

# Getting Started with SharePoint Server 2016

**Lab Time:** 20-30 minutes

**Lab Folder:** C:\Student\Modules\01\_GettingStarted\Lab

**Lab Overview:** In this lab you will get up and running with the student VM and begin to experience the new user interface of SharePoint 2016. You will start off by logging into the student VM and copying the student files to a local folder on your VM. Next, you will navigate around inside the Wingtip Intranet site at <https://intranet.wingtip.com>. After that, you will navigate to the SharePoint 2016 Central Administration to review the configuration of the local farm and to create a new site collection. Note that the site collection you create in this lab will be for testing purpose only and will not be used in later labs so you can experiment with creating lists and changing the site's look and feel.

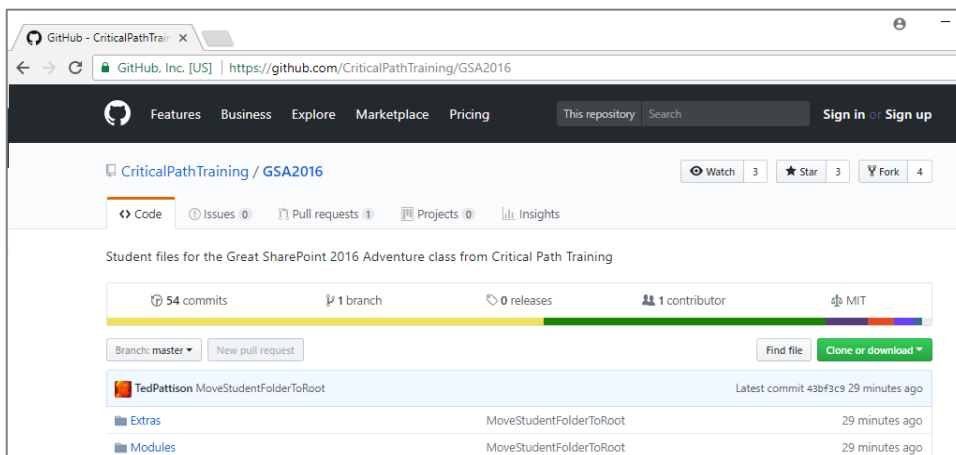
## Exercise 1: Download a Local Copy of the Student Lab Files

In this exercise, you will use the GIT utility to download a local copy of the student files for GSA2016. Note that this exercise assumes that GIT has already been installed on your PC as discussed in the setup guide for this course.

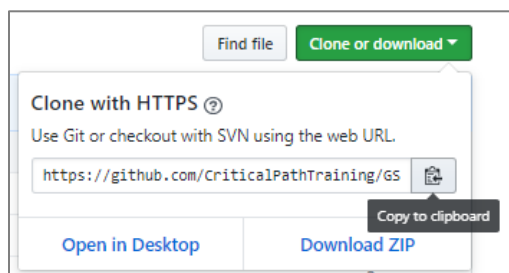
1. Login to the Student VM using the login **WINGTIP\Administrator** and the appropriate password.
  - a) If you're using a local VM provided by the hosting training company, the password will be **Password1**.
  - b) If your student VM is hosted by VisiLearn, the hosting software should automatically log you in as **WINGTIP\Administrator** without you having to type in the password.
  - c) You should now be logged into the student VM.
2. Inside the VM, launch a browser and navigate to the GitHub repository for this course at the following URL.

<https://github.com/CriticalPathTraining/GSA2016>

3. You should see the home page for the repository as shown in the following screenshot.



4. Copy the URL to clone the repository.
  - a) On the home page of the CBD365 repository, click the green **Clone or download** dropdown menu.
  - b) Click the **Copy to clipboard** button to copy the URL for cloning to the Windows clipboard.

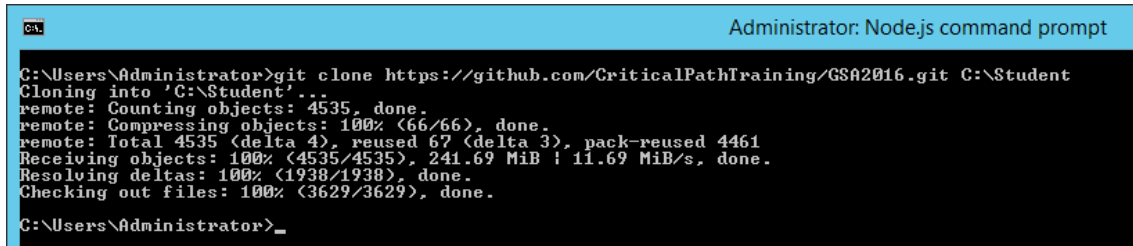


5. Use GIT to clone the GSA2016 repository.

- Open up a Windows PowerShell command prompt.
- Type in and execute the following **git** command to download the student files to a local folder named **C:\Student**. Note that you copied the URL to github.com in the previous step and you can paste it from the Windows clipboard instead of typing it it.

