SSC401: SharePoint Administrators Survival Camp

Student Lab Exercises

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Revision: v3.0

Lab 02: Setup and Configuration of SharePoint

Lab Overview: In this lab you will be starting with a Windows 2003 Server with SP2. The name of server is LitwareServer.TPG.local. It has been configured with the Active Directory and DNS roles. The server also has SQL Server 2005 with SP2 installed. All Windows updates as of 10/11/2007 have been installed.

The goal of this lab is to successfully install and configure Microsoft Office SharePoint Server 2007 Enterprise Edition. You will need to first install the .NET 3.0 Framework. You will also need to define all of the active directory user accounts necessary, create the appropriate DNS entries for your web applications, and run various commands to configure Kerberos authentication. Once you have successfully prepared your environment you will then install SharePoint and configure the necessary services. Finally you will create a Shared Services Provider. This will have your server ready to create your first portal in the next lab. Lots of work ahead of you so let's start.

Exercise 1: Determine the accounts you will need.

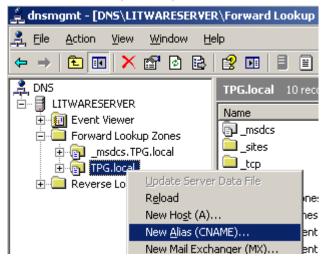
For this lab you will be using the **Least-privilege administration requirements when using domain user accounts** method. For details of the method see the end of the lab. The most important thing to know about this method is you will be using a different account for each service and application pool as you configure MOSS. Below you will find the list of accounts you will need for this lab and a suggested account name followed by a brief explanation of anything special about this account. You will be creating the accounts in AD.

- Setup Account SP_Admin This is the account that you will log into the MOSS server to do the install and when you wish to administer the server. This account will need to be a local administrator on the MOSS server and be given the securityadmin and dbcreator roles from within SQL Server.
- 2) Farm Account **SP_Farm** This is the account that your farm will connect to the SQL Server as. It should only be a domain user. When you tell MOSS to use this account it will automatically set the account up as a dbcreator, securityadmin, and db_owner for all SharePoint databases.
- 3) WSS Search Service **SP_WSSSearch** This account is a domain user. SharePoint will automatically assign it read access to the configuration database and the content database for central administration.
- 4) WSS Search Crawl **SP_WSSCrawl –** This account is a domain user. SharePoint will automatically grant this account Full read to the farm.
- 5) MOSS Search **SP_MossSearch** This account is a domain user. SharePoint will grant access to read the configuration database and read access to all content databases hosted in the farm. This will become you default content access account for crawling.
- 6) SSP App Pool **SP_SSPAppPool** This account is a domain user. SharePoint automatically gives this account db_owner for the SSP content database, read & write to all content databases associated with its SSP, read access to the configuration database, and read access to the central administration database.
- 7) SSP Service **SP_SSPService** This account is a domain user. Same permissions as the SSP App Pool

- 8) MY App Pool **SP_MyAppPool** This account is a domain user. This account will be used as the identity for the My Sites application pool. It will be granted db_owner to that content database, read access to the config and central administration databases, and read access to the associated SSP database.
- 9) Portal App Pool **SP_PortalAppPool** This account is a domain user. This account will be used as the identity for the portal application pool in the Module 3 lab. It will be granted db_owner to that content database, read access to the config and central administration databases, and read access to the associated SSP database.

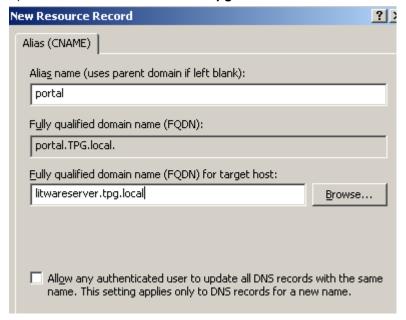
Exercise 2: Choosing our Web Application Settings

- 1) In this portion of the module we need to determine what URLs we will be using for our web applications.
 - A) Central Administration http://Litwareserver:5555 This is the site you will use to administer your farm. It will be created during the installation process.
 - B) Shared Services Provider http://ssp.tpg.local This site is used to host the reusable shared services in the farm.
 - C) My Site host Web Application http://my.tpg.local This site will be the host for our users personal sites. A powerful feature of MOSS.
 - D) Portal Web Application http://portal.tpg.local This will be our main site for the users. Our intranet if you will.
- 2) Log into your server
 - A) Press the **right ALT** key and **delete** at the login prompt
 - B) Username is Administrator and the password is pass@word1
- 3) Now we will need to setup these host headers in DNS.
 - A) Click Start > Administrative Tools > DNS
 - B) Expand Litwareserver > Forward Lookup Zones > **TPG.local** then right click on TPG.local and choose **New Alias (CNAME)**



C) For Alias name enter Portal

D) For FQDN enter litwareserver.tpg.local



- E) Click OK
- 4) Repeat Step 5 for **My** and **SSP** as the alias name. The FQDN should stay the same for all 3.
- 5) Close DNS management

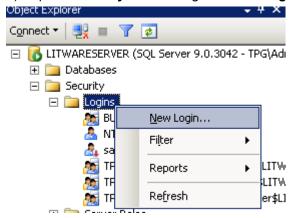
Exercise 3: Creating the necessary service and install accounts.

- 1) Click Start > Administrative Tools > Active Directory Users and Computers
- 2) Expand TPG.local
- 3) Click on the Users container
- 4) Click Create a new user
 - A) First Name: SharePoint
 - B) Last Name: Setup Account
 - C) User logon name: SP_Admin
 - D) Click Next
 - E) Password: pass@word1
 - F) Uncheck User must change password at next logon
 - G) Click Next
 - H) Click Finish
- 5) Repeat step 4 for all of the users. Make their last name describe the account. Use the same password for all accounts.
 - A) SP_Farm
 - B) SP_WssSearch

- C) SP_WssCrawl
- D) SP_MossSearch
- E) SP_SspAppPool
- F) SP_SspService
- G) SP MyAppPool
- H) SP_PortalAppPool
- 6) Now give administrator privileges to the SP_Admin account
 - A) Double click on user SharePoint Setup Account
 - B) Click Member Of tab
 - C) Click Add
 - D) Enter Domain Admins
 - E) Click **OK** and **OK**

NOTE: Normally this account would NOT be a domain administrator. In our environment our MOSS Server is also a domain controller and domain controllers do not have a local administrators group. So we must make this account a domain administrator.

- 7) Now give SP_Admin its necessary SQL Roles
 - A) Click Start > All Programs > Microsoft SQL Server 2005 > SQL Server Management Studio
 - B) At the connect to server screen click Connect
 - C) Expand Security and then right click on Logins and click New Login..



- D) For login name enter TPG\SP_Admin
- E) Click Server Roles from the left column
- F) Select dbcreator and securityadmin
- G) Click **OK**
- H) Close SQL Management Studio

NOTE: Technically this account is in the builtin\administrators group because we made it a domain administrator. You went through this step for completeness as normally in a farm install the setup account should not be a built in administrator of the SQL Server.

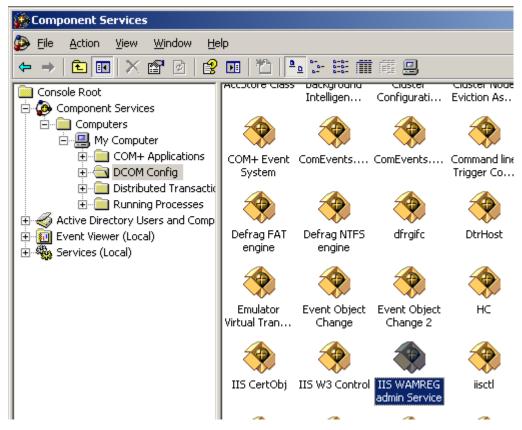
Exercise 4: Configuring our farm for using Kerberos Authentication.

This is optional in your environment back at the office. Kerberos authentication will allow you to avoid the dreaded double hop problem. (A nice explanation here

http://blogs.msdn.com/knowledgecast/archive/2007/01/31/the-double-hop-problem.aspx) If you are going to use Excel Services or the built in RSS feeds/viewer this is almost a requirement. It is also a more efficient authentication process. If you have decided to configure Kerberos it can be a bit tricky so take this portion slow and steady. And of course for the lab you are going to do these steps. **Be very careful about typos.** It will accept any SPN you enter and you will not realize you have errors until later.

- 1) Using setspn.exe to create the ServicePrincipalNames necessary.
 - A) Open a command prompt
 - B) Cd to c:\program files\resource kit
 - C) Run the command for setting the SPN for the FQDN of the server and the Farm Account setspn.exe -A http/litwareserver.TPG.local tpg\SP_Farm
 - D) Run the command for setting the SPN for the Netbios Name of the server and the Farm Account setspn.exe -A http/litwareserver tpg\SP_Farm
 - E) Run the command for setting the SPN for MY web app and app pool account setspn.exe -A http/my.tpg.local tpg\SP_MyAppPool
 - F) Run the command for setting the SPN for the host name and the MY app pool account setspn.exe -A http/my tpg\SP_MyAppPool
 - G) Run the command for setting the SPN for the Portal web app and app pool account setspn.exe -A http/portal.tpg.local tpg\SP_PortalAppPool
 - H) Run the command for setting the SPN for the host name and the Portal app pool account setspn.exe -A http/portal tpg\SP_PortalAppPool
 - I)Run the command for setting the SPN for the SSP web app and app pool account setspn.exe -A http/ssp.tpg.local tpg\SP_SspAppPool
 - J) Run the command for setting the SPN for the host name and the SSP app pool account setspn.exe -A http/ssp tpg\SP_SspAppPool
 - K) Close the command prompt by typing exit
- 2) Now return to AD Users and Computers and define which accounts are trusted for delegation. In a real environment you would need to run the following steps on the following items.
 - I) All SharePoint Servers
 - II) SQL Server
 - III) SP_Farm
 - IV) SP_MyAppPool
 - V) SP_SspAppPool
 - VI) SP_PortalAppPool
 - A) Find SP_Farm, right click and choose properties
 - B) Click the **Delegation** tab
 - C) Select Trust this user/computer for delegation to any service (Kerberos)
 - D) Click OK

- E) Repeat A-D for all of above accounts(III VI).
- F) Close Active Directory Users and Computers
- 3) Make some changes to Component Services
 - A) Click Start > Administrative Tools > Component Services
 - B) Drill down to component services > computers > my computer > DCOM Config > IIS WAMREG admin Service



- C) Right click IIS WAMREG admin Service then click properties
- D) Click the Security tab
- E) Launch and activation permissions > click edit
- F) Click Add
- G) Add sp_farm; SP_SspAppPool; SP_MyAppPool; SP_PortalAppPool
- H) Click OK
- I) Set Local Launch and Local Activation to all for all 4 accounts
- J) Click OK twice
- K) Close Component Services

This saves you from an annoying DCOM error message in the event log later on.

Exercise 5: Install .NET Framework 3.0

- 1) Switch to the SP Admin user
 - A) Click Start > Log Off
 - B) Click Log Off
 - C) Press right ALT and Delete
 - D) Change the username to SP Admin
 - E) Use the password pass@word1
- 2) Navigate to c:_Student Files\Module 2
- 3) Run dotnetfx3.exe
- 4) Click Run
- 5) Read the EULA and then check I have read and ACCEPT the terms.. and click Install
- 6) Click the icon in the tray so you can watch the progress (usually takes 4 minutes)
- 7) Click **Exit** when the install completes

Exercise 6: Slipstreaming Service Pack 1

Microsoft has released SP1 for SharePoint as of December 2007. This means that for fresh installs going forward you have two options. Either you can do the RTM install and then after completing installation run the service pack separately or you can update the install files to include SP1. In this exercise you will update the install files using the slipstream method.

If you would like more information on how to install SP1 please check out Shane Young's blog. http://msmvps.com/blogs/shane/archive/2007/12/14/how-to-install-wss-and-moss-sp1.aspx

- 1) Open a command prompt
- 2) Change directories to the location of the patches
 - A) Type the command below and press enter cd "C:_student files\service packs"
- 3) Extract WSS SP1
 - A) Type the command below and press enter

Wssv3sp1-kb936988-x86-fullfile-en-us.exe /extract:"C:_Student files\module
2\updates"

- B) Read the EULA, check Click here to accept..., and click Continue
- 4) Extract MOSS SP1
 - A) Type the command below and press enter OfficeServer2007sp1-kb936984-x86-fullfile-en-us.exe /extract:"C:_Student files\module 2\updates"
 - B) Read the EULA, check Click here to accept..., and click Continue

```
C:\WINDOWS\system32\cmd.exe

Microsoft Windows [Version 5.2.3790]

(C) Copyright 1985-2003 Microsoft Corp.

C:\Documents and Settings\sp_admin>cd "C:\_Student Files\Service Packs"

C:\_Student Files\Service Packs>wssv3sp1-kb936988-x86-fullfile-en-us.exe /extract:"c:\_student files\module 2\updates"

C:\_Student Files\Service Packs>officeserver2007sp1-kb936984-x86-fullfile-en-us.exe /extract:"c:\_student files\module 2\updates"
```

Exercise 7: Install MOSS 2007 Enterprise Trial Edition

Finally. After all of this prep work it is finally time to get your hands dirty and install MOSS.

- 1) Navigate to c:_Student Files\Module 2
- 2) Run setup.exe
- 3) Enter the trial key F2JBW-4PDJC-HKXTJ-YCKRP-T2J9D (This is a 180 day trial key)
- 4) Click Continue
- 5) Read the EULA, check I Accept, and click Continue
- 6) Choose **Advanced** (Common Mistake is choosing Basic here)
- 7) Choose **Complete** (Common Mistake is choosing stand-alone)
- 8) Choose Install Now (5 Minutes or so)
- 9) Click Close
- 10) Configuration Wizard should automatically open, at the welcome screen click Next
- 11) At the popup click **Yes**
- 12) Click No, I want to create a new server farm
- 13) Click Next
- 14) Specify Configuration Database Settings
 - A) Database server: LitwareServer
 - B) Database name: **SharePoint_Config** (default)
 - C) Username: tpg\SP_Farm
 - D) Password: pass@word1
 - E) Click Next
- 15) Configure SharePoint Central Administration Web Application
 - A) Specify port number: 5555
 - B) Choose Negotiate (Kerberos)
 - C) Click Next
- 16) Click Yes at the warning
- 17) Confirm your settings and click **Next** (6 minutes)

18) At Configuration Successful click Finish

End of Lab

Least-privilege administration requirements when using domain user accounts

From:

http://technet2.microsoft.com/Office/en-us/library/f07768d4-ca37-447a-a056-1a67d93ef5401033.mspx?mfr=true

Server farm-level accounts

Account	Server farm standard requirements	Least-privilege using domain user accounts requirements
SQL Server service account	Use either a Local System account or a domain user account. If a domain user account is used, this account uses Kerberos authentication by default, which requires additional configuration in your network environment. If SQL Server uses a service principal name (SPN) that is not valid (that is, that does not exist in the Active Directory directory service environment), Kerberos authentication fails, and then NTLM is used. If SQL Server uses an SPN that is valid but is not assigned to the appropriate container in Active Directory, authentication fails, resulting in a "Cannot generate SSPI context" error message. Authentication will always try to use the first SPN it finds, so ensure that there are no SPNs assigned to inappropriate containers in Active Directory. If you plan to back up to or restore from an external resource, permissions to the external resource must be granted to the appropriate account. If you use a domain user account for the SQL Server service account, grant permissions to that domain user account. However, if you use the Network Service or the Local System account, grant permissions to the external resource to the machine account (domain_name\SQL_hostname\$).	Server farm standard requirements with the following additions or exceptions: • Use a separate domain user account.
Setup user account	 Domain user account. Member of the Administrators group on each server on which Setup is run. SQL Server login on the computer running SQL Server. Member of the following SQL Server security roles: securityadmin fixed server role dbcreator fixed server role If you run Stsadm commands that affect a database, this account must be a member of the db_owner fixed database role for the database. 	Server farm standard requirements with the following additions or exceptions: Use a separate domain user account. This account should NOT be a member of the Administrators group on the computer running SQL Server.
Server farm account	Domain user account. If the server farm is a child farm with Web applications that consume shared services from a parent farm, this account must be a member of the db_owner fixed database role on the configuration database of the parent farm. Additional permissions are automatically granted for this account on Web servers and application servers that are joined to a server farm. This account is automatically added as a SQL Server login on the computer running	Server farm standard requirements with the following additions or exceptions: Use a separate domain user account. NOT a member of the Administrators group on any

Account	Server farm standard requirements	Least-privilege using domain user accounts requirements
	SQL Server and added to the following SQL Server security roles: • dbcreator fixed server role	server in the server farm, including the computer running SQL Server.
	 securityadmin fixed server role db_owner fixed database role for all databases in the server farm. 	This account does not require permissions to SQL Server before creating the configuration database.

