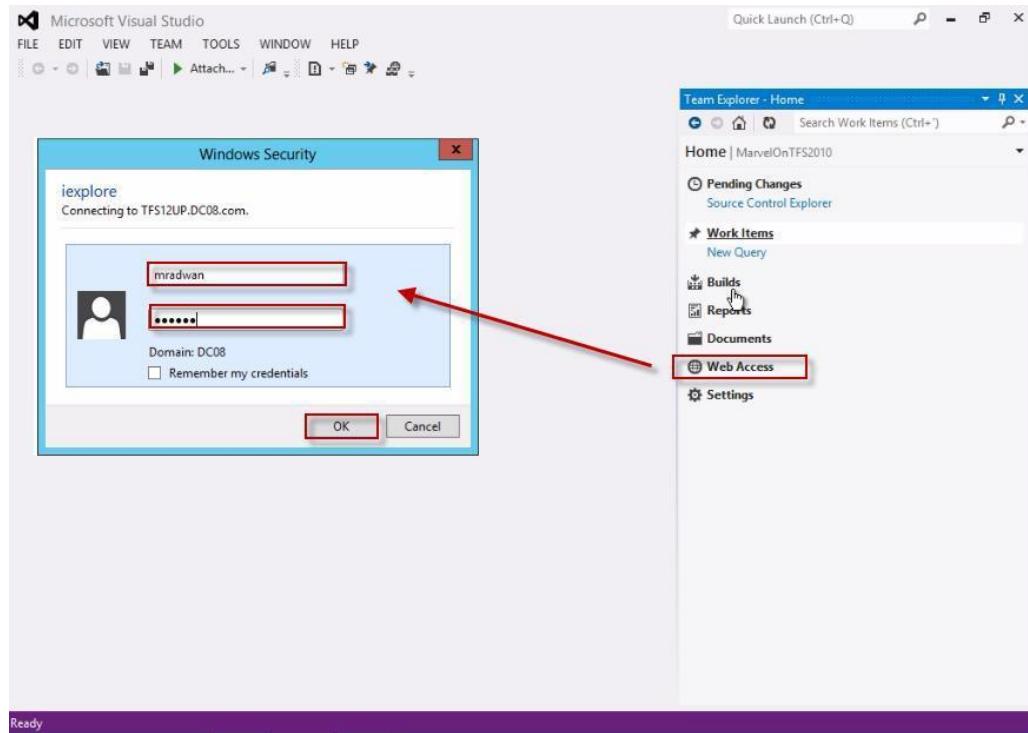
The screenshot shows a SharePoint document library titled 'Excel Reports - All Document...'. The left navigation bar is expanded, showing categories like 'Team Web Access', 'Dashboards', 'Bugs', 'Test', etc., with 'Excel Reports' selected. The main area displays a list of documents. One document, 'Bug Progress', is highlighted with a red box and a red arrow pointing from the 'Excel Reports' link in the navigation bar. The list includes various reports such as 'Test Management', 'Bug Progress', 'Bug Reactivations', 'Bug Trends', etc.

Click on **Data** drop down and choose **Refresh All Connection** and make sure it has no error.

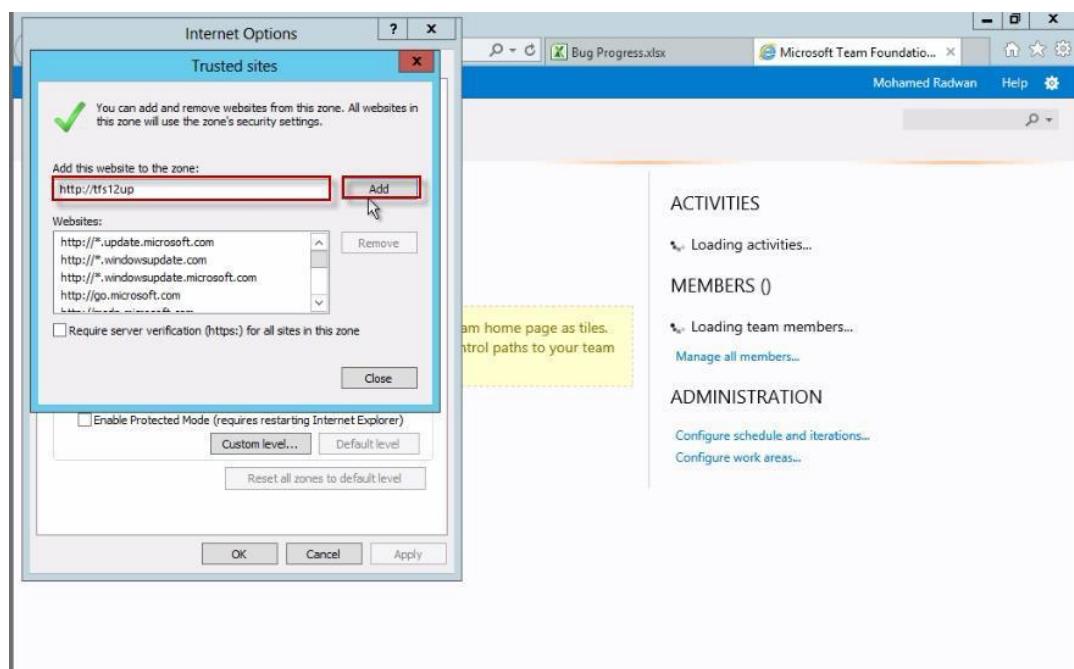
The screenshot shows the Microsoft Excel ribbon with the 'File' tab selected. The 'Data' tab is also selected, indicated by a green background. A context menu is open over a PivotTable, with the 'Refresh All Connections' option highlighted by a red box. The menu also includes 'Refresh Selected Connection' and 'Calculate Workbook'.

Chapter 7 – Verify upgrade success and other configuration.

Now we are going to verify the new features of **TFS 2012**, from **Team Explorer** home page, click on **Web Access**, type the user name and password, the page open successfully but it's not displaying properly, so we need to add that site to the trusted sites.



In **Internet Explorer** go to **Tools**, **Internet Option** then **Security** and add the current site to the trusted sites.



Chapter 7 – Verify upgrade success and other configuration.

Refresh the page, now the Web Access displayed correctly.

