

# Troubleshooting Companyweb on SBS 2008

Version 1.00

## Outline

This document is designed to provide troubleshooting tips for Companyweb issues on Windows Small Business Server (SBS) 2008. You may also be able to use this document to troubleshoot other standalone installations of Windows SharePoint Services v3 to an extent.

## Introduction

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

1. SQL Server 2005 Embedded Edition
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 2008:

6. Exchange Server 2007

Companyweb on SBS 2008 utilizes Windows SharePoint Services v3 and SQL Server 2005 Embedded Edition.

### **1. SQL Server 2005 Embedded Edition**

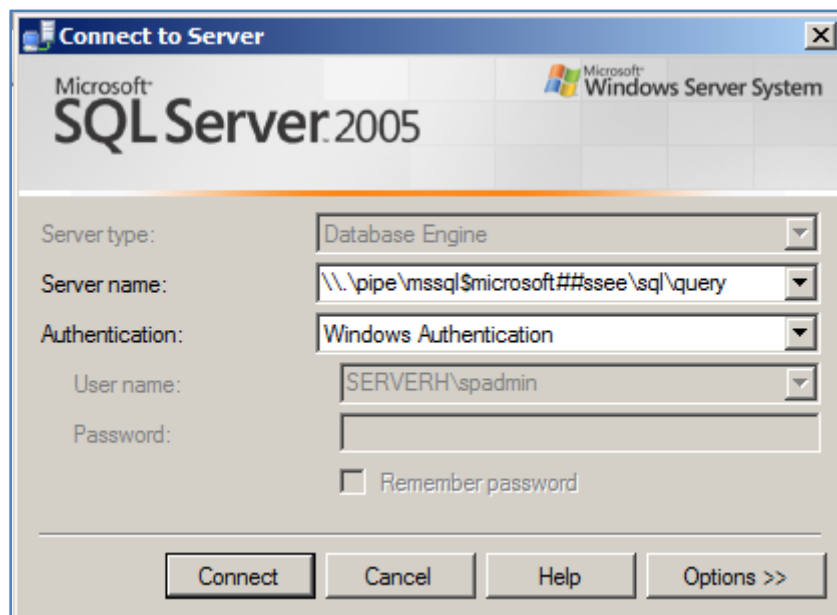
The first place to start troubleshooting is the server Services which can be accessed from the SBS 2008 console via **Start | Administrative Tools | Services**.

You should see a list of services. Scroll down until you find the services starting with *Windows Internal Database (MICROSOFT ##SSEE)*.

Name	Description	Status	Startup Type	Log On As
Windows Color System	The WcsPl...		Manual	Local Service
Windows Driver Foundation - User-mode Driver Framework	Manages u...		Manual	Local System
Windows Error Reporting Service	Allows erro...		Manual	Local System
Windows Event Collector	This servic...		Manual	Network S...
Windows Event Log	This servic...	Started	Automatic	Local Service
Windows Firewall	Windows Fi...	Started	Automatic	Local Service
Windows Font Cache Service	Optimizes ...	Started	Automatic (D...	Local Service
Windows Installer	Adds, modi...	Started	Manual	Local System
<b>Windows Internal Database (MICROSOFT##SSEE)</b>	<b>Windows I...</b>	<b>Started</b>	<b>Automatic</b>	<b>Network S...</b>
Windows Management Instrumentation	Provides a ...	Started	Automatic	Local System
Windows Modules Installer	Enables ins...	Started	Manual	Local System
Windows Presentation Foundation Font Cache 3.0.0.0	Optimizes ...		Manual	Local Service
Windows Process Activation Service	The Windo...	Started	Manual	Local System
Windows Remote Management (WS-Management)	Windows R...	Started	Automatic (D...	Network S...
Windows SharePoint Services Administration	Performs a...		Manual	Local System
Windows SharePoint Services Search	Provides fu...	Started	Manual	Local Service
Windows SharePoint Services Timer	Sends notif...	Started	Automatic	Network S...
Windows SharePoint Services Tracing	Manages tr...	Started	Automatic	Local Service
Windows SharePoint Services VSS Writer	Windows S...		Manual	Local System
Windows Time	Maintains d...		Manual	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 S...

The major service to look for in the list is **Windows Internal Database (MICROSOFT##SSEE)** 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 2005** 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 2008 you will need to connect to use the server name of \\.\pipe\mssql\$microsoft##ssee\sql\query. When you do so you should see a tree structure. If you expand the *Databases* node you should see a number databases displayed. In the list you should see the following databases:

- SharePoint\_AdminContent\_<GUID>
- SharePoint\_ConfigurationDatabase
- WSS\_Content
- WSS\_Search\_<server\_name>

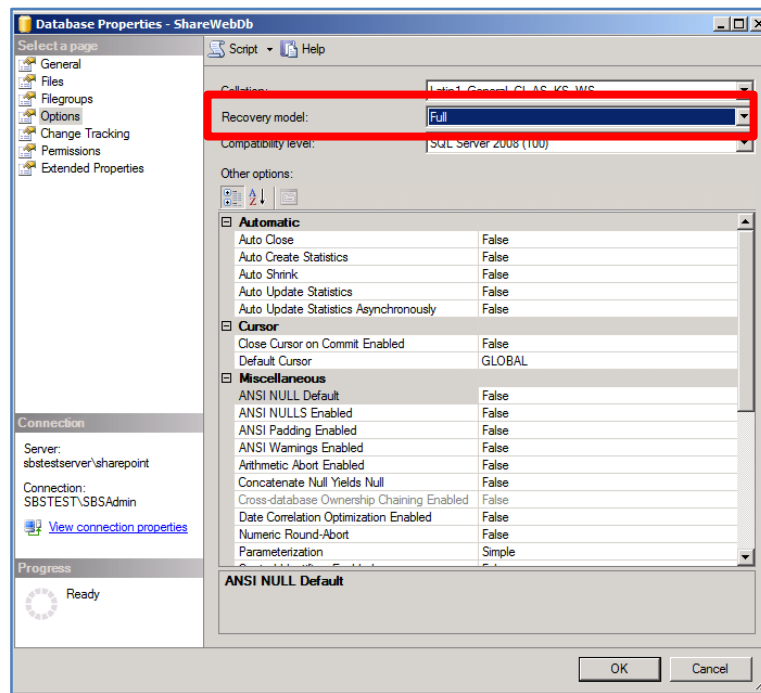
The information in Companyweb is located in WSS\_Content database. Information about the configuration of SharePoint on SBS 2008 is held on the database SharePoint\_Configuration Database. The SharePoint\_AdminContent\_<GUID> contains the SharePoint Central Administration site (which is also a SharePoint 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 2008 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 Embedded Edition that is installed on SBS 2008 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 -