SSP accounts

Account	Server farm standard requirements	Least-privilege using domain user accounts requirements
SSP application pool account	No manual configuration is necessary. The following are automatically configured: • Membership in the db_owner role for the SSP content database. • Access to read from and write to the SSP content database. • Access to read from and write to content databases for Web applications that are associated with the SSP. • Access to read from the configuration database. • Access to read from the Central Administration content database. • Additional permissions to front-end Web servers and application servers are automatically granted.	Server farm standard requirements with the following additions or exceptions: Use a separate domain user account. For security isolation, use a separate service account for each SSP.
SSP service account	 Use a domain user account. No manual configuration is necessary. The same permissions as the SSP application pool account are automatically granted. This account should not be a member of the Administrators group on any computer in the server farm. 	Server farm standard requirements with the following additions or exceptions: Use a separate domain user account.
Office SharePoint Server Search Service account	 Must be a domain user account. Must not be a member of the Farm Administrators group. The following are automatically configured: Access to read from the configuration database 	Server farm standard requirements with the following additions or exceptions: • Use a separate domain user account.
Default content access account	 Must be a domain user account. Must not be a member of the Farm Administrators group. Read access to external or secure content sources that you 	Server farm standard requirements with the following additions or exceptions: Use a separate domain user account.

Account	Server farm standard requirements	Least-privilege using domain user accounts requirements	
	want to crawl by using this account. • For sites that are not a part of the server farm, this account must explicitly be granted Full Read permissions on the Web applications that host the sites. The following are automatically configured: • Full Read permissions are automatically granted to content databases hosted by the server farm.	By default, in a server farm environment, the Office SharePoint Server Search service account is used until a different account is specified. After completing Setup and running the configuration wizard, change this account to a domain user account. Do not grant the default content access account access to the directory service. For added security, use a different default content access account for each SSP.	
Content access account	 Read access to external or secure content sources that this account is configured to access. For Web sites that are not a part of the server farm, this account must explicitly be granted Full Read permissions on the Web applications that host the sites. 	Server farm standard requirements with the following additions or exceptions: • Use a separate domain user account.	
Profile import default access account	 Read access to the directory service. If Enable Server Side Incremental is selected for an Active Directory connection and the environment is Windows 2000 Server, the account must have the Replicate Changes permission in Active Directory. This permission is not required for Windows Server 2003 Active Directory environments. Manage User Profiles personalization services permission. View permissions on entities used in Business Data Catalog import connections. 	 Use a separate domain user account. This account can be the same account as the defaul content access account, or you can use a separate account. Read access to the directory service. 	
Excel Services unattended service account	Must be a domain user account.	Must be a domain user account.	

Windows SharePoint Services Search accounts

Account	Server farm standard requirements	Least-privilege using domain user accounts requirements
Windows SharePoint Services Search service account	 Must be a domain user account. Must not be a member of the Farm Administrators group. The following are automatically configured: Access to read from the configuration database and 	Server farm standard requirements with the following additions or exceptions: Use a separate domain user account.

Account	Server farm standard requirements	Least-privilege using domain user accounts requirements
	the SharePoint_Admin Content database. • Membership in the db_owner role for the Windows SharePoint Services Search database.	
Windows SharePoint Services Search content access account	Same requirements as the Windows SharePoint Services Search service account. The following are automatically configured: Added to the Web application Full Read policy for the farm.	Server farm standard requirements with the following additions or exceptions: Use a separate domain user account.

Additional application pool identity accounts

Account	Server farm standard requirements	Least-privilege using domain user accounts requirements
Application pool	No manual configuration is necessary.	Server farm standard requirements with the
identity	The following are automatically configured:	following additions or exceptions:
	• Membership in the db_owner role for content databases and search databases associated with the Web application.	Use a separate domain user account for each application pool.
	Access to read from the configuration and the SharePoint_AdminContent databases.	This account should not be a member of the Administrators group on any computer in the
	Access to read from and write to the associated SSP database.	server farm.
	Additional permissions for this account to front-end Web servers and application servers are automatically granted.	

Lab 03A: Configuring MOSS and Creating an SSP

Lab Overview: Now that you have installed MOSS it is time to introduce you to Central Administration. After a little configuration you will then be ready to create your first SSP. With these two steps complete your farm is ready for business.

Exercise 1: Configuring MOSS

Now that configuration wizard is complete SharePoint Central Administration (central admin) should have automatically opened. Now there are a handful of steps you need to do. First things first, you need to configure the services on the server and define the email server.

- 1) Click the Operations tab
- 2) Under Topology and Services click Services on server
- 3) Look at the table of services. Click **Start** to the right of **Excel Calculation Services**. After a couple of seconds of processing it will bring you back to the same screen but now you should see Started next to Excel Calculation Services.
- 4) Click Start to the right of Office SharePoint Server Search.
 - A) You are taken to the Configure Office SharePoint Server Search Service Settings on server litwareserver screen. Review the first section.

Query and Indexing Use this option to specify if you want to use this server for search queries or indexing or both.	Use this server for indexing content
	Use this server for serving search queries

- B) Now before you continue consider what happens here. If you were building a farm these settings are important. If you wanted this server to be your index server then you would check the top box. Doing this will refresh the page and give you new configurations options. If you wanted this server to provide only search results then you would select the second box. This would then give you different options. For this environment you will **check both boxes** since this is a single server install.
- C) Configure the rest of the page as below.
 - I) Email = admin@tpg.local
 - II) Username = tpg\SP_MossSearch
 - III) Password = pass@word1
 - IV) Take all other defaults

- D) Click Start
- 5) You should be returned to the service on server page if you were successful. Click **Start** to the right of **Windows SharePoint Services Search**.
 - A) Fill out the screen as below. Password is always **pass@word1** and make sure to choose **Daily** in the last section.

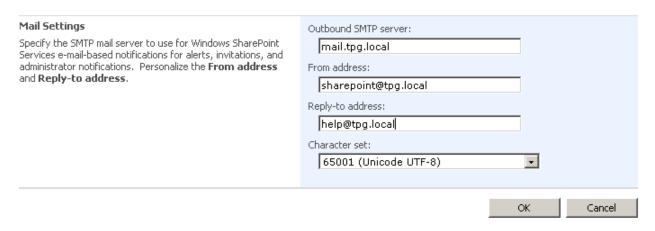
■ Service Account		
The search service will run using this account.	User name	
The search service account must not be a built-in acco	ount in tpg\SP_WssSearch	
order to access the database. Examples of built-in acc		
are Local Service and Network Service.		
	•••••	
☐ Content Access Account		
The search service will access all content using this acc	count. User name	
The account will be added to the Full Read policy, givin	ng it tpg\SP_WssCrawl	
read-only access to all content.	Password	
For proper search functionality and information securit	ity, do	
not use an administrator account, and do not use account that can modify content.	ounts	
that can modify content.		
∃ Search Database		
Use of the default database server and database name is	Database Server	
recommended for most cases. Refer to the administrator's guide for advanced scenarios where specifying database	litwareserver	
information is required.	Database Name	
Use of Windows authentication is strongly recommended. To use SQL authentication, specify the credentials which will be	WSS_Search_litwareserver	
used to connect to the database.	Database authentication	
	Windows authentication (recommended)	
	C SQL authentication	
	Account	
	Password	
	1 3371010	
Indexing Schedule	Indexing schedule:	
Configure the indexing Schedule.		
	C Hourly between and minutes past the hour	
	⊙ paily	
	Between 12 AM v 00 v	
	and 12 AM v 00 v	
	Start Cancel	

B) Click **Start**

You are brought back to the Services screen again.

The Document conversions services were not started. They are not required and should only be started if you plan to implement the smart client authoring feature. More details on what the feature does is available here http://blogs.msdn.com/ecm/archive/2006/06/13/629525.aspx

- 6) Now you need to setup the outgoing email server
 - A) Click the Operations tab
 - B) Under Topology and Services click Outgoing e-mail settings
 - C) Make the settings below



- D) Click Ok
- E) This step was done only for completeness. Outgoing email does not work on your virtual server.

Exercise 2: Creating a Shared Services Provider

The next step is creating your first SSP. It will become your default SSP. To create the SSP you will need to create a web application to host the SSP and another web application that will host My Sites.

- 1) From the left hand column of the page (called the quick launch bar) click **Shared Services**Administration
- 2) Click New SSP
- 3) Set the SSP Name to Primary SSP
- 4) Click **Create a new Web application** from the SSP Name section.

SSP Name

Specify a unique, descriptive name for this Shared Services Provider. This name will be used to identify this SSP in administration pages.

A Web application is required for the SSP administration site. Select an existing Web application from the list or click "Create a new Web application". Note: For server farm installations, the selected Web application cannot have an application pool that uses Network Service as its process account.



- 5) Now you will be creating your first Web application, which is just a site in IIS. So instead of opening IIS Admin you can let SharePoint do all of the work by filling out this page.
 - A) Update the IIS Web Site Section as below

IIS Web Site

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

If you select an existing IIS web site, that web site must exist on all servers in the farm and have the same description, 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.



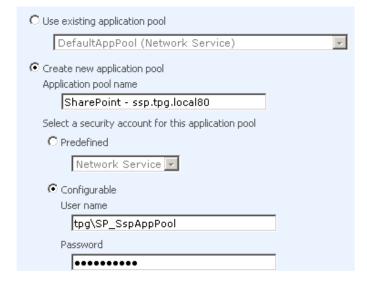
Here you are making an important deployment decision. There are two options here. You can either run the SSP on port 80 (Web default) with a host header to make it easy to access later by navigating to http://ssp.tpg.local/ssp/admin. Or you can just specify an uncommon port like 7777 and not use a host header. Then you would access the site by going to http://litwareserver:7777/ssp/admin. Either works fine and it is just your preference. Remember if you decide to use a host header it will need to be defined in DNS. For the lab use the host header method as pictured above.

- B) The only change under Security Configuration necessary is choosing Negotiate (Kerberos)
- C) Accept the defaults until you get to Application Pool. Now make the changes below. Password is always pass@word1

Application Pool

Choose the application pool to use for the new web application. This defines the account and credentials that will be used by this service.

You can choose an existing application pool or create a new



D) Under Database Name change it from WSS_Content to **WSS_Content_SSP** this makes it easier to identify in SQL Manager.

Database Name and Authentication

Use of the default database server and database name is recommended for most cases. Refer to the administrator's guide for advanced scenarios where specifying database information is required.

Use of Windows authentication is strongly recommended. To use SQL authentication, specify the credentials which will be used to connect to the database.



- E) Click **OK** and **OK** at the Kerberos popup warning.
- 6) You are now returned to the New Shared Services Provider page. You will see lots of warning in red. You can ignore them for now. You have more work to do.
- 7) Scroll down to the My Site Location section and click Create a new Web application

My Site Location

A Web application is required for My Sites. This Web application will be used to host personal sites and profile pages. To use an existing Web application, select from the Web applications in the drop down list. If a new Web application is needed, select the "Create a new Web application" link. We recommend using a different Web application than the one used for the SSP administration site, so that you can backup and restore My Sites independently.

To host My Sites at a location other than the root, change the Relative URL.

Web application
SharePoint - ssp.tpg.local80
Create a new Web application
My Site Location URL
http://ssp.tpg.local/
Relative URL
/

A) Make the changes below

IIS Web Site

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

If you select an existing IIS web site, that web site must exist on all servers in the farm and have the same description, 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.



Once again you have came to a place to make a choice. You can a) choice to host My Sites on the same web application as the SSP b) you can create a new web application and host My Sites in their own environment or c) you can host My Sites on the same web application as you host your portal.

If you choose option a) you will get a warning that Microsoft recommends against this practice. For one reason you cannot backup or restore my sites and the SSP independently using the built in tools. This can make recovery a pain and is generally just not a good idea.

If you choose option b) this is considered the best practice according to Microsoft. Being an independent web app gives you the most flexibility for recoverability. But this approach can cause unnecessary headaches. If you are using HTTPS you will need a separate certificate for my.tpg.local and portal.tpg.local. If you are behind a proxy (like ISA Server) you will need two separate publishing rules. Also, if your users browsers are not set to automatically logon to SharePoint they will enter username/password to access portal.tpg.local. Then when they click the link to their My Site they will be prompted again.

If you choose option c) and host them at http://portal.tpg.local/mysites this seems to be the easiest approach for your users. And if you are using a 3rd party backup tool then you don't have to worry about the ability to easily recover a specific site.

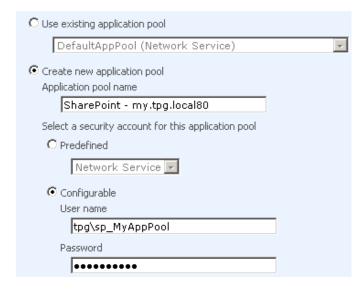
For the lab we use option b as in the screen shot.

- B) The only change under Security Configuration necessary is choosing Negotiate (Kerberos)
- C) Accept the defaults until you get to Application Pool. Now make the changes below. Password is always pass@word1

Application Pool

Choose the application pool to use for the new web application. This defines the account and credentials that will be used by this service.

You can choose an existing application pool or create a new one.



- D) Under Database Name change it from WSS_Content to **WSS_Content_MY** this makes it easier to identify in SQL Manager.
- E) Click **OK** and **OK** at the Kerberos popup warning.
- 8) You are now returned to the New Shared Services Provider page. You will see lots of warning in red. You can ignore them for now. You still have more work to do.
- 9) For SSP Service Credentials enter TPG\SP_SspService and pass@word1
- 10) For SSP Database change SharedServices1 DB to Primary_SSP_DB
- 11) For Search Database change SharedServices1_Search_DB to Primary_SSP_Search_DB
- 12) Take the rest of the defaults and click **OK** (3 minutes)
- 13) If a Success! Screen comes back this lab is done. Click **OK** and close any extra windows you may still have open.

End of Lab

Lab 03B: Granting Administrator Access

Lab Overview: Time to give away the keys to the kingdom. In this lab you will learn how to make someone a farm administrator and what rights that gives them. Then you will grant access to the SSP and the different options available there, including how to disable My Sites in your farm.

Exercise 1: Granting farm administrator access

- 1) Open up Central Administration
- 2) Click the Operations Tab
- 3) Under Security Configuration click Update farm administrator's group
- 4) Click New > Add Users
- 5) For username enter **TPG\Bob**
- 6) Deselect Send welcome e-mail to the new users
- 7) Click OK
- 8) Now Bob Farmer has Farm Admin access log in as him and see what options he has available.
 - A) In the top right corner click on Welcome SharePoint Setup Account
 - B) Click sign in as Different User
 - C) Username tpg\bob
 - D) Password pass@word1
 - E) Click OK

If you start clicking around you will see Bob has access to Central Admin now. But because he is not a local administrator on the server he does not have access to:

- Operations > Services on Server
- Operations > Incoming e-mail settings
- Applications > Create or extend Web application
- STSADM.exe
- 9) Still logged in as Bob click on **Primary SSP** on the guick launch bar.
- 10) Enter tpg\bob and pass@word1 and click OK
- 11) Error: Access Denied This is because SharePoint does a good job of security isolation.

Exercise 2: Grant access to the SSP

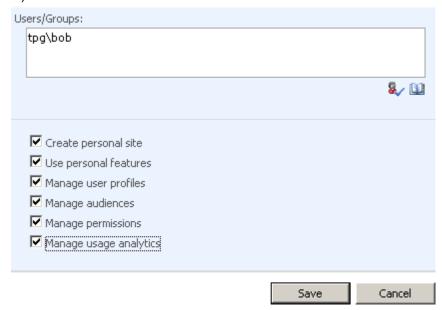
Because Bob is a farm admin he could give himself access to the SSP but that isn't what we want. Instead log back in as SP Admin and take a look at how to grant access to the SSP.

- 1) Log in as SP_Admin
 - A) Click Sign in as a different user

- B) Username tpg\sp_admin
- C) Password pass@word1
- D) Click OK
- 2) Add Bob to the SSP Site Collection as a viewer
 - A) Click Site Actions > Site Settings
 - B) Under Users and Permissions click People and groups
 - C) Click New
 - D) For users/groups: enter tpg\bob
 - E) Deselect Send Welcome email and click OK
 - F) Click **Shared Services Administration: Primary SSP** in the breadcrumb to return to the home page.

