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3.1 Scope

This chapter will examine the process of installing Windows SharePoint Foundation 2010 (WSF) onto a new stand alone Windows 2008 server. If you are planning to install WSF onto a Windows Small Business Server 2008 (SBS) then see - Chapter 4 - Installing Windows SharePoint Foundation 2010 onto Small Business Server 2008.

For information about upgrading and migrating from an existing version of Windows SharePoint Services see – Chapter 7 – Migration and Upgrading.

3.2 **Prerequisites**

There are a number of requirements on any system onto which you plan to install Windows SharePoint Foundation 2010 (WSF). These minimum requirements are:

- Windows Server 2008 (64 bit) Service Pack 2
- Dot Net Framework Version 3.5
- Internet Information Services (IIS) configured with ASP .NET
- You must download an update for Windows Server 2008 before you run Setup, or Setup will not run.
 - For Windows Server 2008 with SP2, see http://go.microsoft.com/fwlink/?LinkID=160770.
 - For Windows Server 2008 R2, http://go.microsoft.com/fwlink/?LinkID=166231.

It is also recommended that you install the following manually:

Microsoft Windows PowerShell (TM) V2 (CTP3), http://www.microsoft.com/downloads/details.aspx?displaylang=en&Familyl D=c913aeab-d7b4-4bb1-a958-ee6d7fe307bc (Note that you will need to uninstall Powershell V1 if it is already installed on your server).

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The following requirements are necessary if you wish to implement additional features in WSF:

SMTP service

Data storage location

29 December 2014

WSF has the ability to store data in a number of locations, including Microsoft SQL Server 2008 Express Edition that comes with WSF. The planned location of your WSF data will have an impact on the installation method you are able to choose. For further information about these options and impacts please see – **Chapter 8 - Database Operations**.

If WSF installs Microsoft SQL Server 2008 Express Edition the default location for the SharePoint content databases will be c:\program files\common files\Microsoft Shared\Web Server Extensions\14\data\MSSQL.10.SharePoint\MSSQL\Data.

Once these requirements have been met it is also advisable to ensure that the machine on which you wish to install WSF is updated with all the latest patches and service packs. It is also advisable to do a reboot of the system prior to a WSF installation to ensure a clean run up environment.

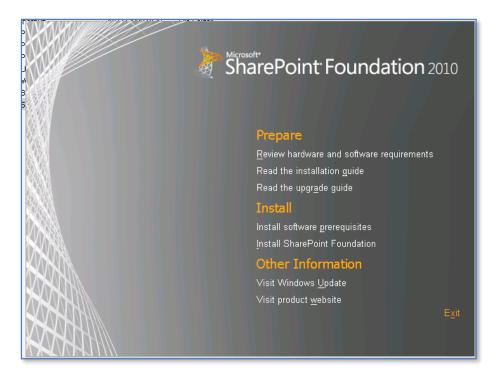
More information about WSF prerequisites can be found in Chapter 14 - Prerequisites

3.3 Installation

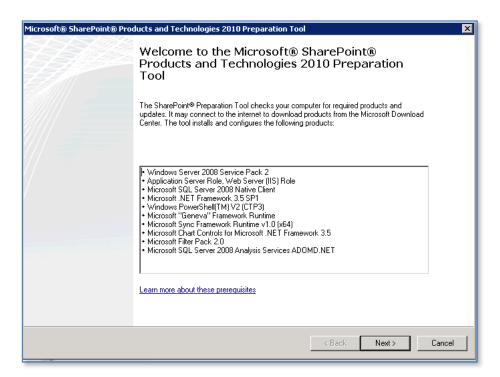
We'll cover the following installations:

- Standalone
- Server Farm

After meeting all the server prerequisites and downloading the WSF software from the Microsoft web site and logging into the Windows Server 2008 as an administrator, commence the installation by **double clicking** on the *sharepoint.exe* file.

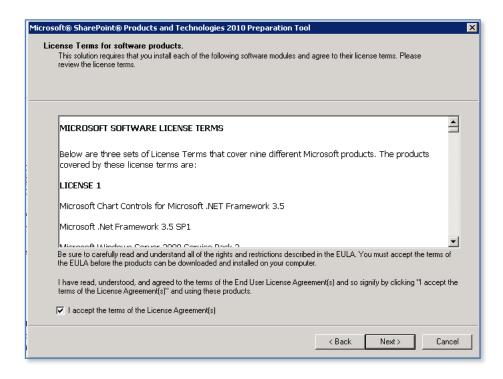


Click on the option **Install software prerequisites** under the *Install* heading.

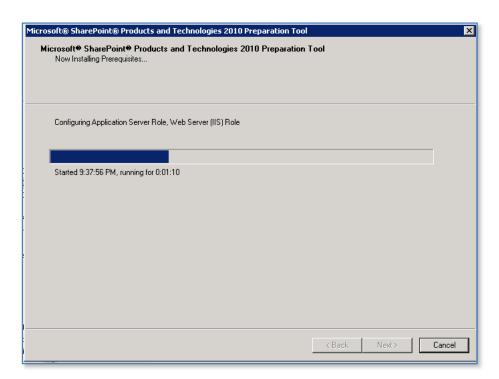


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Click Next to continue.



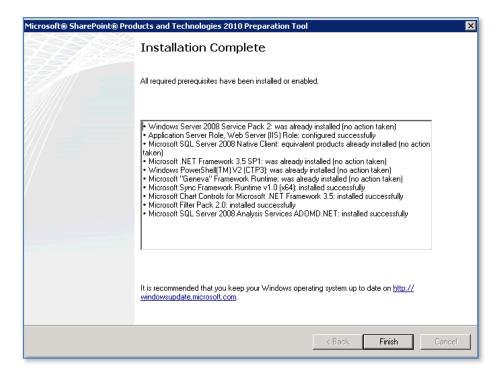
Click the option I accept the terms of the License Agreement(s) and press the Next button to continue.



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If the software is not installed on the server it will automatically be downloaded and installed. It is important to note during the installation of these prerequisites a number of reboots maybe required. This will generally happen automatically and the number will depend on what software is already installed on your machine.

When the process is complete the server may need to be rebooted before proceeding. When the reboot is complete the installation process will continue until you see a screen like:



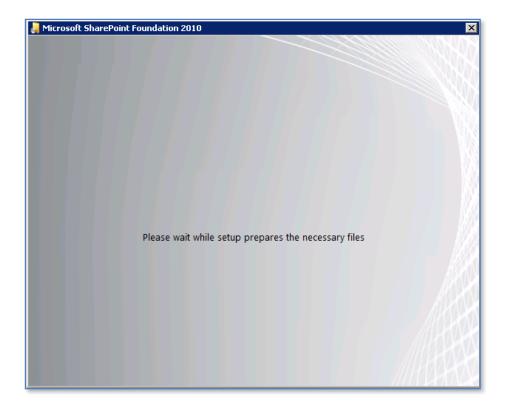
Even if the server does not need rebooting it is recommended you do so just to ensure a clean environment for the installation of WSF.

At the completion of the checking process you will see a summary screen like that displayed above. Note any items that have been skipped or errors that have occurred as these may prevent WSF installing.

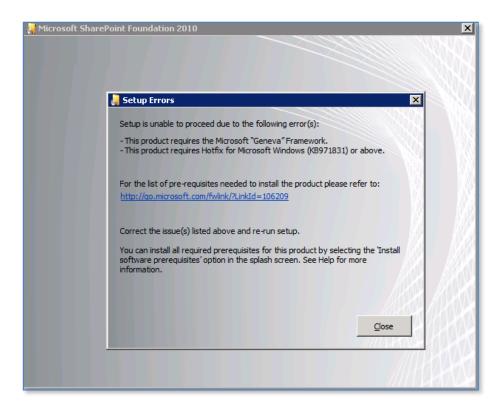
Click the **Finish** button to proceed.