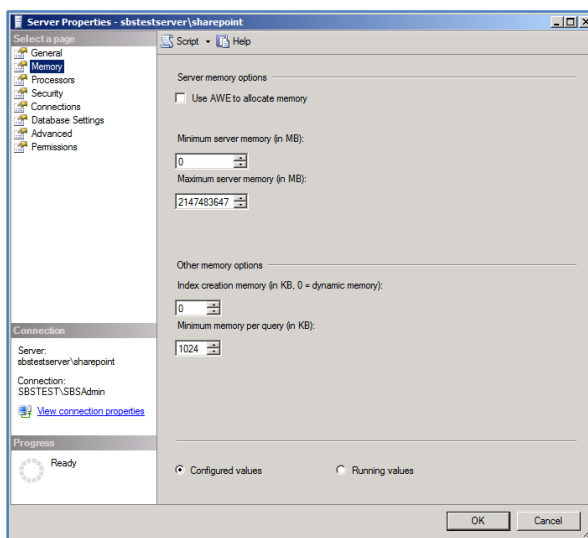
<http://geekswithblogs.net/RogueCoder/archive/2008/06/03/122588.aspx>

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 2008 SharePoint runs on an instance called \\.\pipe\mssql\$microsoft##ssee\sql\query\ . 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.

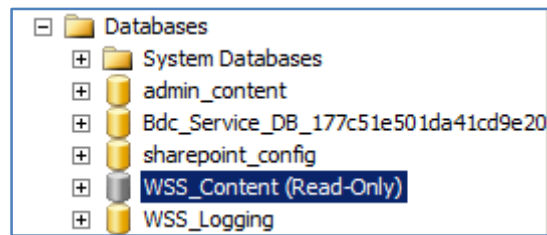
### Reference

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 immediately 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.

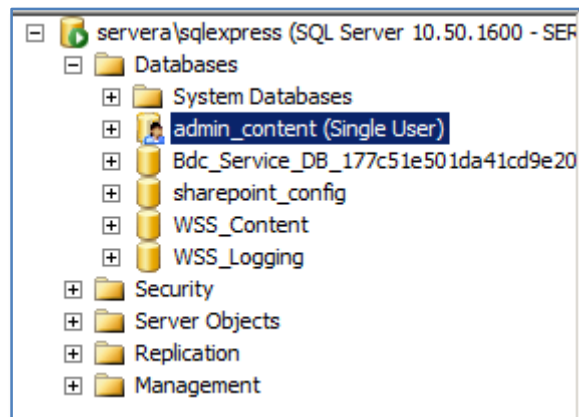
Recursive Triggers Enabled	False
Trustworthy	False
VarDecimal Storage Format Enabled	True
<b>Recovery</b>	
Page Verify	CHECKSUM
<b>Service Broker</b>	
Broker Enabled	True
Honor Broker Priority	False
Service Broker Identifier	43f7ff1d-6721-4fb8-93ba-715fce5685f9
<b>State</b>	
Database Read-Only	True
Database 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:

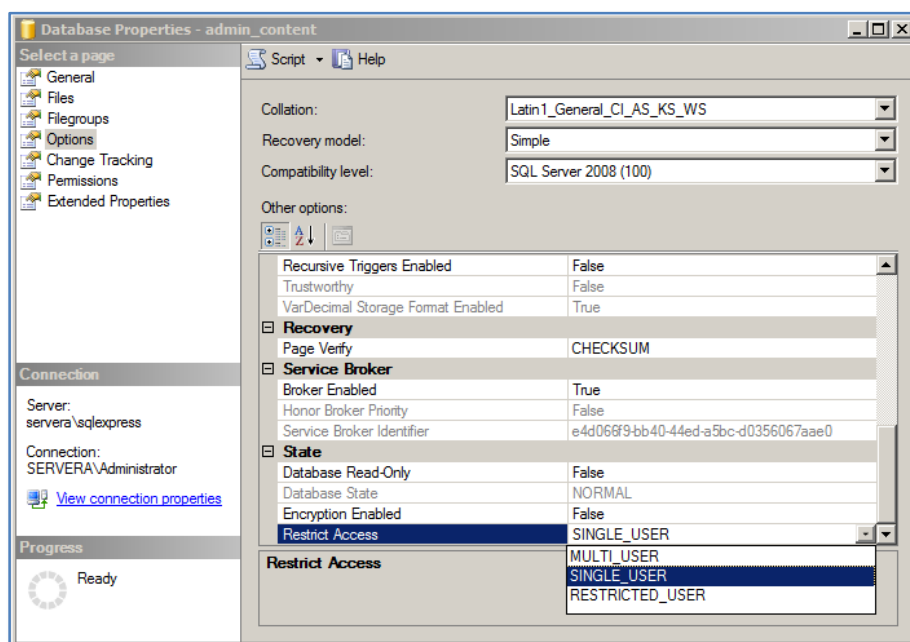


In the above case the SharePoint Administration Content database is in single user mode. This state is denoted by the small person icon on the database as well as *(Single User)* being displayed at the end of the database name.

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 *Windows Internal Database (MICROSOFT##SSEE)* 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.



