Chapter No. 4
"Installing SBS 2008 and Connecting to the Internet"
In this package, you will find:

A Biography of the author of the book
A preview chapter from the book, Chapter NO.4 "Installing SBS 2008 and Connecting to the Internet"
A synopsis of the book’s content
Information on where to buy this book

About the Author

David Overton has been in the IT industry for over 20 years and has worked at Microsoft in the UK for more than nine years. David fell in love with Small Business Server in 2003 when he was given the responsibility of engaging with journalists at the time of the launch of SBS in the UK. For the next four years, David was responsible for improving SBS deliveries by Microsoft partners. David has since has moved on to other roles inside Microsoft, but still continues to be part of the SBS community, helping users answer and resolve questions.

As well as his day job, David is also a writer: he has written for consumer publications Windows XP and Windows Vista magazines, and he blogs at http://davidoverton.com, where he helps readers find solutions to questions and problems.

When not working or writing, David likes to spend time with his family and also tries to fit in sailing any time of the year in any weather.

For More Information:
This book would not have been possible without the interaction of customers, the UK SBS group leads, SBSC partners who work together to improve IT for small businesses, and finally, my colleagues at Microsoft.

I could not have started this project without the support of all three members of my family who agreed to lose me for even more days each month. Once I started the book, I relied on seven people to give their guidance to ensure the content was the most useful possible.

Simon was my ultimate customer guide helping me keep an eye on the owner manager's perspective. Kate Bevan, a journalist, helped improve my writing style and reminded me to keep it simple. The people who are in business supplying and maintaining SBS for their customers every day were Leslie Cupitt of Business Solutions IT, Vijay Riyat of iQuebed, Ian Watkins of Oxbridge Technology Ltd, Alex Stanier of IT 4 Business, and Steve Davis of Sytec.

I need to thank Nick King at Microsoft for answering the questions I could not, and the staff at Packt Publishing Ltd, including Douglas, for the encouragement and guidance that finally led to this book being published.
Small Business Server 2008
Installation, Migration, and Configuration

SBS 2008 has the potential to deliver real business value to a business, but to enable this, you need to implement it correctly while ensuring it is delivered in a secure manner. While SBS 2008 is designed for small businesses, understanding how to make it fit your business is still vital. This means you need to correctly install SBS 2008 or migrate from SBS 2003 and then configure it to meet your needs.

This book will walk you through your journey ensuring you complete all the necessary actions to successfully complete this task.

What This Book Covers

Chapter 1 sets out to ensure that you are prepared for your journey into SBS 2008, and then plot the route you will be taking and explain why.

Chapter 2 is a brief chapter covering the basics of SBS 2008. You will understand the technologies that you will be interacting with while installing and configuring SBS 2008, and have all the technology that you need to complete the task at hand.

Chapter 3 will cover the preparation required to migrate from SBS 2003 to SBS 2008. This will consist of the following steps: checking if your SBS 2003 server is healthy, backing up the server, installing the required software, changing SBS 2003 to prepare it for migration, and completing the migration tools. We will also see the answer to some questions that enable you to decide when and how to perform a migration. At the end of this chapter, we'll see the two areas that I will not be covering in the migration steps, namely ISA and the variety of anti-malware that may be installed.

Chapter 4 covers the installation of SBS 2008 on a new system, either as a first server in an organization or as a new server into an organization with SBS 2003. We will cover: installing the operating system, installing the SBS components, migrating network settings, getting updates, confirming company information, creating an administration account, naming servers, installing anti-malware tools, and resolving installation issues. The steps involved will get you to the point where you are connected to the Internet.

Chapter 5 covers the migration of the configuration settings from the SBS 2003 system to SBS 2008. This will require activity on both servers. We will cover the following areas in this chapter: starting the Migration Wizard, initially configuring the SBS 2008 network, configuring Internet Access, migrating the SBS 2003 network settings across, and cleaning up the group policy settings.


Chapter 8 covers the finalizing of the migration tasks with the migration of the users and the remaining data from the SBS 2003 system to SBS 2008. We will cover the following tasks in this chapter: migrating file shares, migrating the fax data, migrating users and groups, migrating LOB applications, and finishing the migration.

Chapter 9 covers the process of finalizing the network setup—moving all the network services to be served from the SBS 2008 server. In this chapter, we will carry out the following tasks, some of which are optional: accepting the customer feedback option, configuring your Internet domain name for remote access and email, checking your Internet network settings, enabling email routing via your ISP (smart hosts) if required, installing a paid-for SSL certificate (optional), configuring Office Live for Small Business for SBS 2008 (optional), and configuring a VPN (also known as RAS) for external access (optional).

