# Chapter Upgr 16 Depl Office

# Upgrading and Deploying Microsoft Office SharePoint Server 2007

## MICROSOFT EXAM OBJECTIVES COVERED IN THIS CHAPTER:

- ✓ Deploy/Upgrade Microsoft Office SharePoint Server 2007
  - Manage CMS Assessment
  - Configure Shared Services
  - Manage Business Intelligence tools
  - Manage Portal and Site Migration
  - Finalize Upgrades



You might think this chapter is badly placed in the book. After all, it's addressing the concept and practice of deploying Microsoft Office SharePoint Server (MOSS) 2007 (which you've

already done) and upgrading from SharePoint Server 2003 to MOSS 2007. Why not feature the "upgrading" chapter closer to the beginning of the book?

There are a couple of simple answers to this question. First, you really need to know that you want to upgrade from 2003 to 2007, and for that, you need to understand what SharePoint 2007 offers and how it operates in detail. After all, if you are going to upgrade SharePoint for your corporate environment, you are going to be the person who will have to administer it. How can you make a competent upgrade decision unless you know what you're getting into?

The other simple answer has to do with selling the upgrade to the decision makers and stakeholders of your company. In the lab environment you've been using throughout this book, you are the only decision maker involved, but in the real world, the decision to use any product such as SharePoint is largely based on business needs rather than technical needs. To justify the cost of the upgrade in terms of time, money, and effort, you have to establish the return on investment for "the powers that be" in your organization, and you can't do that unless you know what you're talking about. You can't know what you're talking about unless you have a detailed understanding of both your current SharePoint product and the product to which you are proposing to upgrade.

Thus, here we are, at the last chapter of this book, talking about upgrading and deploying to SharePoint Server 2007 and all that it entails. So, what does it entail? Is it really worth the effort?

To some degree, you first need to consider what MOSS 2007 offers that SharePoint Server 2003 doesn't. Chapter 1, "Getting Started with Microsoft Office SharePoint Server 2007," and Chapter 2, "Installing and Deploying SharePoint 2007," should have answered those questions. You can also get a high-level overview of MOSS 2007 and its benefits for an organization at Microsoft's Office website: http://office.microsoft.com/en-us/sharepointserver/default.aspx.

Another really helpful article aimed at the IT professional who needs to understand what MOSS 2007 offers, called "What's New for IT Professionals in Office SharePoint Server 2007," is at http://technet2.microsoft.com/Office/en-us/library/ 527763c3-90a5-4d3b-9781-fc9580314a2d1033.mspx?mfr=true.

The real work begins in deciding a migration path, and I'll cover several in this chapter. Choosing a method of upgrading SharePoint depends both on the parameters defined by your network and server infrastructure and on your corporation's business requirements, so a great deal of this chapter will be focused on this area.

Content Management Server (CMS) 2002 works hand-in-hand with SharePoint Server 2003 to provide services such as navigation, summary links, and scheduled deployments. These services are now fully integrated in MOSS 2007, which allows end users to perform tasks related to these

services that formerly required subject-matter experts to conduct. Since you will likely want the CMS configuration in 2003 to be preserved in the upgrade deployment, you will need to assess these services so that once the upgrade has been completed, there will be little or no delay in users being able to access services.

The same can be said for shared services and business intelligence tools and features. A clean, first-time install of SharePoint 2007 might have seemed a bit daunting to you when you were approaching it at the beginning of this book, but you had a blank slate to work with and you could write on it anything you desired. Here, you have to take an already fully configured and working system and migrate it to a newer version of the platform while preserving all the functionality you (or a predecessor) built into the original system.

This final chapter begins with you taking a look at where you are, where you want to go, and the best path available for you to get from origin to destination.

## Planning a SharePoint 2003 to SharePoint 2007 Migration

Although the utilities built into SharePoint Server 2007 make migrating from 2003 a fairly straightforward task, it's still one you shouldn't take lightly. Procedurally, the migration isn't very involved, but after you've spent months or years setting up an enterprise-level SharePoint 2003 environment, you still want to be particularly careful that when all is said and done, you don't irretrievably lose portions of your data and configuration. As you've seen in many of the chapters you've already read (assuming you took my advice and are reading through this book in a linear fashion), the first step is developing a strategic plan.

## **Developing a Migration Plan**

The first part of your plan involves knowing what you're working with. In the case of Share-Point Portal Server 2003, there are only two options, so it's pretty simple:

- Microsoft Office SharePoint Server 2007 with Standard Edition Client Access Licenses (CALs)
- Microsoft Office SharePoint Server 2007 with Enterprise Edition Client Access Licenses (CALs)

Our working MOSS 2007 deployment for this book has been the Enterprise Edition, but if you'll recall when you first went through the installation process, you had the option to install either the Standard Edition or the Enterprise Edition. The upgrade options are the same.



If you are running Windows SharePoint Services (WSS) 2.0, you can migrate to Windows SharePoint Services 3.0. There is an option to migrate from WSS 2.0 to MOSS 2007; however, it's an advanced option that must use stsadm site transfers.

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# Determining the Migration Readiness of SharePoint Portal Server 2003

Before you can do anything, you need to determine whether your current SharePoint 2003 site structure is prepared for the migration. Most likely, the site structure won't be ready by chance, and you'll need to perform tasks during the assessment process in order to make sure the migration goes smoothly. You must investigate several areas to ensure that your 2003 sites migrate correctly to SharePoint 2007.

The first major hurdle is to determine whether any portion of your site collection has been modified or customized in any way. The most common utility used to customize SharePoint 2003 is FrontPage 2003. Any site or portion of a site that has been so modified will not be "understood" by the SharePoint 2007 migration tool and will retain any "look-and-feel" elements that were created by FrontPage. The good news is that after the migration, you can return each modified site to the look and feel you'd expect in SharePoint 2007. The bad news is twofold: first, you must do so on a site-by-site basis so it will be time-consuming, and second, in returning the look and feel as described, you will likely overwrite any of the modifications that FrontPage originally performed.

This issue doesn't exist just at the site level. Any customized web parts you added in 2003 will also not be able to migrate correctly to 2007 for the same reason. Because creating customized web parts is a fairly common practice, you will likely have to face this issue; in fact, you'll likely discover that some of the "off-the-shelf" web parts that came with 2003 will also suffer migration problems. There's no workaround here. After the migration is done, you'll need to test every web part in your site collection to see whether it retained its functionality.

You will also need to check any other customizations that were performed in 2003 such as themes, customized branding, any added extensions, and other programmatic tweaks. It is likely that these will have been overwritten during the migration process and will not function correctly.

As you can see, migration is not without its risks. Although the process will certainly have better results if you are migrating a completely "out-of-the-box" version of SharePoint 2003 to 2007, even then the results aren't guaranteed. For that reason, it would be better to test the migration process first in a lab scenario before applying it to your production environment.

#### Testing the Migration in the Lab

You, the reader, are ideally positioned to understand this portion of the chapter because you have been working in and have become familiar with a SharePoint lab environment. By now, you should be well acquainted with creating, testing, breaking, and fixing various scenarios in SharePoint. Creating a lab environment for migration testing is just a bit different, though.

In essence, you will need to create a small, mirror image of your production SharePoint 2003 environment. Although it doesn't have to contain the scope of your corporate SharePoint platform, it must contain all the individual elements that you want to survive the migration process. This means that if you have customized some of your websites using FrontPage, you'll need to duplicate those customizations on sites in the test model. The same goes for customized web parts, themes,

and so on. In fact, given that even "standard" web parts are prone to breaking during migration, your test platform should contain examples of every web part in your production platform.

In addition to creating your test SharePoint 2003 environment and migrating it to 2007, you must also make it available to a team of subject-matter experts who will represent the end users. Although it wouldn't be very productive to have all the company employees both doing their actual work in the production environment and duplicating their actions on the test platform, you can select representatives to simulate all the typical tasks end users are expected to perform and see how the test environment responds. This is better than just performing the testing yourself since you can't hope to know every detail of every task that people in the company perform in SharePoint on a daily basis. If you're lucky, you'll work in an environment that has a Quality Assurance or other testing department that is trained for such a function.

