

# 1

## What's New in SharePoint 2013

### WHAT'S IN THIS CHAPTER?

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- The installation process
- Changes to service applications
- Introduction to Apps

If you feel like you only just got your head wrapped around all the improvements and new features that SharePoint 2010 offered, you may also be feeling a bit dismayed by the appearance of SharePoint 2013. When will the madness end? Clearly, SharePoint 2010 was a huge leap forward from SharePoint 2007 — its improvements and enhancements were massive. It introduced us to the service application infrastructure that was a much needed improvement to the SSP model that SharePoint 2007 used. It was a great time to be in the SharePoint business. At this point, you are probably all cozy and comfortable with your SharePoint 2010 farms. You have them built and humming along just the way you want and now Microsoft has released SharePoint 2013!

Don't worry; it's still a great time to be a SharePoint administrator. SharePoint 2013 is new and improved, but it's nothing you can't handle, especially with this trusty book by your side. This chapter provides a brief overview of some of the more exciting new features of SharePoint 2013, and what has changed since SharePoint 2010. It is meant to pique your interest in the SharePoint 2013 journey that lies ahead of you, both as you explore this book and as you work with SharePoint in real-world scenarios. Each abbreviated description includes a reference to the chapter in which you can get the full scoop. Of course, you'll want to read this delightful tome from cover to cover, certainly before the movie comes out, but this chapter enables you to jump ahead to the juicy parts.

## INSTALLATION CHANGES

Familiarizing yourself with SharePoint 2013 might seem daunting, but you'll be pleased to hear that the installation process is not radically changed from the SharePoint 2010 installation process. If you can install SharePoint 2010, with a little effort and a small amount of stumbling, you can install SharePoint 2013, too. The following sections break it down, hitting the main points.

## System Requirements

SharePoint 2013 is a little more demanding than SharePoint 2010 when it comes to hardware requirements. Gone are the days of squeezing by on 8GB of RAM and a measly 80GB C: drive. SharePoint 2013 does big things, and it needs big iron to do them. For a production SharePoint Server 2013 box, you need at a minimum 12GB of RAM and four 64-bit cores. In truth, you can still get by with that 80GB C: drive. If you want to run everything on a development or evaluation box, you'll need to crank that RAM up to 24GB in order to handle SharePoint and SQL Server. Keep in mind that these values are minimums. The Windows 8 minimum RAM requirement is a miniscule 1GB, but no one would seriously consider running it in production that way. A Windows 8 box with 1GB of RAM is how an IT department would punish users who pester them too much. Don't punish your users by running your SharePoint servers on the minimum requirements either. They remember that kind of stuff when they're buying holiday gifts.

SharePoint 2013's software requirements are very reasonable. It requires a database back end that's running 64-bit SQL Server that's either SQL Server 2008 R2 with Service Pack 1 or SQL Server 2012. If you want to use some of the advanced business intelligence (BI) features or the new Access Services service application of SharePoint 2013, you'll need Service Pack 1 on SQL Server 2012. SharePoint itself must be installed on a server running Windows Server 2008 R2 Service Pack 1 or Windows Server 2012. It does a good job of bridging the old and the new both with SQL Server and Windows.

## The Installation Process

As shown in the setup dialog in Figure 1-1, the SharePoint 2013 installation process looks nearly identical to that of SharePoint 2010.

In addition to Windows Server and SQL Server, SharePoint 2013 requires a few other software pieces, but most of them are installed with the Prerequisite Installer, another similarity to SharePoint 2010. The SharePoint 2013 splash screen is nearly identical to its older sibling, which is a good thing. The links are the same; only the background has been updated to match the new color scheme. The links take you to documentation you should read before installation (but after this book, of course), as well as links to the Prerequisite Installer and the SharePoint installer. It's your one-stop shop to get started with SharePoint 2013. Chapter 3 is the authoritative chapter on it. Well, at least the most authoritative chapter in this book.



FIGURE 1-1

## Upgrading from SharePoint 2010

Any successful upgrade begins with plenty of researching and planning. That hasn't changed when upgrading to SharePoint 2013. As with each successive version of SharePoint, the upgrade story has gotten better. In SharePoint 2013 in general, the focus is on site collection owners, and upgrade is part of this focus. SharePoint 2013 enables site collection owners to decide when their site collection is upgraded, and when they would like an eval of how it will look when it's upgraded. Site collection owners can also test their site collections to see how well they will upgrade, and see the actual upgrade logs for their site collection when the upgrade is performed. Lazy SharePoint administrators world 'round are cheering at the thought of this. Because site collections aren't actually upgraded when SharePoint 2010 databases are attached to a SharePoint 2013 server, those database attaches go very quickly. This means less downtime for users when the upgrade happens, and less time that administrators need to spend working nights and weekends. The only real losers here are those pizza delivery folks who fuel late-night IT workers.