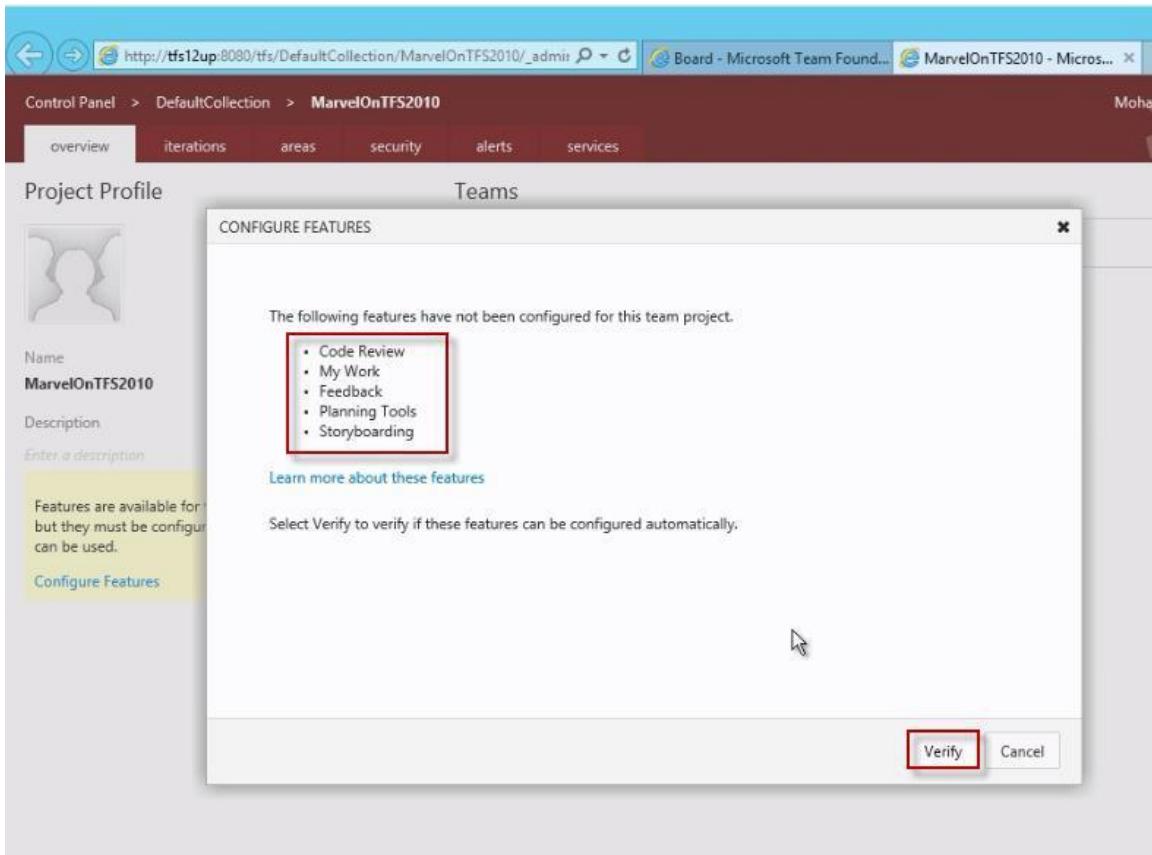
The screenshot shows the Microsoft Team Foundation Server 2012 web interface. The URL in the address bar is <http://tfs12up:8080/tfs/DefaultCollection/MarvelOnTFS2010>. The top navigation bar includes links for HOME, WORK (which is highlighted), SOURCE, and BUILD. A user profile for Mohamed Radwan is visible on the right. The main content area has tabs for '+ User Story', '+ Bug', and 'more'. A message box states: 'Some features of Team Web Access are not visible to you. Show details'. Below this is a section titled 'TEAM FAVORITES' with a note: 'Add items to your team favorites to display them here on the team home page as tiles. You can add work item queries, build definitions and version control paths to your team favorites.' To the right, there are sections for 'ACTIVITIES' (View board, View work items, Go to project portal, View process guidance, View reports, Open new instance of Visual Studio), 'MEMBERS (0)', and 'ADMINISTRATION' (Configure schedule and iterations..., Configure work areas...).

We want to verify the **Agile planning Tool**, so we will click on **Work**, we will find it's not working because this team project need extra configuration because the process template, so we will click on **Configure feature**.

The screenshot shows the Microsoft Team Foundation Server 2012 web interface, specifically the 'Board' page under the 'WORK' tab. The URL in the address bar is http://tfs12up:8080/tfs/DefaultCollection/MarvelOnTFS2010/_board. The top navigation bar includes links for HOME, WORK (which is highlighted), SOURCE, and BUILD. A user profile for Mohamed Radwan is visible on the right. The main content area displays the message: 'This feature cannot be used until you configure it for this team project.' Below this message is a red-bordered button labeled 'Configure feature'.

Chapter 7 – Verify upgrade success and other configuration.

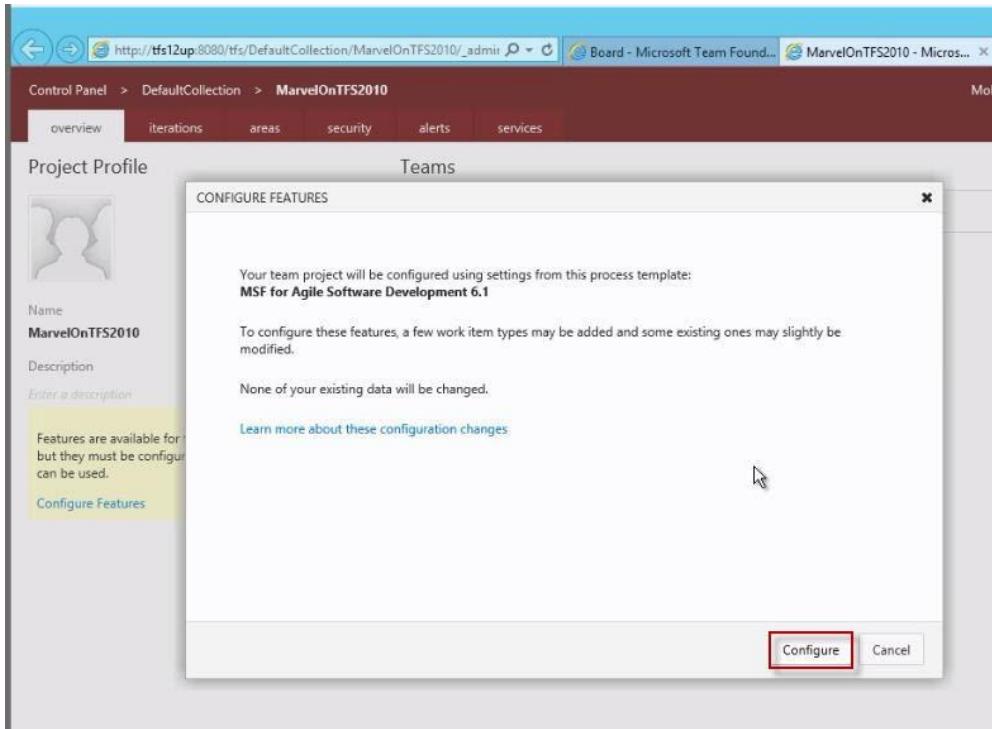
Click on **Verify**, to verify that the wizard can perform that configuration automatically.