In preparation for the migration, and particularly once you've created your test environment and subject testing has begun, it is critical that you do not perform any modifications on the production SharePoint platform. SharePoint 2003 must become completely static as far as any changes in design and functionality are concerned, and the test environment must mirror that static state so that you know the data resulting from the testing will truly represent what you can expect when you perform the actual migration on the production Share-Point environment.

#### Migrating Database Services

I'm tempted to say "there aren't any issues with migrating database services" and just move on, but since SharePoint 2003 and 2007 must access database services pre- and post-migration, you need to know (and are perhaps relieved) that you aren't required to migrate your Microsoft SQL Server database just because you are migrating SharePoint. SharePoint 2007 supports database services provided by Microsoft SQL Server 2000 SP3a or newer, so you can continue to use whatever version of SQL Server under 2007 that you were using with 2003 as long as it meets this requirement.

Of course, ambitious database server administrators might see this as an opportunity to upgrade their hardware and/or software platform, but ideally the CIO or CTO will make those decisions based on financial and administrative costs as well as overall impact on productivity. Migrating SharePoint and SQL Server at the same time might result in a longer service downtime, and performing a migration of two critical systems at the same time increases the opportunity for something to go wrong.

## **Performing Premigration Tasks**

As part of the overall migration planning, you will need to perform some tasks in order to make sure SharePoint 2003 is ready for the migration. Certainly, you'll want to perform these tasks first in your migration test environment so that you'll be more completely familiar with how these procedures are performed and so that you can work out any of the bugs in the process while you are "flying with a safety net." Some of these tasks will be familiar to you because you performed them in the exercises in Chapter 2, "Installing and Deploying SharePoint 2007."

### **Verifying Migration Prerequisites**

The following are the four prerequisites to performing a 2003 to 2007 upgrade migration:

- All the web and application server computers you plan to use must be running some version of Microsoft Windows Server 2003 SP1, including the following:
  - Standard
  - Enterprise
  - Datacenter
  - Web Edition
- Microsoft .NET Framework 3.0 must be installed on all your server computers.
- Microsoft ASP.NET 2.0 must be enabled on all your server computers.
- SharePoint Portal Server 2003 must have SP2 applied.

In Chapter 2, refer to Exercise 2.1, "Installing and Configuring IIS," and Exercise 2.2, "Enabling ASP.NET 2.0," to address these prerequisites. You can find information about how to download and install .NET Framework 3.0 at the following location: http://www .microsoft.com/downloads/details.aspx?FamilyID=10CC340B-F857-4A14-83F5-25634C3BF043&displaylang=en.

#### Performing a Complete Backup

This probably goes without saying, but to be safe I'll say it anyway. Before performing any major maintenance task and certainly before performing a platform upgrade migration, you must perform a complete backup of all affected systems. In this case, that means performing a complete backup of your current SharePoint 2003 environment.



See Chapter 14, "Performing Advanced SharePoint Management," to review standard SharePoint backup and restore procedures. Of course the procedures in Chapter 14 only apply to backup and restore for MOSS 2007, not SharePoint Server 2003.

The complete backup is part of your rollback plan and acts as a fail safe so that you can restore your 2003 production environment should anything go wrong with the migration. You will test your backup and rollback process on your test lab SharePoint 2003 environment before ever touching your production system because you will want to make sure the rollback process is working as required, even if your test lab migration from 2003 to 2007 goes without a hitch. Using the SharePoint 2003 backup utility will generate the necessary backup, but make sure all your databases, site definitions, customized websites, and so forth, are backed up before proceeding with the migration in both your lab and production environments.

After performing the backup in your test environment, perform a complete restore, and then completely test the lab platform to make sure that all the features and elements in Share-Point 2003 work the same way after the restore process.

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### Running a Preupgrade Scan

Microsoft has developed preupgrade scan tools for a number of its software systems, including Windows Server 2003, so that you can scan your current system and receive a list of any outstanding issues that may inhibit a smooth upgrade migration before actually beginning the upgrade. SharePoint 2007 contains such a tool, but to use it to scan SharePoint 2003 you have to install SharePoint 2007 first. This seems like a catch-22 situation, but there's a way around it; in fact, you have it in your hands.

To run the scan utility on SharePoint 2003, you need only two files contained in SharePoint 2007: prescan.exe and preupgradescanconfig.xml. Both files are in your current lab installation in the following directory: C:\program files\common files\microsoft shared\web server extensions\12\bin.

Just select Start  $\geq$  Run, paste this path in the Run box, and click OK. When the directory opens, copy the two files to a location where you can find them again when you need them. If you were a SharePoint administrator in a production environment, you could install a trial copy of SharePoint Server 2007 on a computer and extract the files as I've just described, without having to actually install 2007 on a 2003 machine in order to run the preupgrade scan tool. When you are ready to run the scan in SharePoint 2003, copy the two files onto the 2003 machine, and run prescan.exe.

You might have to run this utility more than once. In the first scan, you may find issues you need to address. Once you've performed the corrective actions, run the scan again to make sure everything shows as resolved. This is a command-line utility, so if you want to scan all your websites under 2003, you'll need to use the /all switch after the prescan command, as in the following example:

C:\prescan tool folder>prescan /c preupgradescanconfig.xml /all

You can also specify a particular site by using the /v URL switch. If you use no switch at all, the utility will scan all sites by default.

### **Determining an Upgrade Migration Path**

There is usually more than one road to any destination, and this is true for migration paths from SharePoint 2003 to 2007. Which one you pick depends on a variety of factors, and as you go through the following sections, you'll see how each path is defined and the reasons you would choose one path over the others.

#### In-Place Upgrade

An *in-place upgrade* is the simplest and most straightforward upgrade migration path. It assumes that there are no complications involved in your move from SharePoint 2003 to 2007 and that you want to upgrade your entire SharePoint environment in one fell swoop. This is an "all-or-nothing" deployment scheme, which means that when the company employees all go home on Friday night, they will have just finished their work in a SharePoint Portal Server 2003 environment, and when they report to work on the following Monday morning, they'll begin their work in a Microsoft Office SharePoint Server 2007 environment.

The bright side to this option is that all your work is done, and now it's just a matter of administering the MOSS 2007 environment for your corporate users. Procedurally, performing the upgrade is as simple as inserting the MOSS 2007 media disc into the relevant servers and launching the upgrade tool. The migration process sweeps through every SharePoint site and replaces all the 2003 look-and-feel elements, web parts, and other components with 2007 counterparts, leaving your data (ideally) intact.

The dark side is that it probably will never be that simple. If something goes wrong with the migration, the scope of what goes wrong could be vast, affecting your site collection (or collections) as a whole. This could include all your content-bearing containers including libraries, lists, documents, and items. Also, even if the migration goes flawlessly, there will always be some users who either have forgotten what they were supposed to learn in the upgrade training or didn't attend specific parts of the training. In either case, the support calls will come rolling in from people seemingly baffled by the change in the interface and functionality of the new environment.



Microsoft recommends using an in-place upgrade only for small, singleserver SharePoint deployments or only in a testing environment and to use the gradual upgrade path for all production environments.

### **Gradual Upgrade Migration**

The *gradual upgrade* migration path is more complex than an in-place upgrade, but it has a number of built-in safety factors that will allow you to stair-step the upgrade process. This path requires that you install MOSS 2007 on the same system that hosts SharePoint 2003. Each platform relies upon its own content databases, so nothing is changed in each environment until you decide to institute a change. Once in place, you then can migrate one site or one group of sites at a time from 2003 to 2007, leaving the remainder of sites on the 2003 platform.

This process allows your SharePoint users to get used to the change one group at a time. For instance, let's say you migrate the sales department's site from 2003 to 2007, leaving the sites operated by all of the other departments untouched. The sales department becomes your pilot project of sorts, allowing you to determine the impact of migration for the entire corporation based on this one department. You can use this experience to work out the kinks in the process and then move on to the next site and then the next. If something goes wrong with a migration, you just need to roll back a single site rather than the entire SharePoint environment. Whatever support calls that come in will be limited to a single department rather than coming from all areas of the corporation.