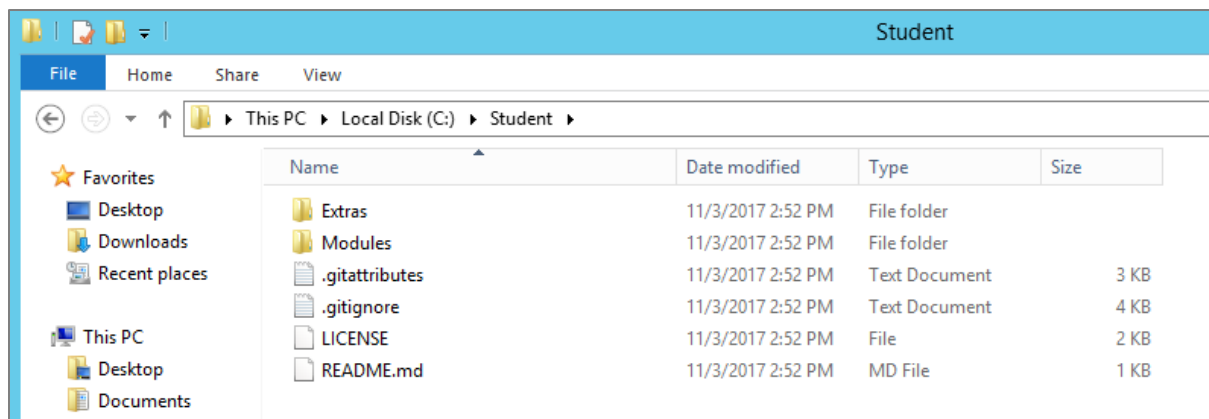
```
git clone https://github.com/CriticalPathTraining/GSA2016.git C:\Student
```

- When the **git clone** command runs, it will create a local copy of the repository on your local machine in the **C:\Student** folder.

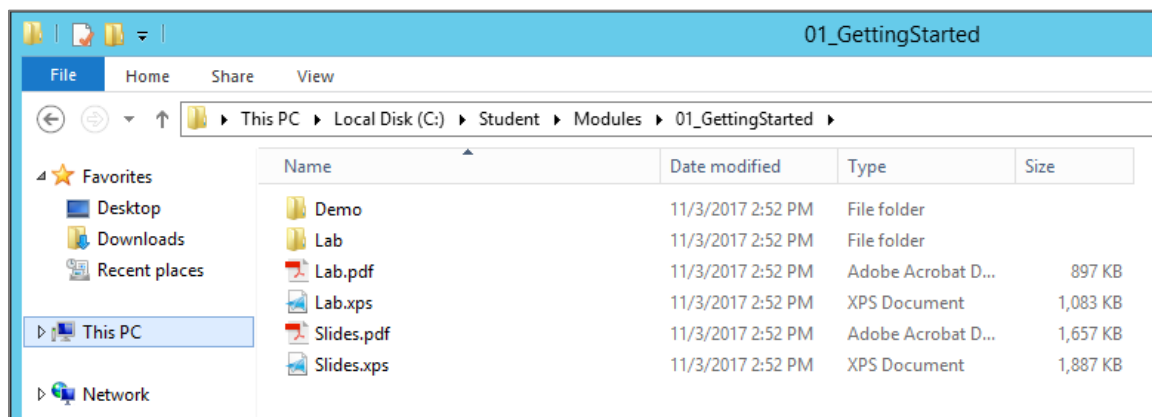


```
Administrator: Node.js command prompt
C:\Users\Administrator>git clone https://github.com/CriticalPathTraining/GSA2016.git C:\Student
Cloning into 'C:\Student'...
remote: Counting objects: 4535, done.
remote: Compressing objects: 100% (66/66), done.
remote: Total 4535 (delta 4), reused 67 (delta 3), pack-reused 4461
Receiving objects: 100% (4535/4535), 241.69 MiB | 11.69 MiB/s, done.
Resolving deltas: 100% (1938/1938), done.
Checking out files: 100% (3629/3629), done.
C:\Users\Administrator>
```

- When the **git clone** command completes, open Windows Explorer and examine the **Student** folder. You should be able to see the **Student** folder has two child folders named **Extras** and **Modules**.