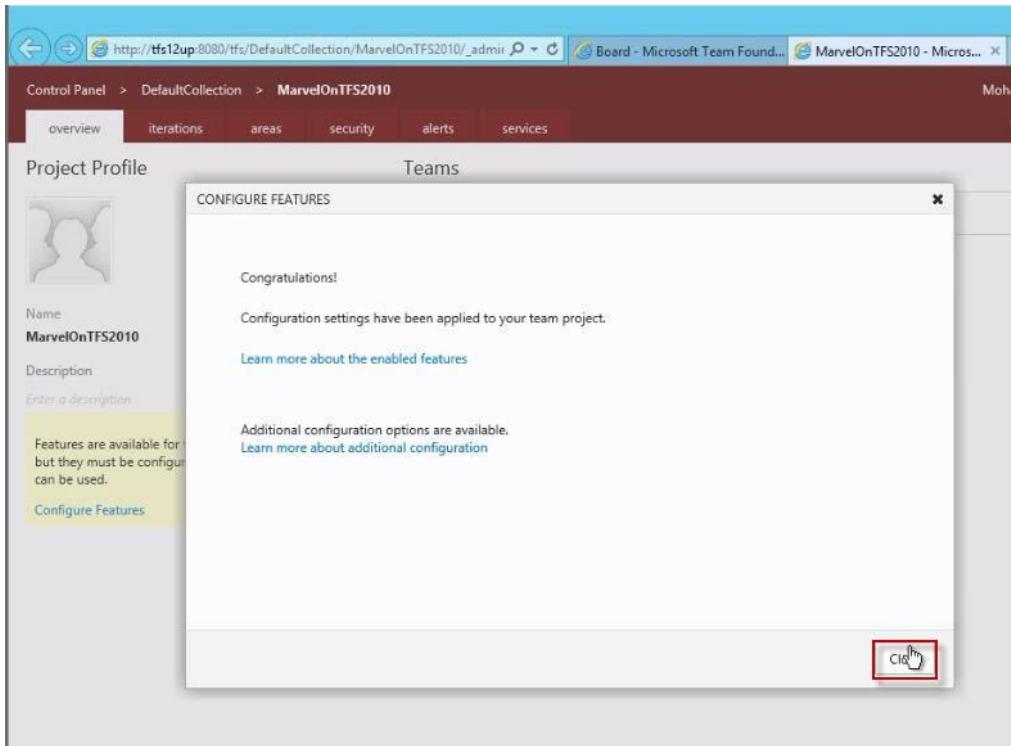
NOTE: this mostly happen if you are not customizing your process in a complex way that prevents the wizard from upgrade the process template.

Chapter 7 – Verify upgrade success and other configuration.

The wizard shows that it can perform that upgrade automatically and show the process template that it will be used for the upgrade, click **Configure**.

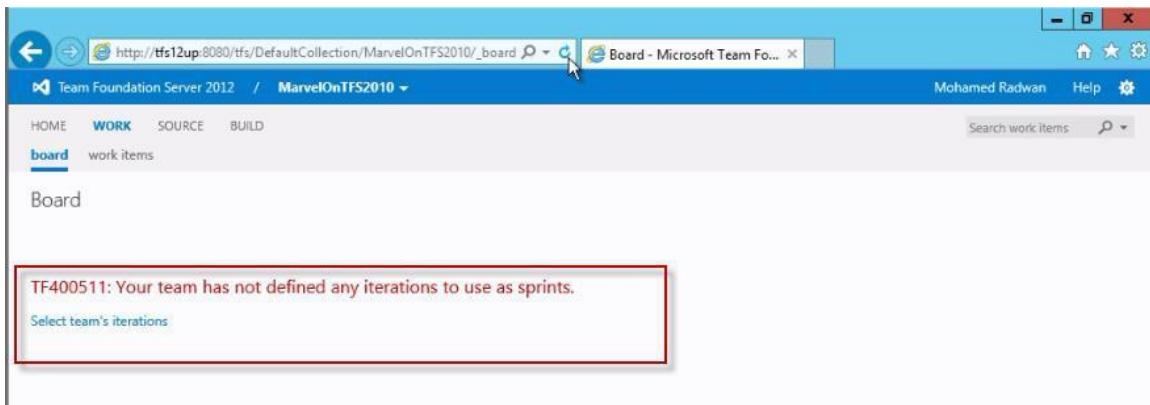


Team Project Upgrade completed successfully.



Chapter 7 – Verify upgrade success and other configuration.

Go to the **work** tab again, to review the **Task Board**, we will find that the problem solved but there is another one because there is no iteration selected, so we will click on **Select team's iterations**.



Select all iterations.

The screenshot shows the 'Iterations' page within the Microsoft Team Foundation Server 2012 interface. The top navigation bar shows the path: Control Panel > DefaultCollection > MarvelOnTFS2010. The 'iterations' tab is selected. The main content area is titled 'iterations' and contains instructions: 'Select the iterations you want to use for iteration planning (sprint planning). Selected iterations will appear in your backlog view as iterations available for planning.' Below this, there are buttons for 'New' and 'New child'. A table lists iterations under the heading 'Iterations'. The table columns are 'Iterations', 'Start Date', and 'End Date'. The first iteration listed is 'Iteration 1' (selected), 'Iteration 2' (selected), and 'Iteration 3' (selected). A red box highlights the list of selected iterations. A tooltip 'Backlog iteration for this team' is visible near the iteration list.

Chapter 7 – Verify upgrade success and other configuration.

Get back to **Task Board**, it's working now but it's empty, so I must assign my existing user stories to existing iteration or add new one assigned, so I will click on home to do that.

The screenshot shows the Microsoft Team Foundation Server 2012 interface. The title bar reads "Task Board - Microsoft Team Foundation Server 2012 / MarvelOnTFS2010". The top navigation bar has tabs for HOME, WORK, SOURCE, and BUILD. The HOME tab is highlighted with a red box and a cursor icon. Below the tabs, there is a "work items" link and a search bar labeled "Search work items". The main content area is titled "Task Board" and contains the message: "The task board cannot be displayed because it is empty. You have configured the task board to show work scheduled for the following iteration: MarvelOnTFS2010\Iteration 1." There are no cards or tasks visible on the board.

Add new user story and by default it's assigned for iteration 1.

The screenshot shows the Microsoft Team Foundation Server 2012 interface with the "Work" tab selected. The title bar reads "Microsoft Team Foundation Server 2012 / MarvelOnTFS2010". The top navigation bar has tabs for HOME, WORK, SOURCE, and BUILD. The WORK tab is highlighted with a red box and a cursor icon. Below the tabs, there are buttons for "+ Task", "+ Bug", and "more". The main content area is titled "ACTIVITIES" and shows a "New User Story 1: Field 'Title' cannot be empty." dialog. The dialog includes fields for "Title" (empty), "STATUS" (Assigned To: Mohamed Radwan, State: Active, Reason: New), "CLASSIFICATION" (Area: MarvelOnTFS2010, Iteration: MarvelOnTFS2010\Iteration 1), and "PLANNING" (Stack Rank: empty, Story Points: empty, Risk: empty). The "DETAILS" tab is selected. The "Description with Acceptance Criteria:" field contains the text "As a I want so that". The "History:" field is also present. A sidebar on the left says "TEAM FAVORITES" with the message "Add items to your favorites. You can add work items here." and a "Copy template URL" button.

