

Troubleshooting Companyweb on SBS 2011

Version 0.91

Outline

This document is designed to provide troubleshooting tips for Companyweb issues on Windows Small Business Server (SBS) 2011. Much of the information can also be used with other versions of SBS (i.e. 2008) however it should not be assumed that the configurations are identical. You may also be able to use this document to troubleshoot other standalone installations of SharePoint Foundation 2010 to an extent.

Introduction

Companyweb (SharePoint on SBS 2011) has a number of dependencies (apart from Window Server 2008 R2 itself) including:

1. SQL Server 2008 Express R2
2. Services
3. Internet Information Services (IIS)
4. Domain Name Service (DNS)
5. SharePoint Configuration

Issues with any of these can prevent Companyweb from launching correctly.

Companyweb also makes use of the following applications on SBS 2011:

6. Exchange Server 2010

Companyweb on SBS 2011 utilizes SharePoint Foundation 2010 and SQL Server 2008 R2 Express.

1. SQL Server 2008 Express R2

The first place to start troubleshooting is the server Services which can be accessed from the SBS 2011 console via **Start | Administrative Tools | Services**.

You should see a list of services. Scroll down until you find the services starting with *SQL Server*.

Name	Description	Status	Startup Type	Log On As
Special Administration Console Helper	Allows adm...		Manual	Local System
SPP Notification Service	Provides S...	Started	Manual	Local Service
SQL Active Directory Helper Service	Enables int...		Disabled	Network Service
SQL Full-text Filter Daemon Launcher (SBSMO...)	Service to l...	Started	Manual	Local Service
SQL Full-text Filter Daemon Launcher (SHARE...)	Service to l...	Started	Manual	Local Service
SQL Server (SBSMONITORING)	Provides st...	Started	Automatic	Local System
SQL Server (SHAREPOINT)	Provides st...	Started	Automatic	Local System
SQL Server Agent (SBSMONITORING)	Executes j...		Disabled	Network Service
SQL Server Agent (SHAREPOINT)	Executes j...		Disabled	Network Service
SQL Server Browser	Provides S...		Disabled	Local Service
SQL Server VSS Writer	Provides th...	Started	Automatic	Local System
SSDP Discovery	Discovers ...	Started	Automatic	Local Service
System Event Notification Service	Monitors s...	Started	Automatic	Local System
Task Scheduler	Enables a ...	Started	Automatic	Local System
TCP/IP NetBIOS Helper	Provides s...	Started	Automatic	Local Service
Telephony	Provides T...		Manual	Network Service
Thread Ordering Server	Provides or...		Manual	Local Service
TPM Base Services	Enables ac...		Manual	Local Service
Update Services	Enables th...	Started	Automatic	Network Service
UPnP Device Host	Allows UPn...	Started	Automatic	Local Service
User Profile Service	This servic...	Started	Automatic	Local System
Virtual Disk	Provides m...	Started	Manual	Local System
Volume Shadow Copy	Manages a...		Manual	Local System
Web Management Service	The Web M...		Manual	Local Service

The major service to look for in the list is **SQL Server (SharePoint)** as shown above. Ensure that this service is started and the *Startup* type is set to *Automatic*.

If the SQL Server service is started then you should now be able to use the *Microsoft SQL Management Studio* to view the databases. To run the *Microsoft SQL Management Studio* select **Start**, then **All Programs**, **Microsoft SQL Server 2008 R2** group and then **SQL Server Management Studio**. Ensure that you run this as an administrator by right mouse clicking and selecting **Run as administrator**.



To connect to the SQL instance on SBS 2011 you will need to connect to `<server_name>\sharepoint`. When you do so you should see a tree structure. If you expand the *Databases* node you should see a number of databases displayed. In the list you should see the following databases:

- SharePoint_AdminContent_<GUID>
- SharePoint_ConfigurationDatabase
- ShareWebDB

- WSS_Search
- WSS_Search_<server_name>

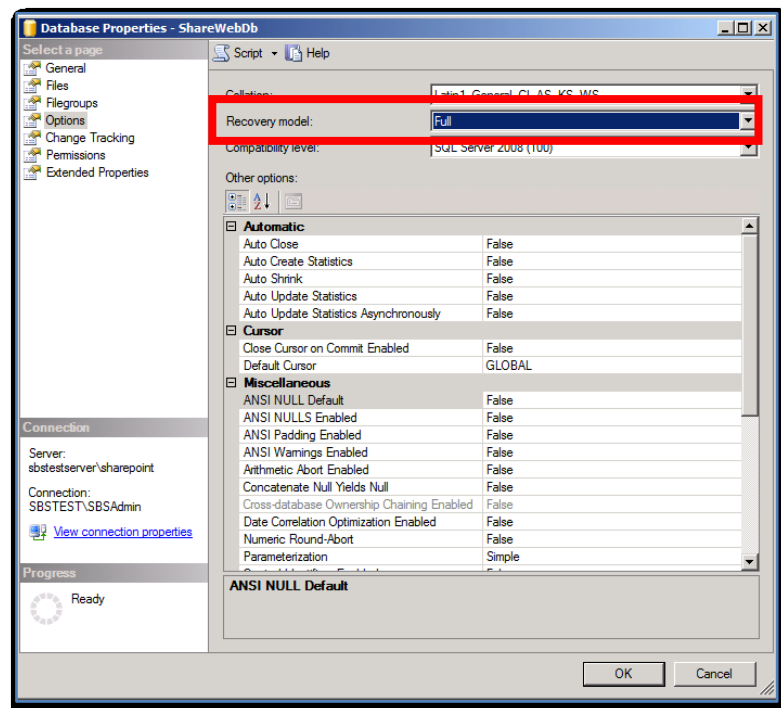
The information in Companyweb is located in ShareWebDb database. Information about the configuration of SharePoint on SBS 2011 is held on the database SharePoint_ConfigurationDatabase. The SharePoint_AdminContent_<GUID> contains the SharePoint Central Administration site (which is also a SharePoint site). WSS_Search contains the search indexing information.

Some of the typical issues that SQL can cause with Companyweb web include:

A. Large files consuming space

SQL databases are composed of two files, an MDF and a LDF. The MDF is the database while the LDF is the transaction log file. By default, each SQL database normally operates in what is known as 'full recovery mode'. This means that the entries from the transaction logs are rolled into the database but the transaction log file is only truncated after an SQL 'aware' backup. In most cases this means that the logs will not be truncated (even if SBS 2011 Backup is used) and will continue to grow.

The logs can either be truncated by running an SQL 'aware' backup that is normally part of SQL Server but isn't available with the Express version that is installed on SBS 2011 or changing the *Recovery Mode* from Full to Simple. This configuration needs to be performed on each affected database which means using *Microsoft SQL Management Studio* to access the SharePoint instance, **right mouse click** on the database in question and then select **Options** from the menu on the left. You should see the option called *Recovery model* at the top of the page.