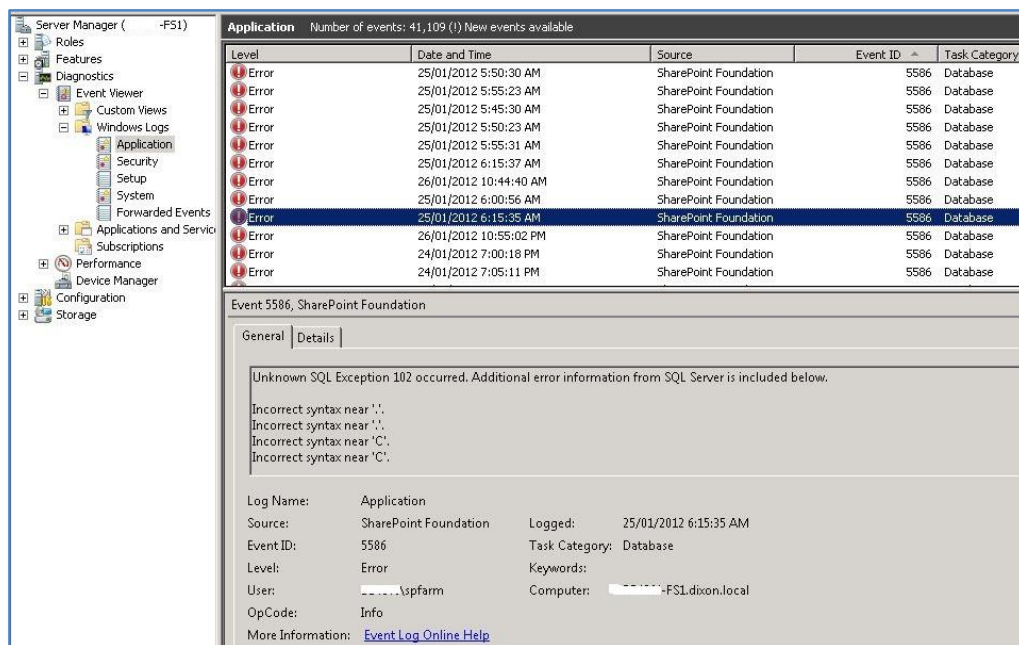
You will see that the *Restrict Access* option is set to **SINGLE\_USER**. From the options available select **MULTI\_USER** and press **OK** to save the changes.

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).

#### E. Database compatibility

This issue arose after a number of updates had been installed on the server and the machine rebooted. It would appear that during this process the database was swapped to a different compatibility mode and maybe happen after Companyweb has been migrated from SBS 2003

The indication of these sort of issues are errors in the event log like:



Event 5586 generated when user attempts to connect to Companyweb.

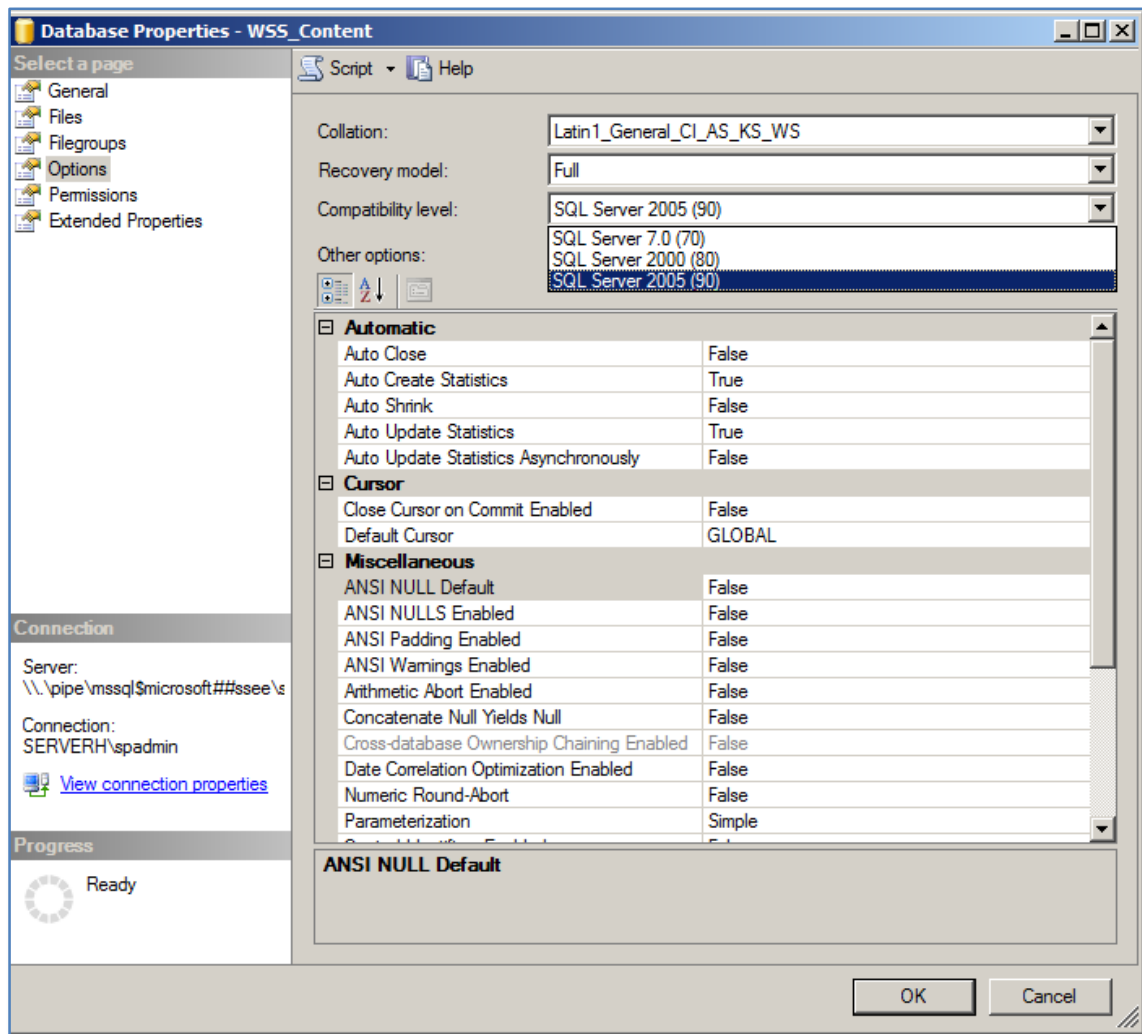
*Unknown SQL Exception 102 occurred. Additional information from SQL source is included below:*

*Incorrect syntax near '.'  
 incorrect syntax near '.'  
 Incorrect syntax near 'C'  
 Incorrect syntax near 'C'*

The resolution is to check compatibility level in SQL Management Studio. To do this run the SQL Management Studio as an administrator and connect to the `\\.\pipe\mssql$microsoft##ssee\sql\query` instance. Locate the content database from underneath the Databases folder. **Right mouse click** on the content database (typically called WSS\_Content) and select **Properties** from the menu that appears.