Chapter 7 – Verify upgrade success and other configuration.

Get back to **Task Board**, now it's working for the old project.

The screenshot shows the Microsoft Team Foundation Server 2012 interface. The URL in the address bar is http://tfs12up:8080/tfs/DefaultCollection/MarvelOnTFS2010/_board. The page title is "Iteration 1 - Microsoft Team Foundation Server 2012". The top navigation bar includes links for HOME, WORK, SOURCE, and BUILD, with WORK being the active tab. The sub-navigation under WORK is "board". The main content area is titled "Iteration 1" and displays a board with two columns: "ACTIVE" and "CLOSED". In the ACTIVE column, there is one item labeled "mmmm" with a plus sign icon to its right. At the top of the board, there are filters for "No iteration dates" (with a "Set dates" link), "person All", and a search bar for "Search work items". The overall layout is clean and organized, typical of a modern web-based project management tool.

Chapter 8 – Upgrade TFS 2012 Build Service.



Watch the
Video

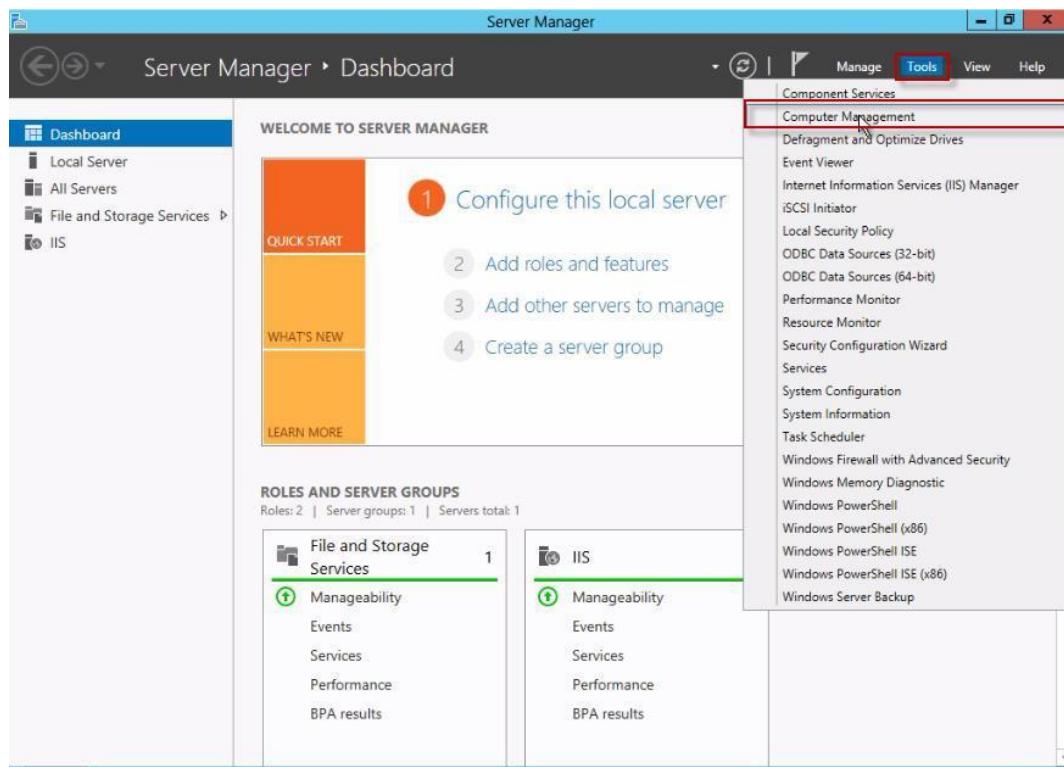
<http://youtu.be/TCtlTDvY8k>

8.1 Upgrade TFS 2012 Build Service.

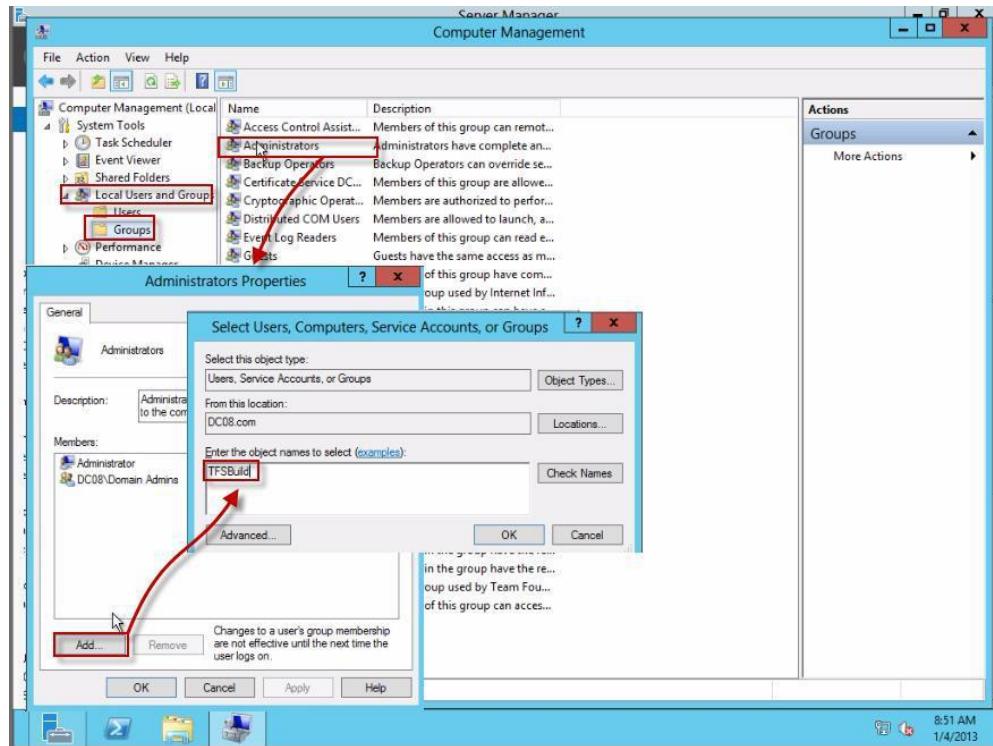
- Upgrade TFS 2012 Build Service.

In this section I will explain how to upgrade **TFS 2012 Build Service** to replace the existing **TFS 2010 Build Service**, the TFS 2010 Build Service can coexist with TFS 2012 on the same machine but it can't work for new TFS 2012 so we may have 2 Build Service each one serve its version of TFS.