The downside is that it takes a lot longer. The length of the migration time depends on how frequently you initiate migrations (one a day, one a week, and so forth), how many sites you migrate at any given point (one site, two sites, ten sites, and so forth), and the overall size of the environment. A SharePoint environment containing a single site collection consisting of 10 sites will go faster than one containing 10 site collections with each collection containing 100 sites.

In terms of the actual process involved, when content for a particular site has been called, the content database accessed will depend on whether that site has been migrated. The URL

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or FQDN of the site doesn't change before or after migration, but the migration process translates HTTP service requests, allowing the correct content to be accessed.

#### **Database Migration**

I mentioned previously that you wouldn't have to perform a database upgrade migration just because you were performing a SharePoint migration, but I also said it could be a viable option. This isn't a usual upgrade scenario, and Microsoft doesn't formally present it as a SharePoint upgrade option at all. It's considered an advanced option and one that you would utilize only if you were going to perform a hardware upgrade or upgrade your SQL Server software. In the latter case, you'd perform an in-place upgrade of the SQL Server system, say from 2000 to 2005. That said, it is unlikely that you, as a SharePoint administrator, would be asked to participate in a database upgrade migration and very unlikely that you will encounter any questions on the 70-630 exam on this subject.

#### Managing CMS in a SharePoint Upgrade Migration

This is a major area in this section of the exam objectives and rightfully so. Performing a CMS assessment prior to upgrade is required before initiating the actual migration. As you read earlier in this chapter, SharePoint 2003 works with CMS 2002 to provide services such as navigation, summary links, and scheduled deployments. These services are all integrated into MOSS 2007, so there is no need for a separate CMS deployment once the migration is done. However, there is a great need to perform an assessment (somewhat like the preupgrade scan on SharePoint 2003) to identify all the relevant information, programming, and components in the CMS application so that you can determine your upgrade migration strategy.

Microsoft published an online article called "Assessing and Analyzing Your MCMS 2002 Application for Migration" in May 2006 that describes all the details involved in performing the assessment. You can access the article at the following URL: http://msdn2.microsoft .com/en-us/library/aa480227.aspx.

The article includes an overview of the assessment process, how to install the CMS assessment tool, all the prerequisites for installing and running the tool, and how to interpret the report results. You can download the CMS assessment tool .exe file from this site: http://www.microsoft.com/downloads/details.aspx?familyid=360d0e83-fa70-4c24-bcd6-426cafbcc627&displaylang=en.

#### Managing Business Intelligence in a SharePoint Upgrade Migration

In SharePoint Portal Server 2003, the concept and practice of business intelligence wasn't an integrated service but was presented through a collection of onboard and third-party solutions. For instance, SharePoint 2003 administrators who wanted to offer business intelligence features in the SharePoint environment relied heavily on Microsoft Office Web Parts and Components, also referred to as Office Web Components (OWC). OWC is a collection of web parts, web part pages, templates, and other services that interoperate with both Office 2003 and WSS 2.0 services. OWC utilizes ActiveX controls to provide chart, data source control, PivotTable, and spreadsheet services in the SharePoint environment to take advantage of the

features offered by the Office 2003 suite of applications and present information in a business intelligence (BI) type of setting.



To review information about business intelligence in SharePoint 2007, see Chapter 12, "Using Excel Services and Business Intelligence," and Chapter 13, "Using Business Forms and Business Intelligence."

MOSS 2007 includes integrated BI solutions consisting of a larger variety of more evolved components, and as a result, OWC has been phased out. Although this is good news in terms of offering SharePoint users a more effective BI option, it presents difficulties when you have been using OWC functionality to provide BI presentations and now are at the threshold of an upgrade migration to SharePoint 2007 that uses an entirely different approach to BI. What happens to the customizations and particularly the data you previously configured?

There are two basic options: keep using OWC, or abandon your original BI solution and re-create it using SharePoint 2007 BI options.

Yes, OWC is no longer being supported, but you can still use the required web parts by extracting the CAB files from your 2003 installation and moving them to your 2007 platform once the upgrade is completed. These are the three required CAB files:

- Microsoft.sharepoint.solutions.greatplains.cab
- Microsoft.sharepoint.webparts.quickquote.cab
- Microsoft.office.dataparts.cab

They are located at the following path: C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\60\wppacks. Once you locate the referenced CAB files, you will need to use the stsadm.exe utility to add them to your SharePoint 2007 installation. The following is the command syntax required:

```
stsadm.exe -o addwppack -filename "c:\program files\common
files\microsoft shared\web server
extensions\60\wppacks\microsoft.office.dataparts.cab" -globalinstall
```

You can learn more about these .cab files at the following blog: http://msmvps.com/ blogs/shane/archive/2006/09/02/How-to-manually-install-the-Office-Web-Parts-in-SharePoint-v3.aspx. You can find more useful information here: http:// support.microsoft.com/Default.aspx?id=929320.

#### Managing Shared Services in a SharePoint Upgrade Migration

The shared services architecture in SharePoint 2007 is markedly different than it was in 2003, and although these changes have allowed more flexibility and ease of use in sharing resources, the fact that the changes are so significant presents upgrade issues. Microsoft provides two viable solutions for managing the upgrade of shared services from 2003 to 2007:

- Perform a gradual upgrade with shared services by upgrading the parent portal first.
- Perform a gradual upgrade with shared services by upgrading a child portal first.

Performing a gradual upgrade of shared services by upgrading the parent portal is the recommended option. This process has five basic steps:

- **1**. Upgrading the parent portal
- 2. Upgrading the personal site host
- 3. Upgrading MySites
- **4.** Upgrading team sites
- 5. Upgrading child portals

Performing a gradual upgrade of shared services by upgrading child portals first has four basic steps:

- 1. Creating a new SharePoint Server 2007 environment
- **2.** Upgrading the personal site host and personal sites in SharePoint Portal Server 2003 and attaching them to the new shared services provider
- **3.** Upgrading team site host and team sites and attaching them to the new shared services provider
- 4. Upgrading child portals and attaching them to the new shared services provider

Each of the steps in these two approaches is a separate, multistep task, and you'll have the opportunity to perform them later in the chapter. Since both of the shared services migration plans are based on performing a gradual upgrade migration, you'll learn how to perform the basics of both the in-place and gradual migration processes before addressing these more complicated solutions.

## Performing an Upgrade Migration

Before getting into the nuts and bolts of actually upgrading SharePoint Portal Server 2003 to MOSS 2007, you should realize (if you haven't already) that the only way to perform these exercises is to have a SharePoint Server 2003 environment already in place so that you can work through the actions required to upgrade it to SharePoint Server 2007. Since there are two basic paths (in-place and gradual), you will need to have either two separate 2003 environments or a single environment that you will upgrade and then restore from a backup to its original state and upgrade again using the second option. On top of that, you will need to repeat the gradual upgrade steps twice more to practice the exercises involved in upgrading shared services.

Of course, the easiest (and least expensive...the full version costs \$5,619) way to acquire your own copy of SharePoint 2003 is to download and install a trial version. As of this writing, you can still locate the trial software at the following location: http://www.microsoft.com/downloads/details.aspx?FamilyID=16006564-4575-4463-920D-C920B4AEAE64&displaylang=en. You can find more general information about downloading and installing SharePoint Portal Server 2003 at the following location: http://www.microsoft.com/products/info/product.aspx?view=22&pcid=2f7ba03d-1762-4ae9-b059-23aa198c08fb&type=ovr.

It is beyond the scope of this book to provide a set of exercises and instructions on how to install and configure SharePoint 2003 to have it available in order to upgrade it to SharePoint 2007, but by now, the experience you've had installing and configuring MOSS 2007 will have likely given you the required skills. Unfortunately, there are no simulators or other types of software that would allow you to enact the migration process in a more artificial environment, so to get the full experience, you'll have to create the full experience. Of course, you don't have to go overboard. Just install the out-of-the-box SharePoint 2003 deployment, create a couple of portal sites, and call it good.