Click on the **Options** item on the left hand side as shown:



Locate the option *Compatibility* near the top on the right hand side and ensure that it is set to *SQL Server 2005 (90)*. If it is not then change option and press **OK**.

An *IISRESET* may also be required.

One of the reasons for this may happen when Companyweb was migrated from SBS 2003.

## 2. Services

Name ^	Description	Status	Startup Type	Log On As
Windows Color System	The WcsPl...		Manual	Local Service
Windows Driver Foundation - User-mode Driver ...	Manages u...		Manual	Local System
Windows Error Reporting Service	Allows erro...		Manual	Local System
Windows Event Collector	This servic...		Manual	Network S...
Windows Event Log	This servic...	Started	Automatic	Local Service
Windows Firewall	Windows Fi...	Started	Automatic	Local Service
Windows Font Cache Service	Optimizes ...	Started	Automatic (D...	Local Service
Windows Installer	Adds, modi...		Manual	Local System
Windows Internal Database (MICROSOFT#SS...	Windows I...	Started	Automatic	Network S...
Windows Management Instrumentation	Provides a ...	Started	Automatic	Local System
Windows Modules Installer	Enables ins...		Manual	Local System
Windows Presentation Foundation Font Cache ...	Optimizes ...		Manual	Local Service
Windows Process Activation Service	The Windo...	Started	Manual	Local System
Windows Remote Management (WS-Management)	Windows R...	Started	Automatic (D...	Network S...
Windows SharePoint Services Administration	Performs a...		Manual	Local System
Windows SharePoint Services Search	Provides fu...	Started	Manual	Local Service
Windows SharePoint Services Timer	Sends notif...	Started	Automatic	Network S...
Windows SharePoint Services Tracing	Manages tr...	Started	Automatic	Local Service
Windows SharePoint Services VSS Writer	Windows S...		Manual	Local System
Windows Time	Maintains d...		Manual	Local Service
Windows Update	Enables th...	Started	Automatic (D...	Local System
WinHTTP Web Proxy Auto-Discovery Service	WinHTTP i...		Manual	Local Service
Wired AutoConfig	The Wired ...		Manual	Local System
WMI Performance Adapter	Provides p...		Manual	Local System

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 **Windows SharePoint Services Administration** and **Windows SharePoint Services BSS Writer** which runs on demand) then configure them appropriately.

You will also notice that most of the services *Log On As* either *Local Service* or *Network Service*.

### Reference

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
<b>World Wide Web Publishing Service</b>	<b>Provides W...</b>	<b>Started</b>	<b>Automatic</b>	<b>Local System</b>
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)

Connections

# Application Pools

This page lets you view and manage the list of application pools on the server. Application pools are associated with worker processes, contain one or more applications, and provide isolation among different applications.

Filter:

Go

Show All

Group by:

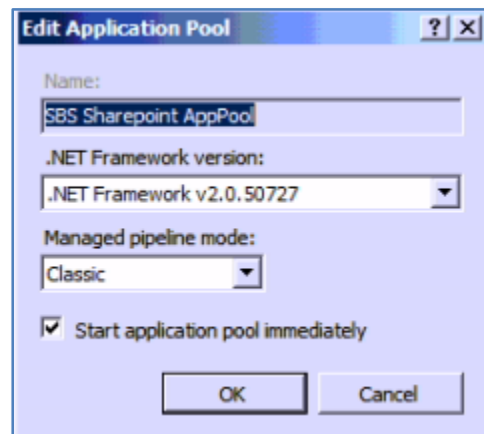
Name	Status	.NE...	Managed Pipeli..
Classic .NET AppPool	Started	v2.0	Classic
DefaultAppPool	Started	v2.0	Integrated
MSEExchangeAutodiscoverAppPool	Started	v2.0	Classic
MSEExchangeOWAAppPool	Started	v2.0	Classic
MSEExchangeServicesAppPool	Started	v2.0	Classic
MSEExchangeSyncAppPool	Started	v2.0	Classic
MSEExchangeUMAppPool	Started	v2.0	Classic
SBS Client Deployment AppPool	Started	v2.0	Integrated
SBS Sharepoint AppPool	Started	v2.0	Classic
SBS Web Applications application pool	Started	v2.0	Integrated
SBS Web Workplace AppPool	Started	v2.0	Integrated
SharePoint Central Administration v3	Started	v2.0	Classic
WsusPool	Started	v2.0	Integrated

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.

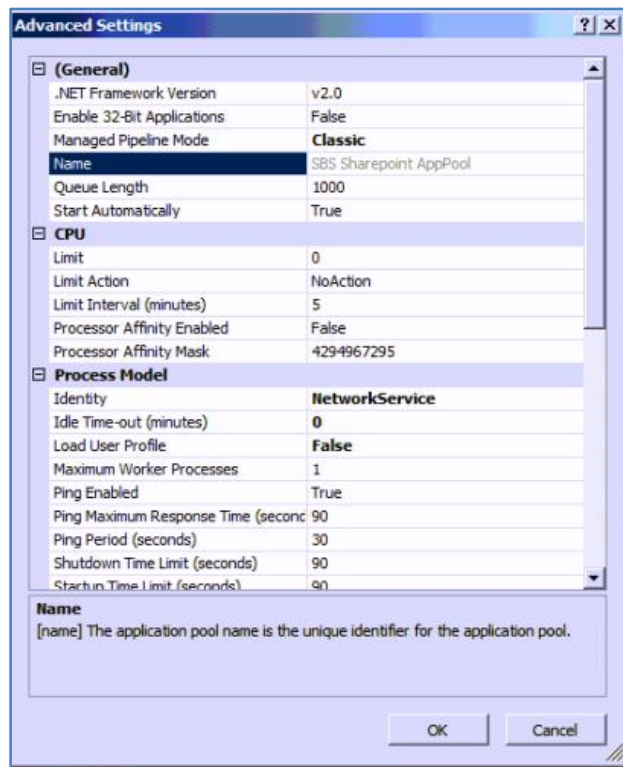
Every application pool shares the same worker process. Every application pool is serviced by an independent instance of the worker process executable, *w3wp.exe* and is separated from worker processes that service other pools. This ensures that if a worker process fails, it does not affect the applications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

By default, SharePoint on SBS 2008 uses 2 application pools; *SBS Sharepoint AppPool* and *SharePoint Central Administration v3* which should all be started.