The “bad” news in SharePoint 2013 isn't really that bad. Consider it “less good” news. Upgrading from SharePoint 2003 to SharePoint 2007 provided three options: side-by-side (also known as gradual) upgrade, in-place upgrade, and database-attach upgrade. Upgrading from SharePoint 2007 to SharePoint 2010 eliminated the gradual option, leaving only in-place upgrades and database-attach upgrades. SharePoint 2013 has voted another upgrade method off the island. This version's upgrade victim was in-place upgrade. In other words, the only way to upgrade SharePoint 2010 content to SharePoint 2013 is to attach your SharePoint 2010 databases to a SharePoint 2013 farm. This will work with content databases and many service application databases. If it sounds confusing and maybe a little scary, don't worry — it's all demystified in Chapter 5, “Upgrading to SharePoint 2013.” After reading it, or maybe even just thumbing through and looking at the figures, you'll be well prepared to upgrade even the fussiest of SharePoint 2010 farms to SharePoint 2013 with ease.

## Patching

You can't talk about upgrading without mentioning patching. Whereas an upgrade is considered a *version-to-version*, or V2V, upgrade, patching is considered a *build-to-build*, or B2B, upgrade. Although upgrading and patching might seem like different activities, the plumbing in the background is the same.

There are three types of patches for SharePoint 2013: service packs (SPs), cumulative updates (CUs), and hotfixes. Service packs aren't on a set schedule, and are typically released every 18 to 24 months, whenever they're good and ready. They fix all the bugs that have been identified since the last service pack or RTM. They're thoroughly tested, and in some situations not only fix bugs, but introduce new functionality. Service Pack 1 for SharePoint 2010 introduced some new features, such as sending deleted webs to the Recycle Bin. When a service pack is released, it should be introduced into your test environment sooner rather than later; and it should be made part of production as soon as possible, as service packs can dramatically affect performance and security.

CUs are released on schedule — roughly at the end of every even-numbered month. Each CU contains all the bug fixes of the previous CU, plus whatever has been fixed in the last couple of months. CUs are tested but not as thoroughly as service packs. The general recommendation is to install a CU only if it fixes a problem that your farm is experiencing. Several CUs for SharePoint 2010 broke things, and some were so troublesome that Microsoft removed them until they worked properly. Don't let your

farm be the one that identifies a problem CU. If a CU does provide a fix for a problem your farm is having, be sure to test it in your test environment first, and wait a few weeks before unleashing it on production. Patches cannot be uninstalled, so if a CU has a regression (something that used to work but is broken by the patch), you're stuck with it until the next CU is released. In short, be careful with CUs. They aren't as dangerous as playing with fire, but they're close.

The last type of patch is the hotfix, or security patch. These little devils usually sneak on to your SharePoint server undetected through Windows Update. Hotfix patches are released to address urgent security issues in SharePoint. Therefore, it is very important to get them onto your servers, although they tend to be the least tested of all the patches because of the need to release them quickly. In most cases you have to bite the bullet and install them. When you do, don't forget to run the Configuration Wizard afterward to complete the installation. It also wouldn't hurt to give the nearest homeless person a couple of bucks for breakfast. Every bit of good karma helps.

## CENTRAL ADMINISTRATION

The Central Administration site is like home base for SharePoint administrators. No matter how bad your day is, or how badly broken SharePoint is, if you can get to Central Administration, often called just Central Admin, there's hope. Central Admin, shown in Figure 1-2, is one of the first dialogs you see after installing SharePoint; and as we all know, you only get one chance to make a first impression. As you can tell from the numerous links, Central Admin provides easy access to every aspect of SharePoint's behavior. Central Admin in SharePoint 2013 bears a very striking resemblance to Central Admin in SharePoint 2010. They look so much alike, in fact, that SharePoint 2013's Central Admin could probably use SharePoint 2010's Central Admin's ID to get into bars if it had to.

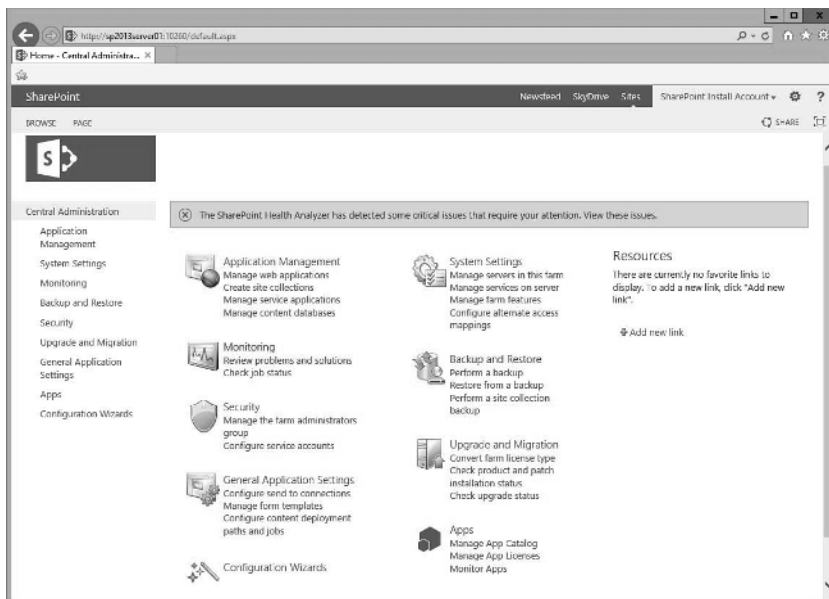


FIGURE 1-2

There are some differences, however, the main ones being the branding and layout changes that are universal to SharePoint 2013. These include the flat look and the location of the Site Settings gear, which is cleverly hidden in the top-right corner of the page, directly under the Internet Explorer settings gear. With one exception, the links on the home page of SharePoint 2013's Central Admin are identical to the links in SharePoint 2010, right down to the red bar across the top alerting you that your farm has critical errors. If you could find it in Central Admin in SharePoint 2010, you can find it in SharePoint 2013.