Chapter 10 covers the process of finishing the network protection and routing setup and configuring the protection of the data on the server. We will cover: configuring the firewall ports, configuring and testing backups, and configuring anti-malware.

Chapter 11 covers the tasks required to add and manage users as well as the tasks to add and manage their desktop and notebook computers.

Chapter 12 covers the following areas: email, calendar, and contacts, file management, and remote access to the server, network, and services.

Chapter 13 covers: daily maintenance checks via the built-in reports, maintenance areas, and troubleshooting common problems.
Installing SBS 2008 and Connecting to the Internet

This chapter covers the installation of SBS 2008 on a new system, either as a first server in an organization or as a new server into an organization with SBS 2003. We will cover:

- Installing the operating system
- Installing the SBS components
- Migrating network settings
- Getting updates
- Confirming company information
- Creating an administration account
- Naming servers
- Installing anti-malware tools
- Resolving installation issues

The steps involved will get you to the point where you are connected to the Internet. There are some steps that are different, depending on whether this is a new installation or a migration.

**SBS 2008 installation**

The installation process is split into two sections:

- Installation of the operating system and other files to the disk
- Installation of everything that makes it SBS 2008

You cannot separate the two or stop the second half from happening; although, you will be required to provide input to the server at each stage.
Operating system installation

If you are performing a migration from SBS 2003 to SBS 2008, you must have your USB memory stick with the SBSAnswerFile.xml file loaded onto the root directory. The process to create this is covered in the previous chapter.

You must also have a network cable plugged into the SBS server, connected to a hub or switch, for the installation to succeed.

Migrating to SBS 2008 in a virtual environment

If you are installing SBS 2008 into a virtual machine, such as under Hyper-V from Microsoft then you cannot simply plug in a USB memory stick as USB ports are not available within the virtual machine. For the install process to read it, either you must add it as a pass-through hard disk or you can create a Virtual Floppy Disk with the file on it. To add the USB Disk as a hard disk in Hyper-V, mark it as offline in the DISKPART tool and then add it as a drive before starting the virtual machine. For detailed instructions, take a look at http://davidoverton.com/r.ashx?12.

If you have a DVD for the system, insert the DVD and boot the system and follow the instructions to boot from a DVD for your system. You will normally have to press a key to start the process. You will see the grey bar progressing across the screen as the DVD is read. If you have a system from a hardware manufacturer then the operating system may already be installed on the hard disk. If this is the case, simply turn on the machine.

If your machine will not boot from the DVD and you have a DVD drive on the system, then check the BIOS settings to ensure that the DVD is the first boot drive.
You will then be asked to set the **Language to install**, **Time and currency format**, and **Keyboard or input method** to match your needs.

If you are migrating, you must ensure that you have installed the USB memory stick before you click on the **Install Now** button. However, if you are performing a clean installation, then simply press the button.
Installing SBS 2008 and Connecting to the Internet

If you wish to carry out a trial installation that gives you 30 days without activating your installation and fixing your hardware to your product key, do not enter a product key into the **Product key** box. If you are performing your final installation, then enter the key from the SBS 2008 package or the **Certificate of Authenticity** on the system case if SBS was pre-installed on the server.

If you do not enter a product key, you will be prompted to enter the key within 30 days. You can extend the time without a key, but ultimately, you will need to activate SBS 2008 to continue using it.

Next, accept the license and click on **Next**.
Select the **Custom (advanced)** installation option.

You should see one or more disks presented to you in a list. There are two schools of thought here on how to configure the first disk. One school has all the data on the first (or primary) partition and the other creates two partitions and splits the data and the operating system. The idea here is that the system partition can be correctly sized and backed up with a different strategy to the data partition. You can also easily move the second partition onto larger disks should there be a need to in the future.

There are merits to both arguments, but if you only have a single disk, I would simply select this and install SBS 2008 to this disk without partitioning first. For SBS 2008, this should be absolutely fine as your data needs are not going to grow too rapidly. If you do have significant data requirements with multiple disks, then having the data and system separate does make sense.