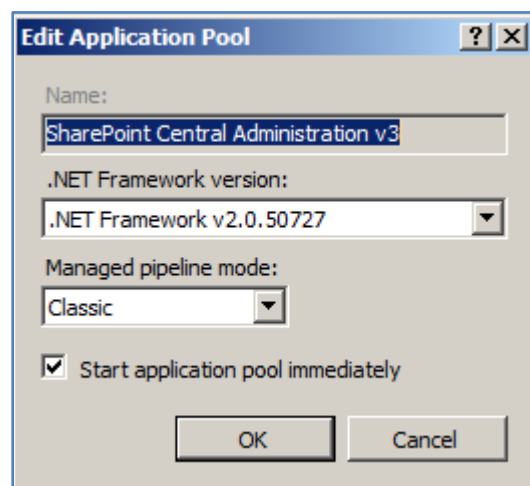


If you select the **SBS Sharepoint AppPool** and select **Basic Settings** from the links on the right hand side you should see the settings shown above.

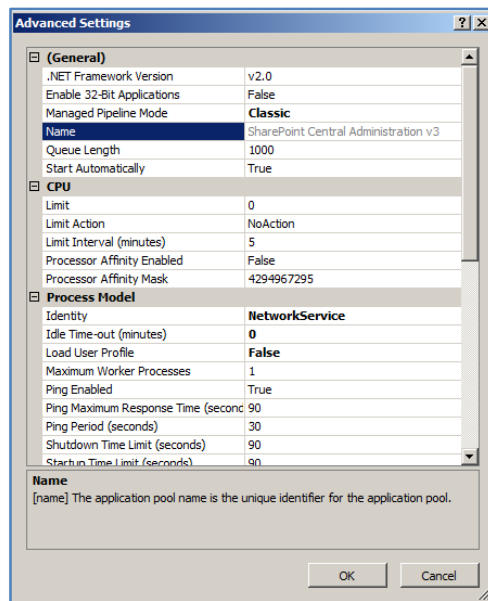
There have been issues where the .NET Framework version has been altered for some reason. You will notice in the above window that the .NET version can be altered by pulling down the selection arrow to the right of the entry. The version needs to be .NET Framework v2.0.XXXX for Companyweb to operate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



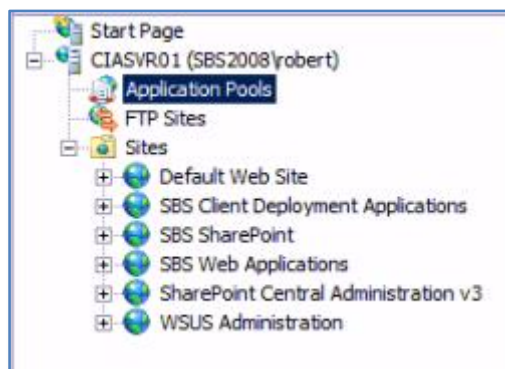
If you now click on the **Advanced** option from the menu on the right hand side you should see the above settings. Note, that if you need to change the service account simply change the entry for the *Identity* field.



Selecting the **Basic settings** for the *SharePoint Central Administration v3* application pool should display the above settings.



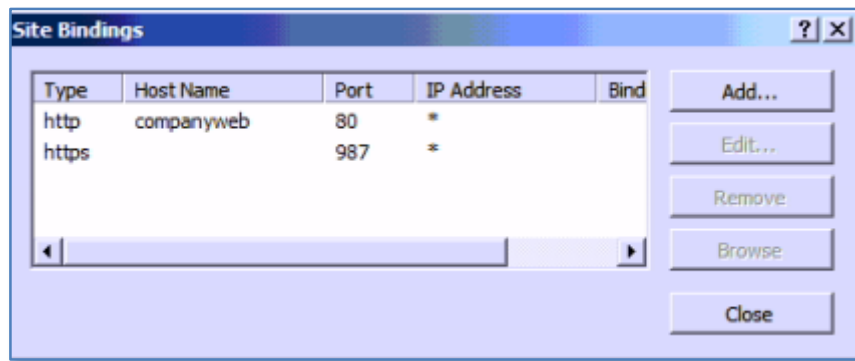
The **Advanced** should display the above.



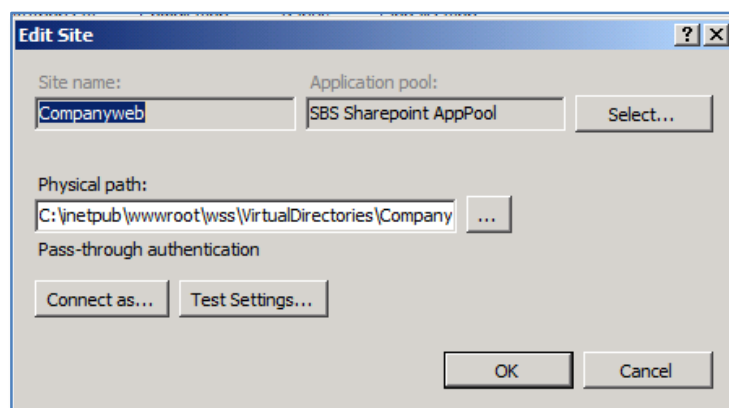
If you now expand the *Sites* folder you should see a list of the total web sites on the server. You should see the following SharePoint sites:

- SBS SharePoint
- SharePoint Central Administration v3
- SharePoint Web Applications

All of these web sites should be running.

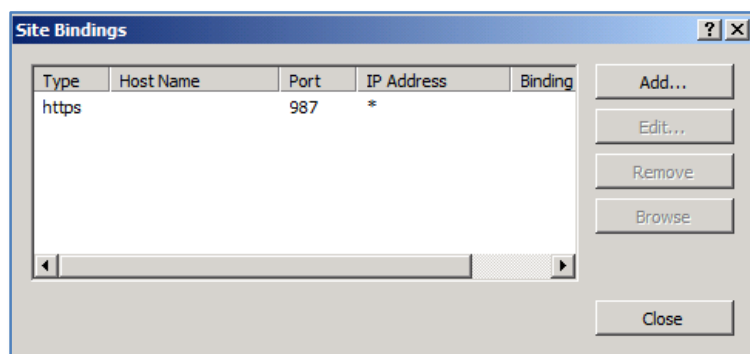


If you now click on the SBS Sharepoint web site and select **Basic Settings** from the task bar on the right you should see the above *Site Bindings*. Click the 987 site and then the **Edit** button.



