



The Visual Guide for Building Team Foundation Server 2012 Environments

Version: 1.0

Date: September 4th, 2012



Authors



Mohamed Radwan (M.Radwan) is a senior ALM Consultant at Marvel ALM with 10+ years of experience in the software industry (Architecture, Design, Development and Management) specializing in Microsoft Technologies and Agile Methodologies with a customer list that spans the Middle East. M.Radwan's areas of focus are: C# / .NET, ASP.NET, MVC, JQuery, TDD, BDD, Team Build, TFS, Application Architecture, Agile, Process Automation and Improvement, Configuration Management and Automation. M.Radwan is the founder of TFSEG User Group, co-founder of MEA ALM Community, the author of DevMagicFake Mocking Framework and a frequent speaker in the different Microsoft events. M.Radwan also holds M.Sc. of Computer Sciences and Information Technology in Agile Methodologies.



Ayman El-Hattab is a Regional Developer Evangelist at MEA Center of Expertise focusing on helping software professionals and organizations build better Software using Microsoft Application Lifecycle Management technologies and tools. Ayman has been in this role since 2010 and has presented at many conferences all over the Middle East & Africa about ALM, Team Foundation Server, SharePoint, C#, ASP.NET and Microsoft Business Intelligence technologies. Ayman is also a Microsoft Most Valuable Professional [MVP], ALM Ranger, published author and an enthusiastic speaker

who enjoys working with the online and offline developer communities all over the world. Ayman is a Co-founder of MEA ALM Community & SharePoint4Arabs, community lead at Egypt SharePoint User Group and an organizer for several SharePoint Saturday events. Outside of work, Ayman can be found watching soccer games, playing Xbox or watching documentary movies.



Hosam Kamel is a Regional Technology Solution Professional at MEA Center of Expertise focusing on development tools and application lifecycle management technologies and tools. Hosam is also a Visual Studio ALM Ranger who can often be seen speaking about software development, most frequently about software development lifecycle and web technologies in many events. He has an interest in and knowledge of Microsoft Technology in general and, more specifically, Development tools. His goal is to enable people to do better software development

using the best practices at development, infrastructure and architecture level making use of great tools provided by Microsoft. Hosam is also an active contributor to the official Microsoft ASP.NET forums.

Copyright

This document is provided for informational purposes only and [MEA ALM Community](#) makes no warranties, either express or implied, in this document. Information in this document, including URL and other Internet Web site references, is subject to change without notice. The entire risk of the use or the results from the use of this document remains with the user. Unless otherwise noted, the companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events depicted in examples herein are fictitious. No association with any real company, organization, product, domain name, e-mail address, logo, person, place, or event is intended or should be inferred. Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of [MEA ALM Community](#).

Contents

The Visual Guide for Building Team Foundation Server 2012 Environments	7
Part 1 – Introduction & Overview	7
 Chapter 1: Introduction.....	7
1.1 How this Guide Is Structured	7
1.2 Where to Start & What to Skip	8
1.3 Conventions Used in this Guide	9
1.4 Feedback.....	10
1.5 Further Learning.....	11
 Chapter 2: Architecture & System Requirements	12
2.1 Architecture	12
2.2 Hardware Requirements	13
2.3 Software Requirements.....	14
Part 2 - Creating & Preparing the Required Infrastructure.....	15
 Chapter 3: Creating & Preparing the Domain Controller	15
3.1 Installing Windows Server 2008 R2 SP1	16
3.2 Creating the Service Accounts & Groups.....	50
 Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)	58
4.1 Installing Windows Server 2012	58
4.2 Adding the Hyper-V Role to Windows Server 2012	81
 Chapter 5: Creating & Preparing the Team Foundation Server Virtual Machine	90
5.1 Creating the TFS Virtual Machine	90

5.2 Installing Windows Server 2012	97
5.3 Configuring the Local Policies	100
Part 3 - Installing and Configuring Team Foundation Server Pre-requisites.....	103
Chapter 6: Installing & Configuring SQL Server 2012	103
Chapter 7: Installing & Configuring SharePoint Server 2010	127
Chapter 8: Configuring SharePoint Server 2010 for Dashboard Compatibility.....	170
Part 4 – Installing, Configuring & Integrating Team Foundation Server 2012	181
Chapter 9: Installing & Configuring Team Foundation Server 2012	181
9.1 Installing Team Foundation Server 2012	181
9.2 Configuring Team Foundation Server 2012	187
Chapter 10: Configuring the Team Build Service.....	193
Chapter 11: Configuring the Enterprise Application Definition	201
Appendices	203
Appendix A: Creating Local Service Accounts and Groups for Windows Server 2012	203
Appendix B: Adding the Hyper-V Role to Windows Server 2008 R2	206
Appendix C: Adding the .NET 3.5 Framework feature to Windows Server 2008 R2	209
Appendix D: Configuring SQL Server 2012 Analysis Services Port	214
Appendix E: Configuring SQL Server 2012 Database Engine Port.....	220
Appendix F: SQL Server 2012 Installation Verification.....	227
Verifying SQL Server Reporting Services	227
Verifying SQL Server Database Engine and SQL Server Analysis Services	234
Verifying the Connection to SQL Server Instance (Database and Analysis Service)	243
Appendix G: SharePoint Server 2010 SP1 Installation Verification	246

Verifying the Connection to the Web Applications	246
Verifying the Recommended Authentication Settings	249
Verifying SharePoint 2010 Dashboard Compatibility	251
Appendix H: Team Foundation Server 2012 Installation and Configuration Verification.....	252
Installing Visual Studio 2012 Ultimate Edition	252
Creating a New Team Project	258
Processing the Warehouse and the Analysis Databases	264
Verifying the Excel Services Reporting	270
Verifying the TFS Build Service.....	273

The Visual Guide for Building Team Foundation Server 2012 Environments

Note: This guide is based on the Team Foundation Server 2012 Installation Guide (<http://www.microsoft.com/en-us/download/details.aspx?id=29035>), Publishing Date: August 15th, 2012.

Part 1 – Introduction & Overview

Chapter 1: Introduction

This guide is not only intended to walk you through the installation and the configuration process of Team Foundation Server 2012 but it is also written and designed to reflect real-world experience of the installation and configuration processes via detailed steps, well-defined screenshots and videos; and hence the name “Visual Guide”.

We highly recommend that you entirely read the introductory chapter of the guide before jumping to the installation and configuration process. This is because the outcome of this guide is a complete installation of Team Foundation Server 2012 that connects many moving parts so information can flow smoothly and securely in many directions. While even the most basic single-server deployment (that we are mainly focusing on) relies on many variables, most real-world deployment scenarios extend much farther to include multiple servers and eventually clusters of both physical and virtual computers.

Before you begin the installation process, gather information on the needs of your organization, and discuss the scope of your deployment with the IT Professionals, System Administrators, and Developers who will use Team Foundation Server. By studying this Guide and carefully analyzing the specific needs of your teams, you will eventually create your own deployment roadmap.

1.1 How this Guide Is Structured

This guide is divided into the following five parts:

Part 1- Introduction & Overview: gives an overview of the whole guide, explains how it's structured, the different scenarios it covers, where you need to start, what you can skip and tells what information you might need during the installation process. It also illustrates the architecture of the environment that you will build throughout the guide and covers the Hardware and Software requirements needed for you to follow along till the end of the guide.

Part 2 - Creating & Preparing the Required Infrastructure: Walks you through creating the infrastructure needed for you to build the Team Foundation Server 2012 environment, installing

and configuring all prerequisite software and services as well as creating the necessary accounts and setting the necessary permissions.

Part 3- Installing and Configuring Team Foundation Server Pre-requisites: walks you through installing and configuring SQL Server 2012 and SharePoint Server 2010 in addition to some configuration steps needed for the integration with Team Foundation Server 2012.

Part 4- Installing and Configuring Team Foundation Server: walks you through installing and configuring Team Foundation Server along with some of its services and components.

Appendices

- A. [Creating Local Service Accounts and Groups for Windows Server 2012](#)
- B. [Installing Hyper-V Role on Windows Server 2008 R2](#)
- C. [Adding .NET 3.5 Framework feature for Windows Server 2008 R2](#)
- D. [Configuring SQL Server 2012 Analysis Services Port](#)
- E. [Configuring SQL Server 2012 Database Engine Port](#)
- F. [SQL Server 2012 Installation Verification](#)
- G. [SharePoint Server 2010 SP1 Installation Verification](#)
- H. [Team Foundation Server 2012 Installation & Configuration Verification](#)

1.2 Where to Start & What to Skip

Team Foundation Server 2012 can be installed on different platforms and operating systems. Depending on the business requirements, it can also be used with or without many services and components. Whether you are building a Team Foundation Server environment from scratch or you already have some installed components that you are willing to reuse (e.g.: Active Directory, SQL Server, SharePoint, etc..), this guide is for you.

In case you are doing a clean installation from scratch, please make sure to follow all the steps provided in this guide. There might be some alternative scenarios that you might need to consider, those will be highlighted in the “Notes” boxes which in turn might point you to one of the appendices that can help you address those scenarios (e.g. [Creating Local Services Account & Groups rather than domain ones](#)). We have tried to cover many alternative scenarios that you might face during your installation process in the same visual step-by-step manner that we are using throughout the whole guide. If you have other scenarios that you need to address, please refer to the [Feedback](#) section.

On the other hand, in case you already have some existing components or software installed within your environment that you want to reuse or connect to (e.g. Active Directory, SQL Server, SharePoint Server, etc...), you can skip some sections in the guide provided that you pay attention to all the “Warnings” and “Notes” provided inside the chapters which in turn might lead you to some appendices either to verify your existing software installation or to do some extra required configuration steps. Please refer to the following table in this case.

Scenario	What to Skip	Notes
You already have a domain controller with DNS	Skip Section 3.1 (Installing Windows Server 2008 R2 SP1) .	<ul style="list-style-type: none"> - Make sure to read and apply all the steps in Section 3.2 (Creating the Services Accounts & Groups).
You already have SQL Server 2012 installed	Skip Chapter 6 (Installing SQL Server 2012) .	<ul style="list-style-type: none"> - Make sure to carefully read and apply Chapter 6 Notes. - Make sure to verify the installation of SQL Server 2012 by checking Appendix F.
You already have SharePoint Server 2010 installed	Skip Chapter 7 (Installing SharePoint Server 2010) .	<ul style="list-style-type: none"> - Make sure to carefully read and apply Chapter 7 Notes. - Make sure to verify the installation of SharePoint Server 2010 by checking Appendix G. - Make sure to configure your existing SharePoint Server for Dashboard Compatibility by following the steps in Chapter 8.

1.3 Conventions Used in this Guide

To help you get the most out of the guide and keep track of what's going on, we've used a number of conventions throughout the guide.

We classified the extra information in this guide into three types:

- 
WARNING: Boxes like this one hold important & must-read information that is directly relevant to the surrounding text.
- 
NOTE: If you are doing a clean installation from scratch, you can skip boxes like this one. They are mandatory otherwise.
- 
TIP: Completely optional to read but usually come with extra real-life knowledge & experience.

As for styles in the text:

- We *highlight* and quote the naming when we introduce it like so: Enter a new name for the computer “*DCM*”
- We show filenames, URLs and code within the text like so: www.mealmcommunity.com
- We show menu commands like this: Click Start → All Programs → Microsoft SQL Server 2012. This means click Start then All Programs and then Microsoft SQL Server 2012. In case of a right click is needed, we add (*) after the command.
Click Start → Computer (*) → Properties means click start then right click on Computer and then Properties.
- Dialogue box and Button titles are bold and quoted like so: From the “**Add Roles Wizard**”, click “**Add Required Features**” then click “**Next**”.

1.4 Feedback

If you want to see this guide in the best shape with all the information you might need to be included, please don't hesitate to drop us a message at the Discussions page on CodePlex (<http://tfs2012visualguide.codeplex.com/discussions>). We would really love to hear back from you, know what worked for you, what didn't, how we can improve this guide and what you would like to see in the next version.

Also, if you want have any ideas for other publications that you would like to see from MEA ALM Community, please do not hesitate to contact us at <http://www.mealmcommunity.com/contact>

1.5 Further Learning

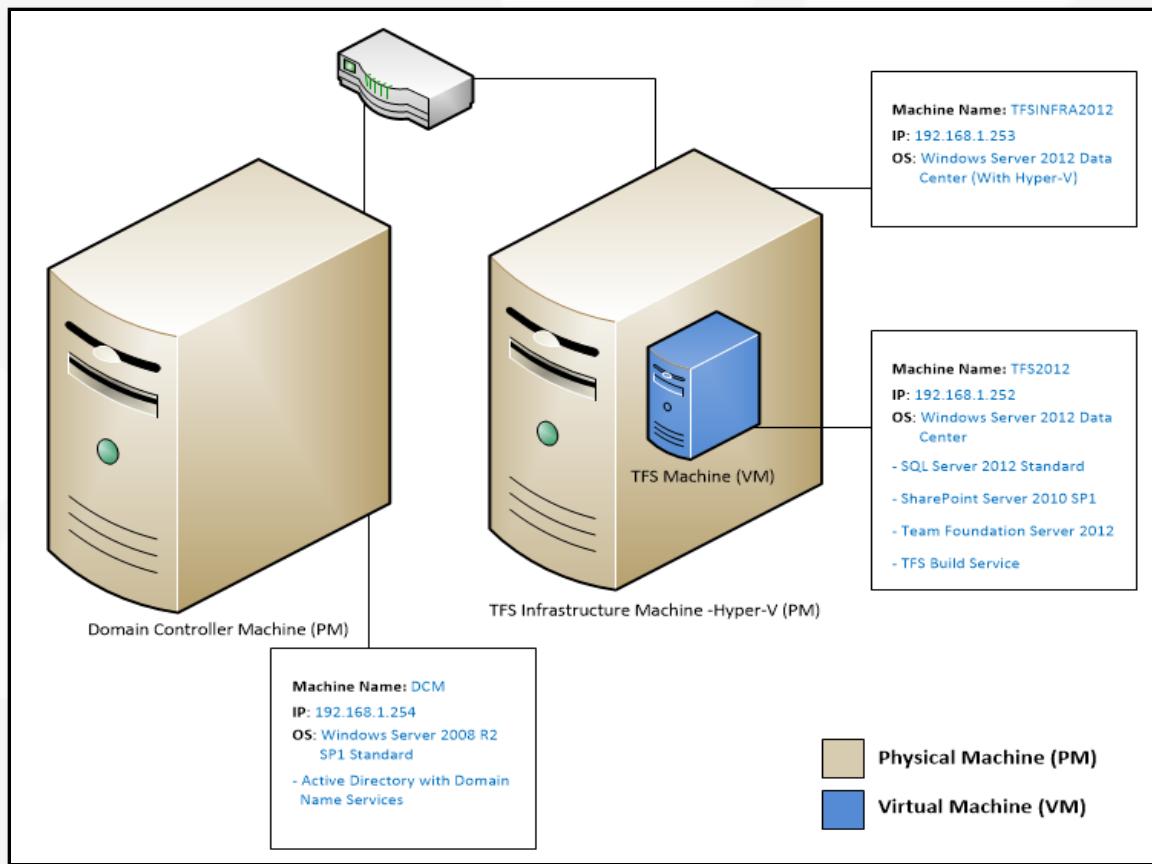
If you want to learn more about Microsoft Application Management, Visual Studio 2012 or Team Foundation Server 2012, please refer to the following links:

Source	URL
Web Sites	http://www.mealmcommunity.com
CodePlex	http://tfs2012visualguide.codeplex.com
Blogs	http://blog.mealmcommunity.com http://mohamedradwan.wordpress.com/ http://blogs.msdn.com/b/hkamel/ http://www.aymanelhattab.com
Twitter	http://www.twitter.com/mealmcommunity https://twitter.com/mradwan06 https://twitter.com/HosamKamel https://twitter.com/AymanElHattab
Facebook	http://www.facebook.com/mealmcommunity
YouTube	http://www.youtube.com/msmealmcommunity

Chapter 2: Architecture & System Requirements

This chapter describes the Architecture of the environment that you will build in [Part 2](#) along with its hardware and software requirements.

2.1 Architecture



As illustrated in the figure above, you will install Team Foundation Server 2012 along with all its pre-requisites, services and components (Database Engine, Analysis Services, Reporting Services, SharePoint Server, etc...) on one Virtual Machine hosted on the TFS Infrastructure Physical Machine. Both machines will join a domain hosted on the “Domain Controller” Physical Machine.

If you do not have two Physical Machines, you will need to create a Domain Controller Virtual Machine and host it on the “TFS Infrastructure Physical Machine”; this will be discussed later in [Chapter 3](#). Also, if you want to join an existing domain or to use an existing installation of SQL Server or SharePoint, please check Section 1.1 “[Where to Start & What to Skip](#)”.

In our case we are assuming that Team Foundation Server will be used by fewer than 500 Users. For the official Hardware recommendations of Microsoft, please refer to <http://msdn.microsoft.com/en-us/library/dd578592.aspx>. Based on those recommendations, you might need to come up with another architecture and do a multi-server installation for Team Foundation Server which is beyond the scope of this guide.

The following Hardware and Software requirements are the ones needed for you to follow along with the guide.

2.2 Hardware Requirements

Physical Machine	CPU	Memory	Hard Disk	Network Adapter
Domain Controller	1.4 GHz 64-bit processor.	512 MB	32 GB	1 Network Adapter (10/100)
Team Foundation Server Infrastructure	1 dual core processor at 2.13 GHz (Hyper-V Capable)	Minimum of 6 GB (12 GB is Recommended)	Minimum of 200 GB (More than one HDD is recommended)	Minimum of 1 Network Adapter (10/100), it's however recommended to have more than one Network Adapter, (10/100/1000) is highly recommended.

*To follow along with the guide, you need at least 6 GB of Memory for the Team Foundation Server Infrastructure Physical Machine. For production environments, at least 12 GB of memory are needed.

2.3 Software Requirements

Machine	Operating System	Other Software	Notes
Domain Controller Machine (Physical or Virtual)	Windows Server 2008 R2 SP1 x64 Standard Edition		Windows Server 2012 can be used but we preferred to illustrate the installation experience of both Operating Systems.
Team Foundation Server Infrastructure Physical Machine (Hyper-V Host)	Windows Server 2012 x64 Data Center with Hyper-V Enabled		Windows Server 2008 R2 SP1 can be used as an Operating System.
Team Foundation Server Virtual Machine	Windows Server 2012 x64 Data Center	SQL Server 2012 Standard Edition SharePoint Server 2012 Team Foundation Server 2012 Visual Studio Ultimate 2012	Windows Server 2008 R2 SP1 can be used as an Operating System.

Part 2 - Creating & Preparing the Required Infrastructure

This part walks you through creating the infrastructure needed for you to build the Team Foundation Server 2012 environment, installing and configuring all prerequisite software, services and roles as well as creating the necessary accounts and setting the necessary permissions for the whole Infrastructure. The primary goal of this part is to show you how to install and configure the Operating Systems needed as well as getting the whole infrastructure (Physical and Virtual Machines) ready for installing and configuring Team Foundation Server 2012 in addition to its pre-requisite software.

Chapter 3: Creating & Preparing the Domain Controller

In this Chapter you will install and configure the domain controller needed for your infrastructure; you will not completely configure the domain controller with all services that might exist in a large infrastructure. However, you will only configure the services needed for this installation type.

You will start by installing Windows Server 2008 R2 with SP1 on the Domain Controller Physical Machine, configuring a Static IP Address, installing the Active Directory with DNS then creating the needed Service Accounts and Groups.



NOTE: If you have an existing Active Directory Domain Controller or you would rather work in a Workgroup, you can skip this section and jump to [Section 3.2](#).



WARNING: It's highly recommended to work in an Active Directory Domain Controller especially if you are planning to have SharePoint 2010 within your TFS environment. Otherwise, you will need some extra configurations and you might not get all features that you need.



NOTE: If you have only one Physical Machine and you don't have an extra one for the Active Directory, you can create the Active Directory Machine as a Virtual Machine on The TFS Infrastructure Physical Machine. In this case, here is the sequence you need to follow:

- Install Windows Server 2012 on the TFS Infrastructure Physical Machine (Same steps as [Chapter 4](#))
- Create a Virtual Machine on the TFS Infrastructure Physical Machine for the Active Directory (Same steps as [Section 5.1](#))
- Return to this point and follow along till the end of the guide while skipping Chapter 4.



3.1 Installing Windows Server 2008 R2 SP1

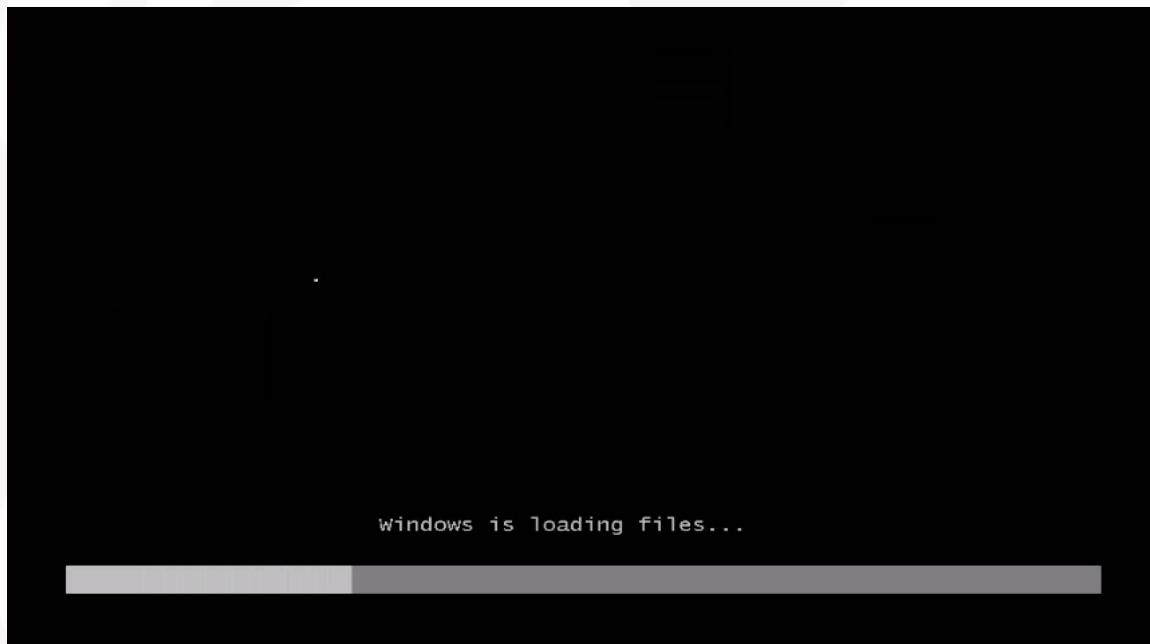
Watch the
Video

www.youtube.com/watch?v=k-8uMqJCI1U

3.1.1 Installing Windows 2008 R2 SP1

Insert the appropriate Windows Server 2008 R2 with SP1 installation media into your DVD drive and reboot your machine, Windows will start loading its files.

If you don't have an installation DVD, you can download a trial one from
<http://technet.microsoft.com/en-us/evalcenter/dd459137.aspx>



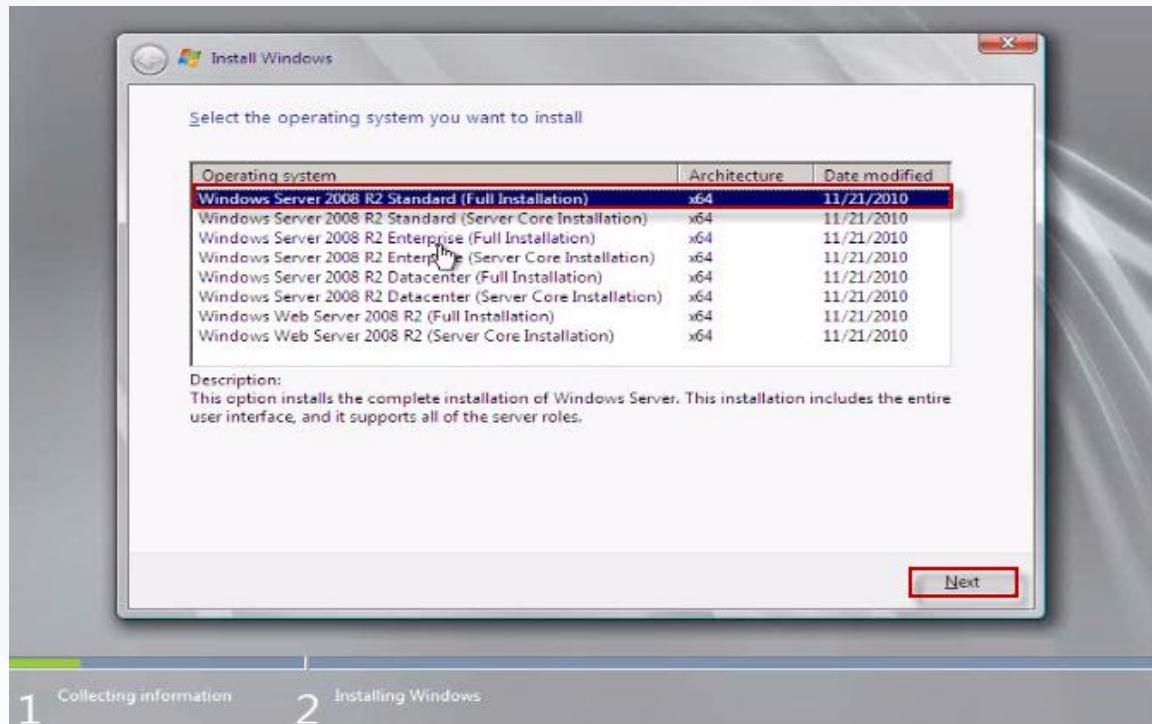
Chapter 3: Creating & Preparing the Domain Controller



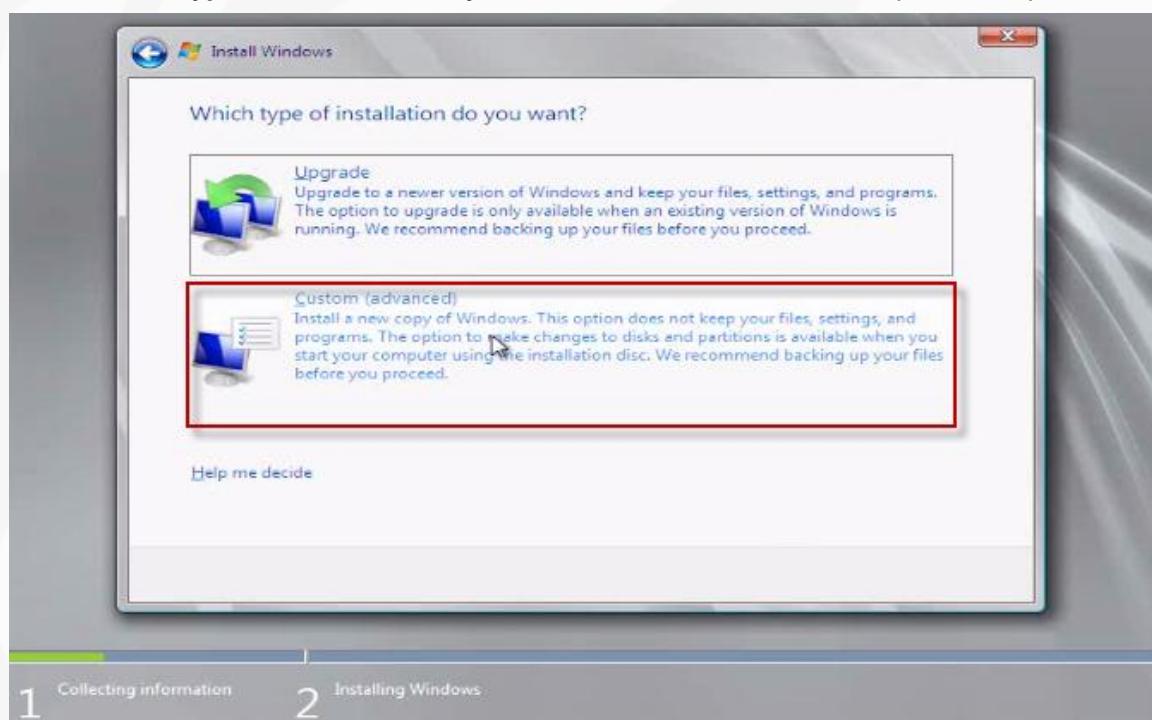
When prompted for an installation language and other regional options, make your selections and click "Next".



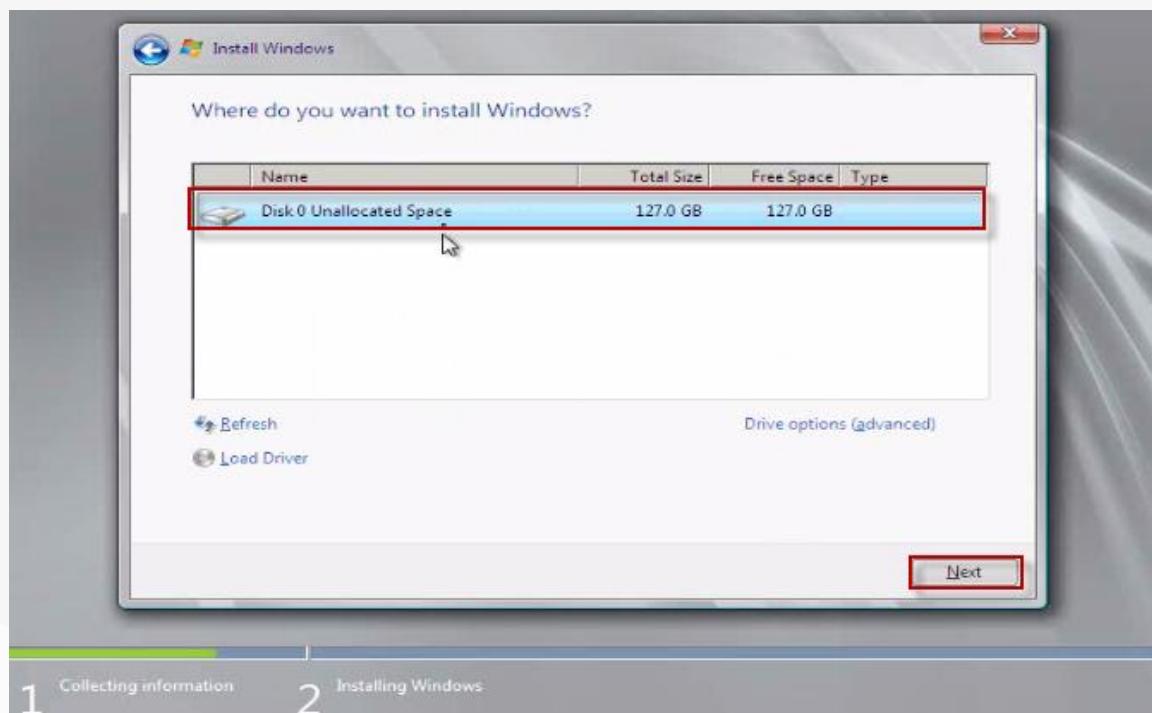
Select “Windows Server 2008 R2 Standard (Full Installation)” then click “Next”.



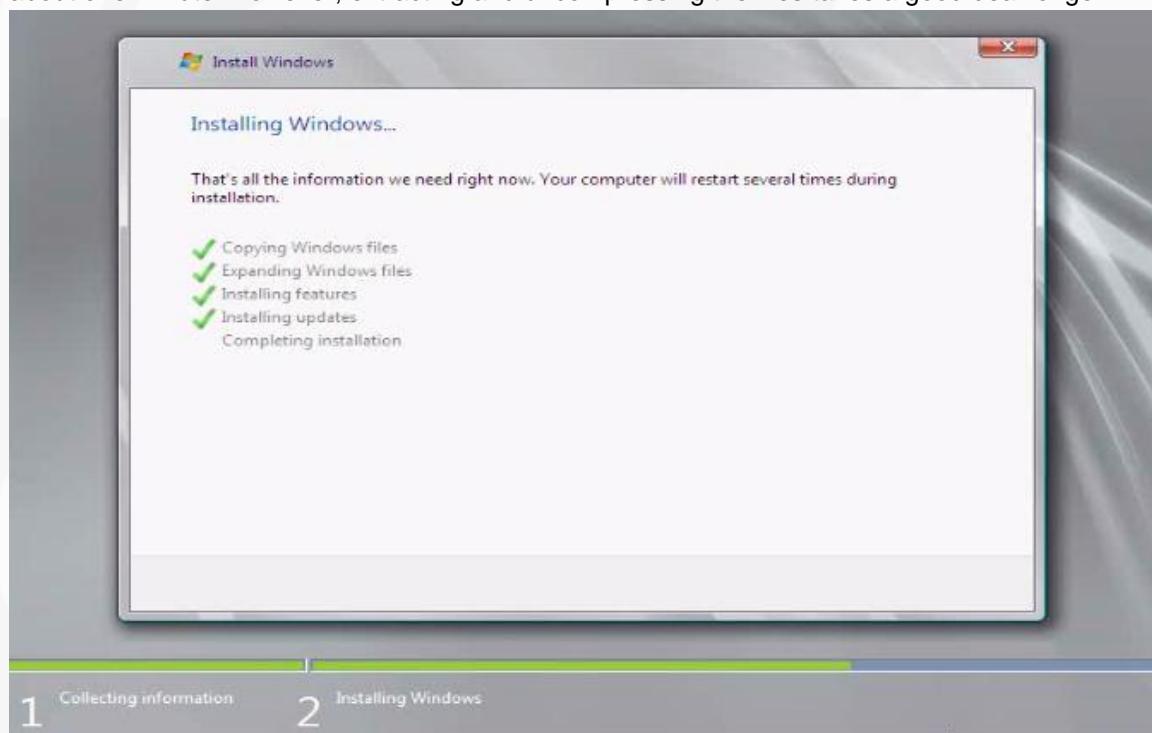
In the "Which type of installation do you want?" screen, click “Custom (Advanced)”.



In the "Where do you want to install Windows?" screen, if you're installing the server on a regular IDE hard disk, click to select the first disk, usually "**Disk 0**", and then click "**Next**".



The installation process begins. Copying the setup files from the DVD to the hard drive only takes about one minute. However, extracting and uncompressing the files takes a good deal longer.

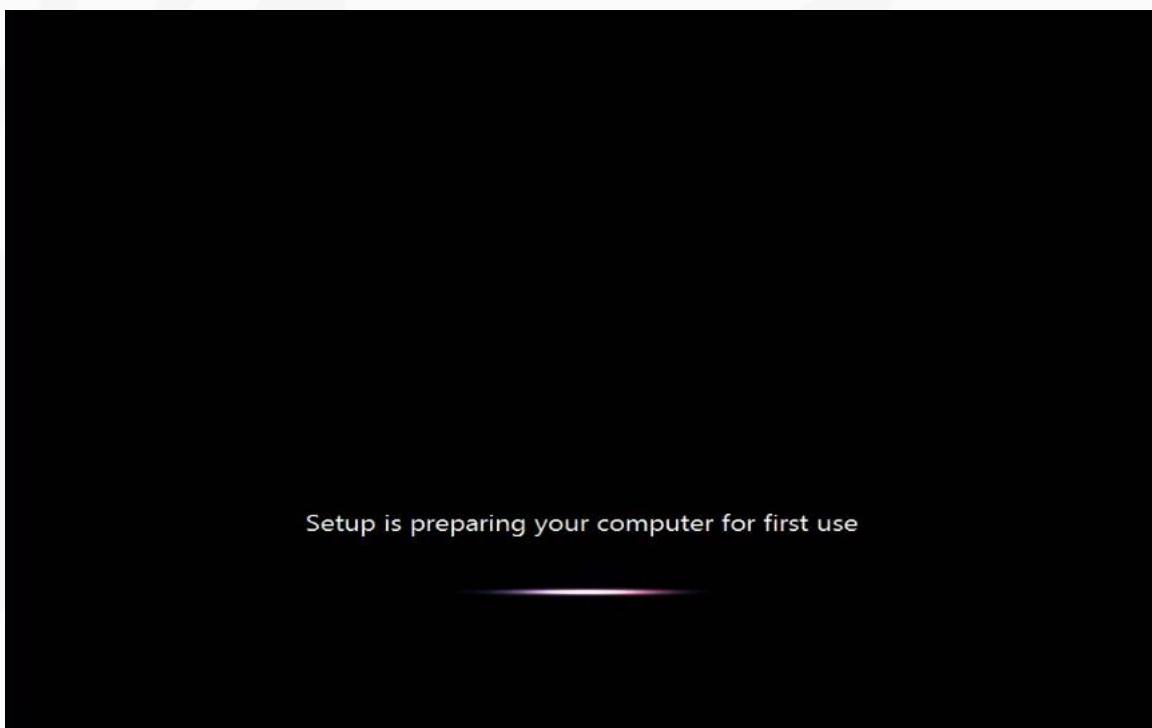


Chapter 3: Creating & Preparing the Domain Controller

The installation process will reboot your computer.

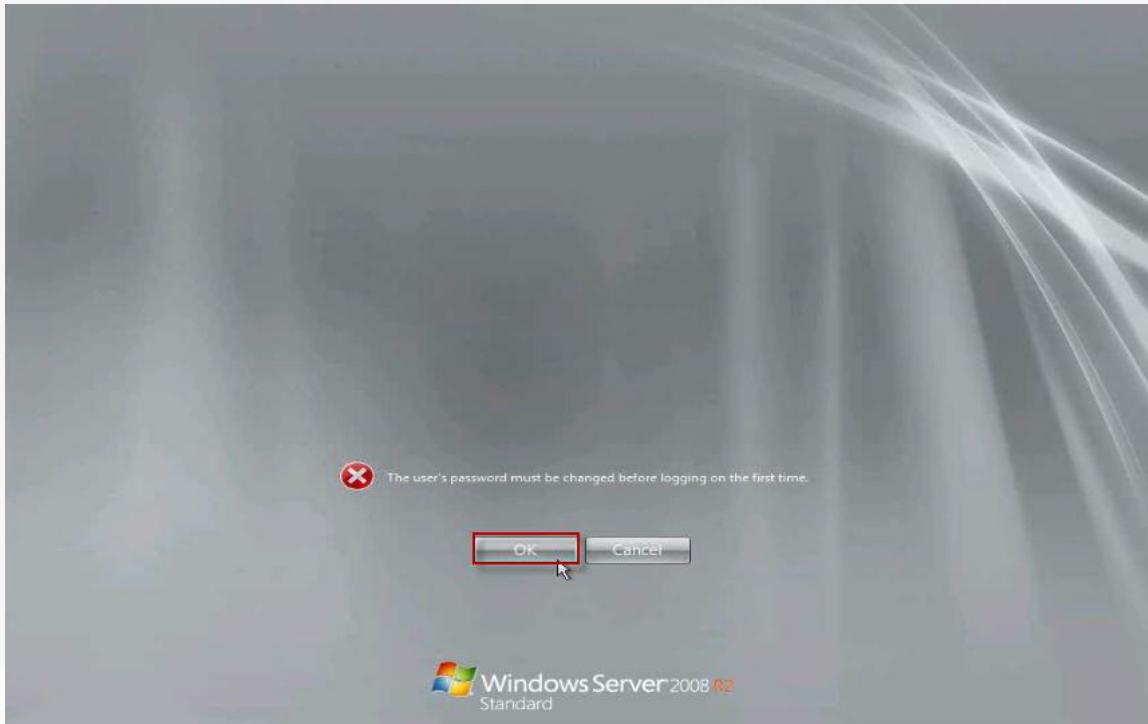


After the machine reboots, the setup process will prepare your machine for the first use.



Chapter 3: Creating & Preparing the Domain Controller

You will be prompted to change the user's password, click “**Ok**”.



Choose a new password, confirm it and then click on the blue arrow.



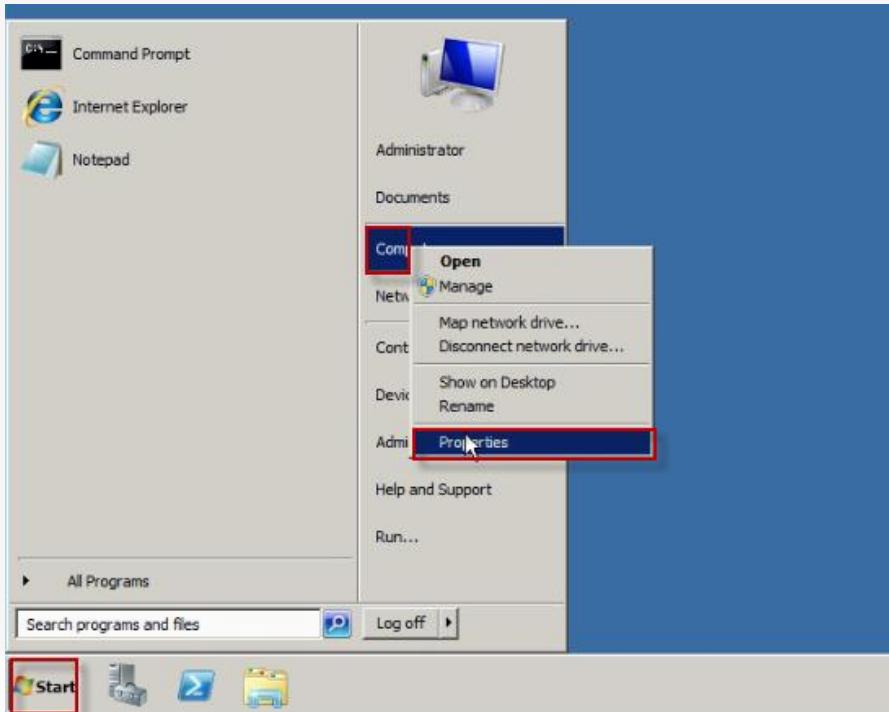
Chapter 3: Creating & Preparing the Domain Controller



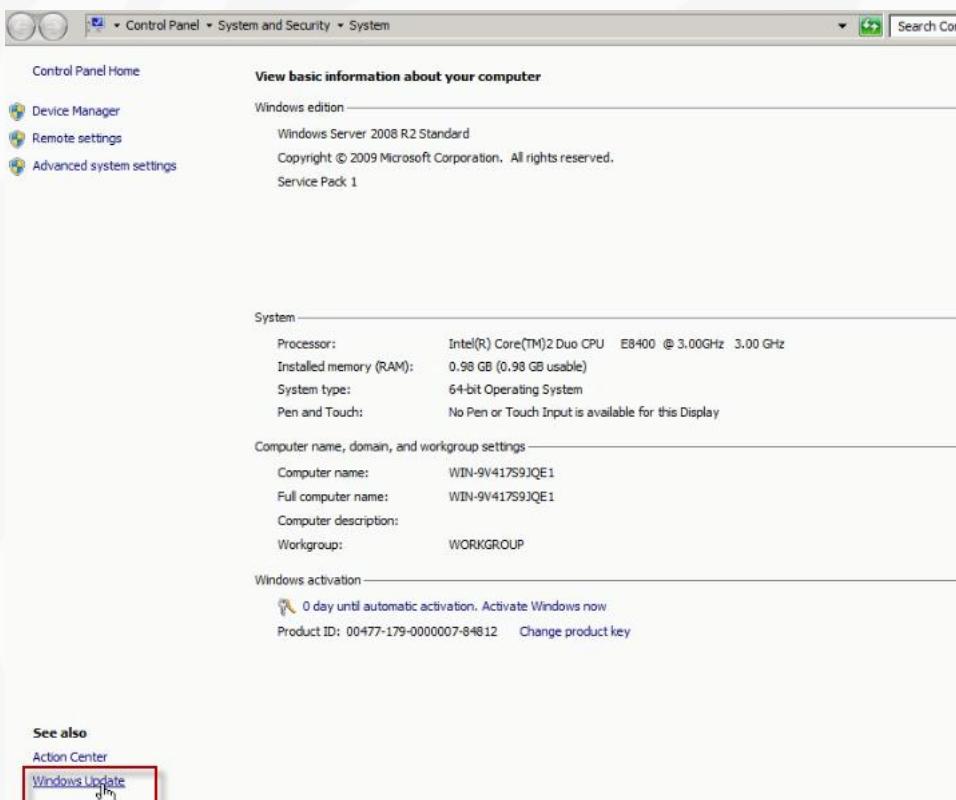
The installation process completes and you should see the desktop.



Click Start → Computer (*) → Properties



Click on the “Windows Update” link.


 A screenshot of the Windows Control Panel. The 'System' section is selected. It shows basic information about the computer, including Windows edition (Windows Server 2008 R2 Standard), Copyright (© 2009 Microsoft Corporation), and Service Pack 1. Below this, the 'System' section provides details about the processor, memory, system type, and input methods. The 'Computer name, domain, and workgroup settings' section shows the computer name (WIN-9V417S9JQE1), full computer name (WIN-9V417S9JQE1), computer description, and workgroup (WORKGROUP). The 'Windows activation' section indicates 0 days until automatic activation and provides a product key. At the bottom, there is a 'See also' section with links to Action Center and Windows Update, where the 'Windows Update' link is highlighted with a red box.

Click “Find out more”.



When the “Setup Windows Internet Explorer” window opens, click “Next”.



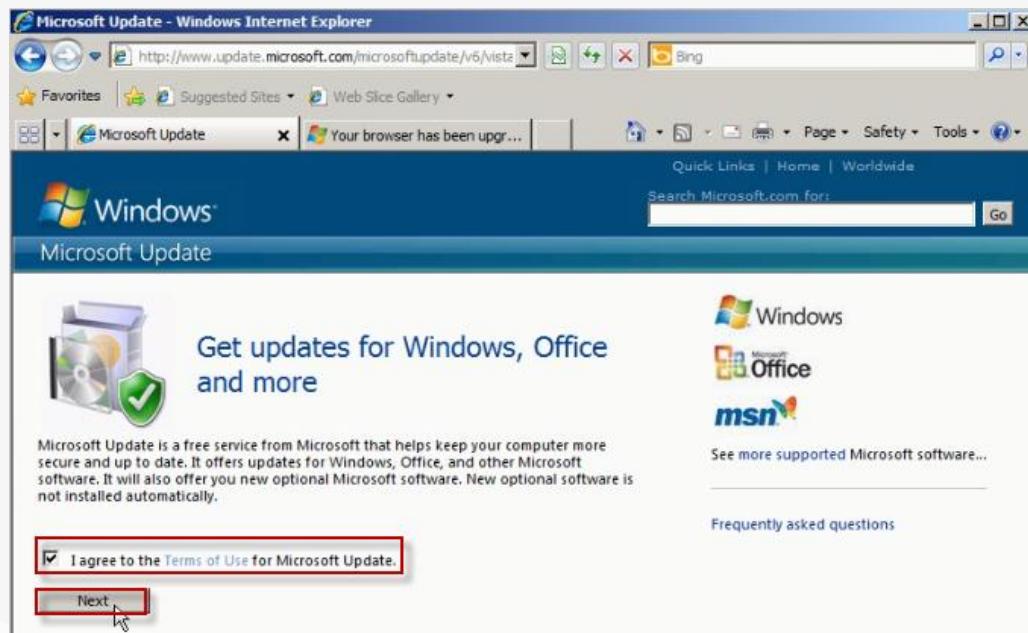
Select “**No, don’t turn on**” and then click “**Next**”.



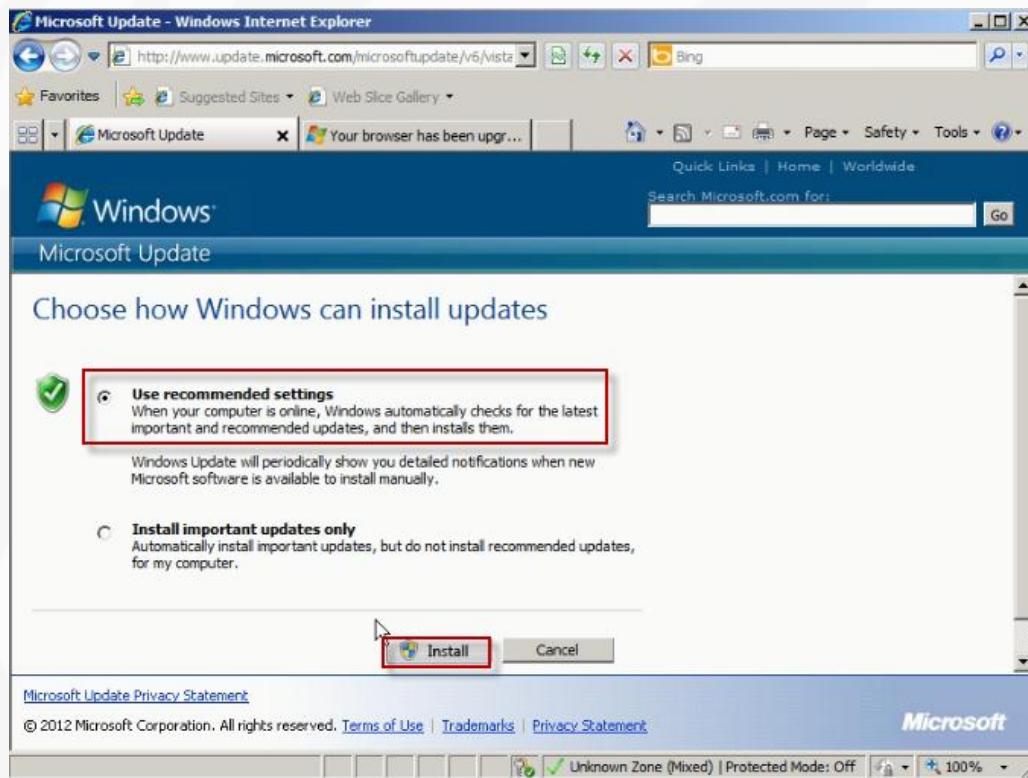
Choose “**Use Express Settings**” and then click “**Finish**”.



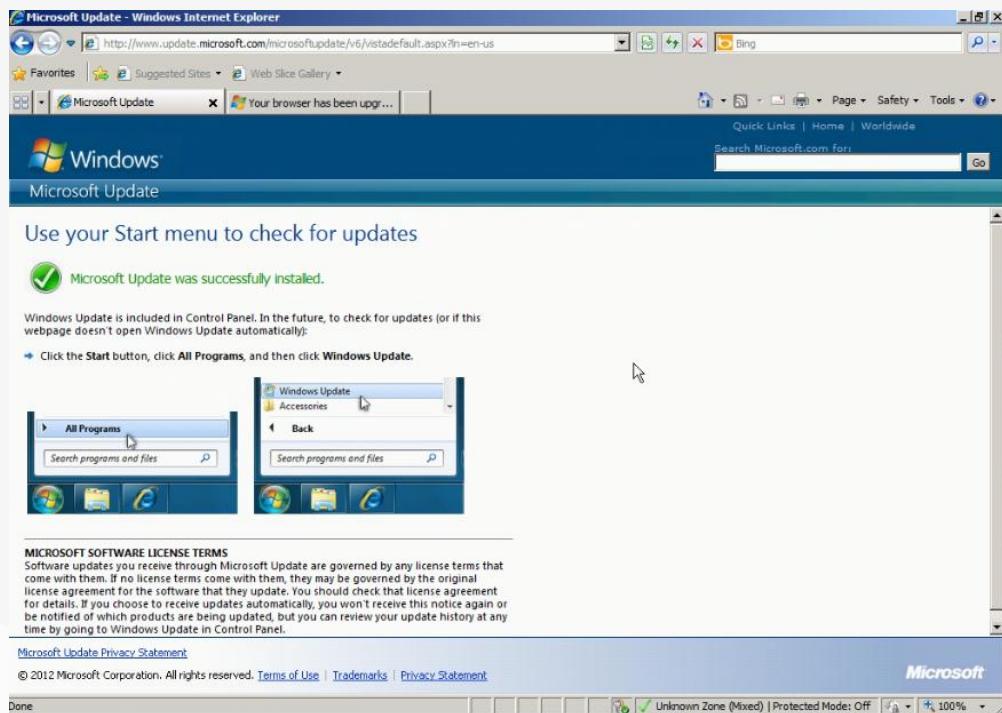
In the “Microsoft Update” page, select “I agree to the Terms of Use for Microsoft Update” then click “Next”.



When prompted to “Choose how Windows can install updates”, select “Use recommended settings” then click “Install”.



Close the browser when you receive the “**Microsoft Update was successfully installed**” message.



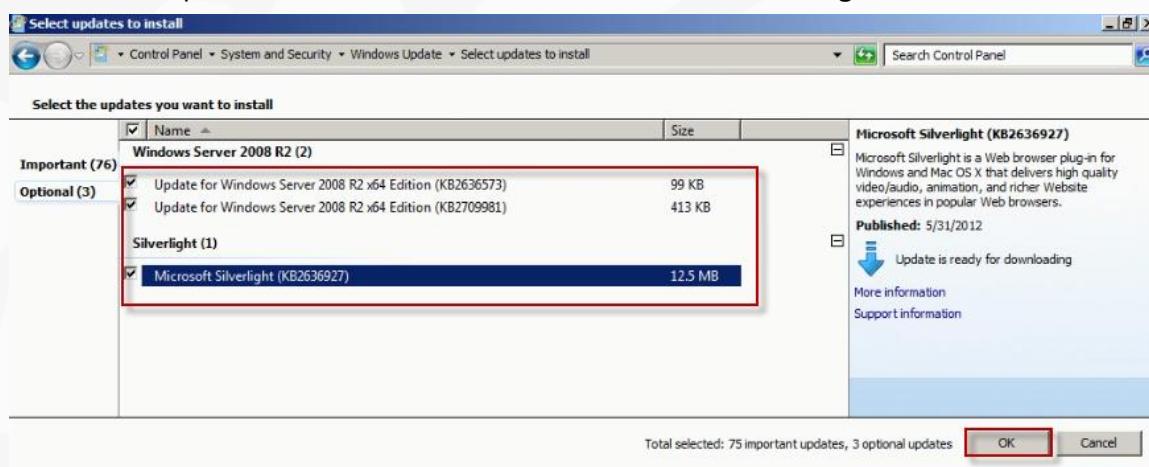
The “**Check for updates**” process starts; note that you are receiving updates “**For Windows and other Microsoft products**”.



From the updates list, click “**3 optional updates are available**”.



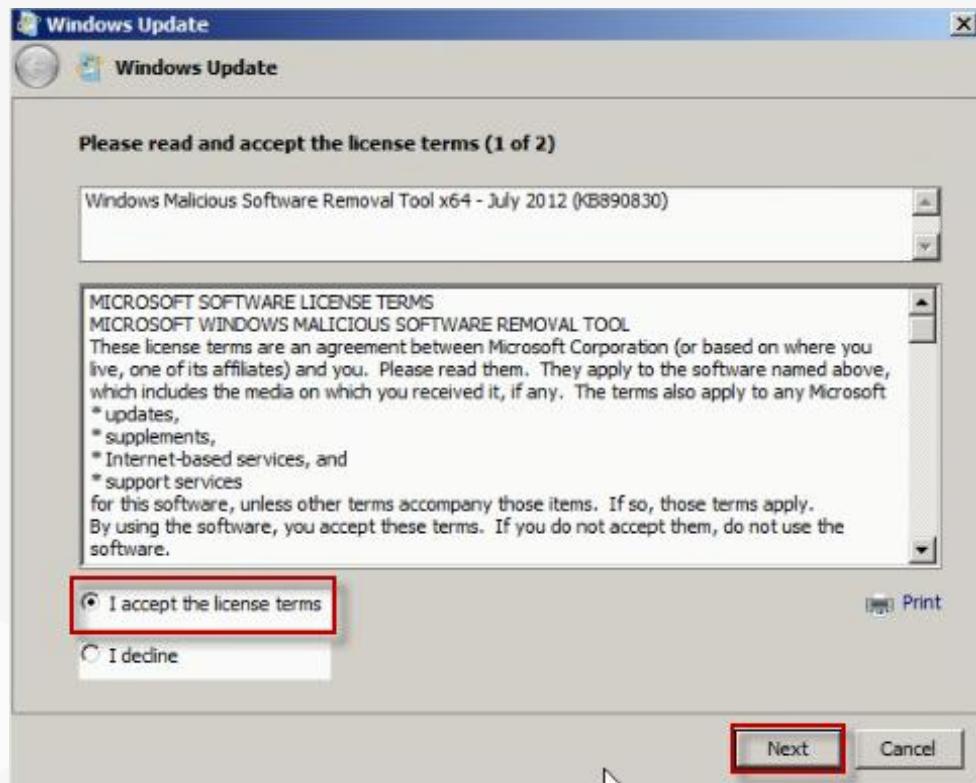
Select all the updates for “**Windows Server 2008 R2**” and for “**Silverlight**” then click “**OK**”.



From the updates list, click “**Install updates**”.



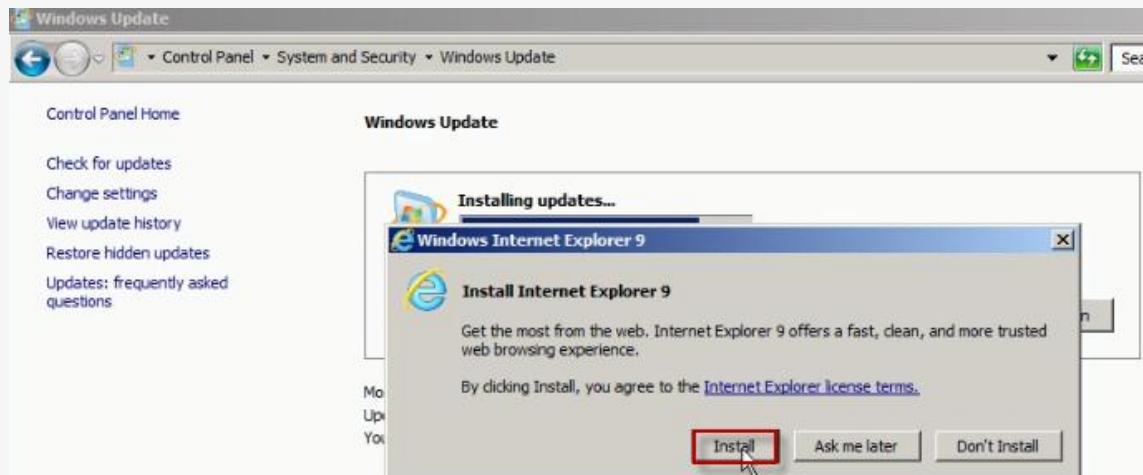
In the “Window Update” window, select the “I accept the license terms” option then click “Next”.



Windows Server 2008 R2 will start downloading the selected updates.



When the “**Install Internet Explorer 9**” dialog box pops up, click “**Install**”.



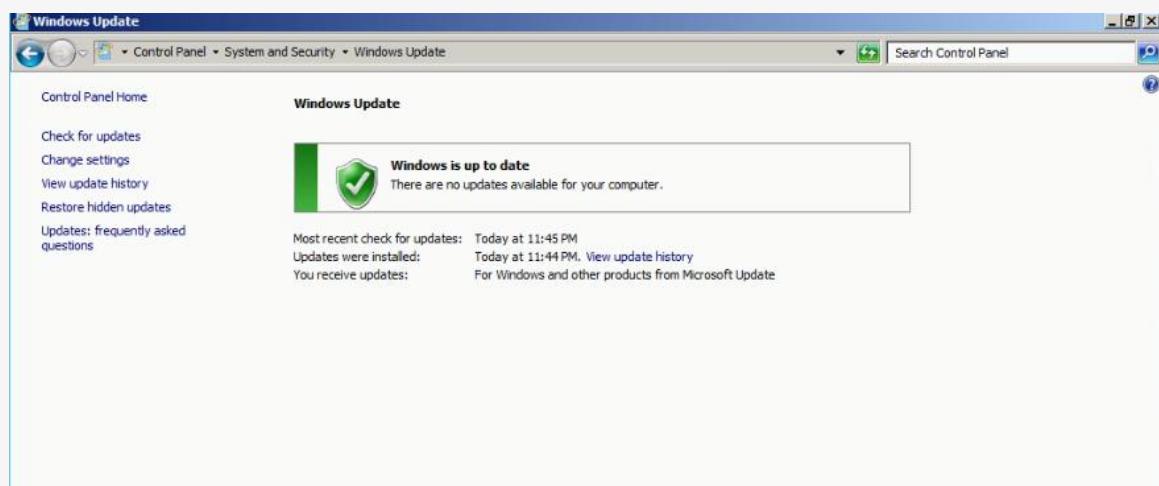
“**Windows Internet Explorer 9**” installation starts.



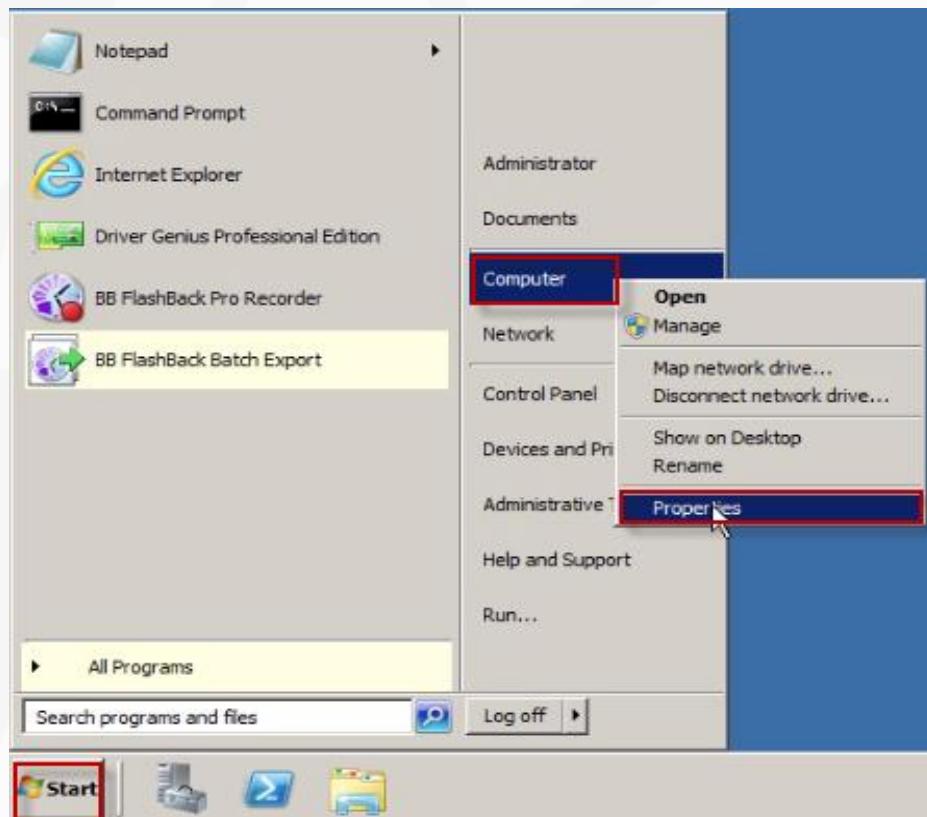
When you are notified that “**The updates were successfully installed**”, click “**Restart now**”.



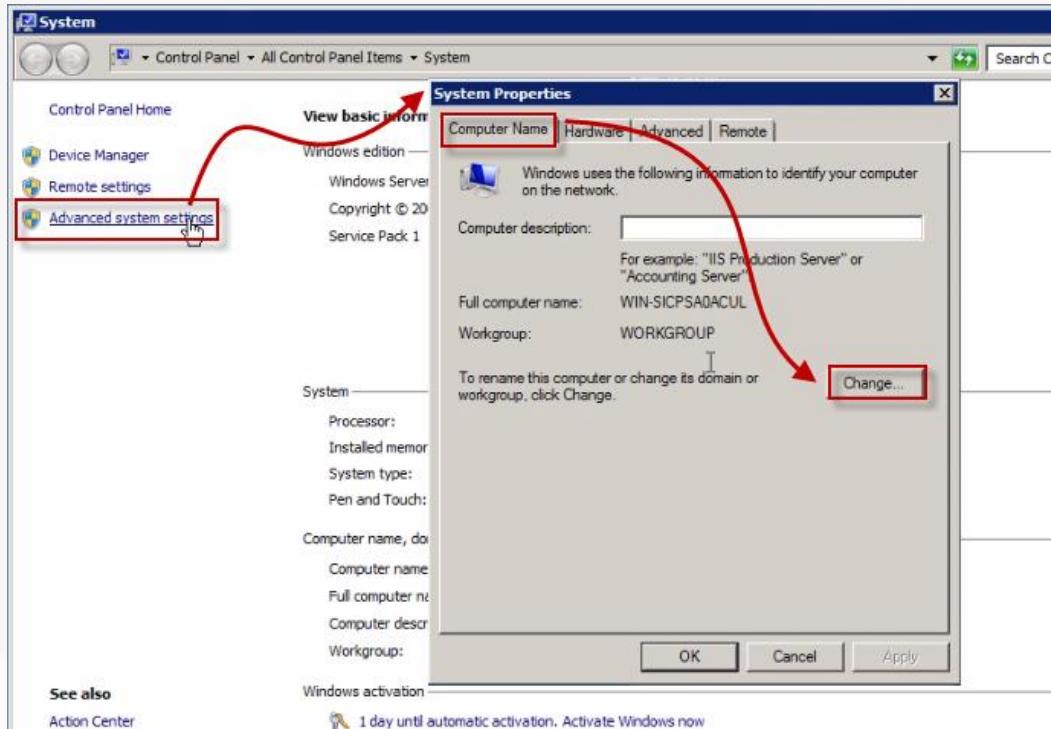
Repeat the previous step for all the available updates till you receive the “Windows is up to date” message.



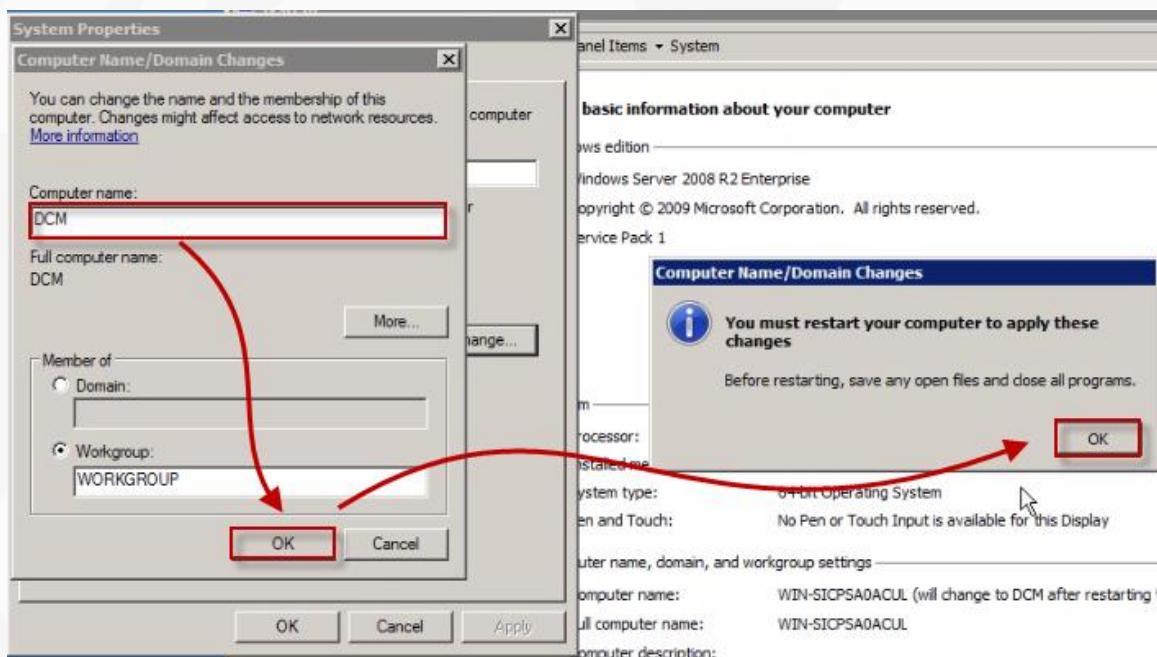
Click Start → Computer (*) → Properties



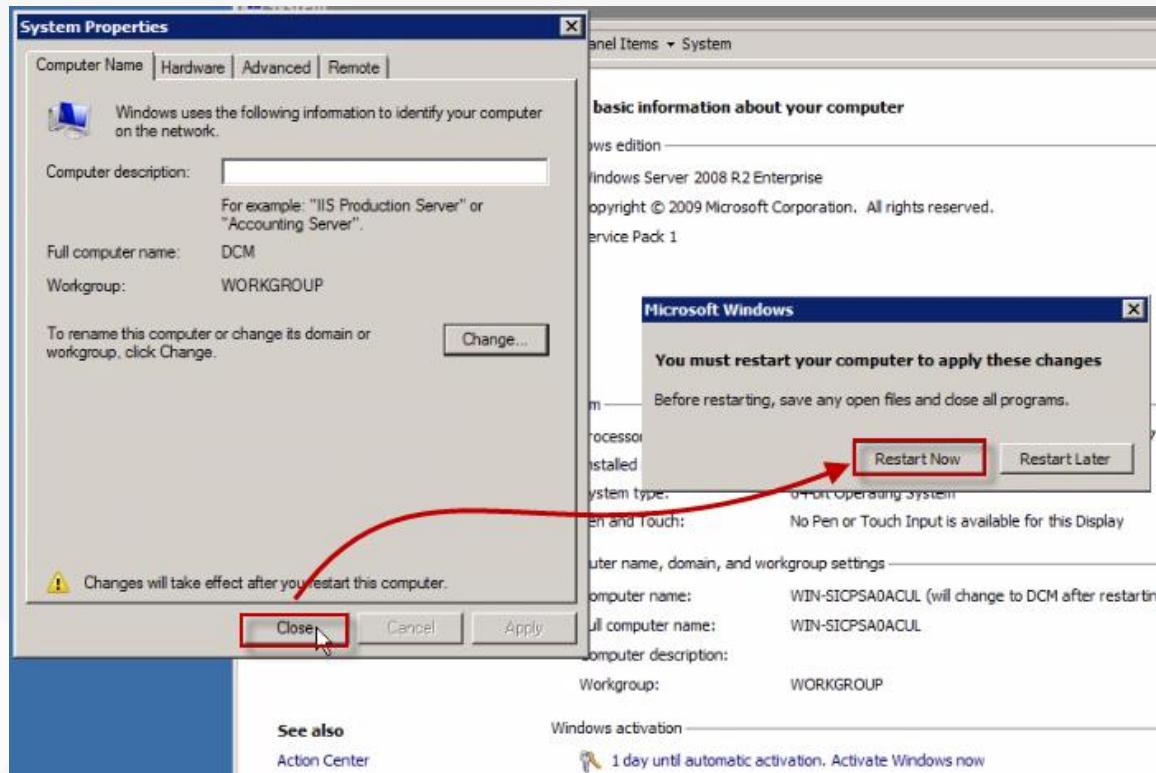
Click Advanced System settings → Computer Name → Change.



Enter a new name for the computer “DCM” and then click “OK”. When informed about the need for a computer reboot, click “OK” again.

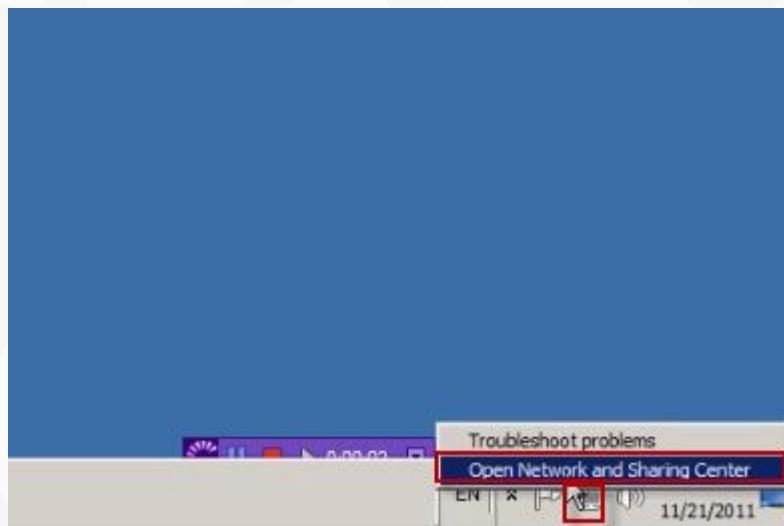


In the “System Properties” window click “Close”. When notified to reboot your computer, click “OK”.

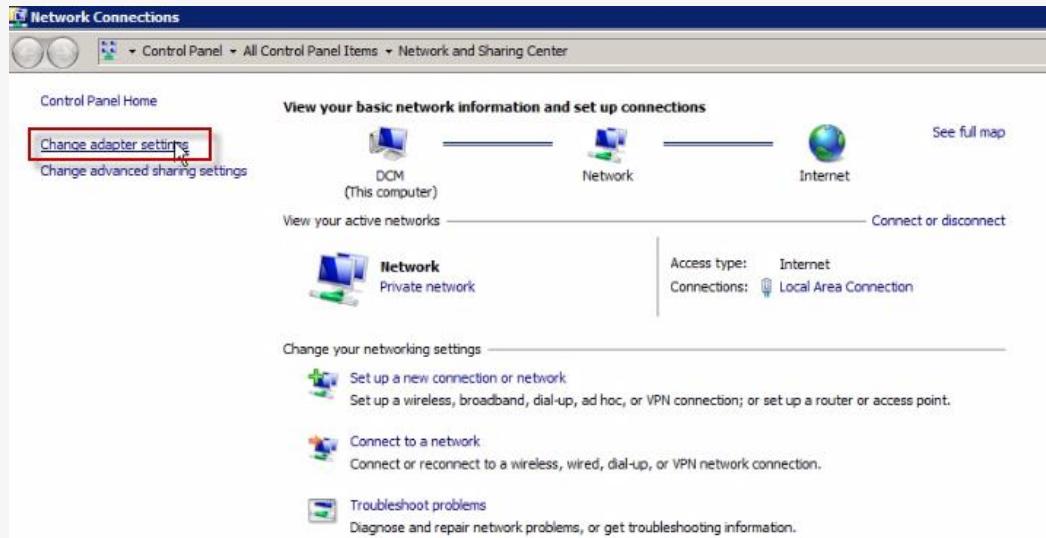


3.1.2 Configuring a Static IP Address

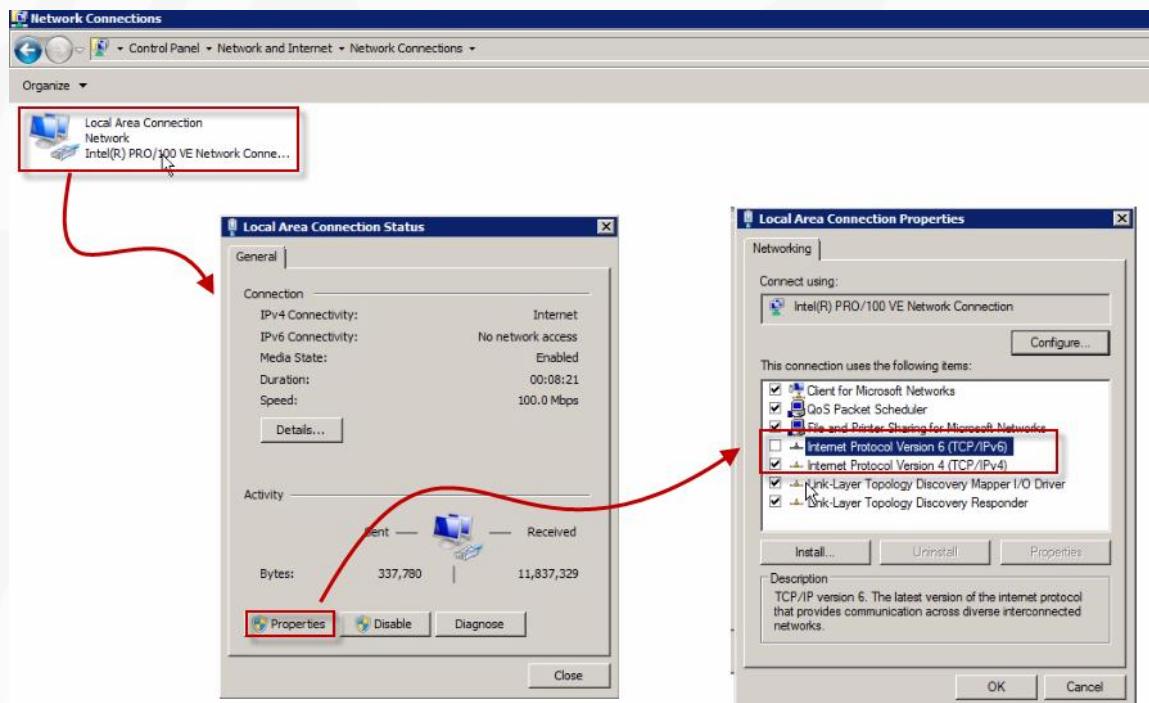
Right-click the Network Notification then click “Open Network and Sharing Center”.



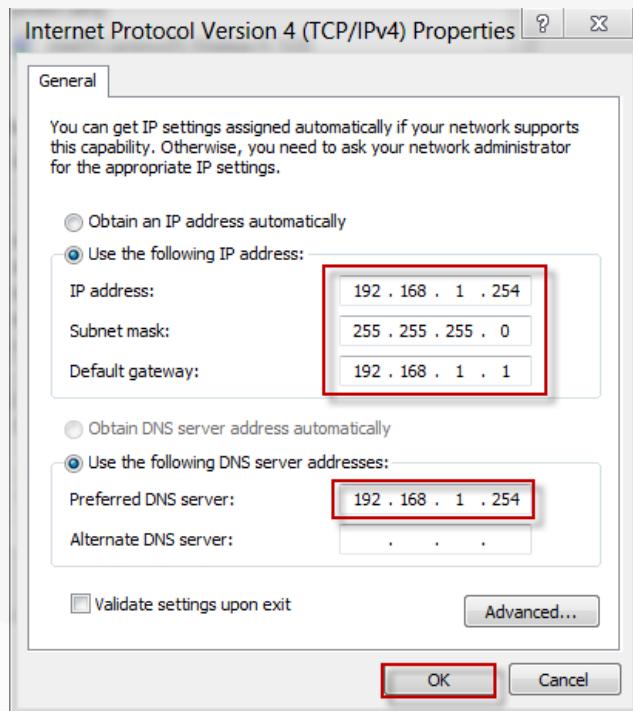
Click “Change adapter settings”.



Double-click “Local Area Connection”, then click “Properties”, then clear the “Internet Protocol Version 6(TCP/IPv6)” checkbox and then double-click “Internet Protocol Version 4 (TCP/IPv4)”

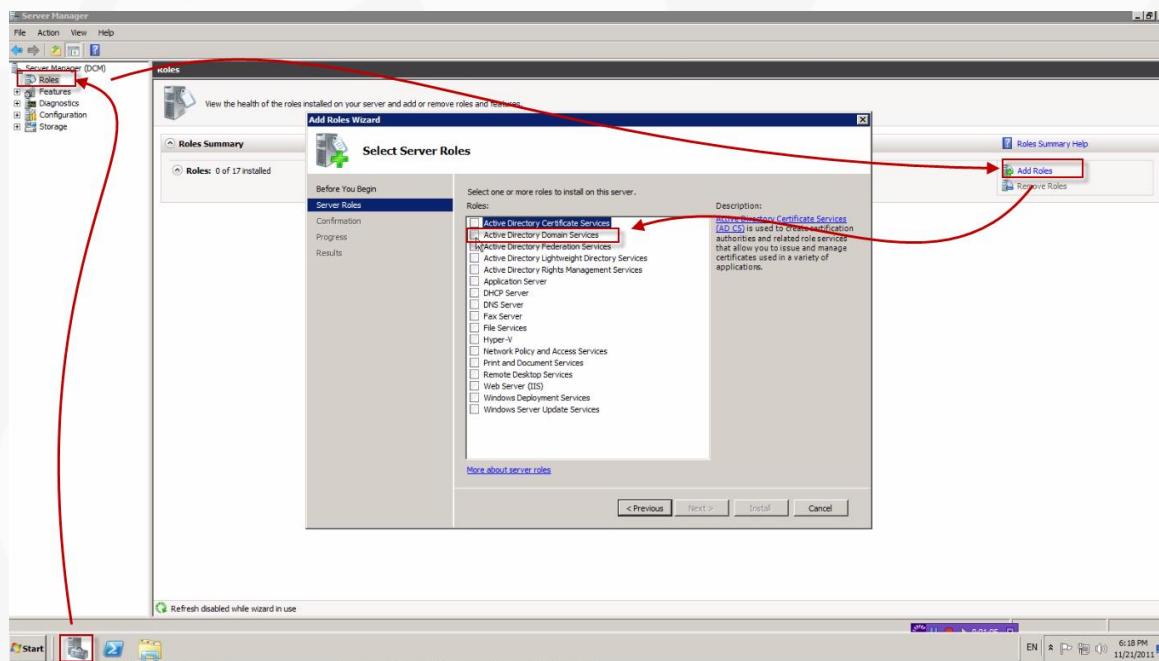


Enter the “IP Address”, “Subnet mask”, “Default gateway” and “Preferred DNS Server” as follows then click “OK”.

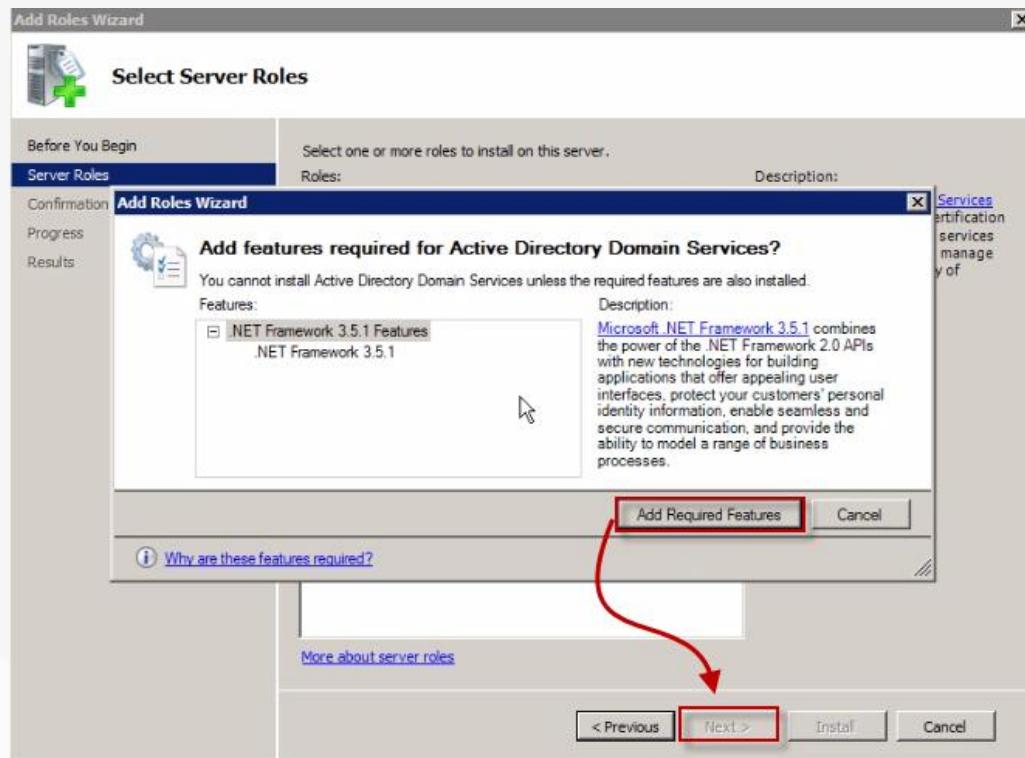


3.1.3 Installing Active Directory and DNS

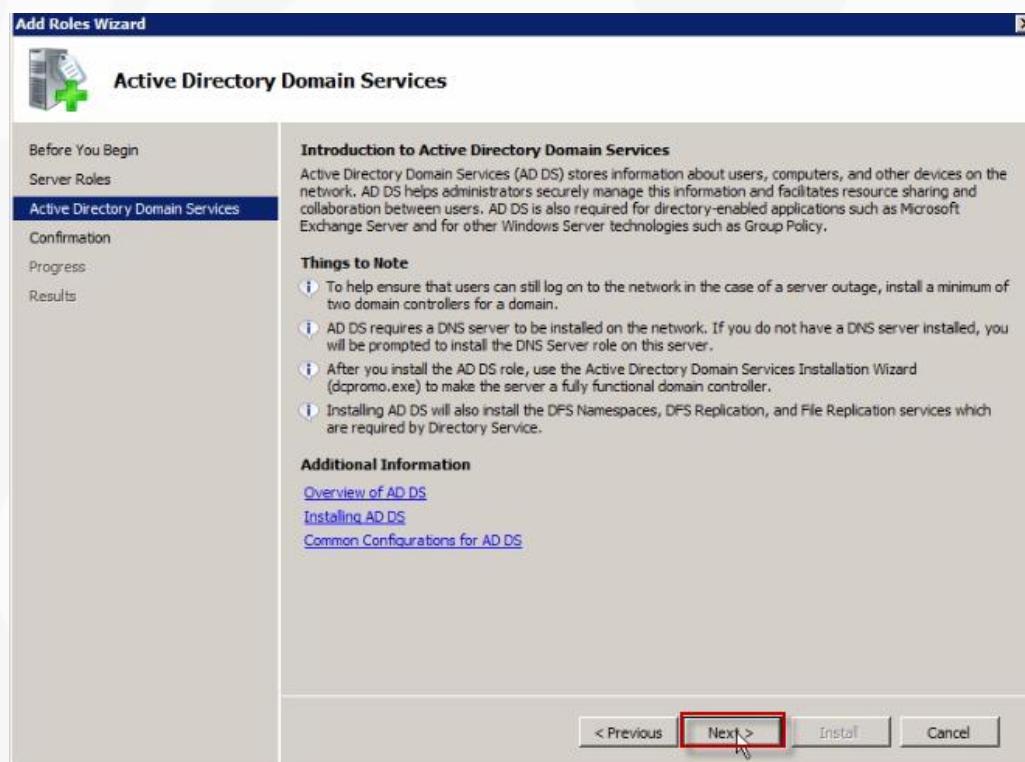
Click Server Manager → Roles → Add Roles → Active Directory Domain Services.



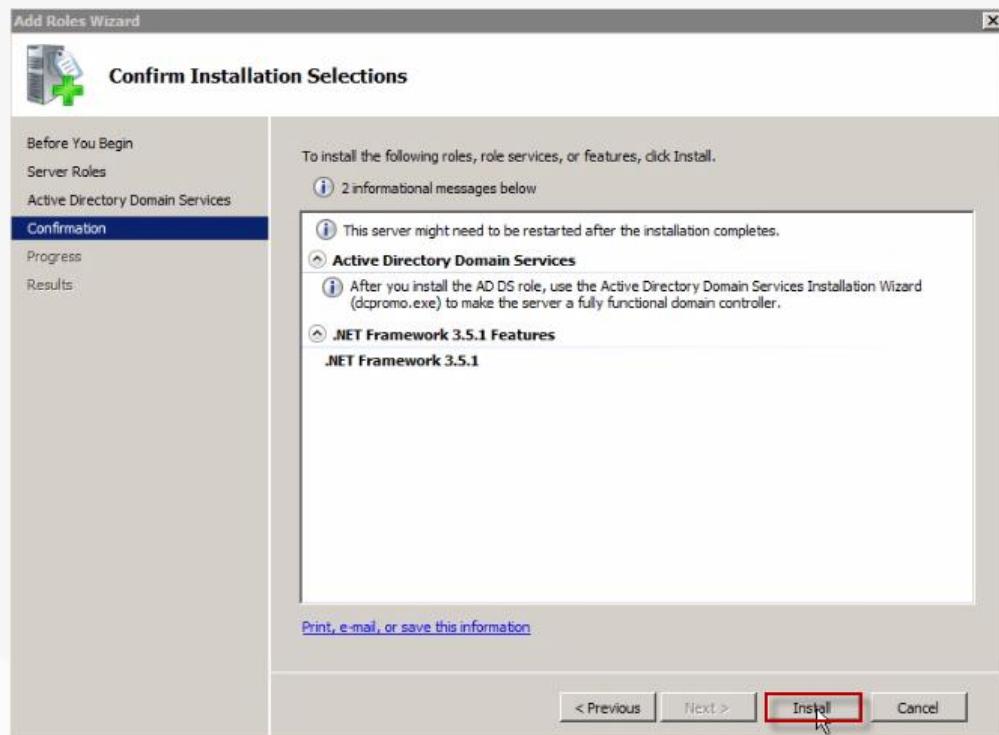
The “Add Roles Wizard” window pops up, click “**Add Required Features**” and then click “**Next**”.



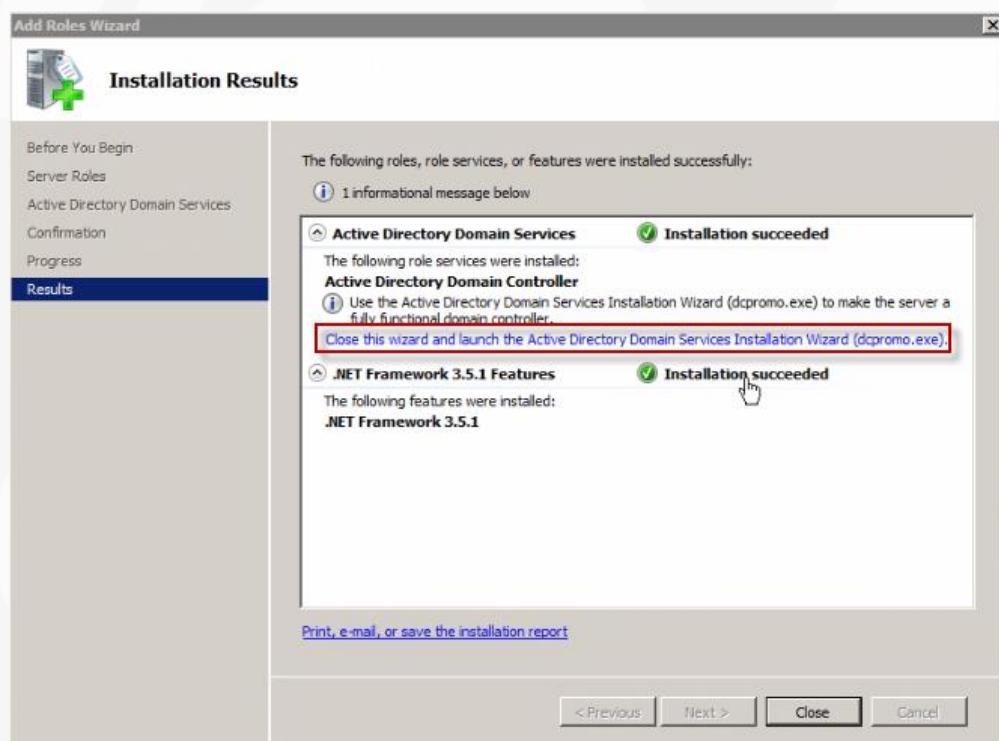
In the “Active Directory Domain Services” window, click “**Next**”.



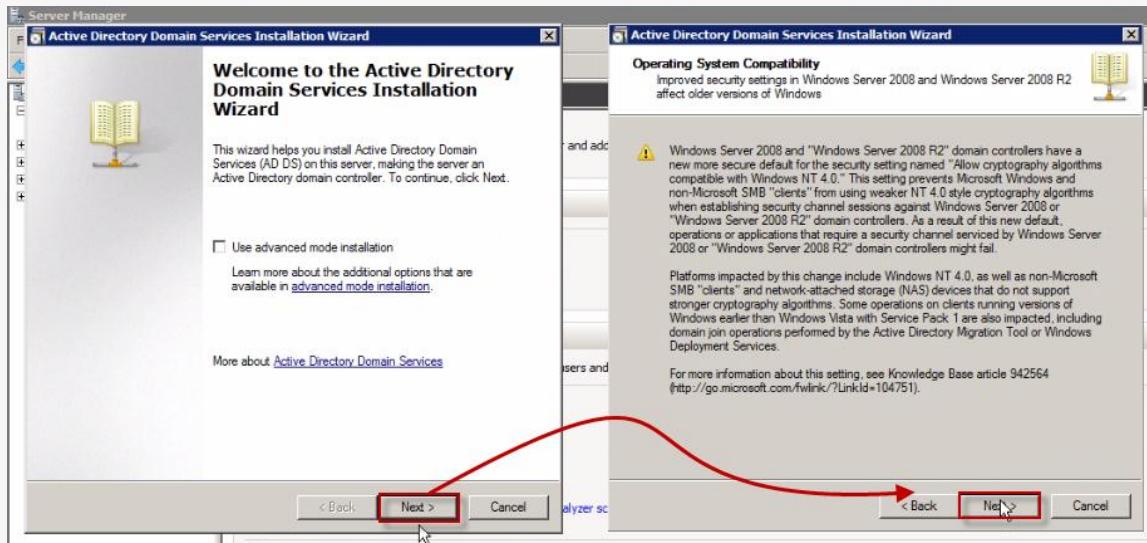
From the “Confirmation” section, click “Install”.



After the installation completes, click on the link that launches “dcpromo. exe” from the “Installation Results” screen.

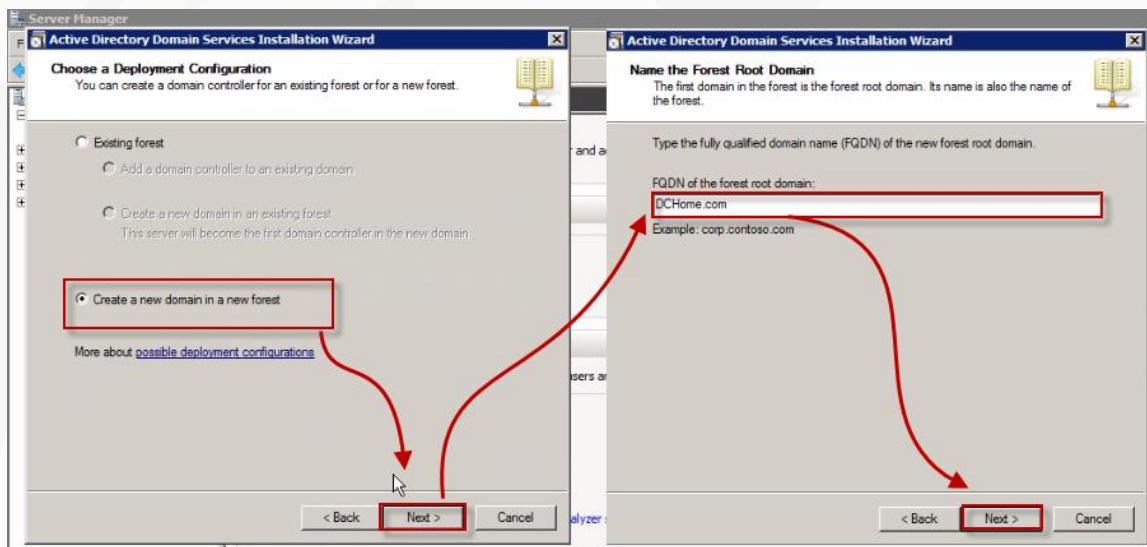


In the “Active Directory Domain Services Installation Wizard” click “Next” then click “Next”.

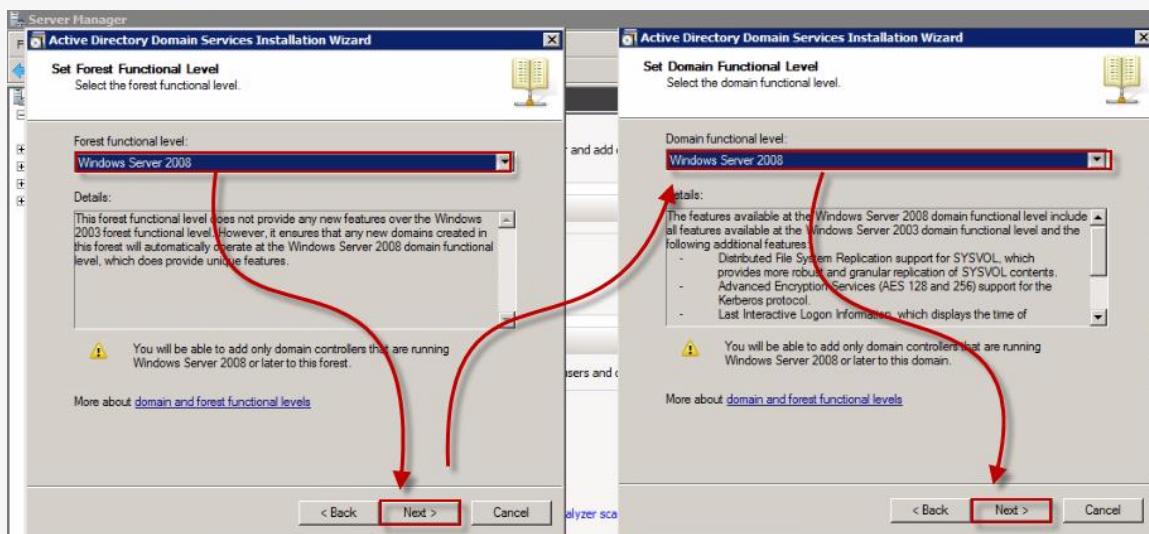


TIP: You can launch the “Active Directory Services Installation Wizard” from the Run command by typing “dcpromo” and pressing enter.

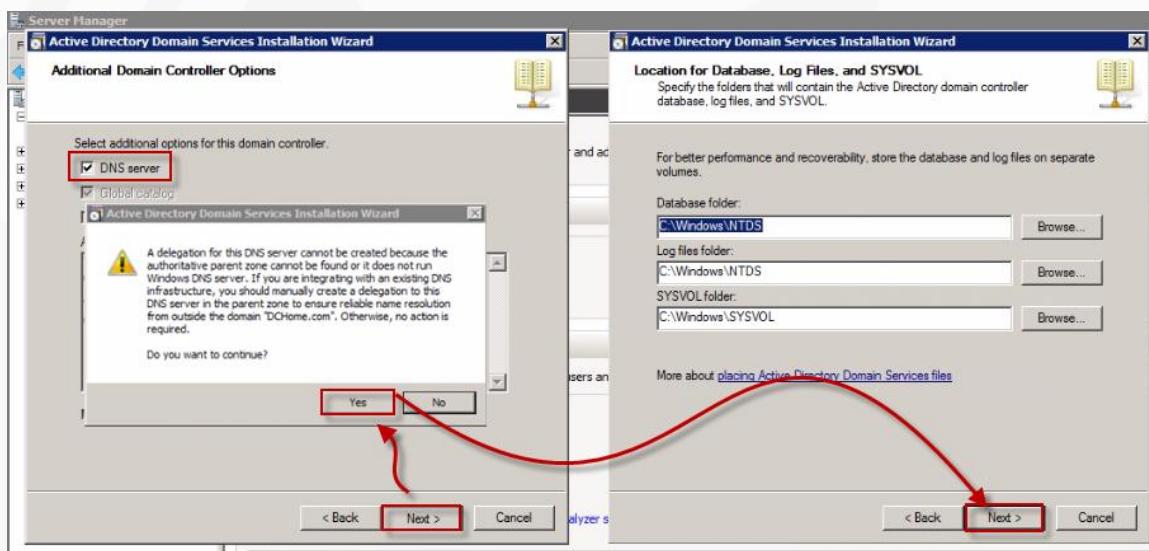
Select “Create a new domain in a new forest”, click “Next”, type a domain name “DCHome.com” and then click “Next”



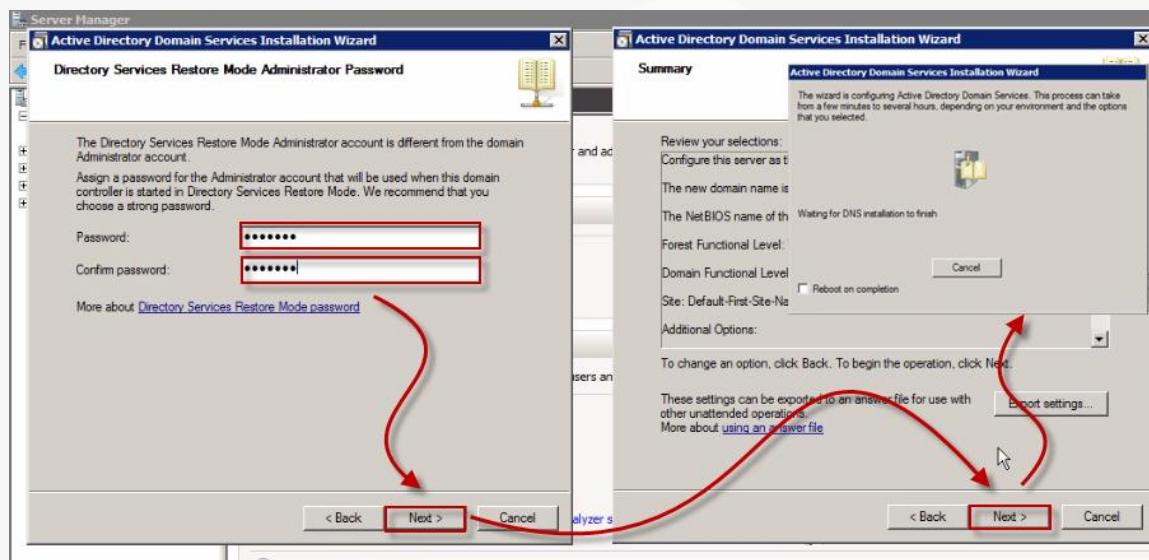
Select “Windows Server 2008” for the “Forest functional level” then click “Next”. Also, select “Windows Server 2008” for the “Domain functional level” and then click “Next”



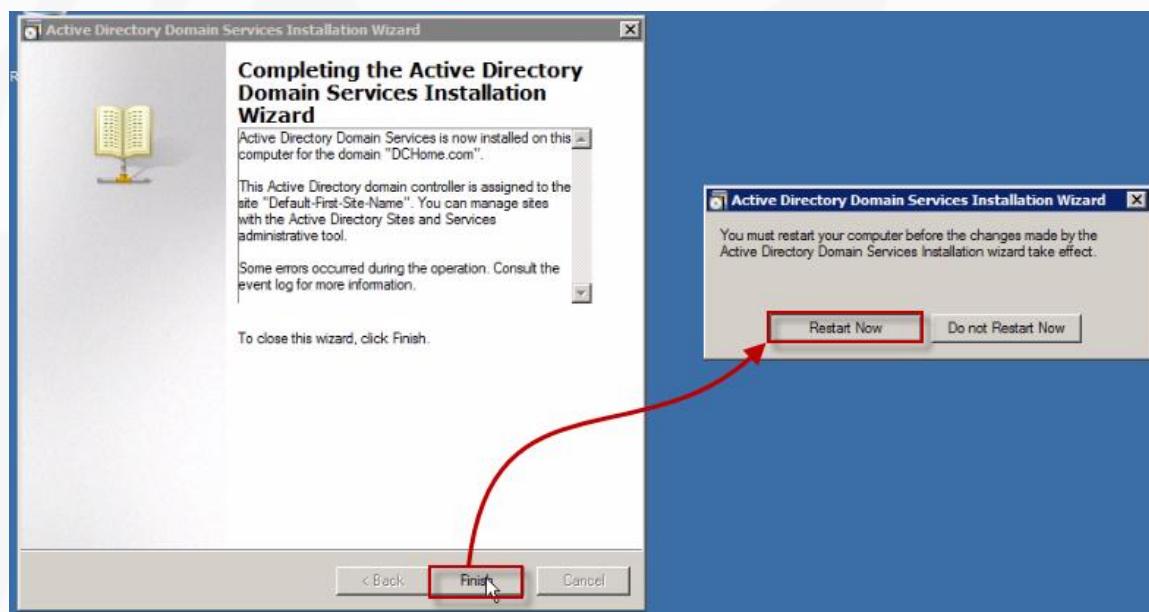
In the “Additional Domain Control Options” window, accept the default (DNS server is selected) then click “Next”. Confirm your selection by clicking “Yes” in the dialog box that pops up then accept all the defaults in the “Location for Database, Log Files, and SYSVOL” window and then click “Next”.



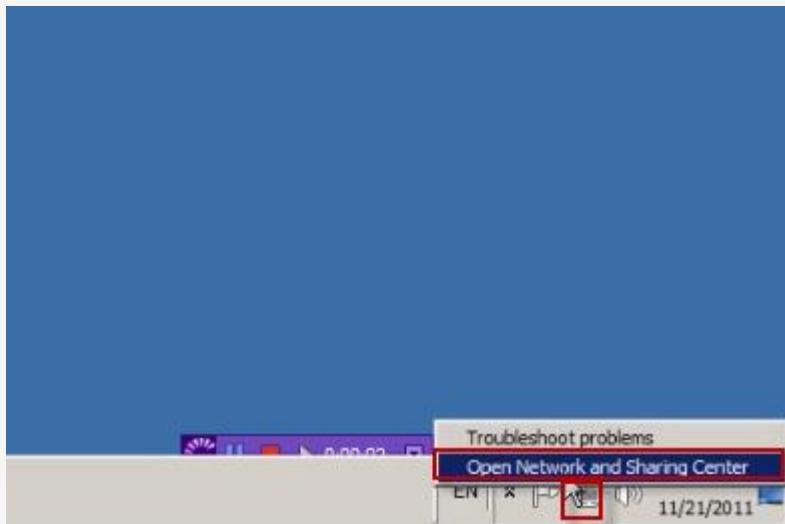
In the “Directory Services Restore Mode Administrator Password” window, enter a password and confirm it then click “**Next**” and then click “**Next**” in the Summary window for the Active Directory Domain Service Installation to start.



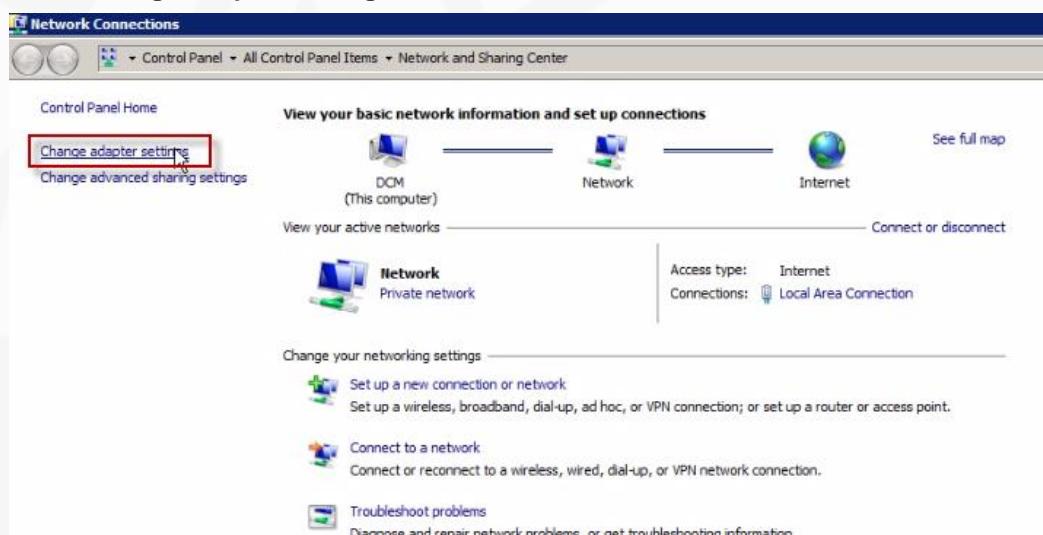
After the Active Directory Domain Services Installation completes, click “**Finish**” and then click “**Restart Now**”.



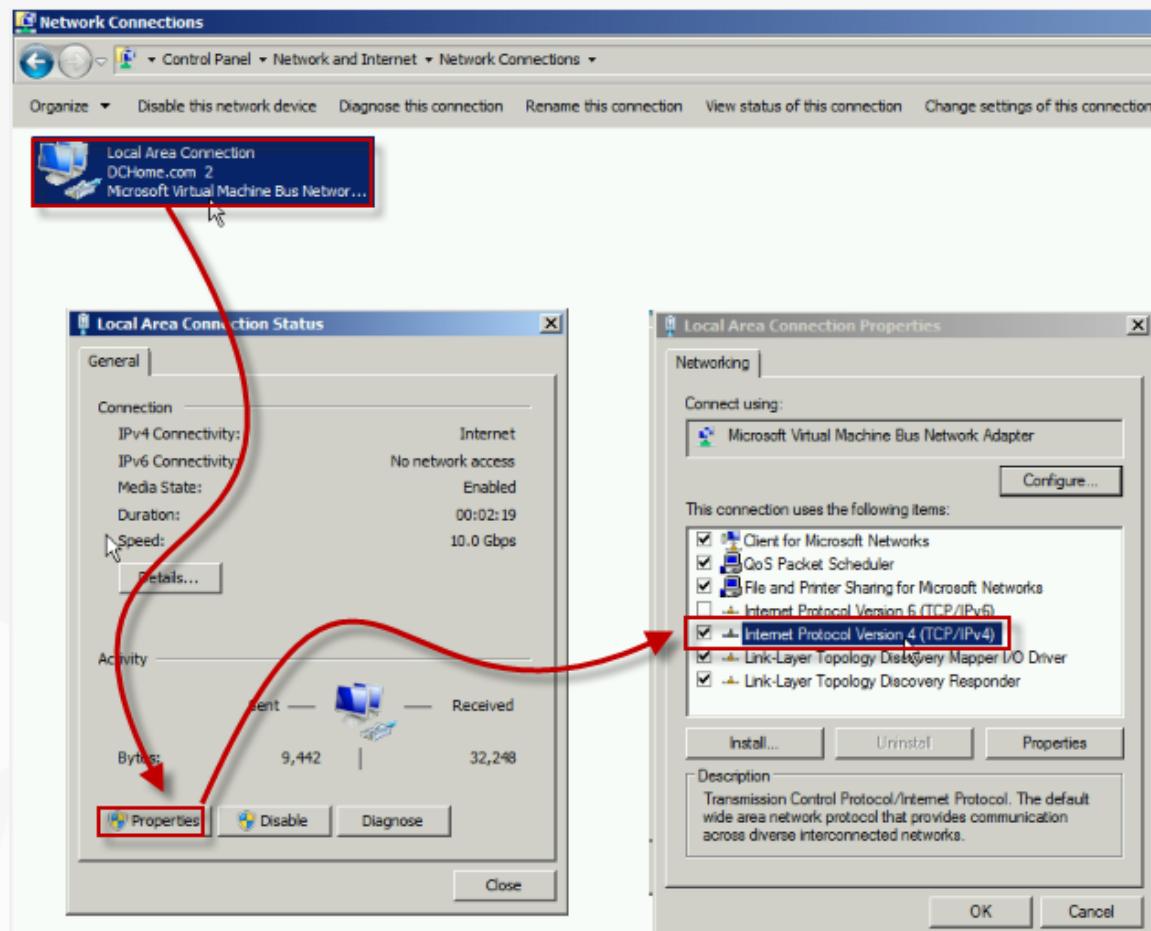
After the machine restarts, right-click the Network Notification and then click “**Open Network and Sharing Center**”.



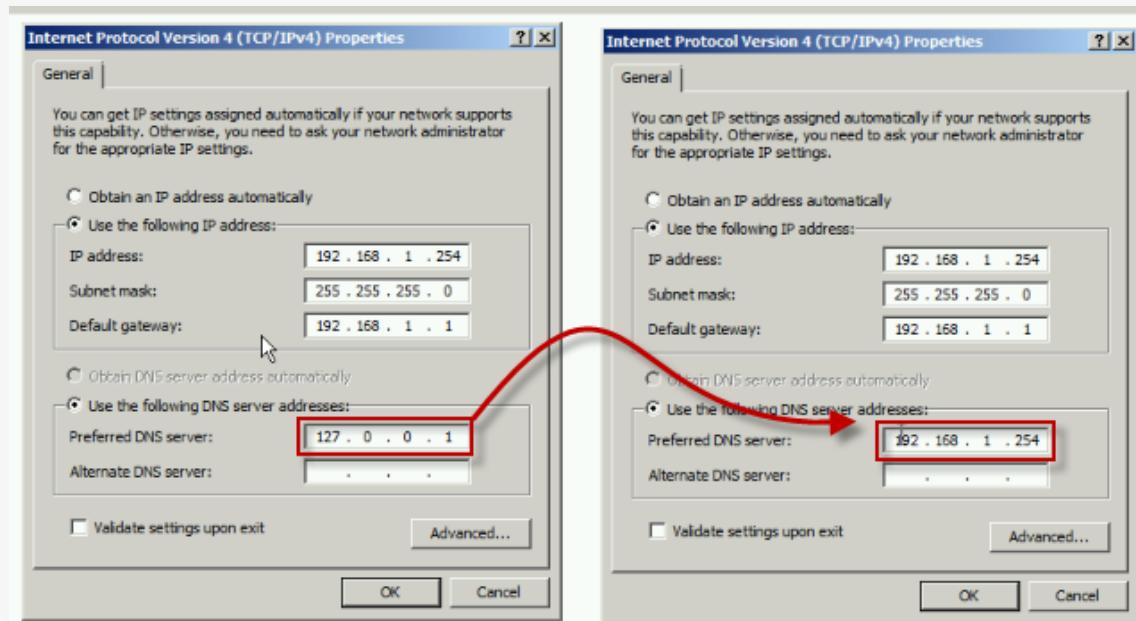
Click “**Change adapter settings**”



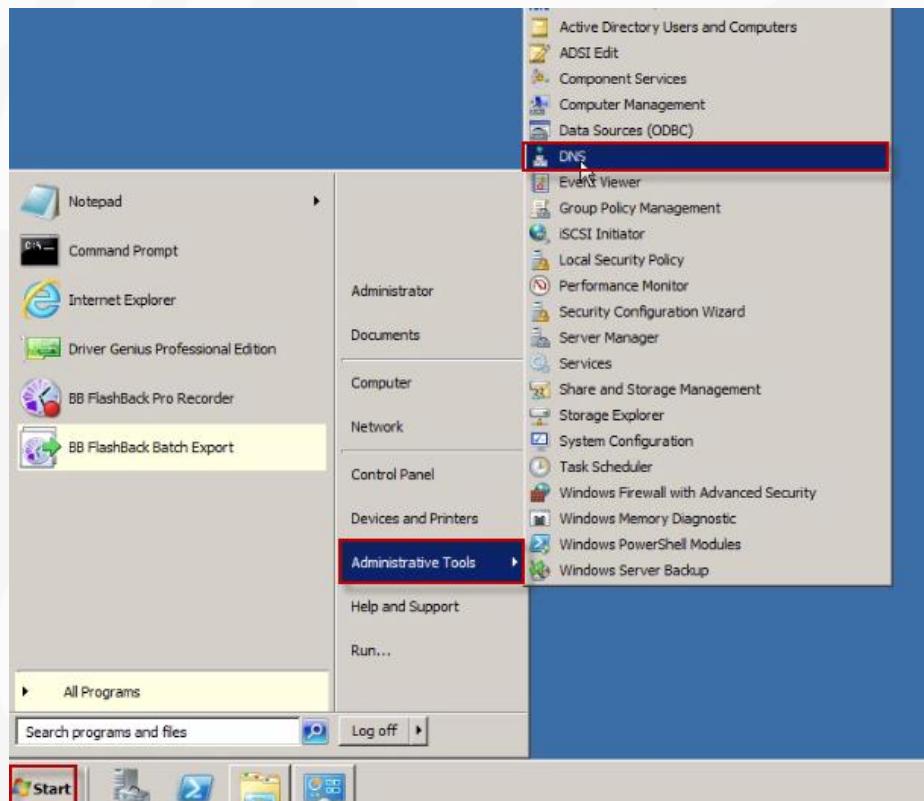
Double-click “Local Area Connection” then click “Properties” and then double-click “Internet Protocol Version 4 (TCP/IPv4)”



In case you find the “Preferred DNS server” becomes 127.0.0.1, change it back to the machine IP Address “192.168.1.254” and then click “OK”.



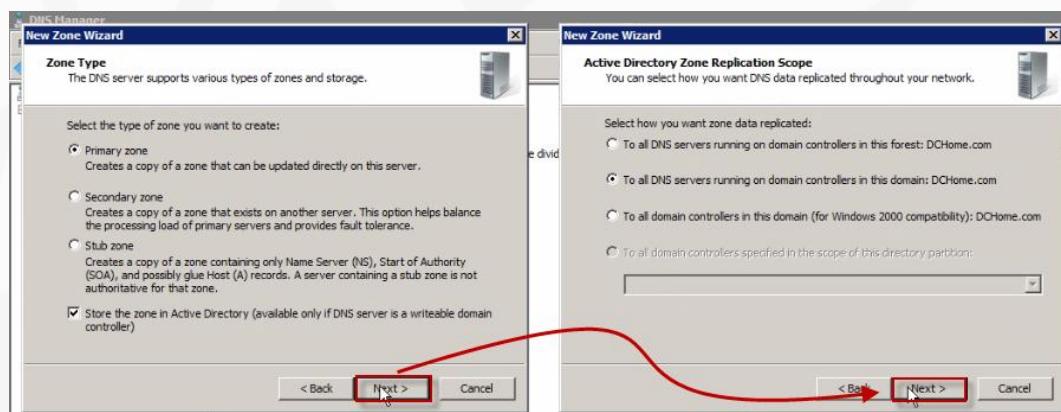
Click Start → Administrative Tools → DNS



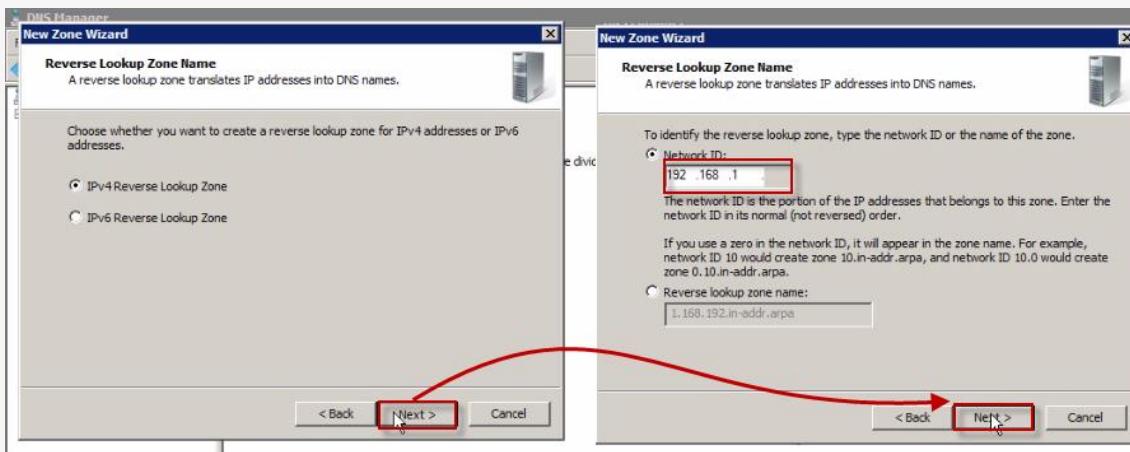
From the “DNS Manager”, right-click “Reverse Lookup Zones” then click “New Zone” and then click “Next”.



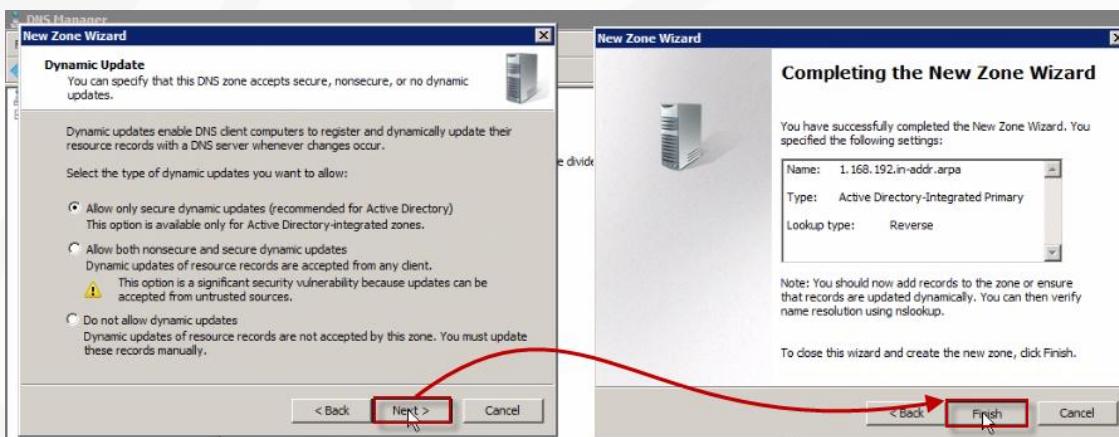
In the “Zone Type”, accept the default and click “Next” then in the “Active Directory Zone Replication Scope”, accept the default and then click “Next”.



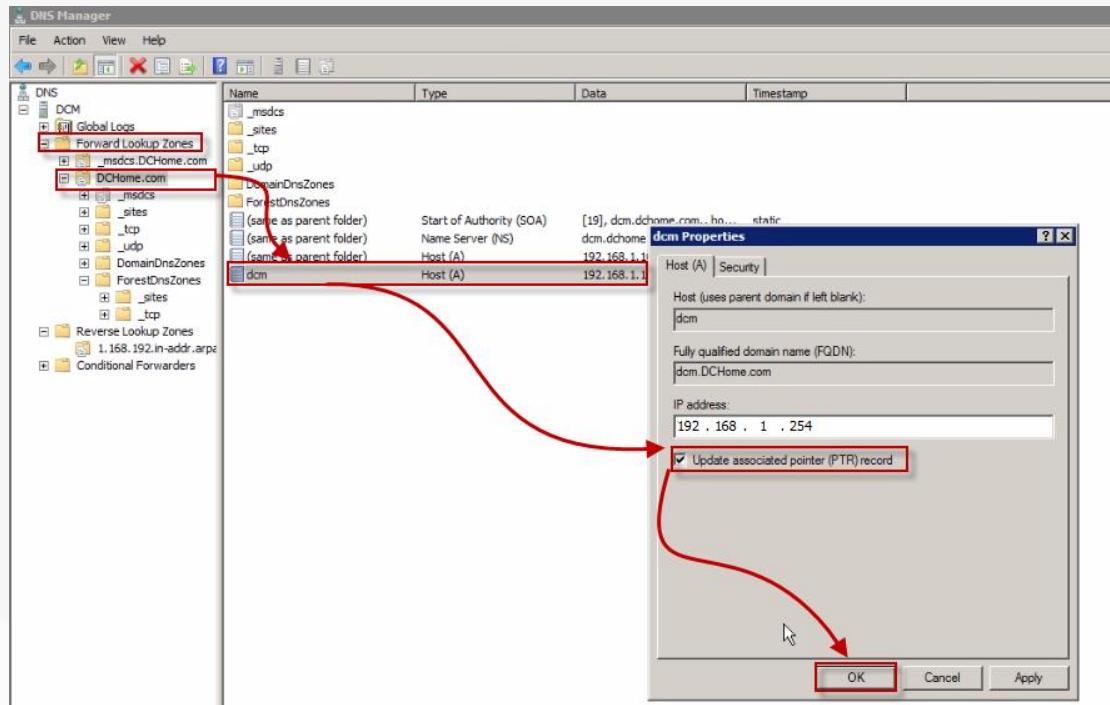
In the “Reverse Lookup Zone Name” screen, accept the defaults and click “Next”, then enter “192.168.1” and then click “Next”.



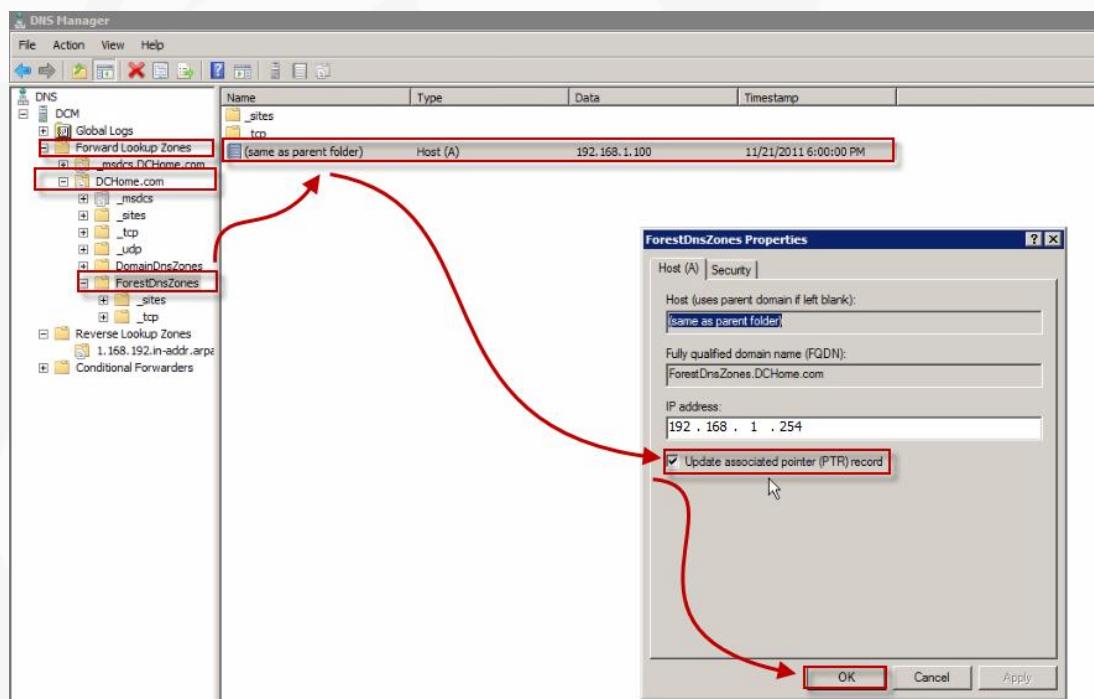
In the “Dynamic update” screen, accept the defaults then click “Next” and then click “Finish.”



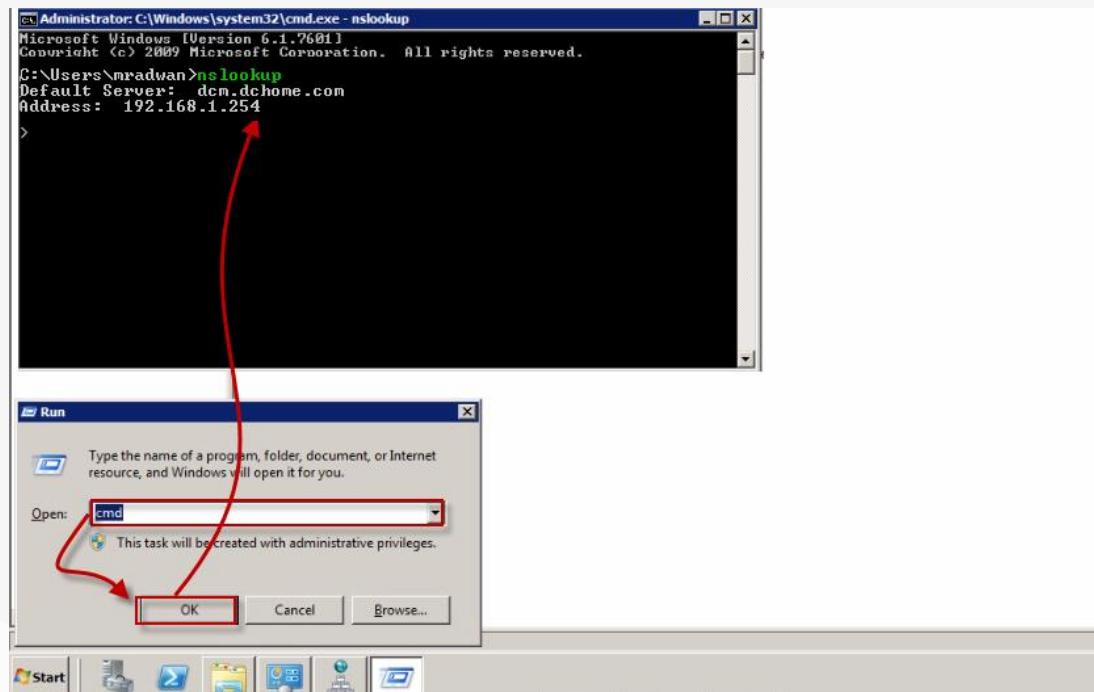
In “DNS Manager”, click “Forward Lookup Zones” then click “DCHome.com”, then double-click “dcm” then select “Update associated pointer (PTR) record” and then click “OK”.



In the “DNS Manager”, click “Forward Lookup Zones”, then click “DCHome.com” then click “ForestDnsZones” then double-click “same as parent folder” then select “Update associated pointer (PTR) record” and then click “OK”.

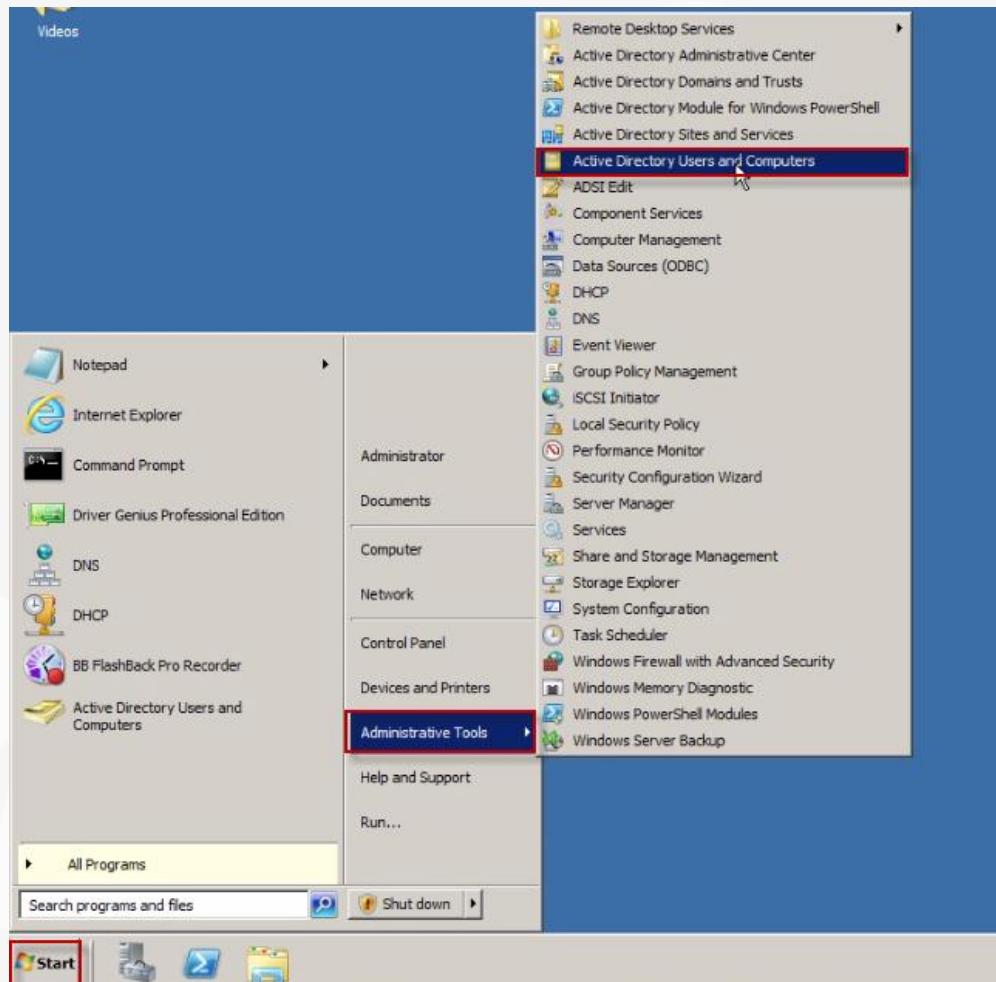


From the command prompt, run the “nslookup” command, you should see your domain name and your IP Address follows.



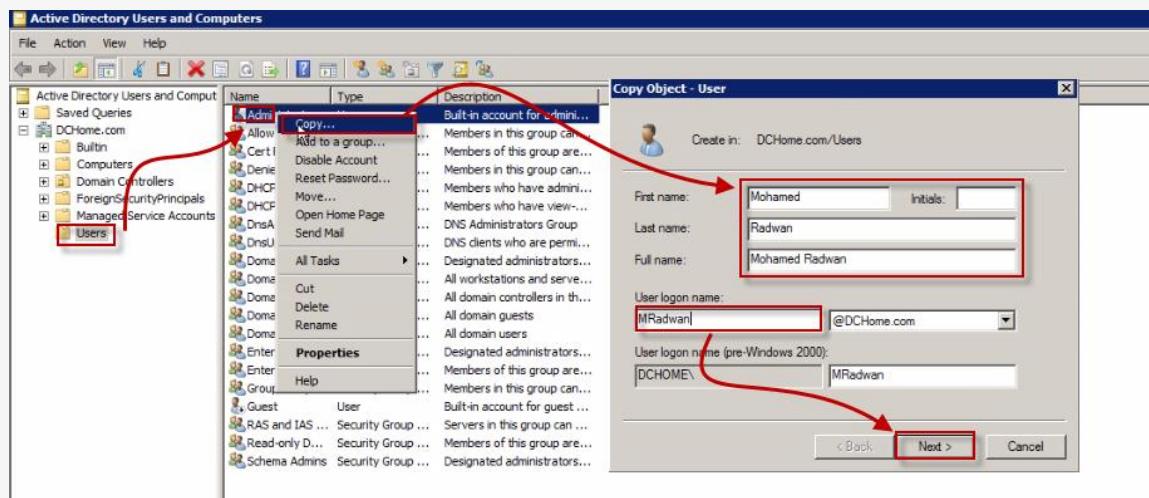
3.1.4 Creating a Domain Admin Account

Click Start → Administrative Tools → Active Directory Users and Computers

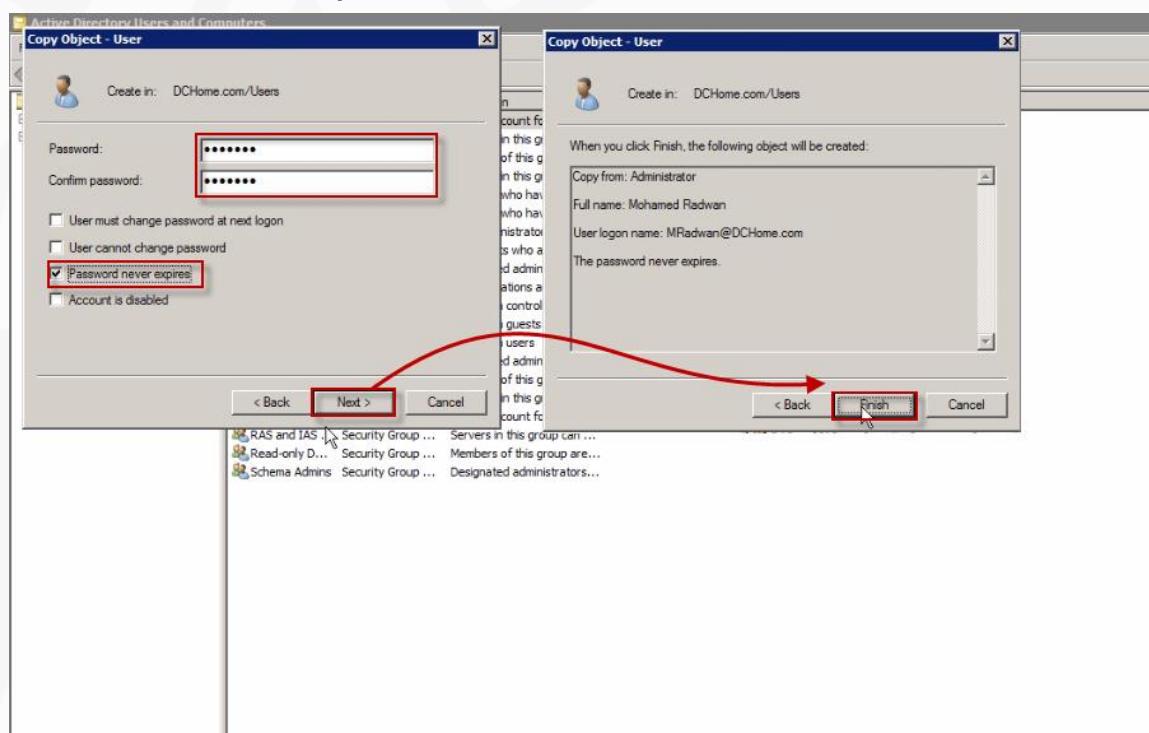


TIP: You can launch the “Active Directory Users and Computers” directly from the Run command by typing “`dsa.msc`” and pressing enter.

Click “**Users**”, right click the “Administrator” account then click “**Copy**”. Enter “**First name**”, “**Last name**” and “**User logon name**” as shown and then click “**Next**”.



Enter a Password, Confirm it then deselect “**User must change password at next time**” and select “**Password never expires**” then click “**Next**” and then click “**Finish**”





Watch the

Video

www.youtube.com/watch?v=4usGtnySDHg

3.2 Creating the Service Accounts & Groups

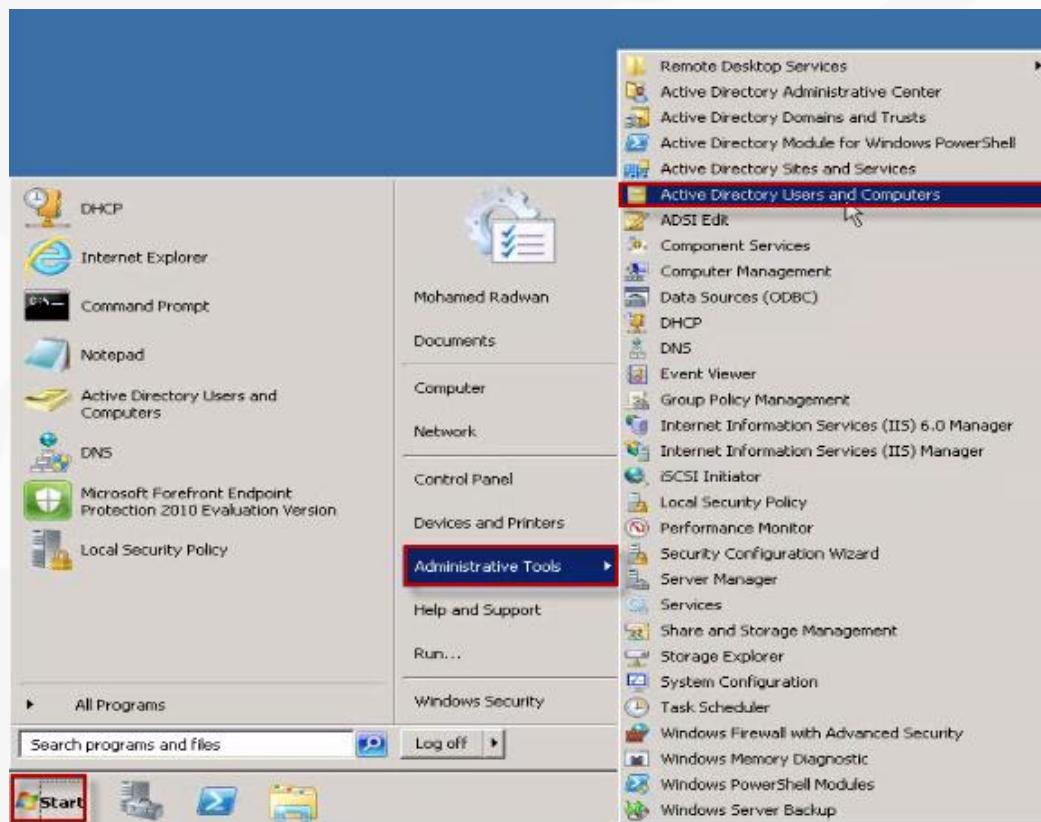
Watch the

In this section, you will create the required service accounts and Active Directory Groups; you will also assign them the prerequisite policies and permissions. You will start by creating the main service account “*TFSService*”, configure its local policy then you will create an Active Directory Group “*SharePointUsers*” and add the users that should have access permissions to Team Foundation Server dashboards that reside in the SharePoint Team Project portal.

3.2.1 Creating Team Foundation Server Service Account

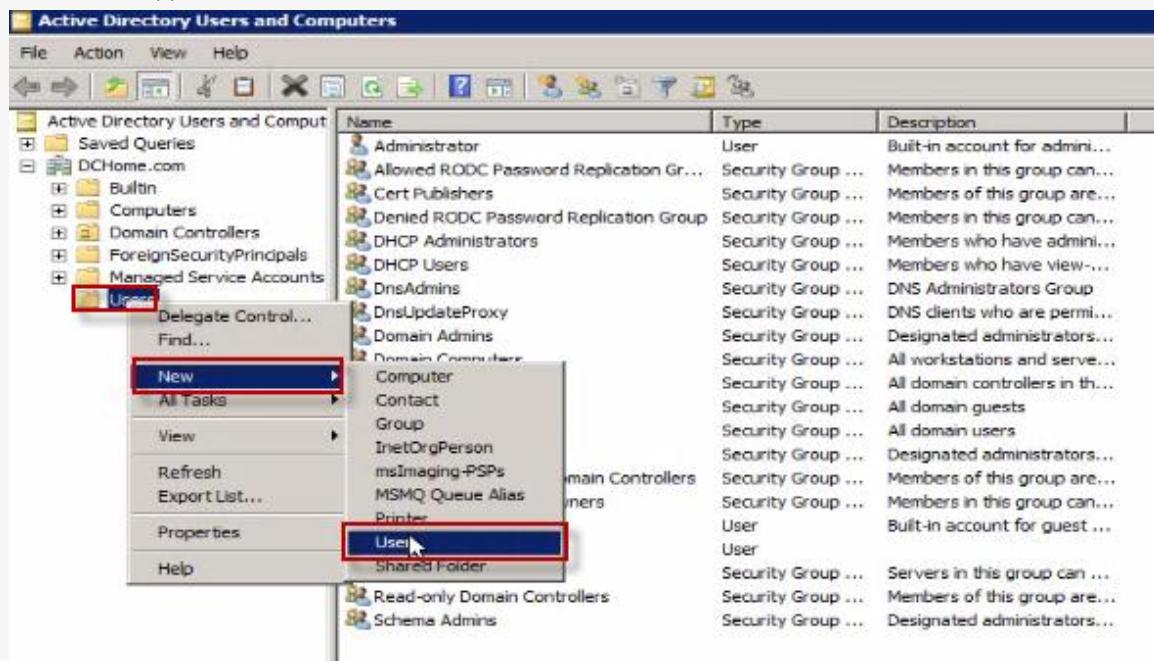
Login to the Domain Controller Machine with the domain admin account “*mradwan*”.

Click Start → Administrative Tools → Active Directory Users and Computers.

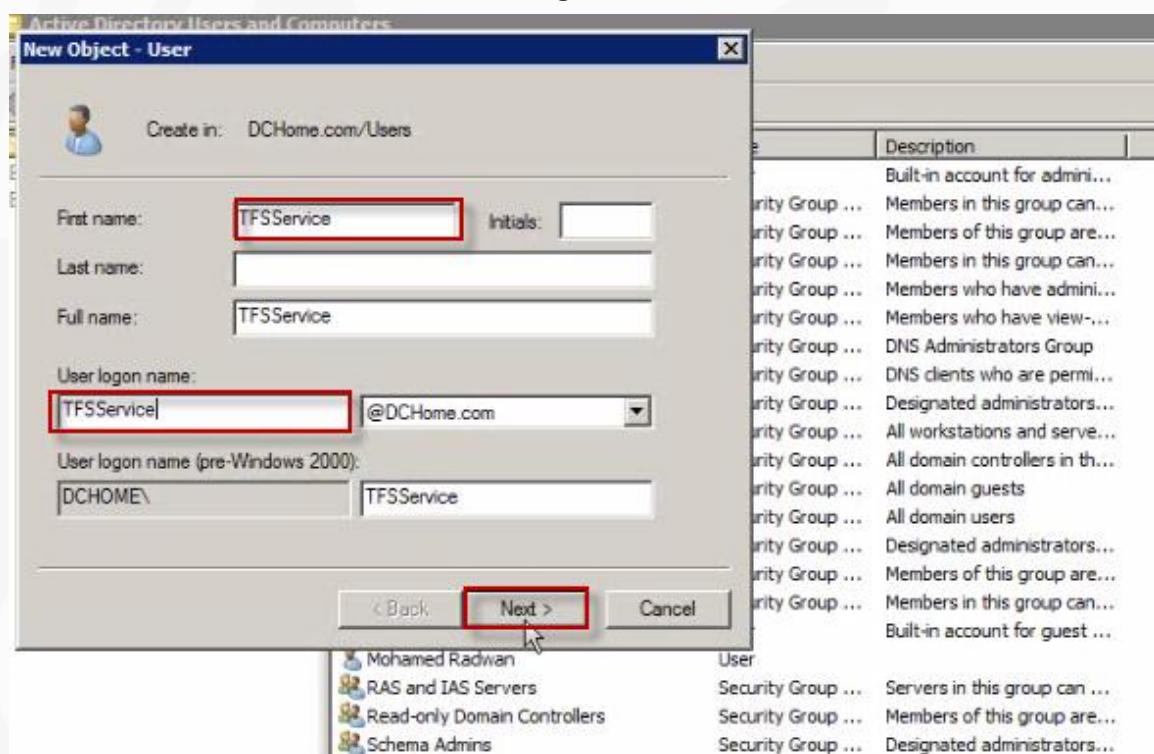


TIP: You can launch the “Active Directory Users and Computers” directly from the Run command by typing “*dsa.msc*” and pressing enter.