Now Bob can log into the SSP and manage search settings, the Excel Service Settings (if you have Enterprise edition), and can view the various links list. But there is still a lot of stuff Bob cannot do. What is even stranger? Bob can now give himself the additional permissions he wants

- 3) Give Bob more permissions
 - A) Under User Profiles and My Sites click Personalization services permissions
 - B) Click Add Users/Groups
 - C) For Users/Groups: enter tpg\bob
 - D) Select all of the boxes and click Save

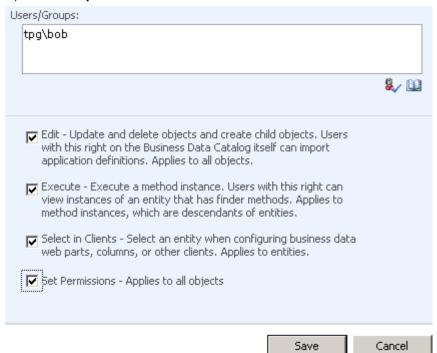


- 4) What are all of these different permissions? Glad you asked.
 - A) **Create personal site** gives the user the capability to create and use a My Site. Going deep here will have to be saved for another day but if you want to make that My Site link disappear take away this right from the users. But you didn't give it to them. Why do they have it? Go back to the manage permission screen. All authenticated users were given this right by default.

- B) **Use personal features** is another topic for another day. Essentially though this provides the My Links functionality and allows users to manage their Colleagues.
- C) **Manage user profiles** this allows your user to do just that. Get in there and modify the profiles for this SSP. Give them this right and now they can access the links: User profiles and properties, Profile services policies, and My Site Settings.
- D) **Manage audiences** you guessed it but now you can click that handy little Audiences link. Once you are there you can set the schedule or define the rules for building those global audiences.
- E) **Manage permissions** this will let that user modify Personalization services permissions (the stuff we are doing right now).
- F) **Manage usage analytics** this gives the user access to make changes to Usage reporting. Small bug here but if the user doesn't have this right they can still open up the screen. Then if they make a change and hit ok they get a 403 forbidden error.

So now if you have given the user all of those permissions they should be a happy camper? Depends. If you have MOSS Enterprise (which in the lab you do) then one more thing to do.

- 5) Giving Bob control of the BDC.
 - A) Click Shared Services Administration: Primary SSP from the breadcrumb
 - B) Under Business Data Catalog click Business Data Catalog permissions
 - C) Click Add Users/Groups
 - D) Enter tpg\bob
 - E) Select all permissions and click Save



Now Bob can do everything in the SSP.

Exercise 3: Disable My Sites for all users

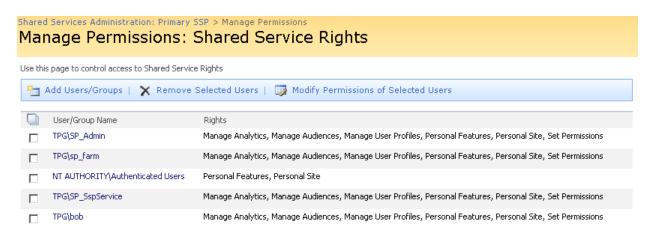
My Sites are personal sites that users are automatically created the first time a user click the My Site link at the top of the page. They are a great tool for expanding social networks internally, allowing users to easily share information, and for allowing them to have a private SharePoint site. My Sites are very powerful and with power comes risk. For most corporations they should not be implemented without a carefully thought out strategy. By default they are enable. When you first setup a farm if you have not planned for My Sites the recommendation is to disable them until you are ready.

- 1) Disable My Sites for all authenticated users
 - A) Return to the home page of the SSP by clicking **Primary SSP** in the breadcrumb.
 - B) Under User Profiles and My Sites click **Personalization services permissions**
 - C) Under User/Group Name click on NT Authority\Authenticated Users
 - D) Deselect Create personal site and click Save

Now you will notice that Bob and SP_Admin still have My Site links. That is because you have given them that right individually. You could simple remove it for them if you wanted to make sure they didn't use My Sites. You can leave the permission for now. In Module 8 you will learn more about My Sites and then re-enable them.

Pop Quiz Time

Take a look at the screen shot below. Can you explain why each account was automatically assigned permissions to the SSP?



End of Lab

Lab 04: Creating a Collaboration Portal

Lab Overview: In this lab you will create the web application portal.tpg.local. Then you will create the root site collection using the collaboration portal template. This will simulate what many companies do to start building their intranet.

Exercise 1: Creating the portal.tpg.local web application

- 1) Open Central Administration by clicking Start > All Programs > Microsoft Office Server > SharePoint 3.0 Central Administration\
- 2) Click the Application Management tab
- 3) Under SharePoint Web Application Management click Create or extend Web application
- 4) Click Create a new Web application
- 5) Change the port to 80
- 6) Enter portal.tpg.local for the host header
- 7) Change the authentication provider to **Negotiate** (**Kerberos**)
- 8) Under Create a new application pool select Configurable
- 9) For user name enter tpg\SP_PortalAppPool
- 10) For password enter pass@word1
- 11) Change Database Name to WSS_Content_Portal
- 12) Click OK twice

Exercise 2: Creating the Collaboration Portal site collection

- 1) When the Application Created screen appears click the blue link **Create Site Collection** in the middle of the page.
- 2) For Title enter The TPG Portal
- 3) Click the Publishing Tab
- 4) Choose Collaboration Portal
- 5) Enter TPG\SP Admin for the Primary Site Collection Administrator
- 6) Click OK

Exercise 3: Setting Up Security

- 1) Open the new portal by clicking the http://portal.tpg.local link on the center of the page.
- 2) Username enter tpg\sp_admin
- 3) Password is pass@word1
- 4) Click OK

This now brings you to The TPG Portal. Take a moment to look around. Notice that it comes with several preconfigured sites and some sample data. This information is just to help get your thought processes started. When you go to build your actual environment you will delete most of the template information.

- 5) From the home page of the portal click the Site Actions > Site Settings > Modify All Site Settings
- 6) From the Users and Permissions section click People and Groups

If you were to click through the groups you would see that only SP_Admin has any permissions right now. This is because you made that account the Site Collection Owner/Administrator.

- 7) Make Owen Owner a member of the The TPG Portal Owners
 - A) Click New > Add Users
 - B) For User/Groups enter TPG\Owen
 - C) For Give Permission select Add users to a SharePoint group and choose **The TPG Portal Owners** [Full Control] group
 - D) Deselect Send welcome e-mail
 - E) Click OK
- 8) Now Owen has full control of this site but not necessarily of the site collection. Login as Owen and compare the options available to him compared to SP_Admin.
 - A) Click Welcome SharePoint Setup Account
 - B) Click Sign in as Different User
 - C) Username is tpg\Owen
 - D) Password is pass@word1
 - E) Click OK
 - F) Click Site Actions > Site Settings > Modify All Site Settings



Compared to SP_Admin

Users and Permissions	Look and Feel	Galleries	Site Administration	Site Collection Administration
People and groups	■ Master page	■ Site content types	■ Regional settings	■ Search settings
■ Site collection	■ Title, description, and icon	■ Site columns	Site libraries and lists	 Search scopes
administrators	■ Navigation	■ Site templates	 Site usage reports 	 Search keywords
 Advanced permissions 	 Page layouts and site templates 	■ List templates	User alerts	■ Recycle bin
		■ Web Parts	■ RSS	 Site directory settings
	Welcome page	■ Workflows	 Search visibility 	Site collection usage reports
	■ Tree view	 Master pages and page layouts 	 Sites and workspaces 	■ Site collection features
	■ Site theme		■ Site features	■ Site hierarchy
	Reset to site definition		■ Delete this site	■ Portal site connection
	■ Searchable columns		 Related Links scope settings Site output cache Content and structure Content and structure logs 	■ Site collection audit settings
				■ Audit log reports
				■ Site collection policies
				Site collection output cache
				Site collection cache profiles
				■ Site collection object cache
				■ Variations
				■ Variation labels
				■ Variation logs
				■ Translatable columns

Notice that SP_Admin has an extra column called Site Collection Administration. These are settings that affect the entire Site Collection not just the current site. Owen was set only to have Full Control of the current site The TPG Portal.

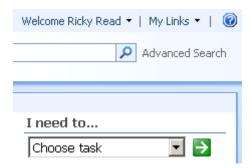
- 9) Everyone who will see the Site Collection Administration options are members of the Site Collection Administrators group. To view this group you will need to log back in as SP_Admin.
 - A) Click Welcome Owen Owner
 - B) Click Sign in as Different User
 - C) Username is tpg\sp_admin
 - D) Password is pass@word1
 - E) Click OK
 - F) Click Site Actions > Site Settings > Modify All Site Settings
- 10) Under users and permissions click Site collection administrators
- 11) From this screen you can see that only SharePoint Setup Account is in the group. Enter **tpg\alan** to make Alan Admin a member also and click **OK**.
- 12) Add Mary Member as a member of the The TPG Portal Members group using the browse functionality
 - A) Under Users and Permissions click People and Groups
 - B) Click New > Add Users
 - C) Click the **browse icon** below Users/Groups:
 - D) In the Find box enter **Ma** and click the **magnifying glass**
 - E) Select Mary Member and click Add ->
 - F) Click OK

- G) For Give Permission select Add users to a SharePoint group and choose **The TPG Portal Members** [Contribute] group
- H) Deselect Send welcome e-mail
- I)Click OK
- 13) Add Domain Users to the The TPG Portal Visitors group
 - A) Click New > Add Users
 - B) For User/Groups enter TPG\Domain Users
 - C) For Give Permission select Add users to a SharePoint group and choose **The TPG Portal Visitors** [Read] group
 - D) Deselect Send welcome e-mail
 - E) Click OK

Exercise 4: Testing Security Trimming

Security trimming is a beautiful thing. The goal is to never show a user a link to things they cannot access.

- 1) Click The TPG Portal link to be taken to the home page of the portal
- 2) Login as Ricky Read and see what his experience is like
 - A) Click Welcome SharePoint Setup Account
 - B) Click Sign in as Different User
 - C) Enter tpg\Ricky
 - D) Password pass@word1
 - E) Click OK
 - F) Notice on right side of the screen the Site Actions menu is not present.

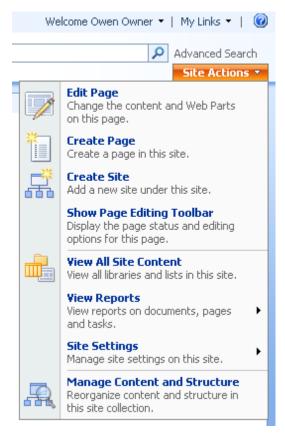


- G) Ricky has only read access to the portal because he is a member of domain users.
- 3) Login as Mary Member and see what her experience is like
 - A) Click Welcome Ricky Read
 - B) Click Sign in as Different User
 - C) Enter tpg\Mary

- D) Password pass@word1
- E) Click OK
- F) Click Site Actions and review her options



- G) Notice Mary has some page options. This is because she is in the Members group that has the contribute permission level.
- 4) Login as Owen Owner and see what his experience is like
 - A) Click Welcome Mary Member
 - B) Click Sign in as Different User
 - C) Enter tpg\Owen
 - D) Password pass@word1
 - E) Click OK
 - F) Click Site Actions and review his options.



G) These options are available because Owen is a member of the Owners group which has Full Control.

Exercise 5: Looking at Security Inheritance

Now if you were to take one of your new users and click around the portal you would notice they have the same access in all of the sub sites throughout the portal. This is because all of the sub sites are setup to inherit permissions. So what permissions you assign to a user at the Portal level will propagate down. This makes for an easy to manage portal. But sometimes you don't want this. Try setting up unique permissions on an existing site.

- 1) Still logged in as Owen click the Document Center tab
- 2) Click Site Actions > Site Settings
- 3) Under Users and Permissions click People and groups
- 4) Everything is the same as the top level portal. Click **Site Permissions** in the quick launch.
- 5) Notice now there are no check boxes beside the groups or accounts. Click Actions



You have two options. Either manage the permissions of the site it is inheriting from or edit permissions. If you choose edit permissions it will copy the existing permissions and break the inheritance.

- 6) Click Actions > Edit Permissions
- 7) Click **OK** at the warning
- 8) Click that Actions menu now. Notice your choices have changed.



9) There is also now a Settings menu. Click **Settings** and see your other options.



- 10) Remove access to the Document Center for the Visitors group
 - A) Select the box next to the **The TPG Portal Visitors** group
 - B) Click Actions > Remove User Permissions
 - C) Click **OK** at the warning message
- 11) Set the Members group to only have read access to the Document Center.
 - A) Click **The TPG Portal Members** group from the list of permissions
 - B) In the Choose Permissions section deselect Contribute and select the link to Read
 - C) Click OK
- 12) Go back to the home page of the portal by click The TPG Portal tab
- 13) Login in as Ricky Read. If you need help use exercise 4 step 2 above to login as Ricky Read.

- A) Notice he no longer see's the document center in the global navigation (The tabs across the top of the page).
- B) If he enters http://portal.tpg.local/docs in the address bar of the browser he gets Error: Access Denied
- 14) Go back to the home page of the portal
- 15) Login in as Mary Member. If you need help use exercise 4 step 3 above to login as Mary.
 - A) Click on the link to the Document Center
 - B) Notice that she does not have a Site Actions menu. This is because she can now only read the site.

Exercise 6: Permission Levels

- 1) Login as Alan Admin
 - A) Click Welcome Mary Member
 - B) Click Sign in as Different User
 - C) User name: tpg\Alan
 - D) Password: pass@word1
 - E) Click OK
- 2) Click The TPG Portal tab to return to the home page
- 3) Click Site Actions > Site Settings > Modify All Site Settings
- 4) Under Users and Permissions click Advanced Permissions
- 5) Click Settings > Permission Levels
- 6) Click the Contribute Permission

This is the permission level the The TPG Portal Members use. After you review these permissions you have decided that you do not want that group to be able to delete items by default. Now from this screen you could modify the Contribute Permission level to meet your needs. But that is not the best practice. You will always run that risk that an upgrade or service pack may reset the permission level back to the default. A better solution is to create a new permission level.

- 7) Scroll to the bottom of the page and click Copy Permission Level
- 8) Now you have a replica of contribute. Set the name to **TPG Contribute**.
- 9) Set the description to The same as contribute except no delete permission.
- 10) Deselect **Delete Item**
- 11) Click Create
- 12) Now assign the Members group this permission level
 - A) Click **Permissions** from the breadcrumb
 - B) Click The TPG Portal Members group from the list
 - C) Deselect Contribute

D) Select TPG Contribute

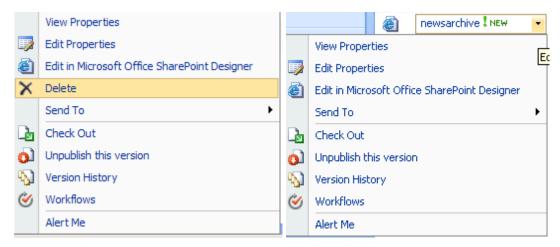
E) Click **OK**

Notice you could give a group multiple permission levels if that was a need.

Now if you were to go into a list or library and click the drop down menu you would notice Delete is missing.

Contributor Permission

TPG Contributor Permission



Screen shots from the Pages Library in the News site.

Exercise 7: Creating Sub Sites

Now that you have setup security it is time to grow out your portal a little. In this section you are going to create a departments site and then several departments below it. One of those sites the HR site you are going to grow out that site tree also.

- 1) Still logged in as Alan navigate back to the **home page** of the portal.
- 2) Create the Departments Site
 - A) Click Site Actions > Create Site
 - B) Title = **Departments**
 - C) URL = departments
 - D) Click the Publishing tab
 - E) Choose Publishing Site
 - F) Accept the other defaults and click Create
- 3) When the site is created you are taken to the home page of the Departments site. Click the **Publish button**.
- 4) Create the HR, IT, Sales, and Accounting sub sites.
 - A) Click Site Actions > Create Site
 - B) Title = HR
 - C) URL = hr
 - D) Click the Publishing tab
 - E) Choose Publishing Site
 - F) Accept the other defaults and click Create
 - G) Click Publish

- H) Navigate back to **Departments**
- I) Now repeat this step for IT, Sales, and Accounting
- 5) Create the HR Work Site
 - A) Hover over **Departments** and click **HR**
 - B) Click Site Actions > Create Site
 - C) Title = HR Work Site
 - D) Description = Site for the HR team to work together privately.
 - E) URL = hrwork
 - F) Choose Team Site
 - G) Select Use unique permissions
 - H) Click Create
- 6) Set the unique permissions for the HR Work Site
 - A) For Visitors to this Site select Create a new group
 - B) Take the default name and leave the users field blank
 - C) For Members of this Site add TPG\HR Users
 - D) For Owners of this Site take the default
 - E) Click OK
- 7) Check out unique permissions
 - A) Click Site Actions > Site Settings
 - B) Click People and groups
 - C) Click Site Permissions
 - D) You should see three groups only. Notice that The TPG Portal groups don't have any permissions. So that means Owen Owner who has so many permissions up in TPG portal has no access at all to this site. But SP_Admin who you did not give any permissions to this site can still access it with full control. Because he is a Site Collection Administrator all sites created in this Site Collection he has complete control of the collection.