Click **OK** when complete.

If you now click on the **Advanced Settings** 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.

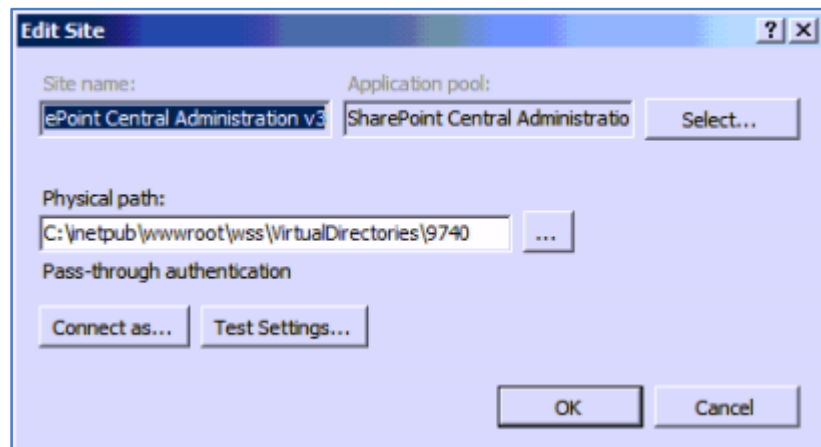


If you now click the **SBS SharePoint** site then the **Basic Settings** you should see the same bindings as shown above. It is important to note here that the default port for this site is 987 and the protocol is https not http.

Press the **Close** button to continue.

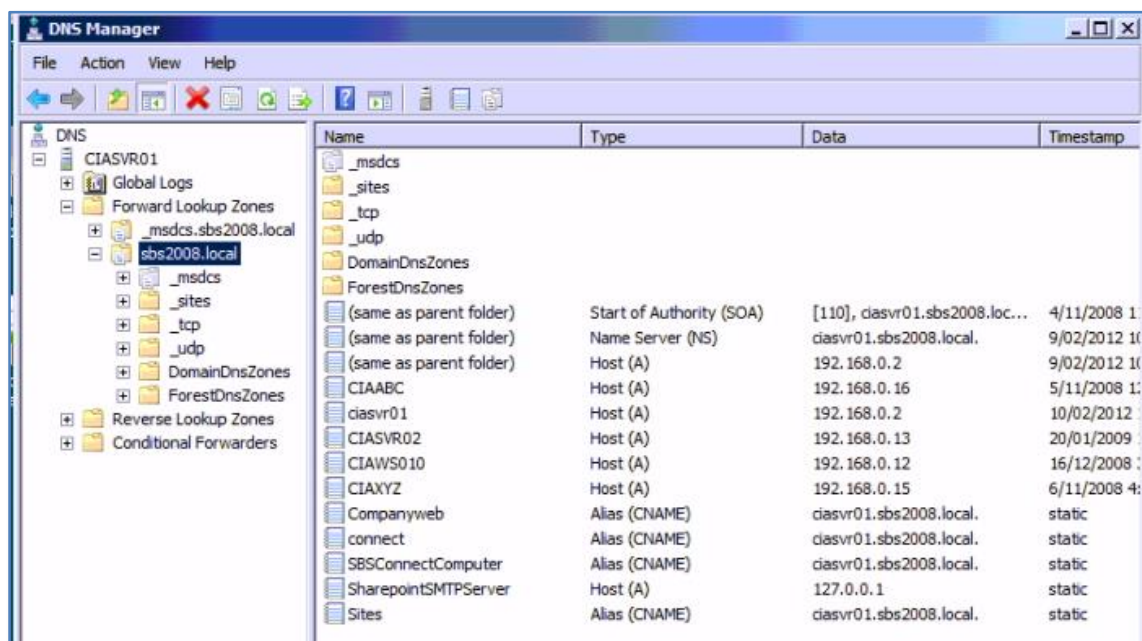


Selecting the **SharePoint Central Administration v3** and then the **Basic Settings** link should reveal something similar to that shown. Note that the port will vary between installations as it is randomly allocated during installation.



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 sbs2008.local). In the list that appears on the right you should see:

Companyweb	Alias (CNAME)	<Name of server>
SharepointSMTPServer	Host (A)	127.0.0.1
Sites	Host (A)	<Name of server>



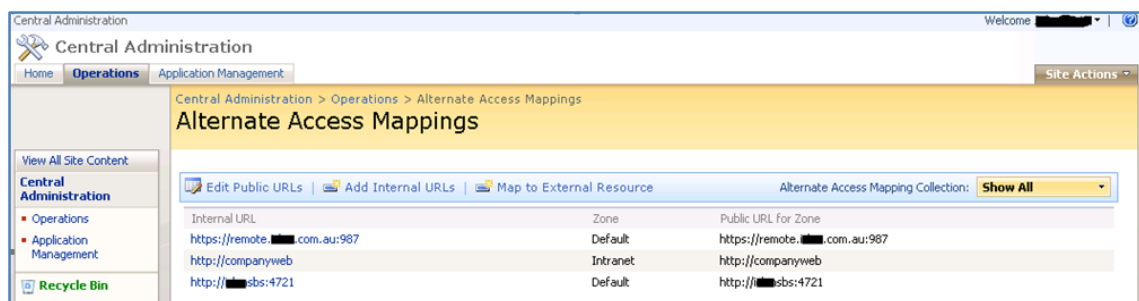
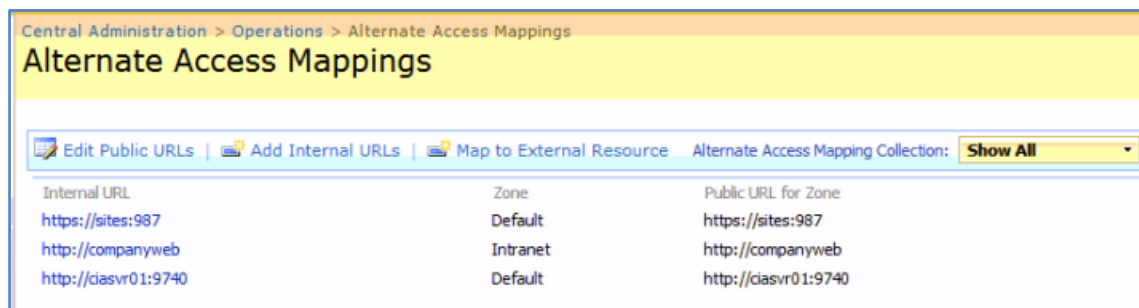
All these entries are required for Companyweb to function correctly. If any of the entries are missing then they should be configured.