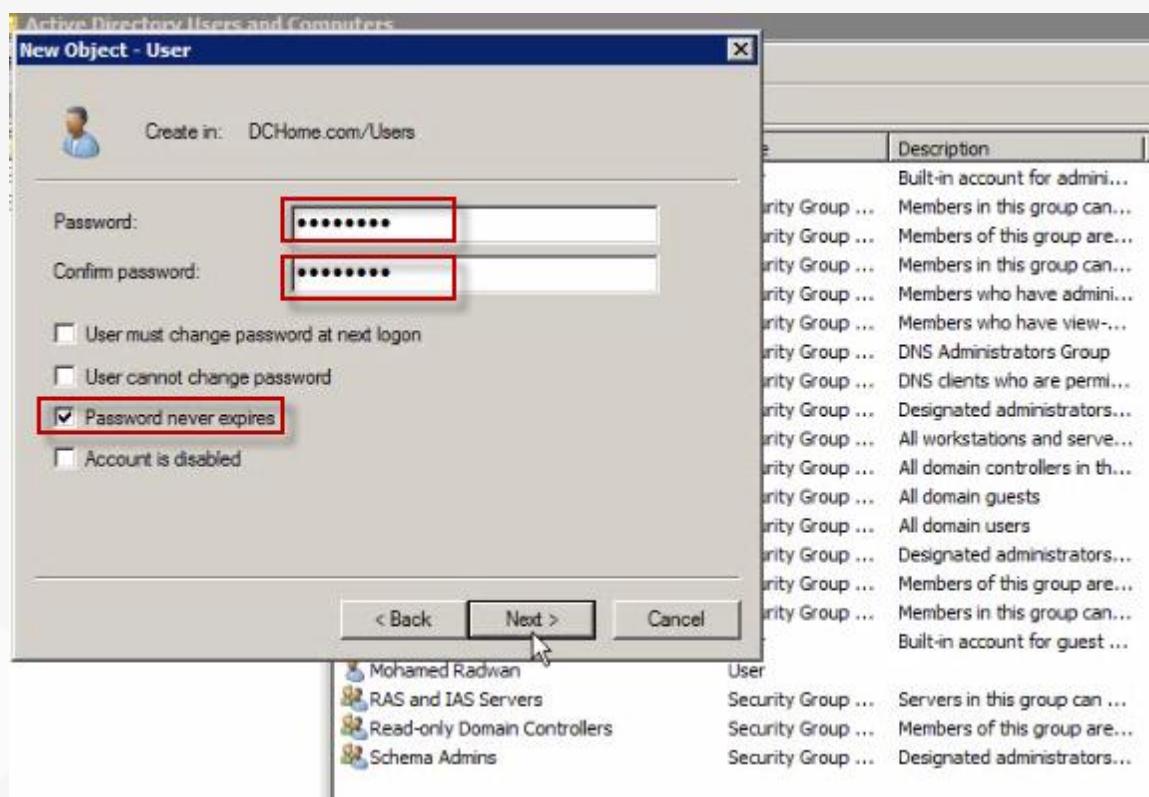
Click Users (*) → New → User.



Enter “First name”, “Last name” and “User logon name” as shown then click “Next”.



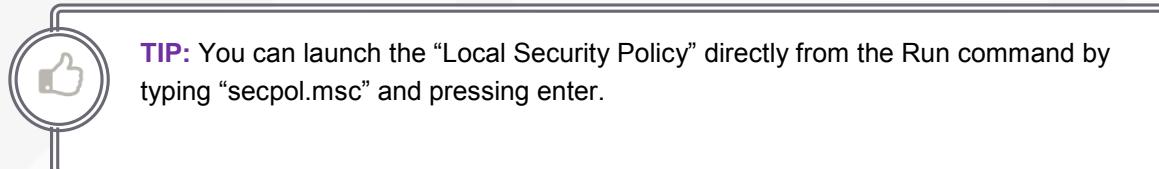
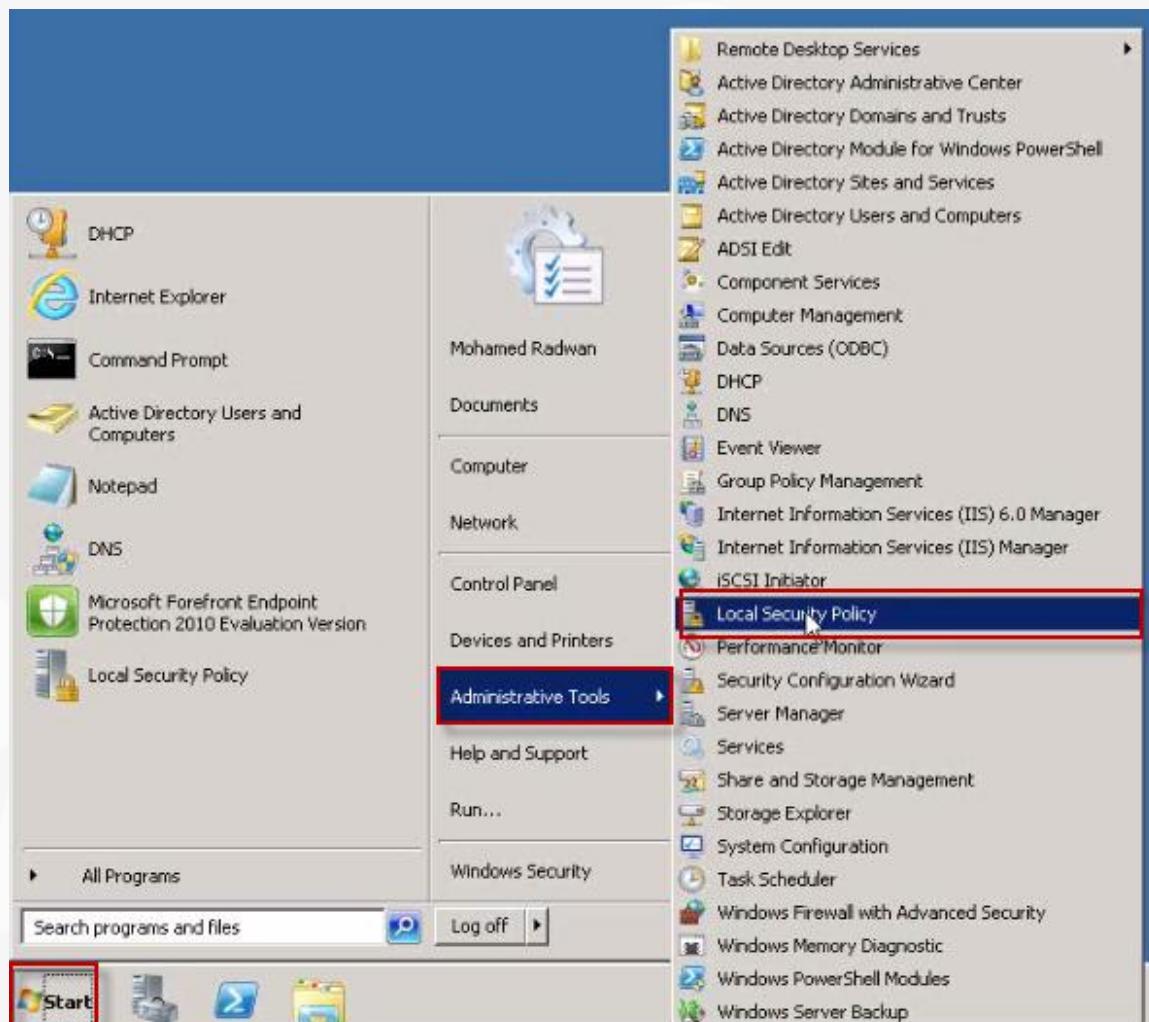
Enter a Password, Confirm it then deselect “User must change password at next time” and select “Password never expires” then click “Next” and then click “Finish”



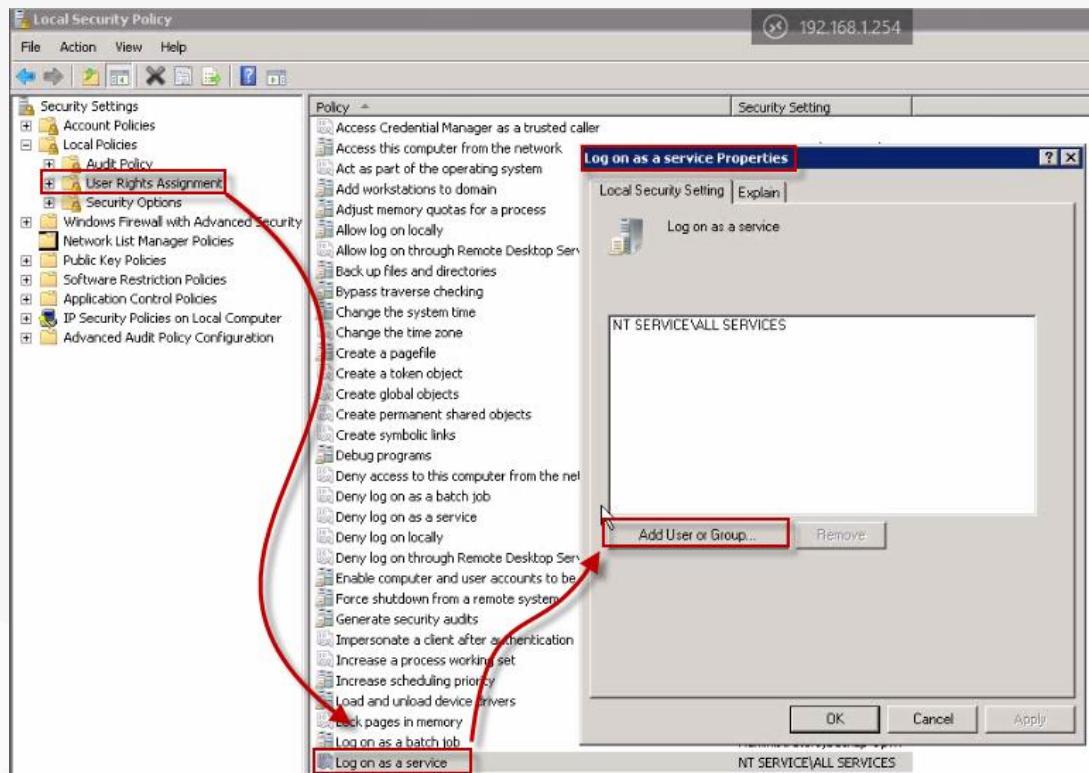
NOTE: If you are working in a Workgroup, you can create local Service Accounts and Groups on the TFS Virtual Machine, Refer to [Appendix A](#) for more information.

3.2.2 Configuring the Local Policies

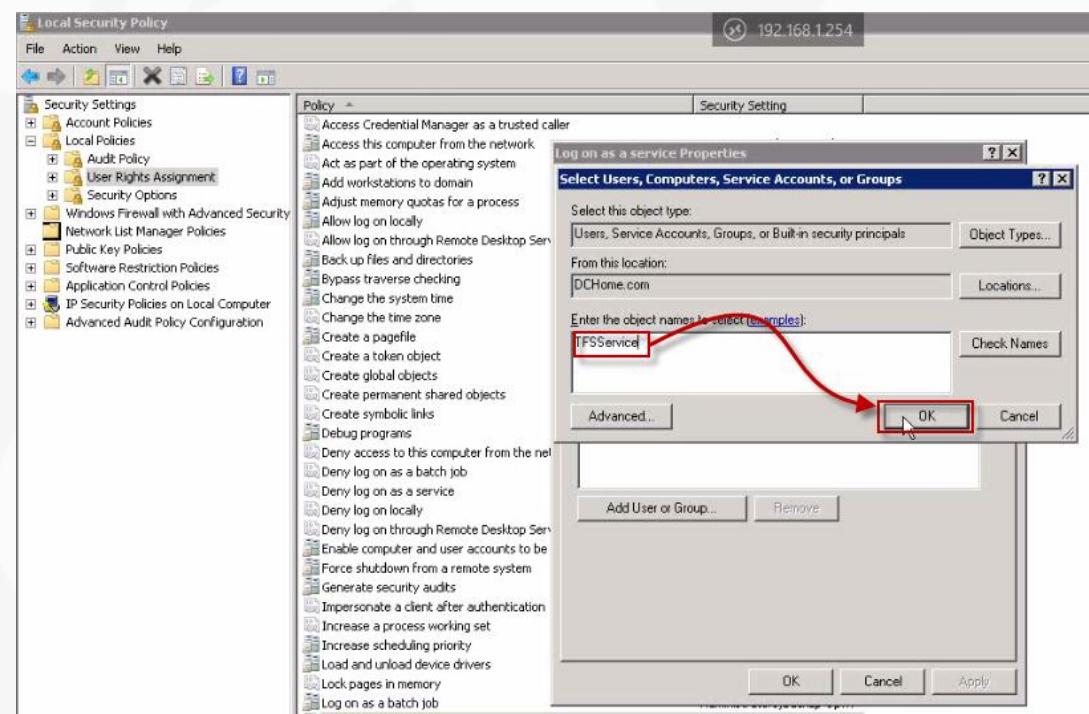
Click Start → Administrative Tools → Local Security Policy.



Click “User Right Assignment” from the left pane then double-click “Log on as service” from the right pane and then click “Add User or Group”



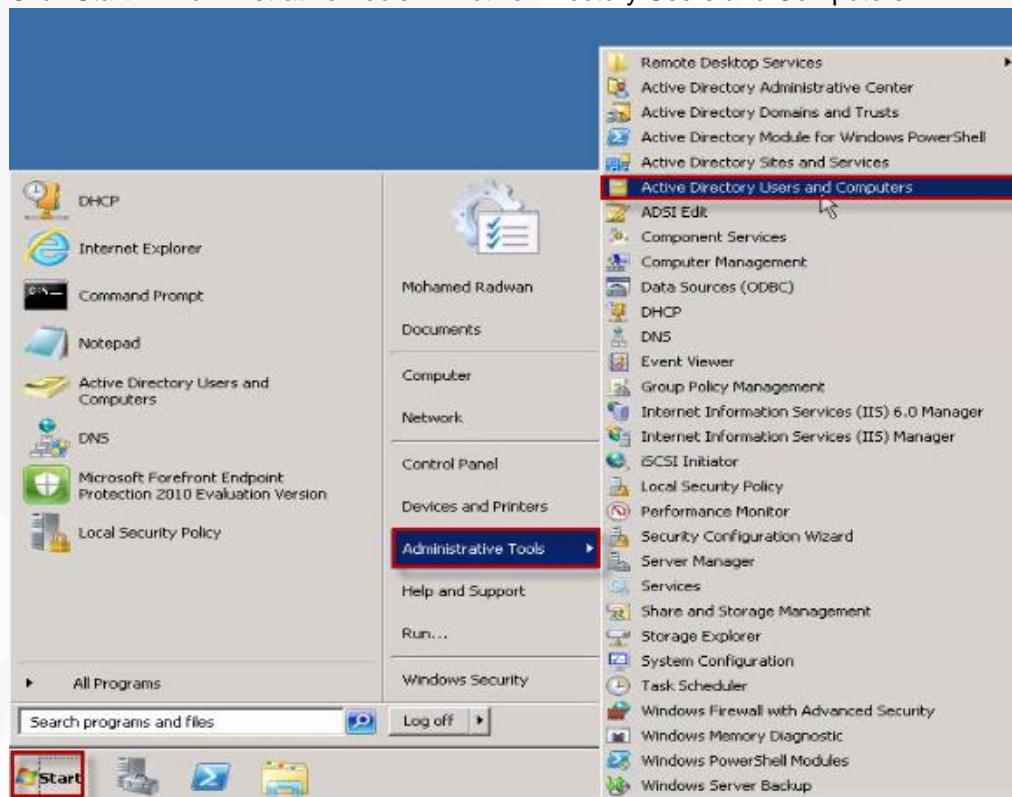
Add the service account you created in the previous step “TFSService” and then click “OK”.



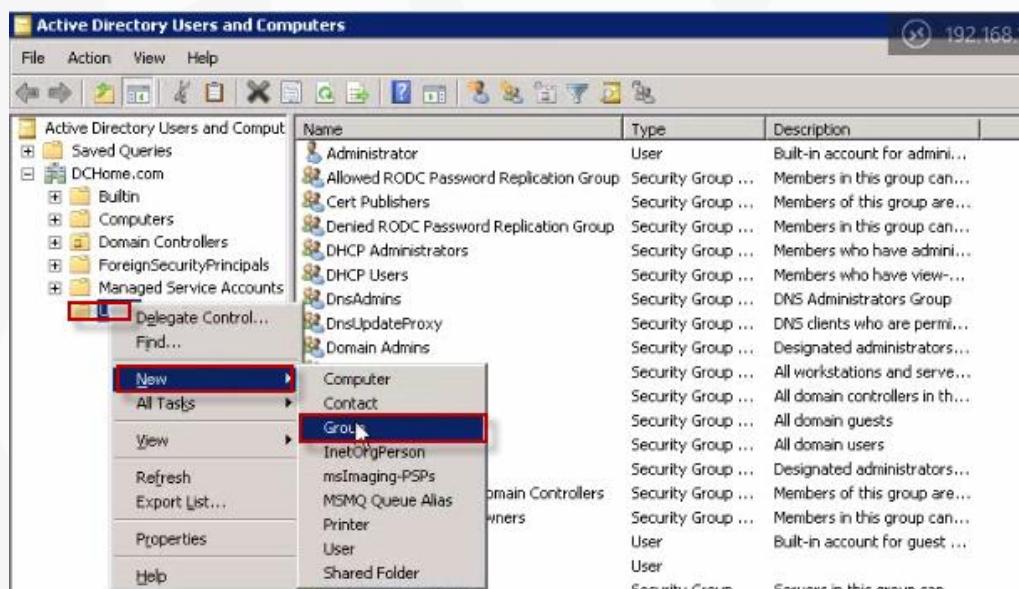
3.2.3 Creating an Active Directory Group for SharePoint Dashboards

Login to the Domain Controller Machine with the domain admin account “*mradwan*”.

Click Start → Administrative Tools → Active Directory Users and Computers.



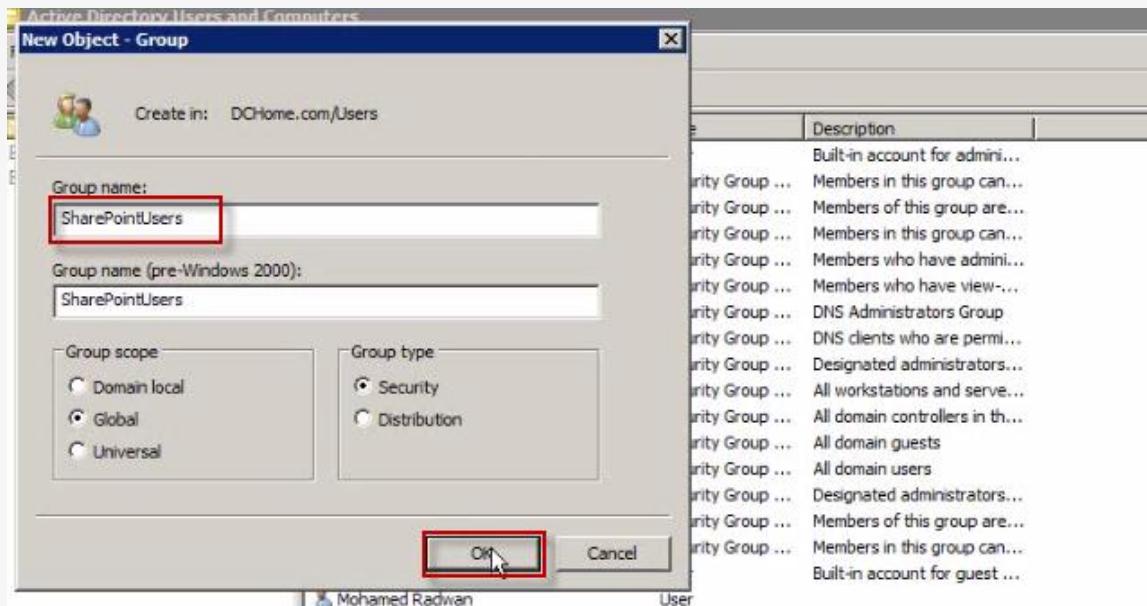
Click Users (*) → New → Group.



The screenshot shows the 'Active Directory Users and Computers' console. The left navigation pane shows the tree structure under 'DHome.com'. The 'New' option in the context menu is highlighted with a red box. A sub-menu is open with 'Computer', 'Contact', and 'Group' options, with 'Group' also highlighted with a red box. The main pane displays a table of existing groups and users. The 'Group' row in the table is also highlighted with a red box. The table columns are 'Name', 'Type', and 'Description'.

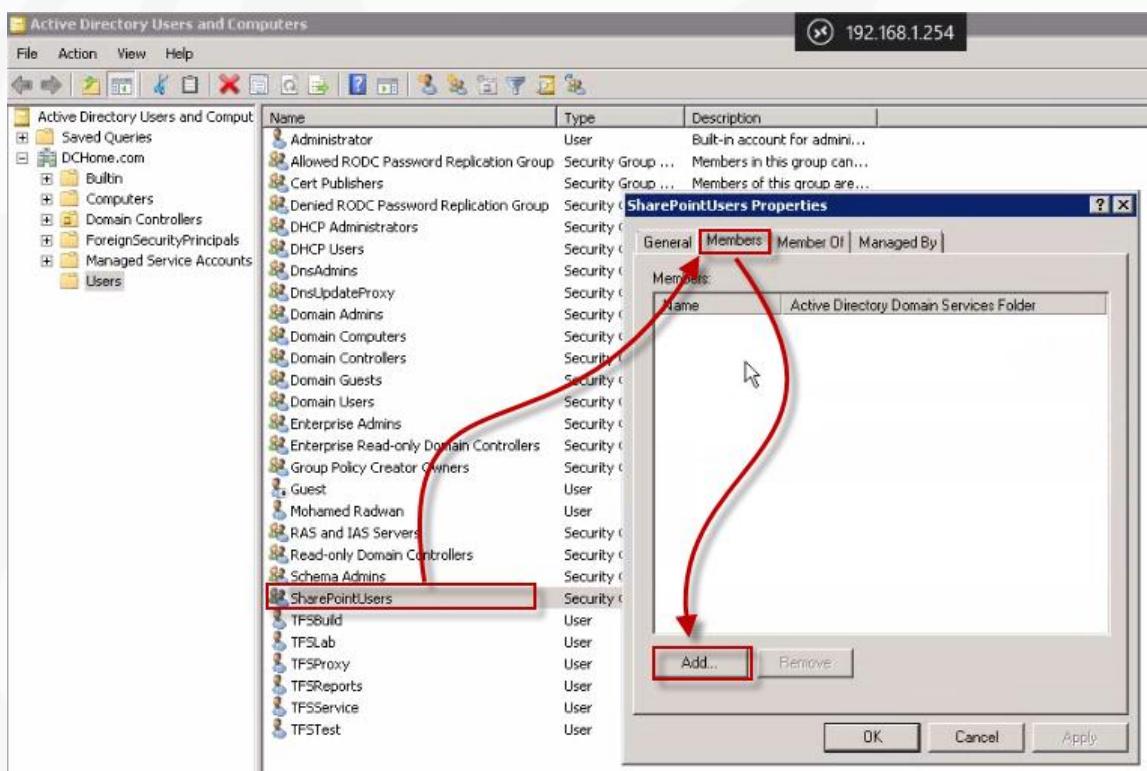
Name	Type	Description
Administrator	User	Built-in account for admini...
Allowed RODC Password Replication Group	Security Group ...	Members in this group can...
Cert Publishers	Security Group ...	Members of this group are...
Denied RODC Password Replication Group	Security Group ...	Members in this group can...
DHCP Administrators	Security Group ...	Members who have admini...
DHCP Users	Security Group ...	Members who have view-...
DnsAdmins	Security Group ...	DNS Administrators Group
DnsUpdateProxy	Security Group ...	DNS clients who are perm...
Domain Admins	Security Group ...	Designated administrators...
Domain Controllers	Security Group ...	All workstations and serve...
Domain Guests	Security Group ...	All domain controllers in th...
InetOrgPerson	Security Group ...	All domain guests
msImaging-PSPs	Security Group ...	All domain users
MSMQ Queue Alias	Security Group ...	Designated administrators...
Printer	Security Group ...	Members of this group are...
User	User	Built-in account for guest ...
Shared Folder	User	User
Service	Security Group	Services in this domain can...

Enter the “**Group Name**” as shown “*SharePointUsers*”, accept all the defaults then click “**Ok**”.

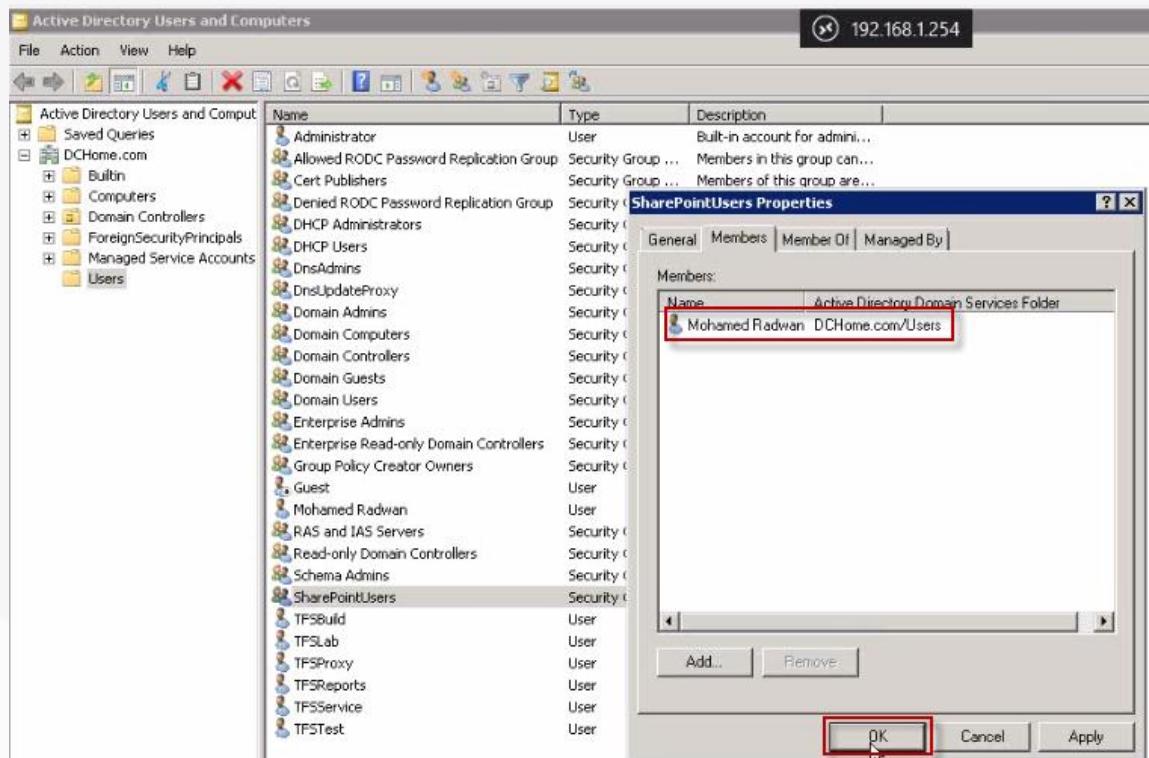


3.2.4 Adding Users to the Active Directory Group

Double-click “*SharePointUsers*”, switch to the “**Members**” tab then click “**Add**”.



Add the user accounts that should have access to the SharePoint Excel Services Reports then ensure that all added users are listed and then click “OK”.



Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

In this chapter you will prepare the TFS Infrastructure Physical Machine by installing and configuring Windows Server 2012 as well as adding the Hyper-V role so that you can create the TFS Virtual Machine in [Chapter 5](#).

In case your hardware does not support Virtualization or you simply do not want to use it, you can directly jump to [Section 5.3](#) then continue to [Part 3](#) to install TFS and all its pre-requisites, services and components on the TFS Infrastructure Physical Machine.

You will start this chapter by installing Windows Server 2012, configuring a static IP address, configuring and running Windows Update and joining the domain in [Section 4.1](#) then you will add the Hyper-V Role in [Section 4.2](#).



4.1 Installing Windows Server 2012

Watch the
Video

www.youtube.com/watch?v=4DlyqSEU-wg

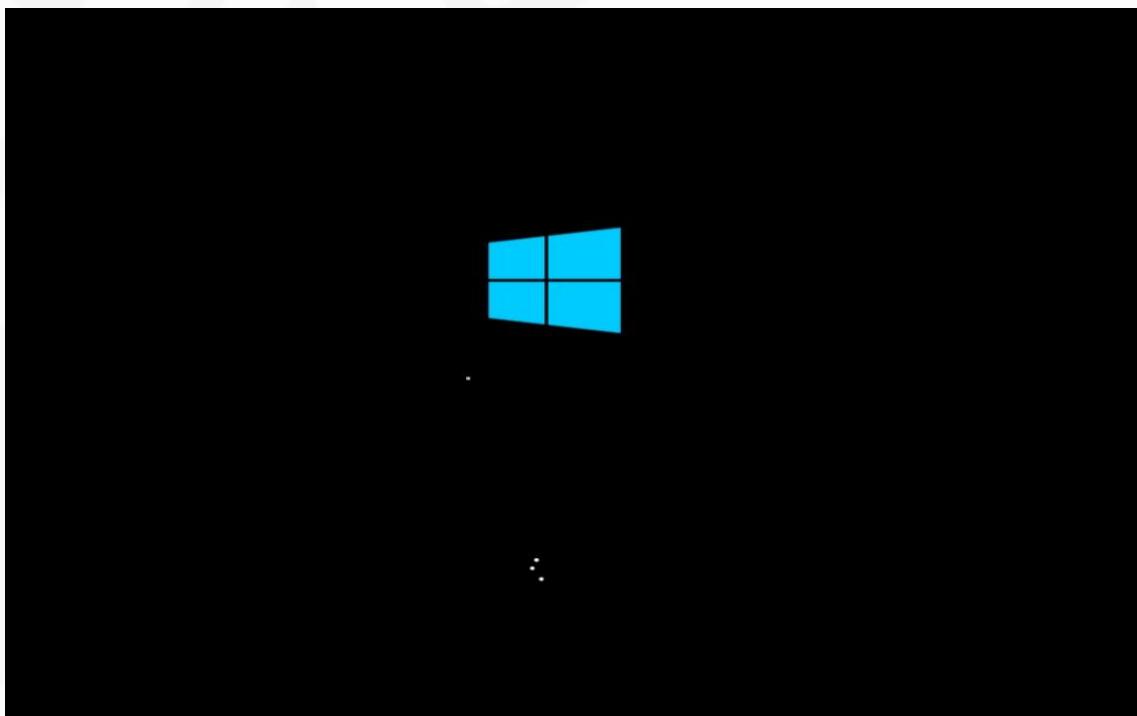
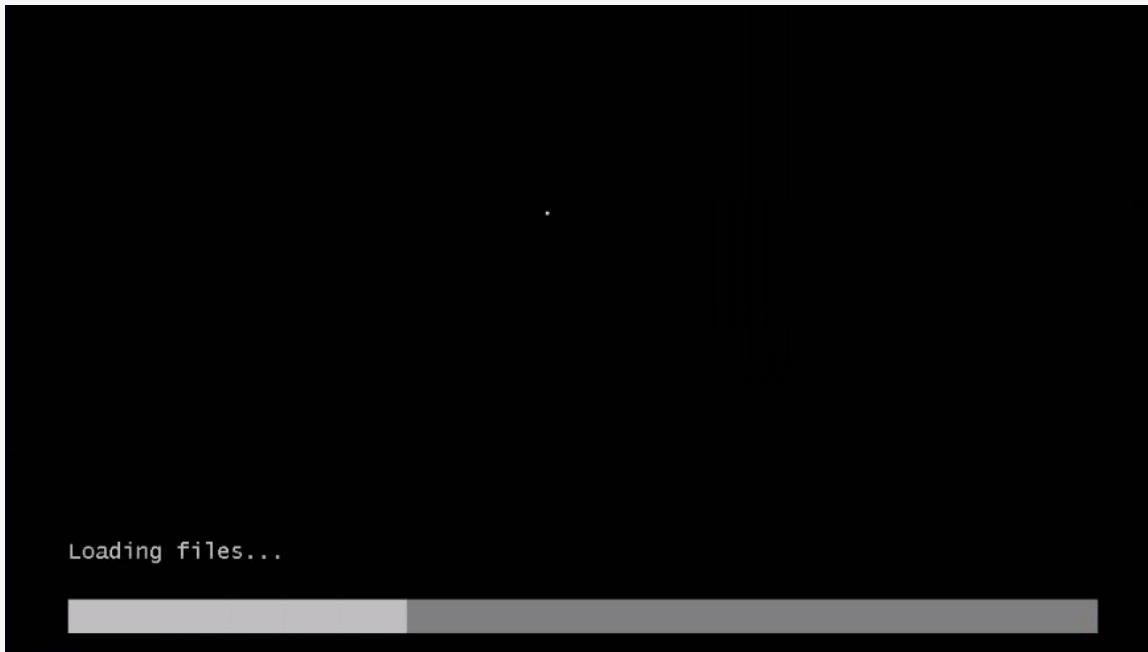
4.1.1 Installing Windows Server 2012

Insert the appropriate Windows Server 2012 installation media into your DVD drive and reboot your machine, Windows will start loading its files.



NOTE: If you prefer to install Windows Server 2008 R2, you can check the steps in [Section 3.1](#).

Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

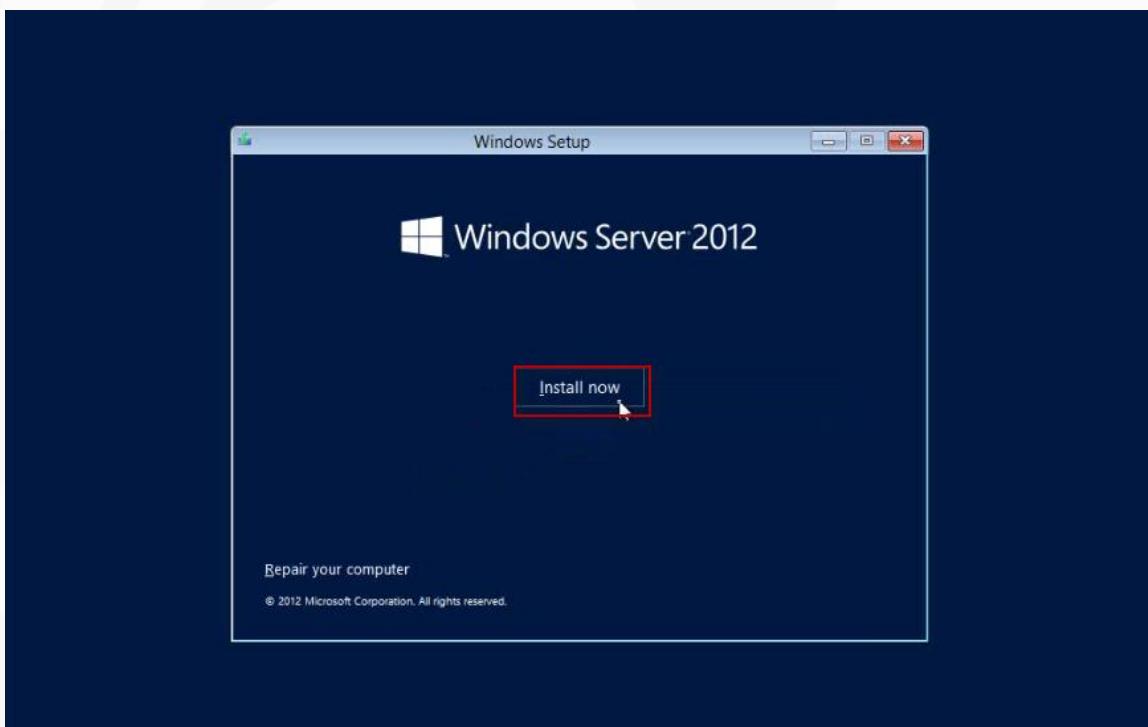


Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

When prompted for an installation language and other regional options, make your selection and then click “**Next**”.

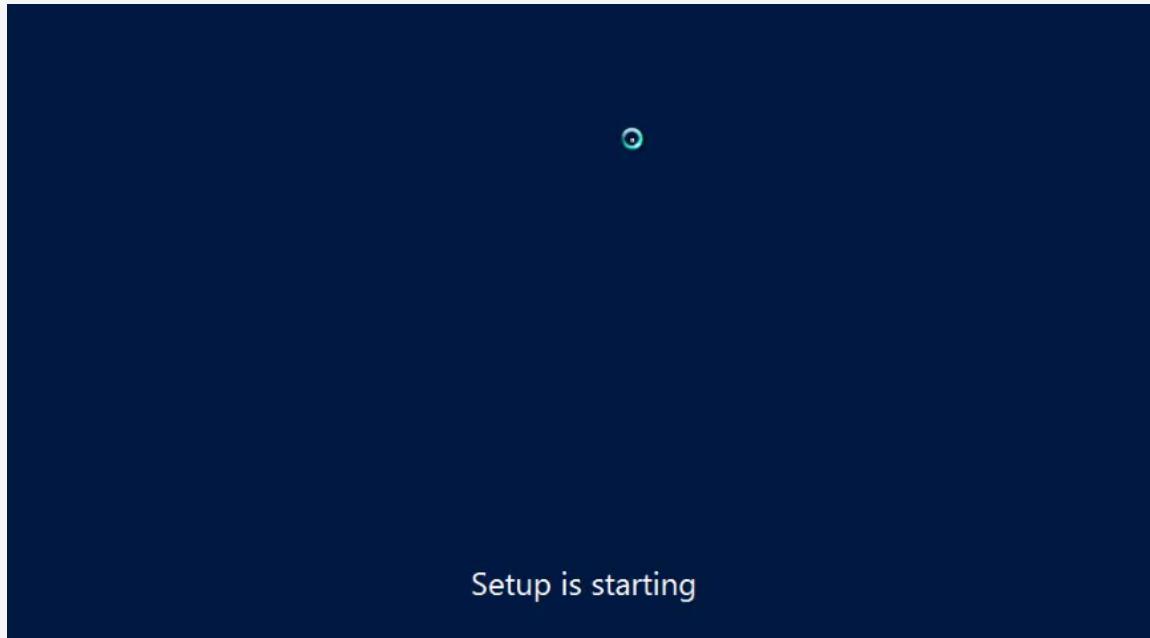


Click “**Install now**”.

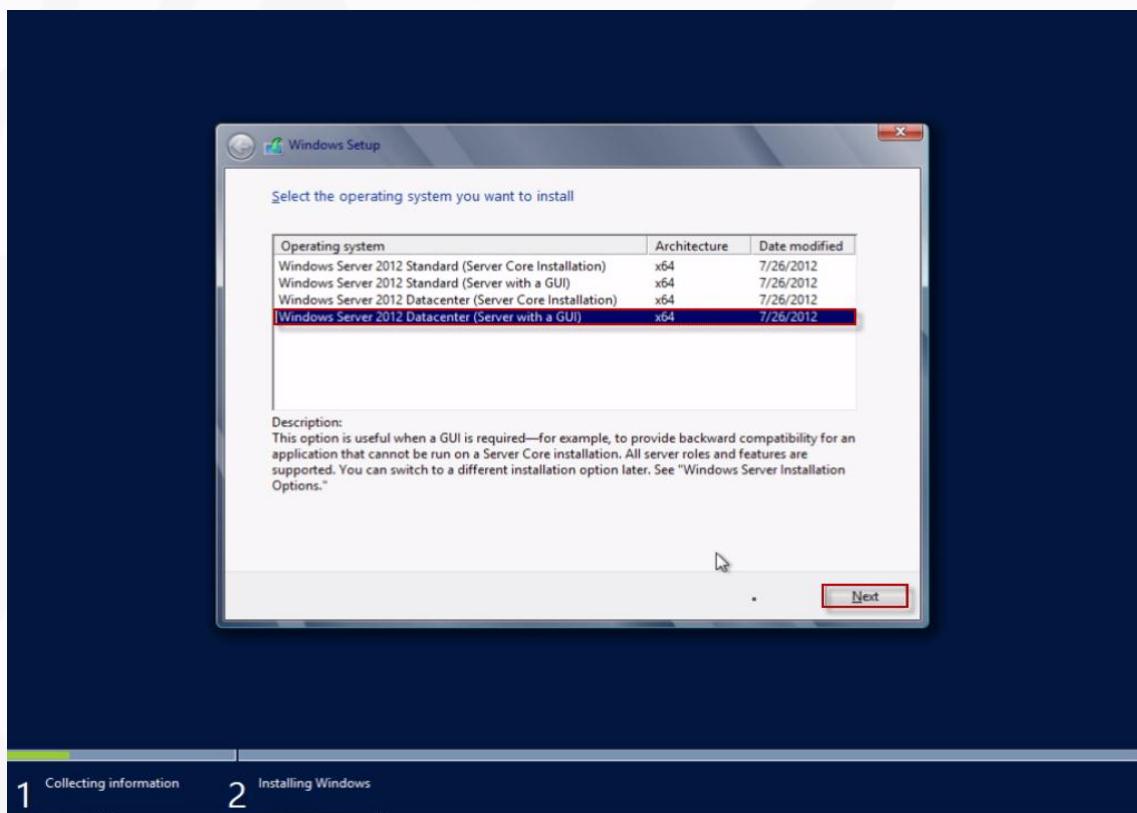


Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

The Setup process starts.

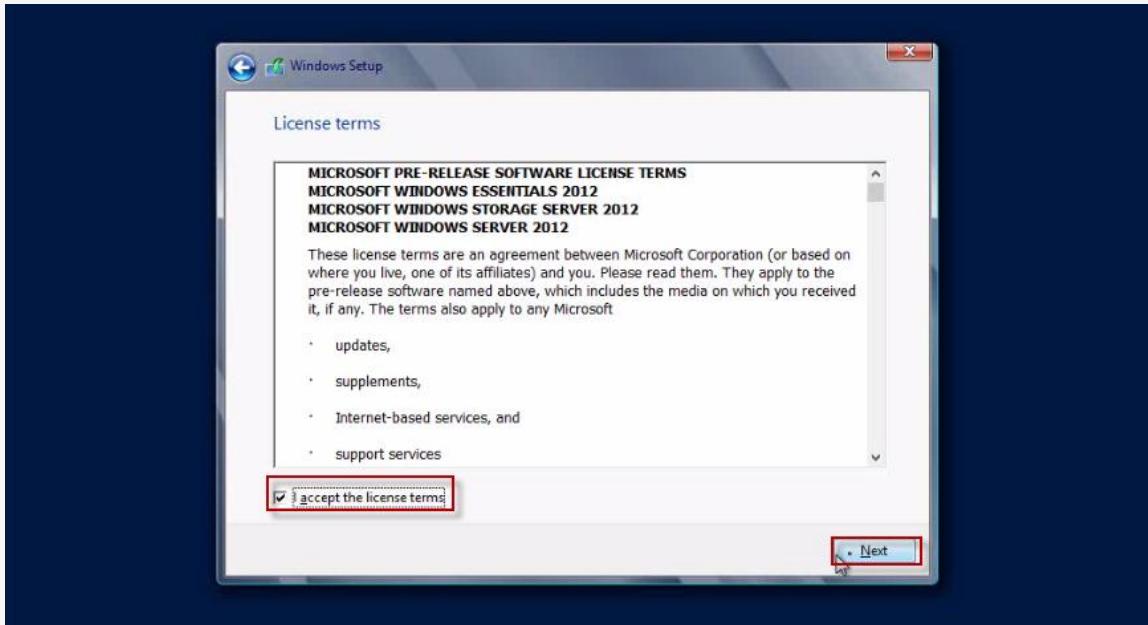


Select “Windows Server 2012 Data center (Server with GUI)” and then click “Next”.

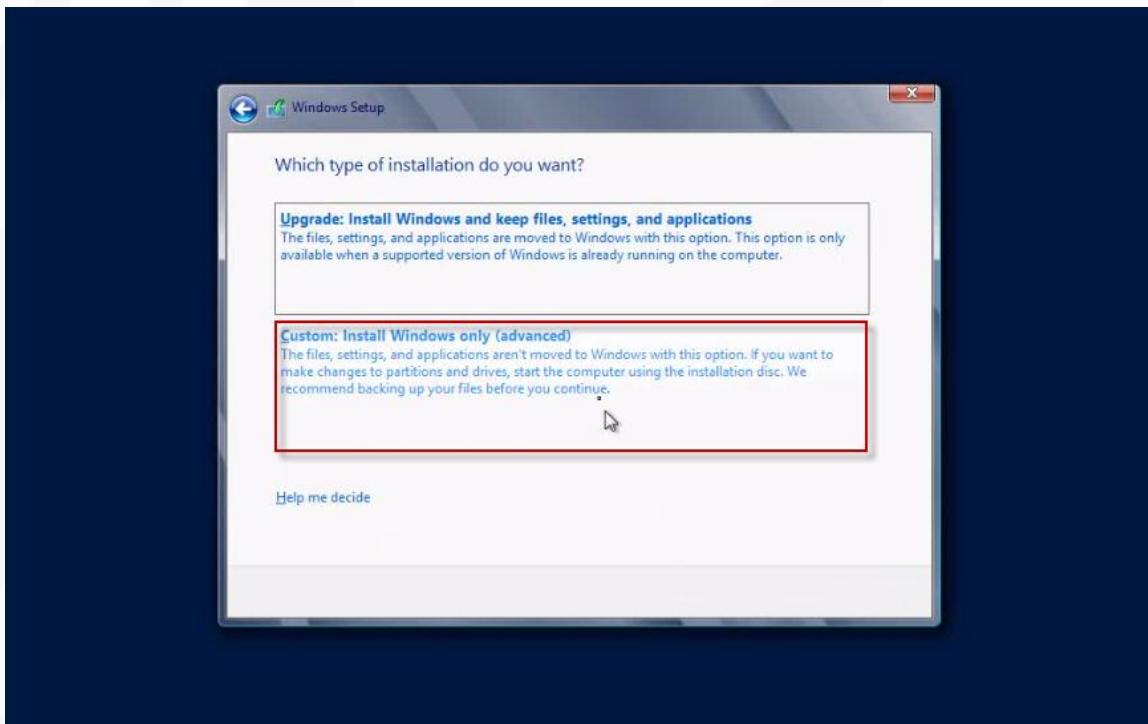


Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

Select “I accept the license terms” then click “Next”.

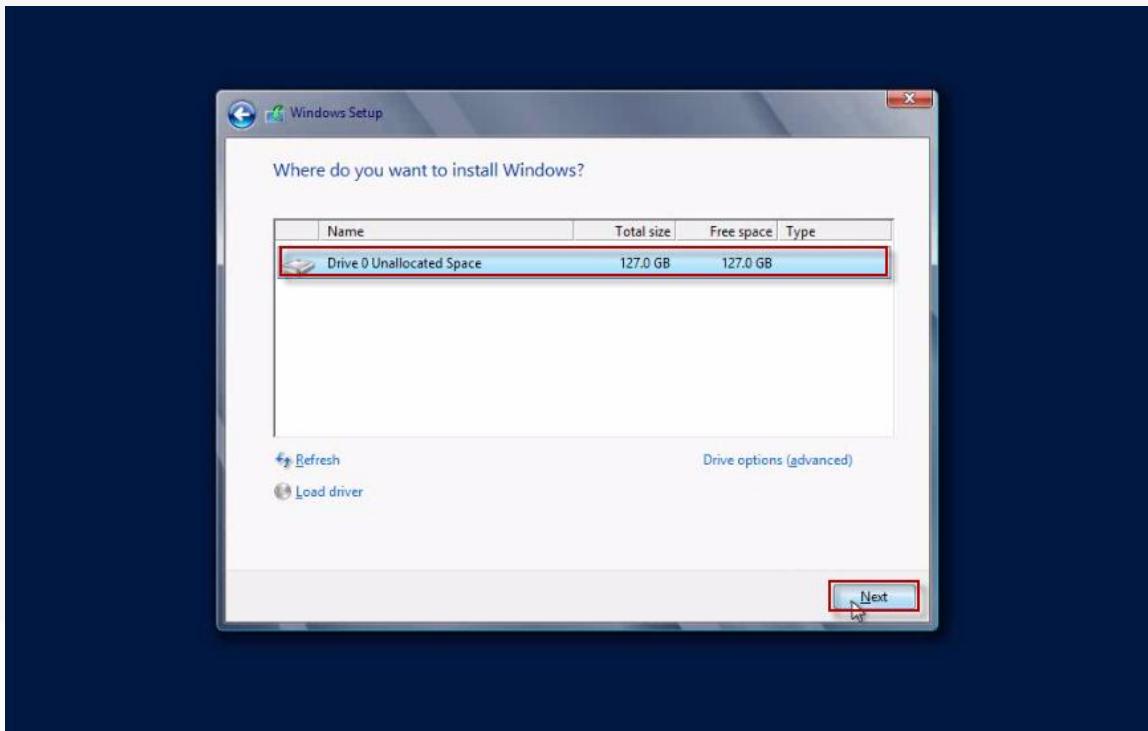


In the "Which type of installation do you want?" window, choose “Custom: Install Windows only (Advanced)”.

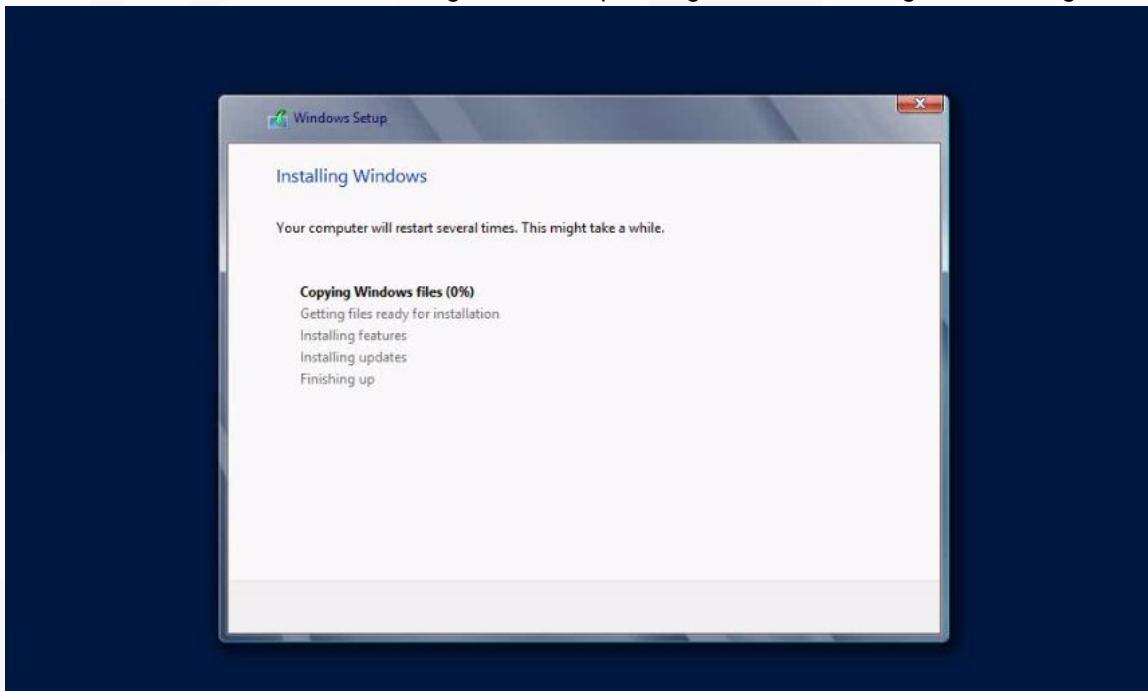


Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

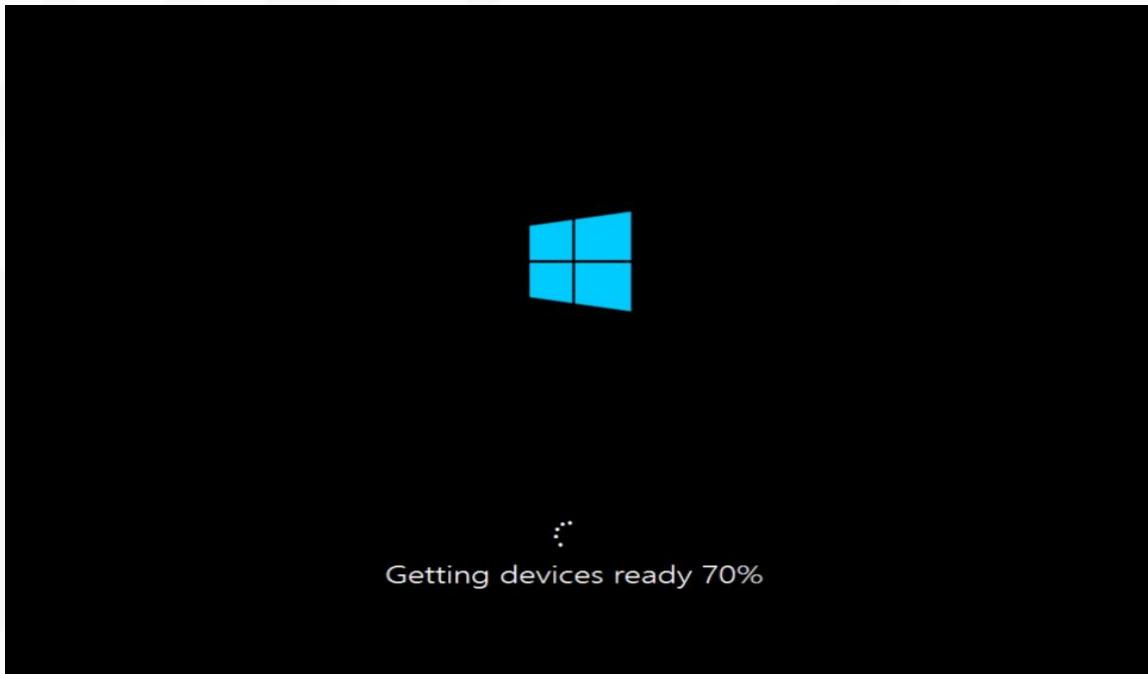
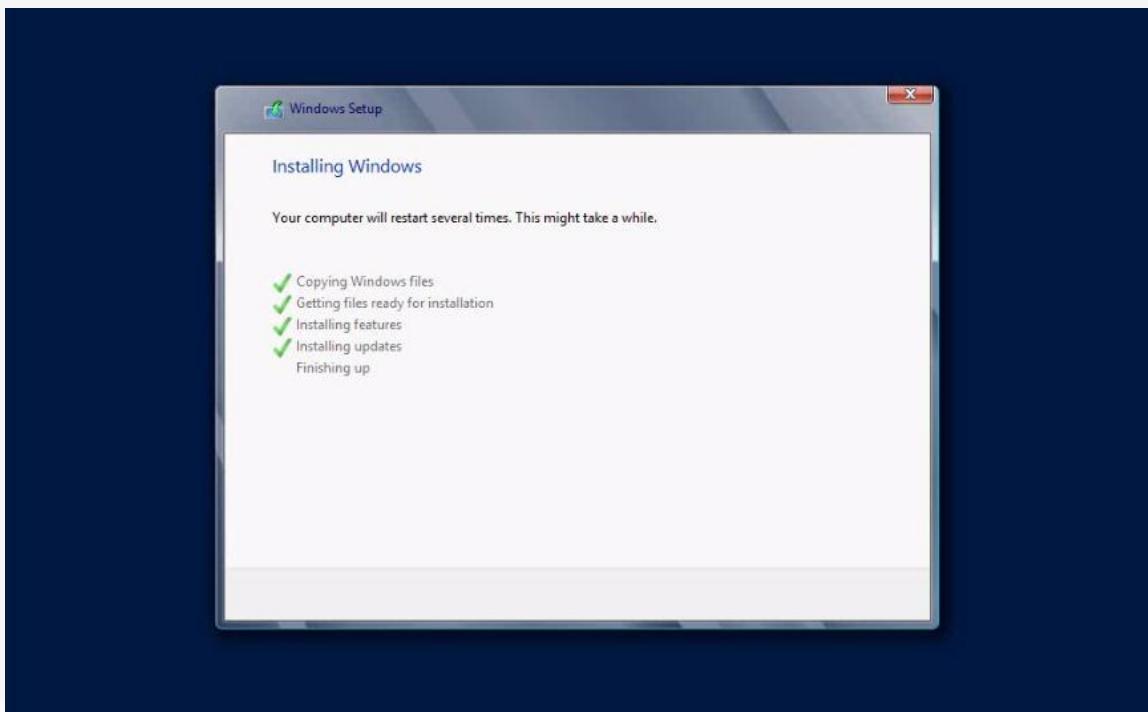
In the "Where do you want to install Windows?" screen, if you're installing the server on a regular IDE hard disk, click to select the first disk, usually "**Disk 0**", and then click "**Next**".



The installation process begins. Copying the setup files from the DVD to the hard drive only takes about one minute. However, extracting and uncompressing the files takes a good deal longer.

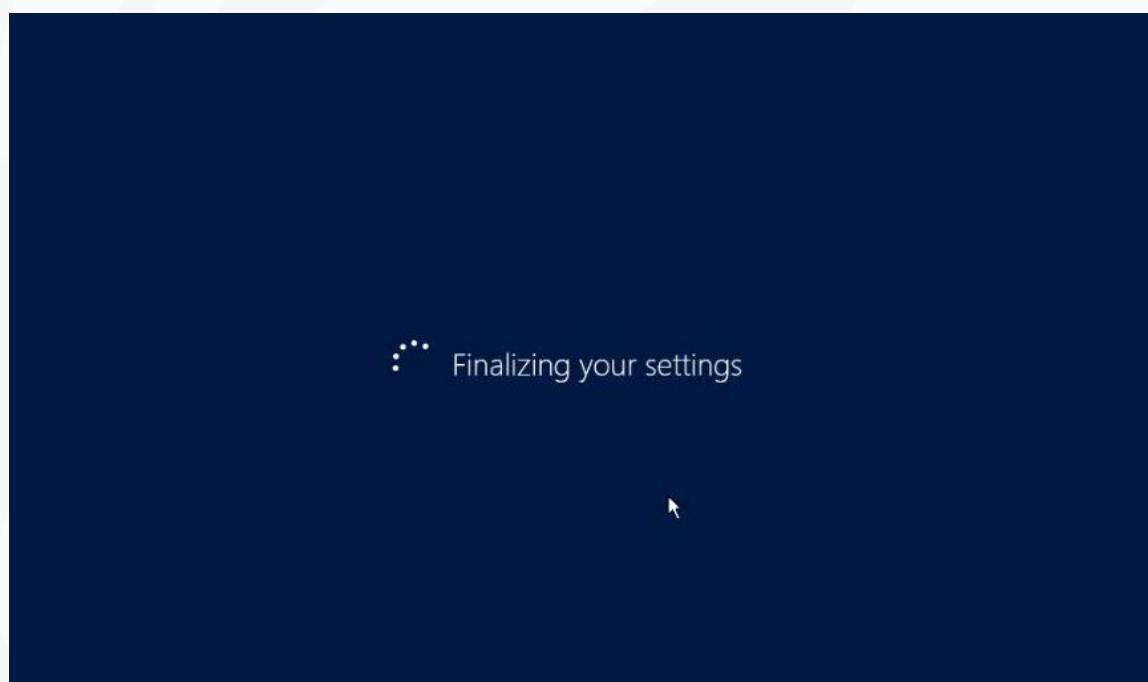
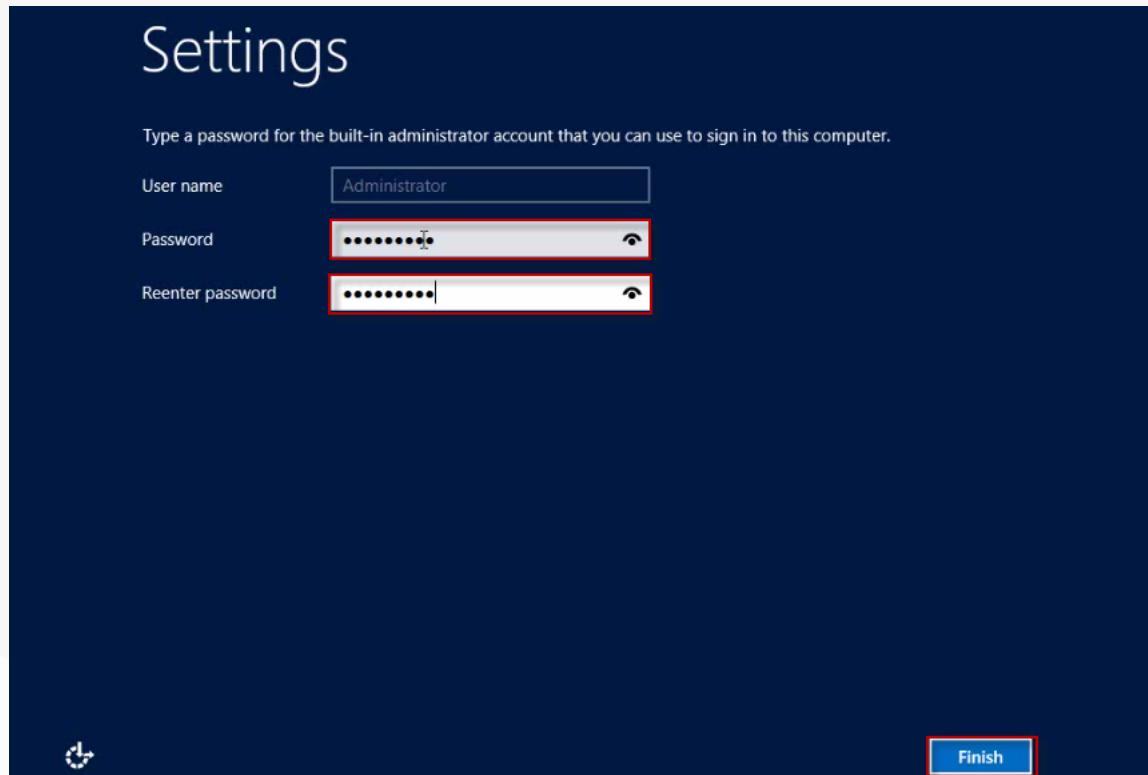


Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)



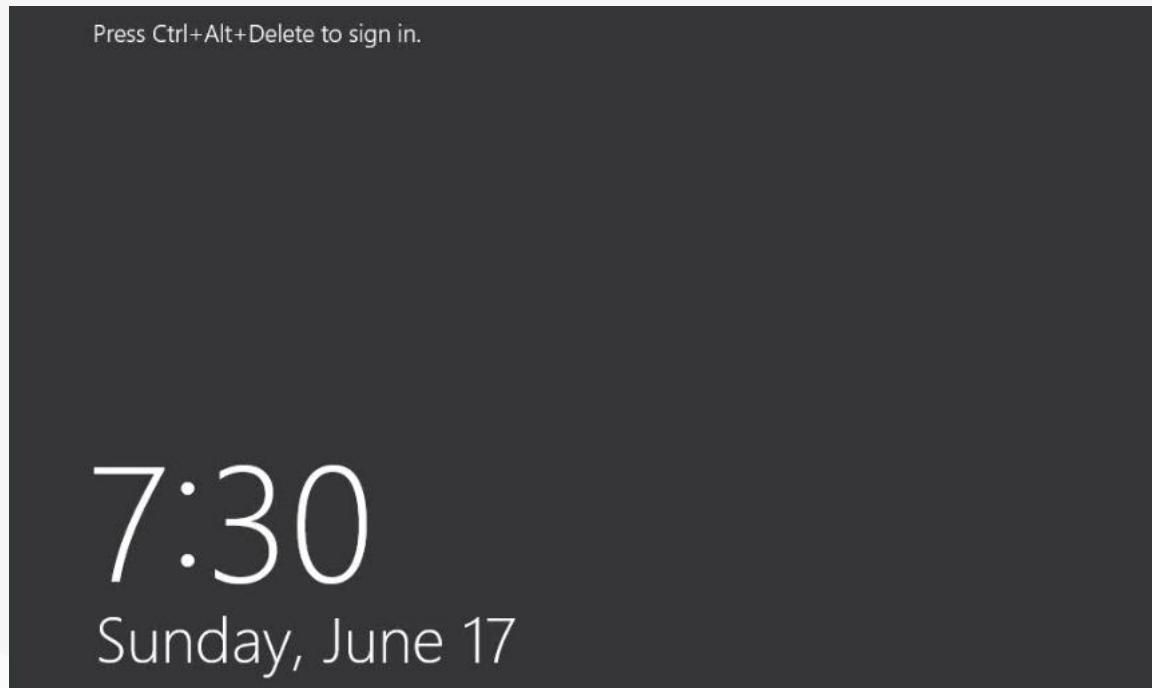
Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

Choose a password for the Administrator account, enter it twice and then click “**Finish**”.



Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

"Press Control +Alt +Delete to sign in".



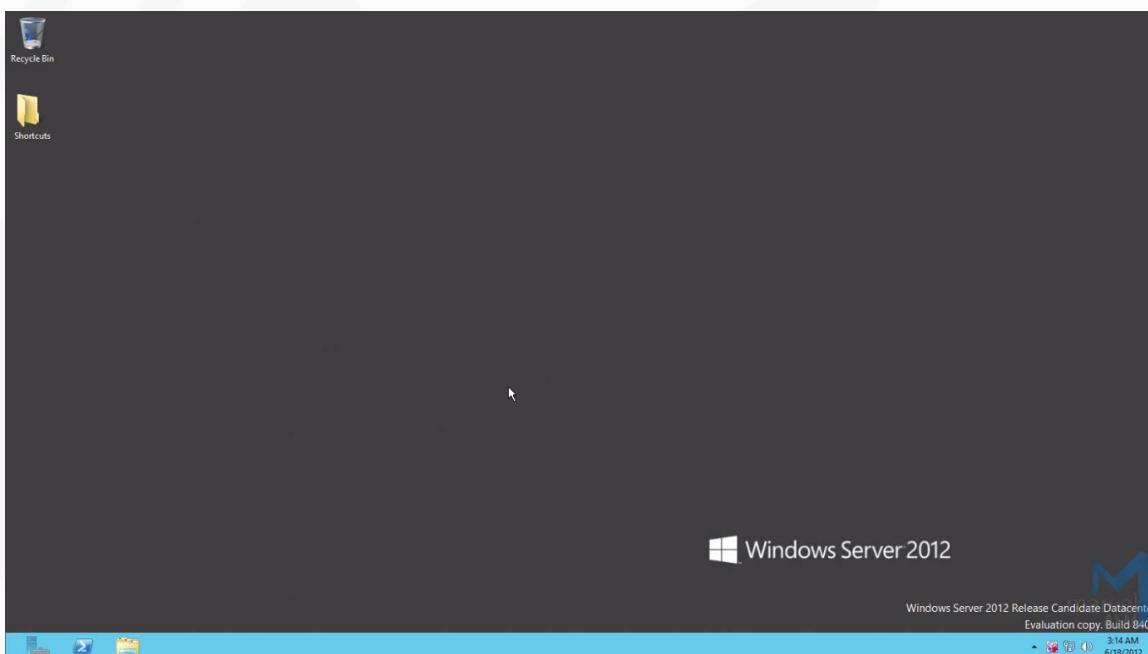
Enter the password that you chose earlier and then press enter or click the blue arrow.



Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)



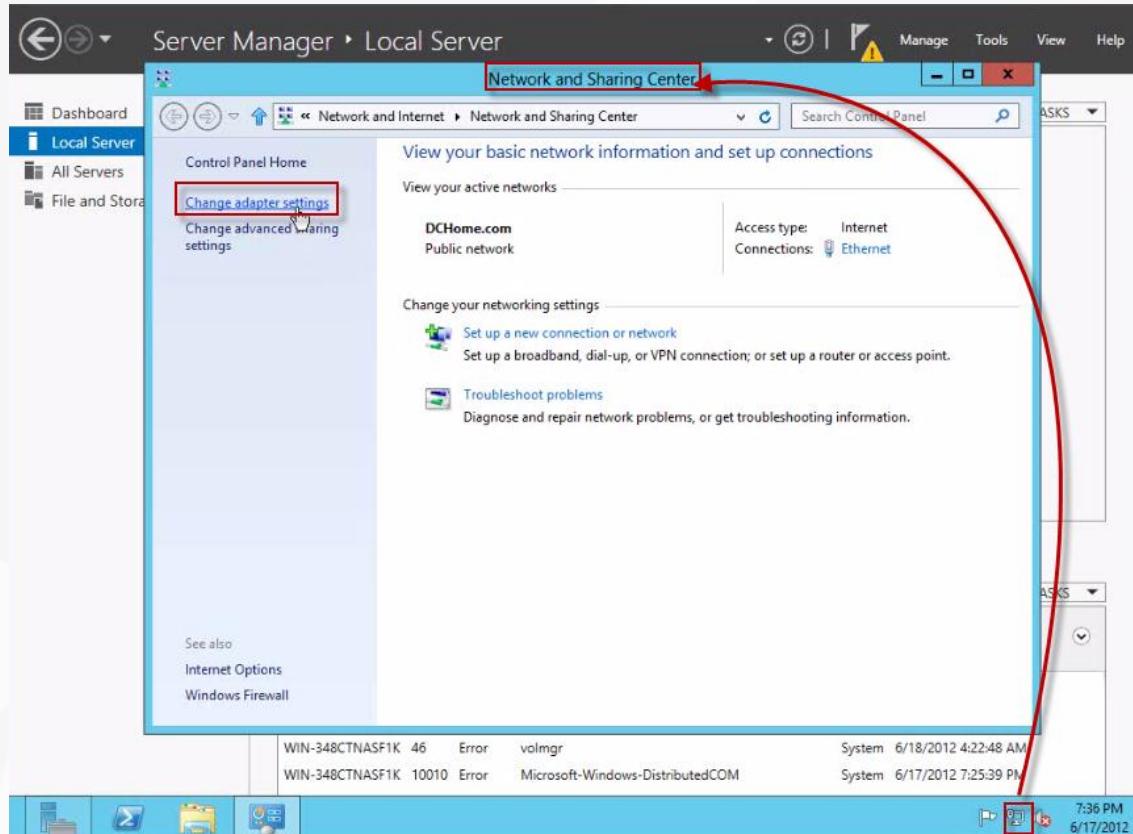
The installation process completes and you should see the desktop.



Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

4.1.2 Configuring a Static IP Address

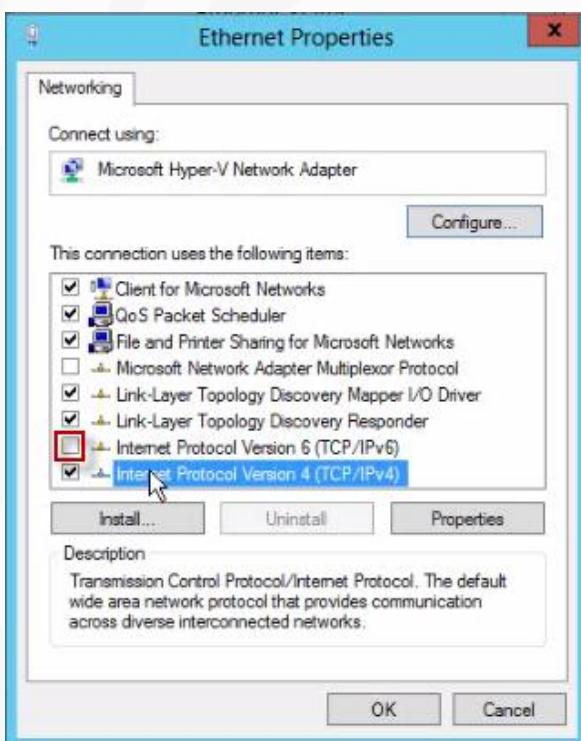
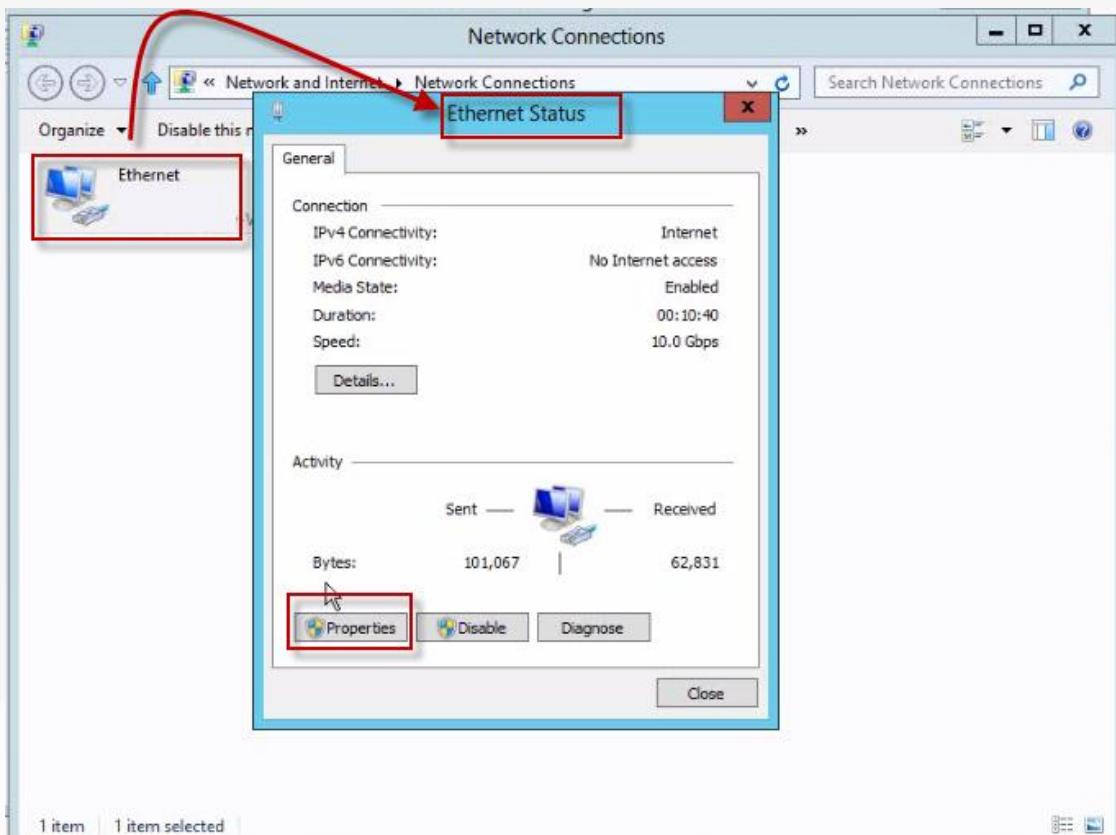
Right-click the Network Notification then click “Open Network and Sharing Center” and then click the “Change adapter settings” link.



Double-click “**Ethernet**” or the main network connection for this machine and then click “**Properties**”.

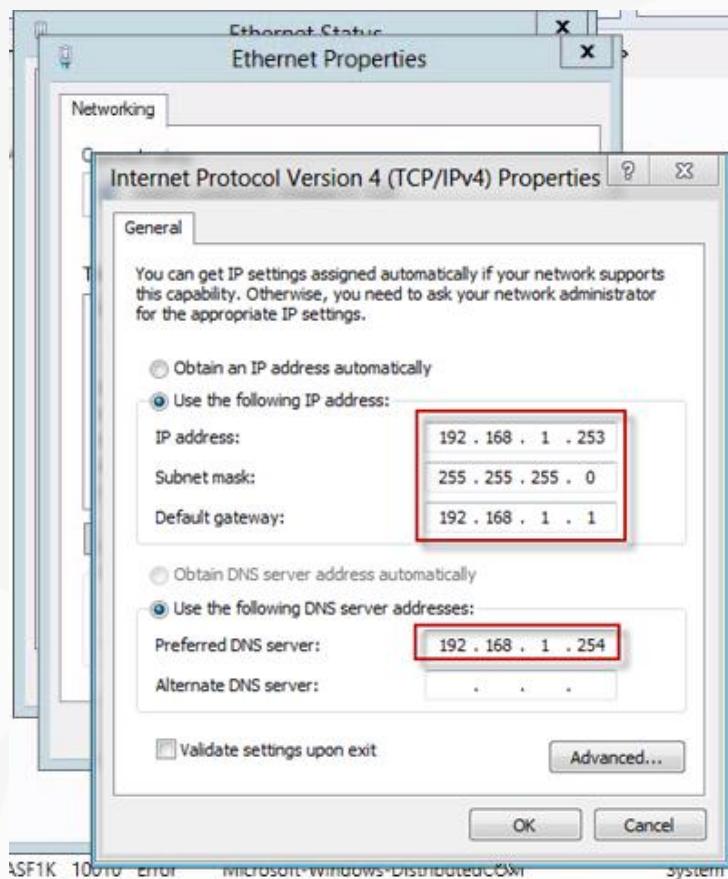
Double-click “**Ethernet**”, then click “**Properties**”, then clear the “**Internet Protocol Version 6(TCP/IPv6)**” checkbox and then double-click “**Internet Protocol Version 4 (TCP/IPv4)**”

Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)



Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

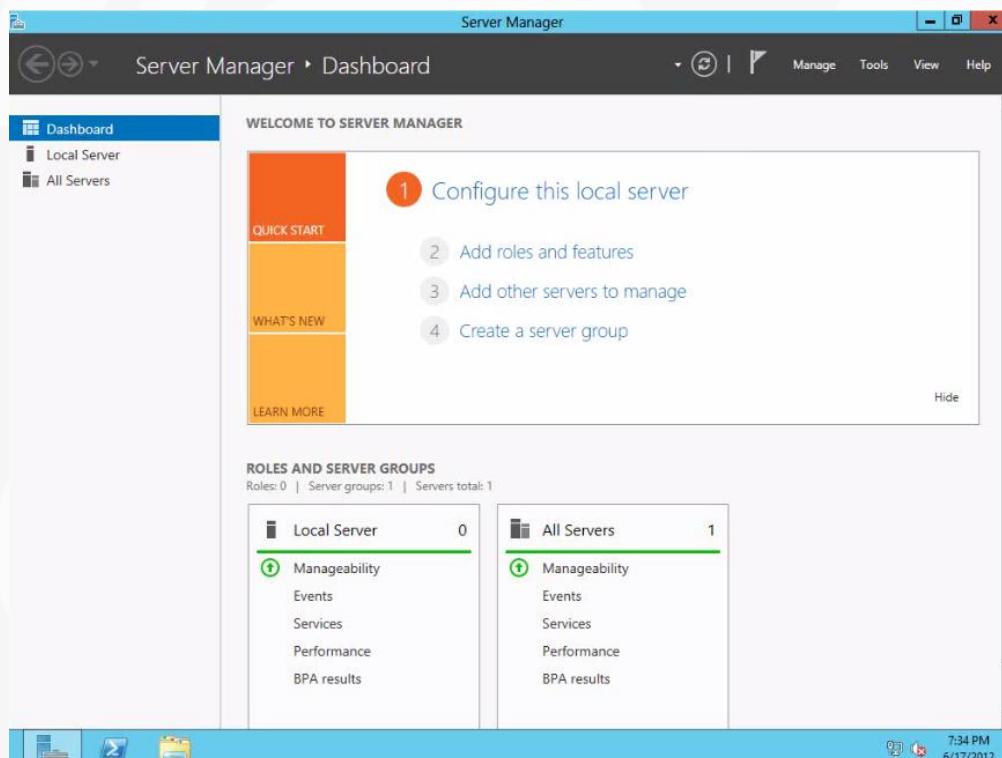
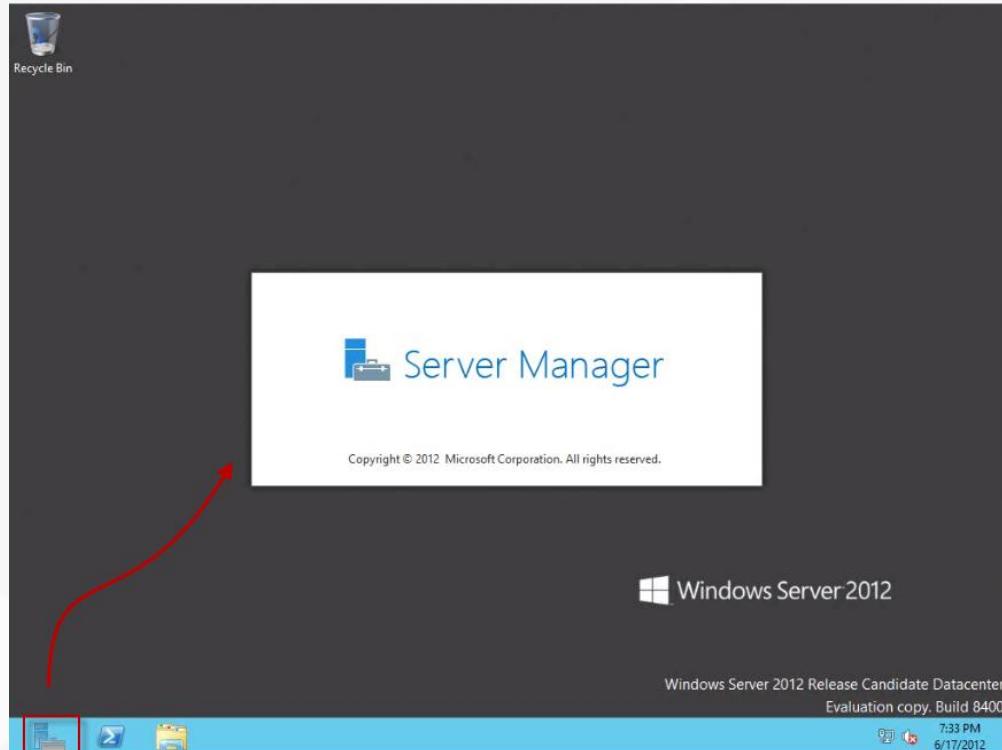
Enter the “**IP Address**”, “**Subnet mask**”, “**Default gateway**” and “**Preferred DNS Server**” as follows and then click “**OK**”. Note that the “**Preferred DNS Server**” IP address should be the IP address of the Domain Controller.



Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

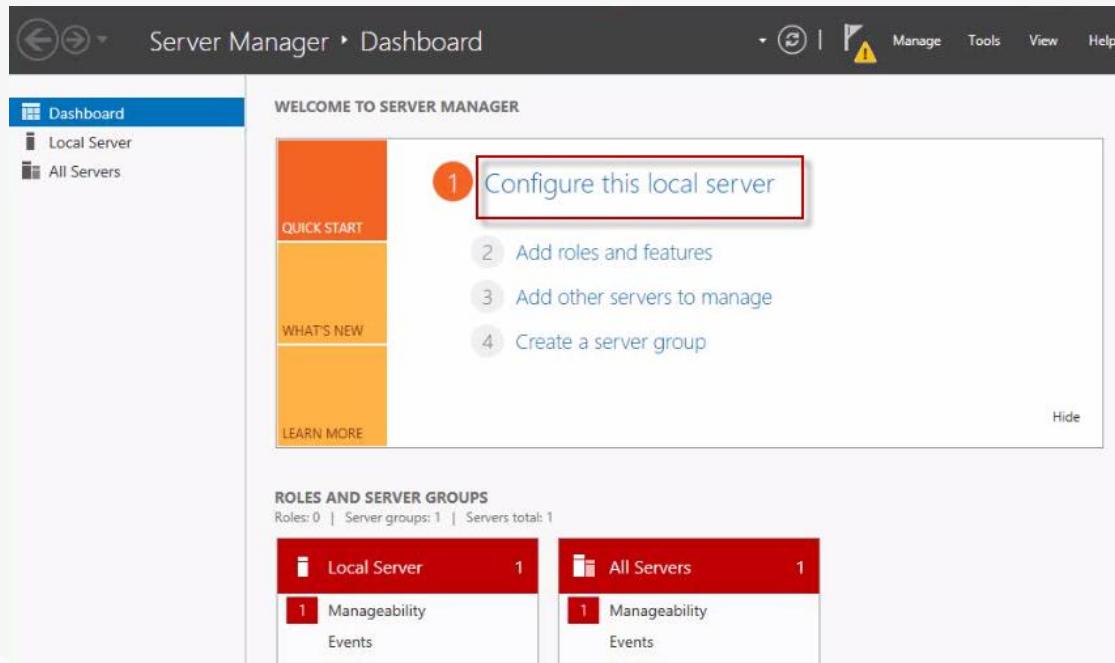
4.1.3 Configuring and Running Windows Server Updates

Click the Server Manager Icon to launch the “**Server Manager**”.



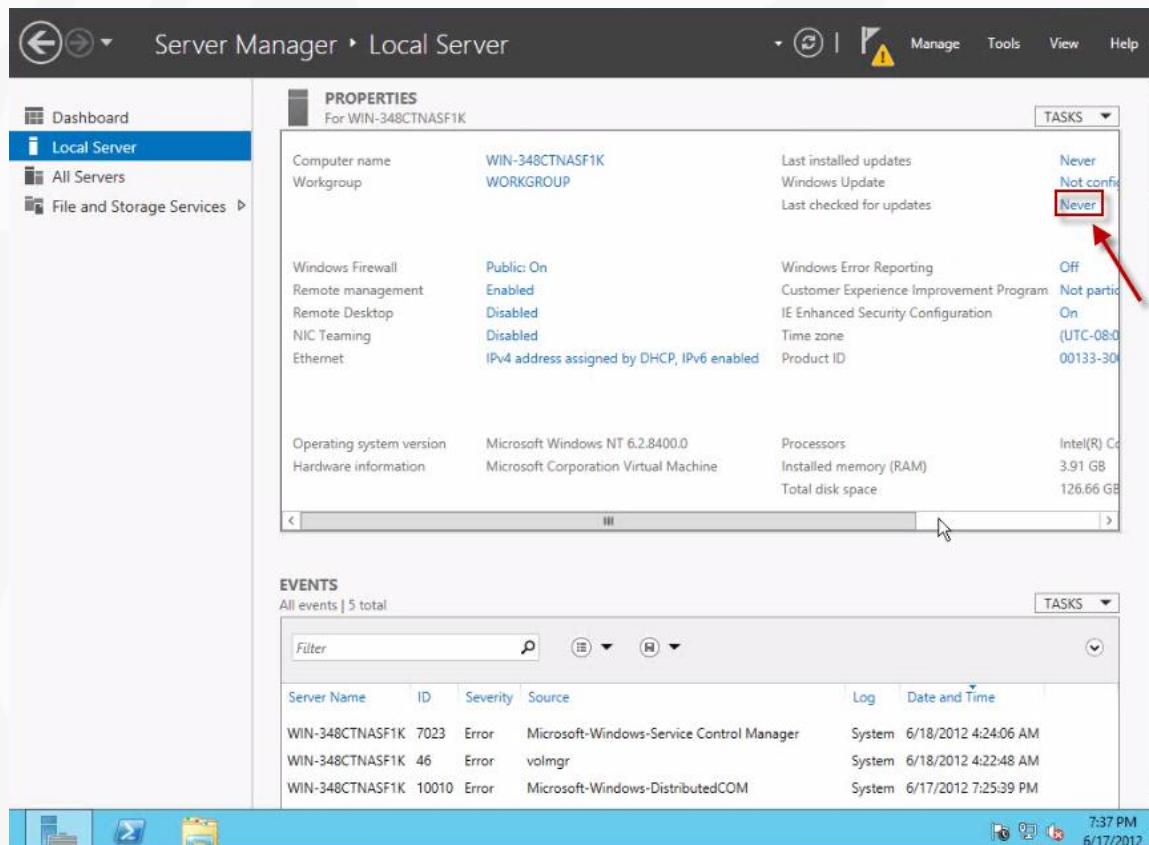
Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

Click “Configure this local server”.



The screenshot shows the Server Manager dashboard. On the left, there's a navigation bar with 'Dashboard' selected. In the center, under 'WELCOME TO SERVER MANAGER', there's a 'QUICK START' section with four numbered steps: 1. Configure this local server (which is highlighted with a red box), 2. Add roles and features, 3. Add other servers to manage, and 4. Create a server group. Below this, there's a 'ROLES AND SERVER GROUPS' section showing one Local Server and one All Servers group, each with one Manageability event. A 'WHAT'S NEW' section and a 'LEARN MORE' button are also present.

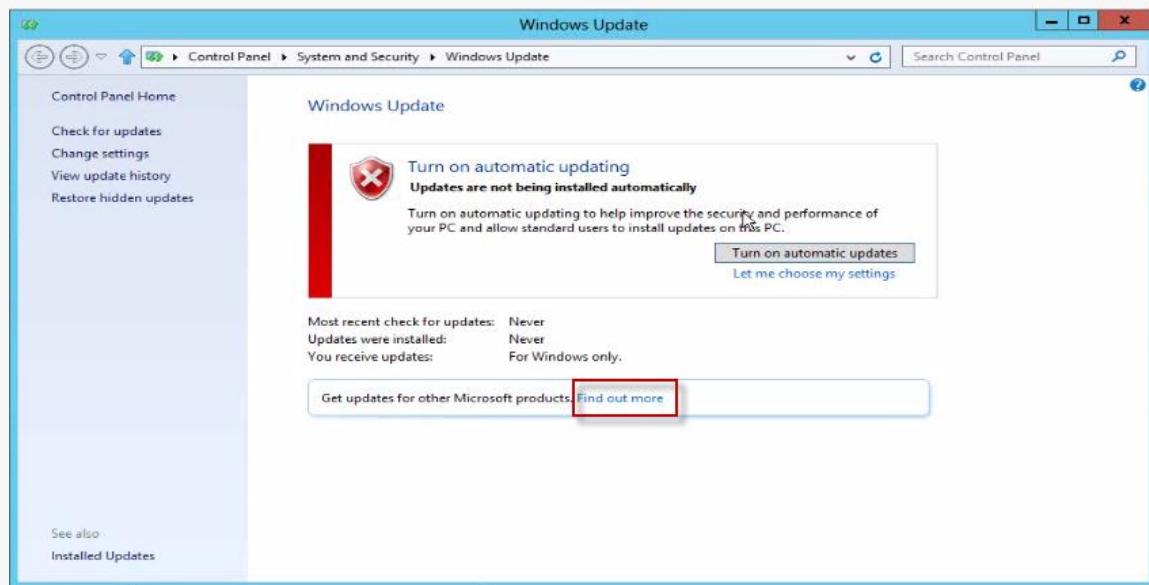
Beside “Last checked for updates”, click the “Never” link.



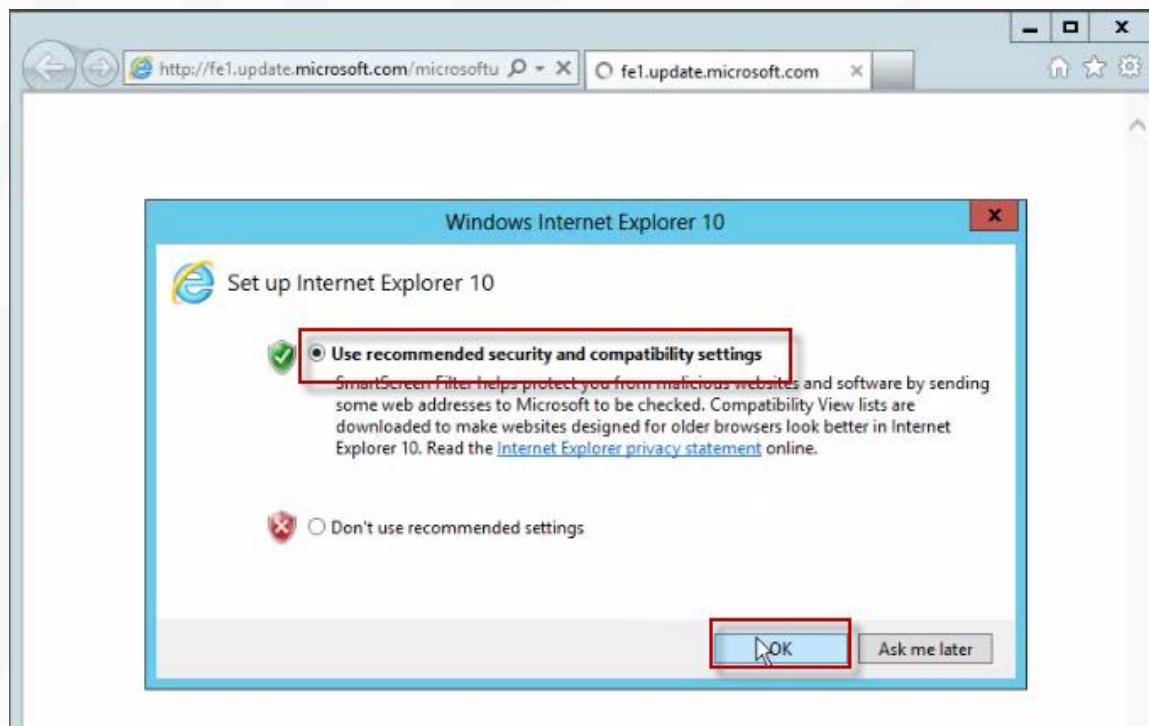
The screenshot shows the 'Local Server' properties for 'WIN-348CTNASF1K'. In the 'PROPERTIES' section, there's a table with various system settings. One row for 'Last checked for updates' has a dropdown menu open with three options: 'Never', 'Not configured', and 'Never' again (the second 'Never' is highlighted with a red box). A red arrow points from the text above to this second 'Never' option. Other rows in the table include 'Computer name' (WIN-348CTNASF1K), 'Workgroup' (WORKGROUP), 'Windows Firewall' (Public: On), 'Remote management' (Enabled), 'Remote Desktop' (Disabled), 'NIC Teaming' (Disabled), 'Ethernet' (IPv4 address assigned by DHCP, IPv6 enabled), 'Operating system version' (Microsoft Windows NT 6.2.8400.0), 'Hardware information' (Microsoft Corporation Virtual Machine), 'Windows Error Reporting' (Off), 'Customer Experience Improvement Program' (Not participated), 'IE Enhanced Security Configuration' (On), 'Time zone' ((UTC-08:00) Pacific Daylight Time), 'Product ID' (00133-30), 'Processors' (Intel(R) Core i5 CPU M 520 @ 2.40 GHz), 'Installed memory (RAM)' (3.91 GB), and 'Total disk space' (126.66 GB). Below the properties, there's an 'EVENTS' section showing a table of log entries with columns for 'Server Name', 'ID', 'Severity', 'Source', 'Log', and 'Date and Time'. The bottom of the screen shows a taskbar with icons for File Explorer, Task View, and Start, along with the date and time (6/17/2012 7:37 PM).

Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

Click the “Find out more” link.



Select the “Use recommended security and compatibility settings” option then click “OK”.

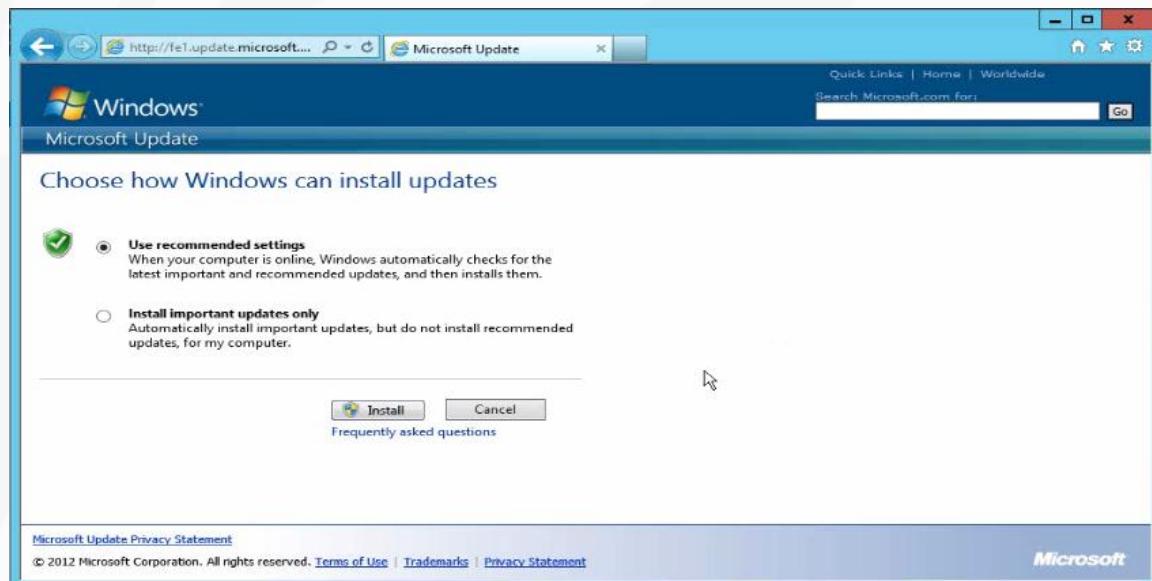


Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

In the “Microsoft Update” page, select the “I agree to the Terms of Use for Microsoft Update” option and then click “Install”.



When prompted to “Choose how Windows can install updates”, select the “Use recommended settings” option then click “Install”.



Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

Close the browser when you receive the “**Microsoft Update was successfully installed**” message.

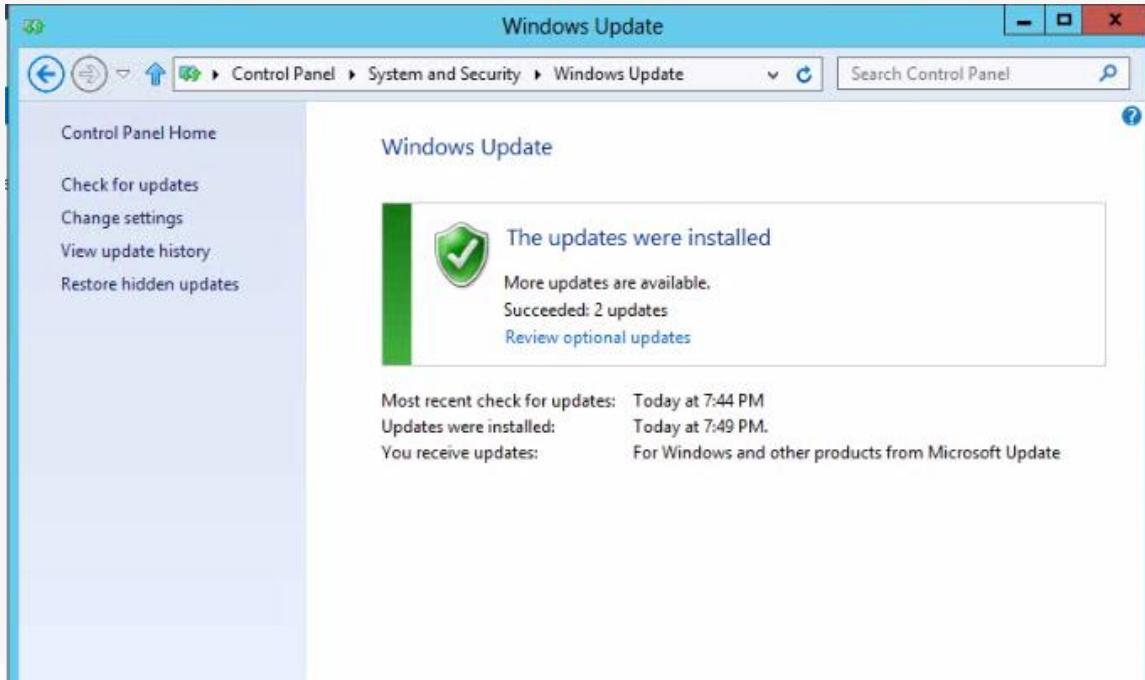


The “**Downloading updates**” process starts; note that you are receiving updates “**For Windows and other Microsoft products**”.



Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

Once “**The updates are installed**”, you are be notified through a message in the same screen.

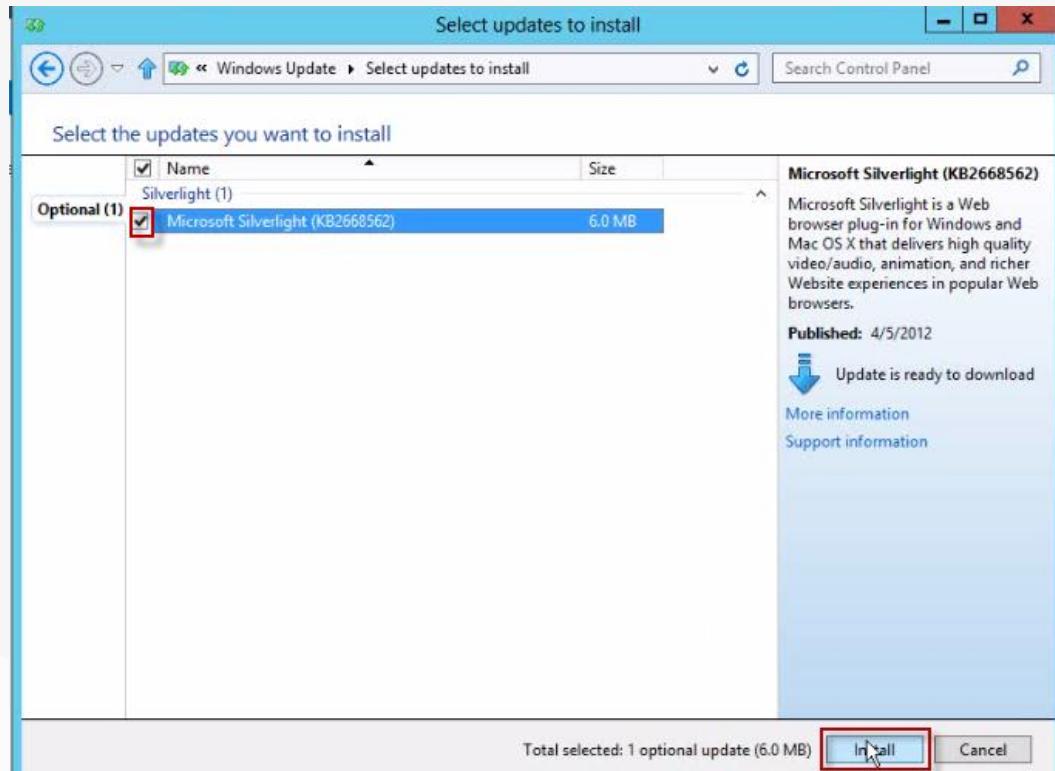


Click “**Check for updates**” and then click on “**1 optional update is available**” if it’s available.

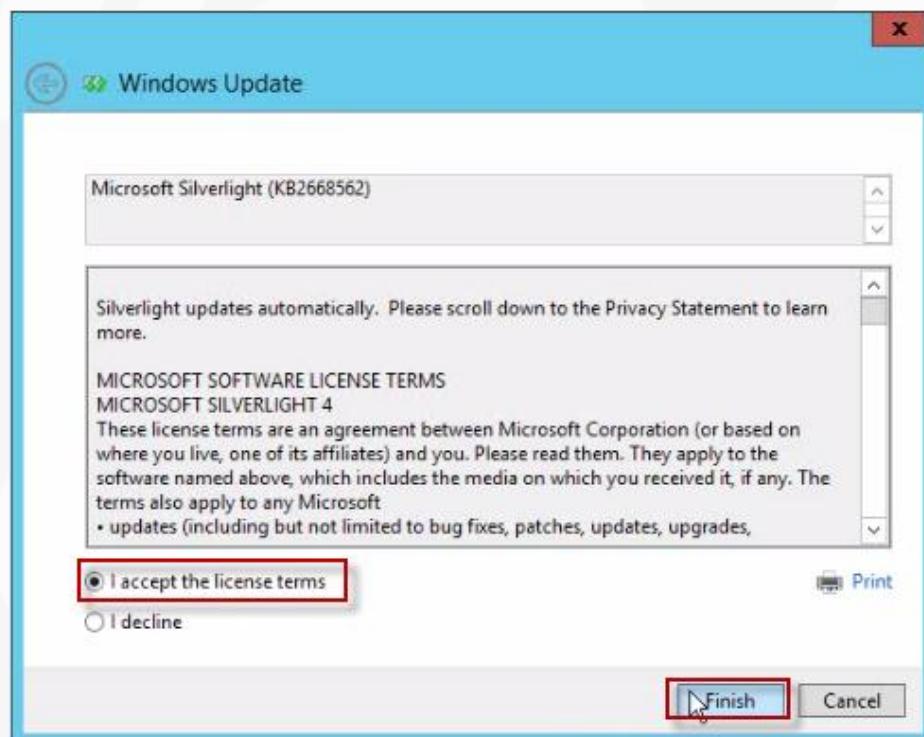


Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

Select “Microsoft Silverlight” then click “Install”.

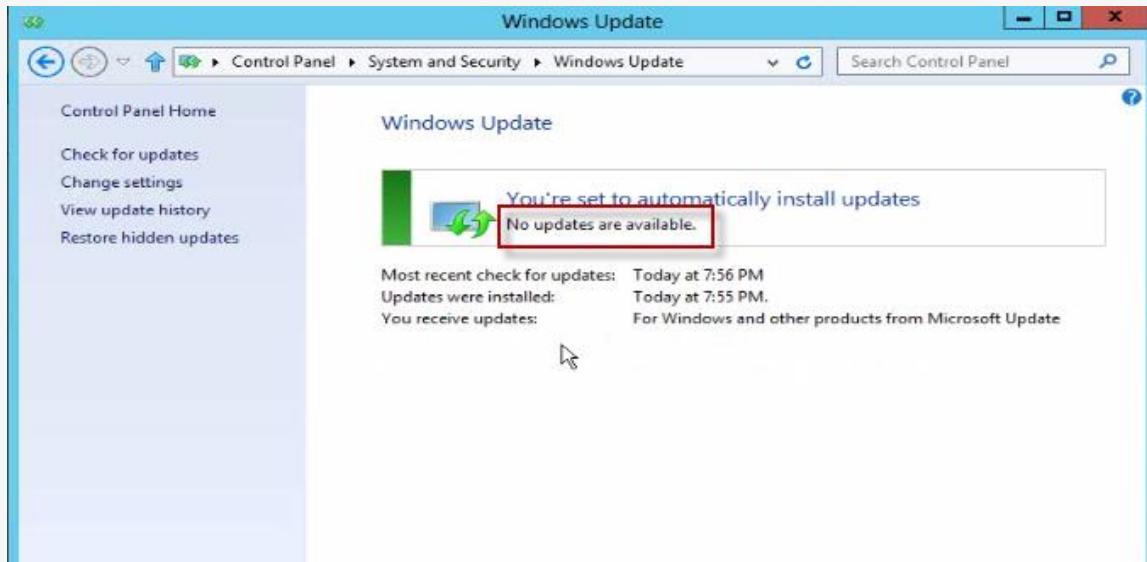


Select the “I accept the licenses terms” option then click “Finish”.



Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

Repeat the previous step for all the available updates till you receive the “**Windows is up to date**” message.



4.1.4 Joining the Domain

Launch the “**Server Manager**” console, click “**Local Server**” and then beside the computer name, click on the default computer name “*WIN-N7NUE77NVPV*”

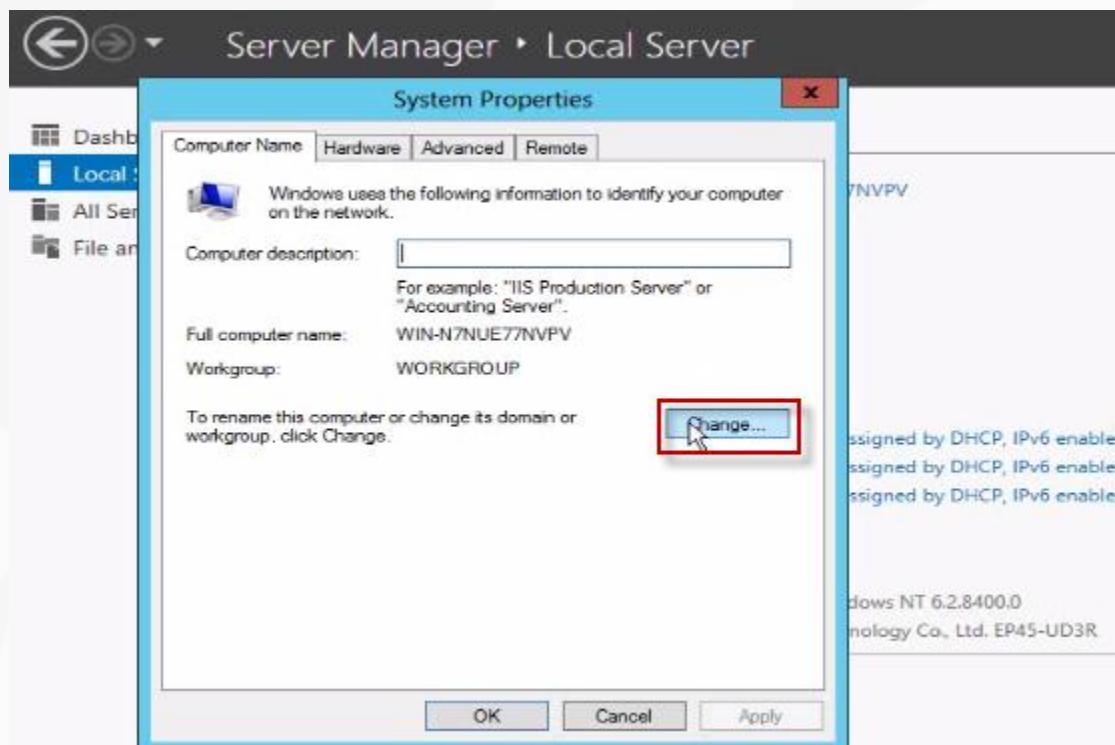
The screenshot shows the Server Manager Local Server properties page. The computer name is listed as WIN-N7NUE77NVPV. The events section shows several system logs, including warnings about LogSys.Client and disk issues.

Server Name	ID	Severity	Source	Log	Date and Time
WIN-N7NUE77NVPV	2	Warning	LogSys.Client	Application	6/18/2012 3:12:18 AM
WIN-N7NUE77NVPV	1530	Warning	Microsoft-Windows-User Profile Service	Application	6/17/2012 4:12:20 PM
WIN-N7NUE77NVPV	10149	Warning	Microsoft-Windows-Windows Remote Management	System	6/17/2012 4:12:20 PM
WIN-N7NUE77NVPV	153	Warning	disk	System	6/17/2012 4:11:49 PM
WIN-N7NUE77NVPV	153	Warning	disk	System	6/17/2012 4:11:49 PM
WIN-N7NUE77NVPV	153	Warning	disk	System	6/17/2012 4:11:49 PM
WIN-N7NUE77NVPV	153	Warning	disk	System	6/17/2012 4:11:26 PM

Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

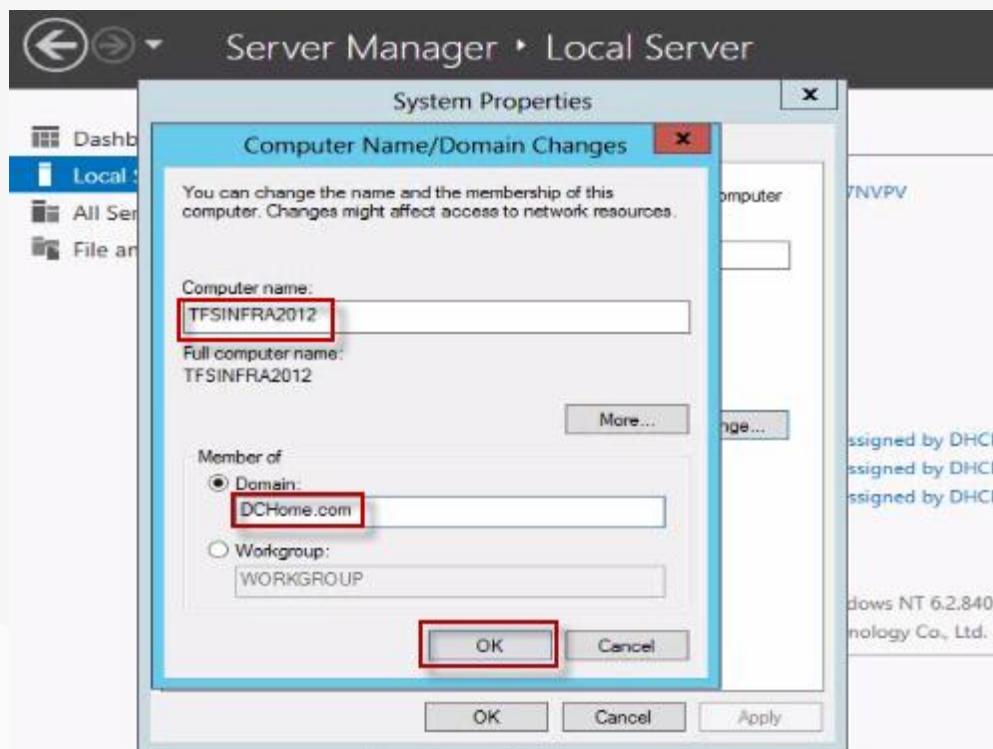


From the “Computer Name” tab, click “Change”.



Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

Enter “TFSINFRA2012”, select “Domain” and enter your domain name, in our case it is “DCHome.com”. Click “OK” when done.

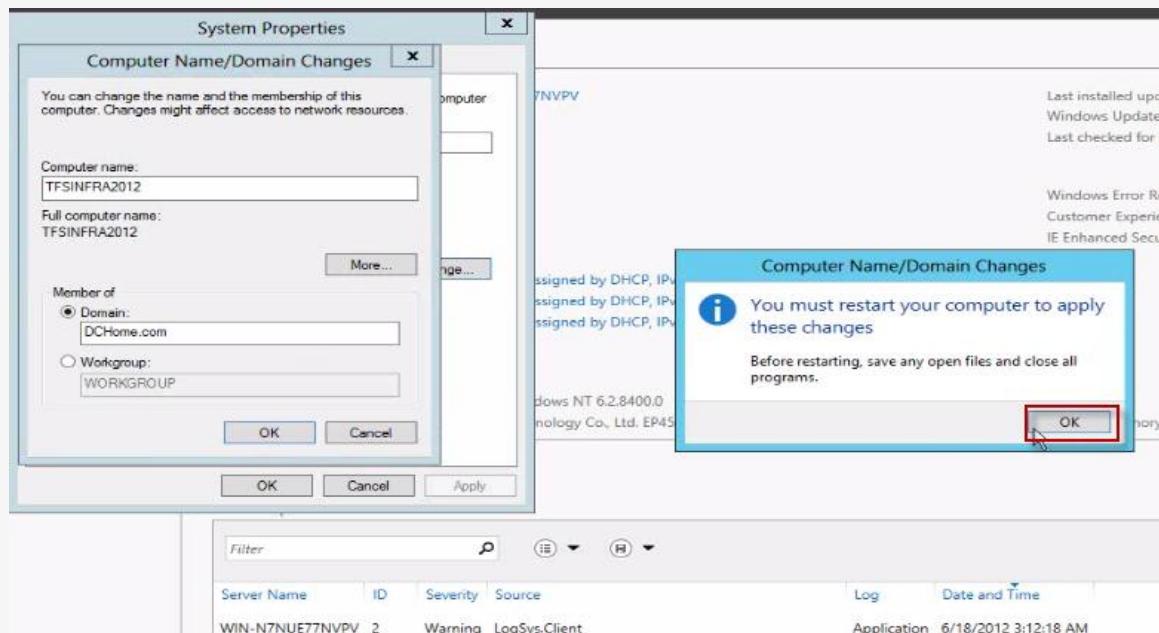


Enter the user name and the password for the domain administrator then click “OK”



Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

When prompted to restart your machine, click “OK”.



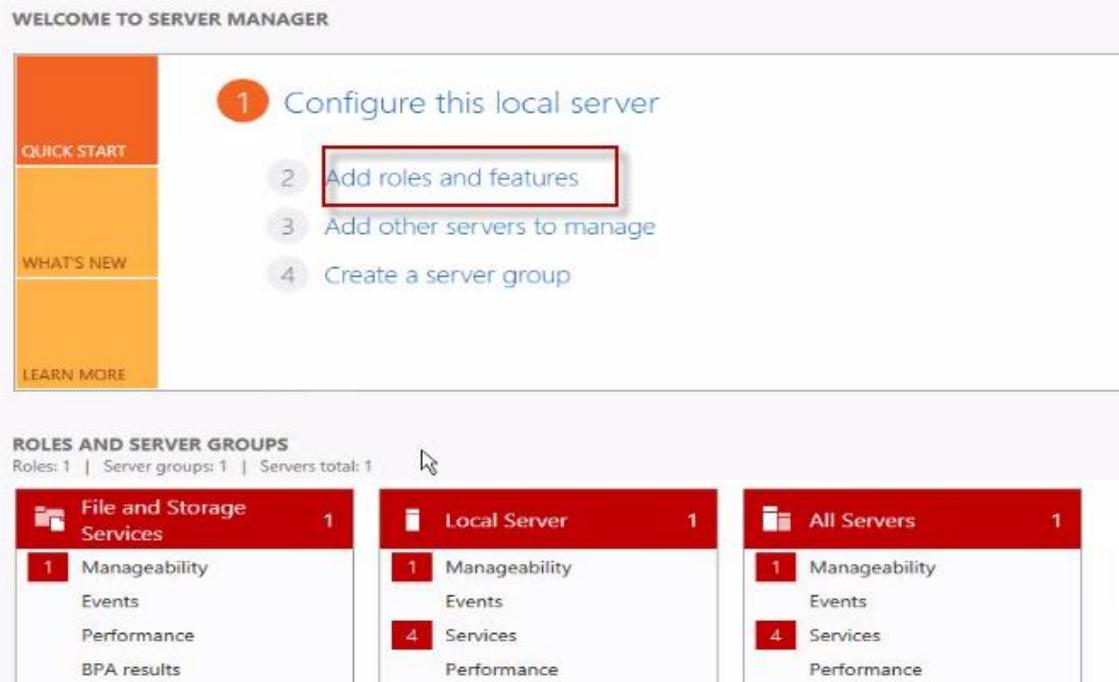
Watch the

Video

www.youtube.com/watch?v=nyfxKuq0Va4

4.2 Adding the Hyper-V Role to Windows Server 2012

Launch the “Server Manager” console and click “Add roles and features”.



WELCOME TO SERVER MANAGER

1 Configure this local server

2 Add roles and features

3 Add other servers to manage

4 Create a server group

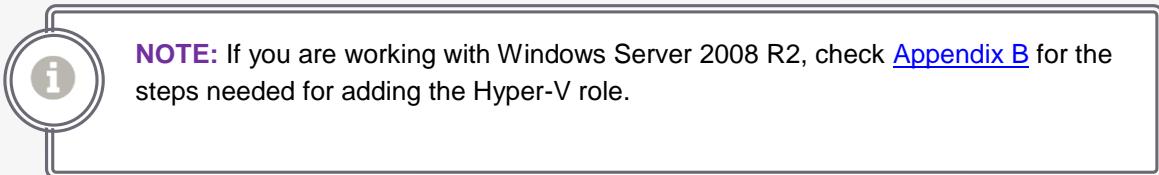
ROLES AND SERVER GROUPS

Roles: 1 | Server groups: 1 | Servers total: 1

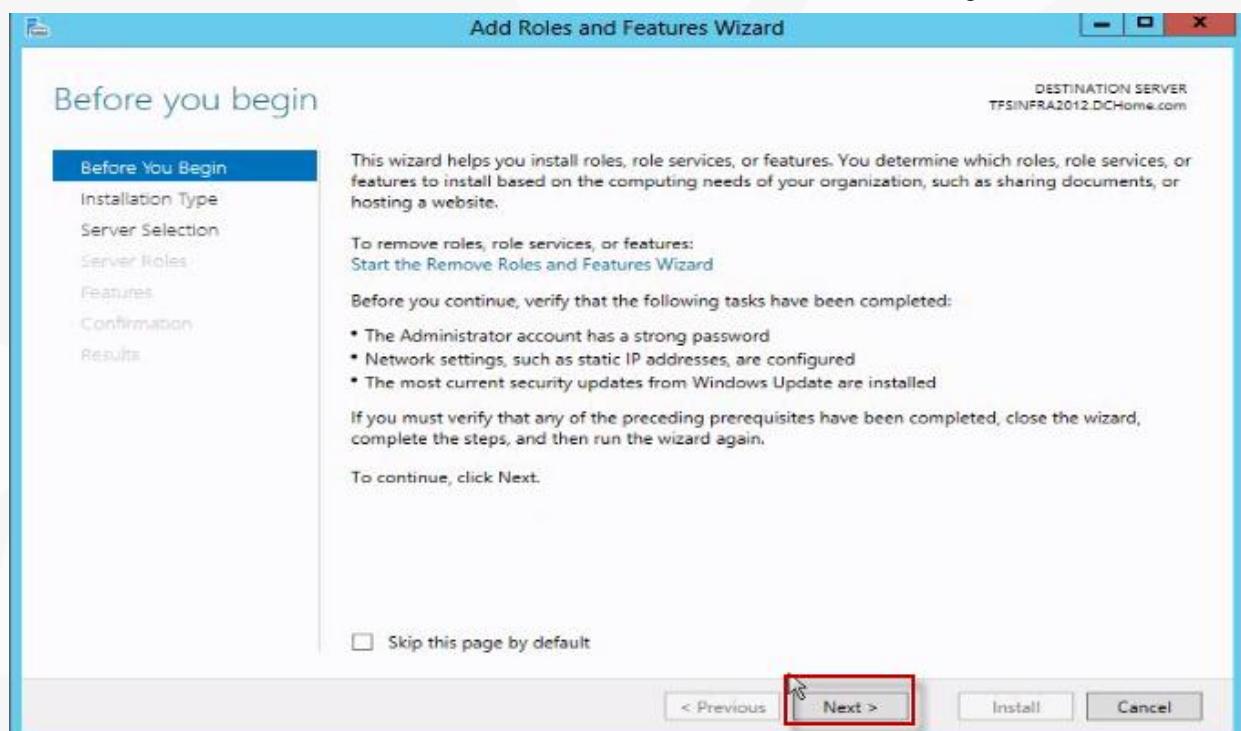
File and Storage Services	Local Server	All Servers
1 Manageability	1 Manageability	1 Manageability
Events	Events	Events
Performance	Services	Services
BPA results	Performance	Performance



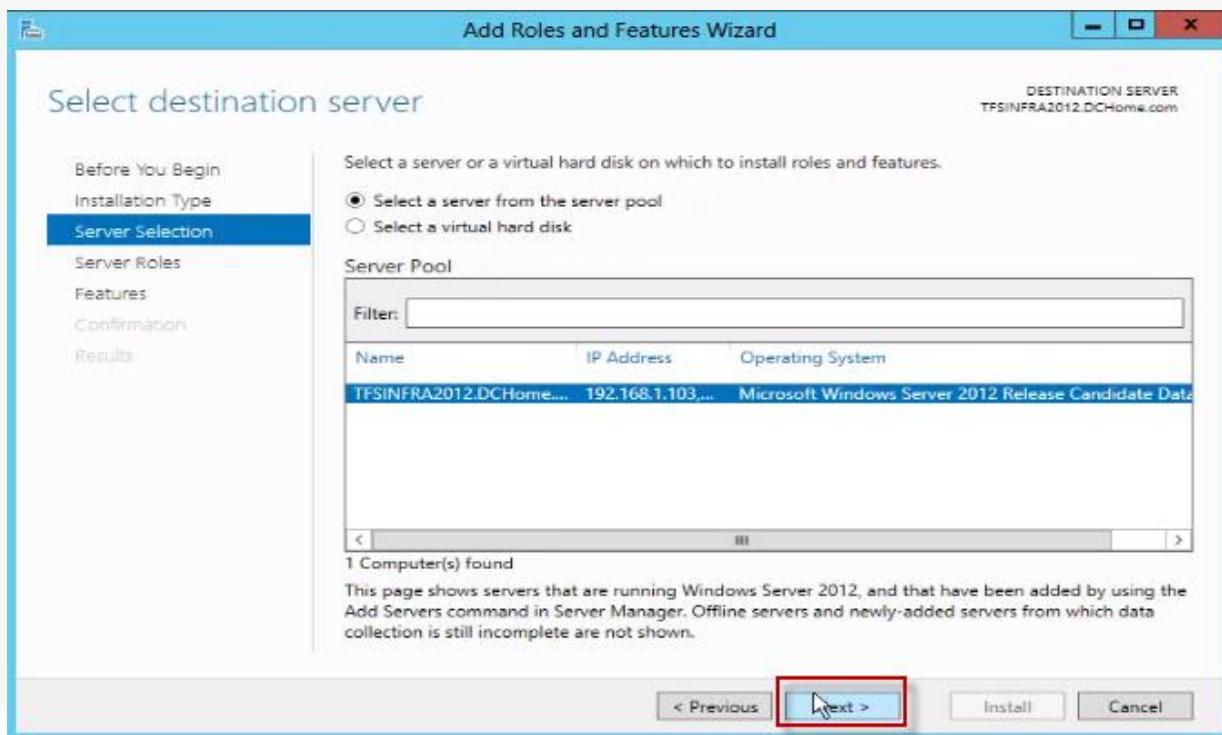
Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)



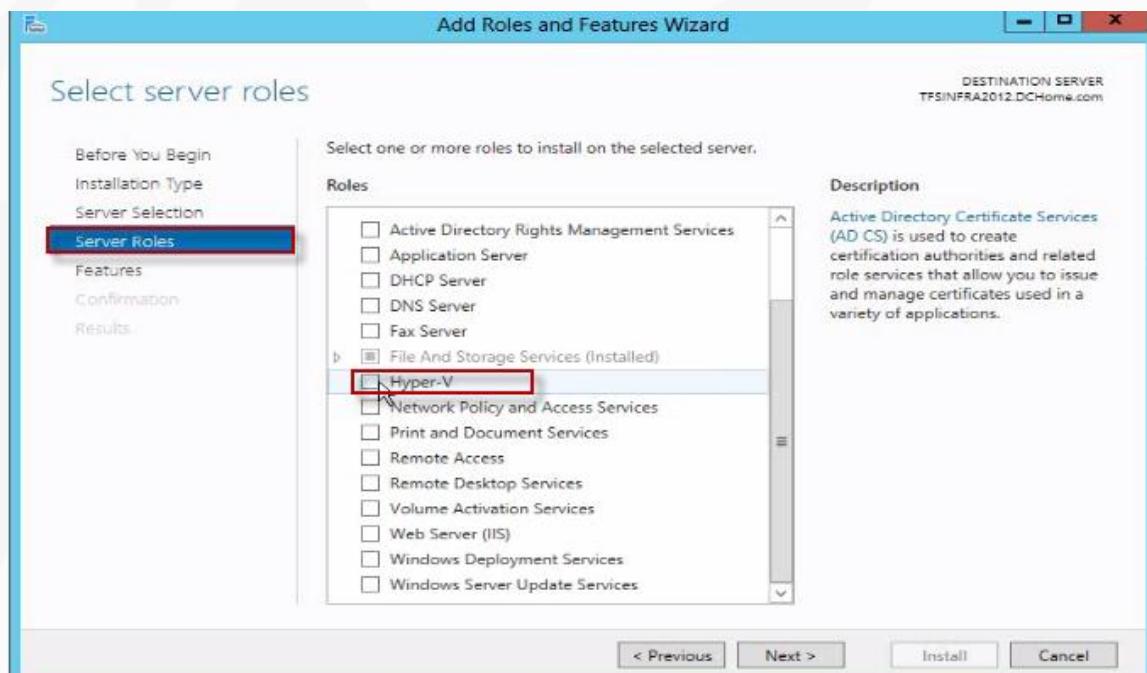
The “Add Roles and Feature Wizard” starts, click “Next” and then click “Next” again.



Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

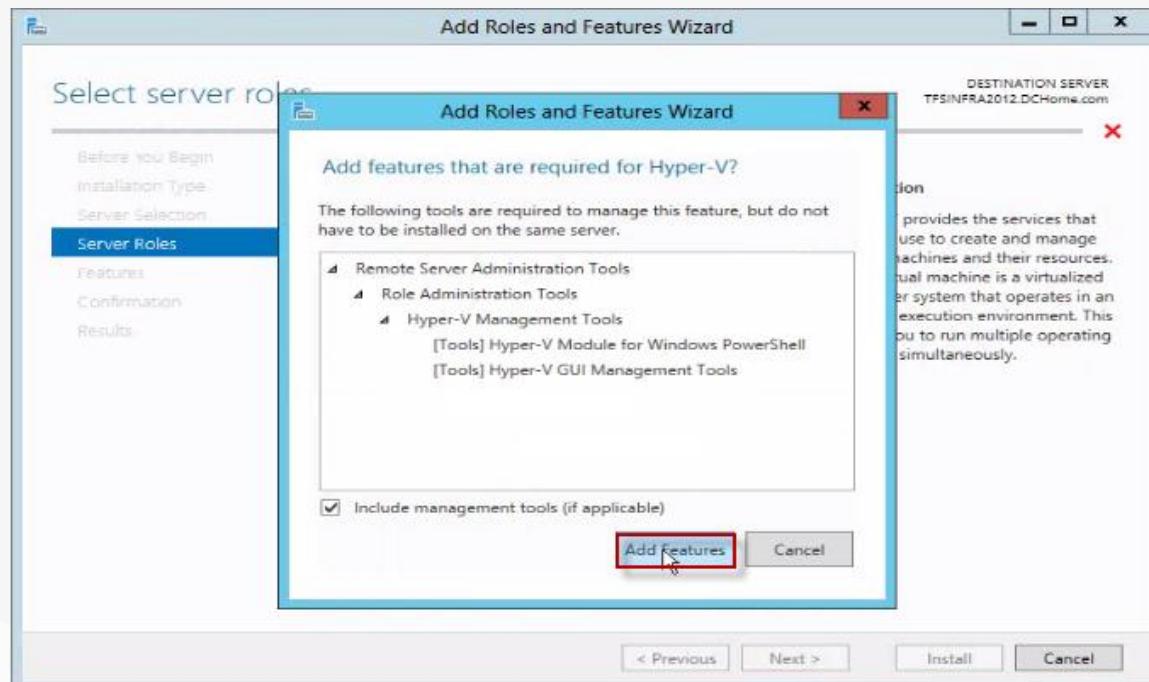


In the “Server Roles” section, select “Hyper-V”.

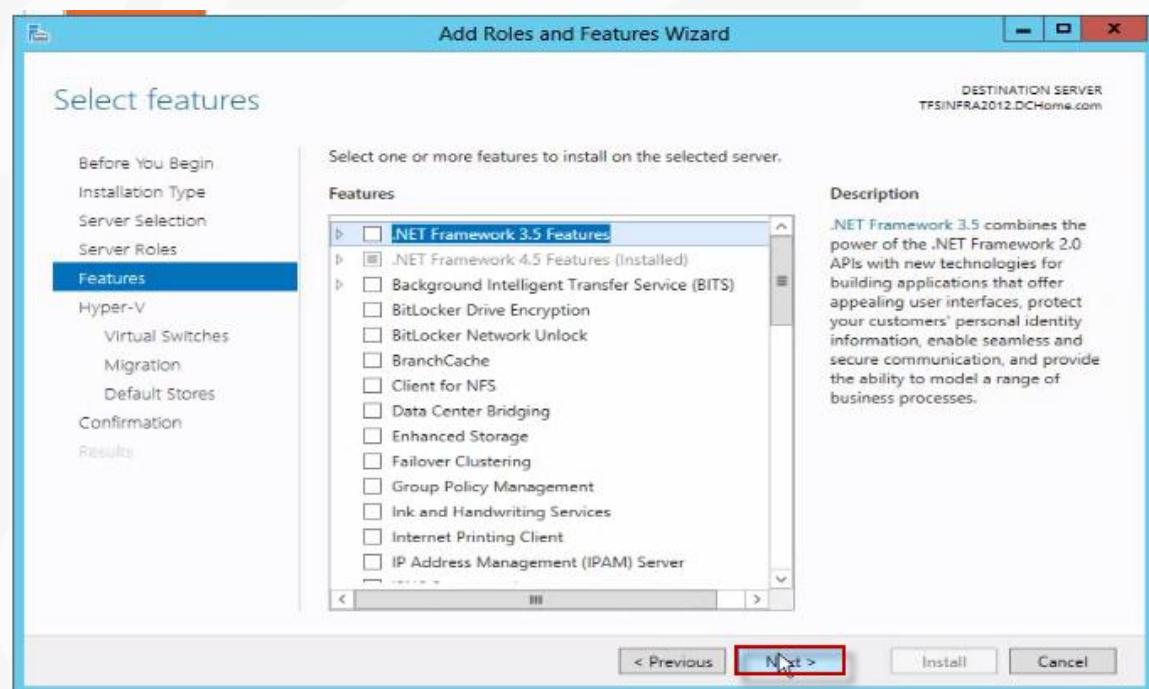


Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

The pre-requisite features required for adding the Hyper-V role pops up, click “**Add features**” and then click “**Next**”.

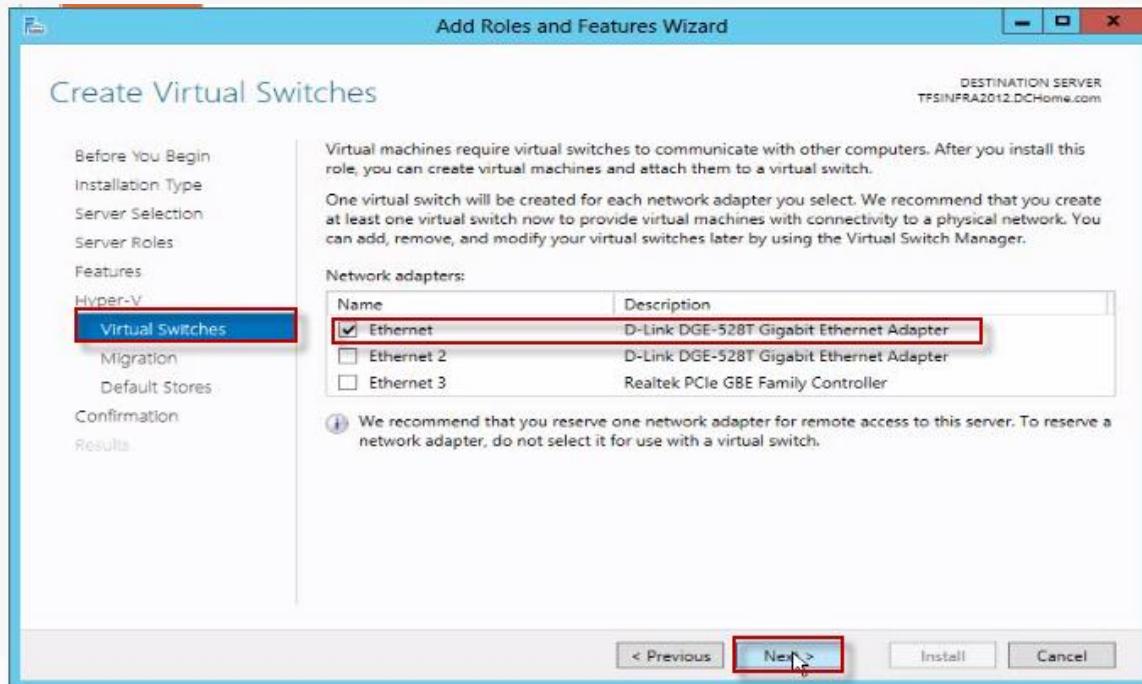


In the “**Features**” section, click “**Next**” without selecting any options.



Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

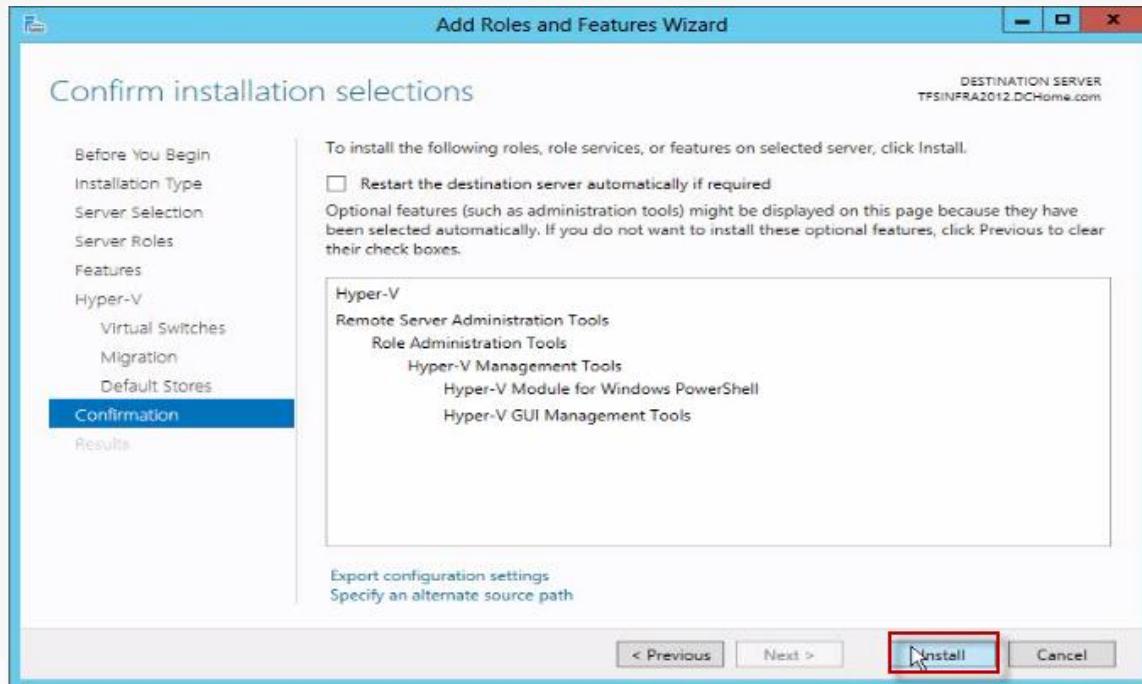
In the “Virtual Switches” section, select “Ethernet” then click “Next”



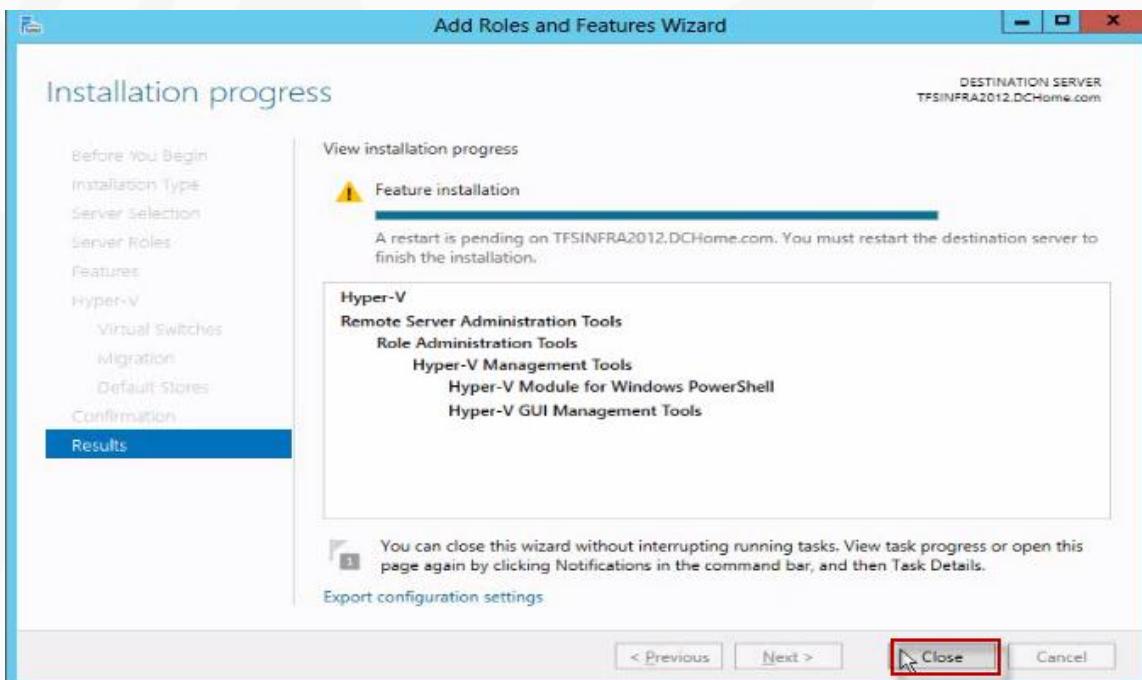
NOTE: Virtual Switch enables VMs (Virtual Machines) to have a network connection, you can skip this selection and create one or more Virtual Switches later from the Hyper-V Manager Console with more control over the settings.

Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

In the “Confirmation” section, click “Install”.

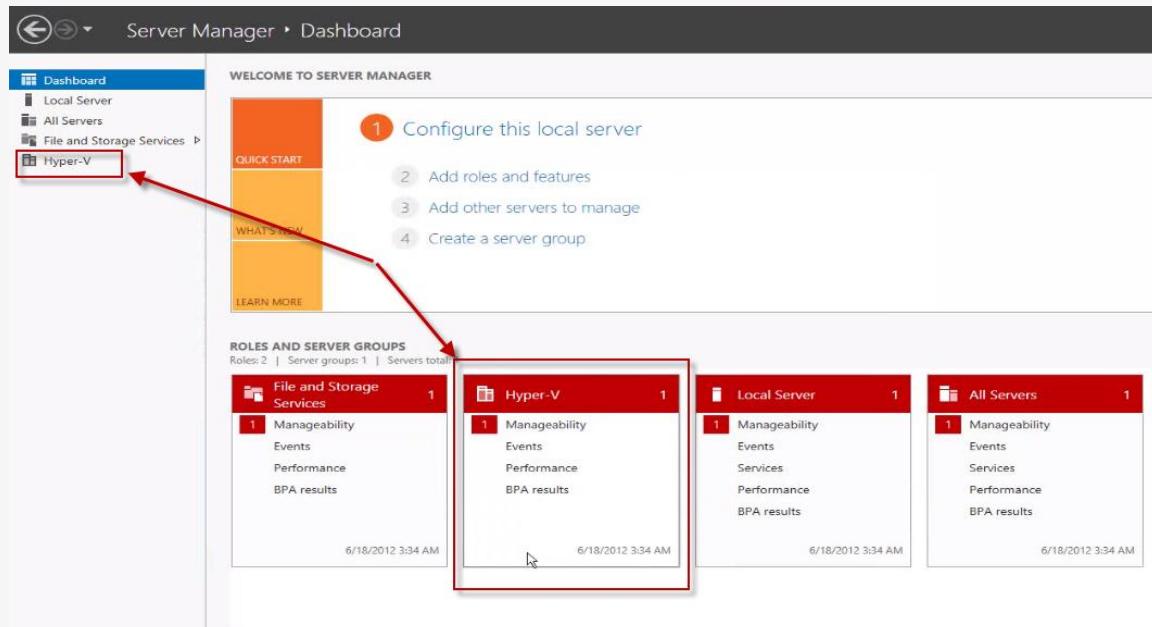


The installation starts. Click “Close” when it successfully completes.



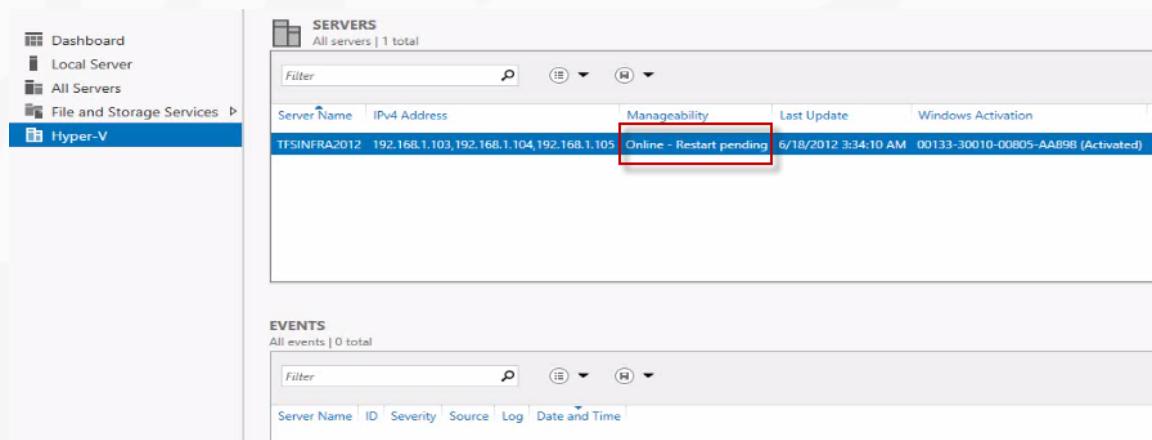
Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

Click the “Hyper-V” section or tile.



The screenshot shows the Server Manager Dashboard. On the left navigation bar, the "Hyper-V" option under "File and Storage Services" is highlighted with a red box and has a red arrow pointing to it. The main area displays a "WELCOME TO SERVER MANAGER" panel with four steps: 1. Configure this local server, 2. Add roles and features, 3. Add other servers to manage, and 4. Create a server group. Below this is a "ROLES AND SERVER GROUPS" section showing "File and Storage Services" (1), "Hyper-V" (1), "Local Server" (1), and "All Servers" (1). Each item has a "Manageability", "Events", "Performance", and "BPA results" link. The "Hyper-V" tile is also highlighted with a red box. At the bottom of each tile is a timestamp: 6/18/2012 3:34 AM.