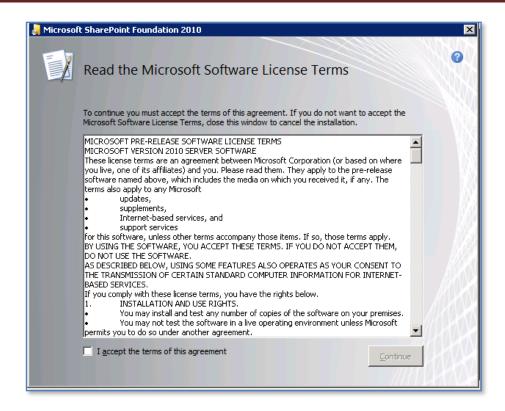
You will be returned to the initial menu. Click the option **Install SharePoint Foundation** to install the software.



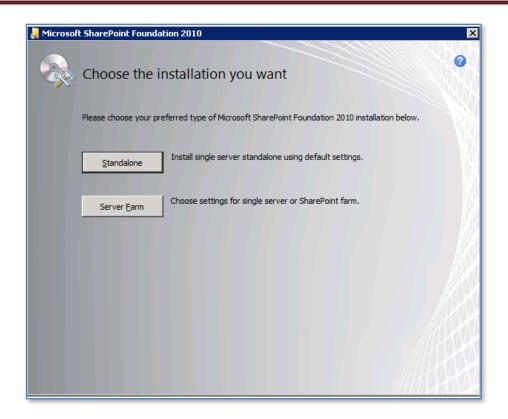
The installation will commence.



If you have not installed KB971831 and the Microsoft "Geneva" Framework you will receive the above error. The installation will not proceed until you have installed these components. Details about obtaining the correct files can be found above.



The first window to be displayed will be the *Microsoft Software License Terms*. After reviewing this, check the - I accept the terms of this agreement in the lower left of the window and press the **Continue** button.



The next window to be displayed will ask you for the type of installation you wish. It is important to pause here and consider the options that are presented and the ramifications they may have for your installation.

Installation type

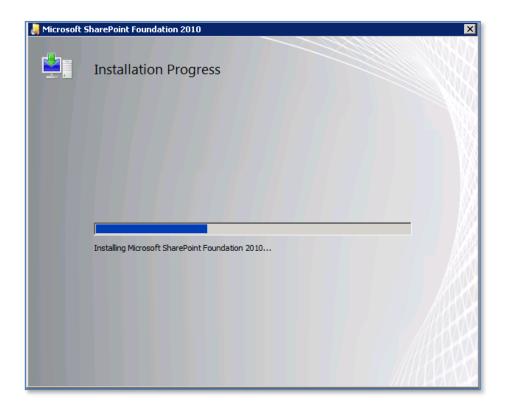
- a. Standalone Selecting this option will install WSF onto your server using the standard defaults. You will NOT be prompted about things like file locations, database locations or whether you wish to only create a web front end. Selecting this option will automatically complete the following tasks:
 - a. Install WSF programs to c:\program files\common files\Microsoft shared\web server extensions\14\
 - b. Install Microsoft SQL Server 2008 Express Edition as the WSF storage option and install this automatically to *c:\program files\Microsoft SQL Server*. You will be unable to upgrade from this version at a later stage if required.

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- c. Locate the SharePoint content database in c:\program files\common files\Microsoft Shared\Web Server Extensions\14\data\MSSQL.10.SharePoint\MSSQL\Data.
- d. Configure a WSF web site on port 80.
- e. Configure a WSF team site collection.
- f. WSF will be configured for a single stand alone server. You will be unable to create a SharePoint farm later if required.
 - Note that using the Standalone option you are unable to change any of the selections mentioned above.
- b. Server Farm Selecting this option will provide you will the full range of options with your WSF installation. However, it is important to note that you will have to complete ALL of the configuration steps and selections (including the creation of a WSF site collection) manually.

Standalone installation

Click the **Standalone** button to continue.



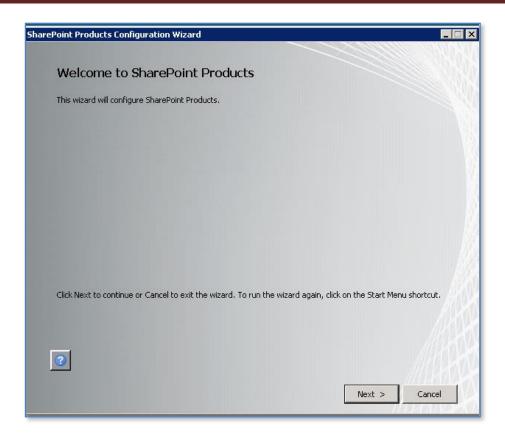
The installation will now copy the required files onto the server. There is no option to cancel or abort the installation until the process is complete. You will not be prompted for further input until the installation progress bar has reached the far right hand side.



Once the file installation process is complete you will be prompted to run the *Configuration Wizard* as shown above.

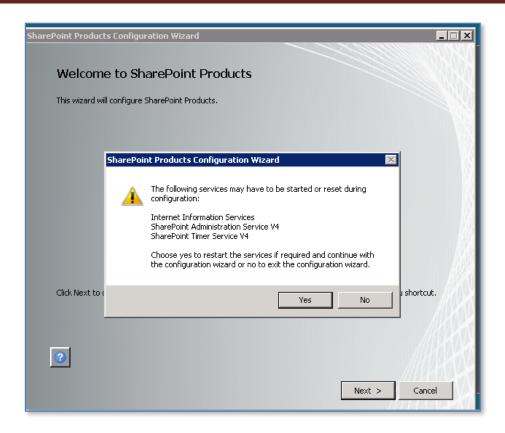
If you leave the *Run the SharePoint Products and Technologies Configuration Wizard now* option checked and press the **Close** button the wizard will commence. If you uncheck this option and press the **Close** button the wizard will not run and you need to run it at a later stage to configure WSF.

It is generally recommended that you leave the option checked and press the **Close** button to run the *SharePoint Products and Technologies Configuration Wizard*.



If you left the option check the *SharePoint Products and Technologies Configuration Wizard* will commence.

Press the **Next** button to continue.



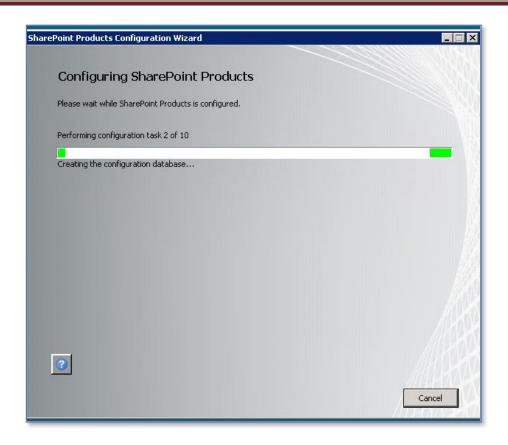
You will now be warned that a number of services on the server will be started or reset. These services are:

- Internet Information Services
- SharePoint Administration Service V4
- SharePoint Timer Service V4

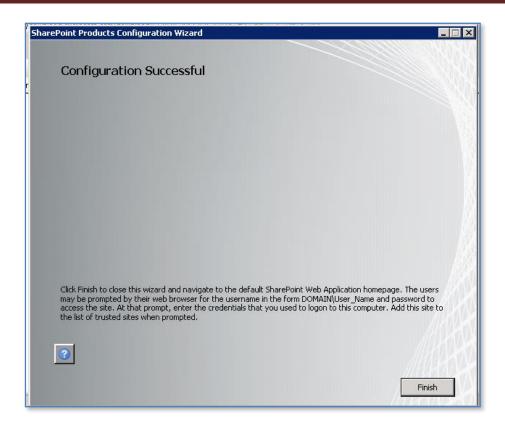
Note that any users making use of these services on the Windows Server will have their processes interrupted during this process. If you do not wish this to happen press the **No** button to abort the process.