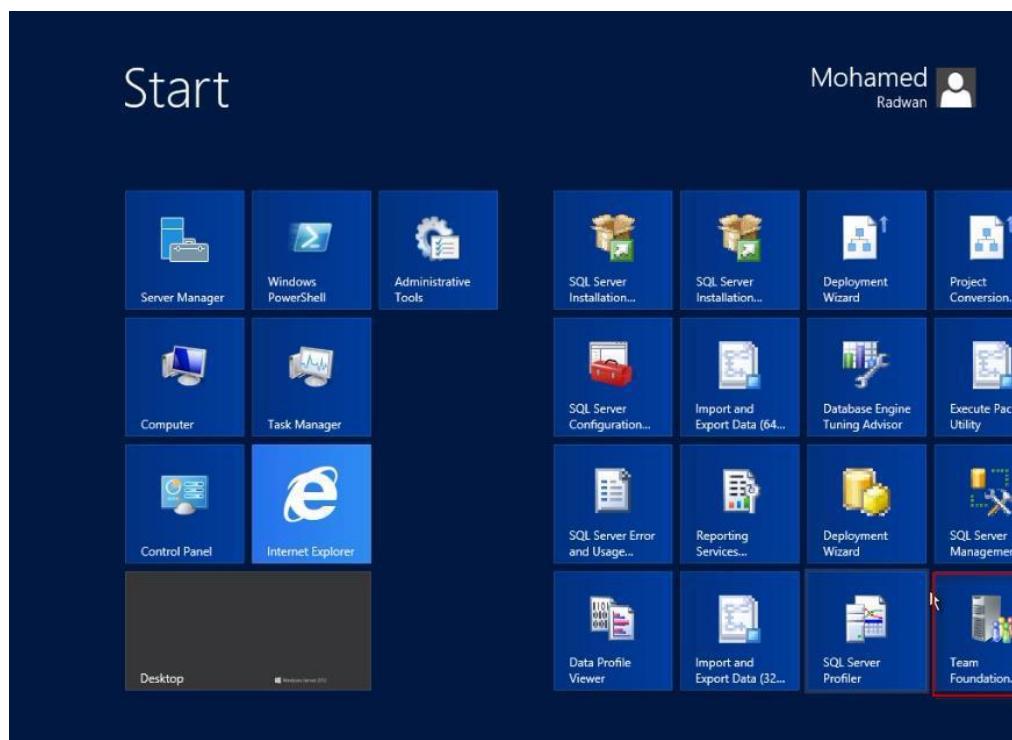
From **Server Manager**, click **Tool** and then click **Computer Management**.



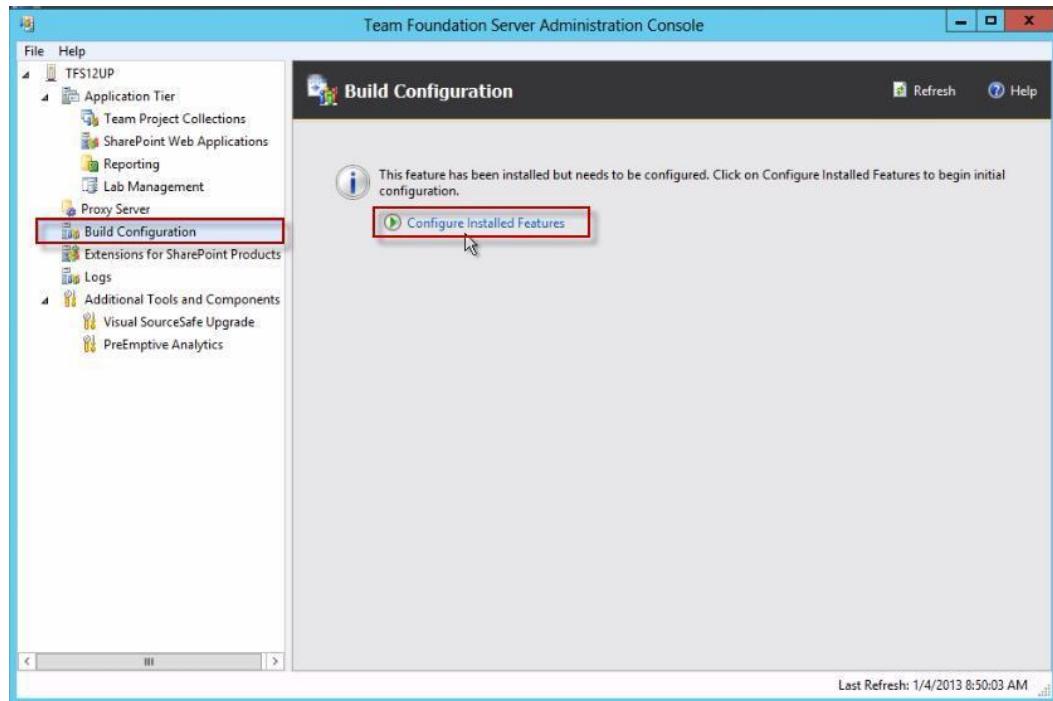
Click on **Local Users and Groups**, click on **Groups**, double-click on **Administrators** group and click **Add**, type **TFSBuild** and then click **OK**.



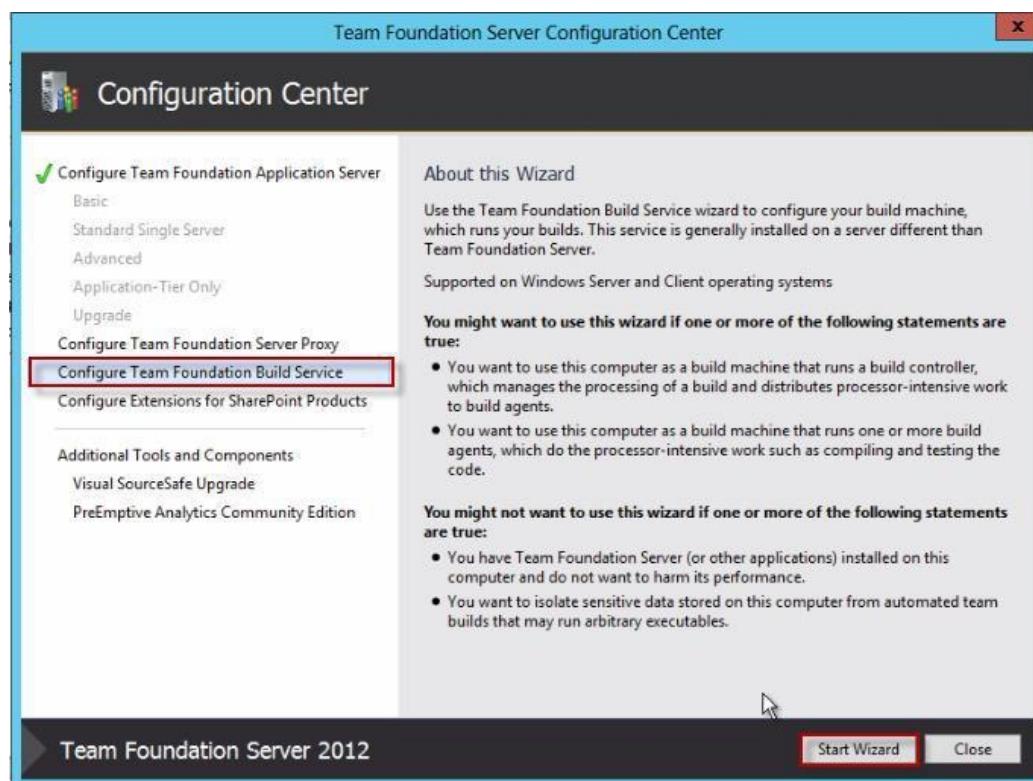
Click on **Team Foundation Server Administration Console**.