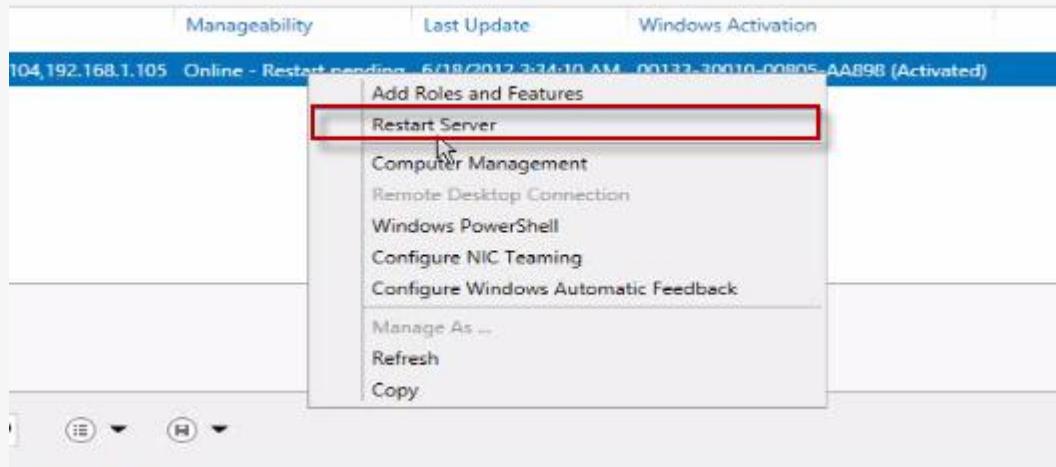
In the “Manageability” column, note that the machine needs to be rebooted.



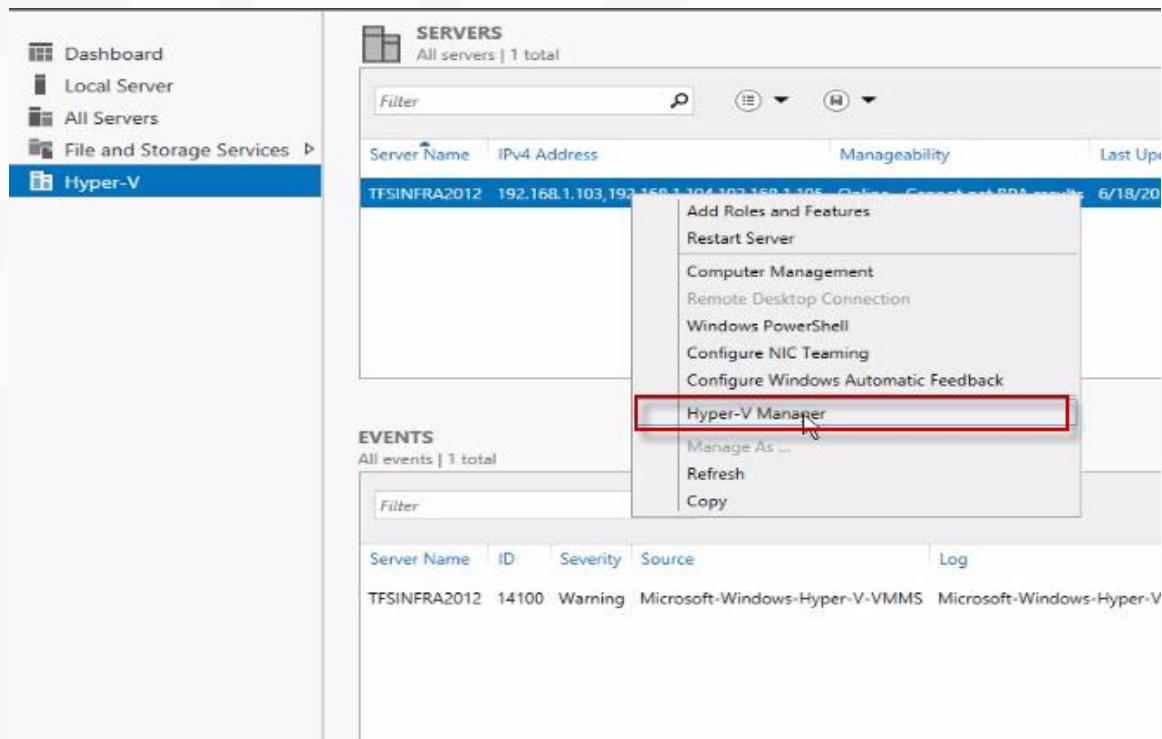
The screenshot shows the "SERVERS" list in the Server Manager. The "Hyper-V" section from the previous screen is still visible on the left. The main table lists one server: "TFSINFRAD2012" with IP "192.168.1.103, 192.168.1.104, 192.168.1.105". The "Manageability" column for this server shows "Online - Restart pending". A red box highlights this status. The table includes columns for "Server Name", "IPv4 Address", "Manageability", "Last Update", and "Windows Activation". Below the table is an "EVENTS" section showing "All events | 0 total".

Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

Right-click the server row and click “**Restart Server**”.

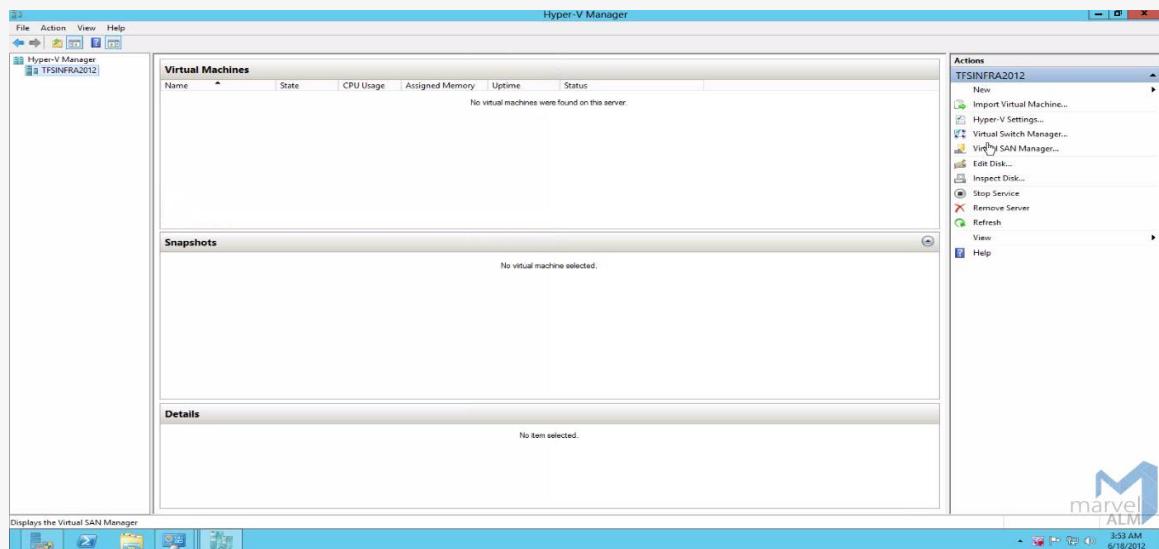


After restarting the machine, click “**Hyper-V**” from the “**Server Manager**” console then right-click the server row (TFSINFRA2012) and then click “**Hyper-V Manager**”.



Chapter 4: Creating & Preparing the TFS Infrastructure Physical Machine (Hyper-V Host)

Verify that the “**Hyper-V Manager Console**” launches successfully.



Chapter 5: Creating & Preparing the Team Foundation Server Virtual Machine

In this chapter, you will create a Virtual Machine on the TFS Infrastructure Physical Machine that will be used to host Team Foundation Server 2012 with all its pre-requisites, services and components.

In case your hardware does not support Virtualization or you simply do not want to use it, you can directly jump to [Section 5.3](#) then continue to [Part 3](#) to install TFS and all its pre-requisites, services and components on the TFS Infrastructure Physical Machine.

You will start this chapter by installing Windows Server 2012, configuring a static IP address, configuring and running Windows Update and joining the domain then you will do some Local Policy configurations for the account you created in [Section 3.2](#).

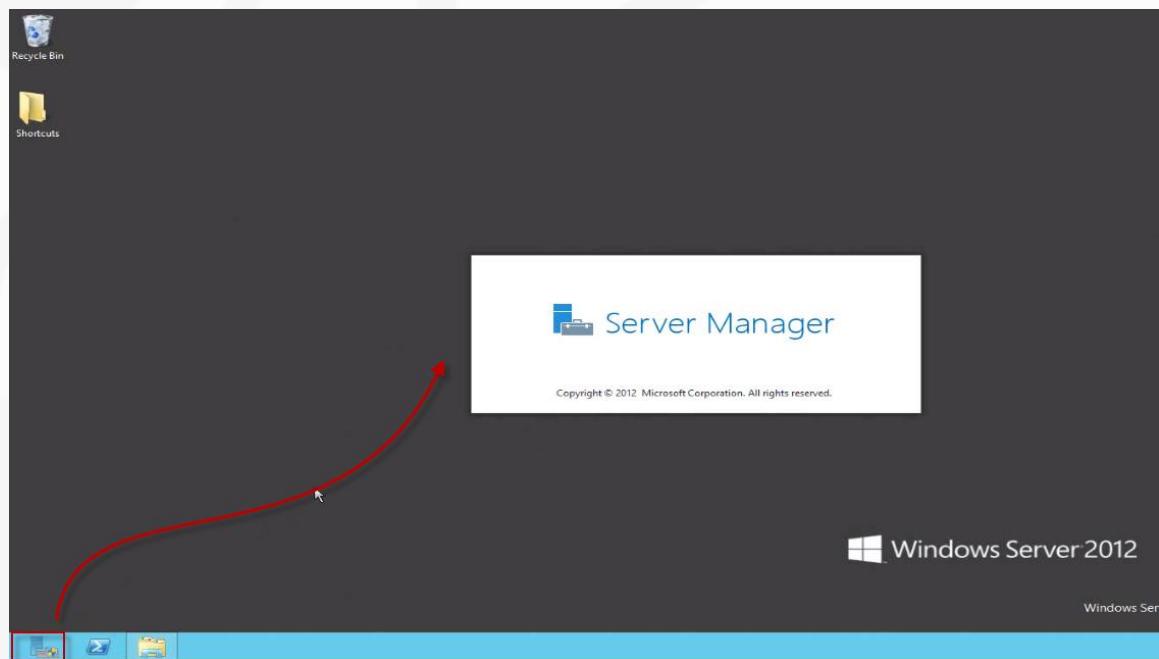


Watch the
Video

www.youtube.com/watch?v=A77bdQDe1OA

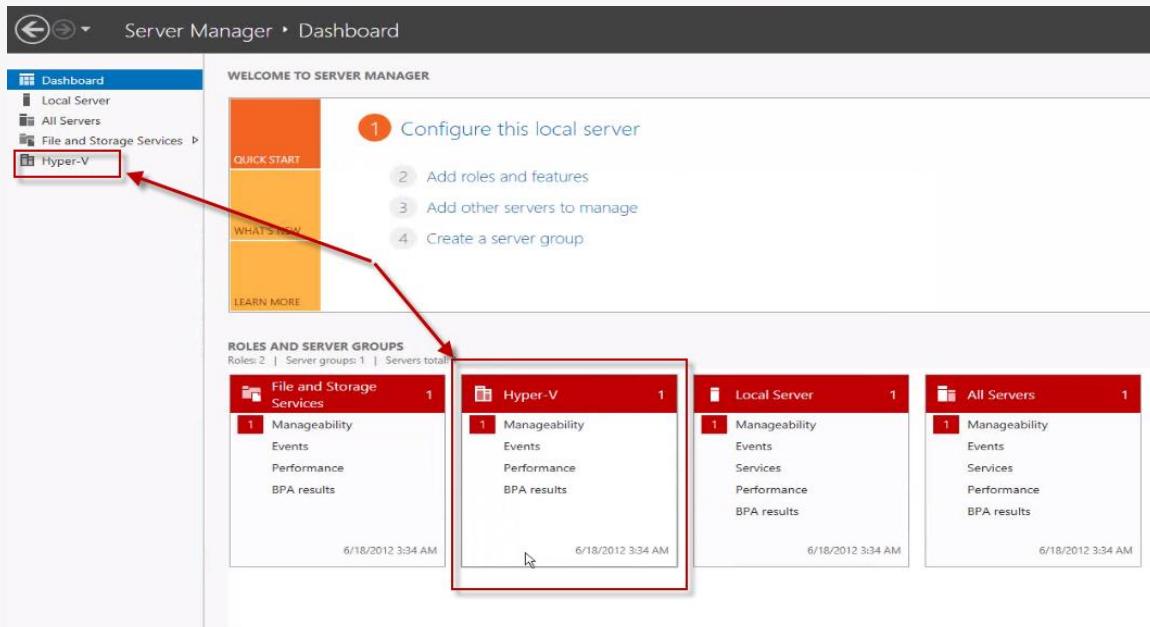
5.1 Creating the TFS Virtual Machine

Click the Server Manager Icon to launch the “**Server Manager**”.



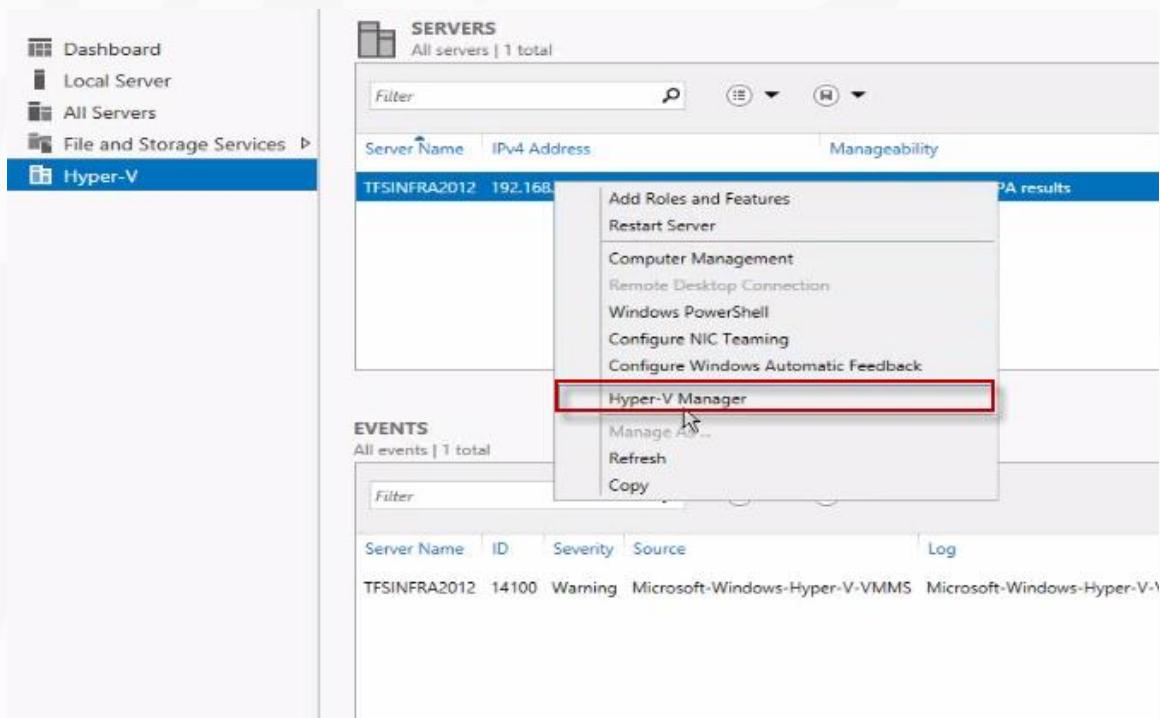
Chapter 5: Creating & Preparing the Team Foundation Server Virtual Machine

Click the “Hyper-V” section or tile.



The screenshot shows the Server Manager Dashboard. On the left navigation bar, the "Hyper-V" option is highlighted with a red box and has a red arrow pointing to it from the text above. In the center, there's a "WELCOME TO SERVER MANAGER" area with a "QUICK START" section containing four numbered steps: 1. Configure this local server, 2. Add roles and features, 3. Add other servers to manage, and 4. Create a server group. Below this is a "ROLES AND SERVER GROUPS" section. A red box highlights the "Hyper-V" tile, which contains four items: Manageability, Events, Performance, and BPA results. To the right of the "Hyper-V" tile are three other tiles: "File and Storage Services" (1 item), "Local Server" (1 item), and "All Servers" (1 item). Each tile lists four items: Manageability, Events, Services, and BPA results. The date "6/18/2012 3:34 AM" is visible at the bottom of each tile.

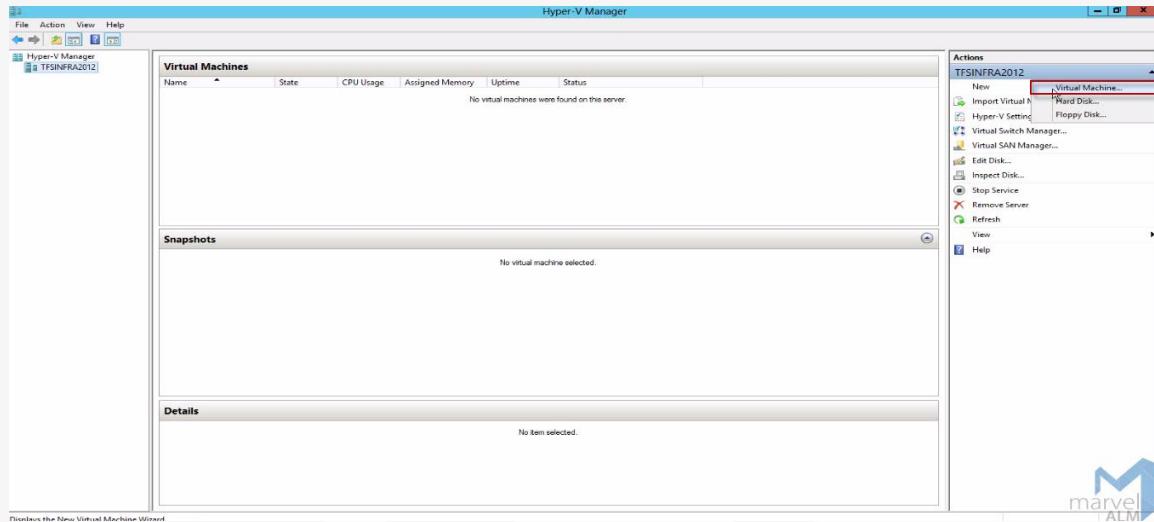
Right-click the Hyper-V host name “*TFSINFRA2012*” then click “**Hyper-V Manager**”.



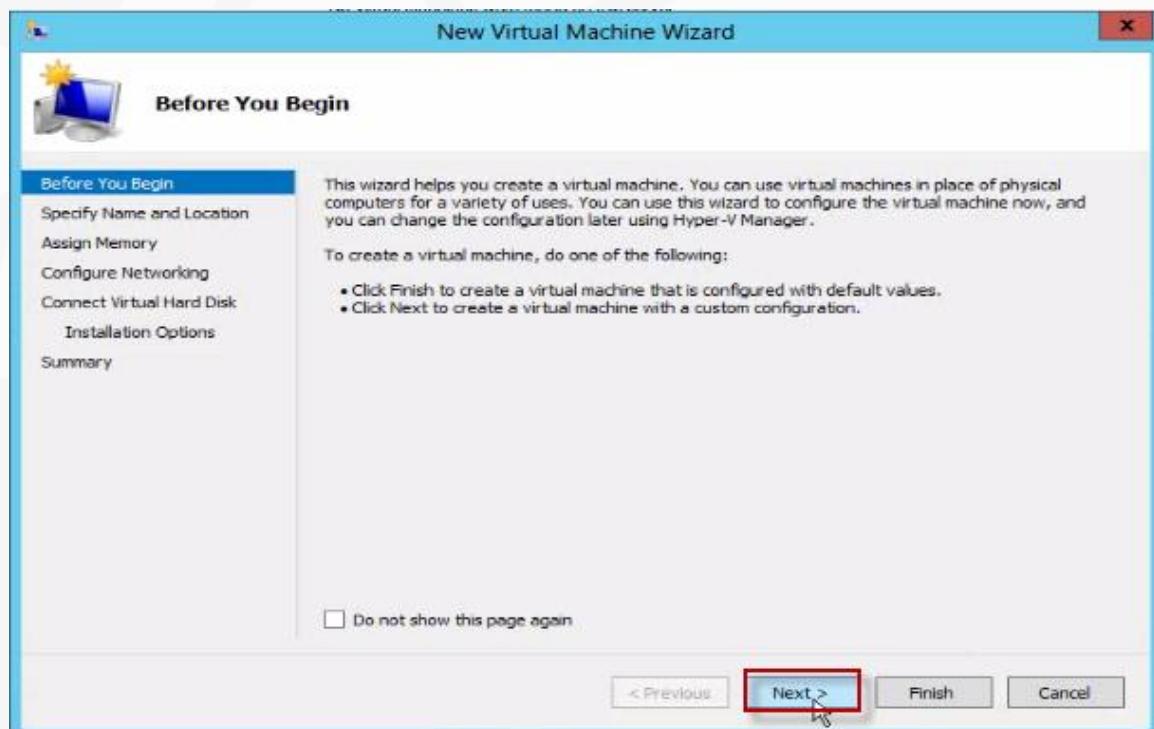
The screenshot shows the "SERVERS" section of the Server Manager. The left navigation bar has the "Hyper-V" option highlighted with a red box and has a red arrow pointing to it from the text above. The main area displays a table of servers. The first row, "TFSINFRA2012" with IP "192.168.1.12", has a context menu open over it. The menu items are: Add Roles and Features, Restart Server, Computer Management, Remote Desktop Connection, Windows PowerShell, Configure NIC Teaming, Configure Windows Automatic Feedback, and Hyper-V Manager. The "Hyper-V Manager" option is highlighted with a red box. Below the table is an "EVENTS" section with one event listed. At the bottom, there's a log entry: "TFSINFRA2012 14100 Warning Microsoft-Windows-Hyper-V-VMMS Microsoft-Windows-Hyper-V-1".

Chapter 5: Creating & Preparing the Team Foundation Server Virtual Machine

From the Hyper-V Manager console, click “**New**” then click “**Virtual Machine**”.

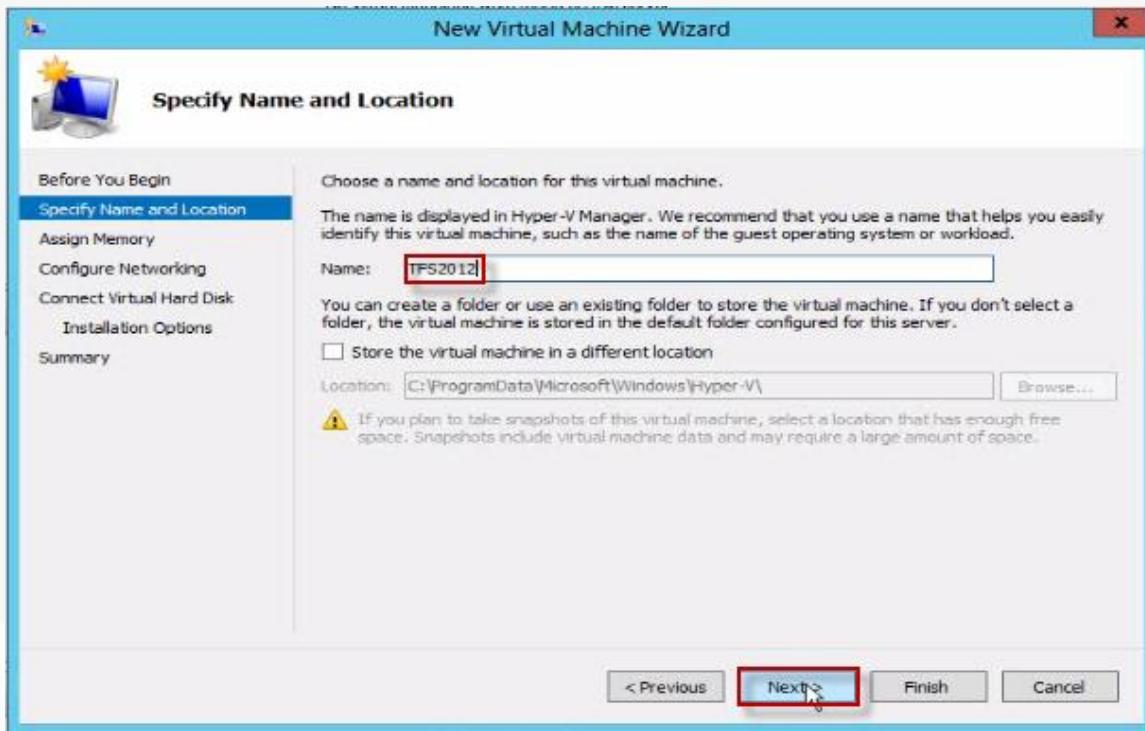


The “**New Virtual Machine Wizard**” launches, from the “**Before You Begin**” page, click “**Next**”.



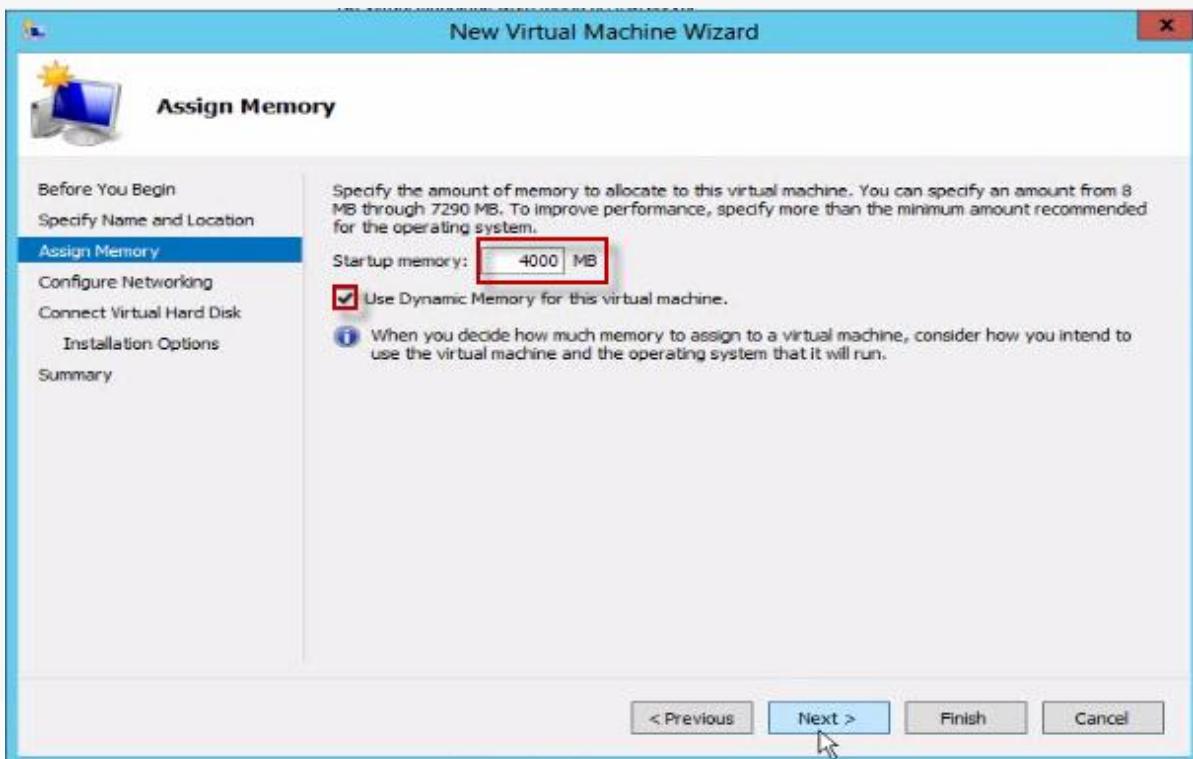
Chapter 5: Creating & Preparing the Team Foundation Server Virtual Machine

From the “Specify Name and Location” page, “TFS2012” for the Virtual Machine “Name” then click “Next”

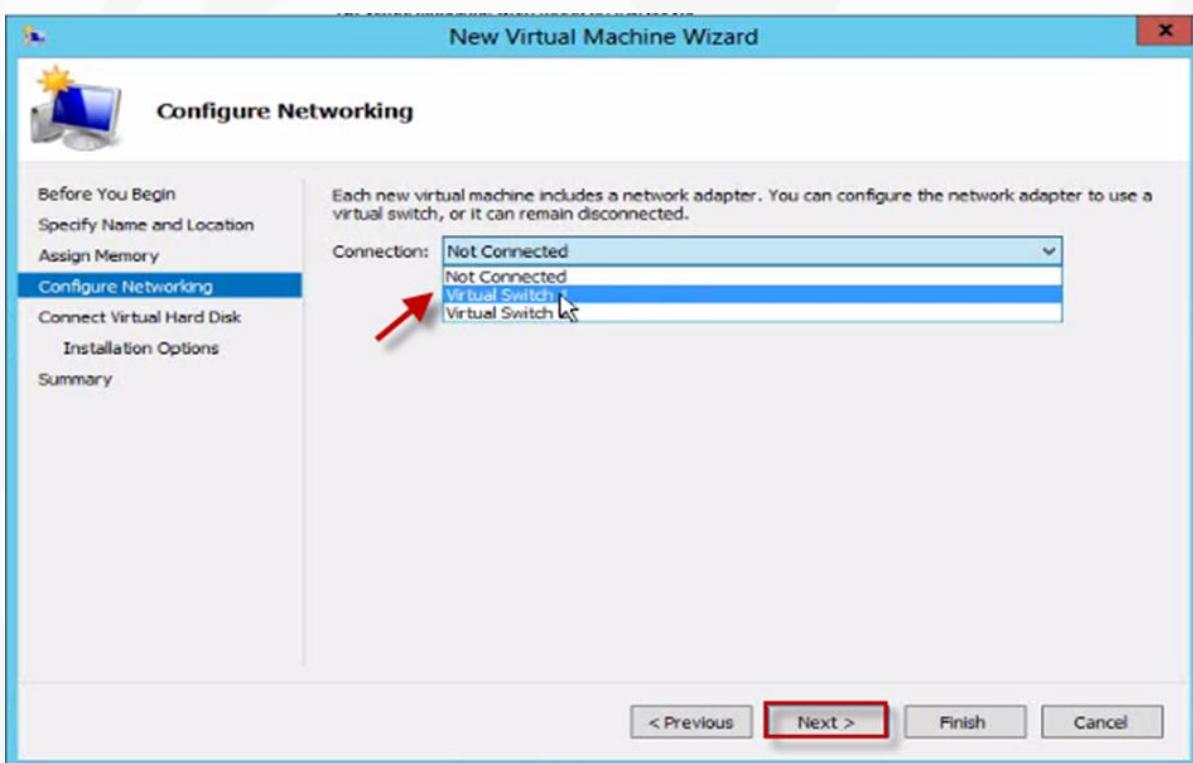


For the “Startup memory”, enter “4000 MB”; this is basically the minimum amount of memory that will be allocated to the Virtual Machine, select the “Use Dynamic Memory for this virtual machine” option then click “Next”.

NOTE: The default scenario in this guide is a Single Server Installation, which means that you will be installing all the components (Database Engine, Analysis Services, Reporting Services, SharePoint Server, and Team Foundation Server) on one machine. For this machine to perform well in a production environment, it needs at least 10 GB of RAM. In the previous step, we allocated the machine 4 GB of RAM which is good enough for a demo environment but will cause a warning when installing and configuring Team Foundation Server.

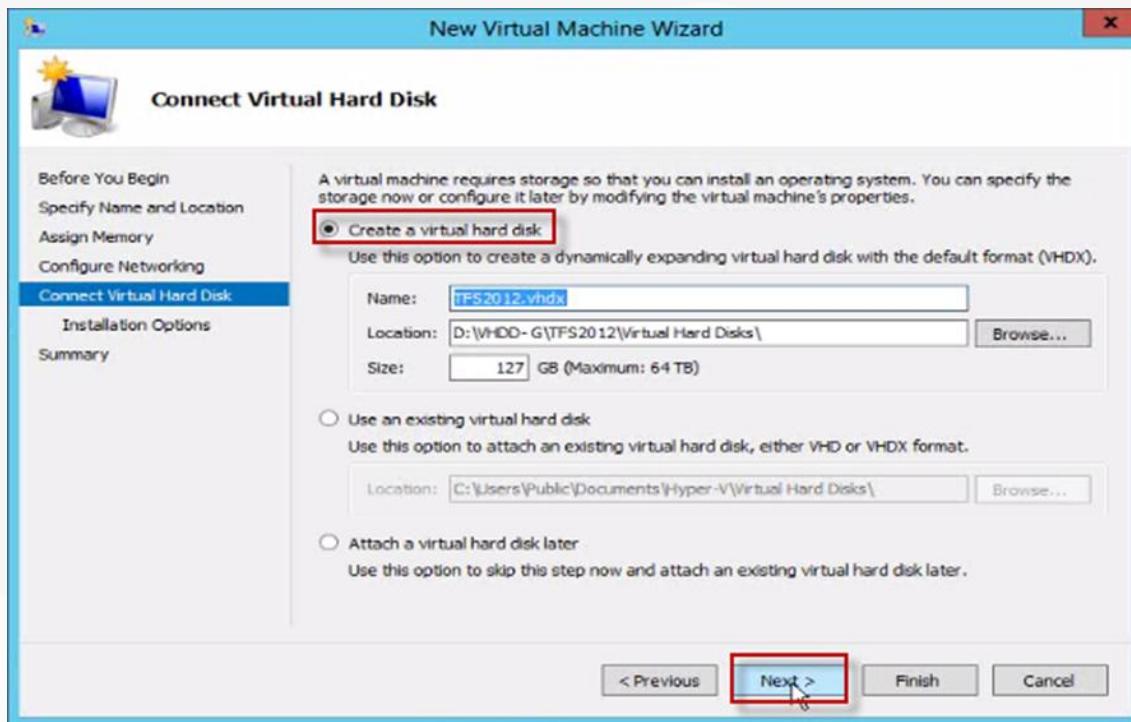


From the “Configure Networking” page, select the virtual switch that you created earlier then click “Next”.

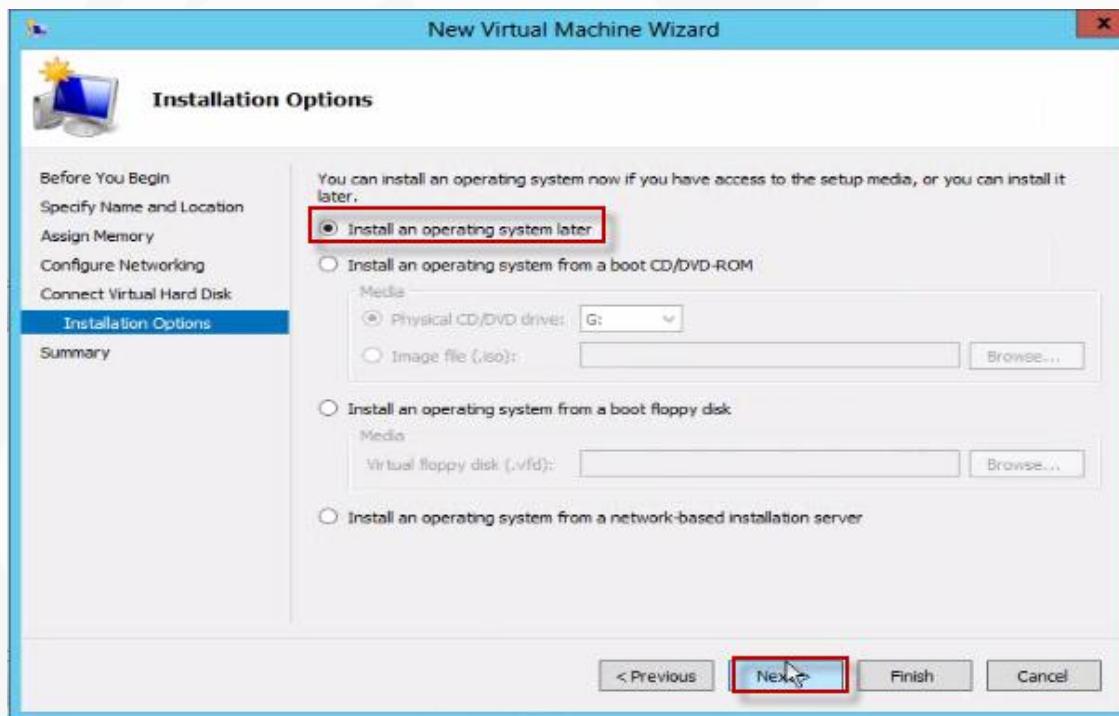


Chapter 5: Creating & Preparing the Team Foundation Server Virtual Machine

From the “Connect Virtual Hard Disk” page, select the “Create a virtual hard disk” option, accept all the defaults then click “Next”.

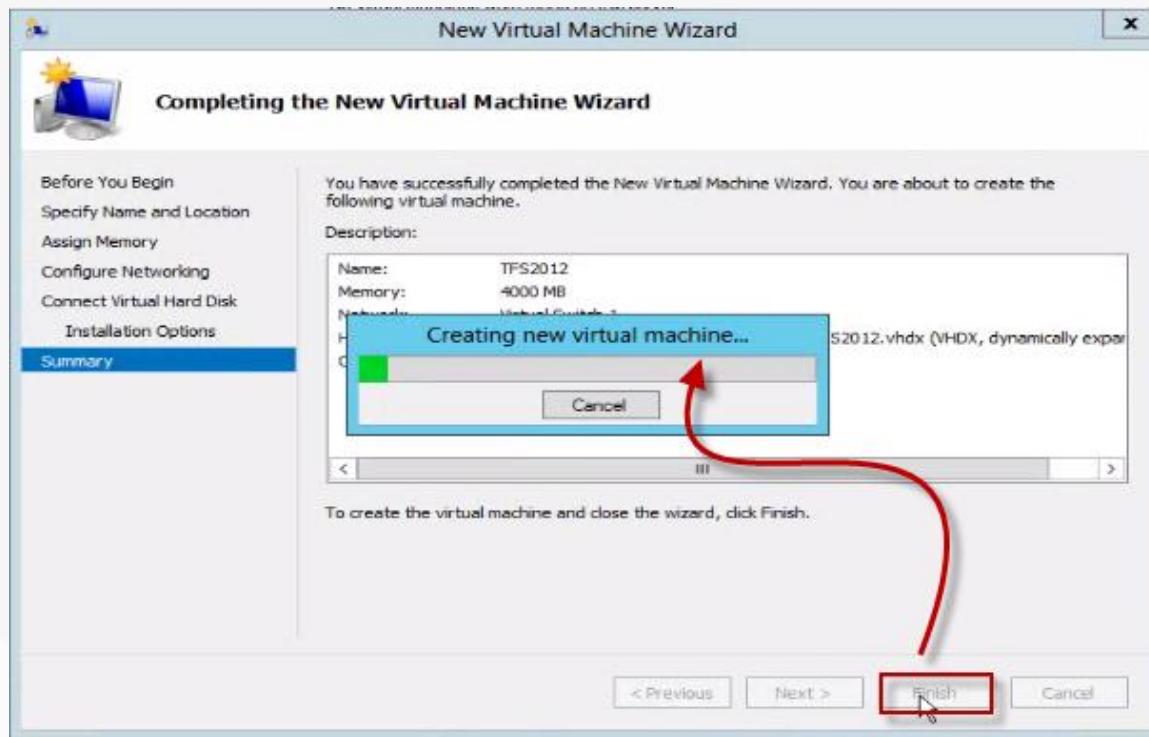


From the “Installation Options” page, select the “Install an operating system later” option then click “Next”.

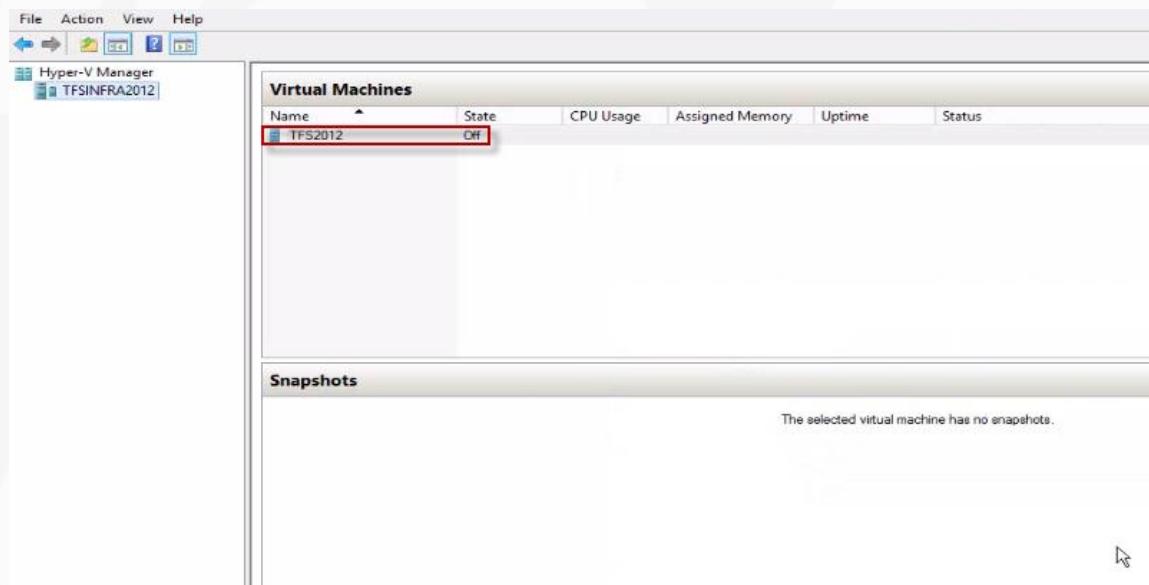


Chapter 5: Creating & Preparing the Team Foundation Server Virtual Machine

From the “**Summary**” page, click “**Finish**” to start the Virtual Machine creation process .



The “TFS2012” Virtual Machine is listed in Hyper-V Manager Console once the creation process finishes.



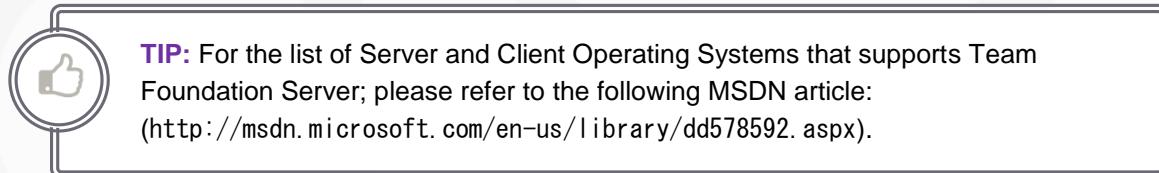
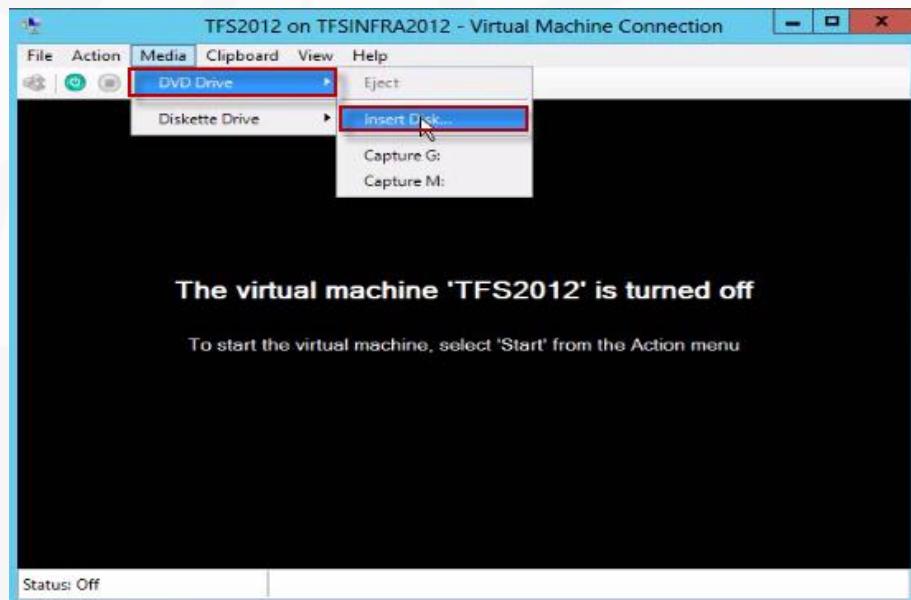
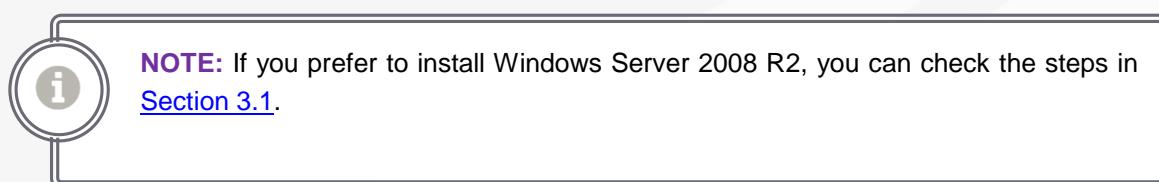
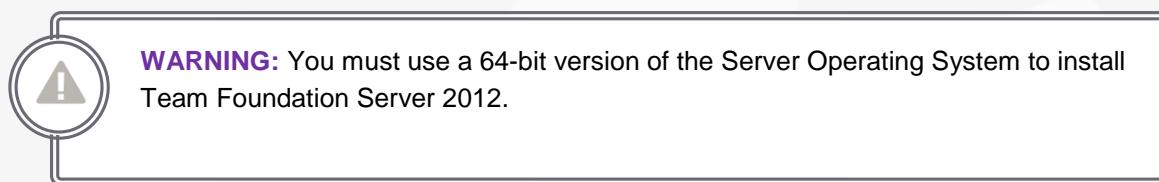


Watch the
Video

www.youtube.com/watch?v=2G4cqG9RzvI

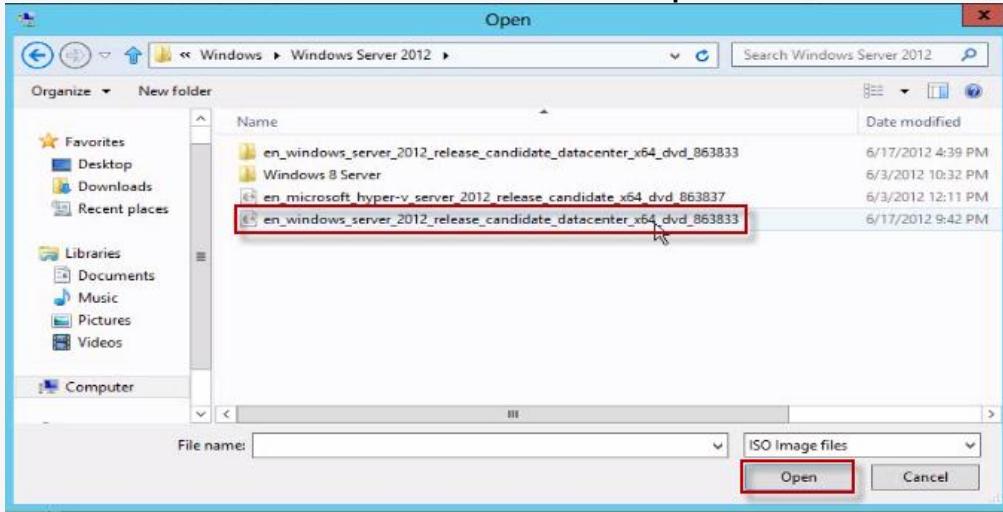
5.2 Installing Windows Server 2012

From the Hyper-V Manager console, double-click the “TFS2012” Virtual Machine then click “Media” from the top menu bar and choose “DVD Drive” then choose “Insert Disk” and then browse to the folder where you are storing Windows Server 2012 ISO image.

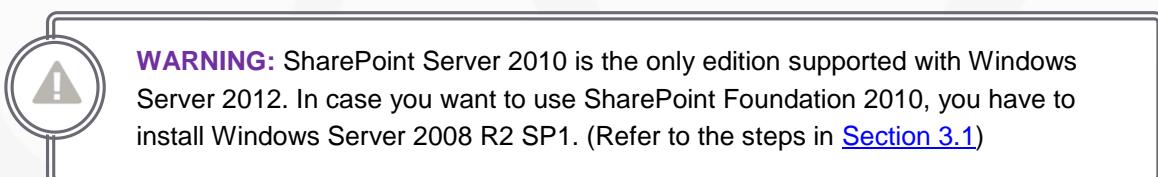
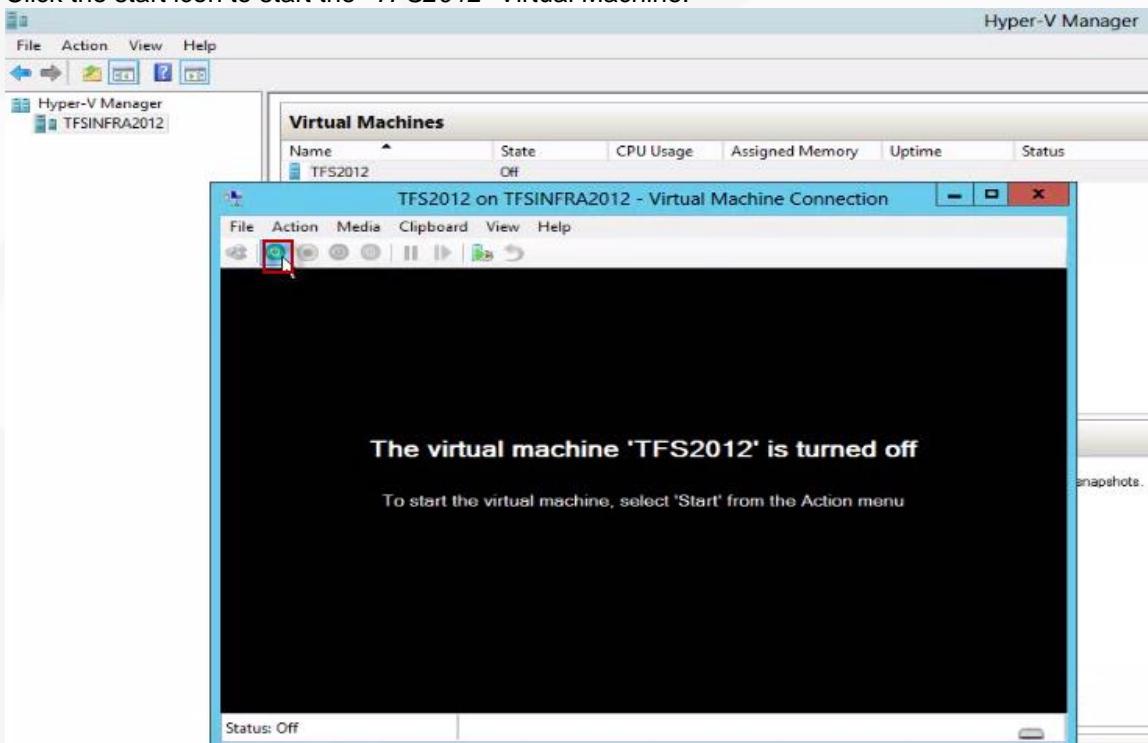


Chapter 5: Creating & Preparing the Team Foundation Server Virtual Machine

Select the ISO file of Windows Server 2012 then click “Open”.

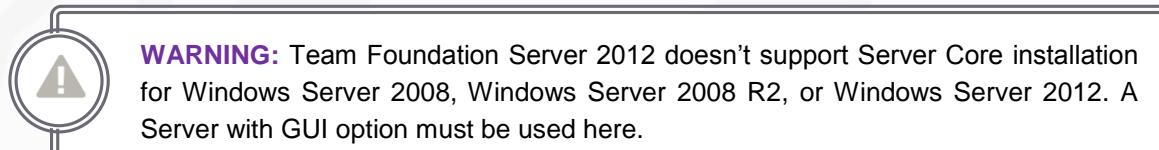
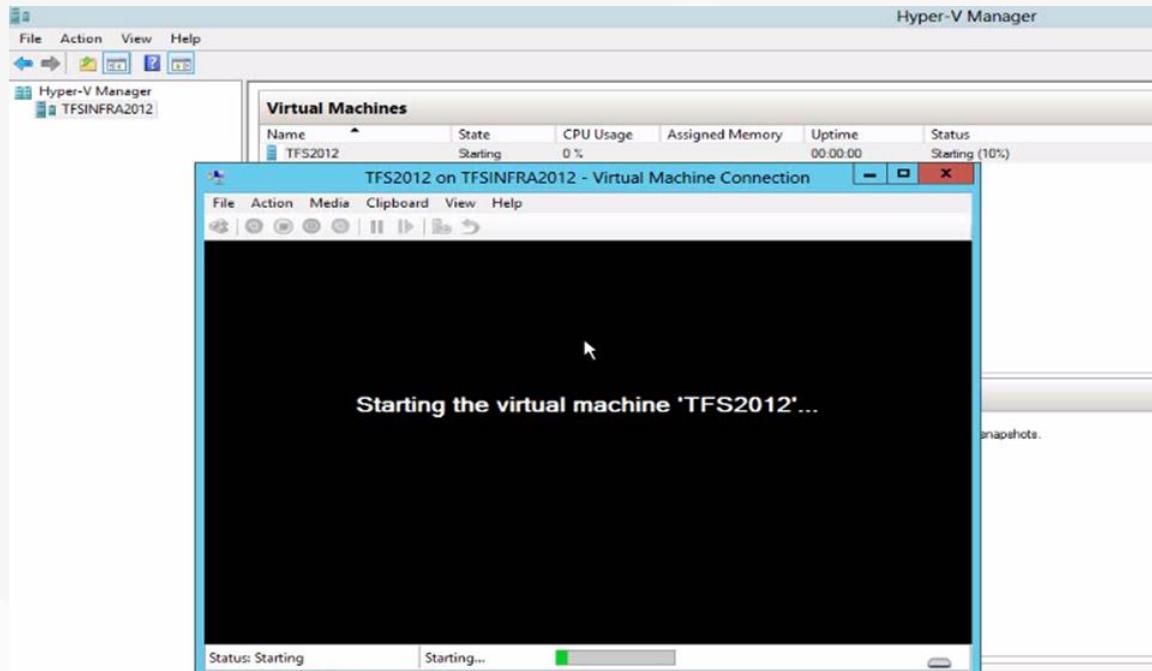


Click the start icon to start the “TFS2012” Virtual Machine.



Chapter 5: Creating & Preparing the Team Foundation Server Virtual Machine

The Virtual Machine starts and the Widows installation process starts, please follow all the steps in [Section 4.1](#) for fully installing and configuring Windows Server 2012 as well as joining the Active Directory Domain.



Chapter 5: Creating & Preparing the Team Foundation Server Virtual Machine



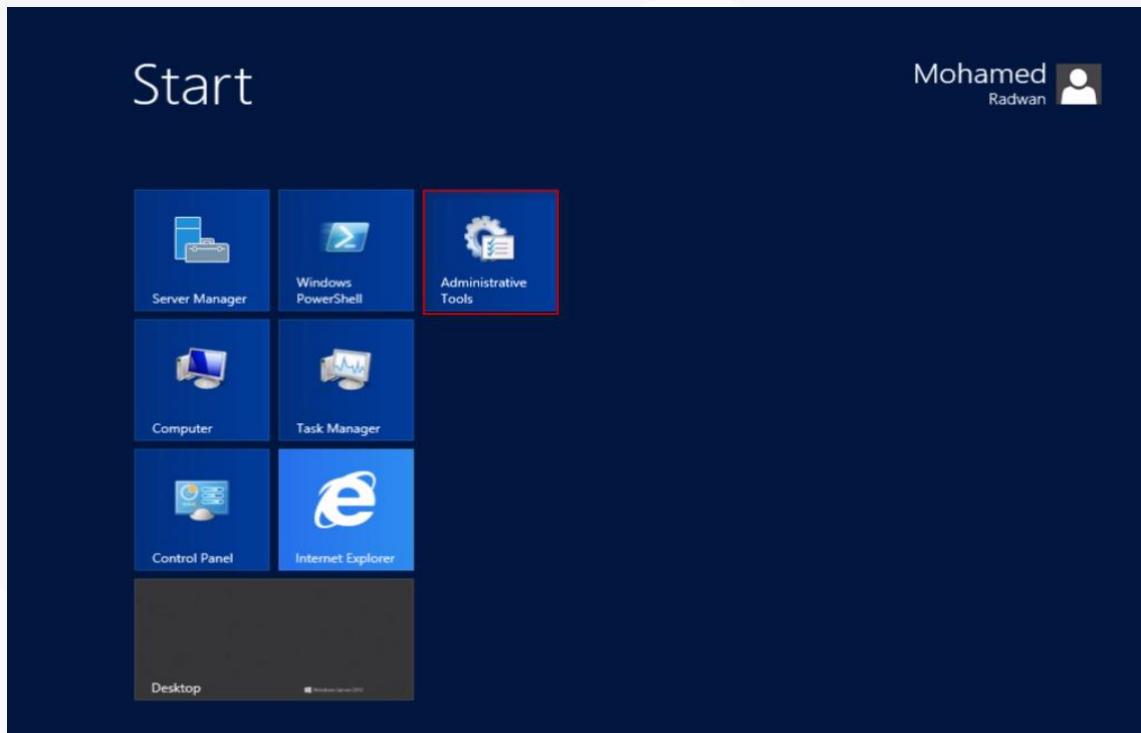
Watch the

Video

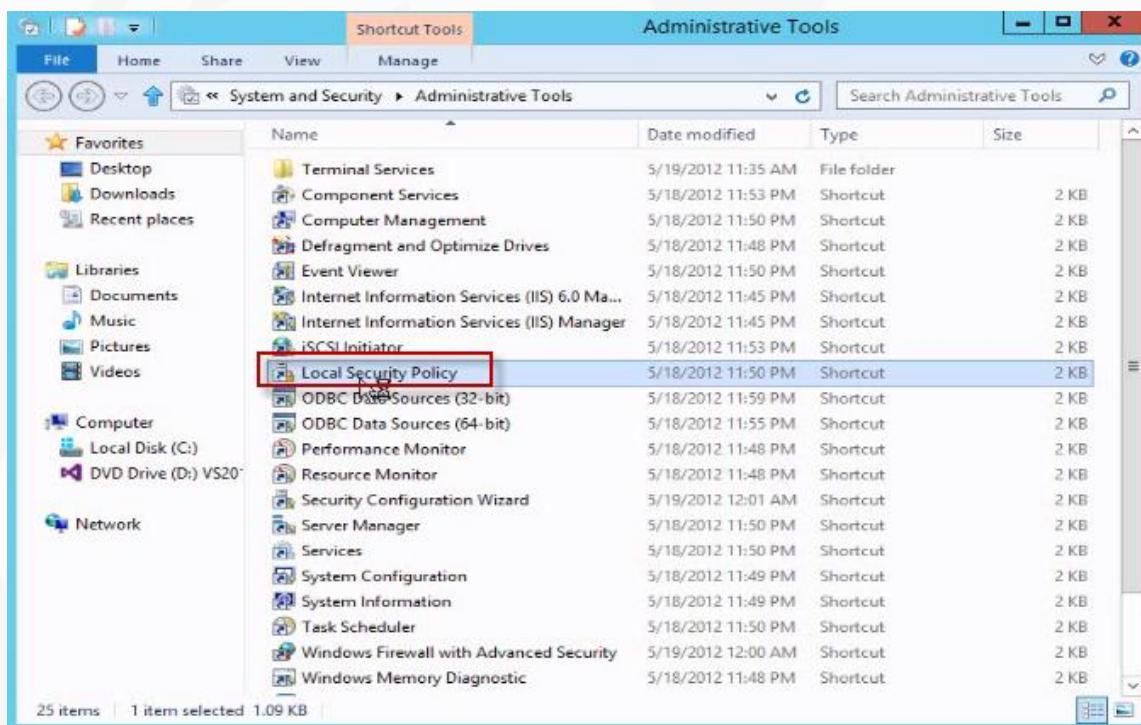
www.youtu.be/TloAewSBec8

5.3 Configuring the Local Policies

Launch the “Administrative Tools” from Windows Server 2012 desktop.



Double-click “Local Security Policy”.



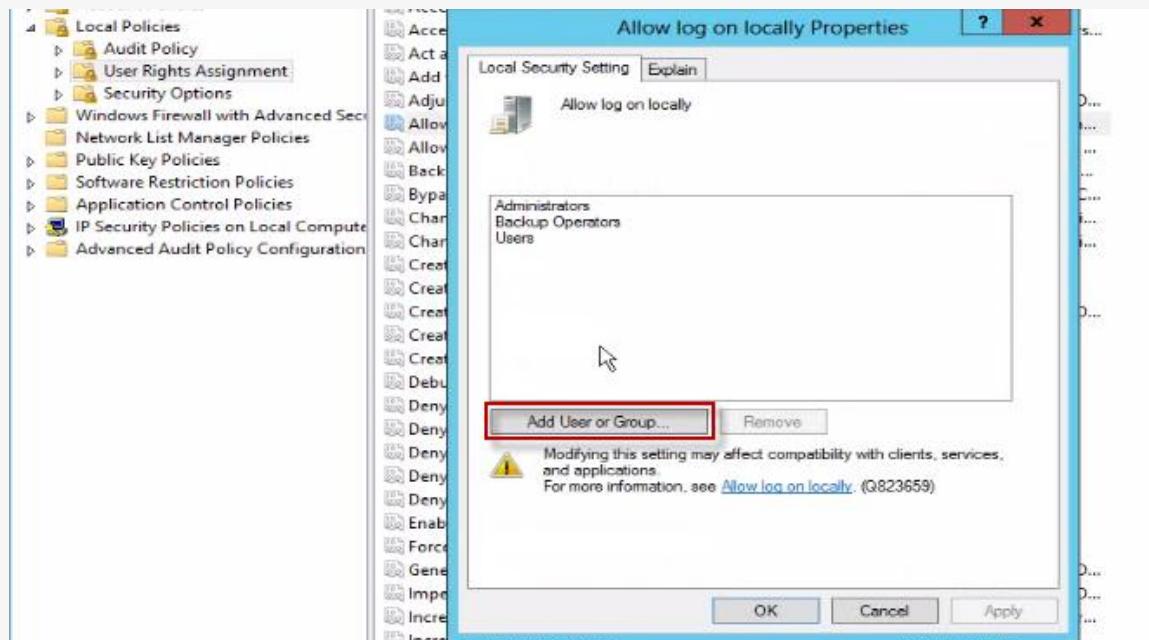


TIP: You can launch the “Local Security Policy” directly from the Run command by typing “secpol.msc” and pressing enter.

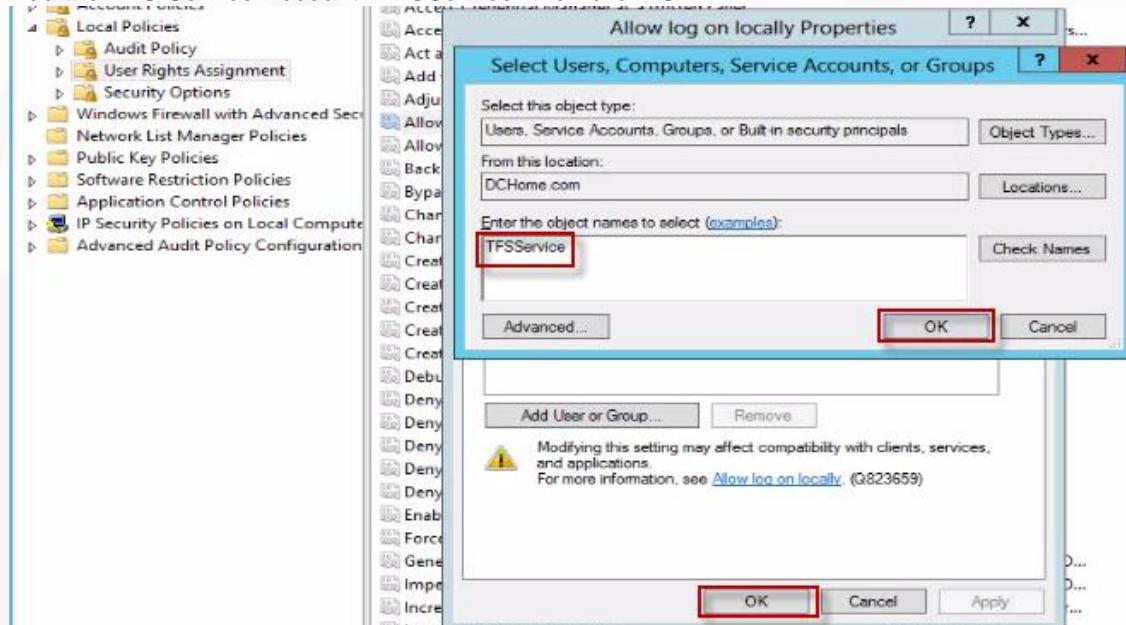
Expand the “**Local Policies**”, click “**User Rights Assignments**” from the left pane then double-click “Allow log on locally”.

Policy	Security Setting
Access Credential Manager as a trusted caller	Everyone,Administrators...
Access this computer from the network	Everyone,Administrators...
Act as part of the operating system	Everyone,Administrators...
Add workstations to domain	Everyone,Administrators...
Adjust memory quotas for a process	Everyone,LOCAL SERVICE,NETWO...
Allow log on locally	Administrators,Users,Bu...
Allow log on through Remote Desktop Services	Administrators,Remote ...
Back up files and directories	Administrators,Backup ...
Bypass traverse checking	Everyone,LOCAL SERVIC...
Change the system time	LOCAL SERVICE,Admini...
Change the time zone	LOCAL SERVICE,Admini...
Create a pagefile	Administrators
Create a token object	Administrators
Create global objects	LOCAL SERVICE,NETWO...
Create permanent shared objects	Administrators
Create symbolic links	Administrators
Debug programs	Administrators
Deny access to this computer from the network	Administrators
Deny log on as a batch job	LOCAL SERVICE,NETWO...
Deny log on as a service	LOCAL SERVICE,NETWO...
Deny log on locally	Users,Window Manager...
Deny log on through Remote Desktop Services	Administrators
Enable computer and user accounts to be trusted for delega...	Administrators
Force shutdown from a remote system	LOCAL SERVICE,NETWO...
Generate security audits	LOCAL SERVICE,NETWO...
Impersonate a client after authentication	Users,Window Manager...
Increase a process working set	Administrators
Increase scheduling priority	Administrators
Load and unload device drivers	Administrators

Click “Add user or Group”.



Add the TFS Service Account “*TFSService*” then click “OK”.



Part 3 - Installing and Configuring Team Foundation Server Pre-requisites

This part walks you through installing and configuring all the pre-requisite software and services for your Team Foundation Server 2012 environment.

You will start by installing SQL Server 2012 with all the needed Services in [Chapter 6](#), SharePoint Server 2010 in [Chapter 7](#) then you will configure SharePoint 2010 for Dashboard Compatibility in [Chapter 8](#).

Chapter 6: Installing & Configuring SQL Server 2012

In this Chapter you will install SQL Server 2012 Standard edition on the TFS Virtual Machine that you previously created in [Section 5.1](#), this will act as a backend for both SharePoint Server 2010 and Team Foundation Server 2012.

If you have an existing SQL Server deployment that you want to reuse or connect to, please refer to [Appendix F](#) to make sure that it's ready for Team Foundation Server 2012.

All SQL Server Services (Database Engine, Analysis Services, Reporting Services, etc...) will be installed on the TFS Virtual Machine. However, if you need to create another topology (e.g. separate some services from the database engine on another machine), please follow along while paying attention to all the “Note” and “Warning” boxes provided inside this chapter. These boxes might lead you to some appendices either to verify your existing SQL Server installation or to do some extra configurations.

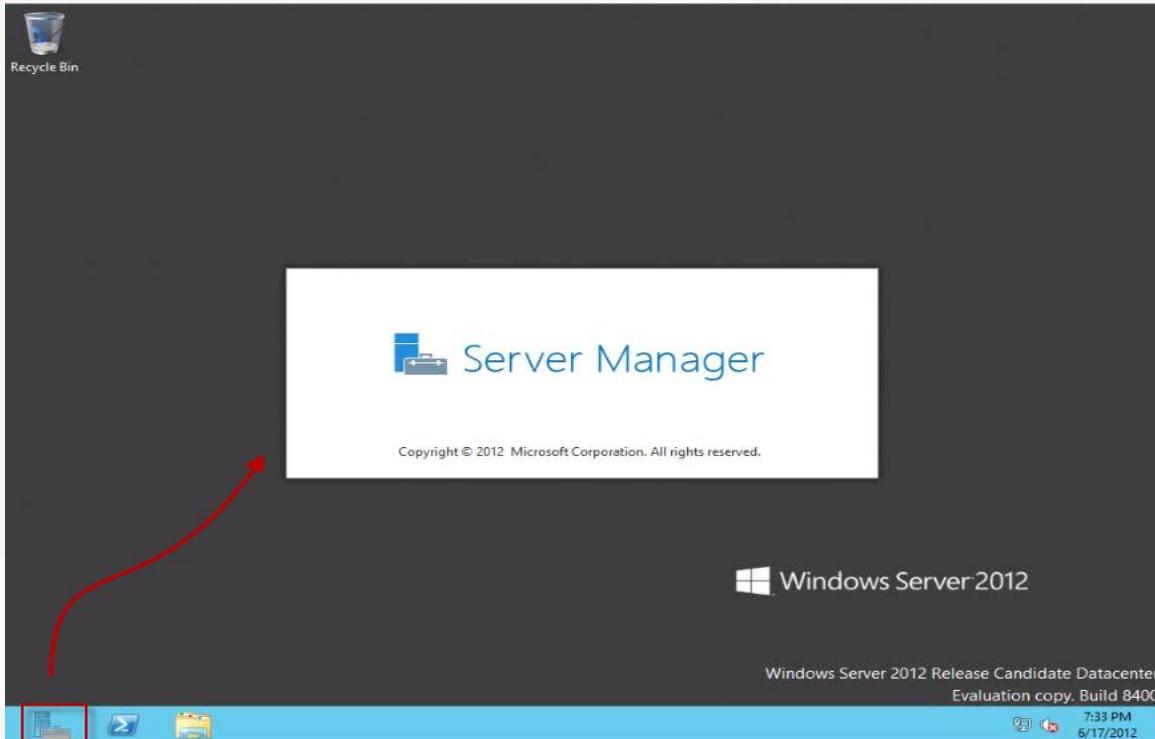


6.1 Adding .NET 3.5 Windows Feature

Watch the
Video

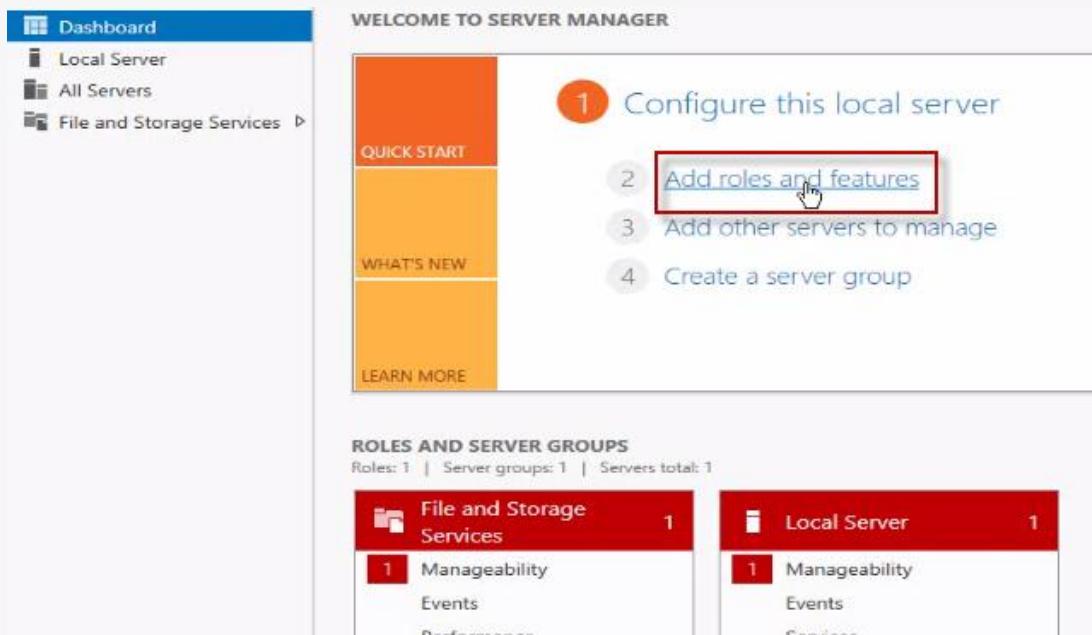
www.youtube.com/watch?v=0_X7zp1XtuY

Click the Server Manager Icon to launch the “**Server Manager**”.

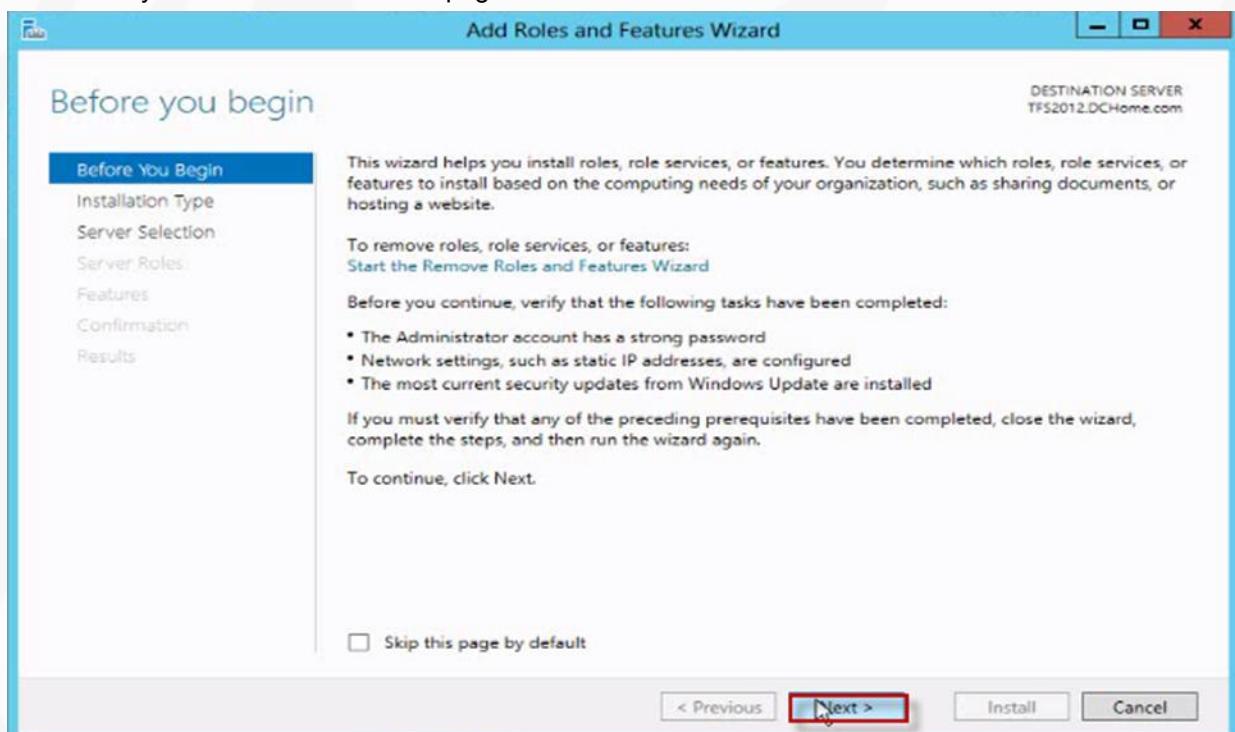


 **NOTE:** If you are working with Windows Server 2008 R2 and not Windows Server 2012, you can refer to [Appendix B](#) for the steps needed to add .NET 3.5 Windows Feature to Windows Server 2008 R2.

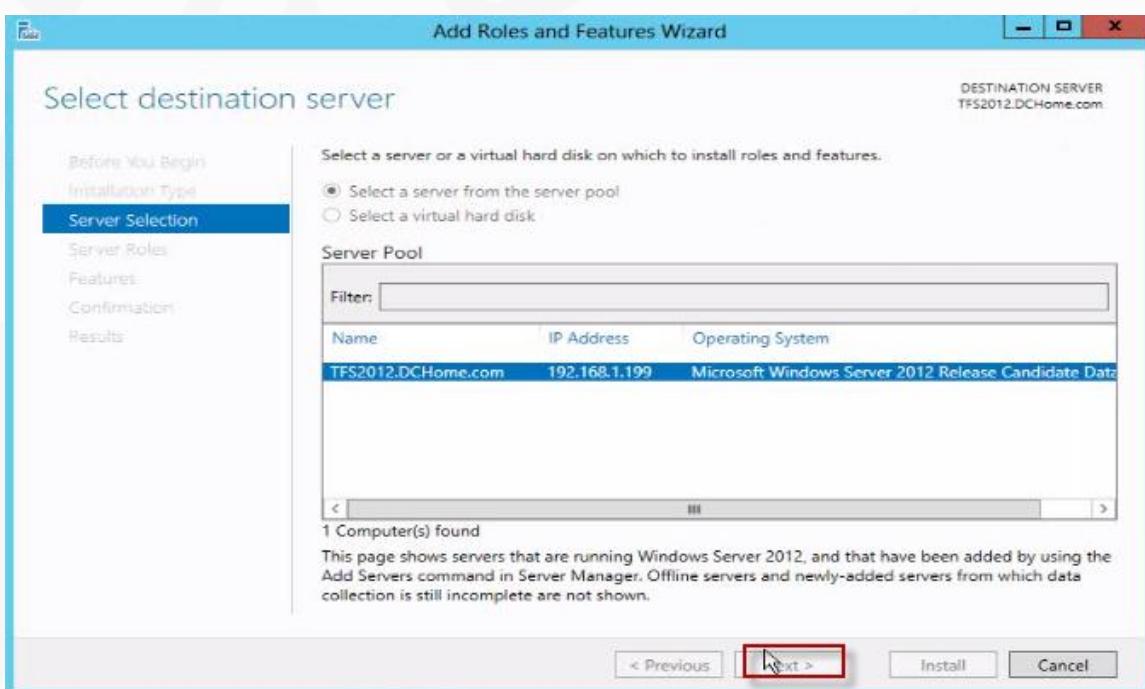
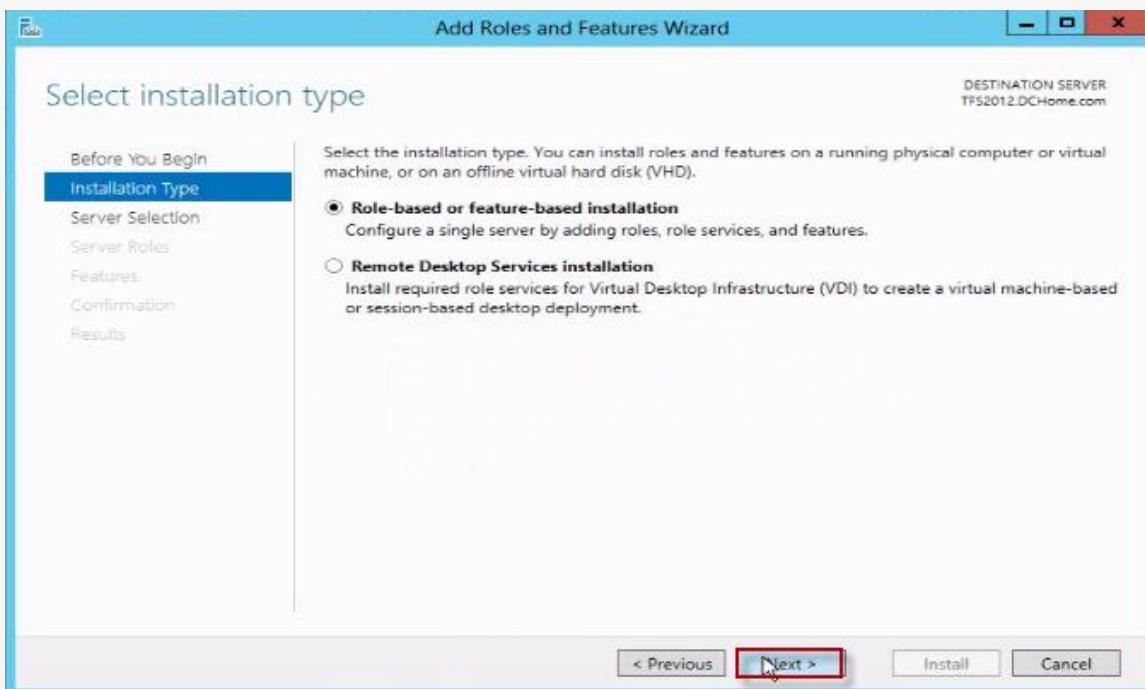
Click “Add roles and features”.

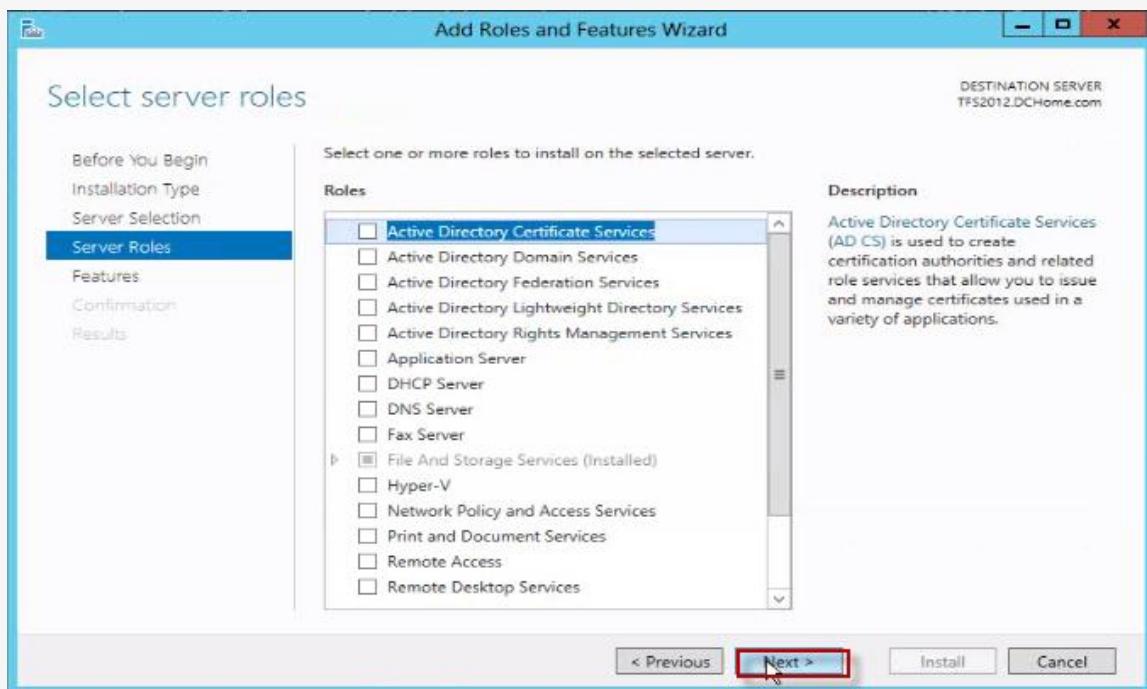


The “Add Roles and Feature Wizard” starts, click “Next” four times while accepting all the defaults till you reach the “Features” page.

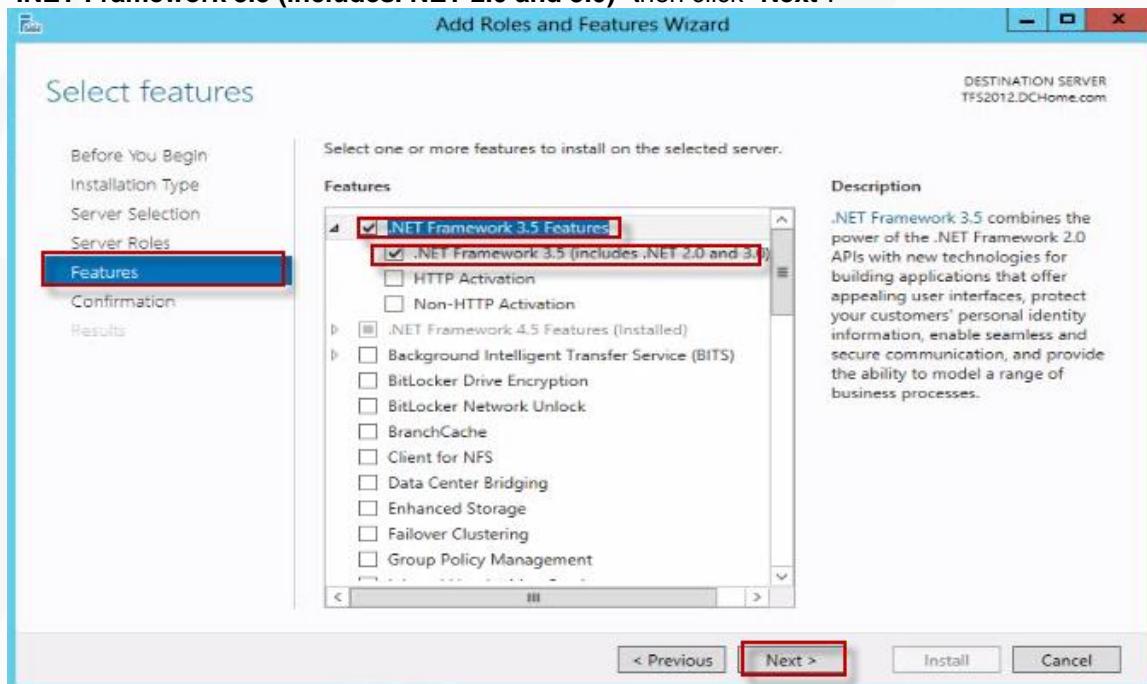


Chapter 6: Installing & Configuring SQL Server 2012

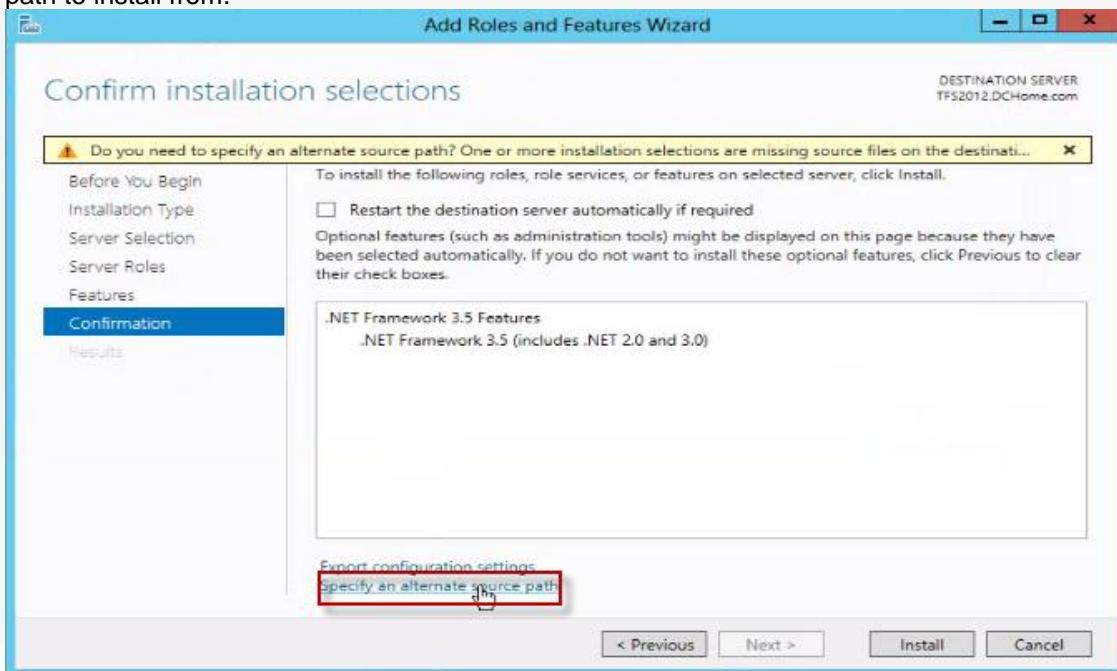




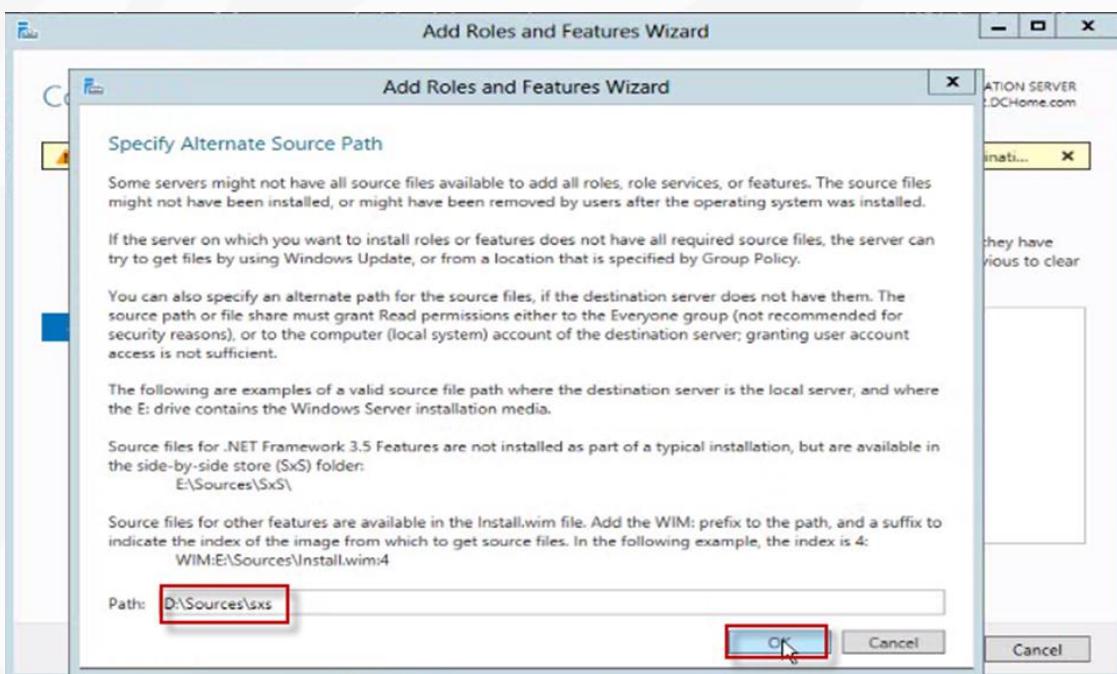
From the “Features” page, select “.NET Framework 3.5 Features” as well as the sub feature “.NET Framework 3.5 (includes .NET 2.0 and 3.0)” then click “Next”.



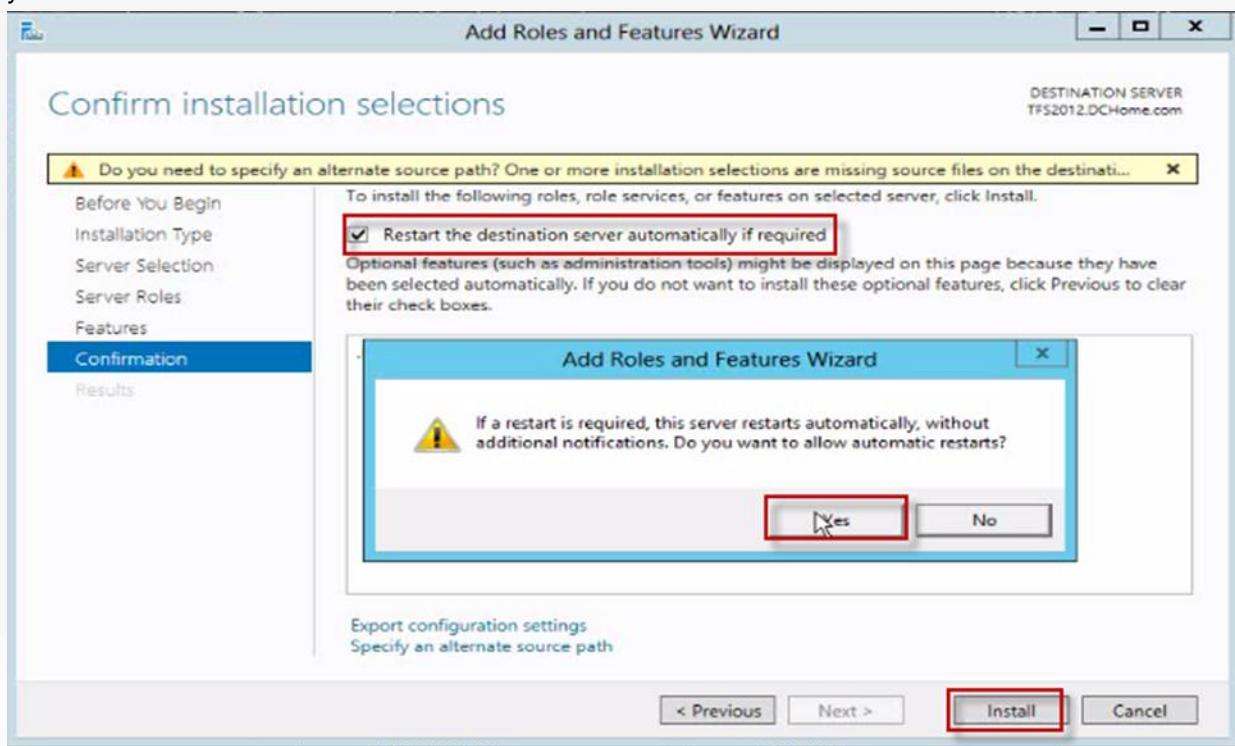
From the “**Confirmation**” section, click “**Specify an alternate source path**” to specify a local path to install from.



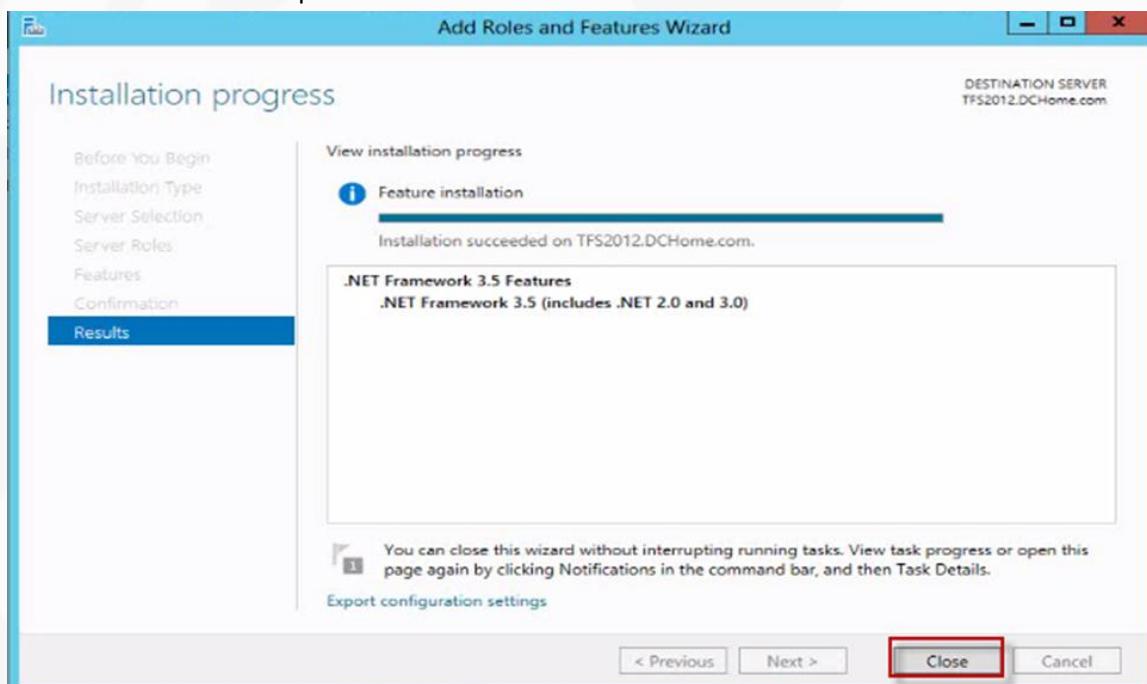
For the “**Path**”, enter the drive letter of your Windows Server 2012 media then append “**\Sources\sxs**” to it and then click “**OK**”.



Select “Restart the destination server automatically if required” then click “Yes” to confirm your selection and then click “Install”.



After the installation completes click “Close”.




 Watch the
Video

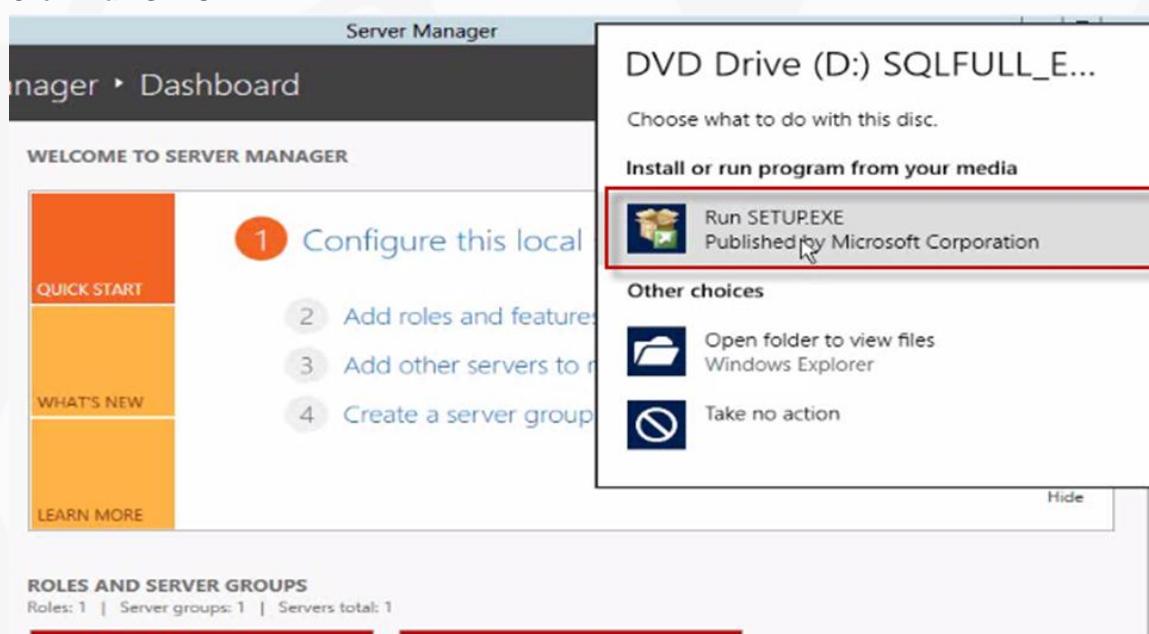
www.youtube.com/watch?v=QWRO_5zh_kk

6.2 Installing SQL Server 2012

From the Hyper-V Manager console, double-click the “TFS2012” Virtual Machine then click “Media” from the top menu bar and choose “DVD Drive” then choose “Insert Disk” and then browse to the folder where you are storing SQL Server 2012 ISO image. A blue window pops up, click it.



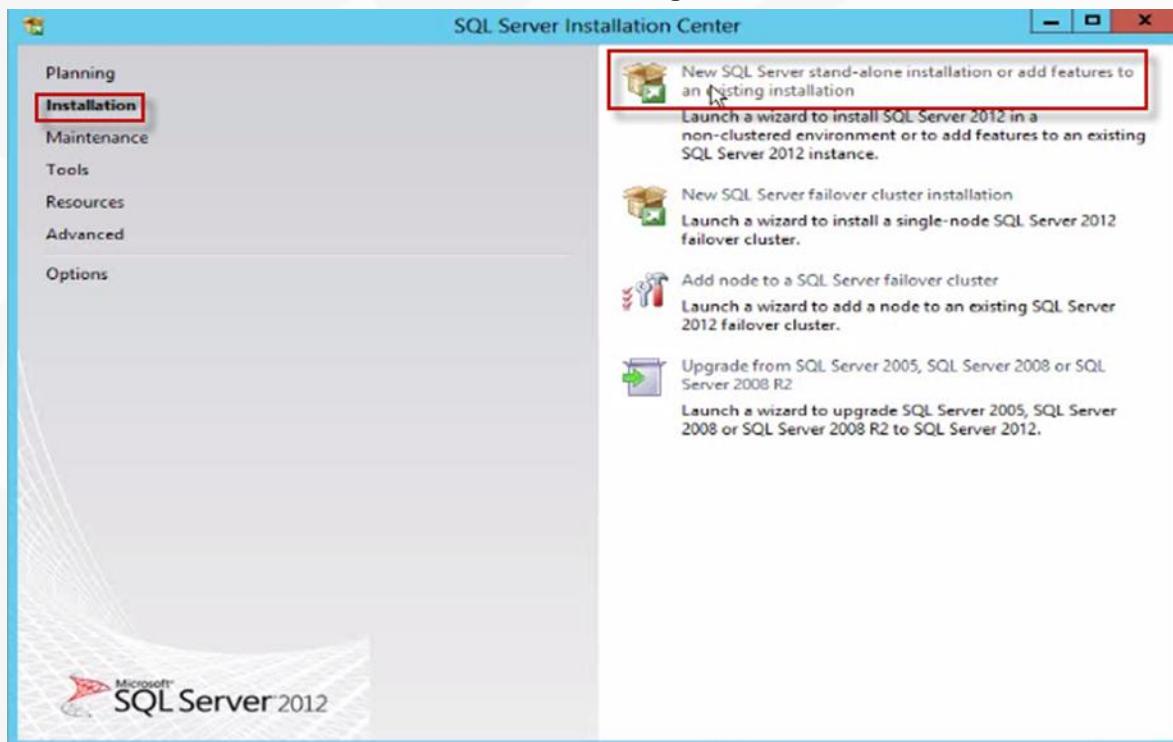
Click “Run SETUP.EXE”.



If the “User Account Control” dialog box pops up, click “Yes”.

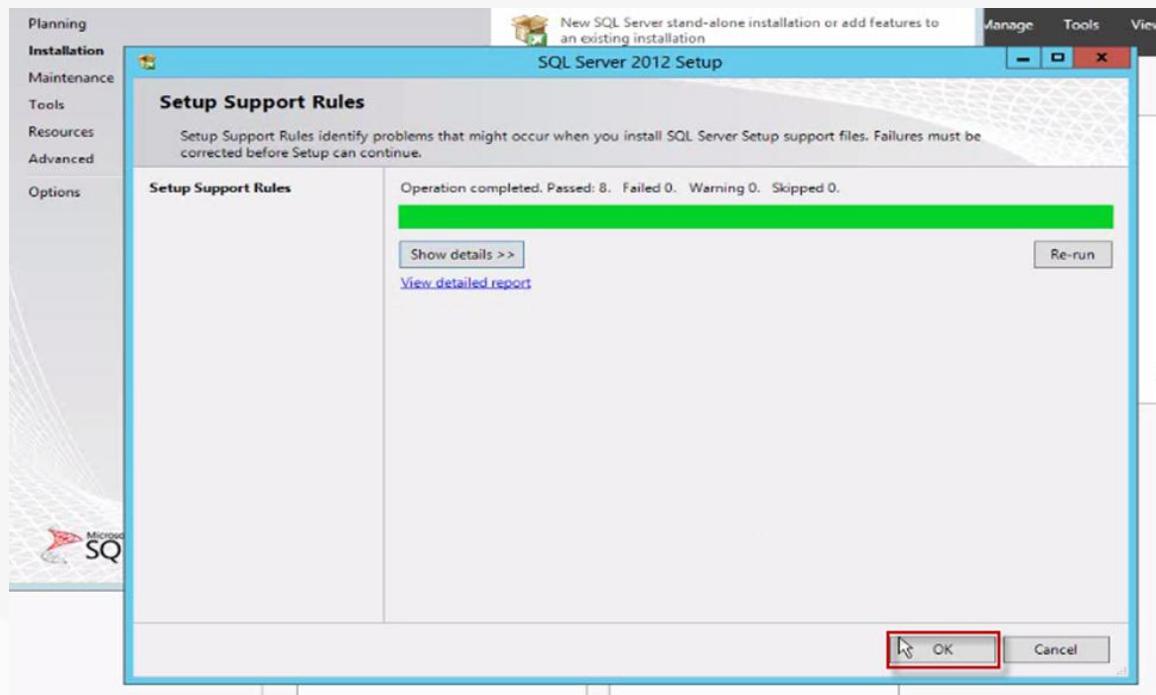


From the “SQL Server Installation Center”, click “Installation” then click “New SQL Server stand-alone installation or add features to an existing installation”.

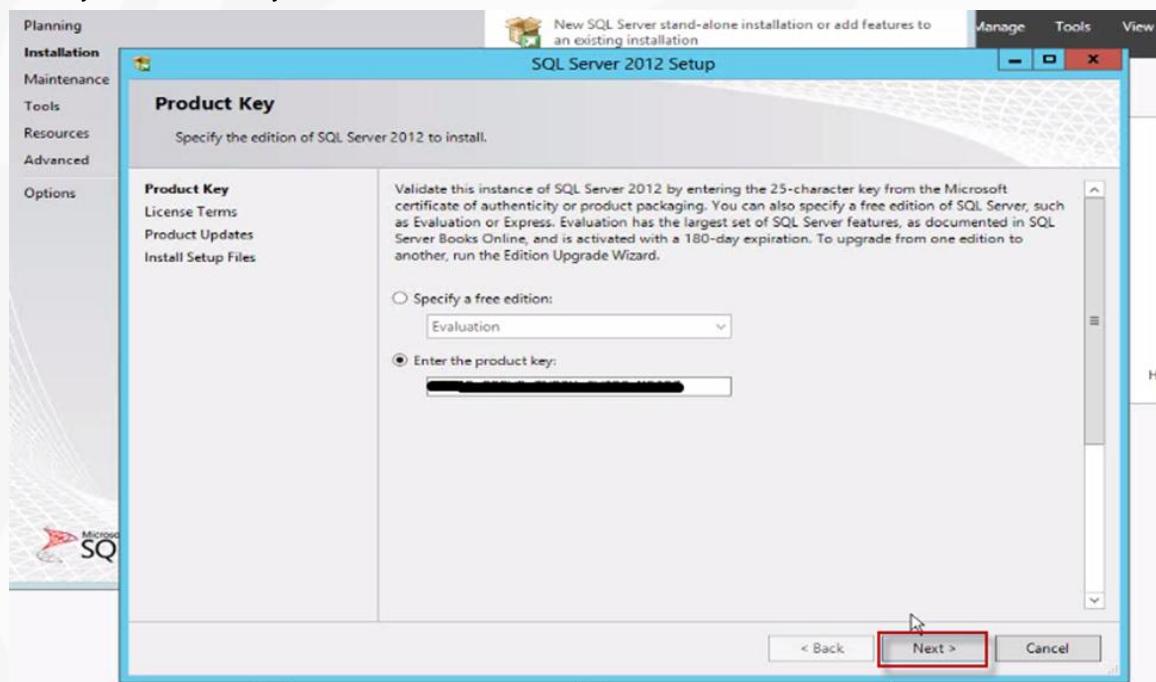


Chapter 6: Installing & Configuring SQL Server 2012

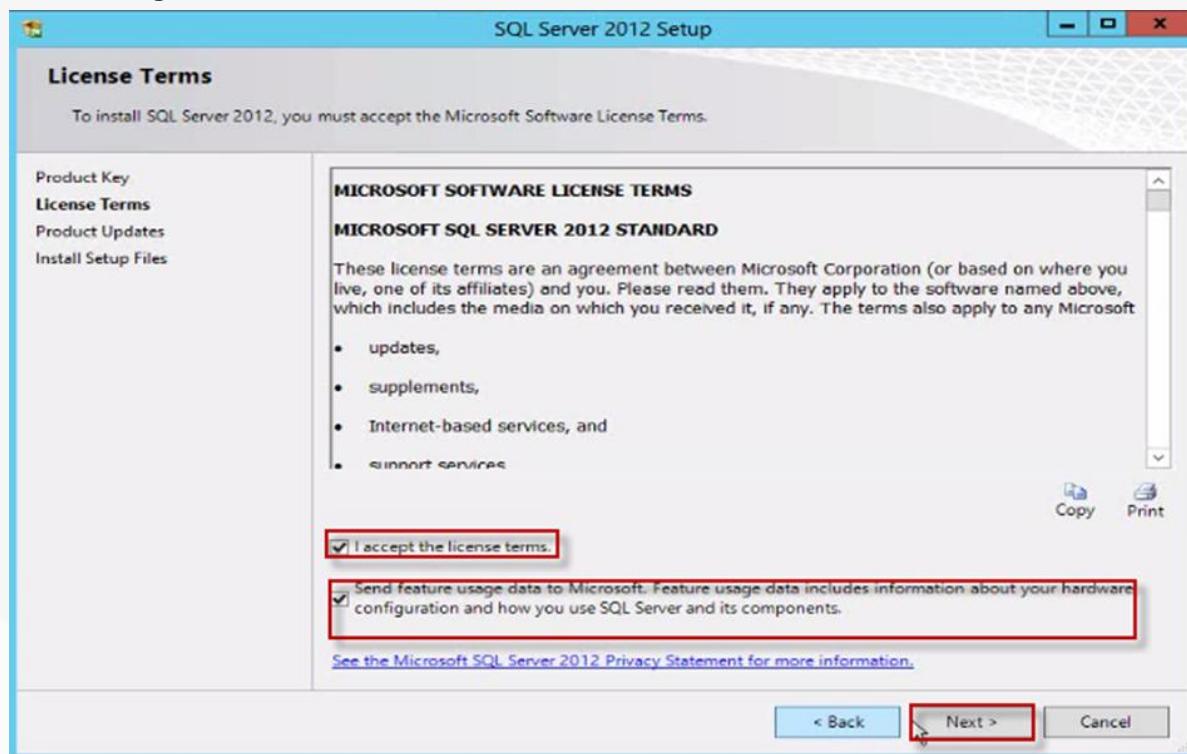
The installation wizard checks for various setup rules and present you with any issues that need to be resolved for set up to continue.



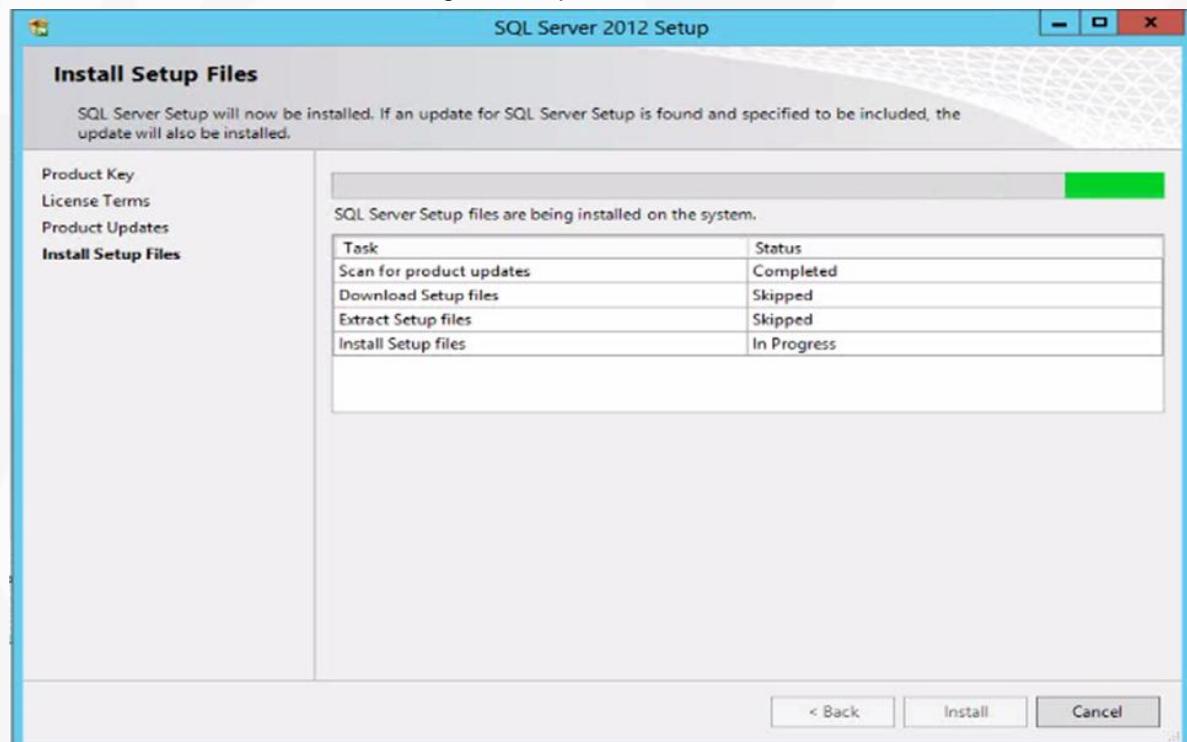
Enter your Product Key then click “Next”.



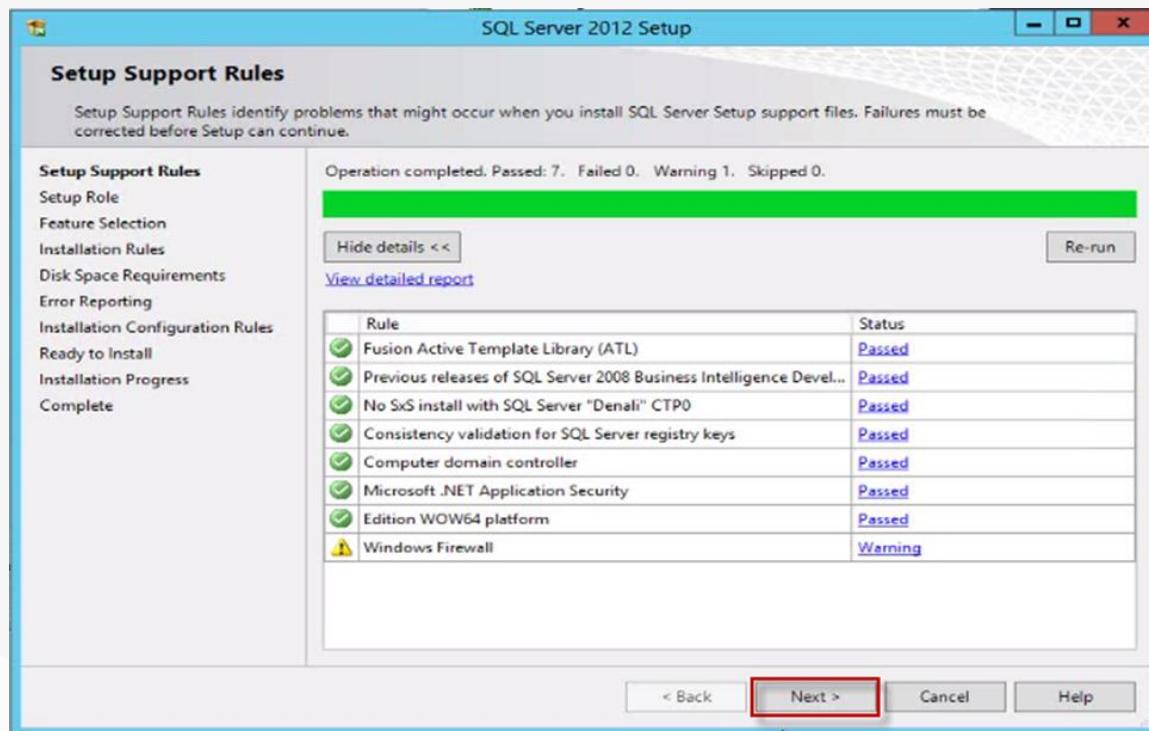
From the “License Terms” page, select “I accept the license terms” and optionally select “Send feature usage data to Microsoft” then click “Next”.



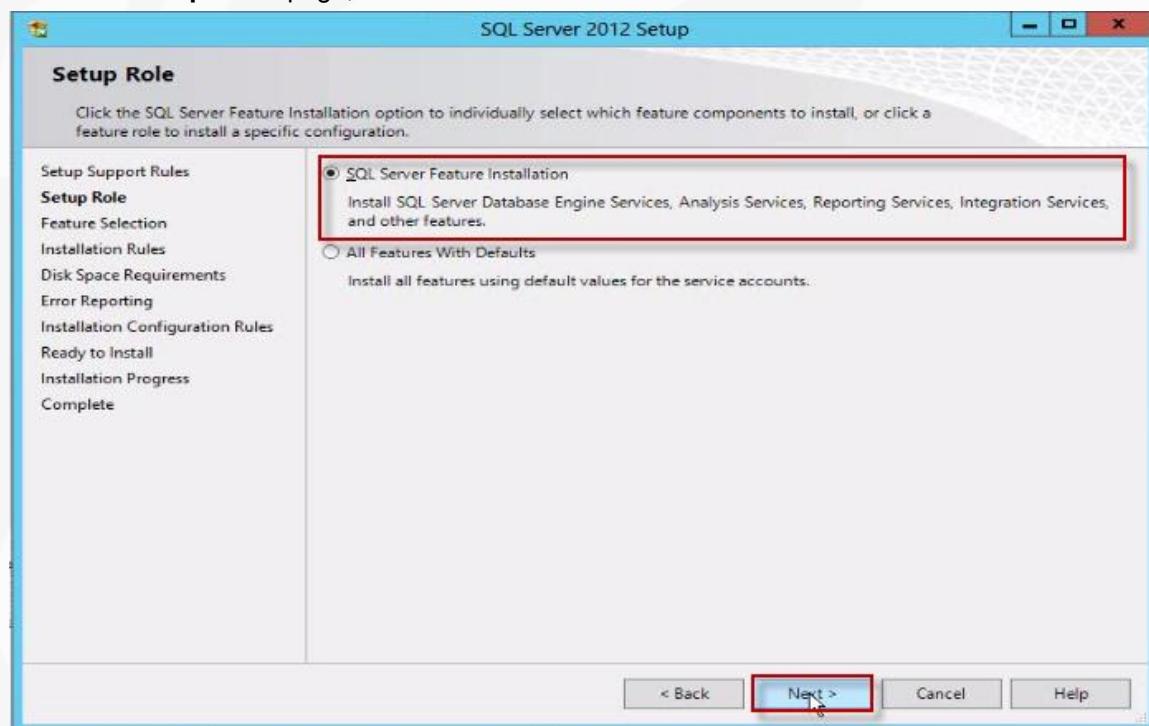
The installation wizard starts installing the setup files. Once done, click “Install”.



Wait till all the “Setup Support Rules” are checked then click “Next”.

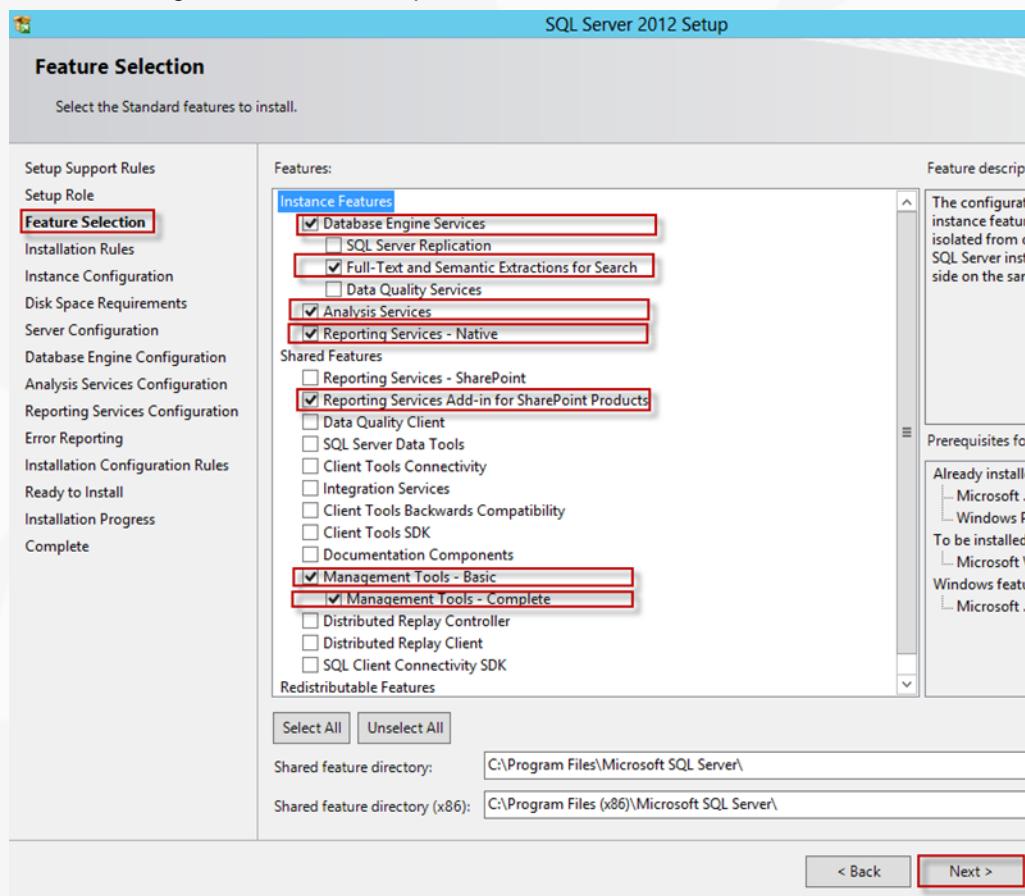


From the “Setup Role” page, select “SQL Server Feature Installation” then click “Next”.



From the “Feature Selection” page, select the following then click “Next”.

- Database Engine Service
- Full Text and Semantic Extractions for Search
- Analysis Services
- Reporting Service - Native
- Reporting Service Add-in for SharePoint Product
- Management Tools - Basic
- Management Tools - Complete



TIP: The Reporting Service Add-in for SharePoint Product is required for SharePoint 2010/ Reporting Services Integration. This component is new to SQL Server 2012 and it was a separate download before.



NOTE: In case you are planning to reuse an existing SQL Server Installation in your environment, TFS supports many SQL Server topologies:

Single server: the Database Engine, Full text search, SQL Server Reporting Services, and Analysis Services on the same server that is running TFS.

Dual Server: SQL Server Reporting Services and TFS running on the same server; the Database Engine, Full text search, SQL Server Analysis Services on another server. The scenario splits HTTP traffic from SQL Server traffic.

Multiple Server: the Database Engine, Full text search on one server; SQL Server Reporting Services on a second server; Analysis Services on a third server (Reporting Services and Analysis Services could also be on the same server).



WARNING: To run Team Foundation Server, you must install both the Database Engine and Full text search on the same instance of SQL Server. However, that instance does not have to run on the same server as Team Foundation Server.



NOTE: If you do not want reporting at all, you do not need SQL Server Reporting Services, and Analysis Services.



WARNING: If SharePoint Server is on a separate machine from the Analysis Services ones, you will need to open the Analysis Service port on the machine that hosts the Analysis Services; otherwise the reports will not be displayed. Check [Appendix D](#) for the exact steps.

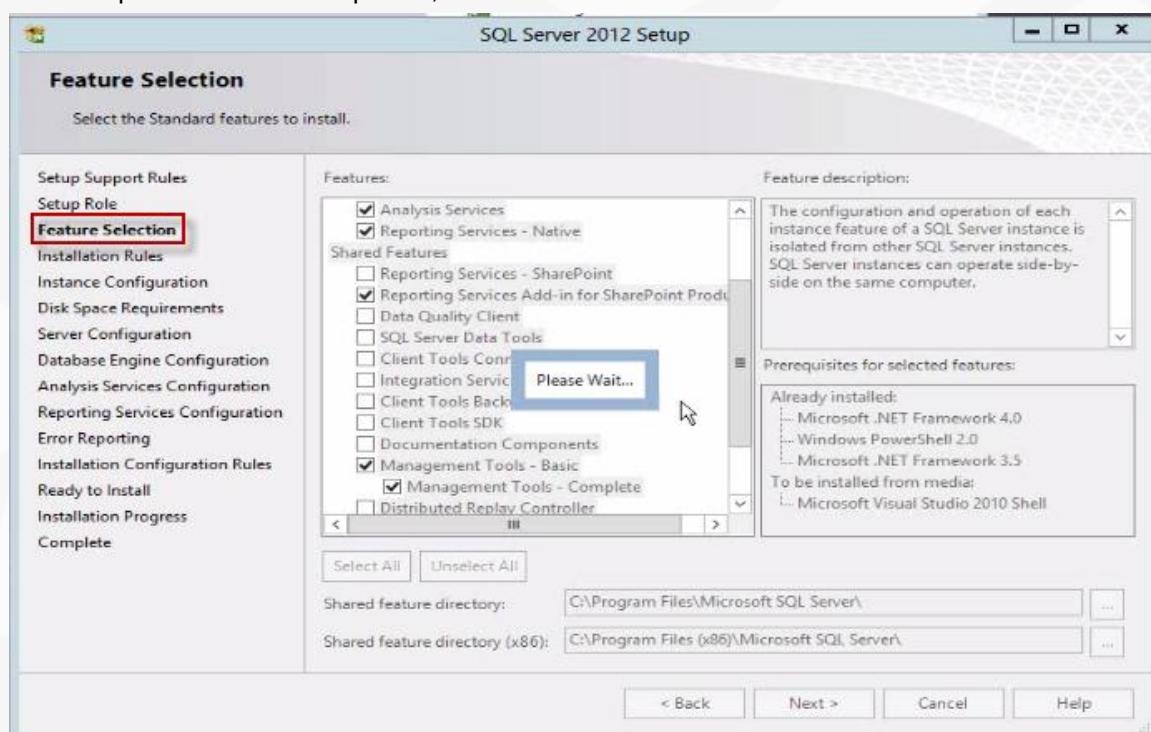


WARNING: If SharePoint Server or TFS are on a separate machine from the Database Engine, you will need to open the Database port on the machine that hosts the Database Engine; otherwise the reports will not be displayed. Check [Appendix E](#) for the exact steps



NOTE: You do not need to install SQL Server Management Tools (Basic or Complete) on the same machine of SQL Server. However, you might use one of the management tools (SQL Server Management Studio) to verify your SQL Server installation.

At this point, the SQL Server Installation Wizard will again check your system for any blocking issues. Upon successful completion, click “**Next**”.

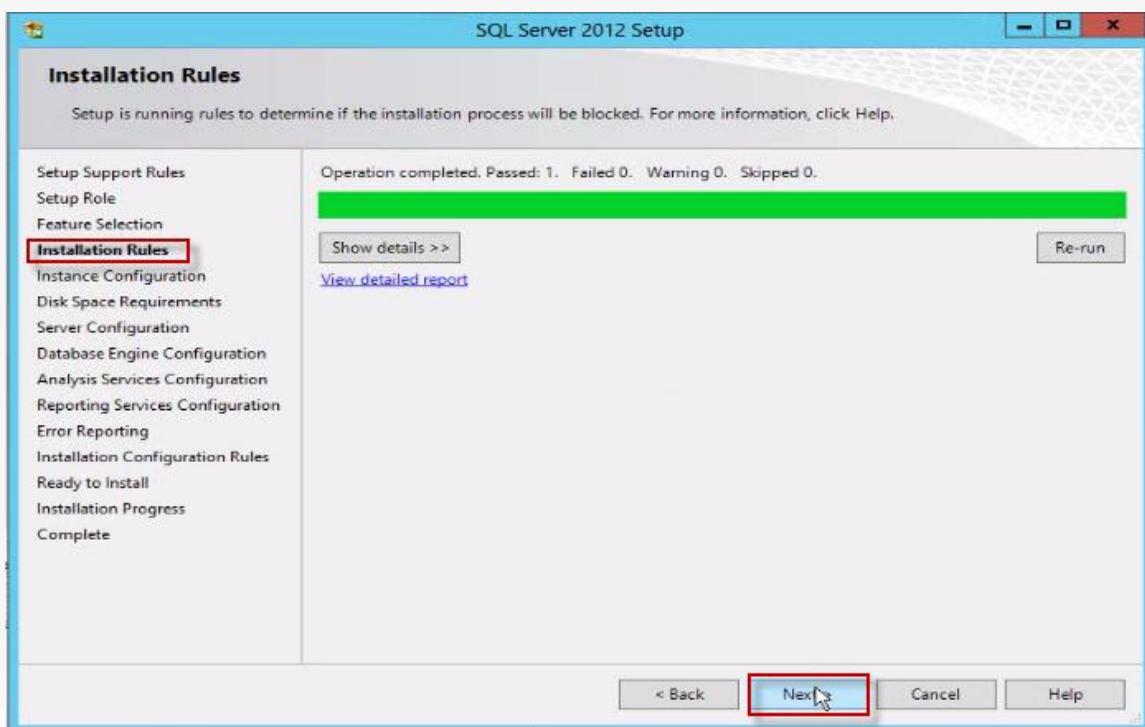


WARNING: If SQL Server Reporting Services is not on the server that is running Team Foundation Server and you are using reporting, you must install Client Tools Connectivity on the TFS machine.

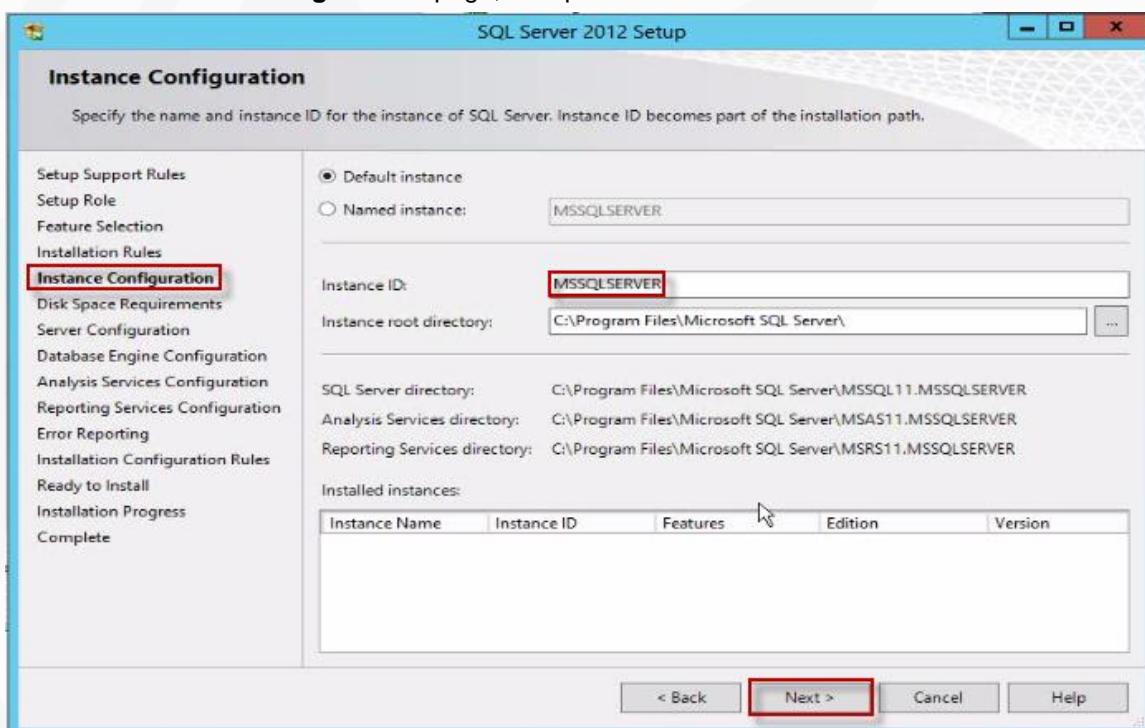


WARNING: If SQL Server Reporting Services is not on the server that is running Team Foundation Server, you must add the reports service account that you will use for TFS (TFSERVICE in this scenario) to the Content Manager group of the report server.

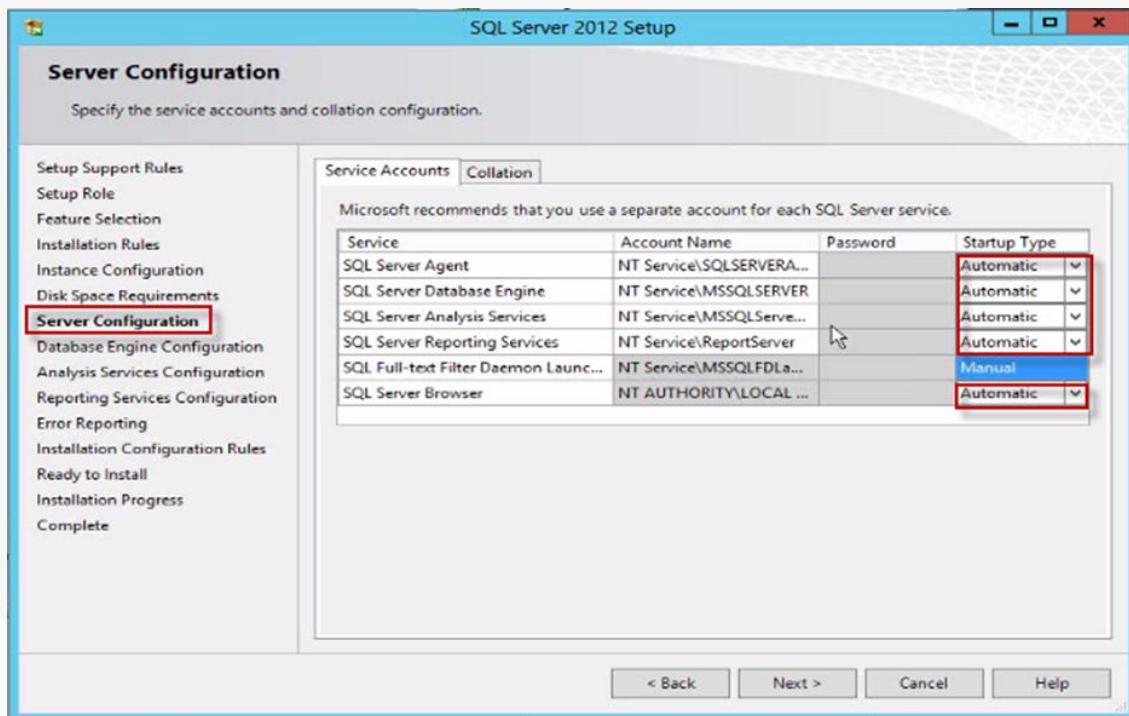
Chapter 6: Installing & Configuring SQL Server 2012



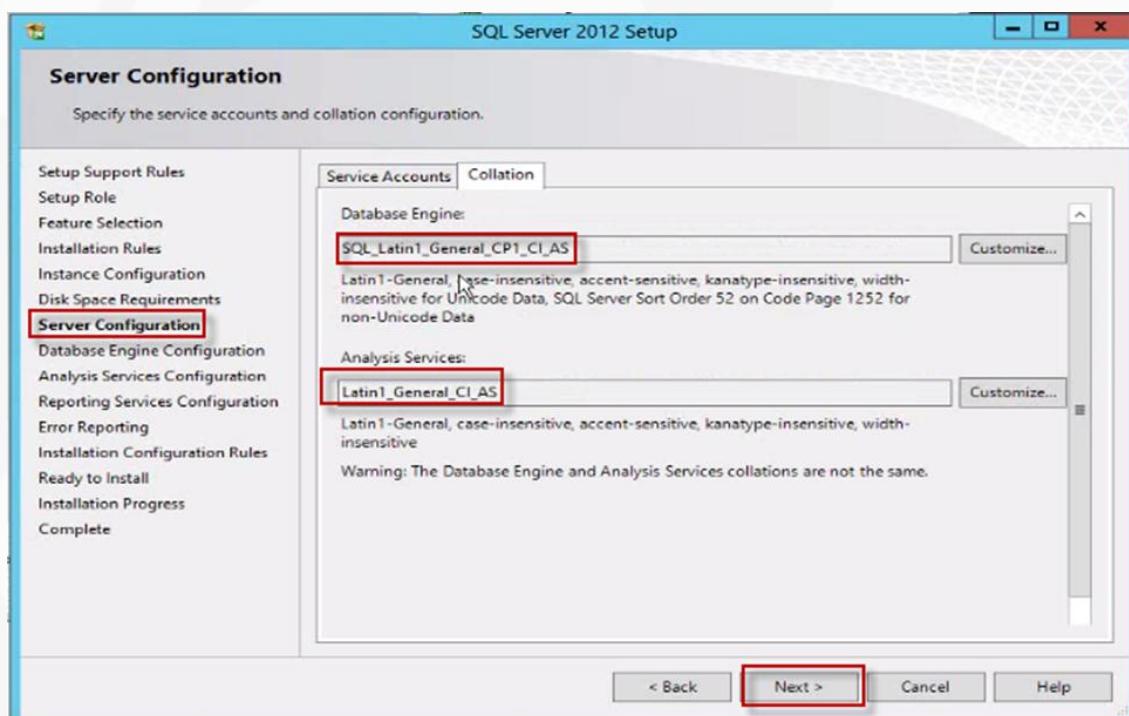
From the “**Instance Configuration**” page, accept the defaults and click “**Next**”.



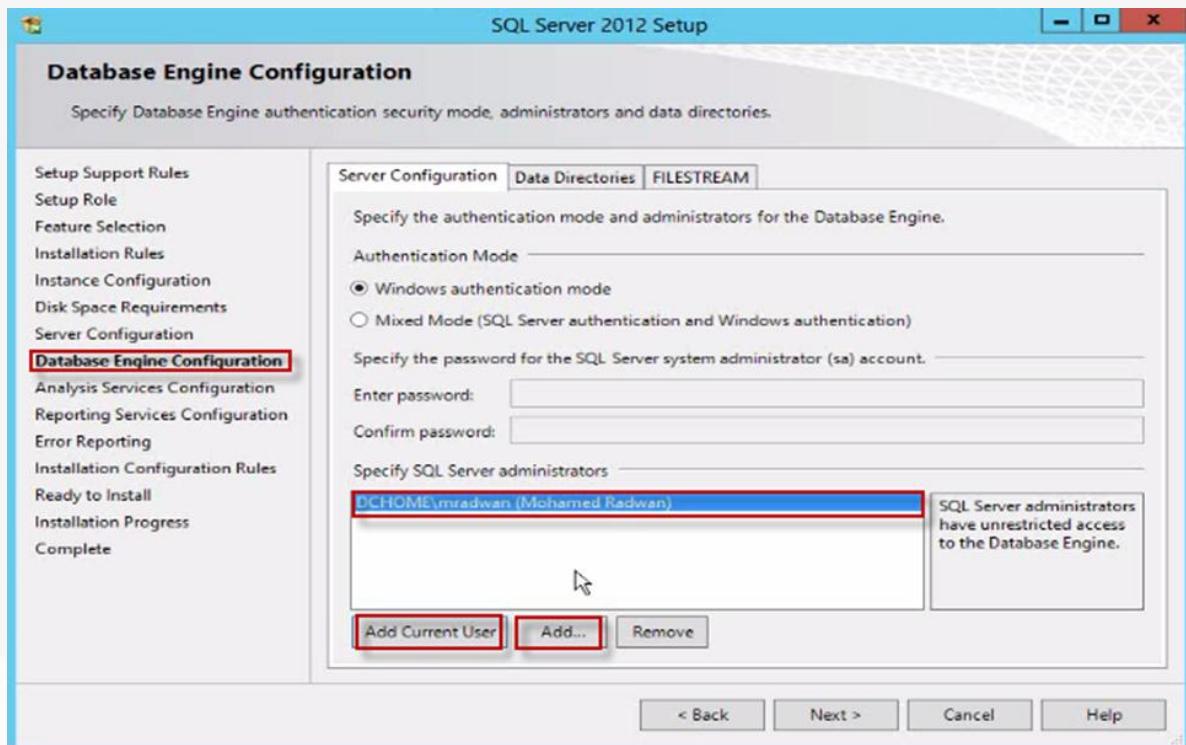
From the “**Server Configuration**” page, make sure that all services are set to “**Automatic**” except for “**SQL Full-text Filter Daemon Launcher**” then switch to the “**Collation**” tab.



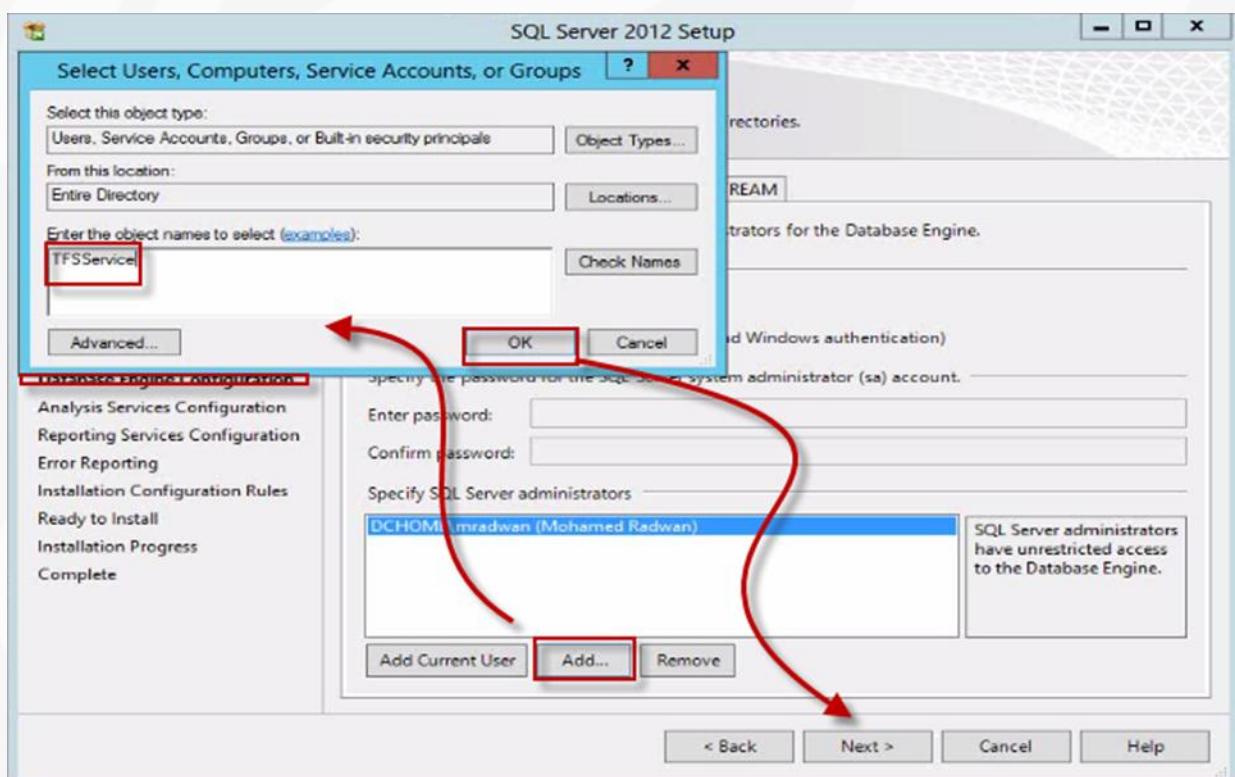
Make sure that the collations are set to be Case Insensitive, Accent Sensitive and not Binary then click “**Next**”.



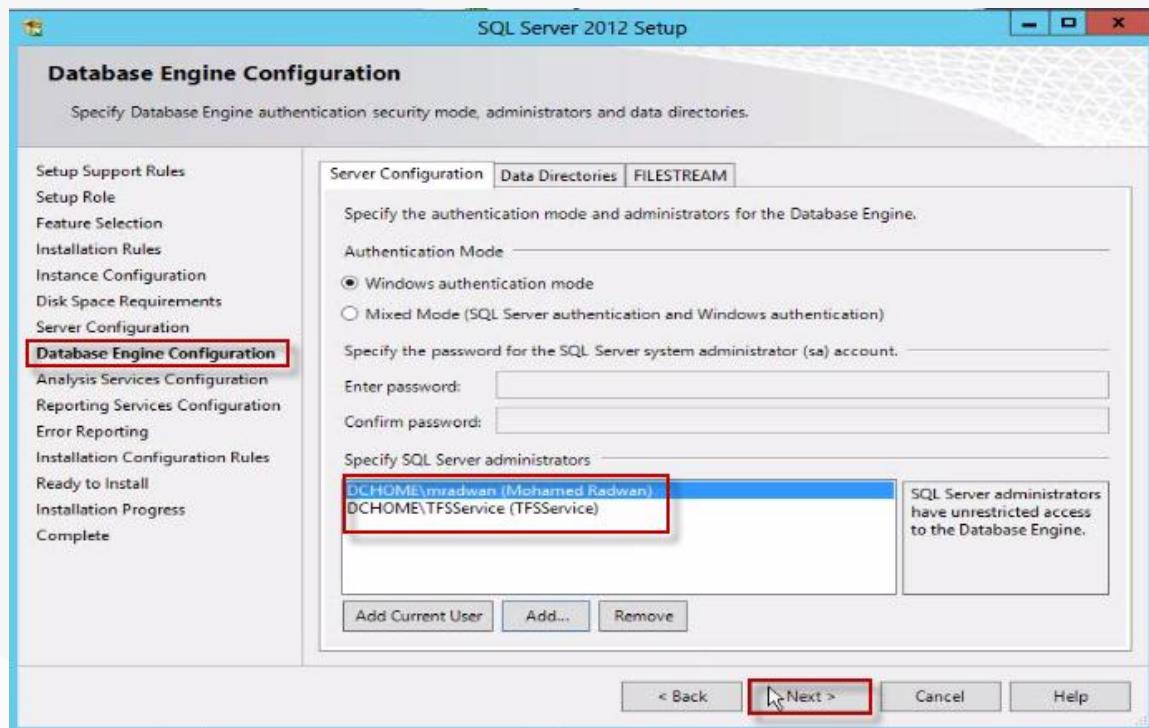
From the “Database Engine Configuration” page, click “Add Current User” then click “Add”.