The aforementioned exception, which you may have noticed, is the newly added Apps link in the left-hand navigation. Apps are new to SharePoint 2013, so no link was needed for them in the SharePoint 2010. Other than that, all those Central Admin navigating skills you honed in SharePoint 2010 transfer directly over to SharePoint 2013. Want to create a new site collection? It's still available by selecting Application Management ⇨ Create Site Collections. Want to set up incoming e-mail? You can still find it using System Settings ⇨ Configure incoming e-mail settings. Administrators of SharePoint 2013 will be glad to find that Central Administration retains its familiar style of being wide rather than deep. Everything you need is typically two or three clicks away.

## SERVICE APPLICATIONS

SharePoint has always been both show pony and workhorse. It's pretty, and it's easy to use, but it also works hard behind the scenes to ensure that all the functionality you're looking for is available. In recent versions of SharePoint, much of that functionality has been powered by service applications. This section spends some time looking at service applications in SharePoint 2013, and how they evolved into their current form.

In SharePoint 2003 the architectures were very rigid, and were based around machine types. As your farm grew, you needed to follow specific configurations in order to scale components such as search and your job server. If having servers in those specific roles didn't work for your situation, you were out of luck. Those restrictions were relaxed with the release of SharePoint 2007, which introduced the concept of a shared service provider (SSP). Although the servers and services in the SSP were rigid, the server roles were not. It was possible to add another Search Query server, or an Excel Calculation server, whatever you needed; there were limits, but it was more flexible. However, there was still room for improvement. You couldn't consume services from more than one SSP in a single web application, and the SSP was provided as one solid block of functionality. If you wanted a second Business Data Connection Service, you could only get that by creating a second SSP, which gave you a second Search instance, a second User Profile service, and so on — better than SharePoint 2003, but not quite ideal.

SharePoint 2010 finally fixed most of these issues. You no longer have to fight with a monolithic SSP; instead you have flexible, friendly service applications. If you want a second Business Connectivity Service, you just create one; there is no need to create another entire SSP. In addition, you can mix and match web applications and service applications in any way imaginable. If you feel you are lacking in imagination, see Chapter 2, "Architecture and Capacity Planning."

SharePoint 2013 carries on in the same tradition. The service application architecture hasn't changed, as shown in the Manage Service Applications dialog in Figure 1-3. At a glance, it could be easily mistaken for its counterpart in SharePoint 2010 Central Administration.

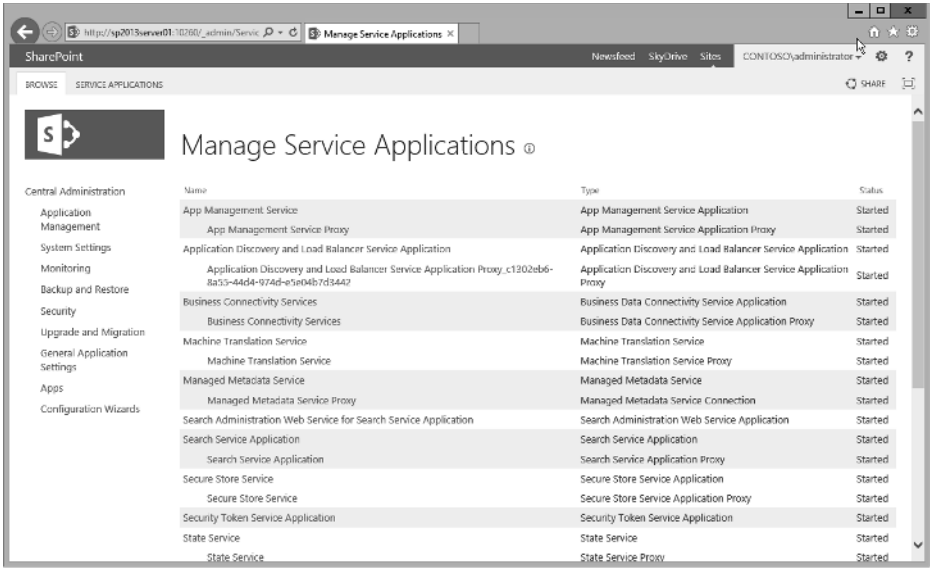


FIGURE 1-3

There are some new faces, however. Here is a list of the new service applications in SharePoint 2013:

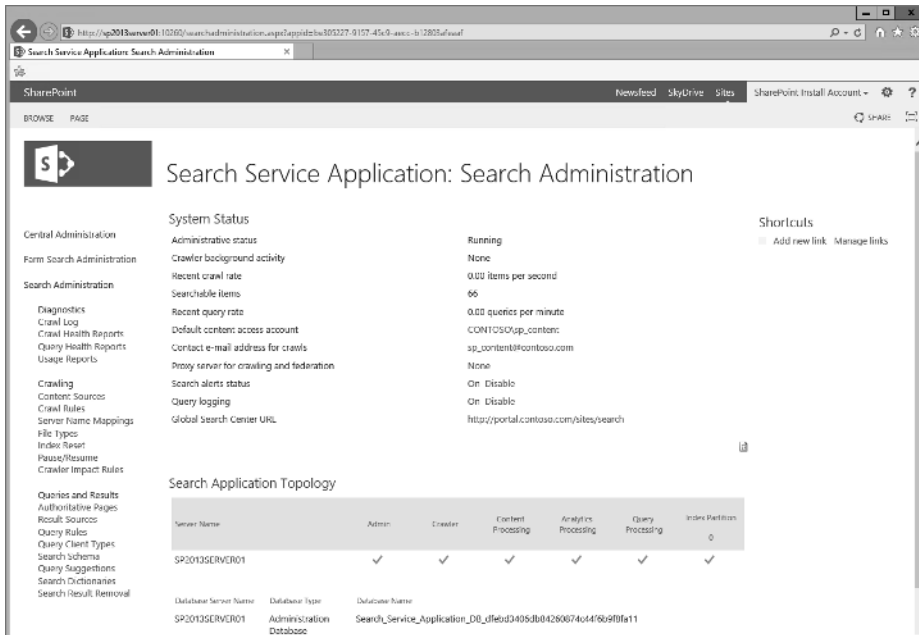
- Access Services
- App Management
- Machine Translation
- Work Management
- PowerPoint Conversion

For those of you who are thinking that Access Services existed in SharePoint 2010, that's true. However, the Access Services in SharePoint 2013 bears little resemblance to its SharePoint 2010 counterpart. In fact, the SharePoint 2010 version lives on in SharePoint 2013 as Access Services 2010. For more detailed information, see Chapter 4, "Understanding Service Applications," which explains each of the new service applications and the functionality they provide.

The Search service application in particular has received some improvements in SharePoint 2013, rebuilt to be better and stronger. Shortly before SharePoint 2010 was released, Microsoft bought a search company called FAST. The purchase didn't happen soon enough for FAST to be properly integrated in SharePoint 2010; but in order to take advantage of the FAST Server product, Microsoft awkwardly bolted it on to SharePoint 2010 — the equivalent of strapping a jet engine on top of a Toyota Corolla. It was a kludged solution at best.

In SharePoint 2013, Microsoft rebuilt the SharePoint Search service application and properly integrated FAST technology into it. They also consolidated Search so it is the same service app, with different levels of functionality, regardless of whether you're running SharePoint Foundation or SharePoint Server. The interface in Central Admin is roughly the same, so if you're comfortable

with it in SharePoint 2010 you'll feel right at home in SharePoint 2013. Figure 1-4 shows the new SharePoint 2013 Search Administration interface. There are additional links for the new functionality that was added, but for the most part you configure it the same way.



**FIGURE 1-4**

Under the hood, however, Search is a completely different beast. It's still based on roles, like Search of the past, but now each role is more clearly defined, manifesting itself as a `noderunner.exe` process on your SharePoint boxes. Here is a list of the six search components and what they do:

- **Index** — Stores and replicates portions of the search index
- **Query Processing** — Responds to user search queries and provides results
- **Search Administration** — The Search ringleader, this component controls the other components. There can be only one Search Administration component per Search service application.
- **Crawl** — Crawls the content sources and passes on their contents to the Content Processing components
- **Content Processing** — Processes the documents retrieved from the Crawl component and writes the results to the Index component
- **Analytics** — Creates usage analytics and search analytic reports



Most of these are old familiar friends, but new to the list is the Analytics component. If you think of the usage logs as content sources, and the usage reports as queries against that source, you can see how it works together. The new features have introduced some complexity. For instance, changing the Search topology can no longer be done in the comfort of Central Admin. That's now a task that only PowerShell can accomplish. Search is a powerful capability, which is why it has been given its own chapter. For more information, see Chapter 13, "Configuring and Managing Enterprise Search."

The Managed Metadata and User Profile service applications have also received some minor improvements in SharePoint 2013. Managed Metadata was expanded to include support for custom navigation. This capability enables you to design and store complex global navigation structures in the Managed Metadata service application. These navigation structures are stored like regular metadata, making it easier to work with them. Not to be outdone, the User Profile service application now supports quicker synchronization with Active Directory. Microsoft has added back the Active Directory Import connection that was used in SharePoint 2007. It's just read-only, but it's faster than the FIM-based profile synchronization of SharePoint 2010, and it supports LDAP filters, as SharePoint 2007 did. This is great news for smaller shops that aren't ready to take advantage of all the functionality offered by the User Profile service. What is all the functionality, you ask? Chapter 14, "Configuring User Profiles and Social Computing," explains all the wonders of this service, and how you can best take advantage of it in your environment.

At this point, you've looked at both the new service applications and the changes made to existing service applications. One last service application to note is one that has gone away — sort of. In SharePoint 2010, you needed to install the Office Web Apps (OWAs) on your SharePoint servers and expose them as service applications. In SharePoint 2013, the OWAs are now their own product, and they must be installed on their own, non-SharePoint server. Although many SharePoint users have reacted to this change with dismay, the news isn't all bad. The OWAs have increased functionality, even in SharePoint. They can give you document previews right in your document libraries, for instance. You can also use the OWAs to render Office documents in Outlook Anywhere in Exchange 2013. Chapter 15, "The Office Web Applications for SharePoint," covers installation and configuration of the OWAs.