There are some ramifications of making the change from full to simple recovery. Doing so means that information is written directly to the database rather than via the

transaction logs. This means that if there is ever an interruption (like a power failure) a corrupt of the database may occur. However, in today's server environment which generally has the protection of UPS's and constant image backups setting the database to simple recovery is not a great issue.

Changing the Recovery mode from full to simple should immediately reduce the log file size. If for some reason it doesn't reduce the size of the files you will then need to run a Shrink operation which is available by **right mouse clicking** again on the database and selecting **Tasks**.

Reference

Very Large SharePoint database files -

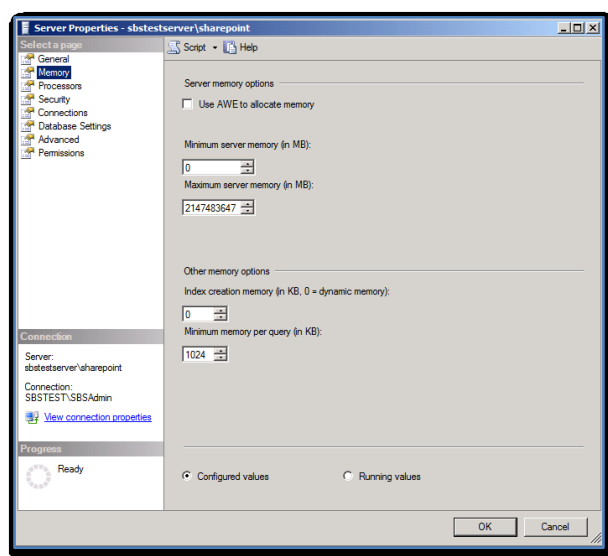
<http://geekswithblogs.net/RogueCoder/archive/2008/06/03/122588.aspx>

Recovery model overview - <http://msdn.microsoft.com/en-us/library/ms189275.aspx>

B. Process consuming memory

By default SQL Server is configured to use all available memory. There may also be other programs that utilize SQL server. Typically these programs will use a separate SQL instance. An SQL instance provides isolation between SQL databases but still utilizes the same SQL Server. In the case of SBS 2011 SharePoint runs on an instance called <server_name>\sharepoint. You must therefore connect to this instance if you wish to make any changes.

Once you have connected to this instance right mouse click on the server name and select **Properties** from the menu that appears. In the *Server Properties* window select the **Memory** option on the left hand side.



By default the Maximum server memory (in MB) will be set to something like 2147483647. You can enter a new value in here (a good starting point is 1024). Press the **OK** button when complete to save the new setting.

You should then find the memory utilized by that SQL instance has decreased. It is important to note that this may not be the only SQL instance or SQL version installed on SBS. It is possible to trim these other instances utilizing the same method if appropriate.

Reference

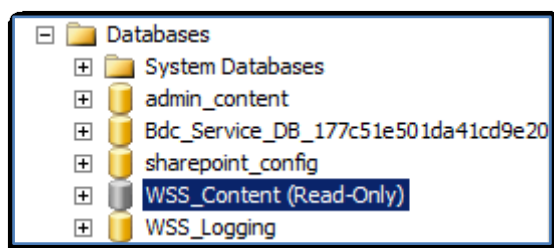
SBS 2011 – WSUS SQL Memory Usage Is Very High – How To Reduce It-

<http://blog.mpecsinc.ca/2011/07/sbs-2011-wsus-sql-memory-usage-is-very.html>

C. *Databases in read only mode*

There are rare situations where SharePoint databases maybe be left in read-only mode. This could happen when updates have been applied to SharePoint. If the database is in read only mode Companyweb will continue to operate but it will not be possible to add new content to the site. You will also see that many of the usual buttons on the ribbon interface (such as upload document) are greyed out.

To check whether a SharePoint database is in read only mode you will need to connect to the SharePoint SQL instance.



When you do and expand the Databases node, you will immediate see whether any databases are in read-only mode as shown above.

To remove the read-only attribute from the database, right mouse click on the database and select **Properties** from the menu that appears. In the *Database Properties* windows select **Options** on the left.

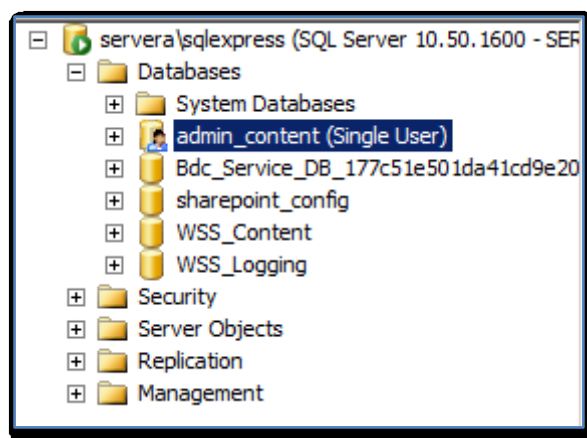
Recursive Triggers Enabled	False
Trustworthy	False
VarDecimal Storage Format Enabled	True
Recovery	
Page Verify	CHECKSUM
Service Broker	
Broker Enabled	True
Honor Broker Priority	False
Service Broker Identifier	43f7ff1d-6721-4fb8-93ba-715fce5685f9
State	
Database Read-Only	True
Database State	NORMAL
Encryption Enabled	False
Restrict Access	MULTI_USER

If you scroll down until you locate the *State* heading and the first option is *Database Read-Only*. If this is set to *True* change it to **False** by clicking on the entry and press **OK** to save the setting.

When you are returned to the list of databases you should see that the database is no longer in read-only mode.

D. Databases in Single User mode

Much like the read only mode issues listed above, SQL databases can end up, for some reason, being placed in single user mode. This effectively prevents them from being shared. You will see when a database is in single user mode if you open the *Microsoft SQL Server Management Studio*, connect to the SharePoint instance then expand the *Databases* folder you will see something like:

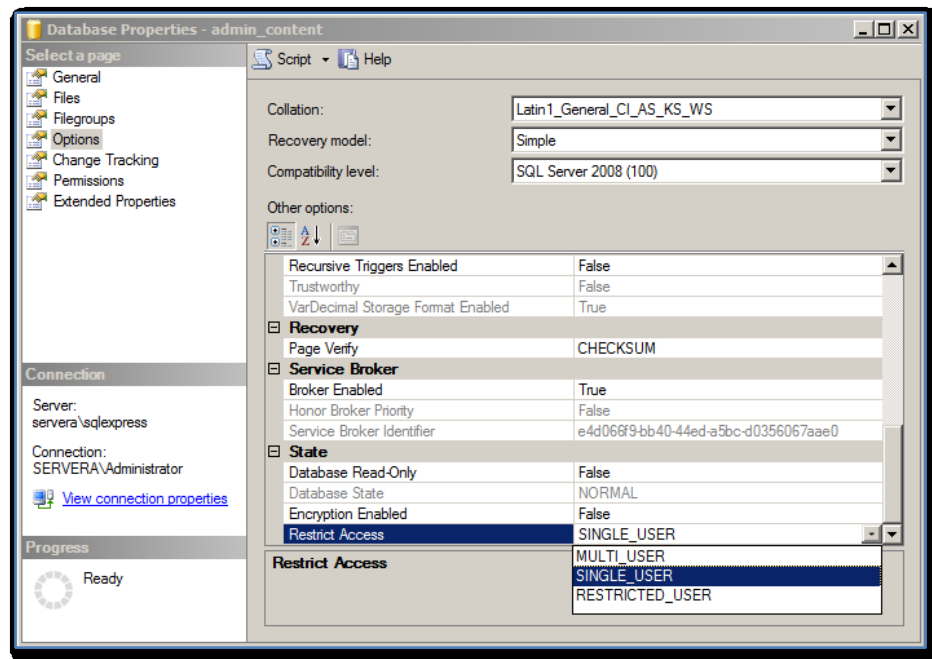


In the above case the SharePoint Administration Content database is in single user mode. This state is denoted by the small person icon on the database as well as *(Single User)* being displayed at the end of the database name.

The fix to this issue is normally simply to take the database out of single user mode. To do this **right mouse click** on the affected database and select **Properties** from the menu that appears. You will need to ensure that you are running the *Microsoft SQL Server Management Console* as an administrator.

If you are unable to access the database because it is being used by another application (as it is only currently supporting one connection) you may need to restart the *SQL Server (SQLEXPRESS)* service from the Administration tools.

Once into the properties of the database select the **Options** section from the menu on the left hand side. Scroll down to the bottom of the displayed list on the right and locate the *Restrict Access* setting under the *State* section.



You will see that the *Restrict Access* option is set to `SINGLE_USER`. From the options available select **MULTI_USER** and press **OK** to save the changes.

You will be warned that doing so will close all other SQL connections. Press **Yes** to continue. When complete you should see that the database no longer has the person icon over the database and the name no longer says (Single User).







2. Services

Name	Description	Status	Startup Type	Log On As
Routing and Remote Access	Offers rout...	Disabled	Automatic	Local System
RPC Endpoint Mapper	Resolves R...	Started	Automatic	Network Service
RPC/HTTP Load Balancing Service	Coordinate...	Started	Manual	Network Service
Secondary Logon	Enables st...	Manual	Automatic	Local System
Secure Socket Tunneling Protocol Service	Provides s...	Manual	Automatic	Local Service
Security Accounts Manager	The startu...	Started	Automatic	Local System
Server	Supports fil...	Started	Automatic	Local System
Server Infrastructure License Service	Provides s...	Started	Automatic	Local System
SharePoint 2010 Administration	Performs a...	Started	Automatic	Local System
SharePoint 2010 Timer	Sends notif...	Started	Automatic	SBSTEST\spfarm
SharePoint 2010 Tracing	Manages tr...	Started	Automatic	Local Service
SharePoint 2010 User Code Host	Executes u...	Disabled	Automatic	SBSTEST\spfarm
SharePoint 2010 VSS Writer	SharePoint...	Started	Automatic	SBSTEST\spfarm
SharePoint Foundation Search V4	Provides fu...	Started	Manual	SBSTEST\spsearch
Shell Hardware Detection	Provides n...	Started	Automatic	Local System
Smart Card	Manages a...	Manual	Automatic	Local Service
Smart Card Removal Policy	Allows the ...	Manual	Automatic	Local System
SNMP Trap	Receives tr...	Manual	Automatic	Local Service
Software Protection	Enables th...	Started	Automatic (D...	Network Service
Special Administration Console Helper	Allows adm...	Manual	Automatic	Local System
SPP Notification Service	Provides S...	Started	Manual	Local Service
SQL Active Directory Helper Service	Enables int...	Disabled	Automatic	Network Service
SQL Full-text Filter Daemon Launcher (SBSMO...)	Service to l...	Started	Manual	Local Service
SQL Full-text Filter Daemon Launcher (SHARE...)	Service to l...	Started	Manual	Local Service

The next services that should be verified are those starting with SharePoint as shown above. You will see that most of the services should be *Started* and set to start automatically. If any of the services

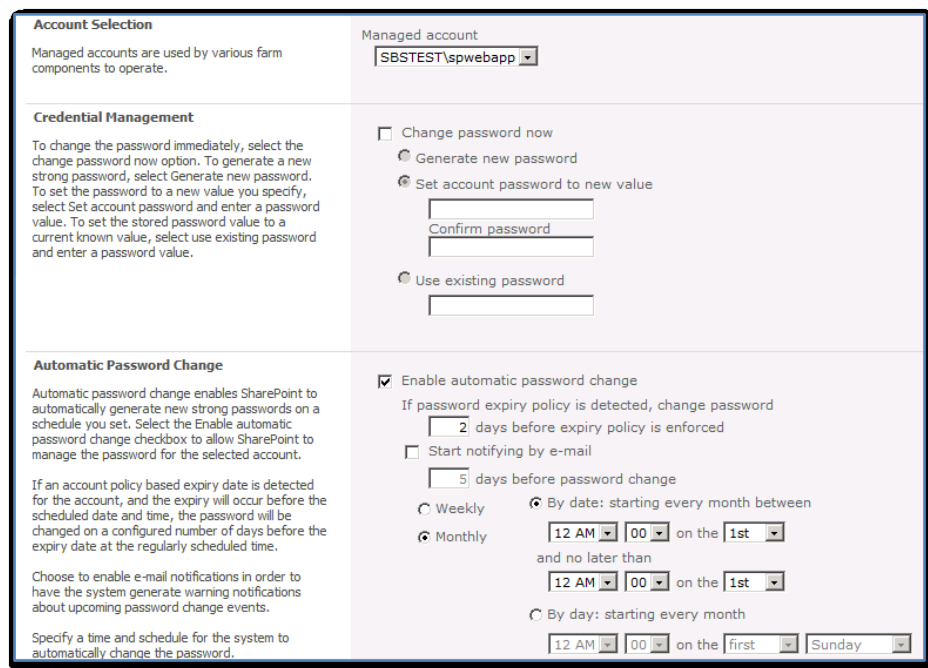
are not in the same state (excluding the **SharePoint Foundation Search V4 service** which runs on demand) then configure them appropriately.

You will also notice that most of the services *Log On As* either `<server_name>\spfarm` or `<server_name>\spsearch`. It is important to remember that both of these accounts have password security enabled that automatically changes the password.