- Drill into the **Modules** folder and look in the folder inside named **01\_GettingStarted**.

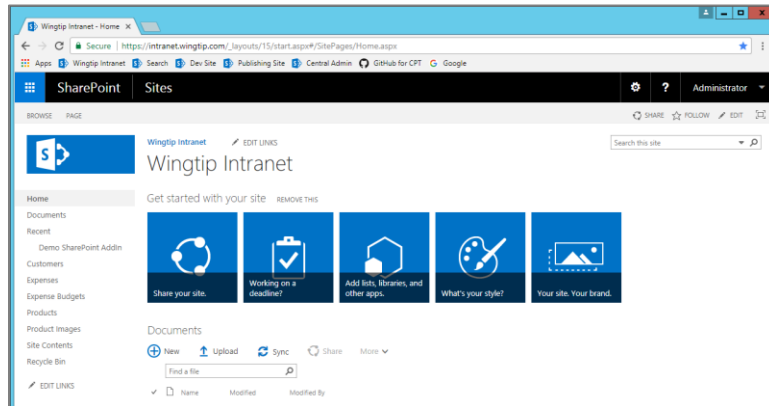


You can see that the **01\_GettingStarted** folder contains are two files named **Lab.pdf** and **Lab.xps** which contain the lab instructions for module 1. The folder for each module in this training course contains the same **Lab.pdf** and **Lab.xps** files for your convenience. That means you can always open up an electronic file from the **Students** folder to read the lab instructions for any of the labs as you are working through the lab exercises that are part of this training course.

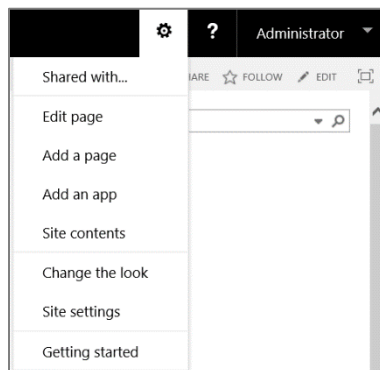
## Exercise 2: Getting Up and Running with a Team Site in SharePoint 2016

In this exercise will you begin by logging into your student VM. Once you have successfully logged in, you will navigate to the Wingtip Intranet Team site and become familiar with the SharePoint 2016 user interface experience.

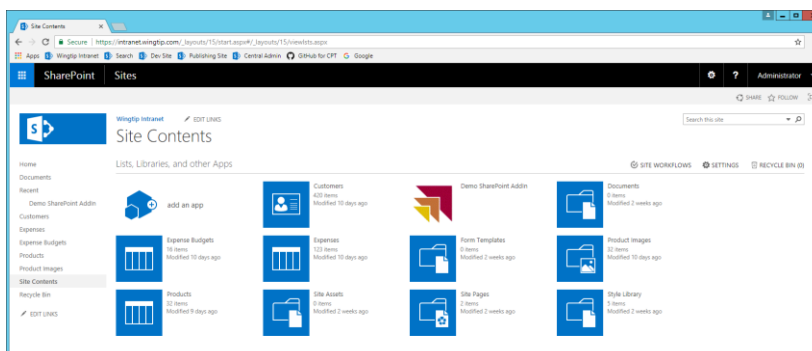
1. Once you have logged on to the student VM, launch the Internet Explorer and navigate to the site at <https://intranet.wingtip.com>.
  - a) It might take a minute or two before the first page of the Wingtip Intranet site appears.
  - b) When the home page of the Wingtip Intranet site appears, you should be able to see that it is a SharePoint 2016 Team site.



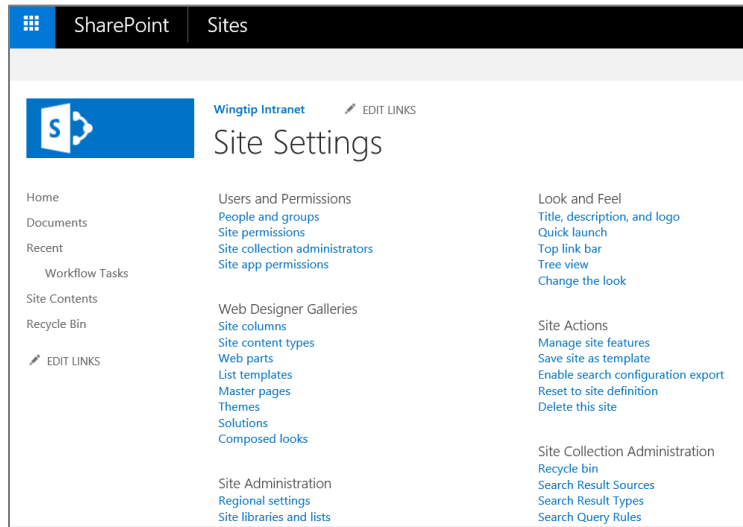
2. Locate the **Site Actions** menu which displays the gear icon on the top right-hand side of the page.
  - a) Be careful not to confuse the SharePoint **Site Actions** menu with the Internet Explorer Settings menu which also displays a similar gear icon and is located just slightly above.
  - b) Drop down the **Site Actions** menu and review the menu commands inside.