Exercise 8: Creating a New Site Collection

As you just discovered there are some potential security headaches with Site Collections. The HR team has requested a private site where they can work on confidential documents without having to worry about SharePoint Administrators "accidently" accessing the site. To do this you will create a HR Site Collection. Using Managed paths you will place the site at http://portal.tpg.local/sites/hr. The /sites/ is a container called a managed path.

- Open Central Admin by clicking Start > All Programs > Microsoft Office Server > SharePoint 3.0
 Central Administration
- 2) Click the Application Management tab
- 3) Under SharePoint Site Management click Create Site Collection

- 4) Make sure your Web Application says http://portal.tpg.local
- 5) Title = **HR Team**
- 6) Description = A secure place for HR to work
- 7) URL = http://portal.tpg.local/sites/hr
- 8) Choose the **Team Site** template
- 9) Primary Site Collection Administrator = tpg\betsy
- 10) Click OK
- 11) At the Successfully Created message click the link to http://portal.tpg.local/sites/hr
- 12) When it tries to automatically log you in as Alan you will get access denied. You can try to login as any of the admin accounts sp_farm, sp_admin, Owen, etc. None of them have access to the site only Betsy.
- 13) Login as Betsy
 - A) Click Sign in as a different user
 - B) Username tpg\betsy
 - C) Password pass@word1
 - D) Click OK
- 14) Now you could build out an environment where the HR people can work without worry of other site collection administrators seeing their site. You could also assign this site collection a quota or put it in its own database.

Exercise 9: Creating Your Own Managed Path

Some companies place a great deal of emphasis on proper URLs. To them using the default container sites is unacceptable. Try creating a managed path for project sites called projects. Then create a basic meeting site as the root site collection. When you create the projects managed path it will be a wildcard inclusion. Like sites it will allow you to create multiple site collections. Example /projects/project1 and /projects/project2

The other type of type of managed paths are explicit inclusions. These are managed paths you can only use for one site. These are powerful because you can create a URL of http://portal.tpg.local/blogs and have a site collection at this URL instead of a sub-site of the portal site collection.

Finally, in this lab you will examine how Site Collection quotas work.

- 1) Open Central Admin
- 2) Create your managed paths
 - A) Navigate to the **Application Management** tab
 - B) Under SharePoint Web Application Management click Define managed paths
 - C) Make sure you are in the proper Web Application http://portal.tpg.local
 - D) For Path: enter /projects

- E) Click OK
- F) The page reloads and you will see Projects in the Included Paths
- G) For Path: enter /blogs
- H) Change type to Explicit inclusion
- I)Click OK
- 3) Click the Application Management tab
- 4) Create a Project site collection
 - A) Click Create Site Collection
 - B) Title = Windows Server 2008
 - C) URL change the drop down from blogs to projects
 - D) URL = http://portal.tpg.local/projects/win2k8
 - E) Click the Meetings tab
 - F) Choose the Basic Meeting Workspace
 - G) Primary Site Collection Administrator = tpg\alan
 - H) Click OK
- 5) You probably noticed in the quota section at the bottom of the screen that you choose no quota. Take a look at quota management.
 - A) Click the **Application Management** tab
 - B) Under SharePoint Site Management click Site Collection quotas and locks
 - C) Click Site Collection > Change Site Collection
 - D) Click /projects/win2k8
 - E) Click OK
 - F) Select Individual quota
 - G) Check Limit site storage and set it to 200 MB
 - H) Check Send warning e-mail and set it to 175 MB
 - I)Click OK

Now if the site collection reaches 175 MB in size Alan (the primary site collection owner) will receive an email warning him. If he ignores the warning and lets the site get to 200 MB then they will no longer be able to add data.

- 6) Create a quota template
 - A) Under SharePoint Site Management click **Quota Templates**
 - B) Click Create a new quota template
 - C) Start from [new blank template]
 - D) New template name = Blog site quota
 - E) Limit site = 500

- F) Send warning = 450
- G) Click OK
- 7) Create the blog site collection
 - A) Under SharePoint Site Management click Create site collection
 - B) Title = Company Blog
 - C) URL = http://portal.tpg.local/blogs
 - D) Choose the Blog template
 - E) Primary Site Collection Administrator = tpg\alan
 - F) Select a quota template = Blog Site quota
 - G) Click OK

Exercise 10: Giving Admin Access to the Entire Web Application

After all of your efforts creating multiple site collections to separate security and lock out the other administrator from things like the HR site you have upset Bob. Bob Farmer is the owner of SharePoint and a control freak. He needs full access to all SharePoint sites all of the time. Luckily instead of going and adding him all over the place to security you can give him full control of the entire Web Application with a couple simple steps.

- 1) Navigate to Central Admin
- 2) Go to the Application Management tab
- 3) Under Application Security click Policy for Web application
- 4) Make sure the web application says http://portal.tpg.local
- 5) Click Add Users
- 6) Click Next
- 7) For users enter tpg\bob
- 8) Select Full Control
- 9) You could select Account operates as System. Then every time Bob makes a change to the site it will reflect as System instead of as Bob Farmer. You do not want to select this for the lab.
- 10) Click **Finish** Now Bob is happy.

Exercise 11: A Quick Peek at Excel Services

While you were clicking around the portal you may have noticed that you got Access Denied from the Sample Dashboard under the Reports site. This is because Excel Services needs a security change before it can render Excel Workbooks even from within the portal.

- 1) Check out the Access Denied error
 - A) Open the **portal** logged in as **Alan**
 - B) Click the Reports tab

C) From the Quick Launch bar on the left click Sample

Once the page loads you will see Access Denied – You do not have permissions to open this file on Excel Services.

- 2) To correct this error you need to navigate back to the SSP
 - A) Open Central Administration
 - B) Click Primary SSP
 - C) User name tpg\sp_admin
 - D) Password pass@word1
 - E) Click OK
- 3) Setting up the Trusted File Locations in Excel Services
 - A) Under Excel Services Settings click Trusted File Locations
 - B) This is the list of location Excel Services trust. Only files located in these location can be displayed and calculated by Excel Services. As you might notice the list is empty. For now you will set the entire portal to be trusted.
 - C) Click Add Trusted File Location
 - D) Address = http://portal.tpg.local
 - E) Click Trust Children
 - F) Take the other **defaults** and click **OK**

You could specify only a certain document library or file share as trusted if you wanted.

4) Now return to the sample dashboard window and refresh the page. Now you can get a quick peek at some of the power of Excel Services.

End of lab – Now would be a good time to reboot your virtual machine.

Lab 05A: Using and Customizing SharePoint Sites

Lab Overview: In this lab you will get some hands on experience with some of the standard, out of the box functionality of SharePoint. Not a lot of SharePoint administration going on here but still good things to know, how to work with the actual sites.

Exercise 1: Adding a Web Part to the page

- 1) Login to the **portal** as **Alan Admin**
- 2) Navigate to the HR Work Site
 - A) Hover over **Departments**
 - B) Click HR
 - C) From the quick launch bar click **HR Work Site**
- 3) Click Site Actions > Edit Page
- 4) Add a Web Part for viewing list contents to the page
 - A) In the Left Zone click Add a Web Part
 - B) Check the box beside Shared Documents
 - C) Click Add

This has placed the Shared Documents Web Part at the top of the Left hand Column. This web part provides you a view of the list Shared Documents. Any time you create a new list you will automatically get this Web Part created for viewing the list. This is the same as the Announcements, Calendar, and Links Web Parts already present on the page.

- 5) Review the options available to all Web Parts
 - A) Click Edit from the Shared Documents title bar
 - B) From the drop down list choose Modify Shared Web Part

Take a moment to notice the different option you have for modifying mostly how a Web Part displays.

- I) Changing the size
- II) Modifying the Chrome (border/title bar)
- III) Determine how users can interact with the Web Part (Minimize, Close, Hide)
- IV) Targeting (Only displaying for certain users/group/audiences)
- C) At the top of the web part zone you will see settings unique to the Web Part. For the list view web part you can control the view and the toolbar.
- D) Click Cancel
- 6) Add a functional web part to the page
 - A) Click Add a Web Part from the Left zone

- B) Scroll down the list, under the Miscellaneous section select the box beside **Content Editor Web**Part
- C) Click Add
- 7) From the Web Part click open the tool pane
- 8) This Web Part allows you to enter Text to display on the page using a Rich Text Editor.
 - A) Click Rich Text Editor...
 - B) Add some text and try out some of the formatting options. You could insert a picture or hyperlink, add a table, and do most basic text formatting options. Once you are finished click **OK**.
 - C) Click **OK** to close the tool pane.
- 9) This Web Part also allows you to directly enter HTML code (including <Scripts>) using the Source Editor
 - A) Click **Edit** from the toolbar
 - B) Click Modify Shared Web Part
 - C) Click the Source Editor...
 - D) It will show you the HTML that was generated previously by the Rich Text Editor. **Delete all of the text and tags.**

```
E) Insert the following code
<script>alert("Changing title to red")</script>
<style>
.ms-sitetitle a
{
Color:red;
}
</style>
```

- F) Click Save
- G) As the page reloads you will get a popup message click **OK**
- H) Now notice the title HR Work Site is red. Very powerful little tool.
- 10) Once you are done playing with the content editor web part delete it from the page.
 - A) Click Edit from the toolbar
 - B) Click Delete
 - C) Click **OK** at the warning

Exercise 2: Adding documents to a document library.

- 1) Upload a single document
 - A) From the home page of the HR Work Site click Shared Documents
 - B) Click Upload
 - C) Browse to c:_Student Files\Module 5\
 - D) Select **Document 1.docx**
 - E) Click Open

- F) Click OK
- 2) Navigate back to the home of the HR Work Site by clicking the breadcrumb

You can see now that your document is automatically displayed in the Shared Documents Web Part you added earlier.

- 3) Upload a document using the Web Part
 - A) Right below Document 1 click the link Add new document
 - B) Browse to c:_Student Files\Module 5\
 - C) Select **Document 2.docx**
 - D) Click Open
 - E) Click OK

Now you are returned to the home page where you see both documents displayed. You just used the shortcut Add new document to add the document instead of navigating back to the list.

- 4) Add a column of metadata
 - A) Click Shared Documents
 - B) Click Settings > Document Library Settings
 - C) These are all of the settings that are unique to this list. Scroll down the page and under Columns click **Create column**
 - D) Column name = Even or Odd
 - E) Type of column = Choice (menu to choose from)
 - F) Require that this column contains information = Yes
 - G) Choices = Even Odd
 - H) Clear out the **Default value**
 - I) Click **OK**
- 5) Upload another document
 - A) Click **Shared Documents** from the bread crumb
 - B) Click Upload
 - C) Browse to c:_Student Files\Module 5\
 - D) Select Document 3.docx
 - E) Click Open
 - F) Click OK
 - G) This time you are prompted for the required information Even or Odd. Select **Odd** and click **Check In.**
- 6) Notice now in the Document Library there is a new column that contains your entered metadata. Also, notice that Document 1 and 2 are blank. You need to add their metadata.
 - A) Hover over document 1

- B) Click the dropdown and select Edit properties
- C) Set Even or Odd to Odd
- D) Click OK
- E) Repeat for **Document 2** setting it to **even**

Exercise 3: Creating a view

Now you will create a custom view. Views are used to display only the items and the metadata that you want. They are very flexible and powerful.

- 1) Click Settings > Document Library Settings
- 2) Scroll to the bottom of the page and click Create view
- 3) Choose the Standard View
- 4) View Name = Odd Documents
- 5) Scroll down to Filter and select **Show items only when the following is true:**
- 6) Show the item when column Even or Odd
- 7) Is equal to
- 8) **Odd**
- 9) Take a moment to notice the other options you have available when creating views
- 10) Click OK

Now you will see that you are only displaying the documents marked Odd.

11) To change the view back you can click View: and select All Documents. (To the right of Settings)

Keep in mind all of these settings are universal across all list. What is a list? Just about everything in SharePoint. Examples: Document Libraries, Page Libraries, Calendars, Announcements, Discussion Boards, and even Surveys.

Exercise 4: Create a custom list

Custom list allow you to create your own list. Think of every time you have ever created an Access database or Excel Spreadsheet just to track or collect some basic information. You can now do that in a custom SharePoint list and use all of the power of SharePoint. In this example you will create a custom list for tracking spending in the HR department.

- 1) Click Site Actions > Create
- 2) From the Custom Lists column choose Custom List
- 3) Name = Budget Tracking
- 4) Click Create

This will create you a new blank list with only the Title column. You will need to grow out the list.

5) You cannot delete the Title column from a custom list, so you must rename it to make it work for your scenario.

- A) Click Settings > List Settings
- B) Under Columns click Title
- C) Change the Column name from Title to Purchased Item
- D) Click OK
- 6) Create a Date Purchased column
 - A) Under Columns click Create column
 - B) Name = Date Purchased
 - C) Type of column = Date and time
 - D) Click OK
- 7) Create an Amount column
 - A) Under Columns click Create column
 - B) Name = Amount
 - C) Type of column = Currency
 - D) Click OK
- 8) Create a Quantity column
 - A) Under Columns click Create column
 - B) Name = Quantity
 - C) Type of column = Number
 - D) Click OK
- 9) Create a Budget Category column
 - A) Under Columns click Create column
 - B) Name = Budget Category
 - C) Type of column = Choice
 - D) Choices = Supplies, Hiring, Travel
 - E) Set the **Default** value to blank
 - F) Click OK
- 10) Create a Total Spent column
 - A) Under Columns click Create column
 - B) Name = Total Spent
 - C) Type of column = Calculated
 - D) Formula = [amount]*[quantity]
 - E) Type of value to return = **Currency**
 - F) Click OK
- 11) Fill out the list

A) Click Budget Tracking in the breadcrumb

B) Repeat steps C-E for each item in the table

Purchased Item	Date	Amount	Quantity	Category
Red Staplers	10/1	12.00	3	Supplies
Staples	10/1	3.25	3	Supplies
Monster Ads	9/15	450.00	2	Hiring

- C) Click New
- D) Fill in the information
- E) Click OK

Notice that the Total Spent column is automatically filled out.

End of Lab

Lab 05B: Modifying Navigation

Lab Overview: In this lab you will manipulate SharePoint's Navigation options. You will explore how you can use Global Navigation to provide a consistent and expected environment for users as they navigate your portal. Also, you will manipulate the Current Navigation to modify the per site experience. Strong navigation is a key to every good web experience.

Exercise 1: Modifying the Global Navigation bar

- 1) Open the **home page** of the portal logged in as **Alan**
- 2) Click Site Actions > Site Settings > Modify All Site Settings
- 3) Under Look and Feel click Navigation

Because this site is the root site the options here are limited. As you can see the Global Navigation bar is currently showing all of the sub-sites of the Portal and all pages (except default.aspx) from the pages libraries of these sites.

- 4) Add the www site to the Global Navigation
 - A) Click Add Link
 - B) Title = Public Web
 - C) URL = http://www.tedpattison.net
 - D) Select Open link in new window
 - E) Click OK
 - F) Click OK

Now there is a tab for Public Web. If you click the tab it will open a new browser window and take you to the web site.

- 5) Hide the Reports tab
 - A) Click Navigation
 - B) Click Reports
 - C) Click Hide
 - D) Click OK
- 6) Remove the pages from the drop down below News
 - A) Click the News tab
 - B) Click Site Actions > Site Settings > Modify All Site Settings
 - C) Click Navigation

Notice now you have several new options. You can choose to use Global Navigation of the parent or not, also you can choose to show the Current Navigation of the parent or this site.

- D) In the Subsites and Pages section deselect Show pages
- E) Click **OK**

Notice under News now there are no drop downs. Whenever you want to affect a tab you should always need to go to that sites Navigation options to make the change.