User name	Edit	Password change schedule	Next password change	Last password change	Remove
SBSTEST\spfarm				11/22/2011 10:43:28 AM	
SBSTEST\spsearch		monthly between 1 00:00:00 and 1 00:00:00	12/1/2011 12:00:00 AM	11/22/2011 10:52:30 AM	
SBSTEST\spwebapp		monthly between 1 00:00:00 and 1 00:00:00	12/1/2011 12:00:00 AM	11/22/2011 10:53:50 AM	

If you go into the *SharePoint Central Administration*, then select **Security** from the menu on the left hand side and then select **Configure Managed Accounts** from under the *General Security* heading.

When you do so you should see that two of these accounts are automatically configured to change their passwords every month.



Account Selection
Managed accounts are used by various farm components to operate.

Managed account
SBSTEST\spwebapp

Credential Management
To change the password immediately, select the change password now option. To generate a new strong password, select Generate new password. To set the password to a new value you specify, select Set account password and enter a password value. To set the stored password value to a current known value, select use existing password and enter a password value.

☐ Change password now
☒ Generate new password
☒ Set account password to new value

Confirm password

☐ Use existing password

Automatic Password Change
Automatic password change enables SharePoint to automatically generate new strong passwords on a schedule you set. Select the Enable automatic password change checkbox to allow SharePoint to manage the password for the selected account.

If an account policy based expiry date is detected for the account, and the expiry will occur before the scheduled date and time, the password will be changed on a configured number of days before the expiry date at the regularly scheduled time.

Choose to enable e-mail notifications in order to have the system generate warning notifications about upcoming password change events.

Specify a time and schedule for the system to automatically change the password.

☒ Enable automatic password change
If password expiry policy is detected, change password
2 days before expiry policy is enforced
☐ Start notifying by e-mail
5 days before password change
☐ Weekly
☒ By date: starting every month between
12 AM 00 on the 1st
and no later than
12 AM 00 on the 1st
☐ By day: starting every month
12 AM 00 on the first Sunday

If you click on the *edit icon* for a **SPWEBAPP** for example you should see the options like shown above. Some of these options allow you set a new password, generate a new password or disable automatic password changing all together.

When you have finished making any configuration changes press the **OK** button at the bottom of the page.

Reference

HTTP Error 503 Accessing Company Web on SBS 2011 Standard -

<http://blogs.technet.com/b/sbs/archive/2011/08/17/http-error-503-accessing-company-web-on-sbs-2011-standard.aspx>

When SharePoint (Companyweb) 503's on you, here's how you fix it -

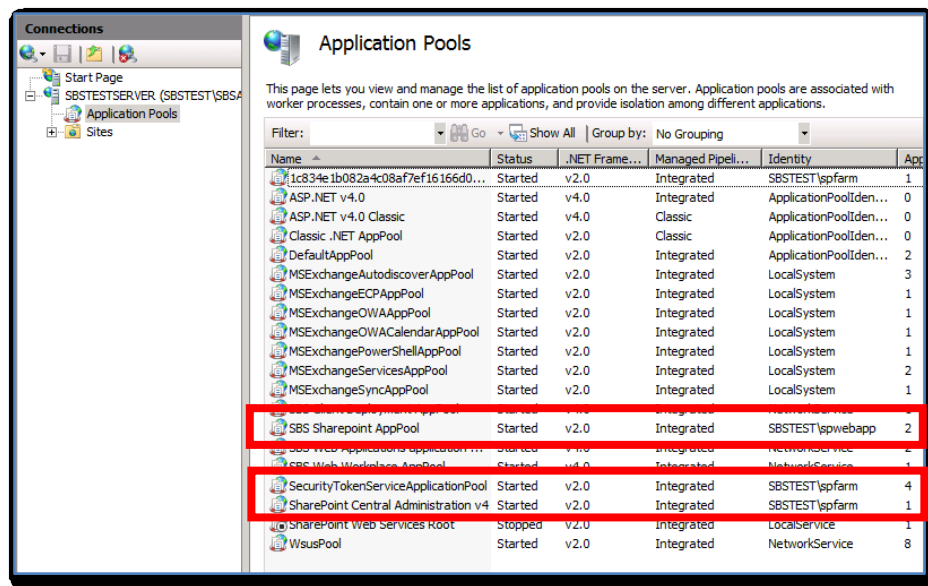
<https://www.thirdtier.net/2011/07/when-sharepoint-companyweb-503s-on-you-heres-how-to-fix-it/>

Name	Description	Status	Startup Type	Log On As
Windows Driver Foundation - User-mode Driv...	Manages u...		Manual	Local System
Windows Error Reporting Service	Allows erro...		Manual	Local System
Windows Event Collector	This servic...		Manual	Network Service
Windows Event Log	This servic...	Started	Automatic	Local Service
Windows Firewall	Windows Fi...	Started	Automatic	Local Service
Windows Font Cache Service	Optimizes ...		Manual	Local Service
Windows Installer	Adds, modi...		Manual	Local System
Windows Internal Database (MICROSOFT#...	Windows I...	Started	Automatic	Network Service
Windows Management Instrumentation	Provides a ...	Started	Automatic	Local System
Windows Modules Installer	Enables ins...	Started	Manual	Local System
Windows Presentation Foundation Font Cach...	Optimizes ...		Manual	Local Service
Windows Process Activation Service	The Windo...	Started	Manual	Local System
Windows Remote Management (WS-Manage...	Windows R...	Started	Automatic (D...	Network Service
Windows SBS Manager	Collect mo...	Started	Automatic	Local System
Windows SBS POP3 Connector	The Windo...		Disabled	Local Service
Windows Search	Provides c...	Started	Automatic (D...	Local System
Windows Time	Maintains d...	Started	Automatic	Local Service
Windows Update	Enables th...	Started	Automatic (D...	Local System
WinHTTP Web Proxy Auto-Discovery Service	WinHTTP i...	Started	Manual	Local Service
Wired AutoConfig	The Wired ...		Manual	Local System
WMI Performance Adapter	Provides p...		Manual	Local System
Workstation	Creates an ...	Started	Automatic	Network Service
World Wide Web Publishing Service	Provides W...	Started	Automatic	Local System
WSUSCertServer	Manages t...		Manual	Local System

The next service that should be checked is the **World Wide Web Publishing Service** which controls the operation of the *Internet Information Service (IIS)* on the server. If this service is not started then a number of web based services, including Company web will not operate.

If the service is not started then start it.

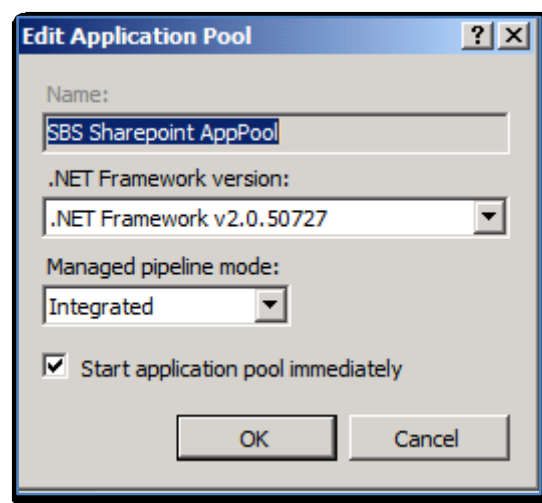
3. Internet Information Services (IIS)



If you now launch the **Internet Information Services (IIS) Manager** on the server via **Start, Administrative tools** and click on **Application Pools** you should see something similar to that shown above. Check to ensure that all the SharePoint application pools are started and if they aren't then start them.