## CLAIMS AND AUTHENTICATION

One of the more significant changes in SharePoint 2013 is the emphasis on claims-based authentication (CBA). CBA was first introduced in SharePoint 2010; and to say it was a little rough around the edges would be generous. Even as a version 1.0 product, Microsoft recommended using CBA as the default authentication method for all web applications. In practice, though, very few SharePoint administrators jumped on the CBA bandwagon, unless they needed it for forms-based authentication or they just enjoyed pain. Change is tough, and classic-mode authentication worked fine in almost all situations. On top of that, many things didn't work with CBA. The combination of CBA's complexity and its incompatibility issues were a one-two punch against its adoption.

Despite its faults, CBA is important. It is the cornerstone of federated authentication in SharePoint, and in SharePoint 2013 Microsoft has upped the ante. CBA is no longer just recommended, it's the default authentication provider for SharePoint. When a new web application is created in Central



Administration, classic-mode authentication is no longer even an option. Figure 1-5 shows the Create New Web Application dialog. Note that the option to choose between classic or claims-based is gone. You can use any authentication type you want as long as it's claims-based. However, classic-mode authentication, while discouraged, is still available using PowerShell cmdlets.

**Create New Web Application**

Warning: this page is not encrypted for secure communication. User names, passwords, and any other information will be sent in clear text. For more information, contact your administrator.

OK Cancel

**IIS Web Site**

Choose between using an existing IIS web site or create a new one to serve the Microsoft SharePoint Foundation application.

If you select an existing IIS web site, that web site must exist on all servers in the farm and have the same name, or this action will not succeed.

If you opt to create a new IIS web site, it will be automatically created on all servers in the farm. If an IIS setting that you wish to change is not shown here, you can use this option to create the basic site, then update it using the standard IIS tools.

☐ Use an existing IIS web site  
Default Web Site

☒ Create a new IIS web site

Name  
SharePoint - shanestinks.toddklindt.com80

Port  
80

Host Header  
shanestinks.toddklindt.com

Path  
C:\inetpub\wwwroot\wss\VirtualDirectories\sh

**Security Configuration**

If you choose to use Secure Sockets Layer (SSL), you must add the certificate on each server using the IIS administration tools. Until this is done, the web application will be inaccessible from this IIS web site.

Allow Anonymous

☐ Yes  
☒ No

Use Secure Sockets Layer (SSL)

☐ Yes  
☒ No

**Claims Authentication Types**

Choose the type of authentication you want to use for this zone.

☒ Enable Windows Authentication

☒ Integrated Windows authentication  
NTLM

**FIGURE 1-5**

The extra complexity of claims-based authentication is offset by several benefits. For one thing, SharePoint can now easily use non-Active Directory authentication stores. Or perhaps you want to give users logins for SharePoint but not add them to your corporate Active Directory. No problem, CBA can do that. Your users can use any authentication store that supports Security Assertions Markup Language (SAML) claims. Examples of this include Microsoft's Live ID and OAuth, which is used by Google and Facebook. This flexibility enables you to give users access to SharePoint without you having to manage their accounts, and without them having to remember yet another username and password. You can also feel safer using CBA with SharePoint 2013, as most of the

problems SharePoint 2010 had with it have been resolved. Chapter 6, “Claims Identity Management and Security,” explains in detail how CBA works, and demonstrates how you can get the most out of it. Claims-based authentication can be daunting, but don’t let that stop you from digging in and getting comfortable with it.

## MANAGING SHAREPOINT 2013 WITH WINDOWS POWERSHELL

Another thing that Microsoft got right in SharePoint 2010 was moving to PowerShell for the command-line administration tool — a move not immediately appreciated by SharePoint administrators. PowerShell’s learning curve is steep. With all its objects, methods, and properties, PowerShell is more than most administrators are used to working with, and if you’re not careful, you end up looking like a developer when you’re using it. Nobody likes that, not even developers. That said, most administrators familiar with PowerShell would agree that it is a great tool, even if it’s a bit unwieldy and unforgiving at times.

SharePoint 2013’s command-line interface continues to be PowerShell, though now it is based on PowerShell v3. There aren’t a lot of radical changes to PowerShell in v3, but there are a few improvements, which SharePoint 2013 leverages. For instance, PowerShell has an improved integrated scripting environment (ISE) that is much improved over its v2 version; it’s actually usable! PowerShell v3 also includes PowerShell Web Access, which provides a way to execute PowerShell commands in a web browser. Also included is a bevy of commands and syntax improvements that SharePoint administrators can take advantage of.

As SharePoint matures, each new release increases the number of tasks that can be performed from the command line. Following a SharePoint Server installation, you can find more than 770 cmdlets in the SharePoint Management Console, which includes nearly 300 new cmdlets for SharePoint 2013. Chapter 7, “Administering SharePoint 2013 with PowerShell,” shows you all the magical things you can do from the command line using PowerShell.

## SHAREPOINT APPS

Probably the most significant change in SharePoint 2013 is the addition of SharePoint apps. Brand-new to SharePoint 2013, apps provide another way to add functionality to your SharePoint farm. They are intended to extend, not to replace, the existing ways of adding functionality — farm (full-trust) solutions and sandbox solutions — which still work fine but have not been sufficient in some situations. SharePoint 2013 apps were added to address those needs.