- 7) Navigate to HR Work Site
 - A) Click the **Departments** tab
 - B) Click HR from the Current Navigation
 - C) Click HR Work Site from the Current Navigation
- 8) The HR Work Site is an area just for the HR Team. As they build out this area they will have many sub-sites and would like to have their own Global Navigation from this site down. You need to setup HR Work Site to use its own Global Navigation.
 - A) Click Site Actions > Site Settings
 - B) Click Navigation
 - C) In the Global Navigation section click Display the navigation items below the current site
 - D) Click OK
 - E) Click the HR Work Site tab

Notice now there is only one tab in the Global Navigation. You can now build out the HR Global Navigation. Also, if you look in the top left hand corner of the screen you will see The TPG Portal > HR Work Site. This is giving you a global breadcrumb for getting back to the portal above.

Exercise 2: Build out the HR site Structure

From here Betsy would like to start building out her own structure and navigation. She currently only has contributor access to the site. Add her to site owners group. Then she will create an HR managers meeting sub-site and add a tab for the HR site collection created earlier.

- 1) Add Betsy as a site owner
 - A) Click Site Actions > Site Settings
 - B) Click People and Groups
 - C) Click New
 - D) Users/Groups = tpg\Betsy
 - E) Add users to a SharePoint group = HR Work Site Owners [Full Control]
 - F) Deselect Send Welcome e-mail
 - G) Click OK
- 2) Sign in as Betsy
 - A) Click Welcome Alan Admin
 - B) Click Sign in as Different User
 - C) User name = tpg\betsy
 - D) Password = pass@word1
 - E) Click OK

- 3) Create the Manager Meeting Site
 - A) Click Site Actions > Create
 - B) Under Web pages click Sites and Workspaces
 - C) Title = Manager Meeting Site
 - D) URL = /managermeeting
 - E) Choose the Meetings tab
 - F) Select Decision Meeting Workspace
 - G) Click user unique permissions
 - H) Click Create
 - I)Take the defaults
 - J) Click OK
- 4) The Meeting site automatically used it is own Global Navigation. Switch it to use the HR Work Site navigation
 - A) Click Site Actions > Site Settings
 - B) Click Navigation
 - C) Under Global Navigation choose Display the same navigation items as the parent site
 - D) Click OK
- 5) Now set the HR Work Site to show sub sites
 - A) Click the HR Work Site tab
 - B) Click Site Actions > Site Settings
 - C) Click Navigation
 - D) Select Show subsites
 - E) Click OK

Now if you look at the Global Navigation bar you will see that the Manager Meeting Site automatically was added.

- 6) Add a link to http://portal.tpg.local/sites/hr
 - A) Click Navigation
 - B) Click Add Link
 - C) Title = HR Private Site
 - D) URL = http://portal.tpg.local/sites/hr
 - E) Click OK
 - F) Click OK
- 7) Test Navigation
 - A) Click the HR Work Site tab

- B) Sign in as Amy
 - I) Click Welcome Betsy Ross
 - II) Click Sign in as Different User
 - III) User name TPG\amy
 - IV) Password pass@word1
 - V) Click OK

Take a look at the navigation bar. Because Amy doesn't have access to the Manager Meeting site that tab is hidden from her. But if she clicks on the link to HR Private Site she gets Accessed Denied. Why doesn't SharePoint security trim this tab also? Because the tab points to a different Site Collection. Since it is in another site collection SharePoint doesn't check the permissions. So it just shows the tab to everyone. Something to consider when using multiple site collections. You could have targeted the link using Audiences to hide it from Amy but you haven't learned that yet.

- 8) Log back in as Betsy
 - A) Click Welcome Amy Pattison
 - B) Click Sign in as Different User
 - C) User name tpg\betsy
 - D) Password pass@word1
 - E) Click OK

Exercise 3: Clean up current navigation

Current navigation has many names. Quick launch and left hand nav are the most common names. Often users are confused by the extra links on the current navigation. In this exercise you will remove the extra links and the add a new heading with sub links.

- 1) Remove some quick launch links
 - A) Click Site Actions > Site Settings
 - B) Click Navigation
 - C) In Navigation Editing and Sorting find Current Navigation
 - D) Click Sites
 - E) Click Delete
 - F) Click People and Groups
 - G) Click Delete
 - H) Click Manager Meeting Site
 - I)Click Hide
 - J) Click OK
- 2) Click the HR Work Site and review your changes
- 3) Now add Insurance sites with a heading

- A) Click Site Actions > Site Settings
- B) Click Navigation
- C) In Navigation Editing and Sorting Click Current Navigation
- D) Click Add Heading...
- E) Title = Insurance Sites
- F) Click OK
- G) Click Insurance Sites
- H) Click Add Link
- I)Title = Anthem
- J) URL = http://www.anthem.com
- K) Select Open link in new window
- L) Click OK
- M) Click OK
- 4) Click HR Work Site tab and check out your changes.

Exercise 4: A couple more quick launch tricks

Two more things with the quick launch bar. It is possible to remove it all together if it is cluttering up your site. Also, SharePoint has a built in Tree view control you can enable on the quick launch bar.

- 1) Turning on the Tree view
 - A) Click Site Actions > Site Settings
 - B) Under Look and Feel click Tree view
 - C) Select the box Enable Tree View
 - D) Click OK
- 2) Click the HR Work Site tab

Now below the current navigation you can see the Site Hierarchy. You can expand the various sections of the site to see its sub information. Unfortunately there are no settings for the Tree view. You cannot manipulate what it shows or if a section is expanded or not. This limits the Tree views usefulness.

- 3) Disable the current navigation
 - A) Click Site Actions > Site Settings
 - B) Under Look and Feel click Tree view
 - C) Deselect Enable Quick Launch
 - D) Click OK
- 4) Click the HR Work Site tab

Now all that remains is View All Site Content and the Tree view

- 5) Disable the Tree view
 - A) Click Site Actions > Site Settings
 - B) Under Look and Feel click Tree view
 - C) Deselect Enable Tree View
 - D) Click OK
- 6) Click the HR Work Site tab

All gone. Nothing but wasted blue space.

Exercise 5: Looking at navigation in a separate Site Collection

Because the private HR site is a separate site collection it has no options for using the portals navigation. Also, by default it does not have a link for navigating to the portal. Finally, it doesn't exactly have the Navigation option because that site collection does not have the publishing features activated. Sounds like it needs a little investigating.

- 1) Click the HR Private Site tab
- 2) Add the connection back to the HR Work Site in the global breadcrumb
 - A) Click Site Actions > Site Settings
 - B) Under Site Collection Administration click Portal site connection
 - C) Click Connect to portal site
 - D) Portal web address = http://portal.tpg.local/departments/hr/hrwork
 - E) Portal Name = HR Work Site
 - F) Click OK



3) Under Look and Feel notice there is no Navigation option. Instead click Top link bar

This interface will only allow you to add new tabs and change their order. There are no options for using headings, displaying pages, or sub-sites. Just add and remove tabs.

- 4) Click Site Settings in the bread crumb
- 5) Under Look and Feel click Quick Launch

Another limited interface. Though here you can use headings. These difference are important to understand as they do cause user question from time to time.

Also, Tree view is exactly the same as in Publishing sites.

End of lab

Lab 05C: Configuring Out-of-the-box Branding

Lab Overview: In this lab you will explore some simple things you can do to make your site not look so much like SharePoint. First you will apply an out of the box theme and upload a custom graphic to give the site a quick make over. Then you will change the master page to get an idea of what is involved in the process.

Exercise 1: Setting HR to use a different theme

Betsy has called and she would like to change the look of the HR Private site. For some reason she wants a flag theme.

- 1) Navigate to the HR Private site logged in as Betsy
 - A) Open http://portal.tpg.local/sites/hr
 - B) tpg\betsy
 - C) pass@word1
 - D) OK
- 2) Create a picture library called images
 - A) Click Site Actions > Create
 - B) Under Libraries choose Picture Library
 - C) Name = Images
 - D) Display the picture library on the Quick Launch? = No
 - E) Click Create
- 3) Upload the custom graphic
 - A) Click Upload
 - B) Click Browse...
 - C) Navigate to c:_Student Files\Module 5
 - D) Click USA.png
 - E) Click Open
 - F) Click OK
 - G) On the properties screen take the default and click **OK**
- 4) Change the theme
 - A) Click Site Actions > Site Settings
 - B) Under Look and Feel click Site theme
 - C) All of the themes have preview images. Browse the collection to get an idea of what is available. Once you are done looking around choose the **Classic theme** and click **Apply**

5) Notice the colors changed right away. Now you need to change the people logo beside HR Team



- A) Under the Look and Feel column click Title, description, and icon
- B) Change the URL to /sites/hr/images1/usa.png Notice the 1 in images1. This is because there is already and images folder so SharePoint is smart enough to change the name of the folder when you created the images list.
- C) Click OK
- D) Click the Home tab

Betsy now has a decent looking site without too much work.

Exercise 2: Changing the master page

Site themes are great for changing the way that a site looks quickly but sometimes you need to change the physical structure of the page. This is where master pages come into play.

- 1) Navigate to the home page of the TPG portal by entering the URL http://portal.tpg.local
- 2) Sign in as Alan
 - A) Click Welcome Betsy Ross
 - B) Click Sign in as Different user
 - C) TPG\alan
 - D) pass@word1
 - E) Click OK
- 3) Click Site Actions > Site Settings > Modify All Site Settings
- 4) Under Look and Feel click Master page
- 5) There are 3 changes you can make from this page. The Site Master Page, the System Master Page, and the CSS file. Try changing just the Site Master Page to see what happens.
 - A) For Site Master Page change default.master to OrangeSingleLevel.master
 - B) Scroll down the page and click **OK**
 - C) Notice the page you are on has not changed. Click the **The TPG Portal** tab to check out the home page.

Completely different. You have a different color palette, the quick launch bar is visible, and if you scroll down the page you will see a footer with the address. What hasn't changed though? The content and web parts.



- 6) Click Site Actions > View All Site Content
- 7) This page hasn't changed. Now click Documents
- 8) Still looks the same. Try changing the system master to see what happens.
 - A) Click Site Actions > Site Settings > Modify All Site Settings
 - B) Under Look and Feel click Master page
 - C) Set System Master Page to OrangeSingleLevel.master
 - D) Click OK
- 9) Site Settings page still the same. Click Site Actions > View All Site Content
- 10) All Site Content still the same. Click Documents

Hooray! A page that has changed. System Master affects all of the list and library view pages. The reason that the other 2 pages have not changed is because they are driven by Application master. Application master affects all pages that are in the /_layouts folder. This is also where this file resides. The trouble with changing this file is it is NOT SUPPORTED and it will affect all sites on the whole server. A better solution would be to just brand the pages with a custom CSS file. This can be applied from the same screen you changed the default and system master.

- 11) Set the site back to the way it was.
 - A) Click Site Actions > Site Settings > Modify All Site Settings
 - B) Under Look and Feel click Master page
 - C) Set Site Master Page to default.master
 - D) Set System Master Page to default.master
 - E) Click OK

Now everything is back to normal.

End of lab

Lab 06: Reusing, Installing, and Configuring Additional Components

Lab Overview: In this lab you are going to implement all of the new ideas you have learned in the lecture.

Exercise 1: Site Templates

In this exercise you will create a New Customer site for the sales team. You will set the site up with the standard files used in setting up a new customer. Once, you complete the site setup you will save it as a template and make it reusable. Finally, you will make the site available globally by using stsadm.

- 1) Open the Sales site
 - A) Navigate to http://portal.tpg.local
 - B) Login as tpg\alan
 - C) Hover over **Departments** and click **Sales**
- 2) Create a New Customer Template site
 - A) Click Site Actions > Create Site
 - B) Title = New Customer Template
 - C) URL = /new
 - D) Template = Team Site
 - E) Navigation Inheritance = Yes
 - F) Click Create
- 3) Add Necessary Documents
 - A) Click Shared Documents
 - B) Click Upload Multiple Documents
 - C) Navigate to c:_Student Files\Module 6
 - D) Select all files
 - E) Click OK
 - F) Click Yes
- 4) Add Shared Documents to home page
 - A) Click **New Customer Template** in the breadcrumb
 - B) Click Site Actions > Edit Page
 - C) Click Add a Web Part in the Left zone
 - D) Select Shared Documents and click Add
 - E) Click Exit Edit Mode
- 5) Change the theme

- A) Click Site Actions > Site Settings
- B) Under Look and Feel click Site Theme
- C) Select a different theme and click Apply
- 6) Save Site as template
 - A) From the Site Settings screen under Look and Feel click Save site as template
 - B) Filename = NewCustomer
 - C) Template name = New Customer Template
 - D) Select Include Content
 - E) Click OK
- 7) At Operation Completed Successfully click **OK**
- 8) Click Sales from the Global Nav
- 9) Create a new site using the Template
 - A) Click Site Actions > Create Site
 - B) Title = Acme Corp
 - C) URL = /acme
 - D) Select a template = Custom tab, New Customer Template
 - E) Navigation inheritance = Yes
 - F) Click Create

Notice your Shared Documents are ready to go including the Web Part on the page. Also, your pretty theme is still intact.

Exercise 2: Using the template globally

If you were to navigate to the HR Private Site and tried to create a site using the New Customer Template it would not be an option. This is because when you saved the site as template you saved it to the site collection template gallery and HR Private is in a different site collection. In order for the template to be usable in the HR Private site collection you need to deploy the template using stsadm.

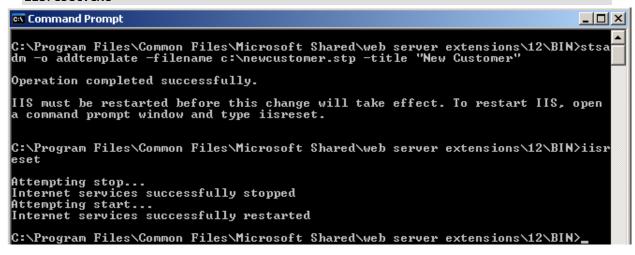
- 1) Make sure the template is not available in the HR Private site
 - A) Navigate to http://portal.tpg.local/sites/hr
 - B) Login as tpg\betsy
 - C) Click Site Actions > Create
 - D) Under Web Pages select Sites and Workspaces
 - E) Look at Select a template. Notice there is no custom tab available.
- 2) Download the template
 - A) Navigate back to http://portal.tpg.local
 - B) Sign in as tpg\alan

- C) Click Site Actions > Site Settings > Modify All Site Settings
- D) Under Galleries click Site templates
- E) Click on NewCustomer
- F) Click Save
- G) Save it to c:\newcustomer.stp
- 3) Load the template globally
 - A) Open the command prompt
 - B) Navigate to c:\program files\common files\Microsoft shared\web server extensions\12\bin
 - C) Run the command

```
Stsadm -o addtemplate -filename c:\newcustomer.stp -title "New Customer Template"
```

D) Run the command

IISreset.exe



- E) Leave the command prompt open. You will use it later in the lab.
- 4) Navigate back to HR Site to check out the results
 - A) Navigate to http://portal.tpg.local/sites/hr
 - B) Login as tpg\betsy
 - C) Click Site Actions > Create
 - D) Under Web Pages select Sites and Workspaces
 - E) Look at Select a template. Notice there is now a custom tab. And on the tab is New Customer template.

Exercise 3: Add a feature

Your developers have just given you the files to deploy their new feature. They didn't have time to package it properly so you will have to deploy it manually.

1) Copy the files into place

- A) Open My Computer and navigate to c:_student files\module 6
- B) Copy the HelloWorld folder
- C) Open another instance of My Computer and navigate to c:\program files\common files\Microsoft shared\web server extensions\12\template\features
- D) Paste in the HelloWorld folder
- 2) Open the command prompt
- 3) Navigate back to 12\bin so you can run Stsadm
- 4) Run the command

Stsadm -o installfeature -name Helloworld -force

5) Run the command

Stsadm -o activatefeature -name Helloworld -url http://portal.tpg.local -force

```
C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>stsadm -o installfeature -name HelloWorld -force

Operation completed successfully.

C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>stsadm -o activatefeature -name HelloWorld -url http://portal.tpg.local -force

Operation completed successfully.

C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>_
```

- 6) Leave the command prompt open, you will be using it again.
- 7) Open http://portal.tpg.local
- 8) Sign in as tpg\alan
- 9) Click Site Actions
- 10) At the bottom of the menu you can see the new feature Hello World. If you click it you will be taken to the MSDN site.

You will also notice that if you went back to http://portal.tpg.local/sites/hr or to http://portal.tpg.local/departments you would not see the menu. This feature was deployed only to the http://portal.tpg.local site because it is scoped at the web level. You could deploy it to another site by rerunning the command and specifying the URL or using the web interface.

