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Windows® Small Business Server 2011



Craig Zacker

Administrator's Pocket Consultant

Windows® Small Business Server 2011

ADMINISTRATOR'S POCKET CONSULTANT

The practical, portable guide to Windows Small Business Server 2011!

Portable and precise, this pocket-sized guide delivers ready answers for administering Windows Small Business Server 2011 Standard. Zero in on core support and maintenance tasks using quick-reference tables, instructions, and lists. You'll get the focused information you need to solve problems and get the job done—whether at your desk or in the field.

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- Use permissions to control access to network resources
- Manage your data storage resources
- Administer email with Microsoft® Exchange Server 2010
- Monitor the performance of your servers and workstations
- Build an intranet with Microsoft SharePoint® 2010
- Migrate an existing network

About the Author

Craig Zacker is a writer, editor, and educator who has written or contributed to dozens of books on operating systems, networking, and PC hardware, including several college texts. Craig is the author of the *Windows Small Business Server 2008 Administrator's Pocket Consultant*, and coauthored the Microsoft Press® *Training Kit for Exam 70-686*.

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Administrator's Pocket Consultant

Craig Zacker

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Introduction

When local area networks (LANs) first appeared in the business world, their primary functions were to share files and printers. These are still critical applications for most business networks, but networks are able to provide many other functions as well. Virtually all business owners want to provide their users with access to the Internet and email, but they must be able to do so securely. Many businesses also want to host their own websites and run specialized applications. Windows Server 2008 R2 provides many of these functions, and other Microsoft products provide those that it does not provide. For example, Microsoft Exchange Server 2010 SP1 provides comprehensive email services and Microsoft SQL Server 2008 R2 provides a robust database management environment.

Installing and configuring these Microsoft products usually requires a certain amount of experience and expertise. Companies with the appropriate resources purchase the products they need and hire IT personnel to install and maintain their networks. However, there are a great many small businesses that cannot afford to keep full-time IT people on staff, or even purchase some of the more expensive networking software products. It is for this reason that Microsoft developed the Small Business Server 2011 product.

Microsoft Small Business Server (SBS) 2011 is a combination product that includes Windows Server 2008 R2, Exchange Server 2010, several other components, and (optionally) SQL Server 2008 R2, all for an attractive price. Even more attractive to the small business owner, however, is the fact that the product includes a setup program that installs and configures all the software components at once, using a standardized configuration that requires almost no user interaction.

In addition to the setup program, Windows SBS 2011 includes Windows SBS Console, a management program that provides simplified access to the most commonly used administrative controls. The end result is a sophisticated network environment that can support up to 75 users, and that many small businesses can afford to purchase, deploy, and maintain without full-time professional IT talent.

Who This Book Is For

Windows Small Business Server 2011 Administrator's Pocket Consultant is designed to help new and relatively inexperienced network administrators deploy and maintain a Windows SBS 2011 network. However, experienced administrators who are new to Windows SBS 2011 can also benefit.

How This Book Is Organized

The book first takes you through the process of planning a small business network, evaluating and purchasing the required hardware, installing Windows SBS 2011, and performing the required post-installation tasks. For first-time network administrators, there is a chapter called “A Networking Primer” and a section called “An Active Directory Primer,” which provide background information on basic networking and directory service concepts. More experienced administrators can skip these sections or refer to them as needed.

Once you have planned, assembled, installed, and configured your network, *Windows Small Business Server 2011 Administrator's Pocket Consultant* takes you through the process of administering the various network applications using the tools provided with Windows SBS 2011. Windows Server 2008 R2, Exchange Server 2010, and SQL Server 2008 R2 are all large and complex products, each of which can support a book of its own. In fact, there are separate Administrator's Pocket Consultants for all of these products available from Microsoft Press.

Because it would not be possible to provide comprehensive coverage of all the Windows SBS 2011 components in one book of this size, *Windows Small Business Server 2011 Administrator's Pocket Consultant* concentrates primarily on the basic administrative tasks you are likely to perform frequently, using the Windows SBS Console and other tools that are exclusive to Windows SBS 2011. For example, the book only covers the process of creating user and computer objects in Active Directory Domain Services (AD DS) using the Windows SBS Console, but you can also create them using the Active Directory Users and Computers console.

Conventions Used in This Book

A variety of elements are used in this book to help you understand what you need to know and to keep it easy to read.

- **Note** To provide additional details on a particular point that needs emphasis.
- **Tip** To offer helpful hints or additional information.
- **Caution** To warn you about potential problems you should look out for.
- **More Info** To point to more information on the subject.
- **Real World** To provide real-world advice when discussing advanced topics.
- **Best Practice** To examine the best technique to use when working with advanced configuration and administration concepts.

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Introducing Windows Small Business Server 2011

- What's Included with Windows SBS 2011? **2**
- Standard or Premium? **8**
- Why Use Windows SBS 2011? **8**
- What Can't Windows SBS 2011 Do? **11**
- What's New in Windows SBS 2011? **12**

Simply put, a server is a software application that provides services or furnishes resources to other computers. Although many organizations have computers that are dedicated to server tasks, virtually any computer can function as a server. If you use your Windows workstation to share files or a printer with other users, your computer is acting as a server. Medium-size and large businesses typically have multiple computers running various server applications. Separate computers might function as file servers, mail servers, database servers, and so on. In addition to its Windows Server products, Microsoft has a full line of server applications that can provide virtually any service a business might need.

Purchasing these servers and licensing these server applications can be an expensive proposition, as can learning to install and maintain them. For small businesses, it is often not economically feasible to purchase the hardware, the software, and the expertise needed to implement a full set of business server applications. This is where Windows Small Business Server (SBS) 2011 enters the picture. Windows SBS is a single product that bundles a comprehensive set of server applications with the Windows Server 2008 R2 operating system and also provides a simplified administration interface that enables a reasonably proficient Windows user to manage all the server functions.

What's Included with Windows SBS 2011?

Windows SBS includes a number of Microsoft server applications; some are retail products, and others are available as free downloads. Even in the case of a free product, however, you benefit by obtaining it with Windows SBS in several ways, including ease of installation and automated configuration.

Windows SBS 2011, as shown in Figure 1-1, is designed for use on a network that consists of 1 server and up to 75 workstations. One primary server performs all the infrastructure services required for the operation of the network. The Premium Add-On (available as a separate product) provides the ability to install a second server and run line-of-business (LOB) applications.

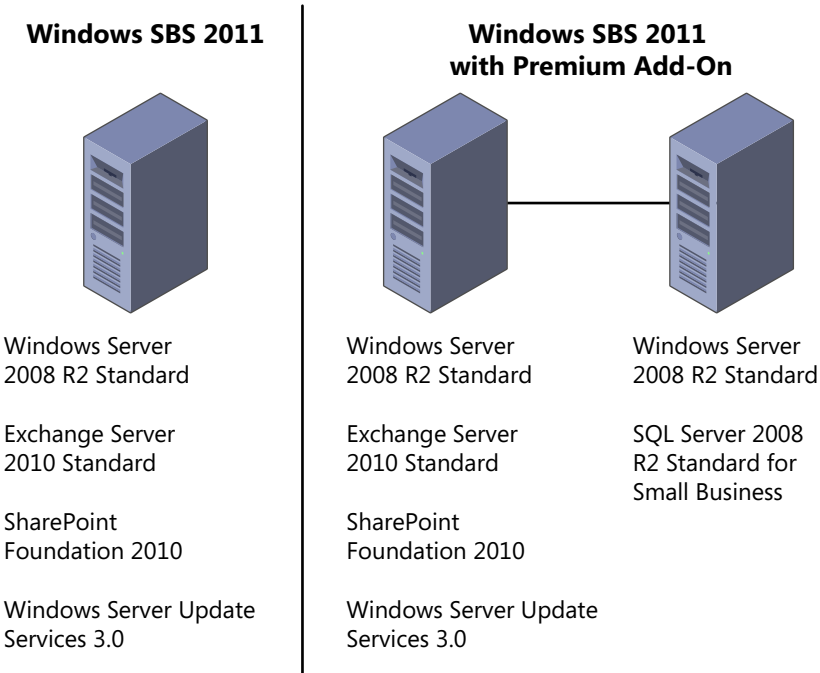


FIGURE 1-1 Windows SBS 2011 server configurations.

The following sections examine each of the components included in the Windows SBS product.

Windows Server 2008 R2

The Windows Server 2008 R2 operating system is a fundamental component of the Windows SBS package; it provides the environment in which all the other components run. Windows SBS 2011 includes Windows Server 2008 R2 Standard, with all the components found in the retail and original equipment manufacturer (OEM) operating system products.

Windows Server 2008 R2 includes a large collection of applications and services, packaged as roles, many of which Windows SBS relies on to provide the infrastructure that your network needs to run. The biggest difference between Windows SBS 2011 and a standalone version of the operating system is that SBS automatically installs and configures many of these roles for you, while with a standalone Windows Server 2008 R2 product you must add the roles that define the functions you want the server to perform.

For example, to configure the server to function as a domain controller, you must install the Active Directory Domain Services (AD DS) role and then run a wizard to promote the server. When you install Windows SBS, the setup program adds the AD DS role for you, along with many of the other available roles, and configures them as needed. In a large business environment, this automatic configuration would not be practical because there are likely to be multiple servers on the network, with each one dedicated to a few specific roles. On a small business network with only one infrastructure server, however, SBS installs all the roles, services, and applications required for a typical network. You can, of course, disable elements that you do not need after the installation, or install additional roles as needed (with some limitations).

MORE INFO For more information on exactly what components Windows SBS installs and configures during the setup process, see Chapter 3, “Installing Windows Small Business Server (SBS) 2011.”

Another big difference between the Windows SBS version of Windows Server 2008 R2 and the standalone versions is the inclusion of the Windows SBS Console tool, shown in Figure 1-2. This console, not included in the standalone versions of Windows Server 2008 R2, provides a central administration tool for all the applications and services installed with Windows SBS. This console also insulates the relatively inexperienced administrator from many of the more advanced, yet infrequently used configuration settings provided by the standard Windows Server tools. As you gain experience with Windows SBS, or if you are already an experienced Windows administrator, you still have access to all the familiar tools included with Windows Server 2008 R2.

The version of Windows Server 2008 R2 in Windows SBS 2011 includes a five-pack of the SBS 2011 Client Access License (CAL) Suite. This enables up to five users or devices to connect to the server and access its services. To support more than five users, you must purchase additional CALs. Unlike the CALs supplied with and sold for Windows Server 2008 R2, which provide clients with access only to the server,

the Windows SBS CALs provide clients with access to all the applications included with the product. With Windows SBS, you do not need to purchase separate licenses for Microsoft Exchange Server clients; the SBS 2011 CAL Suite provides client access to Exchange Server 2010 as well as Windows Server 2008 R2.