3. In the **Site Actions** menu, click the **Site Contents** menu command to navigate to the **Site Contents** page.
  - a) Note that the **Site Contents** page shows list, documents, libraries and apps. Since the Wingtip Intranet site is a brand new Team Site, it has several pre-existing document libraries including **Documents**, **Form Templates**, **Site Assets**, **Site Pages** and **Style Library**.



4. In the **Site Actions** menu, click the **Site Settings** menu command to navigate to the **Site Settings** page.
- a) You can see that the **Site Settings** page has sections of administrative links with captions such as **Users and Permissions**, **Look and Feel**, **Web Designer Galleries**, **Site Actions**, **Site Administration**, **Site Collection Administration**.



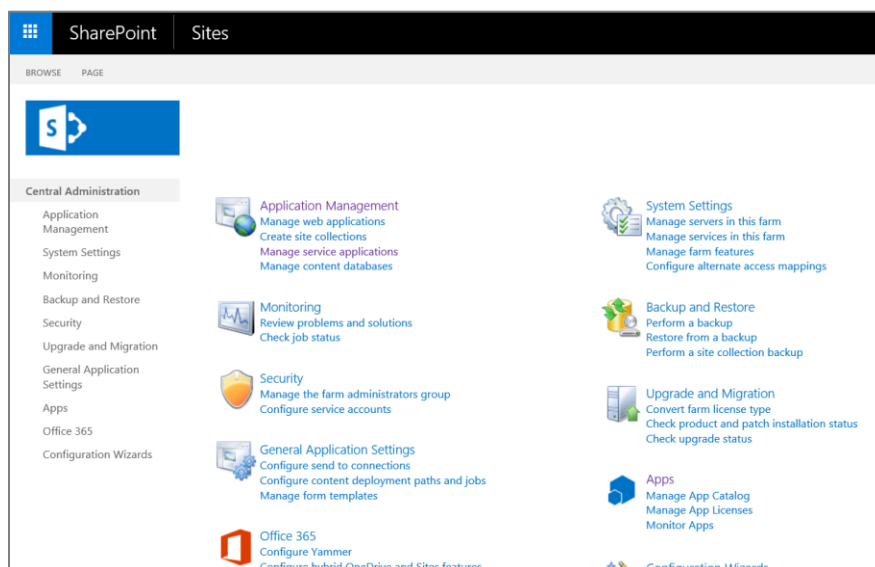
- b) Take a moment to review each link section on the **Site Settings** page because you will be using many of these site administration links throughout the labs exercises in this course.
- c) Return to the home page of Central Administration.

In this exercise you took a quick look at the Wingtip Intranet team site and learned the basics of moving around in a Team site using the **Site Actions** menu. In the next lab you will create a new site collection so you can begin to experiment with the process of creating lists and changing the look and feel of the site.

### Exercise 3: Getting Around in Central Administration

In this exercise you will navigate to Central Administration so you can review the configuration of the current farm and create a new site collection.

5. Using Internet Explorer, navigate to **Central Administration** at **http://wingtipserver:9999**.
- a) It might take a minute or two for the home page of Central Administration to display so be patient.
- b) When the home page of Central Administration displays, take a moment to familiarize yourself with the sections and links that are available.




6. Review the web applications in the local Wingtip Toys on-premises farm.
  - a) From the home page of Central Administration, locate and click the **Manage web applications** link in the **Application Management** section to navigate to the **Web Application List** page.
  - b) You should be able to verify that there are currently three web applications in the local farm.