I'm not going to say it's OK to simply read along with the exercises, studying the steps but not performing the tasks; however, I can't say that not performing the exercises will automatically mean you won't be successful when you take the 70-630 exam. Part of it is a matter of conscience, part of it is how well you understand both the material and how you learn, and part of it is simply being aware that doing something helps you learn a task more effectively than just reading about how to do it.

### Performing an In-Place Upgrade Migration

Exercise 16.1 starts you out with upgrading a SharePoint Server 2003 environment to a Share-Point Server 2007 environment using an in-place upgrade migration. To actually perform the migration, you'll need to have a SharePoint 2003 environment available to you plus the Share-Point 2007 installation files available on an optical disc. The task assumes this is a stand-alone server installation of 2003 both because that has been our standard model throughout this book and because it is the most reasonable deployment for student and lab purposes.

This will be a rather lengthy exercise, at least in terms of the number of steps, so give yourself plenty of time to complete the process. Also, you will want to have performed all of the required preupgrade steps discussed earlier in this chapter before actually launching into the exercise. In addition, you will need to have the product key for the SharePoint 2007 application software handy at the beginning of the exercise. This exercise skips the preinstallation scan process, but you can perform this task if desired.

#### **EXERCISE 16.1**

#### Performing an In-Place Upgrade from SharePoint 2003 to SharePoint 2007

- 1. Insert the SharePoint Server 2007 installation media into the optical drive of the server computer running SharePoint Server 2003, and when prompted, launch Setup.exe.
- 2. When the Enter your Product Key page appears, enter the product key, and click Continue.
- **3.** When the License Terms page appears, tick the I Accept the Terms of This Agreement check box, and click Continue.

#### EXERCISE 16.1 (continued)

On the next page of the upgrade wizard on the Upgrade tab, select Yes, Perform an Auto-4. mated In-Place Upgrade, as shown here.

crosoft Of	fice SharePoint Server 2007
Upgrade	Server Type   Elle Location   Feedback
	Upgrade earlier versions
	Setup has detected previous versions of this product on your computer. Do you wish to upgrade?
	C Yes, perform a Gradual upgrade. This will allow the existing installation to function and enable you to upgrade web sites in batches. This is best for large installations or where web sites have been extensively customized.
	Yes, perform an automated in-place upgrade. All web sites and databases will be upgraded; the process will continue until complete. This is best for installations with few databases and less than 3006 of content.
	C No, do not upgrade at this time. The new version can be installed alongside the existing product and can run without impacting the older installation.
	It is recommended that you run the pre-upgrade scan tool before starting upgrade. This tool reports common errors that might be encountered during upgrade. Review the upgrade documentation for more detailed instructions as well as recommended ways to address issues reported by the tool.
0	
	Install Now

- 5. On the Server Type tab, select Complete – Install All Components.
- 6. On the File Location tab, either accept the default location for the installation files or click the Browse button and browse to a customized location on the server. (If you intend to use the server as a search server, you can either accept the second default installation path or click the Browse button to select a different path.)
- 7. Click Install Now.
- 8. After the installation process is complete, when the Completion page appears, verify that the Run the SharePoint Products and Technologies Configuration Wizard Now check box is ticked, and click Close. (If you didn't run the preupgrade utility previously, you might be prompted to do so now.)
- 9. When the Welcome to SharePoint Products and Technologies Wizard launches, click Next.
- 10. When the warning dialog box appears stating that various services may need to be restarted, click Yes.
- 11. When the Language Template Packs notification dialog box appears, click OK.
- 12. On the Configure SharePoint Central Administration Web Application page, accept the port number assigned by default and the NTLM authentication option, and click Next.

#### EXERCISE 16.1 (continued)

- **13.** On the Completing the SharePoint Products and Technologies Configuration Wizard page, click Next.
- **14.** While the SharePoint products and technologies are configuring, if a dialog box appears notifying you that you must install new binary files for all the servers in your server farm, click OK.
- 15. When the Configuration Successful page appears, click Finish.
- **16.** The Upgrade Running page will open and prompt you for your username and password. Enter your administrator username and password, and click OK to open the page.
- **17.** When the upgrade process completes, click Continue to open the home page of the Central Administration web application.

The upgrade process is now complete, and you are operating within a SharePoint Server 2007 environment. At this point, you would ordinarily begin to perform various site management tasks that were outlined in Chapter 3, "Configuring SharePoint 2007," but in this case, it's just a job well done. As you went through the upgrade process, you most likely noticed that many of the steps you followed were the same as when you initially installed SharePoint 2007 on your stand-alone server in Chapter 2, "Installing and Deploying SharePoint 2007."

## Performing a Gradual Upgrade Migration

As stated earlier in this chapter, the gradual upgrade migration option allows you to run both SharePoint Server 2003 and SharePoint Server 2007 side by side on the same web and application servers in your server farm. In the case of a stand-alone installation, both versions of SharePoint run on the same server computer.

This process allows you to select which sites or groups of sites you want to migrate first, second, third, and so on. If for some reason you decide not to migrate all your sites to SharePoint 2007, those sites not selected will continue to run under SharePoint 2003. This also means that the SharePoint 2003 sites will continue to access services through the 2003 shared services provider, while the SharePoint 2007 sites will access services through the 2007 shared services provider.

There is more preparation involved in getting your SharePoint 2003 deployment ready for migration. Chief among these tasks is to create alternate domain URLs for each of your sites (which can be quite time-consuming depending on how many sites you have created). What this means in practice is that if the URL for a given site is as follows:

#### http://srv01/sites/projects.aspx

then you will need to create a temporary URL for the "old" or unupgraded site, like this:

http://srv01/sites/projects\_old.aspx.

During the upgrade process, you'll be asked to input a temporary URL for the site being upgraded; use the projects\_old.aspx address. The existing URL will be "taken over" by the upgraded site, so from the SharePoint user's point of view they have access to their upgraded site at the same address they've always used. The site redirect will send users to the upgraded site, which now is accessing the correct content database for SharePoint 2007.

When you have upgraded all of your sites, you will then delete all the redirections, all the previous version sites, and all the temporary URLs.

Exercise 16.2 will walk you through the steps of performing a gradual upgrade migration of SharePoint 2003 to SharePoint 2007. For much of the exercise, the steps involved will be the same or similar to those you followed in Exercise 16.1. To begin, you must have SharePoint Portal Server 2003 running on a server computer and the SharePoint 2007 installation disc and product key handy. All the conditions and assumptions that were valid for Exercise 16.1 apply for Exercise 16.2 as well.

#### **EXERCISE 16.2**

#### Performing a Gradual Upgrade from SharePoint 2003 to SharePoint 2007

- 1. Insert the SharePoint Server 2007 installation media into the optical drive of the server computer running SharePoint Server 2003, and when prompted, launch Setup.exe.
- 2. When the Enter Your Product Key page appears, enter the product key, and click Continue.
- **3.** When the License Terms page appears, tick the I Accept the Terms of This Agreement check box, and click Continue.
- On the next page of the upgrade wizard on the Upgrade tab, select Yes, Perform a Gradual Upgrade.
- 5. On the Server Type tab, select Complete Install All Components.
- **6.** On the File Location tab, either accept the default location for the installation files or click the Browse button and browse to a customized location on the server. (If you intend to use the server as a search server, you can either accept the second default installation path or click the Browse button to select a different path.)
- 7. Click Install Now.
- 8. After the installation process is complete, when the Completion page appears, verify that the Run the SharePoint Products and Technologies Configuration Wizard Now check box is ticked, and click Close. (If you didn't run the preupgrade utility previously, you might be prompted to do so now.)
- **9.** When the Welcome to SharePoint Products and Technologies Wizard launches, click Next.
- **10.** When the warning dialog box appears stating that various services may need to be restarted, click Yes.