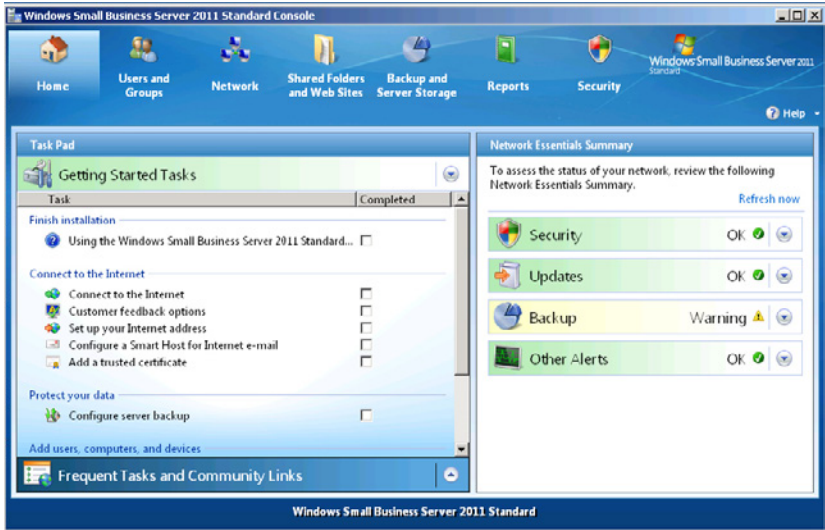


FIGURE 1-2 Windows SBS Console.

Exchange Server 2010 Standard SP1

Email has become a staple of business communications, and Exchange Server 2010 is Microsoft’s flagship email messaging product. Exchange Server provides an organization with internal email messaging, plus incoming and outgoing Internet email access. The mail is stored on the server so that users can access their messages from different computers and with a variety of client interfaces, including Microsoft Office Outlook on the desktop; Outlook Web Access (OWA), a web-based interface that provides access from any computer, inside or outside the enterprise; and even mobile devices, such as smart phones. In addition to email, Exchange Server also provides storage for calendar data, contacts, journals, and to-do lists, all of which users can share over the network, creating a variety of collaborative business solutions.

Exchange Server is a complex product, with many features and settings. However, in Windows SBS 2011, the main product installation process includes Exchange 2010 along with the Service Pack 1 (SP1) release. In addition, the critical configuration settings for the Exchange Server application and access to parameters for individual users are integrated into the Windows SBS Console, simplifying the administration

process considerably. As with Windows Server 2008 R2, though, more experienced administrators can use the standard tools supplied with Exchange Server, such as the Exchange Management Console.

MORE INFO For more information on Exchange Server 2010, see Chapter 15, “Administering Email.”

SharePoint Foundation 2010

As part of its default setup procedure, Windows SBS 2011 installs Internet Information Services (IIS), the web server application included with Windows Server 2008 R2, on the primary server. Windows SBS uses IIS to host a number of websites for various administration purposes, such as client deployment and update distribution. Windows SBS also creates a default company website, as shown in Figure 1-3, using Microsoft SharePoint Foundation 2010 and the Windows Internal Database feature of Windows Server 2008 R2. SharePoint Foundation is a free, web-based collaboration environment that enables users to create, share, and edit files; schedule calendar appointments; create task lists; and participate in forum-style group discussions.

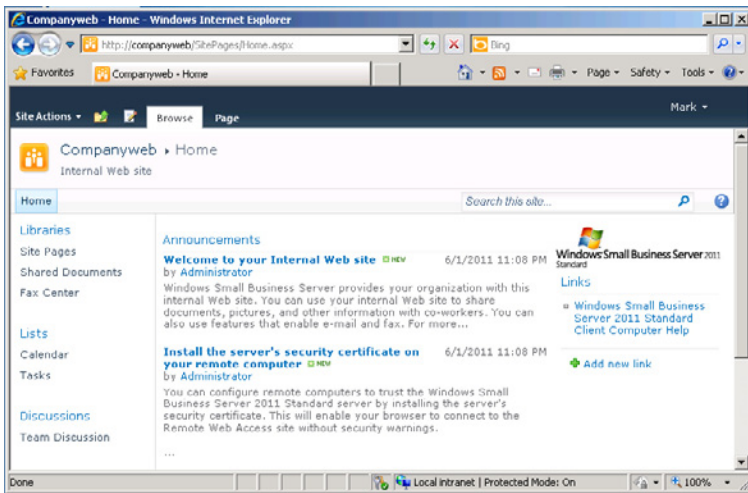


FIGURE 1-3 A default company website created using SharePoint Foundation 2010.

SharePoint Foundation 2010 requires a SQL Server database to store user files, messages, and other information. Windows Server 2008 R2 includes a feature called Windows Internal Database, essentially a special-purpose implementation of SQL Server, which SharePoint Foundation uses by default. Do not confuse the SQL Server implementation in the Windows Internal Database with the full-featured one supplied with Windows SBS Premium Add-On. Windows SBS 2011 includes SharePoint

Foundation 2010 and installs it on the primary server using Windows Internal Database. However, if you are running the Premium Add-On, it is possible to configure SharePoint Foundation to use the full SQL Server 2008 R2 Standard product on your secondary server to host the database.

Windows Server Update Services 3.0

Regular operating system updates are a fact of life for all Windows users and administrators. Microsoft releases security updates, bug fixes, and feature enhancements on a regular basis, and Windows SBS uses Windows Server Update Services (WSUS) 3.0 to automate the process of downloading new updates and distributing them to the computers on the network.

By using a central distribution point, you can conserve bandwidth on your Internet connection by downloading updates once instead of letting each computer download its own copy. WSUS also enables administrators to evaluate and test the updates and then decide whether to deploy them to the rest of the network.

MORE INFO For more information on WSUS 3.0, see Chapter 11, “Deploying Updates.”

SQL Server 2008 R2 Standard for Small Business

SQL Server 2008 R2 is a relational database manager application that you can use to deploy LOB applications designed to run within the environment that it provides. SQL Server 2008 R2 Standard for Small Business is included only with the Windows SBS 2011 Premium Add-On product, along with a second copy of Windows Server 2008 R2 to install on a second server.

NOTE Unlike Windows SBS 2008 Premium, the Windows SBS 2011 Premium Add-On includes only 64-bit versions of Windows Server 2008 R2 and SQL Server 2008 R2 Standard because Windows Server 2008 R2 is available only for the 64-bit platform. Therefore, the secondary server on a Windows SBS 2011 network must be 64-bit.

The primary server in a Windows SBS 2011 deployment performs a large number of functions, including domain controller, Exchange Server, and web server. Adding SQL Server to the mix would likely overtax the server’s resources, so the Windows SBS Premium Add-On provides the software for a second computer running Windows Server 2008 R2, which runs SQL Server 2008 R2 and any applications that require its database services.

SQL Server is a database manager, which means it provides the services that applications need to store data and supply it to clients. Structured Query Language (SQL) is a language that applications use to send instructions to the database manager. The instructions enable the database manager to add information to a database stored on the server or retrieve specific information and supply it to another application.

A typical SQL Server implementation in a Windows SBS environment might consist of a web application running on the primary server along with a website that is accessible from the Internet. Users accessing the website supply information via a form, and the web server stores the information in a SQL Server database on the secondary server. Later, internal users access the information in the database using an intranet web interface or a dedicated client, as shown in Figure 1-4.

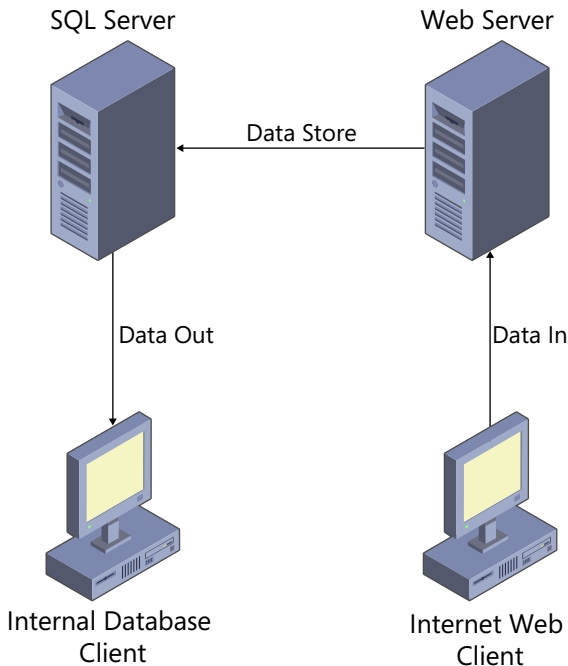


FIGURE 1-4 A typical Windows SBS SQL Server deployment.

For clients on the Windows SBS network to access the SQL Server applications, they must have a special license called the CAL Suite for Premium Users/Devices. This license is more expensive than the standard CAL Suite, but only the clients that access the database require it. If, for example, some users need access to the SQL Server databases and some do not, you can purchase CAL Suite Premium only for those who need it and then use the less expensive, standard CAL Suite for those who do not.

MORE INFO For more information on SQL Server 2008 R2 Standard, see Chapter 18, "Adding a Second Server."

Standard or Premium?

The question of whether to purchase the Premium Add-On for Windows SBS 2011 should be based solely on your need for a second server to run LOB applications. The functionality of the primary server remains identical, so if you do not have any applications that require SQL Server, you are better off with just the standard Windows SBS 2011 product.

The price of the Premium Add-On package is less than if you purchased its two products and the appropriate licenses separately. However, it is possible to install additional servers on a Windows SBS 2011 network that you have licensed separately.

Whichever route you choose, it is important to know that purchasing Windows SBS 2011 does not lock you into a single-server network configuration for the rest of the product's lifetime.

Why Use Windows SBS 2011?

When it comes to networking their computers, small businesses can suffer from a variety of shortcomings. The chief problem, not surprisingly, is a limited budget. Business owners accustomed to purchasing workstation software products for a few hundred dollars might be shocked at the four-figure prices of server software plus the additional cost of licensing the client users.

Another big problem for the small business owner is information technology (IT) staffing. Many small businesses cannot justify the expense of full-time IT employees, which leaves them two alternatives: train someone in the organization to manage the network part-time or hire a freelance consultant as needed.

Windows SBS 2011 addresses both of these problems in various ways, as explained in the following sections.

Pricing

One of the biggest benefits of Windows SBS 2011, as compared with the Microsoft standalone server products that it replaces, is its cost. Purchasing server operating systems and server applications can be a complicated business. You must consider the hardware requirements, operating system requirements, software interoperability, and other factors for each component. Without careful evaluation, you can end up purchasing products that do not work together or paying too much for more software than you need.

Windows SBS 2011 eliminates many of these worries by bundling together most, if not all, of the server products that a small business needs into a single package, with one set of hardware requirements and one price. Table 1-1 lists the suggested retail prices for Windows SBS 2011 and its CAL packs, as of May 2011.