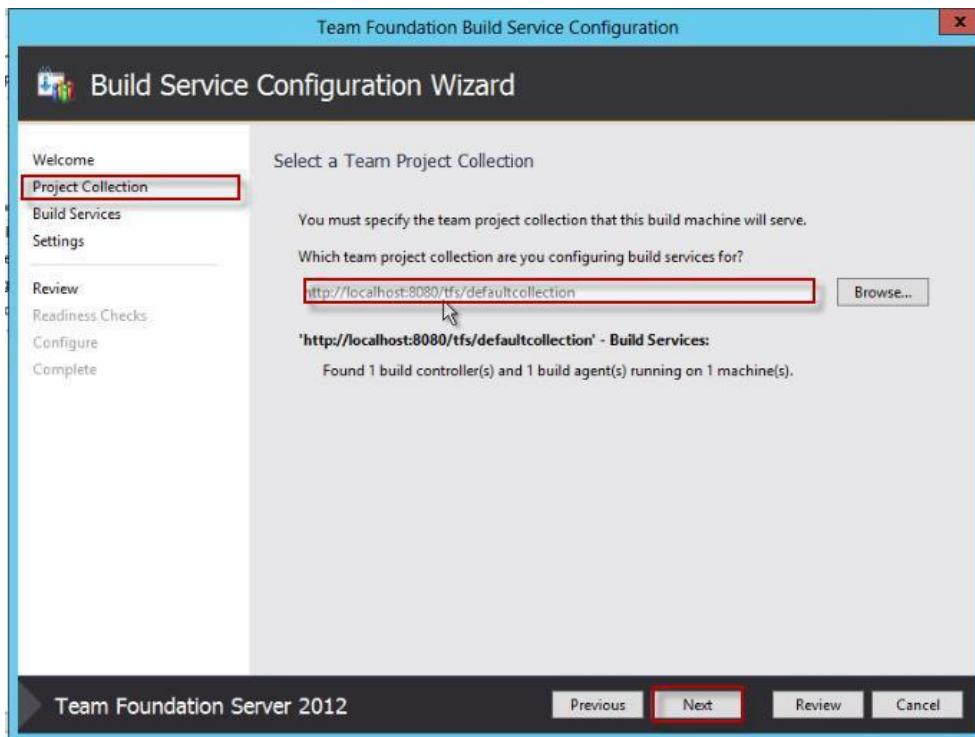
Click on **Build Configuration** and then click **Configure Installed Features**.



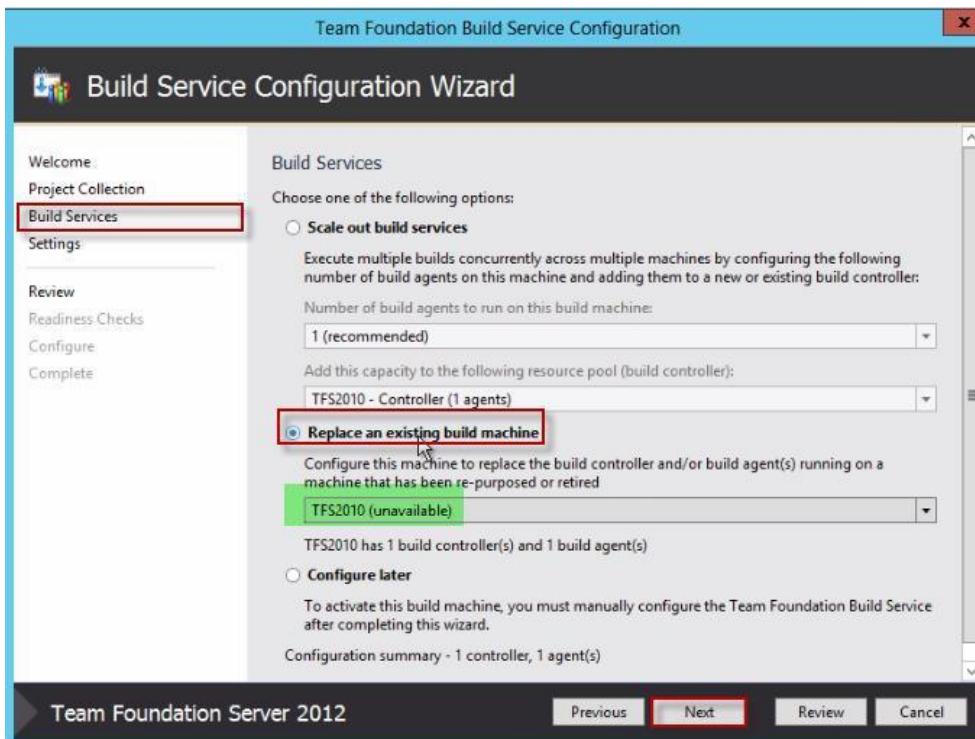
In the **Configuration Center** under **Configure Team Foundation Build Service**, click **Start Wizard**.



