How to move the Shared Service Provider Search Database to a different database location.

By Steve Smith, MVP SharePoint Server, MCT Combined Knowledge www.combined-knowledge.com steve@combined-knowledge.com



This 'How to' guide will take you through moving your SSP search database which may be required due to the database growing too large for the existing SQL server or wishing to move it to a new database that uses a different drive on the existing SQL Server. It is often known for the SSP database to be well over 50-100GB when indexing large amounts of content plus using additional indexed columns. There are major issues with regards to SSP services needed reconfiguring by doing this Search Database move so read this whitepaper several times before deciding if you really want to do it.

My server topology for this guide was as follows

Server Name	Role	Products Installed
ROOTDC	Domain Controller DNS Server	Windows server 2003 SP1
MAIL	Mail Server	Exchange 2003 Enterprise
SQL2005	Database server	SQL 2005 SP1
MOSSAPP	MOSS2007 Server	MOSS2007 Enterprise
XPCLIENT	Client	Windows XP Pro with Office 2007 Enterprise

My internal domain name configured for the Active Directory is trainsbydave.com You will need to replace trainsbydave.com with your own testing domain name

Disclaimer

The first thing I need to point out here is that although this paper deals with moving the SSP Search database there will still be additional reconfiguration of the SSP services after the job. This document assumes that you have fully documented and backed up your Moss environment and when you have restored your SSP that you are able to manually recreate your configuration on your SSP services. I will take no responsibility if you follow this whitepaper on your production server and lose all your SSP settings without documenting them.

Troubleshooting - See the section at the end of the document

Step 1 – Let's do a backup of our existing SSP.

I am assuming here that you have not done a manual backup using the SharePoint UI before. If you know how to do this skip to step 2.

- 1. Create a folder your c or d drive
- 2. Right click and share it. Click permissions to make sure your administrator can write to the folder
- 3. Click OK



- 4. Now you need to open up SharePoint Central Administration
- 5. Click the Operations Tab
- 6. Click perform a backup

Central Administration			Welcome System Account 🝷 My Site My Links 🔻 🔞
🔆 Central A	dmi	nistration	
Home Operations	A	oplication Management	Site Actions 🔻
		Central Administration > Operations > Perform a Backup Perform a Backup - Step 1 of 2: Select (Component to Backup
Server Farm Configuration Not Complete	Ŷ	Select the items you want to backup now. To start a backup, click Continue to Backu path for backup history location.	Ip Options. To see a list of previous backups, click View History and provide a

7. Now select either your farm or just your SSP depending on what backups you already have. In my case I am just going to select SSP1

Continue to Backup Options PView History			
Select	Component	Туре	Description
	∃ Farm	Farm	Content and configuration data for the entire server farm.
	SharePoint_Config	Configuration Database	Configuration data for the entire server farm.
	\blacksquare Windows SharePoint Services Web Application	Windows SharePoint Services Web Application	Collection of Web Applications
	⊒ collab	Web Application	Content and configuration data for this Web application.
	collab	Content Database	Content for the Web Application.
	🖃 mysites	Web Application	Content and configuration data for this Web application.
	mysites	Content Database	Content for the Web Application.
	➡ mysites2	Web Application	Content and configuration data for this Web application.
	mysites2	Content Database	Content for the Web Application.
	WSS_Administration	Central Administration	Collection of Web Applications
		Web Application	Content and configuration data for this Web application.
	SharePoint_AdminContent_e98a2e49-86f0-4620-b289- d07227c8c91c	Content Database	Content for the Web Application.
	■ SharedServices1	Shared Services Provider	Database and Configuration Settings for this Shared Services Provider
	∃newssp1webapp	Web Application	Content and configuration data for this Web application.
	ssp1	Content Database	Content for the Web Application.
	SharedServices1_DB	Shared Service Provider Database	Stores Configuration Settings for this Shared Services Provider
	UserProfileApplication	User Profile Application	User Profile Application
	SessionStateSharedApplication	Session State	Session State
	🖼 Shared Search Index	Search index files for SharedServices1	Search index file for the Shared Services Provider
	SharedServices1_Search_DB	Search database for SharedServices1	Search database containing the property store and the crawler history
	Global Search Settings	Search object in configuration database	Crawler impact rules for the farm
	Windows SharePoint Services Help Search	Index files and Databases	Search instances for Windows SharePoint Services
	Search instance	Index files on MOSSAPP	Search index files on the search server
	WSS_Search_MOSSAPP	Search database for MOSSAPP	Search database for the search server