## 5. SharePoint Configurations

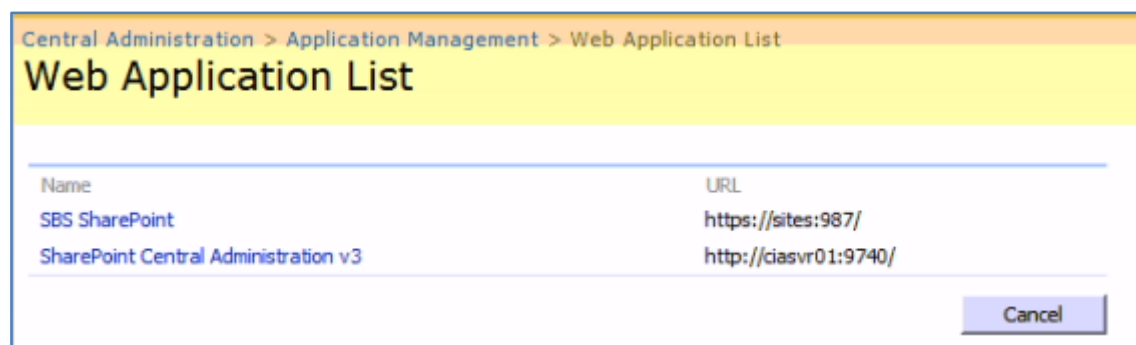
The next location to check is within the configuration of SharePoint. To access this configuration information run the **SharePoint 3.0 Central Administration** which can be found under the *Administrative Tools* group in the *Start menu*.

*SharePoint 3.0 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 **Operations** and then **Alternate access mappings** from under the Global Configuration heading.

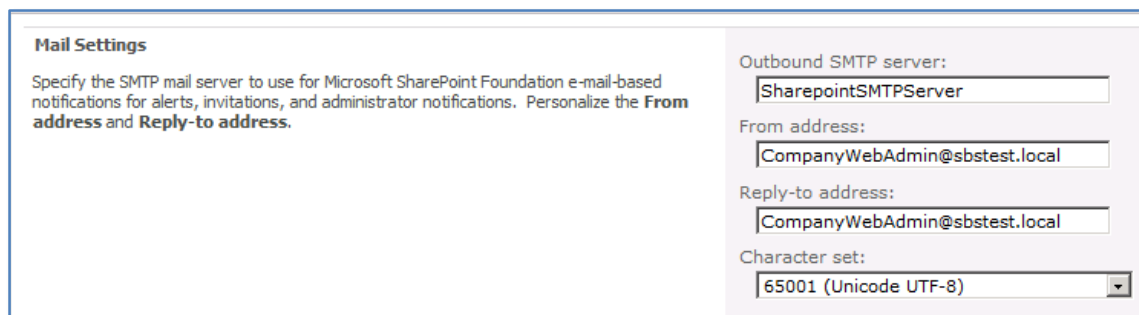


You should now see a list of URLs like shown above. If these are not correct you can use the *Edit Public URLs* link from across the top to configure any missing mappings.



You should also check the SharePoint web applications. You can do so from *SharePoint Central Administration* via **Application Management** and then **Web application list** under the *SharePoint Web Application Management* 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:

From address:

Reply-to address:

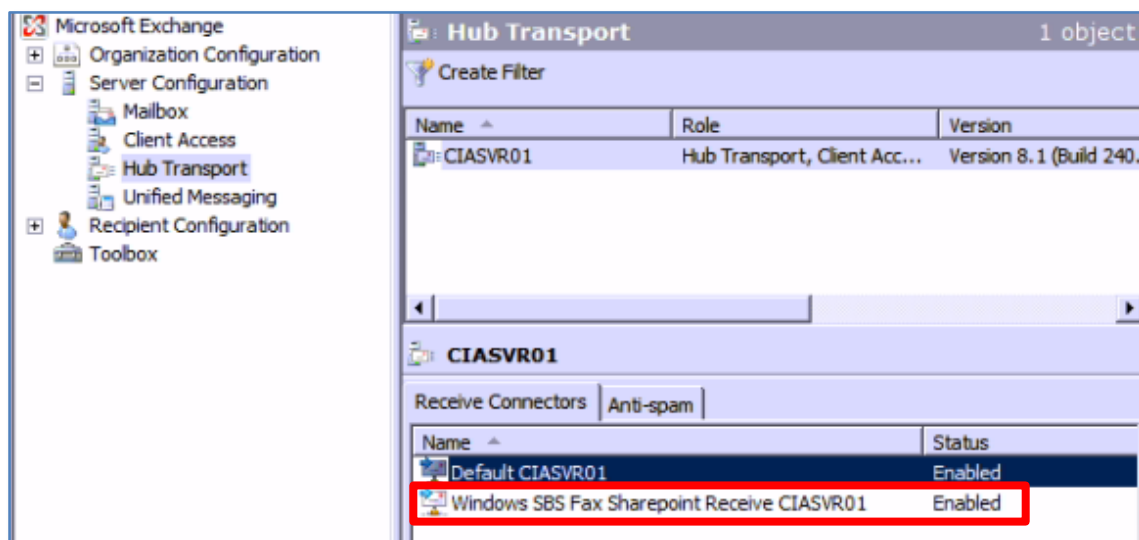
Character set:

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 **Operations** then **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