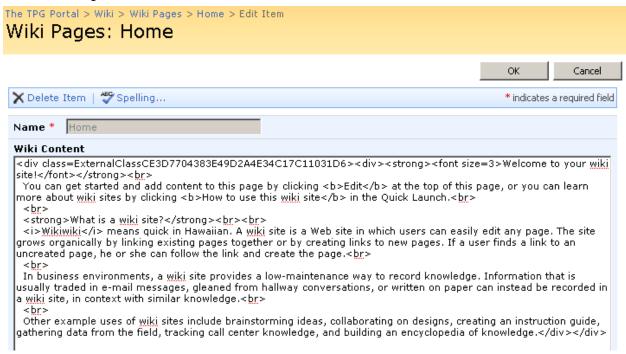
- 11) Add the feature to the Departments site using the web interface
 - A) Navigate to http://portal.tpg.local/departments
 - B) Click Site Actions > Site Settings > Modify All Site Settings
 - C) Under Site Administration click Site features
 - D) You should see A Sample Feature: Hello World click Activate
 - E) Now click Site Actions and notice Hello World is available

Exercise 4: Deploy a WSS Solution Pack

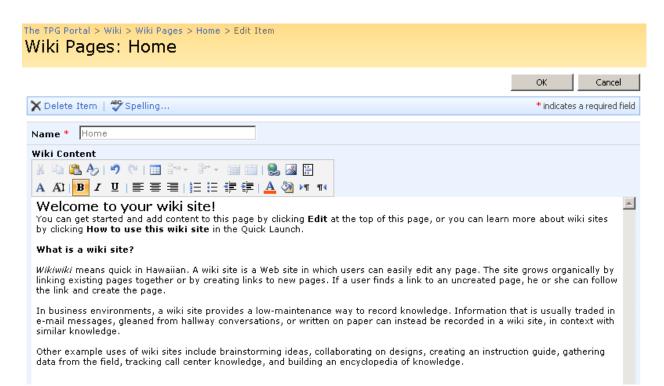
- Open http://portal.tpg.local with FireFox located on your desktop as tpg\alan to discover why you need the RAD Editor
- 2) Create a Wiki site
 - A) Click Site Actions > Create Site
 - B) Title = Wiki
 - C) URL = /wiki
 - D) Template = Wiki Site
 - E) Click Create
- 3) Click Edit from the right side of the page



4) You see nothing but raw HTML

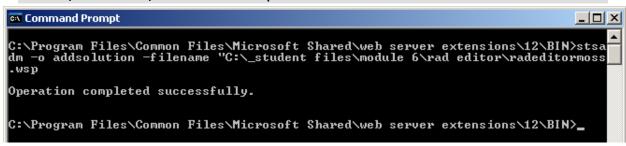


Compare that to what it would look like if you opened the page with Internet Explorer.



- 5) Install the RAD Editor WSS Solution Package
 - A) Open a command prompt
 - B) Navigate back to 12\bin so you can run Stsadm
 - C) Run the command

Stsadm -o addsolution -filename "C:_student files\mo dule 6\rad editor\radeditormoss.wsp"



- D) Leave the command prompt open.
- 6) Deploy the solution using Central Admin
 - A) Click Start > SharePoint 3.0 Central Administration
 - B) Click Operations tab
 - C) Under Global Configuration click Solution management
 - D) Click radeditormoss.wsp
 - E) Click Deploy Solution
 - F) Now select http://portal.tpg.local for Deploy To?

G) Click OK

Had you left Deploy To? You would have deployed the Web Part to the GAC. Giving the solution Full Control. Never a good idea especially when installing 3rd party solutions.

If you opened up the web.config located at C:\inetpub\wwwroot\wss\virtualdirectories\portal.tpg.local80 you would see there are now SafeControl entries for the RAD components.

```
<SafeControl Assembly="RadEditor.Net2, Version=7.2.0.0, Culture=neutral, PublicKeyToken=852c9eb6525c1b53
<SafeControl Assembly="RadSpell.Net2, Version=3.2.0.0, Culture=neutral, PublicKeyToken=b5dad7bf2bf594c2"
<SafeControl Assembly="RadEditorSharePoint, Version=4.4.0.0, Culture=neutral, PublicKeyToken=1f131a62488
<SafeControl Assembly="RadEditorSharePoint, Version=4.4.0.0, Culture=neutral, PublicKeyToken=1f131a62488
</safeControls>

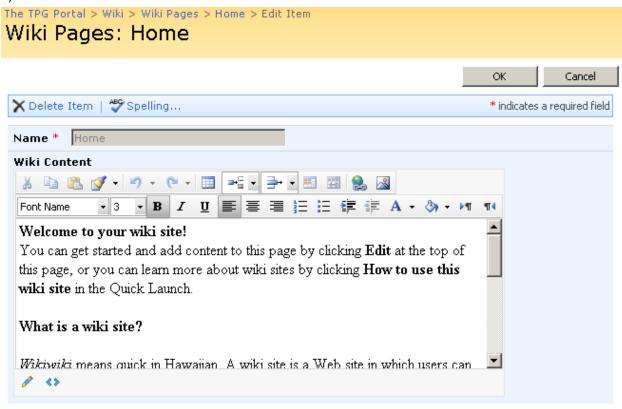
<
```

- 7) Go back to FireFox and check your page
 - A) Go to http://portal.tpg.local/wiki
 - B) Click Edit
 - C) Still the same problem. This is because you have not activated the Feature that the solution packaged deployed.
- 8) Activate the Feature
 - A) Click Site Actions > Site Settings
 - B) Under Site Administration click Site Features
 - C) Next to Use RadEditor to edit List Items click Activate
- 9) Try to edit the page again
 - A) Click Wiki in Global Nav
 - B) Click Edit button
 - C) Still the same problem. What now? You have just discovered one of the challenges of using a truly secure install. When you activated the feature the first time it attempted to copy
 - ..12\template\features\RadEditorFeature\RadEditorList.ascx to
 - ..12\template\ControlTemplates\RadEditorList.ascx. You will need to now do this manually.
- 10) Copy the control into place
 - A) Navigate to c:\program files\common files\Microsoft Shared\web server extensions\12\Template\Features\RadEditorFeature
 - B) Copy RadEdtiorList.ascx
 - C) Navigate to c:\program files\common files\Microsoft Shared\web server extensions\12\Template\ControlTemplates
 - D) Paste RadEditorList.ascx
- 11) Open a command prompt and run

Iisreset.exe

- 12) Go back to **FireFox** and check your page
 - A) Go to http://portal.tpg.local/wiki

B) Click Edit



End of Lab

Lab 07: Configuring and Customizing SharePoint Search

Lab Overview: Search is a powerful tool. In this lab you will setup the server for indexing PDFs and add some content sources. Then you will look at some changes to make the users life's easier.

Exercise 1: Allowing PDF files to be crawled

- 1) Installing the Adobe PDF Ifilter
 - A) Navigate to c:_student files\module 7
 - B) Run ifilter60.exe
 - C) Click Run
 - D) Click Next, Accept, Next
 - E) At successful screen click OK
- 2) Adding PDF to crawled file types
 - A) Open http://ssp.tpg.local/ssp/admin as tpg\sp_admin
 - B) Under Search click Search settings
 - C) Click File types
 - D) Click New File Type
 - E) File extension = pdf
 - F) Click OK
- 3) Add the pdf icon to the images folder
 - A) Navigate to c:_student files\module 7
 - B) Copy pdf16.gif
 - C) Navigate to c:\program files\common files\Microsoft shared\web server extensions\12\template\images\
 - D) Paste pdf16.gif
- 4) Create an entry in docicon.xml for pdf
 - A) Navigate to c:\program files\common files\Microsoft shared\web server extensions\12\template\xml
 - B) Right click on docicon.xml click open with with and choose Notepad
 - C) In the <ByExtension> section add a key as <Mapping Key="pdf" Value="pdf16.gif"/>
 - D) Save the changes and close notepad

Your server will now be able to successfully index text PDFs and display them with the proper icon.

Exercise 2: Add content sources

- 1) Open http://ssp.tpg.local/ssp/admin as tpg\sp_admin
- 2) Under Search click Search settings
- 3) Click Content sources and crawl schedule
- 4) Add the File Share as a content source
 - A) Click New Content source
 - B) Name = File Share
 - C) Select = File Shares
 - D) Start address = \\litwareserver\share
 - E) Click OK
- 5) Add a public web site as a content source
 - A) Click New Content source
 - B) Name = Public Web Site
 - C) Select = Web Sites
 - D) Start address = http://www.tedpattison.net
 - E) Click OK

Now you have your portal, the file share, and a public web site defined as content sources. But you still can't get any search results. This is because you now need to crawl the content. And MOSS does not have a default schedule. So first do a manual crawl, then setup a schedule so you don't have to manually crawl every day.

- 6) Do a manual crawl by clicking Start all crawls in the quick launch bar
- 7) Click Search Settings in the bread crumb
- 8) Wait about 7 minutes and the click refresh. When the status changes to idle continue
- Errors in log isn't zero. That is not good. Find out what happened by clicking the number If you are seeing this error

	URL	Last Content Source	Last Time Crawled
•	sps3://my.tpg.local Exception from HRESULT: 0x80040E2F (Exception from HRESULT: 0x80040E2F)	Local Office SharePoint Server sites	10/12/2007 5:43 PM
•	http://portal.tpg.local Element not found. (Exception from HRESULT: 0x8002802B (TYPE E ELEMENTNOTFOUND)) (Cominterop Exception)	Local Office SharePoint Server sites	10/12/2007 5:43 PM

Then you need to run an iisreset and recrawl by returning to step 6.

10) For sure you are seeing three errors relating to your file share and time card spreadsheets. This is because the default crawling account tpg\SP_MossSearch does not have access to those files to crawl them.

There are two ways to fix this issue. You could go to the files and change their NTFS permissions to give tpg\sp_MossSearch read access. Pretty straightforward.

The other option would be to setup a special crawl rule that use a different account to crawl the file share. The tpg\administrator account already has complete access to the file share so use that account.

- 11) Create a new crawl rule
 - A) From the Configure Search Settings screen click Crawl rules
 - B) Click New Crawl Rule
 - C) Path = file://litwareserver/share/*
 - D) Select Include all items in this path
 - E) Select Specify a different content access account
 - F) Account = tpg\administrator
 - G) Password = pass@word1
 - H) Click **OK**
- 12) Re crawl the file share
 - A) Click **Search Settings** from the breadcrumb
 - B) Click Content source and crawl schedule
 - C) Hover over File Share and click the drop down
 - D) Select Start Full Crawl
- 13) Click **Search Settings** in the breadcrumb
- 14) Wait about a minute and click **refresh**. When the status is **idle** continue.

Exercise 3: Set a crawl schedule

- 1) From Configure Search Settings click Content sources and crawl schedules
- 2) Click on Local Office SharePoint sites to edit the content source
- 3) Setup a Full crawl
 - A) Scroll to the bottom of the page and beneath Full Crawl click Create schedule
 - B) Take the defaults
 - C) Click OK
- 4) Setup an Incremental Crawl
 - A) Beneath Incremental Crawl click Create schedule
 - B) Starting time = 1:00 AM
 - C) Check Repeat within the day
 - D) Every 60 minutes
 - E) For 1320 minutes
 - F) Click OK

5) Click **OK** on the edit content source screen

You now have a schedule that will do a full crawl every night at midnight. Then starting at 1:00 am it will do an incremental crawl once an hour. The last one will run at 11:00 pm. This way you never have overlap of your crawl running.

Exercise 4: Setup a shared search scope for the File Share

- 1) Navigate back to the Search Settings screen
- 2) Scroll to the bottom of the page and click View scopes
- 3) Create a New Scope
 - A) Click New Scope
 - B) Title = File Share
 - C) Click OK
- 4) Add rules to the File Share scope
 - A) Click Add rules beside File Share Empty
 - B) Scope Rule Type = Content Source
 - C) Select File Share
 - D) Click OK
- 5) Click **Search Settings** in the breadcrumb
- 6) In the Scopes section click **Start update now**. Note: Scopes automatically update every 15 minutes. You just don't have patience's to wait that long.:)
- 7) Wait 30 seconds then click View scopes
- 8) Number of items to the right of File Share should be 5

Your work as an administrator is done. Time to navigate to the portal and check out the fruits of your labor.

Exercise 5: Administrating search for the site collection

- 1) Navigate to http://portal.tpg.local as tpg\alan
- 2) In the search box search for HR
- 3) If you got lots of results then you are on track. If not then throw something at your instructor and ask for help. Hint, first place to check is your search logs.
- 4) In the search box search for Sales Reports.pdf
- 5) If you got the sales report.pdf back from file://litwareserver/share/sales reports.pdf then you have proven you are indexing PDFs and the file share
- 6) Click the The TPG Portal to return to the home page
- 7) To the left of the search box click **All Sites**. This is your list of scopes. Notice that File Share does not show up. This is because the Site Collection administrator has to add the shared scope.
- 8) Add the File Share shared scope

- A) Click Site Actions > Site Settings > Modify All Site Settings
- B) From the Site Collection Administration section click Search scopes
- C) Notice File Share is listed as Unused Scopes. Click Display Group: Search Dropdown
- D) Select the check box for File Share
- E) Click OK
- 9) Click the The TPG Portal to return to the home page
- 10) To the left of the search box click **All Sites**. Select **File Share**. If File Share is not there it is probably a cache issue. Do an iisreset and try again.
- 11) In the search box search for HR
- 12) Now only the Employee Manual is returned.

Exercise 6: Make a local search scope

- 1) Navigate to the HR Private site http://portal.tpg.local/sites/hr logged in as tpg\betsy
- 2) Create a new scope
 - A) Click Site Actions > Site Settings
 - B) Under Site Collection Administration click Search scopes
 - C) Click New Scope
 - D) Title = **HR Only**
 - E) Select **both check boxes** for display groups
 - F) Click OK
- 3) Next to HR Only Empty click Add rules
- 4) Add a rule to include the HR Private site collection
 - A) Select Web Address
 - B) Folder = http://portal.tpg.local/sites/hr
 - C) Click OK
- 5) Add a rule to include the HR portal sites
 - A) Click **HR Only**
 - B) Click New rule
 - C) Select Web Address
 - D) Folder = http://portal.tpg.local/departments/hr
 - E) Click OK
- 6) Click **Scopes** in the breadcrumb. This will give you an indication as to how long before the scope is updated. It is not available in the dropdown until it has been updated. Also note File Share is available in Unused Scopes.

Exercise 7: Making HR happy - Adding a search scope and a tab to search center

Betsy has came to you and made some very specific request. Betsy would like the scope she created to now be available from the portal. Then she would like to have a tab added to the search center for HR. She has more request but you should probably solve these issues first.

- 1) Navigate to the SSP logged in as tpg\sp_admin
- 2) Under Search click Search settings
- 3) Click View scopes
- 4) From this screen you can see the HR Only search scope. Now you need to copy it to the Shared scopes
 - A) Hover over HR Only and click Make Copy as Shared
 - B) Now click on Copy of HR Only
 - C) Click Change scope settings
 - D) Change Title to HR Sites
 - E) Click OK
- 5) Navigate back to http://portal.tpg.local logged in as tpg\alan
- 6) Add the HR Sites search scope to the portal
 - A) Click Site Actions > Site Settings > Modify All Site Settings
 - B) Click Search Scopes
 - C) Click Display Group: Search Dropdown
 - D) Select HR Sites
 - E) Click OK
- 7) Click the Search tab in Global Nav to get to the Search Center
- 8) Create an HR Search Page
 - A) Click Site Actions > Create Page
 - B) Title = HR Search
 - C) URL Name = hrsearch
 - D) Select (Welcome Page)Search Page
 - E) Click Create
- 9) Add an HR Search tab
 - A) Click Add New Tab from the center of the page
 - B) Tab Name = HR Search
 - C) Page = hrsearch.aspx
 - D) Tooltip = Use this tab for searching HR content.
 - E) Click OK

- 10) Create an HR Results Page
 - A) Click Site Actions > Create Page
 - B) Title = HR Results
 - C) URL Name = hrresults
 - D) Select (Welcome Page)Search Results Page
 - E) Click Create
- 11) Add an HR Search tab for results
 - A) Click Add New Tab
 - B) Tab Name = HR Search
 - C) Page = hrresults.aspx
 - D) Tooltip = Use this tab for searching HR Content.
 - E) Click OK
- 12) Point the hrsearch.aspx page to use hrresults.aspx for displaying results
 - A) Click Search in the Global Nav
 - B) Click HR Search
 - C) Click Edit Page
 - D) On the Search Box click the Edit dropdown and select Modify Shared Web Part
 - E) Expand the Miscellaneous tab
 - F) Scroll down to Target search results page URL and set it to hrresults.aspx
 - G) Click OK
 - H) Click Publish
- 13) Search for HR
- 14) This takes you to HR Search results page. Notice though you are still returning all results. You need to setup the page to only use the HR Sites scope.
 - A) Click Edit Page
 - B) For the Search Core Results Web Part click the **Edit** dropdown and select **Modify Shared Web**Part
 - C) Expand the Miscellaneous section
 - D) For Scope enter HR Sites
 - E) Click OK
 - F) Click Publish
 - G) Rerun your query for **HR**. You should get about 48 results.