Farm solutions have existed since SharePoint 2007. They require someone with farm administrative rights to log onto one of the SharePoint servers and add the solution to the farm. Then they must deploy to the farm or a web application. This method gives developers the most flexibility, but it poses the most challenges for administrators; and there are security and stability concerns because the code is running on the SharePoint servers themselves, and could potentially have full access to the server, depending on how well the security options are locked down.

To address some of these liabilities, sandbox solutions were introduced in SharePoint 2010. Instead of requiring farm administrators to load them, sandbox solutions can be uploaded and activated by site collection administrators. In addition, farm administrators can control the resources a sandbox solution can consume, as well as which SharePoint server consumes them. This has brought us closer to administration nirvana, but not close enough. The sandbox worked almost too well. Developers complained that it was too restrictive, and the throttling would sometimes disable solutions that weren't impacting server performance. It was a step in the right direction, but there was room for improvement. Enter SharePoint 2013...

SharePoint apps address the concerns administrators had with the methods previously available to extend SharePoint functionality. With SharePoint apps, the apps can run on SharePoint, another server entirely, or even in the client browser. If the code isn't running on the SharePoint servers, it is much tougher for it to bring down a server by consuming resources. It also makes it tougher for the code to create any security problems, or exploit any that might already exist. All this increased stability and security does come with a small price, in the form of a complex setup, but once the App Management and Subscription settings service applications are created and configured, it's smooth sailing.

As administrators, we aren't the only ones who benefit from the new app model. Developers stand to gain a lot from it, too. In addition to reducing the number of times innocent developers are blamed for taking down SharePoint servers, there is another benefit: money. The new app model also includes a public SharePoint App Market where developers can publish and sell their apps to users who want to add them to their farms. Their apps can also be sold on Office365. Although we probably won't see a lot of developers quitting their day jobs and buying big houses in the Caribbean from the proceeds, it should be worth their time — and it increases the number of apps to which the rest of us will have access. Everybody wins!

Chapter 10, “Managing SharePoint Developer Solutions and Features,” and Chapter 11, “Managing Apps and the New App Model,” cover different aspects of this new feature. They include how to configure SharePoint to use the app model, and how to write apps for it. There's something for everyone.

## WORKFLOW MANAGER

Workflows have been in SharePoint since the 2007 release, and they have proven to be a capable and popular feature for modeling business processes. Out of the box, SharePoint 2013 supports all workflow functionality that existed in SharePoint 2010. This means that the workflows in content databases you upgrade from SharePoint 2010 will function without any extra work afterward. However, if you have SharePoint Server, with a little extra work, you can take workflows up another notch. Heck, another two notches! Sorry SharePoint Foundation users, the Workflow Manager requires SharePoint Server.

While SharePoint 2013 natively supports SharePoint 2010 workflow, there are two additional workflow options: SharePoint 2013 workflows and Project Server 2013 workflows. The SharePoint 2013 workflows are available after you install the SharePoint 2013 Workflow Manager, which is an additional download. The Workflow Manager doesn't need to be installed on a SharePoint server, and for performance reasons it probably shouldn't be. After you have successfully installed

the Workflow Manager, you're only one carefully crafted PowerShell cmdlet away from being able to use the SharePoint 2013 workflows. If you install Project Server 2013, you'll obtain even more workflow options.

After installing the SharePoint 2010 Workflow Manager, and optionally Project Server 2013, you can open SharePoint Designer 2013 and enjoy your handiwork. If all the components are installed and configured correctly, when you create a new workflow, you'll see a drop-down with three workflow platforms. The fun doesn't end there; you can also use the new workflow functionality in Visual Studio, if you're a developer type.

What does all that effort buy you? SharePoint 2013 adds some useful enhancements to SharePoint Designer. You'll be able to use Visio 2013 to develop workflows, and you'll be able to easily create and start SharePoint tasks with workflows. Significant improvements have also been made in scaling workflows and making them work better in highly dense or multi-tenant environments. We could go on and on, but Chapter 16, "Installing and Configuring Azure Workflow Server," explains it all in detail. If this section has whet your appetite to learn more about what's new with workflow, that's the place to satisfy your curiosity.

## NEW USER EXPERIENCE

One of the first things you notice after installing SharePoint 2013 and Central Admin pops up is that it looks different — not radically different, but different nonetheless. And while it will take some getting used to (for those of you used to the old color scheme), the new interface has a lot to offer, addressing two of the most common issues raised by SharePoint 2010 users: "Why is it so slow?" and "How can we make SharePoint not look like SharePoint?" The following sections describe how SharePoint 2013 has resolved those burning questions.

### Faster

One of the goals of the new user experience (UX) was to make it faster. No one likes to wait for web pages to load. If a web page, any web page, takes more than a couple of seconds to load, our impatient little brains are distracted by something shiny and we lose interest. SharePoint has a lot going on in the background — many components have to come together in order to render a page. In the past, SharePoint hasn't been the most efficient in its page load size, and it wasn't afraid of a postback or two. That resulted in some slow page loads, sometimes many of them.