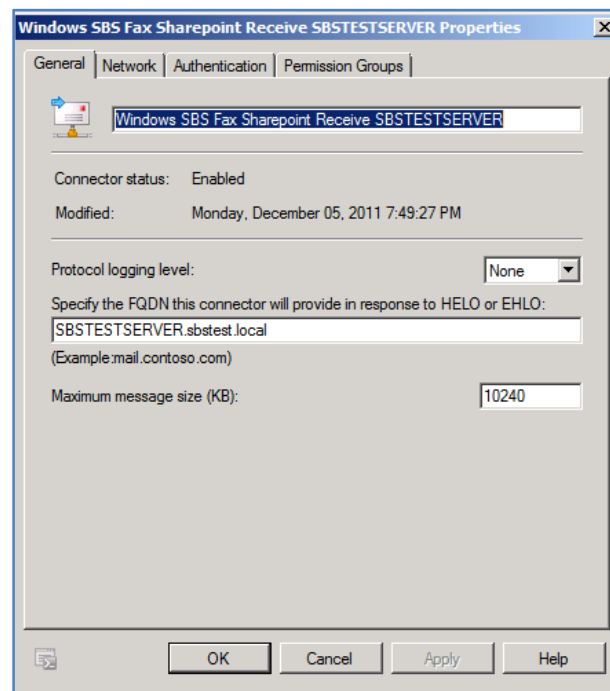
Companyweb uses Exchange Server on SBS 2011 to send emails for alerts. It does this via a specially configured Hub Transport in Exchange Server. To view this configuration launch the *Exchange Management Console*.



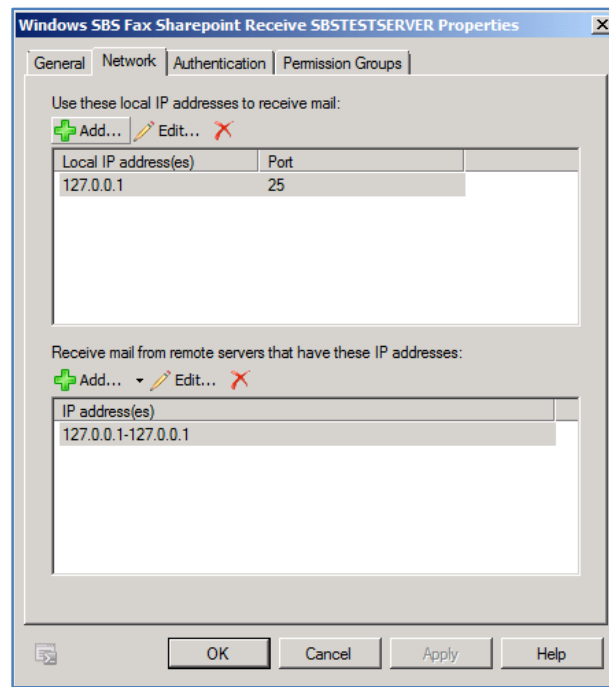
Expand the *Microsoft Exchange* node, then *Server Configuration* node and finally select *Hub Transport* on the left hand side of the screen.

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*

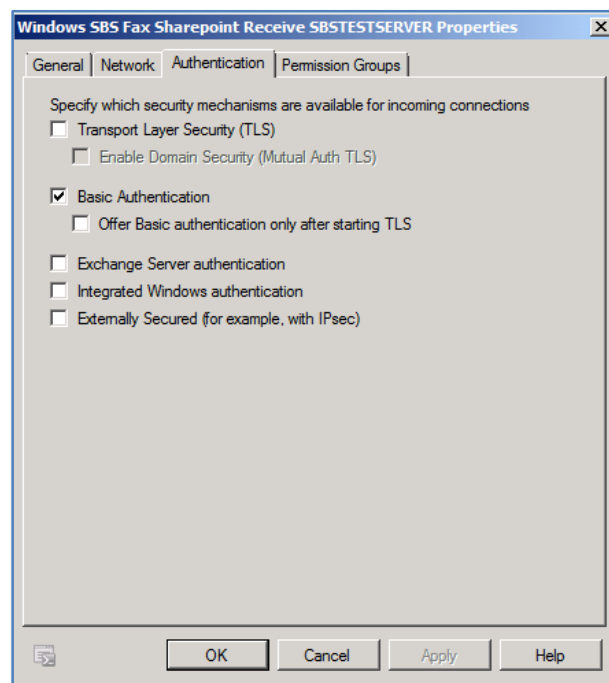


*Network tab*

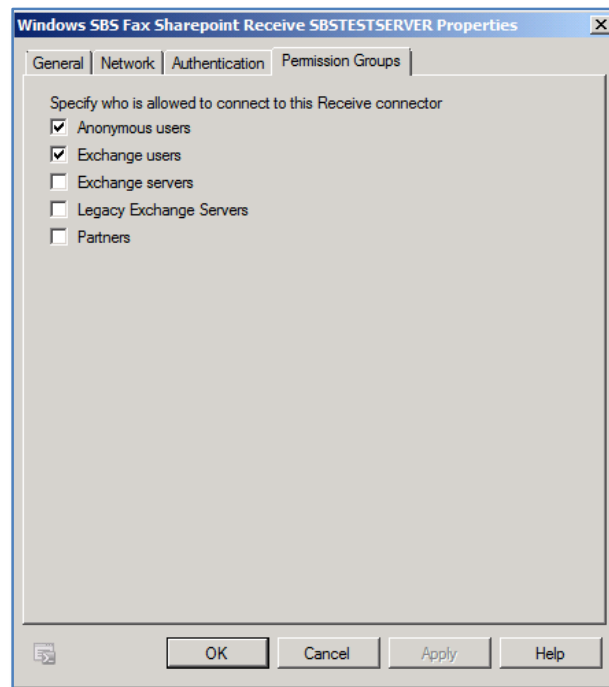


Notice here how the IP address for this connector is set to 127.0.0.1. This is the IP address used in the DNS for SharePointSMTPServer which is what is configured in Companyweb by default shown previously.

*Authentication tab*



*Permission Groups tab*



## 7. Links

How to backup and restore companyweb in SBS 2008 -

<http://blogs.technet.com/b/sbs/archive/2010/06/02/how-to-backup-and-restore-companyweb-in-small-business-server-2008.aspx>

Repair user access to the internal Web site - <http://technet.microsoft.com/en-us/library/dd548330%28WS.10%29.aspx>

Reinstall Windows SharePoint Services - [http://technet.microsoft.com/en-us/library/dd548327\(WS.10\).aspx](http://technet.microsoft.com/en-us/library/dd548327(WS.10).aspx)

Repair other issues with Windows SharePoint Services - [http://technet.microsoft.com/en-us/library/dd560621\(WS.10\).aspx](http://technet.microsoft.com/en-us/library/dd560621(WS.10).aspx)