#### EXERCISE 16.2 (continued)

- 11. When the Language Template Packs notification dialog box appears, click OK.
- **12.** On the Configure SharePoint Central Administration Web Application page, accept the port number assigned by default and the NTLM authentication option, and click Next.
- **13.** On the Completing the SharePoint Products and Technologies Configuration Wizard page, click Next.
- 14. While the SharePoint products and technologies are configuring, if a dialog box appears notifying you that you must install new binary files for all the servers in your server farm, click OK.
- **15.** When the Configuration Successful page appears, click Finish.
- **16.** The Upgrade Running page will open and prompt you for your username and password. Enter your administrator username and password, and click OK to open the page.
- **17.** When the upgrade process completes, click Continue to open the home page of the Central Administration web application.

Except for the selection in step 4, the process is the same as an in-place upgrade, but once the Central Administration web application becomes available, the real task begins. Thus far, none of your sites has been upgraded, and in fact, they are all waiting to be upgraded. Exercise 16.3 will begin where Exercise 16.2 left off—in Central Administration.

Exercises 16.1 and 16.2 both performed installations that specified stand-alone server installs and did not address the option to either create a server farm or notify the system that you would create a server farm later using the Connect to a Server Farm page. You also did not go through the process of selecting a database server and database name on the Specify Configuration Database Settings page.

#### **EXERCISE 16.3**

#### Selecting a Web Application for a Gradual Upgrade

- 1. In the Central Administration web application, click the Operations tab.
- 2. On the Operations tab under Upgrade and Migration, click Site Content Upgrade Status.
- **3.** On the Site Content Upgrade Status page, choose the URL of the site you want to upgrade from the list, and click Begin Upgrade next to the name of the desired site.
- **4.** On the Set Target Web Application page, in the Web Application to Upgrade section, verify that the correct web application is displayed in the Updating Web Application list. (If not, click the down arrow to open the list, and select the correct web application.)

#### EXERCISE 16.3 (continued)

- 5. Under New URL for Original Content, type a new port number for the site in the Port field, and if necessary, add a port header in the Port Header field.
- 6. Under Application Pool for New Web Application, select either Use Existing Application Pool or Create New Application Pool. (It is recommended that you either use an application pool you previously created for the upgrade or create a new application pool in this step.)
- 7. If you selected Create New Application Pool in step 6, under Select a Security Account for This Application Pool, select Predefined and use the drop-down menu to select a security account, or select Configurable and use the available fields to input a username and password for this security account.
- 8. Under Reset Internet Information Services, select either Restart IIS Automatically or Restart IIS Manually.
- Under Security Configuration, select either Negotiate (Kerberos) or NTLM.
- **10.** Under Content Databases, select either Automatic Database Name Selection or Manually Set Database Names.
- **11.** Under SSP Database Settings, type the SSP database name in the SSP Database Name field, and type the search database name in the Search Database Name field. (These are the names of the database used to host the upgraded audience, user profile, and search configuration data.)
- **12.** Under Index Server, use the Index Server drop-down menu to select an index server. (The path displayed by default for the path of the index file location can be accepted.)
- 13. Click OK to finish.

If you selected any of the "manual" options in this exercise, additional options would have appeared requiring you to input additional data. After you click OK, an Operation in Progress page will appear. Once the web application has been successfully upgraded, you will be taken to the Site Collection Upgrade page.

When you upgraded the web application, you didn't actually upgrade any sites, but rather the web application hosting the sites. For instance, all the sites in my site collection, such as my portal site, the Projects site, and so forth, are all hosted on the SharePoint – 80 web application. If that application were running in SharePoint 2003 and I upgraded it to SharePoint 2003, my next step would be to either upgrade another web application (such as Central Administration) or begin to upgrade sites hosted in the web application. Exercise 16.4 will go through the steps of selecting and upgrading a site collection hosted by the now-upgraded web application.

On the Site Collection Upgrade page, you will see a list of the site collections available in your SharePoint environment, including the root site collection. If you intend to upgrade any of these site collections, you must upgrade the root site collection first. In Exercise 16.4, you will choose a site collection and upgrade it from SharePoint 2003 to SharePoint 2007.

#### **EXERCISE 16.4**

#### Performing a Gradual Upgrade on a Site Collection

- 1. On the Site Collection Upgrade page, tick the check box next to the root site collection. (You can also choose one or more sites under the root site collection.)
- 2. Click Upgrade Sites.
- **3.** On the Sites Selected for Upgrade page, verify that the information displayed is correct, including the number of site collections to be upgraded, the amount of storage the site collections originally used, and the names of the originating and target databases, and then click Upgrade Sites.
- 4. When the Upgrade Running page opens, the upgrade process will run for some time depending on the number and size of the selected site collections and their database. When the upgrade is finished, you can click the Home tab to return to the main page in Central Administration.

At this point, you can visit the upgraded sites; however, the 2003 version of the portal site still exists, and you can visit it at the temporary URL you previously selected.

### 🖽 Real World Scenario

## Preparing a Test Server for an Upgrade from SharePoint 2003 to SharePoint 2007

You are the SharePoint administrator for the Wallaby Way Corporation, a wholesale distributor of dental office equipment. For the past three years, you have administered Wallaby Way's Share-Point Portal Server 2003 environment very successfully. Peter Sherman, Wallaby Way's CEO, has been favorably impressed by the ROI the company has enjoyed as a result of the SharePoint deployment, and he is ready to consider upgrading to Microsoft Office SharePoint Server 2007. He has tasked Hunter, the CTO, to work with you to develop an upgrade plan. As part of developing the plan, you and Hunter determine that performing an in-place upgrade migration in a testing environment is necessary.

Hunter secures a test server for you to use. Your first job is to make sure it meets all the prerequisites for the upgrade test including all the software and operating system requirements. You install Windows Server 2003 Enterprise Edition on the computer and apply all the latest service packs and patches. Next, you go through the list of software that needs to be installed and configured. You are not going to install SharePoint 2003 until your next meeting with Hunter, but you want the server ready for the installation and upgrade once he gives final approval. To prepare the server for a stand-alone SharePoint installation, you install and configure IIS services through Administrative Tools on the server. Next you install version 3.0 of the .NET Framework and enable ASP.NET 2.0 in the IIS Manager. The server is now ready for the SharePoint 2003 installation and, subsequently, for the upgrade migration to SharePoint 2007.

## Performing a Gradual Upgrade with Shared Services

Now that you've performed both basic upgrade migration types, it's time to see how the gradual upgrade process can be used to manage a shared services upgrade. As previously discussed, you can select from two overall processes, and each process involves more than one exercise. The following sections will take you through these tasks.

### Performing a Gradual Upgrade with Shared Services by Upgrading the Parent Portal First

Some of the steps involved in these exercises will be something like "perform a gradual upgrade of the parent portal." Since you have already performed these exercises, the steps involved in these tasks won't be repeated. I'll just put an instruction in place, and you will need to return to the earlier exercise in this chapter to review the steps. This includes any preliminary work you need to do to prepare the 2003 environment for upgrade, such as installing any language template packs if needed, reviewing log files, preparing web applications, and so on.

#### **Upgrading the Parent Portal**

The first task is to upgrade the parent portal, which will require that you repeat Exercises 16.2, 16.3, and 16.4. In Exercise 16.4, in step 1, tick the check box next to the parent portal site, which should be the root, and then complete the exercise.

#### **Upgrading the Personal Site Host**

This task is usually redundant since in most SharePoint Server 2003 deployments, the personal site host is the parent portal. The only time it would be different is if you set up a personal site host in its own server farm in Central Administration. If this is the case, you would repeat Exercise 16.4, specifying this site.

#### Upgrading MySites

Since MySites runs on a separate web application and represents a completely different site collection (or collection of site collections in some cases), you will need to perform Exercises 16.2, 16.3, and 16.4, repeating Exercise 16.4 if necessary if there are a large number of sites and site collections involved.

#### **Upgrading Team Sites**

Team sites are usually hosted on the same server farm as the rest of the site collections, but occasionally they're not. If they're not, you'll need to repeat Exercises 16.2, 16.3, and 16.4.

Otherwise, you will need to perform only the steps in Exercise 16.4 to upgrade all the team sites in your site collection.