SharePoint 2013 has made great strides in speeding up page loads. New to SharePoint 2013 is the Minimal Download Strategy (MDS), which takes advantage of the fact that most SharePoint pages have a lot in common, so it's inefficient to download redundant material every time you load a new page. As you move between pages that have MDS enabled, SharePoint sends the browser only the changes that occur in the content areas of the page. The parts in common, such as the global navigation and the branding, are reused. The MDS is enabled by default, but it can be disabled. It doesn't work well with some page types, such as publishing sites, so disabling it on them will improve performance. After you read Chapter 12, "Branding SharePoint" and you start making your own master pages, make sure they are designed to take advantage of MDS, too.

If MDS were the only performance improvement in SharePoint 2013 we would still be in great shape, but Microsoft didn't stop there. Also added is a new feature called Distributed Cache service, which caches frequently requested information and makes it quickly available to all the servers in the farm. The Distributed Cache service is used for both read and write operations, so it contributes to fast page loads and fast submissions. This is primarily used to facilitate Search and the new social features of SharePoint 2013, both of which require fast access to vast amounts of information. The Distributed Cache service enables both features to cache this information and get it back to users as quickly as possible. If your farm leverages these features heavily, you can increase the amount of RAM each server allocates to the Distributed Cache service, or dedicate servers entirely to it. Chapter 2, "Architecture and Capacity Planning," provides more guidance about how Distributed Cache service figures into designing your farm's architecture.

## Prettier

As SharePoint administrators, we've all heard the following: "Can we make SharePoint not look like SharePoint?" This has to be tough on SharePoint's self-esteem. Fortunately, thanks to some changes and Design Manager, it is easier than ever to customize SharePoint and make it as non-SharePointy as you want, although SharePoint 2013's out-of-the-box look has been updated from SharePoint 2010, so you might decide it doesn't look so bad after all.

To match Microsoft's UX changes in its other products, SharePoint has adopted the Modern UI, formally known as Metro. It has a flat look and uses the Metro-style boxes we are accustomed to seeing in Windows 8 and Windows Server 2012. Links to help pages and documents, as well as templates in picker screens, now all resemble tiles. These tiles are active, meaning they reveal useful information when users hover the mouse over them. The new look is very clean and crisp. Figure 1-6 shows an example of the Modern UI, in this case the dialog used when creating new lists or libraries.

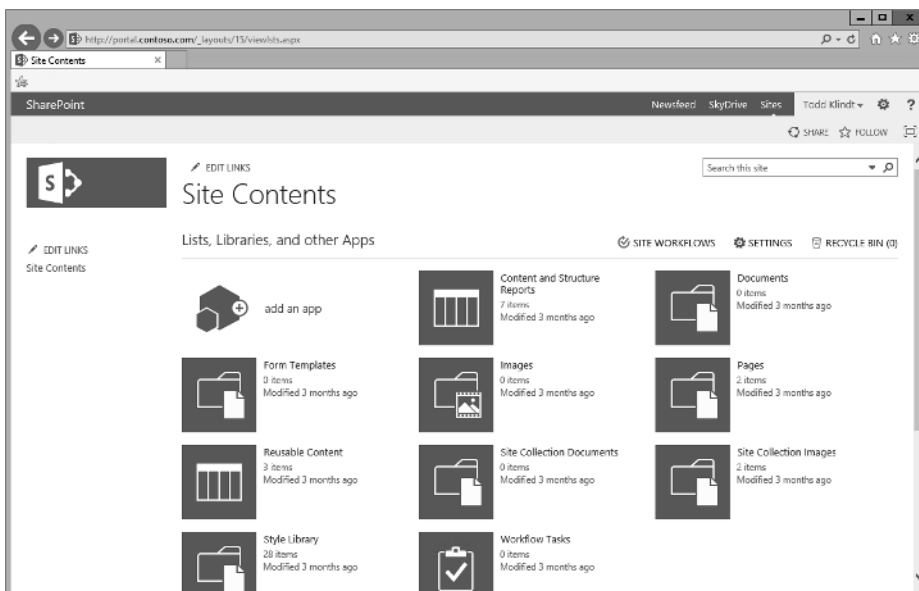


FIGURE 1-6

The content pages in SharePoint have received the majority of the facelift. The settings pages in the `/_layouts` directory haven't been changed too much from SharePoint 2010. Earlier in this chapter it was mentioned that Central Admin hasn't changed. It includes the new branding, but the navigation is identical to SharePoint 2010. Central Admin is prettier, but just as easy to use as before.

To make it easier for admins to gussy up SharePoint, SharePoint 2013 comes with a new feature, the Design Manager. This feature brings SharePoint branding more in-line with the techniques used to brand other types of websites. Designers are no longer forced to use SharePoint Designer to brand SharePoint sites. They can use industry standard tools to create their new designs. With these tools designers can create an HTML file that they will upload to the Design Manager. The Design Manager will walk them through converting it to SharePoint Master pages and other supporting files. Being able to use industry standard tools will open up SharePoint branding to a larger crowd, and hopefully result in more SharePoint sites that don't look like SharePoint.

## GETTING SOCIAL

If the introduction of apps was the biggest change to SharePoint 2013, changes to the social platform have to be a close second — or maybe third, behind Search. Even a quick glance at the new social features makes it obvious that this was one of Microsoft's main areas of focus; and from the looks of it, their effort has provided major dividends for users.