End of Lab

Lab 08: Importing Profiles, Building Audiences and My Sites

Lab Overview: In this lab you will work with Profiles and Audiences. First you will setup a custom profile mapping and then you will import information from AD. Then you will create and compile a couple of audiences. Finally you target both content and a web part to the Executives audience.

Exercise 1: Importing profile data and building audiences

- 1) Open the SSP
 - A) Open Central Administration
 - B) Click on Primary SSP from the quick launch
 - C) Login in as tpg\sp_admin
- 2) Map AD mobile phone to cell phone in the profile database
 - A) Under User Profiles and My Sites click User profiles and properties
 - B) Scroll down the page and under User Profile Properties click View profile properties
 - C) Scroll down the page and click on **Mobile phone > edit**
 - D) Change Display Name from Mobile phone to Cell Phone
 - E) Change Edit Settings to Do not allow users to edit values for this property
 - F) Under Property Import Mapping set Data source field to map to mobile
 - G) Click OK
- 3) Start a profile import
 - A) Click **User Profile and Properties** from the breadcrumb
 - B) Click Start full import
 - C) Wait about 30 seconds then refresh the page. If you see 27ish profiles and an idle status then continue
- 4) Build an HR global audience
 - A) Click **Primary SSP** in the Quick Launch
 - B) Under Audience click Audiences
 - C) Click Create audience
 - D) Name = **HR Members**
 - E) Click OK
 - F) Select Property
 - G) Select **Department** from the properties list
 - H) Operator is =
 - I)Value = HR

- J) Click OK
- K) Click Compile audience
- L) Number of members should equal 3 when it finishes
- 5) Create an Executives audience
 - A) Click Manage Audiences from the breadcrumb
 - B) Click Create audience
 - C) Name = Executives
 - D) Select Satisfy any of the rules
 - E) Click OK
 - F) Select Property
 - G) Select Title from the properties list
 - H) Operator is =
 - I) Value = President
 - J) Click OK
 - K) Scroll to the bottom of the page and click Add rule
 - L) Select Property
 - M) Select Manager from the properties list
 - N) Operator is =
 - O) Value = tpg\Ted
 - P) Click OK
 - Q) Click Compile Audience
 - R) If Number of members = 4 then you are good to go
- 6) Now that you have this information imported you need to do a crawl to make the information searchable
 - A) Click **Primary SSP** in the Quick Launch
 - B) Under Search click Search settings
 - C) Click Content sources and crawl schedules
 - D) Hover over Local Office SharePoint Server sites, click the down arrow, and click Start Full Crawl
 - E) Click **Search Settings** from the breadcrumb
 - F) Wait until the status changes to idle (don't forget to refresh) and then continue

Exercise 2: Targeting content using your audiences

Create executive dashboard on home page using documents, list targeting, WP targeting, and CQWP

1) Upload and target documents

- A) Navigate to http://portal.tpg.local/departments/sales as Alan
- B) From the guick launch click View All Site Content
- C) Click Documents
- D) Click Settings > **Document Library Settings**
- E) Under General Settings click Audience targeting settings
- F) Select Enable audience targeting
- G) Click OK
- H) Click **Documents** from the breadcrumb
- I) Click Upload
- J) Browse to c:_studnet files\module 8\
- K) Select Sales Goals.docx
- L) Click Open
- M) Click OK
- N) Target Audience = Executives
- O) Click OK
- P) Repeat as follows
 - I) Upload Sales Action Items and no target audience
 - II) Change documents on http://portal.tpg.local/departments/it to enable targeting
 - III) Upload IT Yearly Plan.docx and target to Executives audience
 - IV) Change documents on http://portal.tpg.local/departments/accounting to enable targeting
 - V) Upload Accounting Yearly Goals and target to Executives audience
 - VI) Upload General Accounting Information and no target audience
 - VII) Change documents on http://portal.tpg.local/departments/hr to enable targeting
 - VIII) Upload HR Goals and target to Executives audience
 - IX) Upload HR Action Items and no target audience
- 2) Navigate to the home page of the portal http://portal.tpg.local
- 3) Add the Content Query Web Part
 - A) Click Site Actions > Edit Page
 - B) In the Top Zone click Add a Web Part
 - C) Expand All Web Parts
 - D) Navigate to the Default section and select Content Query Web Part
 - E) Click Add
- 4) Modify the settings for the CQWP

- A) Click Edit > Modify Shared Web Part
- B) Expand Query
- C) Change List Type to Document Library
- D) Scroll down to Audience Targeting and select Apply audience filtering
- E) Scroll down to Appearance and expand it
- F) Set Title = Executive Yearly Goals Dashboard
- G) Click OK
- 5) Click Publish
- 6) Alan sees



This is because Alan is not in the Executive audience.

- 7) Luckily SharePoint has the ability to target the entire Web Part also.
 - A) Click Site Actions > Edit Page
 - B) For the Executive Yearly Goals Dashboard click edit > Modify Shared Web Part
 - C) Expand Advanced
 - D) Scroll to the bottom and set Target Audiences to Executives
 - E) Click OK
 - F) Click Publish
- 8) Now Alan sees nothing. Try logging in as an Executive and see what they see
 - A) Sign in as tpg\ted and pass@word1



If that is what you see then you have got audiences and targeting figured out.

End of lab

Lab 09: Setting up a SharePoint Internet Site

Lab Overview: In this lab you will create a MOSS Publishing Site that is completely anonymous accessible. http://customer.tpg.local You will also create a new SSP for this site. Then you will make the anonymous site use Forms Based Authentication against a SQL store.

Exercise 1: Creating a new web application

- 1) Setup DNS
 - A) Click Start > Administrative Tools > **DNS**
 - B) Expand Litwareserver > Forward Lookup Zones > **TPG.local** then right click on TPG.local and choose **New Alias (CNAME)**
 - C) For Alias name enter customer
 - D) For FQDN enter litwareserver.tpg.local
 - E) Click OK
 - F) Repeat for **cust**
 - G) Close DNS Management
- 2) Setup a new user for the App Pool
 - A) Click Start > Administrative Tools > Active Directory Users and Computers
 - B) Click on the Users container
 - C) Click Create a new user
 - D) First Name: SharePoint
 - E) Last Name: Customer App Pool
 - F) User logon name: SP_CustomerAppPool
 - G) Click Next
 - H) Password: pass@word1
 - I) Uncheck User must change password at next logon
 - J) Click Next
 - K) Click Finish
 - L) Repeat for SP_CustomerSSP
 - M) Close User Management
- 3) For this web application we will not setup Kerberos
- 4) Open Central Admin
- 5) Go to the Application Management tab
- 6) Under SharePoint Web Application Management click Create or extend Web application

- 7) Click Create a new Web application
 - A) Port = **80**
 - B) Host Header = customer.tpg.local
 - C) Create New application pool
 - D) Username = tpg\sp_CustomerAppPool
 - E) Password = pass@word1
 - F) Database Name = WSS_Content_Customer
 - G) Click OK
- 8) Create a new SSP
 - A) From the quick launch click **Shared Services Administration**
 - B) Click New SSP
 - C) SSP Name = Customer SSP
 - D) For SSP Web application choose customer.tpg.local
 - E) For MY Site Location choose customer.tpg.local
 - F) Relative URL = /mysite
 - G) Username = tpg\sp_CustomerSSP
 - H) Password = pass@word1
 - I)SSP Database = CustomerSSP_db
 - J) SSP Search Database = CustomerSSP_Search_db
 - K) Click OK
 - L) Click **OK** at the warning screen
 - M) Click OK at the success screen
- 9) Create the publishing Site Collection
 - A) Click the **Application Management** tab
 - B) Under SharePoint Site Management click Create site collection
 - C) Title = TPG Customers
 - D) Template = Publishing Tab, Publishing Portal
 - E) Site Collection Administrator = tpg\alan
 - F) Click OK
 - G) Click OK at the Success screen
- 10) Set the Web application to allow anonymous access
 - A) From the Application Management tab, under Application Security click Authentication providers
 - B) Click **Default** (make sure the web application is set to **http://customer.tpg.local**)
 - C) Click Enable anonymous access

- D) Click Save
- 11) Set the customer publishing site for anonymous access
 - A) Open http://customer.tpg.local
 - B) Log in as tpg\alan
 - C) Click Site Actions > Site Settings > Modify All Site Settings
 - D) Under Users and Permissions click **Advanced permissions**
 - E) Click Settings > Anonymous Access
 - F) Select Entire Web site
 - G) Click OK
- 12) Open Firefox from the desktop. Click No at any Firefox configuration messages.
- 13) Go to http://customer.tpg.local
- 14) If you have done everything correctly no logins! You can check the top right hand corner. If you see Sign In then you know you are accessing the page anonymously.

Exercise 2: Setup a site that requires authentication

News Flash! The Customer site is a hit! So much so that your sales team wants to create a portion of the site that allows new customer to login and download information. You have the potential to grow to 1000's of users so adding these people to your Active Directory is not an option. You will deploy forms based authentication.

- 1) Begin by creating the Downloads site
- 2) From the home page click Sign In (Firefox or IE)
- 3) Sign in as tpg\alan
- 4) Create a sub site for Customer Downloads
 - A) Click Site Actions > Create Site
 - B) Title = Customer Downloads
 - C) URL = downloads
 - D) Select Use unique permissions
 - E) Click Create
 - F) Take the groups defaults
 - G) Click OK
- 5) Click Submit for Approval
- 6) Click Start
- 7) Approve the page
 - A) Click Site Actions > View All Site Content
 - B) Click Pages

- C) Hover over default, click the drop down and choose Approve/reject
- D) Select Approved and click OK
- E) Click **OK** at the pop up
- 8) Navigate back to the home page http://customer.tpg.local
- 9) Click Welcome Alan Admin and sign out
- 10) Click Go back to site
- 11) Notice now you do not see the customer downloads tab. That is security trimming working, the site knows anonymous users don't have access to that site so it doesn't show it. Try typing in the URL. http://customers.tpg.local/downloads you should get a login prompt. Perfect. (If you didn't get a prompt then cache probably got the best of you. Close the browser and try again.)
- 12) Close all open windows

Exercise 3: Forms Based Authentication

That was the easy part. Now for the challenge of your skills. Windows based authentication would be great for your employees but now getting those 1000's of customer access is priority one. For this you will be using Forms Based Authentication.

For FBA the developers have provided you with a database to use for your user storage. They have also given you all of the configuration settings. It is your job to hook it all up to SharePoint.

- 1) Deploy the database
 - A) Click Start > All Programs > Microsoft SQL Server 2005 > SQL Server Management Studio
 - B) Click Connect
 - C) Expand Litwareserver
 - D) Right click **Databases**
 - E) Click Restore Database...
 - F) Select From device
 - G) Click ... button
 - H) Click Add
 - I) Navigate to c:_student files\module 9
 - J) Select TPG_FBA.bak
 - K) Click OK
 - L) Click **OK** at Specify Backup
 - M) Check Restore beside Name
 - N) To Database select TPG_FBA
 - O) Click OK
 - P) Click **OK** at the successful message
- 2) Set security on your new database

The Application Pool accounts of the web applications that will use FBA need access to read and write the database. Granting access to sp_CustomerAppPool may be obvious but don't forget about sp_Farm. Central Admin will not use FBA but it will need access to the user store to look up users.

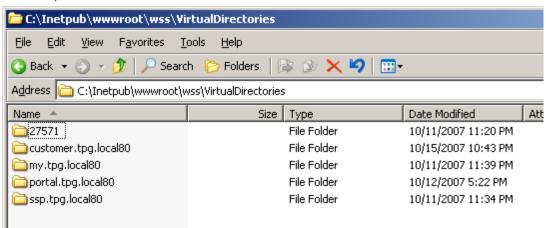
- A) Expand Databases
- B) Expand TPG_FBA
- C) Expand Security
- D) Right click on Users and click New User...
- E) User name = tpg\SP Farm
- F) Login Name = tpg\sp_farm
- G) Under Database role membership select db owner, db datareader and db datawriter
- H) Click OK
- I) Repeat for tpg\SP_CustomerAppPool
- J) Close SQL Management Studio
- 3) Update web.config for customer.tpg.local
 - A) Navigate to c:\inetpub\wwwroot\wss\VirtualDirectories\customer.tpg.local80
 - B) Make a copy of **web.config** (just in case)
 - C) Right click on web.config and choose open with...
 - D) Choose **Notepad** and click **OK** (if you prefer to use Visual Studio you may. Do NOT use Word pad!)
 - E) Add the following text to your web.config file between </configSections> and <SharePoint> (if you prefer to cut and paste you will find a file called customer.txt in the module 9 folder)

```
<connectionStrings>
  <add name="TPG_Connect" connectionString="Data Source=litwareserver; Initial
Catalog=TPG_FBA;Integrated Security=True" />
  </connectionStrings>
```

F) Add the following text between **<system.web>** and **<securitypolicy>** (second half of **customer.txt**)

```
<add connectionStringName="TPG_Connect" applicationName="/" name="TPG_Role"</pre>
type="System.Web.Security.SqlRoleProvider,System.Web,Version=2.0.0.0,Culture=neutr
al, PublicKeyToken=b03f5f7f11d50a3a" />
 </providers>
</roleManager>
  </SharePoint>
  <system.web>
     <membership defaultProvider="TPG_Members">
        type="System.web.Security.SqlMembershipProvider,System.web,Version=2.0.0.0,Culture=neutral,PublicKeyToken=b03f5f7f11d50a3a" />
        </providers>
    </membership>
    <roleManager enabled="true" defaultProvider="TPG_Role">
       cproviders>
               <add connectionStringName="TPG_Connect" applicationName="/" name="TPG_Role"</pre>
type="System.Web.Security.SqlRoleProvider,System.Web,Version=2.0.0.0,Culture=neutral,PublicKeyToken=b03f5f7f11d50a3a" />
eyToken=b03f5f7f11d50a3a
    </providers>
</roleManager>
    <securityPolicy>
```

- G) Save the file
- 4) Edit the web.config for central admin
 - A) Now navigate to c:\inetpub\wwwroot\wss\vituraldirectories
 - B) Open the folder that is just a **number**. In the example below it is 27571 (your number may be different.)



- C) Make a copy of the web.config file
- D) Right click on web.config, Open with > Notepad
- E) Make the same change as step E above. There is a file called **centraladmin.txt** in the **module 9 folder** you can copy from.

```
<connectionStrings>
  <add name="TPG_Connect" connectionString="Data Source=litwareserver; Initial
Catalog=TPG_FBA;Integrated Security=True" />
  </connectionStrings>
```

F) Make the same changes as step F above

```
<membership defaultProvider="TPG_Members">
 oviders>
  <add connectionStringName="TPG_Connect" enablePasswordRetrieval="false"</pre>
enablePasswordReset="true" requiresQuestionAndAnswer="false" applicationName="/" requiresUniqueEmail="false" passwordFormat="Hashed" maxInvalidPasswordAttempts="5" minRequiredPasswordLength="1" minRequiredNonalphanumericCharacters="0"
passwordAttemptWindow="10" passwordStrengthRegularExpression="" name="TPG_Members"
type="System.Web.Security.SqlMembershipProvider,System.Web,Version=2.0.0.0,Culture
=neutral,PublicKeyToken=b03f5f7f11d50a3a" />
 </providers>
</membership>
<roleManager enabled="true" defaultProvider="TPG_Role">
 oviders>
  <add connectionStringName="TPG_Connect" applicationName="/" name="TPG_Role"</pre>
type="System.Web.Security.SqlRoleProvider,System.Web,Version=2.0.0.0,Culture=neutr
al, PublicKeyToken=b03f5f7f11d50a3a" />
 </providers>
</roleManager>
```

G) Now find the line <role manager enabled="true" defaultProvider="TPG_Role"> and change TPG_Role to **AspNetWindowsTokenRoleProvider** (if you copied from **centraladmin.txt** skip this step)

- H) Save the file
- I) Close all open windows
- 5) Change the authentication settings for customer.tpg.local
 - A) Open Central Admin
 - B) Click the Application Management tab
 - C) Under Application Settings click Authentication providers
 - D) Make sure you are on the http://customer.tpg.local web app and click Default

- E) For authentication type select Forms
- F) Membership provider name = **TPG_Members**
- G) Role manager name = TPG_Role
- H) Click Save
- 6) Grant access to the FBA account to login to the site
 - A) Click Application Management tab
 - B) Under SharePoint Site Management click Site collection administrators
 - C) Change Primary site collection administrator to admin
 - D) Click OK
- 7) Try out FBA
 - A) Open a new browser and navigate to http://customer.tpg.local
 - B) Initially the page should load without any login prompts thanks to anonymous access
 - C) Click Sign In up in the top right corner
 - D) User name = admin
 - E) Password = pass@word1
 - F) Click Sign In
 - G) If you are taken back to the page and it says Welcome admin Congrats! You have done well and setup FBA.