TABLE 1-1 Windows Small Business Server 2011 Retail Pricing

PRODUCT	RETAIL PRICE
Windows SBS 2011 (including a 5-pack of SBS 2011 CAL suite)	US \$1,096
Windows SBS 2011 Premium Add-On (including a 5-pack of SBS 2011 CAL suite for Premium Users/Devices)	US \$1,604
Windows SBS 2011 CAL Suite 5-pack	US \$361
Windows SBS 2011 CAL Suite 20-pack	US \$1,447
Windows SBS 2011 CAL Suite for Premium Users/Devices 5-pack	US \$457
Windows SBS 2011 CAL Suite for Premium Users/Devices 20-pack	US \$1,831

Using these prices, the total product cost for a sample network consisting of one Windows SBS 2011 server and 25 client workstations would be US \$2,543 (that is, US \$1,096 for the Windows SBS 2011 product plus US \$1,447 for 20 additional CALs). If you were to purchase the server software products separately, the total cost, based on the current retail prices, would add up as shown in Table 1-2.

TABLE 1-2 Cost of Products Equivalent to Windows SBS Purchased Separately

PRODUCT	RETAIL PRICE
Windows Server 2008 R2 Standard with 5 CALs	US \$1029
Windows Server 2008 CAL 20-pack	US \$799
Exchange Server 2010 Standard	US \$699
(25) Exchange Server 2010 CALs	US \$67 x 25 = US \$1,675
Total	US \$4,202

NOTE SharePoint Foundation 2010 and Windows Server Update Services 3.0 are free products, and therefore add no cost to the equation. Because this is an example of a one-server network using Windows SBS 2011, SQL Server 2008 R2 is also not part of the calculations.

Of course, there are additional costs involved in setting up a small-business network, including the client operating systems, the hardware, and various networking expenses. However, a savings of US \$1,659 on the server software and client licenses is remarkable, especially when you consider that you are receiving the benefits of the unified installation and administration tools as a bonus.

System Requirements

The literature for every software product on the market includes a list of the system hardware that you need to run the software. Before you purchase a software product, you must make sure that your computer has a processor of the appropriate type and speed; sufficient memory and hard disk space; and the proper peripherals, as specified by the software manufacturer. However, for a single server running a variety of applications and services, determining exactly what hardware you need can be a problem.

In its system requirements for Windows Server 2008 R2, Microsoft specifies minimum and recommended processor speeds, amounts of memory, and hard disk sizes. However, the actual requirements of a server can vary greatly. For example, a computer running Windows Server 2008 R2 that functions only as a file server requires far less memory and disk space than one that is configured to be a domain controller. And when you install additional roles on the server, even more memory is required. Without actual testing, it would be difficult for a small-business purchaser to estimate exactly what hardware is required for a complex Windows Server 2008 R2 configuration such as the one created by Windows SBS 2011.

Complicating the matter even further are the hardware requirements for all the additional applications that you might want to install on a server. Products such as SharePoint Foundation 2010 and Windows Server Update Services 3.0 have their own requirements, which you must consider cumulatively, along with the hardware needed for the operating system. Exchange Server 2010 is even more of a problem because the hardware resources that it requires depend on the role that the individual server plays in an enterprise Exchange Server deployment.

With Windows SBS 2011, the system requirements for the product account for all the components, including Exchange Server 2010, as installed in the default configuration. You don't have to consider the roles that will be installed on the server or the additional components included with the product.

MORE INFO The system requirements for Windows SBS 2011 are discussed in detail in Chapter 3.

Installation

The actual process of installing the software for a server is where the question of who will administer the small-business network becomes significant. The process of installing the Microsoft server components individually can be puzzling to an inexperienced administrator.

The Windows Server 2008 R2 setup itself is relatively straightforward. Microsoft has streamlined the operating system installation process so that virtually any user familiar with the Windows interface can do it. However, once the operating system installation is completed, the administrator must add more than a dozen roles and

features and, in some cases, configure them as well. Following that is the installation of Exchange Server and the other server components, some of which you must download from Microsoft's website and some of which have software prerequisites that you must install first. Overall, the server installation process is quite complicated when you use the individual software components; it requires a good working knowledge of the Windows Server 2008 R2 tools and components and some background in networking.

With Windows SBS 2011, the installation process for all the server components is performed by a single setup program. The beginning of the process is no different from a standard Windows Server 2008 R2 installation, but once the operating system is installed, the setup program prompts the user for some basic business information and then proceeds to install and configure all the necessary roles and features, as well as the additional server applications included with the product. This integrated setup routine makes it possible for virtually anyone to install Windows SBS 2011.

NOTE The comprehensive, integrated setup routine in Windows SBS 2011 is possible only because the designers of the product have made a great many installation and configuration decisions for the administrator to create a well-integrated, multifunction server platform. One of the big advantages of Windows Server 2008 R2 is the flexibility provided by the roles and features that administrators can install as needed. On a medium-size or large enterprise network, administrators typically use multiple servers to perform different roles. It is therefore not possible to anticipate the roles and features each server needs. Having Windows SBS 2011 is like having a knowledgeable, trustworthy administrator by your side to answer the hard questions for you.

Administration

Once the installation of Windows SBS 2011 is complete, the server restarts and the user (after logging on) sees the Windows SBS Console. The Home page of this console contains a list of tasks the administrator should perform to get started, and the various other pages contain the most frequently used controls for the product's various components.

By integrating the most important controls into a single interface and eliminating the more advanced, less frequently used ones, Windows SBS 2011 makes it far easier for the beginning administrator to manage a small-business network.

What Can't Windows SBS 2011 Do?

There are limitations to what Windows SBS 2011 can do compared with the stand-alone products that comprise it. As mentioned previously, one of the main advantages of Windows SBS is its integrated installation and administration tools, and these tools exist only because the product's developers have made many important

installation and configuration decisions for you. The Windows SBS server environment is carefully designed to provide most, if not all, of the services that a small business needs.

Because this configuration is so carefully wrought, Windows SBS 2011 has some limitations that Windows Server 2008 R2 does not, such as the following:

- **Only 75 users** Windows SBS 2008 is limited to a maximum of 75 client users, while there is no limit to the number of clients that a computer running Windows Server 2008 R2 can support.
- **Only 64-bit processors** The Windows SBS 2011 primary server can run only on a computer with a 64-bit processor.
- **Only one network interface** A Windows SBS primary server can have only one network interface, which means that you cannot configure the computer to function as a router, as you can with Windows Server 2008 R2, or use other technologies requiring two network adapters, such as DirectAccess.
- **No Remote Desktop Services** The primary server in a Windows SBS 2011 installation cannot function as a Remote Desktop server for any purpose other than administration. Although you can install the Remote Desktop Services role on the computer, attempts to activate the Remote Desktop Licensing server results in errors. You can, however, configure the secondary server in a Windows SBS 2011 Premium Add-On installation to function as a Remote Desktop server.
- **No upgrade from earlier versions** If you are running an earlier version of Windows SBS, you can migrate your data to a new Windows SBS 2011 server, but you cannot perform an in-place upgrade.

What's New in Windows SBS 2011?

The most obvious differences between Windows SBS 2011 and the previous version, Windows SBS 2008, are the latest versions of the software components. Table 1-3 lists the versions of the software components included in the two products.

TABLE 1-3 Software Components Upgraded in Windows SBS 2011

WINDOWS SBS 2008	WINDOWS SBS 2011
Windows Server 2008 Standard	Windows Server 2008 R2 Standard
Exchange Server 2007 Standard	Exchange Server 2010 Standard with SP1
SQL Server 2008 Standard (Premium Add-On only)	SQL Server 2008 R2 Standard (Premium Add-On only)
Windows SharePoint Services 3.0	SharePoint Foundation 2010
Windows Server Update Services 3	Windows Server Update Services 3.0

New System Requirements

As emphasized in this chapter, Windows SBS 2011 requires a computer with a 64-bit, quad-core processor, running at 2 gigahertz (GHz) or faster. Microsoft has also increased the physical memory requirement to 8 gigabytes (GB), up from 4 GB for Windows SBS 2008. Windows SBS 2011 runs reasonably well with 4 GB of memory, but it runs much better with the minimum recommended 8 GB of memory (although, as always, more is better).

Microsoft has also increased the disk space requirement. Windows SBS 2011 does not install on a disk with less than 80 GB of free space, up from 40 GB in Windows SBS 2008.

Getting Started

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- Performing Post-Installation Tasks 93

The Windows Small Business Server (SBS) 2011 installation process performs a large number of configuration tasks that administrators have to perform manually in the case of a standalone Windows Server 2008 R2 installation. However, this is not to say that a server running Windows SBS is ready for users when the installation is finished. You still must perform a variety of tasks to prepare the server for use, not the least of which is familiarizing yourself with the Windows SBS Console.

Using the Windows SBS Console

The Windows SBS Console is an administrative tool, first introduced in Windows SBS 2008, which replaces the Server Management Console from Windows SBS 2003. Unlike Server Management, Windows SBS Console is not a Microsoft Management Console (MMC) snap-in; it is a standalone application that groups together many of the basic server management and monitoring functions that require separate applications in Windows Server 2008 R2.

NOTE Windows SBS Console does not replace the standard Windows Server 2008 R2 tools; it merely supplements them. While Windows SBS Console includes many of the tools that administrators use most often, the various Windows Server 2008 R2 utilities offer many more advanced functions.

Starting Windows SBS Console

When you log on to Windows SBS 2011 for the first time after the installation, the Windows SBS Console window opens by default and displays the interface shown in Figure 4-1. You can also start the program at any time by selecting *Start > Administrative Tools > Windows SBS Console*, and then clicking Yes in the User Account Control dialog box.

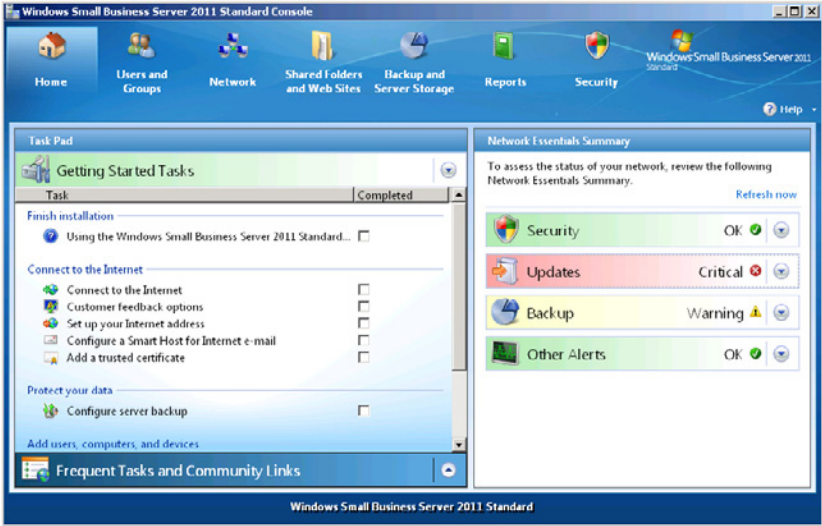


FIGURE 4-1 The Windows SBS Console.

You might notice that the Administrative Tools group also contains a Windows SBS Console (Advanced Mode) shortcut. Selecting this shortcut opens a version of the Windows SBS Console that includes links to other Windows Server 2008 R2 tools, such as the Active Directory Users And Computers, DHCP, and DNS Manager Consoles.