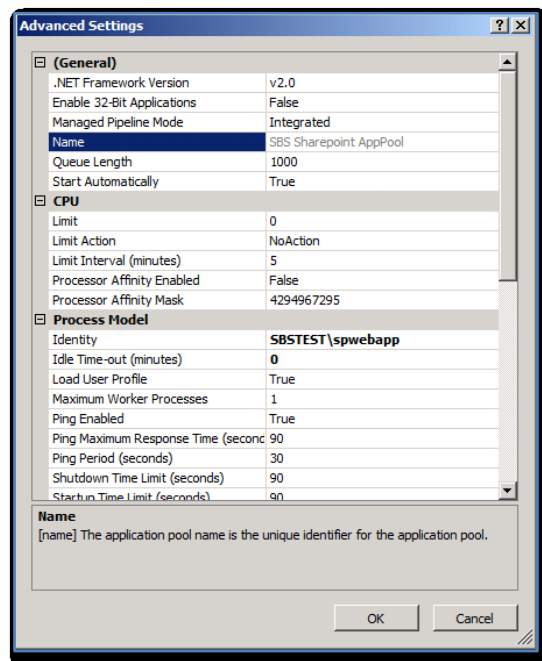
Every application pool shares the same worker process. Every application pool is serviced by an independent instance of the worker process executable, *w3wp.exe* and is separated from worker processes that service other pools. This ensures that if a worker process fails, it does not affect the applications running in other pools.

By default, SharePoint on SBS 2011 uses 3 application pools; *SBS SharePoint AppPool*, *SecurityTokenServiceApplicationPool* and *SharePoint Central Administration v4* which should all be started.

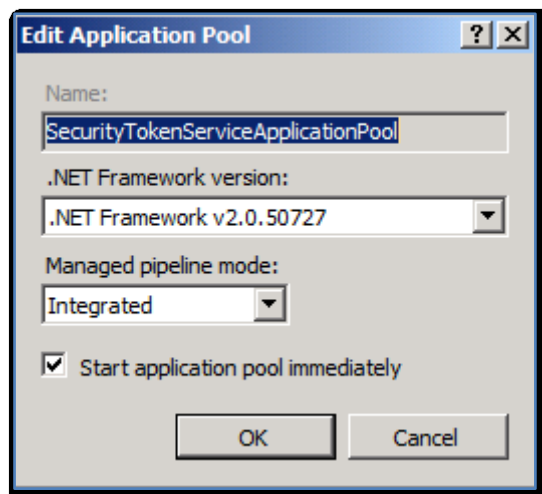


If you select the **SBS SharePoint AppPool** and select **Basic Settings** from the links on the right hand side you should see the settings shown above.

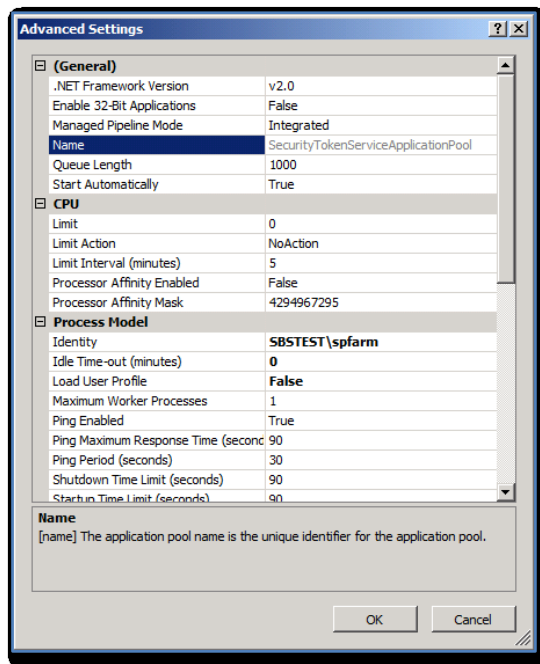
There have been issues where the .NET Framework version has been altered for some reason. You will notice in the above window that the .NET version can be altered by pulling down the selection arrow to the right of the entry. The version needs to be .NET Framework v2.0.XXXX for Companyweb to operate correctly.



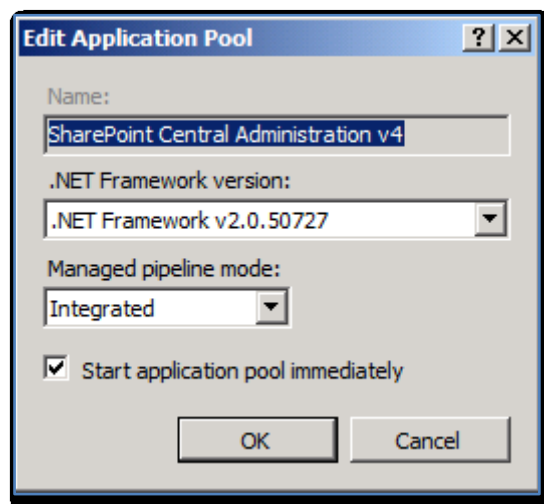
If you now click on the **Advanced** option from the menu on the right hand side you should see the above settings. Note, that if you need to change the service account simply change the entry for the *Identity* field.



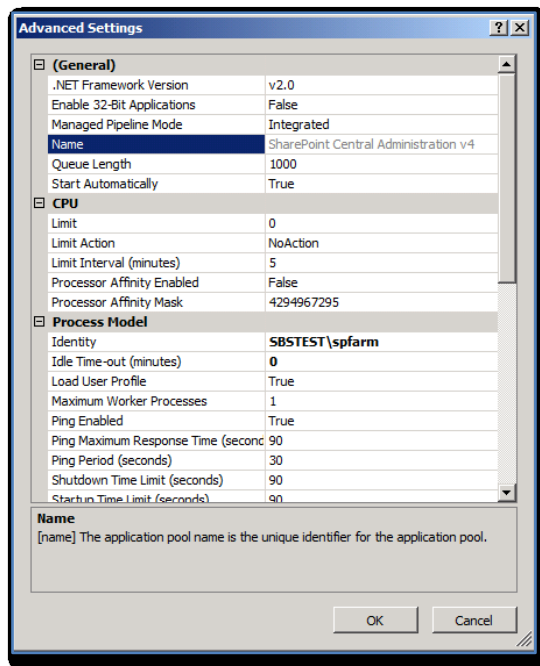
If you now select the *SecurityTokenApplicationPool* and then select **Basic settings** you should see the settings as shown above.