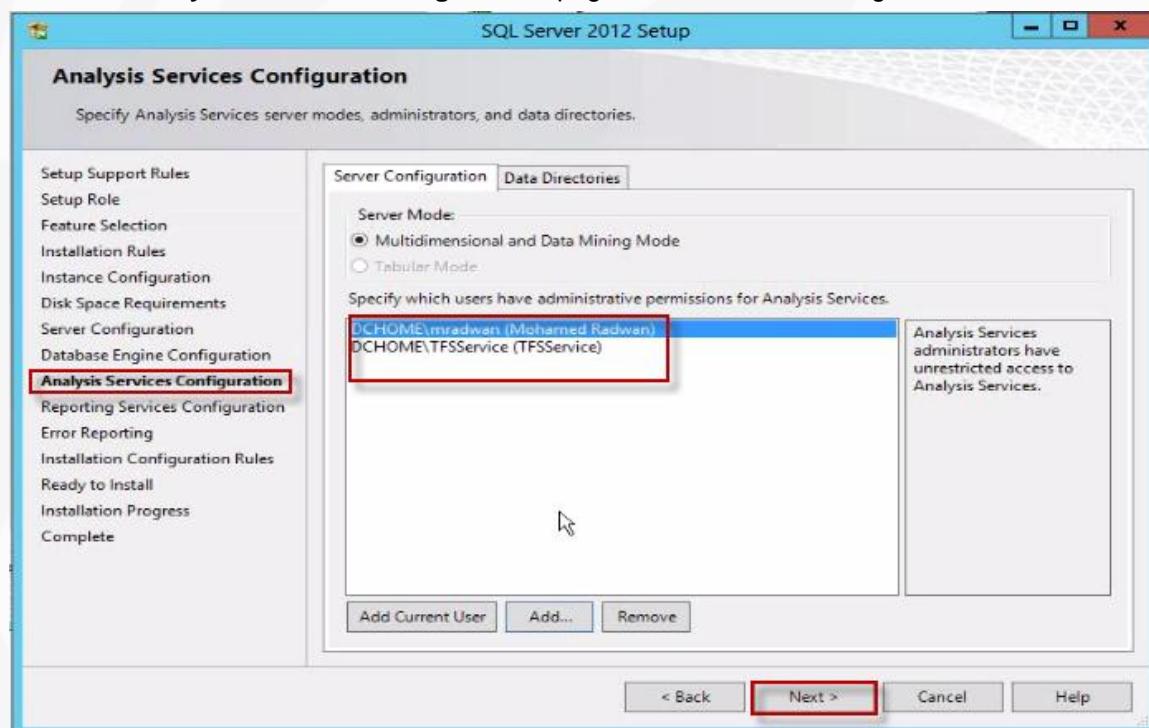
Enter “**TFSService**” then click “**OK**” and then click “**Next**”.



Make sure that both accounts are added successfully and then click “Next”.

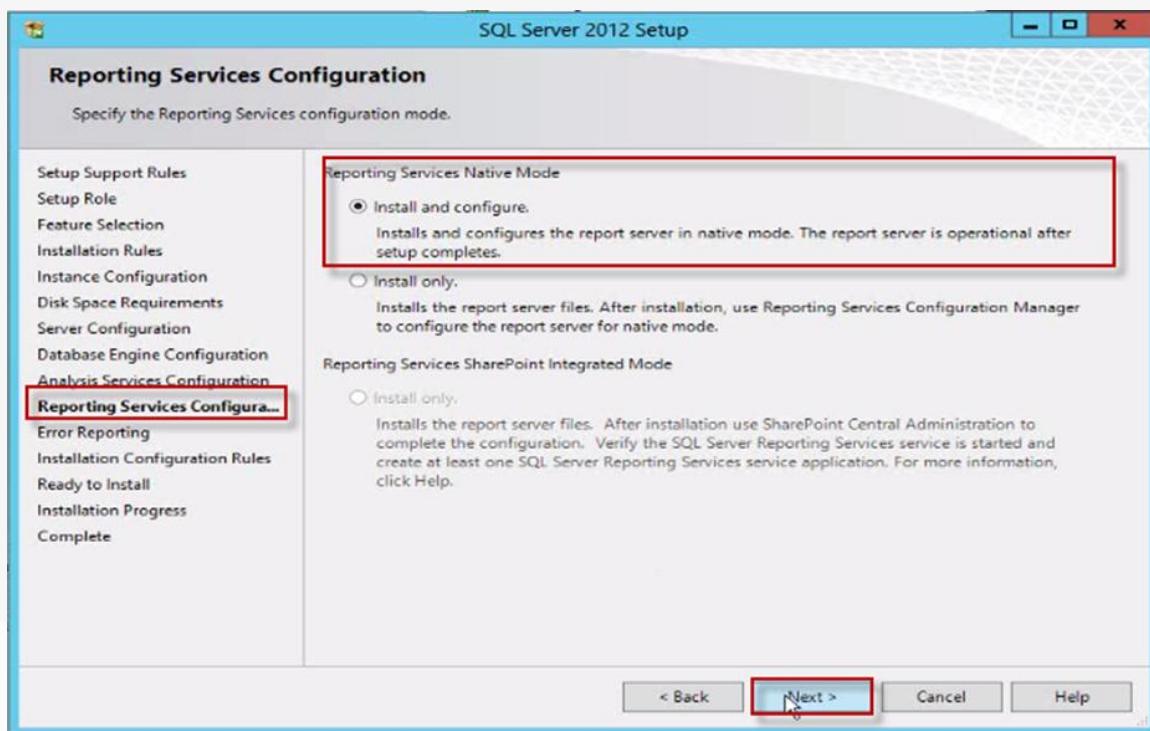


From the “Analysis Services Configuration” page, add both accounts again then click “Next”.

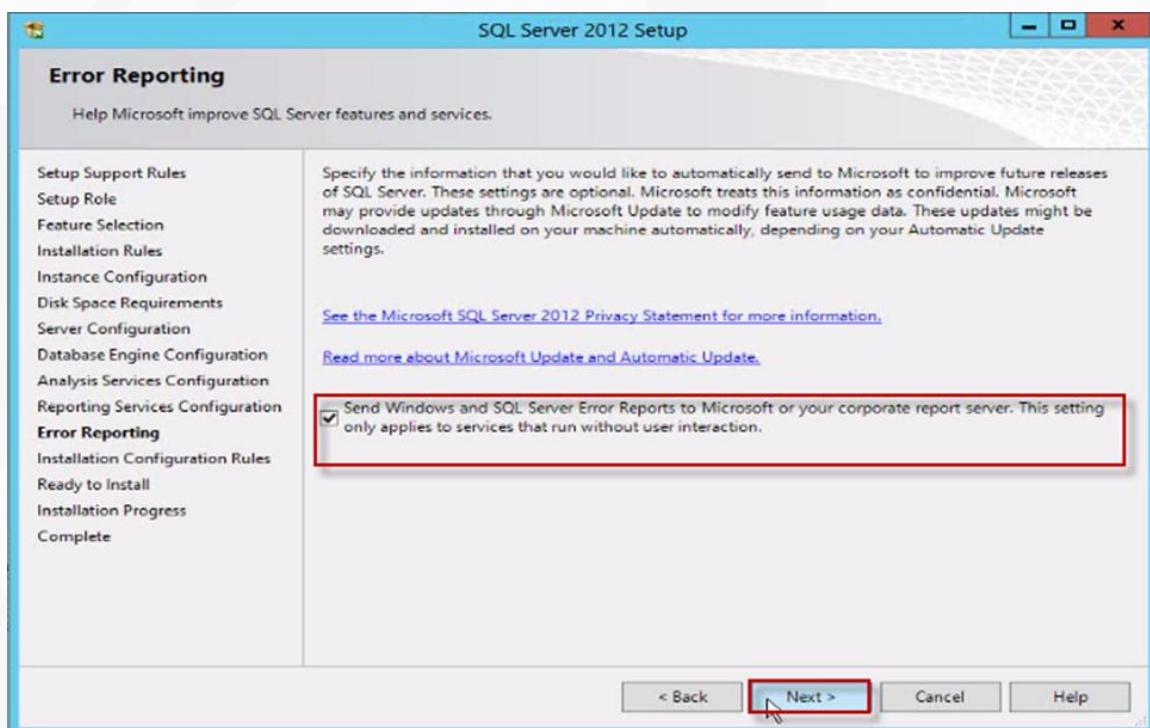


Chapter 6: Installing & Configuring SQL Server 2012

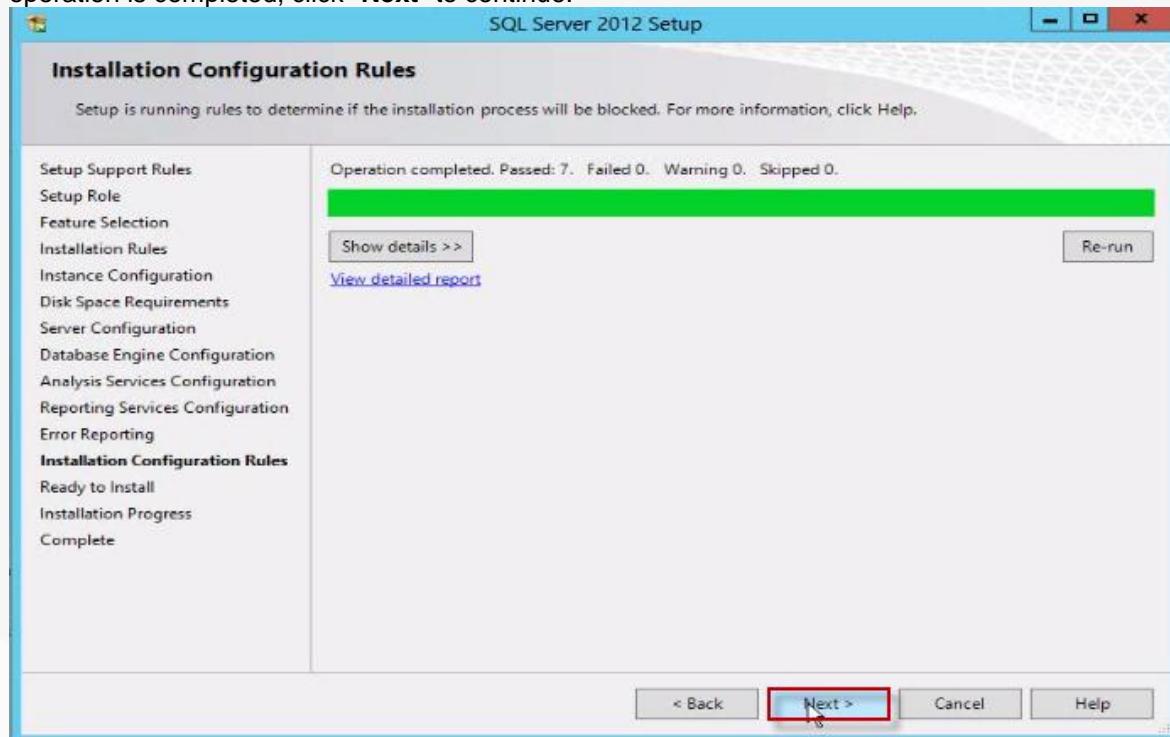
From the “**Reporting Service Configuration**” page, select the “**Install and configure**” option then click “**Next**”.



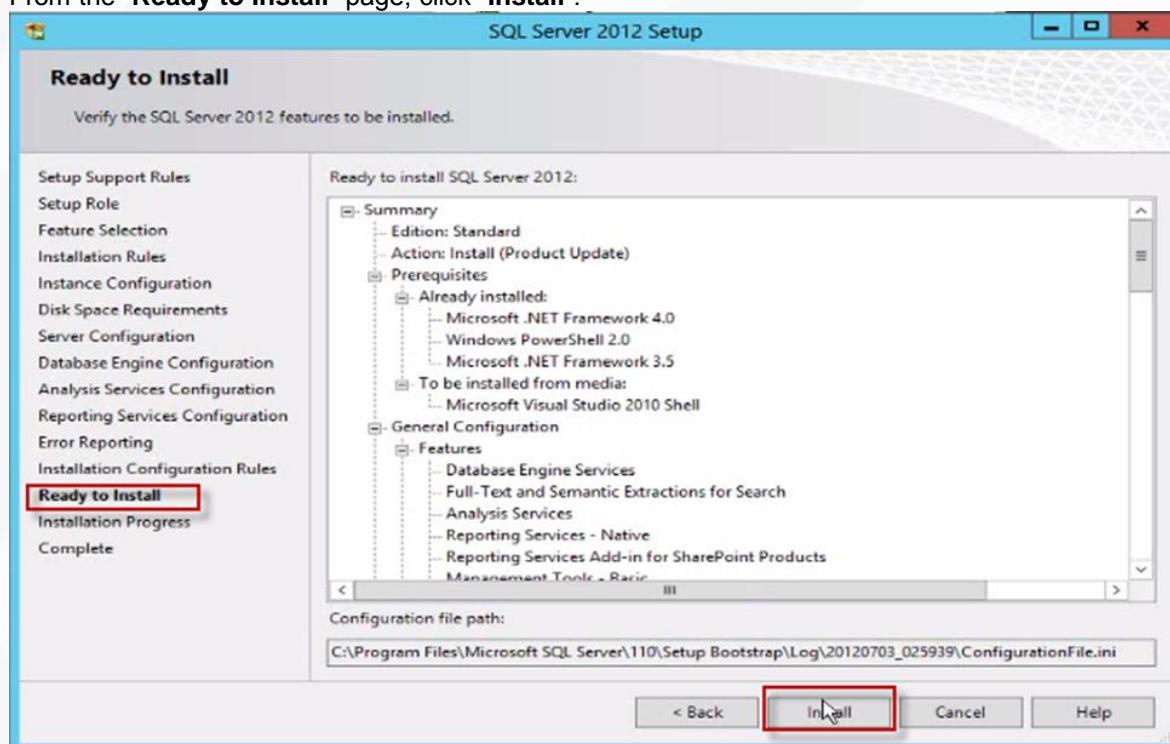
From the “**Error Reporting**”, optionally select “**Send Error Reports to Microsoft**” then click “**Next**”.



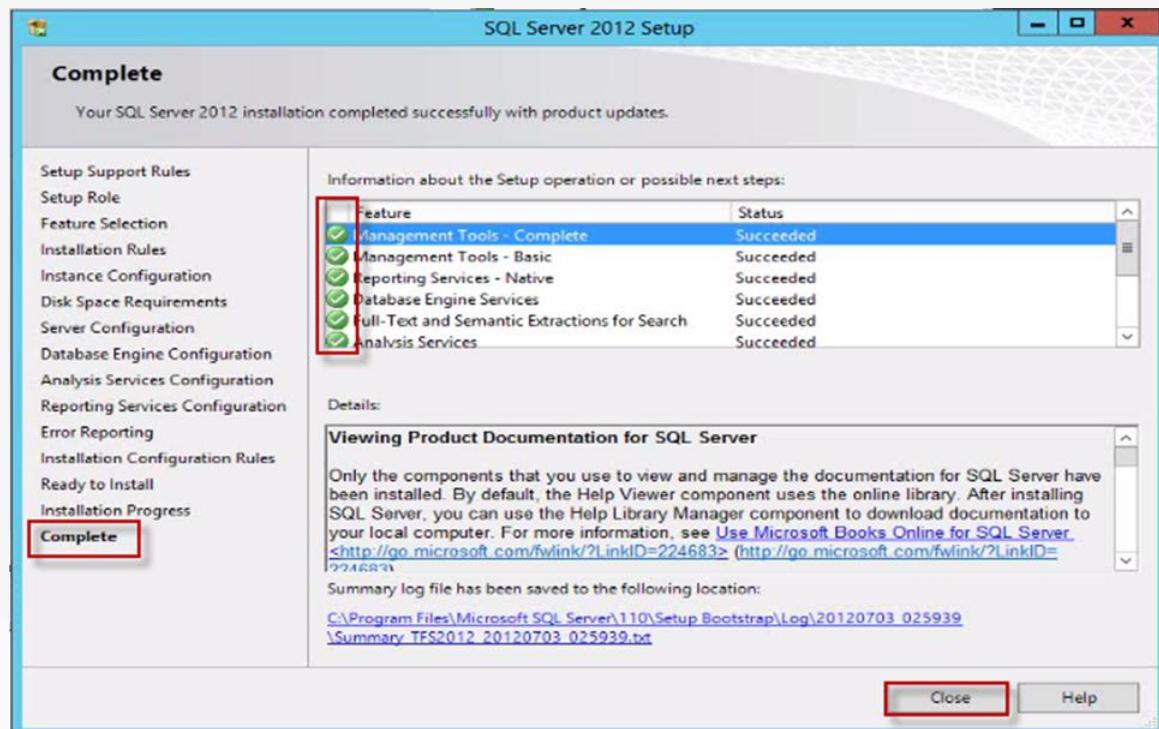
At this point, setup will again verify your system for any potential blocking issues. Once the operation is completed, click "Next" to continue.



From the "Ready to Install" page, click "Install".



The Installer will take a while in this step before the installation is complete. Click “**Close**” when the operation completes.

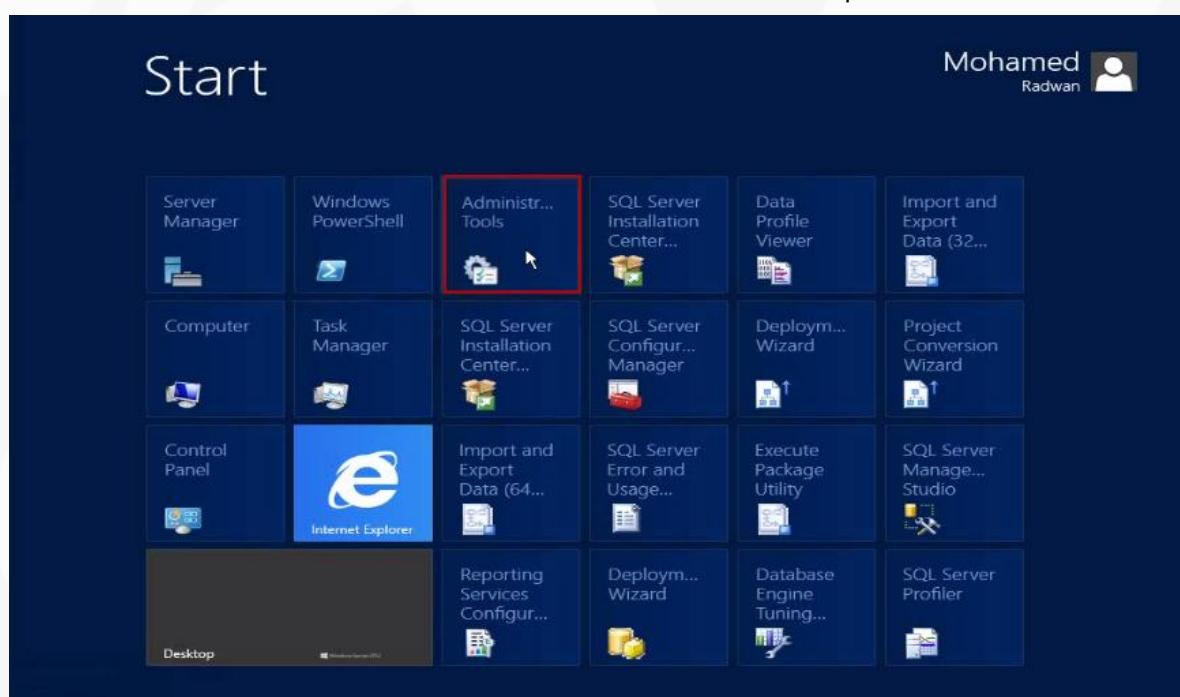


Watch the
Video

www.yout.be/zu4OhKHPLRY

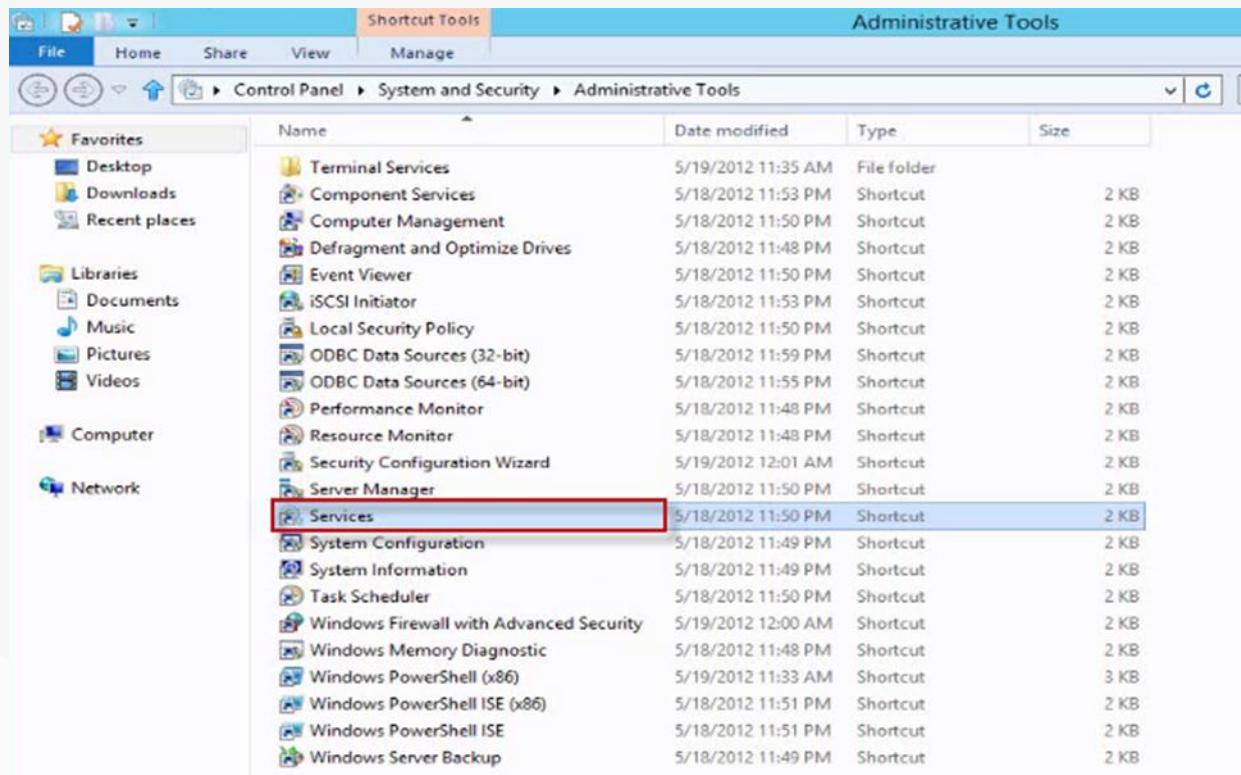
6.3 Configuring Analysis Services to Recover on Failure

Launch the “**Administrative Tools**” from Windows Server 2012 desktop.

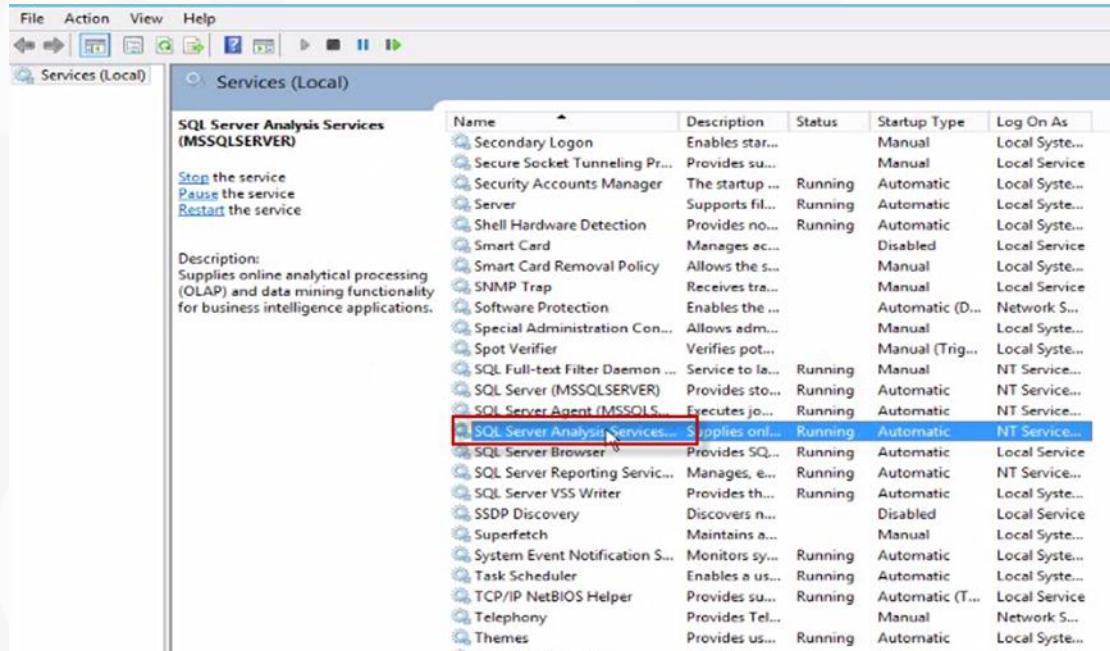


Chapter 6: Installing & Configuring SQL Server 2012

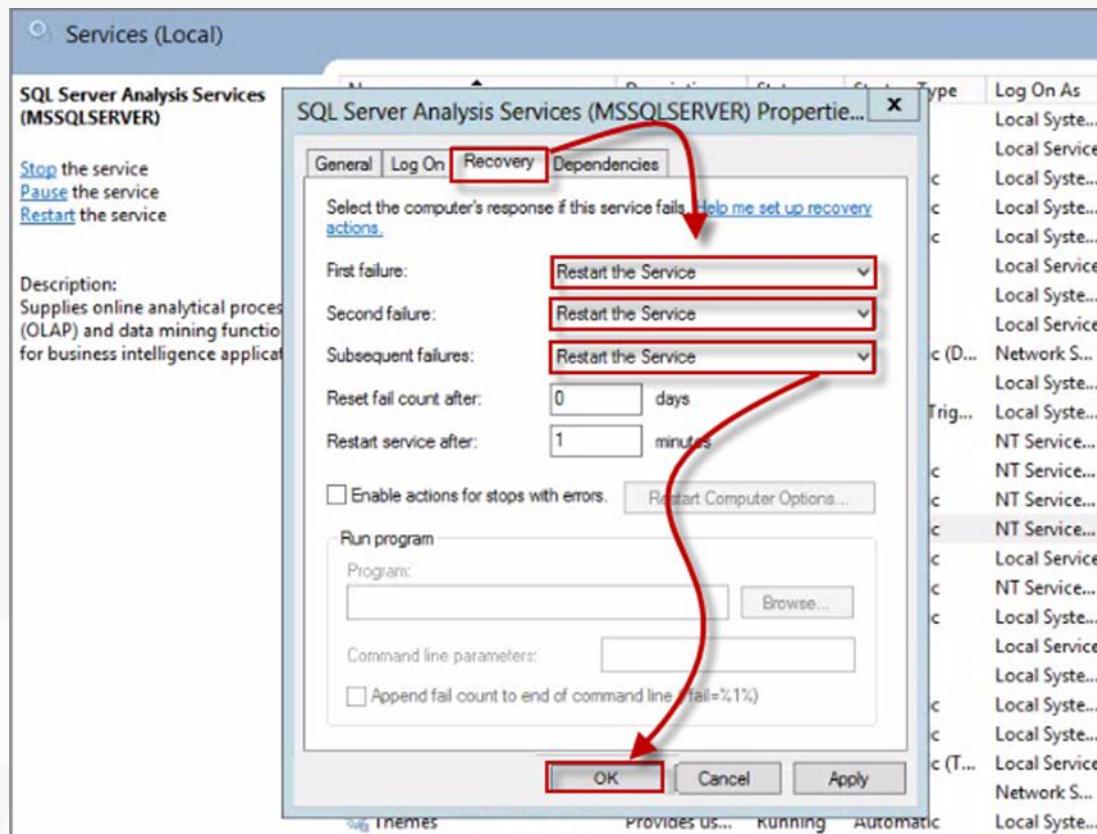
Double-click “Services”.



Double-click “SQL Server Analysis Services”.



Switch to the “Recovery” tab and change all failures types to be “Restart the Service” then click “OK”.



Chapter 7: Installing & Configuring SharePoint Server 2010

In this Chapter you will install SharePoint Server 2010 SP1 on the TFS Virtual Machine that you created in [Section 5.1](#).

You will start by adding the Roles and Features Required for SharePoint 2010, emulating Exit Code, installing SharePoint 2010 Prerequisites, installing SharePoint 2010, configuring the default Application Pool then you will configure SharePoint Server 2010.

In case you have an existing SharePoint Server 2010 installation that you want to reuse, please make sure to read all the “Note” and “Warning” boxes provided inside this chapter. These boxes might lead you to [Appendix G](#) either to verify your existing installation or to do some extra configurations.

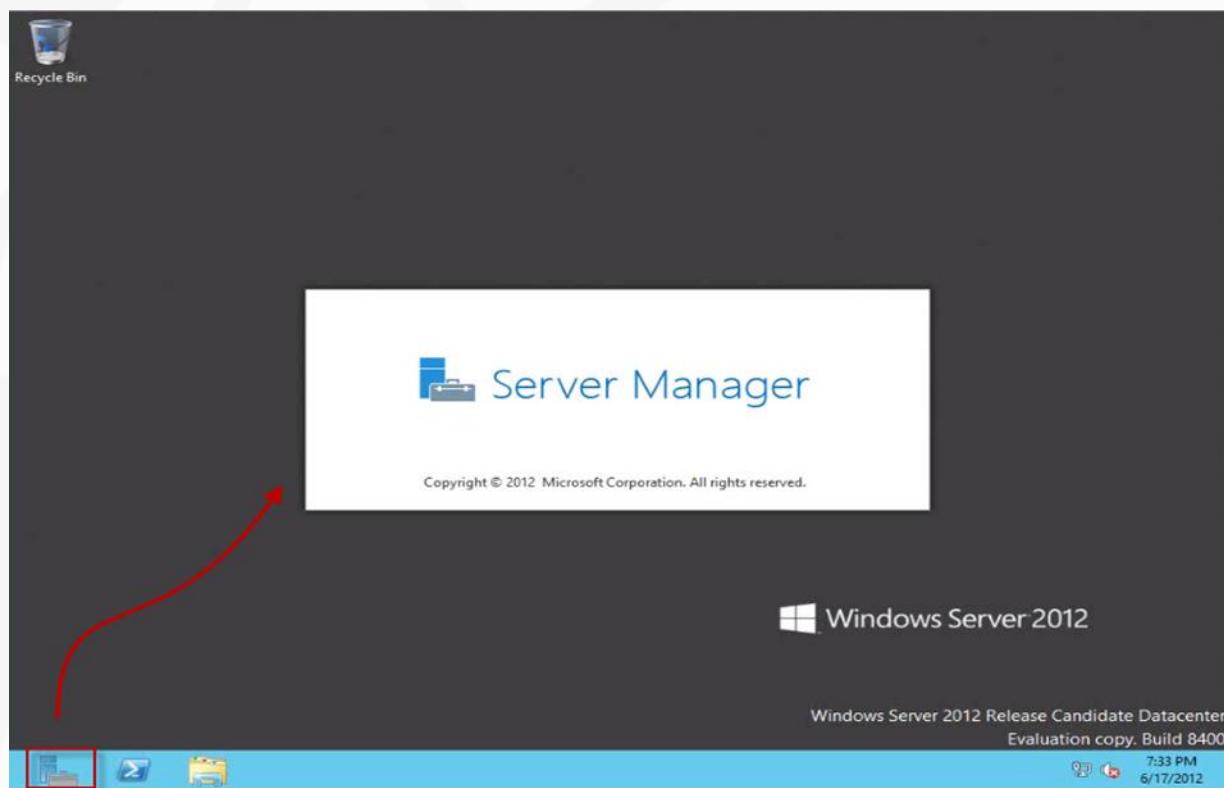


Watch the
Video

www.youtube.com/watch?v=gdnUTChIGIE

7.1 Adding the Required Roles and Features

Click the Server Manager Icon to launch the “**Server Manager**”.





TIP: If you are working with Windows Server 2008 R2 and not Windows Server 2012, you can skip this section since Microsoft SharePoint 2010 Products Preparation Tool will automatically take care of everything mentioned here.



NOTE: You can install SharePoint Server 2010 on a separate machine from the TFS machine and the Database Server machine, but this will require more configurations that will be explained later.



NOTE: If you install SharePoint Server on a different machine than the TFS one, you must install TFS SharePoint Extensions on that machine. TFS SharePoint Extensions (tfs_sharePointExtensions.exe) is a separate component that exists on the TFS 2012 media. In a single-server installation scenario you don't have to install the extensions.

Click “Add roles and features”.

The screenshot shows the "WELCOME TO SERVER MANAGER" screen. On the left, there's a navigation bar with "Dashboard", "Local Server", "All Servers", and "File and Storage Services". The main area has a "QUICK START" section with "WHAT'S NEW" and "LEARN MORE" buttons. To the right, numbered steps are listed: 1. Configure this local server, 2. Add roles and features (which is highlighted with a red box and a cursor), 3. Add other servers to manage, and 4. Create a server group. Below this, under "ROLES AND SERVER GROUPS", it says "Roles: 1 | Server groups: 1 | Servers total: 1". There are two sections: "File and Storage Services" (1 item) and "Local Server" (1 item). Each section lists its components: File and Storage Services includes Manageability, Events, Performance, and RPA results; Local Server includes Manageability, Events, Services, and Performance.

The “Add Roles and Feature Wizard” starts, click “Next” three times while accepting all the defaults till you reach the “Roles” page.

The screenshot shows the 'Before You Begin' step of the 'Add Roles and Features Wizard'. The title bar says 'Add Roles and Features Wizard'. The right pane is titled 'DESTINATION SERVER TFS2012.DCHome.com'. The main content area contains instructions for installing roles, role services, or features, mentioning the need for a strong password, network settings, and security updates. It also provides links for removing roles and starting the Remove Roles and Features Wizard. A note says to verify completed tasks like a strong password before continuing. A checkbox 'Skip this page by default' is present. The bottom navigation bar includes '< Previous', 'Next >' (which is highlighted with a red box), 'Install', and 'Cancel'.

Before you begin

DESTINATION SERVER
TFS2012.DCHome.com

This wizard helps you install roles, role services, or features. You determine which roles, role services, or features to install based on the computing needs of your organization, such as sharing documents, or hosting a website.

To remove roles, role services, or features:
[Start the Remove Roles and Features Wizard](#)

Before you continue, verify that the following tasks have been completed:

- The Administrator account has a strong password
- Network settings, such as static IP addresses, are configured
- The most current security updates from Windows Update are installed

If you must verify that any of the preceding prerequisites have been completed, close the wizard, complete the steps, and then run the wizard again.

To continue, click Next.

Skip this page by default

< Previous **Next >** Install Cancel

The screenshot shows the 'Select installation type' step of the 'Add Roles and Features Wizard'. The title bar says 'Add Roles and Features Wizard'. The right pane is titled 'DESTINATION SERVER TFS2012.DCHome.com'. The main content area explains the two installation types: 'Role-based or feature-based installation' (selected) and 'Remote Desktop Services installation'. It describes how to configure a single server and install required role services for VDI. The bottom navigation bar includes '< Previous', 'Next >' (highlighted with a red box), 'Install', and 'Cancel'.

Select installation type

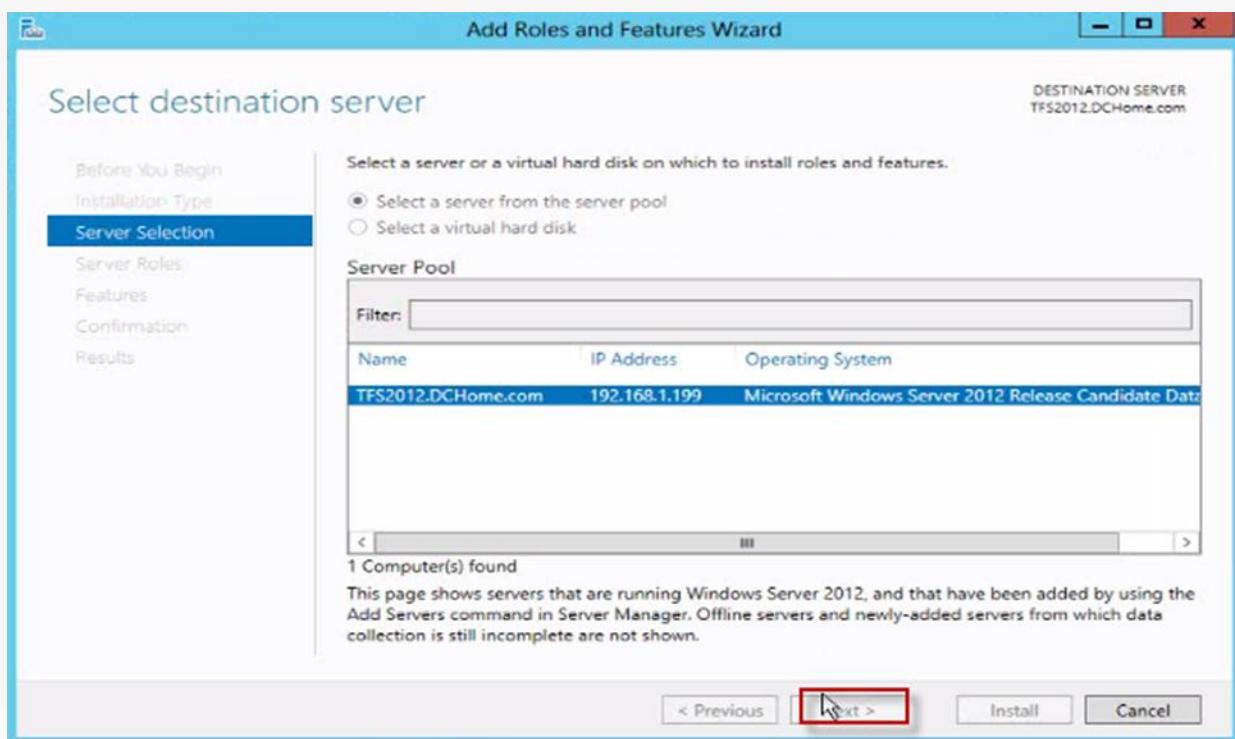
DESTINATION SERVER
TFS2012.DCHome.com

Select the installation type. You can install roles and features on a running physical computer or virtual machine, or on an offline virtual hard disk (VHD).

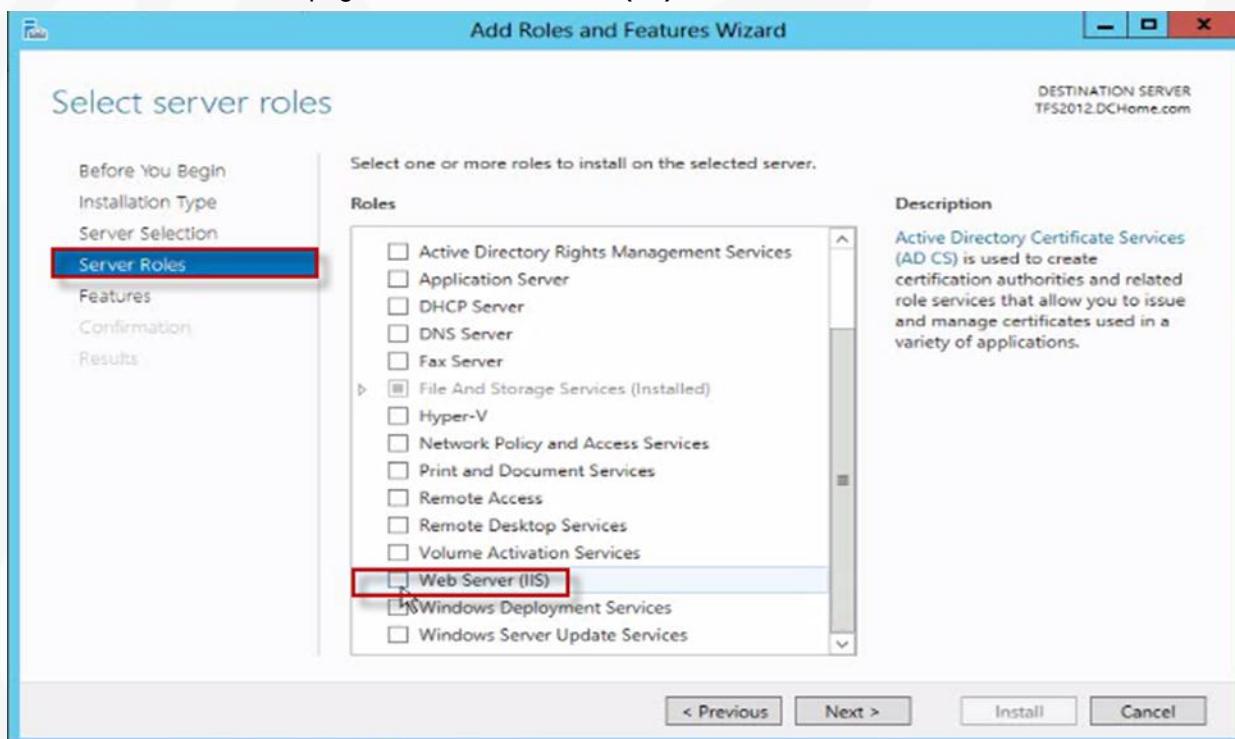
Role-based or feature-based installation
Configure a single server by adding roles, role services, and features.

Remote Desktop Services installation
Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment.

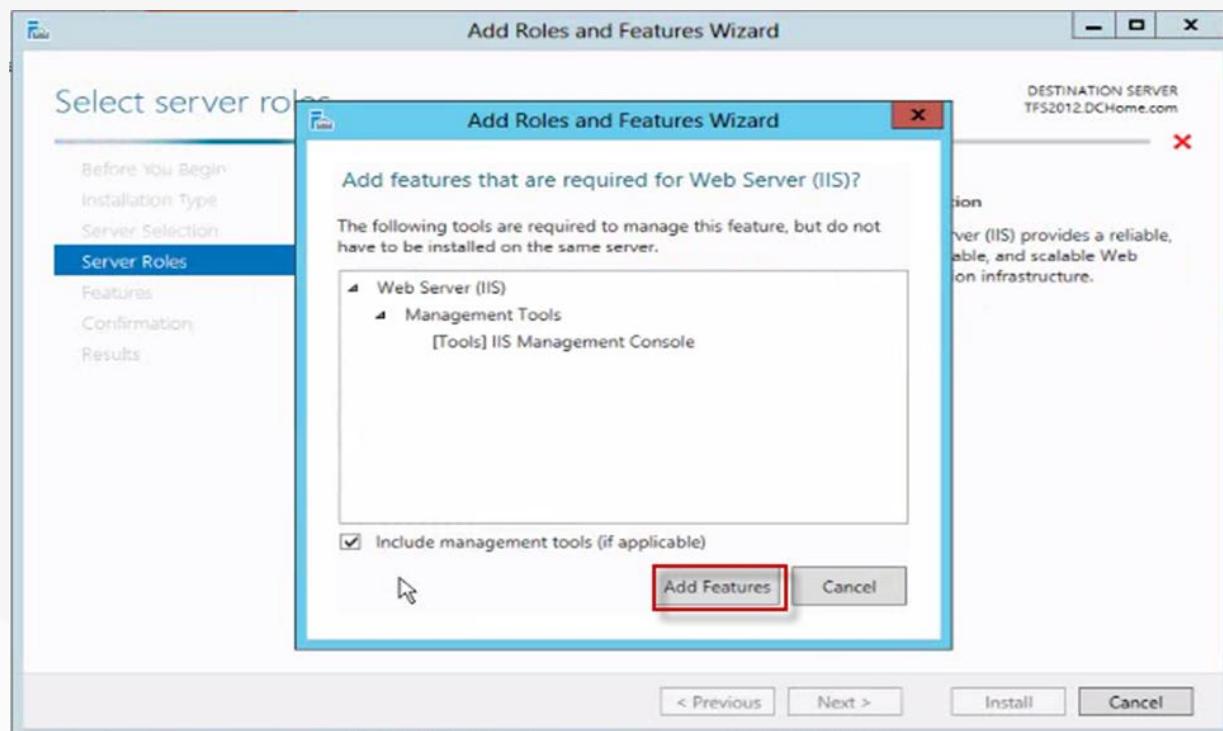
< Previous **Next >** Install Cancel



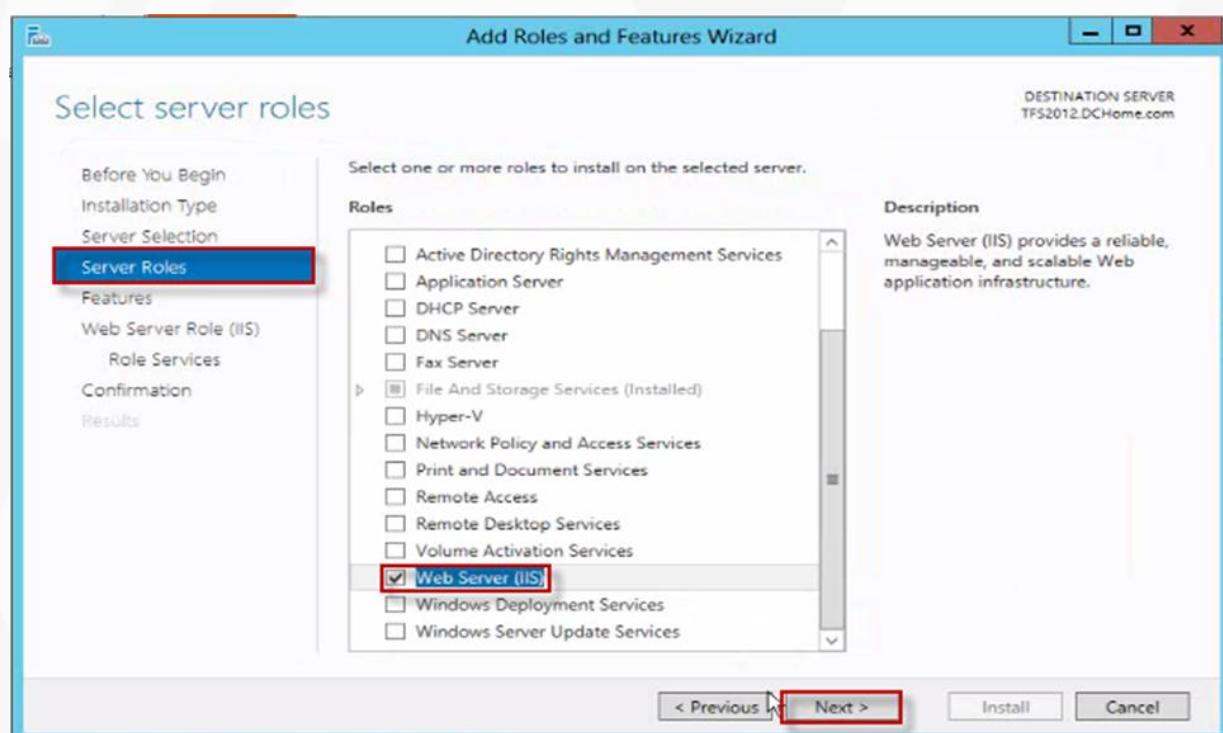
From the “**Server Roles**” page, select “**Web Server (IIS)**”.



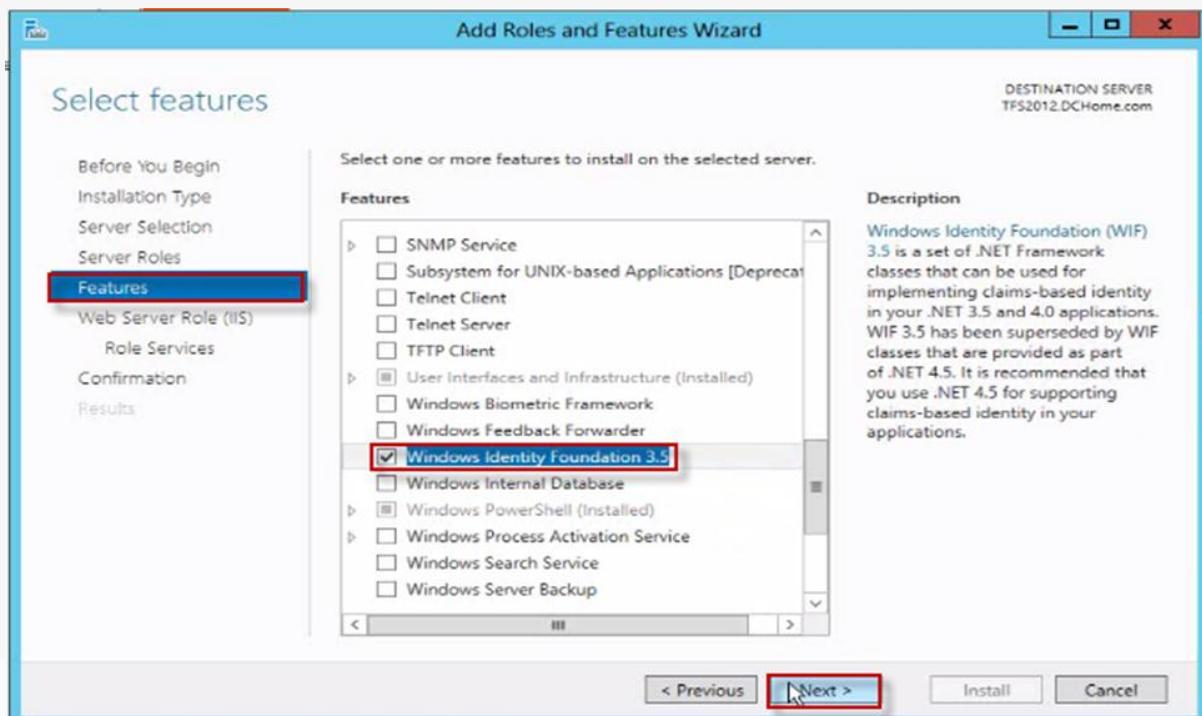
A window pops up prompting you to add the pre-requisite features for adding the IIS role, click “Add features”.



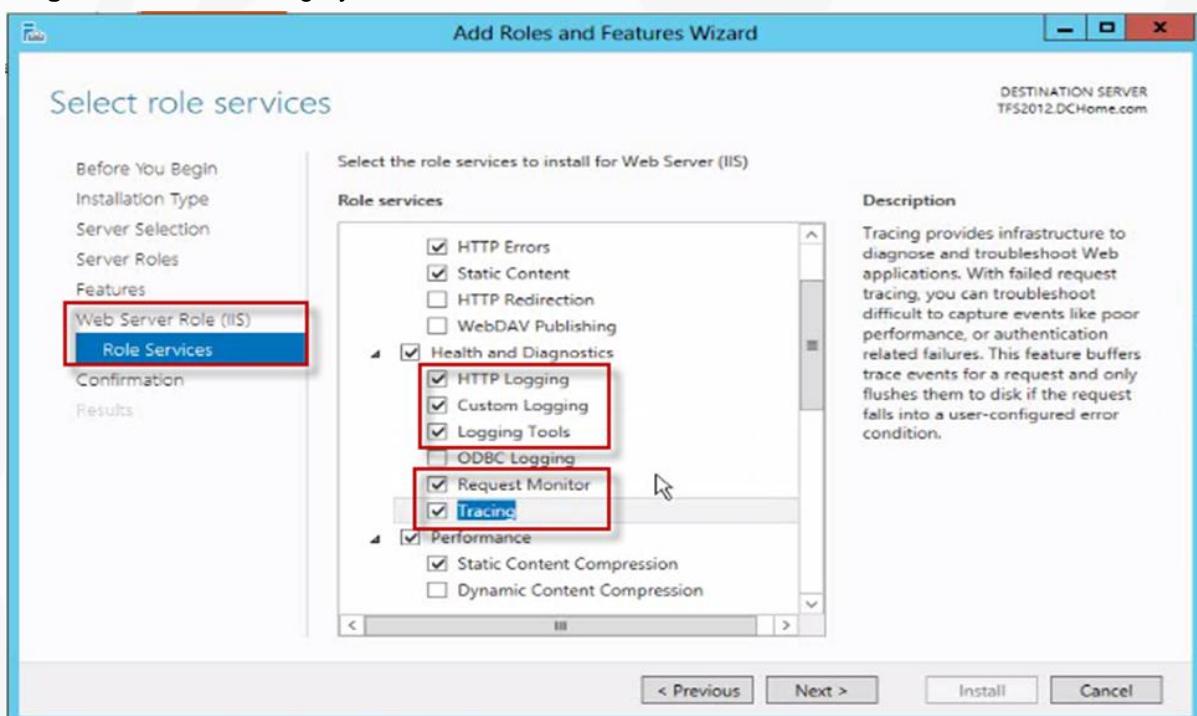
Click “Next”.



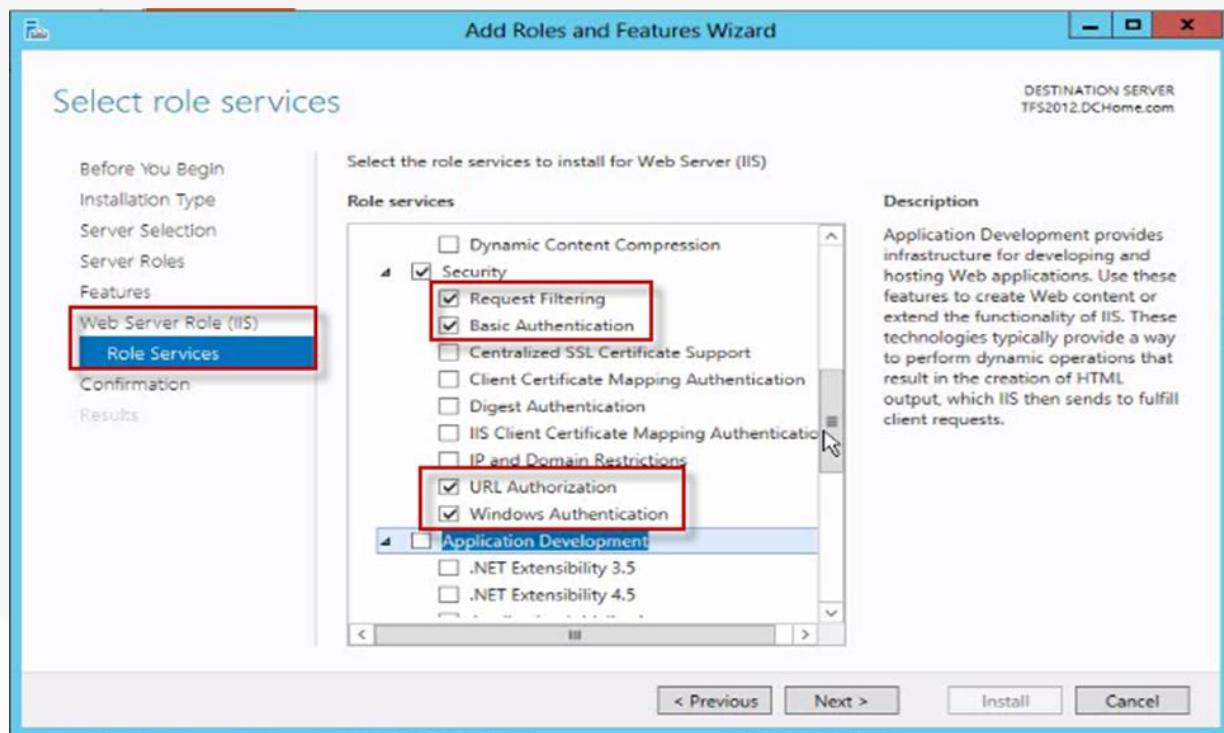
From the “Features” page, select “Windows Identity Foundation 3.5” then click “Next”.



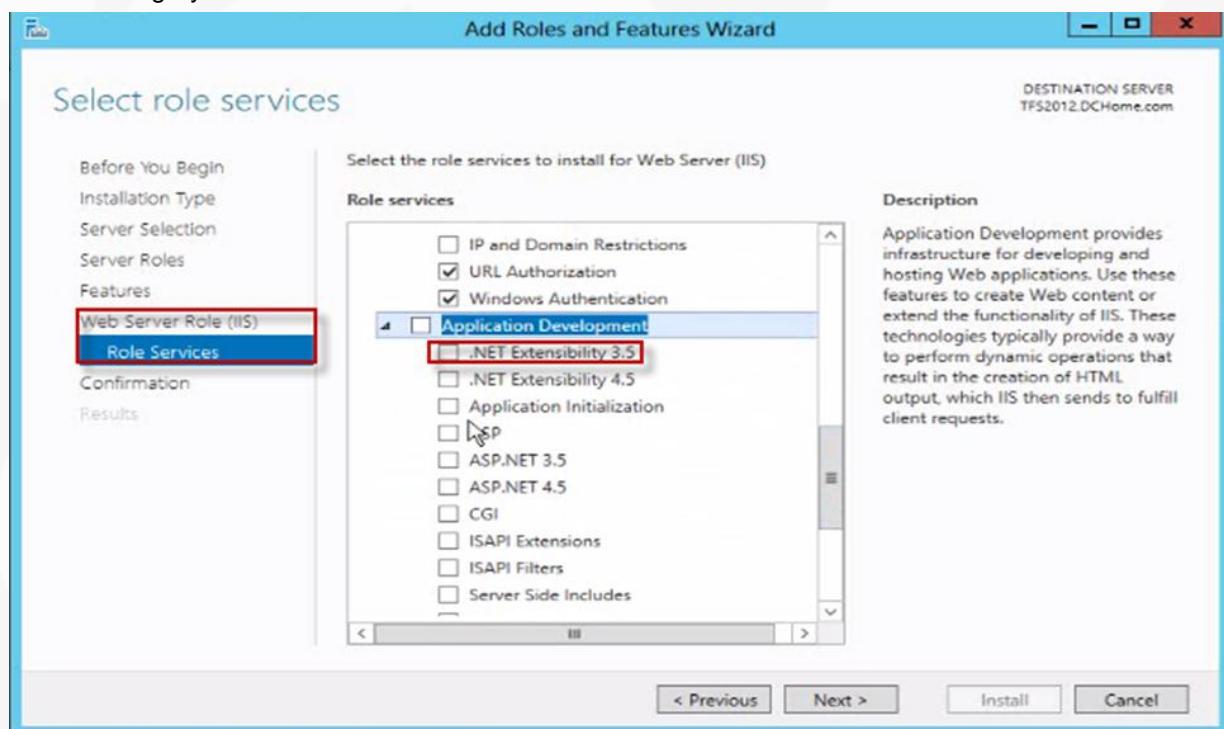
From the “Role Services” page for “Web Server Role (IIS)”, select “HTTP Logging”, “Custom Logging”, “Logging Tools”, “Request Monitor” and “Tracing” from the “Health and Diagnostic” service category.



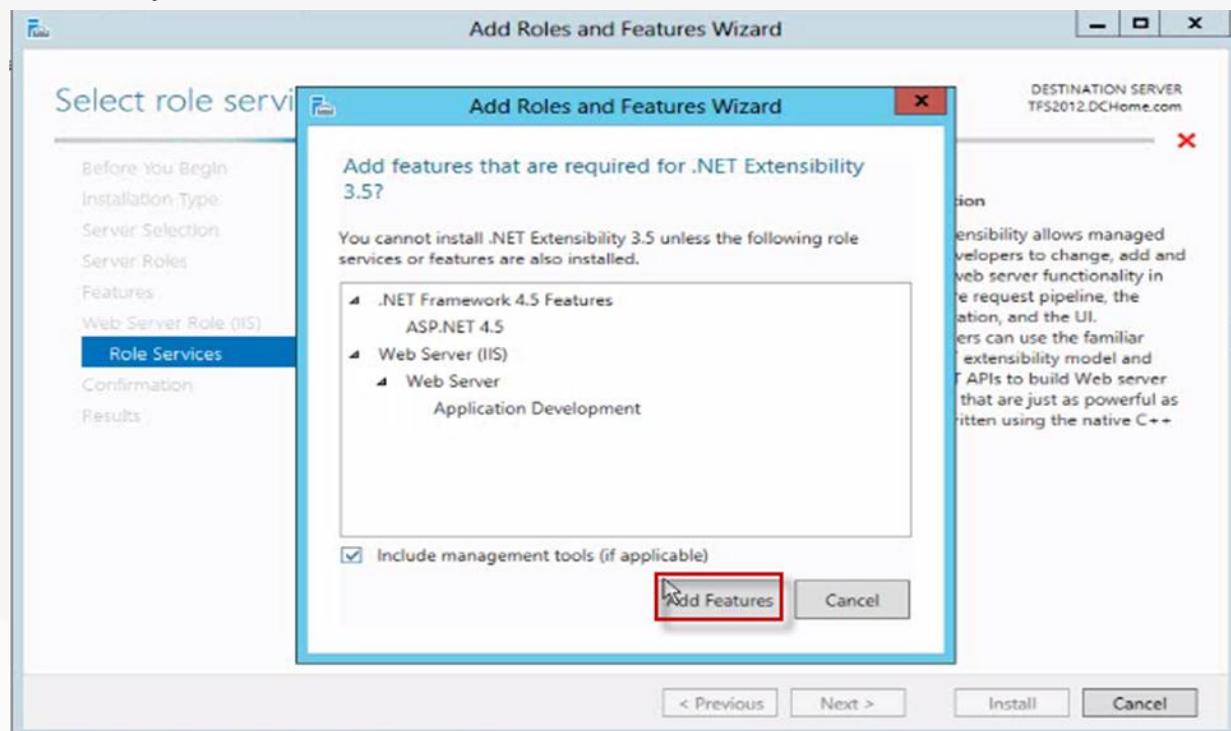
From the same page, select “Request Filtering”, “Basic Authentication”, “URL Authorization” and “Windows Authentication” from the “Security” service category.



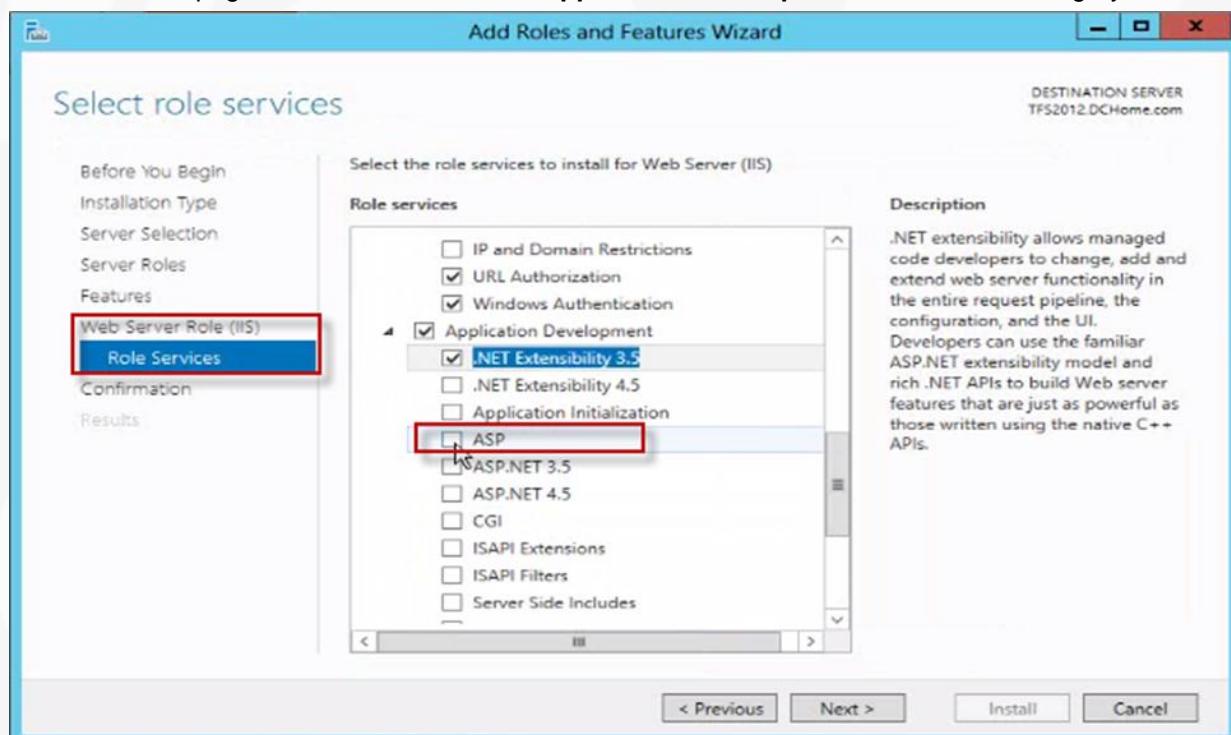
From the same page, select “.NET Extensibility 3.5” from the “Application Development” role service category.



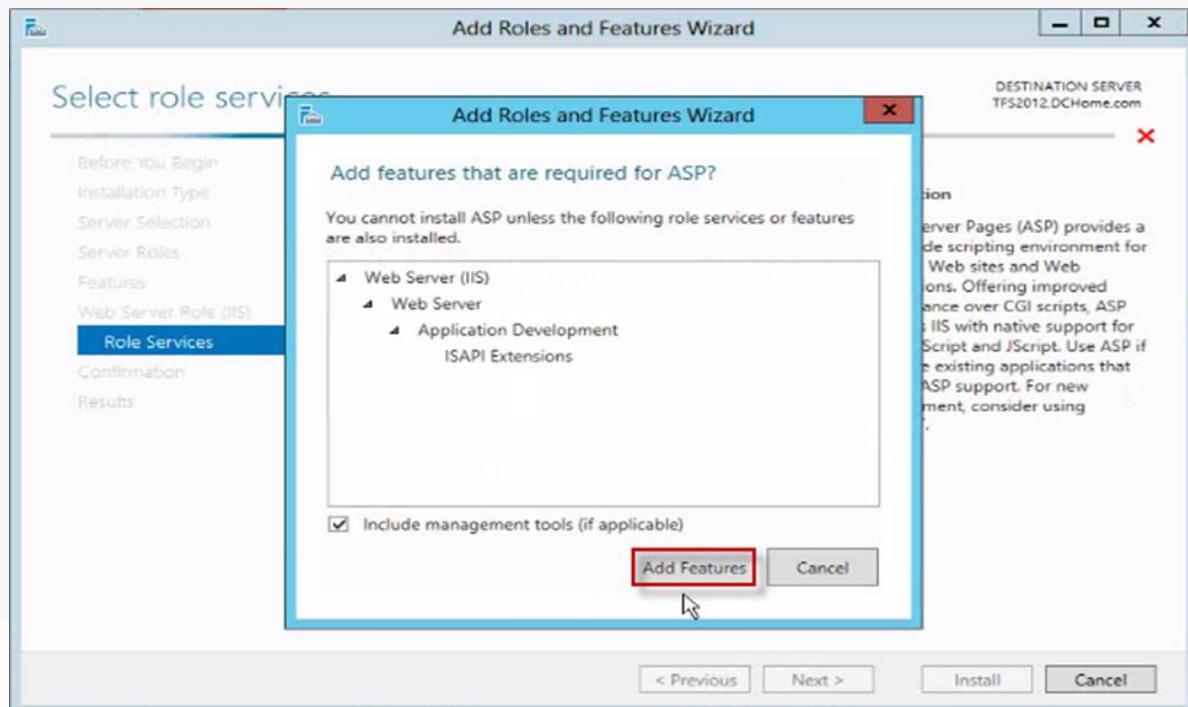
A window pops up prompting you to add the pre-requisite features for adding the “.NET Extensibility 3.5” service, click “Add features”.



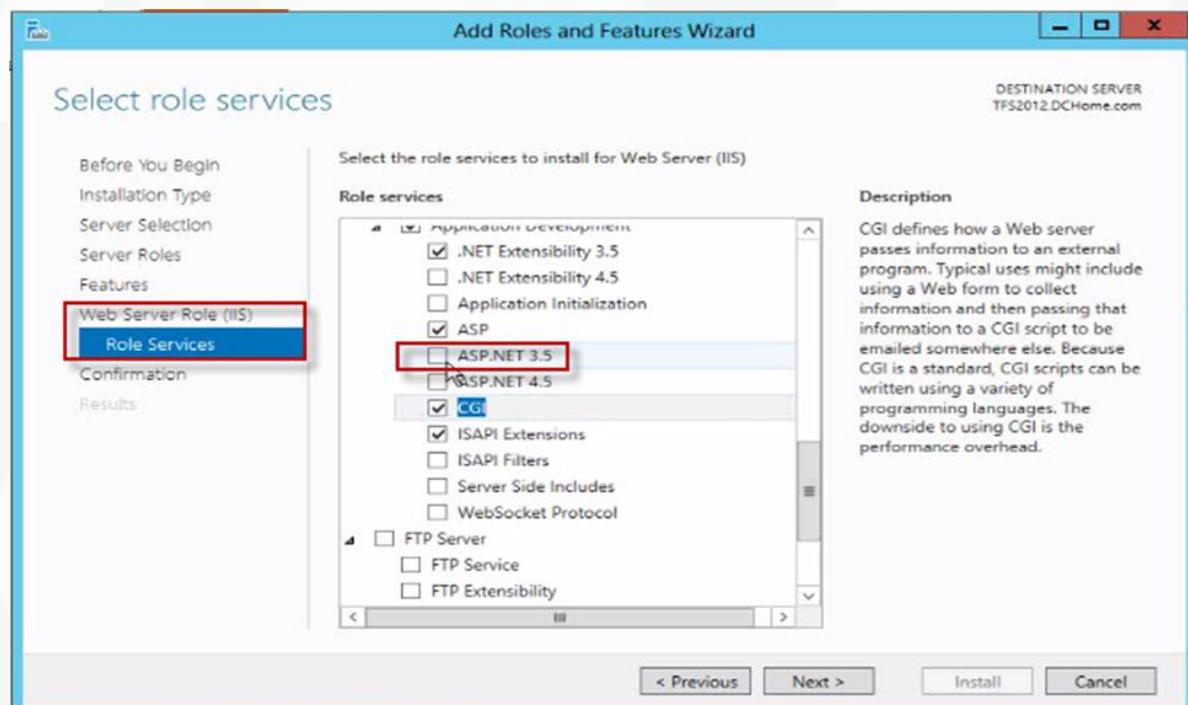
From the same page, select “ASP” from the “Application Development” role service category.



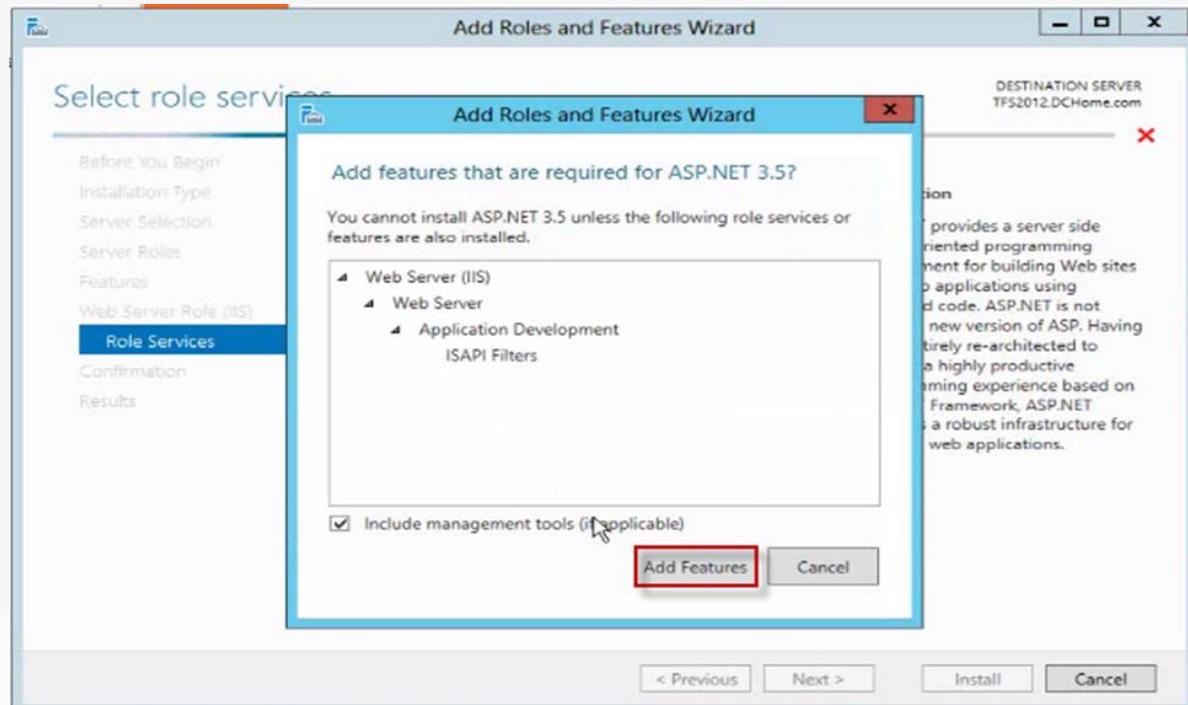
A window pops up prompting you to add the pre-requisite features for adding the “ASP” service, click “Add features”.



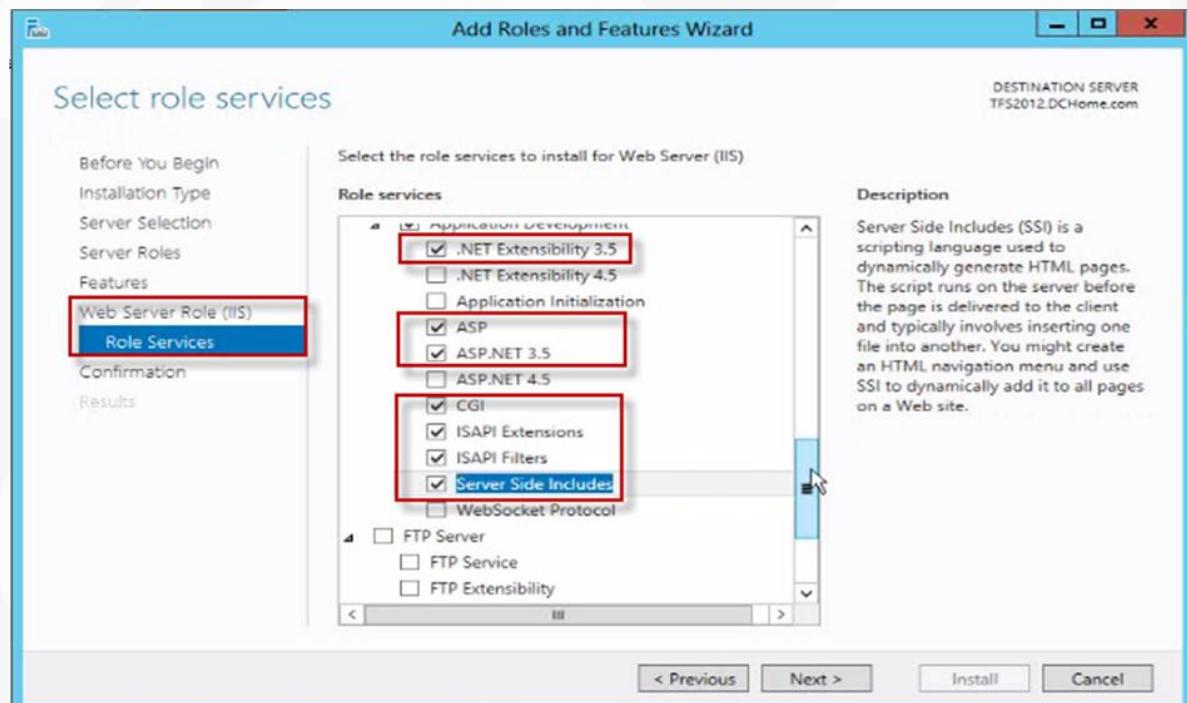
From the same page, select “**CGI**”, “**ISAPI Extensions**” and “**ASP.NET 3.5**” from the “**Application Development**” category.



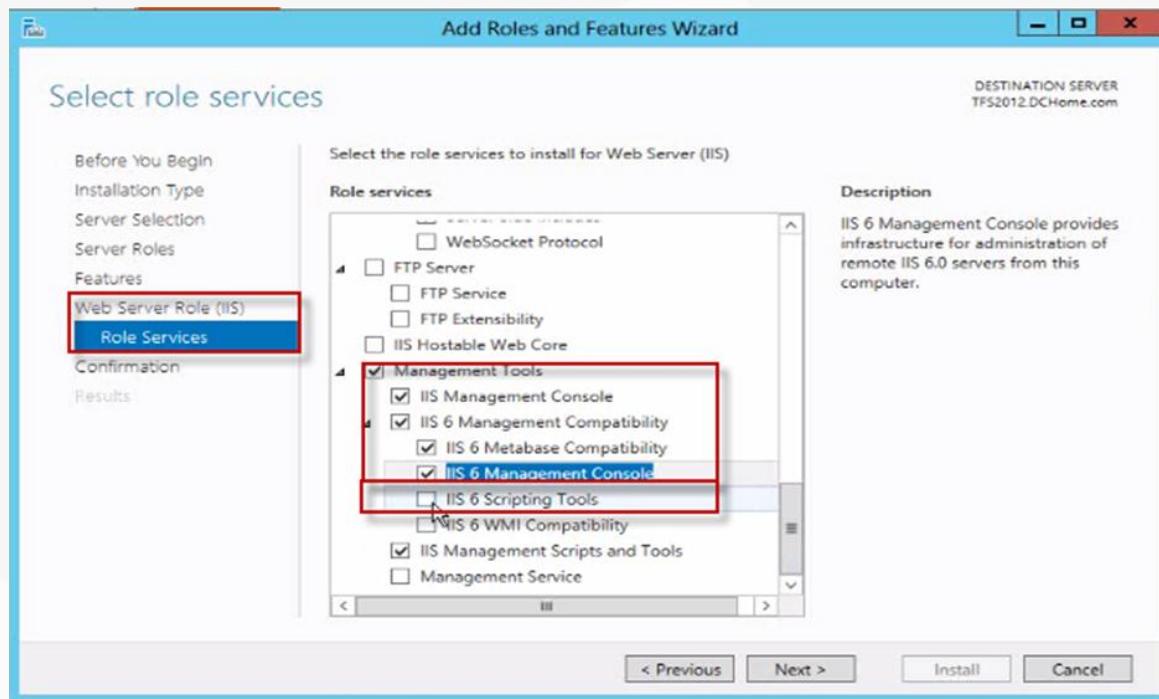
A window pops up prompting you to add the pre-requisite features for adding the “**ASP.NET 3.5**” service, click “**Add features**”.



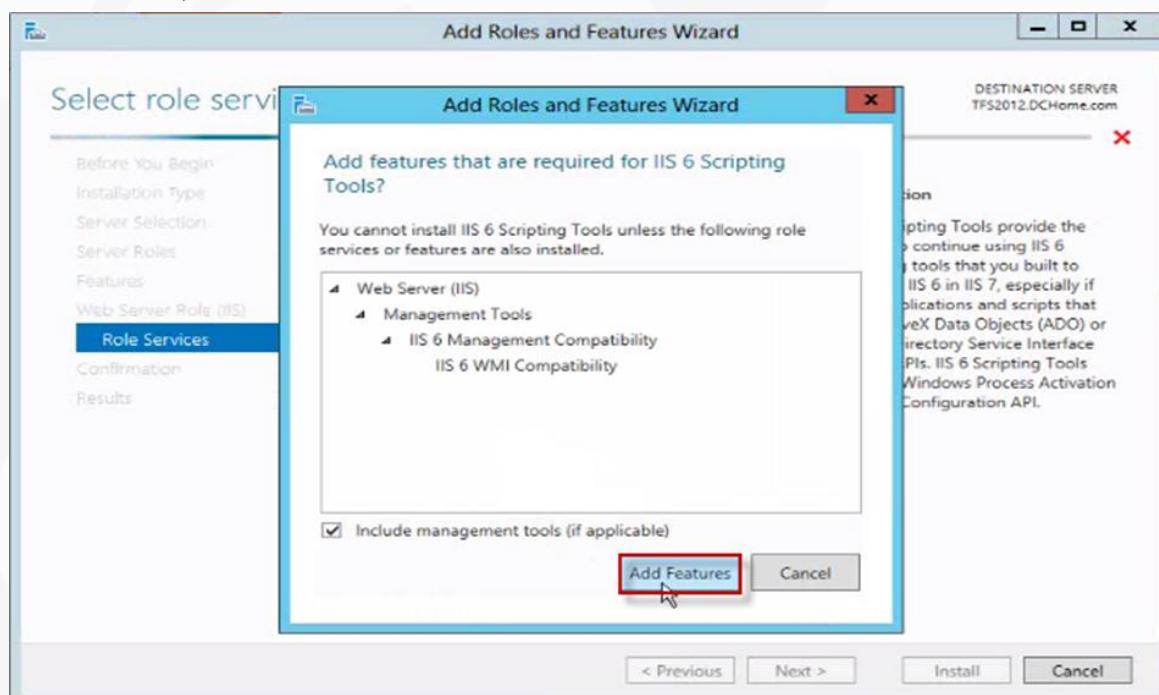
From the same page, select “**ISAPI Filters**” and “**Server Side Includes**” from the “**Application Development**” category.



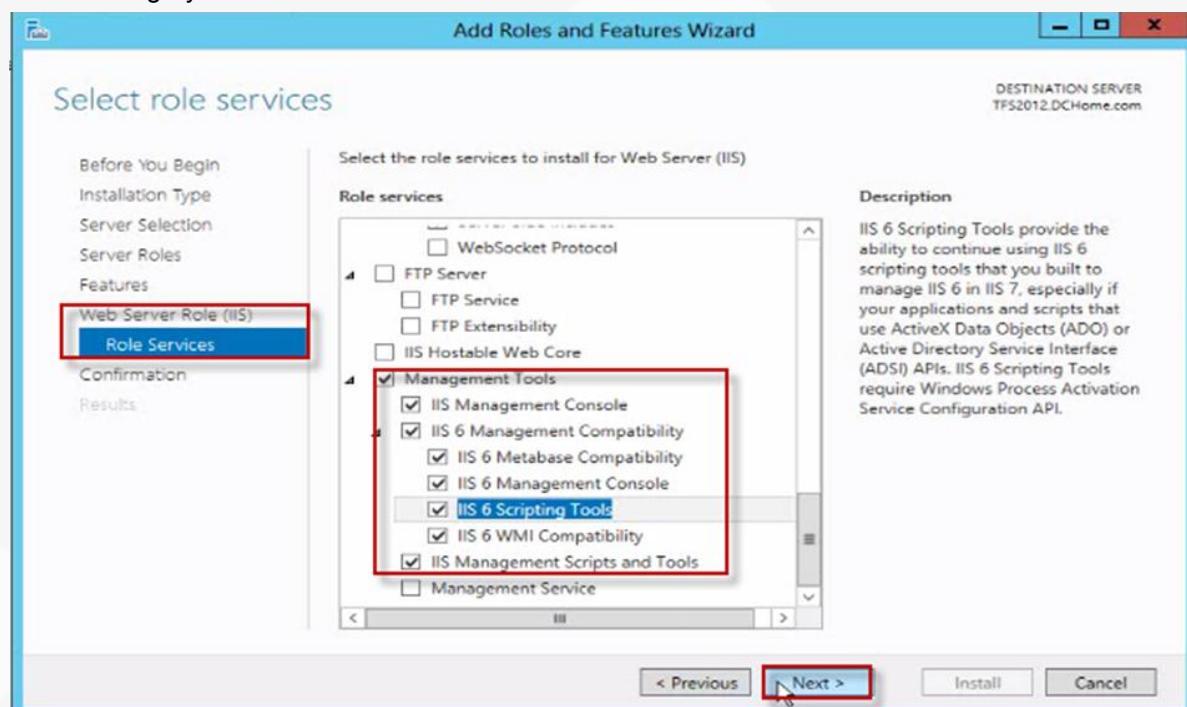
From the same page, select “IIS Management Console”, “IIS 6 Management Compatibility”, “IIS 6 Metabase Compatibility”, “IIS 6 Management Console” and “IIS 6 Scripting Tools” from the “Management Tools” category.



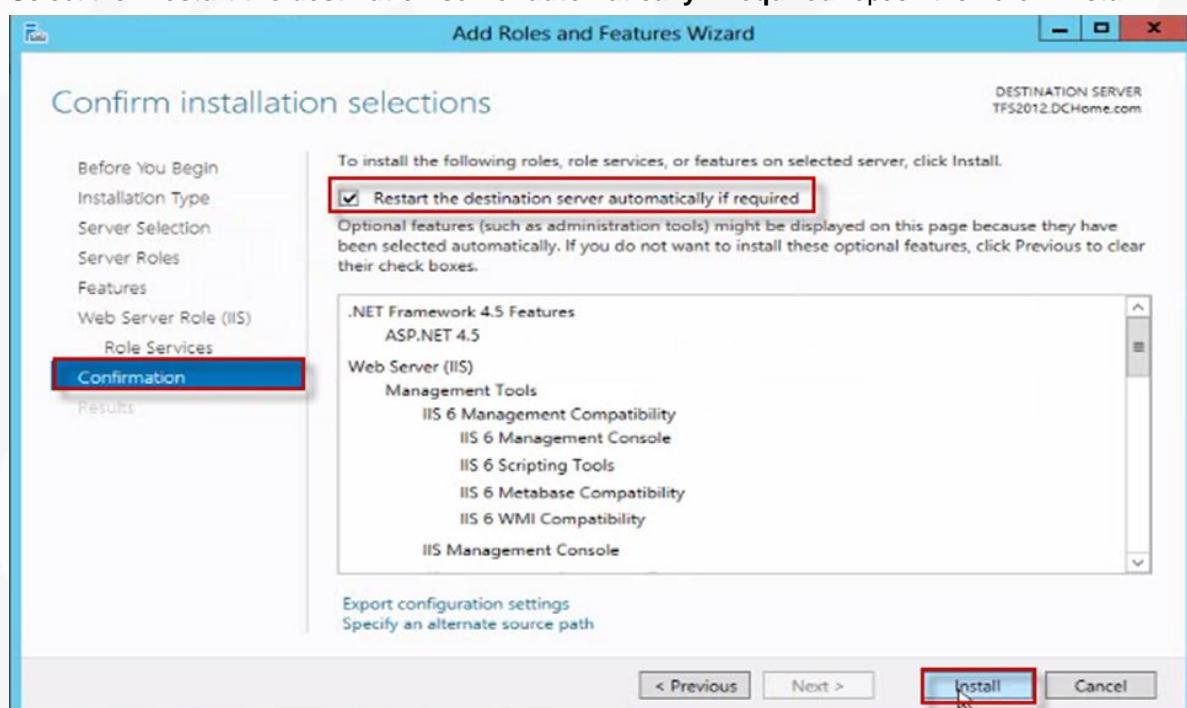
A window pops up prompting you to add the pre-requisite features for adding the “IIS 6 Scripting Tools” service, click “Add features”.



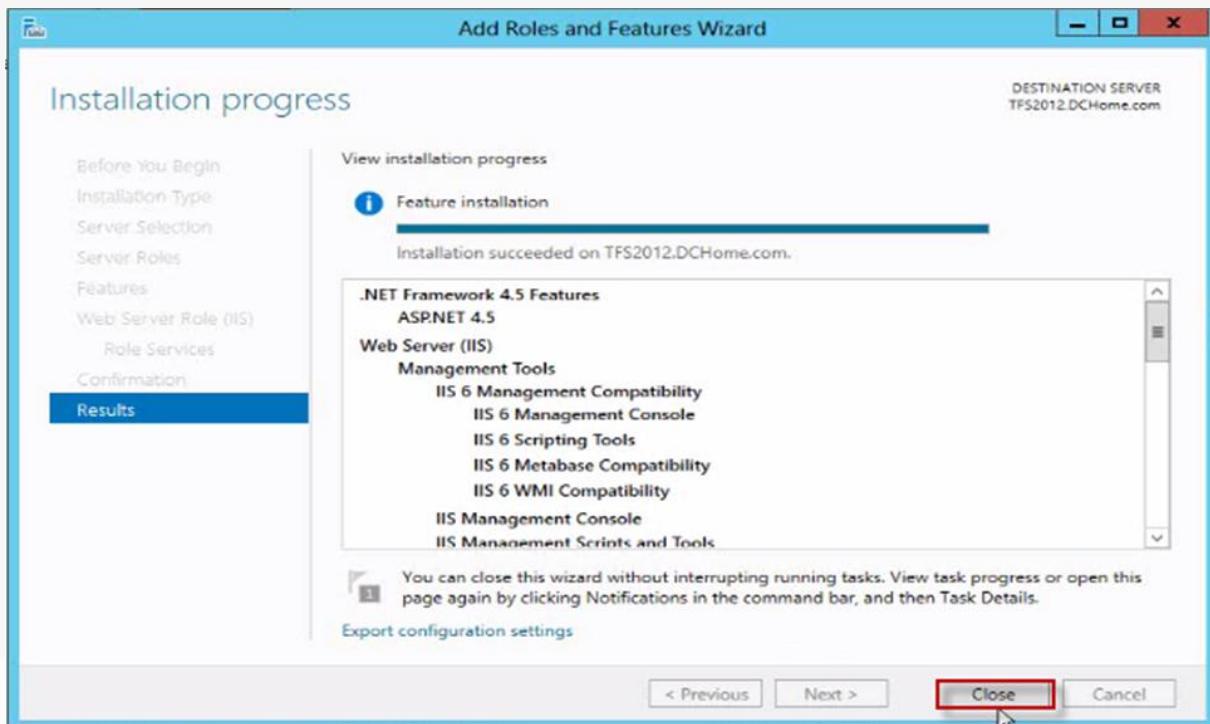
Ensure that the “IIS Management Console”, “IIS 6 Management Compatibility”, “IIS 6 Metabase Compatibility”, “IIS 6 Management Console”, “IIS 6 Scripting Tools”, “IIS 6 WMI Compatibility” and “IIS Management Scripts and Tools” are selected from the “Management Tools” category then click “Next”



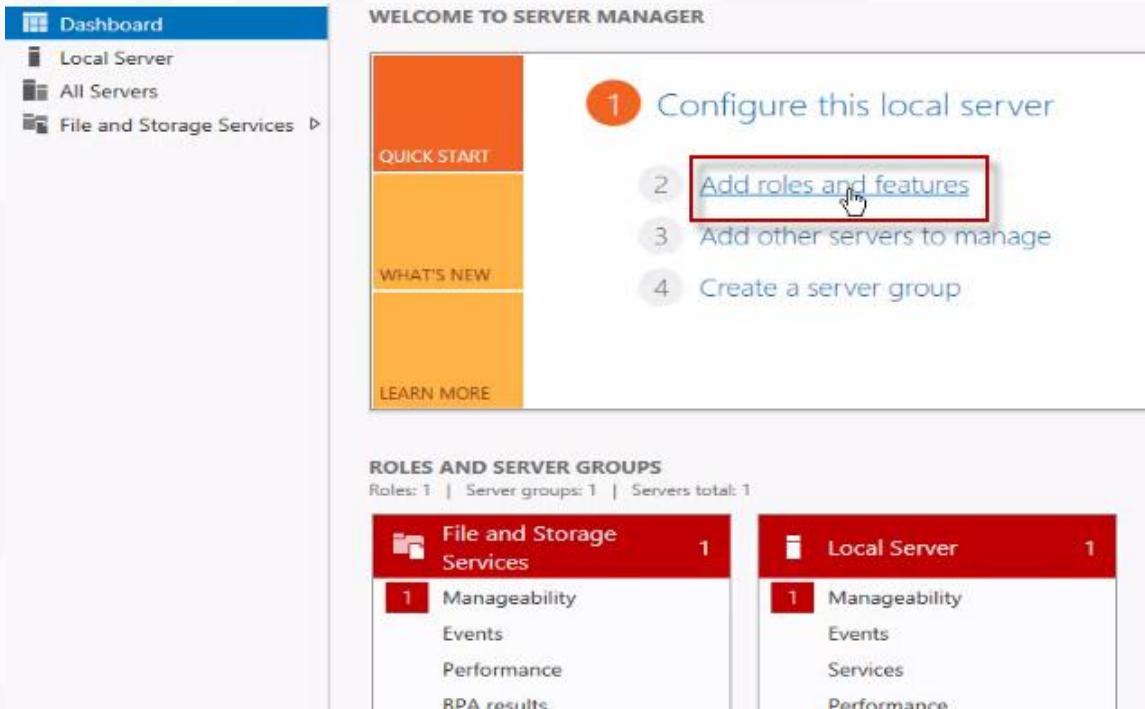
Select the “Restart the destination server automatically if required” option then click “Install”.



Click “Close” when the installation process finishes.



Click “Add roles and features”.



The “Add Roles and Feature Wizard” starts, click “Next” three times while accepting all the defaults till you reach the “Roles” page.

The screenshot shows the 'Before You Begin' step of the 'Add Roles and Features Wizard'. The title bar says 'Add Roles and Features Wizard'. The right pane is titled 'DESTINATION SERVER TFS2012.DCHome.com'. The main content area contains instructions for installing roles, role services, or features based on organizational needs like sharing documents or hosting a website. It also provides links for removing roles and starting the Remove Roles and Features Wizard. A list of prerequisites is provided, including a strong password, network settings, and security updates. A note says to verify prerequisites and close the wizard if any are missing. A 'Skip this page by default' checkbox is at the bottom. The navigation bar at the bottom includes '< Previous', 'Next >' (which is highlighted with a red box), 'Install', and 'Cancel'.

Before you begin

DESTINATION SERVER
TFS2012.DCHome.com

This wizard helps you install roles, role services, or features. You determine which roles, role services, or features to install based on the computing needs of your organization, such as sharing documents, or hosting a website.

To remove roles, role services, or features:
[Start the Remove Roles and Features Wizard](#)

Before you continue, verify that the following tasks have been completed:

- The Administrator account has a strong password
- Network settings, such as static IP addresses, are configured
- The most current security updates from Windows Update are installed

If you must verify that any of the preceding prerequisites have been completed, close the wizard, complete the steps, and then run the wizard again.

To continue, click Next.

Skip this page by default

< Previous **Next >** Install Cancel

The screenshot shows the 'Select installation type' step of the 'Add Roles and Features Wizard'. The title bar says 'Add Roles and Features Wizard'. The right pane is titled 'DESTINATION SERVER TFS2012.DCHome.com'. The main content area explains that users can install roles and features on a running physical computer or virtual machine, or on an offline virtual hard disk (VHD). It offers two options: 'Role-based or feature-based installation' (selected) and 'Remote Desktop Services installation'. The 'Role-based or feature-based installation' option allows configuring a single server by adding roles, role services, and features. The 'Remote Desktop Services installation' option installs required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment. The navigation bar at the bottom includes '< Previous', 'Next >' (highlighted with a red box), 'Install', and 'Cancel'.

Select installation type

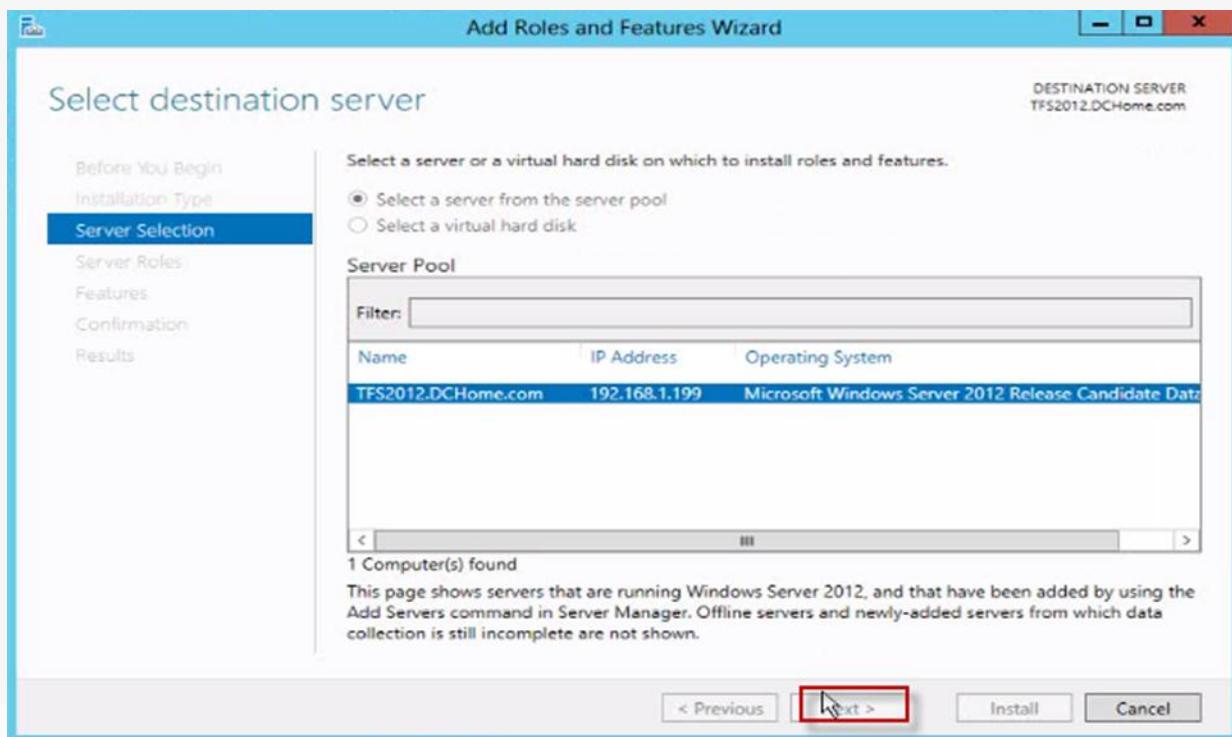
DESTINATION SERVER
TFS2012.DCHome.com

Select the installation type. You can install roles and features on a running physical computer or virtual machine, or on an offline virtual hard disk (VHD).

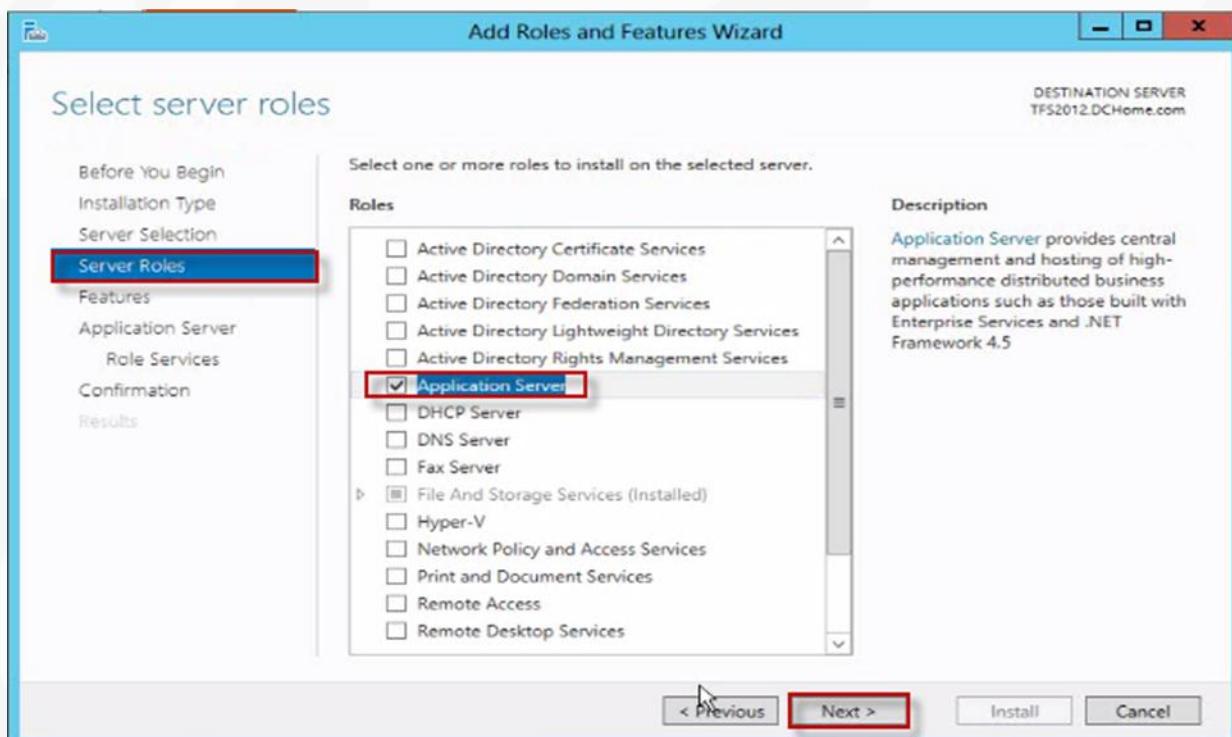
Role-based or feature-based installation
Configure a single server by adding roles, role services, and features.

Remote Desktop Services installation
Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment.

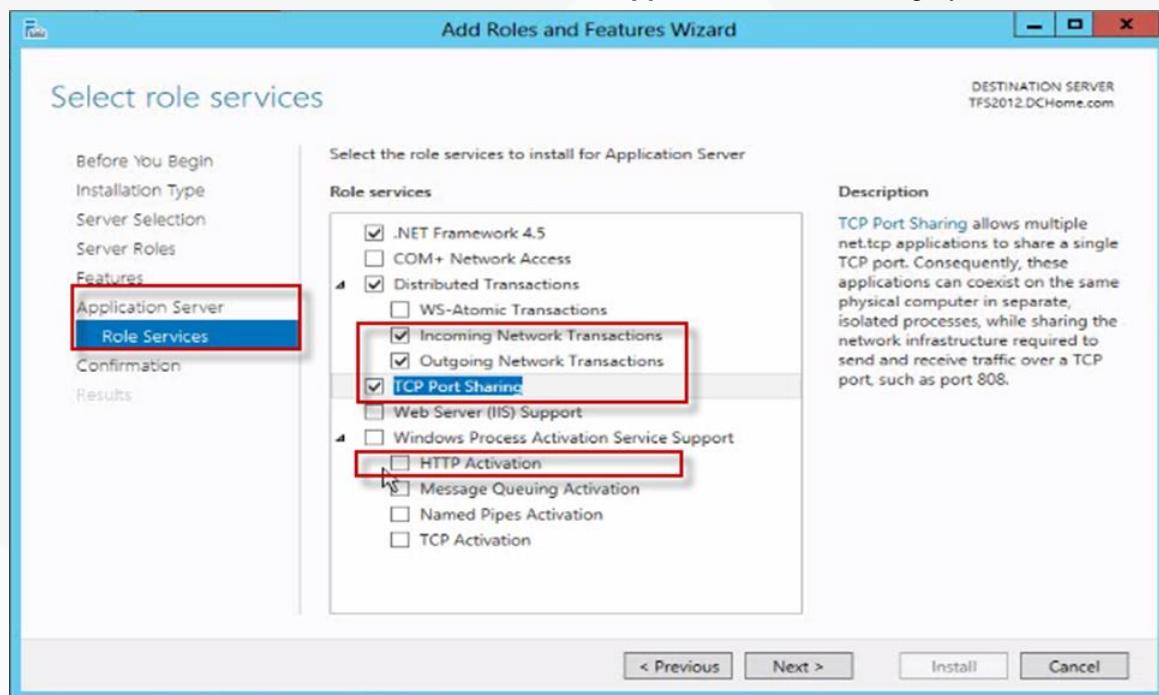
< Previous **Next >** Install Cancel



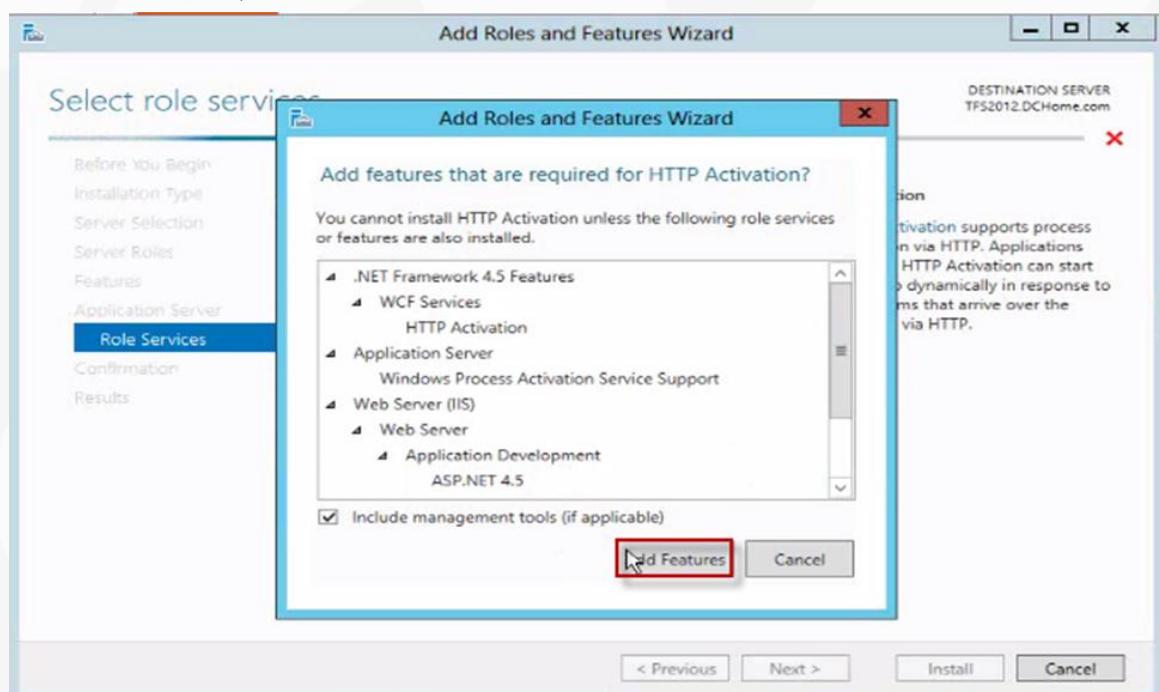
From the “**Server Roles**” page, select “**Application Server**” then click “**Next**”.



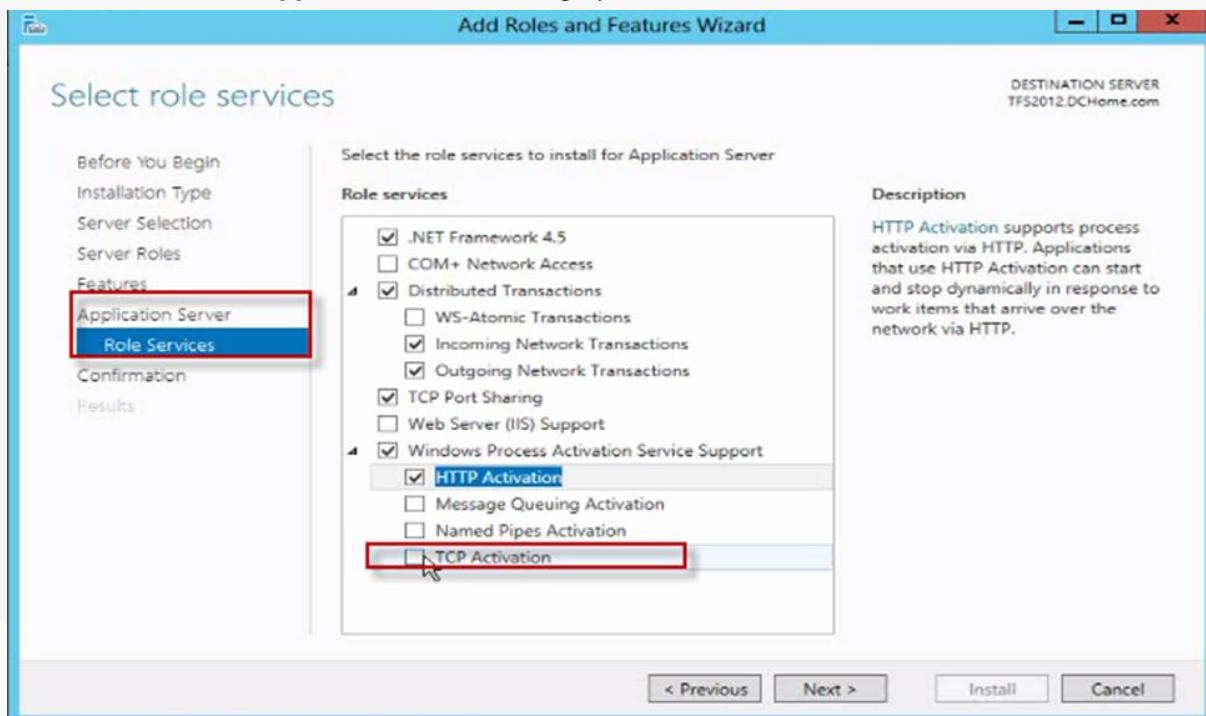
From the “Role Services” page for “Application Server”, select “Incoming Network Transactions” and “Outgoing Network Transactions” from the “Distributed Transactions” service category then select the “TCP Port Sharing” service and then select “HTTP Activation” from the “Windows Process Activation Service Support” role service category.



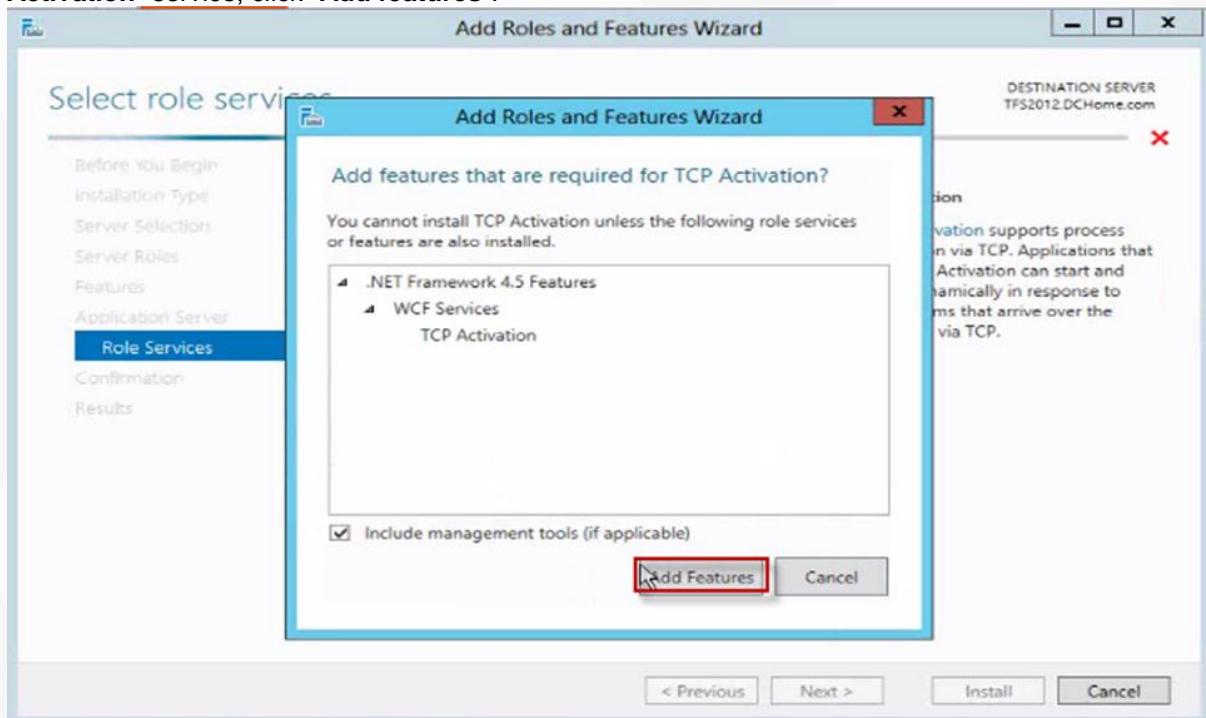
A window pops up prompting you to add the pre-requisite features for adding the “HTTP Activation” service, click “Add features”.



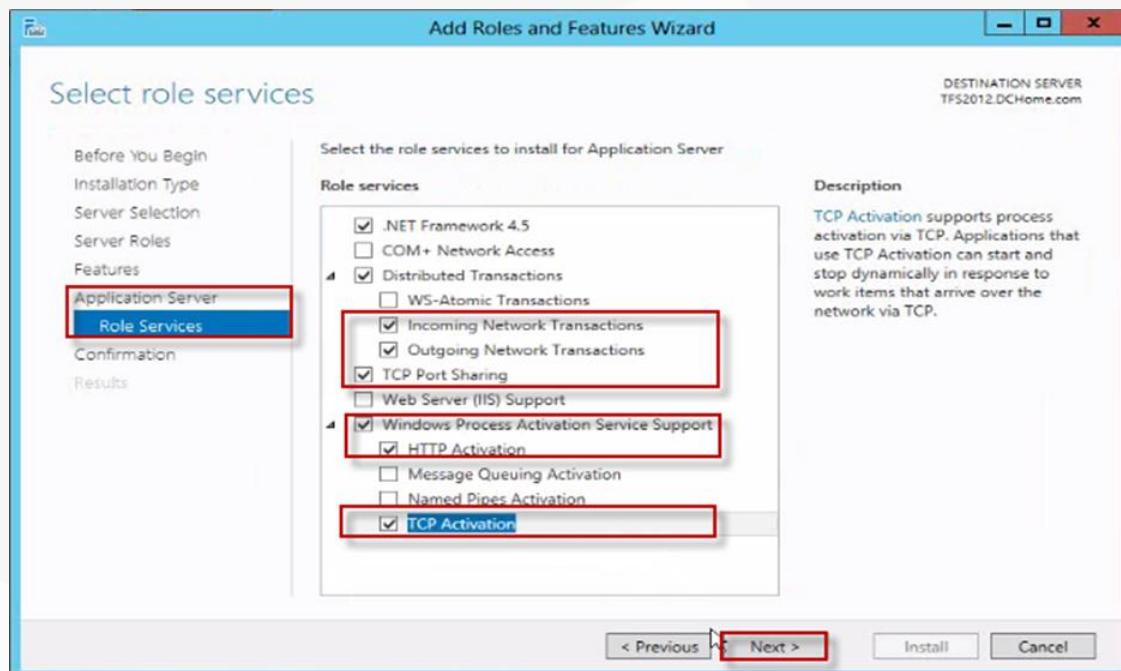
From the same page, select the “**TCP Activation**” service from the “**Windows Process Activation Service Support**” role service category.



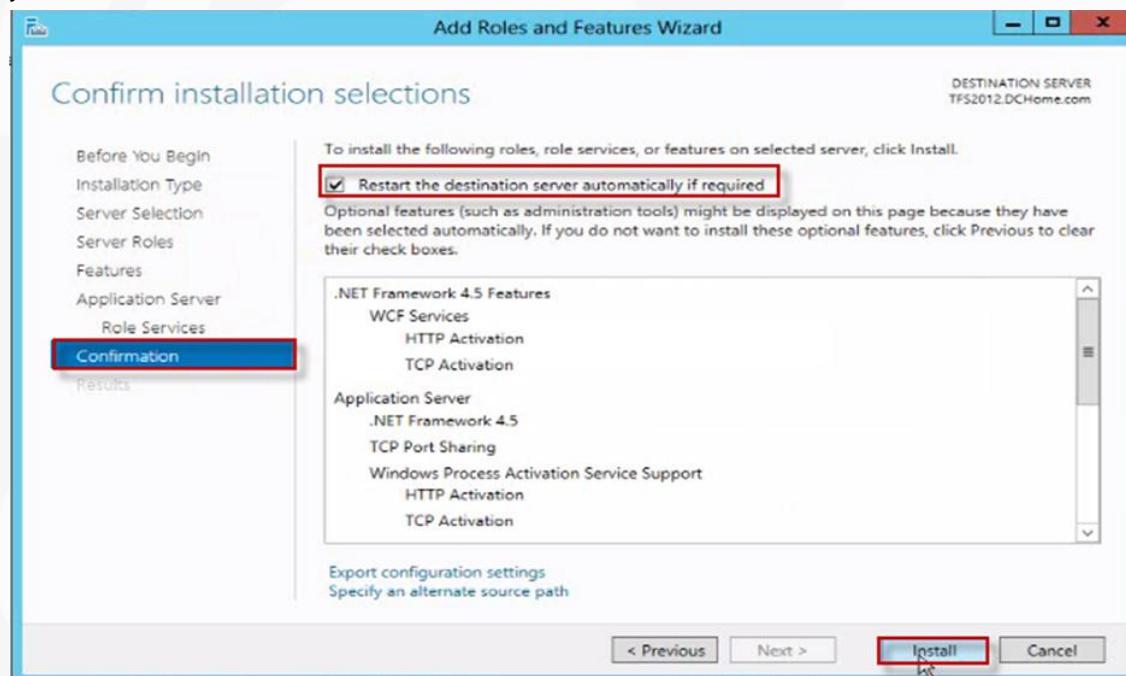
A window pops up prompting you to add the pre-requisite features for adding the “**TCP Activation**” service, click “**Add features**”.



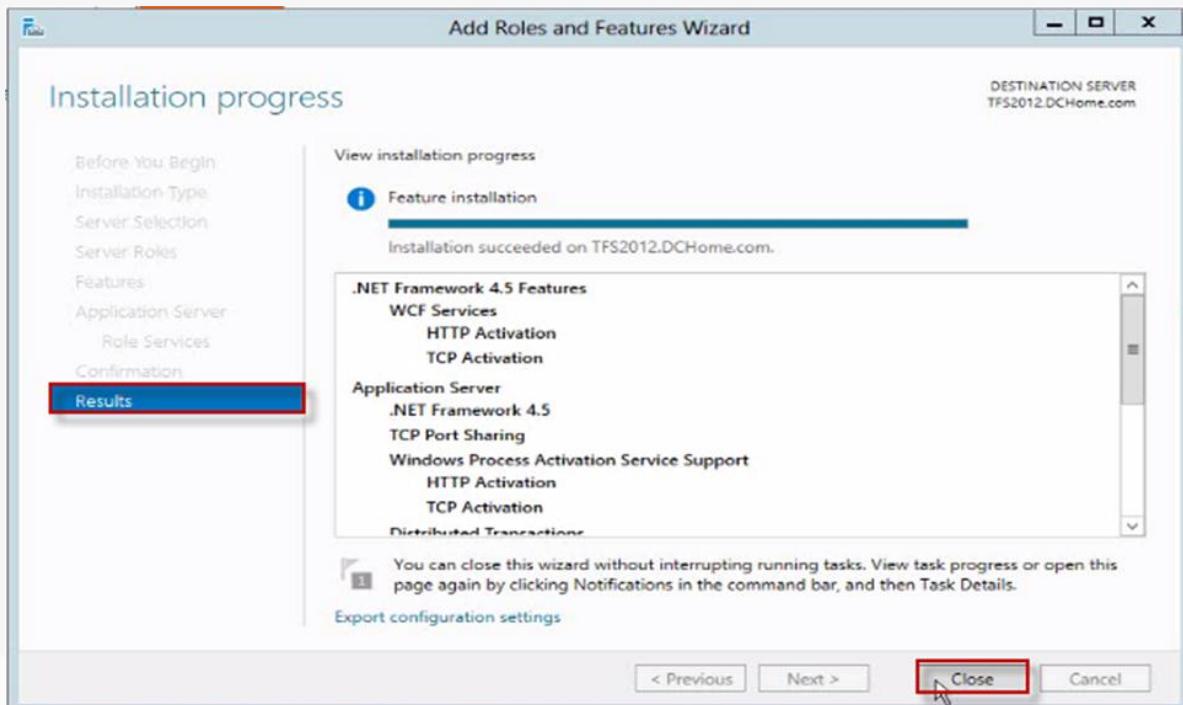
Ensure that the “**Distributed Transactions**”, “**Incoming Network Transactions**”, “**Outgoing Network Transactions**”, “**TCP Port Sharing**”, “**HTTP Activation**” and “**TCP Activation**” services are selected then click “**Next**”.



Select “**Restart the destination server automatically if required**” then click “**Yes**” to confirm your selection and then click “**Install**”.



After the installation completes click “Close”.



Watch the
Video

www.youtube.com/watch?v=orWYbWZXnvM

7.2 Emulating the Exit Code

Using Visual Studio 2012, create a console application with the name “**ServerManagerCmd**”, copy the following code and then compile it.

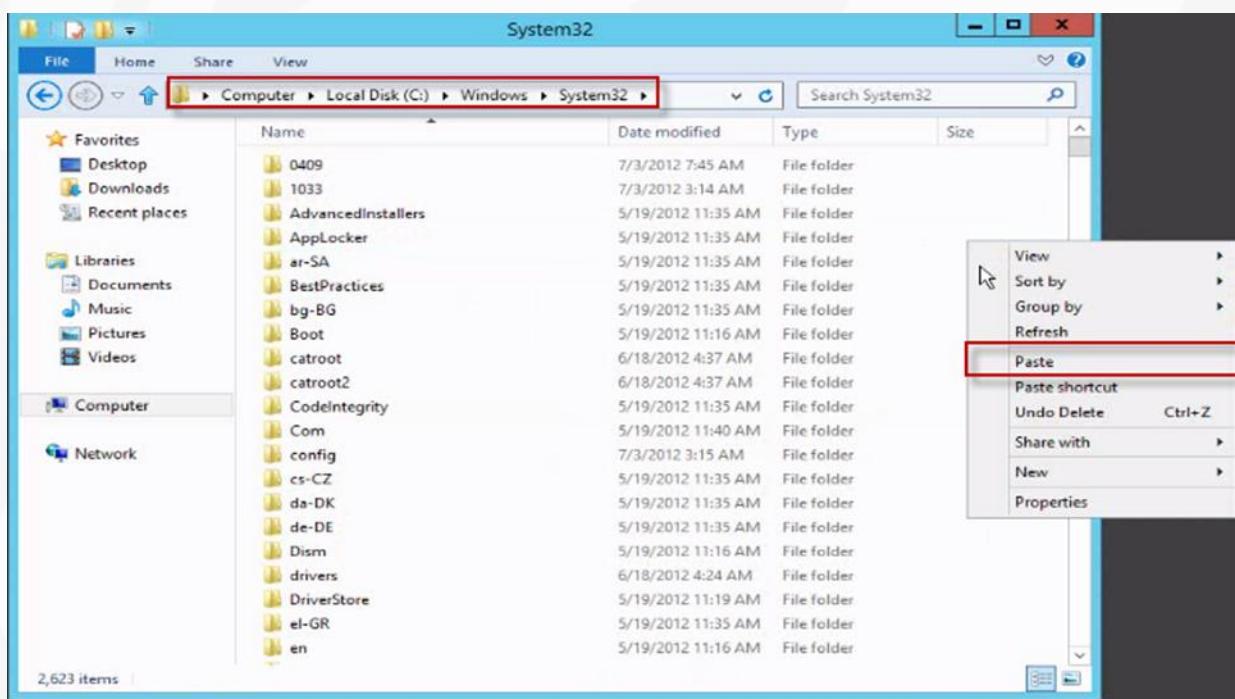
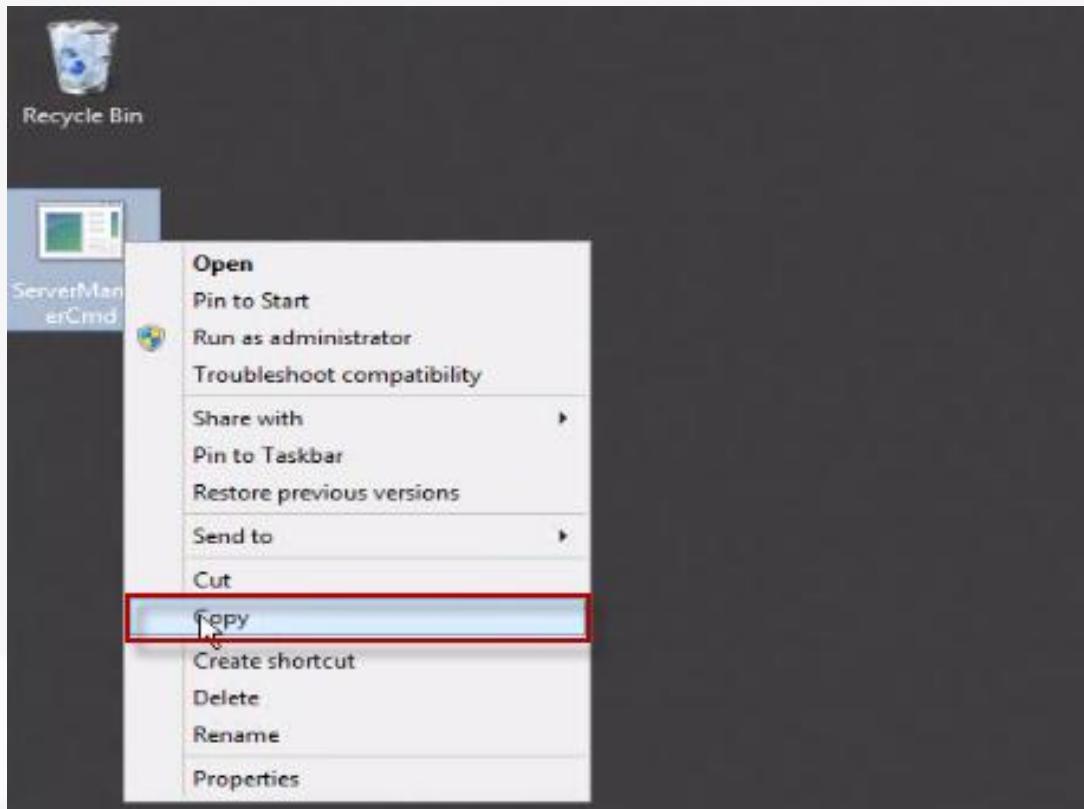
```
namespace ServerManagerCmdEmul
{
    class Program
    {
        static void Main(string[] args)
        {
            System.Environment.ExitCode = 1003;
        }
    }
}
```



WARNING: If you don't have Visual Studio installed or you don't want to create this program, you can download the executable directly from <http://blog.hand-net.com/wp-content/uploads/2010/06/Hand.ServerManagerCmdEmul-Binaries.zip>.

Please note that It is not recommended to download an executable file from the internet unless you trust the source.

Copy the “ServerManagerCmd.exe” file to “System32” folder.



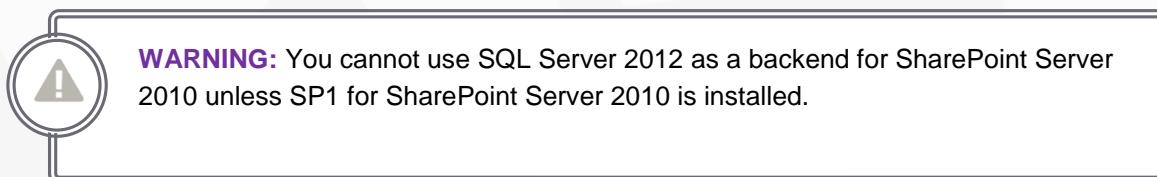
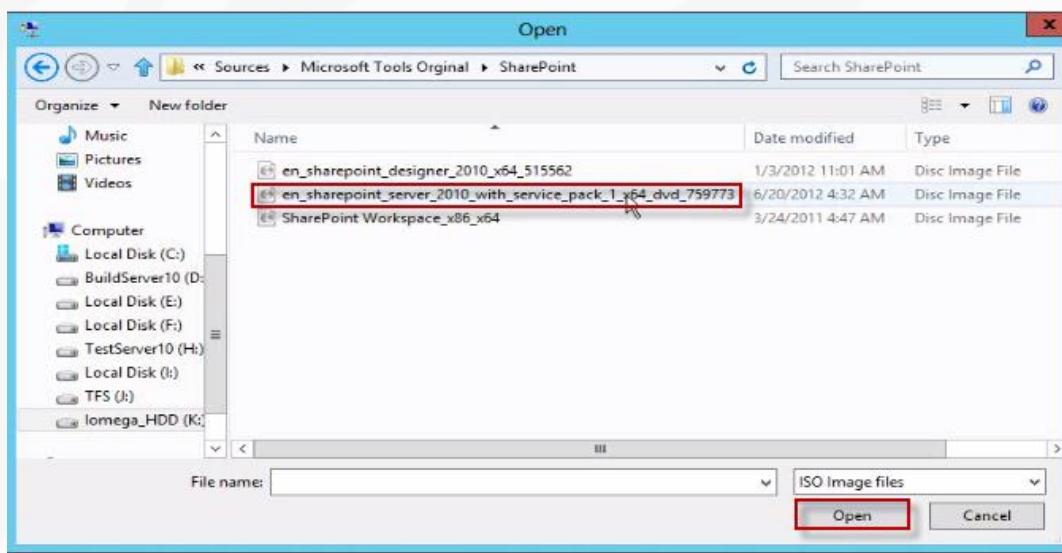
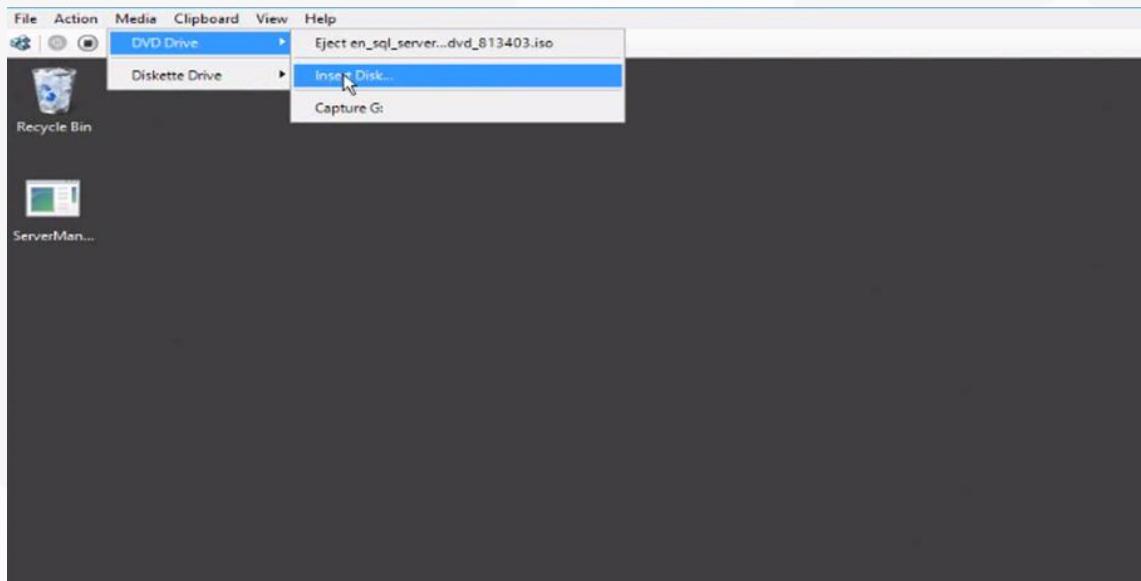


Watch the
Video

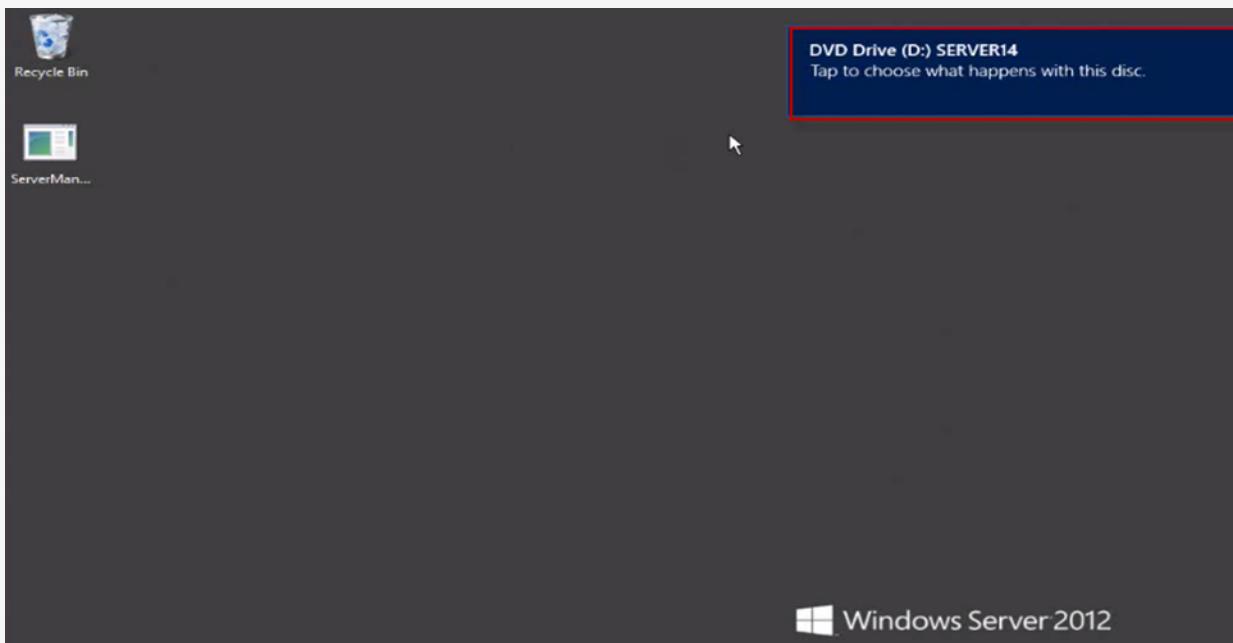
www.youtube.com/watch?v=P3VU5wRclac

7.3 Installing SharePoint 2010 Prerequisites

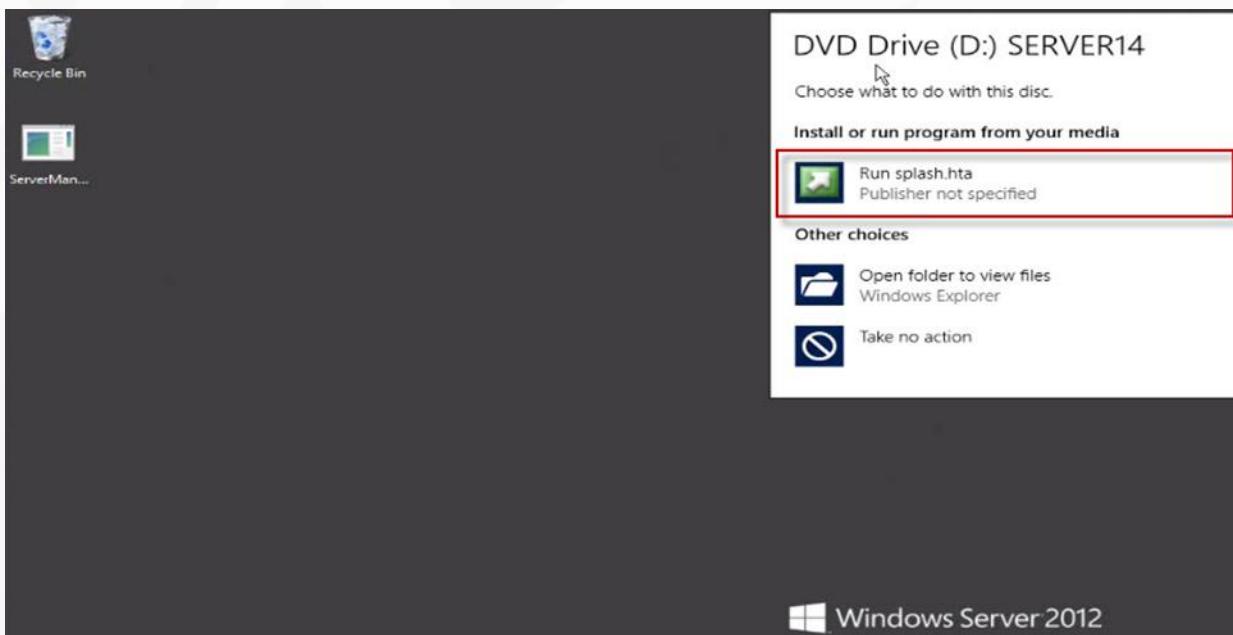
From the Hyper-V Manager console, double-click the “TFS2012” Virtual Machine then click “Media” from the top menu bar and choose “DVD Drive” then choose “Insert Disk” and then browse to the folder where you are storing SharePoint 2010 SP1 ISO image. A blue window pops up, click it.



Chapter 7: Installing & Configuring SharePoint Server 2010

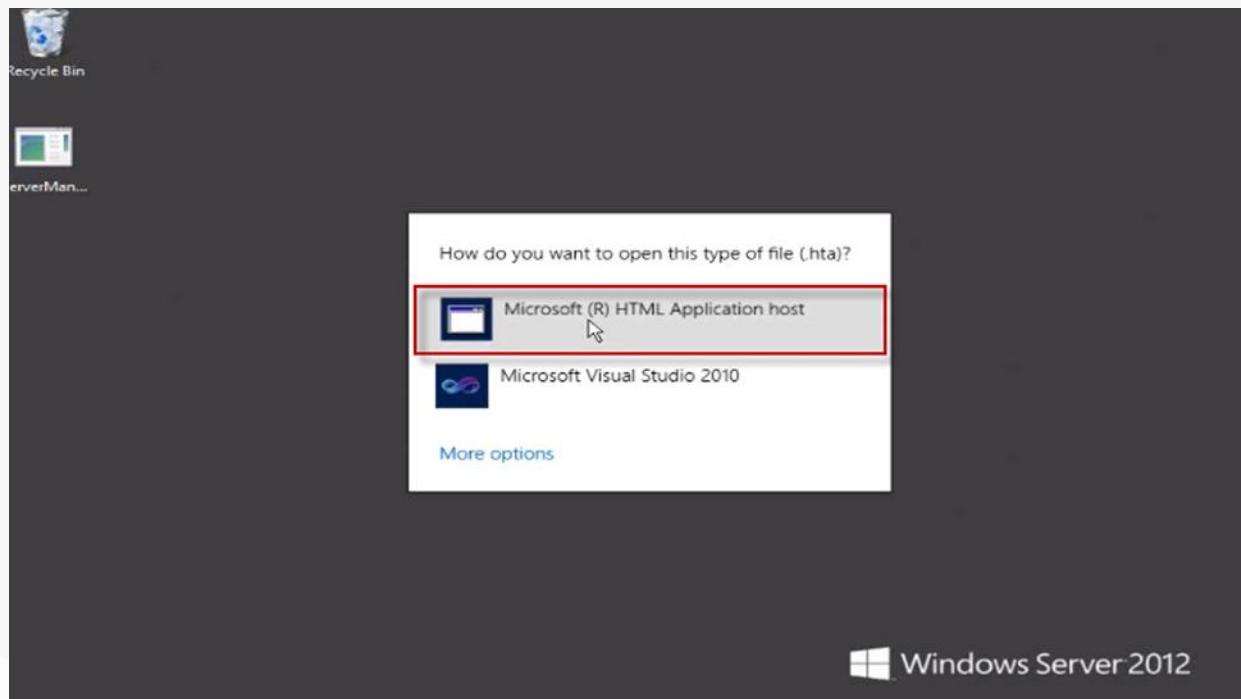


Click "Run splash.hta".

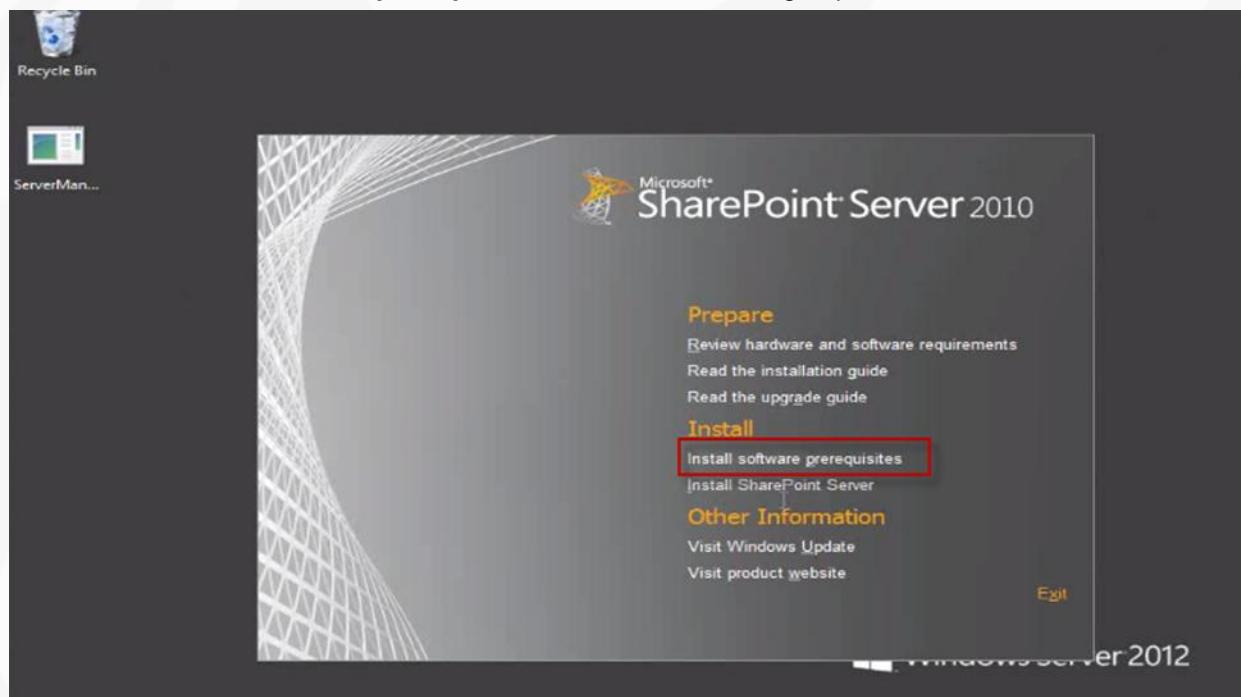


Chapter 7: Installing & Configuring SharePoint Server 2010

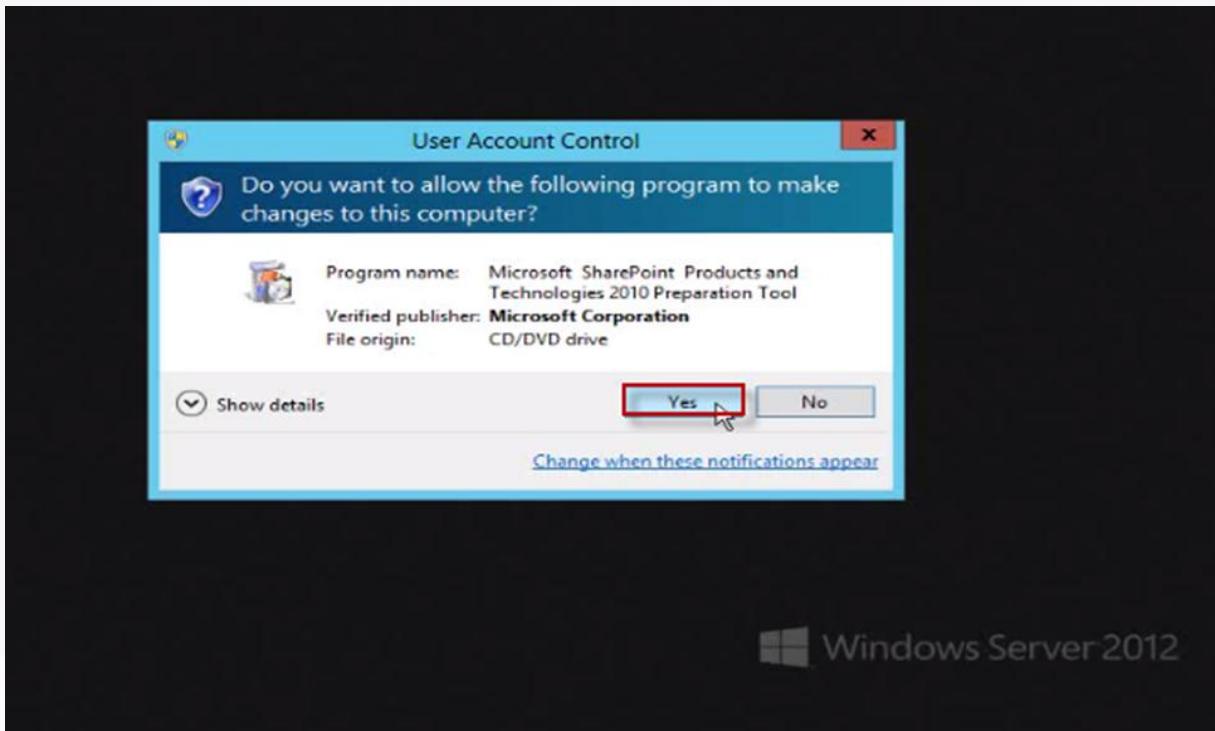
Click “Microsoft ® HTML Application host”.