****** Notice that when I select SSP1 that it also includes the SSP database, profile applications. Search Index and the Search Database. ******

8. Continue the backup process and complete the fields for the backup type and location. I chose Full and then entered the location to the previous shared folder <u>\\mossapp\backups</u>

Central Administration		Welcome System Account 🝷 My Site My Links 🔻 🌘	
🔆 Central Administration			
Home Operations A	pplication Management	Site Actions	
	Central Administration > Operations > Perform a Backup > Start Backup - Str Start Backup - Step 2 of 2: Select Backup	ep 2 of 2: Select Backup Options Options	
Server Farm ? Configuration ? Not Complete	Use this page to configure a backup job.		
See <u>administrator task list</u> for more information View All Site Content	Backup Content Specify content to include in the backup.	Backup the following component: Farm\SharedServices1\newssp1webapp\ssp1	
Central Administration • Operations • Application Management Shared Services Administration	 Type of Backup Specify which type of backup to start: Full - backs up the selected content with all history. Differential - backs up all changes to the selected content since the last full backup. 	Type of backup:	
SharedServices1 Recycle Bin	Backup File Location Specify where to store the backup files. Each backup job is stored in a separate subdirectory at the location you specify, and each object is backed up to an individual file in that subdirectory. Learn about backup locations.	Backup location: \\mossapp\backups Example: \\backup\SharePoint Estimated Disk Space Required: 13,75 MB.	
		OK Cancel	

9. When the backup is complete you will get a final notification of the job completed

Central Administration > Operations > Backup and Restore Job Status Backup and Restore Status

Use this page to view the backup or restore job status.

🖸 Refresh | 🔎 View History |

Backup

Requested By	TRAINSBYDAVE\spadmin
Phase	Completed
Start Time	11/21/2007 4:29 PM
Finish Time	11/21/2007 4:29 PM
Top Component	Farm\SharedServices1\newssp1webapp\ssp1
Backup ID	9687d2da-73e6-4af7-a782-59026e111a17
Directory	\\mossapp\backups\spbr0000\
Backup Method	Full
Warnings	0
Errors	0
	Requested By Phase Start Time Finish Time Top Component Backup ID Directory Backup Method Warnings Errors

** Note – If the backup job fails you will need to go to the Operations Tab – Timer Job Definitions and then select the backup/restore job. Then click delete to remove the job. Another backup job cannot run until this is deleted.

Now you have a successful backup you can proceed to step 2.

Step 2 - Create a new SSP and re-associate the Web Applications.

You now need to create a new Shared Service Provider that will act as the standby SSP to manage the existing web applications whilst we prepare to delete the original SSP.

Delete the original SSP !! I hear you say. Unfortunately yes, we need to remove the old SSP in order to restore it back but as the whitepaper implies with a different location for the SSP Search database.

I am assuming at this point you know how to create a new SSP if you do not then I would recommend reading chapter 18 of the MSPress SharePoint 2007 Administrators Companion that has the step by step procedure from start to finish (it should have I wrote it ⁽ⁱ⁾)

When I created my second SSP I called it emergencySSP, in other words it will only be used in situations where I need to do this type of restore of job and I would never use it as a production SSP. I also created a separate Web Application for the My Sites called emergencysspmysites. (I know it's a bit long winded but hey C) I have no intention of hosting my sites on this SSP but still best practice is to put them on a separate web application in the SSP.

Ok so now that you created your new emergency SSP we need to re-associate all of your existing Web Applications from Shared Services 1 to the emergency SSP.

** Important ** this operation of Re-Associating Web Applications should only be done at a time when your users are disconnected from this SSP. If we start re-associating Web Applications that have Collaboration portals and web parts that use Audiences, BDC, Excel services etc. then these services will no longer function whilst the Web Applications are associated with the Emergency SSP. Once we have Restored SSP 1 and Re-Associated the Web Applications back only then should the users be allowed back in to the Shared Services 1.

- 1. In Central Administration click on Shared Service Administration on the left hand quick launch or alternatively go to Application Management Manage this Farms Shared Services
- 2. Click Change Associations on the title bar
- 3. On the Shared Service Provider page select your new emergency SSP from the drop down list. (see below for how mine looked)
- 4. Now tick all the Web Applications that you will re-associate with the new SSP.

We need to move all the Web Applications as we are going to delete SSP 1 in the next step.

Central Administration > Application Management > Manage this Farm's Shared Services > Change Association between Web Applications and SSPs

Change Association between Web Applications and SSPs

The association defines which shared services are used by a Web application. A Web application may be associated to one SSP, but each SSP may have multiple Web applications associated with it.