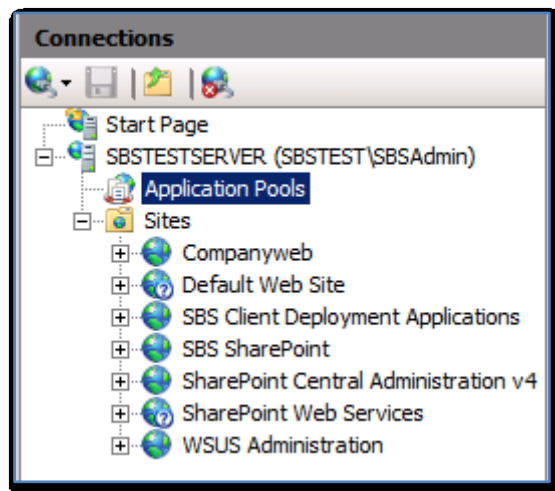
If you then select **Advanced** the settings should be as displayed above. Again, you can change the service account for this application pool by making changes to the *Identity* field.



Selecting the **Basic settings** for the *SharePoint Central Administration v4* application pool should display the above settings.



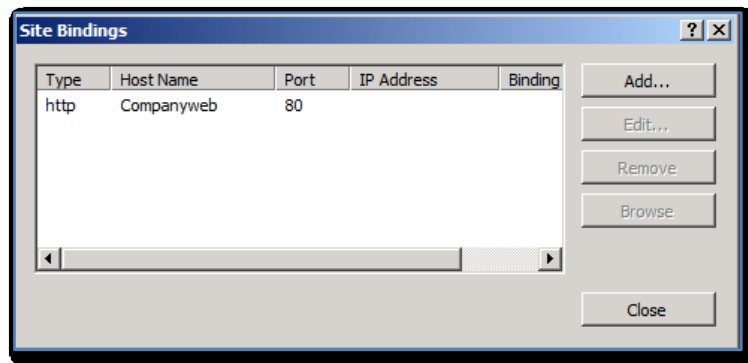
The **Advanced** should display the above.



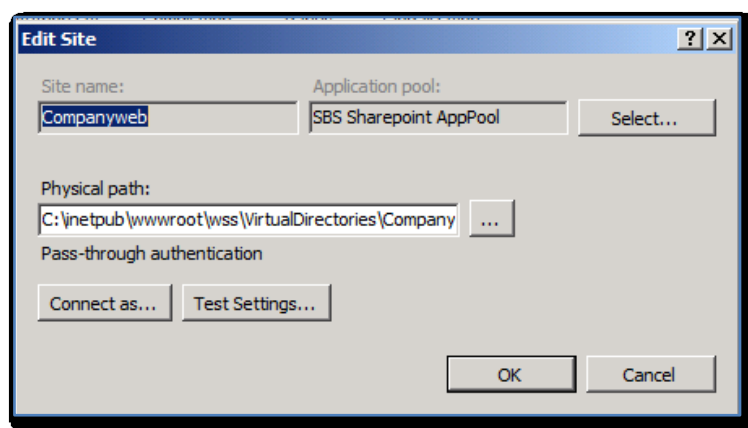
If you now expand the *Sites* folder you should see a list of the total web sites on the server. You should see the following SharePoint sites:

- Companyweb
- SBS SharePoint
- SharePoint Central Administration v4
- SharePoint Web Services

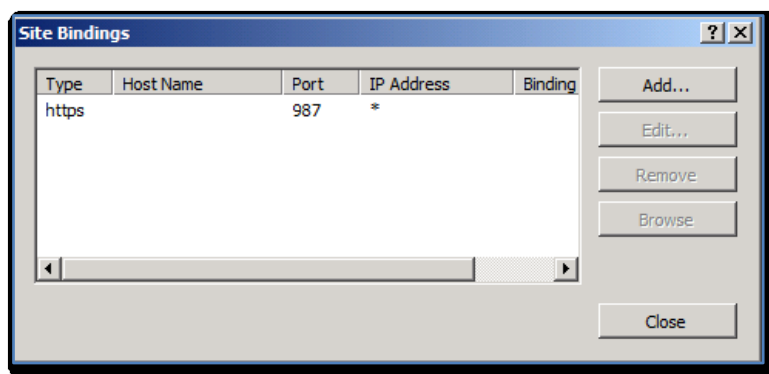
All of these web sites should be running except the *SharePoint Web Services* site which is stopped by default.



If you now click on the Companyweb web site and select **Basic Settings** from the task bar on the right you should see the above *Site Bindings*. Click the **Close** button when complete.

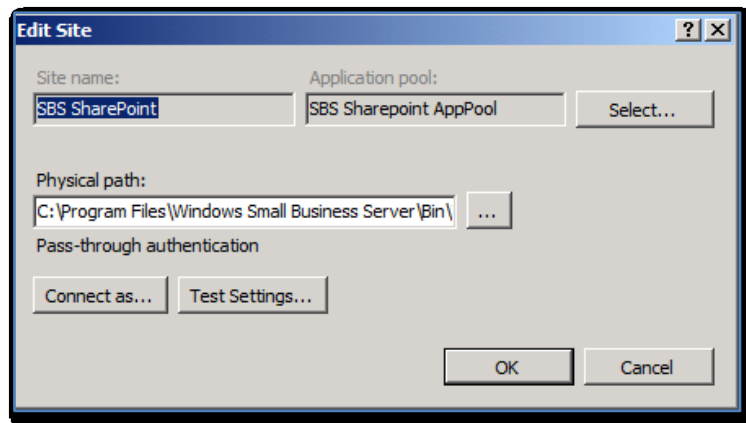


If you now click on the **Advanced** link on the right you should have the same site settings as shown above. You will notice that Companyweb is allocated the application pool *SBS Sharepoint AppPool*. Press the **OK** button when complete.

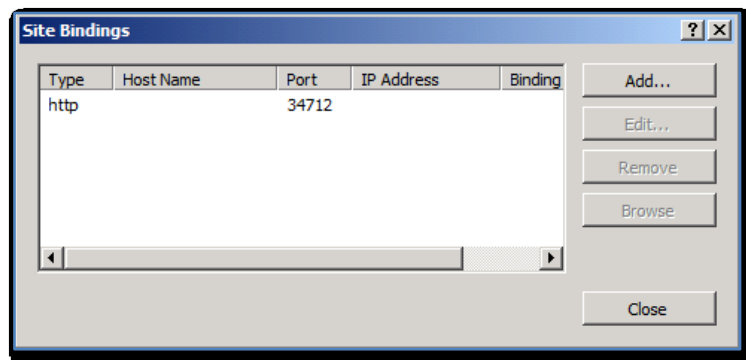


If you now click the **SBS SharePoint** site then the **Basic Settings** you should see the same bindings as shown above. It is important to note here that the default port for this site is 987 and the protocol is https not http.