Remember, in our lab deployment, we are working with a simple SharePoint deployment, so a minimal amount of administrative cost is required to perform these tasks. In a large and complex production environment, you could find yourself performing many of the possible variations presented in order to complete the migration.

#### **Upgrading Child Portals**

Although a simple SharePoint deployment might contain only one portal site and various child or subsites, a large and complex environment could contain a number of child portal sites, such as one child portal for every nationwide office in an enterprise-level, international organization.

Basically, the previous four tasks were performed for the parent portal and any sites and site collections that operated beneath that portal. Now you will repeat those tasks as necessary for each child portal managed in your SharePoint 2003 environment. As far as our stand-alone server lab deployment goes, your job is done, but in the real world, it might be only the beginning.

## Performing a Gradual Upgrade with Shared Services by Upgrading a Child Portal First

The second method of performing a gradual upgrade for shared services is by upgrading a child portal before the parent. In this case, you will be performing the same tasks you did in the previous section, but in a different order. They involve the same three exercises that have previously been referenced, so there is no new material. The order of the required tasks is as follows:

- 1. Upgrade personal site host and personal sites.
- 2. Upgrade team sites.
- **3.** Upgrade child portals.

At what point you upgrade any MySites is up to you, but it's recommended that you upgrade all your MySites at the same time so that all your users will be able to access their upgraded MySites across the board.

For more information on upgrading from SharePoint 2003 to SharePoint 2007, visit the following Microsoft sites:

Upgrading to Office SharePoint Server 2007 http://technet2.microsoft.com/Office/ en-us/library/a44147be-3658-4bf0-ae39-0fca0794c01b1033.mspx?mfr=true

Chapter overview: Perform a gradual upgrade in a shared services environment http:// technet2.microsoft.com/Office/en-us/library/21dd7a46-8433-4115-8004-850a6c8a1a891033.mspx?mfr=true Perform a gradual upgrade with shared services (upgrading the parent portal first) http://technet2.microsoft.com/Office/en-us/library/13c54c47-f931-4cd2-ad7f-1bdea4d628da1033.mspx?mfr=true

Perform a gradual upgrade with shared services (upgrading a child portal first) http:// technet2.microsoft.com/Office/en-us/library/4361b71b-7a69-4ea5-b064f266705e4f331033.mspx?mfr=true

## Summary

In this chapter, you learned a great deal of information about the various aspects of upgrading and deploying from SharePoint Portal Server 2003 to SharePoint Server 2007, including the following points:

- Developing a migration plan for your SharePoint 2003 environment that determines your environment's readiness for migration, developing a migration testing lab, and understanding migrating database services
- Performing premigration tasks including verifying that you have met the prerequisites of the correct server platform versions, performing a complete backup of your environment, and running a preupgrade scan of the system
- Deciding which upgrade migration path to select such as an in-place or gradual upgrade as well as planning for CMS, business intelligence, and shared services migration
- Performing both in-place and gradual upgrades
- Performing a gradual upgrade for shared services by either upgrading the parent portal first or upgrading a child portal first

## **Exam Essentials**

Be able to manage portal and site readiness for migration. Know how to prepare your SharePoint 2003 environment for migration including performing any premigration scans and other tasks and testing to verify that it is ready for migration to 2007.

Know how to perform different migration methods. Understand how to perform both inplace and gradual upgrade migrations, including managing the complexities involved in the gradual upgrade process.

Be able to assess the requirements for upgrading CMS and business intelligence. Know how CMS and business intelligence is performed in SharePoint 2003, how migration will affect those processes, and how to provide those services with SharePoint 2007 components.

**Configure shared services migration.** Be well-versed in the different methods of upgrading shared services using different models of the gradual upgrade migration process.

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## **Review Questions**

- 1. You are the SharePoint administrator for your company. You are in the process of planning an upgrade from SharePoint 2003 to SharePoint Server 2007 and are assessing the readiness of your current deployment for migration. You are currently assessing the impact the migration will have on all the services now being provided by Content Management Server (CMS) 2002 in SharePoint so that you can determine what you will have to re-create once the migration has been completed. In your current environment, what services does CMS manage? (Choose all that apply.)
  - A. MySites
  - B. Navigation
  - C. Scheduled deployments
  - **D.** Summary links
- 2. You are the SharePoint administrator for your company. You are in the process of planning an upgrade from SharePoint 2003 to SharePoint Server 2007 and are assessing the readiness of your current deployment for migration. You are currently reviewing the necessary prerequisites for the migration including the necessary server platforms to support the upgrade. Of the following, which server platforms will support the migration from SharePoint 2003 to SharePoint 2007? (Choose all that apply.)
  - A. Windows Server 2000 SP3 Standard Edition
  - B. Windows Server 2003 SP1 Standard Edition
  - C. Windows Server 2003 SP1 Datacenter Edition
  - D. Windows Server 2003 SP1 Web Edition
- **3.** You are the SharePoint administrator for your company. You are in the process of planning an upgrade from SharePoint 2003 to SharePoint Server 2007 and are assessing the readiness of your current deployment for migration. You want to run a preinstallation scan of your SharePoint 2003 environment and see what outstanding issues exist in your current deployment. The CTO has advised you not to install SharePoint Server 2007 on any of your 2003 machines but instead to extract the necessary files from a test machine running SharePoint 2007, install the files on SharePoint 2003, and run the scan. You know the files that are required. In SharePoint Server 2007, what is the location where you will find the necessary files?
  - A. C:\program files\common files\microsoft shared\application server extensions\10\bin
  - B. C:\program files\common files\microsoft shared\application server extensions\12\bin
  - C. C:\program files\common files\microsoft shared\web server extensions  $10\bin$
  - D. C:\program files\common files\microsoft shared\web server extensions\12\bin

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- 4. You are the SharePoint administrator for your company. You are in the process of planning an upgrade from SharePoint 2003 to SharePoint Server 2007 and are assessing the readiness of your current deployment for migration. You are considering the type of migration path to take and are consulting with the IT staff to develop a plan that would best meet the requirements of your organization's SharePoint environment. You work for a small business using a standalone server deployment and administer approximately 25 sites. Many of your web parts have been customized, and you have used FrontPage 2003 to modify three of the sites in the site collection. Jim, one of the IT techs, has done some research and presents Microsoft's official recommendation for an upgrade path of a production environment such as yours. Of the following options, what is Jim's answer?
  - **A.** An in-place upgrade is the Microsoft-recommended procedure because of the small size and limited number of sites in the SharePoint deployment.
  - **B.** An in-place upgrade is technically reasonable, but Microsoft recommends using this method only for testing purposes and to use the gradual upgrade method for all production environments.
  - **C.** An in-place upgrade is technically unreasonable according to Microsoft because it is designed to be used only in testing environments. Jim says that the gradual upgrade method is the only recommended option.
  - **D.** Jim says that the Microsoft-recommended method for your SharePoint environment is a gradual upgrade migration because each site in a production environment must be upgraded separately to avoid losing any specialized web part and web page customizations.
- You are the SharePoint administrator for your company. You are in the process of planning an 5. upgrade from SharePoint 2003 to SharePoint Server 2007 and are assessing the readiness of your current deployment for migration. You manage a large set of site collections for a multinational corporation and have determined that a gradual upgrade migration path is the best option. You are giving your team a high-level briefing on this procedure since none of them have performed a large-scale SharePoint 2003 to 2007 upgrade before. Of the following, which statements are most true about a gradual upgrade? (Choose all that apply.)
  - A. SharePoint Server 2007 replaces SharePoint Portal Server 2003 on each web server as sites and site collections are upgraded.
  - **B.** SharePoint Server 2007 and SharePoint Portal Server 2003 coexist on the servers during the entire upgrade migration process.
  - **C.** As individual sites are upgraded from 2003 to 2007, they acquire new URLs that must be mapped so users can access the upgraded sites.
  - **D.** After an individual site is upgraded, user requests are automatically redirected to the upgraded site when they use the URL originally used by the 2003 version of the site.

