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**Author:** John Omelko

**Description:** This document is intended to help setup and manage a share using the Site-Based Share Management Tool.

**Who’s it for:** The Site-Based Share Management Tool is designed to setup a share with the folder structure described below. I only recommend using the tool if this structure works for your environment:

Example Sites are ‘Test Site (TST)’ and ‘Another Site (ANT)’

If this structure seems to fit your needs, then the Site-Based Share Management Tool will make scaling the environment a little bit easier by creating the AD groups and setting the security to the share whenever you add sites or department folders. It also does some clean up if folders/sites are removed (more information about folder/site removal in the [Additional Info section](#Additional_Info)). I am assuming you will be setting up your share on a windows server that has the File and Storage Services role installed.

Shares Using the Site-Based Share Management Tool

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Creating the Share

1. In a file explorer, locate or create the share root folder of your directory structure that you wish to share and bring up its properties dialog window.
2. On the ‘Sharing’ tab, click on ‘Advanced Sharing…’ to open the Advanced Sharing dialog window.
3. Check the ‘Share this folder’ checkbox and add a $ behind the share name. The $ will make the share hidden; in that, it won’t be listed when you go to the

‘\\servernameUNCpath’. If you don’t mind the share being discoverable on your network, you can skip adding the $ to the share name.

1. Click the ‘Permissions’ button, to open the Permissions dialog window. These are the share permissions.
2. With the ‘Everyone’ user selected, check the ‘Allow Full Control’ check box. This will set the share permissions to the highest possible access for all users, so we can manage all permissions via the NTFS security permissions on the share.
3. Click ‘OK’ on the permissions and the Advanced Sharing dialog windows. You can close the properties dialog box.
4. Open the ‘Server Manager’ and go to ‘File and Storage Services’, then ‘Shares’.
5. Find your share’s name, right click it and select ‘properties’. Under ‘Settings’ check the box for ‘Enable access-based enumeration’. This will make it so users who access the share will only see folders they have permissions to, as opposed to seeing all folders whether they have permissions to access them or not.
6. Click ‘OK’ to close the share properties window.

You can now move on to the next section:

[Configuring the Site-Based Share Management Tool](#Configuring SBSM Tool).

Configuring the Site-Based Share Management Tool

1. Extract the tool from the zip file. Doesn’t really matter where. I usually just extract it to the desktop.
2. Under the main folder (which you can rename if you want) right click the start.ps1 file and select ‘Run with PowerShell’ to start to tool.
3. Since this is most likely the first time this tool is being ran, it will start the configuration setup. Proceed through the setup process, some helpful info below.

Here are the configuration options along with their descriptions in the order they will be presented:

**IsADDC** – The first question will determine whether or not you are running your share on an Active Directory Domain Controller (referred to as an ADDC for short). If you are the RemoteADDC option is ignored.

**RemoteADDC** – If you are not on an ADDC, you will be asked to provide the host name of one. This is so that groups and OUs can be created via a remote PowerShell session. You may need to perform additional actions which are described during the setup process to allow remote powershell sessions on your ADDC.

**DCPath** – This is your logon domain’s domain component, weird wording; I know. The setup will display your user’s DNS domain, which is usually the correct one. You can set it manually if it is wrong though.

**ShareGroupsOU** – This is the top level OU that will be created to store all the site OUs and their respective groups.

**FileServiceAdminGroup** – This is the group that will have full control to all share folders and data. You will want to add the user account that will be used to login to your server for share management to this group. You may also want to add your domain admin account. Other than those accounts; you should choose wisely with whom you give access to this group.

**GroupNamePrefix** – This is the prefix that will come before the group name if it’s set. Details about the group naming convention are in the [Additional Info section](#Additional Info) :)

**MainMenuTitle** – This is just a title for the main menu. It’s purely cosmetic but I felt like adding it in.

**ShareFolderRootPath** – This is the root folder of your share, the one you created in the first part of this document ([Creating the Share](#Creating the Share)).

Adding Department Level Folders

1. On the main menu, enter 2 to ‘Show Department Level Folders’
2. Enter 1 to ‘Add New Department Folder’
3. Enter a unique department folder name for the new folder.
4. Choose whether to add a general folder to the new department folder. A general folder is a folder that can be accessed by all sites. If a user account is in one of that department folder’s site groups, they will have access to the general folder. This can be useful for storing non-site-specific data that all sites can access. Such as generic forms or department info.
5. Review the new folders info and confirm the add. You can perform steps 3 through 6 as many times as needed to stage your new folders. New folders are not added to the share until you commit the changes.
6. Once you have finished adding all your new folder data. Choose option 2 to ‘Commit New Department Folders’ to the share. There will be a confirmation page.
7. If you don’t have any sites, the new folders will be created with no additional steps needed. If you have existing sites, the tool will need to collect some data to create new groups, folders, and apply security to the share. Once data about the share is collected there will be a summary page with options to review the changes about to be made to share or cancel the commit if needed.
8. You can return to the main menu by entering 4 ‘Back to main menu’.