Press the **Yes** button to proceed.

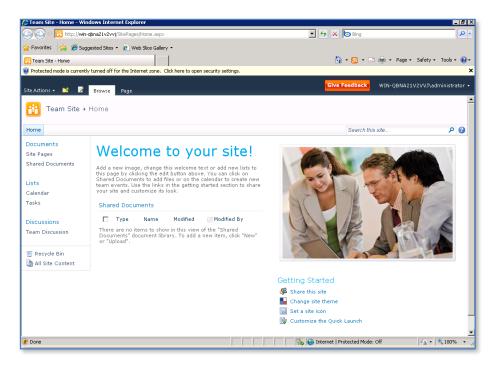
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The wizard will now run through ten tasks to complete the configuration on the server. During some stages it is possible to abort the installation by pressing the **Cancel** button. However, in most cases you will leave the process run until completion.

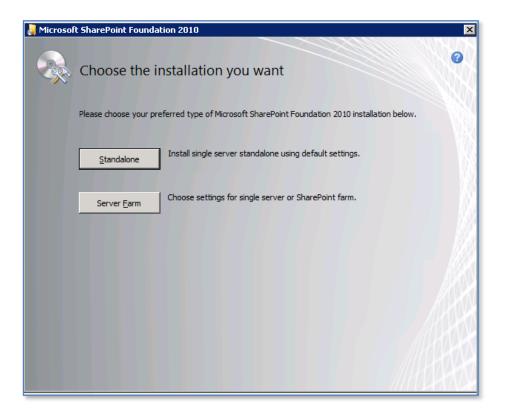


At the completion of the process you will see the above screen. Press the **Finish** button to display the WSF site.

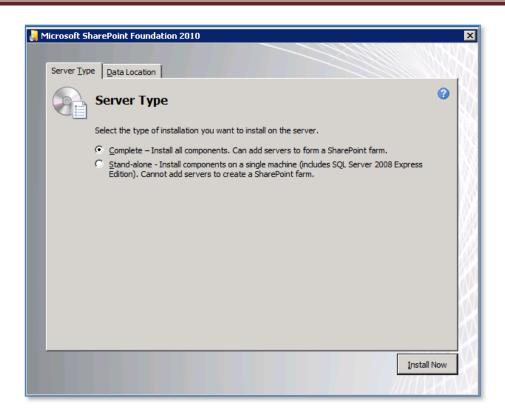


You may need to login to view the site. It is recommended that you add the WSF site to the safe sites as well.

Server Farm installation



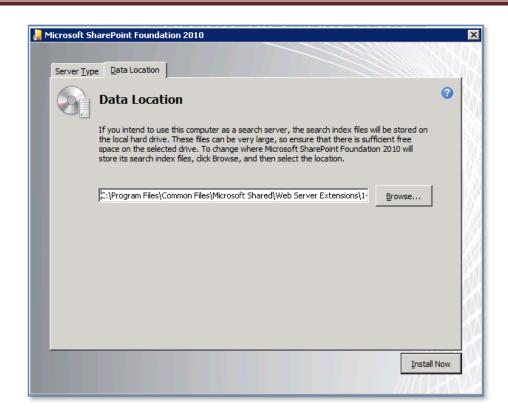
At the installation choice screen press the **Server Farm** button to continue.



The next window that is displayed after pressing the **Server Farm** button is shown above. On the first tab you can select what type of installation you desire. Here again, the choices that you make can have a major impact on your installation going forward.

- 1. Complete This option is the most flexible because it allows you to select your own data storage location (using SQL Server) as well as allowing you to add additional WSF servers into the same 'SharePoint farm' at a later stage. If you wish to store you WSF data in an SQL server or plan to expand the number of servers in your WSF installation then you should select this option but you need to have the SQL server in place prior to this.
- 2. **Stand-alone** This option will not allow you to choose your own data storage location. It will also install the Microsoft SQL Server 2008 Express Edition into c:\program files\microsoft sql server\ and locate the SharePoint content databases in c:\program files\common files\Microsoft Shared\Web Server Extensions\14\data\MSSQL.10.SharePoint\MSSQL\Data. Another limitation of this installation option is that you are unable to add additional servers into this configuration to create a 'SharePoint farm' for improved reliability and load balancing. If do not plan to use a data storage program like SQL Server (non embedded) for your WSF data and do not plan the need of additional WSF servers for a 'SharePoint farm' then select this option.

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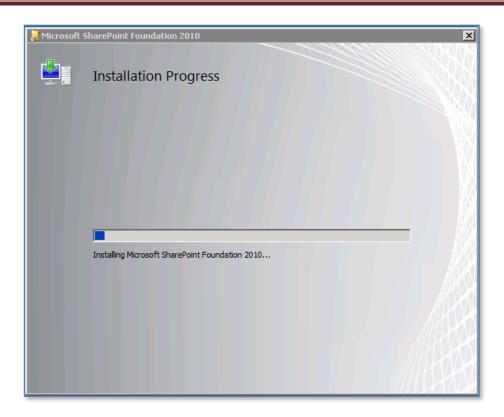
The Data Location tab allows you to specify where the WSF index files will be stored. By default these will be installed in c:\program files\common files\Microsoft shared\web server extensions\14\data. You can specify any location by changing the entry displayed. It is recommended that you only change the drive letter if necessary to ensure compatibility and ease of future support.

Once you have made your selections click the **Install Now** button in the lower right of the window to continue.

Complete installation

Our installation here will continue along the installation of the *Complete* option since it illustrates all the available options.

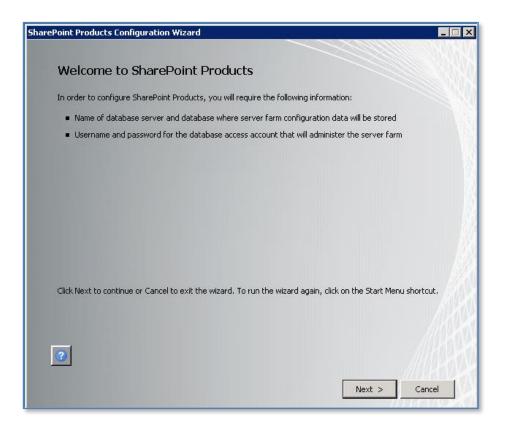
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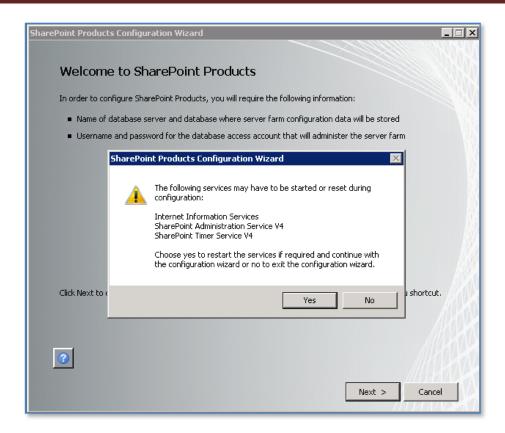


If you selected to run the configuration wizard then the following window will appear. The window warns you that to complete the wizard you require:

- Name of database server and database where server farm configuration will be stored. You must have this database in place prior to proceeding.
- Username and password for the database access account that will administer the server farm.