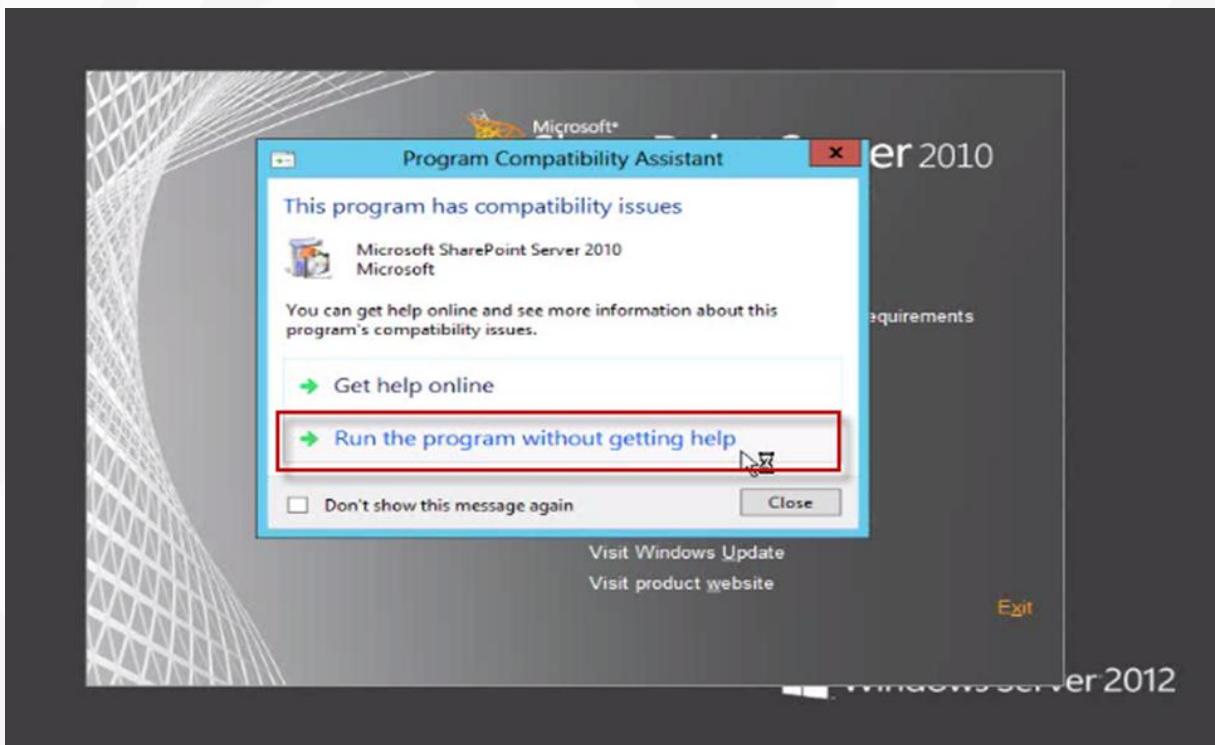
Click the link “Install software prerequisites” under the “Install” group.



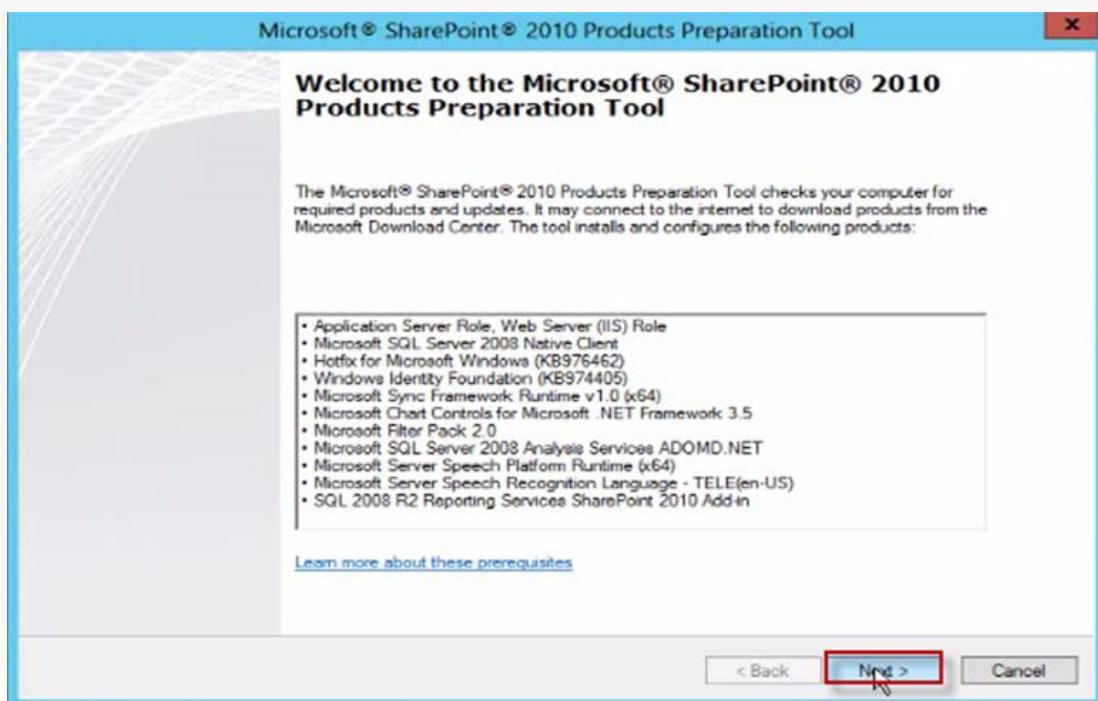
If the “User Account Control” dialog box pops up, click “Yes”.



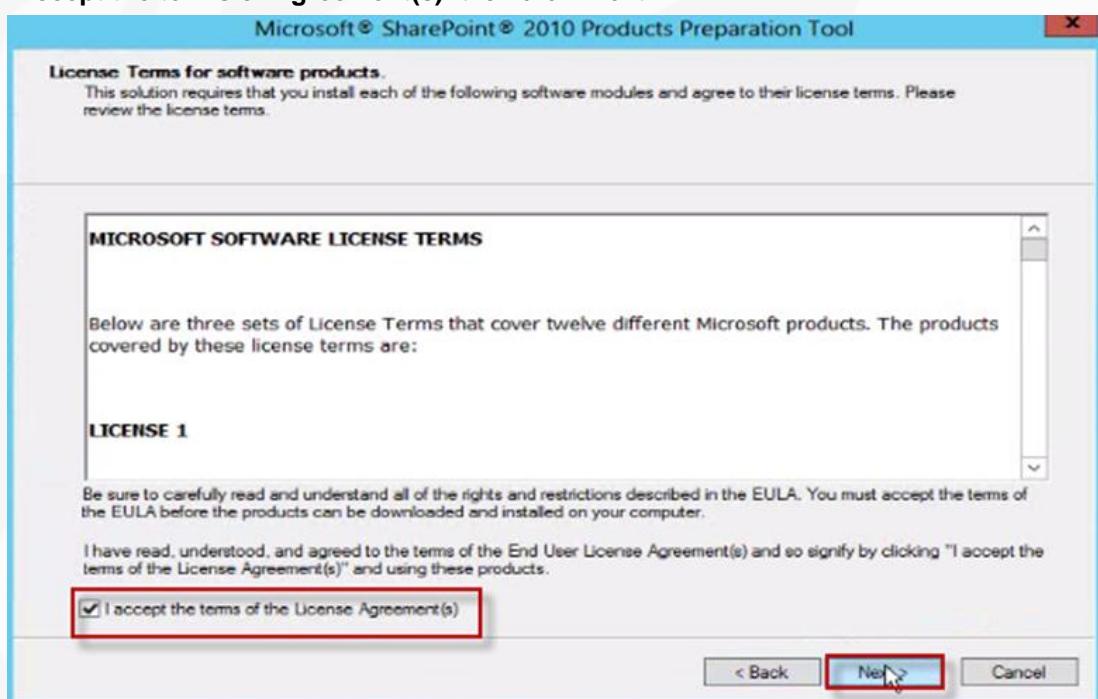
If the “Program Compatibility Assistant” window pops up, click “Run the program without getting help”.

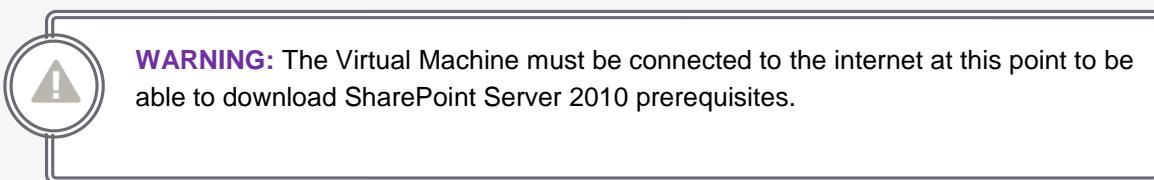


From the “Microsoft SharePoint 2010 Products Preparation Tool” welcome screen, click “Next”.

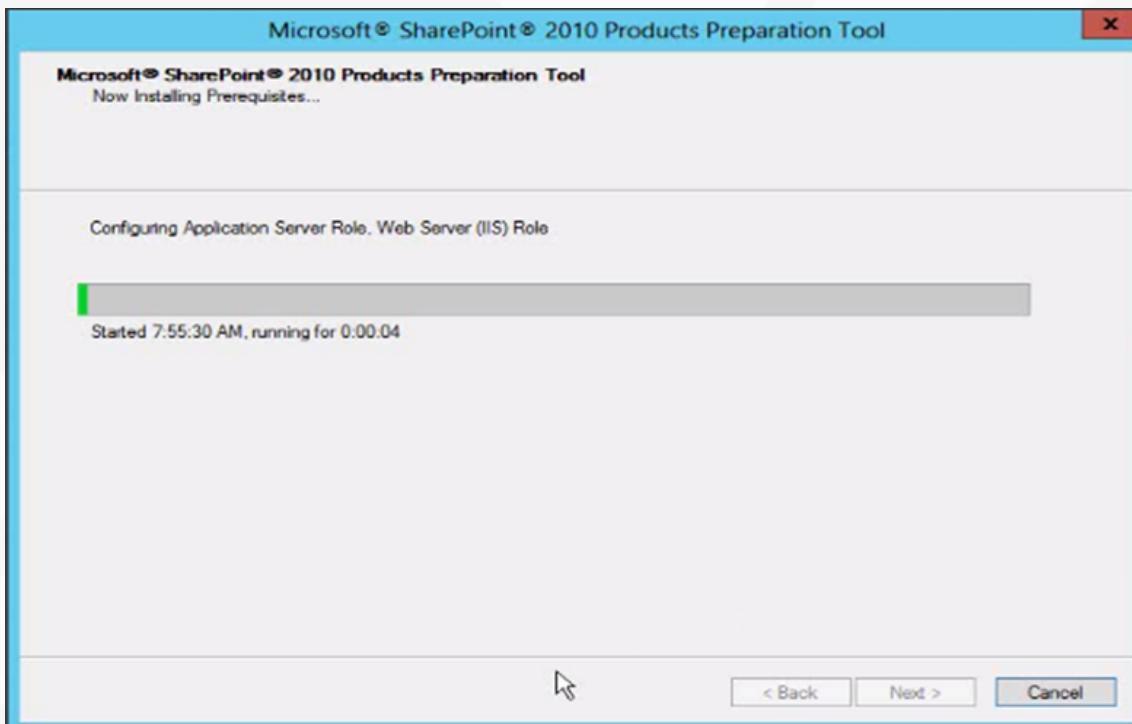


“Accept the terms of Agreement(s)” then click “Next”.

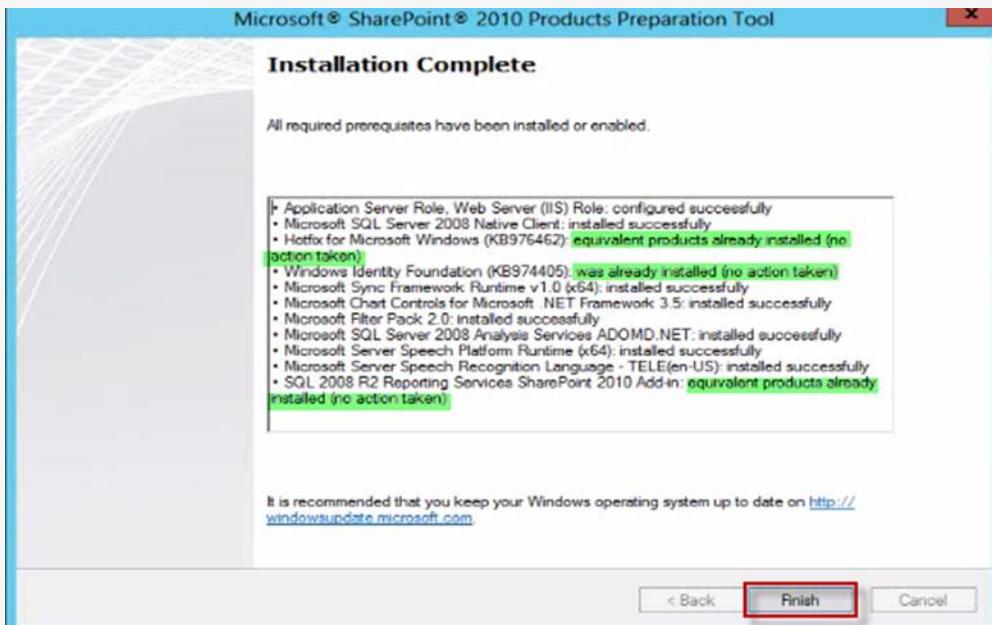




The “**Microsoft SharePoint 2010 Products Preparation Tools**” starts downloading and installing all the pre-requisites.



When the Installation process completes, click “Finish”.



TIP: The Preparation Tool will take no action in case it finds an already installed component. Since you installed Windows Server 2012 and SQL Server 2012, the tool will find some already installed ones, those are the ones highlighted in green.



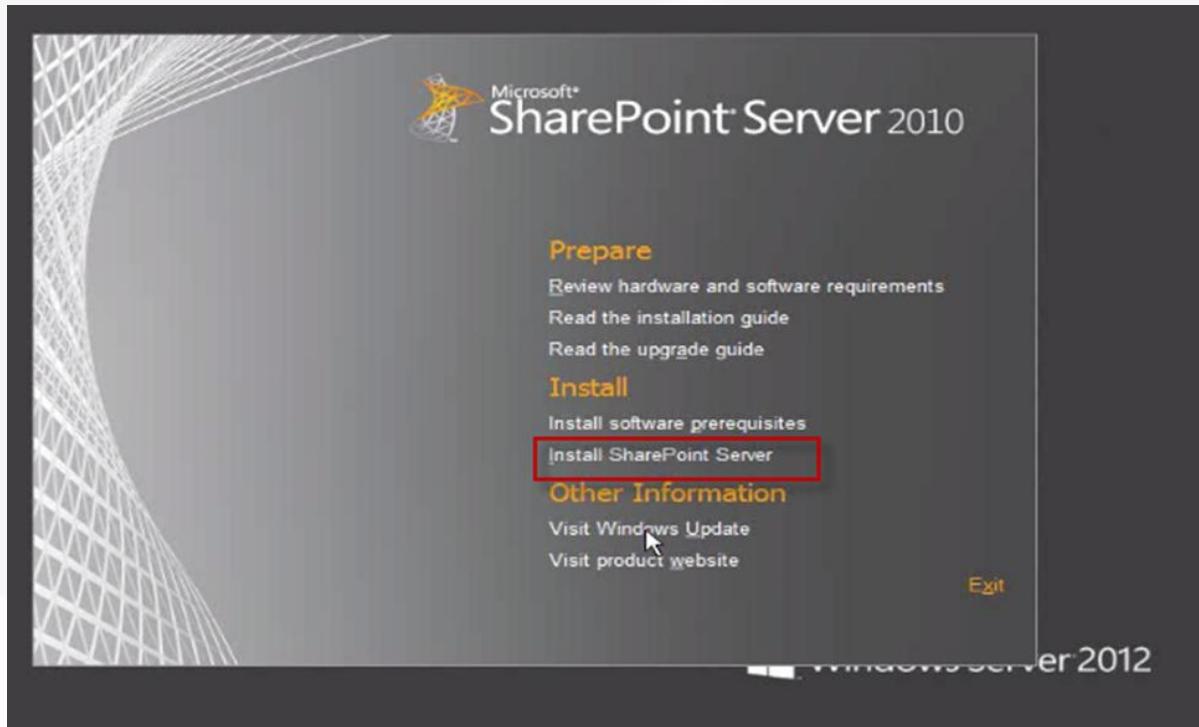
Watch the

Video

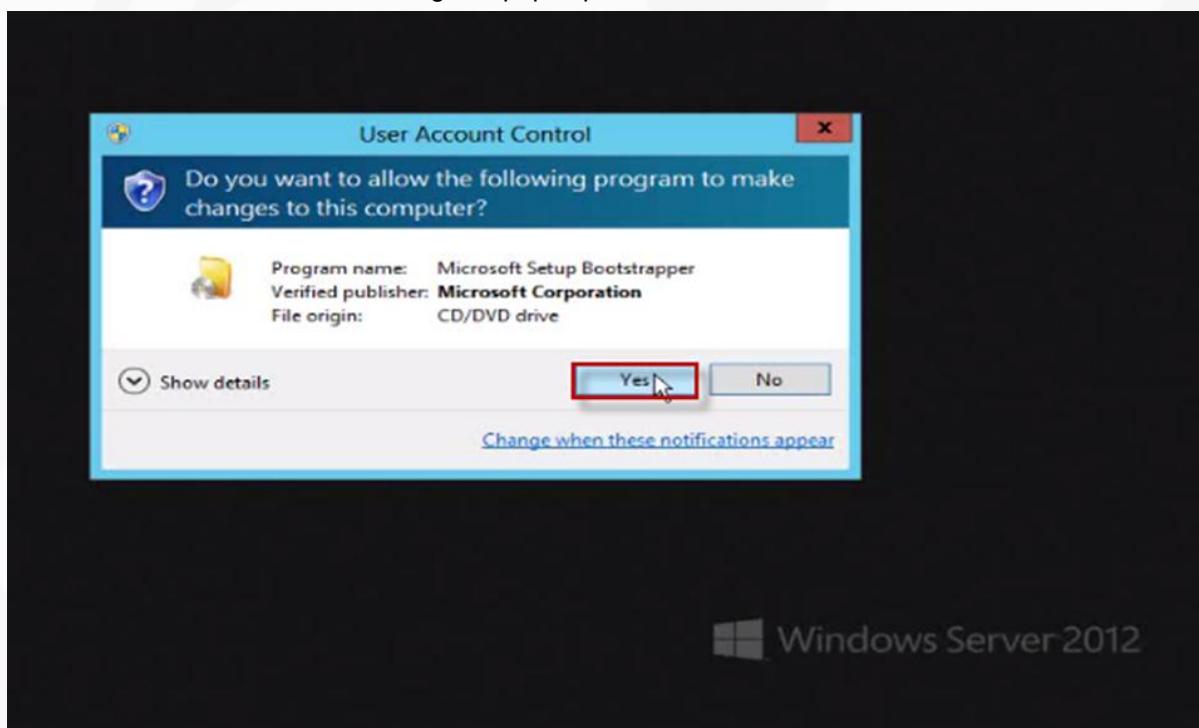
www.youtube.be/Bf7dlioelOvU

7.4 Installing SharePoint Server 2010

Click the link “**Install SharePoint 2010**” under the “**Install**” group.



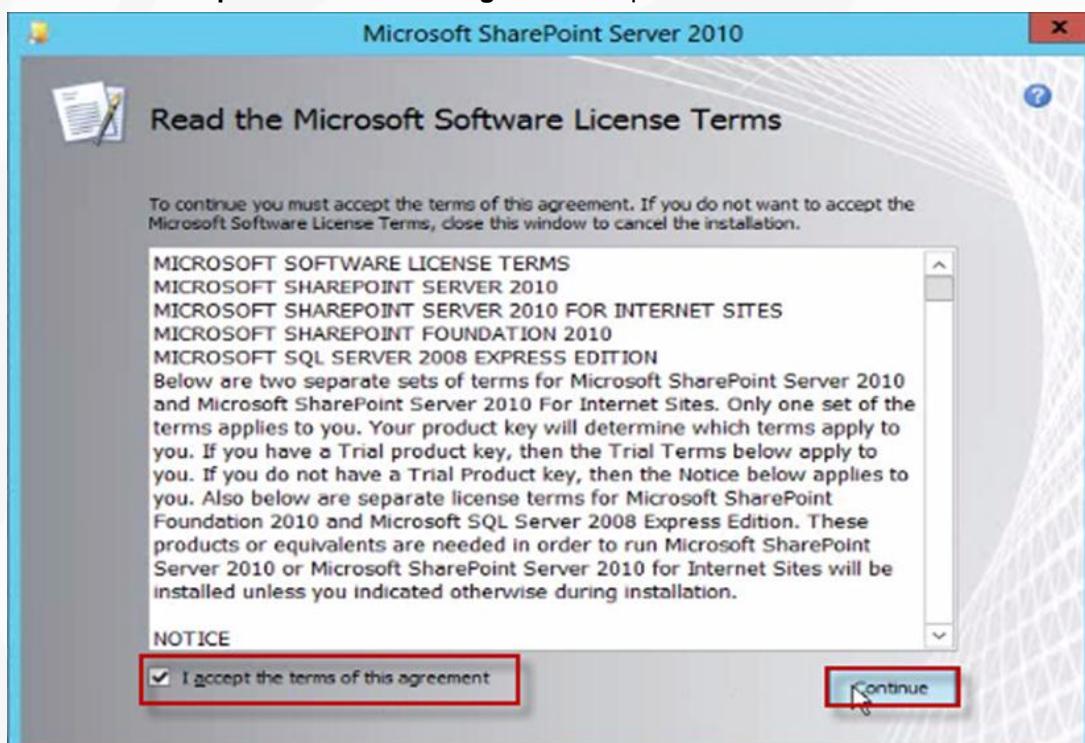
If the “**User Account Control**” dialog box pops up, click “**Yes**”.



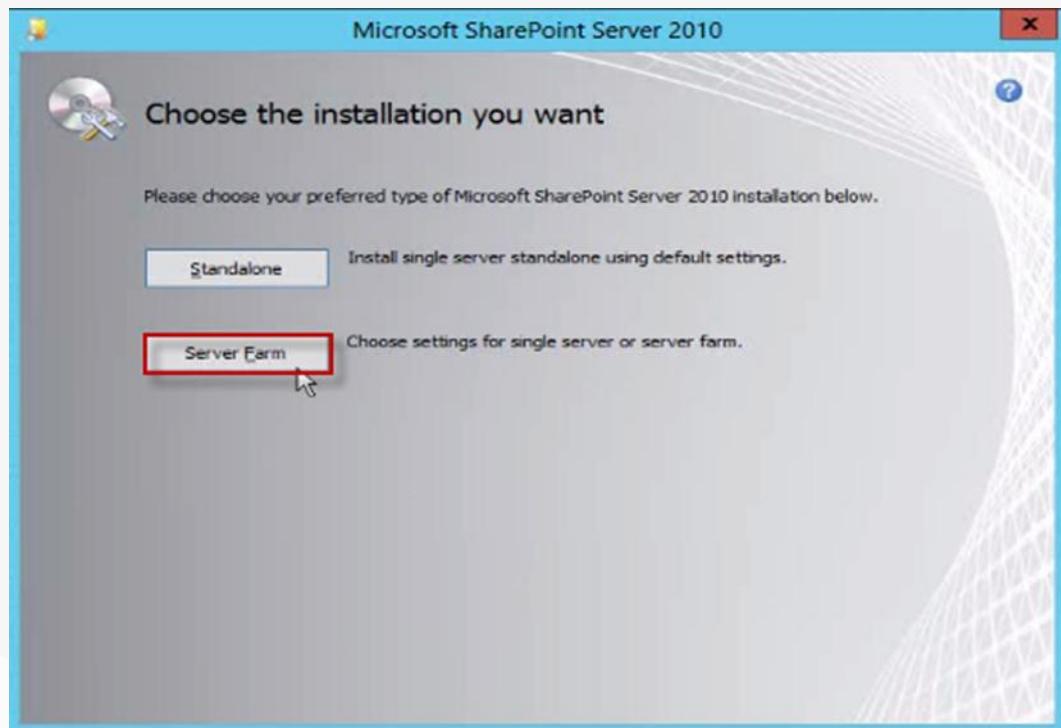
"Enter your Product Key" then click "Continue".



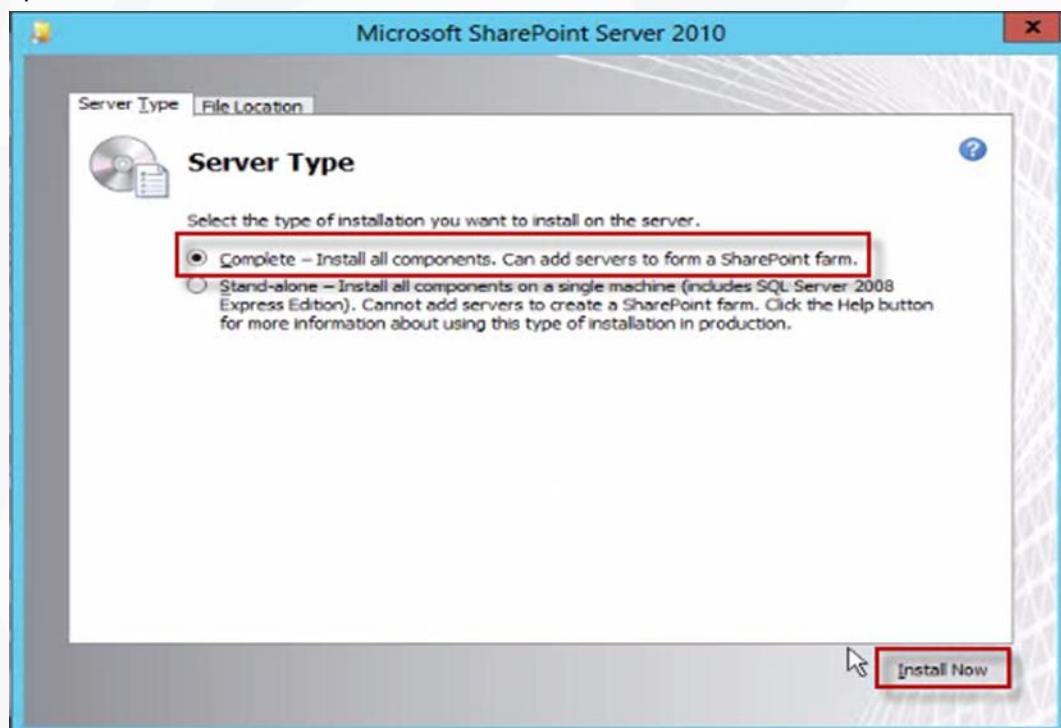
Check the "I accept the terms of this agreement" option then click "Continue".



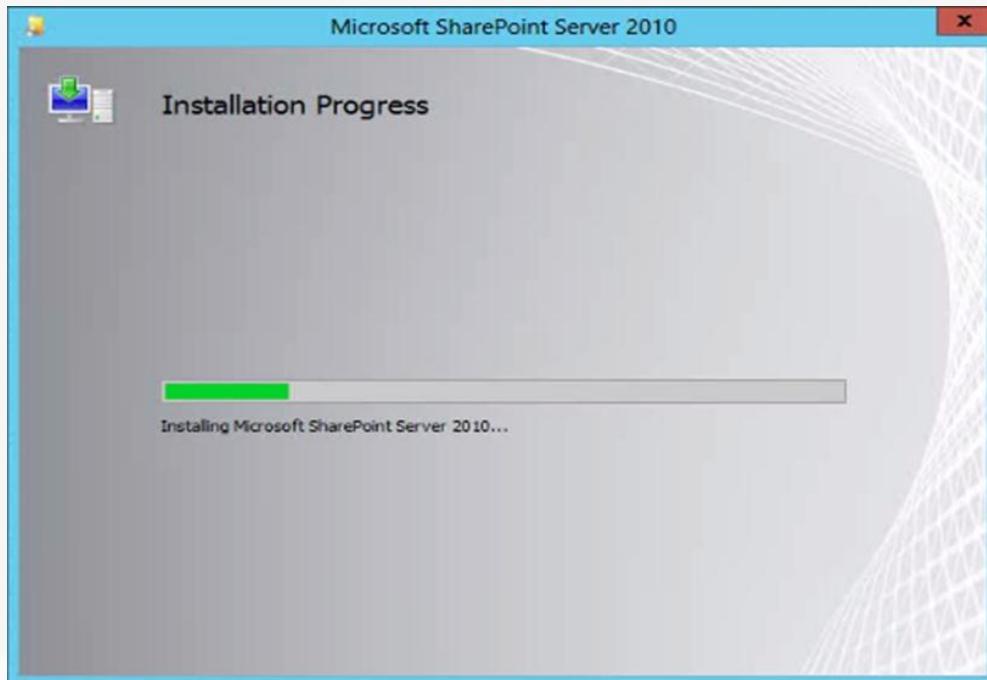
Click “Server Farm”.



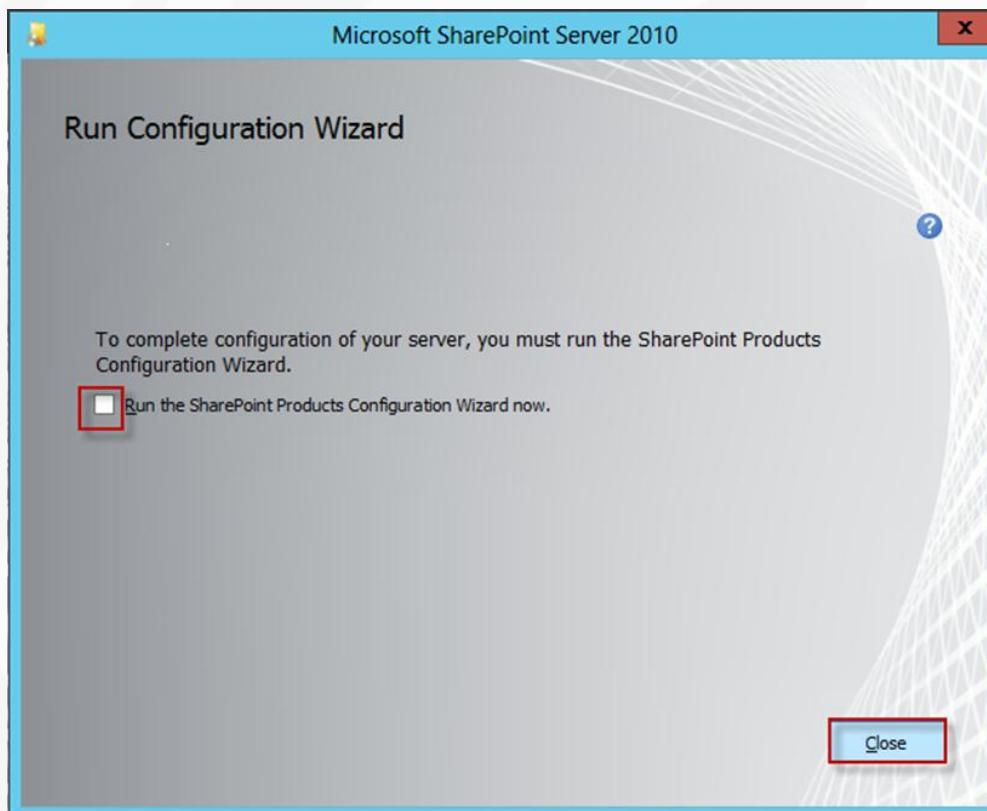
Select the “Complete – Install all components. Can add servers to form a SharePoint farm” option then click “Install Now”.



The SharePoint installation process starts.



When the installation process finishes, Clear the “Run the SharePoint Products Configuration Wizard now” option then click “Close”.



WARNING: If you run SharePoint 2010 Configuration Wizard before changing the Application Pool Defaults, the configuration will fail. You need to apply the steps in the next section before running the wizard.

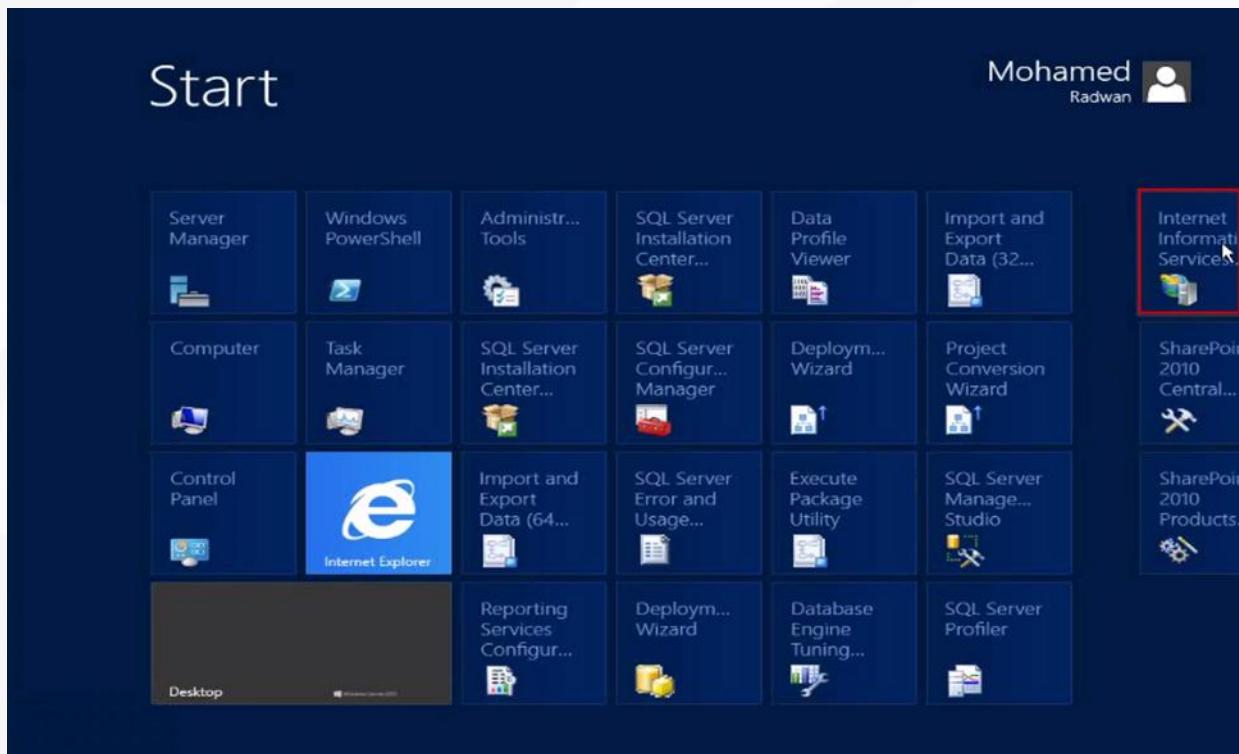


7.5 Configuring the Default Application Pool

Watch the
Video

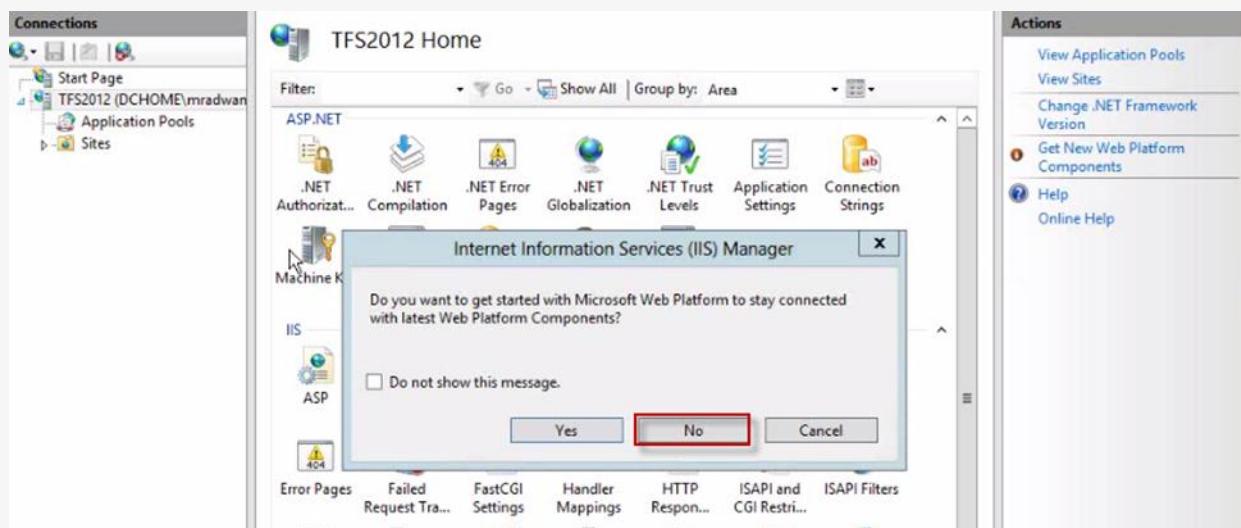
www.youtube.com/watch?v=envZ8_qy5k0

Launch the “Internet Information Services” from Windows Server 2012 desktop.

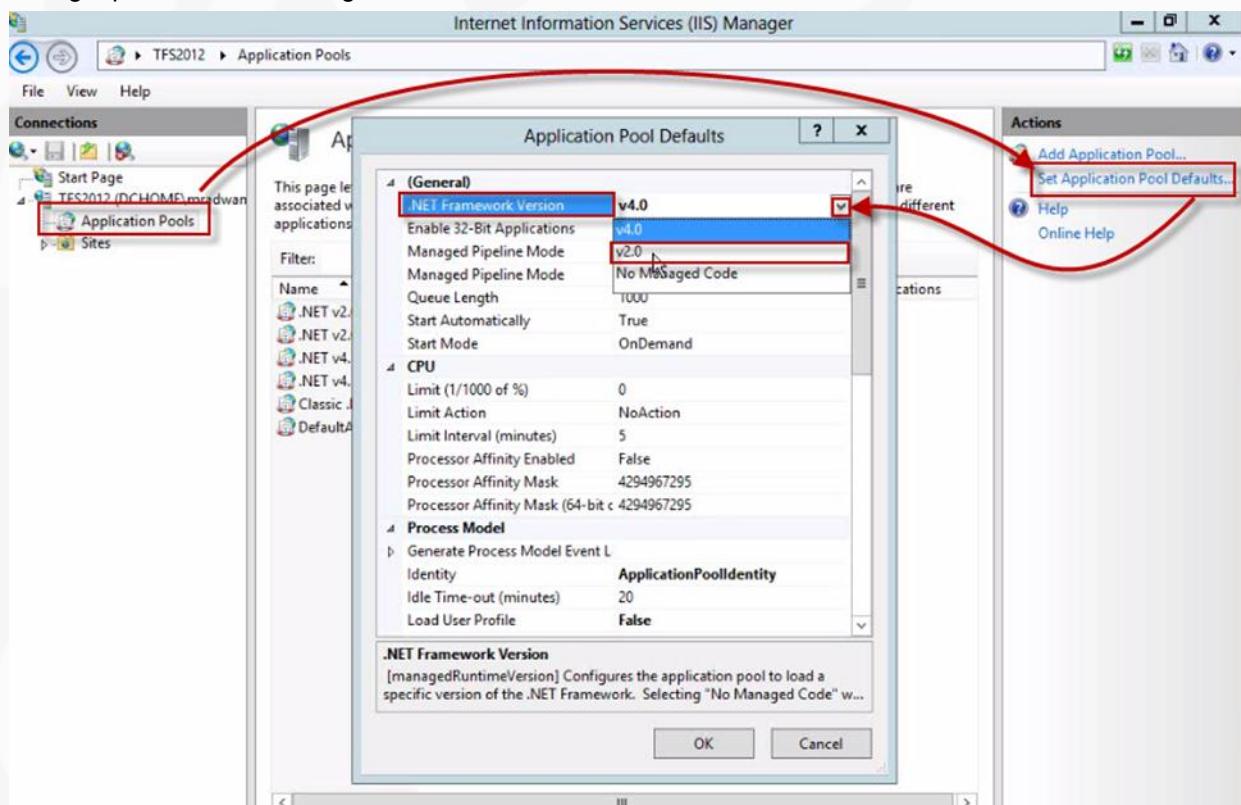


TIP: You can launch the “Internet Information Services” directly from the Run command by typing “inetmgr” and pressing enter.

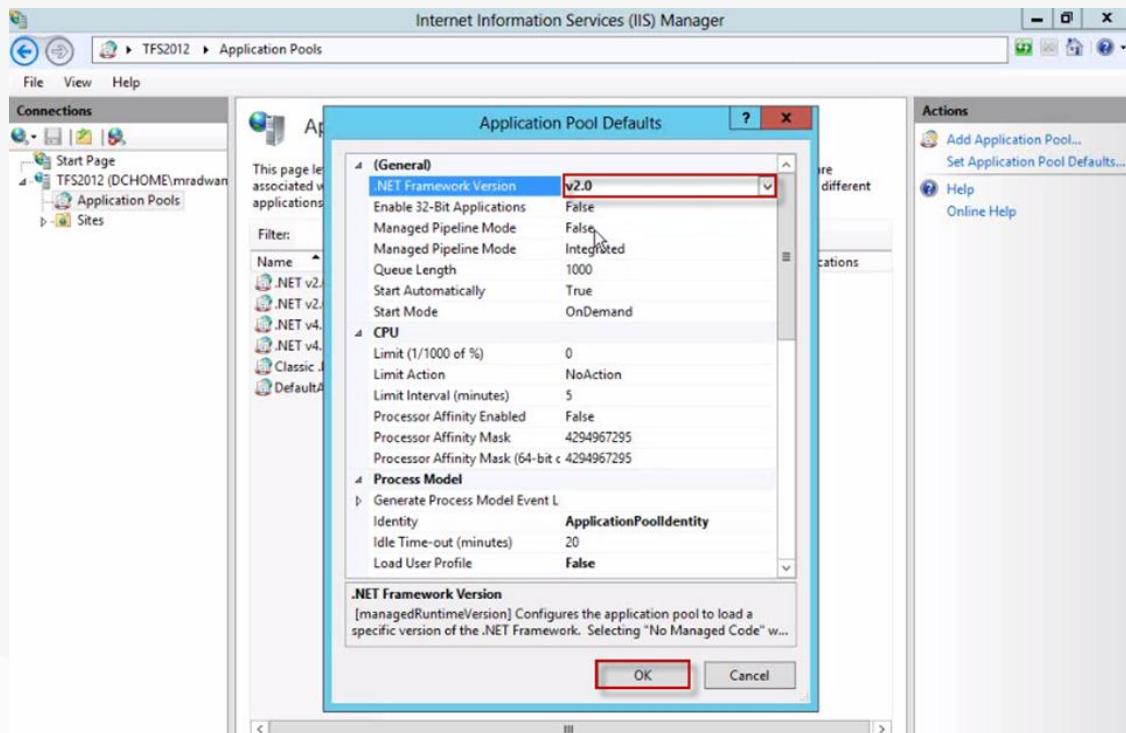
When prompted “Do you want to get started with Microsoft Web Platform to stay connected with latest Web Platform Components?”, click “No”.



From the left pane, click “Application Pools” then click “Set Application Pool Defaults” from the right pane, and change the “.NET Framework Version” from “v4.0” to “v2.0”.



Click “OK” to commit the change.



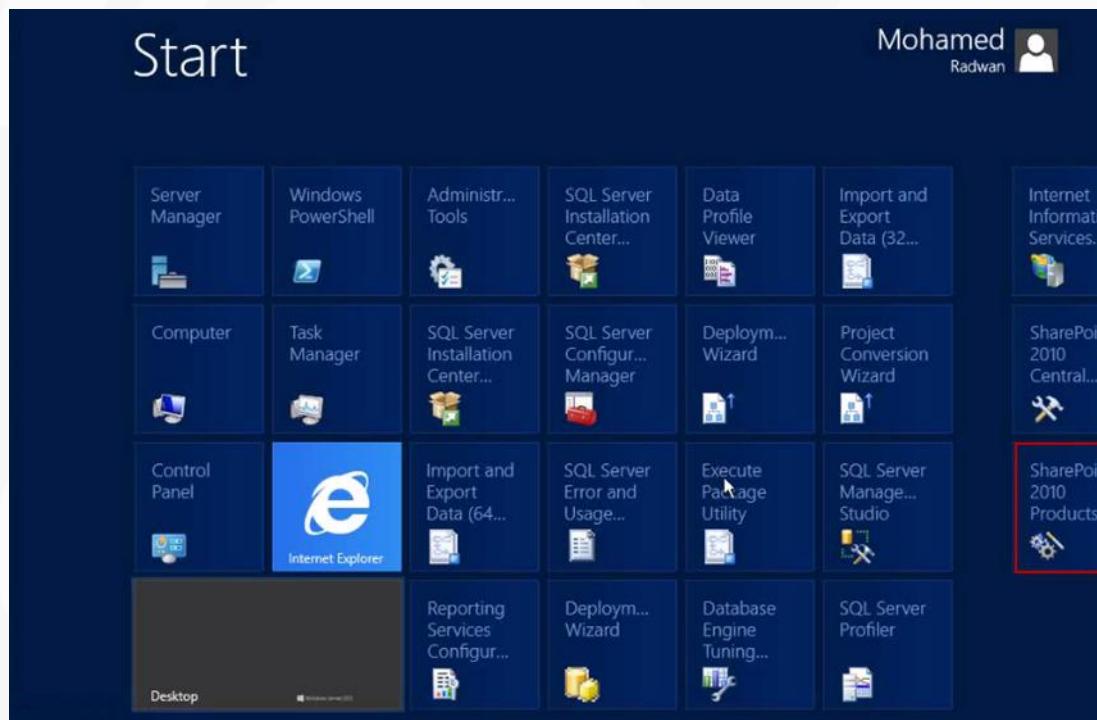
Watch the

Video

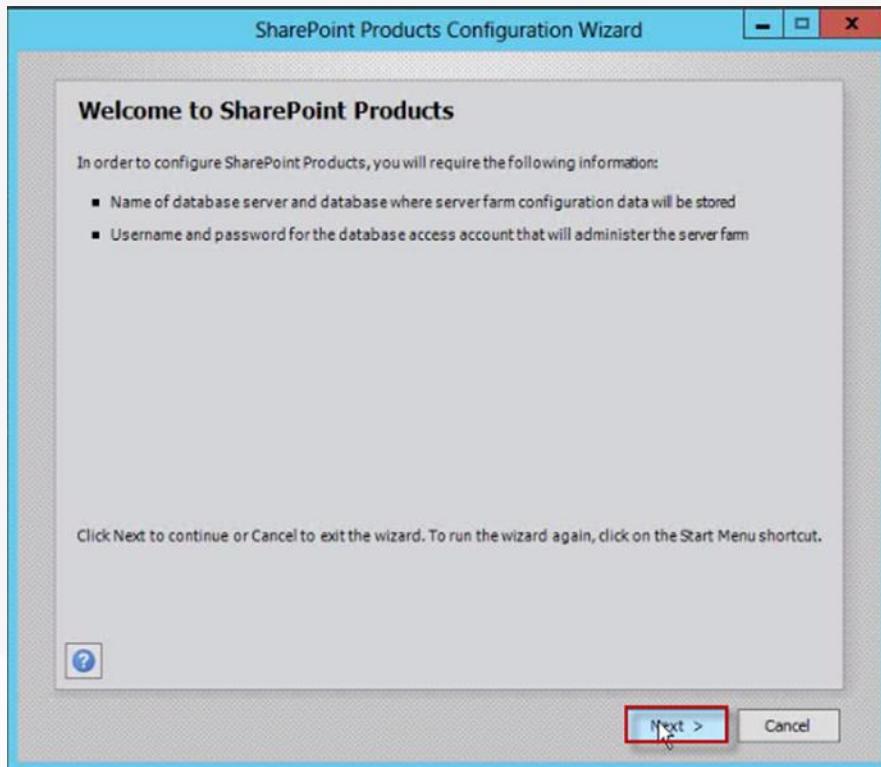
www.youtube.com/watch?v=KITG3UGS244

7.6 Configuring SharePoint Server 2010

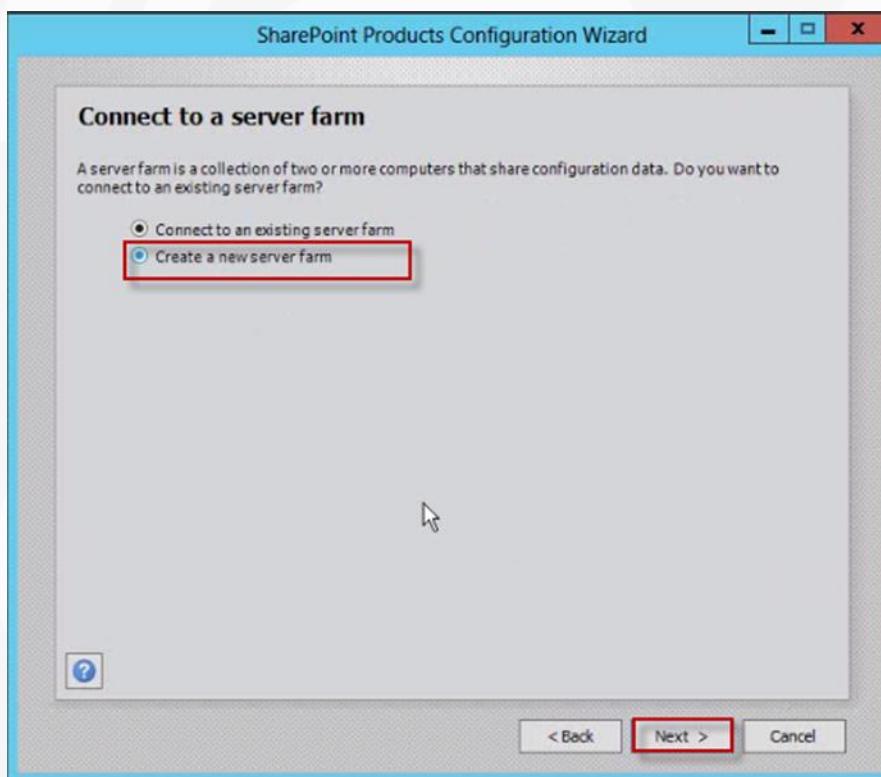
Launch “SharePoint 2010 Product Configuration Wizard” from Windows Server 2012 desktop.



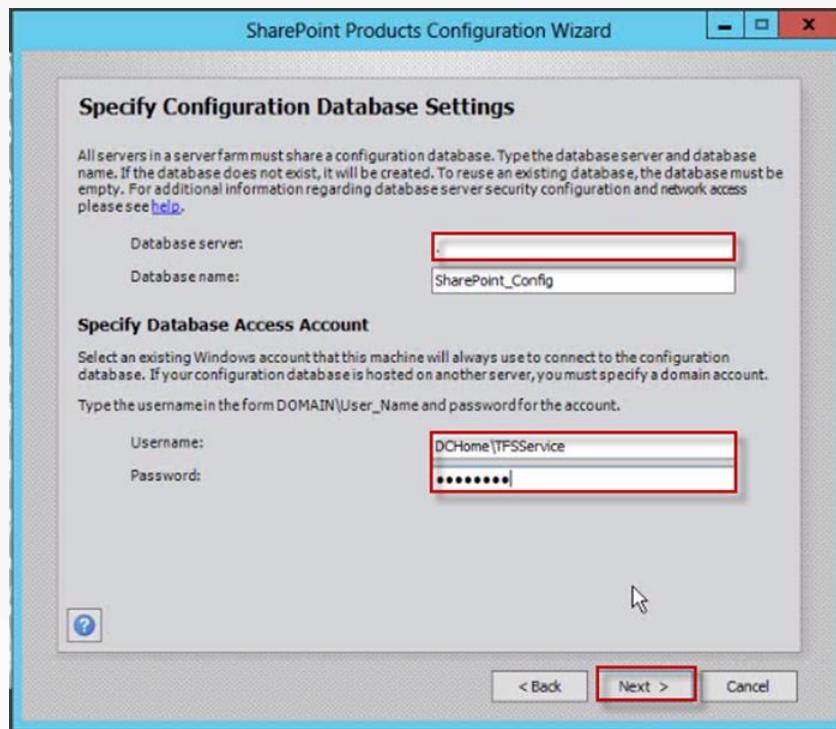
"SharePoint Products Configuration Wizard" launches, click "Next" from the welcome screen.



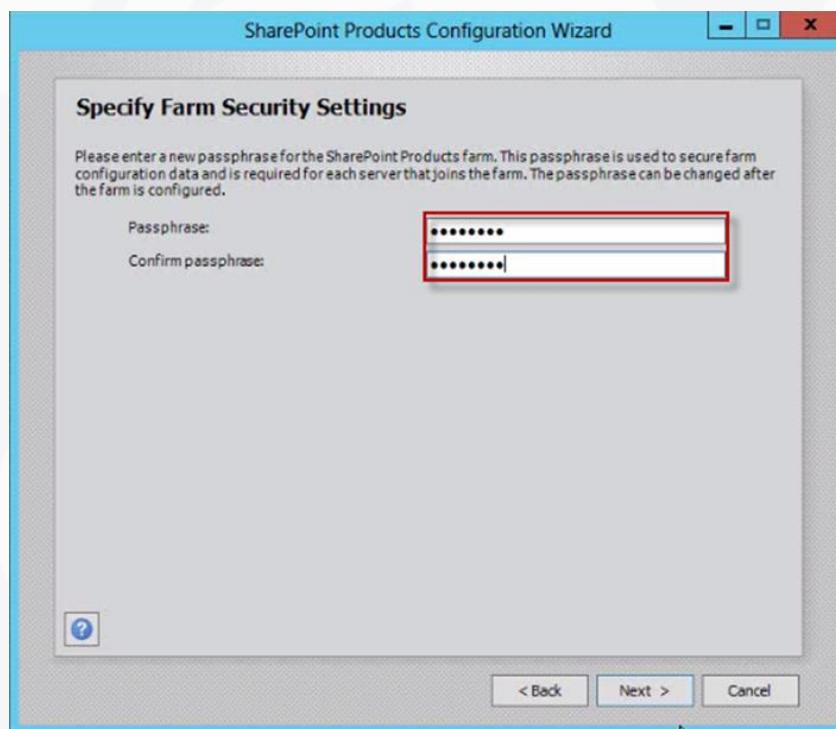
Select "Create a new server farm" then click "Next".



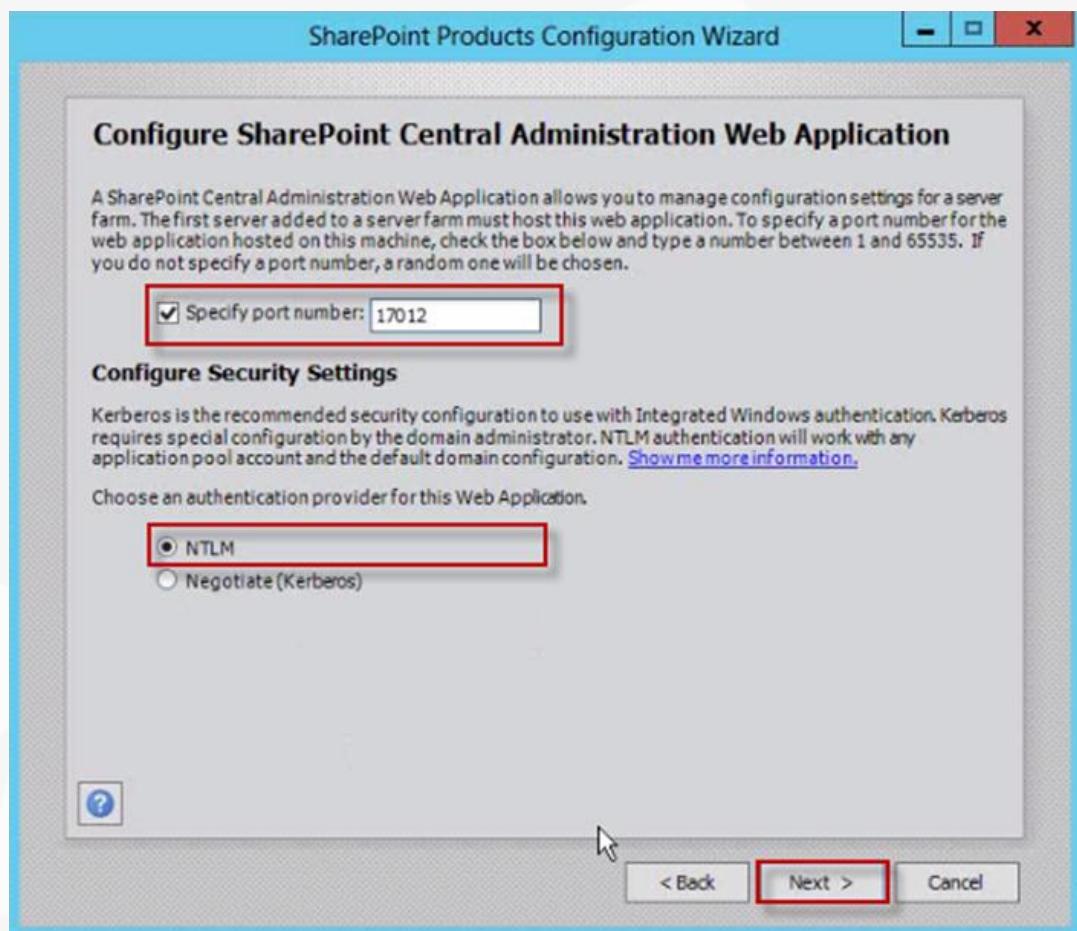
Enter “.” or “localhost” for the “Database server” then enter “DCHome\TFSService” and its password for the “Database Access Account” and then click “Next”.



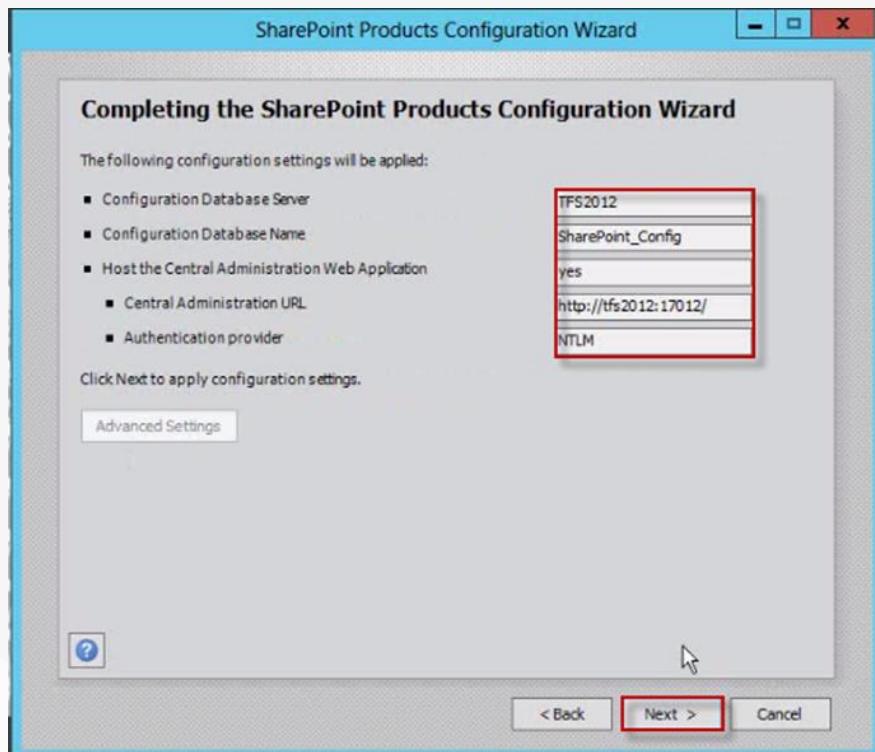
From the “Specify Farm Security Settings” screen, type a password, confirm it and then click “Next”.



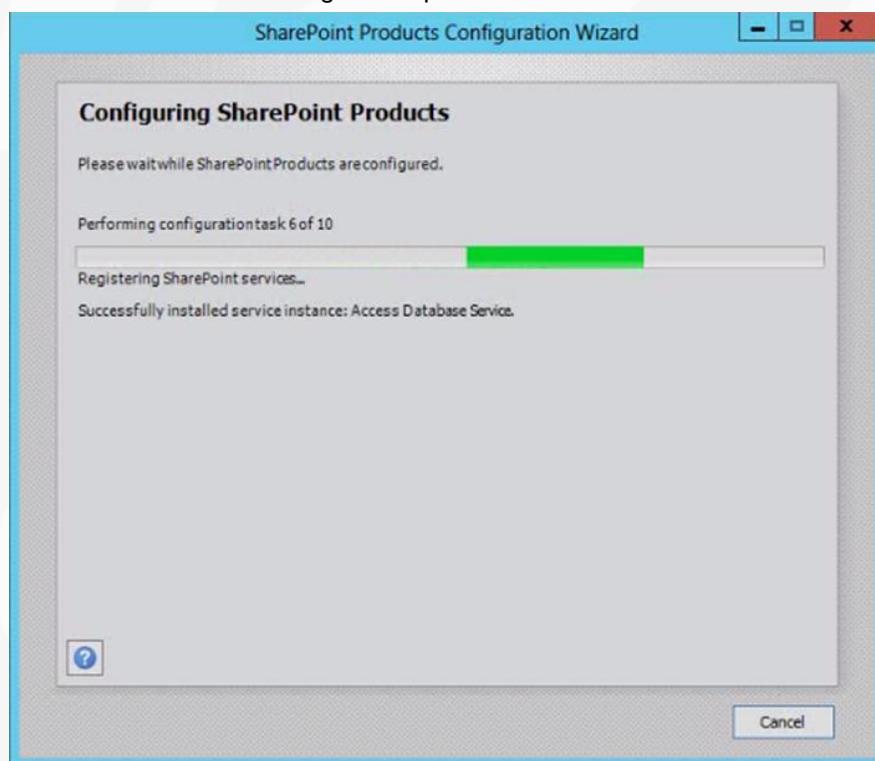
From the “Configure SharePoint Central Administration Web Application” screen, select “Specify port number”, enter “17012” for the Central Administration We Application port number then make sure that “NTLM” is selected and then click “Next”.



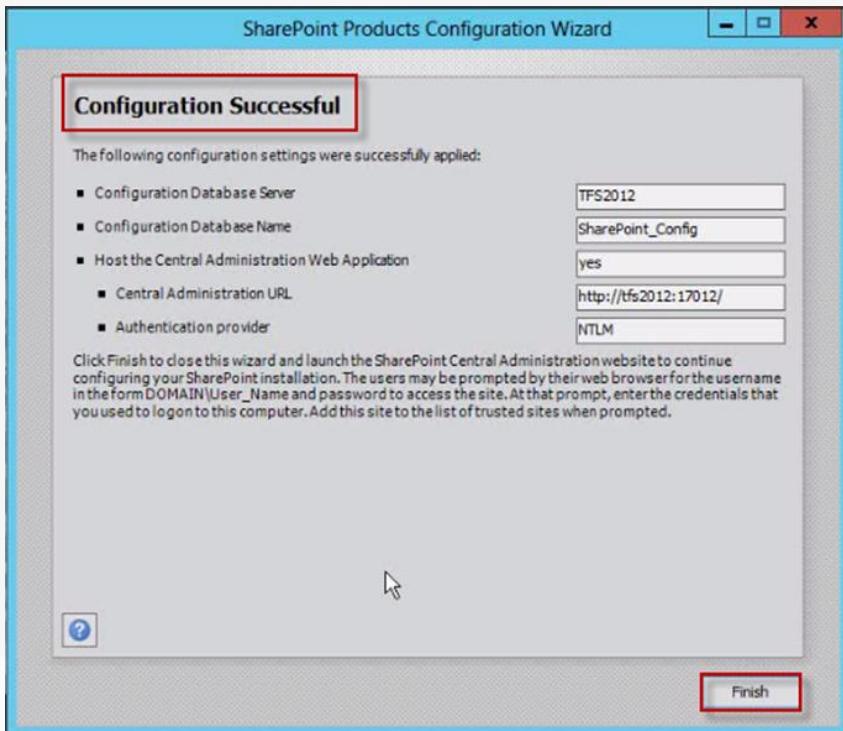
Confirm your configuration data then click “**Next**”.



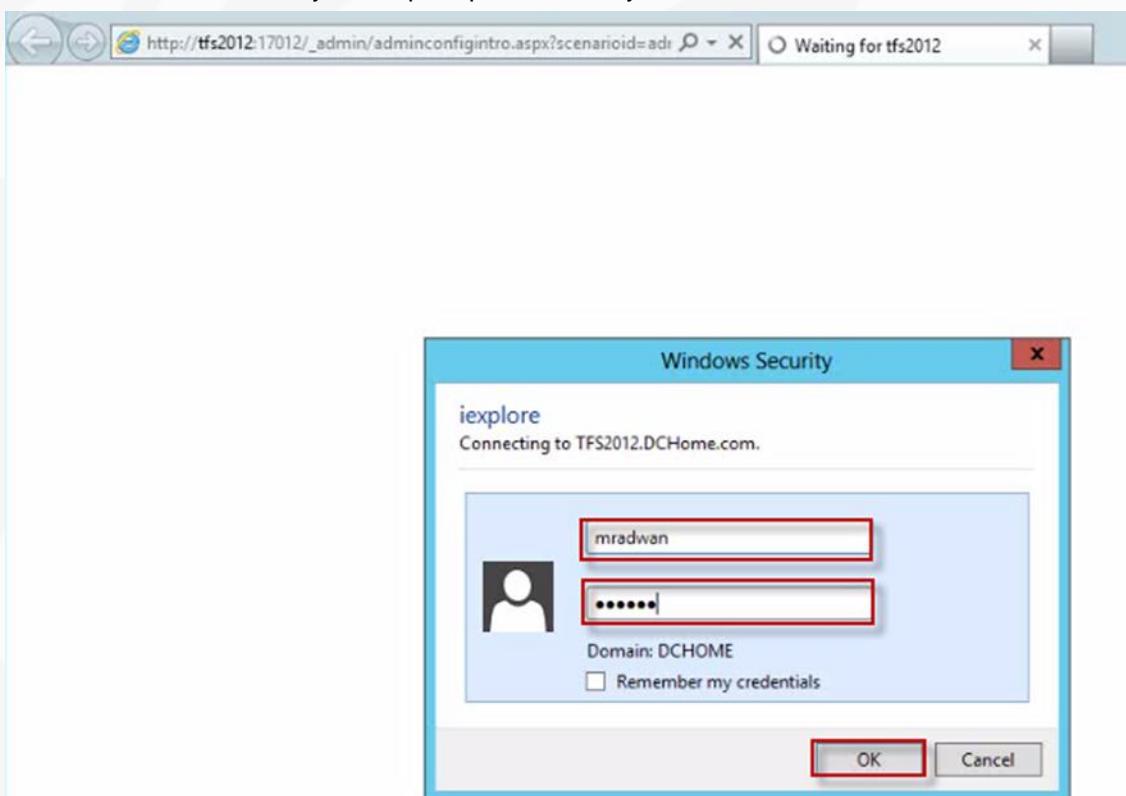
The wizard starts the configuration process.



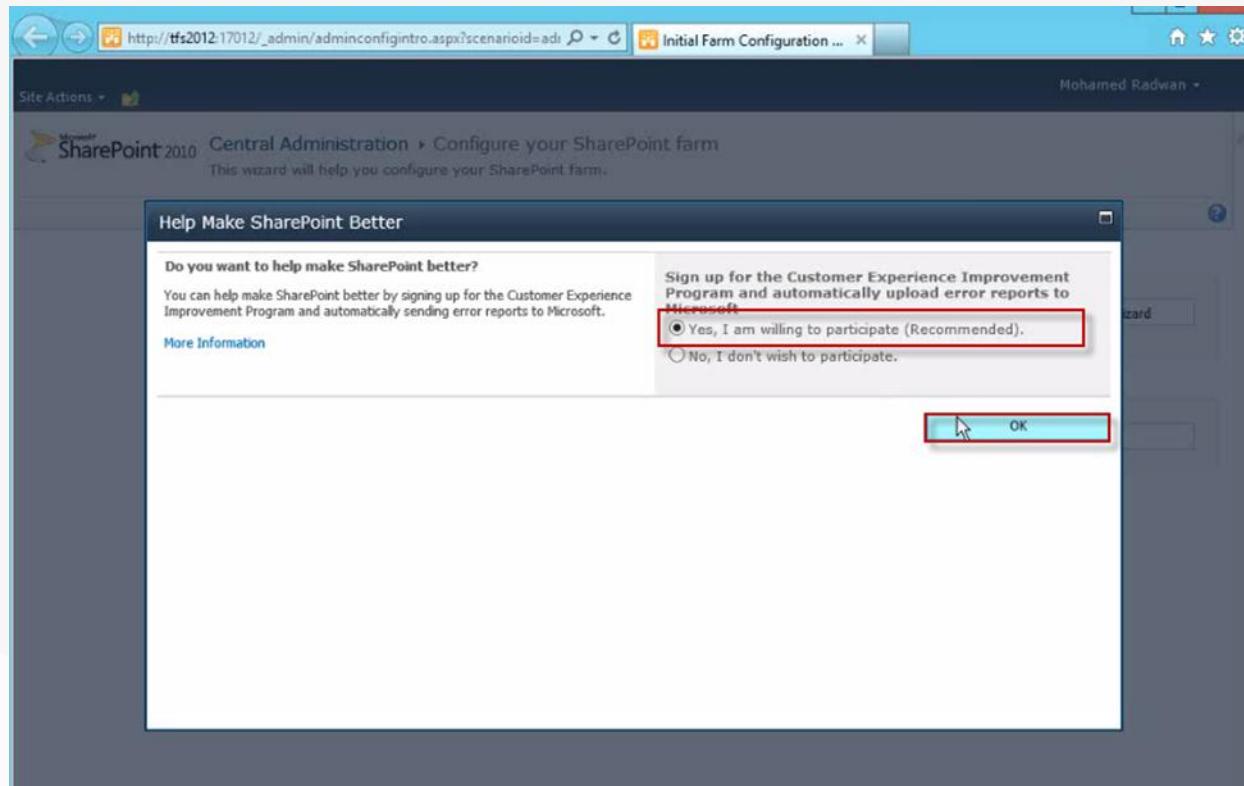
Click “Finish” when the configuration process successfully completes.



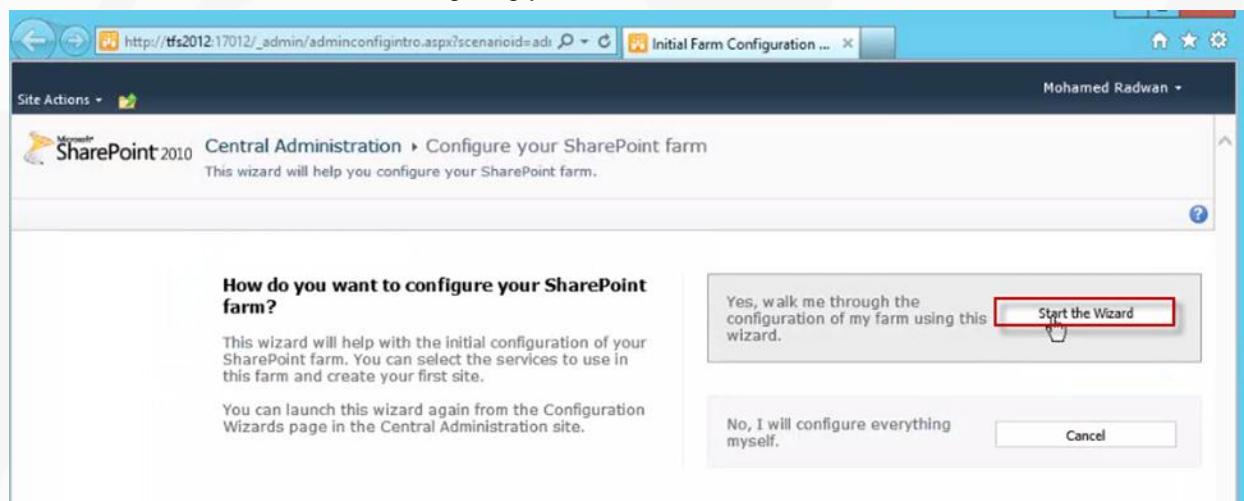
The browser launches and you are prompted to enter your credentials.



Optionally select “Yes, I am willing to participate (Recommended)” then click “OK”.



Click “Start the Wizard” to start configuring your SharePoint farm.



Select “Use existing managed account”, select “TFSService” then make sure that both the “Excel Service Application” and “Secure Store Service” service applications are selected and then click “Next”.

Central Administration > Configure your SharePoint farm

Select the services you want to run in your farm. The services you select below will run with default settings on all servers in your farm.

Use existing managed account
DCHOME\TFSService

Create new managed account

User name:

Password:

Access Services
Allows viewing, editing, and interacting with Access Services databases in a browser.

Application Registry Service
Backwards compatible Business Data Connectivity API.

Business Data Connectivity Service
Enabling this service provides the SharePoint farm with the ability to upload BDC models that describe the interfaces of your enterprises' line of business systems and thereby access the data within these systems.

Excel Services Application
Allows viewing and interactivity with Excel files in a browser.

Lotus Notes Connector
Search connector to crawl the data in the Lotus Notes server.

Managed Metadata Service
This service provides access to managed taxonomy hierarchies, keywords and social tagging infrastructure as well as Content Type publishing across site collections.

PerformancePoint Service Application
Supports the monitoring and analytic capabilities of PerformancePoint Services such as the storage and publication of dashboards and related content.

Search Service Application
Index content and serve search queries.

Secure Store Service
Provides capability to store data (e.g. credential set) securely and associate it to a specific identity or group of identities.

State Service
Provides temporary storage of user session data for SharePoint Server components.

Usage and Health data collection
This service collects farm wide usage and health data and provides the ability to view various usage and health reports.

User Profile Service Application
Adds support for My Sites, Profiles pages, Social Tagging and other social computing features. Some of the features offered by this service require Search Service Application and Managed Metadata Services to be provisioned.
Learn about security implications related to this option

Visio Graphics Service
Enables viewing and refreshing of Visio Web Drawings.

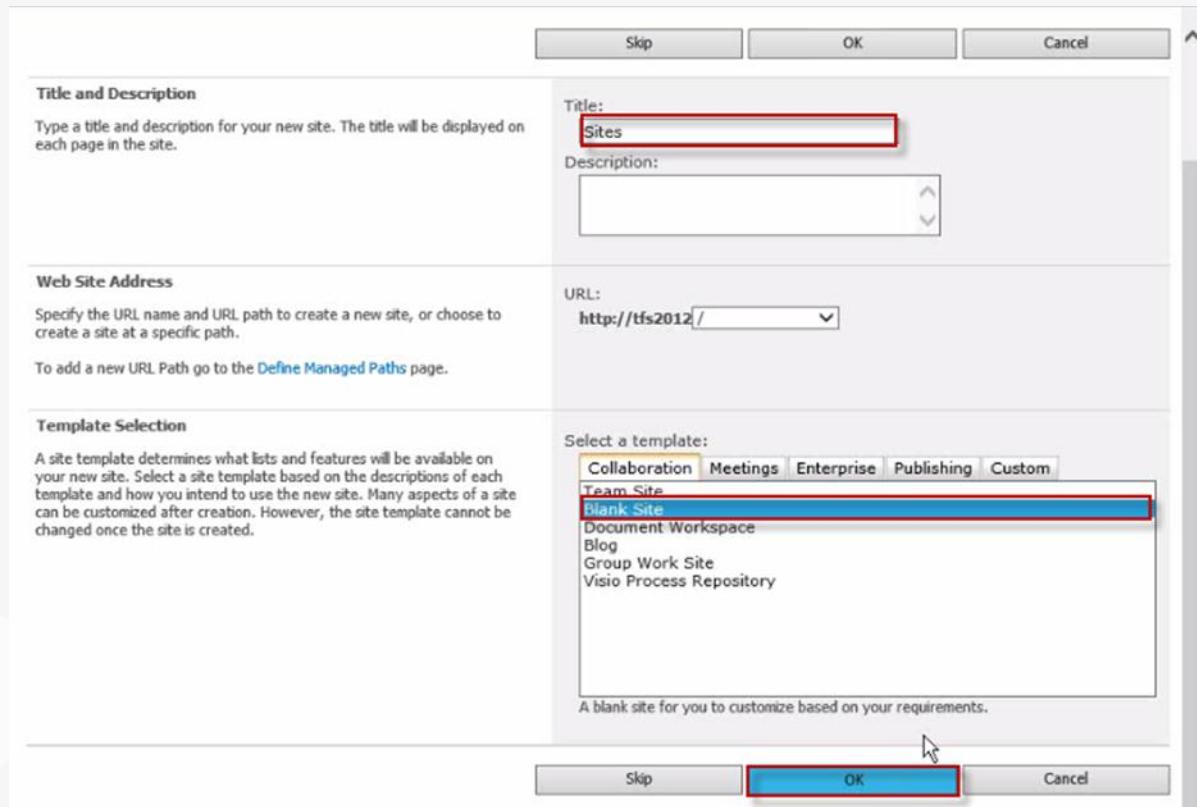
Web Analytics Service Application
Web Analytics Service Application

Word Automation Services
Provides a framework for performing automated document conversions.

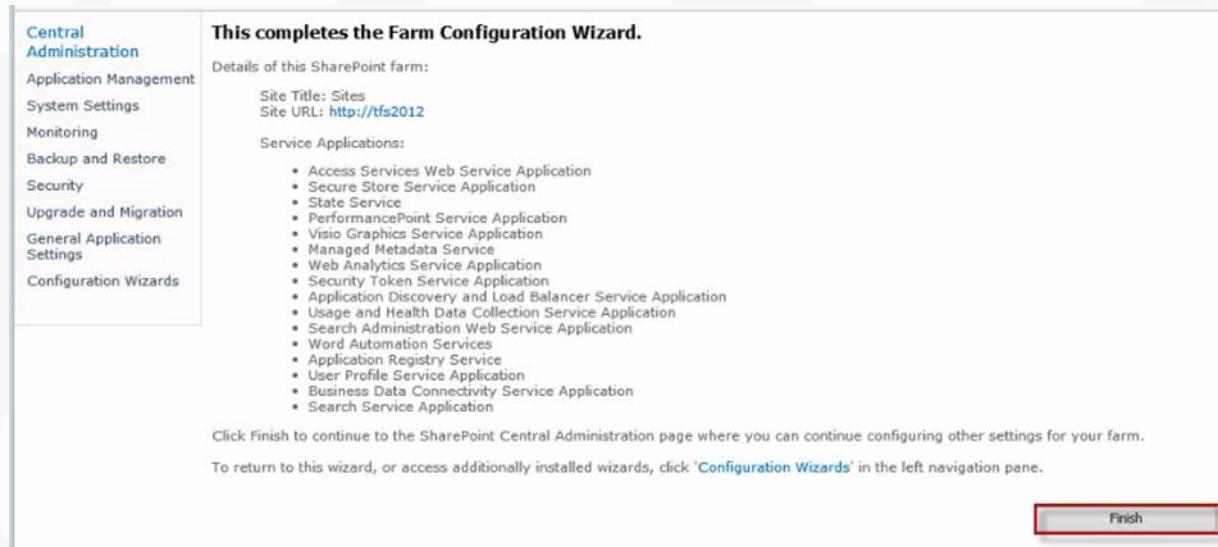
Next

Cancel

In the “Create top level site” page, enter “**Sites**” for the Web Application “**Title**” then select “**Blank Site**” for the site template and then click “**OK**”.



Click “**Finish**” to complete the Farm Configuration Wizard.



Click “Central Administration” from the left pane then “Manage web applications” to ensure the successful creation of the default web application.

The screenshot shows the SharePoint 2010 Central Administration interface. On the left, there's a navigation menu with links like Application Management, System Settings, Monitoring, Backup and Restore, Security, Upgrade and Migration, General Application Settings, and Configuration Wizards. The 'Application Management' section is expanded, and the 'Manage web applications' link is highlighted with a red box. Other sections shown include Monitoring, Security, System Settings, Backup and Restore, and Upgrade and Migration, each with their respective icons and descriptions.

Ensure that the default web application (SharePoint – 80) is created with the URL “<http://tfs2012/>” and the default port “80”.

The screenshot shows the 'Web Applications' management page in SharePoint 2010. It lists existing web applications: 'SharePoint - 80' (Name: SharePoint Central Administration v4, URL: http://tfs2012/, Port: 80). The 'New' button is visible on the ribbon. The left sidebar includes links for Central Administration, Application Management, System Settings, Monitoring, Backup and Restore, Security, Upgrade and Migration, General Application Settings, and Configuration Wizards. The 'Name' column for the SharePoint - 80 entry is highlighted with a red box, as are the 'URL' and 'Port' columns.

Chapter 8: Configuring SharePoint Server 2010 for Dashboard Compatibility

In this chapter you will prepare your SharePoint Server for Team Foundation Server Dashboard compatibility so that the reports and dashboards in Team Foundation Server Team Project portals function correctly with all the available functionalities and to the permitted users.

You will first start by configuring the Excel Services Service Application then you will configure the Secure Store Service Application; both from the SharePoint Central Administration.

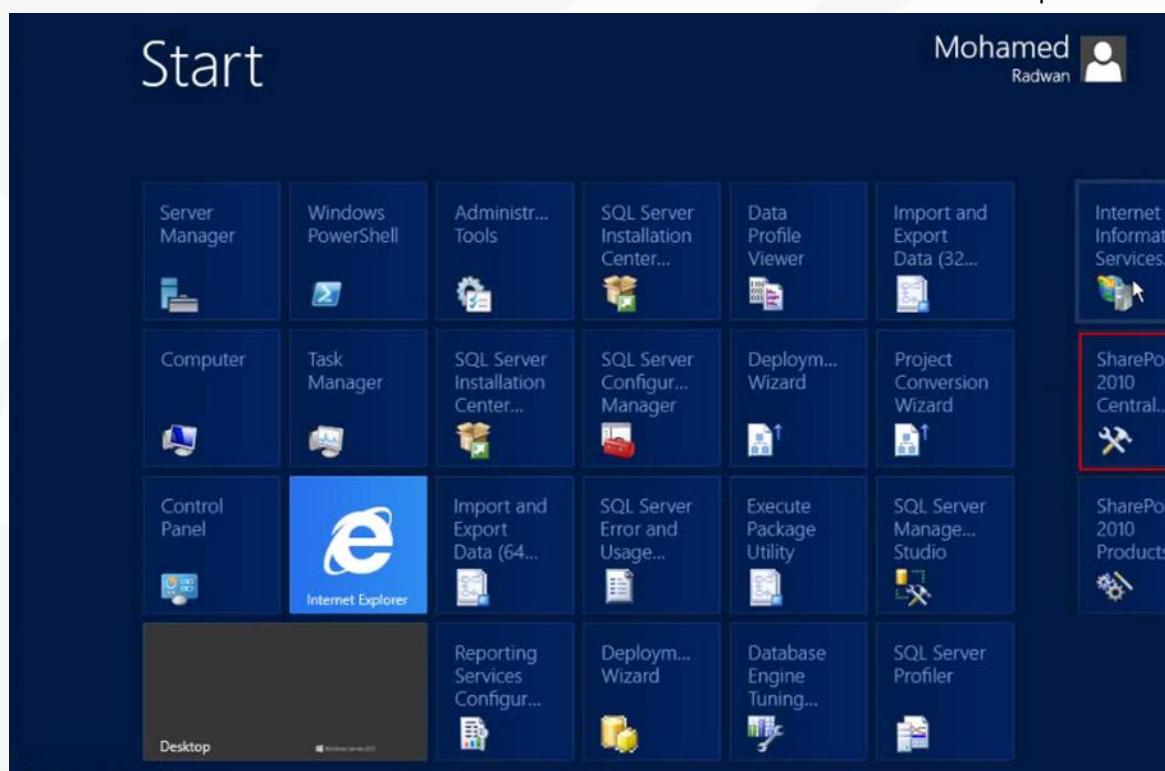


Watch the
Video

www.youtube.com/watch?v=xHa3lZDwh38

8.1 Configuring the Excel Services Application

Launch “SharePoint 2010 Central Administration” from Windows Server 2012 desktop.



Click “Manage web applications”.

Central Administration

- Application Management
- System Settings
- Monitoring
- Backup and Restore
- Security
- Upgrade and Migration
- General Application Settings
- Configuration Wizards

Application Management

Manage web applications

System Settings

Backup and Restore

Upgrade and Migration

Copy the URL “<http://tfs2012/>” of the default web application (SharePoint – 80).

Name	URL	Port
SharePoint - 80	http://tfs2012/	80
SharePoint Central Administration v4	http://tfs2012/_vti_bin/owssvr.dll/OWSSVR.asmx	170

Chapter 8: Configuring SharePoint Server 2010 for Dashboard Compatibility

Navigate to “Manage service application” from the home page of the “Central Administration”.

Central Administration

- Application Management
- System Settings
- Monitoring
- Backup and Restore
- Security
- Upgrade and Migration
- General Application Settings
- Configuration Wizards

Application Management

- Manage web applications
- Create site collections
- Manage service applications**
- Manage content databases

System Settings

- Manage servers in this farm
- Manage services on server
- Manage farm features
- Configure alternate access mappings

Monitoring

- Review problems and solutions
- Check job status
- View Web Analytics reports

Backup and Restore

- Perform a backup
- Restore from a backup
- Perform a site collection bac

Security

- Manage the farm administrators group
- Configure service accounts

Upgrade and Migration

- Convert farm license type
- Check product and patch installation status

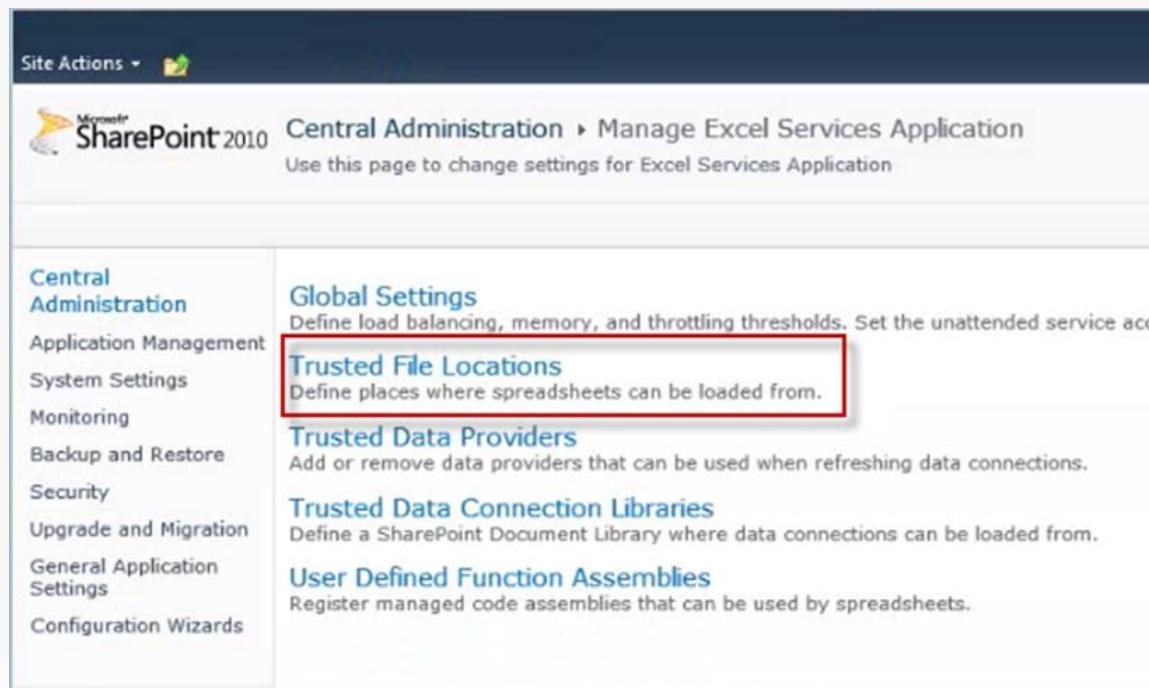
Click “Excel Services Application”.

Service Applications

Operations	Sharing	Type
New	Connect	Access Services
Delete	Manage Administrators	Access Services Web Application
Create	Properties	Application Discovery and Load Balancer Service Application
	Publish	Application Discovery and Load Balancer Service Application Proxy_15ee06c3-1bd0-44d7-9334-95e1c1618989
	Permissions	Application Registry Service
		Application Registry Service
		Business Data Connectivity Service
		Business Data Connectivity Service
		Excel Services Application
		Excel Services Application

Chapter 8: Configuring SharePoint Server 2010 for Dashboard Compatibility

Click “Trusted File Locations”.

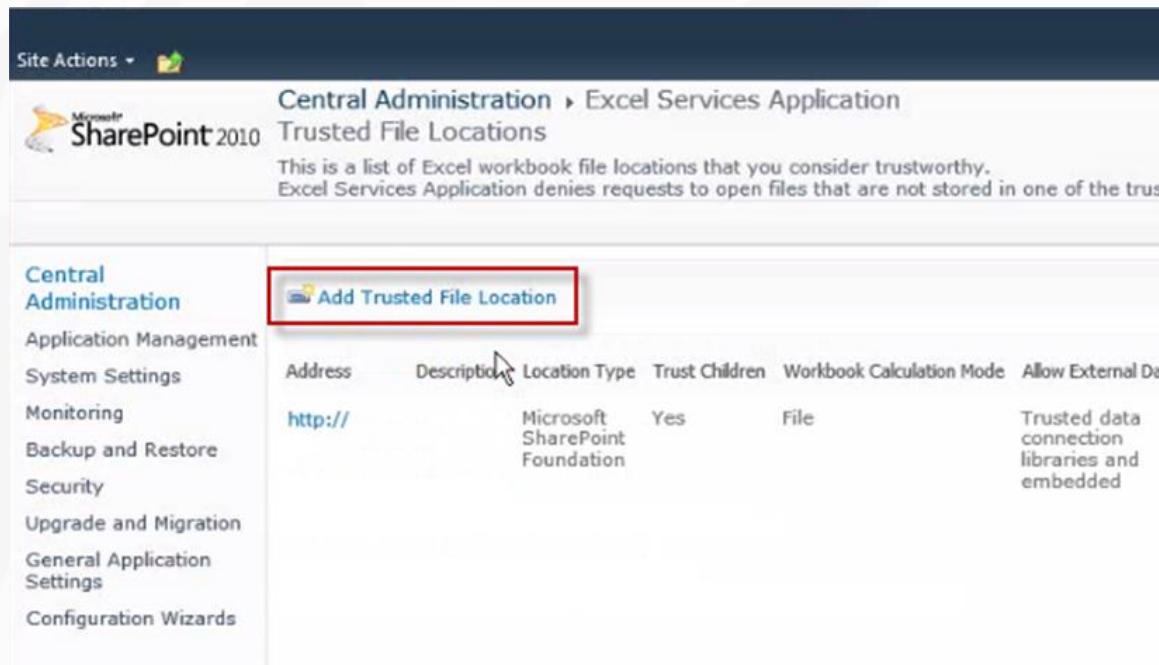


Site Actions 

SharePoint 2010 Central Administration > Manage Excel Services Application
Use this page to change settings for Excel Services Application

Central Administration Application Management System Settings Monitoring Backup and Restore Security Upgrade and Migration General Application Settings Configuration Wizards	Global Settings Define load balancing, memory, and throttling thresholds. Set the unattended service account for the application pool. Trusted File Locations Define places where spreadsheets can be loaded from. Trusted Data Providers Add or remove data providers that can be used when refreshing data connections. Trusted Data Connection Libraries Define a SharePoint Document Library where data connections can be loaded from. User Defined Function Assemblies Register managed code assemblies that can be used by spreadsheets.
--	---

Click “Add Trusted File Location”.



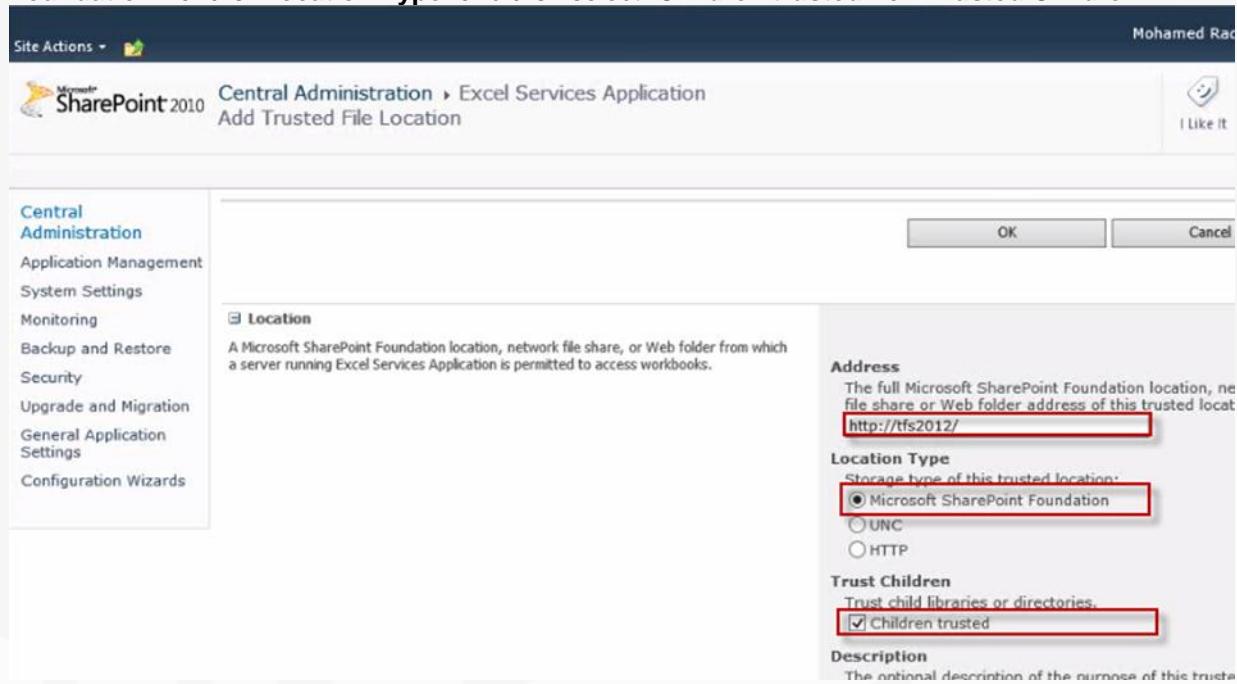
Site Actions 

SharePoint 2010 Central Administration > Excel Services Application
Trusted File Locations
This is a list of Excel workbook file locations that you consider trustworthy. Excel Services Application denies requests to open files that are not stored in one of the trusted locations.

Central Administration Application Management System Settings Monitoring Backup and Restore Security Upgrade and Migration General Application Settings Configuration Wizards	Add Trusted File Location <table border="1"> <thead> <tr> <th>Address</th> <th>Description</th> <th>Location Type</th> <th>Trust Children</th> <th>Workbook Calculation Mode</th> <th>Allow External Data</th> </tr> </thead> <tbody> <tr> <td>http://</td> <td>Microsoft SharePoint Foundation</td> <td>File</td> <td>Yes</td> <td></td> <td>Trusted data connection libraries and embedded</td> </tr> </tbody> </table>	Address	Description	Location Type	Trust Children	Workbook Calculation Mode	Allow External Data	http://	Microsoft SharePoint Foundation	File	Yes		Trusted data connection libraries and embedded
Address	Description	Location Type	Trust Children	Workbook Calculation Mode	Allow External Data								
http://	Microsoft SharePoint Foundation	File	Yes		Trusted data connection libraries and embedded								

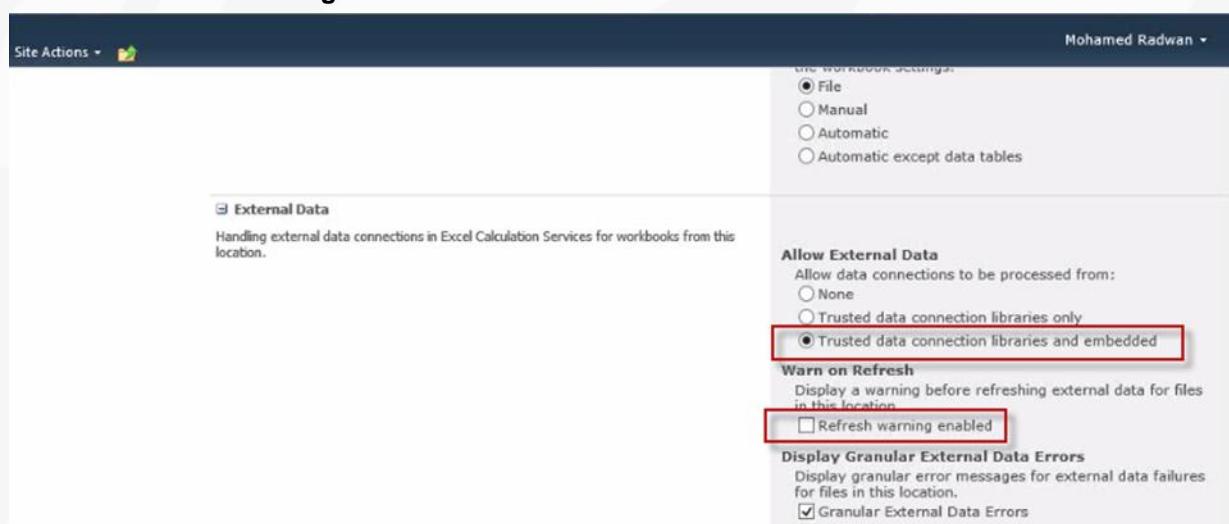
Chapter 8: Configuring SharePoint Server 2010 for Dashboard Compatibility

In the “Address” field, paste the copied URL “<http://tfs2012/>” then select “Microsoft SharePoint Foundation” for the “Location Type” and then select “Children trusted” for “Trusted Children”.



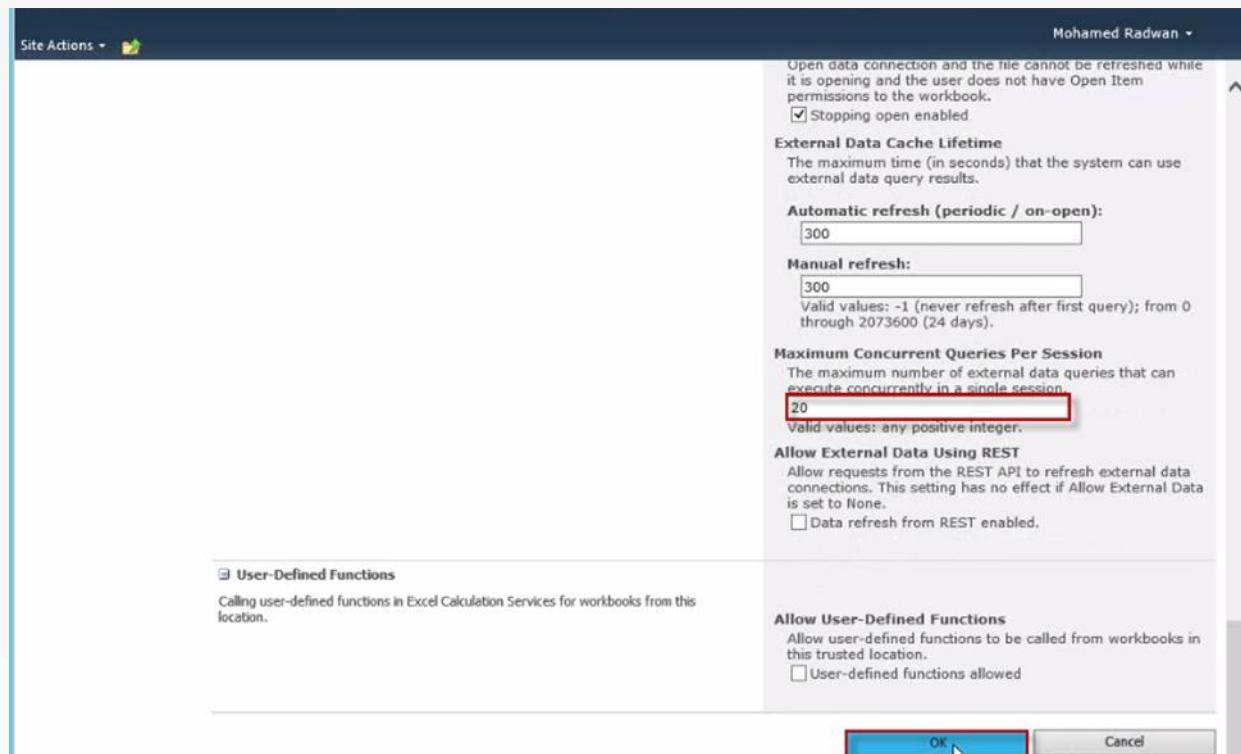
The screenshot shows the "Add Trusted File Location" dialog box in SharePoint Central Administration. The "Address" field contains the URL "http://tfs2012/", which is highlighted with a red box. The "Location Type" section has the radio button for "Microsoft SharePoint Foundation" selected, also highlighted with a red box. The "Trust Children" section has the checkbox for "Children trusted" checked, highlighted with a red box. The "Description" section contains the optional description "The optional description of the purpose of this trust".

Select “Trusted data connection libraries and embedded” for “Allow External Data” then clear the “Refresh warning enabled” checkbox.



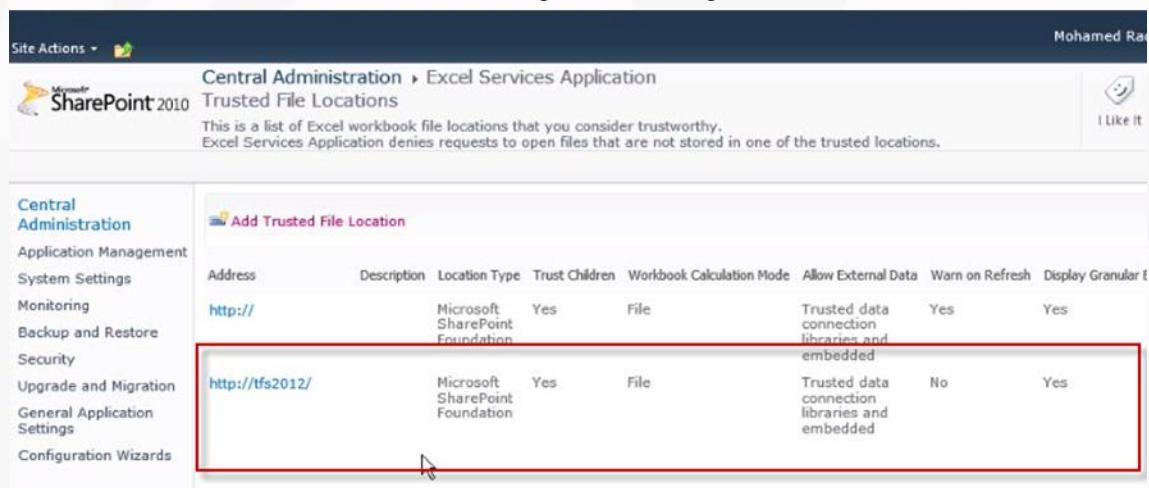
The screenshot shows the "Excel Workbook Settings" dialog box. In the "Allow External Data" section, the radio button for "Trusted data connection libraries and embedded" is selected, highlighted with a red box. In the "Warn on Refresh" section, the checkbox for "Refresh warning enabled" is unchecked, highlighted with a red box. The "Display Granular External Data Errors" section has the checkbox for "Granular External Data Errors" checked.

Modify the “Maximum Concurrent Queries per Session” to be “20” then click “OK”.



The screenshot shows the SharePoint Central Administration interface for configuring Excel Services Application settings. The 'Trusted File Locations' section is visible, showing two entries. The second entry, 'http://tfs2012/' with 'Microsoft SharePoint Foundation' as the location type, is highlighted with a red box. At the bottom right of the page, the 'OK' button is also highlighted with a red box.

Review the added Trusted File Location along with its configuration.



The screenshot shows the 'Trusted File Locations' page under 'Central Administration > Excel Services Application'. It lists two trusted file locations:

Address	Description	Location Type	Trust Children	Workbook Calculation Mode	Allow External Data	Warn on Refresh	Display Granular E
http://		Microsoft SharePoint Foundation	Yes	File	Trusted data connection libraries and embedded	Yes	Yes
http://tfs2012/		Microsoft SharePoint Foundation	Yes	File	Trusted data connection libraries and embedded	No	Yes



Watch the
Video

www.youtube.com/watch?v=hv9Esg9y_ds

8.2 Configuring the Secure Store Service Application

Navigate to “Manage service application” from the home page of the “Central Administration”.

Central Administration

Application Management

System Settings

Monitoring

Backup and Restore

Security

Upgrade and Migration

General Application Settings

Configuration Wizards

Application Management

Manage web applications

Create site collections

Manage service applications

Manage content databases

Monitoring

Review problems and solutions

Check job status

View Web Analytics reports

Security

Manage the farm administrators group

Configure service accounts

System Settings

Manage servers in this farm

Manage services on server

Manage farm features

Configure alternate access mappings

Backup and Restore

Perform a backup

Restore from a backup

Perform a site collection bac

Upgrade and Migration

Convert farm license type

Check product and patch

Click “Secure Store Service”.

New Connect Delete Manage Administrators Properties Publish Permissions

Create

Operations

Sharing

Business Data Connectivity Service

Excel Services Application

Managed Metadata Service

PerformancePoint Service Application

Search Administration Web Service for Search Service Application

Search Service Application

Secure Store Service

Security Token Service Application

State Service

Business Data C Proxy

Excel Services A Application

Excel Services A Application Prox

Managed Metada

Managed Metada

PerformancePoi

PerformancePoi

Search Administ

Search Service

Search Service

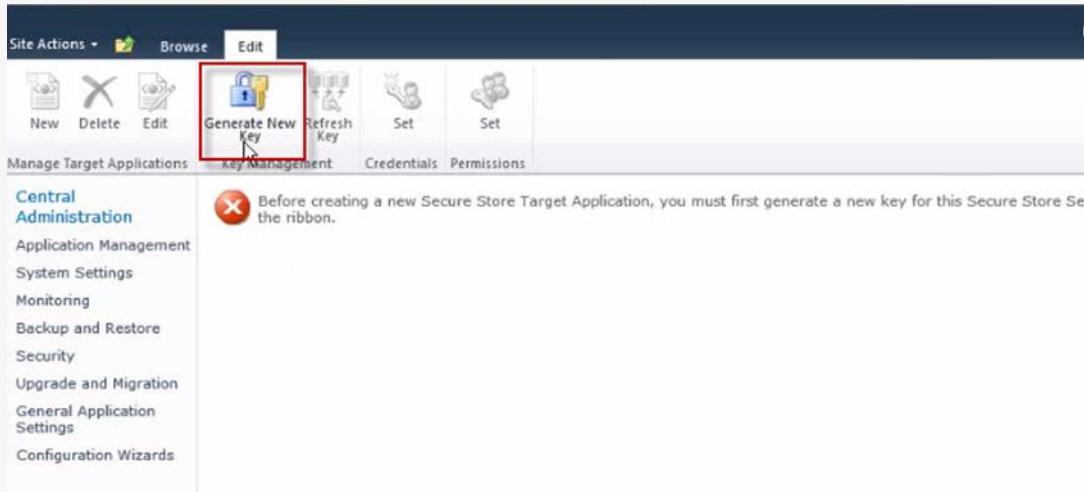
Secure Store Se

Secure Store Se

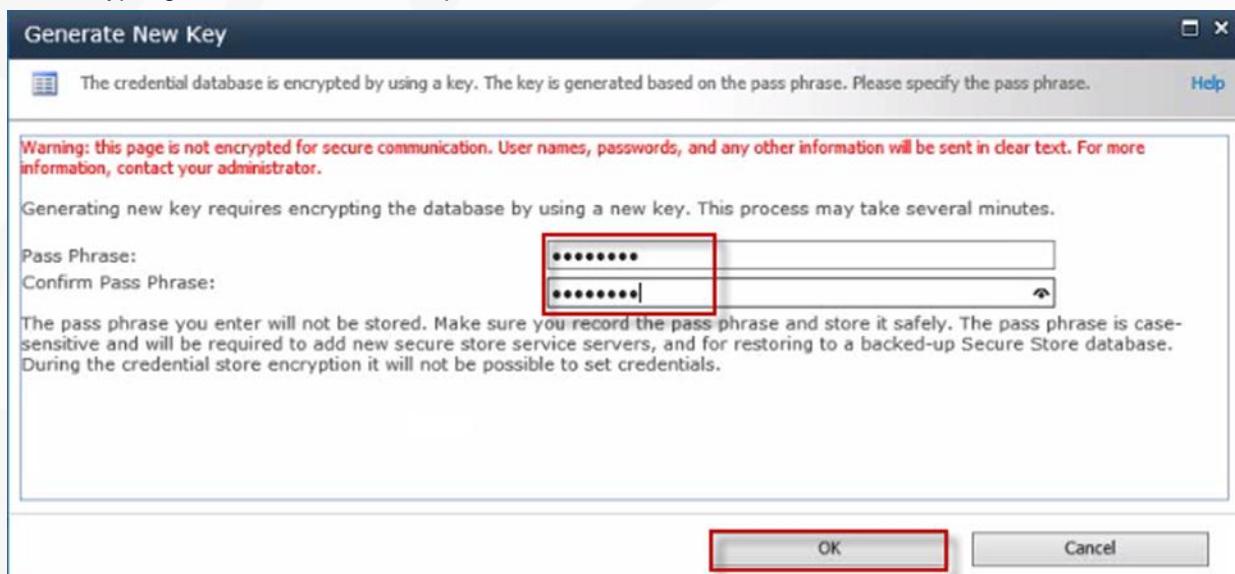
Security Token !

State Service

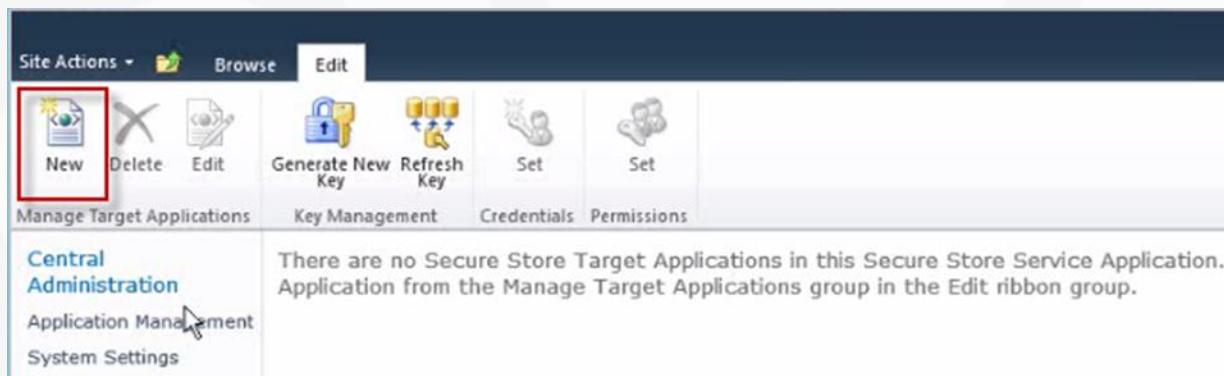
Click “Generate New Key” from the SharePoint ribbon.



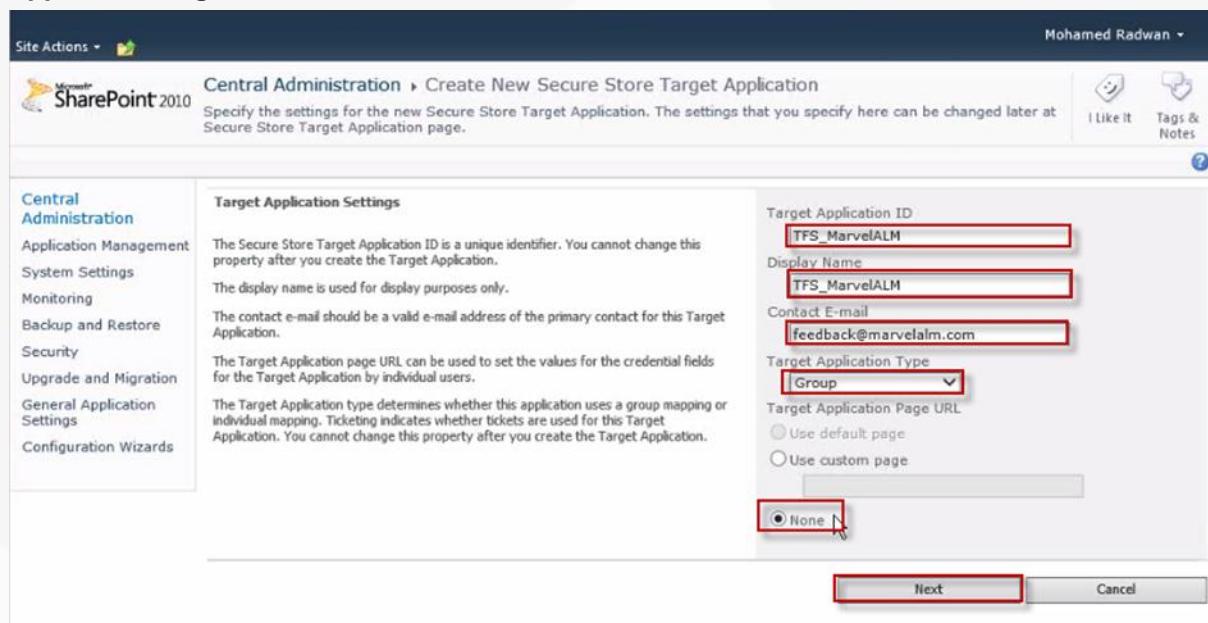
For encrypting the database, enter a password and confirm it, then click “OK”.



Click “New” from the SharePoint ribbon.



From the “**Target Application Settings**” page, enter “*TFS_MarvelALM*” for both the “**Target Application ID**” and “**Display Name**” fields then enter an email for the “**Contact E-mail**” field, then select “**Group**” for the “**Target Application Type**” then select “**None**” for the “**Target Application Page URL**” and then “**Next**”.

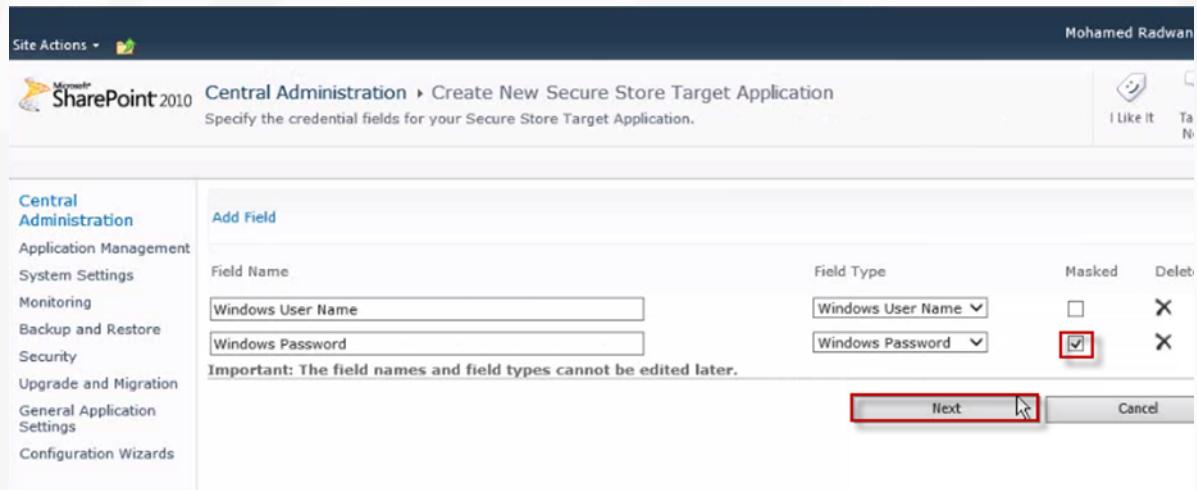


Central Administration › Create New Secure Store Target Application

Specify the settings for the new Secure Store Target Application. The settings that you specify here can be changed later at Secure Store Target Application page.

Central Administration <ul style="list-style-type: none"> Application Management System Settings Monitoring Backup and Restore Security Upgrade and Migration General Application Settings Configuration Wizards 	Target Application Settings <p>The Secure Store Target Application ID is a unique identifier. You cannot change this property after you create the Target Application.</p> <p>The display name is used for display purposes only.</p> <p>The contact e-mail should be a valid e-mail address of the primary contact for this Target Application.</p> <p>The Target Application page URL can be used to set the values for the credential fields for the Target Application by individual users.</p> <p>The Target Application type determines whether this application uses a group mapping or individual mapping. Ticketing indicates whether tickets are used for this Target Application. You cannot change this property after you create the Target Application.</p>	Target Application ID <input type="text" value="TFS_MarvelALM"/> Display Name <input type="text" value="TFS_MarvelALM"/> Contact E-mail <input type="text" value="feedback@marvelalm.com"/> Target Application Type <input type="button" value="Group"/> <input checked="" type="radio"/> Target Application Page URL <input type="radio"/> Use default page <input type="radio"/> Use custom page <input checked="" type="radio"/> None <input type="button" value="Next"/> <input type="button" value="Cancel"/>
---	--	--

Specify the credential fields for your Secure Store Target Application by accepting the default options as follows then click “**Next**”.

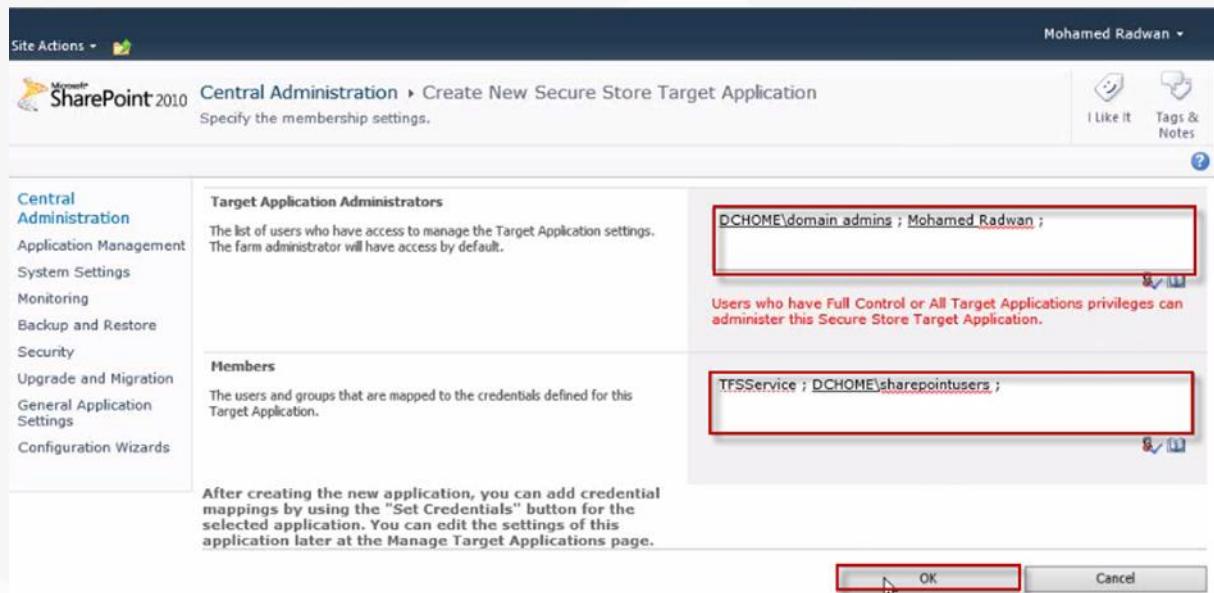


Central Administration › Create New Secure Store Target Application

Specify the credential fields for your Secure Store Target Application.

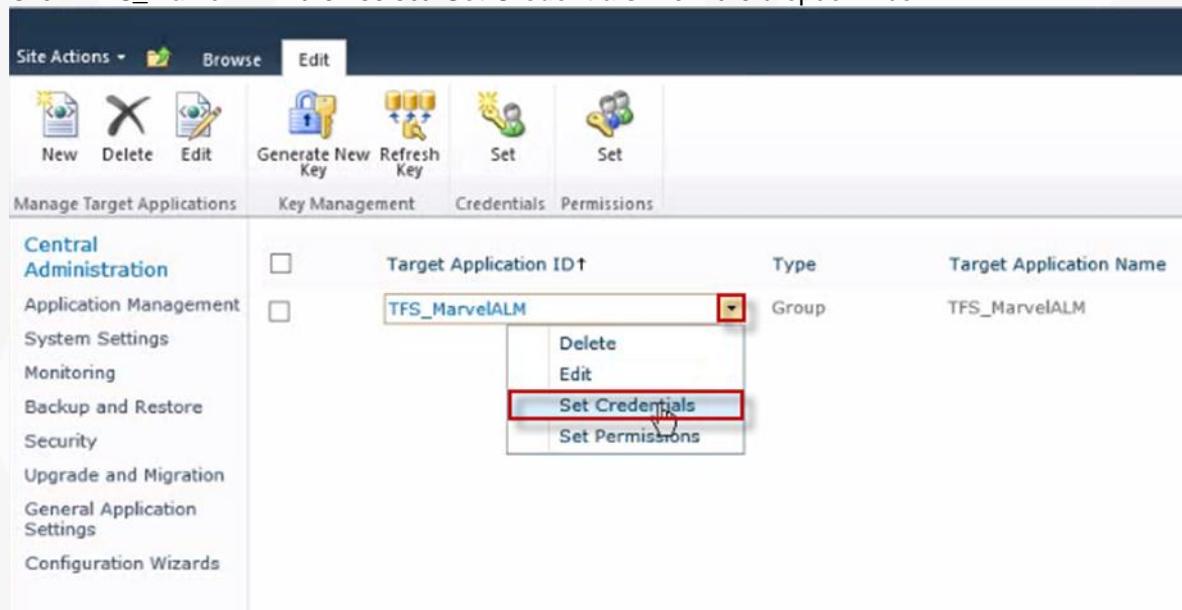
Central Administration <ul style="list-style-type: none"> Application Management System Settings Monitoring Backup and Restore Security Upgrade and Migration General Application Settings Configuration Wizards 	Add Field <table border="1"> <tr> <td>Field Name</td> <td>Field Type</td> <td>Masked</td> <td>Delete</td> </tr> <tr> <td><input type="text" value="Windows User Name"/></td> <td><input type="button" value="Windows User Name"/></td> <td><input type="checkbox"/></td> <td></td> </tr> <tr> <td><input type="text" value="Windows Password"/></td> <td><input type="button" value="Windows Password"/></td> <td><input checked="" type="checkbox"/></td> <td></td> </tr> </table> <p>Important: The field names and field types cannot be edited later.</p>	Field Name	Field Type	Masked	Delete	<input type="text" value="Windows User Name"/>	<input type="button" value="Windows User Name"/>	<input type="checkbox"/>		<input type="text" value="Windows Password"/>	<input type="button" value="Windows Password"/>	<input checked="" type="checkbox"/>		<input type="button" value="Next"/>  <input type="button" value="Cancel"/>
Field Name	Field Type	Masked	Delete											
<input type="text" value="Windows User Name"/>	<input type="button" value="Windows User Name"/>	<input type="checkbox"/>												
<input type="text" value="Windows Password"/>	<input type="button" value="Windows Password"/>	<input checked="" type="checkbox"/>												

Add the admin user account “*mradwan*” and the domain admins group to the “**Target Application Administrators**” field then add both “*TFSService*” and “*SharePointUsers*” accounts to the “**Members**” field then click “Ok”.



NOTE: You created the “SharePoint Users” Active Directory Group in [Section 3.2.3](#).

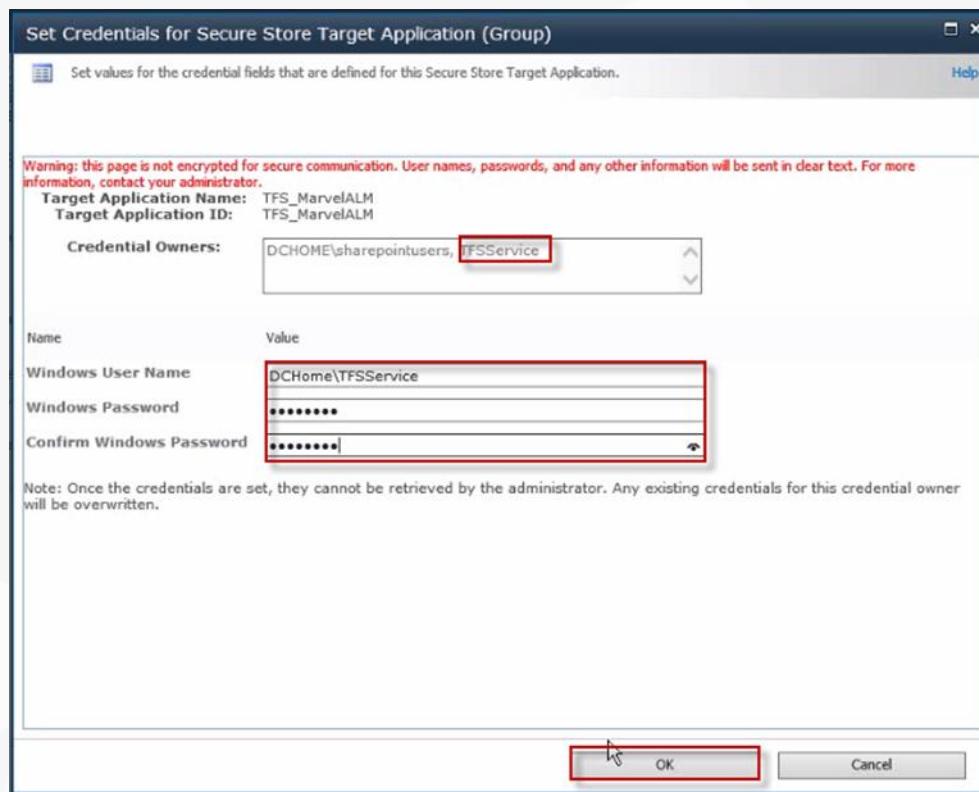
Click “*TFS_MarvelALM*” then select “**Set Credentials**” from the dropdown box.



Central Administration	Target Application ID	Type	Target Application Name
	TFS_MarvelALM	Group	TFS_MarvelALM

Chapter 8: Configuring SharePoint Server 2010 for Dashboard Compatibility

For the “Windows User Name” field, enter “DCHome\TFSService” then enter its password and confirm it in the “Windows Password” and “Confirm Windows Password” fields and then click “OK”.



Part 4 – Installing, Configuring & Integrating Team Foundation Server 2012

This part walks you through installing and configuring Team Foundation Server 2012 in addition to its Team Build Service. It also explains the process of configuring the integration between Team Foundation Server 2012 with SharePoint Server 2010 and SQL Server 2012 Reporting Services.

You will start by installing Team Foundation Server 2012 in [Chapter 9](#), installing and configuring the Team Build Services in [Chapter 10](#) then you will configure the Enterprise Application Definition for SharePoint Server 2010 in [Chapter 11](#).

Chapter 9: Installing & Configuring Team Foundation Server 2012

In this chapter you will install Team Foundation Server 2012 on the TFS Virtual Machine you created in [Section 5.1](#) then you will use the Standard Configuration Wizard to configure Team Foundation Server in addition to its Reporting and SharePoint integration capabilities.



Watch the
Video

www.youtube.com/watch?v=OYtsaa8BE3Y

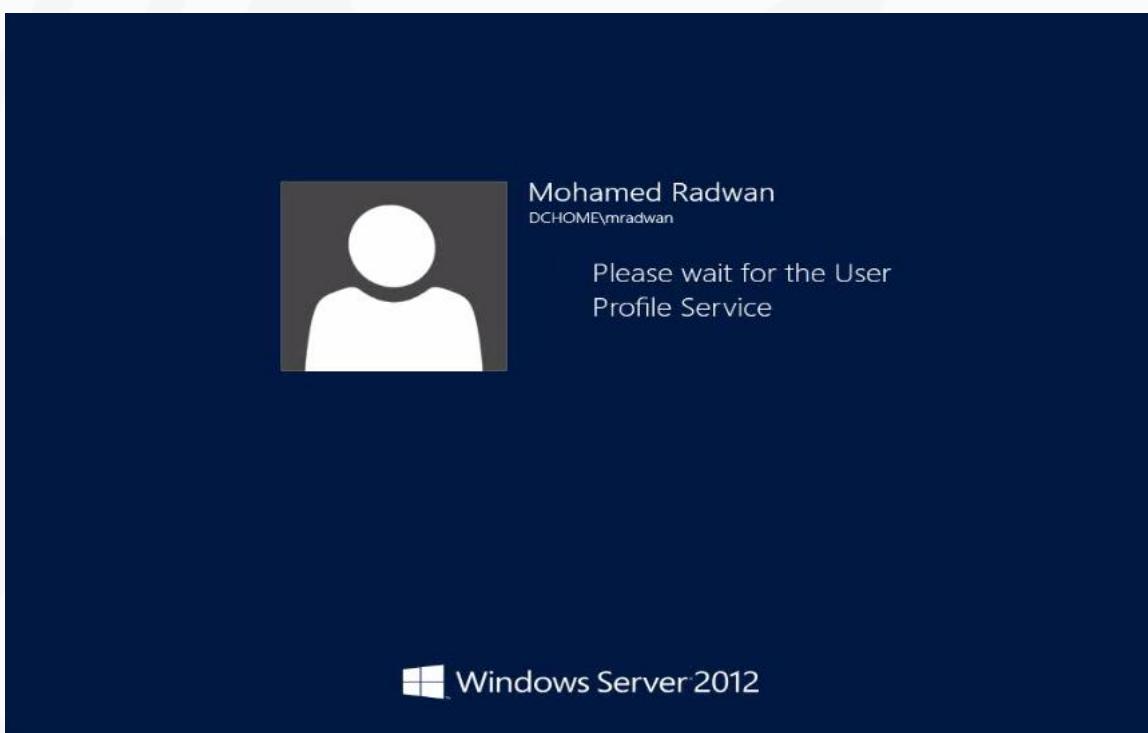
9.1 Installing Team Foundation Server 2012

Reboot the “TFS2012” Virtual Machine.

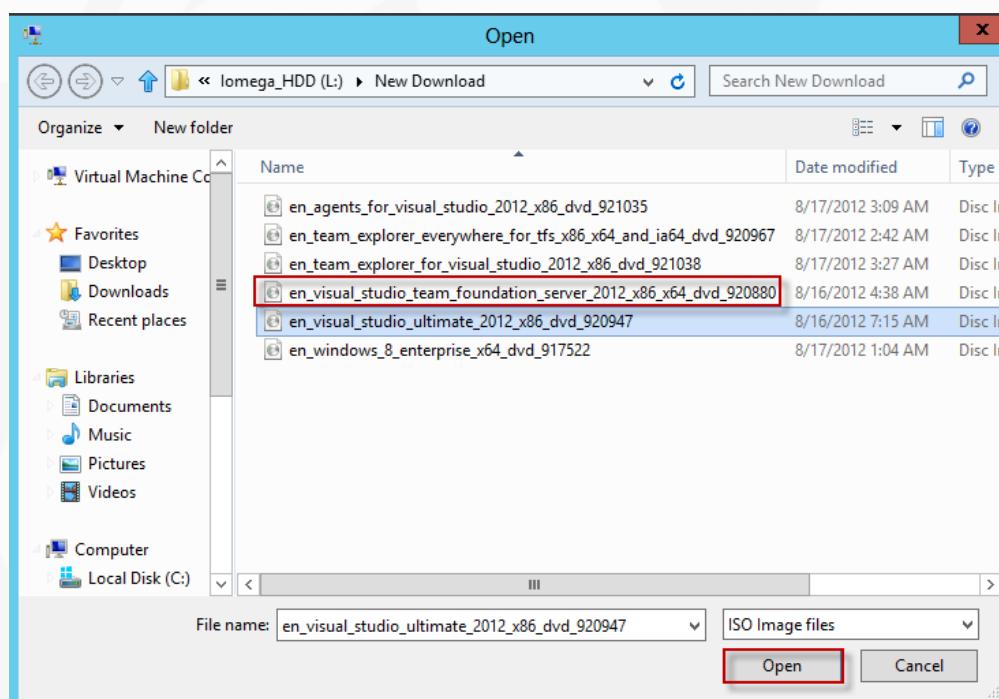
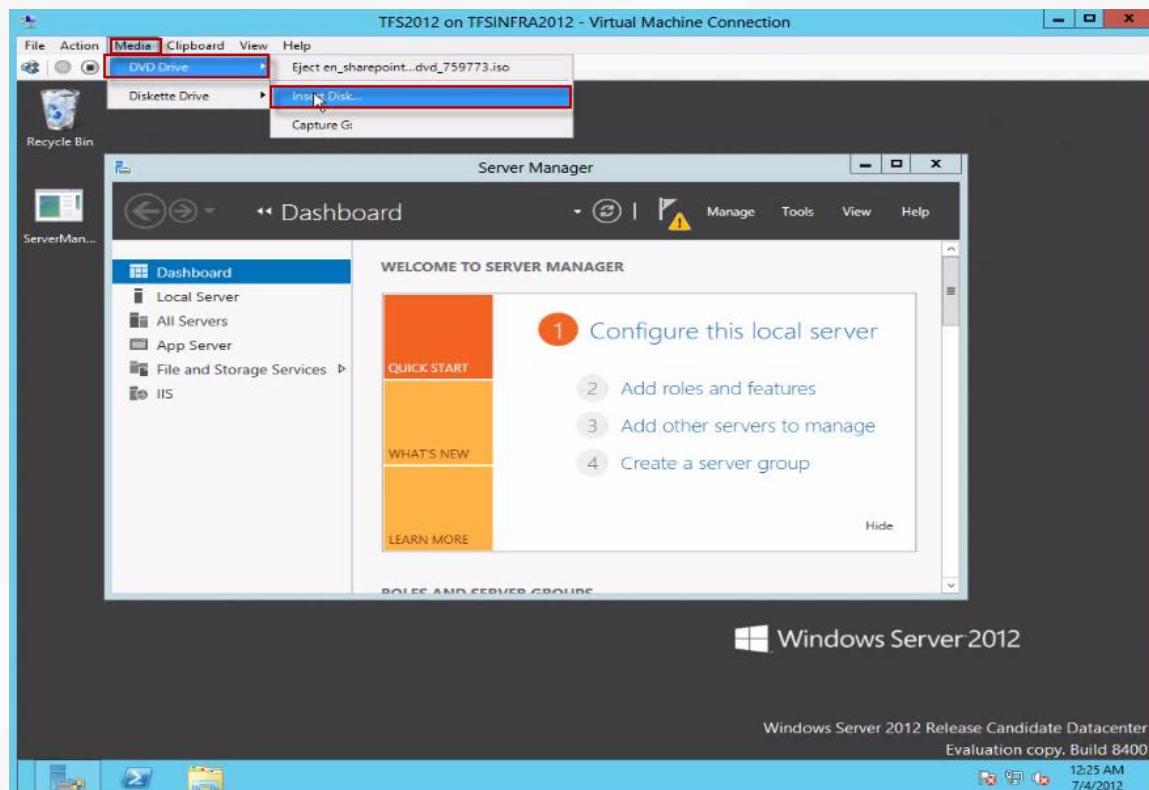


Chapter 9: Installing & Configuring Team Foundation Server 2012

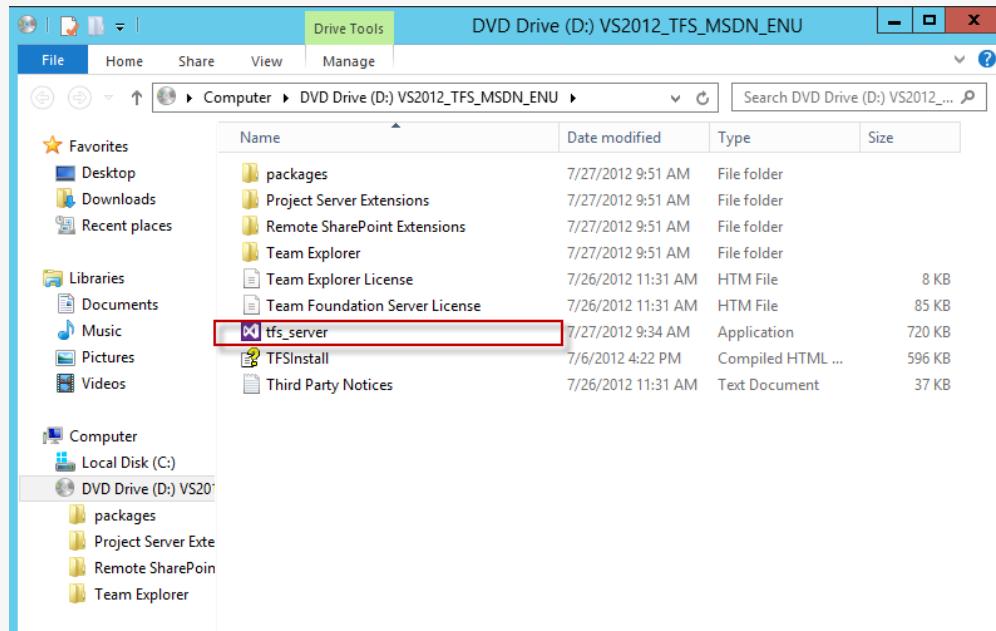
After the machine reboots, login using the domain admin account “*mradwan*”.



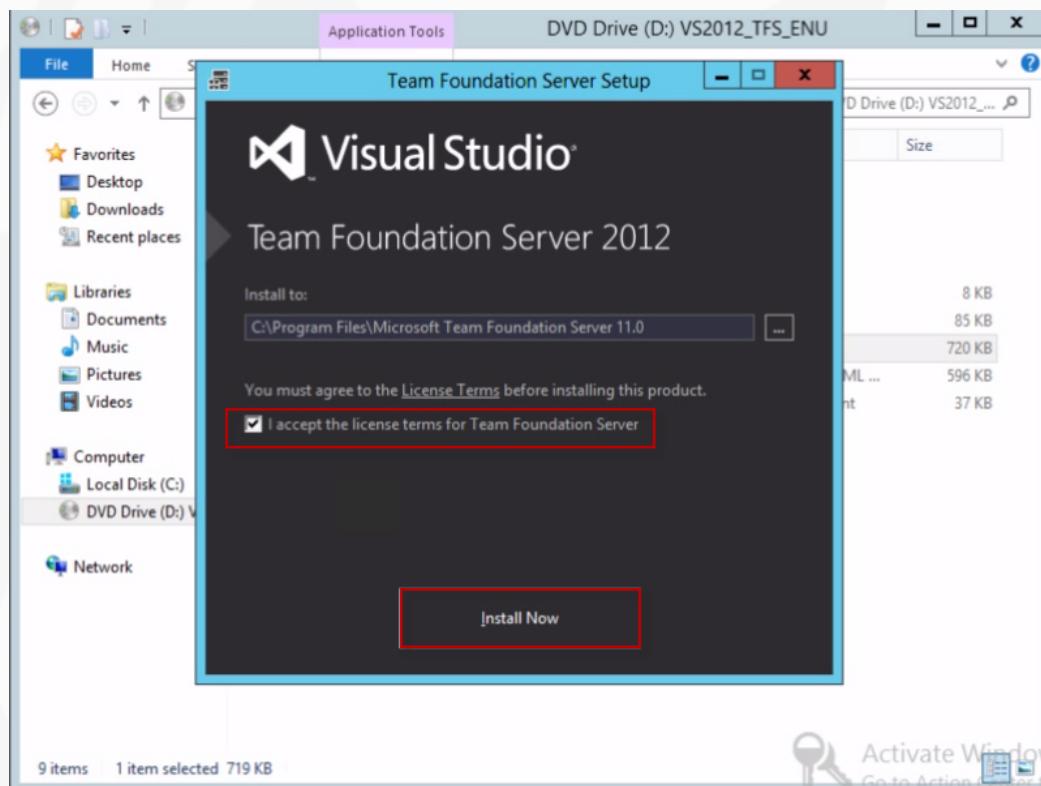
From the Hyper-V Manager console, double-click the “TFS2012” Virtual Machine then click “**Media**” from the top menu bar and choose “**DVD Drive**” then choose “**Insert Disk**” and then browse to the folder where you are storing TFS 2012 ISO image and then click “**Open**”.



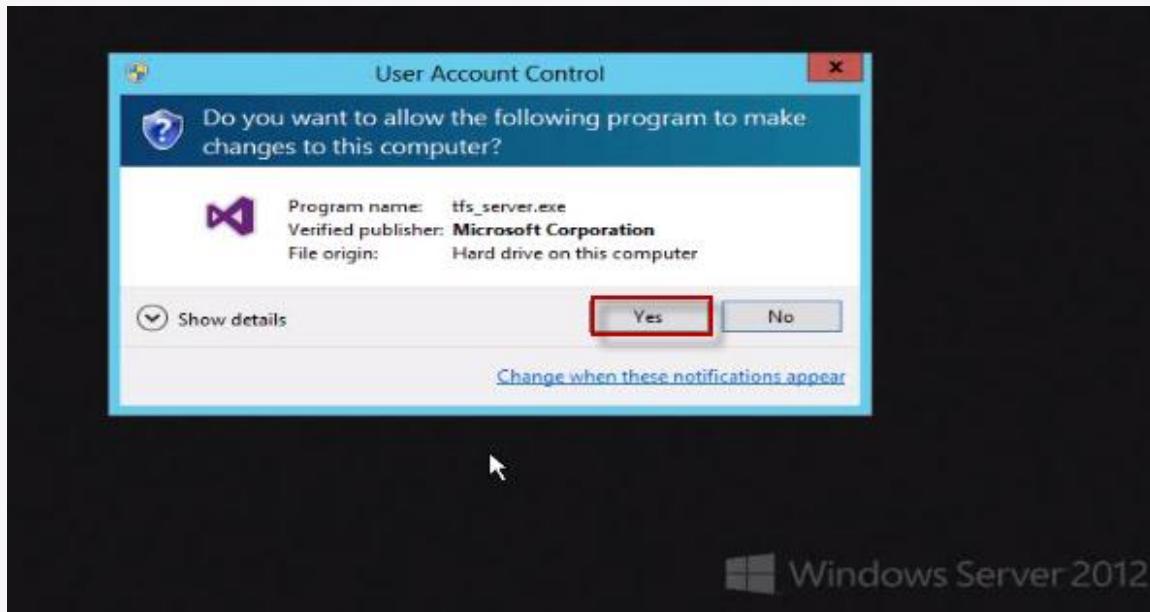
Launch “**tfs_server.exe**” from the containing folder.



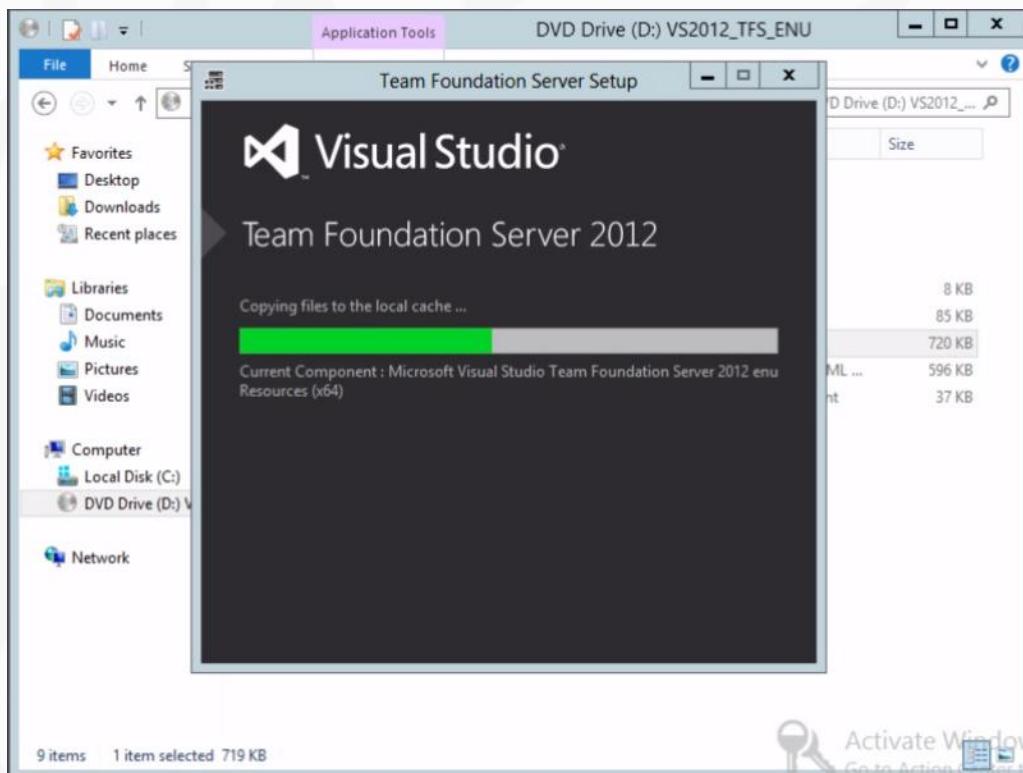
Team Foundation Server Setup process starts. From the welcome screen, select “**I accept the license terms for Team Foundation Server**” and then click “**Install Now**”.



If the “User Account Control” dialog box pops up, click “Yes”.