TIP In addition to running the Windows SBS Console application on the server, you can access it from remote locations. From another computer on the local network, you can use the Remote Desktop Connection client to access the server and start Windows SBS Console. You can also use the Remote Web Workplace (RWW) site to access the server from anywhere on the Internet. The address for your RWW site is http://remote.domain_name.com, where *domain_name.com* is the name of your Internet domain.

Using the Windows SBS Console Interface

The Windows SBS Console has seven main pages represented by seven buttons at the top of the window. Clicking *Home* displays a page, different in appearance from the other six, which consists of two task panes and a status area. Each of these two panes has an arrow button on the right. Clicking the down arrow on the open pane minimizes it and moves it to the bottom, so that the other pane can open and take its place, as shown in Figure 4-2.

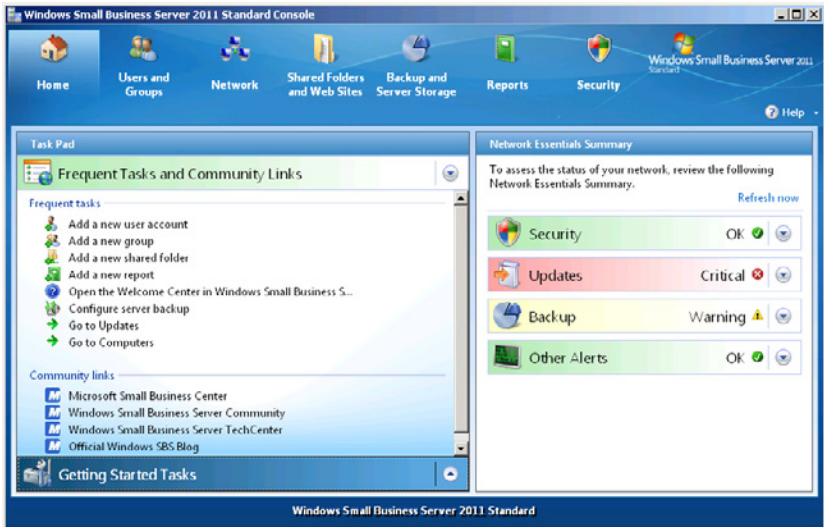


FIGURE 4-2 Swapping the Task pane in the Home page of the Windows SBS Console.

The other six pages in the console consist of tabbed lists of operating system elements on the left, as shown in Figure 4-3, and a context-sensitive task list on the right, which you can use to perform specific actions.

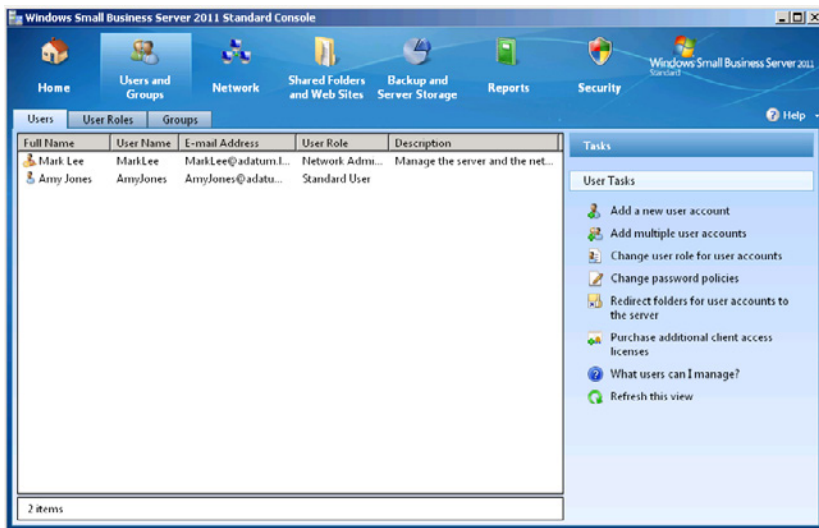


FIGURE 4-3 The tabbed interface of the Windows SBS Console.

The functions found in the main pages of the Windows SBS Console are as follows:

- Home
 - *Getting started tasks* Contains a list of post-installation tasks to perform on your server
 - *Frequent tasks and community links* Contains links to the console's most frequently used functions and to Windows SBS resources on the Internet
 - *Network essentials summary* Contains status displays for the servers on your network, along with links to appropriate pages with more information
- Users and groups
 - *Users* Contains a list of the user accounts you have created in your domain and enables you to create new user accounts and manage existing ones
 - *User roles* Enables you to create and manage templates that simplify the process of creating user accounts
 - *Groups* Contains a list of the Windows SBS security and distribution groups in your domain and enables you to create new groups and manage group memberships
- Network
 - *Computers* Contains a list of the computers on your network and enables you to add new computers and monitor existing ones

- *Devices* Contains a list of shared print and fax devices on the network, and enables you to manage existing devices and share additional ones
- *Connectivity* Contains a list of Windows SBS network and Internet resources and enables you to manage their properties
- Shared folders and web sites
 - *Shared folders* Contains a list of the shared folders on the network and enables you to create new shares and manage existing ones
 - *Web sites* Contains a list of the intranet and Internet websites for the organization and enables you to manage their properties and permissions
- Backup and server storage
 - *Backup* Contains a list of the scheduled backup jobs for the server and enables you to configure the jobs, check their status, and restore files from backups
 - *Server storage* Contains a list of the server's storage volumes and enables you to move specific data stores to other locations
- Reports Contains a list of the Windows SBS reports that the system is configured to generate and enables you to view the reports and create new ones
- Security
 - *Security* Contains a list of the security mechanisms on the server, and enables you to check their status and view their properties
 - *Updates* Contains a list of the updates downloaded by Windows Server Update Services (WSUS), tracks their status, and enables you to deploy or decline them

Performing Post-Installation Tasks

As soon as possible after you install Windows SBS 2011 on your server, you should begin addressing the items in the *Getting started tasks* list on the Home page of the Windows SBS Console. Some of these tasks link to wizards that help you to configure various server functions, while others display help files that provide useful information about administering your server and your network.

The following sections describe the functions of the various tasks in the list. As you finish each task, select its *Completed* check box to keep track of your progress.

Using the Windows SBS Console

For administrators working with Windows SBS for the first time, it is a good idea to become familiar with the management tools supplied with Windows SBS 2011, especially the Windows SBS Console. Clicking the *Using the Windows SBS console* link on the Home page opens a Help window that describes the basic capabilities of the Windows SBS and provides links to more detailed help pages on specific subjects.

Some of the other entries in the *Getting started tasks* list link to help files as well, including *How can users access computers on the network?* and *How can I add a shared printer to the network?* For more information on these subjects, see Chapter 6, “Working with Users, Computers, and Groups” and Chapter 10, “Sharing Printers.”

MORE INFO If you migrated your server running Windows SBS 2011 from an earlier version of Windows SBS, an additional *Migrate to Windows SBS* task appears in the *Getting started tasks* list. For more information on completing the migration process, see the section entitled “Performing Post-Migration Tasks,” in Chapter 5, “Migrating to Windows SBS 2011.”

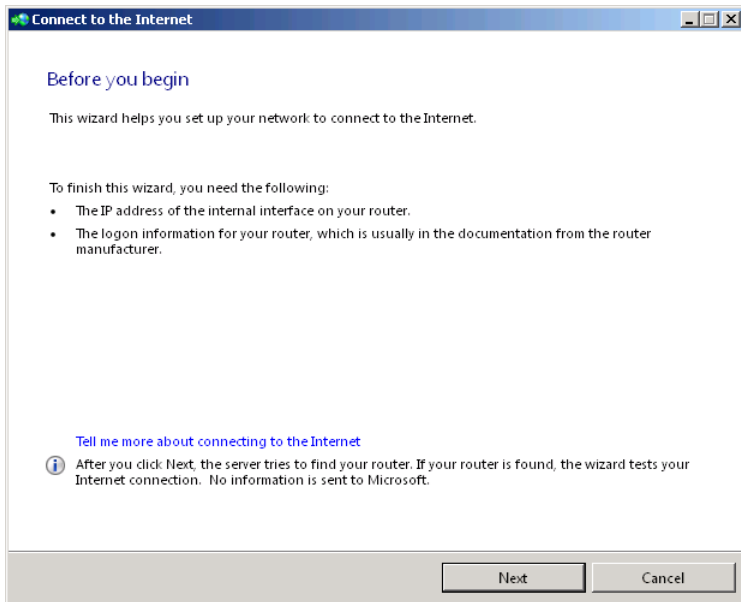
Connecting to the Internet

The Connect To The Internet Wizard is an important part of the Windows SBS 2011 setup process; many of the other wizards in the *Getting started tasks* list cannot run until you complete it. If you installed your server running Windows SBS 2011 before setting up an Internet access router on your network, this wizard detects the router and configures the server to use it for Internet access. The wizard also configures the DHCP Server service on the computer to supply Internet Protocol (IP) addresses and other Transmission Control Protocol/Internet Protocol (TCP/IP) configuration settings to the client workstations that you will be connecting to the network.

TIP You should run the Connect To The Internet Wizard again if you ever install a new router on your network or reconfigure your router to use a different IP address. You can access the wizard from the Home page of the Windows SBS Console or by switching to the Network page, selecting the *Connectivity* tab, and, in the Tasks pane, clicking *Connect to the Internet*.

To complete the Connect To The Internet Wizard, set up your router on the network according to the manufacturer’s instructions and then use the following procedure:

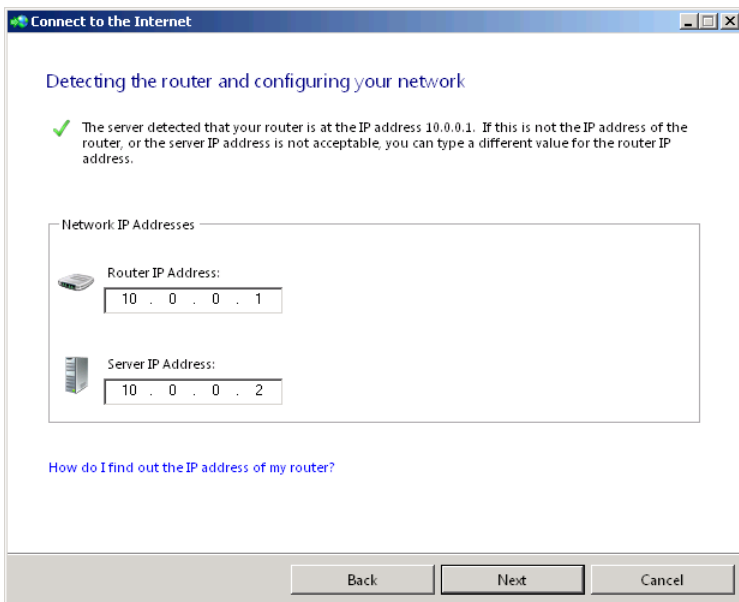
1. Log on to your server running Windows SBS 2011 using an account with network Administrator privileges. The Windows SBS Console appears.
2. On the Home page of the Windows SBS Console, click *Connect to the Internet*. The Connect To The Internet Wizard appears, displaying the Before You Begin page.