Press the **Next** button to continue.

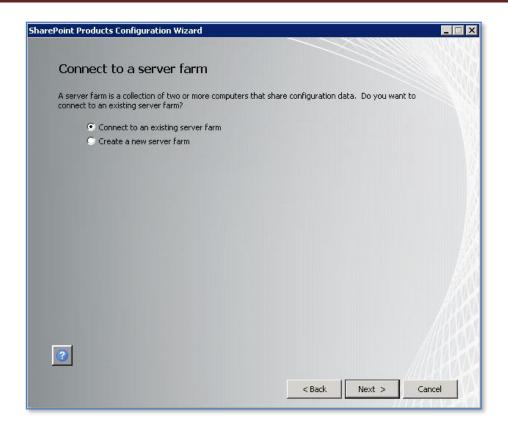


You will now be warned that a number of services on the server will be started or reset. These services are:

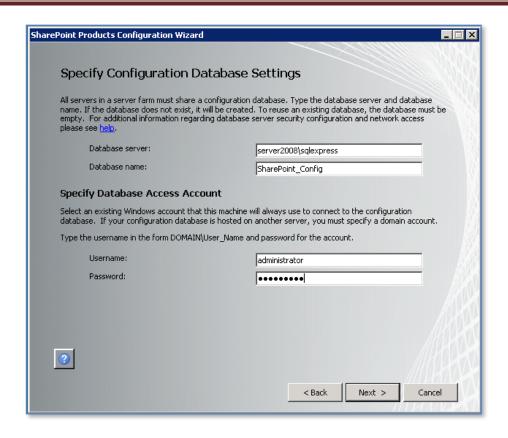
- Internet Information Services
- SharePoint Administration Service V4
- SharePoint Timer Service V4

Note that any users making use of these services on the Windows Server will have their processes interrupted during this process. If you do not wish this to happen press the **No** button to abort the process.

Press the Yes button to proceed.



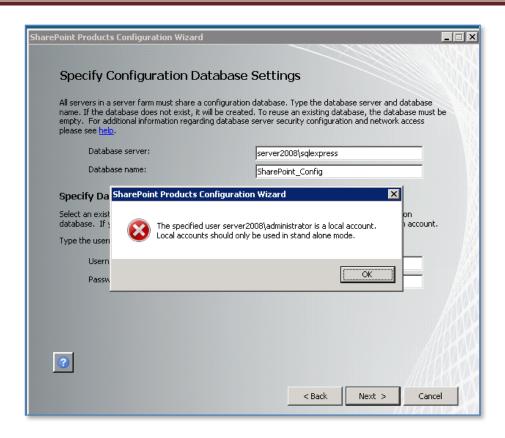
You are now presented with the option to either connect to an existing WSF 'SharePoint farm' or create a new server farm. In this case, because this is a new installation, select — **Create a new server farm** and press the **Next** button to continue.



Because you selected the option to create new farm you will now be prompted for the location of your database server. The *Server Farm Installation* option selected previously does not automatically install the Microsoft SQL Server 2008 Express Edition and thus you will need to already have a compatible database server available on your network. Typically, this database server will be Microsoft SQL Server (2005 Express, 2005 Workgroup, 2005 Standard, 2008 etc). For more information about the WSF database options see - **Chapter 8 – Database Operations**.

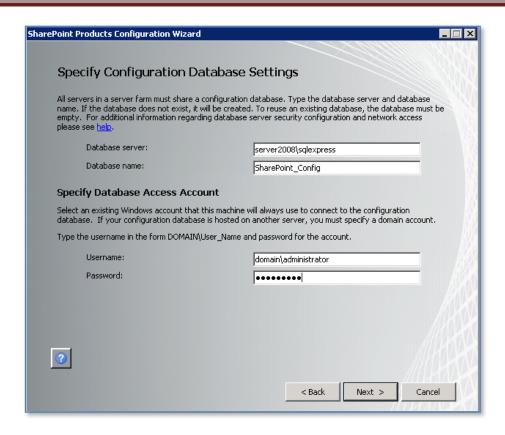
Note that you may be required to enter your database server name as <SERVER>\<INSTANCE> and the database access account as <domain>\<username>.

When these options are complete, press the **Next** button to continue.



If you attempt to install onto a server that is not part of a domain you will see the above screen informing you that local user accounts can only be used in stand-alone mode. You are also prevented from proceeding further.

This is different from what happens with Windows SharePoint Services v3 (WSS v3). It means in effect that to install WSF using the *Server Farm* method the server to be installed on will need to be part of a domain.



Once the server is on a domain and you have completed the required fields, press the **Next** button to continue.



You will now be prompted to enter a passphrase. This passphrase is used by WSF to allow the different components and servers in a farm to communicate securely.

This is an additional option that is not available in WSS v3.

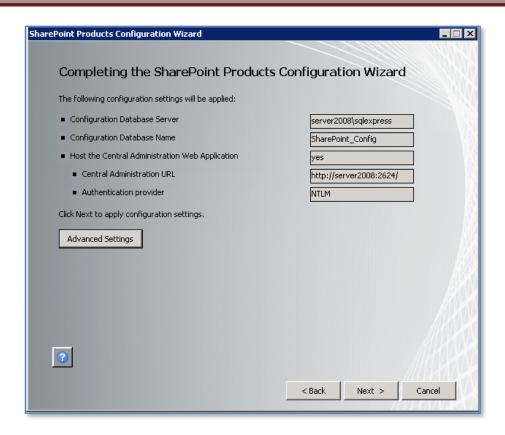
Enter the desired passphrase, ensuring that it meets you security policy and press the **Next** button to continue. Note you may change this password later if desired.



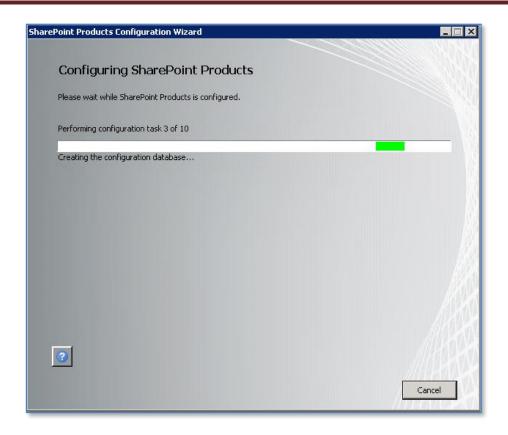
Now you will be prompted to set the SharePoint Central Administration Web Site port number if you want. By default, the installation will choose a random port. This configuration will ensure that the SharePoint Central Administration site doesn't conflict with an existing web site (especially the default web site on port 80). It is recommended that you leave this option unchecked so the installation can select a free random port.

You are also prompted for the authentication provider required for WSF security. This provider is referenced by WSF to determine who has access to the information in WSF. It is possible to change this at a later stage, however initially, it is recommended that it be left as NTLM.

When this is complete press the **Next** button to continue.



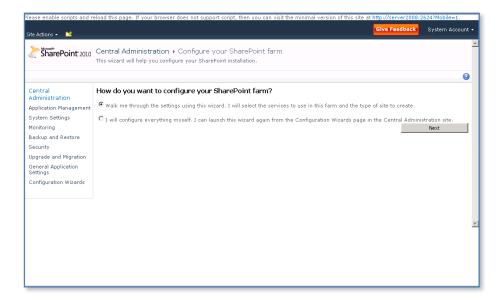
You are now finally presented with a summary of your installation choices. After reviewing these press the **Next** button to continue.