**No hard disks showing**

If you do not see a hard disk shown in the screen, maybe because you need to load RAID disk drivers, click on the **Load Driver** button and insert the CD or floppy disk that came with your computer or motherboard. Provided your system supports Windows 2008, this will resolve this problem.
Let's have a look at the following screenshot:

Click on **Next** and the actual installation will finally start and take over an hour to complete. You will find yourself watching the progress on a screen similar to the one shown in the following screenshot. There is no interaction to this process, which means it can just be left on its own; however, it is best to check in ever so often to ensure that an error message has not interrupted the installation. The only error I've seen was when there was a read error from my DVD (I had scratched it!). I cleaned the disk and re-started the install again without any issue.
SBS 2008 installation continued

Once the system has rebooted, you will see a screen informing you that the installation was successful and that it is now time to continue. Some of the screens shown only relate to a system that is part of a migration, while others only relate to a clean installation. If this is a clean installation and not a migration, then you simply need to click on **Next**.

If you are performing a migration, you will see the **Start the Migration Guide** screen that re-affirms the importance of a backup. I'm assuming you do have a backup.
Check the two boxes regarding a backup and the migration guide, and click on Next.

The Microsoft migration guide can be downloaded from http://davidoverton.com/r.ashx?X. This was used in putting together the information for this book. If you are keen to explore more details around the installation process, then this guide is a valuable source of information. I also have a forum on my web site at http://davidoverton.com/r.ashx?13.

If you have selected to run unattended in the answer file settings, then you will not see many of the following settings screens. If you did not ask for an unattended install, then all the answers you have entered will still be used, but you will be asked to verify the details. The next sections cover off those sections you will need to complete.

**Time Verification**

Even if you selected an unattended install, you could have still set for the time to be manually confirmed. As with the SBS 2003 system you are migrating from, you are next asked to verify the time for the migration to work. Correct time is an essential part of the security settings.

The small clock picture does not show the time, so the only way to verify the date and time is to click on the **Open Date and Time** link. This brings up the normal date and time dialog box scene as shown in the following screenshot. As this is a new system, it is quite probable that the date and/or the time will be wrong or the time zone will not be correct, so verify all the items.
Network settings for migrating systems

For the migration to work, the source (SBS 2003) and destination (SBS 2008) servers need to have their IP or network addresses confirmed. Since this information was in the Answer File, it should simply be a case of confirming it if the unattended installation is not selected. Normally, the IP addresses should both be of the form of 192.168.x.y where x is the same for both addresses and y is different.
Installing SBS 2008 and Connecting to the Internet

The next items that may need confirmation are the settings for the domain. Do not add certificate information as it can cause issues; leave this setting blank. Again, this should simply be a case of clicking on Next to confirm the settings from the Answer File.

![Install Windows Small Business Server 2008 dialog box](image)

Getting installation updates

You are now presented with an opportunity to download updates for your server. These updates can cover both the process of the installation and the security of the server. Since it can take only minutes for a machine connected to the Internet to be compromised, I strongly suggest that you get the installation updates. Select Go online and get the most recent installation updates to get updates.

You will need a working Internet connection to be able to get updates.
Confirming Company information

The Company information is used to populate information in the Fax settings, the intranet site, and Exchange 2007. Even if you are using an Answer File, you may be prompted to re-confirm these settings. Fill in the details and click on Next.

For More Information:
Creating an administrator account for new installations

If you're performing a clean installation, you need to create the administrator account. To do this, fill in the First name and Last name fields with the name of the administrator of the system. The Administrator user name should be related to the administration of the system, but should not be Administrator as this is a security risk.

Think carefully about the name of the administrator as this will be the name used to manage the system. It should not be administrator, and it should not be a regular user's account either. It may be that someone is both a user and administrator of the system, which should mean that two accounts are created.

Naming your server and domain for new installations

If this is a new installation, you will need to name your server in the Server name box and enter an internal domain name, which should not be confused with the Internet domain name. If your Internet domain name was mycompany . com then your internal domain name might be mycompany. Enter this and then click on Next.
Installing OneCare and Forefront Trials

You always have the option as to whether to use the Microsoft security products or those provided by a third party. If you intend to use third-party products that are suitable for SBS 2008, do not check these boxes, but ensure you install those products and sign up to the subscription as soon as possible. The Microsoft products are trial products, which means you can use them to secure your machine for 3+ months without paying any additional money; however, after that time you will need to purchase the subscription licenses. You can de-install the Microsoft products to replace them at any time.

Microsoft has announced the end of OneCare, but you can still use it to give three months free anti-malware support. You will need to purchase anti-malware software for your SBS 2008 system eventually.
Paying for security products on an ongoing basis

Whether it is Microsoft or other third-party products you use for security, they will need constant updates to deal with the ever changing threat to your server and network. For this reason, you should purchase a subscription with monthly or annual payments no matter who the provider is.

You may see a summary screen confirming the settings. Click Next on this screen and once this has finished expanding and installing, click on the Finish button.