Exercise 4: Adding users

Out of the box SharePoint provides you with no mechanism for managing users in the SQL store. Meaning adding another user or role is impossible. You must either buy a 3rd party tool to manage the users, build your own, or use the free feature on CodePlex. For the lab try out the CodePlex solution conveniently downloaded to your machine.

- 1) Install the feature
 - A) Open a command prompt
 - B) Navigate to the 12 hive c:\program files\common files\Microsoft shared\web server extensions\12
 - C) Run the stsadm command to add the solution

 Stsadm -o addsolution -filename "C:_student files\module 9\fbamanagement.wsp"
 - D) Run the stsadm command to deploy the solution

 Stsadm -o deploysolution -name FBAManagement.wsp -immediate -allowgacdeployment
 - E) Run the stadm command to force timer jobs to run Stsadm -o execadmsvcjobs
 - F) Run the stsadm commands to activate the features
 Stsadm -o activatefeature -name FBAConfigurationManagement
 Stsadm -o activatefeature -name FBAUserRoleManagement -url
 http://customer.tpg.local

- G) Exit the command prompt
- 2) Open the site and check out the new feature
 - A) Navigate to http://customer.tpg.local
 - B) Sign in as admin
 - C) Open Site Settings
 - D) Under Site Collection Administration click Mange FBA Users
- 3) Create a new Role and put Freddy in it
 - A) Click New Role
 - B) Role name = FBA_Members
 - C) Click OK
 - D) Click New User
 - E) Username = **freddy**
 - F) Password = pass@word1
 - G) Email = freddy@tpg.local
 - H) Select FBA_Members
 - I) Click OK
- 4) Now you have put Freddy in the Role FBA_Members. This is just like putting him in an AD group. Now you can grant that group access to the SharePoint site. Remember, right now Freddy exist in the user store but he does NOT have access to the SharePoint site. Add him to the customer site.
 - A) Navigate to http://customer.tpg.local/downloads
 - B) Open Site Settings
 - C) Under Users and Permissions click People and groups
 - D) Click New
 - E) Users/Groups = **FBA_Members**
 - F) Add users to a SharePoint group = **TPG Customers Visitors [Read]**
 - G) Deselect Send welcome e-mail
 - H) Click OK
- 5) Try to login as Freddy
 - A) Return to the home page
 - B) Click Welcome admin
 - C) Sign in as Different user
 - D) Username = Freddy
 - E) Password = pass@word1
 - F) Now Freddy has read only access to the site. When the sales people upload files here Freddy will be able to download them.

Exercise 5: Fixing Search

But now that you are using FBA there are new challenges. The primary challenge? Search doesn't not work. In order to get search working you will create a separate web application http://cust.tpg.local that uses windows integrated authentication. Then with a little configuration everything should work like a charm.

- 1) Open the SSP
 - A) Open Central Admin
 - B) In the quick launch click on Customer SSP
 - C) Yikes! An FBA login, but you didn't grant any FBA users access to the SSP. Time to back pedal.

You have two choices. Either grant admin access using Policy for Web application or create a new Web application that is mapped to customer.tpg.local that uses windows auth.

As it turns out you will need a windows auth app for search to work so you should go that route.

- 2) Create the cust.tpg.local Web app
 - A) Open Central admin
 - B) Click the Application Management tab
 - C) Under SharePoint Web Application Management click Create or extend Web application
 - D) Choose Extend an existing Web application
 - E) For Web Application click No selection > change web application
 - F) Click customer.tpg.local
 - G) Port = 80
 - H) Host Header = cust.tpg.local
 - I)Click **OK**
- 3) Try the SSP again
 - A) Navigate to http://cust.tpg.local/ssp/admin
 - B) Sign in as tgp\sp_admin
 - C) Under Search click Search settings
 - D) Click Content sources and crawl schedules
 - E) Click Local Office SharePoint Server sites
 - F) Look under Start Addresses. Notice that sps3://customer.tpg.local is still pointed to the FBA URL. This will not work. Change the URL to sps3://cust.tpg.local
 - G) Select Start full crawl of this content source
 - H) Click OK
 - I) Click Search Settings in the breadcrumb
 - J) After a minute you should see about 122 results and 0 errors. If so good job!

Exercise 6: Adding SSL

Customers? Logins? Over the internet? Encrypting the communication is a must. For this lab you will install the IIS Resource Kit and then use a self signed SSL certificate.

- 1) Install the IIS Resource kit
 - A) Navigate to c:_student files\module 9
 - B) Run iis60rkt.exe
 - C) Click Next
 - D) Check I agree and click Next
 - E) Click Next 3 more times
 - F) Click Finish
- 2) Find the ID for the customer.tpg.local Web application
 - A) Start > Administrative Tools > IIS Manager
 - B) Expand Litwareserver
 - C) Click Web Sites
 - D) To the right of SharePoint customer.tpg.local80 locate the Identifier (10 digit number). **Write the number down** below

 - E) Close **IIS Manager**
- 3) Install the certificate
 - A) Start > All Programs > IIS Resources > SelfSSL > SelfSSL
 - B) At the command prompt run the following command. Replace ######## with the id from step 2 –D from above

Selfssl.exe /T /N:cn=customer.tpg.local /S:######## /q

- C) At successful message close the **command prompt**
- 4) Try out the change
 - A) Open https://customer.tpg.local in your browser

When the site opens you will notice you were redirected to http://customer.tpg.local/pages/default.aspx

This is because SharePoint doesn't understand the request for https so it redirects you to the default URL.

- 5) Configure AAM
 - A) Open Central Admin
 - B) Navigate to the **Operations** tab
 - C) Under Global Configuration click Alternate access mappings
 - D) Click Edit Public URLS
 - E) Change AAM Collection to http://customer.tpg.local

- F) Change the default URL to https://customer.tpg.local
- G) Click Save
- 6) Now you have SSL only setup. This is because your goal is to not allow HTTP access to the FBA site. But your users will still try to access it over HTTP and you don't want them getting 404 errors or ending up at a random page. You need to make some changes in IIS.
 - A) Open IIS Manager
 - B) Expand Litwareserver
 - C) Expand Web Sites
 - D) Right click on **SharePoint customer.tpg.local80** and click **properties**
 - E) Change TCP port from 80 to 8001
 - F) Click Directory Security tab
 - G) In the Secure communications click Edit
 - H) Check Require secure channel (SSL)
 - I)Click OK
 - J) Click OK
- 7) Now create the redirect site
 - A) Right click Web Sites > New > Web Site
 - B) Click Next
 - C) Description = Customer Redirect
 - D) Click Next
 - E) Host Header = customer.tpg.local
 - F) Click Next
 - G) Click Browse
 - H) Expand C:, Inetpub, wwwroot
 - I) Click Make New Folder
 - J) Enter Redirect
 - K) Click OK
 - L) Click Next, Next, Finish
- 8) Setup the redirect
 - A) Right click Customer Redirect and select Properties
 - B) Click Home Directory tab
 - C) Select A redirection to a URL
 - D) Redirect to = https://customer.tpg.local
 - E) Select A permanent redirection for this resource

- F) Click **OK**
- G) Close IIS Manager
- 9) Now navigate to http://customer.tpg.local

You should be redirected to https://customer.tpg.local/pages/default.aspx automatically.

End of lab

Lab 11: Working with content deployment

Lab Overview: In this lab you will create a new site collections for a test portal. Then you will setup a content deployment job to move data from the TPG portal to the test portal.

Exercise 1: Setup content deployment

- 1) Create a DNS entry for test.tpg.local
 - A) Start > Administrative tools > DNS
 - B) Double click TPG.local in the Forward Lookup Zones
 - C) Right click TPG.local > New Alias(cname)
 - D) Alias name = test
 - E) FQDN for target host = litwareserver.tpg.local
 - F) Click OK
 - G) Close DNS
- 2) Create a new Web application
 - A) Open Central Admin
 - B) Click the Application Management tab
 - C) Under SharePoint Web Application Management click Create or extend Web application
 - D) Click Create a new Web application
 - E) Port = 80
 - F) Host Header = test.tpg.local
 - G) To save time you will use NTLM authentication
 - H) To save time you will Use existing application pool
 - I) Select SharePoint portal.tpg.local80
 - J) Database name = WSS_Content_Test
 - K) Click OK
- 3) Create the test site collection (target)
 - A) Click Create site collection in the center of the page
 - B) Title = Test Portal
 - C) URL = /sites/prod
 - D) Template = Collaboration > Blank Site
 - E) Primary Site Collection Administrator = tpg\alan
 - F) Click OK
 - G) At the success screen click OK

- 4) Click the Operations tab
- 5) Configure the server to accept Content deployment jobs
 - A) Under Content Deployment click Content deployment settings
 - B) Select Accept incoming content deployment jobs
 - C) Select **Do not require encryption**
 - D) Click OK
- 6) Click the Operations tab
- 7) Setup the Content deployment path
 - A) Under Content Deployment click Content deployment paths and jobs
 - B) Click New Path
 - C) Name of path = Production to Test
 - D) Choose a Web application = SharePoint portal.tpg.local80
 - E) Choose a site collection = I
 - F) Destination Central Admin URL = http://litwareserver:5555
 - G) Scroll down and click Connect
 - H) When the page refreshes continue
 - I)Destination Web application = SharePoint test.tpg.local80
 - J) Destination site collection = I
 - K) Click OK
- 8) Setup a New Job
 - A) Click New Job
 - B) Name = Entire Production Site Collection
 - C) Content deployment path = **Production to Test**
 - D) Read through the options then take the defaults
 - E) Click OK
- 9) Run the job
 - A) Hover over Entire Production Site Collection
 - B) Click Run Now
 - C) Wait about 6 minutes then hit **refresh**. When status is Succeeded continue.
- 10) Configure the Quick Deploy job
 - A) Click Quick Deploy job for path 'Production to Test'
 - B) Check Allow Quick Deploy jobs along this path
 - C) Click OK

- 11) Navigate to **http://test.tpg.local** sign in as Alan. If all went well it should look exactly like The TPG Portal does.
- 12) Open another tab in your browser
- 13) Navigate to http://portal.tpg.local sign in as Alan
- 14) Click the News tab
- 15) Create an urgent news story
 - A) Click Site Actions > Create Page
 - B) Title = Urgent News
 - C) Click Create
 - D) Click Edit Content
 - E) Enter The sky is falling! Bury your head underground.
 - F) Click Publish

Now this page would eventually publish to the Test portal if you had your deployment job on a schedule. But you need this to publish quick.

- 16) Use Quick Deploy job
 - A) Click Site Actions > Show Page Editing Tool Bar
 - B) Click Tools > Quick Deploy

That is it. Now next time your Quick Deploy job fires the page will be moved over. You took the default so this will be every 15 minutes. You could navigate back paths and jobs and force the job to run immediately if you wanted.

End of Lab

Lab 12: Setup the Microsoft IT Site Delete Capture Tool

Lab Overview: In this lab you will walk through the install of this free tool for SharePoint. Once configured it will backup any site or site collection before it is deleted. Allowing a server administrator the capability to recover it.

Exercise 1: Install the Undelete tool

- 1) Create the folder c:\backups
- 2) Copy files into place
 - A) Navigate to c:_student files\module 10\Microsoft IT Site Delete Capture Feature 1.0(Package) WINDOW1
 - B) Open a second window and navigate to c:\program files\common files\Microsoft shared\web server extensions\12\template\features WINDOW2
 - C) From WINDOW1 copy MSITSiteFeature, MSITDeleteFeature, MSITSiteFeatureStapling, and MSITDeleteFeatueStapling to WINDOW2
 - D) From WINDOW1 drag **MS.IT.SiteDeleteCapture.dll** to **c:\windows\assembly** (copy paste does not work)
 - E) From WINDOW1 copy Messages.xml to c:\program files\common files\Microsoft shared\web server extensions\12\template\layouts\1033
 - F) From WINDOW1 run install.bat
- 3) Specify the backup location
 - A) From WINDOW2 navigate to MSITDeleteFeature\
 - B) Edit ConfigurationForReceiverDLL.xml
 - C) Change D:\BackupFolder to c:\backups
 - D) Close the file saving your changes
- 4) Create a site collection for configuration
 - A) Open Central Admin
 - B) Click the Application Management tab
 - C) Under SharePoint Site Management click Create site collection
 - D) Web Application = http://portal.tpg.local
 - E) Title = Capture Configuration
 - F) URL = /sites/captureconfiguration
 - G) Primary Site Collection Administration = tpg\alan
 - H) Click OK
- 5) Click the link to http://portal.tpg.local/sites/captureconfiguration
- 6) Login as tpg\alan

- 7) Add a list template to the list template gallery
 - A) Go to Site Settings
 - B) Under Galleries click List templates
 - C) Click Upload
 - D) Browse to c:_student files\module 10\Microsoft IT Site Delete Capture Feature 1.0(Package)
 - E) Select AppConfig.stp
 - F) Click Open
 - G) Click OK
 - H) Click **OK** at the properties screen
- 8) Create a list from template
 - A) Click Site Actions > Create
 - B) Under Custom Lists choose AppConfig
 - C) Name = AppConfig
 - D) Display on Quick Launch = No
 - E) Click Create
- 9) Modify the AppConfig item
 - A) Hover over AppConfig, click the drop down and select edit
 - B) NetworkShare = c:\backups
 - C) Now you would normally modify SMTP server and email address. But email does not work on your server.
 - D) Click OK
- 10) Enable the feature for Portal Web Application
 - A) Return to Central Admin
 - B) Click the **Application Management** tab
 - C) Under SharePoint Web Application Management click Manage Web application features
 - D) Set Web application to http://portal.tpg.local
 - E) Activate the Microsoft IT Site Delete Capture Feature 1.1
 - F) Access Denied???
- 11) Once again you have encountered a challenge of running a securely setup install. By default SP_Admin does not have any rights to the web application Portal. Generally in a situation like this you would just temporally elevate SP_admins privileges.
 - A) Click go back to site
 - B) Click the Application Management tab
 - C) Under Application Security click Policy for Web application
 - D) Click Add Users

- E) Make sure you are on http://portal.tpg.local and click Next
- F) Users = tpg\sp_admin
- G) Select Full Control
- H) Click Finish
- 12) Now repeat step 10. After you finish step 10 you can take away SP admins elevated privileges.

Exercise 2: Delete and restore some sites

- 1) Delete the HR Private site
 - A) Open Central Admin
 - B) Click the Application Management tab
 - C) Under SharePoint Site Management click **Delete site collection**
 - D) Click No selection > change Web application
 - E) Web application = http://portal.tpg.local
 - F) Select URL /sites/hr
 - G) Click OK
 - H) Make sure you have http://portal.tpg.local/sites/hr for your site collection
 - I) Click Delete
 - J) Click OK
- 2) Delete a sub site
 - A) Navigate to http://portal.tpg.local/ as tpg\alan
 - B) Click Document Center
 - C) Click Site Actions > Site Settings
 - D) Under Site Administration click Delete this site
 - E) Click Delete
 - F) Click OK
- 3) Navigate to c:\backups\

In the root of the folder you will find docs.bak. This is your site you deleted. In the sites folder you will find hr.bak. This is the site collection you deleted.

- 4) Restore the Document Center
 - A) Open a command prompt
 - B) Navigate to c:\program files\common files\Microsoft shared\web server extensions\12\bin
 - C) Run the command

Stsadm -o import -url http://portal.tpg.local/docs -filename c:\backups\docs.bak

- 5) Restore the HR Private site
 - A) Run the command

Stsadm -o restore -url http://portal.tpg.local/sites/hr -filename c:\backups\sites\hr.bak

6) All done! Navigate in the browser to confirm your restores were successful.

End of Lab