The configuration wizard will now run through ten or so stages to complete the configuration on the server. During this process there is no option to enter further information and the only option available is to press the **Cancel** button to halt the process.

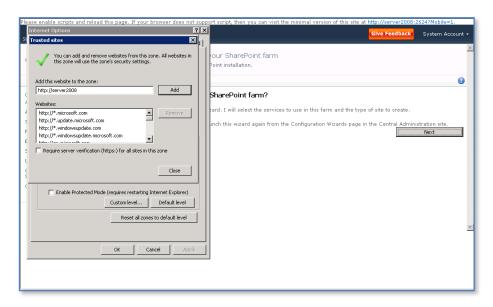


Once the wizard has completed all the steps you will see the above summary screen indicating that the configuration was successful. Press the **Finish** button to continue.

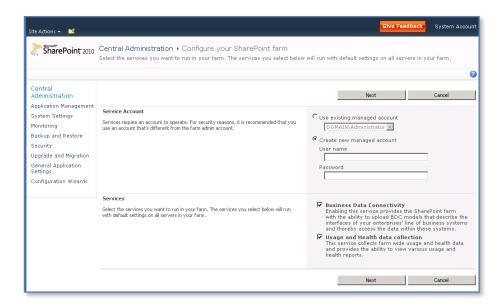


You will now be taken to the SharePoint Central administration site. The process will also start the SharePoint configuration wizard for you as shown above.

To use the configuration wizard to create a new SharePoint site ensure the Walk me through using this wizard option is selected and press the **Next** button.

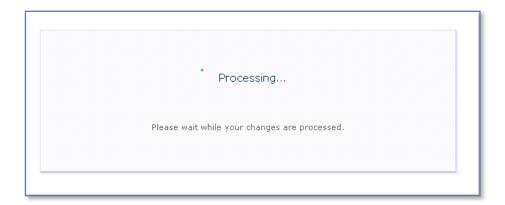


In most cases you will need to add the server URL to the safe sites to allow the scripts that run the wizard to function.

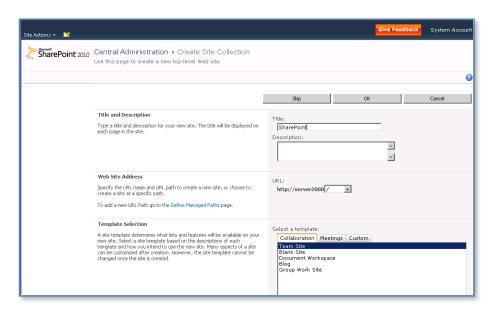


You should now be presented with the options for the desired *Service Account* and *Services*.

Make the desired selection for both of these and press the **Next** button to continue.



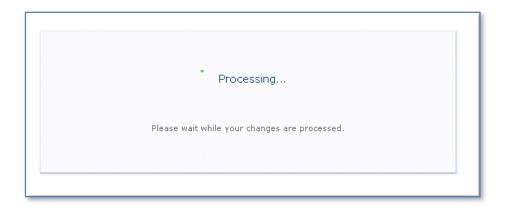
Your selections will now be configured. This process may take a few minutes to run and should not be interrupted.



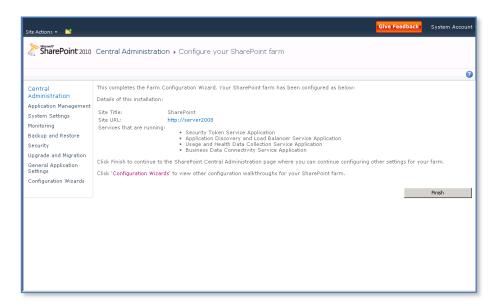
The next step in the wizard process is to select a *Title* for the site as well as the *Template* on which it will be based.

Now select the template you wish to use when creating your WSF site. More information about the options available here can be found in **Chapter 5 – Central Administration** and **Chapter 10 - Templates**.

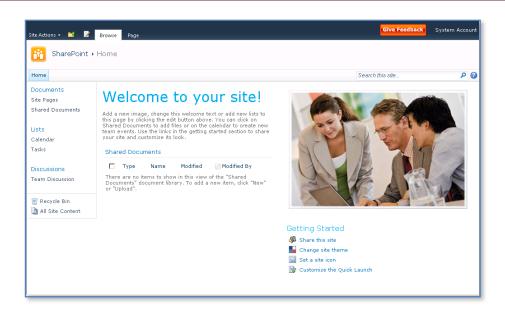
Make you desired selections and press the **Next** button to continue.



Your selections will now be configured. This process may take a few minutes to run and should not be interrupted.



Once processing is complete the wizard will finish. You will see a link in the middle of the page to your new SharePoint site (in this case http://server2008). Click on this link to display your new WSF site.



If everything has completed successfully you should now see the familiar WSF team web site displayed in your browser. You will note that this site is now the default web site for that server (i.e. operates on port 80).

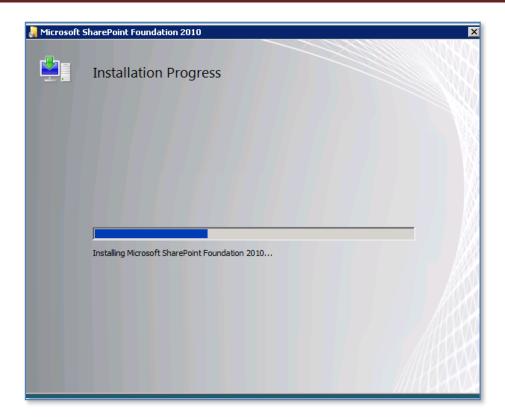
Standalone installation



Ensure that the *Stand-alone* option is selected and press the **Install Now** button to continue.

This option will not allow you to choose your own data storage location. It will also install the Microsoft SQL Server 2008 Express Edition into c:\program files\microsoft sql server\ and locate the SharePoint content databases in c:\program files\common files\Microsoft Shared\Web Server

Extensions\14\data\MSSQL.10.SharePoint\MSSQL\Data. Another limitation of this installation option is that you are unable to add additional servers into this configuration to create a 'SharePoint farm' for improved reliability and load balancing. If do not plan to use a data storage program like SQL Server for your WSF data and do not plan the need of additional WSF servers for a 'SharePoint farm' then select this option.

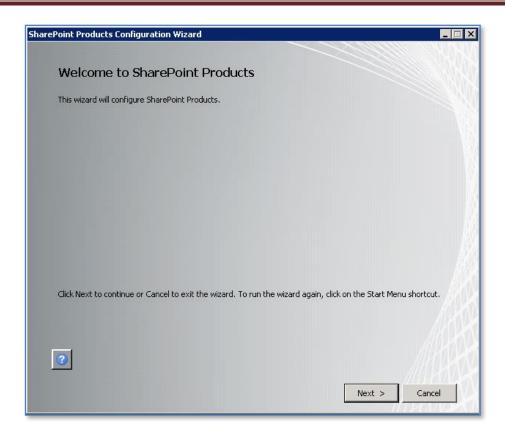


The installation will now copy the required files onto the server. There is no option to cancel or abort the installation until the process is complete. You will not be prompted for further input until the installation progress bar has reached the far right hand side.