SharePoint   Sites			
WINGTIP administrator			
BROWSE WEB APPLICATIONS			
<div> <div> <div>Manage Features</div> <div>Managed Paths</div> <div>Service Connections</div> </div> <div> <div>Authentication Providers</div> <div>Self-Service Site Creation</div> <div>Web Part Security</div> </div> <div> <div>Blocked File Types</div> <div>User Permissions</div> <div>Web Part Security</div> </div> <div> <div>User Policy</div> <div>Anonymous Policy</div> <div>Permission Policy</div> </div> </div>			
Central Administration	Name	URL	Port
Application Management	Wingtip My Site Host Web Application	http://my.wingtip.com/	80
System Settings	Wingtip Primary Web Application	http://wingtipserver/	80
Monitoring	SharePoint Central Administration v4	http://wingtipserver:9999/	9999

7. Review the service applications in the local Wingtip Toys on-premises farm.
  - a) Return to the home page of Central Administration.
  - b) From the home page of Central Administration, locate and click the **Manage service applications** link in the **Application Management** section to navigate to the **Manage Service Applications** page.
  - c) Take a moment and review the existing service applications.

Central Administration	Name	Type	Status
Application Management	App Management Service	App Management Service Application	Started
System Settings	App Management Service	App Management Service Application Proxy	Started
Monitoring	Application Discovery and Load Balancer Service Application	Application Discovery and Load Balancer Service Application	Started
Backup and Restore	Application Discovery and Load Balancer Service Application Proxy_f1f67b81-7c6d-4593-85dc-b04b54378462	Application Discovery and Load Balancer Service Application Proxy	Started
Security	Business Data Connectivity Service	Business Data Connectivity Service Application	Started
Upgrade and Migration	Business Data Connectivity Service	Business Data Connectivity Service Application Proxy	Started
General Application Settings	Managed Metadata Service	Managed Metadata Service	Started
Apps	Managed Metadata Service	Managed Metadata Service Connection	Started
Office 365	Search Administration Web Service for Search Service Application	Search Administration Web Service Application	Started
Configuration Wizards	Search Service Application	Search Service Application	Started
	Search Service Application	Search Service Application Proxy	Started
	Secure Store Service	Secure Store Service Application	Started
	Secure Store Service	Secure Store Service Application Proxy	Started
	Security Token Service Application	Security Token Service Application	Started
	Site Subscription Settings Service Application	Microsoft SharePoint Foundation Subscription Settings Service Application	Started
	Microsoft SharePoint Foundation Subscription Settings Service Application Proxy	Microsoft SharePoint Foundation Subscription Settings Service Application Proxy	Started
	State Service	State Service	Started
	State Service	State Service Proxy	Started
	Usage and Health data collection	Usage and Health Data Collection Service Application	Started
	Usage and Health data collection	Usage and Health Data Collection Proxy	Started
	User Profile Service Application	User Profile Service Application	Started
	User Profile Service Application	User Profile Service Application Proxy	Started
	Workflow Service Application	Workflow Service Application	Started
	Workflow Service Application	Workflow Service Application Proxy	Started

8. Create a new SharePoint 2016 Team Site for testing purposes.
  - a) Return to the home page of Central Administration.
  - b) From the home page of Central Administration, locate and click the **Create Site Collections** link in the **Application Management** section to navigate to the **Create Site Collection** page.
  - c) When the **Create Site Collection** page is displayed, begin by ensuring that the **Web Application** setting at the top of the page references the web application with the URL of <http://wingtipserver/>. If the page references a different web application such as <http://my.wingtip.com/>, use the drop down control to update the target web application to be the one at <http://wingtipserver/>.



## Create Site Collection ⓘ

Central Administration

Application Management

System Settings

Web Application

Select a web application.

To create a new web application go to [New Web Application](#) page.

Web Application: <http://wingtipserver/>

⬅

- d) In the **Title and Description** section of the **Create Site Collection** page, add the following entries.
  - i) **Title:** Wingtip Test Site

- ii) **Description:** A test site for experimenting with a SharePoint 2016 Team Site
- iii) **URL:** <http://wingtipserver/sites/Testing>
- e) Your input values should match those in the following screenshot.

**Title and Description**  
Type a title and description for your new site. The title will be displayed on each page in the site.

**Title:**  
Wingtip Test Site

**Description:**  
A test site for experimenting with a SharePoint 2016 Team Site

**Web Site Address**  
Specify the URL name and URL path to create a new site, or choose to create a site at a specific path.

**URL:**  
http://wingtipserver /sites/ Testing

To add a new URL Path go to the [Define Managed Paths](#) page.

- f) In the **Template Selection** section of the **Create Site Collection** page, ensure that the **Select a template** setting is set to **Team Site** and below that make sure the in **Primary Site Collection Administration** section that you assign a **User Name** setting of **WINGTIP\Administrator**.