As noted on the Before You Begin page, you should locate the IP address of your router's internal interface before you proceed with the wizard. Stand-alone router devices usually have a web-based administration interface and a factory-configured IP address that is specified in the product documentation. To access the administration interface, you type that IP address in a web browser and log in using the access password, also specified in the product documentation.

MORE INFO TCP/IP routers, by definition, have two IP addresses because their function is to connect two networks. The internal interface is the one connected to your private network, for which the router uses an address in the designated private IP address ranges. The external network interface is the one connected to your Internet service provider's (ISP's) network, which typically has a Dynamic Host Configuration Protocol (DHCP) server that assigns an IP address to the router.

3. Click *Next*. The Detecting The Existing Network page appears. The wizard attempts to detect a router on the network and access its settings. If the attempt is successful, the Detecting The Router And Configuring Your Network page appears. This page specifies the IP address of the router's internal interface, which becomes the Default Gateway address for all your network computers, and the IP address that the wizard configures your server to use.



If there is a router on your network, and the wizard fails to detect it, the wizard leaves the *Router IP address* and *server IP address* text boxes blank. Click *Cancel* to exit the wizard, troubleshoot your router, and restart the wizard.

4. If the *Router IP address* and *Server IP address* values that appear on the page are correct, click *Next*. If the *Router IP address* and *Server IP address* fields are incorrect or blank, then troubleshoot your router (if necessary), supply the correct values, and click *Next*. The wizard configures your server, and the *Your Network Is Now Connected To The Internet!* page appears.
5. Click *Finish*. The wizard closes.

MORE INFO The previous procedure assumes that you have a properly functioning router connected to your network and configured to access the Internet. For more information on choosing and setting up an Internet access router, see the sections entitled “Selecting a Router” and “Connecting Your Router,” in Chapter 3, “Installing Windows Small Business Server (SBS) 2011.”

The basic function of the Connect To The Internet Wizard is to configure your server with an IP address on the same network as your router, and a Default Gateway address that is the same as the router’s IP address. This enables the server to access the Internet through the router. In addition, the wizard configures the DHCP Server service on the computer running Windows SBS.

The Windows SBS 2011 setup program installs the DHCP Server role during the server installation whether a router is present on the network or not, leaving the DHCP Server unconfigured and the service stopped. The wizard configures the DHCP Server by starting the service and creating a scope. In DHCP parlance, a *scope* is a range of IP addresses that the server can allocate dynamically to clients on the network as needed.

As you can see in the DHCP Console, shown in Figure 4-4, the wizard has created a scope consisting of the IP addresses from *x.x.x.1* to *x.x.x.254* on the network it detected from the router. The wizard has also created an address exclusion for the scope, which prevents the service from allocating the IP addresses from *x.x.x.1* to *x.x.x.10*. This exclusion range includes the address of the router, the Windows SBS server address, and additional addresses for any other servers that you might want to install on the network at a later time.

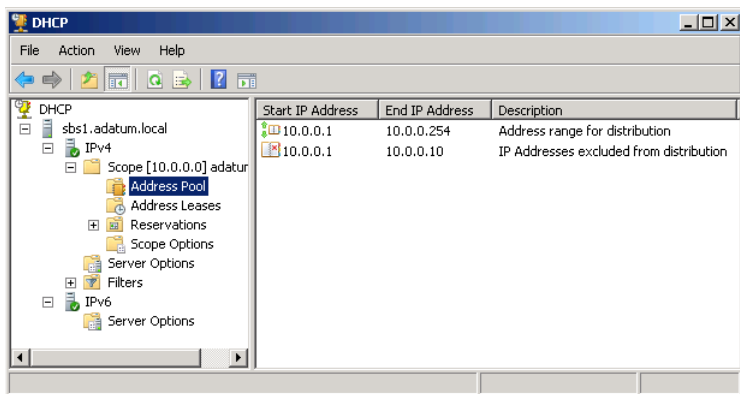


FIGURE 4-4 The DHCP Console, showing the scope that the Connect To The Internet Wizard created.

NOTE In Figure 4-4, the DHCP scope is using the 192.168.2.0 network address because this happens to be the private network address that the router uses. Your router might use a different address, and the wizard configures the DHCP scope accordingly.

In addition to the range of IP addresses and the exclusion range, the wizard also configures the DHCP scope with scope options, as shown in Figure 4-5. *Scope options* are additional TCP/IP configuration settings that the DHCP server delivers to clients along with an IP address.

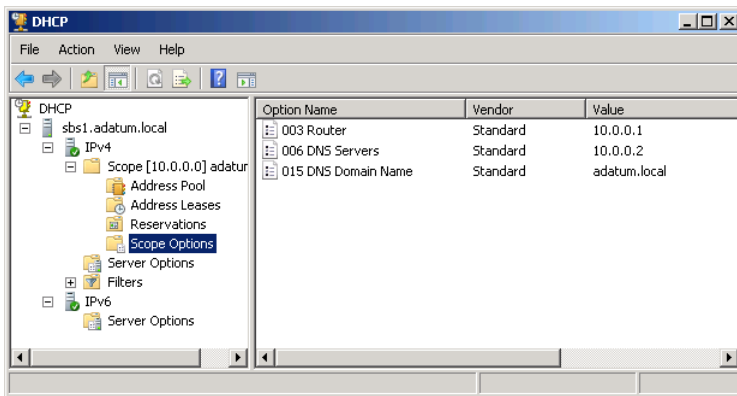


FIGURE 4-5 The DHCP Console, showing the scope options that the Connect To The Internet Wizard created.

The scope options that the wizard configures are as follows:

- **003 Router** Specifies the IP address of the router, which the client should use for its Default Gateway address
- **006 DNS servers** Specifies the IP address of the server running Windows SBS 2011, which functions as a DNS server and which the client should use for its Preferred DNS Server address
- **015 DNS Domain name** Specifies the name of the internal domain that you created during the Windows SBS 2011 installation

If the wizard fails to detect a router on the network, you can still specify values for the *Router IP address* and *Server IP address* fields. After you confirm that you want the server configuration process to continue, the wizard configures the TCP/IP and DHCP Server settings just as if a router were present and then displays pages that help you to configure your router for Internet access.

The Configure Your Router page, shown in Figure 4-6, enables you to connect to your router’s administration console so that you can manually configure it and then test its Internet connectivity. This function assumes that the router uses web-based configuration and the standard port number (80) for its interface. If the router is configured to use a nonstandard port number for the administrative interface, you can connect to it with a web browser using a uniform resource locator (URL) that specifies both an IP address and a port number, as in the following example: *http://10.0.0.1:4096*. If the router uses a different type of administrative interface, consult the router manufacturer’s documentation to determine how to access it.

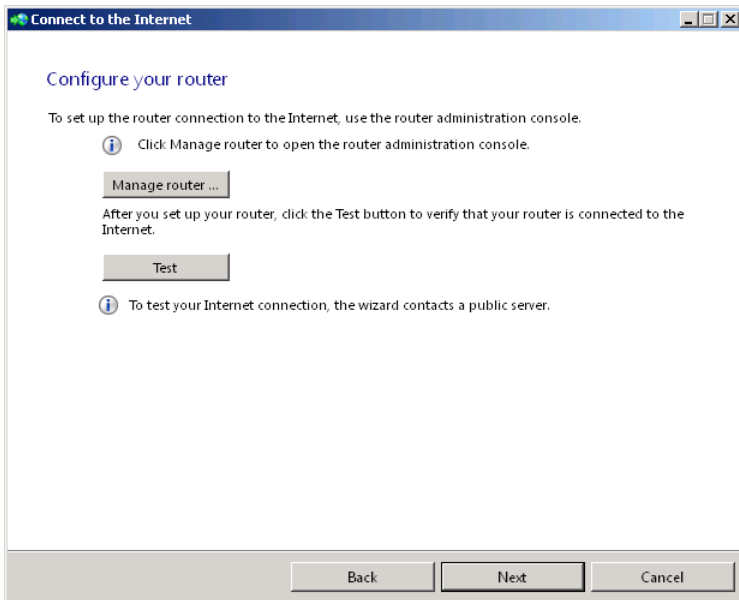


FIGURE 4-6 The Configure Your Router page of the Connect To The Internet Wizard.

Before you proceed with the other wizards in the *Getting started tasks* list, you must complete this wizard successfully by connecting to the Internet through a router on your network. The Windows SBS Console does not permit the other wizards requiring Internet access to launch until the Connect To The Internet Wizard succeeds.

Customer Feedback Options

Selecting the *Customer feedback options* link causes a Customer Experience Improvement Program dialog box to appear, which asks if you want to allow Windows SBS to send information about your system hardware and usage trends anonymously to Microsoft for analysis.

Set Up Your Internet Address

For your users to send and receive Internet email or access your network services from a remote location, you must establish a presence on the Internet. This is different from simply accessing the Internet, which you configured the server to do when you ran the Connect To The Internet Wizard. Establishing a presence on the Internet enables users on the Internet to access your network's resources. To receive email from users outside your organization, for example, their messages must be able to reach the Microsoft Exchange Server application running on your server.

By default, Windows SBS 2011 configures your server to use a private IP address and a domain name with a *local* suffix (both of which are inaccessible from the Internet by design). To establish an Internet presence, you must register a domain name with an Internet domain registrar and configure your router to admit Internet traffic addressed to your server. The domain name enables Internet users to locate your network, and the router configuration lets the packets coming from those users pass through your firewall. Both of these tasks can be relatively complicated, but fortunately, Windows SBS 2011 includes an Internet Address Management Wizard that helps you to complete them.

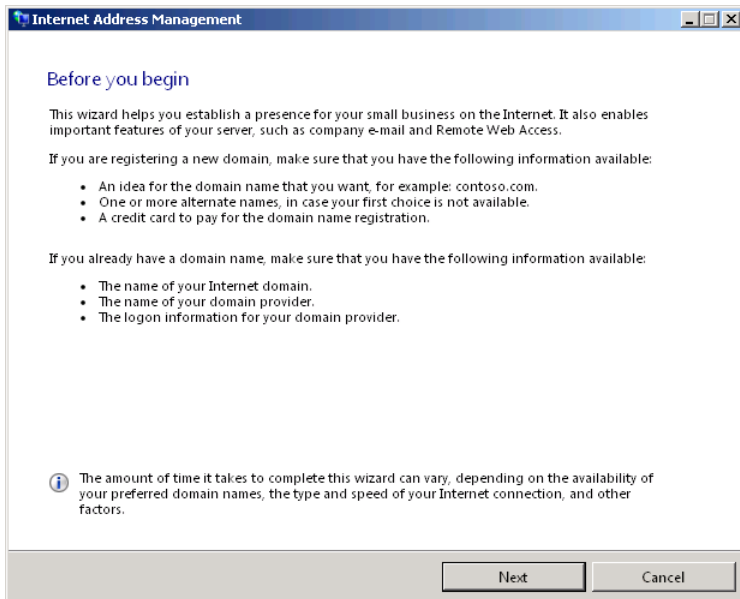
The Internet Address Management Wizard prompts you to select a domain name that is accessible from the Internet, as opposed to the local name you specified for your Active Directory Domain Services (AD DS) domain during the Windows SBS 2011 installation. The most common practice is to use the same second-level domain name, but with a different top-level domain. For example, if you use *adatum.local* for your internal domain, you might choose *adatum.com* for your Internet domain. You don't have to use the same second-level domain, however; you can use any domain name that is available for registration.