Adding Sites

1. On the main menu, enter 1 to ‘Show Sites’
2. Enter 1 to ‘Add New Site’
3. Enter a unique name for the new site. The site name is only used to give the site prefix more context.
4. Enter a unique site prefix for the new site. This is used for site folders and group names.
5. Review the new site information and confirm the add. Like the department folders, you can stage multiple site adds by repeating steps 2 through 5. Sites are not added until you commit them.
6. Once you have finished adding all your new site data. Choose option 2 to ‘Commit New Sites’ to the share. There will be a confirmation page. Once data about the share is collected there will be a summary page with options to review the changes about to be made to share or cancel the commit if needed. **You can add new site data before creating department folders; however, you need at least 1 department folder to commit new site data.**
7. You can return to the main menu by entering 4 ‘Back to main menu’.

Additional Info

**AD Group Naming Convention**

The group naming convention is as follows:

<**GroupNamePrefix**> <**Site Prefix**> <**Department Folder Name**> <**Access level**>

Here is a simple example using the info below:

GroupNamePrefix: **GNP**

Site Name: **Test Site** Site Prefix: **TST**

Department Folder: **Shipping**

**These groups would be created:**

**GNP TST SHIPPING MODIFY** (using the GroupNamePrefix GNP)

**TST SHIPPING MODIFY** (if no GroupNamePrefix was set)

-The Test Site’s Shipping department modify group. Has access to modify files located at:

‘**ShareRootFolder\Shipping\TST**’ and ‘**ShareRootFolder\Shipping\GENERAL**’ (if shipping has

a general folder)

**GNP TST SHIPPING READONLY** (using the GroupNamePrefix GNP)

**TST SHIPPING READONLY** (if no GroupNamePrefix was set)

-The Test Site Shipping departments readonly group. Has access to read files located at:

‘**ShareRootFolder\Shipping\TST**’ and ‘**ShareRootFolder\Shipping\GENERAL**’ (if shipping has a general folder)

**Unmanaged and Missing Department Level Folders**

**Unamanged Folders** are folders that were not created by the share tool; that is, they were created in a file explorer in the share’s department level directory. Unmanaged folders are not taken into account while the tool checks for groups/folders/security that need to be applied. These folders can be useful for edge case folders that go against the normal share operation. You will need to manage security/groups normally without the tool for unmanaged folders. You can add unmanaged folders to the share using the ‘add umfs’ command while unmanaged folders exist. Know that this will force them to comply with the share’s structure/security setup and could cause issues.

**Missing Folders** are folders that were added by the share tool, but can not be found either due to the folder being renamed or deleted. These appear in the existing folders section with red background and start will an ‘!’. If you take backups of your share and need to restore the folder, simply do so and things are back to normal. If you renamed the folder, it’s new name will appear as an unmanaged folder while the old name will show as missing. You can use the ‘remove missing folders’ command while missing folders exist to remove **all** missing folder’s groups/security.

**Removing a Site**

In the ‘Show Sites’ menu, option 5 is Remove Site. This allows you to remove a single site at a time. Removing a site will remove all the permissions of any group associated with the site being removed to avoid orphaned group records. It will then remove all the associated groups from AD. To ensure data isn’t lost, the tool does not remove any site folders. It will also not remove any OUs to ensure any additional data that may have been stored there isn’t lost.

**Removing a department folder**

There is no direct way to remove a department folder from within this tool. This is to avoid deleting any data those folders contain. If you wish to delete a department folder. Simply backup/remove the folder from the department level share directory and run the ‘remove missing folders’ command on the ‘Show Department Folders’ menu to remove the associated groups/security.

**Share Integrity Check** Option 3 on the main menu ‘Check Share Integrity’ scans the share and AD to ensure that all groups, folders, and security are correct. If it finds any missing information, a summary page with pending operations to be performed will appear for you to confirm the changes needed to be made.

**Log Files**

This tool creates 4 different log files which can be found in their corresponding folder under the ‘logs’ folder.

**Groups –** Group logs contain information about groups that were created or removed.

**Folders –** Folder logs contain information about folders that have been created.

**Program –** Program logs contain basic information about operations being performed in the tool.

**Security –** Security logs contain information about security being added or removed from the share.

**Reports**

The Reports folder contains any report from when a new site or department folder are added and require changes to the share. They are also saved if an integrity check alters the share. These reports are simple but offer information about the operations that were performed on the share and whether or not they completed successfully.

**Additional Tools**

The additional tools folder contains any scripts I felt like including at the time. Below is information about each script.

**ClearOrphanedGroups.ps1 –** This script is used to clear any orphaned group records that may have been created on the share. This usually happens if a group is removed manually. The tool avoids this by removing the permissions on the share before removing the group. Running this script can take a long time if you have a lot of data, as it runs recursively on the share’s root directory.