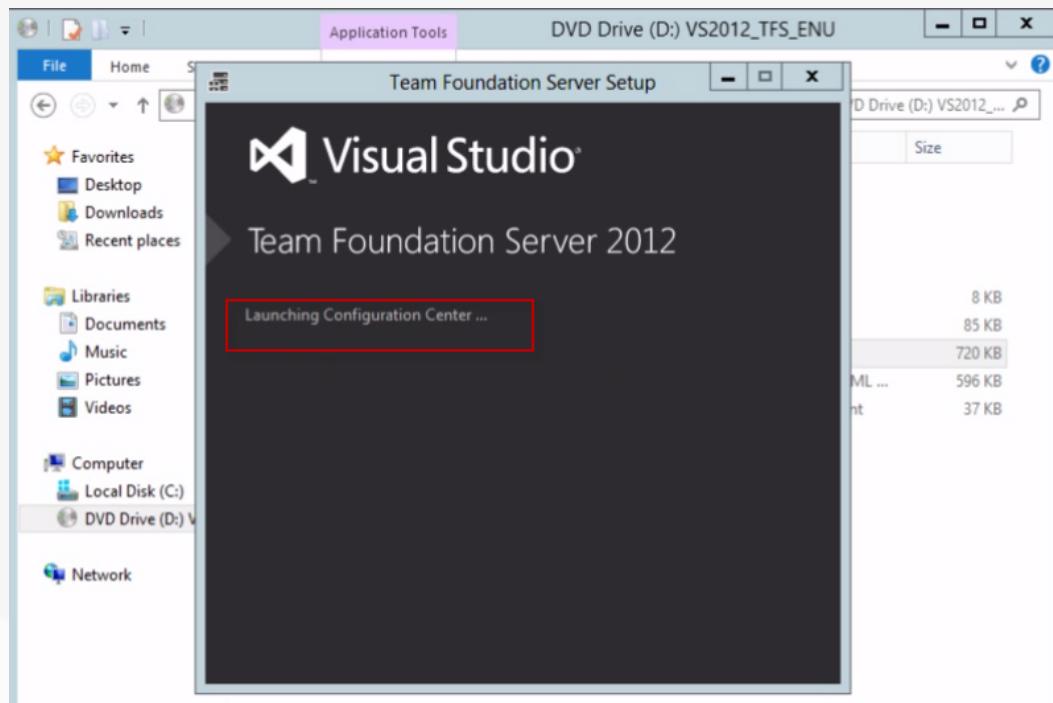


The setup process starts copying TFS 2012 files and installing them.

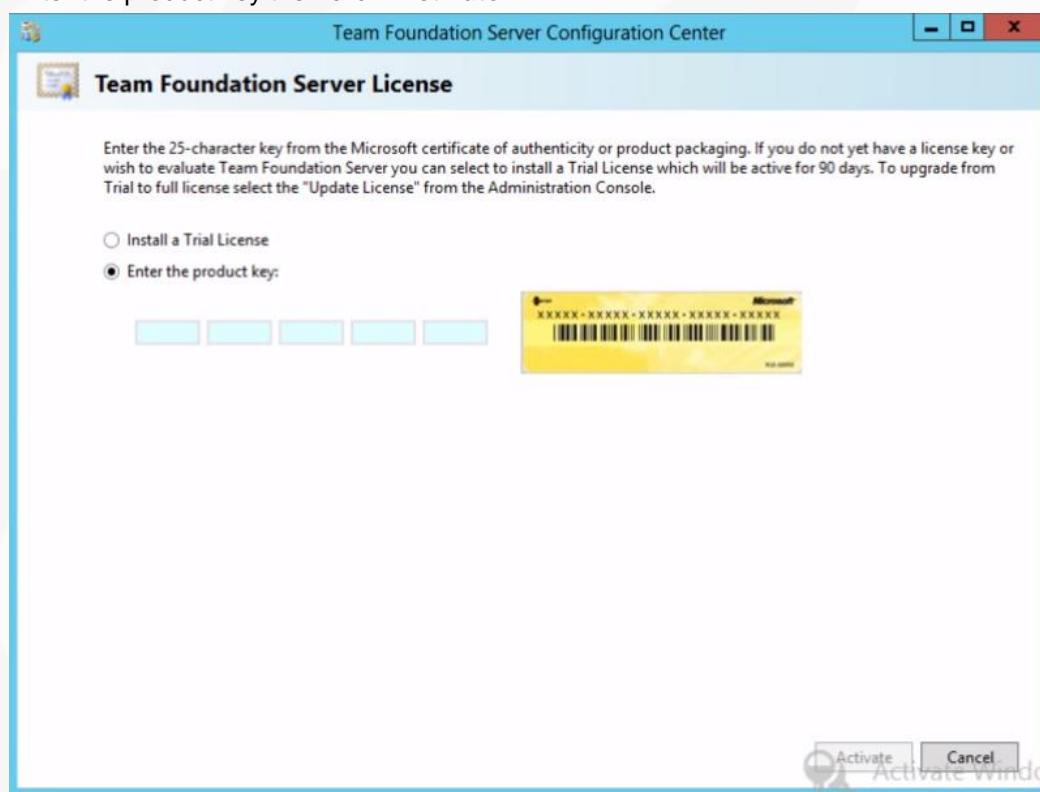


Chapter 9: Installing & Configuring Team Foundation Server 2012

When the setup process successfully completes, the “**Configuration Center**” automatically launches.



Enter the product key then click “**Activate**”.





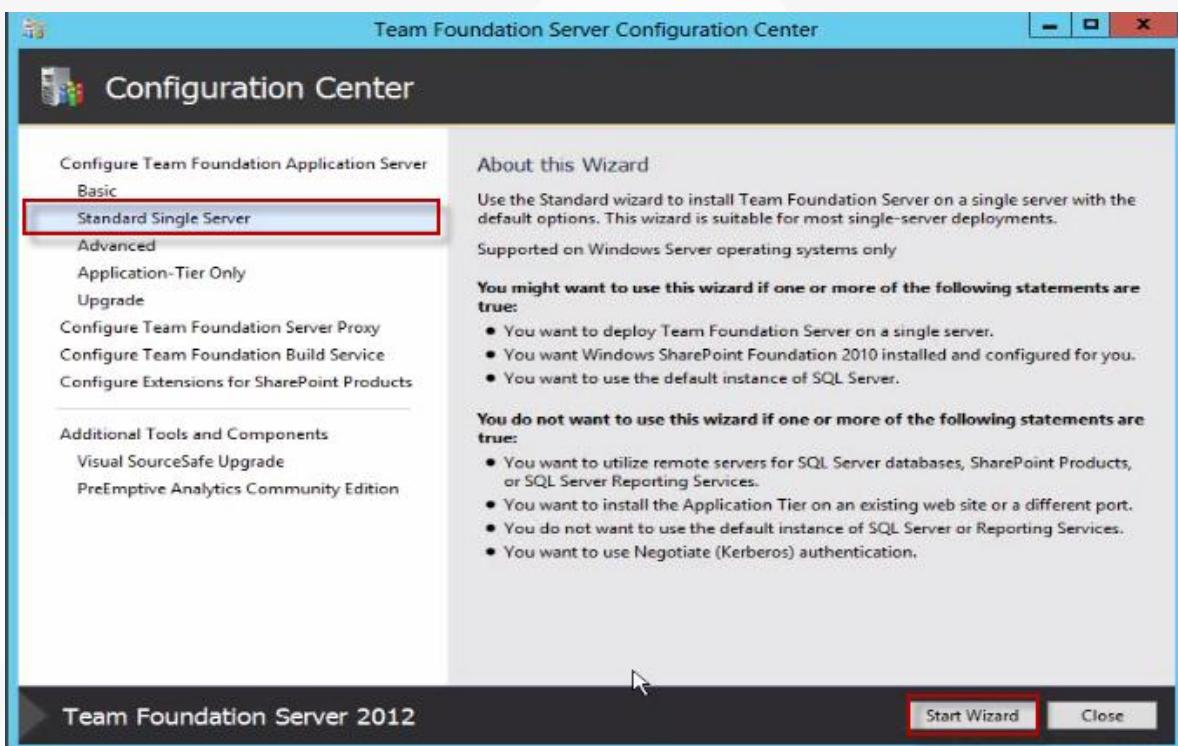
9.2 Configuring Team Foundation Server 2012

Watch the

Video

www.youtube.com/watch?v=UwJjl7Imkkc

From “Team Foundation Server Configuration Center”, click “Standard Single Server” and then click “Start Wizard”.



From the “**Standard Configuration Wizard**”, enter “DCHome\TFSService” and its password then click “**Test**” and then click “**Next**” when the test successfully completes. This is the account that you created in [Section 3.2.1](#) and it is used for accessing SharePoint Products and SQL Server Reporting Services.



From the “**Standard Configuration Wizard**”, ensure that “**Use Reporting**” and “**Use SharePoint**” are both set to “True”, the “**Existing Site URL**” is set to “<http://tfs2012/sites>” and that the “**Existing Admin Site URL**” is set to “<http://tfs2012:17012>” and then click “**Next**”.

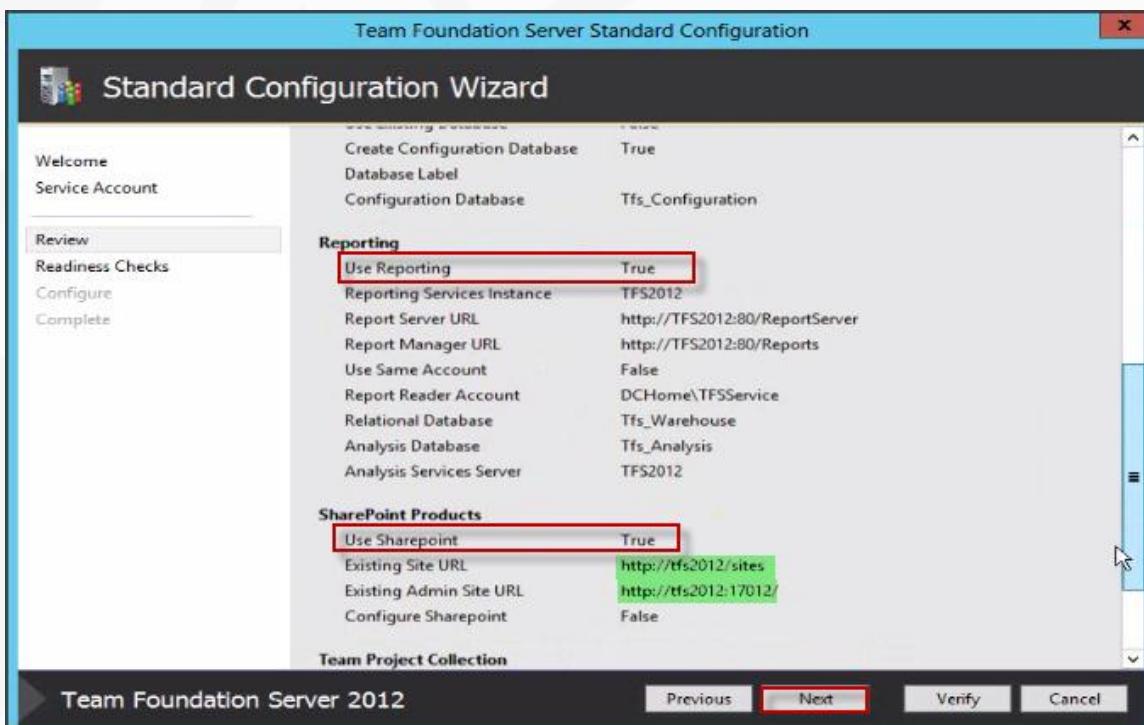
NOTE: TFS 2012 Standard Configuration Wizard can now be used to install and configure SharePoint Foundation 2010. This is new to TFS2012. However, in case SharePoint already exists on the same machine, the wizard will detect it and will not ask you to install it again.



NOTE: TFS 2012 Standard Configuration Wizard can detect the SharePoint Installation, but it cannot detect the SharePoint Central Administration Web Application port number or the Default TFS Web Application. The Configuration Wizard just assumes that the Central Administration Web Application uses the "17012" port and that the default TFS Web Application is <http://servername/sites>, this justifies why we used both in [Section 7.6](#). Please note that using a different port number for the SharePoint Central Administration Web Application will cause the configuration to fail.

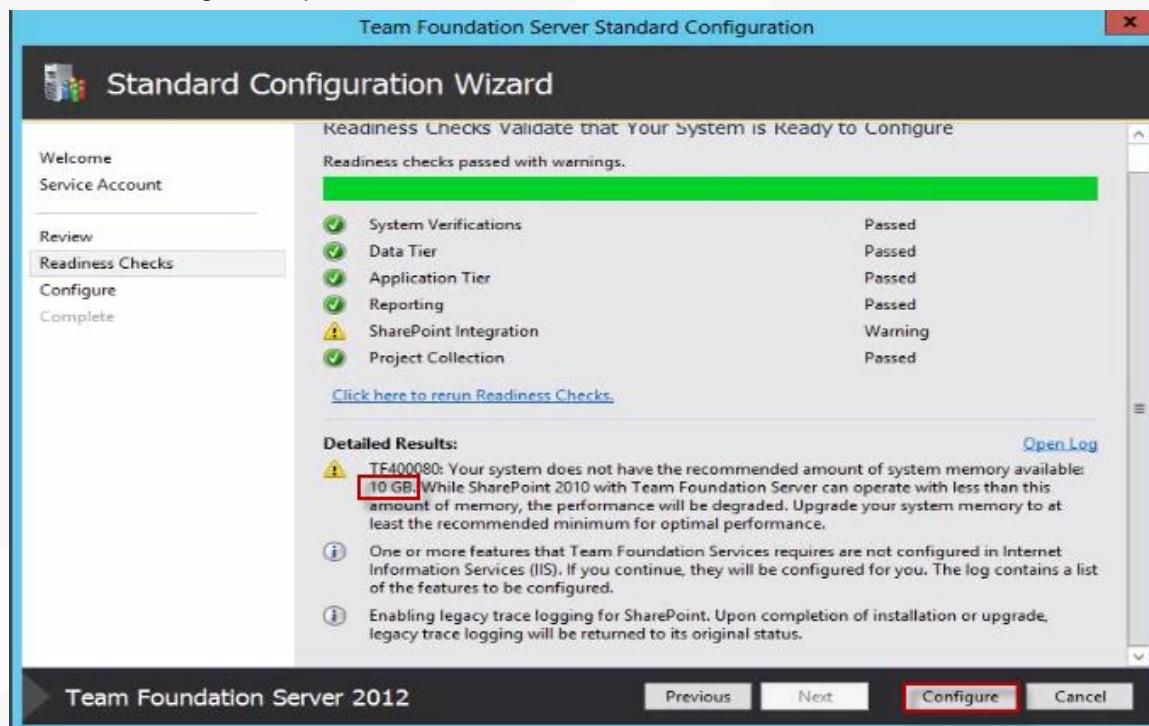


WARNING: SharePoint Foundation 2010 is not supported on Windows Server 2012. However, you can skip the SharePoint installation and the configuration wizard will continue without complaining but you will miss the SharePoint capabilities in your TFS environment.



TIP: Team Foundation Server 2012 Basic Configuration enables you to Install SQL Server Express.

The “**Standard Configuration Wizard**” starts performing some “**Readiness Checks**” to validate that your system is ready to configure Team Foundation Server. You might experience some warnings if you don’t have the recommended amount of system memory. Click “**Configure**” to kick off the configuration process.



NOTE: The default scenario in this guide is the Single Server installation, which means install all the components (Database, Analysis Service, Reporting Service, SharePoint, TFS) on one machine and for this reason specially with SharePoint this machine needs 10 GB of RAM, but we just give it 4 GB, the installation and configuration will continue but will raise a warning and you will end up with a low-performance machine.

TIP: Team Foundation Server 2012 automatically configures the Required Features and Roles for both Windows Server 2008 R2 and Windows Server 2012, so no need to configure IIS nor Windows Features and Roles as the case with the previous versions of TFS.

Chapter 9: Installing & Configuring Team Foundation Server 2012

The configuration process starts.



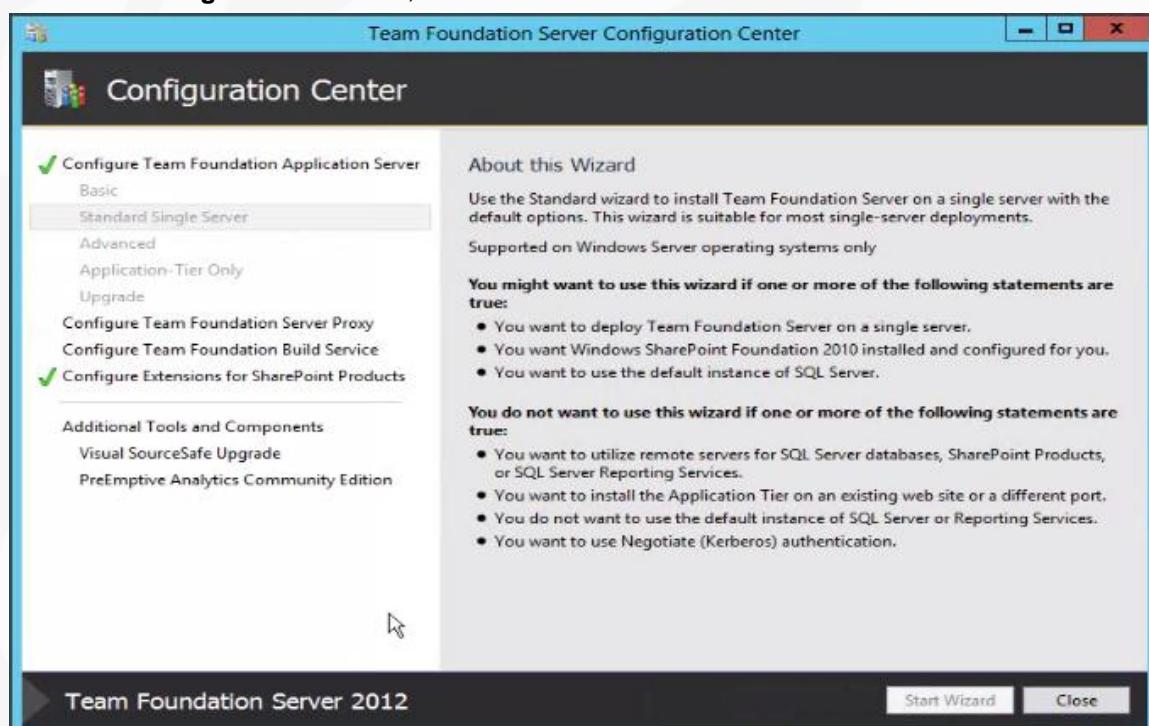
After the configuration successfully completes, click “Next”.



"Review the Results" then click "Close".



From the "Configuration Center", click "Close".





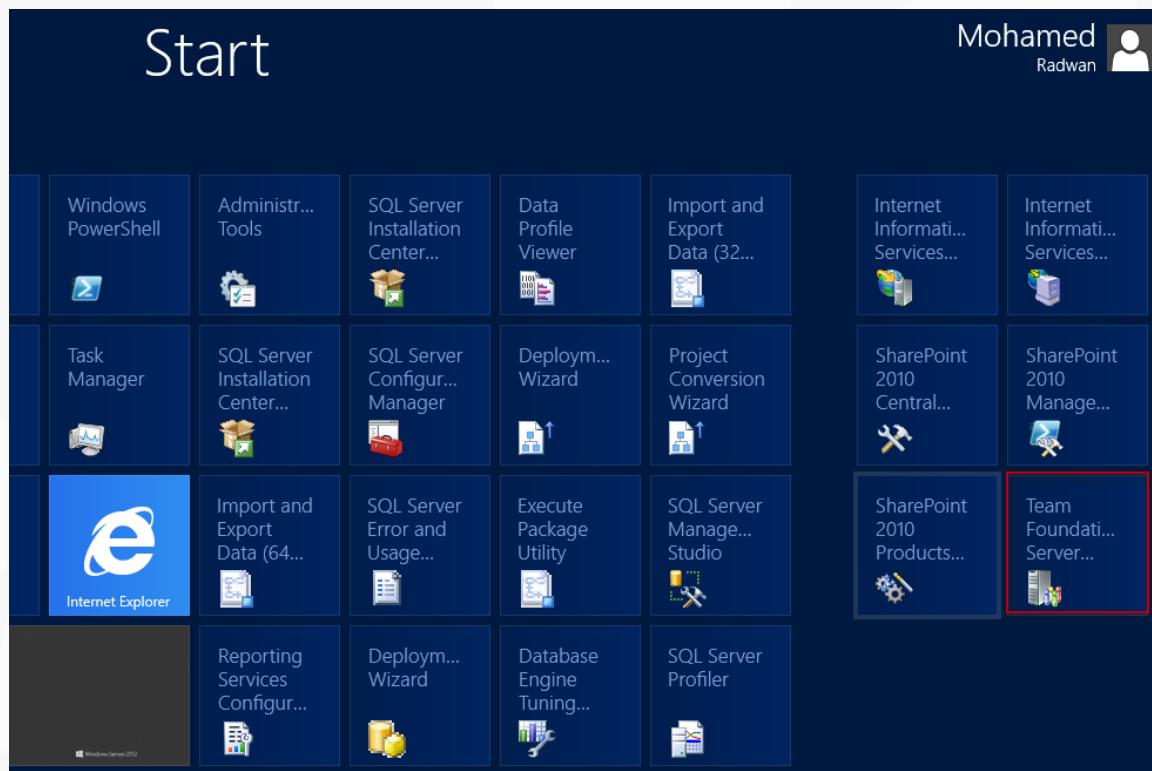
Watch the
Video

www.youtube.com/watch?v=6Dj0LIPchTs

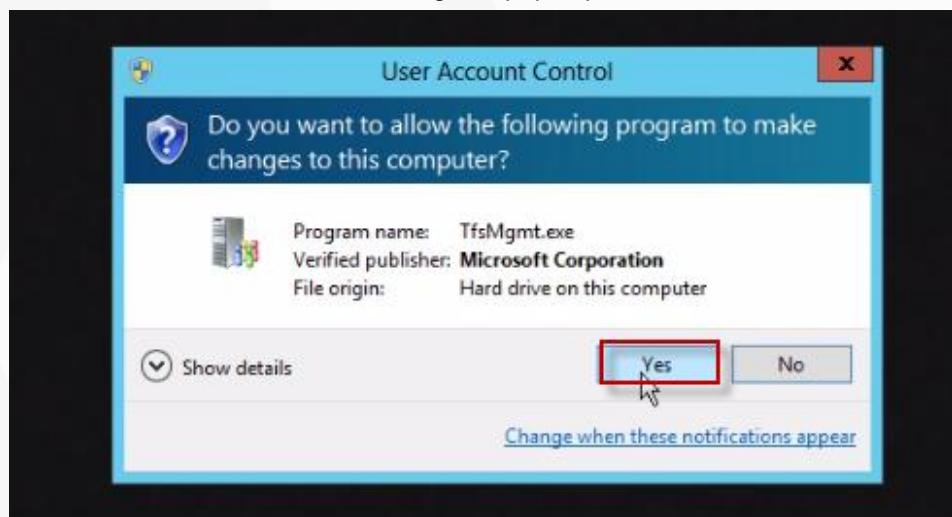
Chapter 10: Configuring the Team Build Service

In this chapter you will install and configure the Team Build Service on the “TFS2012” Virtual Machine.

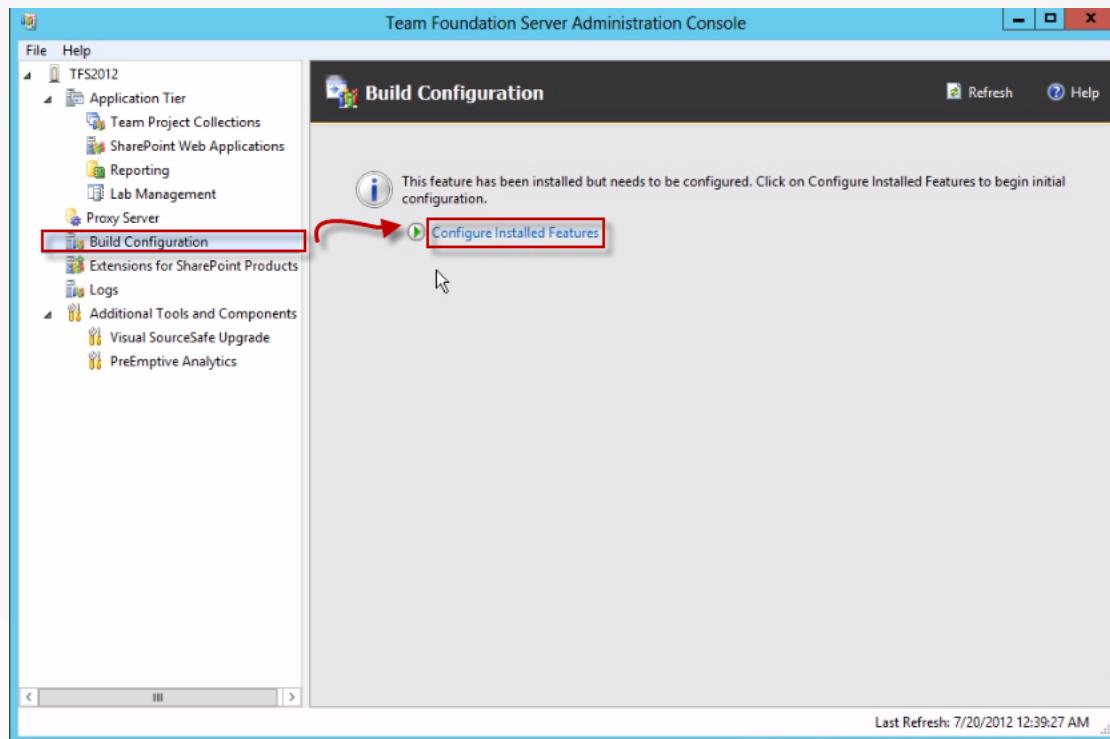
Launch “Team Foundation Server Administration Console” from Windows Server 2012 desktop.



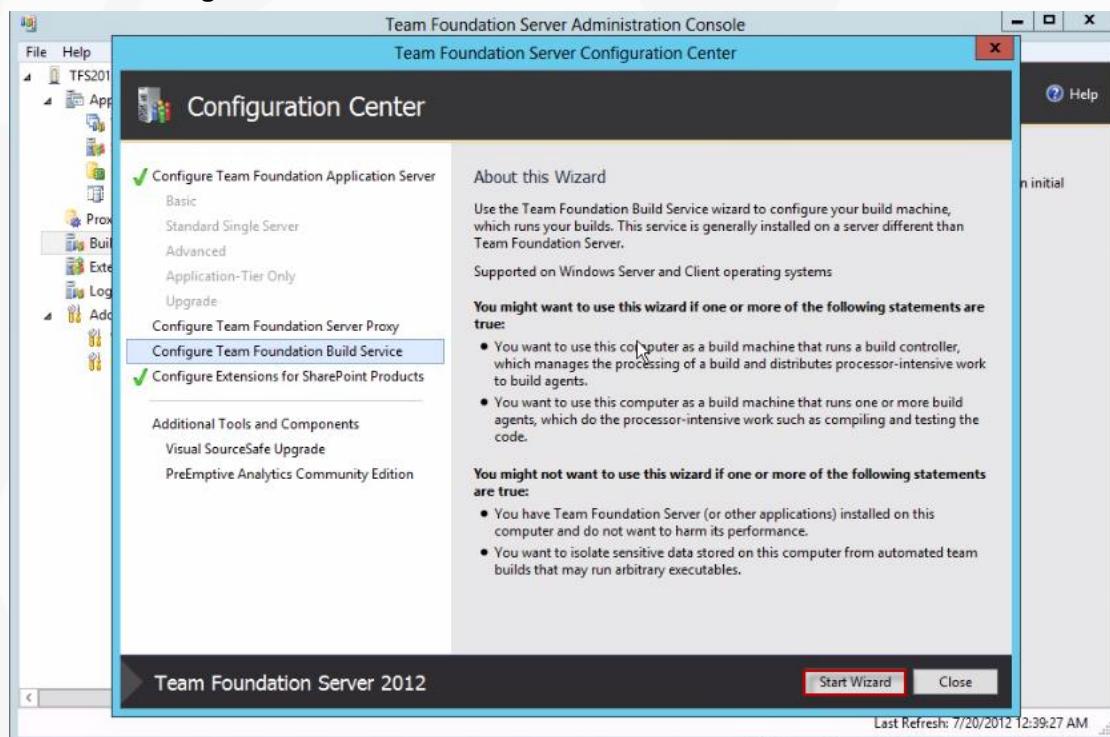
If the “User Account Control” dialog box pops up, click “Yes”.



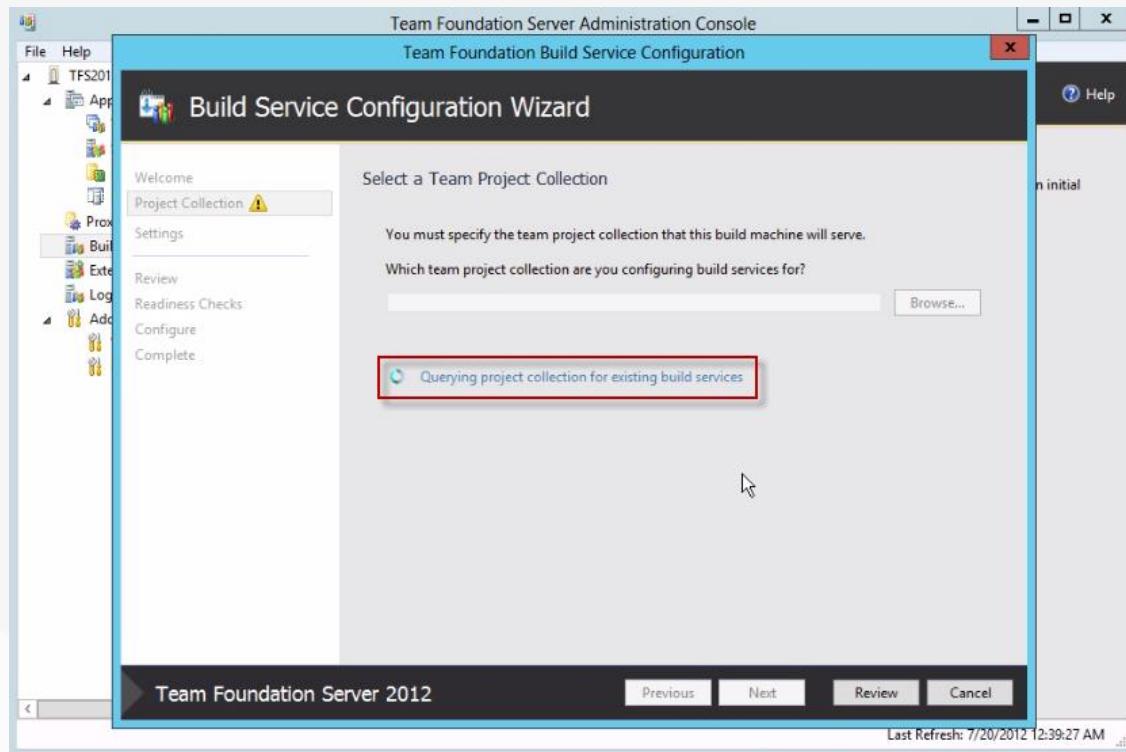
From the left pane of “Team Foundation Server Administration Console”, click “Build Configuration” then click “Configure Installed Features” from the right pane.



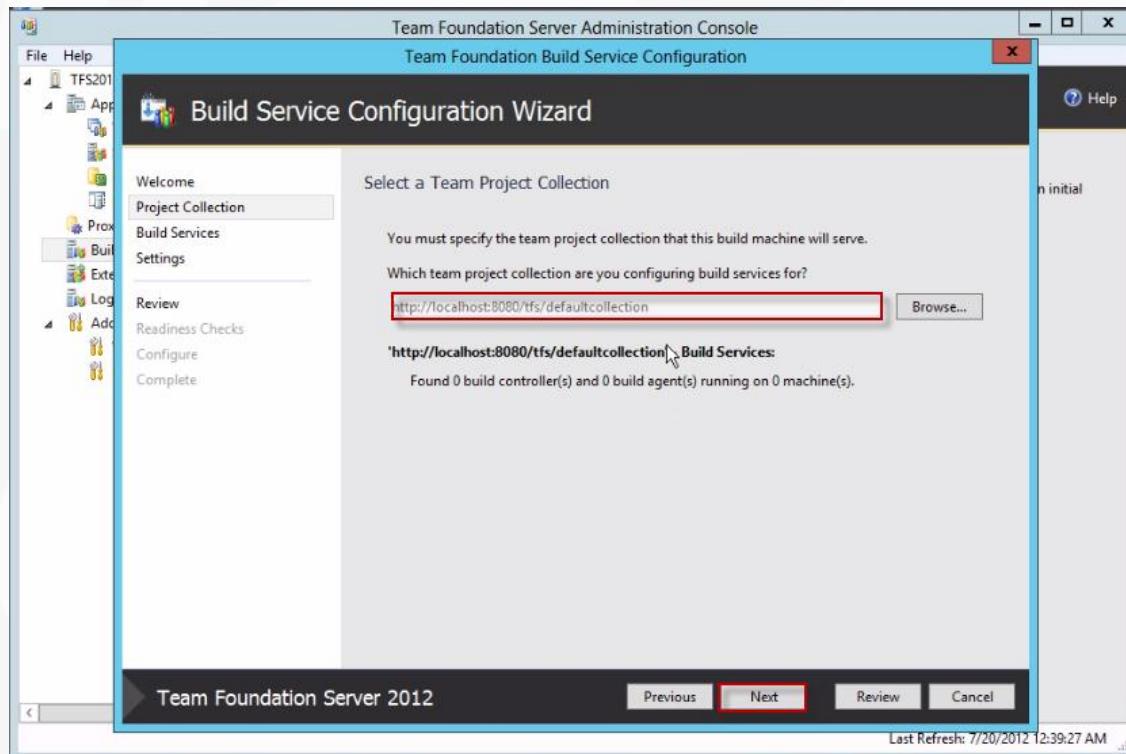
From the “Configuration Center”, click “Start Wizard”.



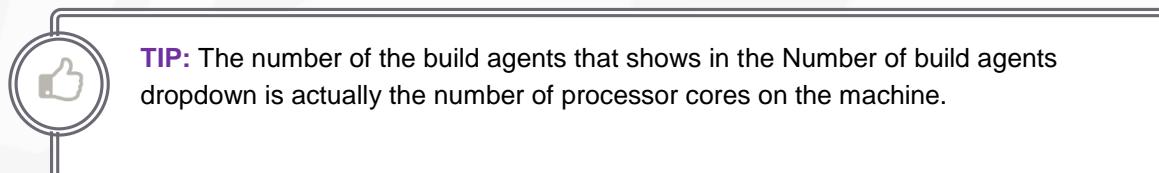
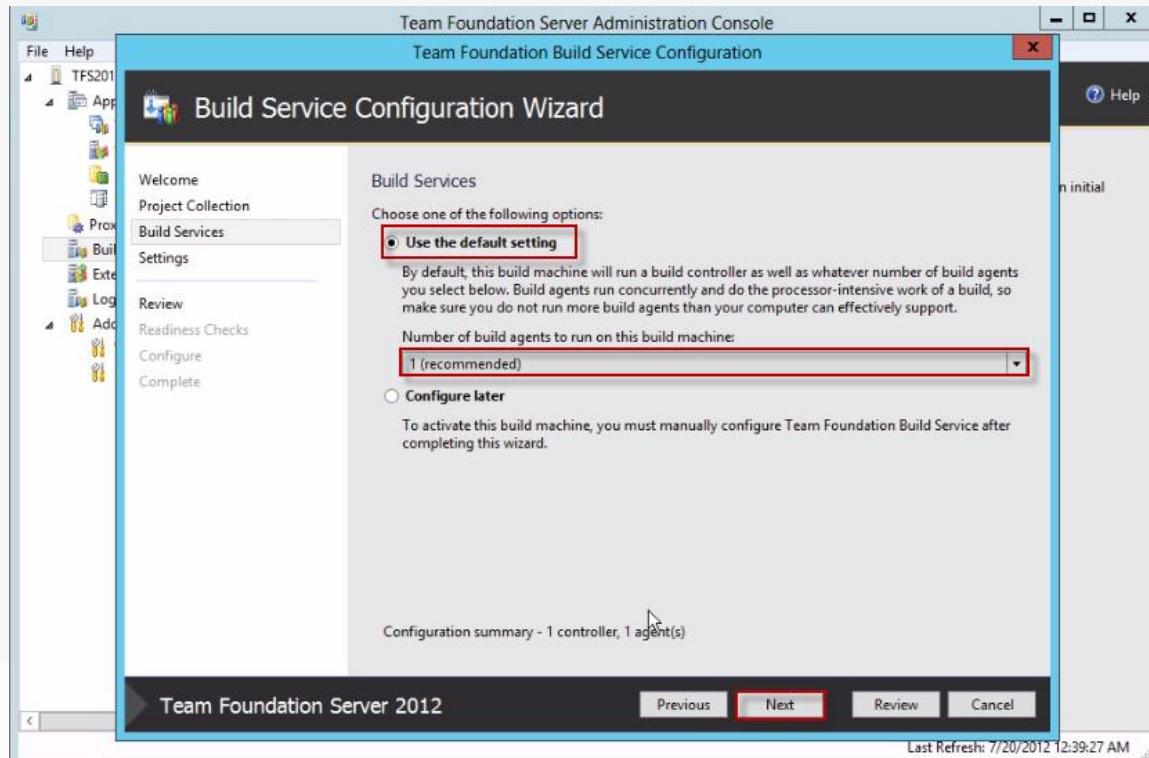
The “Build Service Configuration Wizard” starts “querying project collection for existing build services”.



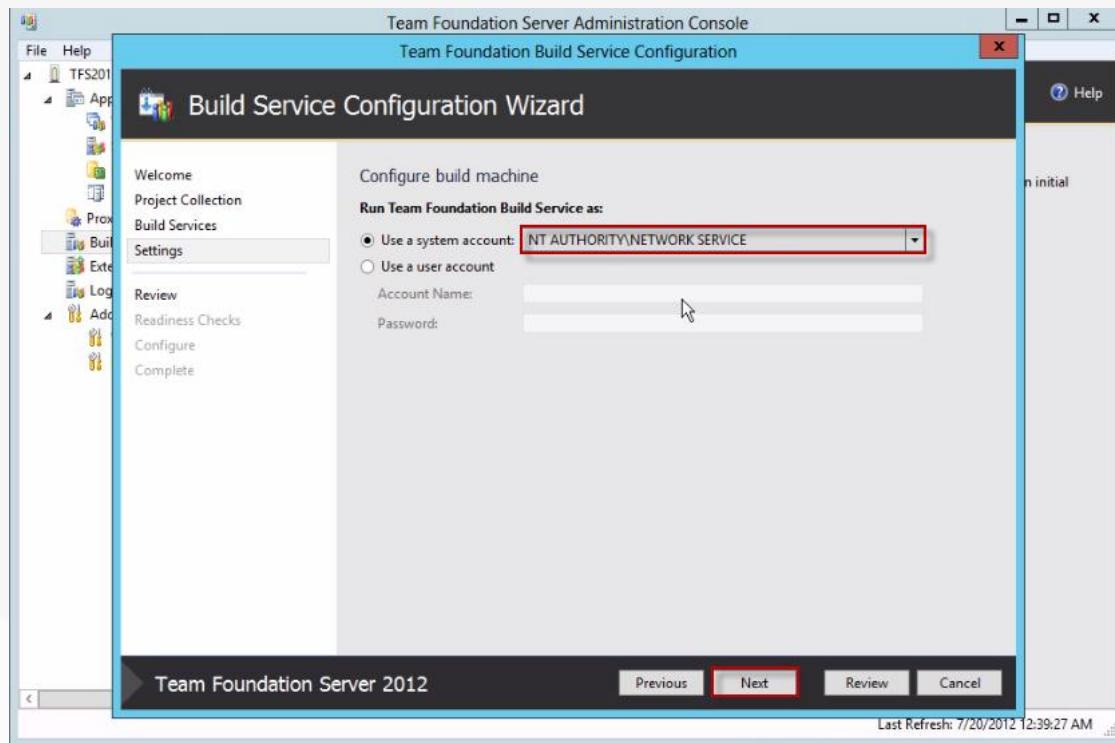
When the “Build Service Configuration Wizard” detects the default collection, click “Next”.



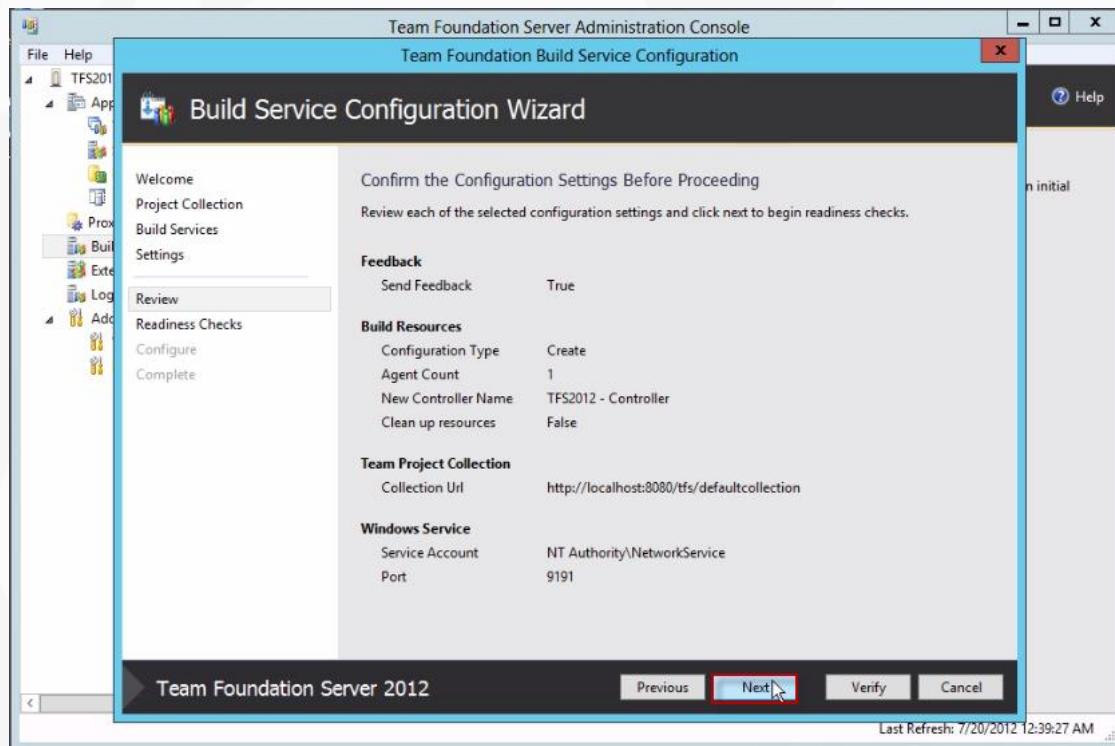
Accept the default settings then click “Next”.



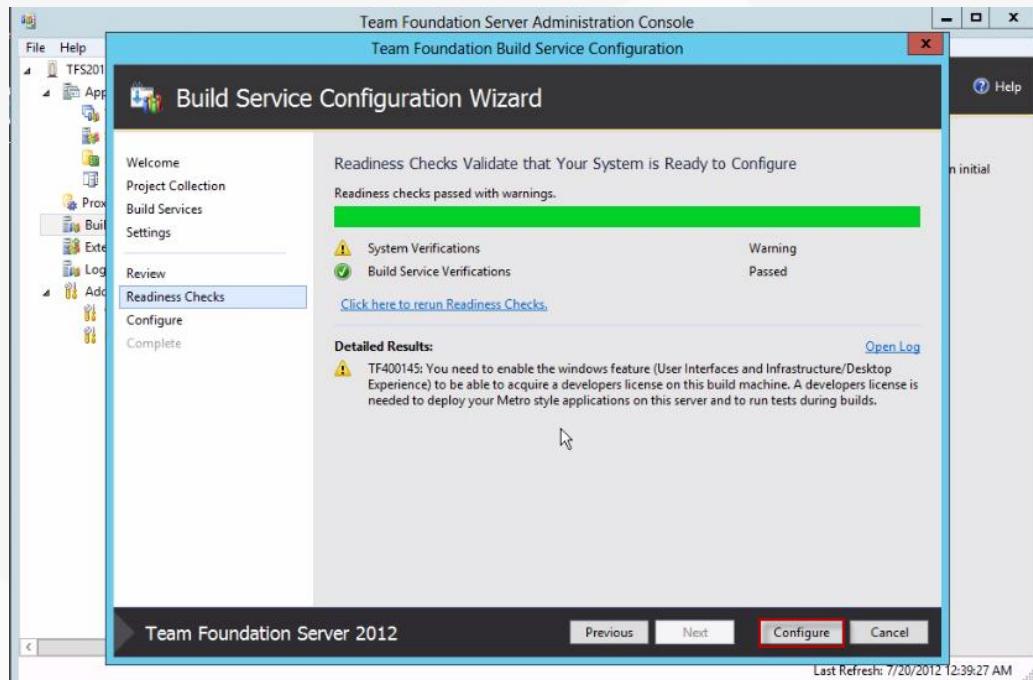
Leave the default option “**NT AUTHORITY\NETWORK SERVICE**” for the “**Use a system account**” setting then click “**Next**”.



Confirm your configuration settings then click “**Next**”.

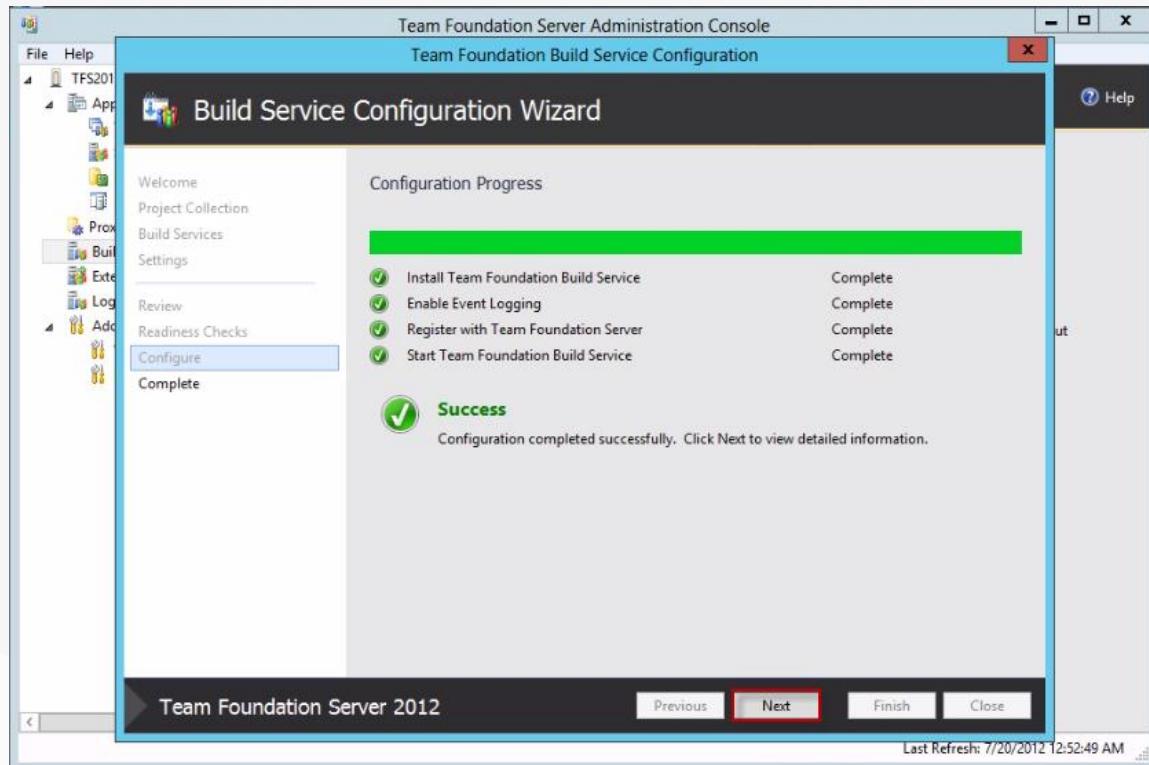


The “Build Service Configuration Wizard” starts performing some “**Readiness Checks**” to validate that your system is ready to configure the Build Service. On completion, click “Configure” to kick off the configuration process.

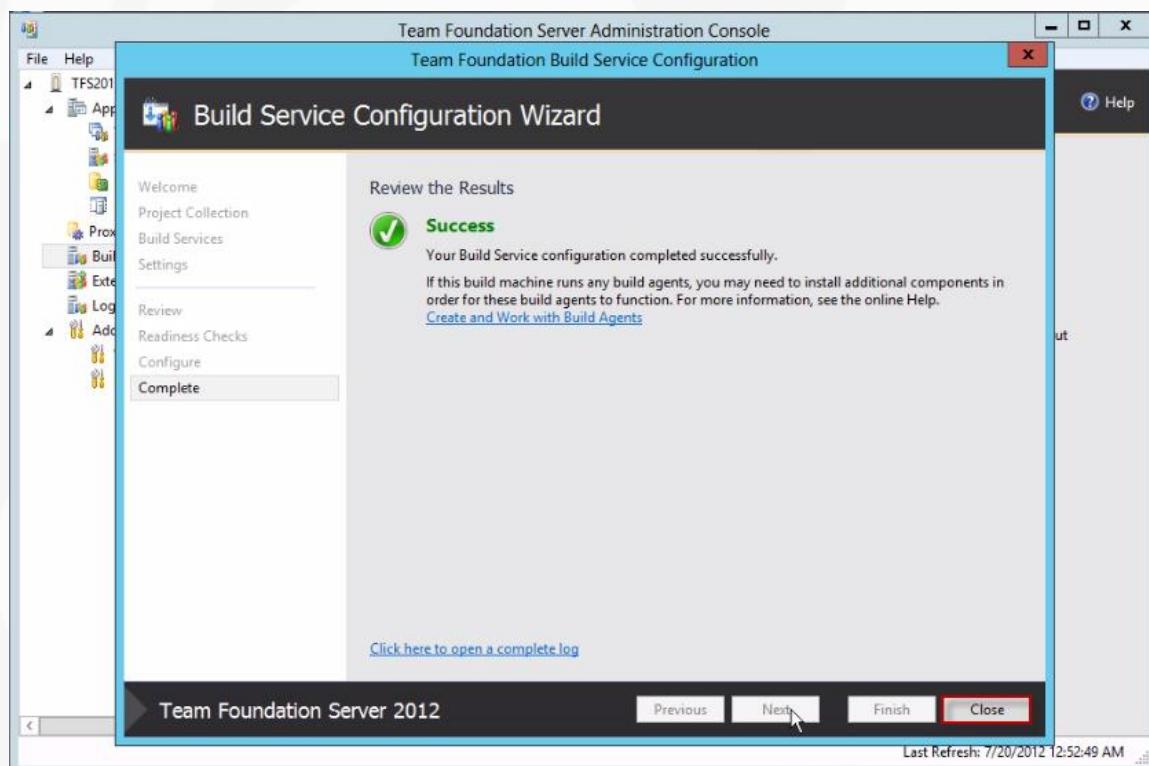


WARNING: You might encounter a Warning here in case the Desktop Experience feature is not enabled. This feature must be enabled in case you are planning to use this build server to build Windows 8 Modern Style Applications.

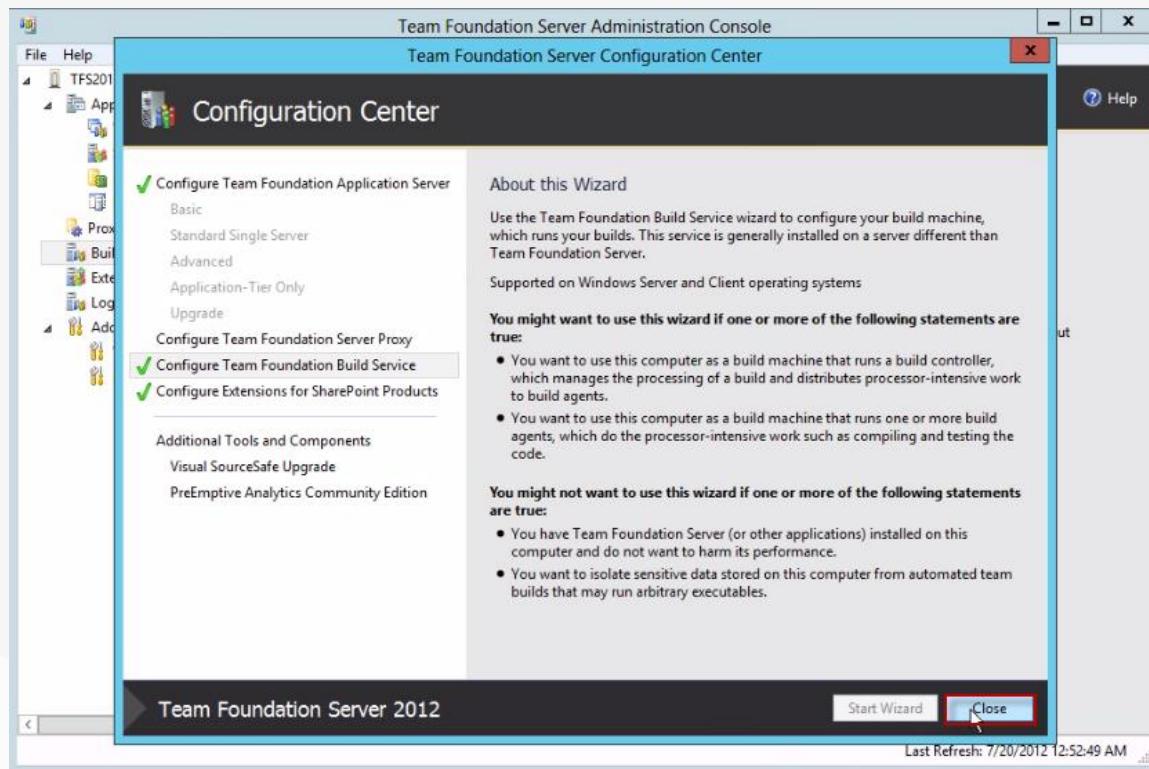
After the configuration successfully completes, click “**Next**”.



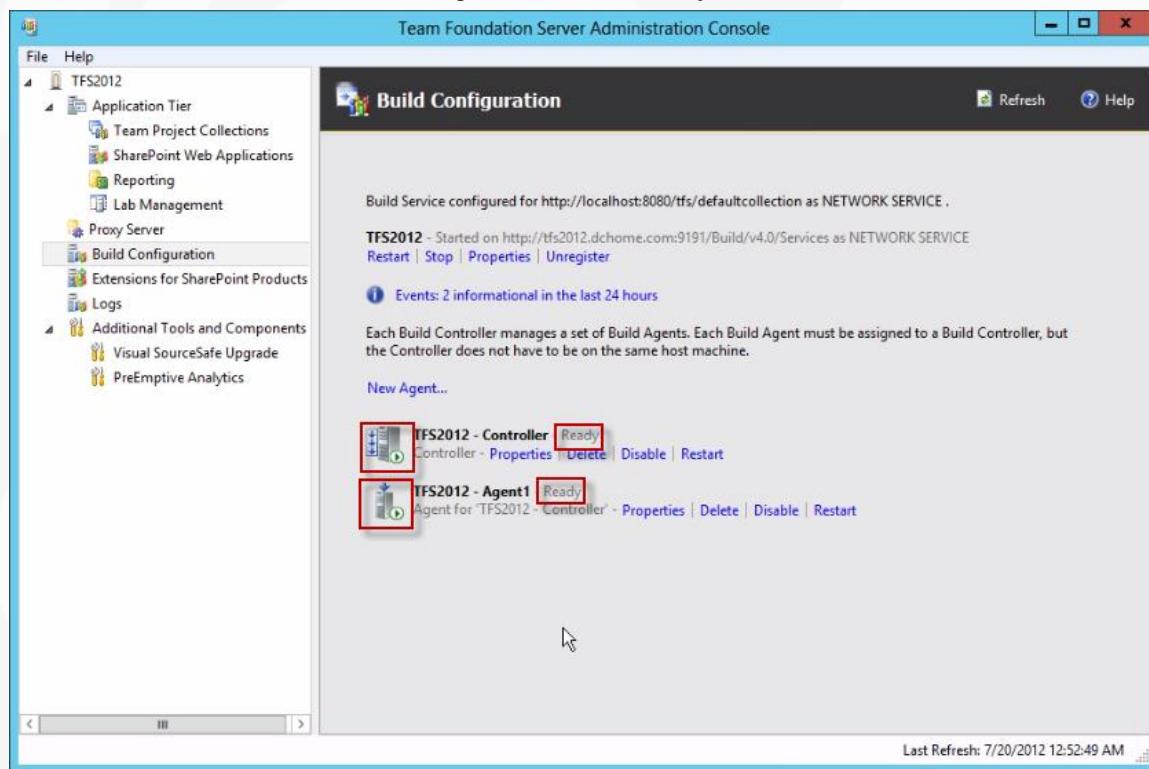
“Review the Results” then click “**Close**”.



From the “Configuration Center”, click “Close”.



Ensure that the Build Controller and agents are in a “Ready” status.





Watch the

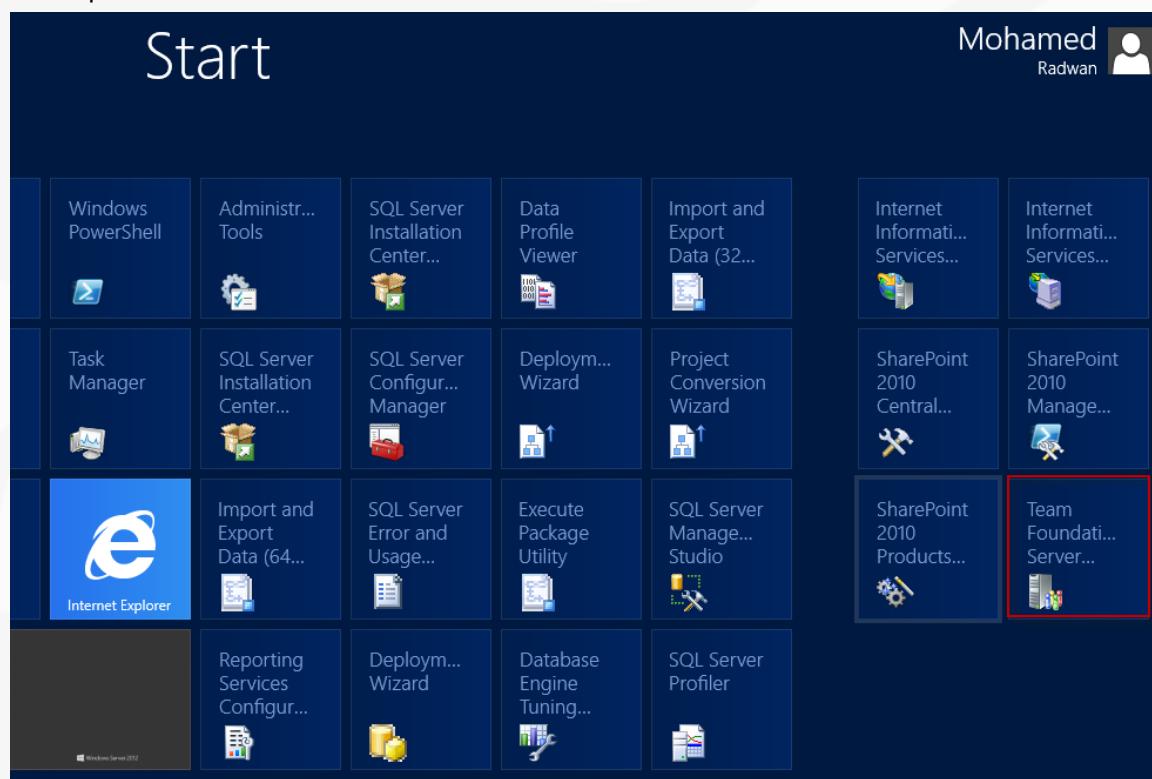
Video

www.youtube.com/watch?v=3ZvCi-Mcqlo

Chapter 11: Configuring the Enterprise Application Definition

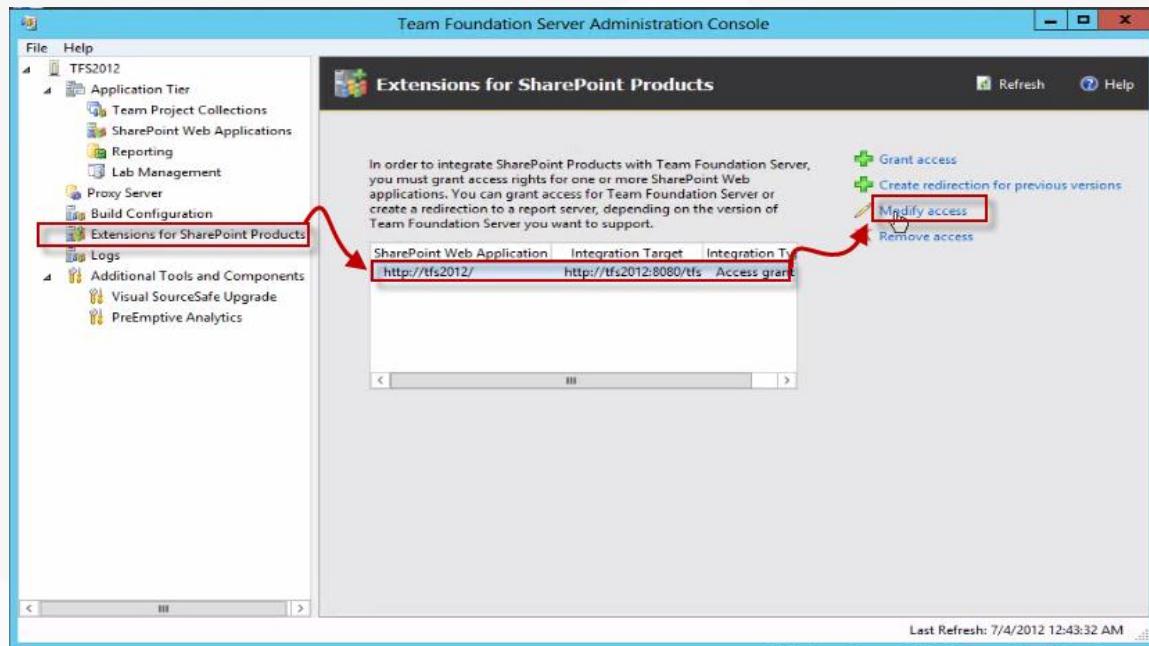
In this chapter you will configure the Enterprise Application Definition so that the reports and dashboards in Team Foundation Server Team Project portals function correctly with all the available functionalities and to the permitted users.

Launch “**Team Foundation Server Administration Console**” from Windows Server 2012 desktop.

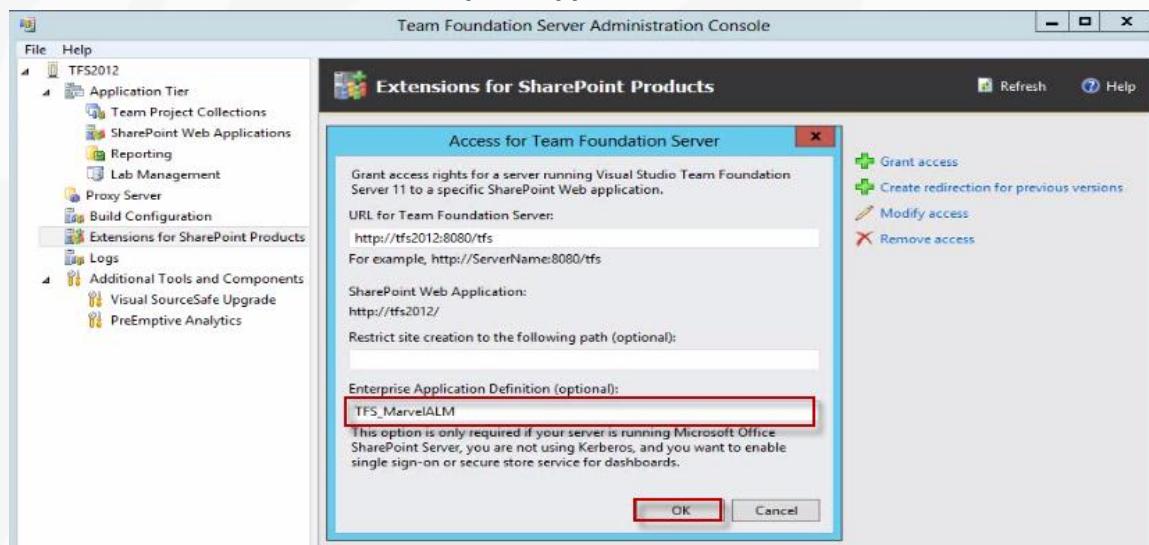


Chapter 11: Configuring the Enterprise Application Definition

From the left pane of “**Team Foundation Server Administration Console**”, click “**Extensions for SharePoint Products**” then click select “<http://tfs2012>” and then click “**Modify Access**” from the right pane.



Enter “**TFS_MarvelALM**” for the “**Enterprise Application Definition**” field then click “**OK**”.



NOTE: “TFS_MarvelALM” is the ID of the target application that you created in [Section 8.2](#).

Appendices

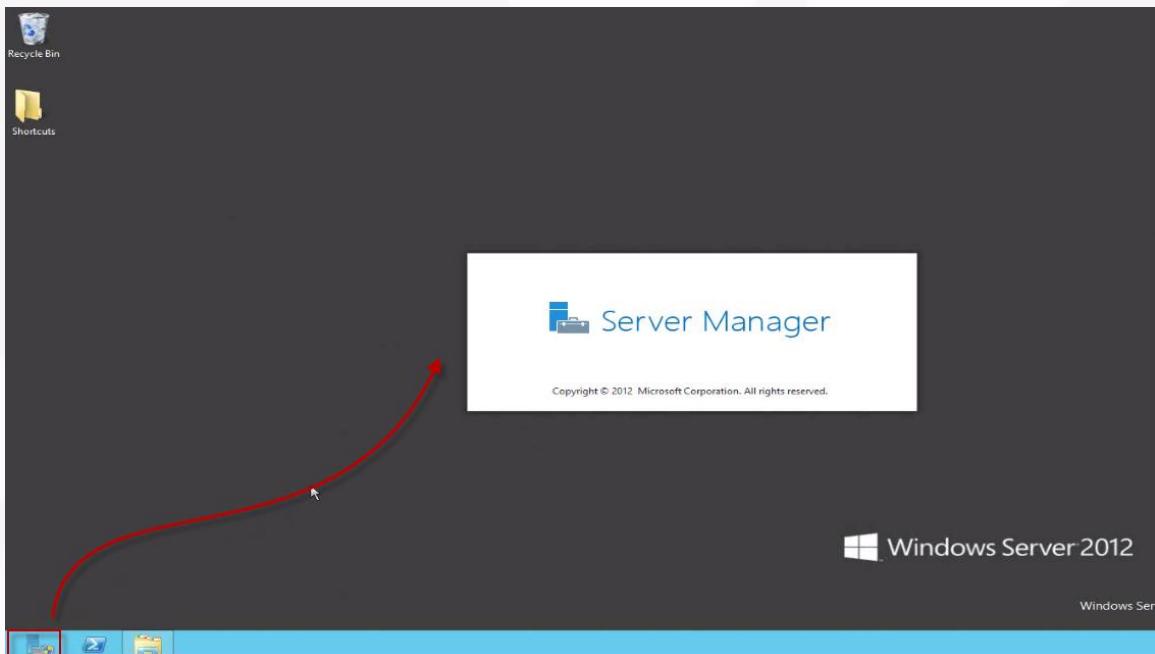


Watch the
Video

www.youtube.com/watch?v=cbIFxxZlEgg

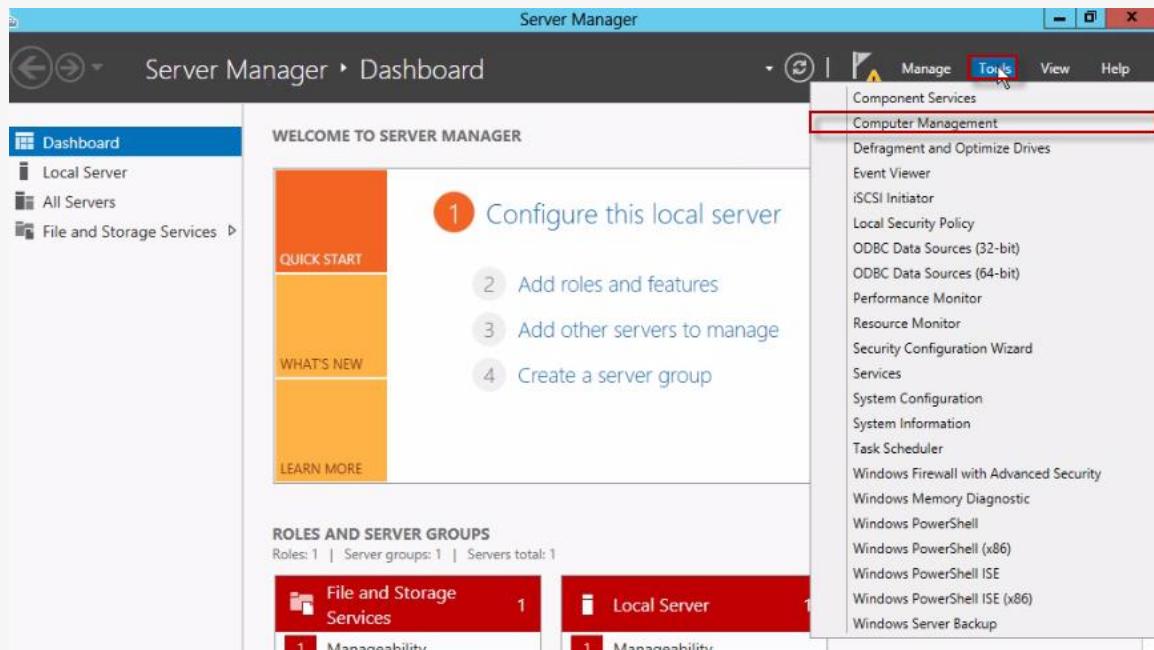
Appendix A: Creating Local Service Accounts and Groups for Windows Server 2012

Click the Server Manager Icon to launch the “**Server Manager**”.

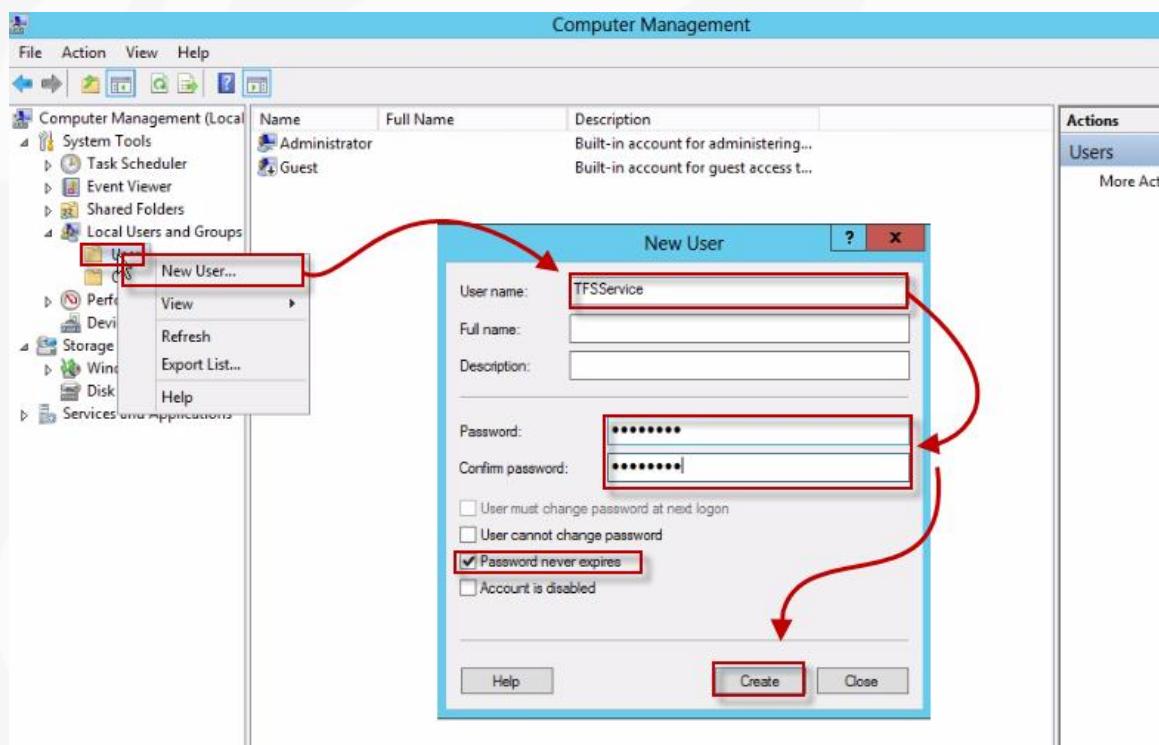


Appendix A: Creating Local Service Accounts and Groups for Windows Server 2012

Click “Tools” then click “Computer Management”.

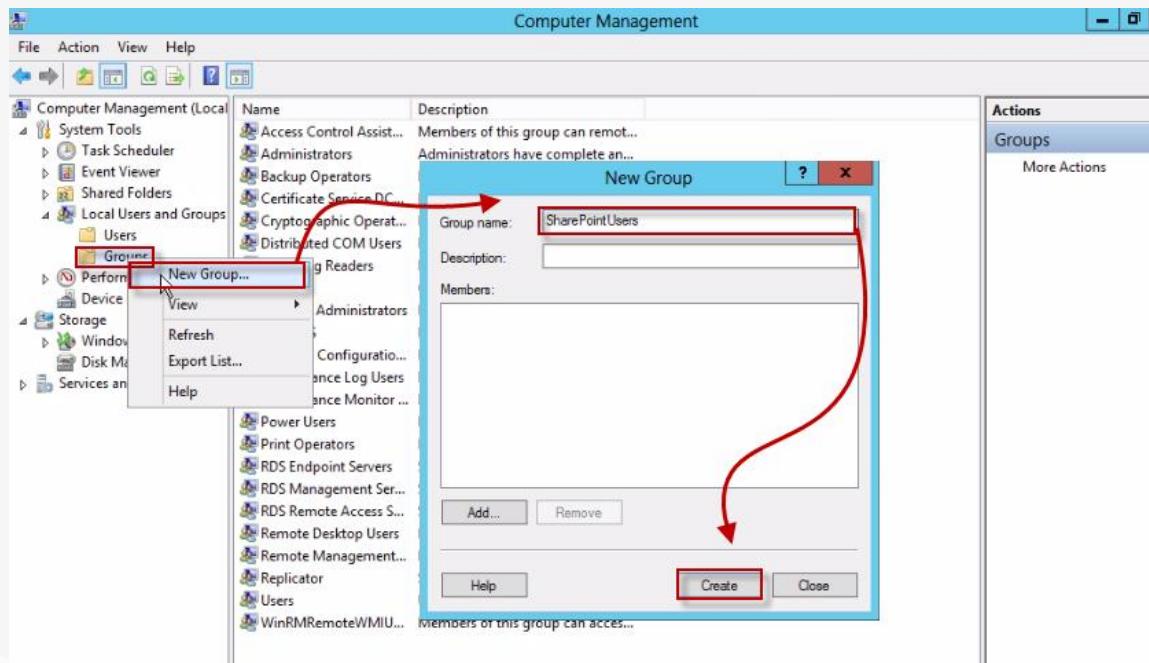


Right-click “Users”, click “New User”, enter “*TFSService*” then deselect the “User must change password at next login” option and select the “Password never expires” option and then click “Create”.

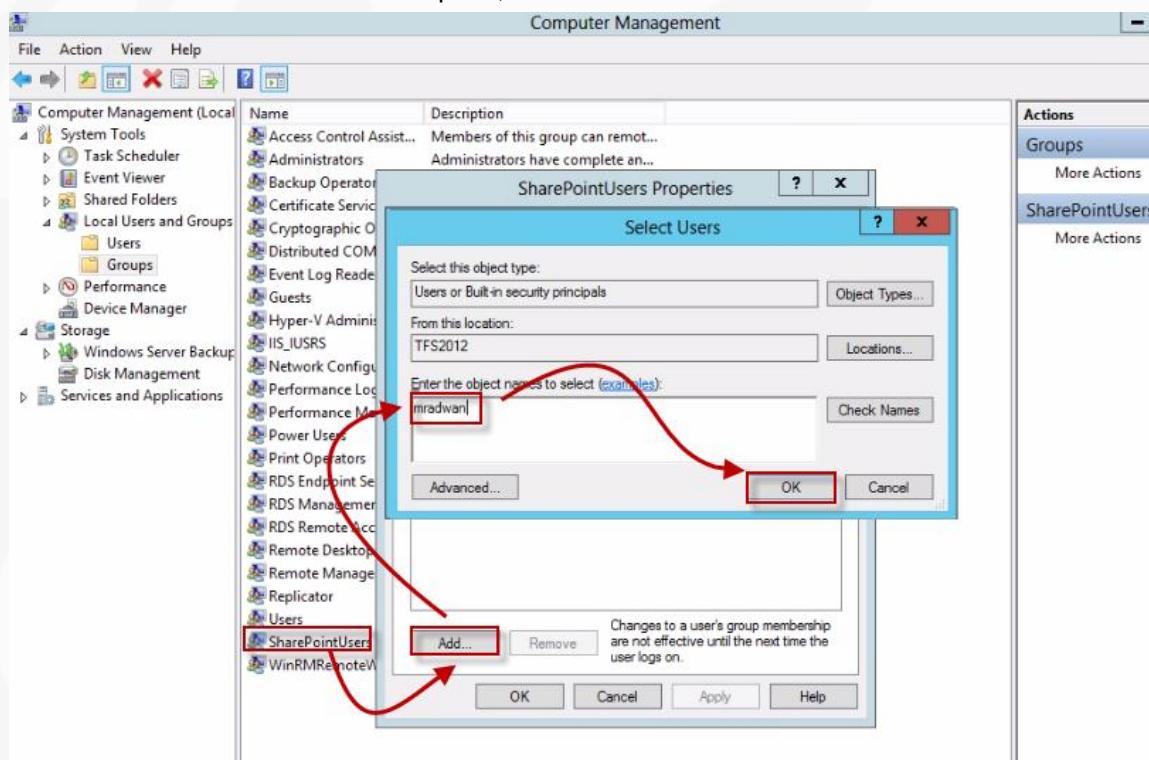


Appendix A: Creating Local Service Accounts and Groups for Windows Server 2012

Right-click “Groups”, click “New Group”, enter “SharePointUsers” and then click “Create”.



Double-click “SharePointUsers”, click “Add”, then add the user accounts that should have access to the SharePoint Excel Services Reports, and then click “OK”.





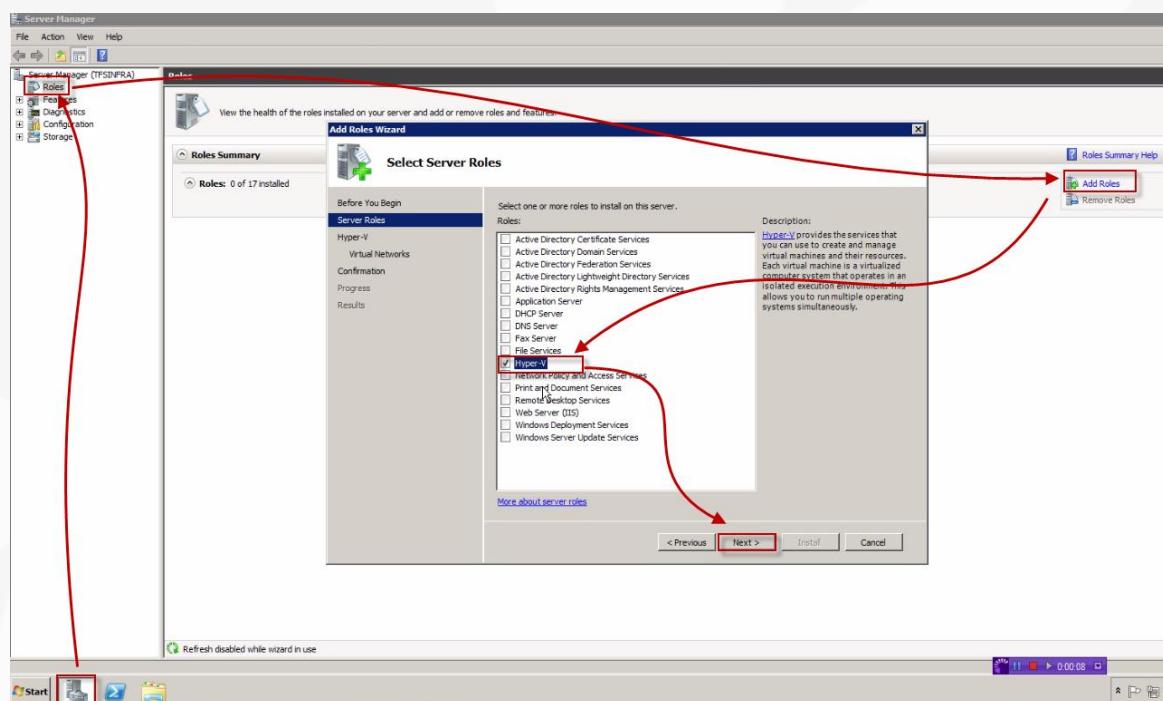
Watch the

Video

www.youtube.com/cwpA05Got1A

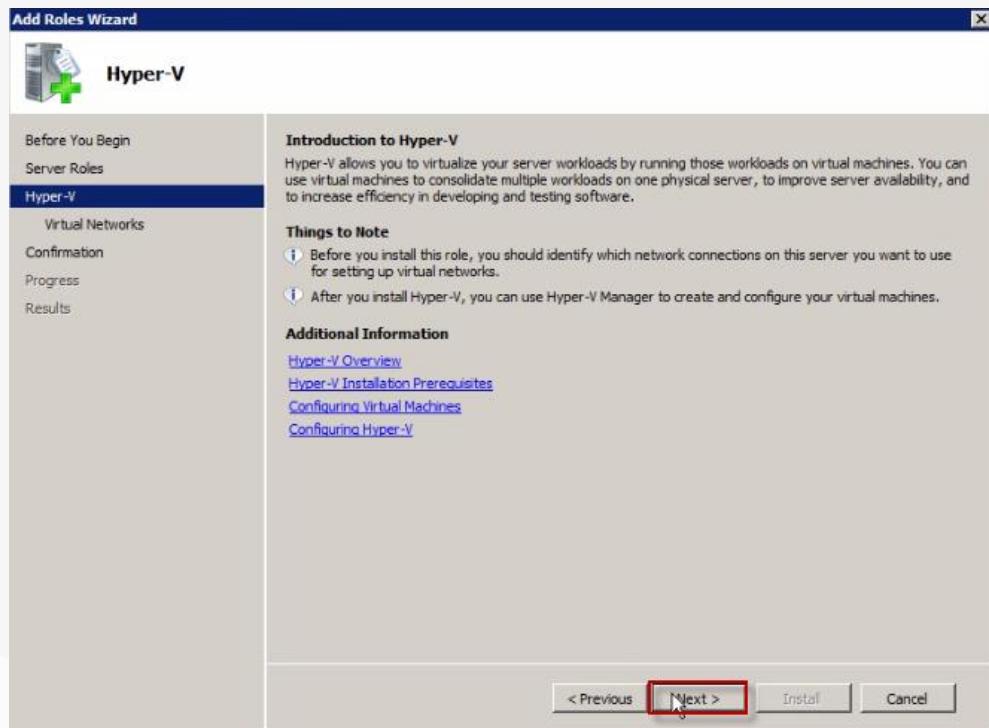
Appendix B: Adding the Hyper-V Role to Windows Server 2008 R2

From Windows Server quick launch bar, click “**Server Manager**”, then click “**Roles**” from the left pane. From the “**Add Roles Wizard**”, click “**Add Roles**”, then select “**Hyper-V**” and then click “**Next**”.

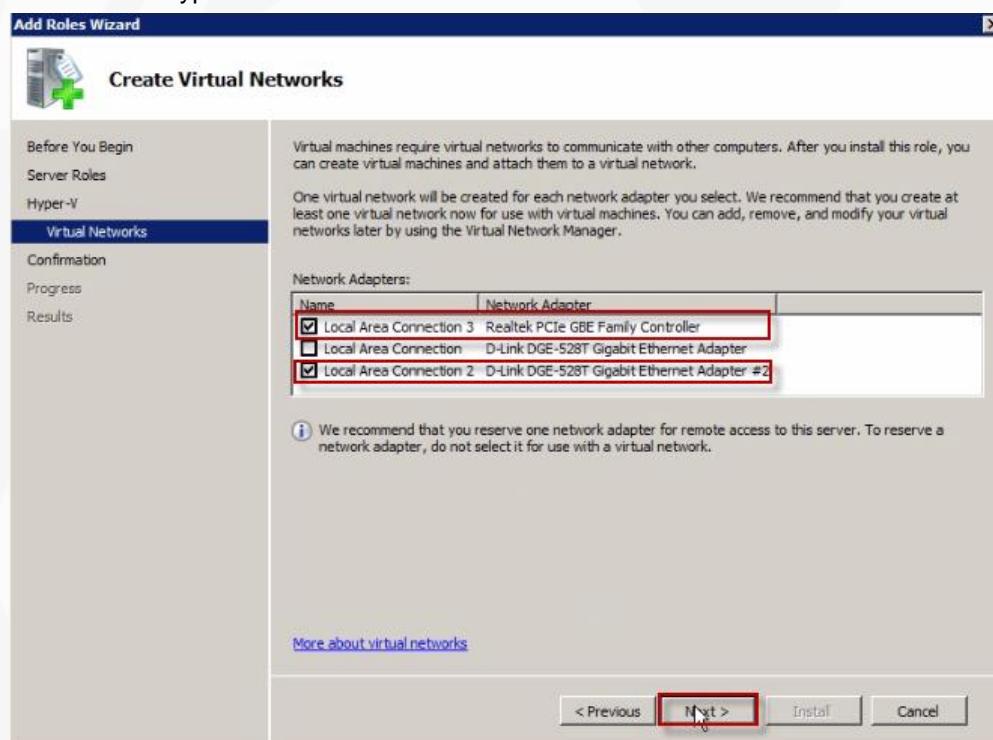


Appendix B: Adding the Hyper-V Role to Windows Server 2008 R2

From the “Hyper-V” page, click “Next”.

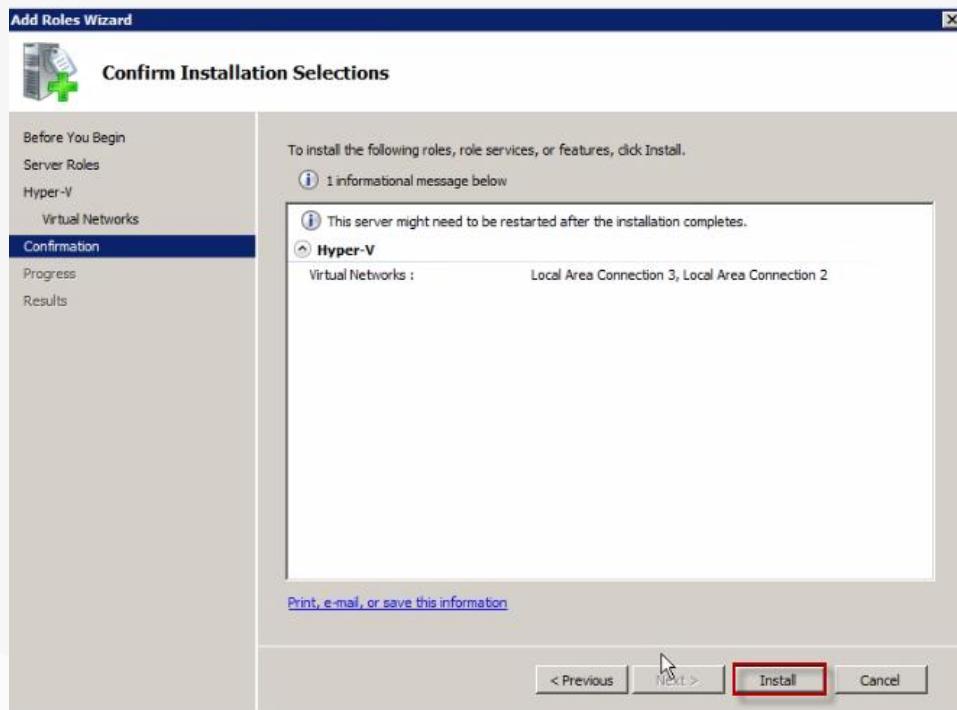


From the “Create Virtual Networks” page, select all the network adapters that you want to make available for Hyper-V and then click “Next”

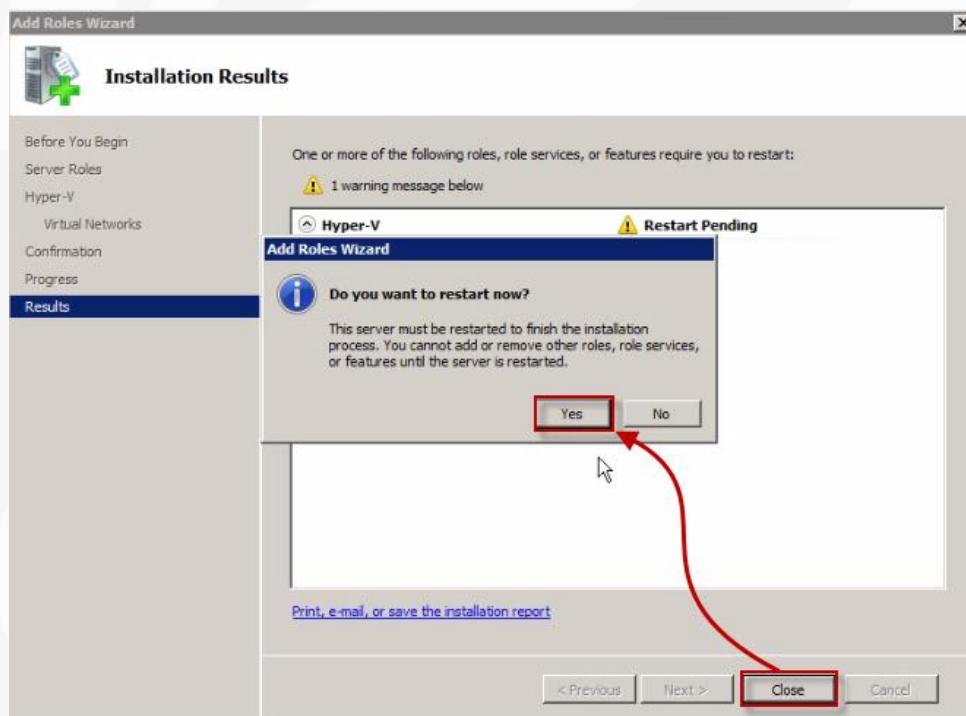


Appendix B: Adding the Hyper-V Role to Windows Server 2008 R2

Confirm your installation selections from the “**Confirmation**” page then click “**Install**”.



When installation completes, click “**Close**” and then click “**Yes**” when prompted to restart your machine.





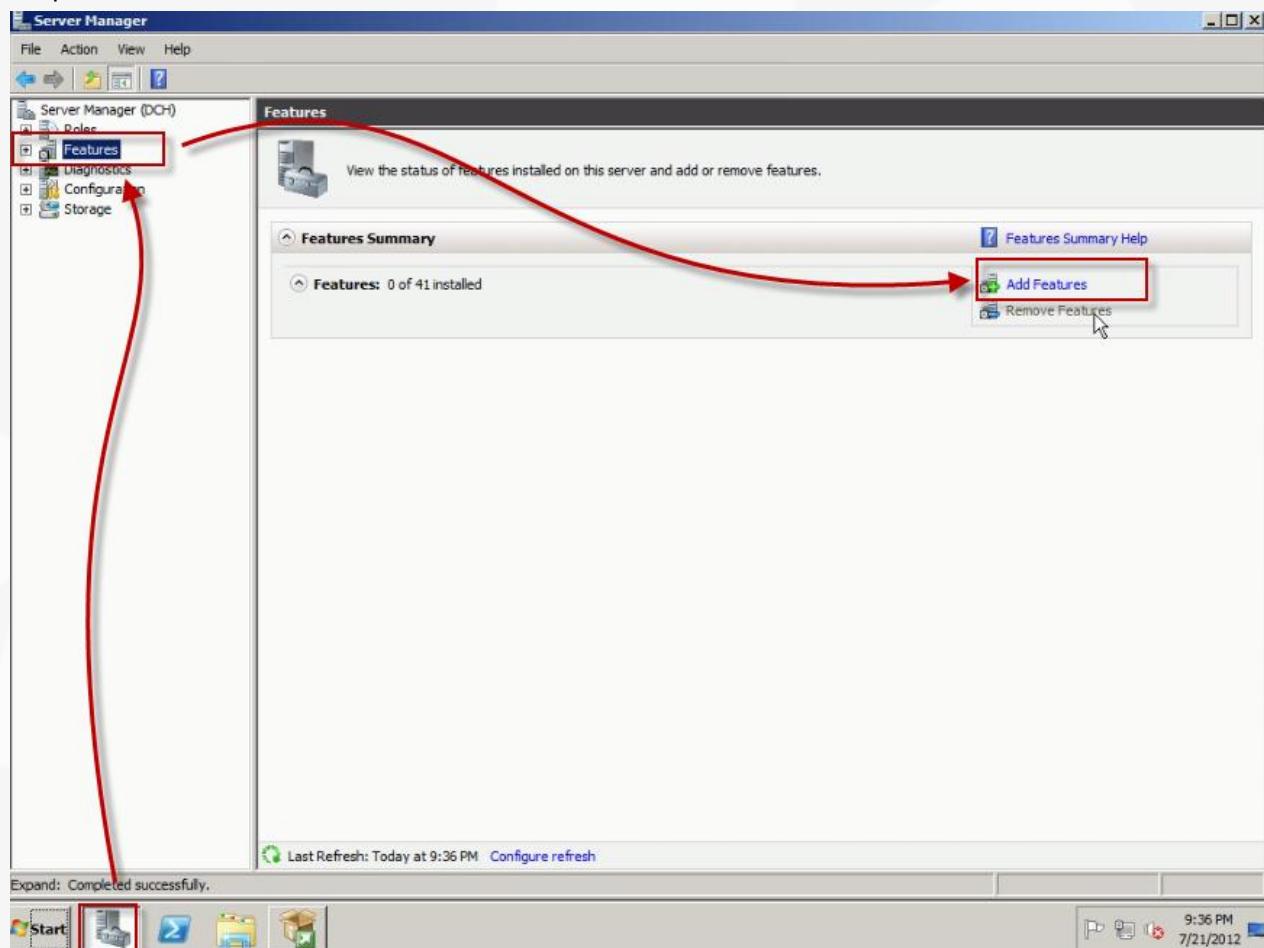
Watch the

Video

www.youtube.com/watch?v=NHgXJlkx-mo

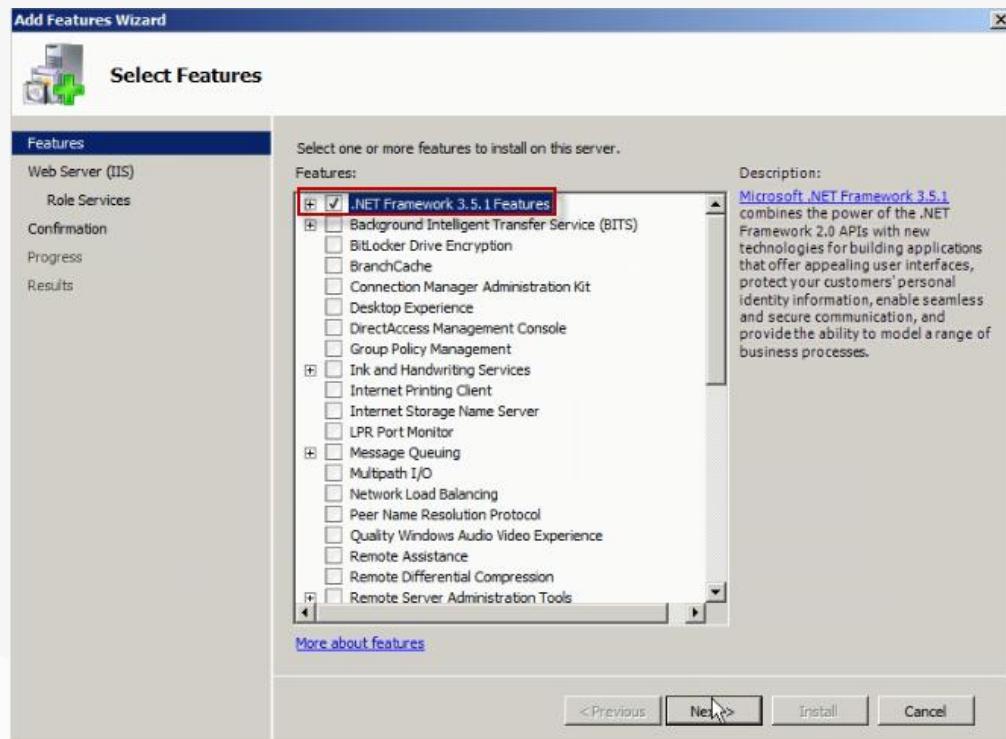
Appendix C: Adding the .NET 3.5 Framework feature to Windows Server 2008 R2

From Windows Server quick launch bar, click “**Server Manager**”, then click “**Features**” from the left pane and then click “**Add Features**”.

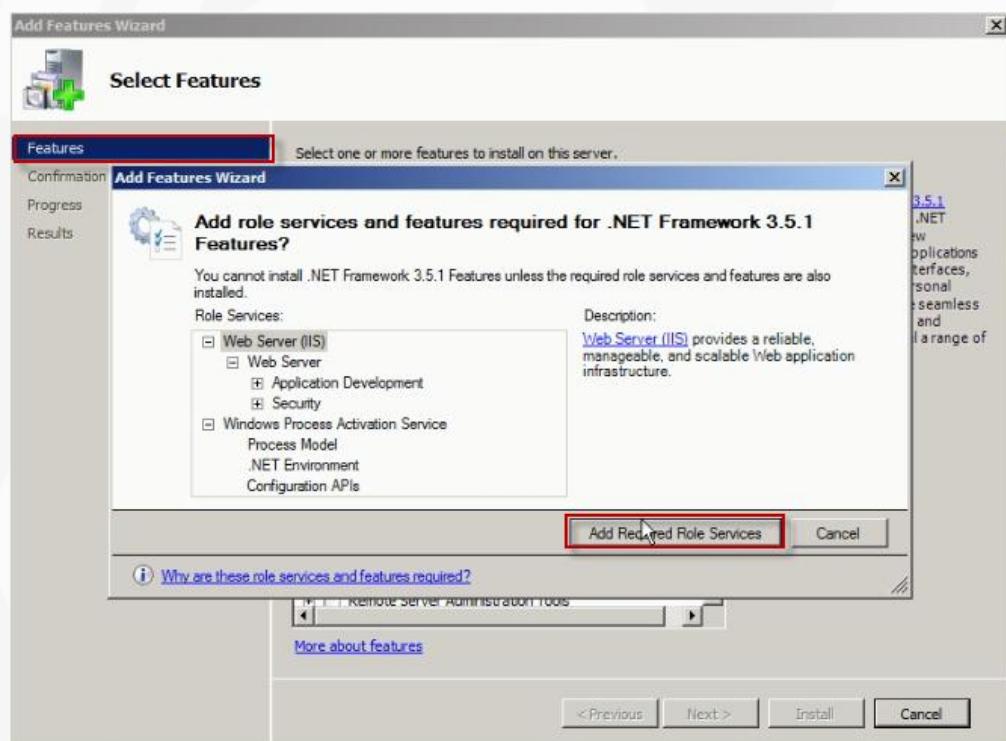


Appendix C: Adding the .NET Framework feature to Windows Server 2008 R2

Select “.NET Framework 3.5.1 Features”.

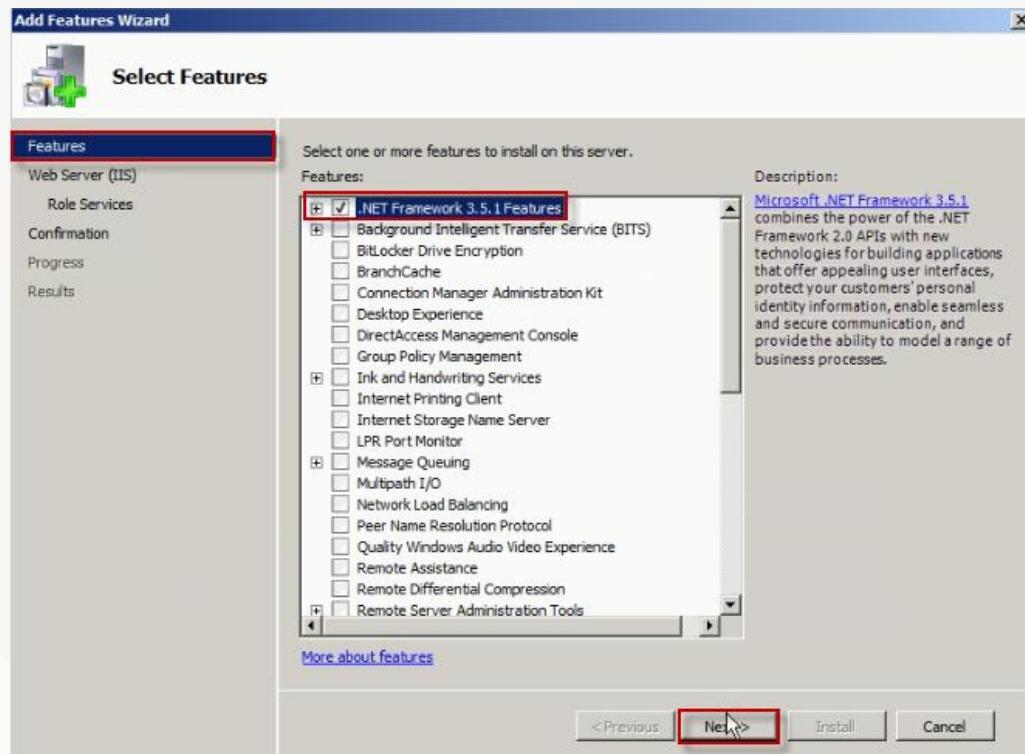


The “Add Features Wizard” window pops up, click “**Add Required Role Services**” and then click “**Next**”.

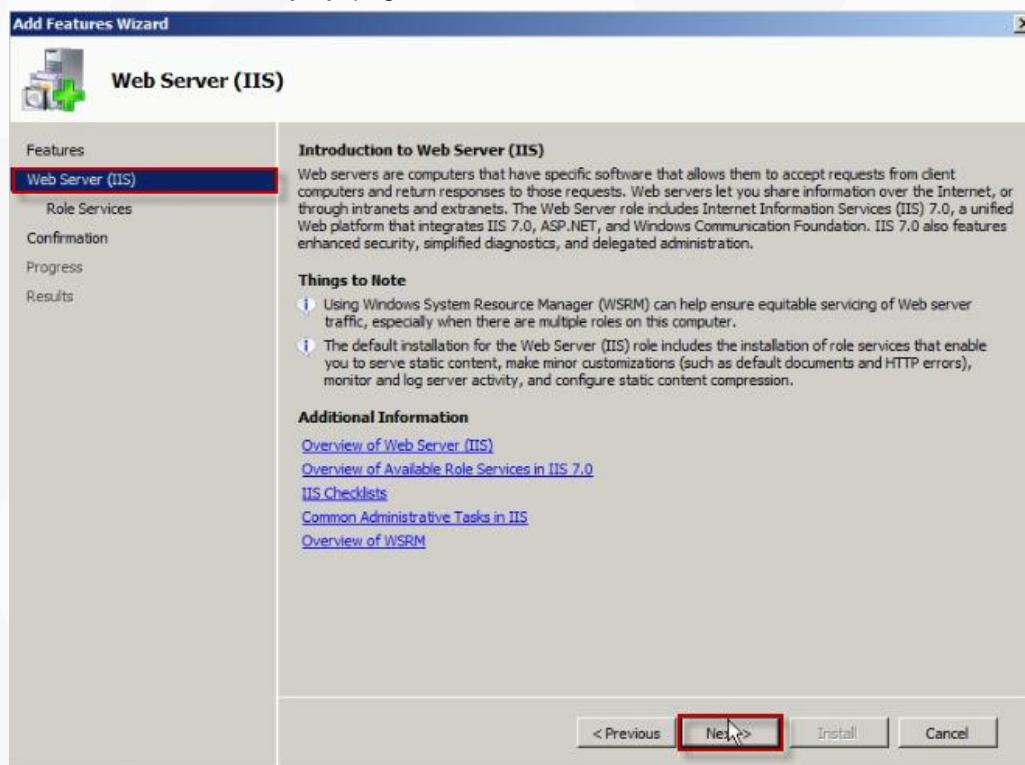


Appendix C: Adding the .NET 3.5 Framework feature to Windows Server 2008 R2

Click “Next”.

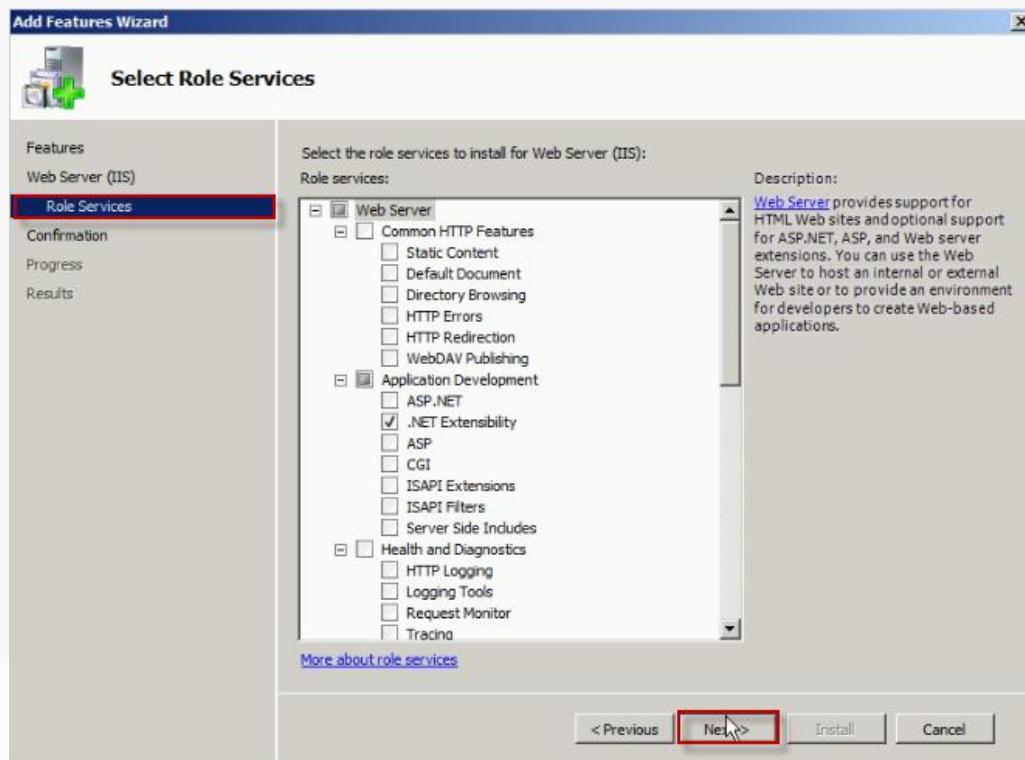


From the “Web Server (IIS)” page, click “Next”.

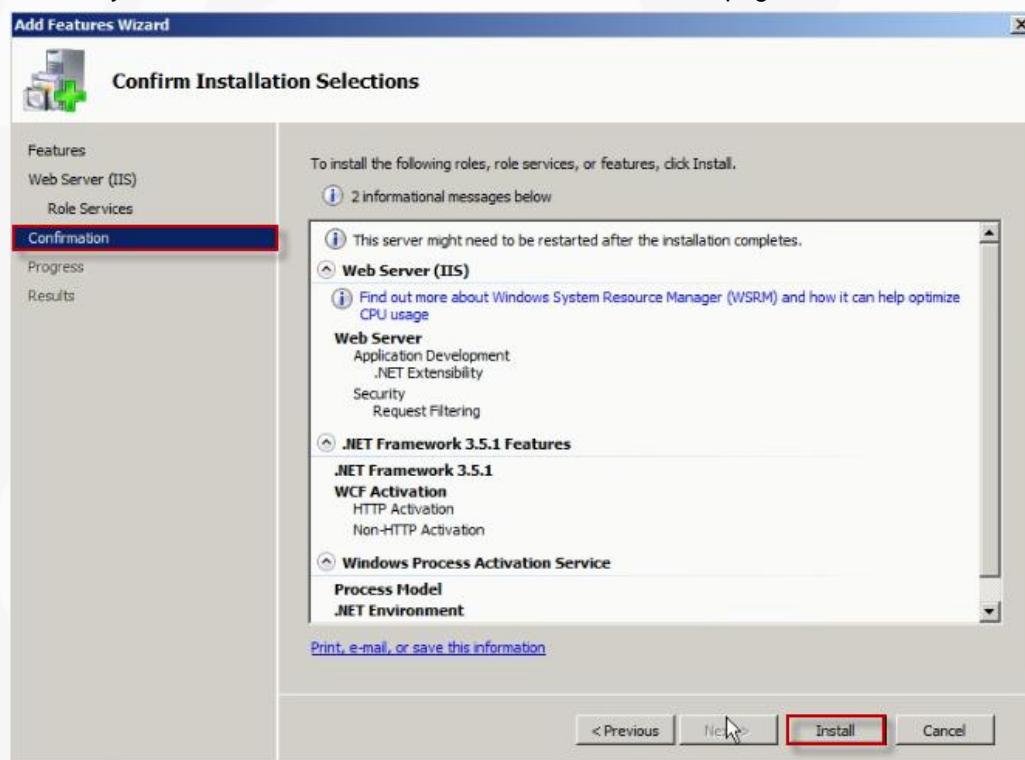


Appendix C: Adding the .NET 3.5 Framework feature to Windows Server 2008 R2

Accept the defaults then click “**Next**”.

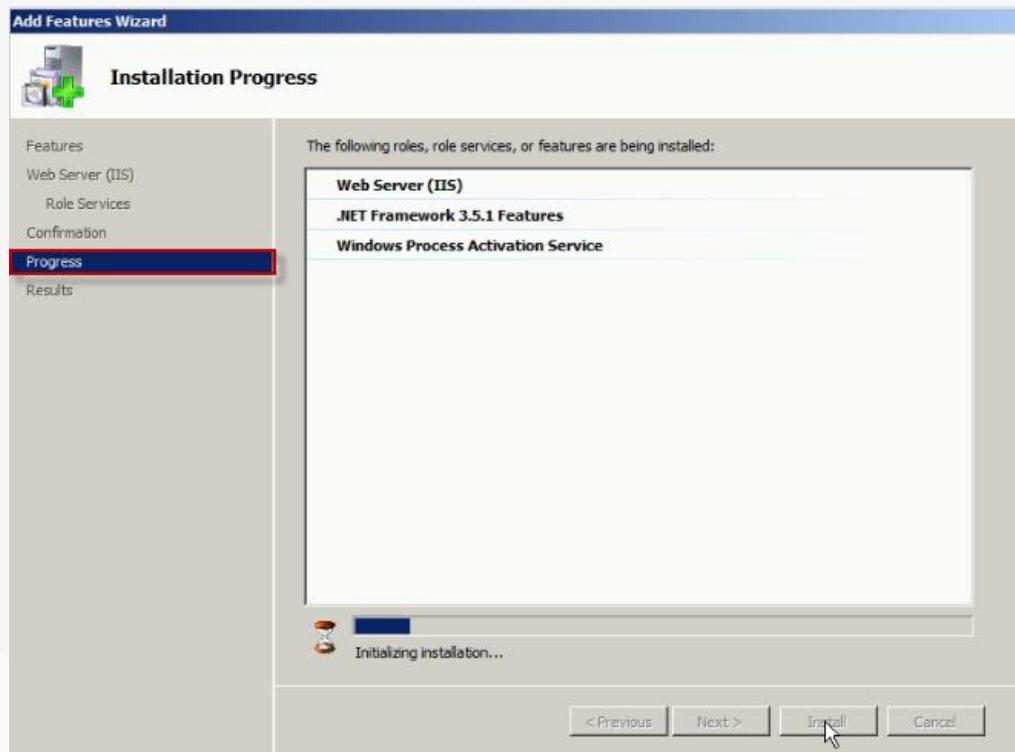


Confirm your installation selections from the “**Confirmation**” page then click “**Install**”.

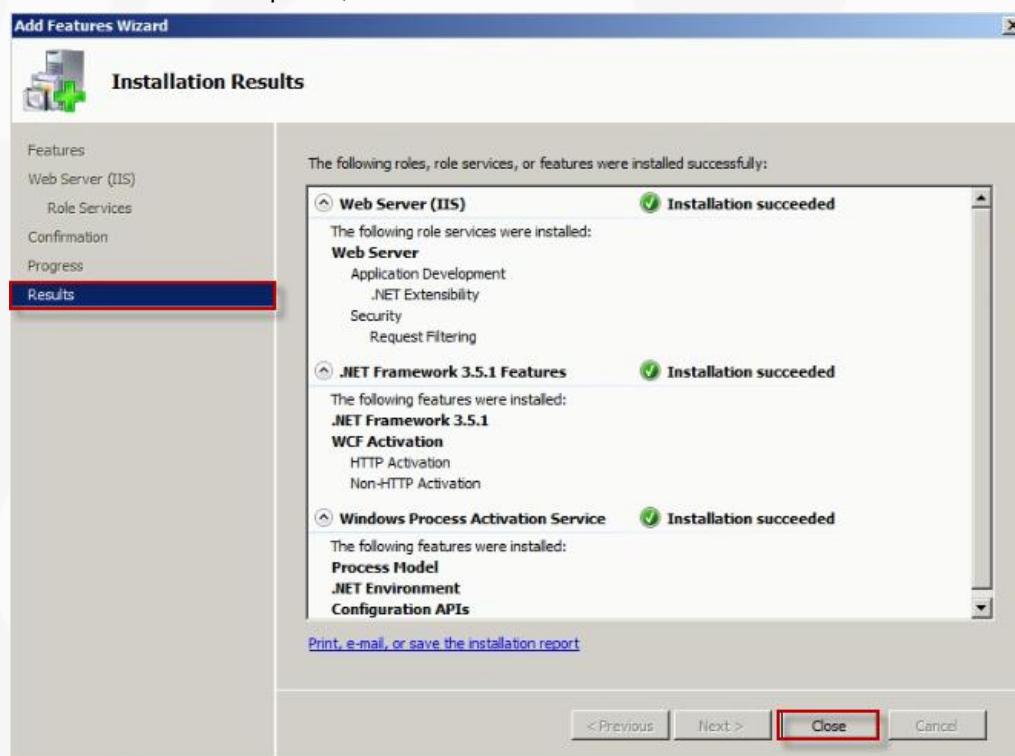


Appendix C: Adding the .NET 3.5 Framework feature to Windows Server 2008 R2

The wizard starts the installation process.



When installation completes, click “Close”.





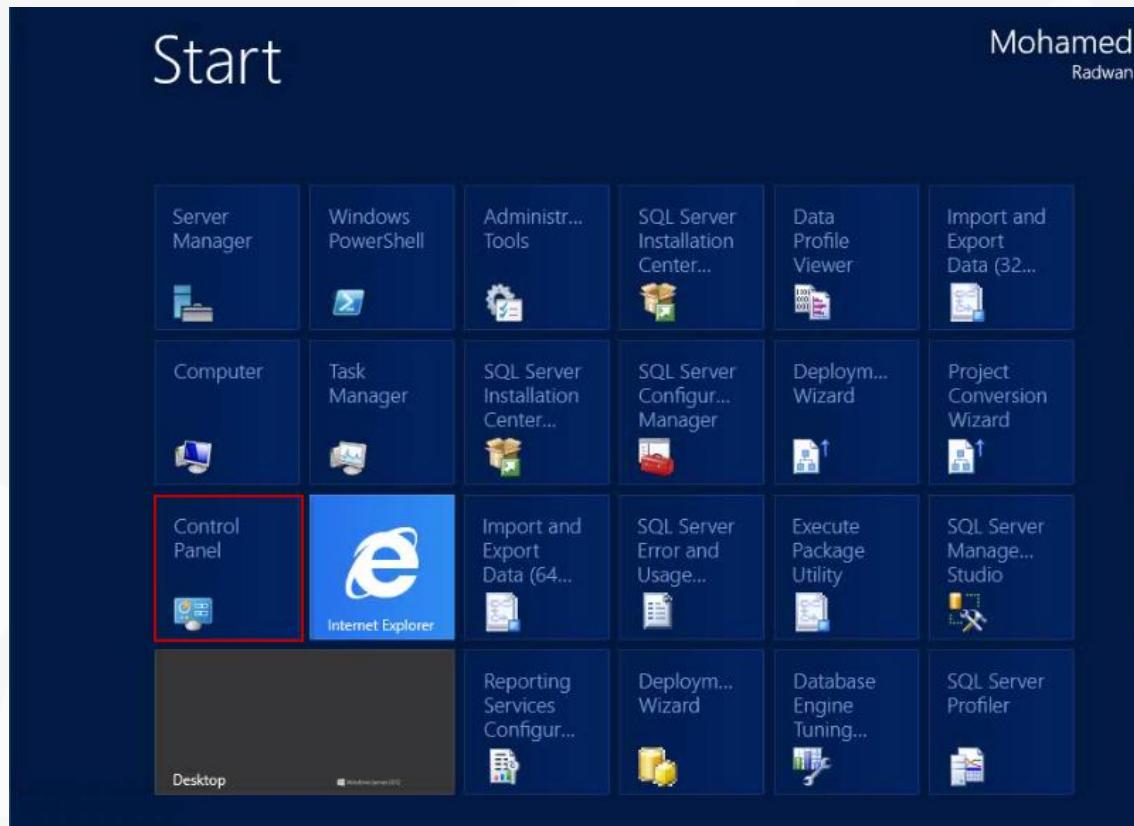
Watch the

Video

www.youtube.com/AxQO-UTicac

Appendix D: Configuring SQL Server 2012 Analysis Services Port

Launch the “Control Panel” from Windows Server 2012 desktop.

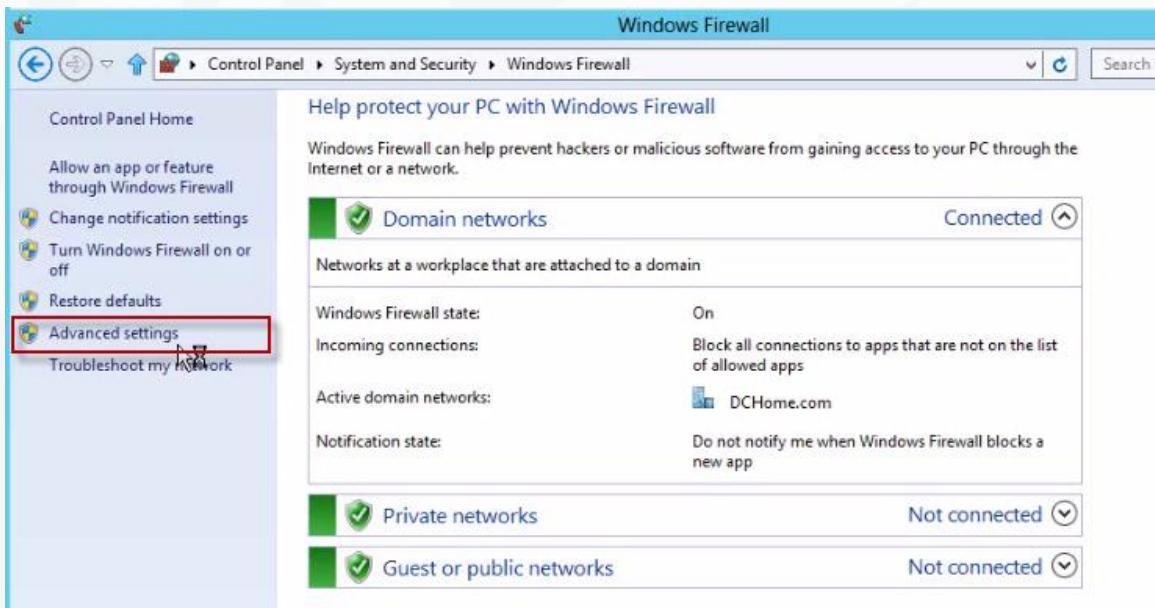


Appendix D: Configuring SQL Server 2012 Analysis Services Port

Click “Check Firewall Status”.

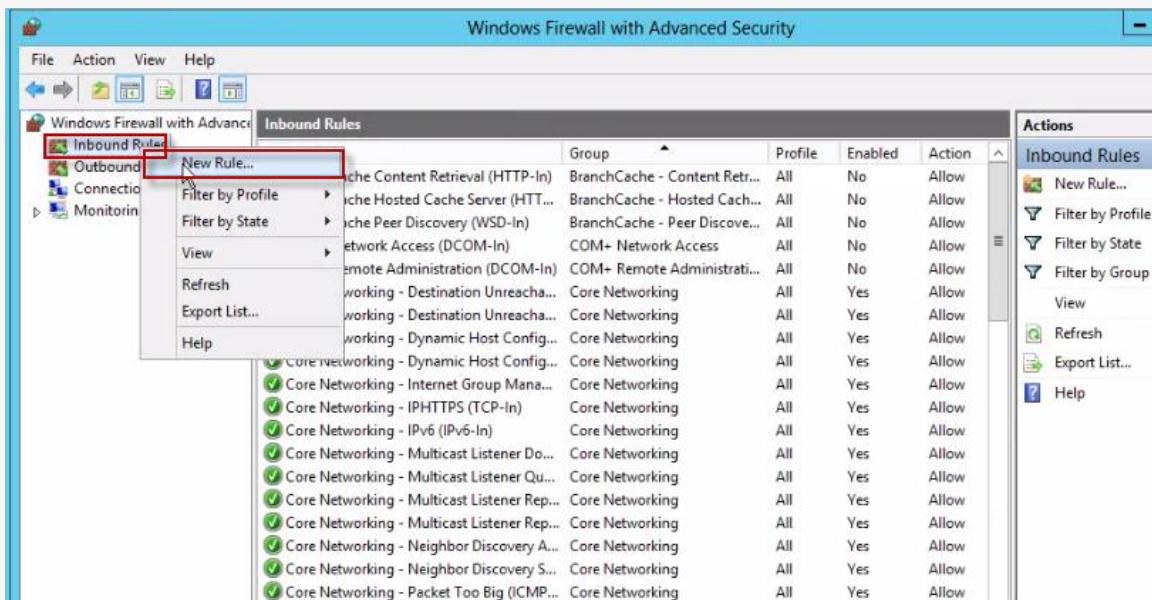


Click “Advanced settings”.

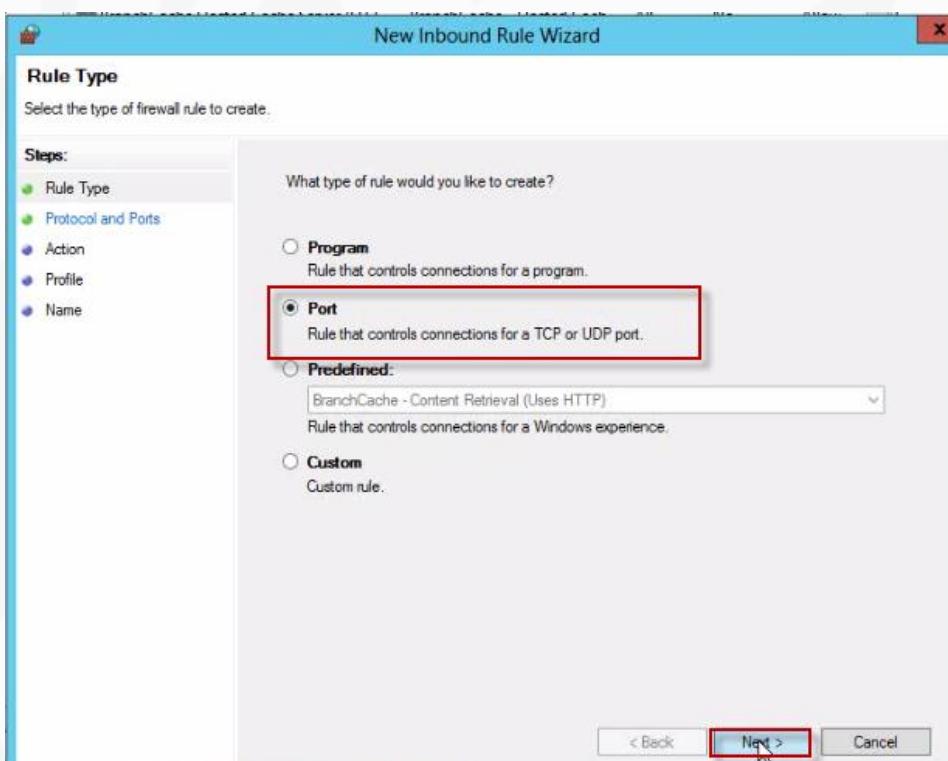


Appendix D: Configuring SQL Server 2012 Analysis Services Port

Right-click “Inbound Rules” then click “New Rule”.

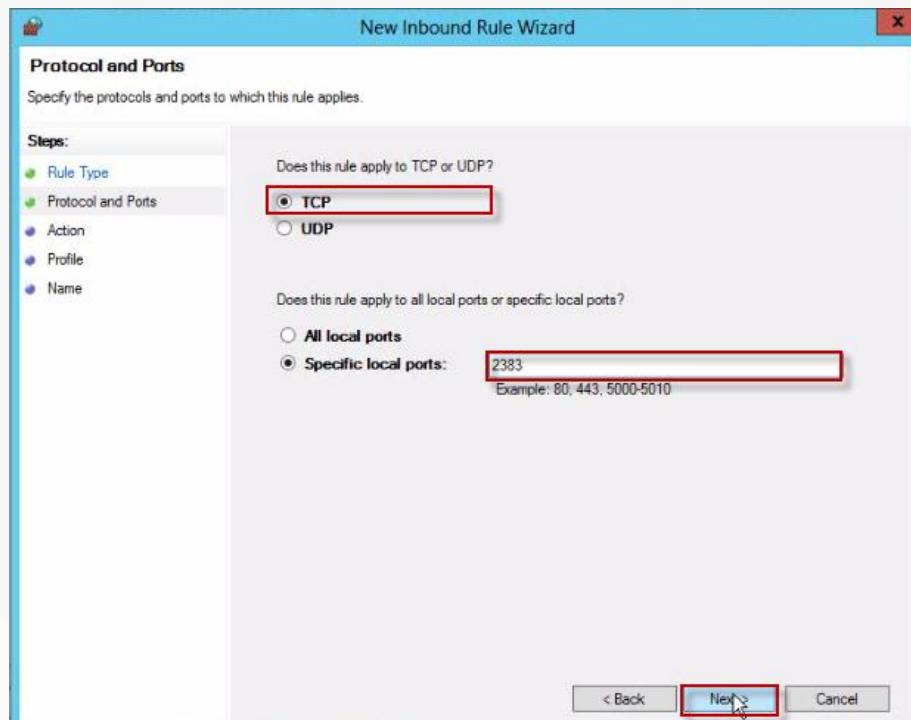


The “New Inbound Rule Wizard” launches. From the “Rule Type” page, select “Port” then click “Next”.

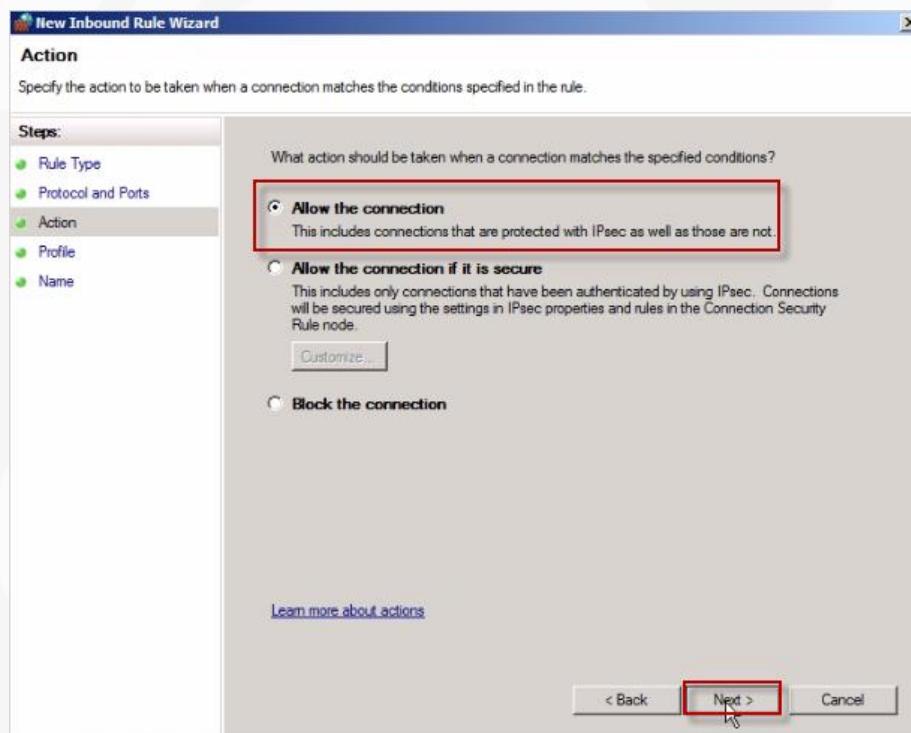


Appendix D: Configuring SQL Server 2012 Analysis Services Port

From the “Protocol and Ports” page, select “TCP” and enter “2382” for the local port then click “Next”.

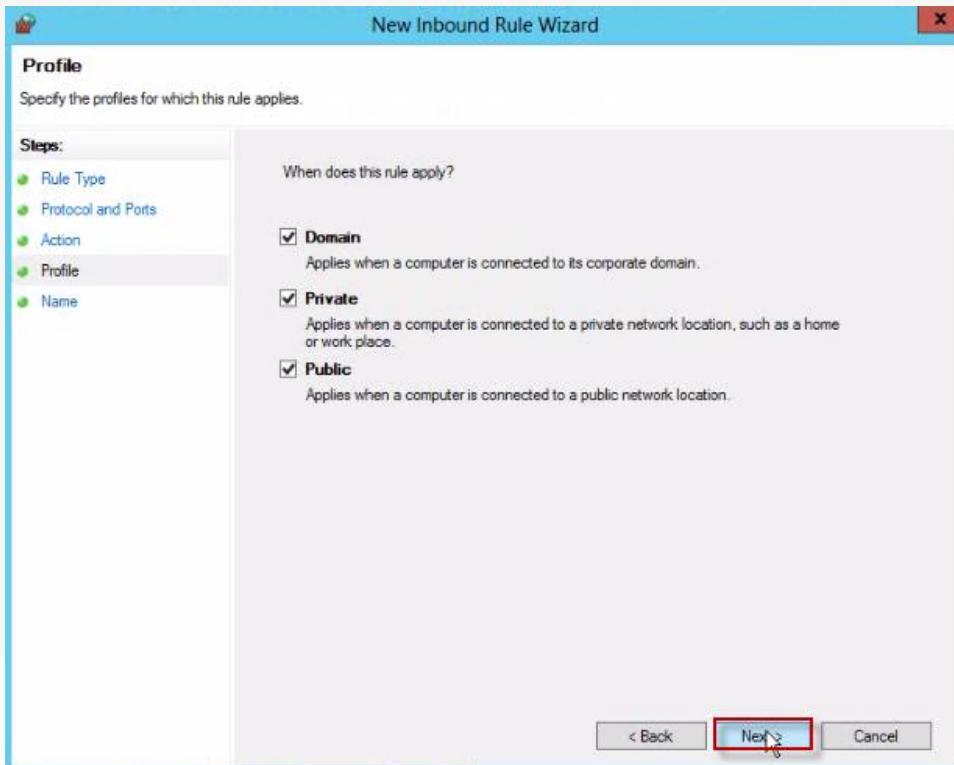


From the “Action” page, ensure that the “Allow the connection” option is selected then click “Next”.

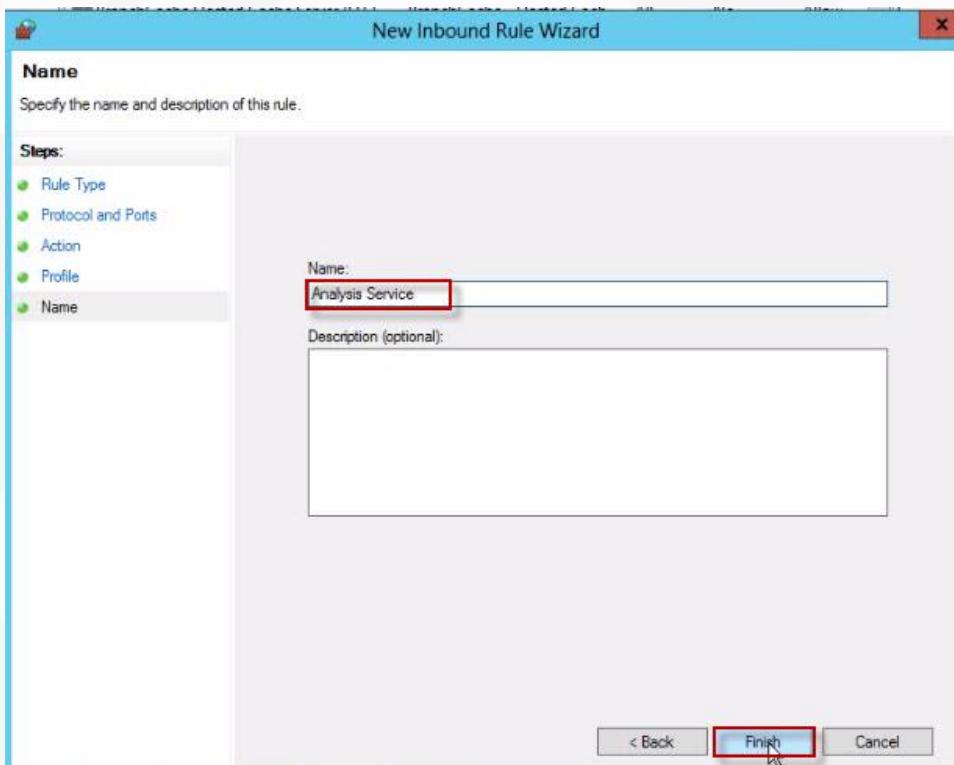


Appendix D: Configuring SQL Server 2012 Analysis Services Port

From the “Profile” page, accept the defaults then click “Next”.



From the “Name” page, give the rule the “Analysis Service” name then click “Finish”.



Appendix D: Configuring SQL Server 2012 Analysis Services Port

Ensure that the “Analysis Service” rule is listed in the Inbound Rules and that “Profile” is set to “All”, “Enabled” is set to “Yes” and that “Action” is set to “Allow”.

The screenshot shows the Windows Firewall with Advanced Security window. The left navigation pane has 'Inbound Rules' selected. The main area displays a table of rules:

Name	Group	Profile	Enabled	Action
Analysis Service		All	Yes	Allow
BranchCache Content Retrieval (HTTP-In)	BranchCache - Content Retr...	All	No	Allow
BranchCache Hosted Cache Server (HTTP-In)	BranchCache - Hosted Cach...	All	No	Allow
BranchCache Peer Discovery (WSD-In)	BranchCache - Peer Discove...	All	No	Allow
COM+ Network Access (DCOM-In)	COM+ Network Access	All	No	Allow
COM+ Remote Administration (DCOM-In)	COM+ Remote Administrati...	All	No	Allow
Core Networking - Destination Unreacha...	Core Networking	All	Yes	Allow
Core Networking - Destination Unreacha...	Core Networking	All	Yes	Allow
Core Networking - Dynamic Host Config...	Core Networking	All	Yes	Allow
Core Networking - Dynamic Host Config...	Core Networking	All	Yes	Allow
Core Networking - Internet Group Mana...	Core Networking	All	Yes	Allow
Core Networking - IPHTTPS (TCP-In)	Core Networking	All	Yes	Allow
Core Networking - IPv6 (IPv6-In)	Core Networking	All	Yes	Allow
Core Networking - Multicast Listener Do...	Core Networking	All	Yes	Allow
Core Networking - Multicast Listener Qu...	Core Networking	All	Yes	Allow
Core Networking - Multicast Listener Rep...	Core Networking	All	Yes	Allow
Core Networking - Multicast Listener Rep...	Core Networking	All	Yes	Allow
Core Networking - Neighbor Discovery A...	Core Networking	All	Yes	Allow
Core Networking - Neighbor Discovery S...	Core Networking	All	Yes	Allow
Core Networking - Packet Too Big (ICMP...	Core Networking	All	Yes	Allow
Core Networking - Parameter Problem (I...	Core Networking	All	Yes	Allow
Core Networking - Router Advertisement...	Core Networking	All	Yes	Allow

The 'Analysis Service' rule is highlighted with a red box. The right side of the window shows a toolbar with various icons for managing rules.

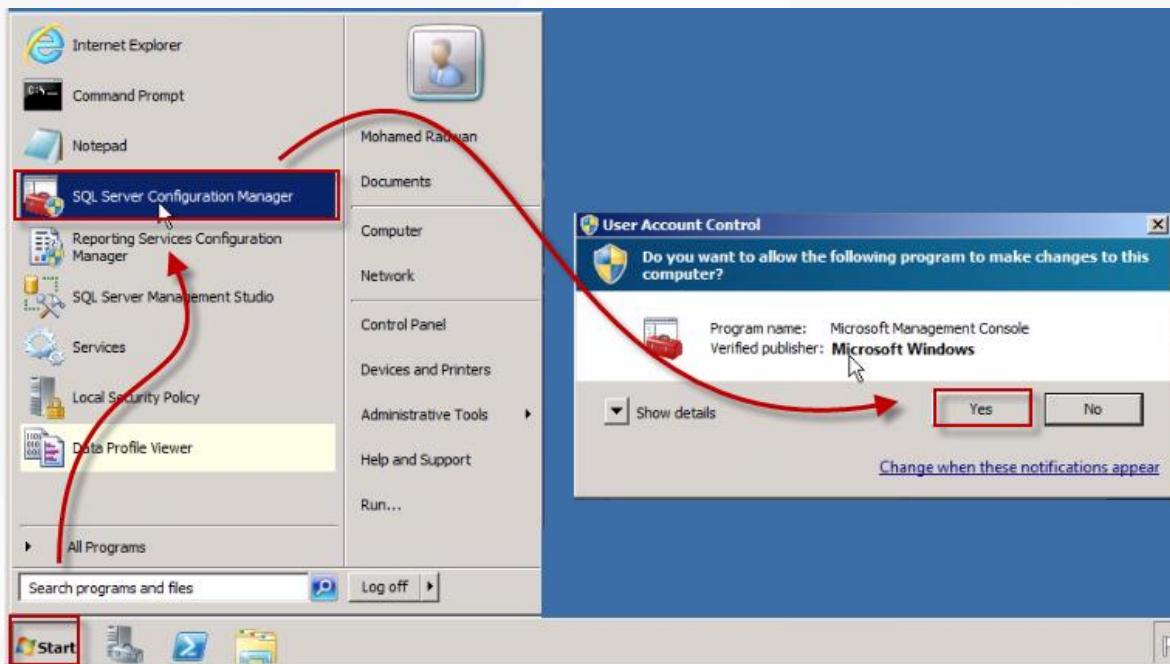


Watch the
Video

www.youtube.com/watch?v=hqaWGFLDXs

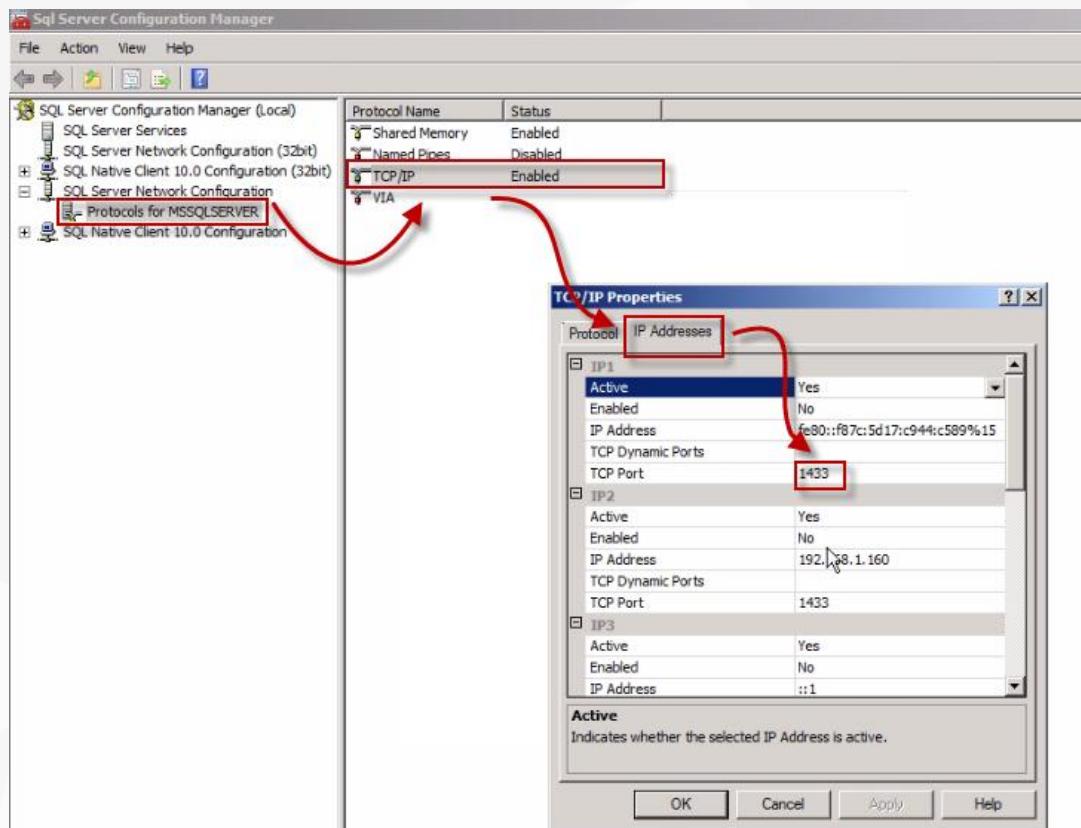
Appendix E: Configuring SQL Server 2012 Database Engine Port

Click Start → SQL Server Configuration Manager.

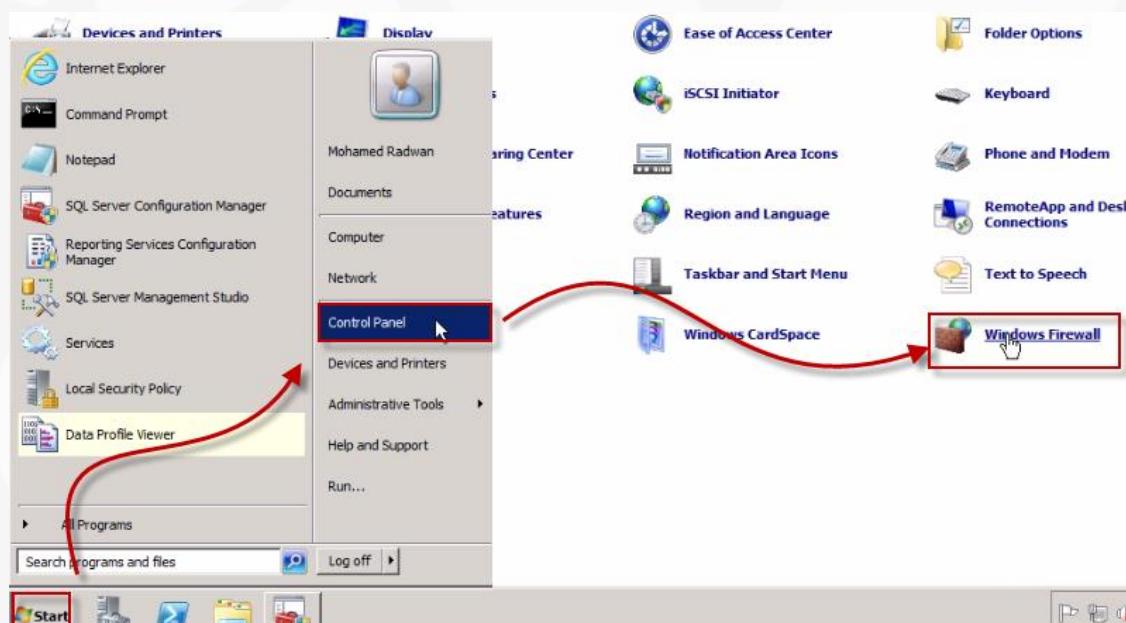


Appendix E: Configuring SQL Server 2012 Database Engine Port

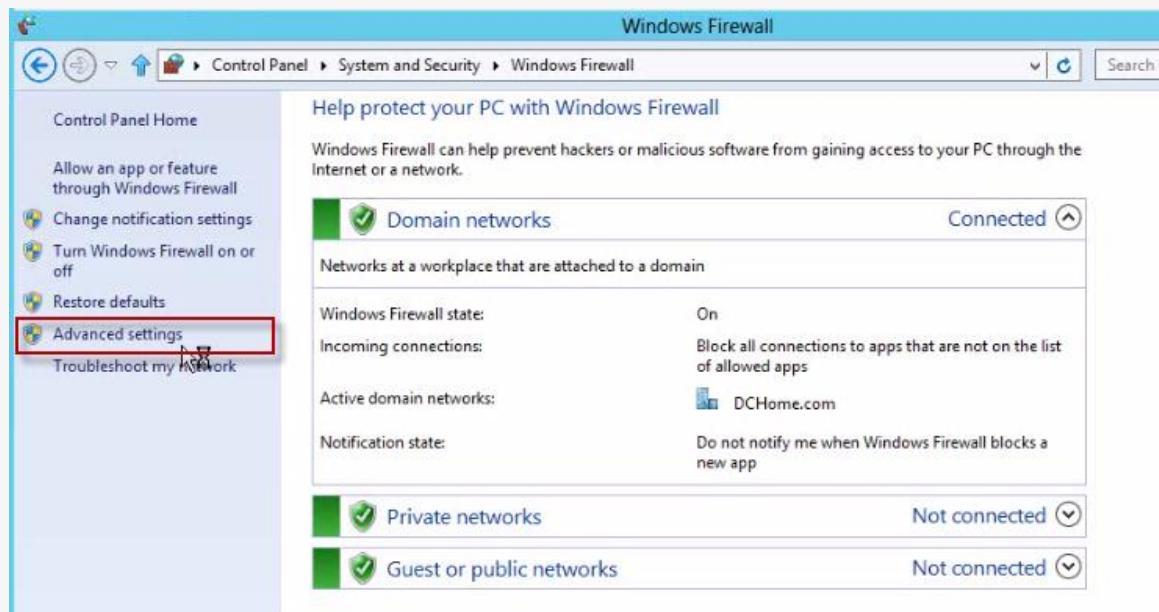
Expand “SQL Server Network Configuration”, click “Protocols for MSSQLSERVER” from the left pane, then double-click “TCP/IP” from the right pane, switch to the “IP Address” tab of the “TCP/IP Properties” window and then copy the port number.