If the Internet domain name you select is available, the wizard enables you to register it with one of several commercial domain registrars. If you already have a registered domain name, the wizard lets you use that instead. Once you have a registered domain name, the wizard then configures your server, your router, and the Domain Name System records for the new domain.

Registering a New Domain

The Internet Address Management Wizard requires access to the Internet, so you must complete the Connect To The Internet Wizard first. Then, to run the wizard and register a new domain name, use the following procedure:

1. Log on to your Windows SBS 2011 primary server using an account with network Administrator privileges. The Windows SBS Console appears.
2. On the Home page of the Windows SBS Console, click *Set up your Internet address*. The Internet Address Management Wizard appears, displaying the Before You Begin page.



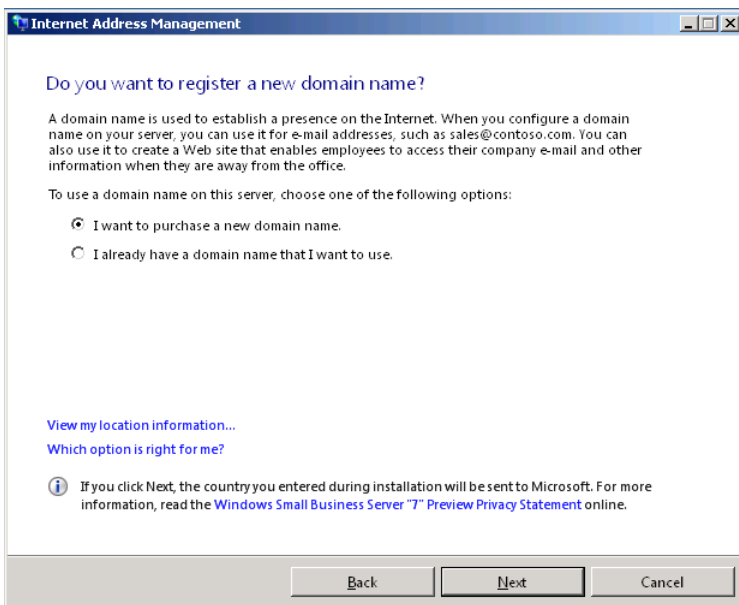
The Before You Begin page lists the resources that you need to complete the wizard, which vary, depending on whether you are registering a new domain name or using an existing one. To register a new name, you must have some idea what name you want to use and a credit card to pay the registration fee.

TIP Determining what domain name to use for your organization can often be the hardest part of this entire process. In fact, you might want to begin your search for a domain name before you install Windows SBS 2011 and create your internal domain. The most popular generic top-level domains (gTLDs) on the Internet: *com*, *net*, and *org*, have millions of names already registered, and you might find it difficult to find a satisfactory name that is available for use.

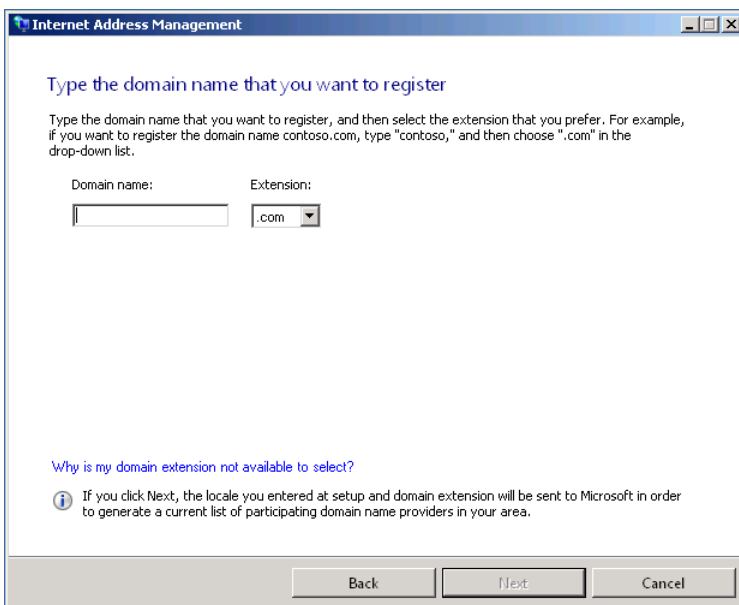
If your company name is already taken in the *com*, *net*, and *org* domains, you must either choose a variation on the company name, or select a different gTLD. For example, if you are the owner of an eponymously named company that manufactures kilts, and your surname is the same as that of a well-known fast food restaurant chain, you will probably not be able to register your company name in the *com* domain. Your alternatives are to either vary the name, such as by adding the word “kilts” to your surname, or register your surname in a less popular gTLD, such as *biz*.

To check on the availability of specific domain names before you run the Internet Address Management Wizard, you can use the WHOIS service provided by the Internet Corporation for Assigned Names and Numbers (ICANN), available at <http://www.internic.net/whois.html>.

3. Click *Next*. The Do You Want To Register A New Domain Name? page appears.



4. Select the *I want to purchase a new domain name* option and click *Next*. The Type The Domain Name That You Want To Register page appears.



5. In the *Domain name* text box, type the second-level domain name that you want to register. Then, from the *Extension* drop-down list, select the top-level domain that you want to use and click *Next*. The Choose A Domain Name Provider page appears.

The wizard displays a list of domain name registrars, based on the domain name that you entered and the location that you specified during the Windows SBS 2011 installation.

NOTE Although you can use any registrar to register your domain name, you must select one of the registrars suggested by the wizard for Windows SBS 2011 to manage your domain fully.

6. Select the domain registrar that you want to use and click *Next*. The wizard sends the name you specified to the selected registrar.

TIP You might want to examine each of the registrars' websites before you commit to one of them. Domain registration has become a highly competitive business in recent years, and prices can vary widely.

7. If the name you specified is not available for registration, the Choose A Different Domain Name page appears, offering variations on the name that are available. Type an alternative name in the fields provided and click *Search*.

The screenshot shows a window titled "Internet Address Management" with the subtitle "Choose a different domain name". A warning icon and text state: "The domain name that you chose, adatum.com, is not available. To continue, either choose a name from the list of available domain names, which is provided by eNomCentral, or search for a different domain name." Below this, there are two main sections: "Available domain names" and "Search".

Available domain names

- adatum.cc
- adatum.tv
- adatumonline.com
- adatumonline.net
- adatumonline.cc
- adatumonline.tv
- myadatum.com
- myadatum.net
- myadatum.cc
- myadatum.tv
- theadatum.com
- theadatum.net
- theadatum.cc

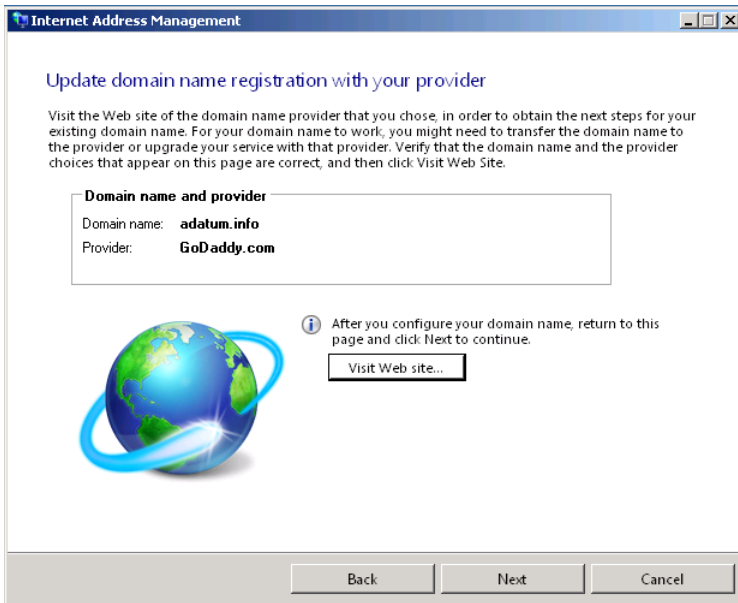
Search

Domain name: Extension:

Send my address information to the provider to help it recommend alternative domain names.

Buttons: Back, Next, Cancel

- If the name you specified is available for registration, the Register And Purchase The Domain Name page appears. Click *Register now* to open Internet Explorer and connect to the registrar's website.



BEST PRACTICES Domain name registrars are commercial enterprises, and they may very likely try to sell you a variety of additional products and services before you complete the registration process. While you might want to consider some of their offers, you don't need anything other than a standard domain name registration to complete the wizard and finish configuring your server.

- Use the form on the registrar's website to register your selected domain name. You have to supply, at minimum, your name, mailing address, telephone number, and credit card information to complete the registration process.

NOTE The registrar adds the contact information that you supply to the WHOIS database, in which it is available to anyone who searches for your domain name. Domain name registration listings must have an administration, a billing, and a technical contact. These can all be the same person, or you can specify a different individual for each one. Because this is public information, many organizations use a post office box or pay an additional fee for a private registration to prevent their contact information from being harvested by spammers.

10. Once you have completed the registration process on the website, return to the wizard and click *Next*. The Store Your Domain Name Information page appears.

Internet Address Management

Store your domain name information

Type the domain name, user name, and password that you transferred to GoDaddy.com. This information is required to manage and monitor your domain name and to complete Setup.

Domain name and extension:

(For example, contoso.com)

User name:

Password:

[Advanced settings](#)

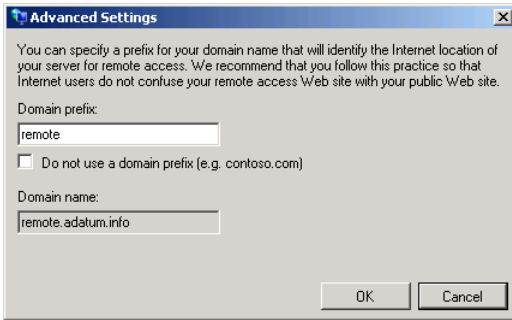
i If you click Configure, your IP address will be sent to your provider in order to set up your server on the Internet. Your user name and password will be stored in Windows Small Business Server 7 Preview. This information will be sent periodically to your provider to help maintain your domain. View the [Windows Small Business Server 7 Preview Privacy Statement](#) online.