- **6.** You are the SharePoint administrator for your company, and you are currently planning an upgrade migration of your SharePoint Portal Server 2003 environment to SharePoint Server 2007. You make heavy use of OWC components and various third-party solutions to provide business intelligence functionality in your SharePoint 2003 environment. You are considering how to provide the same features for your users after the migration to SharePoint 2007. Of particular interest are features specifically provided by OWC. Which of the following are specifically provided by OWC? (Choose all that apply.)
  - A. ActiveX controls
  - B. Charts
  - C. Data source control
  - **D.** PivotTables
- 7. You are the SharePoint administrator for your company, and you are currently planning an upgrade migration of your SharePoint Portal Server 2003 environment to SharePoint Server 2007. You make heavy use of OWC components and various third-party solutions to provide business intelligence functionality in your SharePoint 2003 environment. Although SharePoint 2007 provides a wide variety of business intelligence utilities, there are some unique configurations in OWC that you still want to utilize after the migration. Of the following, what option can you use to preserve the specific OWC components? (Choose all that apply.)
  - **A.** Extract the necessary CAB files for OWC from SharePoint 2003, and install them on SharePoint 2007 after the upgrade is complete.
  - **B.** Add the path C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\60\wppacks in SharePoint 2007, and then import the necessary CAB files from 2003 to the wppacks folder in 2007.
  - **C.** Run the command stsadm.exe -o addwppack -filename -hostname2003 hostname2007 to move the necessary CAB files to run OWC components from the SharePoint 2003 installation to SharePoint 2007.
  - **D.** OWC is not supported in SharePoint 2007, and any customizations that depend on OWC in 2003 will be lost after the upgrade. Any desired functionality will need to be re-created in 2007 using its BI tools once the upgrade is complete.
- **8.** You are the SharePoint administrator for your company, and you are currently planning an upgrade migration of your SharePoint Portal Server 2003 environment to SharePoint Server 2007. You are planning a method for migrating shared services from SharePoint 2003 to SharePoint 2007. There is a significant difference in how shared services operates on either platform, so the migration method to correctly make sure the upgrade is successful is very specific. Of the upgrade migration options presented, which can you use to successfully migrate shared services? (Choose all that apply.)
  - **A**. Perform a gradual upgrade by upgrading the parent portal first.
  - **B.** Perform a gradual upgrade by upgrading the team sites first.
  - C. Perform a gradual upgrade by upgrading the child portals first.
  - **D**. Perform a gradual upgrade by upgrading the personal host site first.

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- **9.** You are the SharePoint administrator for your company, and you are currently planning an upgrade migration of your SharePoint Portal Server 2003 environment to SharePoint Server 2007. You are planning a method for migrating shared services from SharePoint 2003 to SharePoint 2007. There is a significant difference in how the shared services feature operates on either platform, so the migration method to correctly make sure the upgrade is successful is very specific. You have determined that performing a gradual upgrade of shared services by upgrading child portals first is the best option for your environment. Of the following options, which represent the basic required steps in this process? (Choose all that apply.)
  - A. Creating a new SharePoint Server 2007 environment
  - **B.** Upgrading child portals and attaching them to the new shared services provider
  - **C**. Upgrading MySites and attaching them to the new shared services provider
  - **D.** Upgrading the personal site host and attaching it to the new shared services provider
- **10.** You are the SharePoint administrator for your organization, and you are about to begin the upgrade migration process from SharePoint 2003 to SharePoint 2007 in a testing environment to make sure the upgrade migration will go as you have planned. You want to perform a pre-upgrade scan of the current system to see whether any outstanding issues must be resolved prior to beginning the upgrade. Darla, one of your staff, has asked at what points during the process the scan could be initiated. What do you tell her?
  - **A.** The preupgrade scan can be performed only prior to beginning the in-place upgrade migration process.
  - **B.** The preupgrade scan can be performed before beginning the in-place upgrade migration process and after the installation, at the point where you are launching the SharePoint Products and Technologies Configuration Wizard.
  - **C.** The preupgrade scan can be performed before beginning the in-place upgrade migration process and just after running the SharePoint Products and Technologies Configuration Wizard.
  - **D.** The preupgrade scan can be performed only after launching Setup.exe on the SharePoint 2007 installation disc and entering the product key.
- 11. You are the SharePoint administrator for your organization, and you are about to begin the upgrade migration process from SharePoint 2003 to SharePoint 2007 in a testing environment to make sure the upgrade migration will go as you have planned. You perform the in-place upgrade in your testing environment on a stand-alone server, and everything seems to go well. When you actually perform the upgrade in your production environment, you will be upgrading a much larger environment for your enterprise-level organization. You anticipate that additional steps will be involved in the upgrade of your production environment. Of the following selections, which are the likely steps you'll encounter that you didn't go through during the test migration? (Choose all that apply.)
  - **A.** On the Connect to a Server Farm page, you'll be asked whether you want to create a server farm or wait until a later time.
  - **B.** On the Connect to Web Applications page, you will be asked which web applications you want to upgrade.
  - **C.** On the Specify Configuration Database Settings page, you will be asked to specify a database server and database name.
  - **D.** On the SSP Database Settings page, you will be asked to choose an administrator account name and password for access to the SSP database.

- **12.** You are the SharePoint administrator for your organization, and you are about to begin the upgrade migration process from SharePoint 2003 to SharePoint 2007 in a testing environment to make sure the upgrade migration will go as you have planned. After you begin running the SharePoint Products and Technologies Configuration Wizard, some dialog boxes come up one after the other requiring you to respond. Of the following options, which dialog boxes appear, and what should you do?
  - **A.** A dialog box appears notifying you that an authentication method has not yet been set and that the system is insecure until a method has been selected. Click OK.
  - **B.** The Language Template Packs notification dialog box appears. Click OK.
  - **C.** The warning dialog box appears stating that various services may need to be restarted. Click Yes.
  - **D.** A dialog box appears notifying you that you must install new binary files for all servers in your server farm. Click OK.
- **13.** You are the SharePoint administrator for your company. You have successfully completed the upgrade migration process from SharePoint 2003 to SharePoint 2007 in a test environment and are almost ready to perform a gradual upgrade migration in your production environment. Since you will be upgrading a few sites at a time, there is one crucial prerequisite task you must perform because 2003 and 2007 SharePoint sites will be coexisting. Of the following options, which one is the required task?
  - **A.** Create temporary URLs for the upgraded 2007 sites.
  - **B.** Create temporary URLs for the "unupgraded" 2003 sites.
  - **C**. Create a temporary web application for the upgraded 2007 site collection.
  - **D**. Create a temporary web application for the "unupgraded" 2003 site collection.
- 14. You are the SharePoint administrator for your company. You have successfully completed the upgrade migration process from SharePoint 2003 to SharePoint 2007 in a test environment and are ready to perform a gradual upgrade migration in your production environment. You have scheduled the migration to begin after the end of business on Friday and will progress through the upgrade, gradually moving sites from 2003 to 2007 over the next several weeks. You get a frantic phone call from Dory, one of the users in accounting, late on Friday afternoon saying that she is still in the middle of a project that requires she be able to access accounting's site to update resource files. She is concerned that the upgrade will cause a data loss that will in turn cause her project to suffer a serious delay. You assure Dory that all data has been backed up and can be recovered if the upgrade of accounting's site should cause any problems, but she still wants to know whether the 2003 version of accounting's site can be accessed in any way after the upgrade migration. What do you tell her?
  - **A.** You tell Dory that once the migration of accounting's site is done, it completely replaces the 2003 version, and although all her data should also be safely migrated, if it isn't, the data files can still be recovered from the backup.
  - **B.** You tell Dory that once the migration of accounting's site is done, it completely replaces the 2003 version; you also tell her that you have backed up all of the original content data-

bases for the 2003 sites, and the original accounting site can be restored from the database backup if necessary.