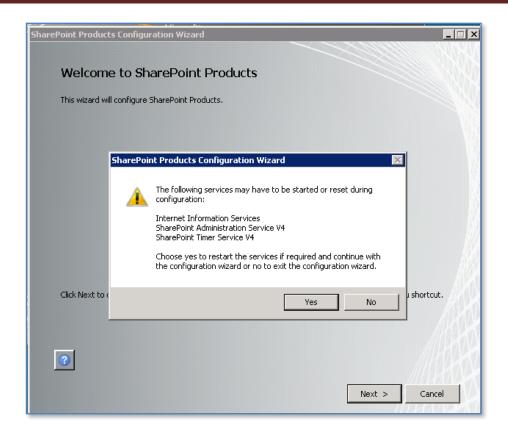


Once the file installation process is complete you will be prompted to run the *Configuration Wizard* as shown above.

If you leave the *Run the SharePoint Products and Technologies Configuration Wizard now* option checked and press the **Close** button the wizard will commence. If you uncheck this option and press the **Close** button the wizard will not run and you need to run it at a later stage to configure WSF.



If you left the option check the *SharePoint Products and Technologies Configuration Wizard* will commence.

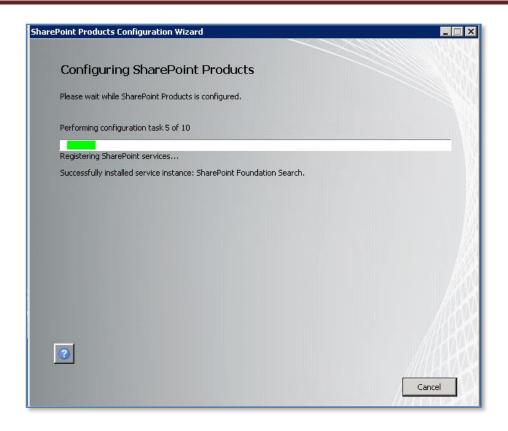


You will now be warned that a number of services on the server will be started or reset. These services are:

- Internet Information Services
- SharePoint Administration Service V4
- SharePoint Timer Service V4

Note that any users making use of these services on the Windows Server will have their processes interrupted during this process. If you do not wish this to happen press the **No** button to abort the process.

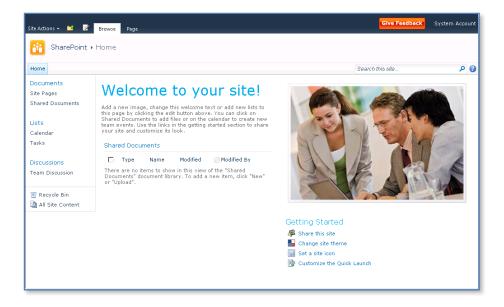
Press the **Yes** button to proceed.



The wizard will now run through 10 tasks to complete the configuration on the server. During some stages it is possible to abort the installation by pressing the **Cancel** button. However, in most cases you will leave the process run until completion.



At the completion of the process you will see the above screen. Press the **Finish** button to display the WSF site.



You may need to login to view the site. It is recommended that you add the WSF site to the safe sites as well.

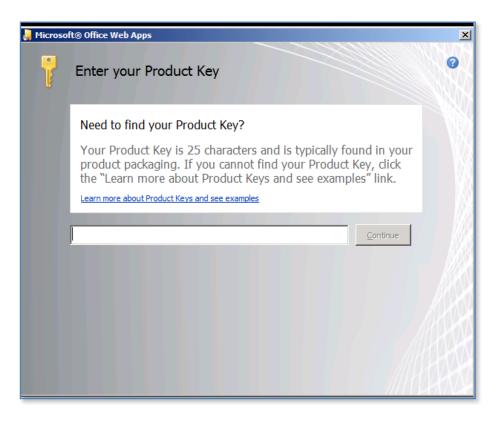
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3.4 Installing Office Web Apps

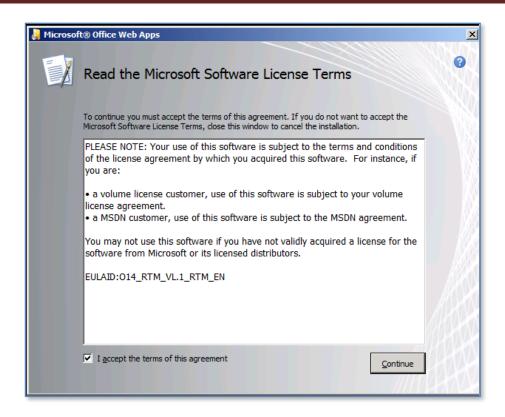
Microsoft Office Web Apps are an add on product for SharePoint 2010. They allow the viewing and editing of Microsoft Office documents (Word, Excel, PowerPoint and OneNote) stored in SharePoint 2010 servers through a web browser. Note that not all the functionality of the Office Desktop application (i.e. Word, Excel, PowerPoint and OneNote) is available via Office Web Apps but it is more than adequate for basics tasks and updates.

Microsoft Web Apps are currently available free and only as part of an Office Volume Licence agreement. To install Office Web Apps you will need to already have a SharePoint 2010 installation (Server or Foundation) in place.

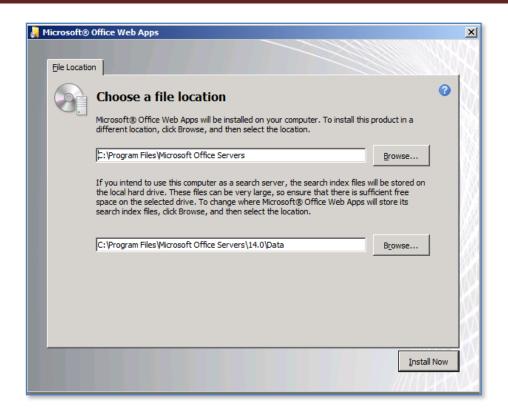
You will need to login into your WSF server as an administrator. Once you have inserted the Office Web Apps DVD into a drive you should see the following window displayed.



You will now need to enter the Office Web Apps Key you have been provided and press the Continue button once that key has been verified.

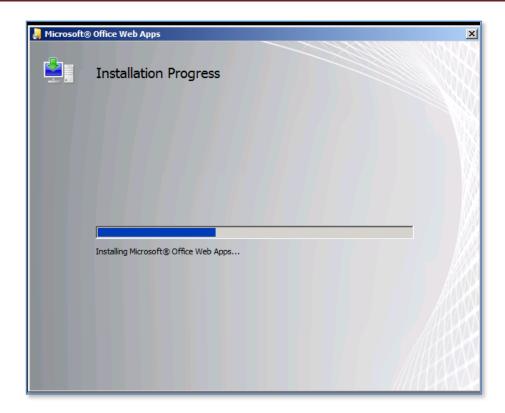


You should now place a check in the *I accept the terms of this agreement* and press the **Continue** button.



You will now be asked to select a location on your system for Office Web Apps. The default location is c:\program files\microsoft office server.

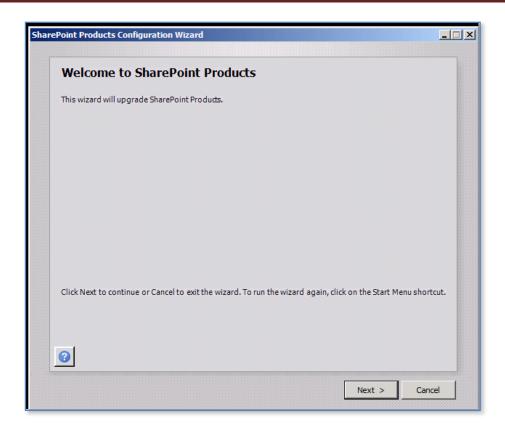
When you have made your selection press the **Install Now** button.