Shared Services Provider	SSP N	lame		
Select the shared services provider with which the Web applications will be associated.	Er	merg	encySSP 💌	1
Web applications	Select	tall		
Select the Web applications which will be associated with the selected shared services provider.	•			
			Web application	Current SSP Association
		V	emergencysspmysites	EmergencySSP
		☑	collab	shared services1 (Default)
		•	mysites	shared services1 (Default)
		◄	mysites2	shared services1 (Default)
				OK Cancel

5. Click ok and you will see the following warning message

Have a good read of this warning message as it gives you a good idea of what will change when Re-Associating Web Applications.

Warning!

Changing associations between Shared Services Providers You have chosen to associate Web applications to a new shared services provider (SSP). Implications of this action include: Services may take time before they are available for use in the newly associated Web applications. For example, search must crawl the new content before it appears in query results. Any Web application specific data in the old SSP will remain in the old SSP, but will no longer be accessible. All service-level configurations will remain in the old SSP until manually removed using the old SSP administration pages. If needed in the new SSP, they will have to be reset using the new SSP administration pages. You should review the process accounts access list on the SSP Properties page and remove accounts that no longer require access. Click OK to change association(s). Click Cancel to return to the previous page.

- 6. Click ok to change the associations.
- 7. You should now see all the Web Applications listed under the new SSP except for the default Web Application that actually hosts the Admin site For SSP 1.

Step 3 – Change the Default SSP and delete SSP 1.

Before we can delete the first SSP we must first make the emergency SSP the default. This is because SharePoint will not allow the default SSP to be deleted. Consider it a safeguard. To change the default SSP follow these steps.

- 1. Go to Central Administration Application Management Manage this farms Shared Services
- 2. Click change default SSP
- 3. From the drop down list select the emergency SSP and click OK

Central Administration > Application Management > Manage this Farm's Shared Services > Change Default Shared Services Provider Change Default Shared Services Provider		
Shared farm services, such as Search, must be accessible for many features to work correct ensure access to shared farm services.	tly. Web applications are automatically associated with the default SSP to	
Shared Services Provider Select the shared services provider with which Web applications will automatically be associated.	SSP Name EmergencySSP	
	OK Cancel	

- 4. You will now get a warning message that basically says any new Web Applications that are created from new will be associated with the new default SSP.
- 5. Click OK to continue.

Warning!

Changing the Default Shared Services Provider

Changing the default shared services provider has the following effects:



Existing Web applications retain their associations; they do not automatically re-associate to the new default SSP.
 Web applications created henceforth are automatically associated to the new default SSP.

Click OK to make the selected shared services provider the default for the farm. Click Cancel to return without re-assigning the default shared services provider.

Cancel

ΟК

Now that the default SSP has been moved to the new emergency SSP and all the Web Applications have been re-associated we can now delete SSP1.

**** Warning **** before deleting your SSP make sure you have documented the name of the Web Application hosting the SSP and the My Sites. Plus document the name of the SSP database. In my case this was SharedServices1_DB.

1. Return to the Manage this farm's Shared Services page

Central Administration > Application Management > Manage this Farm's Shared Services Manage this Farm's Shared Services		
Use this page to manage shared services providers (SSPs). SSPs provide the infrastructure - databases, Web services, and admin pages - for shared services. From this page, create new SSPs, control which SSP is used by each Web application, and reconnect the pieces of an SSP as part of database recovery.		
🛅 New SSP 🗊 Change Default SSP 🖶 Change Associations 🔚 Restore SSP		
SSP and associated Web applications		
EmergencySSP (Default)		
collab		
emergencyssp (Administration site host)		
emergencysspmysites		
mysites		
mysites2		
shared services1		
newssp1webapp (Administration site host)		

- 2. Put your mouse over Shared Services 1 (Your first SSP) and then on the drop down menu select delete.
- 3. On the Delete Shared Services Provider page make sure that '*Remove without deleting the associated database*'

This step is important because if you do delete the SSP database you will lose all your existing profile information and audiences after the SSP restore is complete. Again please ensure you have documented all your configuration settings for the SSP including profile and audience details.