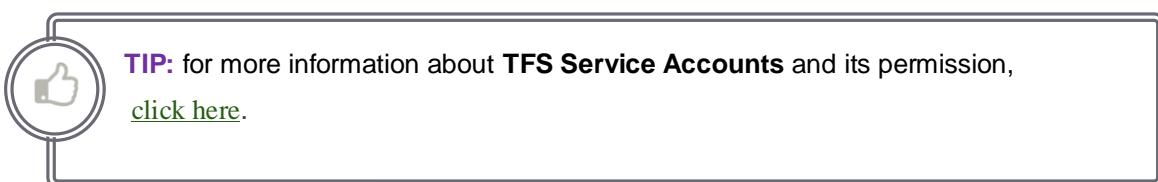
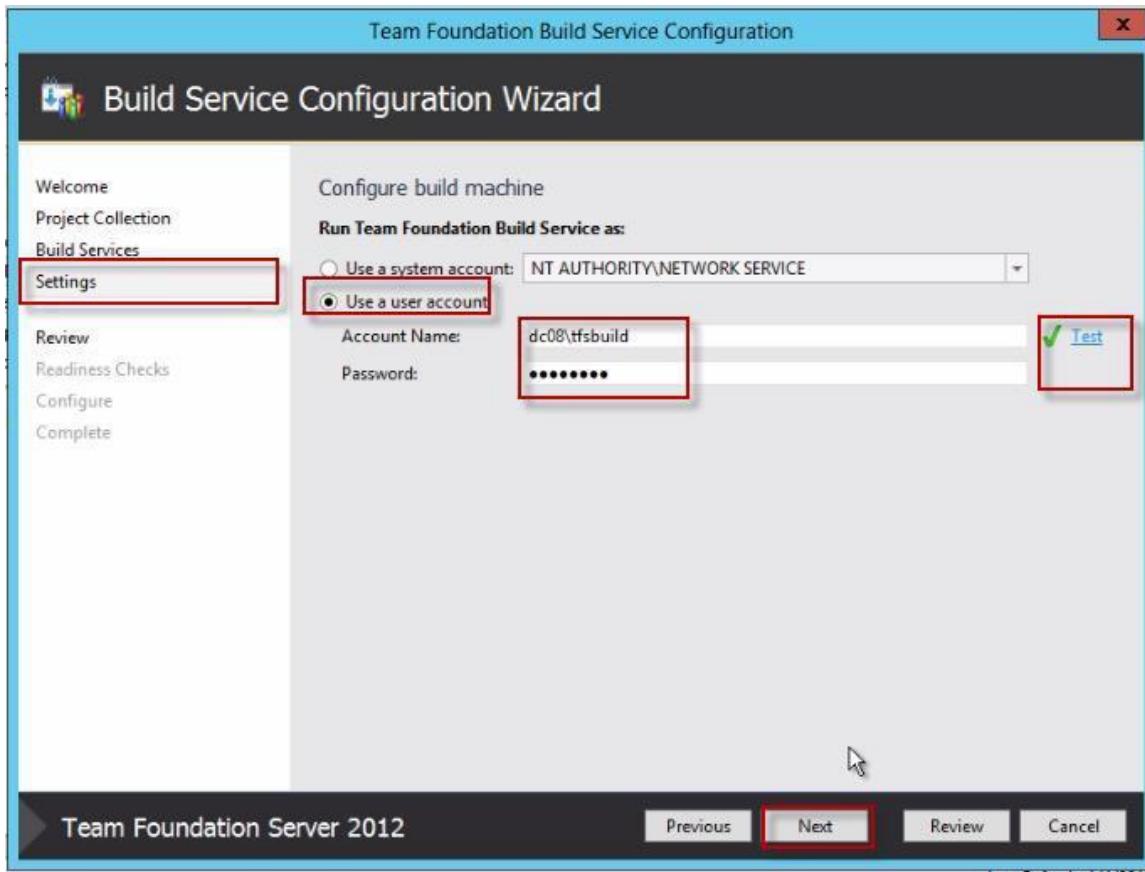
In the **Project Collection** wait while retrieve the project collection and when retrieved click **Next**.



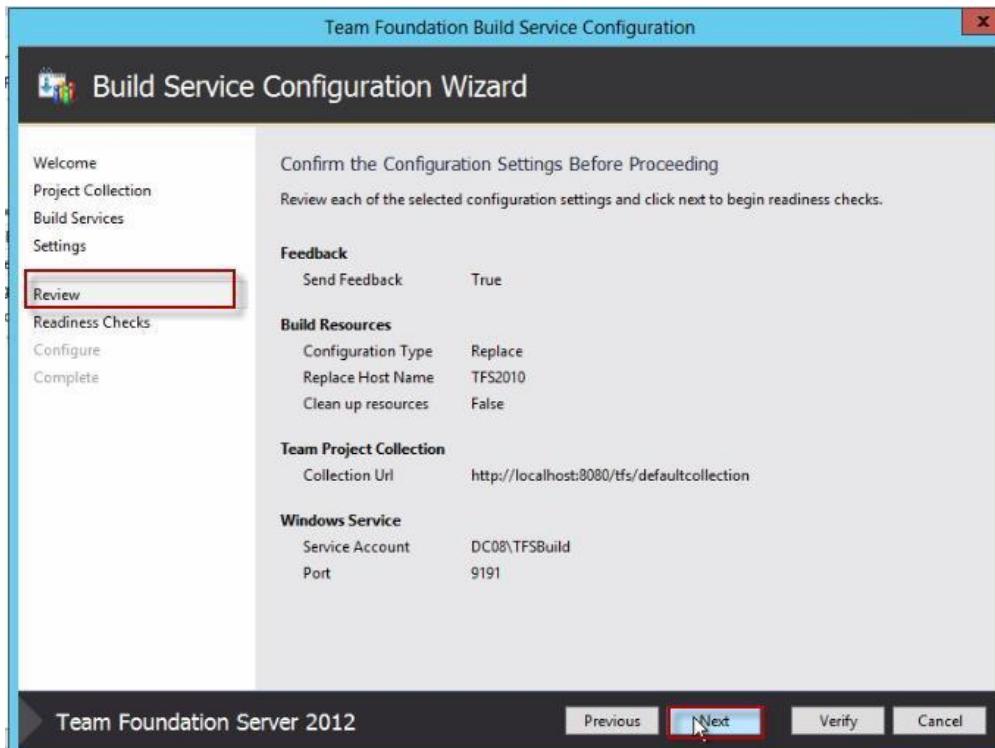
In the **Build Service**, select **Replace an existing build machine** and then click **Next**.



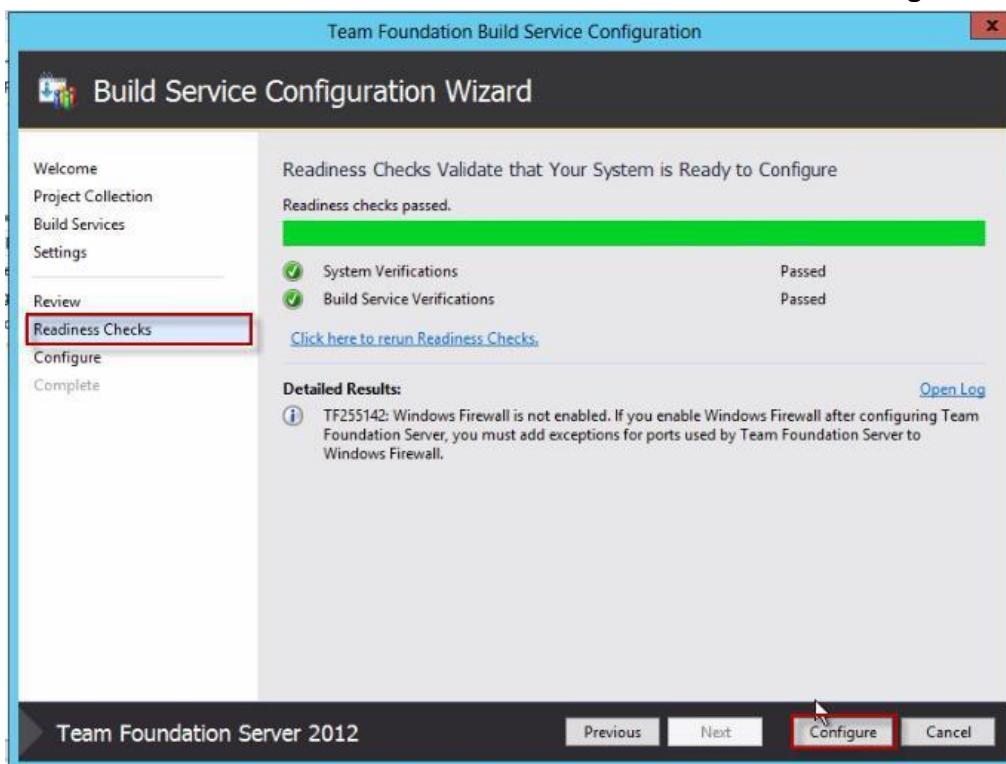
In setting select Use a user account, I prefer to use the recommended service accounts, so type **DC08\TFSBuild** and type its password then click **Test** to make sure the correction of the account.