Although SharePoint 2010 had some social features, they didn't come close to what users were accustomed to on the Internet. SharePoint 2010 has been a great collaboration platform, but it always felt lacking because of these missing social features we have all come to expect.

SharePoint is no longer lacking in this area. The enhancements made to the social experience in SharePoint 2013 not only put it on par with what public sites offer, it exceeds them in a lot of cases. Of course, SharePoint does the easy stuff. Much like Facebook, users can post status updates to let coworkers know what they're up to. Are you curious when Jack down the hall is making a trip to the copy room? Well, wonder no more. As with Facebook, users can use the @ sign to mention coworkers, which makes it easy to find out who is talking about you. These status updates can become threads, and you can tag threads with keywords using the hashtag (#). You can follow fellow users and trends, and all this traffic is integrated into Search results. Figure 1-7 shows a sample conversation between two coworkers. SharePoint also supports users posting pictures to their newsfeed, so if you like that picture of someone's dog eating a shoe, go ahead and "like" it, and SharePoint will be all over it. It has even worked the newsfeed into regular SharePoint sites, like team sites. Again, SharePoint can do the easy stuff.

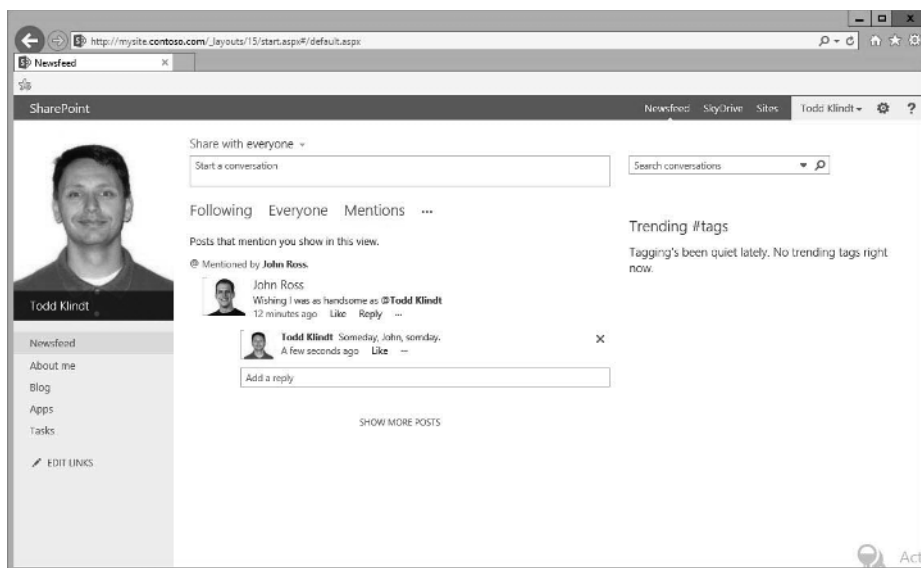


FIGURE 1-7

Now let's take a look at some of the not so easy stuff SharePoint 2013 can do. In addition to following your coworkers, you can also follow individual documents. You can also post comments and create threads about individual documents. These are just a couple of the advanced social features that SharePoint 2013 provides. We're all used to the public social functionality that Internet sites offer, but with access to your Active Directory information and your work documents, SharePoint 2013 takes it up another level: The social features of SharePoint are fully integrated into a user's workflow. Social in SharePoint isn't just fun, it's actually useful! Chapter 14, "Configuring User Profiles and Social Computing," explains how to set up all this social business, and how to configure it to get the most out of it for your organization.

## SUMMARY

This chapter's purpose was to get you whipped into a lather about SharePoint 2013. It covered some of its major improvements, such as the shiny new app model that not only makes SharePoint more stable and secure for administrators, but also gives developers more flexibility (and the opportunity to become independently wealthy and buy a private island by selling SharePoint apps in the public store). This chapter also introduced you to all the big changes made to Search, in terms of both architecture and functionality. You have also seen how SharePoint's social features have been improved and extended in SharePoint 2013, and how your company can leverage them. All the new functionality provided in SharePoint workflows will be a welcome change to companies that heavily use them.



SharePoint 2010 got a lot of things right, so those aspects didn't change much in SharePoint 2013. This chapter covered those as well. The service application infrastructure, for example, hasn't changed much. Neither has using PowerShell to bend SharePoint to your will. If you have a good grasp on them now, you'll feel very comfortable using SharePoint 2013.

Finally, you looked at a few components that received overhauls in SharePoint 2013. Claims-based authentication (CBA) existed in SharePoint 2010, but it wasn't a big player and wasn't taken very seriously. That's all changed in SharePoint 2013. CBA is now front and center — the primary authentication mechanism. Branding also got some welcome improvements that will make your SharePoint 2013 experience both faster and more aesthetically pleasing. The best of both worlds, brains and good looks too.

SharePoint 2013 has a lot to offer and this book covers all the information you need to get the most out of it. It is the culmination of many months of hands-on experience with SharePoint 2013, which included making almost every mistake possible with it. Mistakes can be painful, but they're also usually a good way to learn. As you're reading the book, you are encouraged to follow along in SharePoint 2013 and try things. Sure, you're going to break stuff, but you'll have fun and learn a lot while you're doing it. Keep this book by your side and we'll get you through it.