Back Configure Cancel

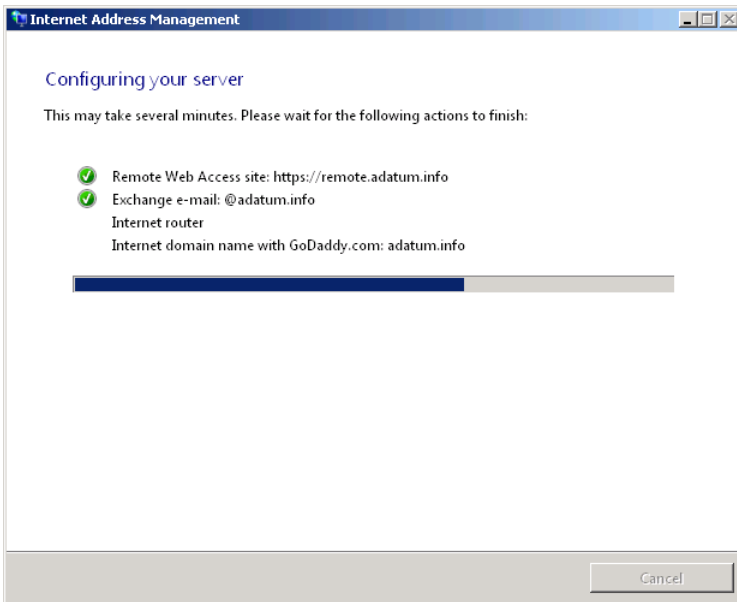
11. In the *Domain name and extension* text box, type your full domain name, with the suffix.
12. In the *User name* and *password* text boxes, type the credentials that provide access to your account on the registrar's website.

NOTE Some registrars have you supply the user name and password that you want to use during the registration process, while others assign credentials to you.

By default, the wizard uses the name *remote* for the Windows SBS 2011 Remote Web Workplace site, so that the Internet URL for the domain *adatum.info* would be *http://remote.adatum.info*. If you want to use a different name, click *Advanced settings* to display the Advanced Settings dialog box, shown in the following illustration, in which you can specify an alternative.



13. Click *Configure*. The *Configuring Your Server* page appears, displaying the wizard's progress as it configures the server, the router, and the DNS resource records for the domain.



14. When the configuration process finishes, the *Congratulations!* page appears, summarizing the wizard's results and displaying any warnings that might have occurred.
15. Click *Finish*. The wizard closes.

Using an Existing Domain

If you already have a registered domain on the Internet, you can still use the Internet Address Management Wizard to configure your network to use it. When you select the *I already have a domain name that I want to use* option on the Do You Want To Register A New Domain Name? page and click *Next*, a How Do You Want To Manage Your Domain Name? page appears, as shown in Figure 4-7.

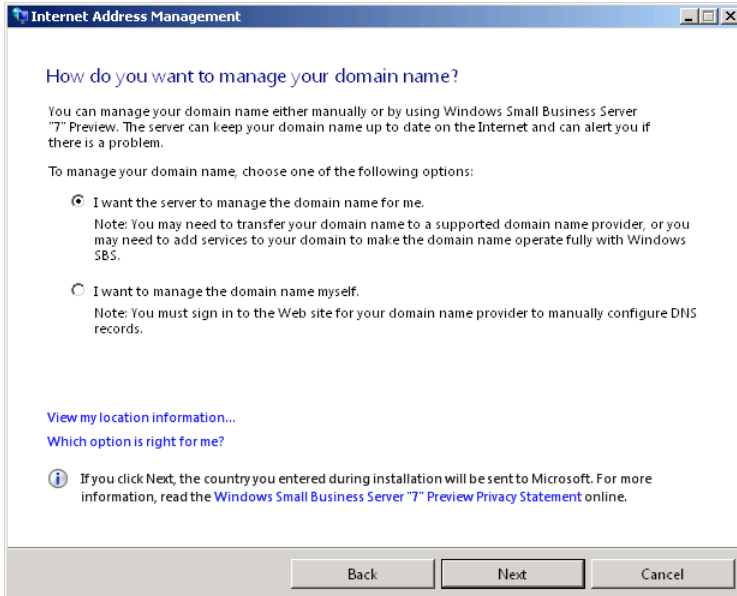


FIGURE 4-7 The How Do You Want To Manage Your Domain Name? page in the Internet Address Management Wizard.

This page provides the following two options:

- *I want the server to manage the domain name for me* To use this option, your domain name must be registered with one of the registrars supported by the wizard. If you have registered your domain with another registrar, the wizard gives you the opportunity to transfer the domain to one of the supported registrars, a process that can take several days. Once you have completed the transfer, the wizard proceeds as with a newly registered domain.
- *I want to manage the domain name myself* If you decide to leave your domain name with another registrar, the wizard configures your server and your router, but it cannot create the new resource records your network needs on your registrar's DNS servers. In this case, you must create those resource records yourself, using the interface supplied by the registrar and the information in the next section.

Understanding the Wizard's Configurations

During the configuration phase, the Internet Address Management Wizard makes a variety of changes to the various components involved in your presence on the Internet. First, on your server running Windows SBS 2011, the wizard configures the following services:

- **Certification Authority (CA)** The wizard has the CA on the server issue a certificate for the Remote Web Workplace website, as shown in Figure 4-8. This certificate enables users on the Internet to confirm that the RWW that they are connecting to is authentic.

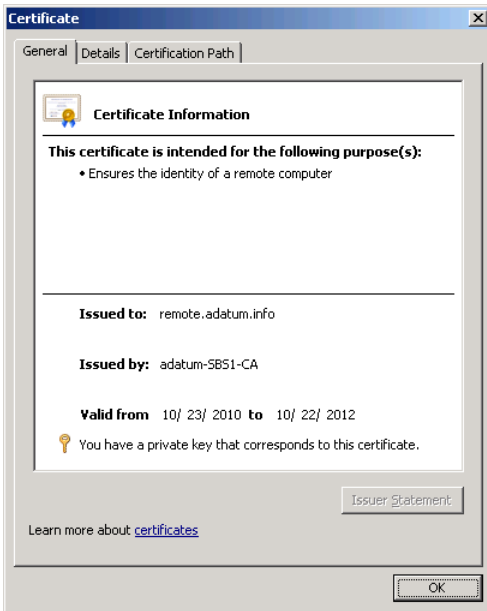


FIGURE 4-8 The certificate for the RWW site, issued by the CA.

- **Domain Name System (DNS)** On the server's DNS server, the wizard creates a zone for the *remote* third-level domain beneath the Internet domain that you registered, as shown in Figure 4-9. This makes the DNS server the authoritative source for information about this third-level domain.

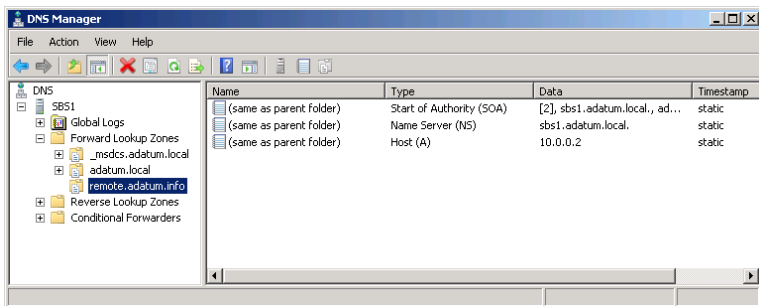


FIGURE 4-9 The DNS Manager Console, showing the third-level domain created by the Internet Address Management Wizard.

- **Internet Information Services (IIS)** The wizard configures IIS on the server to recognize incoming web traffic addressed to the *remote* domain and forward it to the Remote Web Workplace site.
- **Simple Mail Transfer Protocol (SMTP)** The wizard configures Exchange Server 2010 to process incoming SMTP traffic addressed to the domain you registered.

Next, the wizard uses the credentials you supplied to connect to your registrar’s website and configure DNS records for your newly registered domain. What you are actually paying for when you register a domain is space on the registrar’s DNS servers, in which you can create resource records in that domain.

MORE INFO For more information on domain names and the Domain Name System (DNS), see the section entitled “Understanding Domains” in Chapter 2, “A Networking Primer.”

Using the interface provided by the registrar, the wizard automatically creates the resource records listed in Table 4-1.

TABLE 4-1 DNS Resource Records for Your Internet Domain

RECORD TYPE	NAME	RECORD SETTINGS	RECORD FUNCTION
Host (A)	remote	IP address of your router’s external interface	Maps the remote name in your domain to your router’s Internet IP address
Mail Exchanger (MX)	domain.com	remote.domain.com	Directs SMTP mail traffic to your server running Windows SBS 2011

RECORD TYPE	NAME	RECORD SETTINGS	RECORD FUNCTION
Text (TXT)	domain.com	v=spf1 a mx ~all	Prevents email sent by your internal users from being flagged as spam
Service (SRV)	_autodiscover	Protocol = _tcp Priority = 0 Weight = 0 Port = 443 Target = remote. <i>domain.com</i>	Enables remote email users to configure the Outlook Anywhere client automatically

NOTE In this table, replace *domain.com* with your full Internet domain name and suffix.

Finally, if your router conforms to the Universal Plug and Play (UPnP) standard, the wizard configures your router by opening ports 25, 80, 443, and 987, so that traffic arriving from the Internet using those ports can pass through the firewall to your server running Windows SBS 2011.

If your router does not support UpnP, you must configure it yourself to admit traffic through those ports and forward it to the server's IP address. A router's configuration site typically provides an interface for this like the one shown in Figure 4-10.

Port Range					
Application	Start	End	Protocol	IP Address	Enable
smtp	25	to 25	Both	192.168.2.7	<input checked="" type="checkbox"/>
http	80	to 80	Both	192.168.2.7	<input checked="" type="checkbox"/>
ssl	443	to 443	Both	192.168.2.7	<input checked="" type="checkbox"/>
sbs	987	to 987	Both	192.168.2.7	<input checked="" type="checkbox"/>

FIGURE 4-10 A typical port-forwarding interface in a router's configuration site.

Configure a Smart Host for Internet Email

A *smart host* is an external email server, typically operated by an ISP, which you can use as an intermediate stop for your users' outgoing email. For more information on configuring a smart host, see Chapter 15, "Administering Email."

Add a Trusted Certificate

Digital certificates are electronic documents that verify the identity of a computer or a user. By default, a server running Windows SBS 2011 creates self-signed certificates for the intranet websites it hosts and for its domain controller functions. Self-signed

certificates are sufficient for internal functions because users on the network can trust the authority of their local server.

When a client computer first uses one of these internal functions, it automatically applies for and receives a certificate from the server, a process called *autoenrollment*. The process is invisible to the users on the network, but they can open the Certificates snap-in on their computers and look at the certificates they have received.

However, Internet users are not logged on to the AD DS domain, so they cannot obtain certificates using autoenrollment. When a remote user on the Internet connects to a Windows SBS 2011 resource on your network, such as the RWW website, the browser displays an error message, as shown in Figure 4-11. This message appears because the web server has generated its own certificate, and on the Internet, a computer that verifies its own identity is not trustworthy.