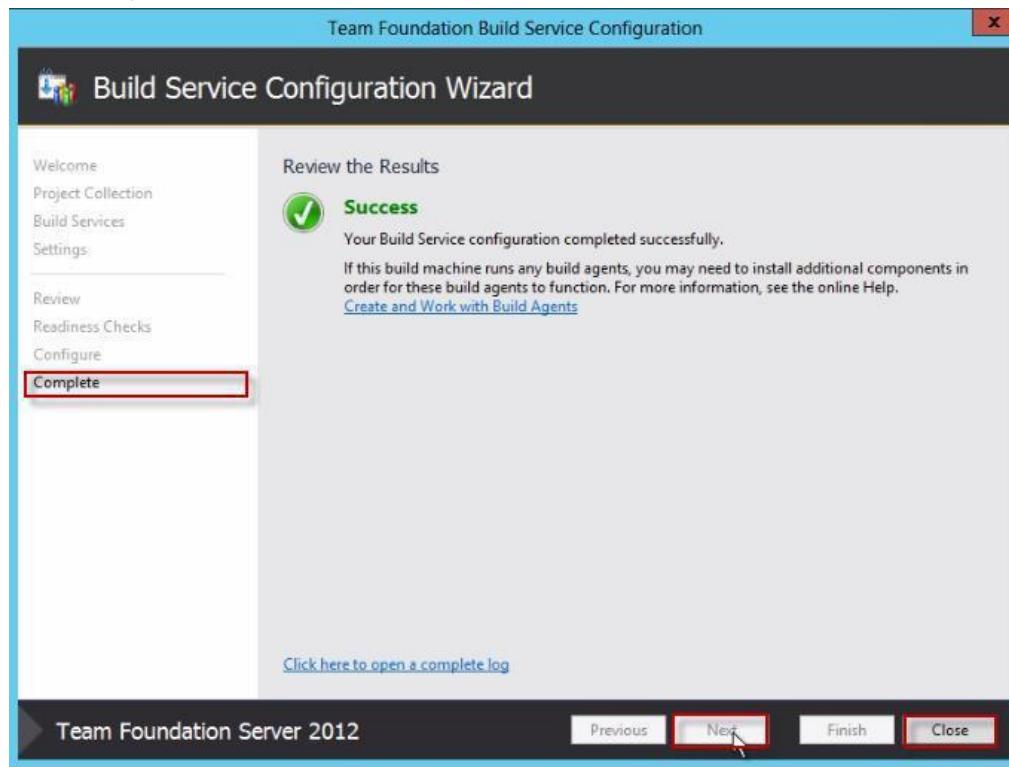
Review the configuration and then click **Next**.



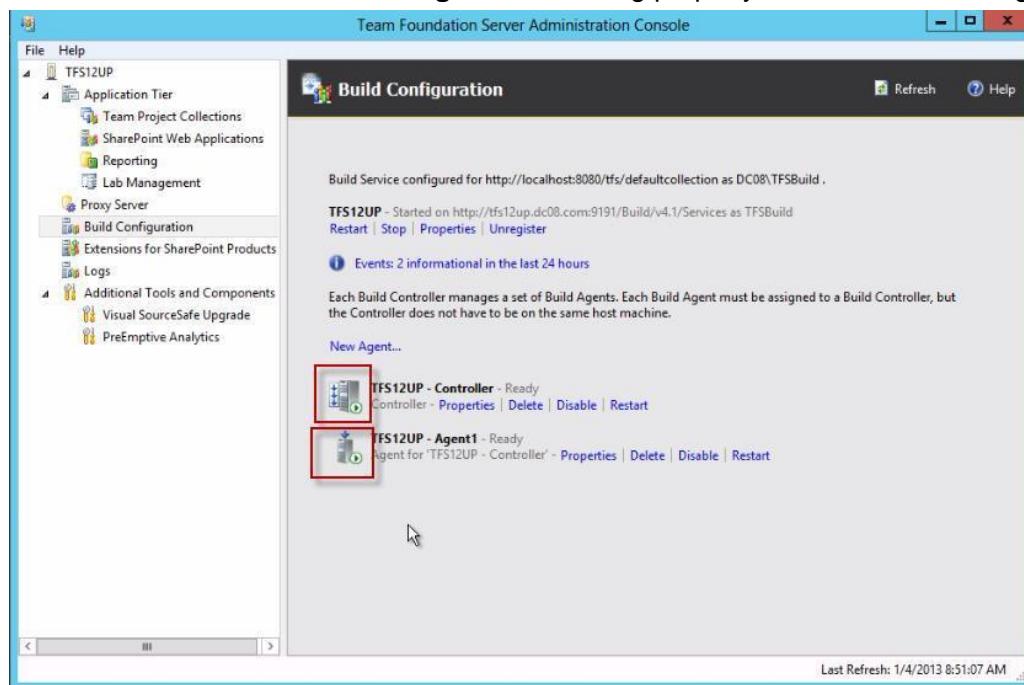
Run the **Readiness Checks** and review its success and then click **Configure**.



The configuration completed successfully.



In **Team Foundation Server Administration Console** go to **Build Configuration** to review that **Build Controller** and **Build Agent** are working properly and we can see the green sign.





Watch the
Video

<http://youtu.be/nm-WOLc-GQQ>

Chapter 9 – Summary.

The video associated with this chapter covers the whole scenario and all posts for the upgrade guide from the beginning to the end.

At the end I'd like to mention some tips and advices for TFS upgrade:

- Go for Virtualization, TFS + Hyper-V = happy life😊.
- Backup Backup Backup... it's very important to backup anything before performing any task, so backup all, Databases VMs, Domain Controller, DNS, any configuration you have....they must be backup.
- Always update, always backup before update, always update before configuration perform all of these actions as you can.
- You may need to temporary disable firewall during any connection problem and if the firewall is the problem, try to know what the port needed to be opened, of course there is a list of needed ports to be opened depends on the TFS Topology, for more info, [click here](#).
- If you using SQL Server 2008R2 with Windows Server 2012 and TFS 2012, it will need extra update, I recommended upgrading using SQL Server 2012.
- During my upgrade, I use SQL Server 2012 Standard Edition but restore DB fail because the old SQL server 2008 was Enterprise, this is because the stored data itself in the old SQL Server.
- Of course we can use a new SharePoint Server or even on the same TFS 2012 machine, but I'd like to show how to use the old machine.
- For more information about upgrade TFS, [click here](#).

Thank you.