- **C.** You tell Dory that the 2003 version of accounting's site can still be accessed using the original URL and that all of the upgraded sites use new URLs that are to be provided to all SharePoint users as sites are upgraded.
- **D.** You tell Dory that the 2003 version of accounting's site can still be accessed using a temporary URL that you can provide her with if necessary.
- **15.** You are the SharePoint administrator for your company. You have successfully completed an inplace upgrade migration process from SharePoint 2003 to SharePoint 2007 in a test environment and are ready to perform a gradual upgrade migration in your production environment. You insert the SharePoint 2007 installation disc and launch the Setup.exe file. You progress through the required steps and notice that the process of performing the initial parts of the gradual upgrade seem quite similar to the in-place upgrade. Between launching Setup.exe and Share-Point Products and Technologies, what differences do you notice? (Choose all that apply.)
  - **A.** On the Upgrade tab, you notice you have to select Yes, Perform a Gradual Upgrade.
  - B. On the Server tab, you notice that you must select Complete Install All Components.
  - **C.** On the File Location tab, you notice that you are offered the option to browse to a different directory from the default for the installation files.
  - **D.** On the Authentication tab, you notice you are offered the option of selecting Kerberos or NTLM.
- 16. You are the SharePoint administrator for your company. You have successfully completed an in-place upgrade migration process from SharePoint 2003 to SharePoint 2007 in a test environment and are ready to perform a gradual upgrade migration in your production environment. You have finished the initial installation phase of the upgrade and have moved on to the upgrade of a web application. You plan to select the SharePoint 80 web application that hosts your SharePoint site collections. Where must this action be performed?
  - **A.** In Central Administration on the home page
  - B. In Central Administration on the Operations tab
  - **C.** In Central Administration on the Application Management tab
  - **D**. On the home page for the default shared services provider
- 17. You are the SharePoint administrator for your company. You have successfully completed an in-place upgrade migration process from SharePoint 2003 to SharePoint 2007 in a test environment and are ready to perform a gradual upgrade migration in your production environment. You have finished the initial installation phase of the upgrade and have moved on to the upgrade of a web application. You plan to upgrade the SharePoint 80 web application that hosts your SharePoint site collections. During the upgrade, you must identify more than one database to update. Of the following choices, which are valid database types you must address in the web application upgrade process? (Choose all that apply.)
  - **A.** Content database
  - B. SQL database
  - C. Search database
  - D. SSP database

- 18. You are the SharePoint administrator for your company. You have successfully completed an inplace upgrade migration process from SharePoint 2003 to SharePoint 2007 in a test environment and are ready to perform a gradual upgrade migration in your production environment. You are at the part of the process where you must begin selecting site collections to upgrade. What is the first site collection that you must select, even if you select others to be upgraded at the same time?
  - **A.** The root site collection
  - **B.** The MySite site collection
  - **C.** The first web application site collection
  - **D.** The child portal site collection
- 19. You are the SharePoint administrator for your company. You have successfully completed an inplace upgrade migration process from SharePoint 2003 to SharePoint 2007 in a test environment and are ready to perform a gradual upgrade migration in your production environment. You are currently upgrading shared services using a gradual upgrade by upgrading the parent portal first method. You are about to upgrade the team sites and find that it is necessary to not just select these sites for upgrade but to perform all of the initial upgrade steps starting with relaunching Setup.exe and upgrading a web application. What circumstance required this?
  - **A.** The team sites are hosted under a child portal.
  - **B.** The team sites are hosted in MySites.
  - **C.** The team sites use a separate server farm.
  - **D.** The team sites use a separate personal site host.
- **20.** You are the SharePoint administrator for your company. You have successfully completed an in-place upgrade migration process from SharePoint 2003 to SharePoint 2007 in a test environment and are ready to perform a gradual upgrade migration in your production environment. You are currently upgrading a web application and are at the part of the process where you need to select an application pool. You decide to select Create a New Application Pool. Of the following options, which ones are valid selections as next steps? (Choose all that apply.)
  - A. You can select Predefined and use the drop-down menu to select a security account.
  - **B.** You can select Configurable and use the drop-down menu to select a security account.
  - **C.** You can select Configurable and use the available fields to input a username and password for a security account.
  - D. You can select Predefined and use the available fields to input a username and password for a security account.

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## Answers to Review Questions

- B, C, and D. CMS 2002 manages the features described in options B, C, and D. Option A is 1. incorrect.
- 2. B, C, and D. All versions of Windows Server 2003 SP1 will support the migration including Standard Edition, Enterprise Edition, Datacenter Edition, and Web Edition. No version of Windows Server 2000 will support migration.
- 3. D. Option D displays the correct path to find the necessary files. The other options are bogus.
- B. Although it is technically feasible to perform an in-place upgrade on a small SharePoint 4. 2003 deployment, Microsoft recommends using this method only in a test environment.
- B and D. Option A is false and option B is correct because both SharePoint 2003 and Share-5. Point 2007 installations coexist throughout the entire lifetime of the gradual upgrade process. Option C is false and option D is correct because upgraded sites take over the original URLs used by their 2003 versions and user requests are automatically redirected to the upgraded content. The 2003 versions continue to exist and can be accessed by temporary URLs that you must configure.
- B, C, and D. Option A is incorrect because OWC uses ActiveX controls to provide charts, data 6. source control, and PivotTables. OWC does not provide ActiveX controls as a service or feature.
- A. You can extract the necessary CAB files from C:\Program Files\Common Files\Microsoft 7. Shared\Web Server Extensions\60\wppacks on SharePoint 2003 and install those files in SharePoint 2007 to continue to use the required OWC components after the upgrade. You do not need to add that path to 2007, so option B is false. Option C is false because it does not reference the correct stsadm.exe command to add the CAB files to 2007, and option D is false because although OWC is not supported, you can still use OWC in 2007. Only option A is correct.
- 8 A and C. The only two valid methods of performing the shared services upgrade are those described in options A and C. Options B and D are bogus.
- 9. A, B, and D. Option C is not a required basic step in this process because the MySites upgrade can be included at any point in the gradual upgrade process that involves upgrading child portals first. The correct basic steps are creating a new SharePoint Server 2007 environment, upgrading the personal site host and personal sites in SharePoint Portal Server 2003 and attaching them to the new shared services provider, and upgrading child portals and attaching them to the new shared services provider.
- **10.** B. You can run the scan either before starting the upgrade or just before running the Share-Point Products and Technologies Configuration Wizard. Option A is incorrect because it doesn't include both options. Options C and D are bogus.
- 11. A and C. The pages described in options A and C will be encountered in a large enterpriselevel upgrade migration that will require a server farm and external database server. Options B and D are bogus.

- **12.** B, C, and D. Option A is bogus since you already determined an authentication method before you got to this point in the upgrade process. All other options represent dialog boxes you will encounter and the correct responses.
- **13.** B. You must create alternate domain URLs for each of the 2003 sites. During the migration process, you will be asked to input a temporary URL for each site being upgraded because the existing URL for the site will be "taken over" by the 2007 upgrade site. Options A, C, and D are bogus.
- **14.** D. Even after a site is upgraded, it still exists and can be accessed using a temporary URL you configure for the site during the upgrade. The temporary URLs and the older sites can be deleted after all the sites have been upgraded to SharePoint 2007 and tested to make sure they are working properly.
- **15.** A. Of the selections presented, only option A is different from the options you are offered in an in-place upgrade. Options B and C are offered in both methods, and option D is a bogus option since there is no Authentication tab and authentication is offered on a different page of the upgrade wizard.
- **16.** B. The wizard that takes you through the process of upgrading a web application begins on the Operations tab of the Central Administration web application. All the other options are bogus.
- **17.** A, C, and D. You must specify names for the content, search, and SSP databases during the web application upgrade. The option for the SQL database is bogus.
- **18.** A. You must select the root site collection to be upgraded first, even if you select other site collections beneath the root to be upgraded at the same time. The other options are bogus.
- **19.** C. You should have to go through these additional steps only if you have your team sites hosted on a separate server farm than the other sites. This is done only when you are administering an unusually large number of team sites. Both the parent portal and all child portals will likely contain team sites, so option A is false. Team sites aren't hosted under MySites, so option B is false. The personal site host is usually also the parent portal site, so option D is false.
- 20. A and C. A and C are the only two valid options. Options B and D are bogus.