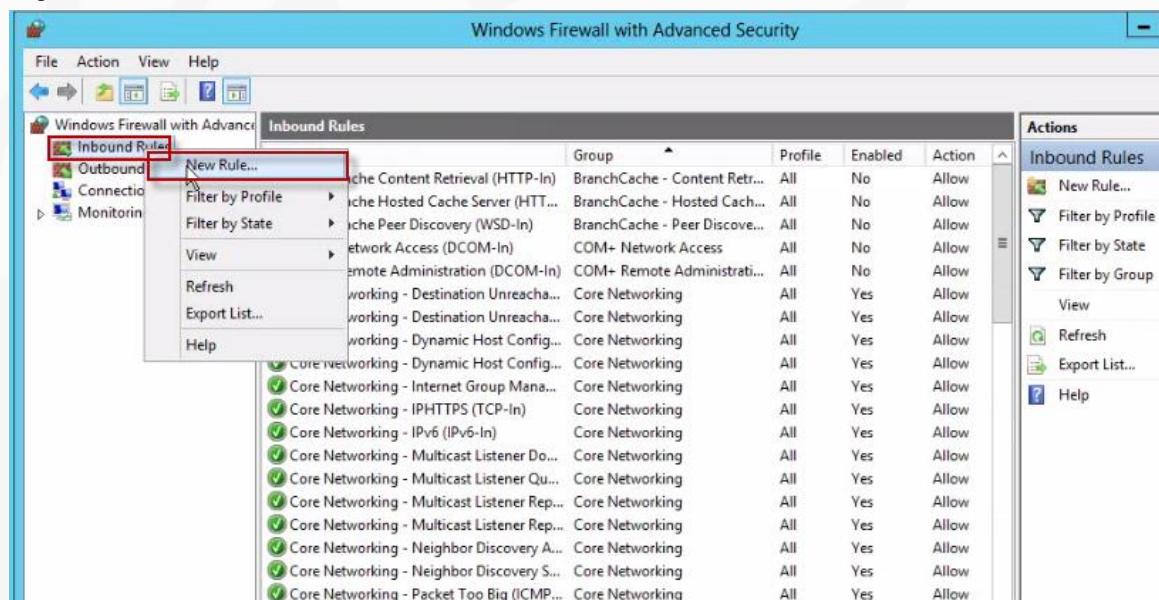
Click Start → Control Panel → Windows Firewall.



Click “Advanced settings”.

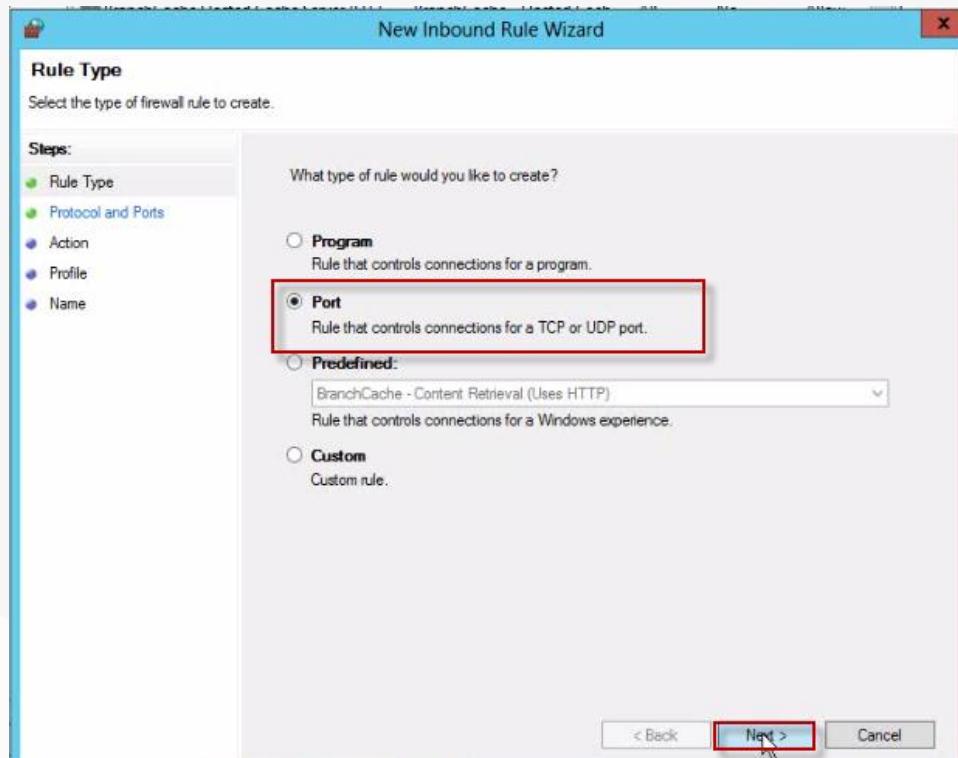


Right-click “Inbound Rules” then click “New Rule”.



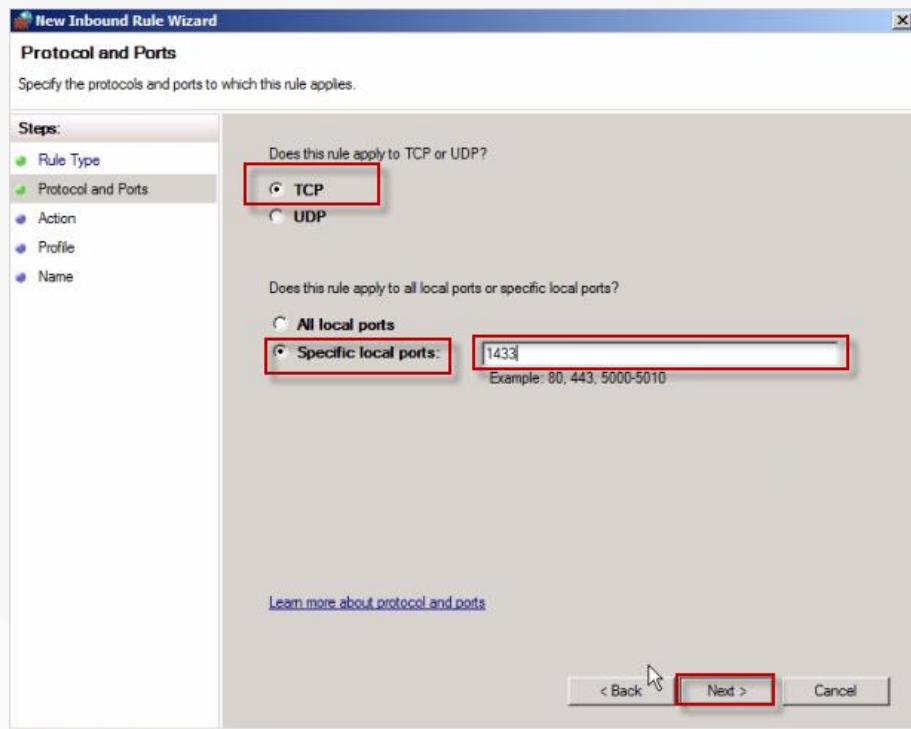
Appendix E: Configuring SQL Server 2012 Database Engine Port

The “New Inbound Rule Wizard” launches. From the “Rule Type” page, select “Port” then click “Next”.

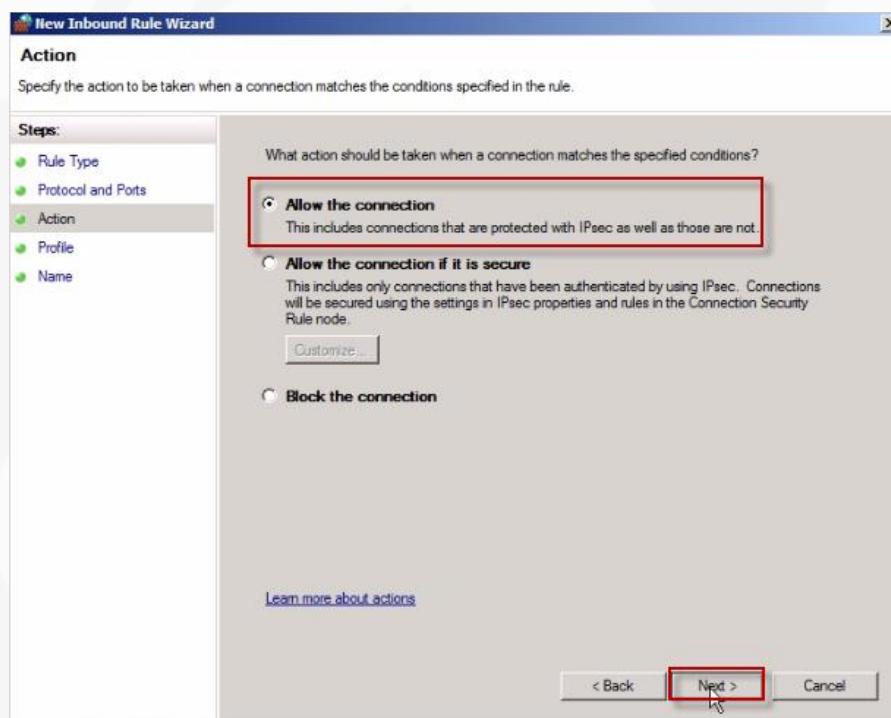


Appendix E: Configuring SQL Server 2012 Database Engine Port

From the “Protocol and Ports” page, select “TCP” and enter the port number “1433” you copied earlier from SQL Server Configuration Manager and then click “Next”.

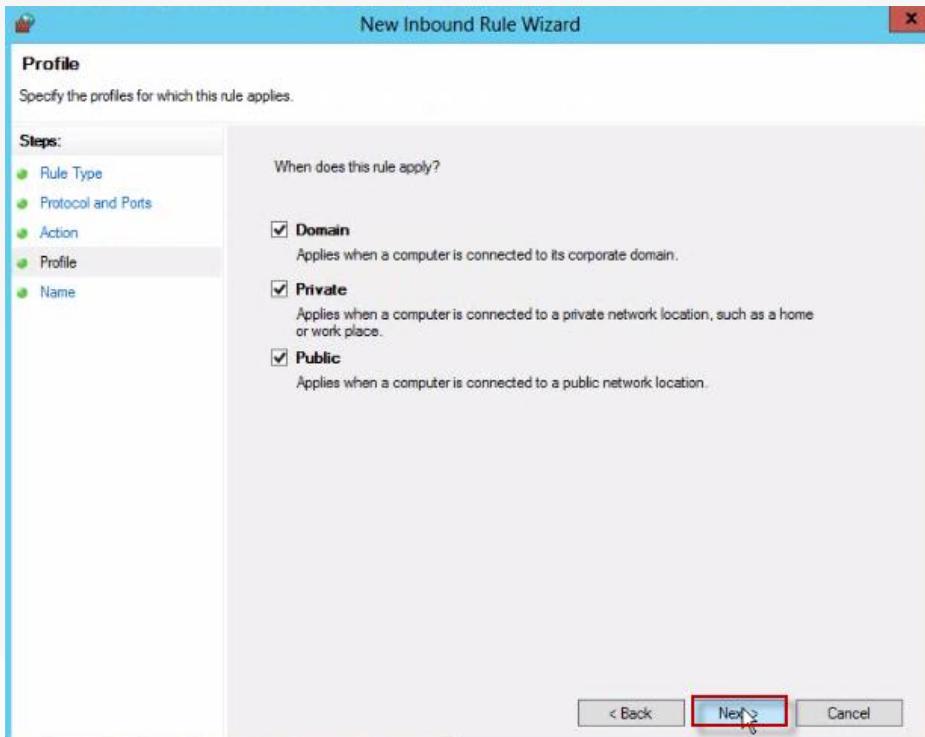


From the “Action” page, ensure that the “Allow the connection” option is selected then click “Next”.

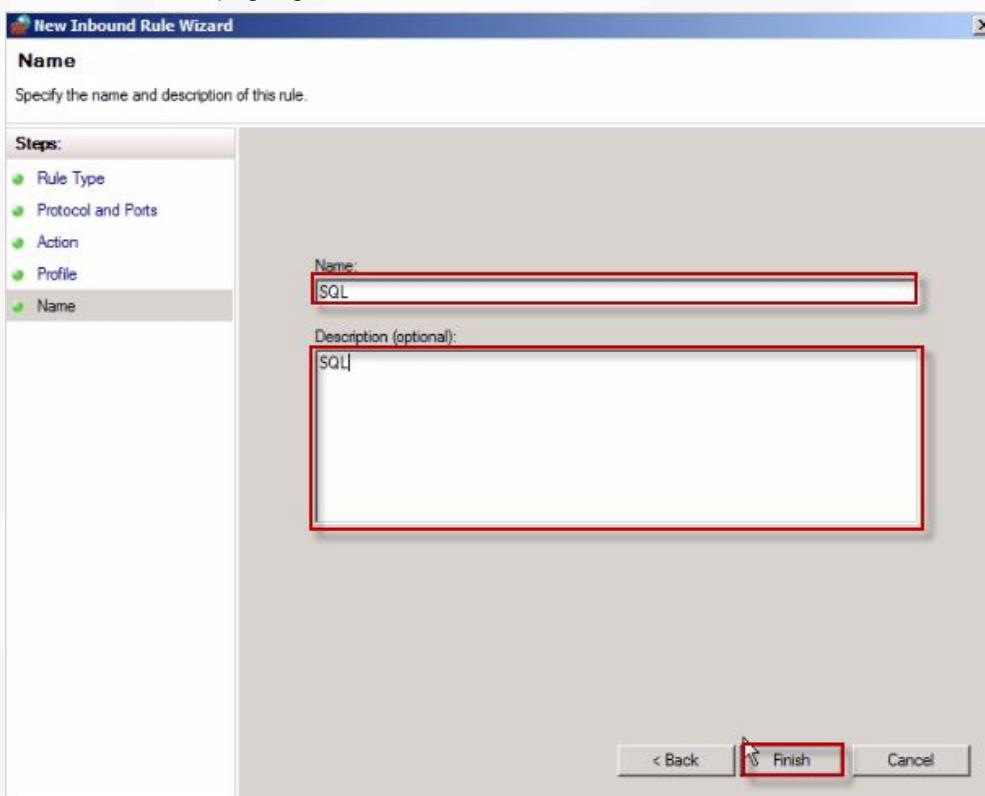


Appendix E: Configuring SQL Server 2012 Database Engine Port

From the “Profile” page, accept the defaults then click “Next”.



From the “Name” page, give the rule the “SQL” name then click “Finish”.



Appendix E: Configuring SQL Server 2012 Database Engine Port

Ensure that the “SQL” rule is listed in the Inbound Rules and that “Profile” is set to “All”, “Enabled” is set to “Yes” and that “Action” is set to “Allow”.

The screenshot shows the Windows Firewall with Advanced Security window. The left pane displays navigation options: Windows Firewall with Advanced Security, Inbound Rules (selected), Outbound Rules, Connection Security Rules, and Monitoring. The right pane is titled "Inbound Rules" and lists various rules. A specific rule, "SQL", is highlighted with a red box around its row. The columns in the table are: Name, Group, Profile, Enabled, Action, and Order. The "SQL" rule has the following values: Name = SQL, Group = All, Profile = All, Enabled = Yes, Action = Allow, and Order = N.

Name	Group	Profile	Enabled	Action	Order
SQL	All	Yes	Allow	N	
Visual Studio Test Agent Service	Private	Yes	Allow	N	
BranchCache Content Retrieval (HTTP-In)	BranchCache - Content Retrie...	All	No	Allow	N
BranchCache Hosted Cache Server (HTTP-In)	BranchCache - Hosted Cache ...	All	No	Allow	N
BranchCache Peer Discovery (WSD-In)	BranchCache - Peer Discovery...	All	No	Allow	N
COM+ Network Access (DCOM-In)	COM+ Network Access	All	No	Allow	N
COM+ Remote Administration (DCOM-In)	COM+ Remote Administration	All	No	Allow	N
Core Networking - Destination Unreachable (ICMPv6-In)	Core Networking	All	Yes	Allow	N
Core Networking - Destination Unreachable (TCP-In)	Core Networking	All	Yes	Allow	N
Core Networking - Dynamic Host Configuration (DHCP-In)	Core Networking	All	Yes	Allow	N
Core Networking - Dynamic Host Configuration (DHCP-Out)	Core Networking	All	Yes	Allow	N
Core Networking - Internet Group Management (IGMP-In)	Core Networking	All	Yes	Allow	N
Core Networking - IPHTTPS (TCP-In)	Core Networking	All	Yes	Allow	N
Core Networking - IPv6 (IPv6-In)	Core Networking	All	Yes	Allow	N
Core Networking - Multicast Listener Done (IGMP-In)	Core Networking	All	Yes	Allow	N
Core Networking - Multicast Listener Query (IGMP-In)	Core Networking	All	Yes	Allow	N
Core Networking - Multicast Listener Report (IGMP-In)	Core Networking	All	Yes	Allow	N
Core Networking - Multicast Listener Report (IGMP-Out)	Core Networking	All	Yes	Allow	N
Core Networking - Neighbor Discovery Advertise (NDP-In)	Core Networking	All	Yes	Allow	N
Core Networking - Neighbor Discovery Solicit (NDP-In)	Core Networking	All	Yes	Allow	N
Core Networking - Packet Too Big (ICMPv6-In)	Core Networking	All	Yes	Allow	N

Appendix F: SQL Server 2012 Installation Verification

This appendix is intended to help you verify the installation and configuration of SQL Server 2012 Database Engine, Reporting Services and Analysis Services for Team Foundation Server 2012 to work properly and efficiently. It's highly recommended to go through it in case you are installing SQL Server 2012 from scratch but it is mandatory in case you already have an installation of SQL Server 2012 that you want to reuse.

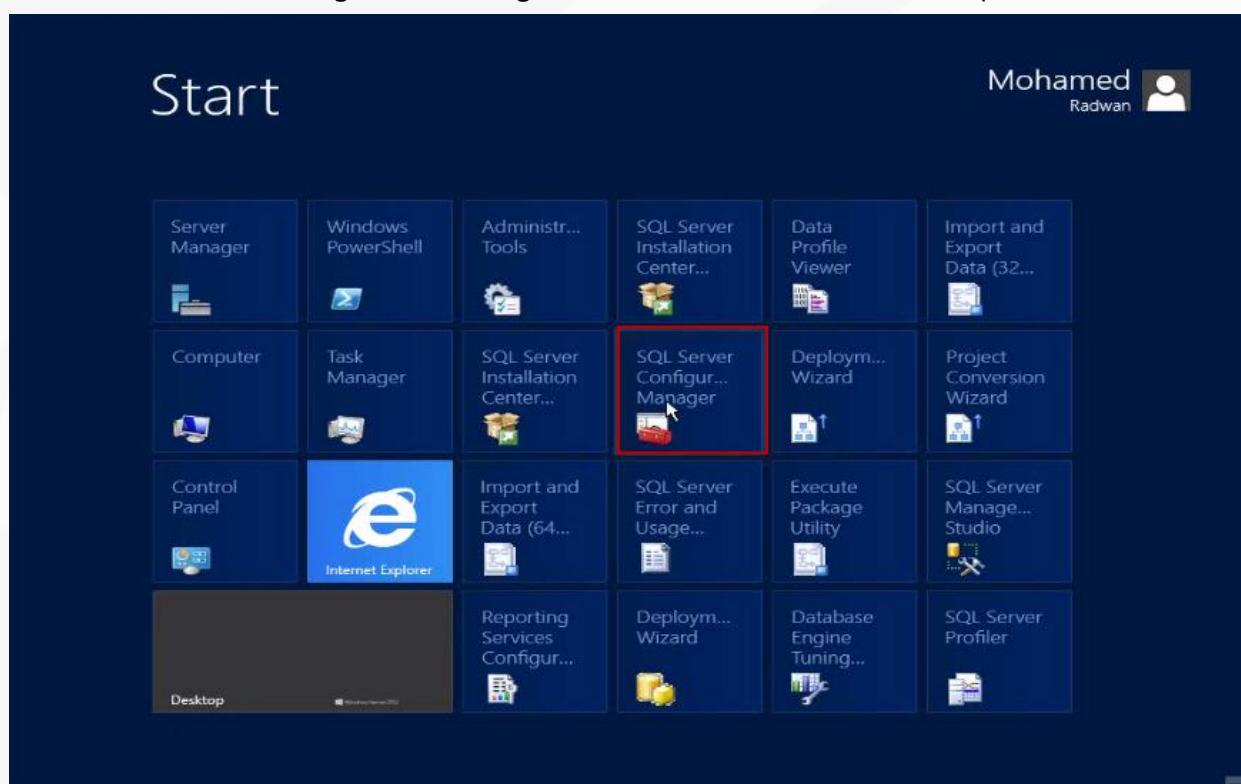


Watch the
Video

www.youtube.com/watch?v=R_uL-c_xuDc

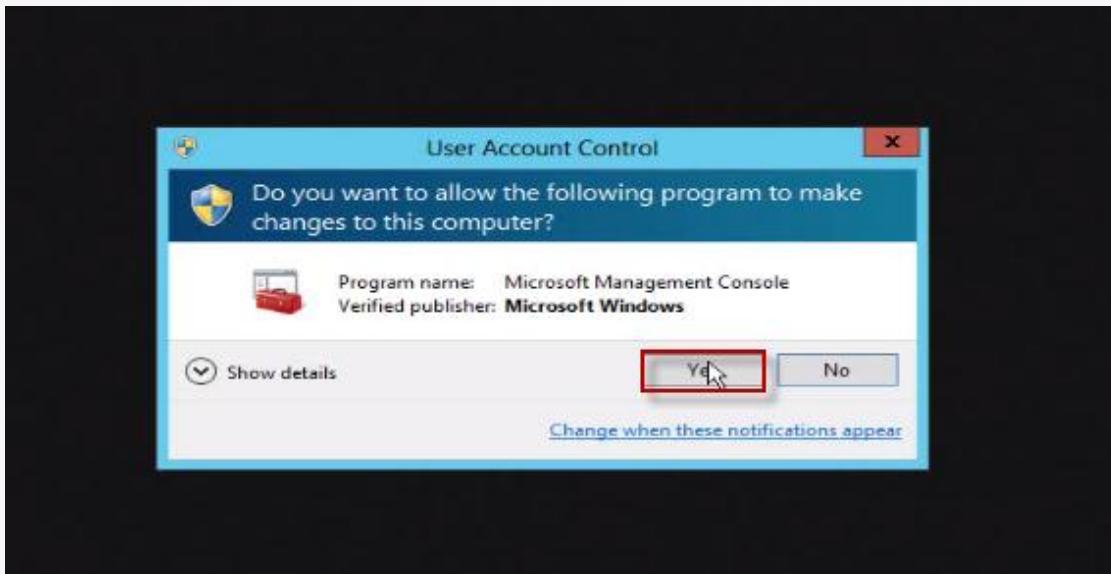
Verifying SQL Server Reporting Services

Launch “SQL Server Configuration Manager” from Windows Server 2012 desktop.

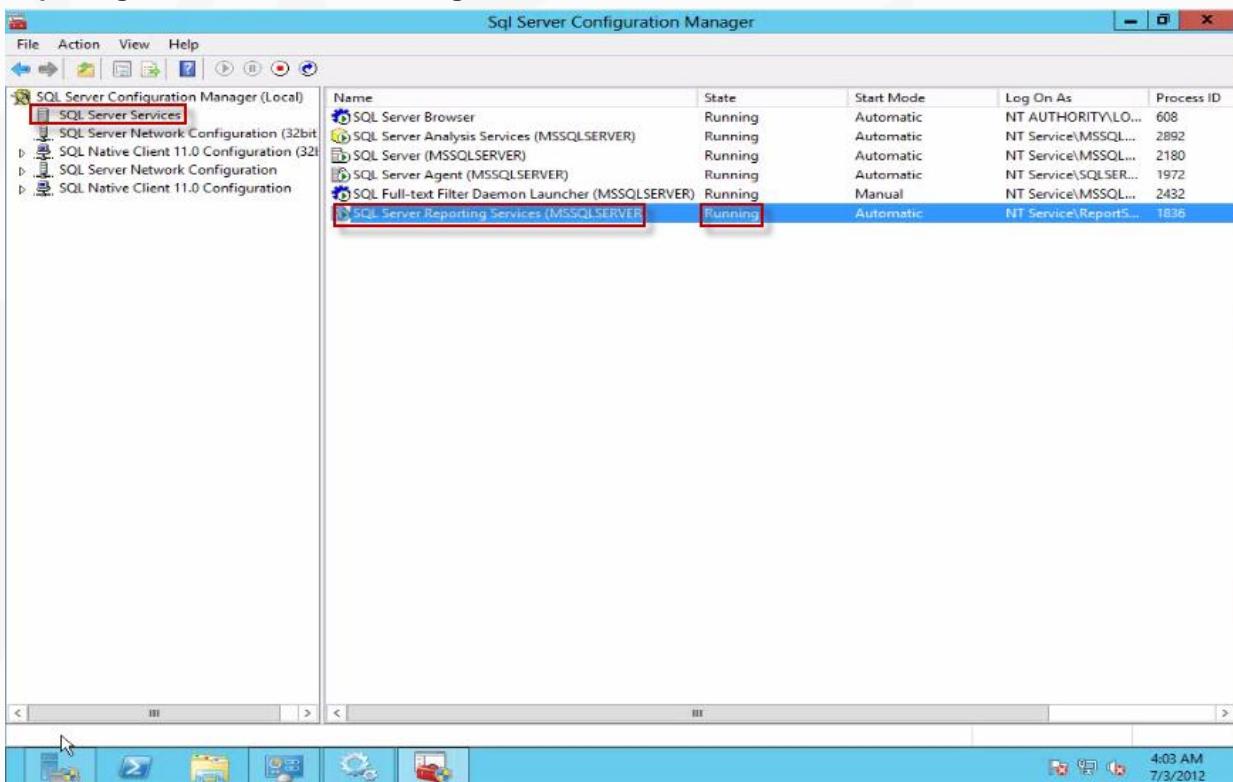


Appendix F: SQL Server 2012 Installation Verification

If the “User Account Control” dialog box pops up, click “Yes”.

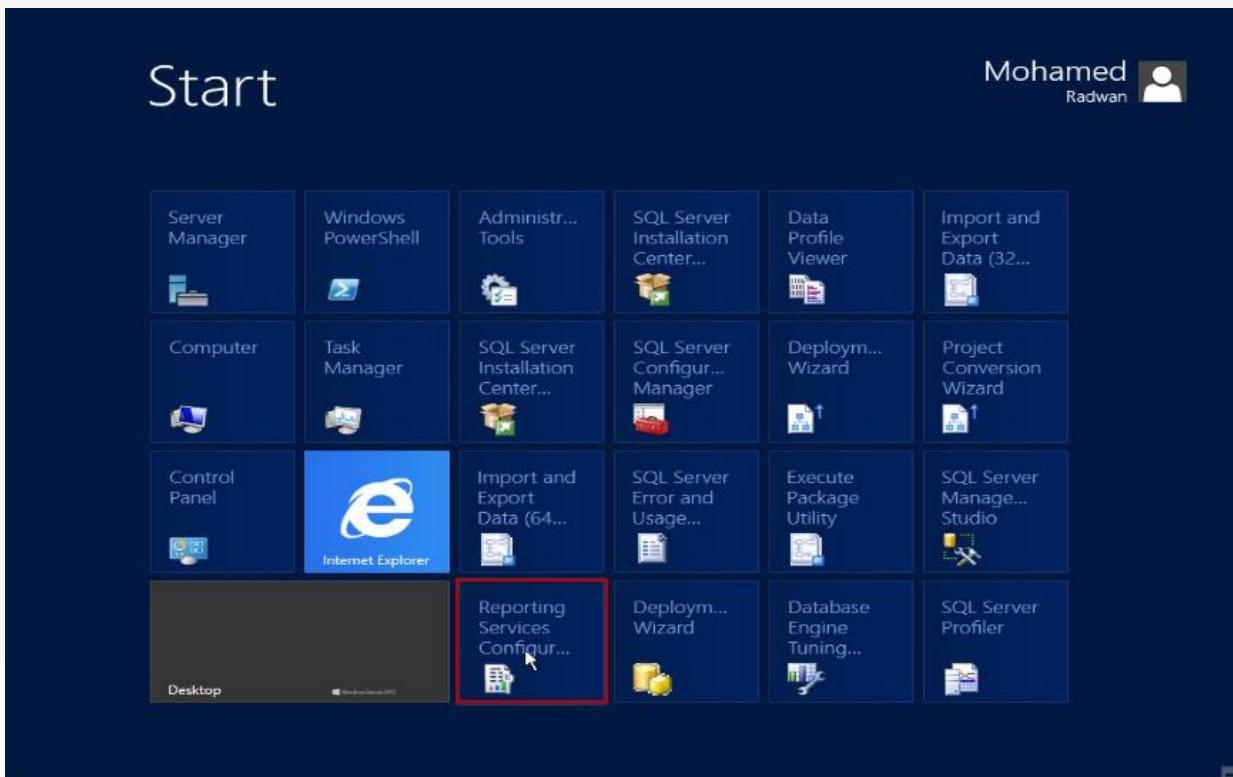


From the left pane, click “SQL Server Services” and ensure that the state of “SQL Server Reporting Service” is set to “Running”.

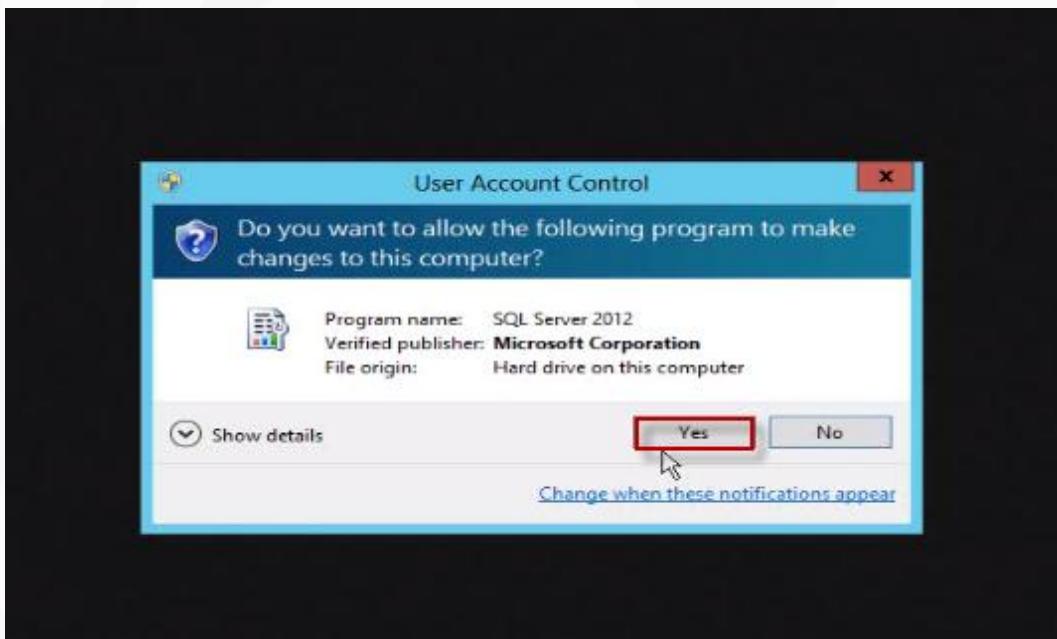


Appendix F: SQL Server 2012 Installation Verification

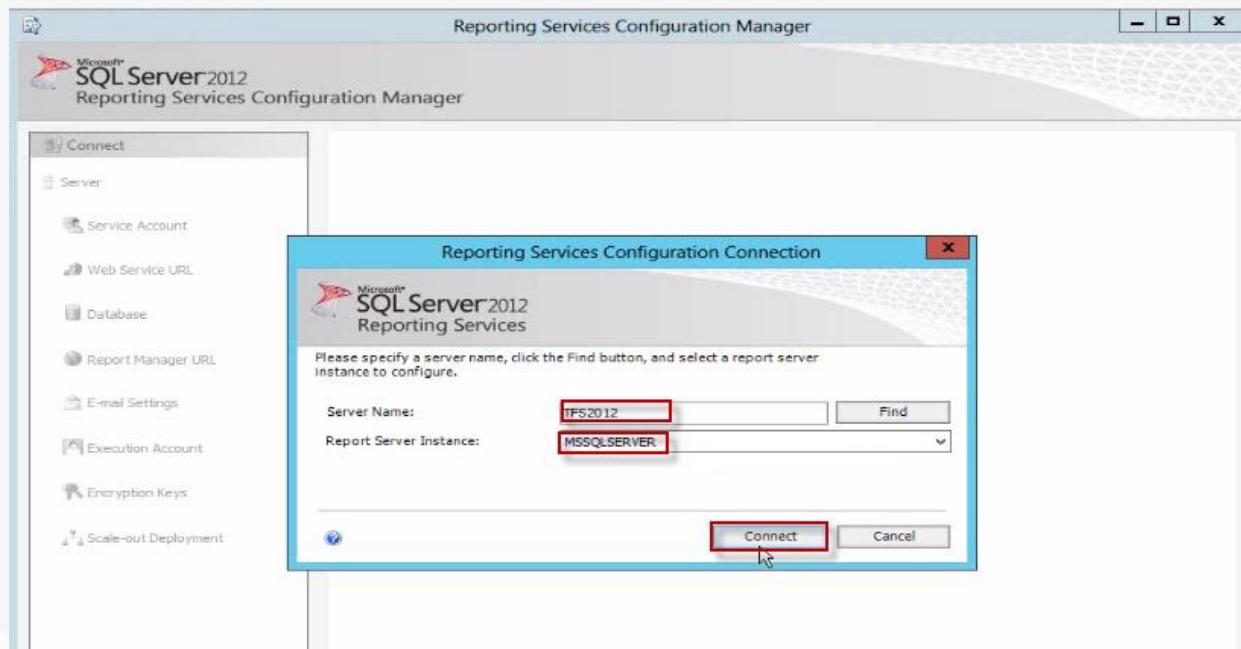
Launch “**Reporting Service Configuration Manager**” from Windows Server 2012 desktop.



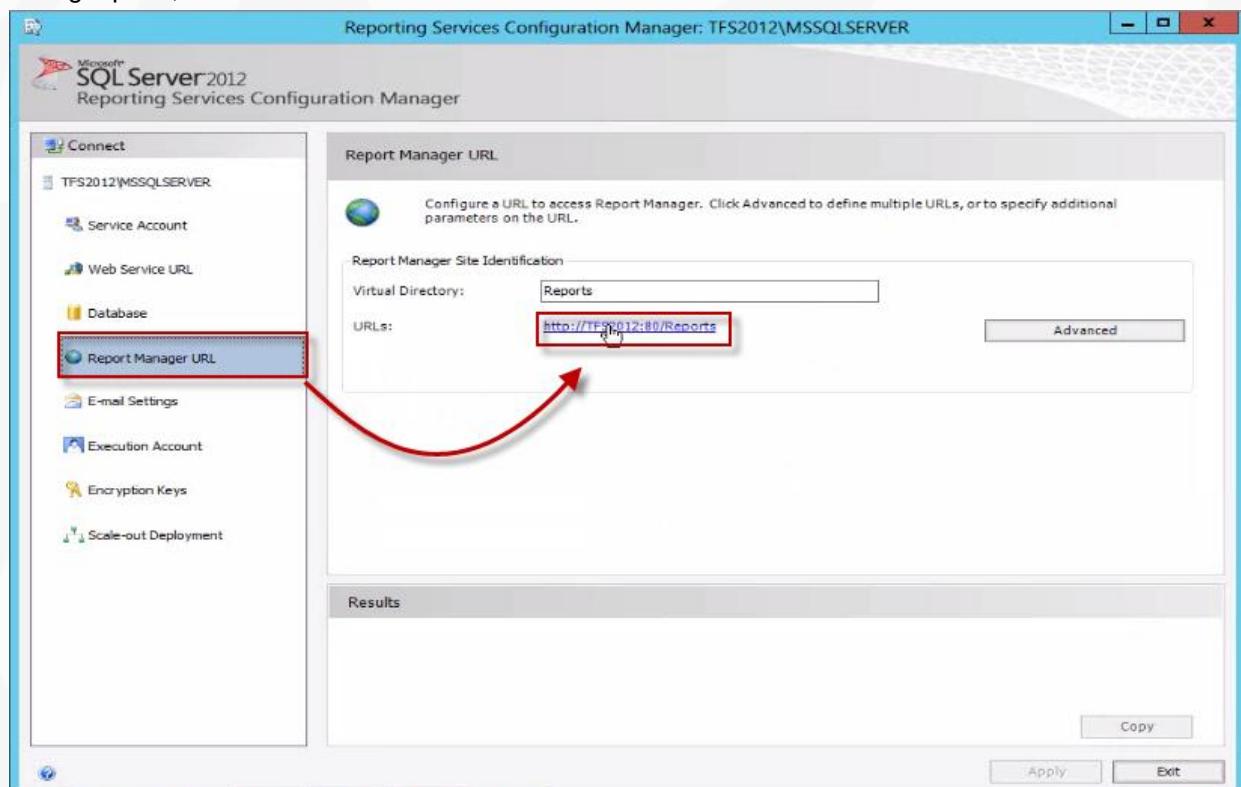
If the “**User Account Control**” dialog box pops up, click “**Yes**”.



Enter the “**Server Name**” and “**Report Server Instance**” to Connect to the Reporting Services Configuration Manager then click “**Connect**”.

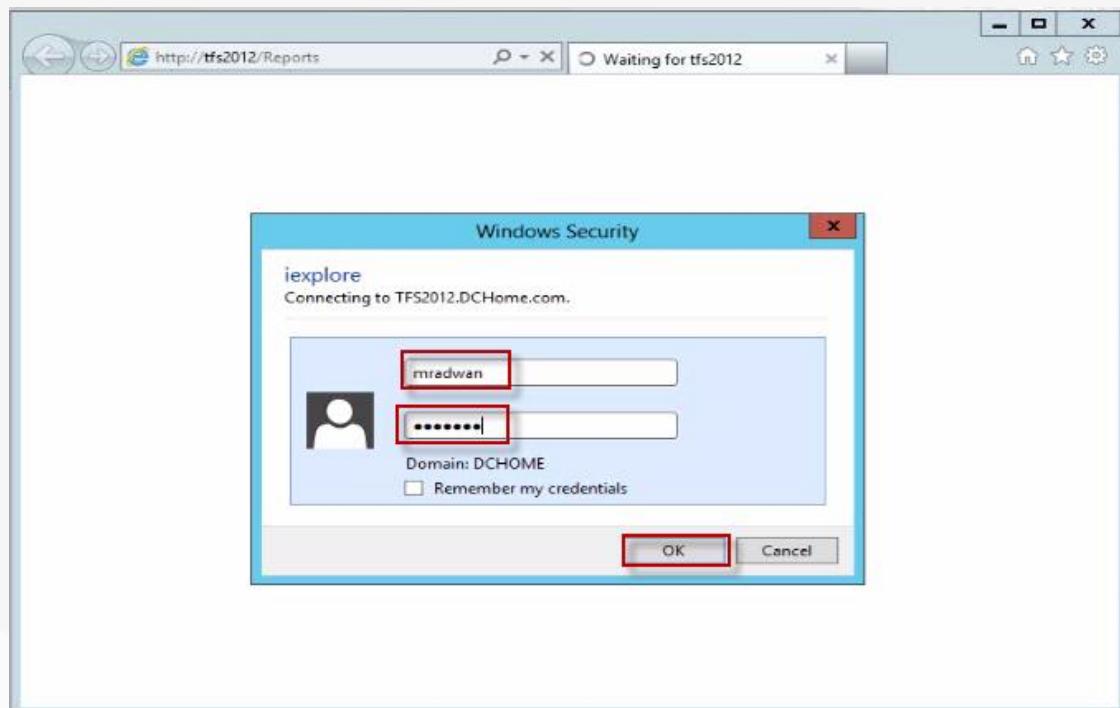


From the left pane, click “**Report Manager URL**” then click on the link beside the “**URLS**” label in the right pane,

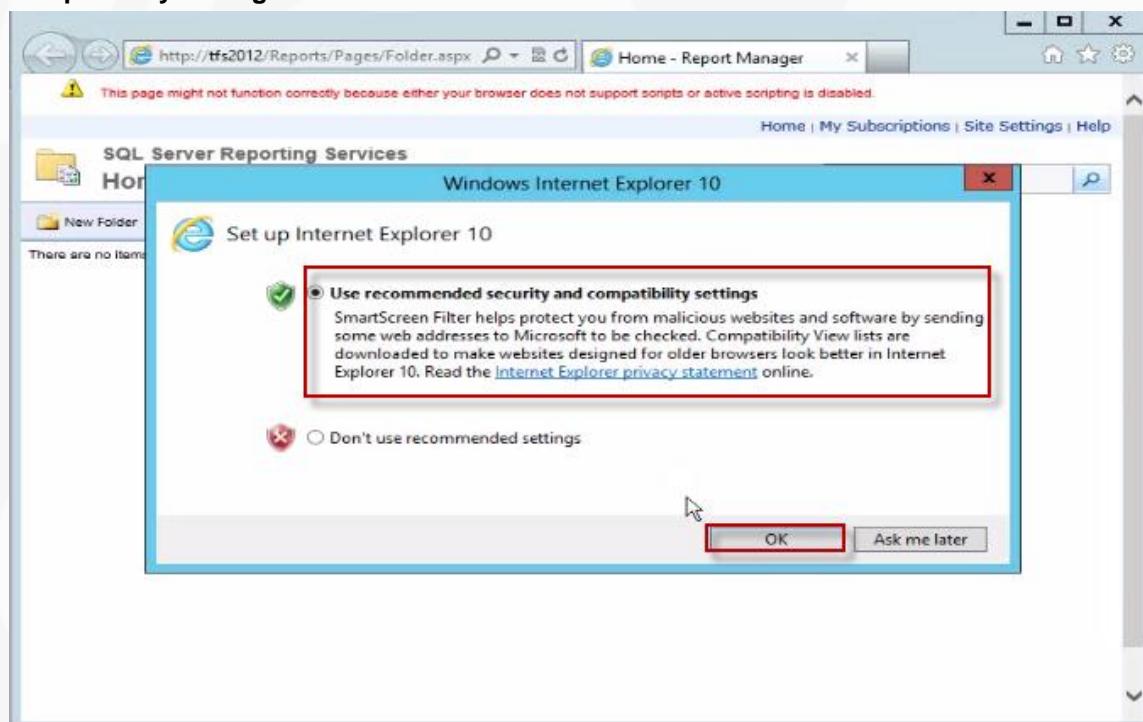


Appendix F: SQL Server 2012 Installation Verification

The browser launches and you are prompted to enter your credentials, enter the domain admin credentials “*mradwan*” and then click “OK”.

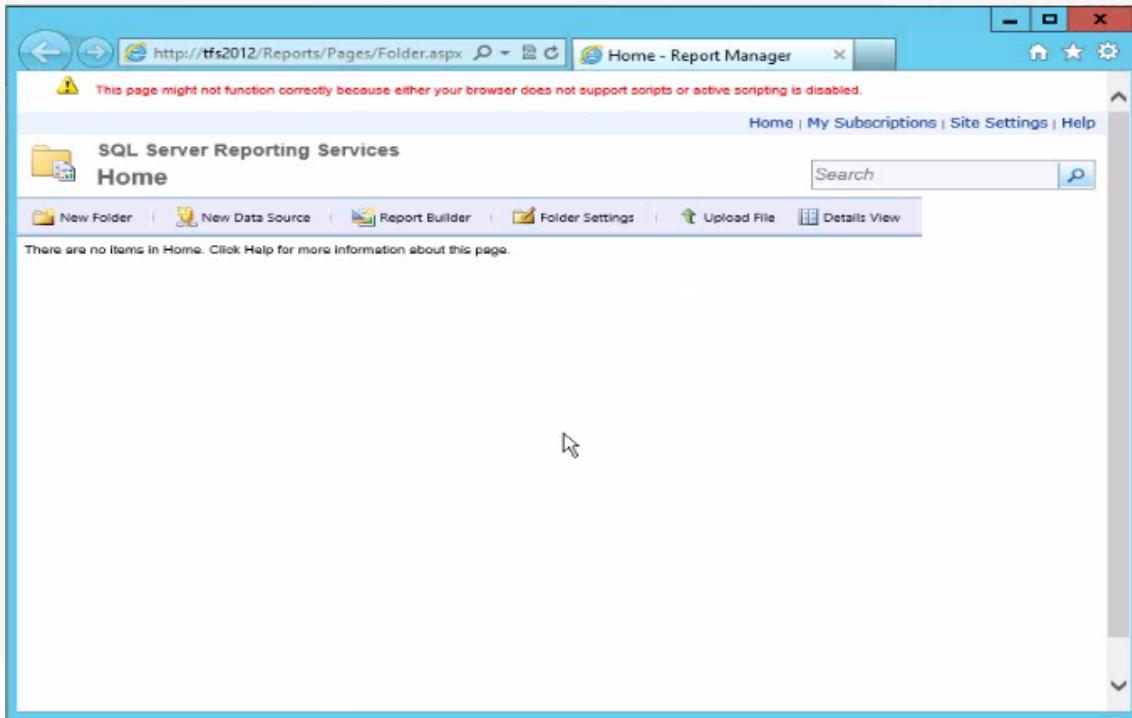


When “Windows Internet Explorer 10” launches, select “User recommended Security and compatibility settings” then click “OK”.

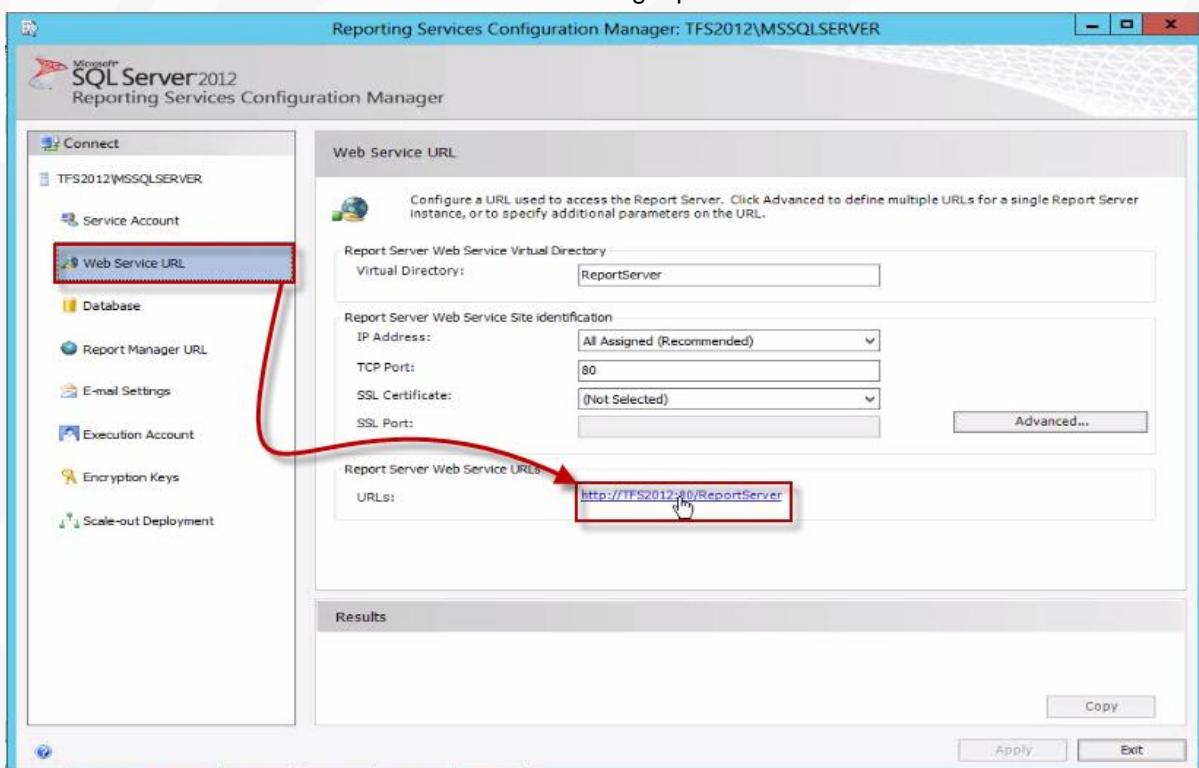


Appendix F: SQL Server 2012 Installation Verification

The home page of the “SQL Server Reporting Services” should successfully open.

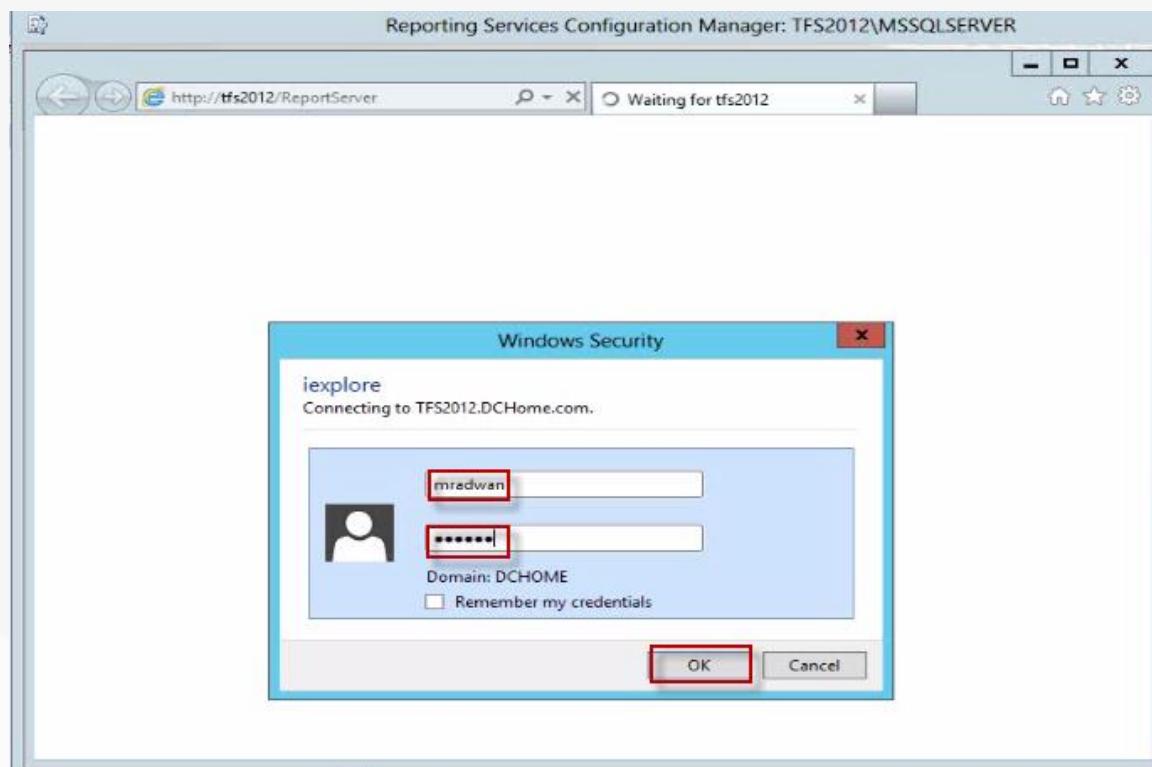


From the left pane of the “Reporting Service Configuration Manager”, click “Web Service URL” then click on the link beside the “URLS” label in the right pane.



Appendix F: SQL Server 2012 Installation Verification

The browser launches and you are prompted to enter your credentials, enter the domain admin credentials “mradwan” and then click “OK”.



The following page should successfully open with the version number displayed.





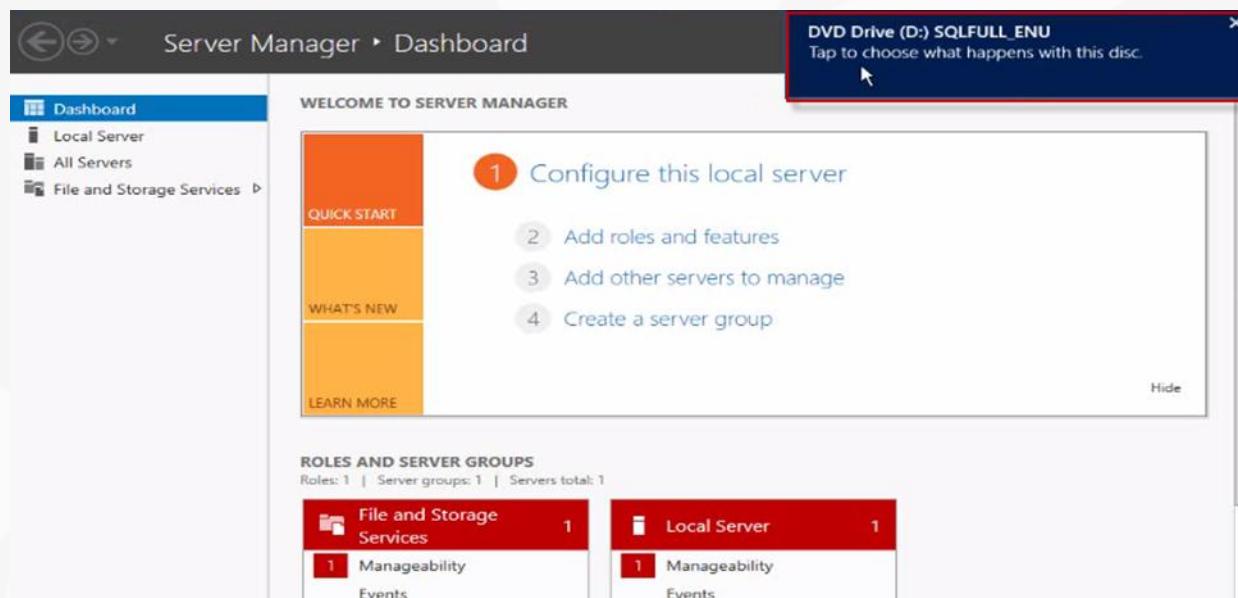
Watch the

Video

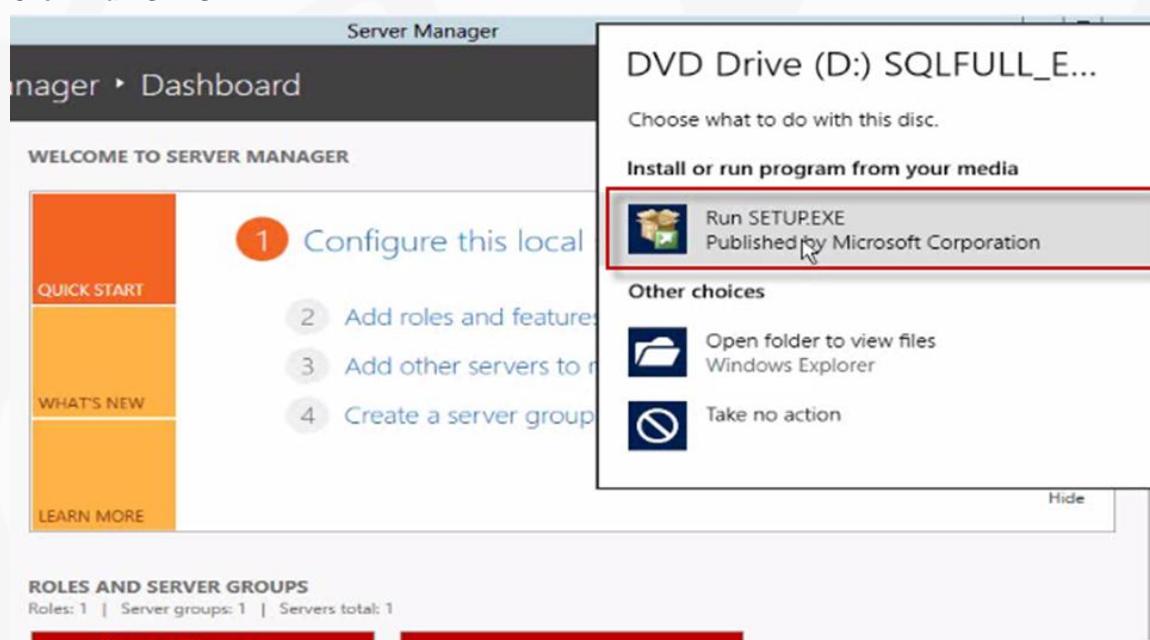
www.youtube.com/KLXRxnFy6g

Verifying SQL Server Database Engine and SQL Server Analysis Services

From the Hyper-V Manager console, double-click the “TFS2012” Virtual Machine then click “Media” from the top menu bar and choose “DVD Drive” then choose “Insert Disk” and then browse to the folder where you are storing SQL Server 2012 ISO image. A blue window pops up, click it.



Click “Run SETUP.EXE”.

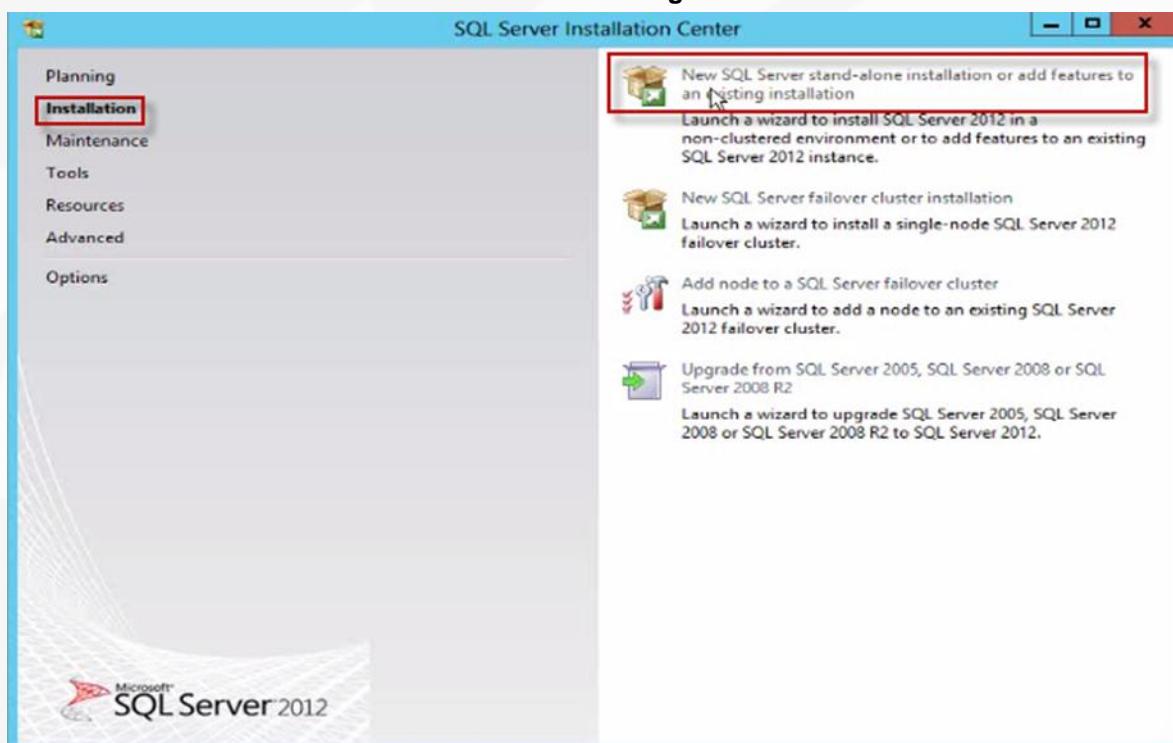


Appendix F: SQL Server 2012 Installation Verification

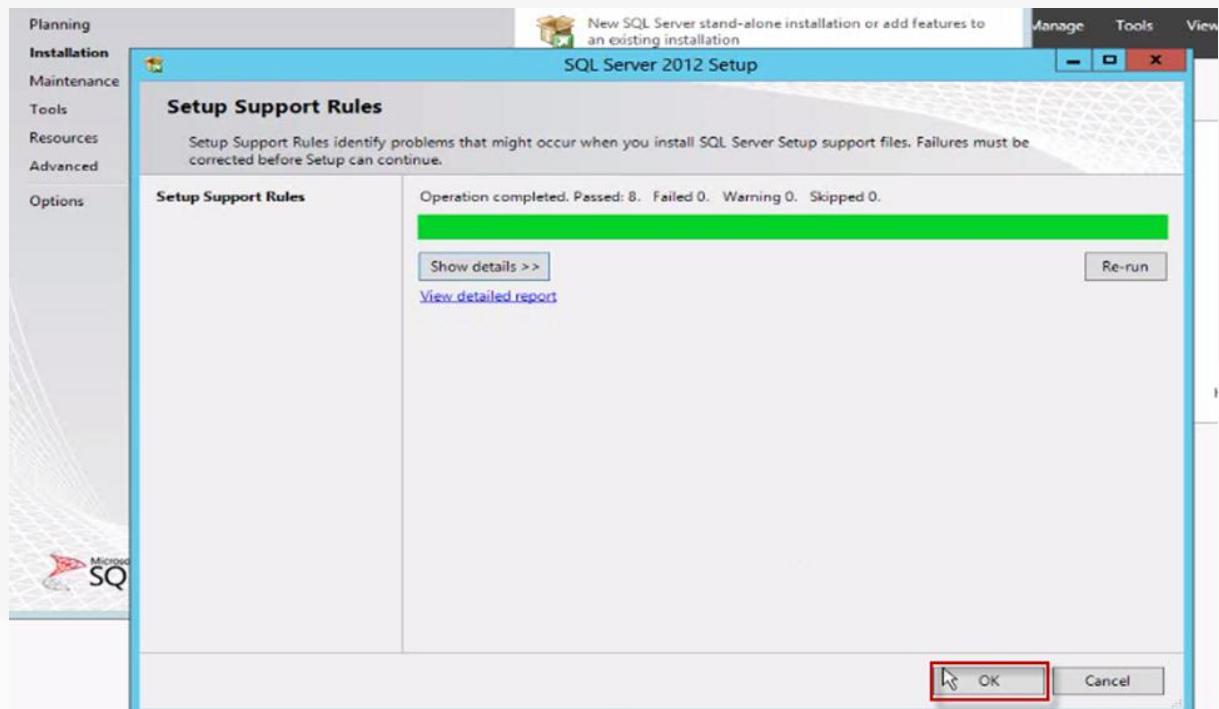
If the “User Account Control” dialog box pops up, click “Yes”.



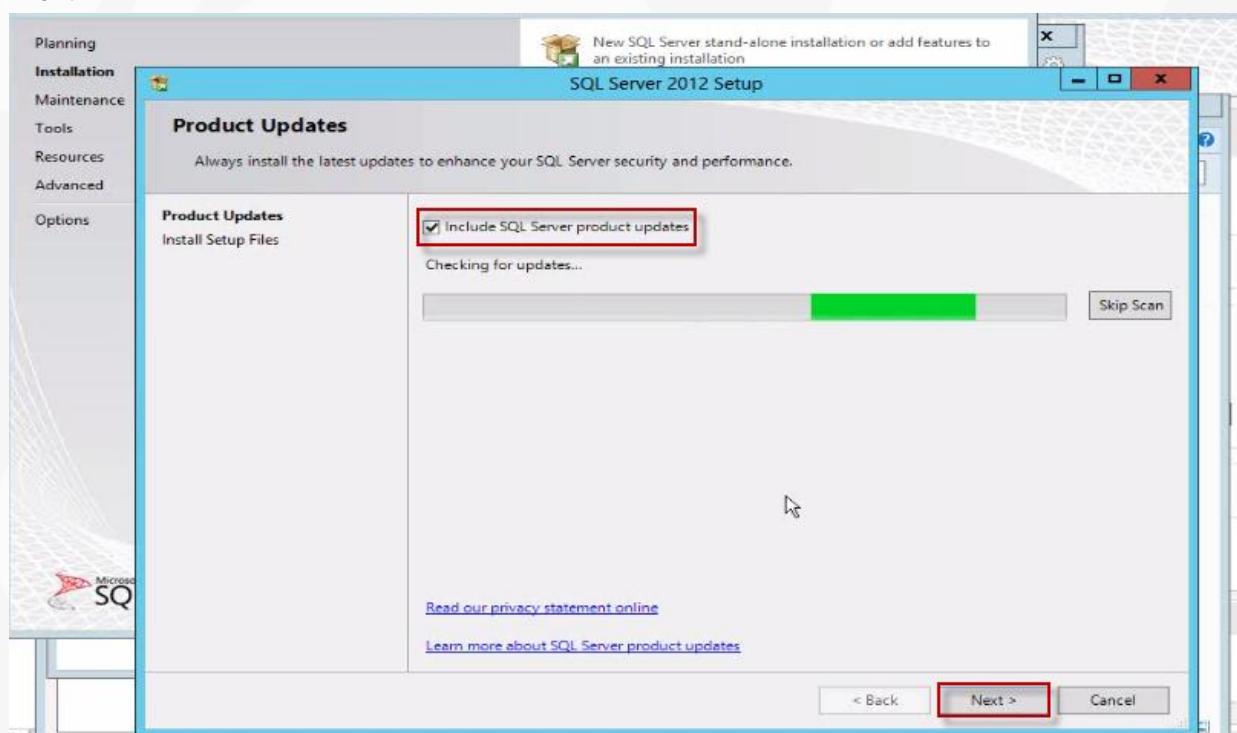
From the “SQL Server Installation Center”, click “Installation” then click “New SQL Server stand-alone installation or add features to an existing installation”.



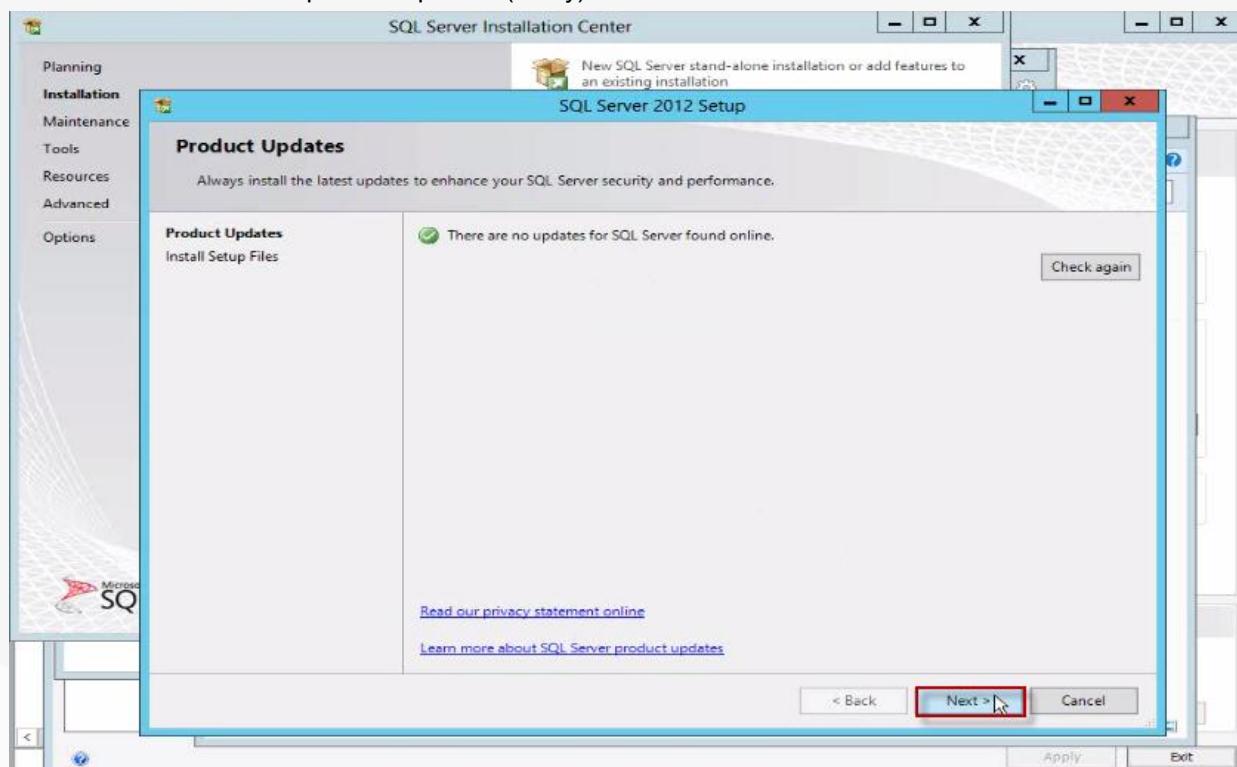
The installation wizard checks for various setup rules and present you with any issues that need to be resolved for set up to continue.



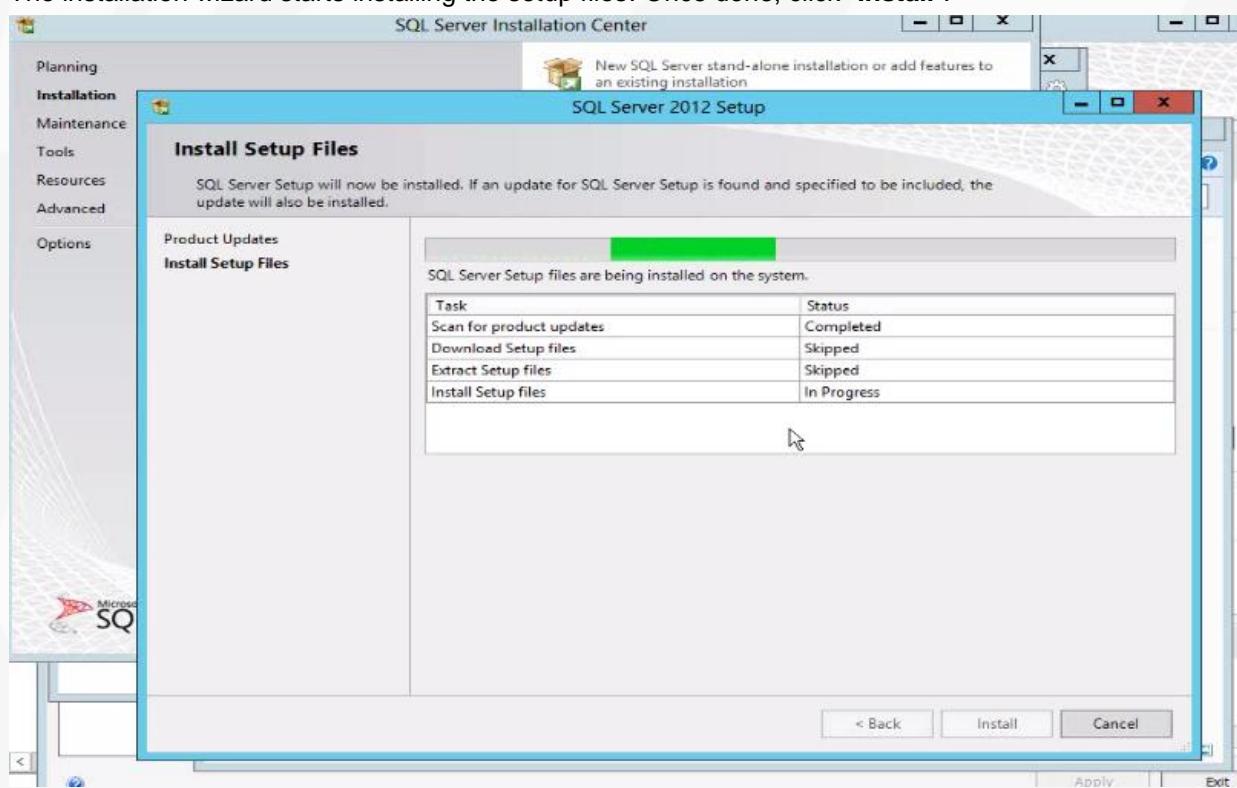
From the “**Product Updates**” screen, select “**Include SQL Server Product Updates**” then click “**Next**”.



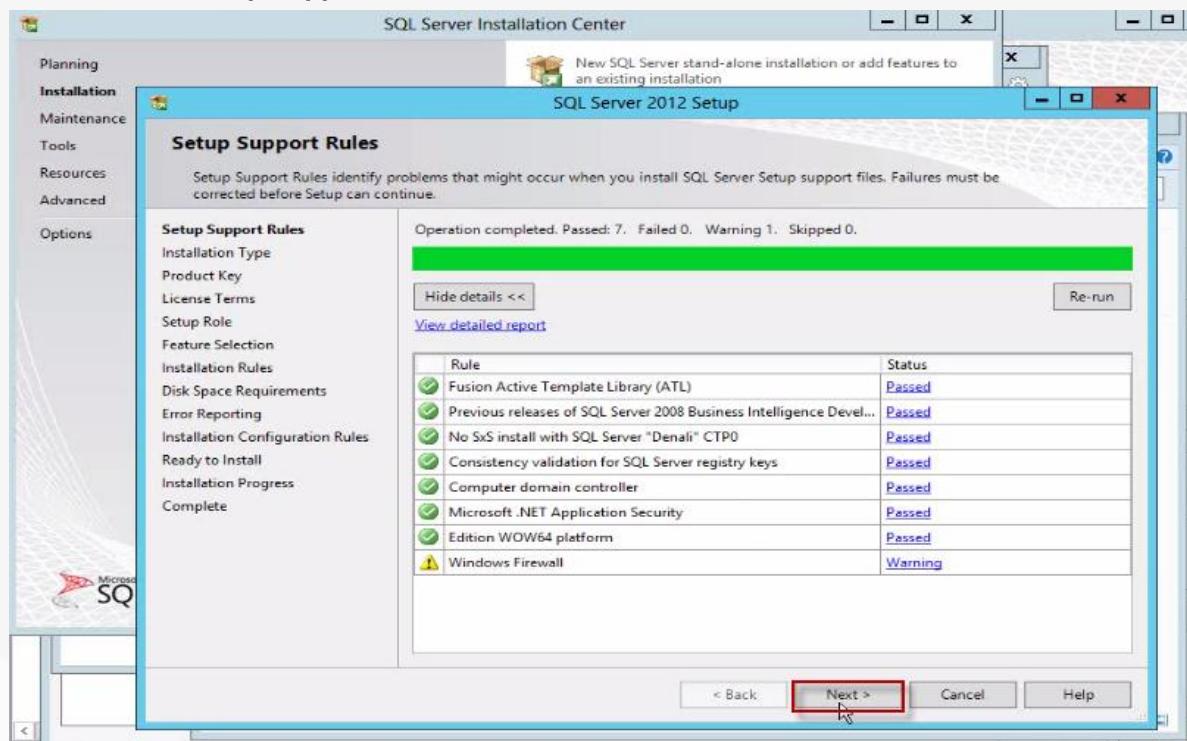
Click “Next” to install the product updates (if any).



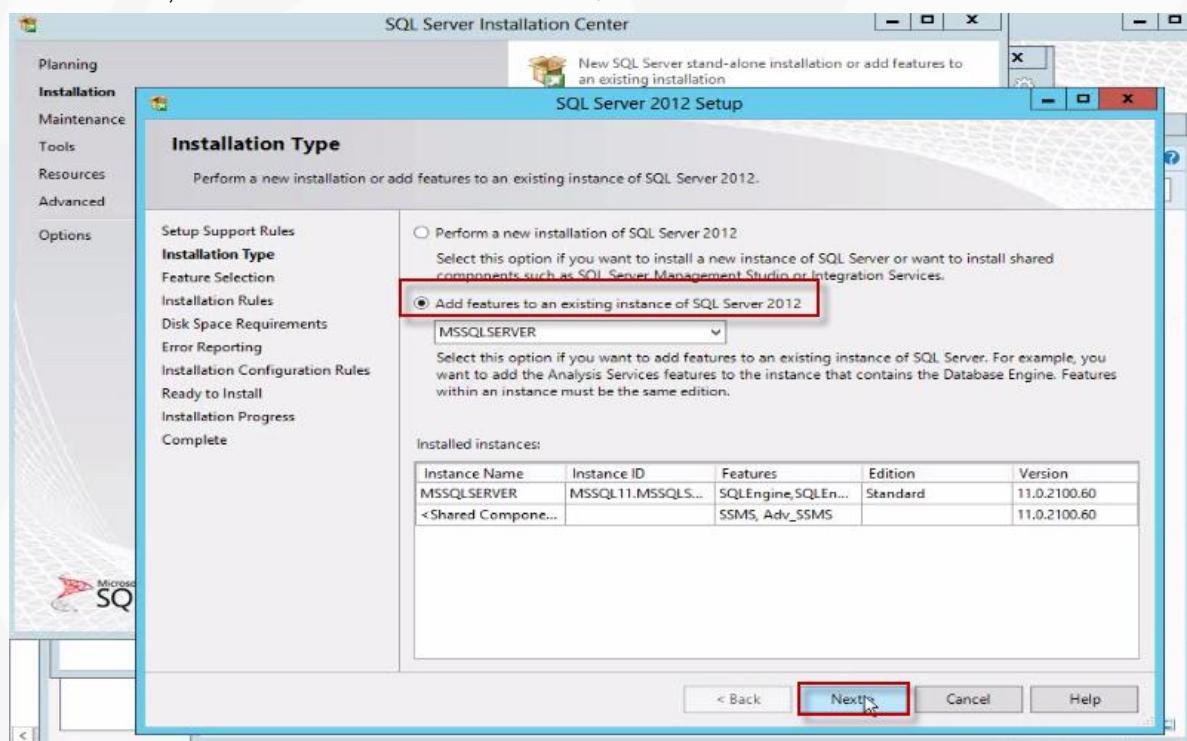
The installation wizard starts installing the setup files. Once done, click “Install”.



Wait till all the “**Setup Support Rules**” are checked then click “**Next**”.

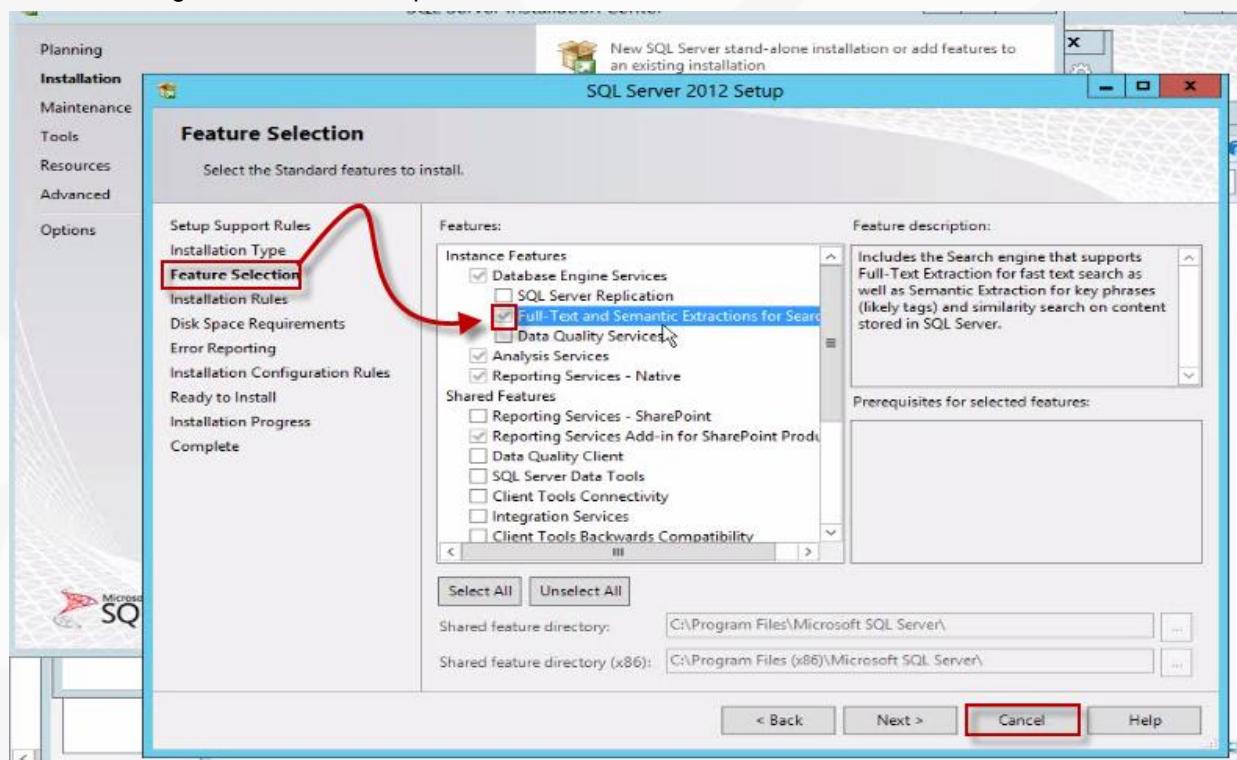


From the “**Installation Type**” page, select “**Add features to an existing instance of SQL Server 2012**”, choose the default instance “**MSSQLSERVER**” then click “**Next**”.



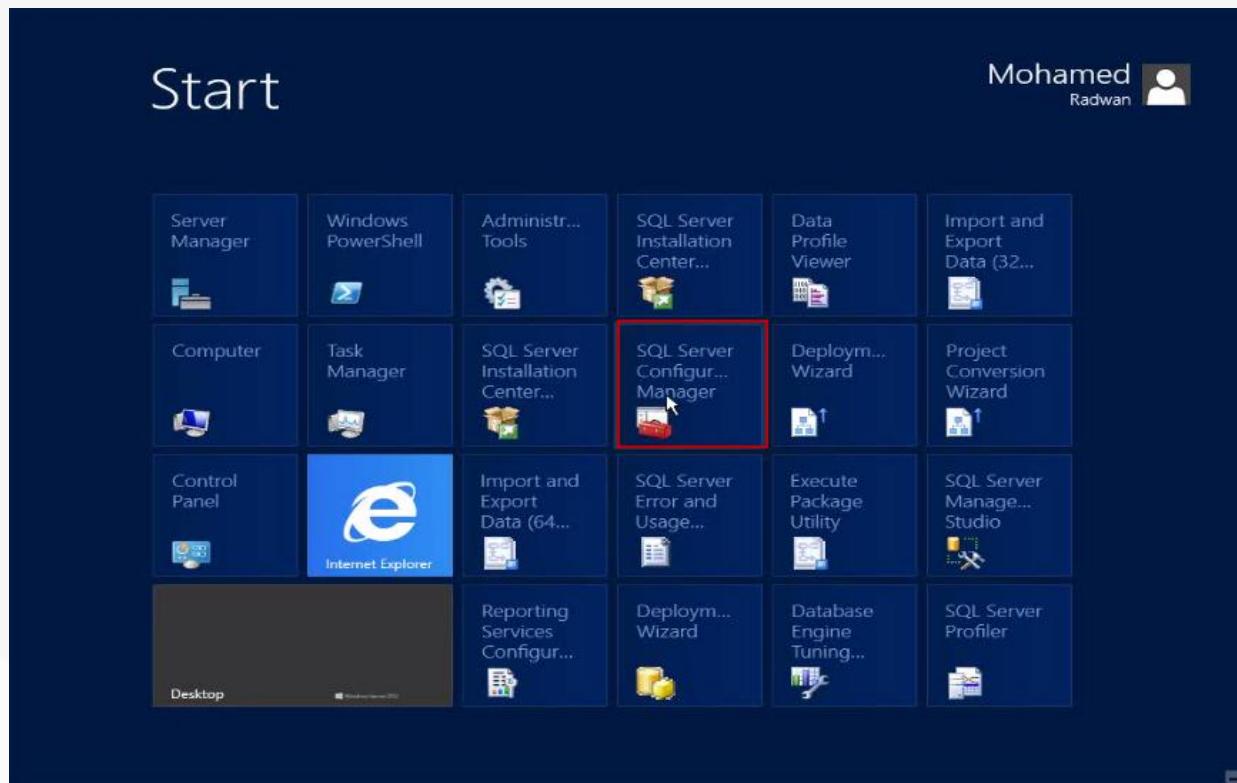
From the “**Feature Selection**” page, ensure that the following features are selected then click “**Cancel**”. Otherwise, select the missing features and continue the installation as illustrated in [Section 6.2](#).

- Database Engine Service
- Full Text and Semantic Extractions for Search
- Analysis Services
- Reporting Service - Native
- Reporting Service Add-in for SharePoint Product
- Management Tools - Basic
- Management Tools - Complete



Appendix F: SQL Server 2012 Installation Verification

Launch “SQL Server Configuration Manager” from Windows Server 2012 desktop.



If the “User Account Control” dialog box pops up, click “Yes”.



Appendix F: SQL Server 2012 Installation Verification

From the left pane, click “**SQL Server Services**” then from the right pane, make sure that all the service are in “**Running**” state and that their “**Start Mode**” are set to “**Automatic**” except for the “**SQL Full-text Filter Daemon Launcher**”.

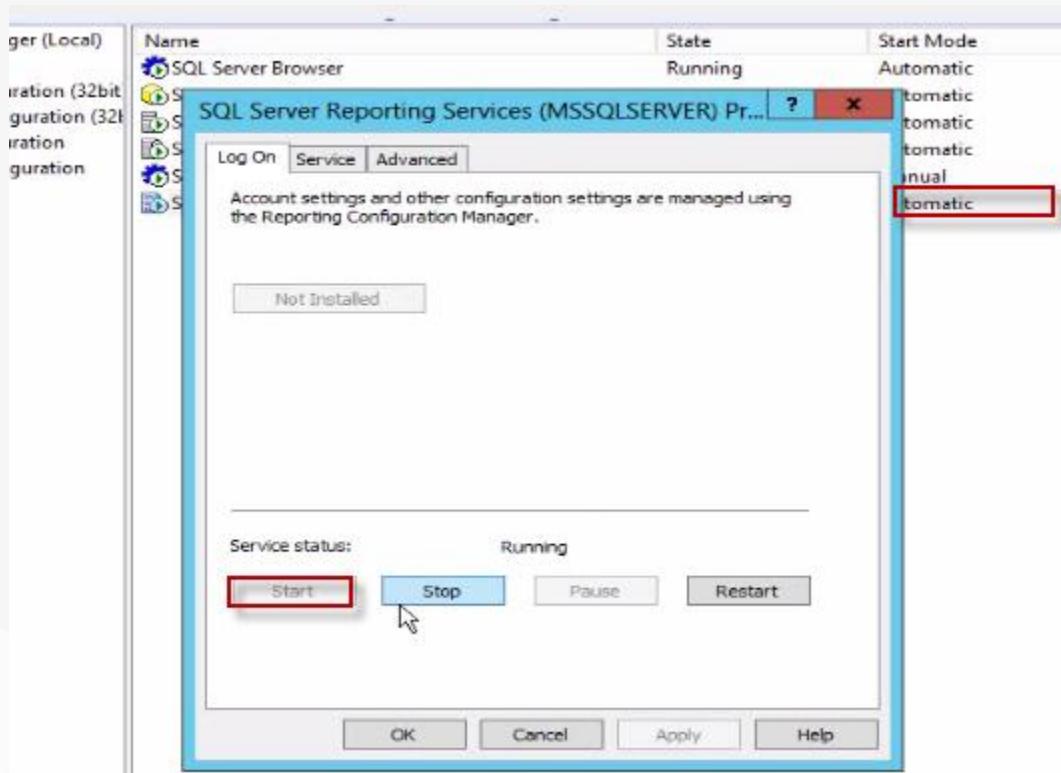
Name	State	Start Mode	Log On As
SQL Server Browser	Running	Automatic	NT AUTHORITY\SYSTEM
SQL Server Analysis Services (MSSQLSERVER)	Running	Automatic	NT Service\ANALYSER
SQL Server (MSSQLSERVER)	Running	Automatic	NT Service\M
SQL Server Agent (MSSQLSERVER)	Running	Automatic	NT Service\SQLAGENT
SQL Full-text Filter Daemon Launcher (MSSQLSERVER)	Running	Manual	NT Service\FULLTEXTSERV
SQL Server Reporting Services (MSSQLSERVER)	Running	Automatic	NT Service\RSERV

If the “**Start Mode**” of any of those services is not set to “**Automatic**”, double-click it to open the Properties windows then switch to the “**Service**” tab and set it to be “**Automatic**” and then click “**OK**”.

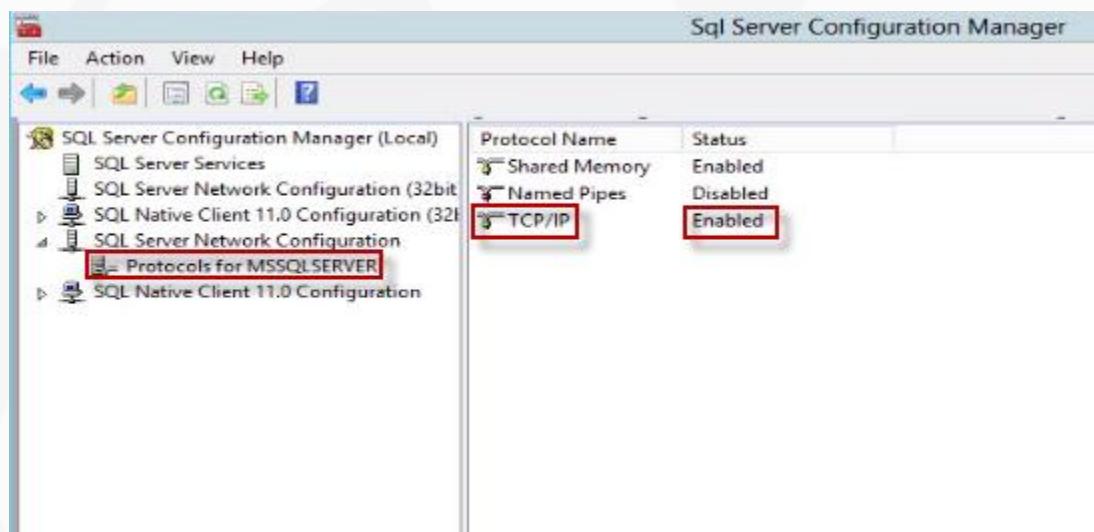
Name	State	Start Mode
SQL Server Browser	Running	Automatic
SQL Server Analysis Services (MSSQLSERVER)	Running	Automatic
SQL Server (MSSQLSERVER)	Running	Automatic
SQL Server Agent (MSSQLSERVER)	Running	Automatic
SQL Full-text Filter Daemon Launcher (MSSQLSERVER)	Running	Manual
SQL Server Reporting Services (MSSQLSERVER)	Running	Automatic

Appendix F: SQL Server 2012 Installation Verification

If the “**State**” of any of those services is not “**Running**”, double-click it to open the Properties windows then “**Start**” it from the “**Log On**” tab and then click “**OK**”.



From the “**SQL Server Configuration Manager**” left pane, click “**SQL Server Network Configuration**” and ensure that the “**TCP/IP**” protocol is “**Enabled**”. If not, double click it then enable it.





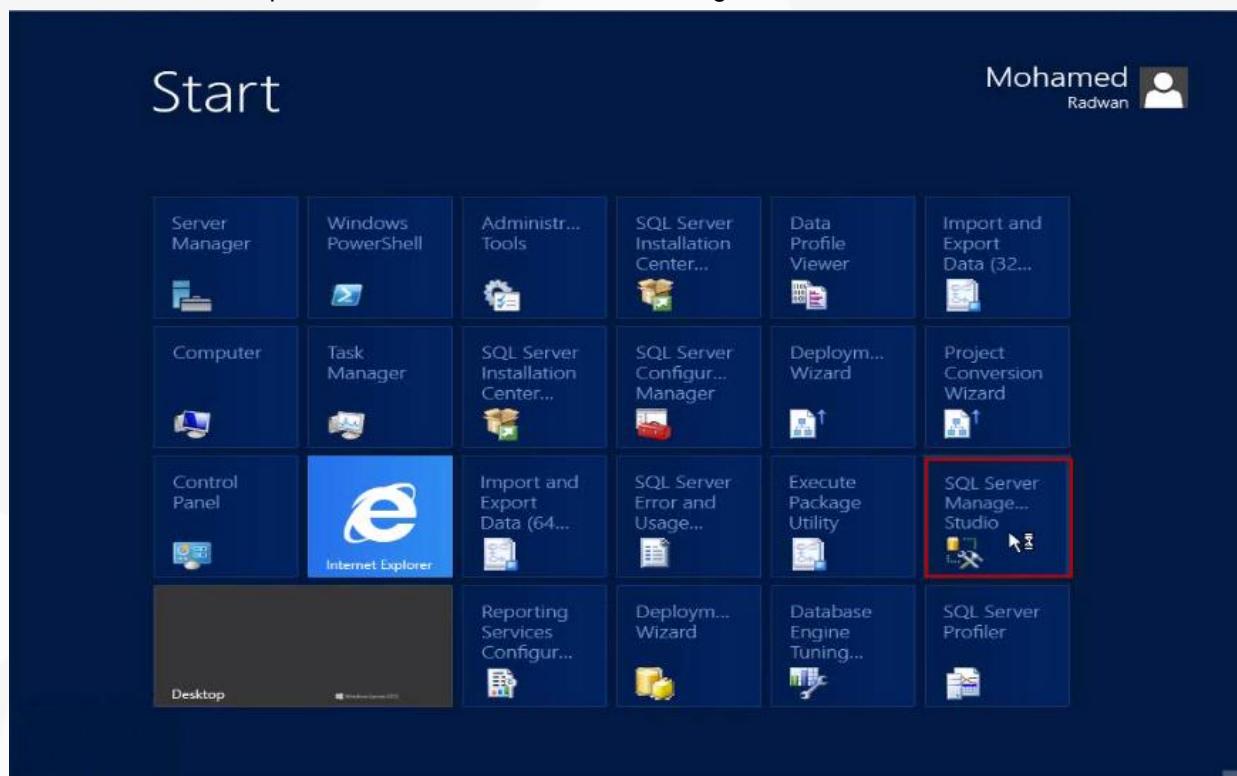
Watch the

Video

www.youtube.com/RhQ-4rqssxc

Verifying the Connection to SQL Server Instance (Database and Analysis Service)

Click on Metro Desktop and then click on SQL Server Management Studio.



The “SQL Server Management Studio” launches.

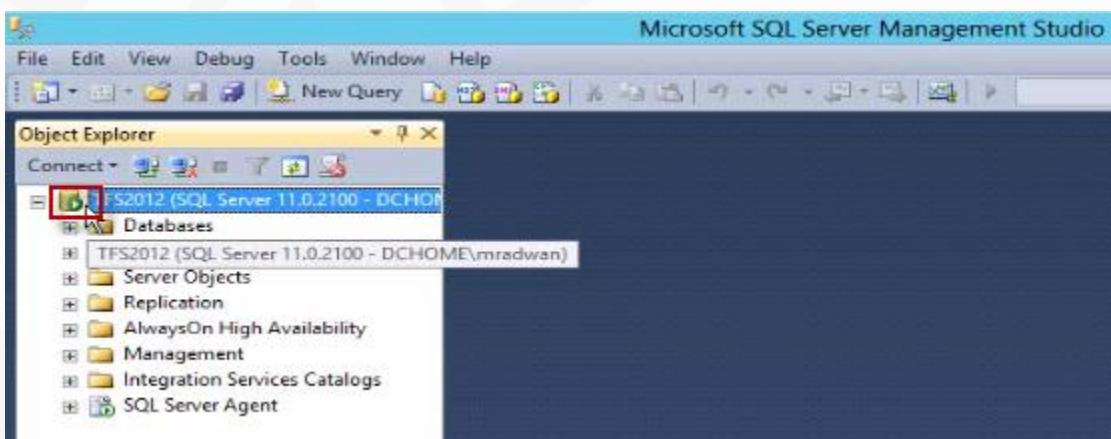


Appendix F: SQL Server 2012 Installation Verification

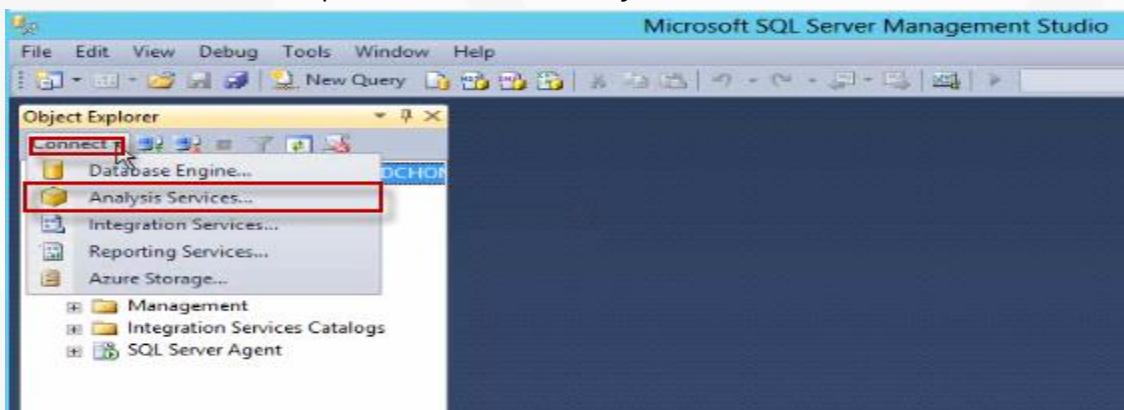
Enter the server name “TFS2012” then click “Connect”.



You should see a green arrow beside the database instance name indicating a successful connection.

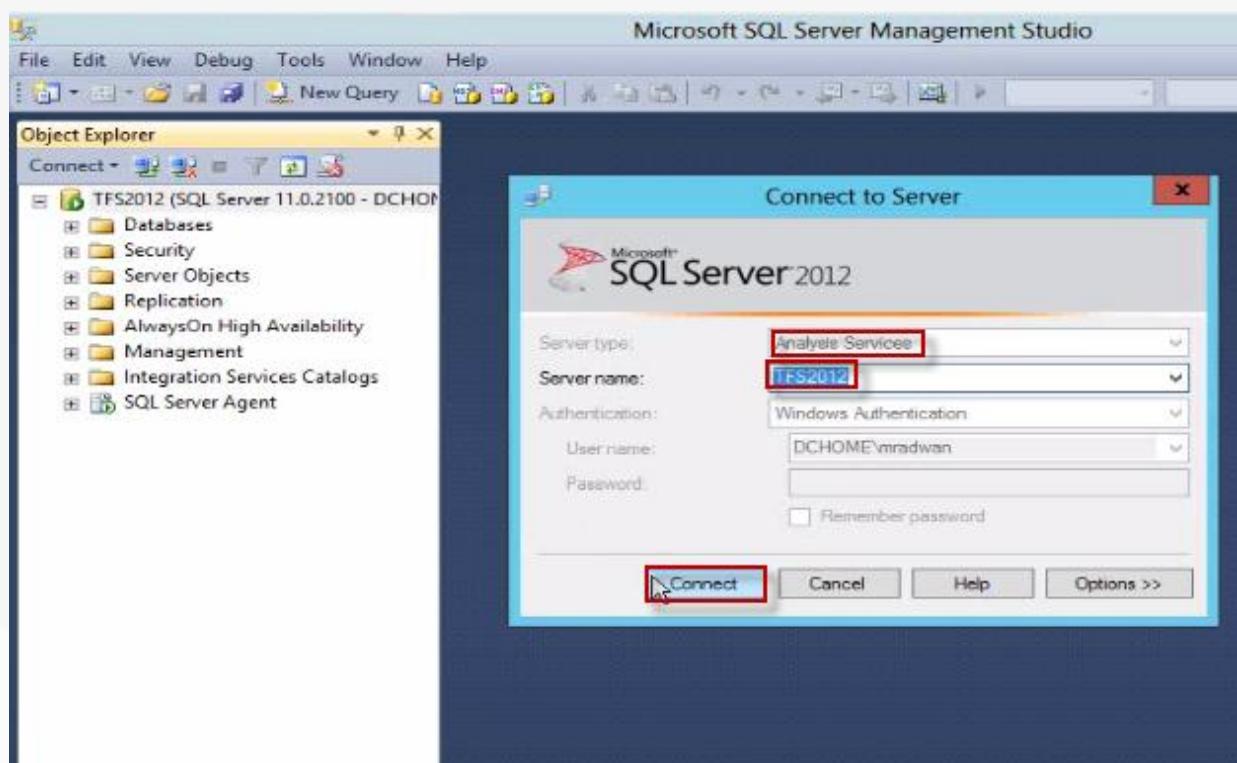


Click on the “Connect” dropdown and choose “Analysis Services”.

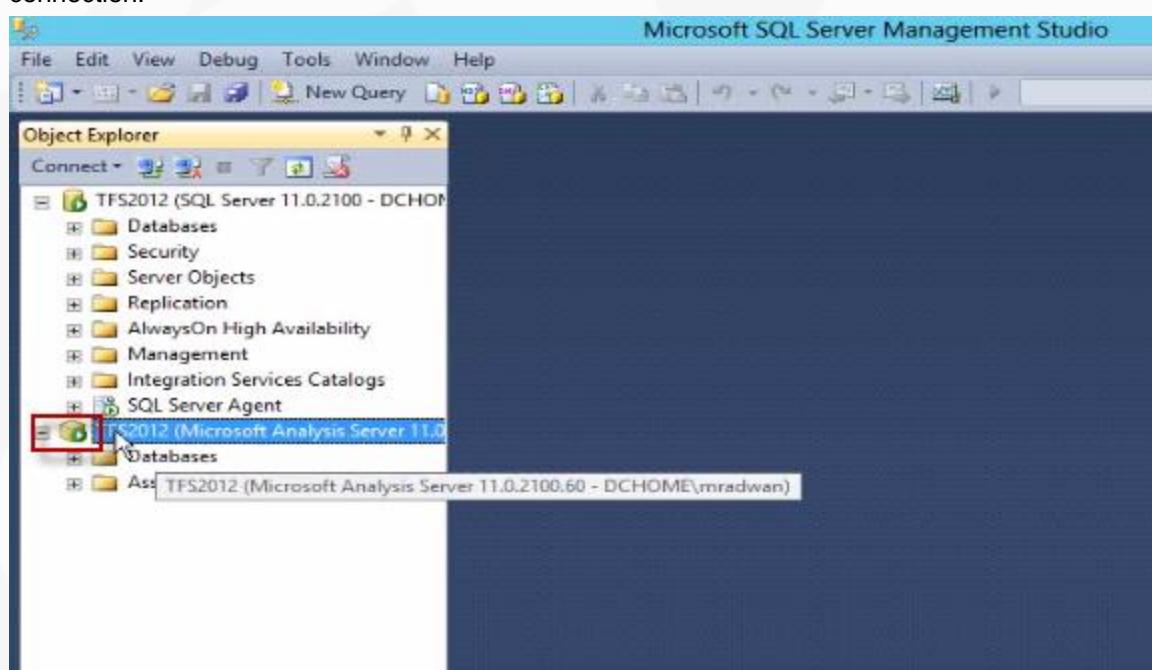


Appendix F: SQL Server 2012 Installation Verification

Enter the server name “TFS2012” then click “Connect”.



You should see a green arrow beside the Analysis Services server name indicating a successful connection.



Appendix G: SharePoint Server 2010 SP1 Installation Verification

This appendix is intended to help you verify the installation and configuration of SharePoint Server 2010 for Team Foundation Server 2012 to work properly and efficiently. It's highly recommended to go through it in case you are installing SharePoint 2010 from scratch but it is mandatory in case you already have an installation of SharePoint 2010 that you want to reuse.

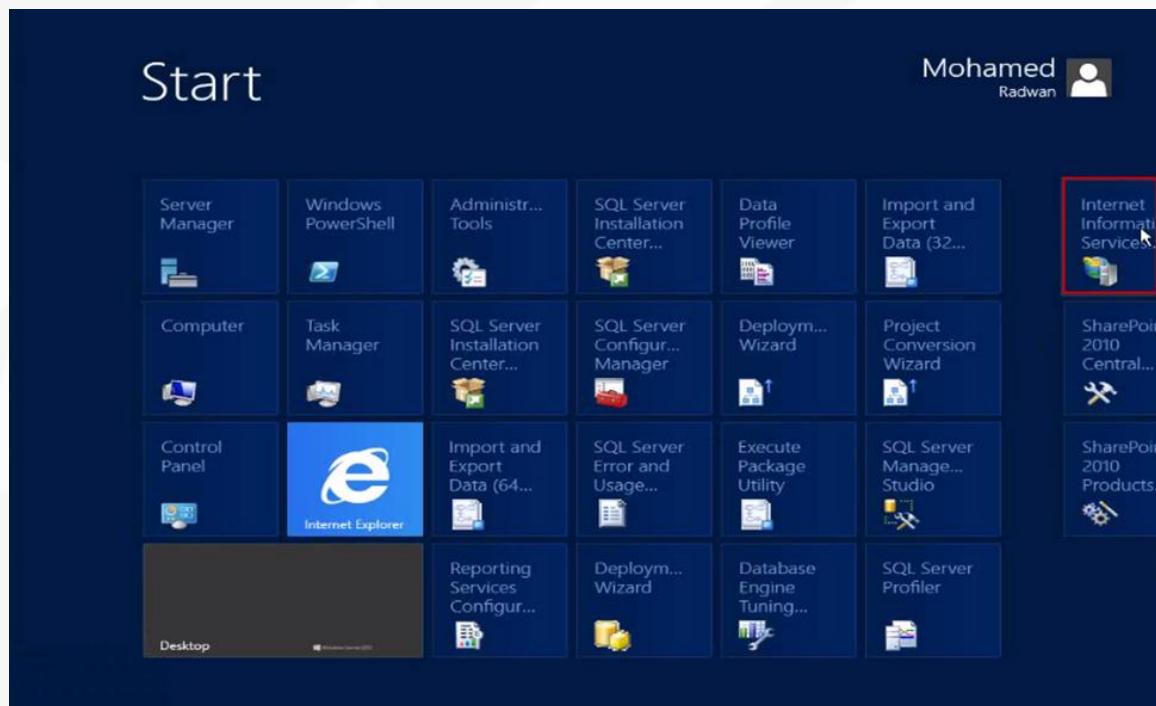


Watch the
Video

www.youtube.com/watch?v=kbXB4BZQUBQ

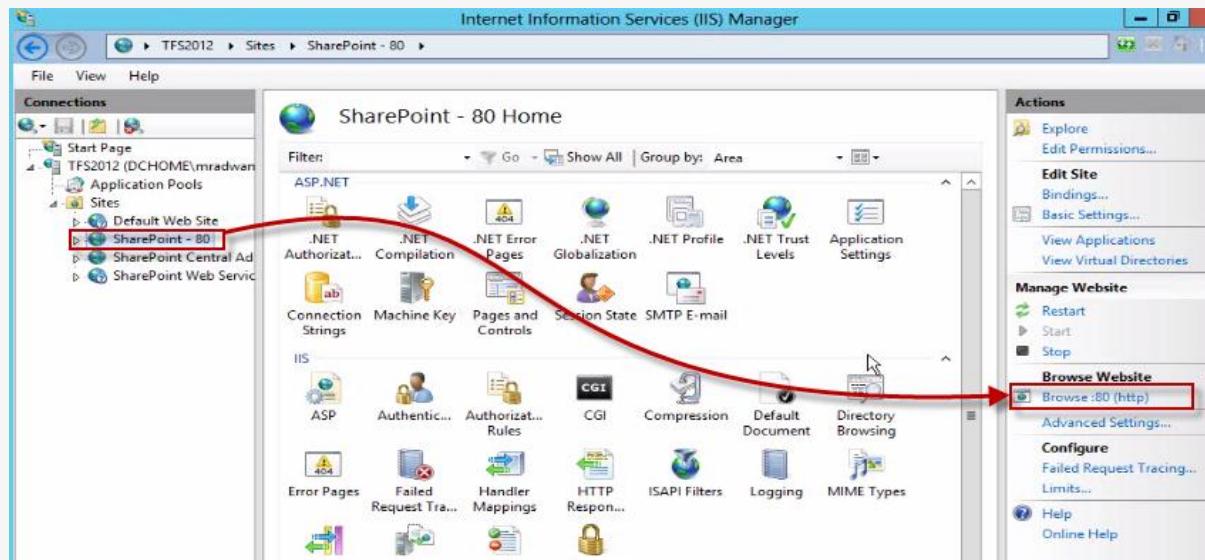
Verifying the Connection to the Web Applications

Launch “Internet Information Services” from Windows Server 2012 desktop.

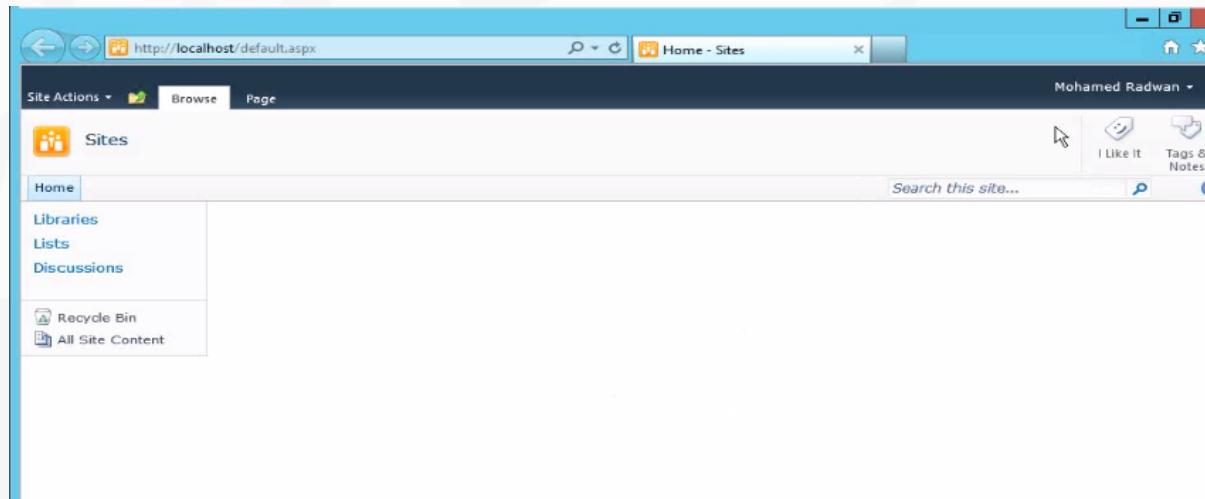


Appendix G: SharePoint Server 2010 SP1 Installation Verification

From the left pane, expand “**Sites**” then click the default web application “*SharePoint - 80*” and then click “**Browse**” from the right pane.

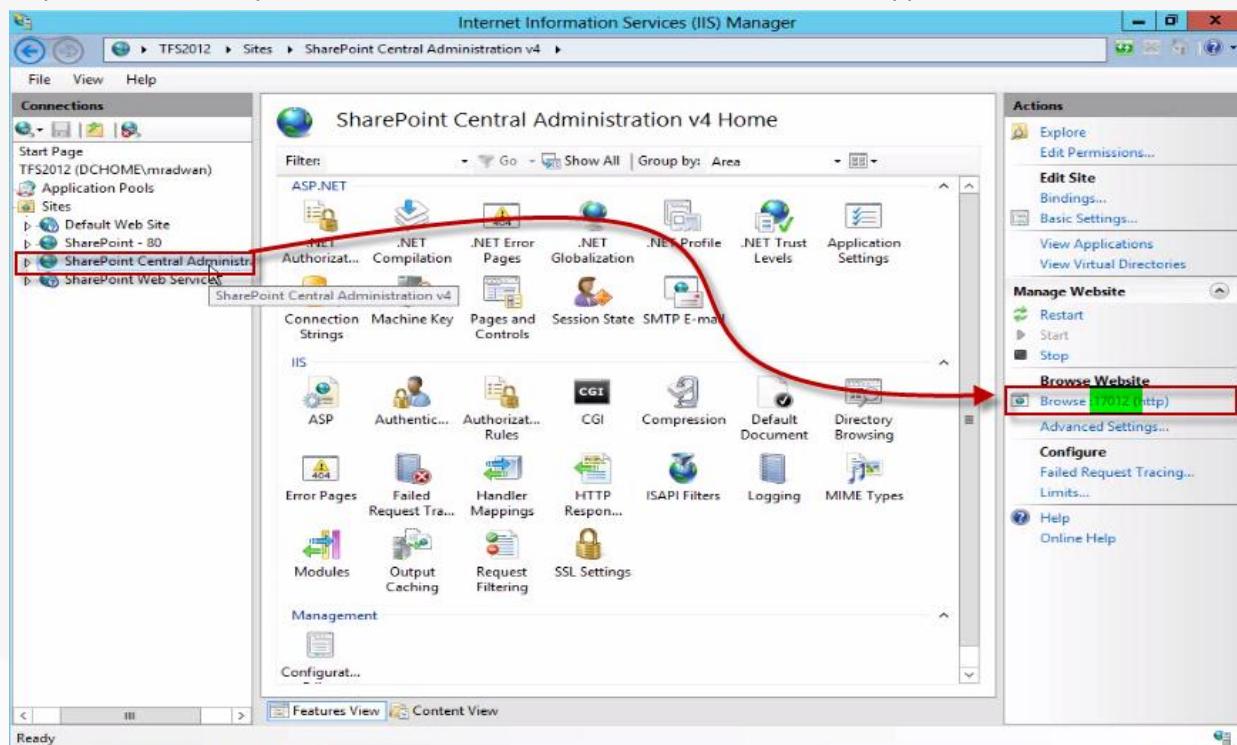


The web application should successfully open.

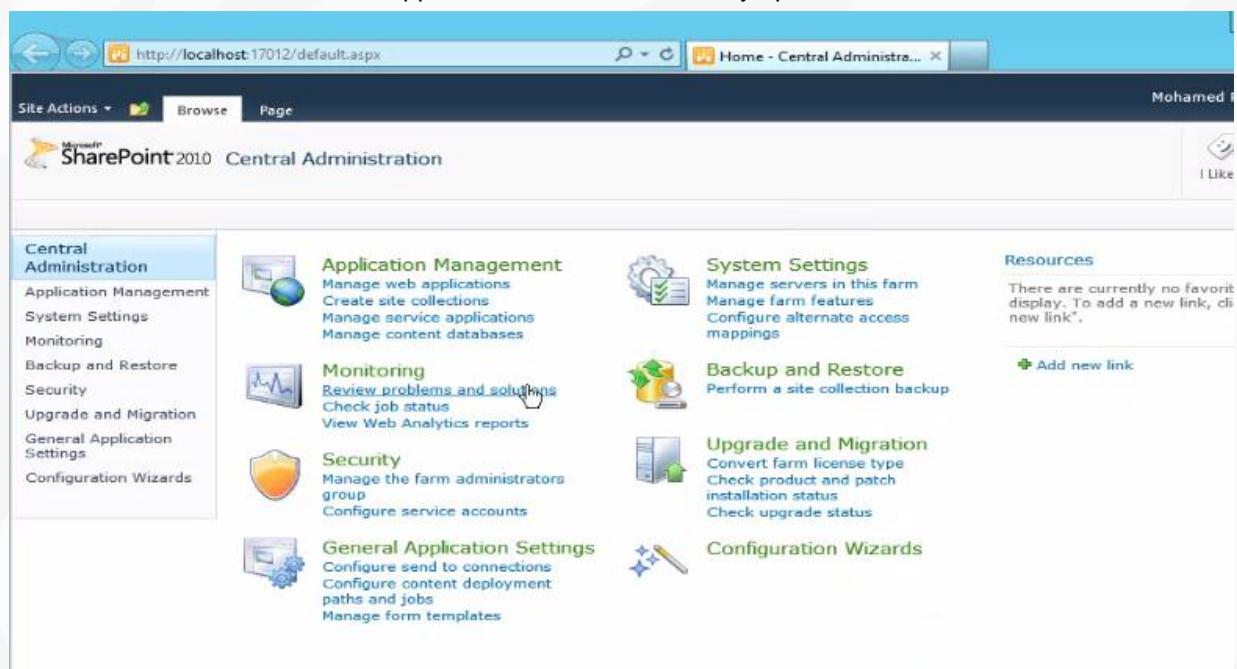


Appendix G: SharePoint Server 2010 SP1 Installation Verification

Repeat the same step for the “**SharePoint Central Administration**” web application.



The Central Administration web application should successfully open.



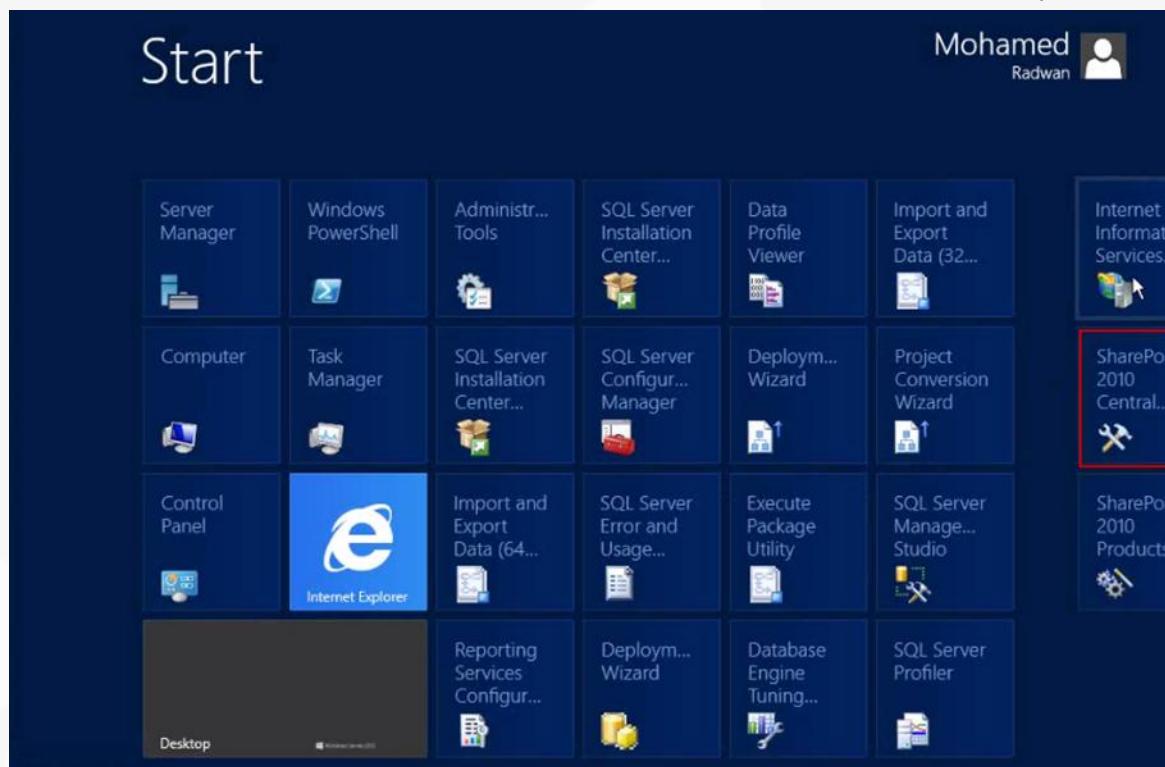


Watch the
Video

www.youtu.be/1td0pqj7EnI

Verifying the Recommended Authentication Settings

Launch “**SharePoint 2010 Central Administration**” from Windows Server 2012 desktop.

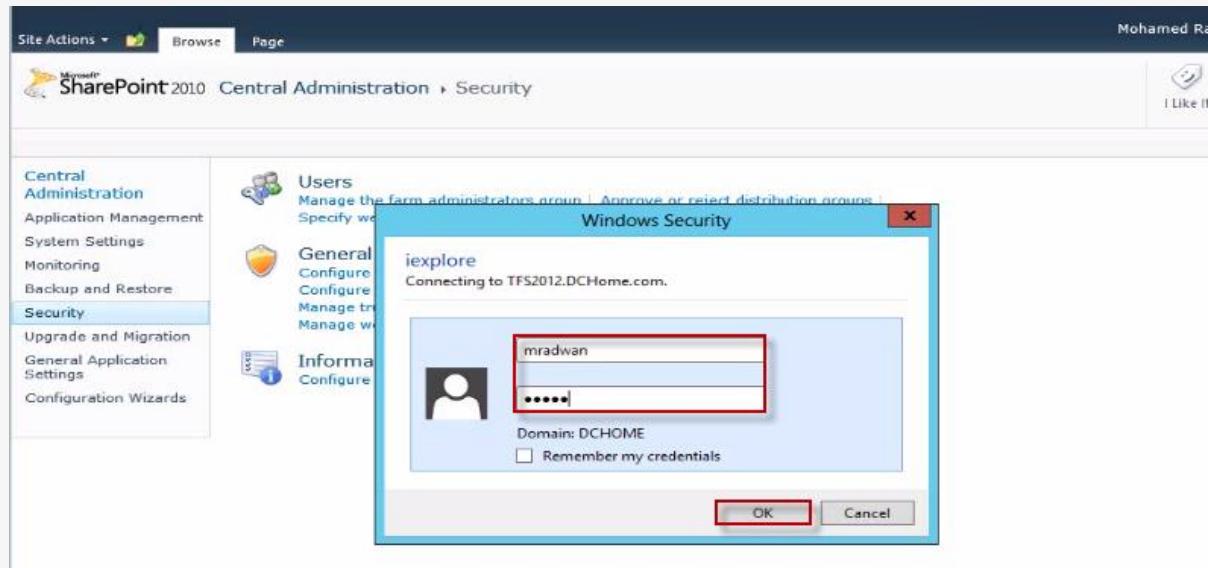


From the left pane, click “**Security**” then click the “**Specify authentication providers**” link located under the “**General Security**”.

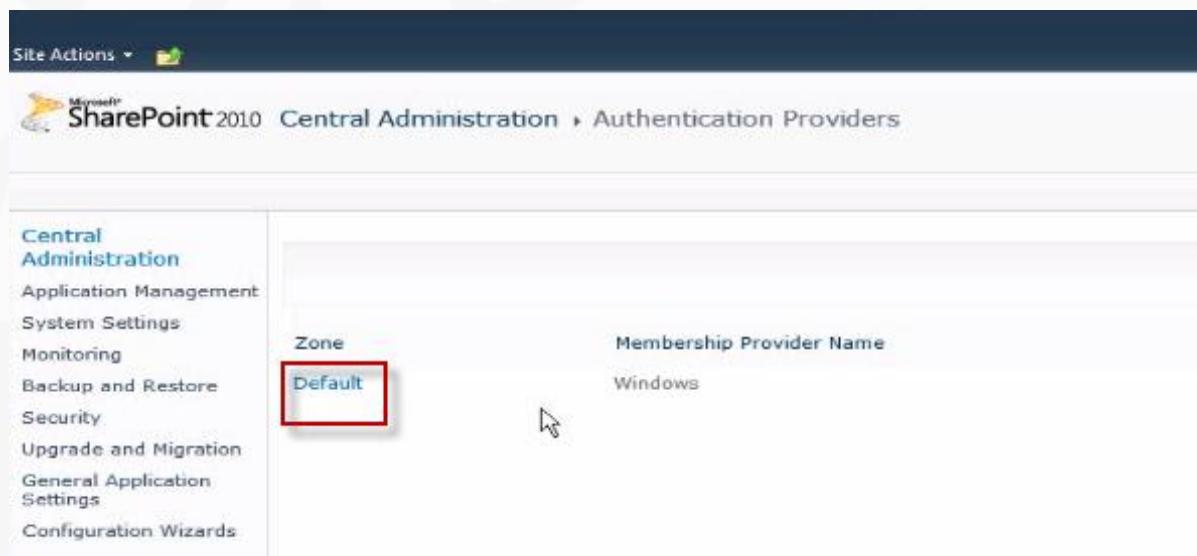
The screenshot shows the SharePoint 2010 Central Administration interface. The left navigation bar has a "Security" link that is highlighted with a red box. The main content area displays several sections: "Users", "General Security", and "Information policy". Under "General Security", there is a list of links including "Specify authentication providers", which is also highlighted with a red box.

Appendix G: SharePoint Server 2010 SP1 Installation Verification

Enter the domain admin credentials “**mradwan**” if prompted to then click “**OK**”.



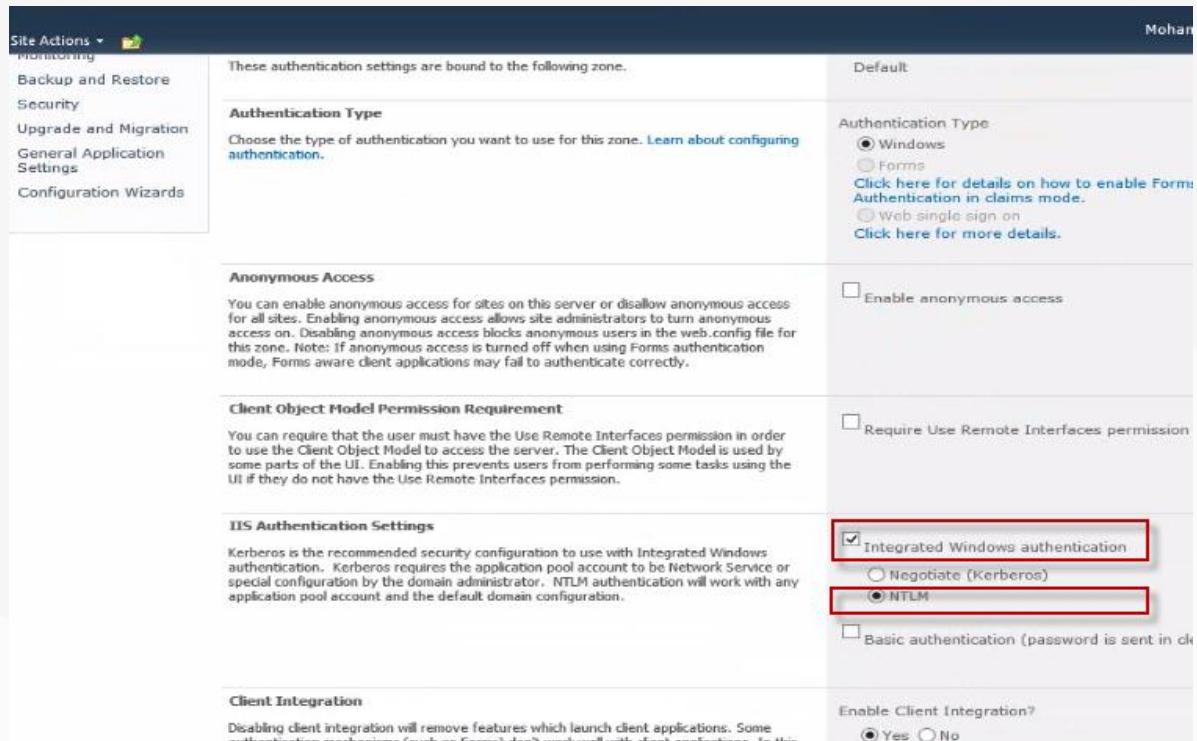
Click the “Default” zone.



The screenshot shows the SharePoint 2010 Central Administration interface. The 'Central Administration' navigation bar is visible on the left. In the main content area, the 'Authentication Providers' section is displayed. A table lists the zones and their corresponding membership provider names. The first row shows 'Zone' as 'Default' and 'Membership Provider Name' as 'Windows'. The 'Default' cell is highlighted with a red border. A cursor arrow is pointing towards the 'Default' cell.

Zone	Membership Provider Name
Default	Windows

Ensure that the “**Integrated Windows authentication**” and “**NTLM**” options are both selected for the “**IIS Authentication Settings**”.



The screenshot shows the SharePoint Site Actions - Monitoring page. Under the "Authentication Type" section, the "Windows" radio button is selected. In the "IIS Authentication Settings" section, the "Integrated Windows authentication" and "NTLM" radio buttons are selected, while "Negotiate (Kerberos)" is unselected. Other options like "Enable anonymous access" and "Require Use Remote Interfaces permission" are also visible.

Site Actions ▾		Mohan
Monitoring	These authentication settings are bound to the following zone.	Default
Backup and Restore	Authentication Type	
Security	Choose the type of authentication you want to use for this zone. Learn about configuring authentication .	
Upgrade and Migration	<input checked="" type="radio"/> Windows <input type="radio"/> Forms Click here for details on how to enable Forms Authentication in claims mode. <input type="radio"/> web single sign on Click here for more details.	
General Application Settings	<input type="checkbox"/> Enable anonymous access	
Configuration Wizards	<input type="checkbox"/> Require Use Remote Interfaces permission	
	IIS Authentication Settings	
	<input checked="" type="checkbox"/> Integrated Windows authentication <input type="radio"/> Negotiate (Kerberos) <input checked="" type="radio"/> NTLM <input type="checkbox"/> Basic authentication (password is sent in clear text)	
	Client Integration <input type="checkbox"/> Enable Client Integration? <input checked="" type="radio"/> Yes <input type="radio"/> No	



Watch the

Video

www.youtube.com/watch?v=f8wNqyDPeo4

Verifying SharePoint 2010 Dashboard Compatibility

NOTE: To verify that SharePoint 2010 Dashboard Compatibility is properly configured, you can review the same steps explained in [Chapter 8](#) and make sure that your current configurations are identical to them.

Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

In this appendix, you will verify the installation of Team Foundation Server 2012, we installed and configure many components in the previous chapters, so the main objective of this Chapter is to make sure that all the previous installation and configuration working well and integrated with each other, this verification will need to create a dummy team project on TFS so we prefer to take a snapshot before our verification and revert it back to the original state after we verified that everything are OK.

This Chapter will walk you through how to install Team Explorer 2012, create New Team Project, manually Process Warehouse and Analysis Service and verify Dashboard for Excel Reports.

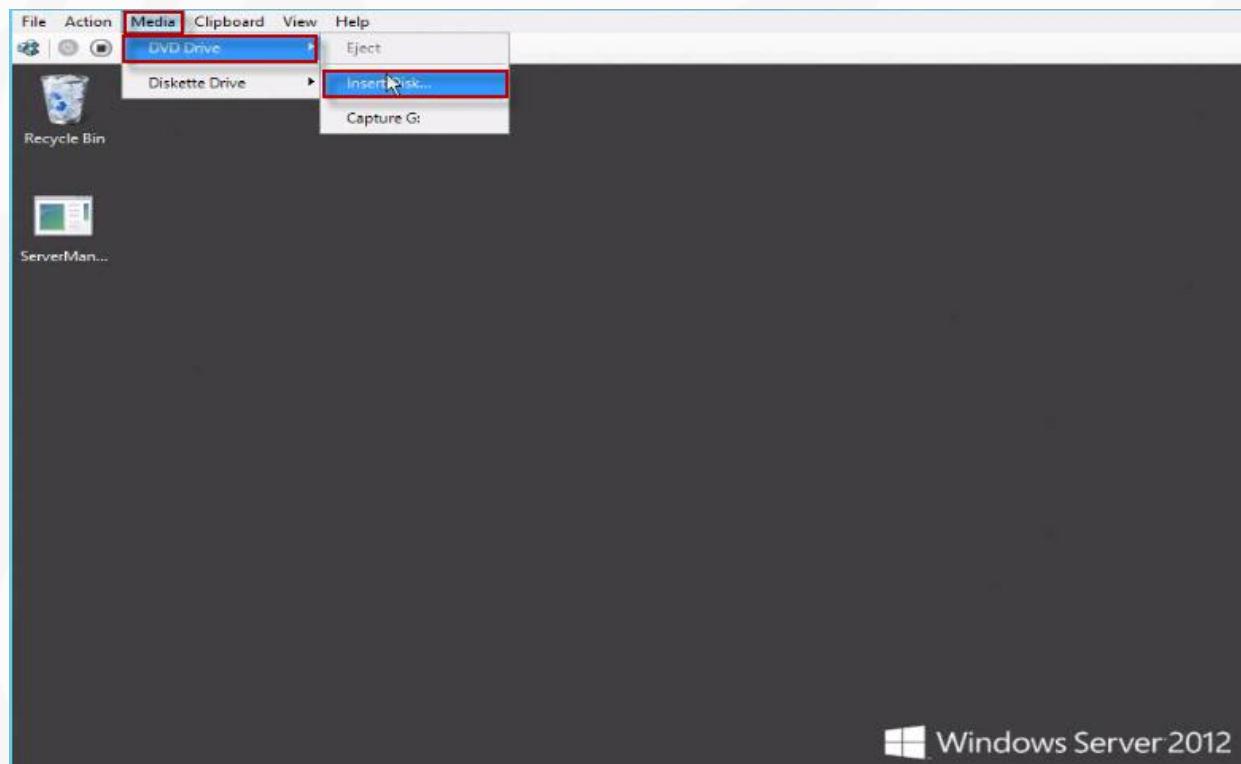


Watch the
Video

www.youtube.com/watch?v=WHZHT1hhDig

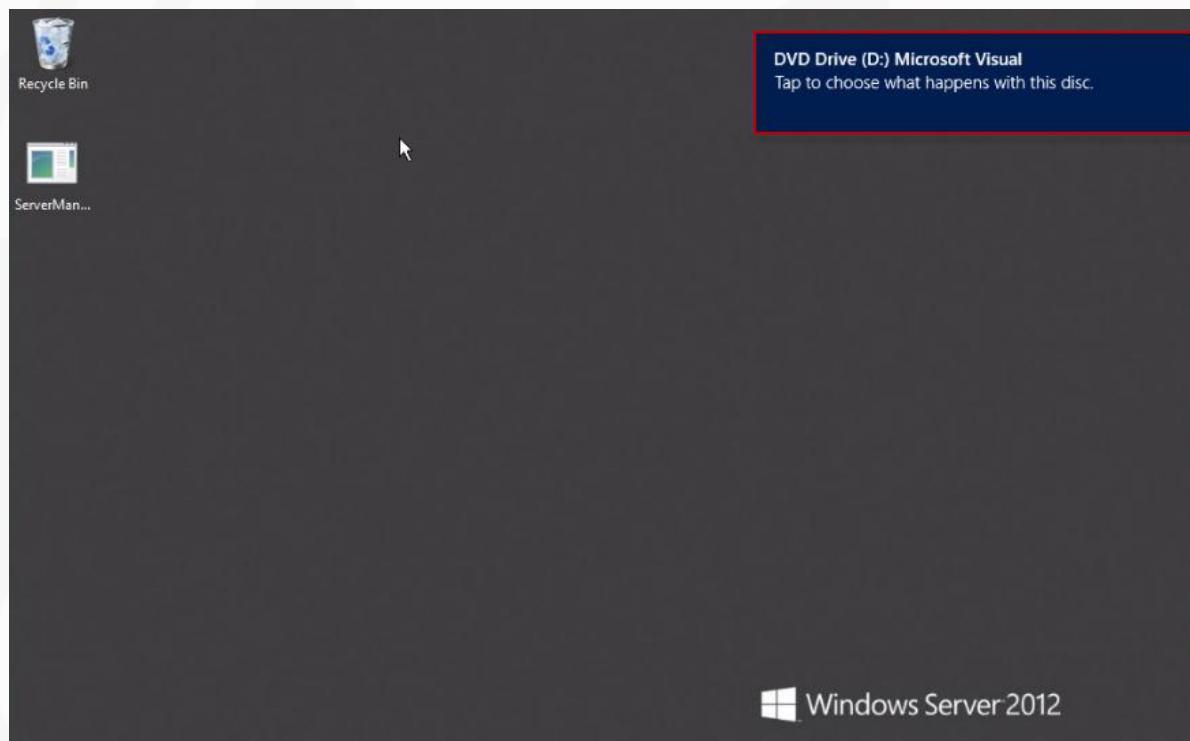
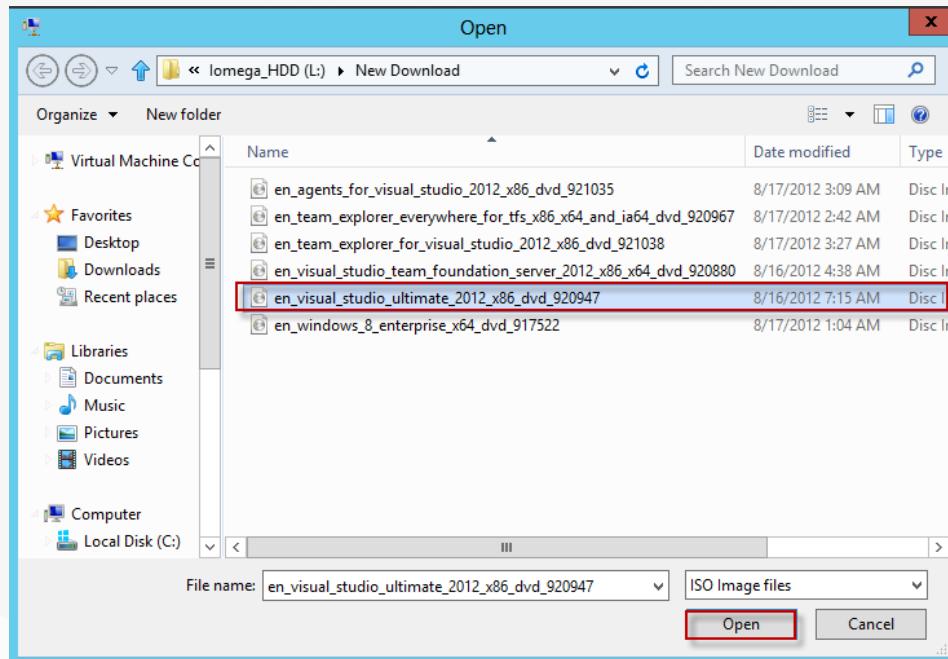
Installing Visual Studio 2012 Ultimate Edition

From the Hyper-V Manager console, double-click the “TFS2012” Virtual Machine then click “Media” from the top menu bar then choose “DVD Drive” and then choose “Insert Disk”.



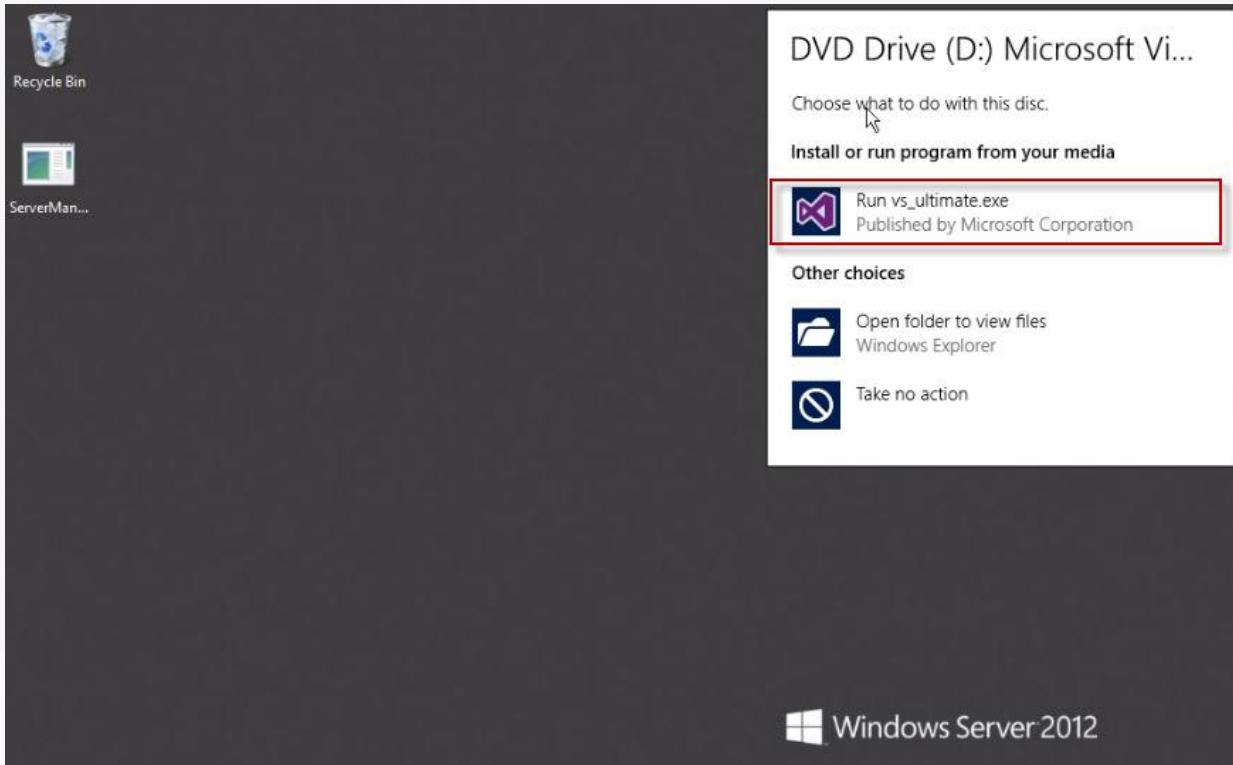
Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Browse to the folder where you are storing the Visual Studio Ultimate 2012 ISO image, choose it and then click “**Open**”. A blue window pops up, click it.



Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Click “Run vs_ultimate.exe”.



The installation wizard launches.



Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Select “I agree to the License terms and conditions” then click “Next”.

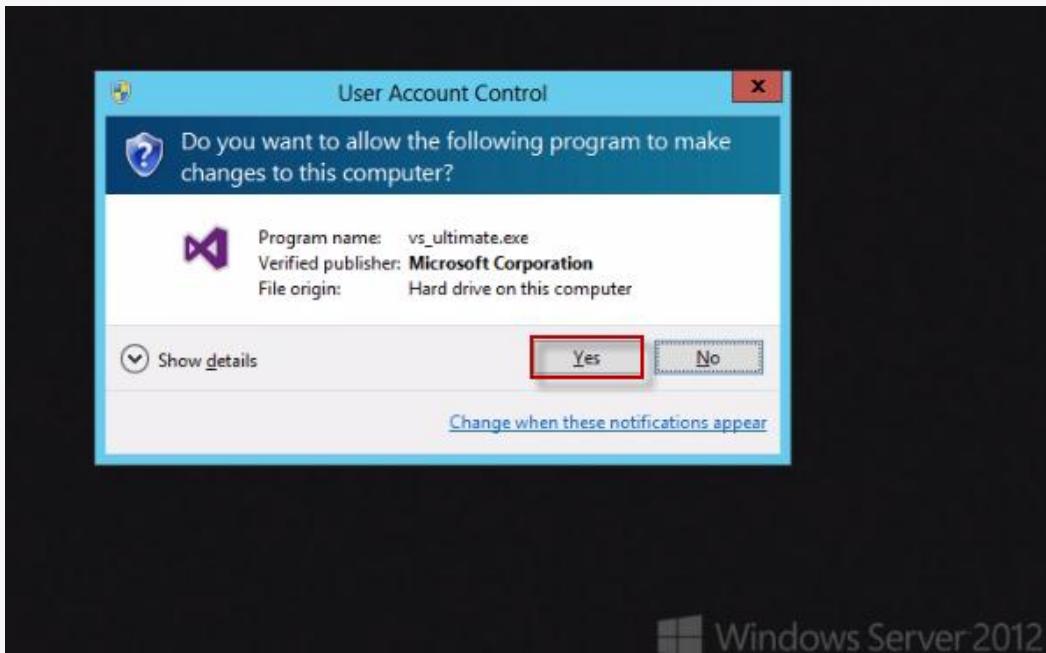


Select the “Select All” checkbox then click “INSTALL”.