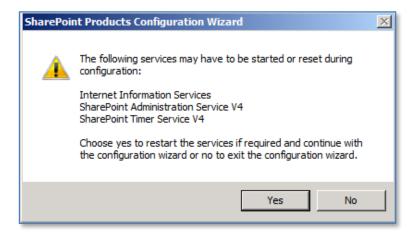
The program will now install the Office Web Apps files on your system. Note, there is no option to cancel the process here you will have to wait until it is complete.



When the files have been copied you will be prompted to run the Configuration Wizard. Ensure the *Run the SharePoint Products Configuration Wizard now* is selected and press the **Close** button.



The Configuration Wizard will now commence. Press the **Next** button to continue.

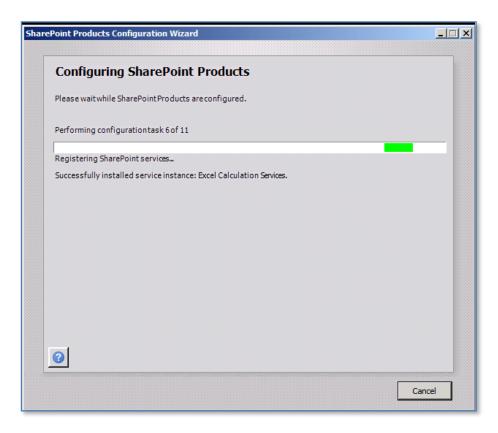


You will be warned that a number of shared server services will be started or reset during this process. These services may affect other applications currently being used. These services are:

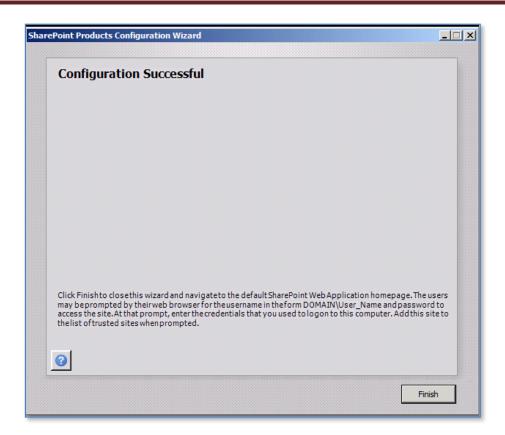
Internet Information Services
SharePoint Administration Service V4
SharePoint Timer Service V4

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When you are ready to proceed with the configuration press the **Yes** button.

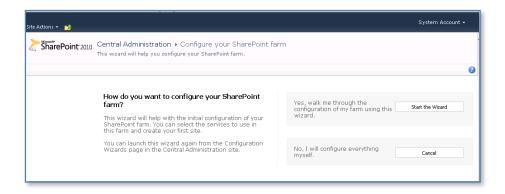


The configuration wizard will now run through about 10 steps. This process may take several minutes to complete depending on the hardware that you have installed. You can press the **Cancel** button in the bottom right at any time to stop the process.



Once the configuration process has completed you will see a summary screen like that shown above.

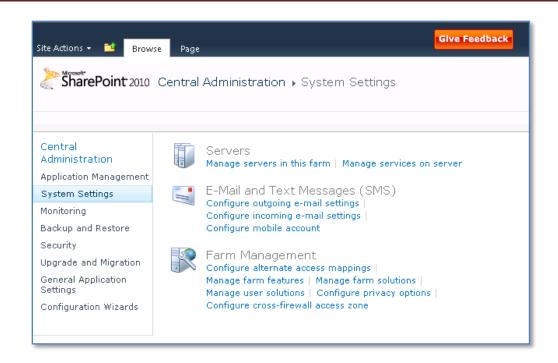
Press the Finish button to close this window.



Most likely a browser will now be opened and you will be given the option to configure the SharePoint farm using a wizard. The process detailed here will take you through the manual process.

Click the Cancel option to terminate the wizard.

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Select the **Systems Settings** item from under the *Central Administration Quickstart menu* on the left hand side of the screen. Then select **Manage Services on Server** from the *Servers* section on the right hand side.

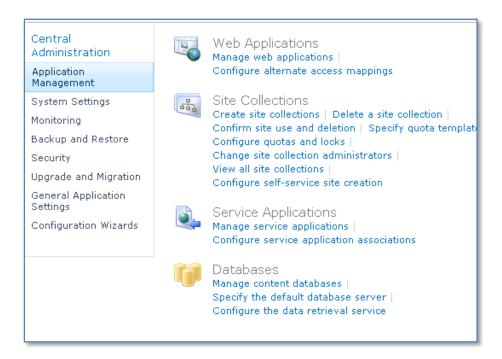


This will then list all the SharePoint services on your farm. In there should appear the following Office Web Apps services:

- Excel Calculation Services
- PowerPoint Service
- Word Viewing Service

Note that the OneNote service is not listed here as it is operated through a different component that generally does not require modification.

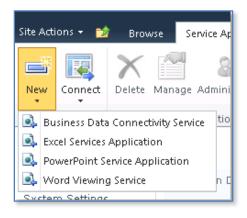
If any of the services are note shown with a *Status* of started then click on the hyperlink to the right of this called **Start**.



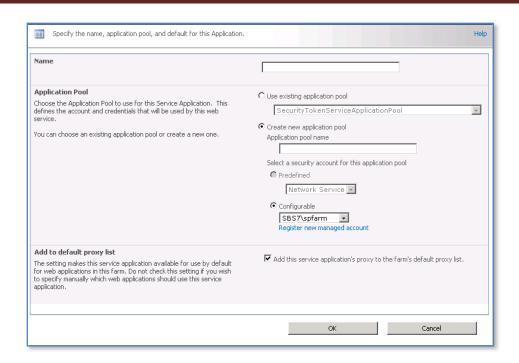
Now select the **Application Management** item under *Central Administration* on the *Quickstart menu* to the left of the screen. Then select **Manage service applications** under the *Service applications* section on the right hand side.



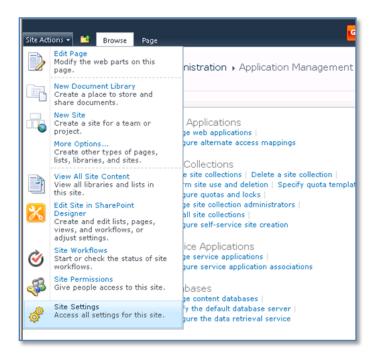
Ensure that the Office Web Apps are present as shown above. If they are not present then select the missing ones from the pull down under the *New* menu in the top left like so:



And completed the required information

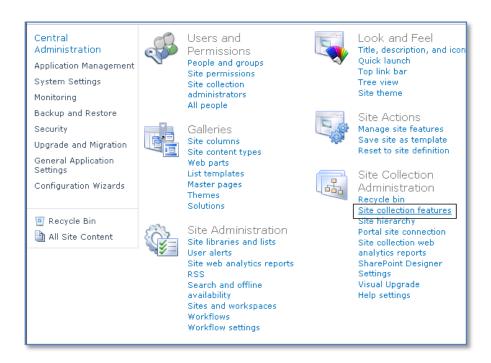


And press the **OK** button to save the configuration when complete.



Office Web Apps has now been configured on the SharePoint server but it needs to be enabled on any site collection.