**Template Selection**

Select a template:

Collaboration Enterprise Publishing Custom

Team Site  
Blog  
Developer Site  
Project Site  
Community Site

A place to work together with a group of people.

**Primary Site Collection Administrator**  
Specify the administrator for this site collection. Only one user login can be provided; security groups are not supported.

**User name:**  
Wingtip\Administrator

- g) Click the **OK** button to begin the process of provisioning the new Team site. This might take a few minutes to complete. When the new site collection has been created, the Central Administration site will display a page that contains a link to the new Team site at <http://wingtipserver/sites/Testing>. Click on this link to navigate to the new Team site.

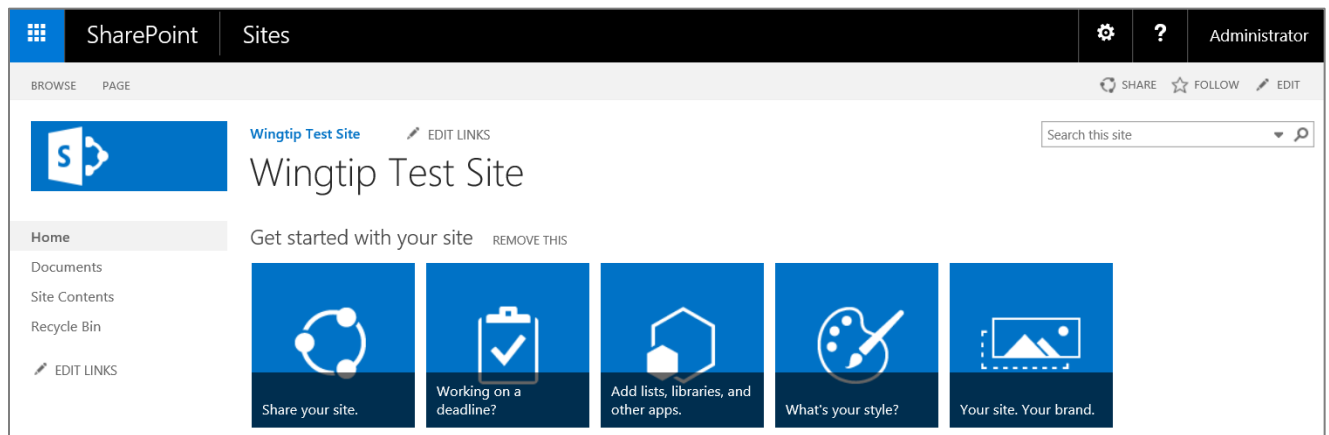
Central Administration > Application Management > Top-Level Site

The new top-level site was created successfully with the specified URL. If you have permission to view the Web site, you can do so in a new browser window by clicking the URL. To return to SharePoint Central Administration, click **OK**.

<http://wingtipserver/sites/Testing>

OK

- h) Wait until the home page displays for the site at: <http://wingtipserver/sites/Testing>.



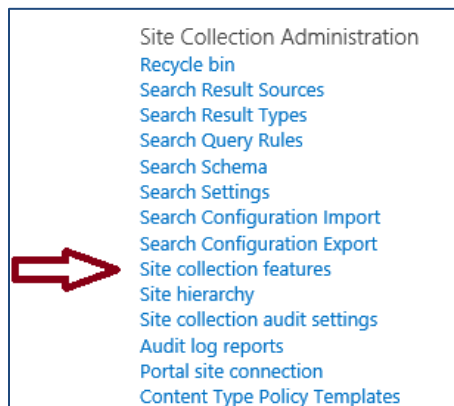
- i) Once you can see the home page of the new Team site, you can move on to the next exercise.

In this exercise you used Central Administration to create a Team site in a new site collection. In the following exercises, you will begin working with this new site to add content and change its look and feel.

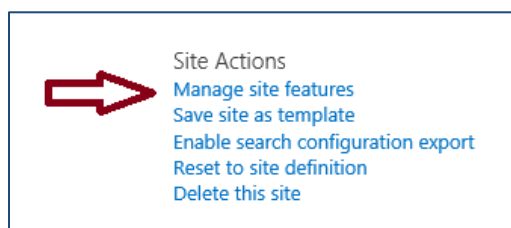
## Exercise 4: Activating and Deactivating Site Features

In this exercise, you will begin to manage features which activate at both the site level and the site collection level.