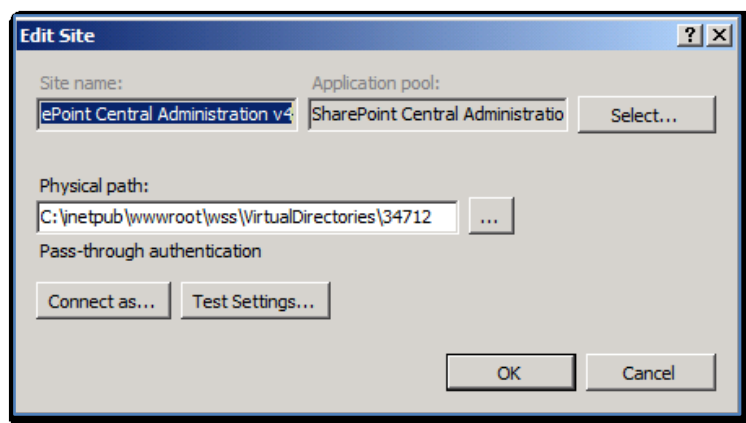
Press the **Close** button to continue.



If you now select the **Advanced** option you should see the above settings. Press the **OK** button when complete.

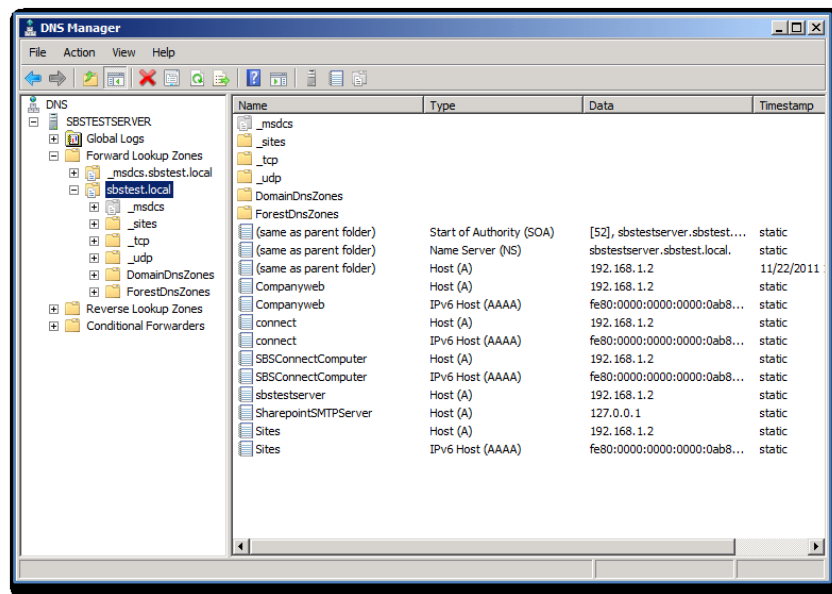


Selecting the **SharePoint Central Administration v4** and then the **Basic Settings** link should reveal something similar to that shown above. Note that the port will vary between installations as it is randomly allocated during installation.



The **Advanced Settings** for the same site should have option set like shown above. Press **OK** when complete.

4. Domain Name Service (DNS)



Another part of accessing a web site is via *Domain Name Service (DNS)*. As such you will find on SBS a number of DNS entries. To view these open the *DNS Manager* from the *Administrative Tools* link in the *Start Menu*. Drill down through the server name, *Forward Lookup Zones* to domain name of the network (in this case *sbstest.local*). In the list that appears on the right you should see:

Companyweb	Host (A)	<IP of server>
Companyweb	IPv6 Host (AAAA)	<IPv6 of server>
SharepointSMTPServer	Host (A)	127.0.0.1
Sites	Host (A)	<IP of server>
Sites	IPv6 Host (AAAA)	<IPv6 of server>

All these entries are required for Companyweb to function correctly. If any of the entries are missing then they should be configured.

5. SharePoint Configurations

The next location to check is within the configuration of SharePoint. To access this configuration information run the **SharePoint 2010 Central Administration** which can be found under the *Microsoft SharePoint 2010 Products* group in the *Start menu*.

SharePoint Central Administration is itself a SharePoint site that requires all the above components (databases, IIS, etc) operating. If you can't view the *Central Administration* site then you need to troubleshoot the items above to get it operational.

Once you can access the *Central Administration* site select **Site Settings** and then **Configure alternate access mappings** from under *the Farm Management* heading.

Edit Public URLs Add Internal URLs Map to External Resource Alternate Access Mapping Collection: Show All		
Internal URL	Zone	Public URL for Zone
https://sites:987	Default	https://sites:987
http://companyweb	Intranet	http://companyweb
http://sbstestserver:34712	Default	http://sbstestserver:34712

You should now see a list of URLs like shown above. If these are not correct you can use the *Edit Public URLs* link from across the top to configure any missing mappings.

Name	URL	Port
SharePoint Central Administration v4	http://sbstestserver:34712/	34712
SBS SharePoint	https://sites:987/	987

You should also check the SharePoint web applications. You can do so from *SharePoint Central Administration* via **Application Management** and then **Manage web applications** under the *Web Applications* heading.

In there you should see two web applications like you see displayed above, one for the *Central Administration* site and the other one for SBS SharePoint. The URL for the *Central Administration* site will contain the random port generated during set up, while the *SBS SharePoint* site should always have the URL <https://sites:987/>.

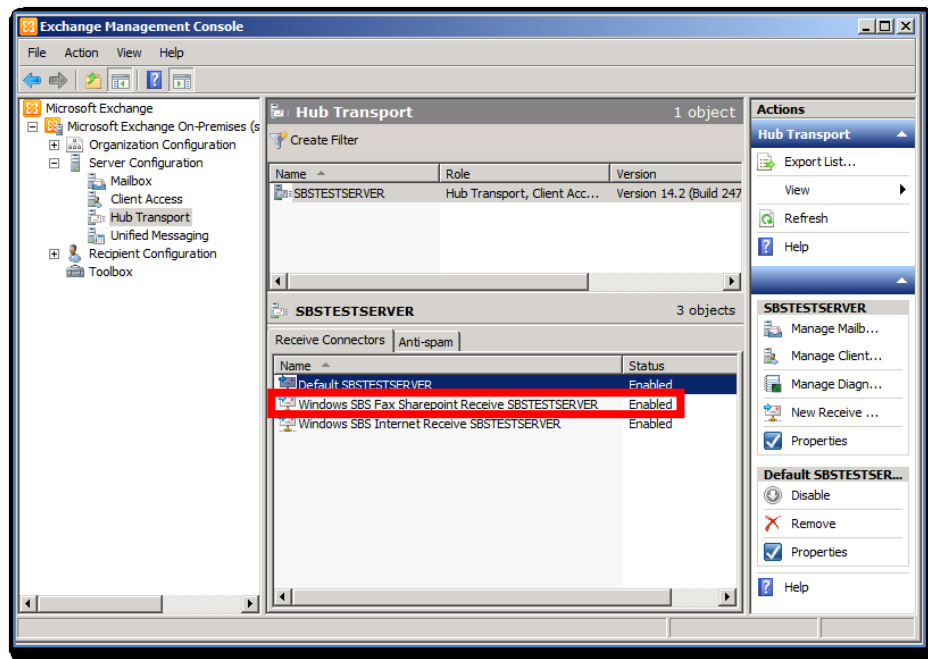
Mail Settings Specify the SMTP mail server to use for Microsoft SharePoint Foundation e-mail-based notifications for alerts, invitations, and administrator notifications. Personalize the From address and Reply-to address .	
Outbound SMTP server:	<input type="text" value="SharepointSMTPServer"/>
From address:	<input type="text" value="CompanyWebAdmin@sbstest.local"/>
Reply-to address:	<input type="text" value="CompanyWebAdmin@sbstest.local"/>
Character set:	<input type="text" value="65001 (Unicode UTF-8)"/>