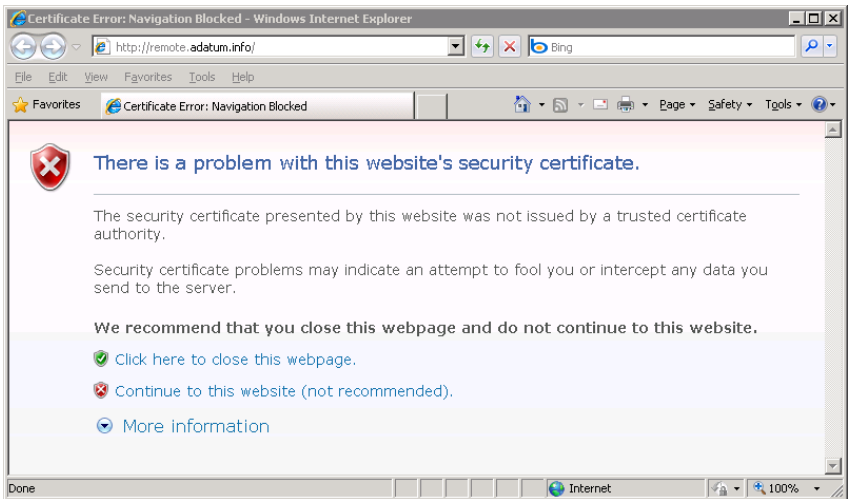


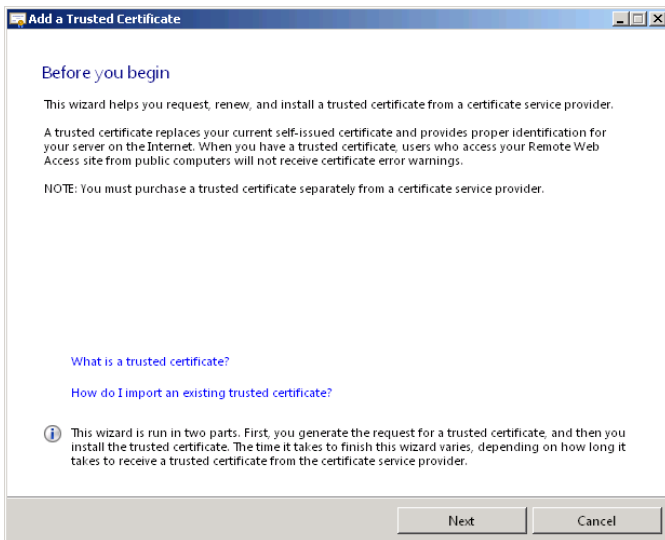
FIGURE 4-11 A certificate error in a web browser.

For users conscious of this situation, clicking the *Continue to this website (not recommended)* link presents no danger, but to eliminate the error message, the server must have a certificate issued by a third party that both the clients and the server trust. The third party is typically a commercial CA that is in the business of confirming the identities of clients and issuing certificates attesting to that identity.

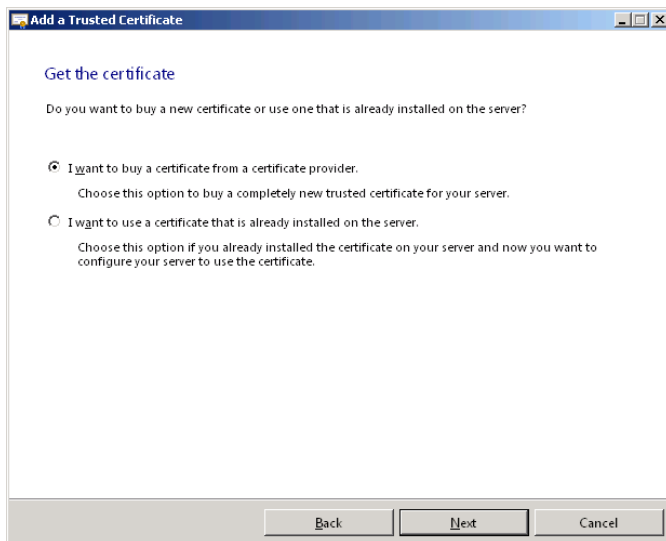
MORE INFO You can also eliminate the error message by deploying your server's self-signed certificate on the remote computer. For more information, see Chapter 13, "Managing Windows SBS 2011."

The Getting Started Tasks page provides an Add A Trusted Certificate Wizard that simplifies the process of enrolling for and installing a third-party certificate. To run the wizard, use the following procedure:

1. Log on to your Windows SBS 2011 primary server, using an account with network Administrator privileges. The Windows SBS Console window appears.
2. On the Home page of the Windows SBS Console, click *Add a trusted certificate*. The Add A Trusted Certificate Wizard appears, displaying the Before You Begin page.



3. Click *Next*. The Get The Certificate page appears.



4. Select the *I want to buy a certificate from a certificate provider* option and click *Next*. The *Verify The Information For Your Trusted Certificate* page appears, containing the name of your *remote* site and the company and address information you supplied during the Windows SBS 2011 installation.

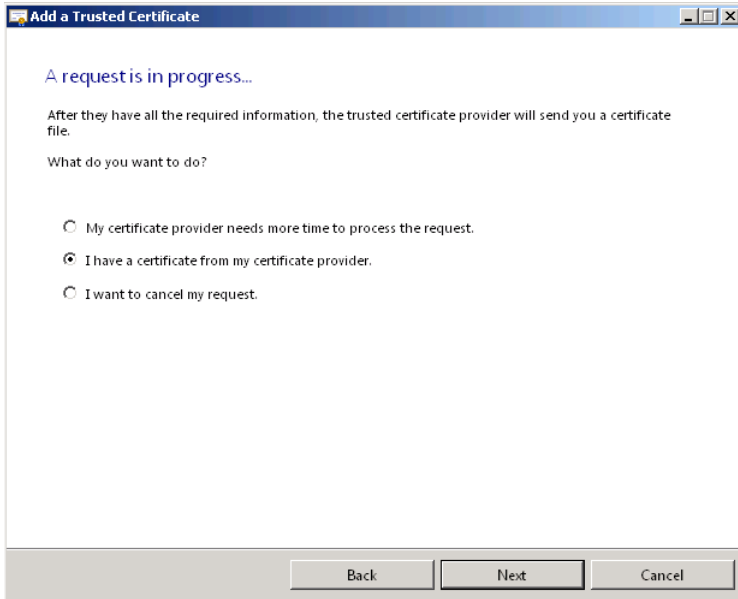
The screenshot shows a window titled "Add a Trusted Certificate" with a sub-header "Verify the information for your trusted certificate". Below the header is a warning icon and text: "The following information is used to purchase your trusted certificate. If any of the information is incorrect or missing, you should change it now. Otherwise, you may need to purchase another trusted certificate to correct the information." The form contains the following fields: "Issued To:" with the value "remote.adatum.info"; "Organization:" with the value "A. Datum Corporation"; "Country:" with a dropdown menu showing "US (United States)"; "State / Province:" with the value "NY"; and "City:" with the value "New York". There is a link "How is this information used?". At the bottom are three buttons: "Back", "Next", and "Cancel".

5. Modify the company and address information, if necessary, and click *Next*. The *Generate A Certificate Request* page appears.

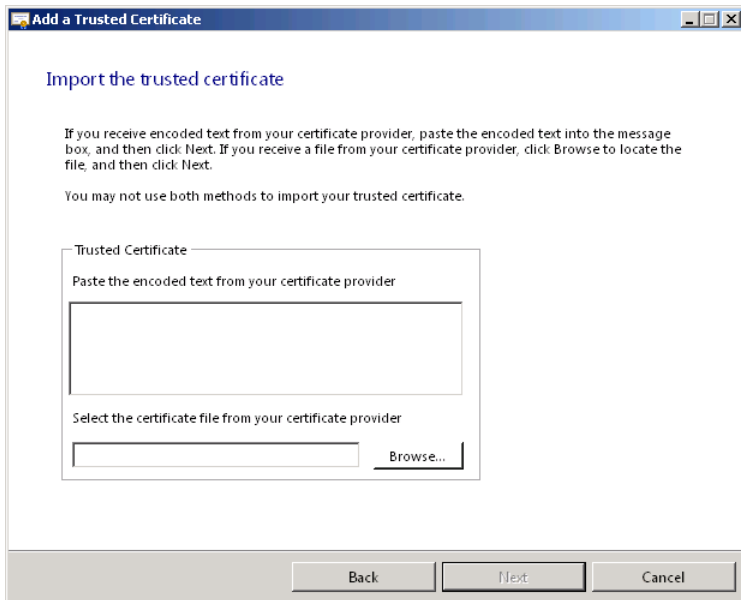
The screenshot shows a window titled "Add a Trusted Certificate" with a sub-header "Generate a certificate request". Below the header is text: "The trusted certificate provider requires some encoded data from your server. The encoded data is listed in the Certificate Request text box, which was generated using the contact information that you provided." and "Click: Copy to copy the encoded data, and then paste it into the space provided on the request page of your certificate service provider's Web site." Below this is a text area titled "Generate Trusted Certificate Request" containing the following text: "-----BEGIN NEW CERTIFICATE REQUEST-----\nMIIEKTCCAIECAQAwgYgrCzAJBgIVBAYTAIVTMQswCQYDVQQIDAJ\nOwTERMA8GA1UE\nBwwITmV3IFVcm5xHTAbBgNVBAsMFEEuIERhdHVdENvcnBvcnF0a\nW99uMR0wGwID\nVQKDBRRLIBETXR1bSBDb3Jwb3JhdGlvbEhMBkGA1UEAw5cm\nVtb3RILmFlLWJ1\nbS5pbmZvMIBBJANBgqlqhKIG9w9BAQEFAAOCAQ8AMIBCGKCAQE". Below the text area are two buttons: "Save to File..." and "Copy". At the bottom is text: "You can purchase a trusted certificate from your domain name provider: [GoDaddy.com](#)." At the bottom are three buttons: "Back", "Next", and "Cancel".

NOTE If your domain name registrar can also supply certificates, the wizard displays a link to its site. However, you can use any provider you want to obtain your certificate.

6. Click *Copy* to copy the certificate request to the clipboard or click *Save to file* to save the request as a file on your local drive.
7. Click *Next*. The A Request Is In Progress page appears.



8. Open the website of the certificate provider that you want to use and submit your request by pasting the contents of the Clipboard into the appropriate form or uploading the request file that you saved. After you pay a fee and supply the correct information, the provider issues a certificate, either as text you can copy to the Clipboard or as a file you can download.
9. Return to the Add A Trusted Certificate Wizard, make sure that the *I have a certificate from my certificate provider* option is selected, and click *Next*. The Import The Trusted Certificate page appears.



10. In the *Trusted certificate* box, either paste the text that you copied from the certificate provider's site or click *Browse* to select the file that you downloaded, and then click *Next*. A *The Trusted Certificate Is Imported Successfully* page appears.
11. Click *Finish*. The wizard closes.

Configure Server Backup

The *Getting started tasks* list contains a link to the Configure Server Backup Wizard, which you can also access from the Backup And Server Storage page of the Windows SBS Console. For information on performing backups and restores on your server running Windows SBS 2011, see Chapter 12, "Backing Up and Restoring."

Adding Users and Computers

To connect workstations to your network, you must create user accounts and join the computers to your AD DS domain. The Add A New User Account Wizard in the *Getting started tasks* list is also accessible from the Users And Groups page in the Windows SBS Console. The Connect Computers To Your Network Wizard is also accessible from the Network page. For information on using these wizards, see Chapter 6.

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