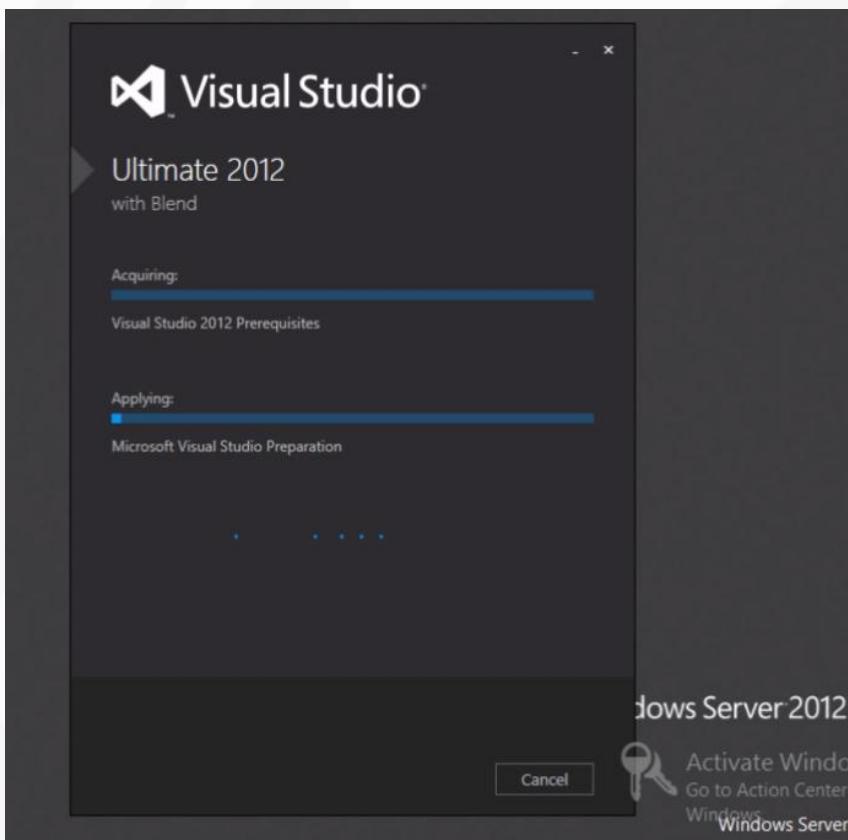


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

If the “User Account Control” dialog box pops up, click “Yes”.

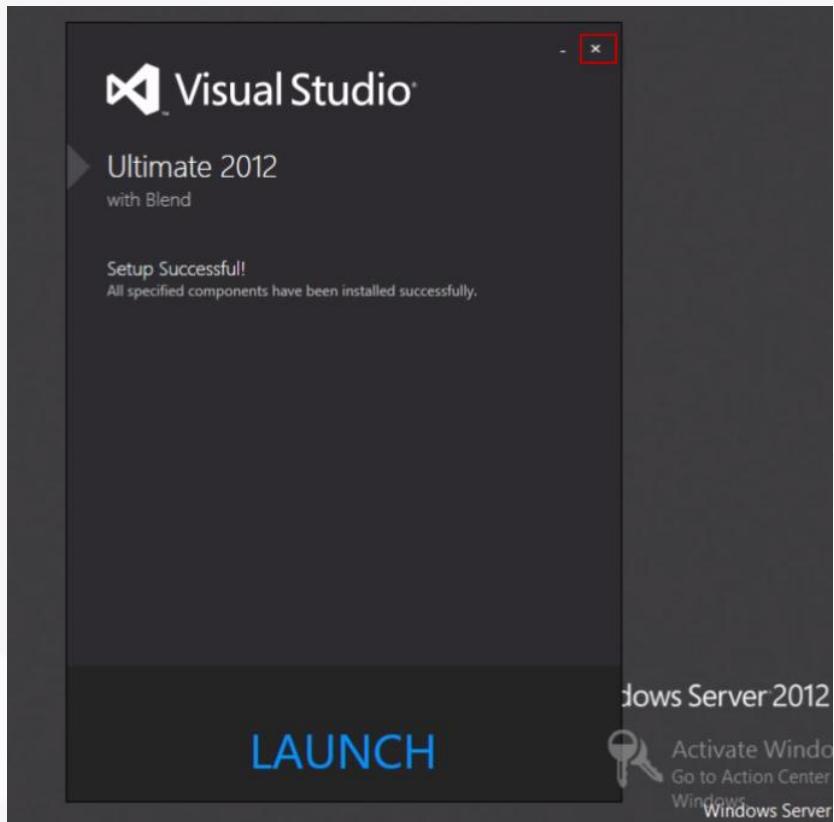


The installation process starts.



Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

After the installation completes, close the window.



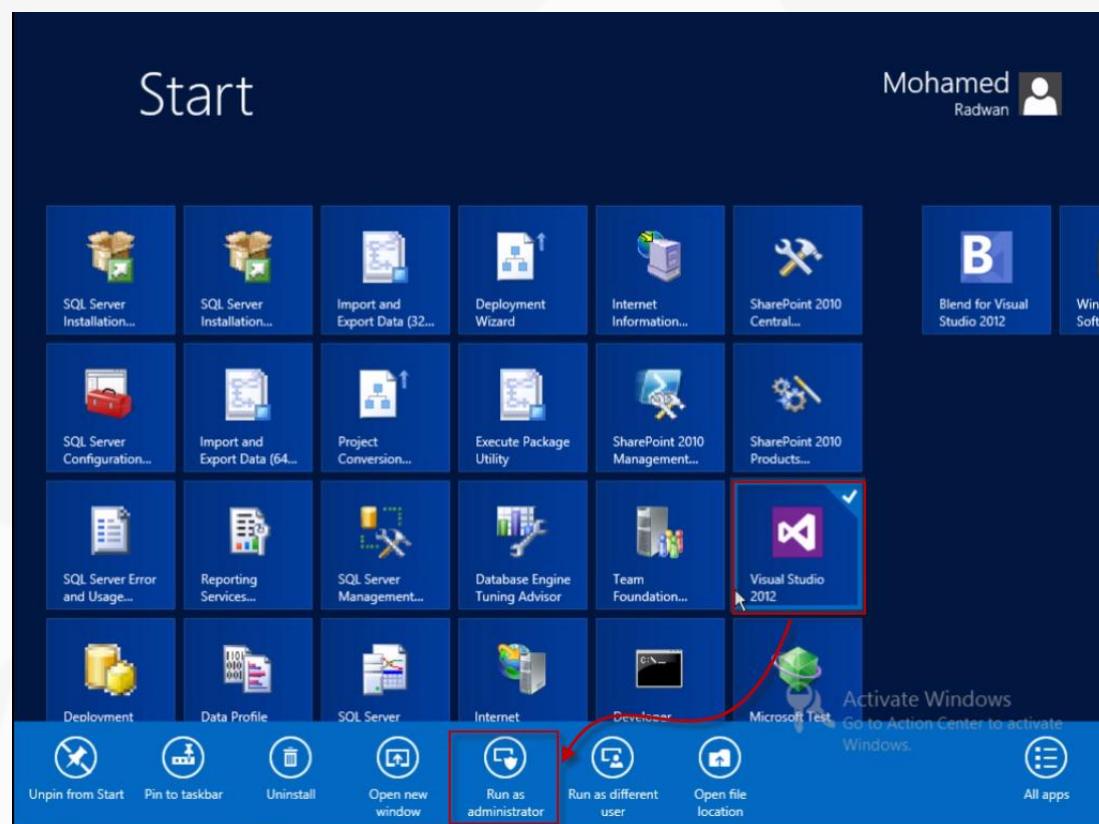


Creating a New Team Project

Watch the
Video

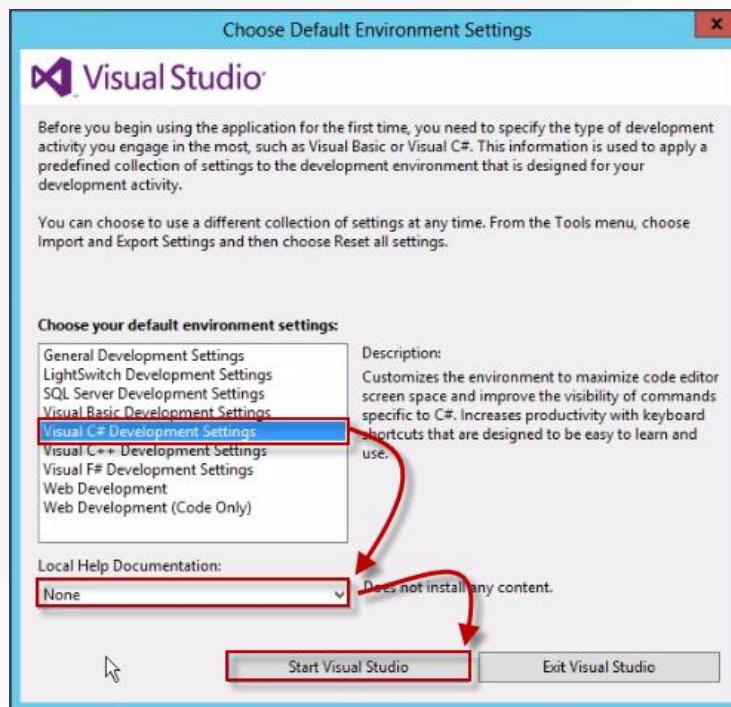
www.youtube.com/watch?v=wuPLy4UrRyo

From Windows Server 2012 desktop, right-click “Visual Studio 2012” then click “Run as Administrator”.

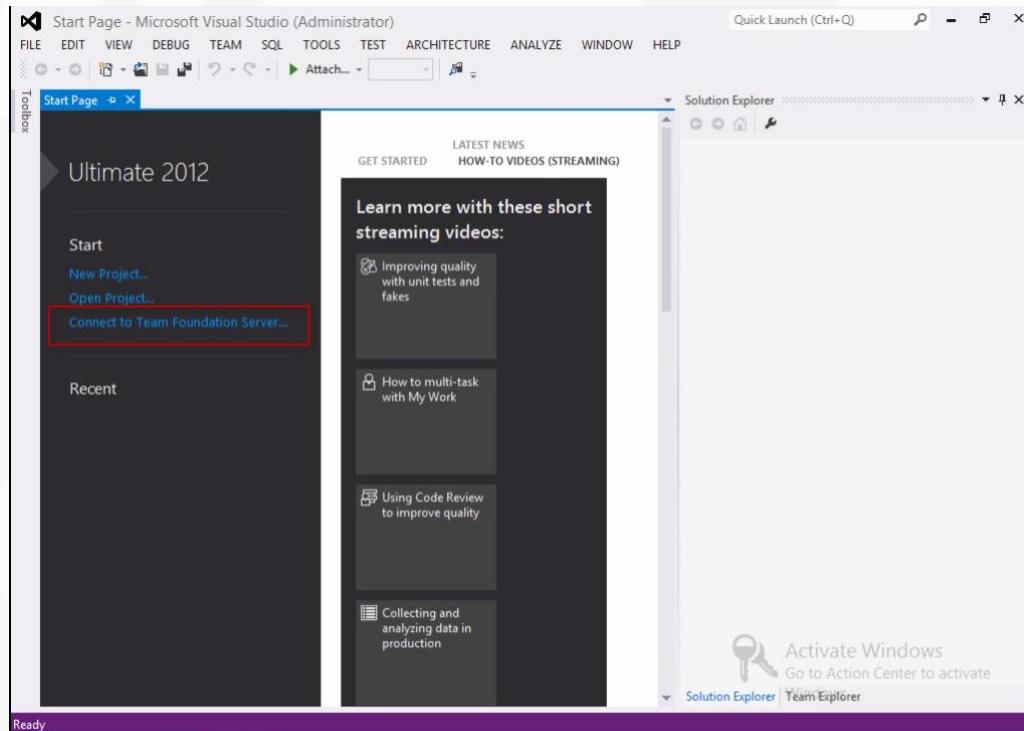


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

When prompted to “**Choose Default Environment Settings**”, select “**Visual C# Development Settings**” then select “**None**” for the “**Local Help Documentation**” and then click “**Start Visual Studio**”.

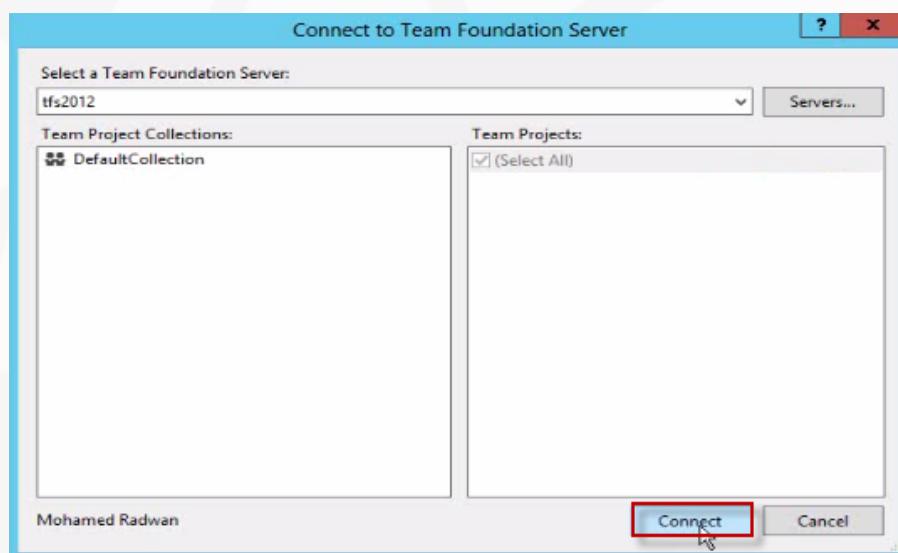
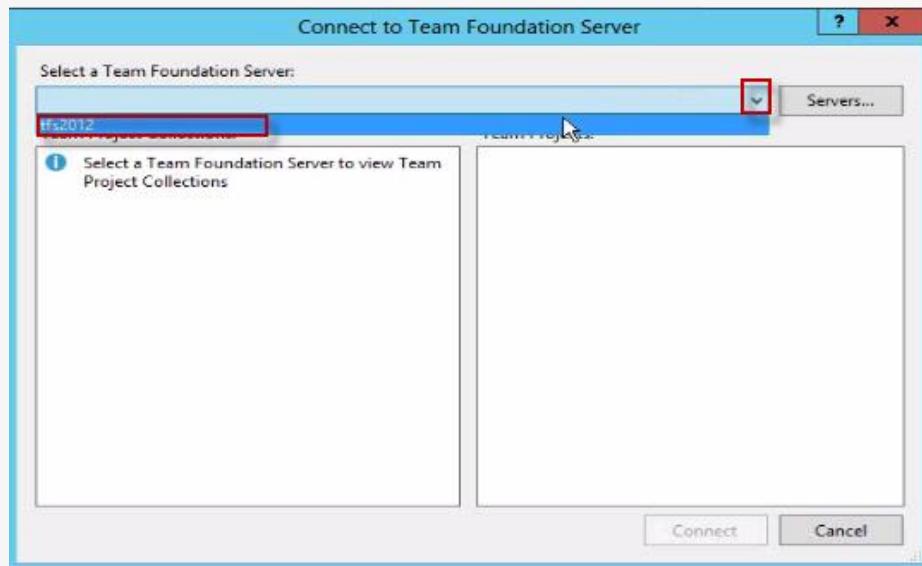


Click “**Connect to Team Foundation Server**” from Visual Studio 2012 “**Start Page**”,



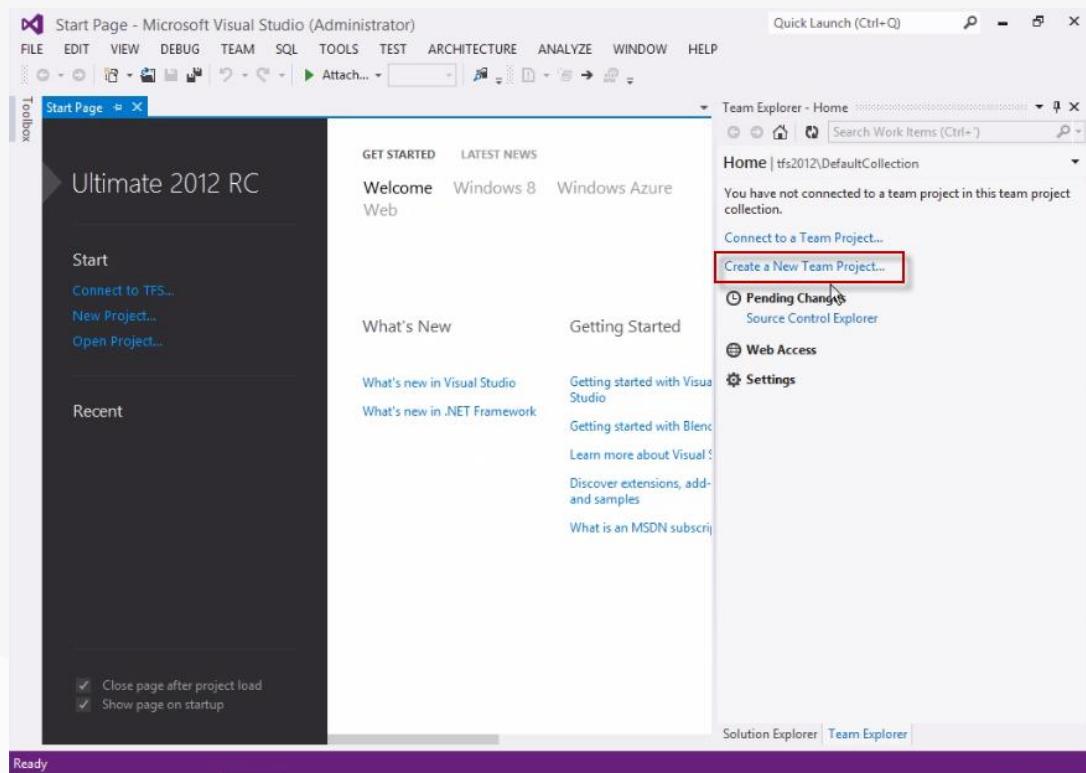
Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

From the server dropdown list, select the “TFS2012” server then click “Connect”.

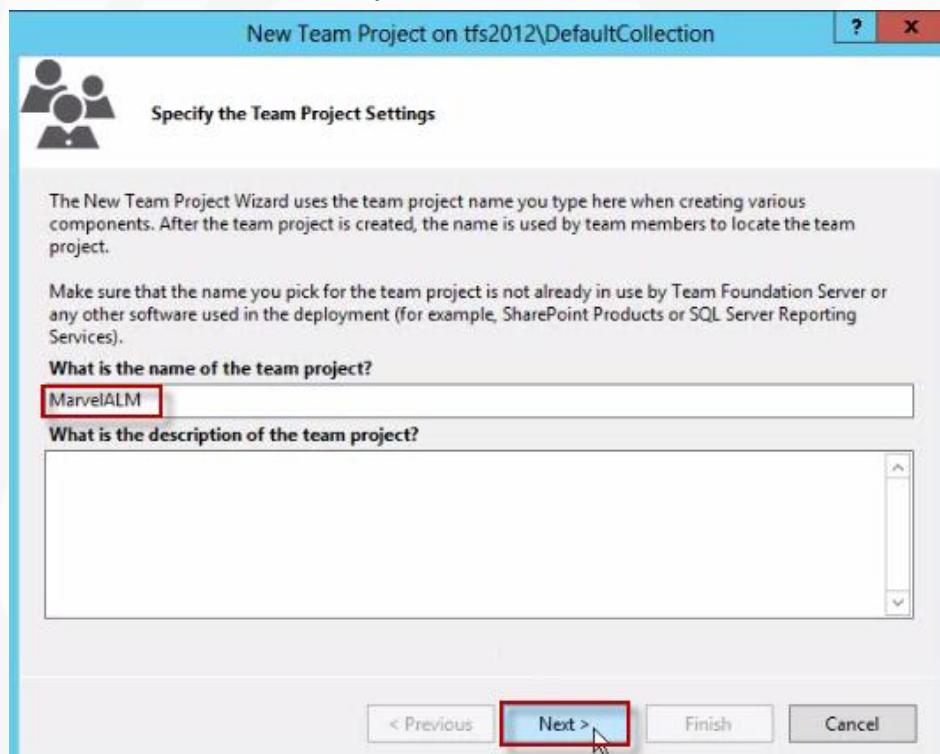


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Click "Create a New Team Project" from the "Team Explorer" window,

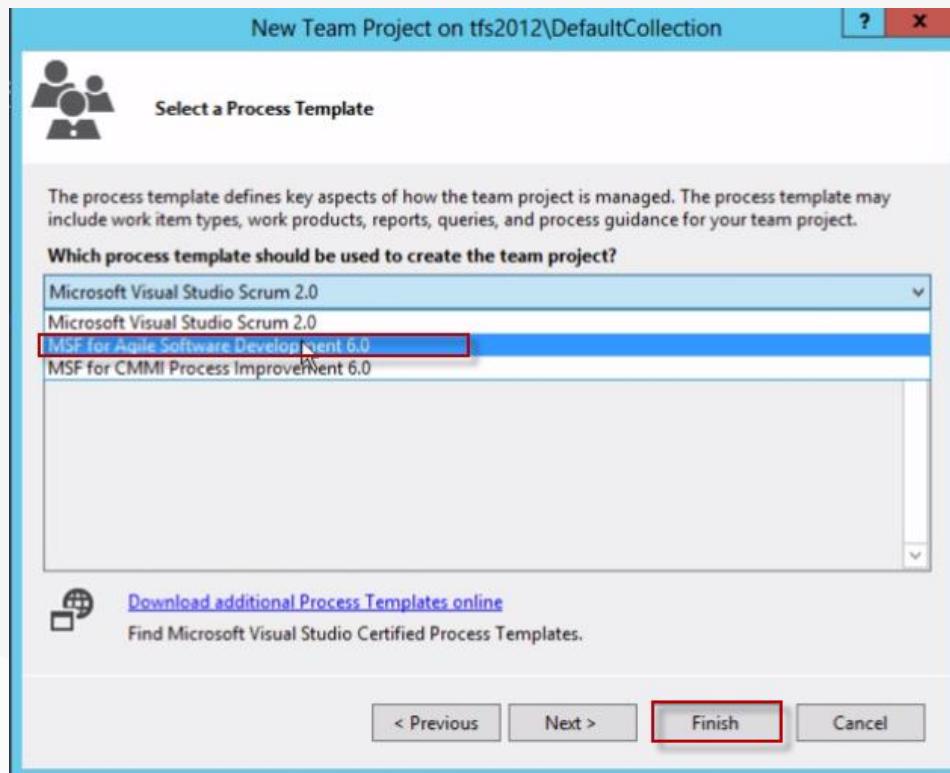


Enter a name for the Team Project then click "Next".

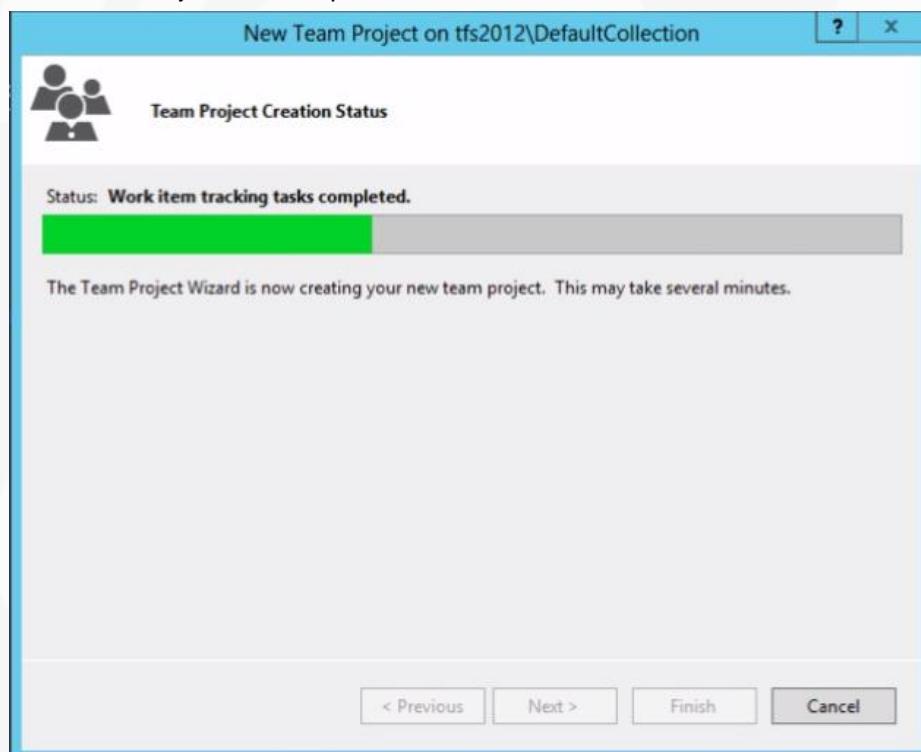


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Select the “MSF for Agile Software Development 6.0” process template then click “Finish”.

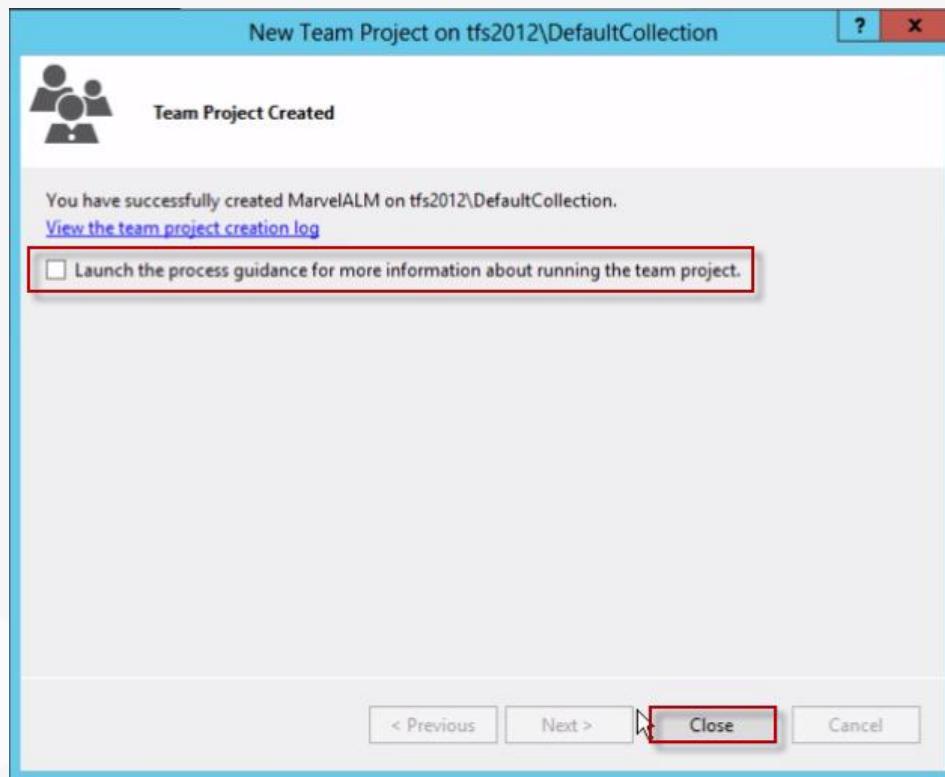


The Team Project creation process starts.



Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

After the Team Project creation process successfully completes, deselect the “**Lunch the process guidance**” checkbox then click “**Close**”.





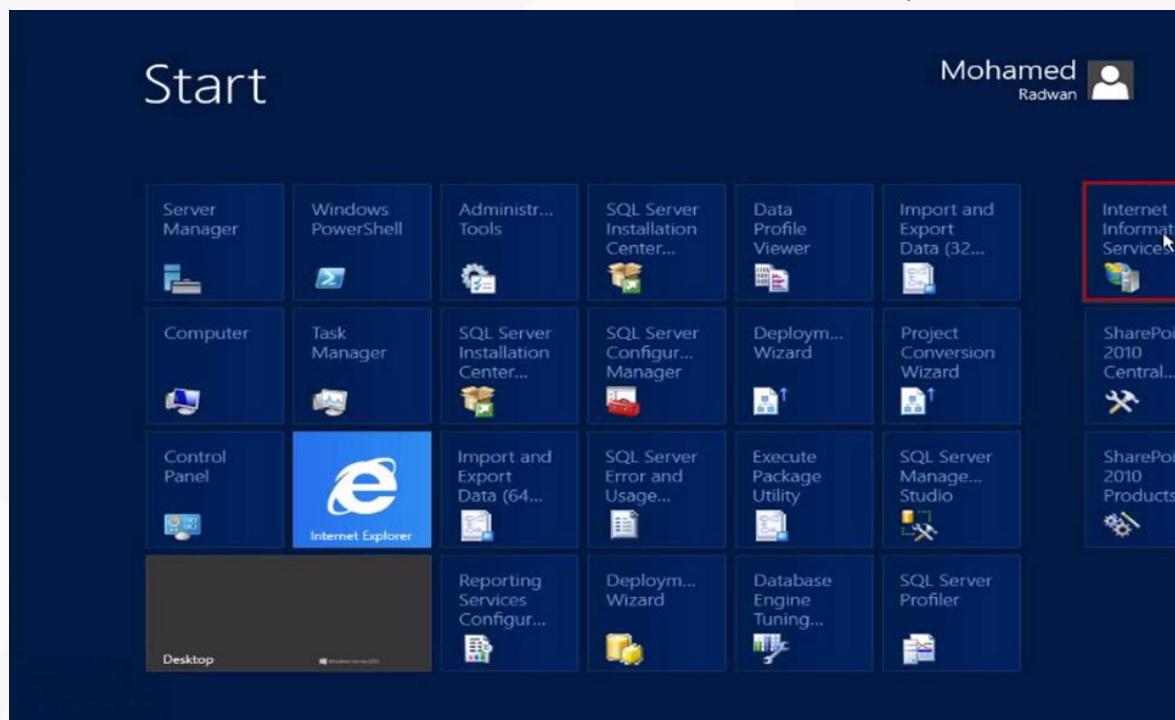
Watch the

Video

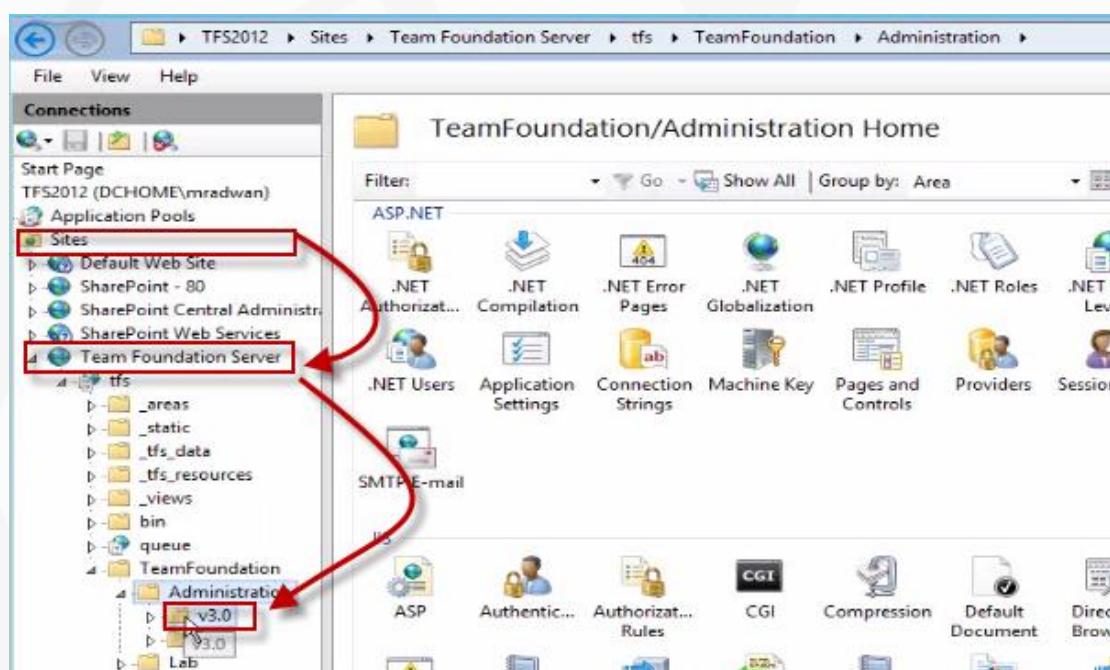
www.youtube.com/watch?v=DmH9aaNSkMs

Processing the Warehouse and the Analysis Databases

Launch “Internet Information Services” from Windows Server 2012 desktop.

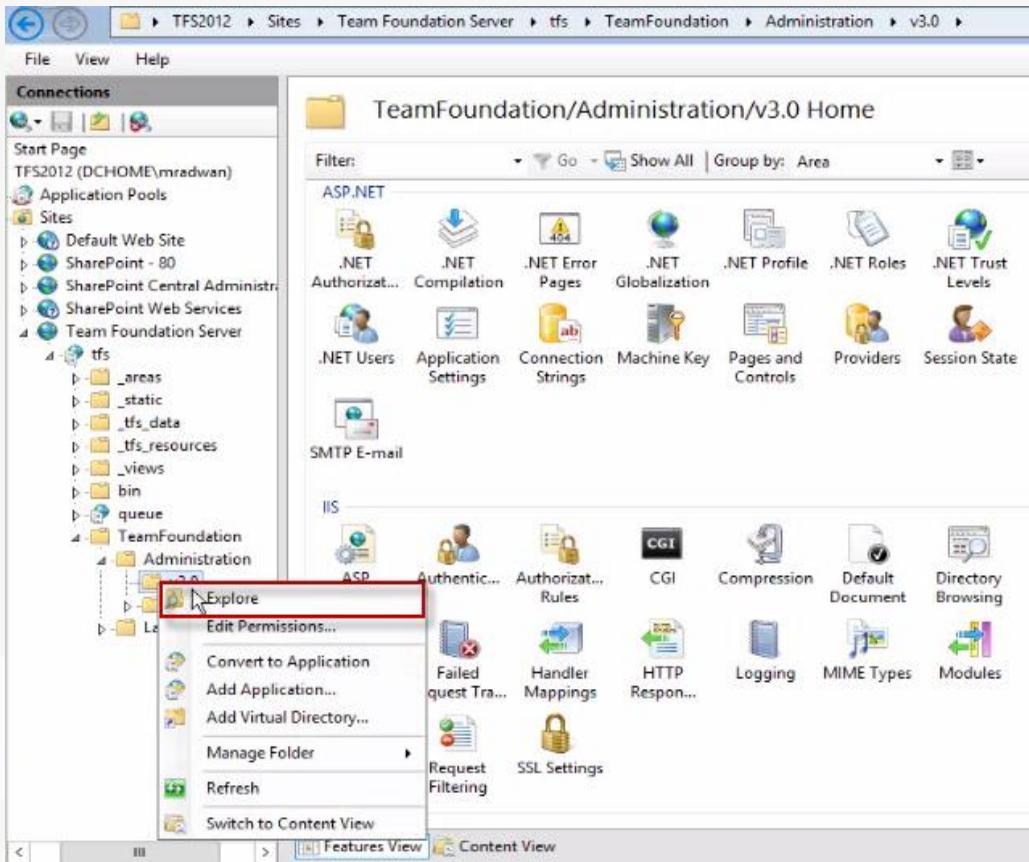


Click Sites → Team Foundation Server → tfs → TeamFoundation → Administration → v.3.0.



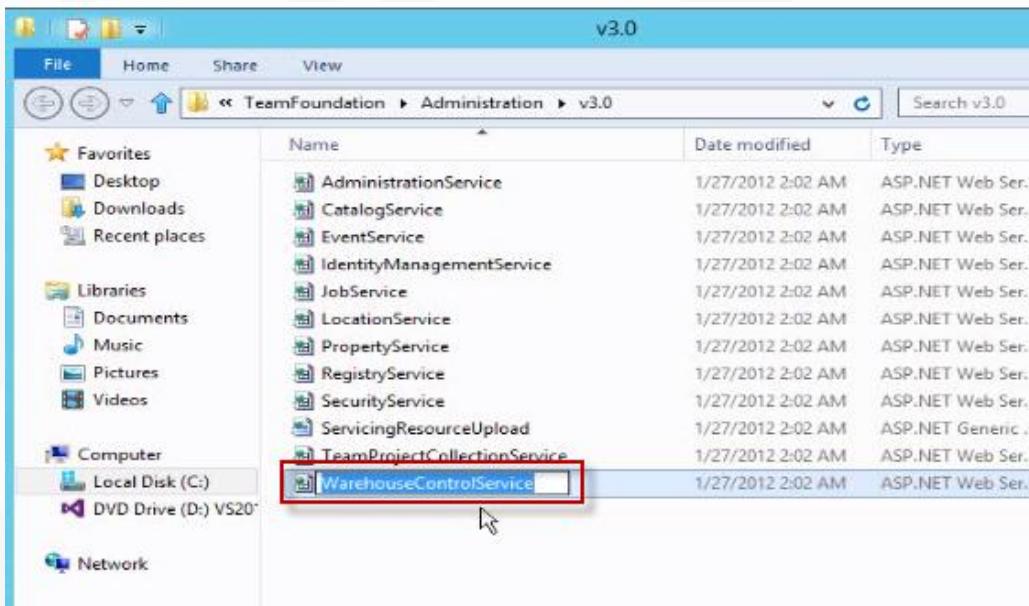
Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Right-click “v.3.0” then click “Explore”.



The screenshot shows the 'TeamFoundation/Administration/v3.0 Home' page in IIS Manager. On the left, there's a navigation tree with 'Connections' expanded, showing 'TFS2012 (DCHOME\mradowan)' and its sub-sites like 'Default Web Site', 'SharePoint - 80', etc. Under 'Team Foundation Server', it lists 'tfs' and 'TeamFoundation'. 'TeamFoundation' has 'Administration' and 'v3.0' as children. A context menu is open over the 'v3.0' folder, with 'Explore' highlighted by a red box. Other options in the menu include 'Edit Permissions...', 'Convert to Application', 'Add Application...', 'Add Virtual Directory...', 'Manage Folder', 'Refresh', and 'Switch to Content View'. The main pane displays various IIS settings icons grouped into sections: ASP.NET (e.g., .NET Authorization, .NET Compilation), Application Settings, Connection Strings, Machine Key, Pages and Controls, Providers, Session State, and IIS (e.g., ASP, Authentication, Authorization Rules, CGI, Compression, Default Document, Directory Browsing, Failed Request Tracing, Handler Mappings, HTTP Response, Logging, MIME Types, Modules, Request Filtering, SSL Settings).

Copy the name of the “WarehouseControlService. asmx” web service.



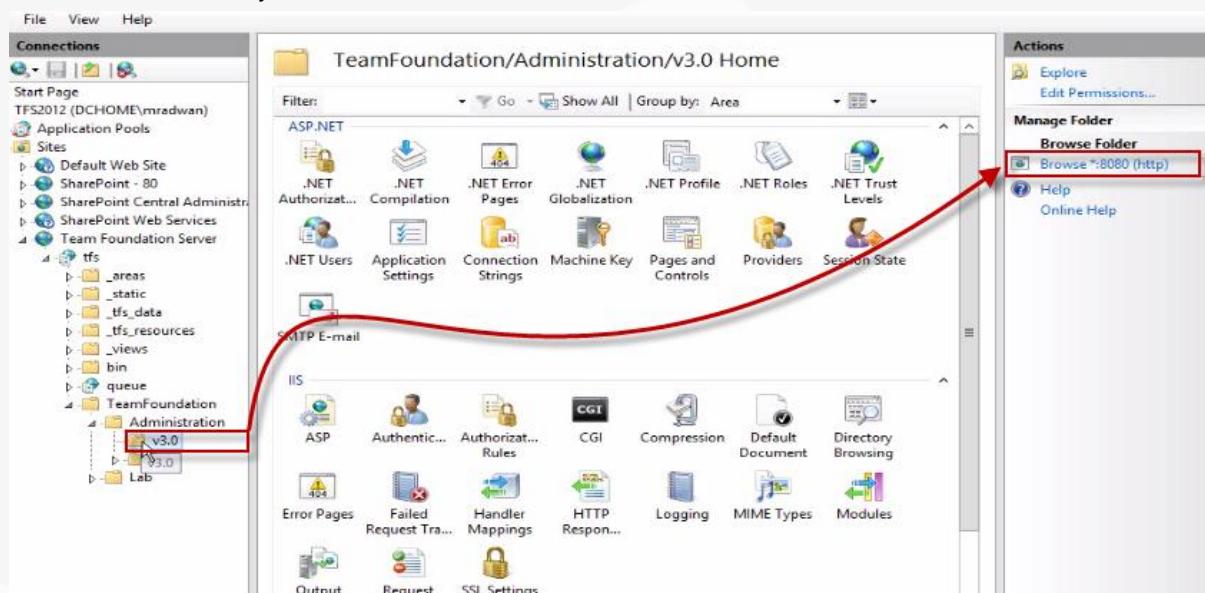
The screenshot shows a file explorer window titled 'v3.0'. The left sidebar includes 'Favorites' (Desktop, Downloads, Recent places), 'Libraries' (Documents, Music, Pictures, Videos), and 'Computer' (Local Disk (C:), DVD Drive (D:) VS2012, Network). The main area is a table listing files and folders. The 'WarehouseControlService' file is selected and highlighted by a red box. The table columns are 'Name', 'Date modified', and 'Type'. Other listed items include AdministrationService, CatalogService, EventService, IdentityManagementService, JobService, LocationService, PropertyService, RegistryService, SecurityService, ServicingResourceUpload, TeamProjectCollectionService, and WarehouseControlService.

Name	Date modified	Type
AdministrationService	1/27/2012 2:02 AM	ASP.NET Web Ser..
CatalogService	1/27/2012 2:02 AM	ASP.NET Web Ser..
EventService	1/27/2012 2:02 AM	ASP.NET Web Ser..
IdentityManagementService	1/27/2012 2:02 AM	ASP.NET Web Ser..
JobService	1/27/2012 2:02 AM	ASP.NET Web Ser..
LocationService	1/27/2012 2:02 AM	ASP.NET Web Ser..
PropertyService	1/27/2012 2:02 AM	ASP.NET Web Ser..
RegistryService	1/27/2012 2:02 AM	ASP.NET Web Ser..
SecurityService	1/27/2012 2:02 AM	ASP.NET Web Ser..
ServicingResourceUpload	1/27/2012 2:02 AM	ASP.NET Generic ..
TeamProjectCollectionService	1/27/2012 2:02 AM	ASP.NET Web Ser..
WarehouseControlService	1/27/2012 2:02 AM	ASP.NET Web Ser..

Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

From the IIS manager, ensure that “**v.3.0**” is selected then click “**Browse**” from the right pane.

This is the folder under which the web services that you will use to manually process the Warehouse and Analysis Services are located.



Internet Explorer launches, navigate to the test page of the “WarehouseControlService.asmx” web service “<http://tfs2012:8080/tfs/TeamFoundation/Administration/v3.0/WarehouseControlService.asmx>”.



HTTP Error 403.14 – Forbidden

The Web server is configured to not list the contents of this directory.

Most likely causes:

- A default document is not configured for the requested URL, and directory browsing is not enabled on the server.

Things you can try:

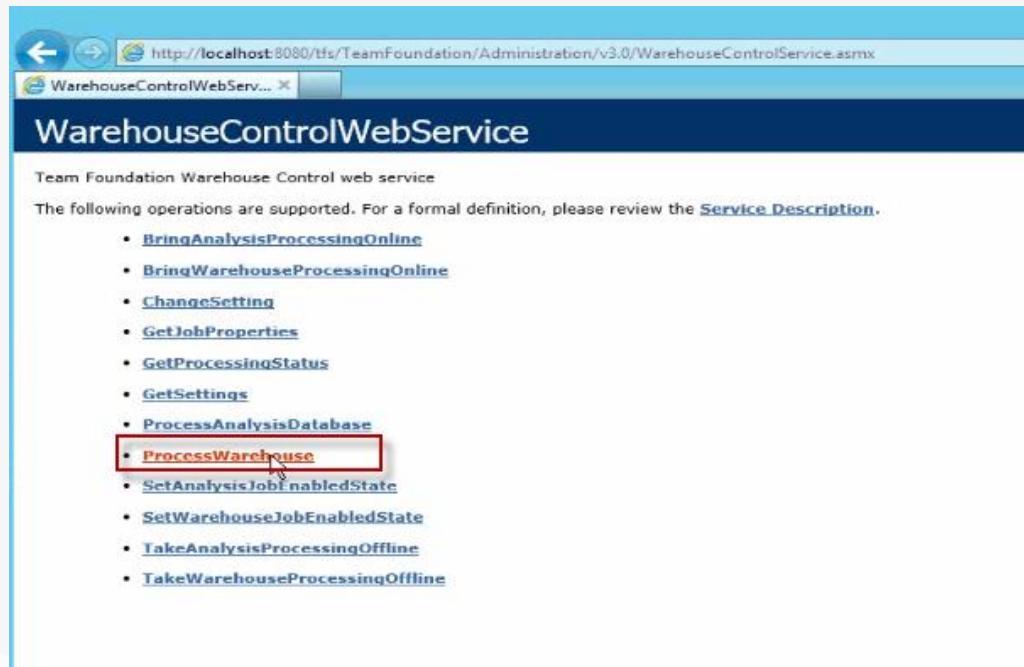
- If you do not want to enable directory browsing, ensure that a default document is configured and that the file exists.
- Enable directory browsing using IIS Manager.
 - Open IIS Manager.
 - In the Features view, double-click Directory Browsing.
 - On the Directory Browsing page, in the Actions pane, click Enable.
- Verify that the configuration/system.webServer/directoryBrowse@enabled attribute is set to true in the site or application configuration file.

Detailed Error Information:

Module	DirectoryListingModule	Requested URL	http://localhost:8080/tfs/TeamFoundation/Administration/v3.0/WarehouseControlService.asmx
Notification	ExecuteRequestHandler	Physical Path	C:\Program Files\Microsoft Team Foundation Server 11.0\Application Tier\Web Services\TeamFoundation\Administration\v3.0\
Handler	StaticFile	Logon Method	NTLM
Error Code	0x00000000	Logon User	DCHOME\MRadwan

Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

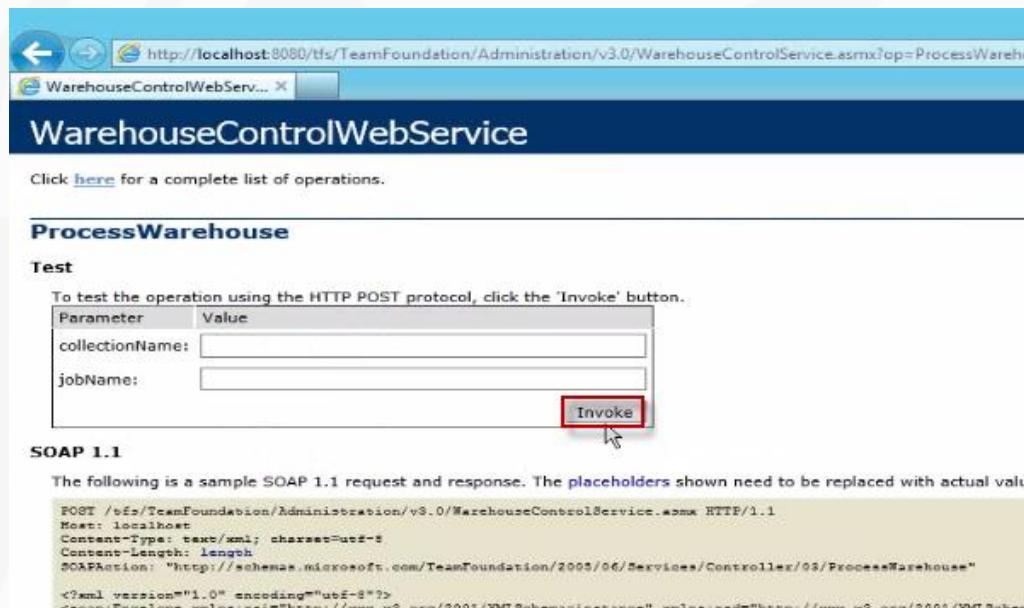
Click “**ProcessWarehouse**”.



The following operations are supported. For a formal definition, please review the [Service Description](#).

- [BringAnalysisProcessingOnline](#)
- [BringWarehouseProcessingOnline](#)
- [ChangeSetting](#)
- [GetJobProperties](#)
- [GetProcessingStatus](#)
- [GetSettings](#)
- [ProcessAnalysisDatabase](#)
- [**ProcessWarehouse**](#)
- [SetAnalysisJobEnabledState](#)
- [SetWarehouseJobEnabledState](#)
- [TakeAnalysisProcessingOffline](#)
- [TakeWarehouseProcessingOffline](#)

Leave both textboxes empty then click “**Invoke**”.



To test the operation using the HTTP POST protocol, click the 'Invoke' button.

Parameter	Value
collectionName:	<input type="text"/>
jobName:	<input type="text"/>

Invoke

SOAP 1.1

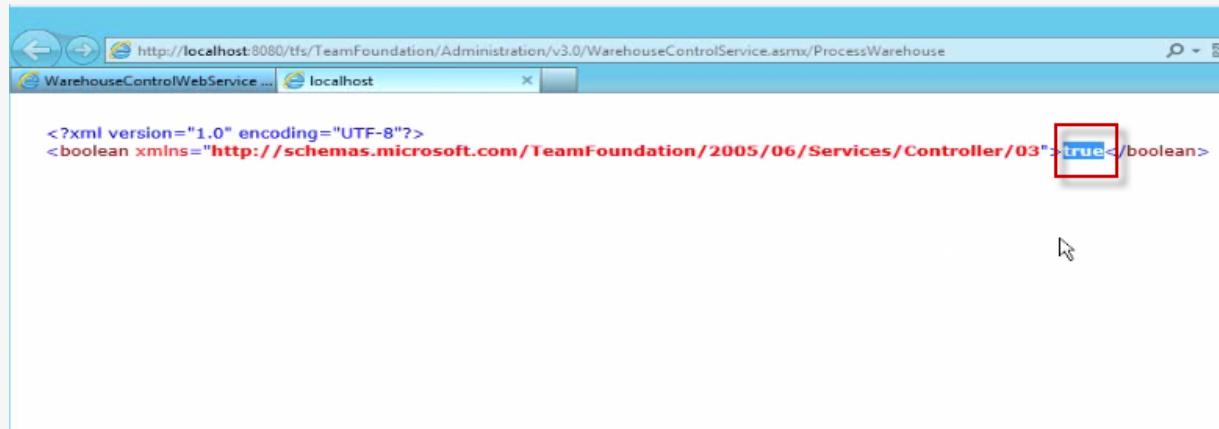
```

POST /tfs/TeamFoundation/Administration/v3.0/WarehouseControlService.asmx HTTP/1.1
Host: localhost
Content-Type: text/xml; charset=utf-8
Content-Length: length
SOAPAction: "http://schemas.microsoft.com/TeamFoundation/2005/06/Services/Controller/03/ProcessWarehouse"
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
<soap:Body>
</soap:Body>
</soap:Envelope>

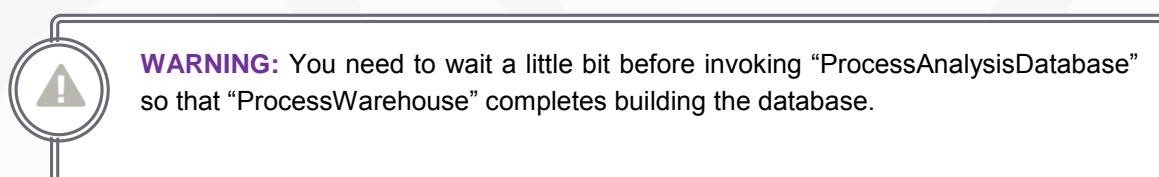
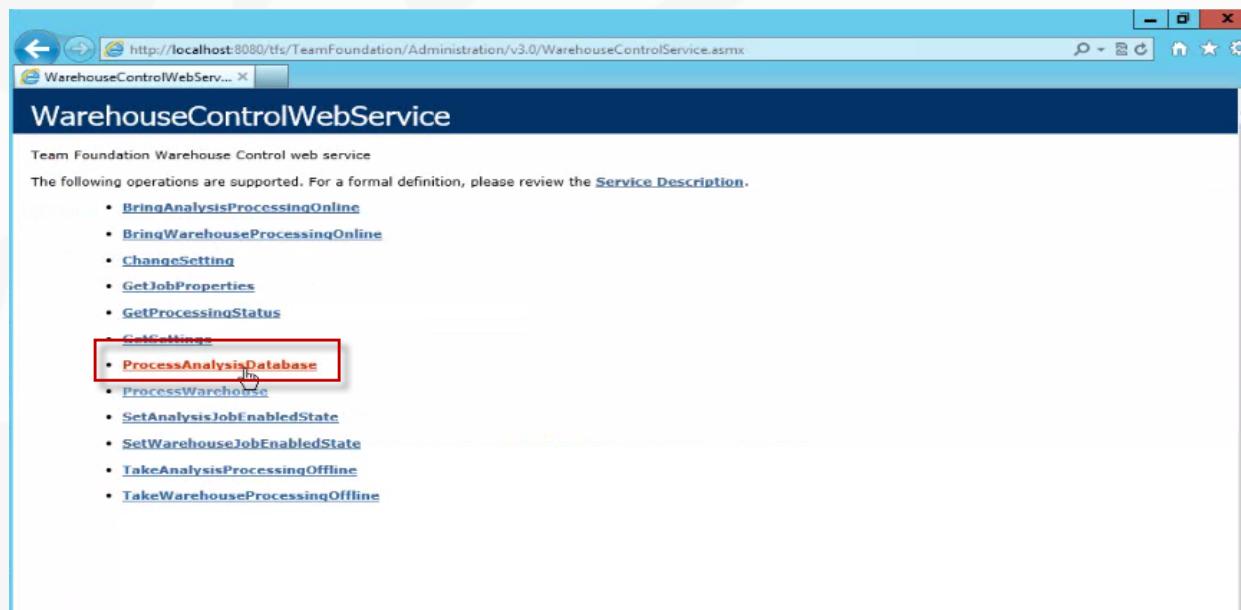
```

Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Ensure that the return value is “true”.

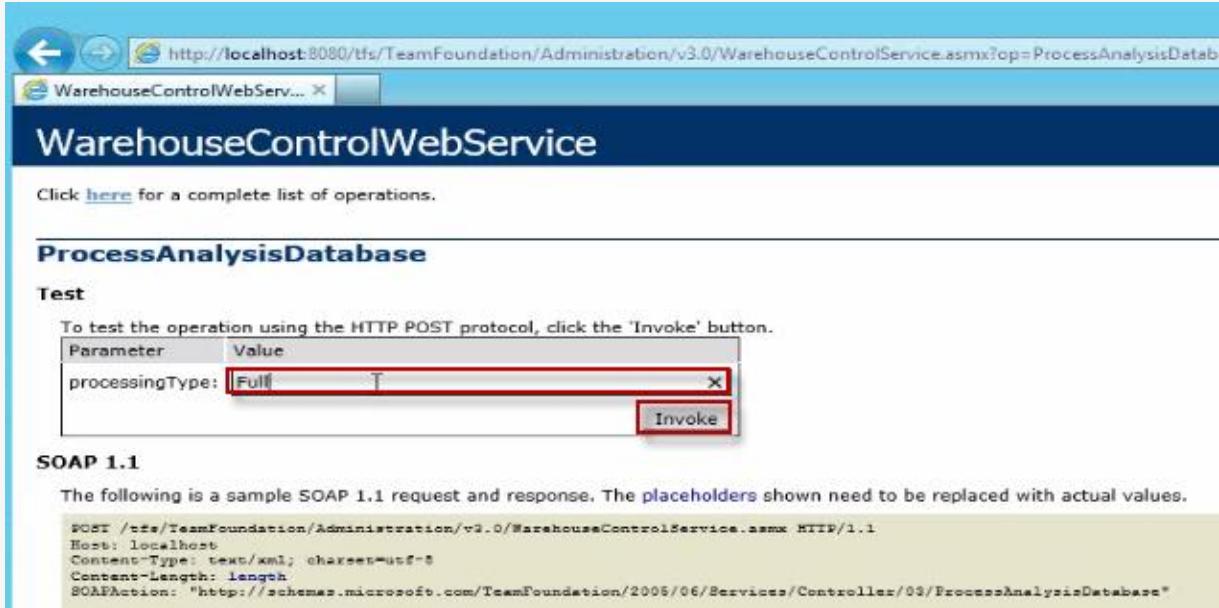


Return to the test page of the **“WarehouseControlWebService.asmx”** web service then click **“ProcessAnalysisDatabase”**.



Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

For the “Processing Type” parameter, enter “Full” then click “Invoke”.



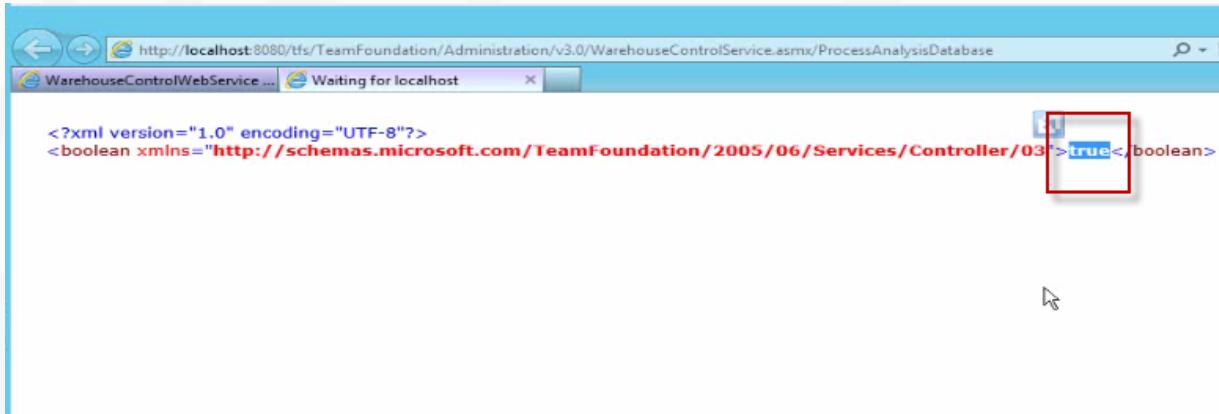
The screenshot shows the **WarehouseControlWebService** interface. In the **Test** section, there is a table with a single row. The first column is **Parameter** and the second is **Value**. The **Value** column contains the text **Full**, which is highlighted with a red box. Below the table is a red button labeled **Invoke**.

SOAP 1.1

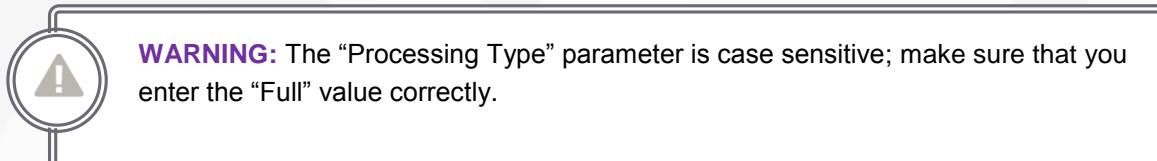
The following is a sample SOAP 1.1 request and response. The placeholders shown need to be replaced with actual values.

```
POST /tfs/TeamFoundation/Administration/v3.0/WarehouseControlService.asmx HTTP/1.1
Host: localhost
Content-Type: text/xml; charset=utf-8
Content-Length: length
SOAPAction: "http://schemas.microsoft.com/TeamFoundation/2005/06/Services/Controller/03/ProcessAnalysisDatabase"
```

Ensure that the return value is “True”.



The screenshot shows the results of the **Invoke** operation. The response is an XML document with the text **true**, which is highlighted with a red box.



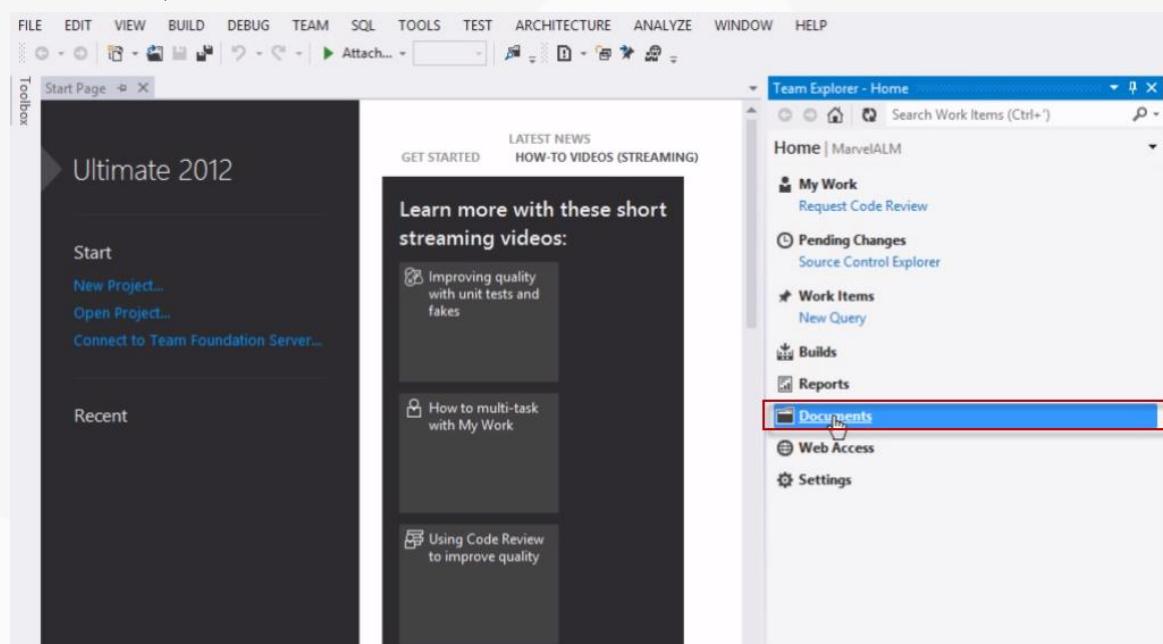


Verifying the Excel Services Reporting

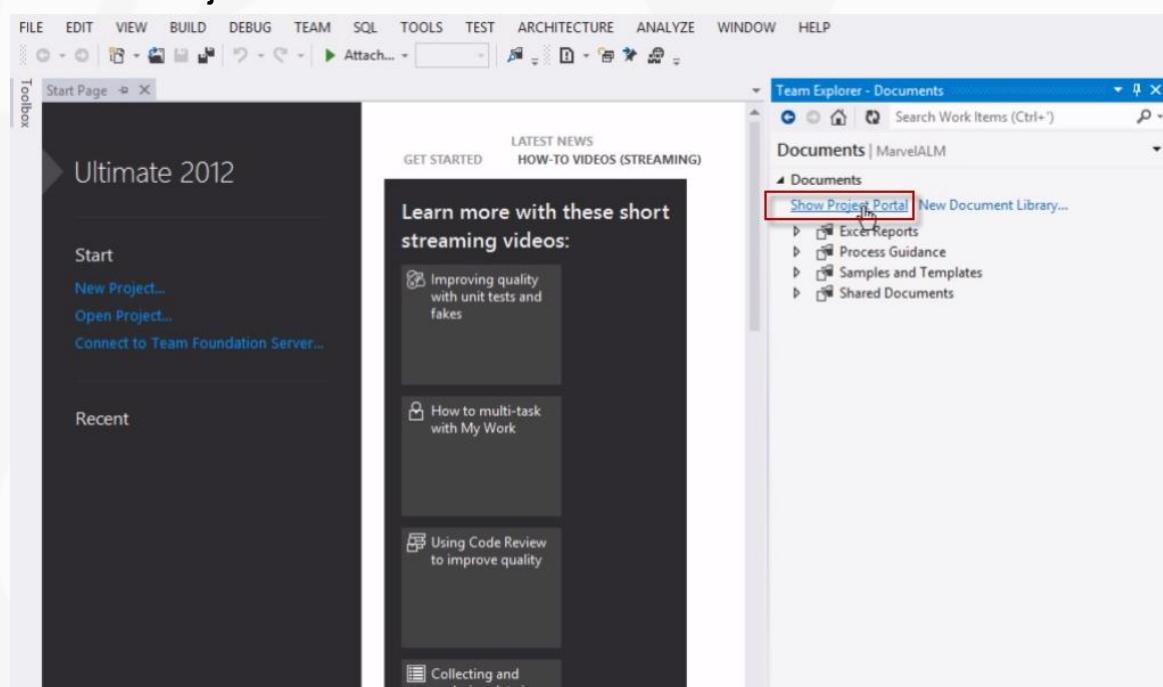
Watch the
Video

<http://www.youtu.be/NpRwhjpn>

Launch Visual Studio 2012, open the Team Project you created in the previous section "MarvelALM", then click "**Documents**".

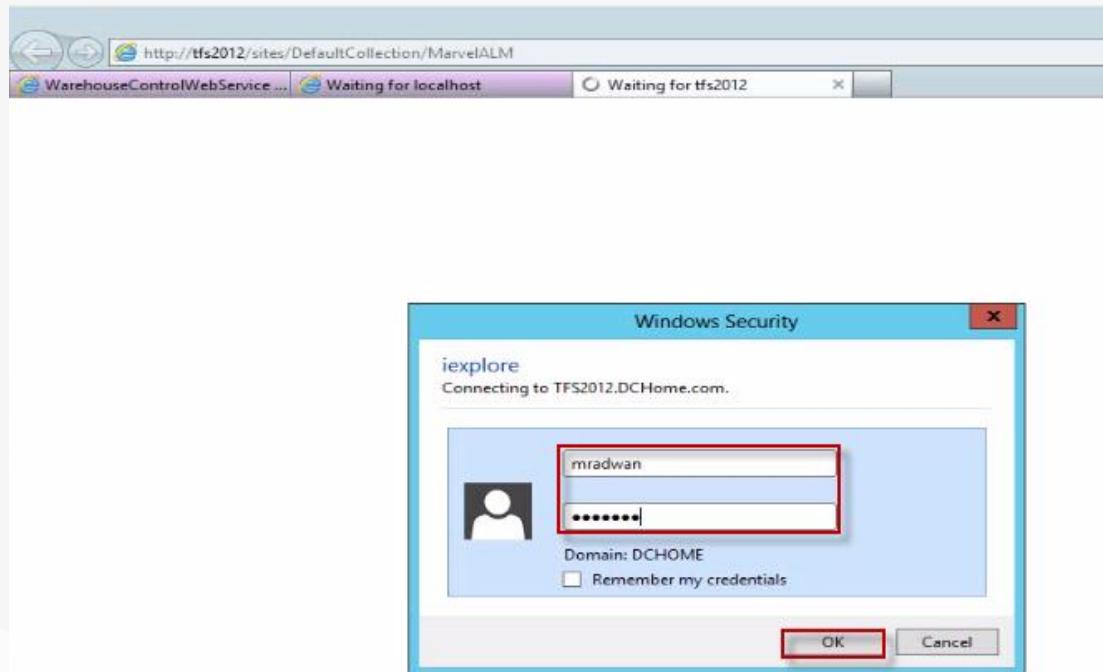


Click "**Show Project Portal**".

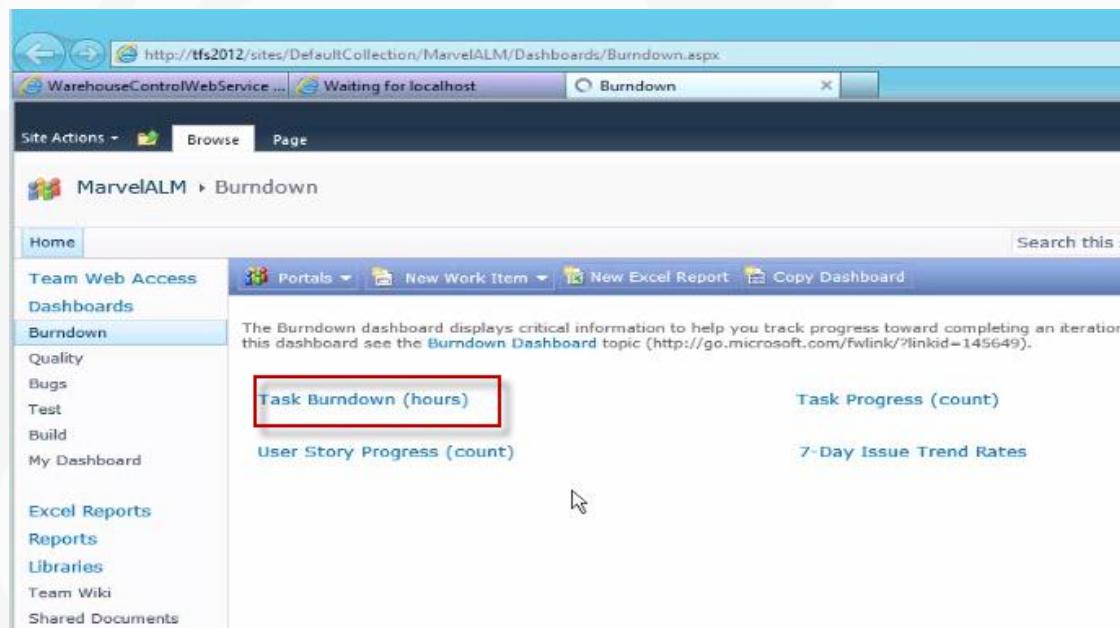


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

The browser launches and you are prompted to enter your credentials, enter the domain admin credentials “**mradwan**” and then click “**OK**”.



From the quick launch bar, open the “**Burndown**” dashboard then click the “**Task Burndown (hours)**” link.





Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

The Excel Report opens. Click “Data” then click “Refresh All Connections”.

A screenshot of a Microsoft Excel window titled "Burndown.xlsx". The ribbon at the top has "File" selected. Below it, the "Data" tab is also selected and highlighted with a red box. A context menu is open over a chart area, listing three options: "Refresh Selected Connection", "Refresh All Connections" (which is highlighted with a yellow box), and "Calculate Workbook". The chart displays a burndown chart with a single data series labeled "Remaining Work" and a Y-axis ranging from 0 to 1.0. The X-axis shows dates from July 4, 2012, to July 30, 2012.

The report should be refreshed without any errors.

A screenshot of the same Microsoft Excel window after refreshing the connections. The chart now shows a completed burndown line, starting at a value of approximately 0.65 on July 4, 2012, and dropping to zero by July 28, 2012. The legend indicates "Remaining Work" (blue) and "Completed Work" (green).

NOTE: if you encounter any errors upon refreshing the connections, you may need to reset the IIS or manually process the Warehouse and the Analysis Database again.



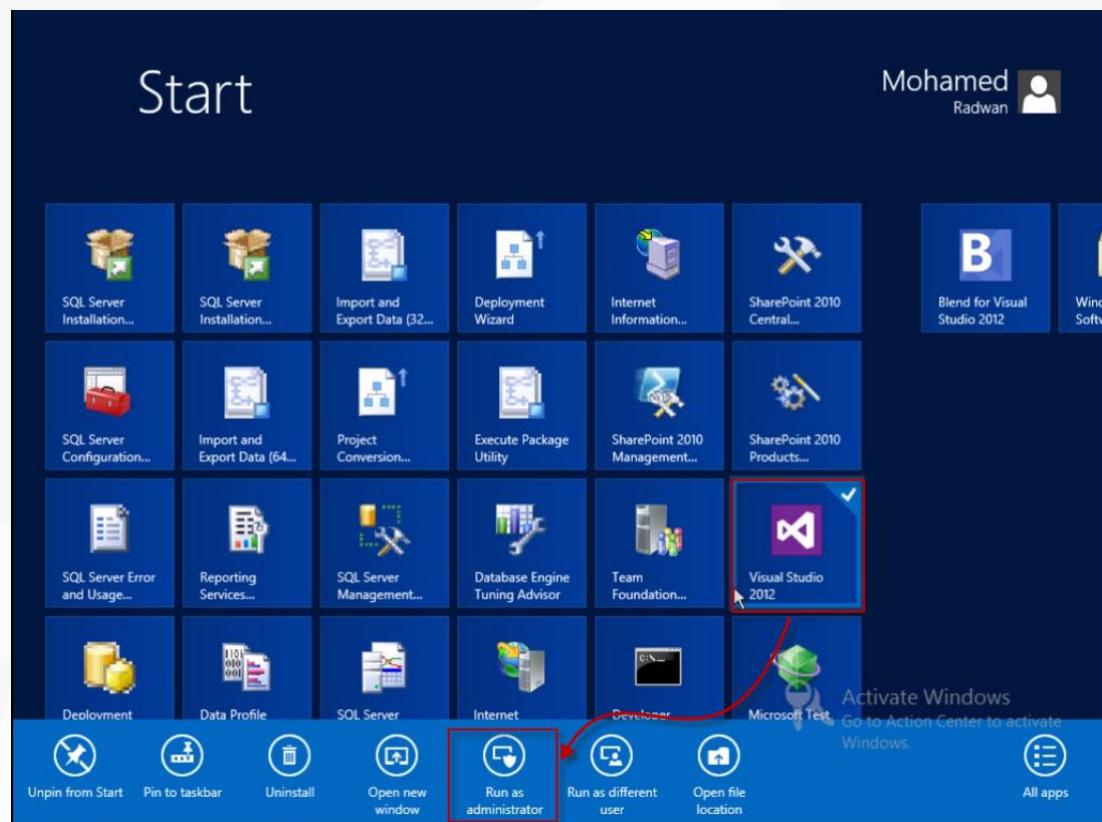


Verifying the TFS Build Service

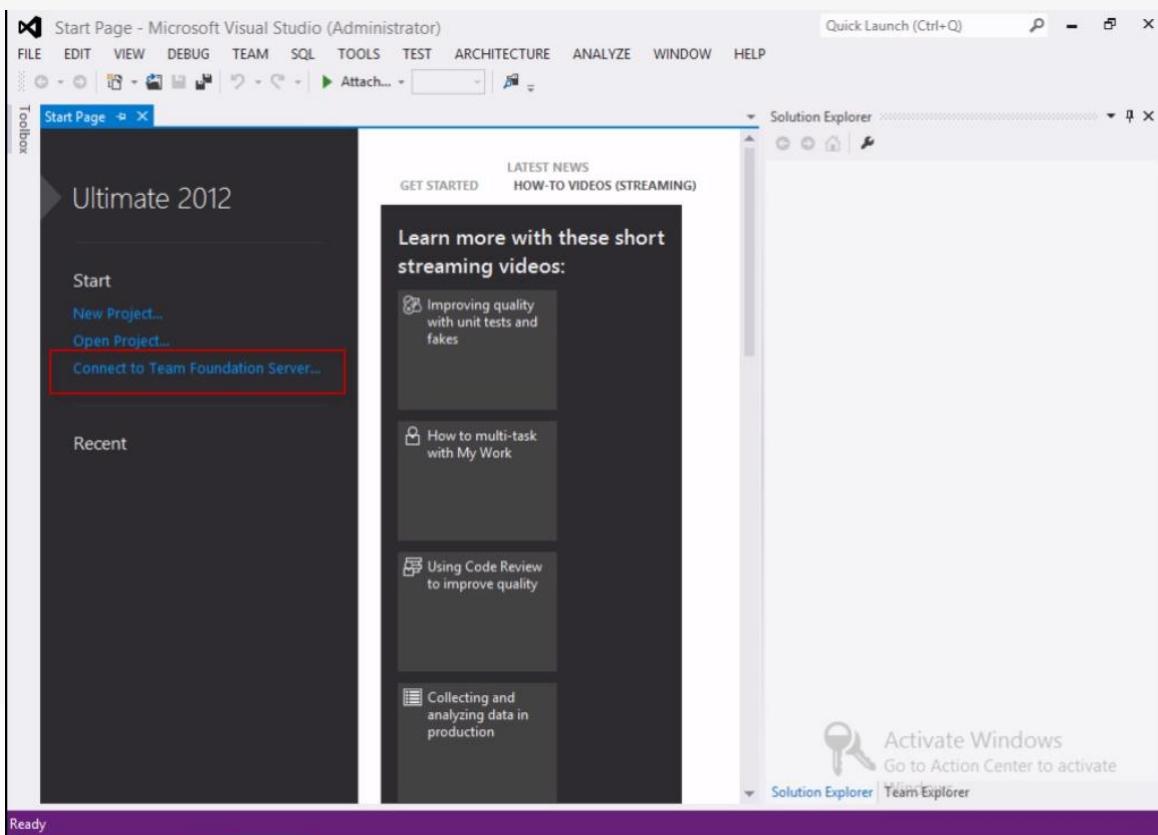
Watch the
Video

www.youtube.com/watch?v=2hNLdmCAu1g

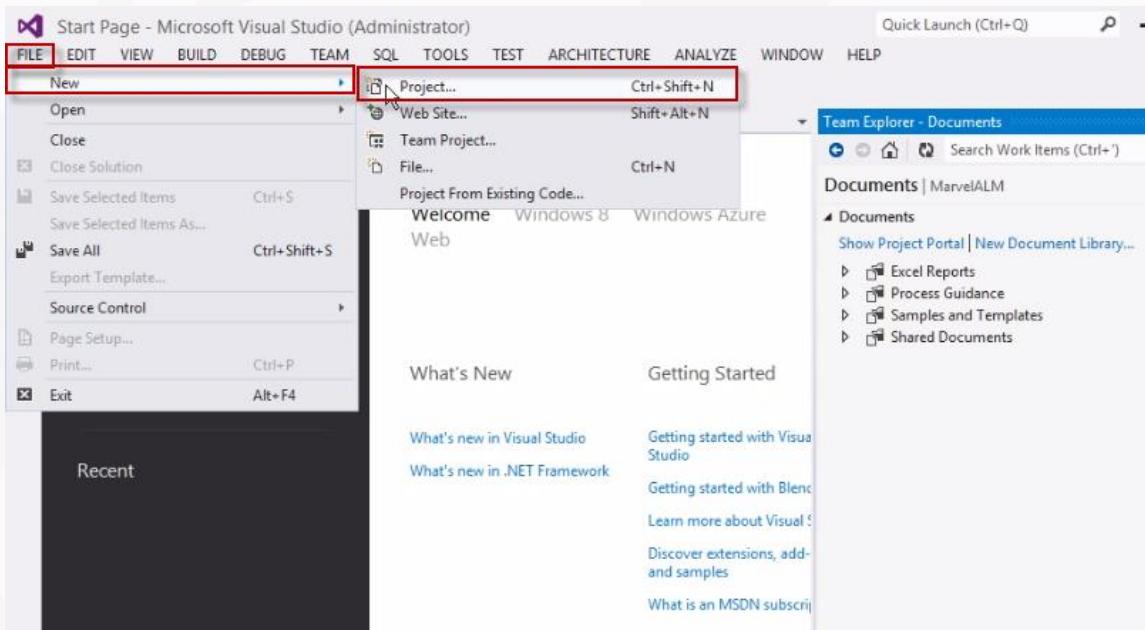
From Windows Server 2012 desktop, right-click “Visual Studio 2012” then click “Run as Administrator”.



Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

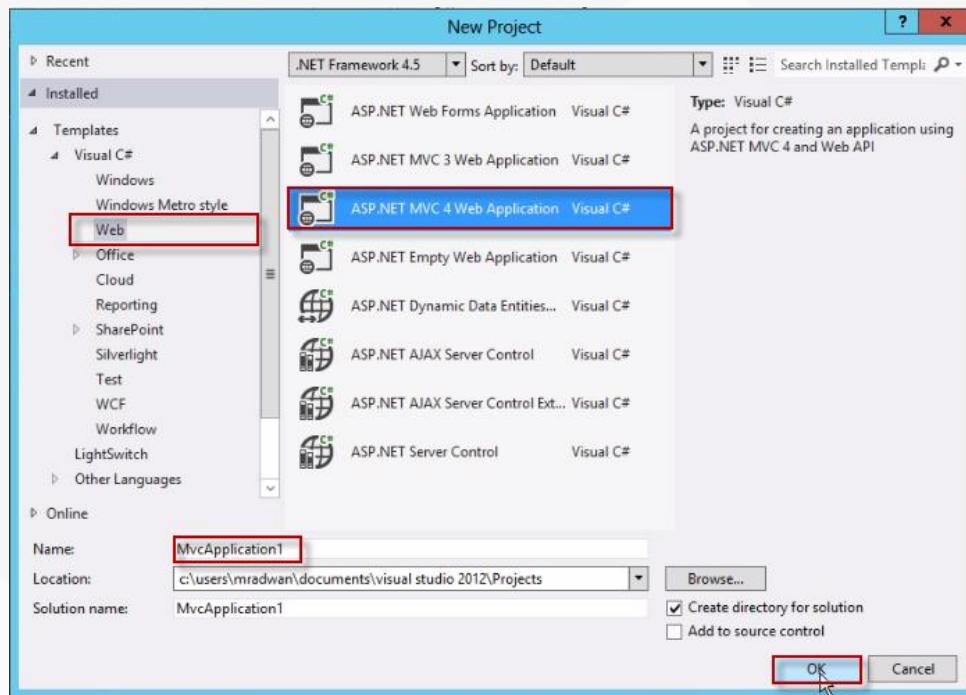


Click File → New→ Project.

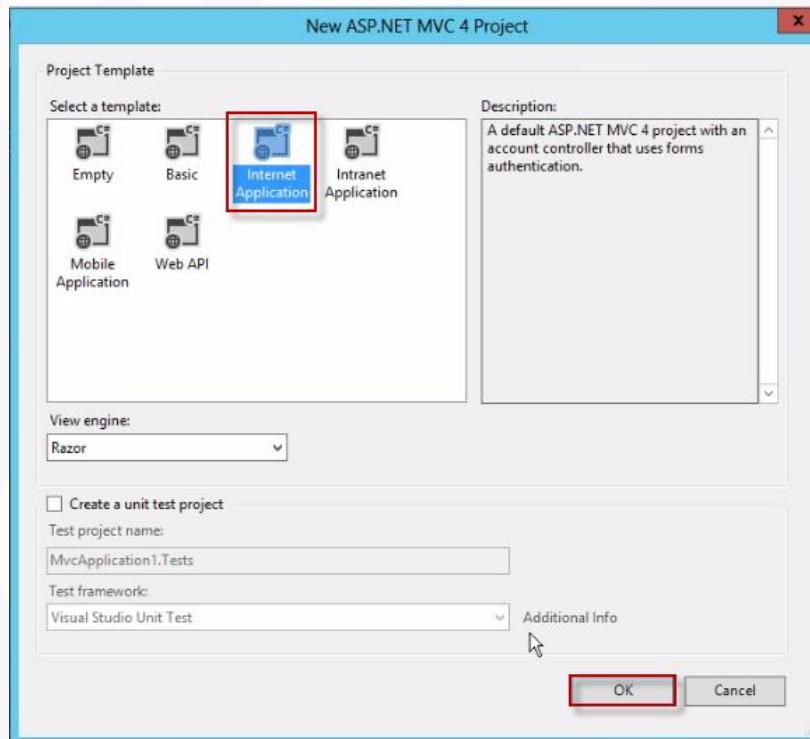


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

From the left pane, expand “**Visual C#**”, click “**Web**” then select “**ASP.NET MVC 4 WEB Application Visual C#**” from the middle pane. Leave the default “Name”, “Location” and “Solution Name” and then click “**OK**”.

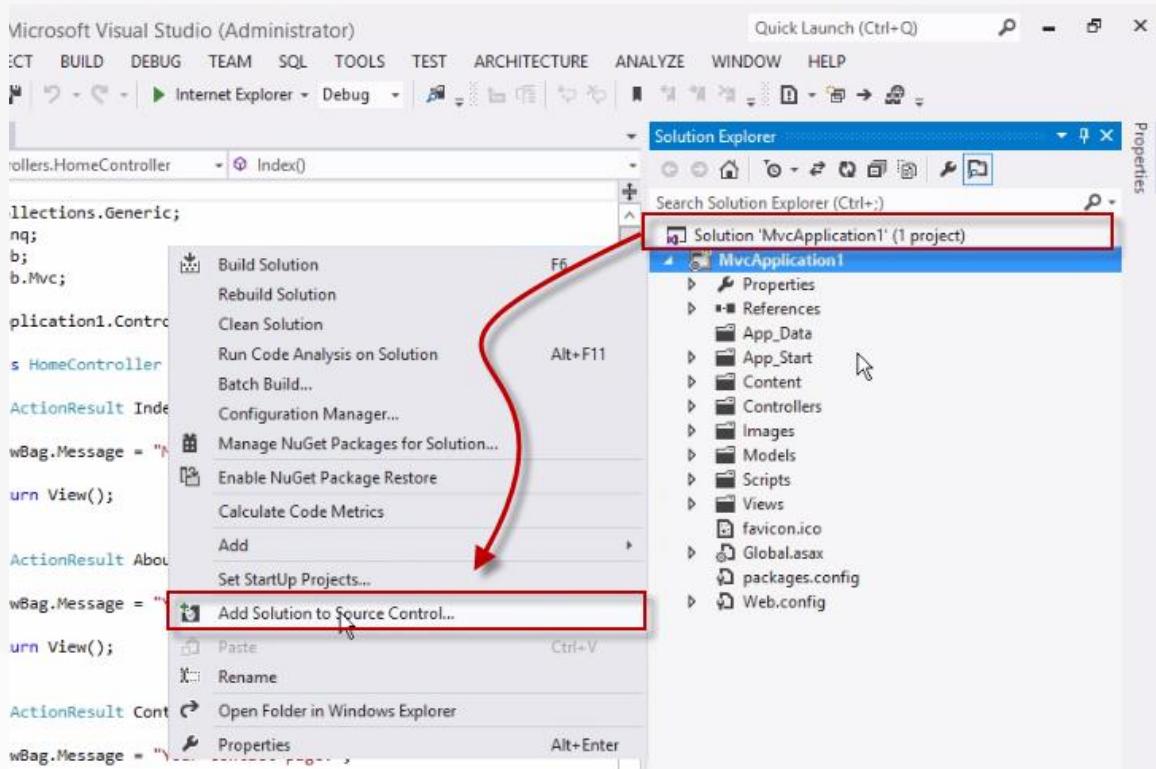


Select the “**Internet Application Template**” then click “**OK**”.

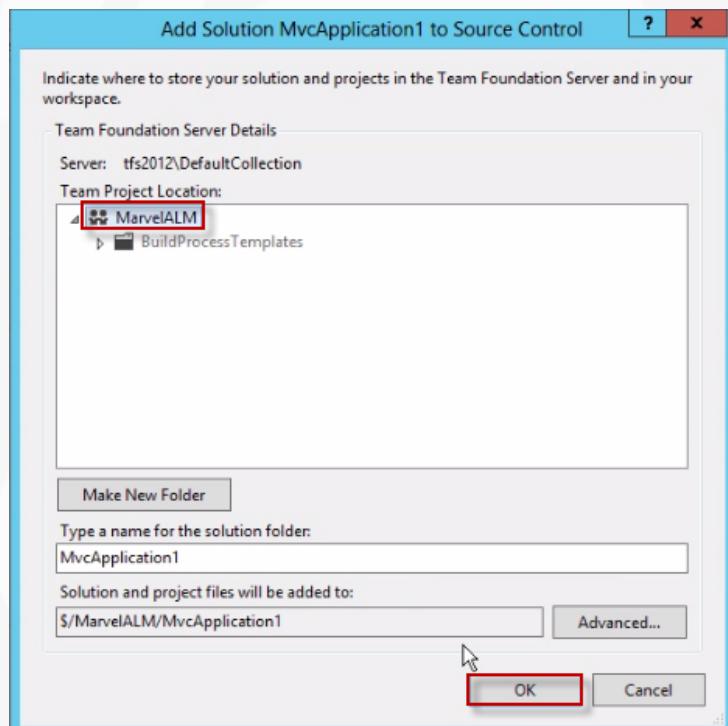


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Right-click the solution file and click “Add Solution to Source Control”.

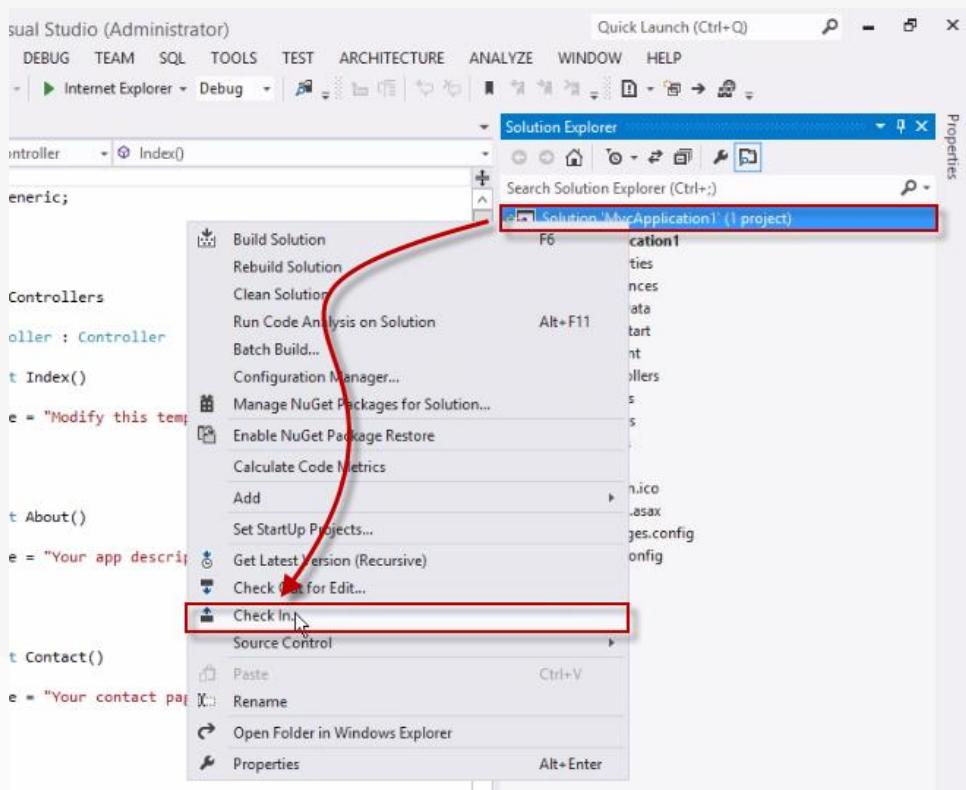


Add the solution to the “MarvelALM” Team Project Source Control repository then click “OK”.

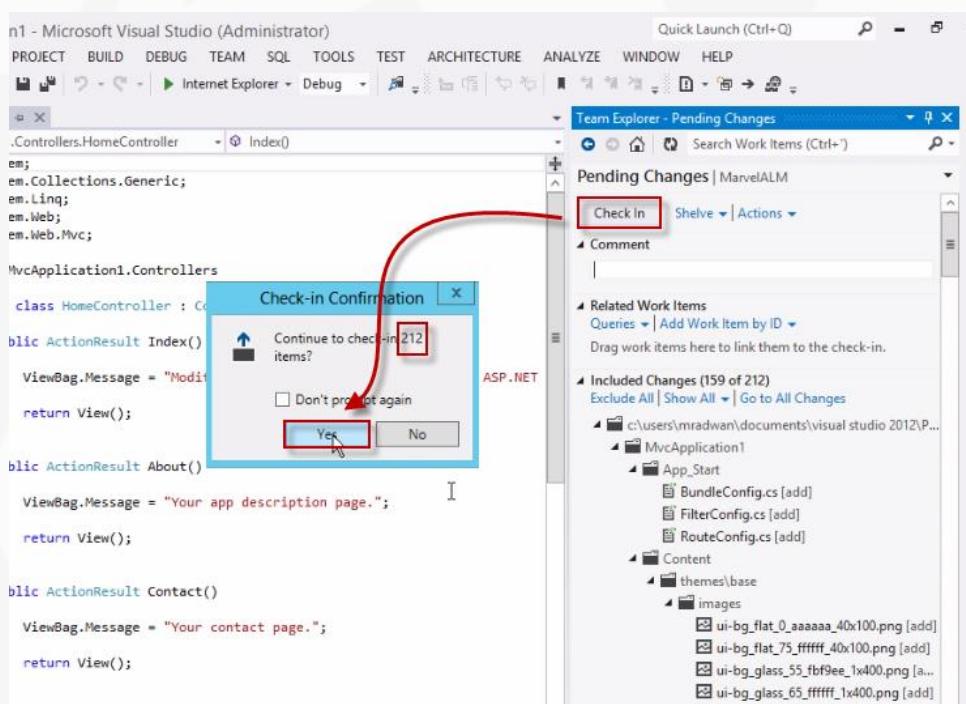


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Right-click the solution file then click “Check In”.

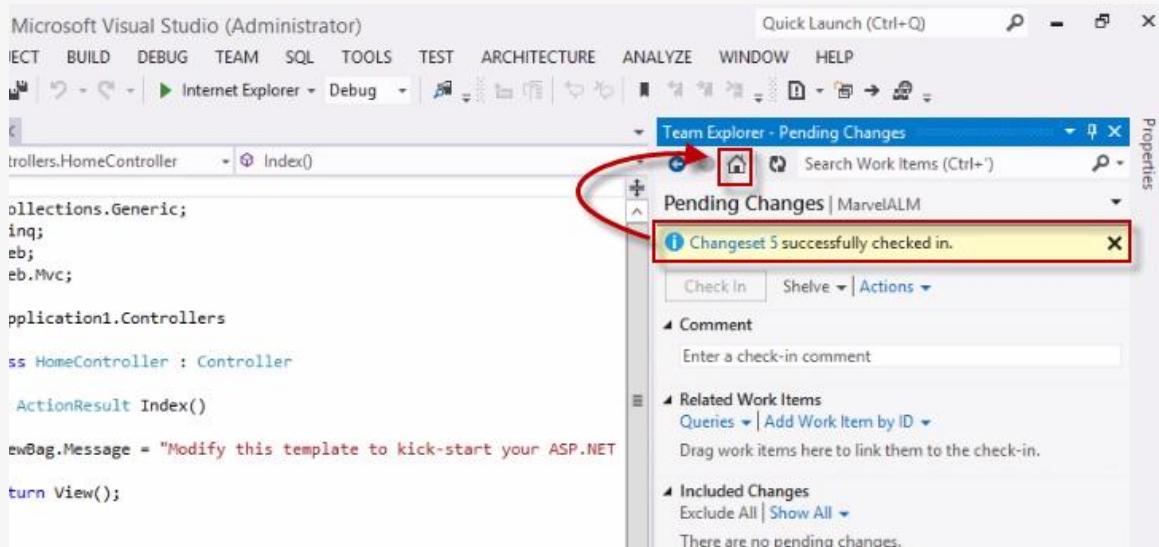


From the “Pending Changes” view, click “Check-In” then confirm your selection by clicking “Yes”.

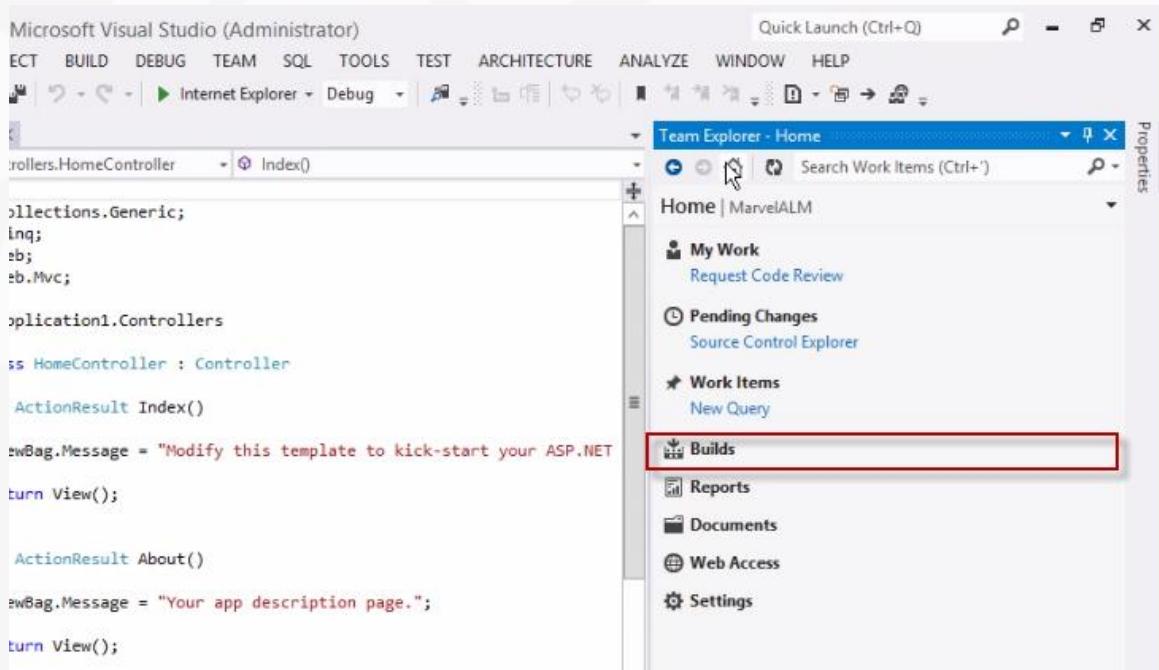


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Ensure that the file was “Successfully Checked In” then click the home icon.

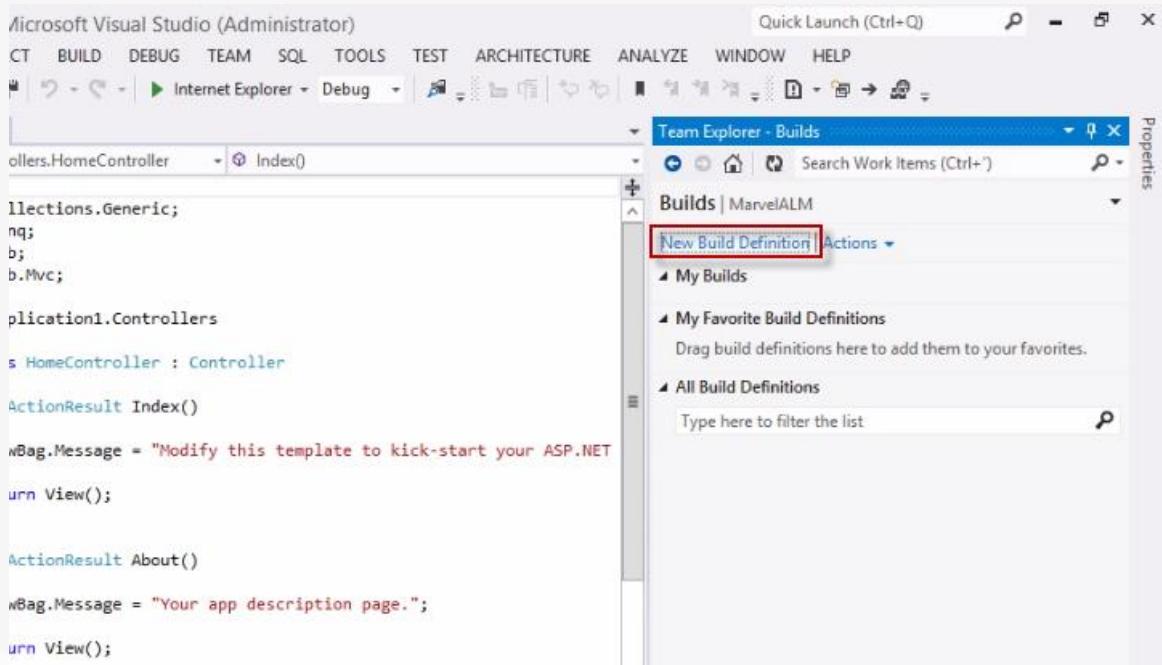


From the “Team Explorer” home view click “Builds”.

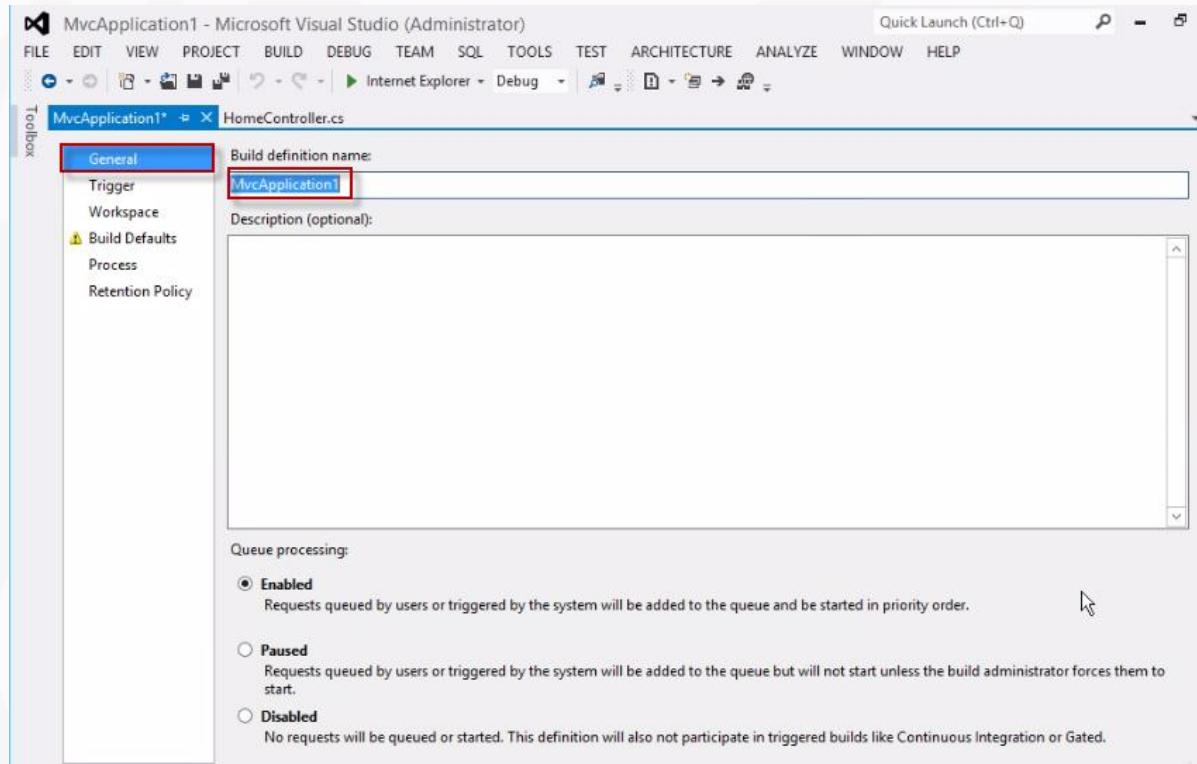


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Click “New Build Definition”.

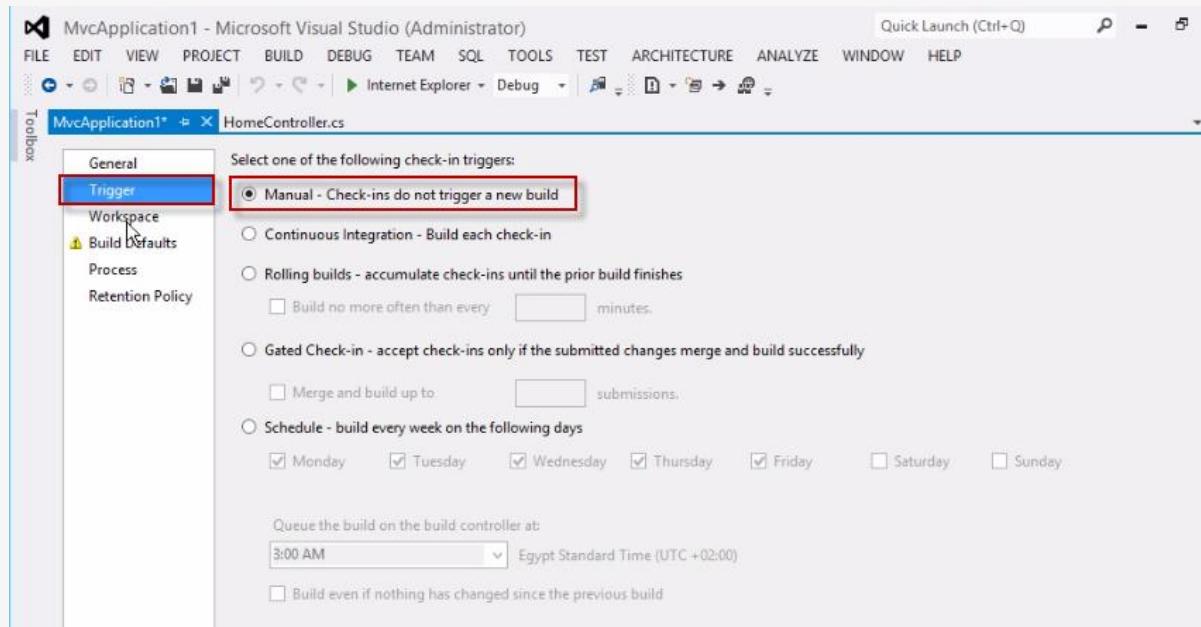


Accept the default name then switch to the “Trigger” section from the left pane.

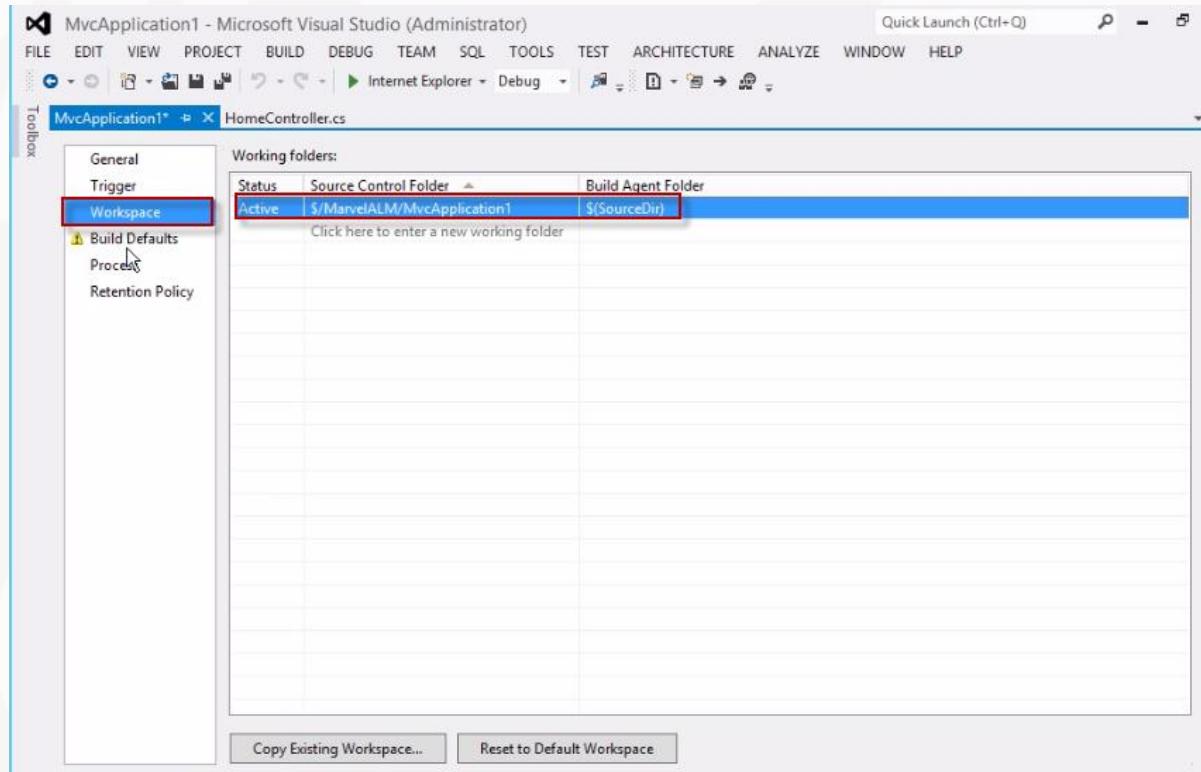


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Select the “**Manual**” check-in trigger then switch to the “**Workspace**” section from the left pane.

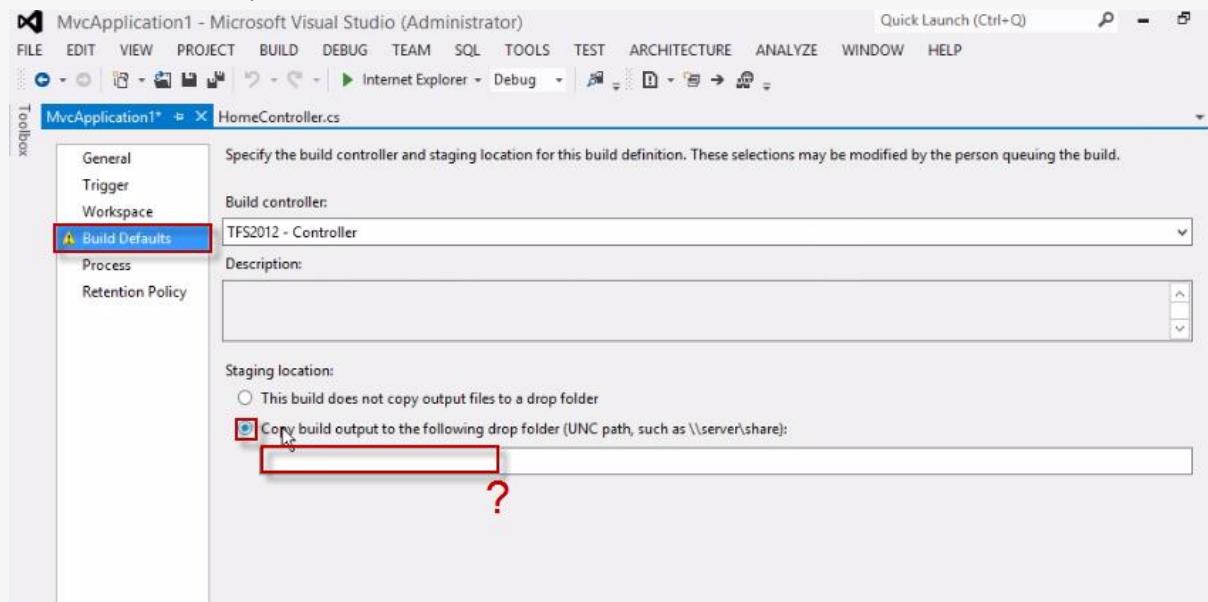


From the “**Workspace**” section, accept the defaults then switch to the “**Build Defaults**” section from the left pane.

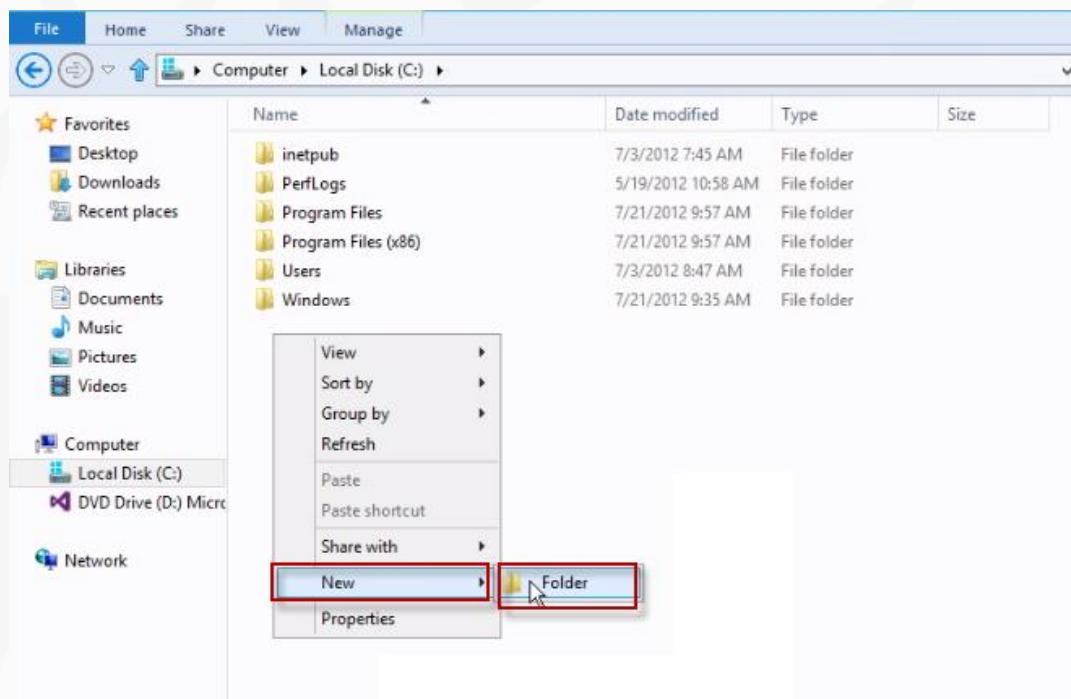


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Note that a build drop folder is needed in the “Build Defaults” section.

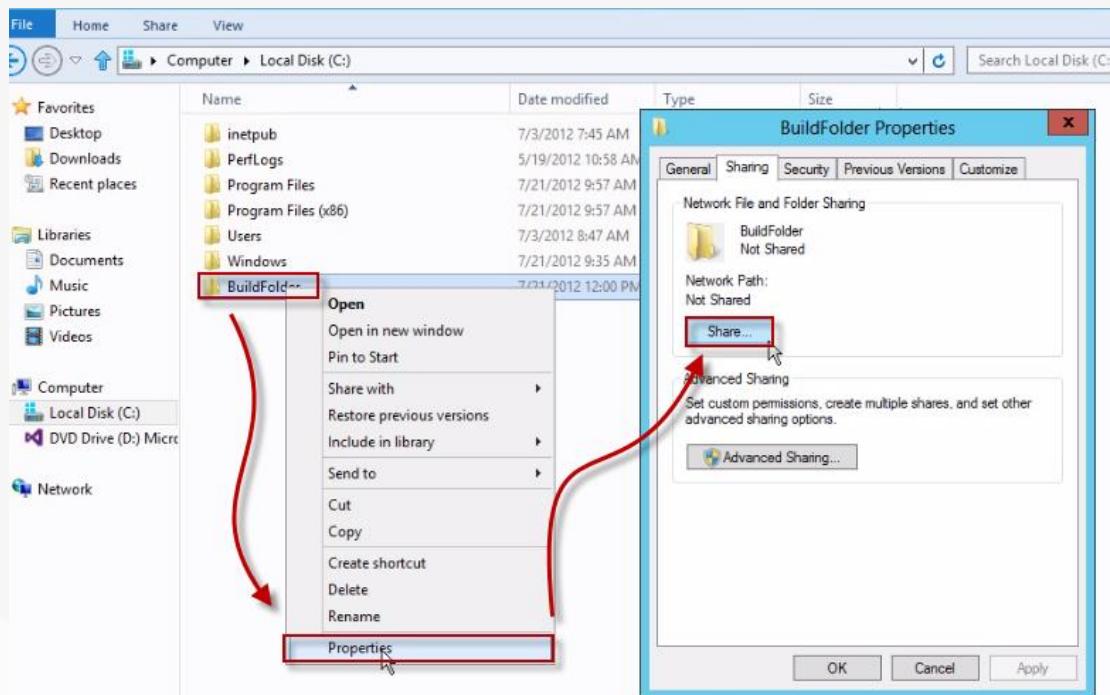


Create a folder in the “C” drive.

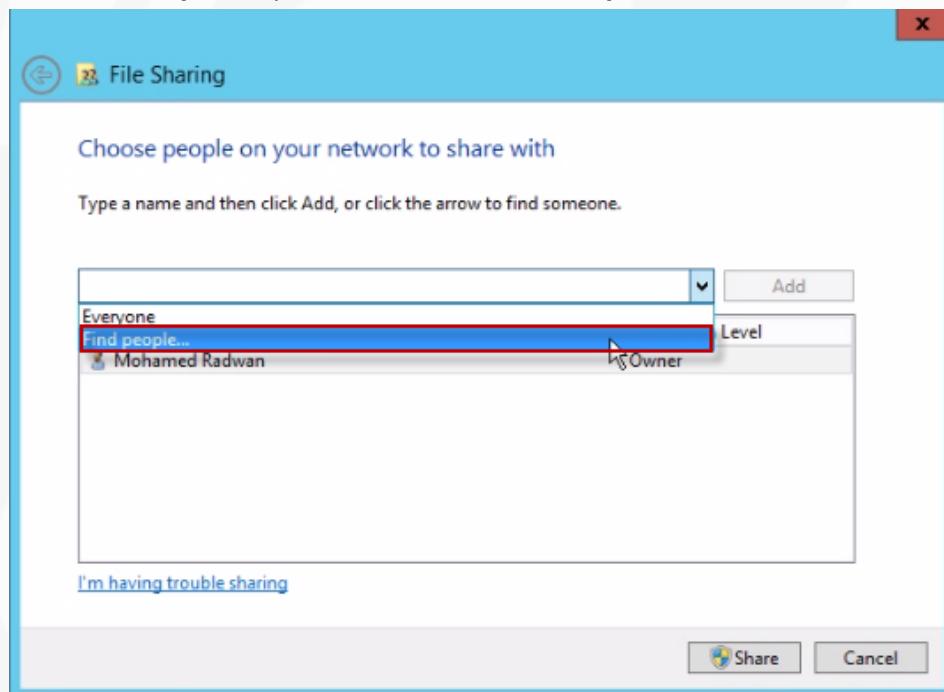


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Rename the folder to “BuildFolder” then right-click it, click “Properties” and then click “Share” from the “Sharing” tab.

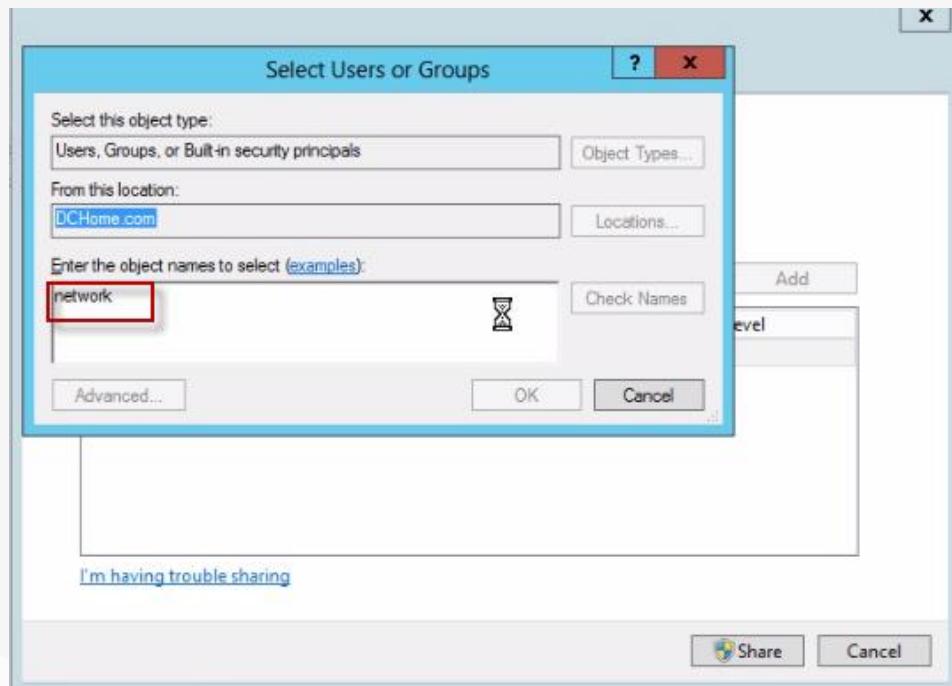


From the “People” dropdown list, select “Find People”.

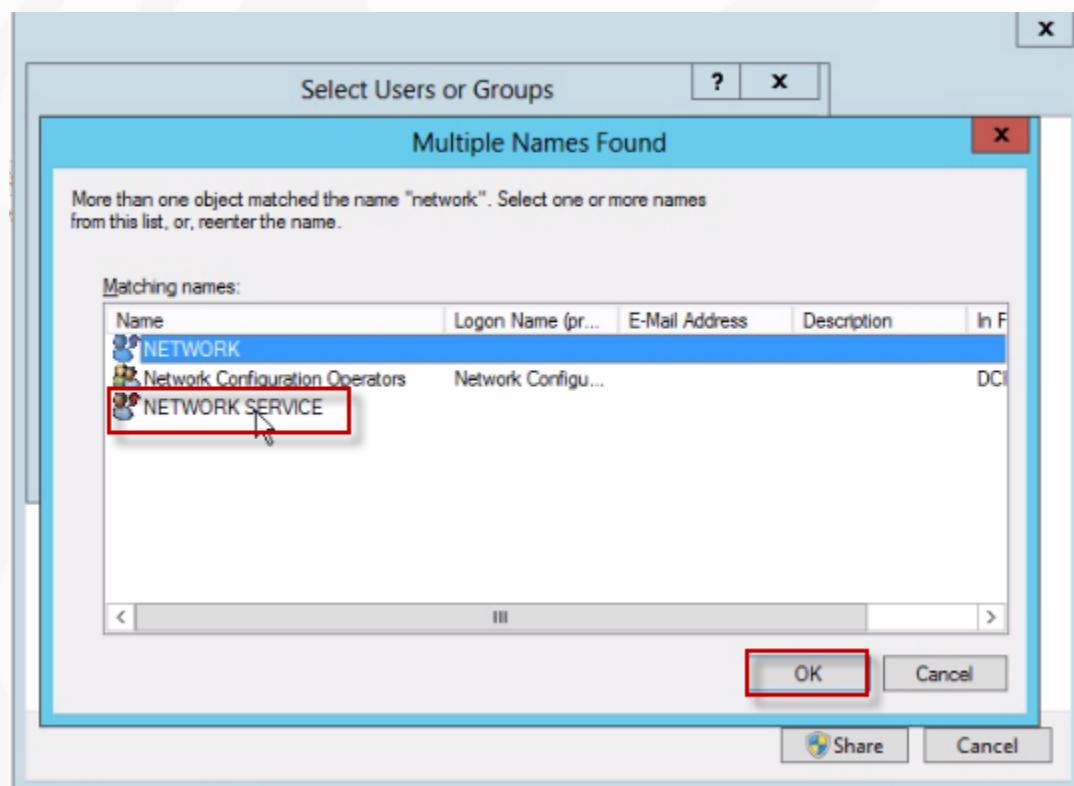


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Enter “*network*” and press enter.

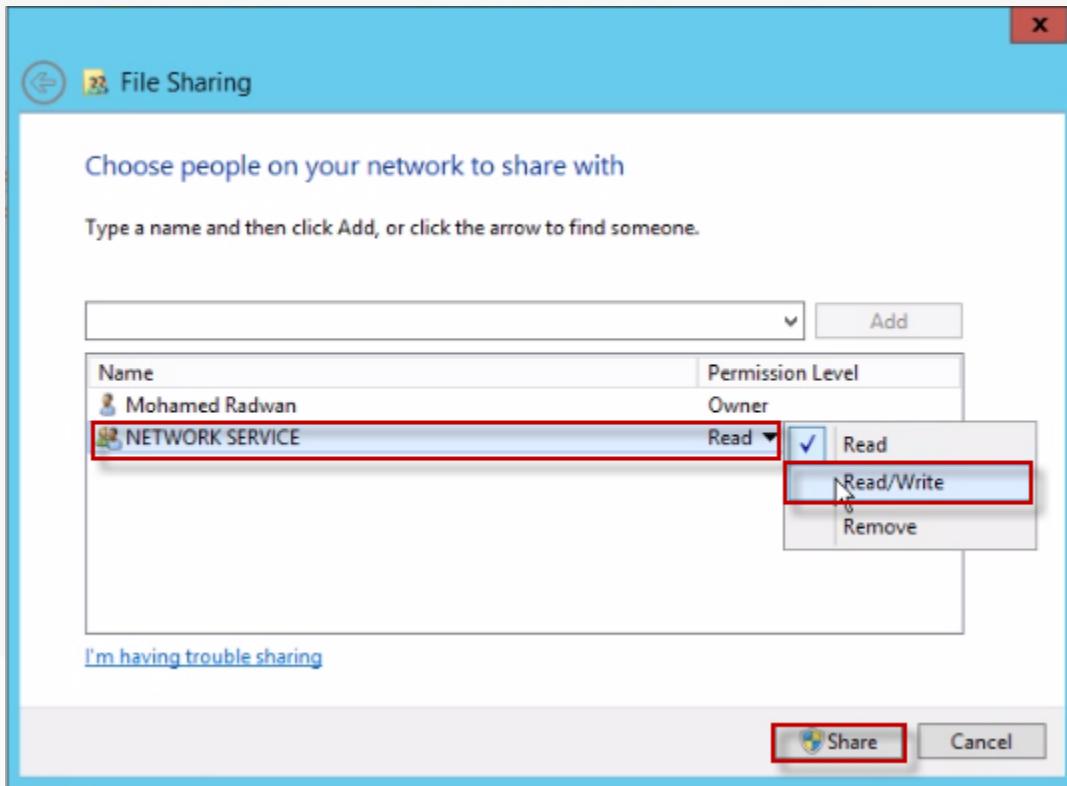


Select “*NETWORK SERVICE*” from the search results then click “**OK**”.

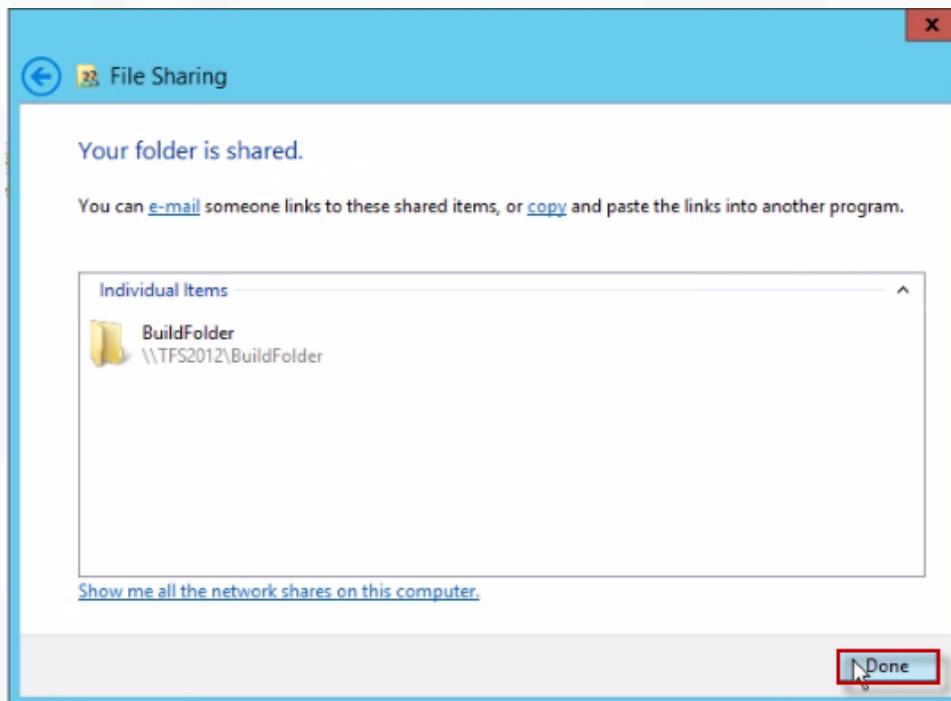


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Change the “Permission Level” to “Read/Write” then click “Share”.

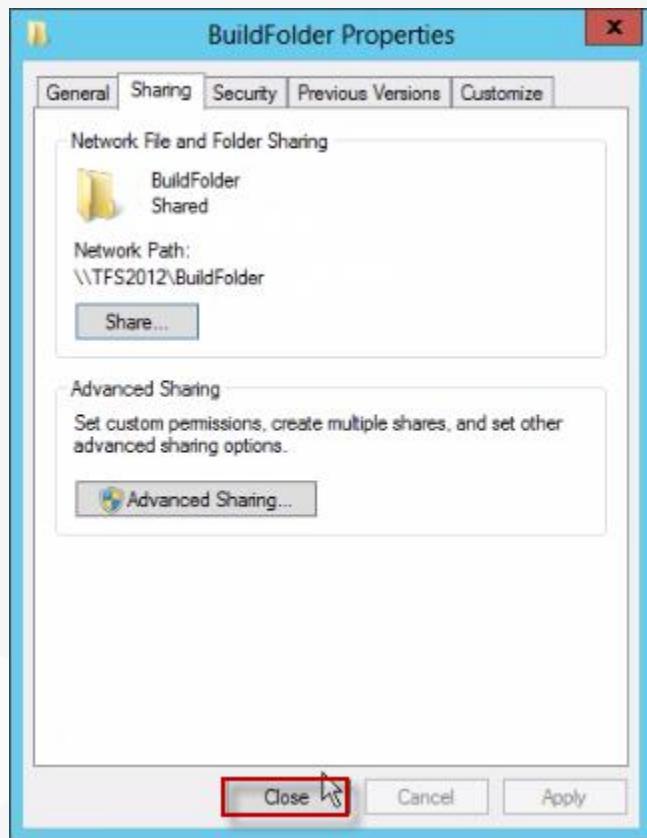


From the “File Sharing” window, click “Done”.

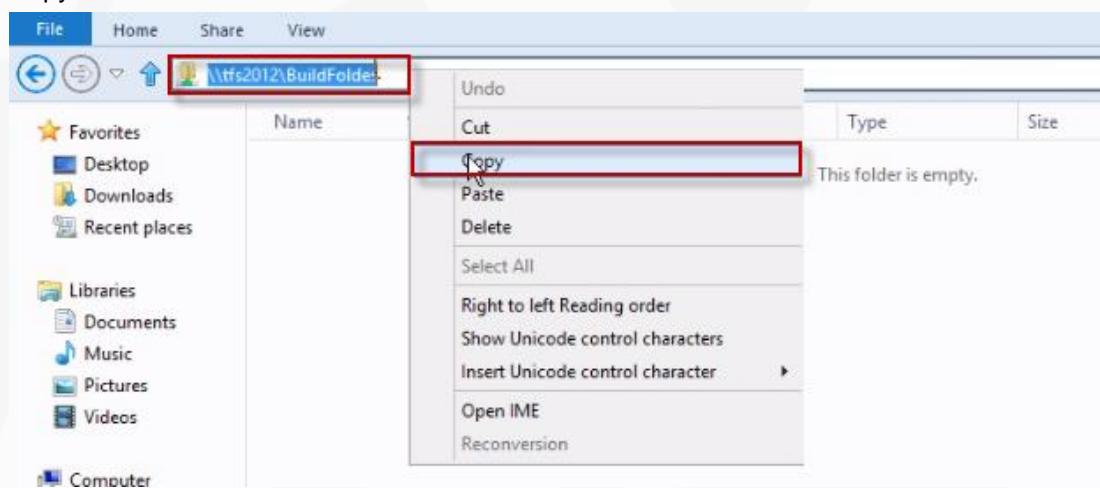


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

From the “BuildFolder Properties” window, click “Close”.

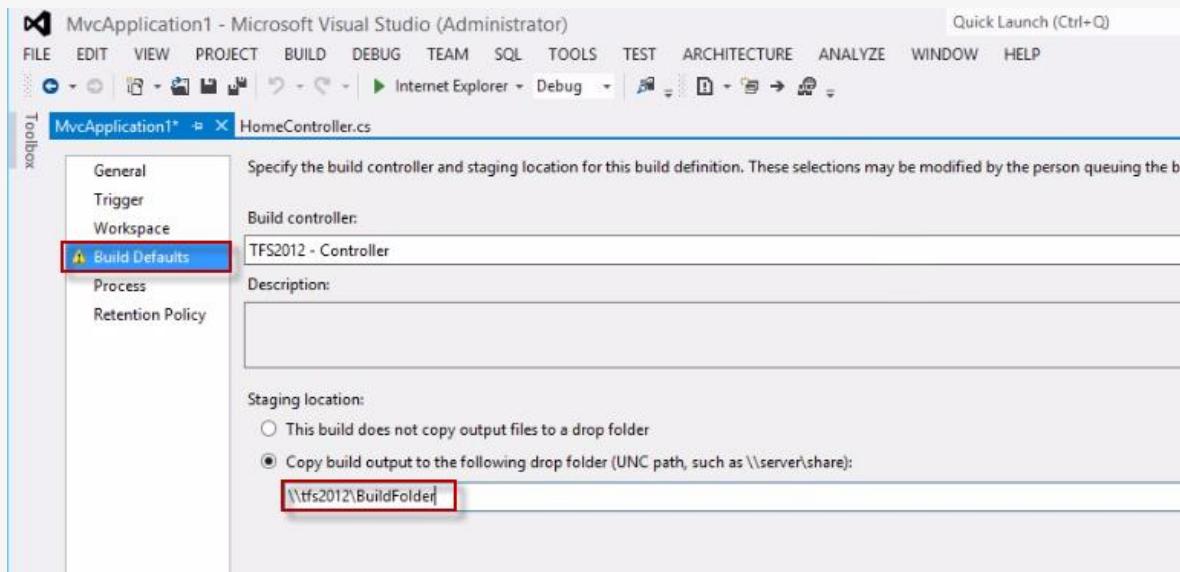


Copy the Network Path of the “BuildFolder” folder “\\tfs2012\BuildFolder”.

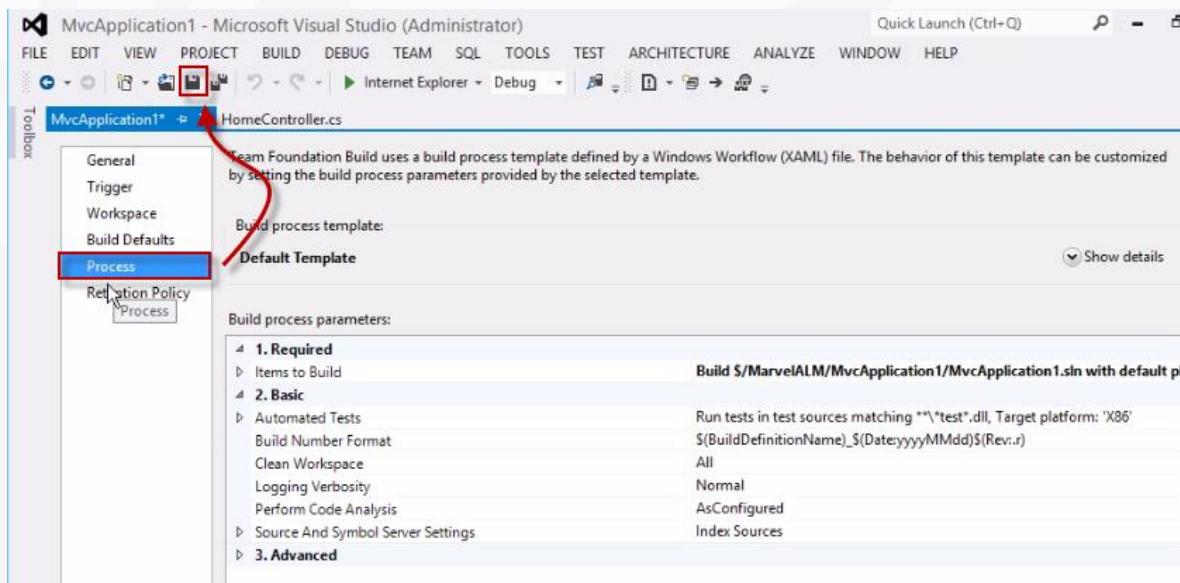


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

Paste the Network Path to the “**Staging Location**” field in the “**Build Defaults**” section of the Build Definition then switch to the “**Process**” section from the left pane.

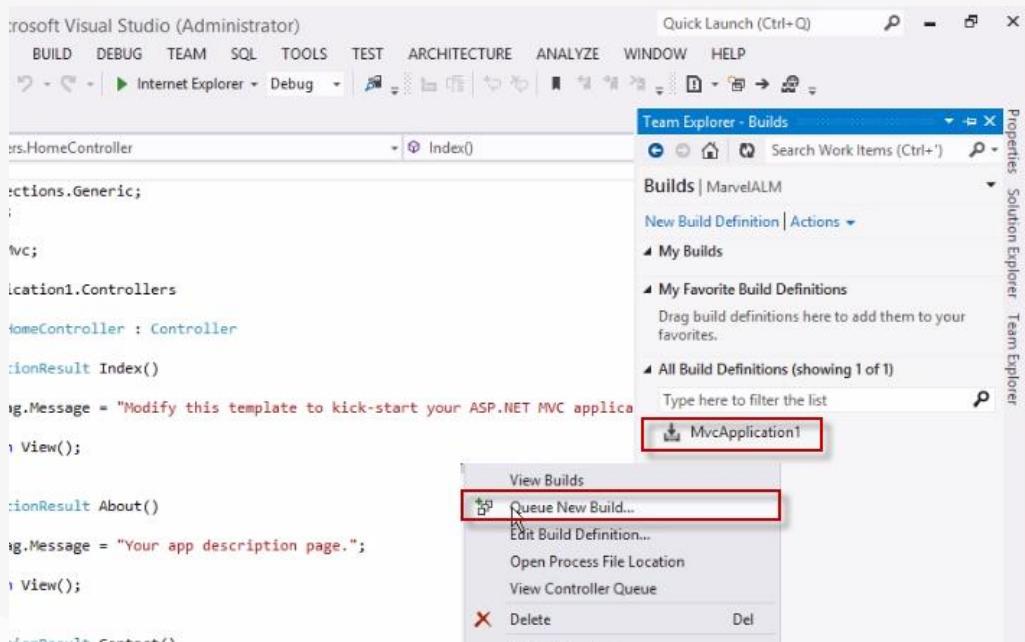


From the “**Process**” section, accept the defaults then click the “**Save**” icon and close the Build Definition.

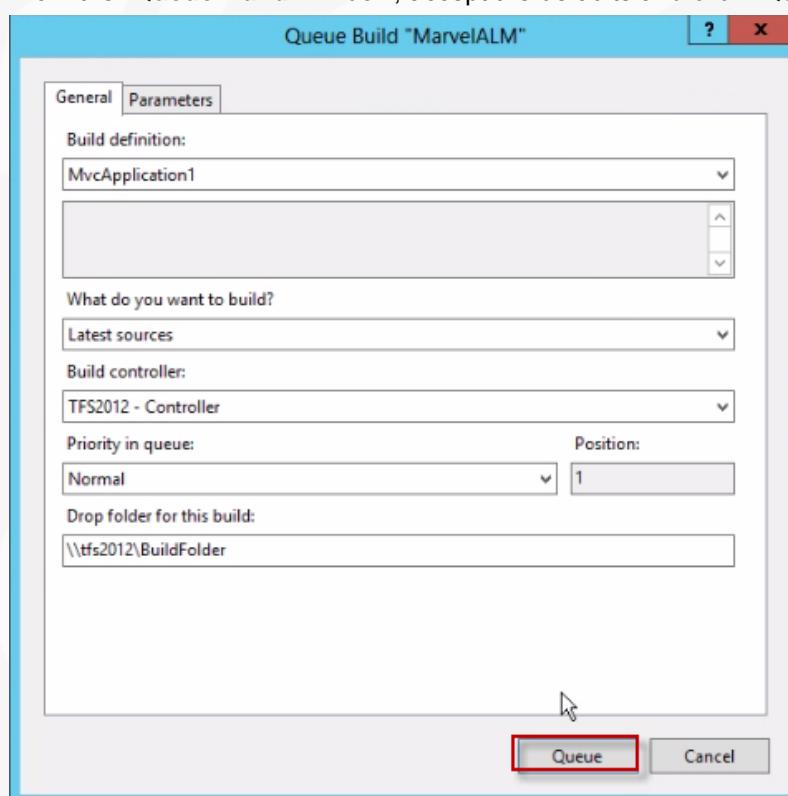


Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

From the “Builds” view of the “Team Explorer”, right-click the “*MVCApplication1*” Build Definition that you just created, then click “Queue New Build”.

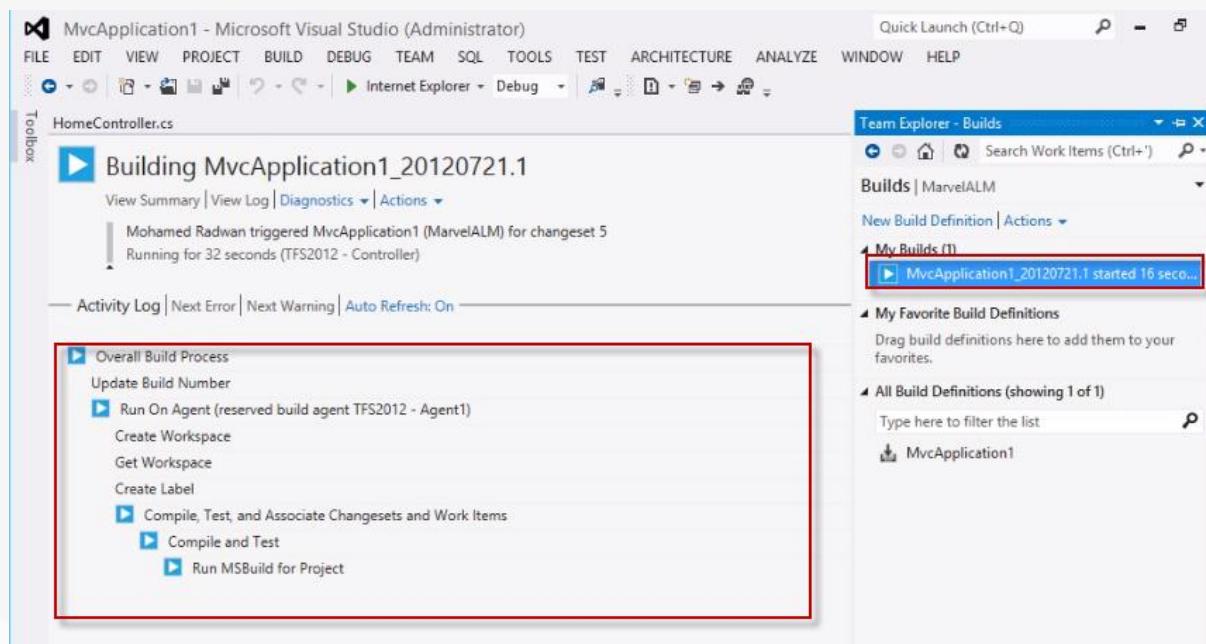


From the “Queue Build” window, accept the defaults and click “Queue”.



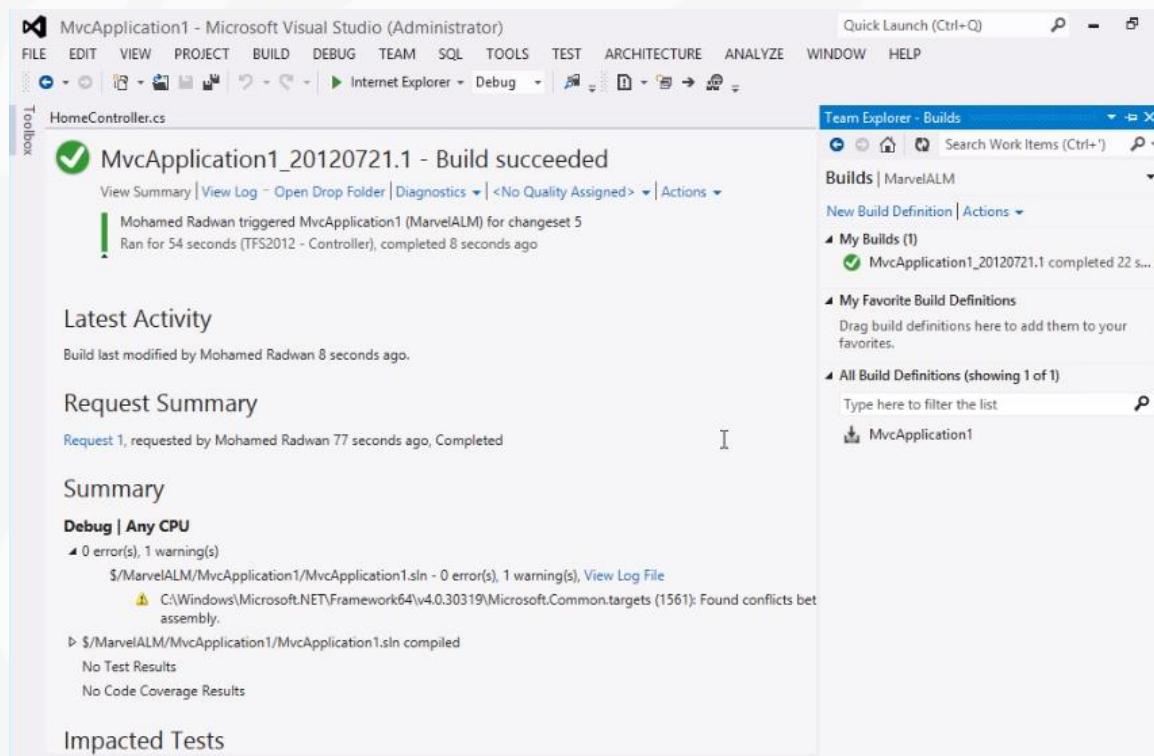
Appendix H: Team Foundation Server 2012 Installation and Configuration Verification

From the “**My Builds**” section of the “**Builds**” view, double-click the running build to check its status.



The screenshot shows the Microsoft Visual Studio interface with the Team Explorer - Builds view open. In the center, a build named "MvcApplication1_20120721.1" is listed as "Building". The "Overall Build Process" tree is expanded, showing steps like "Update Build Number", "Run On Agent (reserved build agent TFS2012 - Agent1)", "Create Workspace", "Get Workspace", "Create Label", "Compile, Test, and Associate Changesets and Work Items" (which further branches into "Compile and Test" and "Run MSBuild for Project"). A red box highlights this tree structure.

Once the build successfully completes, you should receive a “**Build succeeded**” message. This indicates that the Build Service is working as expected.



The screenshot shows the Microsoft Visual Studio interface with the Team Explorer - Builds view open. The build "MvcApplication1_20120721.1" is now shown as "Build succeeded" with a green checkmark icon. The "Overall Build Process" tree is collapsed. The "Builds" pane on the right shows the build has completed 22 seconds ago. Below the main view, sections for "Latest Activity", "Request Summary", "Summary", and "Impacted Tests" are visible.