9. If you are not already there, navigate to the Team site at <http://wingtipserver/sites/Testing> that you created in the previous exercise.
10. Review the site-collection--scoped features available for activation within a Team site.
  - a) Return to the Site Settings page.
  - b) On the **Site Settings** page, locate and click the **Site collection features** link in the **Site Collection Administration** section.



- c) Take a moment and review all the site-collection-level features shown on this page. You should also take note which site-collection-level features are activated by default in a new site collection and which features are not.
11. Review the site-scoped features available for activation within a Team site.
  - a) Use the **Site Actions** menu to navigate to the **Site Settings** page.
  - b) On the **Site Settings** page, locate and click the **Manage site features** link in the **Site Actions** section.



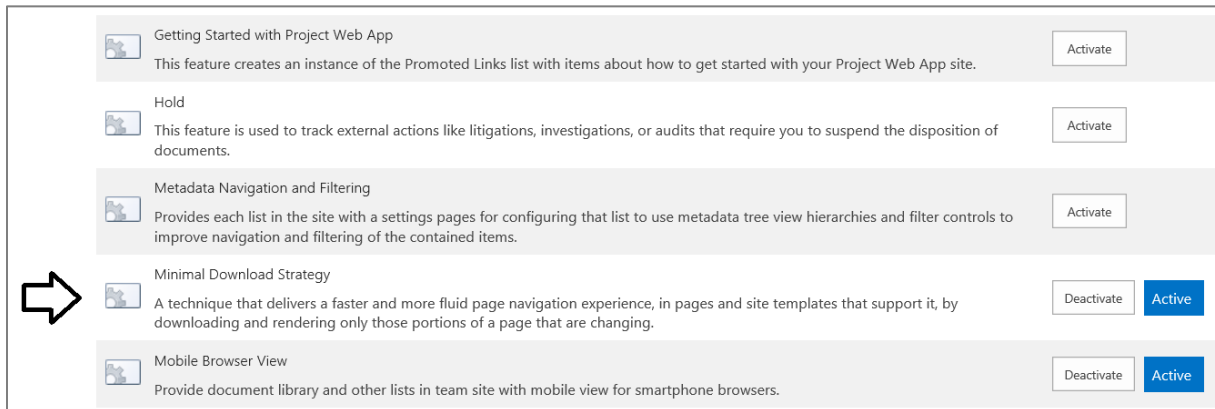
- c) Take a moment and review all the site-level features shown on this page. You should also note which site-level features are activated by default in a new Team site and which features are not.

12. Deactivate the **Minimal Download Strategy** feature in the test site.

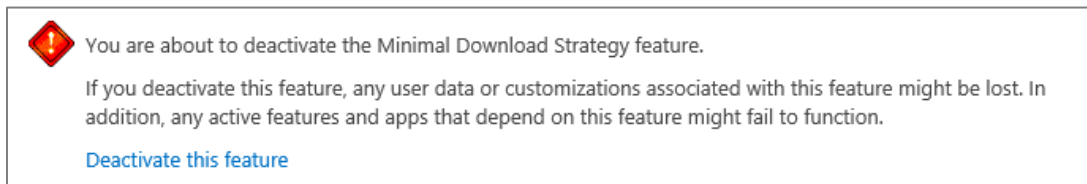
- a) Return to the home page of the testing site.  
b) Inspect the URL shown in the address bar of the browser which is used to navigate to the home page of the test site.

**`http://wingtipserver/sites/Testing/_layouts/15/start.aspx`**

- c) On the **Site Settings** page, locate and click the link titled **Manage site features** in the **Site Actions** section.  
d) Locate the feature with the title of **Minimal Download Strategy**.



- e) Click the **Deactivate** button to the right of the **Minimal Download Strategy**. When you do this, the SharePoint UI prompts you to confirm that you want to deactivate the feature. Click the **Deactivate this feature** link to complete the deactivation process.



- f) Once the feature has been deactivated, return to the home page of the site.  
g) Inspect the URL in the address bar of the browser. You should be able to see that the URL to the site is now easier to read.

**`http://wingtipserver/sites/Testing/SitePages/Home.aspx`**

- h) Return to the home page of the test site.

In this lab, you began working with feature management. It's essential that you know how to manage features and that you also have an understanding about which features activate at the site level versus features that activate at the site collection level.

## Exercise 5: Creating a New Site Collection using a PowerShell Script

In this exercise, you will create a new site collection using a PowerShell script. Unlike creating a new site collection using Central Administration as you did in a previous exercise, a PowerShell script makes it possible to create a new site collection using a top-level Internet domain name such as <https://TestSite.Wingtip.com>.