Another setting that should also be set that is found in *Central Administration* is the OutBound SMTP Server. You can check this configuration from the *Central Administration* site via **System Settings** then **Configure outgoing e-mail settings**.

For an SBS 2011 system the OutBound SMTP server should be set to *SharepointSMTPServer* as shown above which is in fact a special Exchange connector on the SBS Server. You will see this is in the DNS settings mentioned previously.

6. Exchange

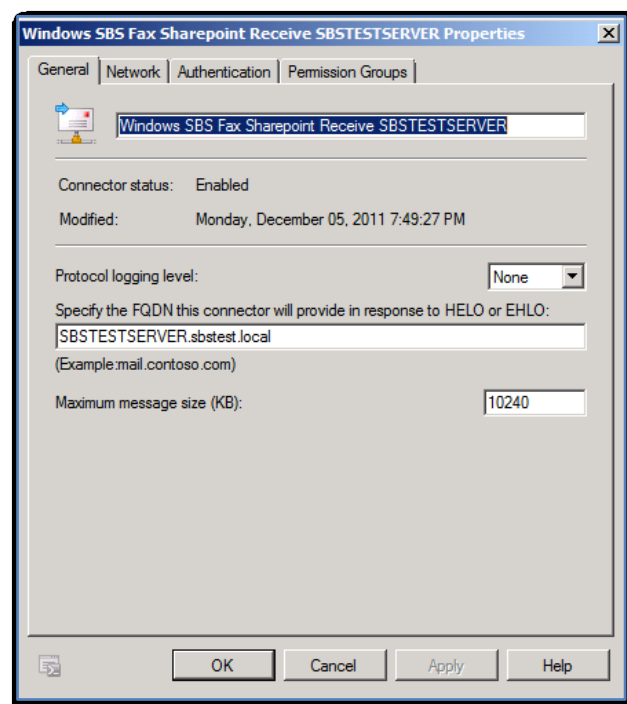
Companyweb uses Exchange Server on SBS 2011 to send emails for alerts. It does this via a specially configured Hub Transport in Exchange Server. To view this configuration launch the *Exchange Management Console*.



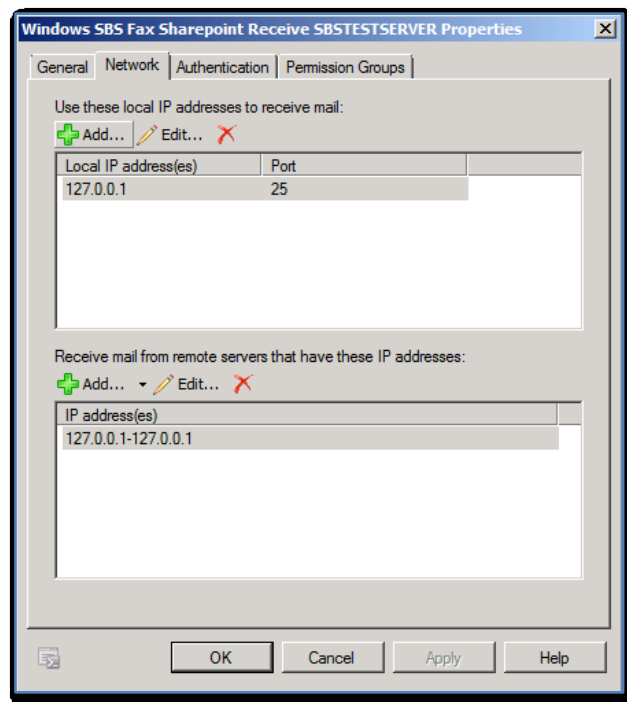
Expand the *Microsoft Exchange On-Premises* node, then *Server Configuration* node and finally select *Hub Transport* on the left hand side of the screen.

In the lower part of the right hand side, on the *Remote Connectors* tab you will see a connector called *Windows SBS Fax SharePoint Receive <SERVERNAME>*. Firstly ensure that it is enabled and **double click** on it to view its properties.

General tab

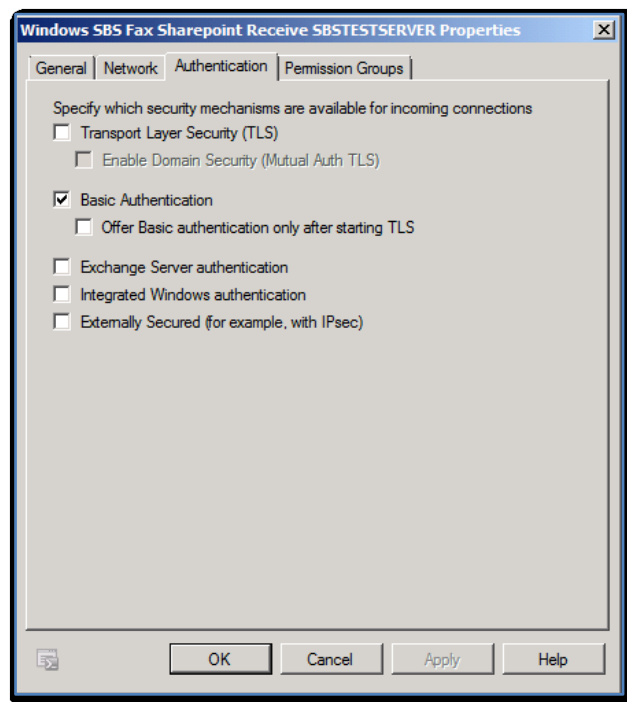


Network tab



Notice here how the IP address for this connector is set to 127.0.0.1. This is the IP address used in the DNS for SharePointSMTPServer which is what is configured in Companyweb by default shown previously.

Authentication tab



Permission Groups tab