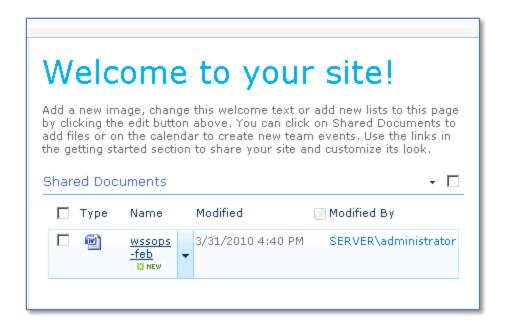
To do this access the SharePoint site on which you wish to enable Office Web Apps, as a site collection administrator and select **Site Settings** from the *Site Actions* menu in the top left of the site.



Select **Site Collection features** under the *Site Collection Administration* section on the right hand side of the window.

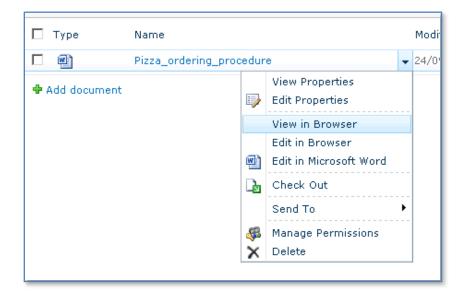


Ensure that the Office Web Apps feature is enabled. In the above screen you can see that it is Active. You can also press the *Deactivate* button at any time in the future to remove the Office Web Apps functionality from this SharePoint site.



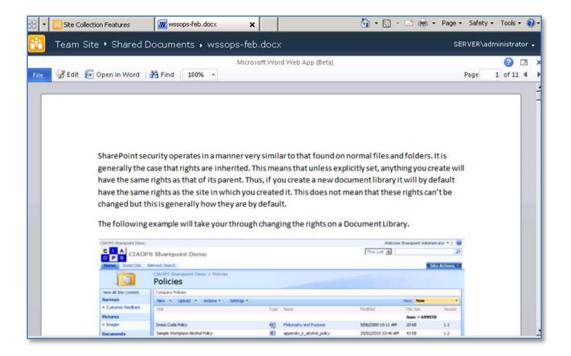
If you return to your WSF site you should find that Office Web Apps is fully enabled for the relevant documents in your site. To test this functionality hover over any applicable Office document until you see the arrow for the pull down menu on the right hand side of the document name as shown above.

By default is you click on a document that is supported by Office Web Apps it will open in a browser.

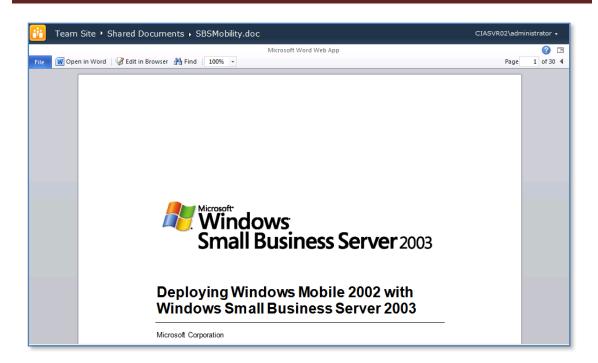


If you press the *arrow key* you will see a menu like that shown above displayed. You should see two additional options to what is normally available, *View in Browser* and *Edit in Browser*.

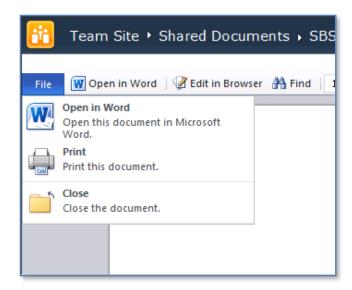
Select the option to **View in Browser** to continue.



In a few moments the document you selected should display in a web browser like shown above.



You will also see on the menu that you have the ability to open in the Office program as well as *Edit in a browser*.



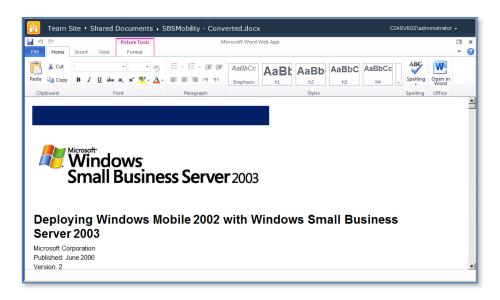
You can also pull down the Office Backstage to display a limited menu like that shown above.



If you wish to edit a document in the browser it may need to be converted into the latest Office document format. You will be given the choice to complete the conversion, edit the document in the Office desktop application (in this case Word) or cancel the process.



If you select Convert then your document will be converted and you will be placed into edit mode within your browser.

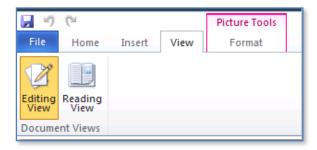


Once in edit mode in the browser you will see an extended ribbon interface much like what you find in Office 2010 documents.

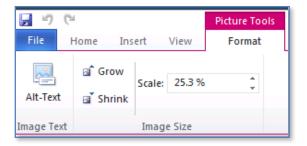
You are free to use this ribbon to make any required changes to your document.



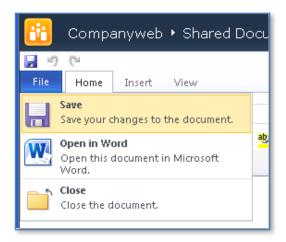
For example you can insert images.



Or change the display view



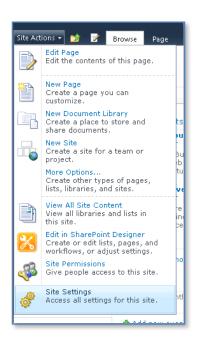
Or change the formatting.



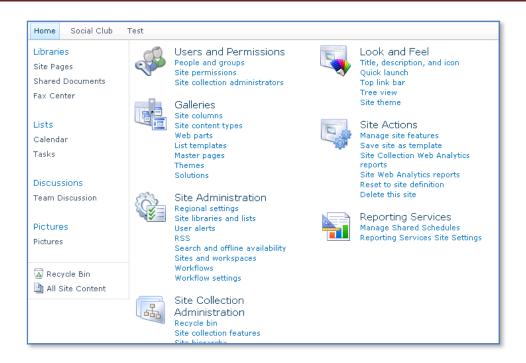
When complete save the document via the *Save* icon in the top right or use the backstage save option. This will save any changes you have made to the file on the WSF site.

You can then close the file you have been working on in Office Web Apps.

By default, once Office Web Apps has been installed any time you click on a supported document in WSF it will open in a browser. To change this behaviour login to your WSF site as an administrator.



Select **Site Settings** from the *Site Actions* menu in the top left of the window.

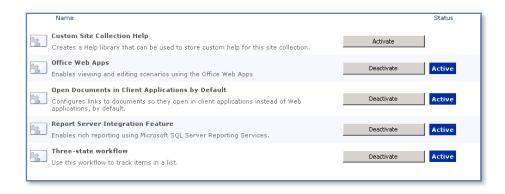


Select **Site collection features** from under the *Site Collection Administration* heading on the right hand side.



You should see an option *Open Documents in Client Applications be Default*. If this not *Active* then supported documents will open in a browser when selected.

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To change the default behaviour simply click on the **Active** button and you should see the *Active* status appear next to the button, which will also change to read Deactivate.

Now any supported document will open with the default client application software rather than in a browser.

3.5 Conclusion

Prior to any installation you need to decide on what type of installation you wish to perform, advanced, default or stand alone. Each of these options presents a number of different options that can be selected during the installation process and can affect the future growth of your installation.

Once installation has been completed you should also check to ensure that search has been enabled on WSS v3. More details on how to this can be found in **Chapter 3** – **Advanced Configuration** and **Chapter 11** – **Search**.

Please send your comments and feedback to director@ciaops.com.

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