1. Review the PowerShell script named **CreateTestSite.ps1**.
- a) Using Windows Explorer, navigate to the folder at **C:\Student\Modules\01\_GettingStarted\Lab**.  
b) Locate the PowerShell script named **CreateTestSite.ps1**.  
c) Right-click on **CreateTestSite.ps1** then select the **Edit** command to open this script in the PowerShell ISE.  
d) At the top of the script, you will see a call to **Add-PSSnapin** which loads the library of SharePoint cmdlets

**`Add-PSSnapin Microsoft.SharePoint.PowerShell`**



- e) The next few lines of code in the script initialize variables with essential values required to create new site collection.

```
$webapp = Get-SPWebApplication -Identity "http://wingtipserver"
$siteDomain = "testsite.wingtip.com"
$siteUrl = "https://testsite.wingtip.com"
$siteTitle = "My Other Test Site"
$siteAdmin = "wingtip\Administrator"
$siteTemplate = "STS#0"
```

- f) Next, you should see code in the PowerShell script that determines whether there is already an existing site at the target URL. The script contains conditional logic to delete any existing site if it already exists.

```
# delete current site if it already exists
$site = Get-SPSite | where-Object {$_.Url -eq $siteUrl}
if ($site -ne $null) {
    Write-Host "Deleting existing site collection at $url..." -ForegroundColor Red
    Remove-SPSite -Identity $site -Confirm:$false
}
```

- g) Next, the script contains a call to **New-SPSite** to create a new SharePoint site collection.

```
# create new site at target URL
$site = New-SPSite -HostHeaderWebApplication $webapp `
    -Url $siteUrl `
    -Name $siteTitle `
    -OwnerAlias $siteAdmin `
    -Template $siteTemplate
```

- h) After the scripts creates the new site collection, it then includes additional code to configure permissions for all domain users.

```
# configure contributor site permissions for all domain users
$account = $site.RootWeb.EnsureUser(" WINGTIP\domain users")
$role = $site.RootWeb.RoleDefinitions["Contribute"]
$assignment = New-Object Microsoft.SharePoint.SPRoleAssignment($account)
$assignment.RoleDefinitionBindings.Add($role)
$site.RootWeb.RoleAssignments.Add($assignment)
```

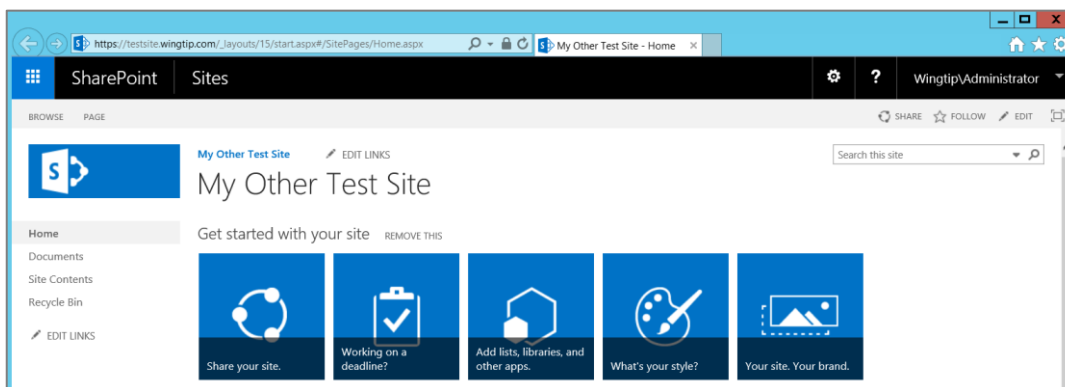
- i) Next, the script contains code which updates the HOST file of the local machine to resolve to target site domain name using the local loopback address of 127.0.0.1. This is important when developing against the site using the Visual Studio debugger.

```
# add entry to HOST file to site URL for Visual Studio development
$hostsFilePath = "c:\windows\System32\Drivers\etc\hosts"
$hostFileEntry = "127.0.0.1 $siteDomain"
Add-Content -Path $hostsFilePath -Value "`r`n$hostFileEntry"
```

- j) Finally, the script calls **Start** to launch a session of the Internet Explorer and to navigate to the home page of the new site.

```
# launch Internet Explorer and navigate to new site
start iexplore $siteUrl
```

2. Execute the script named **CreateTestSite.ps1**.
3. Once the script has completed its execution, you should be able to see it in the Internet Explorer.



At this point, you have now completed all the exercises that are part of the lab.