Installation finished, possibly with errors

Now, you have finally finished the last part of the installation before you actually migrate data and settings across. It might have all gone smoothly or some errors may have been reported as installation issues. If the installation process goes severely off the rails then SBS 2008 will stop the installation; however, there are some errors or issues that are acceptable during the installation process. A log of these errors will be made and you will be told about them on the final screen as shown in the following screenshot. To view the errors, click on the View installation issues text.

You can read the installation issues at any time from the SBS 2008 console, so you do not need to note all the detail, at this stage of the process, if you decide to resolve some of them later.
Chapter 4

Resolving errors and installing SBS 2008 updates

Having finished the installation, you can check the issues in the Windows SBS Console by clicking on View installation issues. Most of the installations I have carried out have shown at least one issue, ranging from network errors to update failures.

Click on the link View installation issues to see any issues.
Installing SBS 2008 and Connecting to the Internet

You need to take the action recommended or other appropriate action. Click on **How do I fix this issue** to get advice on the specific issue and how to fix it. Given that errors are unexpected, I can't script all the answers here; however, there is one I have frequently seen, about updates that did not run.

If the issue, as shown in the following screenshot, is **One or more updates cannot be installed** then the best option is to run **Windows Update**. You can find this by typing **Windows Update** into the **Start menu**.

![Installation issues](image)

You should see that your system is waiting to install updates as shown in the following screenshot and then, you simply need to click on the **Install Updates** button. If there are no updates listed, click on the **Check for Updates** button. If this fails to connect to find updates, then you need to check your network cables and network settings.

For More Information:  
Once the updates are installed, you will probably be prompted to reboot the system, which you should do so by clicking on the **Restart Now** button.

### Setting up IP addresses for clean installations

If you are running a new installation, you will need to configure your Internet settings to continue with the setup. For migrations, this will have already been done automatically, so this step can be skipped. To complete this step, your SBS 2008 system must be wired into your network.

#### DHCP Settings

SBS 2008 should be configured as the only DHCP server on your network. It is possible that your router, wireless hub, telephone system, or other network component will be fulfilling this role at the moment. You will need to disable this for SBS 2008 to be correctly configured.
Installing SBS 2008 and Connecting to the Internet

If you have restarted the system, log back in and open the Windows SBS Console from the Start menu. In the Task Pad on the Home screen, click on the task Connect to the Internet.

The initial screen requires you to confirm that you have the IP address of the internal interface on your router. This is also known as the router gateway address. This is used to configure the access to the Internet for the server, and if you have a UPnP router to also configure various settings on it.

If you configure a router with UPnP, you might remove any customizations you have made to it. It might be easier to configure the network by hand.
Once you have confirmed you have this information, click on **Next**.

SBS 2008 will try to detect your existing network settings. It should take no more than 30 seconds to do so.
Installing SBS 2008 and Connecting to the Internet

If it cannot find your settings, it will offer some default settings that you can accept or change. Once you have what you believe are the correct settings, click on Next.

SBS 2008 checks for routers on 192.168.x.1 and 192.168.x.254 only, so I advice using one of those. You should also plan the IP addresses of fixed devices on your network, such as printers.

SBS 2008 will try to verify the router gateway address and use the IP address that you suggested. If it is still not able to detect these settings, you will be told that a router was not found on your local network. If you have not yet set up your Internet connection, then click on the Yes button. If you have configured your router, then click on No and check your settings.

If you have problems here, then you can check settings by using Ping or Tracert to check the network’s ability to carry messages and then Nslookup to check DNS settings.
If the settings are correct, SBS 2008 will show the settings and confirm that the router was found with a large green check mark at the top of the **Connect to the Internet** wizard. Click on **Next** to start the configuration process.
Once the configuration is complete, you will see a green check mark and be able to click on the **Finish** button.

![Connect to the Internet](image)

**Summary**

You now have a system that is part of a network domain, either an existing domain if you're running a migration or a new domain, your first, if this is a clean install.

The server should be able to send and receive information with the Internet, but is not yet configured to take advantage of the many abilities that SBS 2008 offers a small business. If you are running a migration, you will need to run through the migration wizard over the next four chapters to migrate all the settings and data.

If this is a clean installation, you will need to continue with the configuration by following the **Windows SBS Console** check list, and then migrate each business PC's data into the SBS domain. To follow the checklist, go to Chapter 7 to configure the server and secure it.
Where to buy this book

Free shipping to the US, UK, Europe and selected Asian countries. For more information, please read our shipping policy.

Alternatively, you can buy the book from Amazon, BN.com, Computer Manuals and most internet book retailers.