4. Click OK

Central Administration > Application Management > Manage this Farm's Shared Services > Delete Shared Services Provider Use this page to delete a shared services provider from the farm. Current Shared Services Provider To change the shared services provider, return to the Manage this Farm's Shared Services1 SSP Name shared services Page. Choose the appropriate removal operation. The associated databases contain user and configuration data for the shared services provided by the SSP. OK

Step 4 – Restoring the SSP and creating a new Search database

Now you should only have the standby SSP (emergency SSP in my case). What we now need to do is restore the deleted SSP but instead of doing this through backup / restore we need to use the Restore SSP option on the Manage this farm's Shared Services page.

So what is the difference you may ask between the two? I actually think that the restore SSP title should be renamed to re-associate SSP because you don't actually restore anything from this page all you do is create a new SSP object and point it to an existing web application and the previous SSP database. You can however get the magic option we are after which is create a new Search Database.

So let's get on with restoring the SSP.

1. On the Manage this Farms Shared Services click restore SSP

Cent Ma	tral Administration > Application Management > Manage this Farm's Shared Services anage this Farm's Shared Services
Use page	this page to manage shared services providers (SSPs). SSPs provide the infrastructure - databases, Web services, and admin pages - for shared services. From this e, create new SSPs, control which SSP is used by each Web application, and reconnect the pieces of an SSP as part of database recovery.
-	New SSP 📴 Change Default SSP 🗃 Change Associations 🛅 Restore SSP
	SSP and associated Web applications
Ξ	EmergencySSP (Default) collab
	emergencyssp (Administration site host)
	emergencysspmysites
	mysites
	mysites2
	newssp1webapp

- 2. Give the SSP a name description (Does not have to be the same name as the Deleted SSP)
- 3. Select a Web Application to host the SSP or create a new one. In my case I decided to create a new Web Application using the link. Make sure you do not select a web Application already being used.
- 4. For My Site location uncheck the box for 'Use the existing location from the SSP'
- 5. From the drop down list select you're my Sites Web Application that your previous SSP used. ** You documented this Web Application earlier.

SSP Name	
Specify a unique, descriptive name for this Shared Services Provider. This name will be used to identify this SSP in administration pages.	SSP Name SSP1
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. If the Web application you select contains an SSP site, that site will be used as this SSP's administration site.	Web application
Users will be able to navigate to the SSP administration site by typing this Web site address (URL) into their browsers.	
My Site Location	
A Web Application is required for My Sites. This Web application will be used to host personal sites and profile pages. By default, the restored SSP will continue to use the existing location, which may be located on the original farm. You can also select an existing Web application on this farm where you have already restored personal sites. Alternatively, you can create a new Web application for hosting personal sites. Until you restore personal sites to the selected Web application, new personal sites will be created when users try to access them.	Use the existing location from the SSP Web application Treate a new Web application My Site Location URL http://mossapp:15260/ Relative URL

- 6. Now enter the credentials of your SSP service account. This can be the same as your previous SSP or a new account.
- 7. Enter the SQL server details as per your previous SSP. This was the reason we did not delete the database on the previous step as we now need to use the same Shared Services database. In my case this was sharedservices1_db

■ SSP Service Credentials Specify the credentials for the SSP Web services to use for inter-server communication and for running SSP-scoped timer jobs.	Username trainsbydave\spadmin Password •••••••
 SSP Database Each SSP requires a database for service specific data. Specify the server and name of the database this SSP is to connect to. This database must already exist. To use SQL authentication, specify the credentials that will be used to connect to the SSP Database. 	Database Server

- 8. Now finally we get to the point of this exercise. Choose a database server and define a new name for your SSP search database. This can be any SQL server and database name as we will have to reindex our content anyway.
- 9. Choose a file location for your Index file
- 10. Choose if you want to use SSL for web services.
- 11. Click OK

Search Database In addition to the SSP database, a senarate database is required for frequently.	Database Servier
changing search related data.	sql2005
Use of the default database server and database name is recommended for most cases. Refer to the Office SharePoint Server TechCenter on TechNet for advanced scenarios where specifying database information is required.	Database Name newSSPsearch_db Database authentication
Use of Windows authentication is strongly recommended. To use SQL authentication, specify the credentials that will be used to connect to the SSP Database.	Windows authentication (recommended) SQL authentication Account Password
∃ Index Server	
Select the index server which will crawl content in all Web applications associated with this SSP. Specify the path on the index server where the indexes will be located. Note: Changing the index server will reset the index. To move the index without a reset STSAdm must be used.	Index Server MOSSAPP Path for index file location C:\Program Files\Microsoft Office Serv
 SSL for Web Services Use Secure Sockets Layer (SSL) to protect communications to and from Web services. Note: If you choose to use SSL, you must add the certificate on each server using the IIS administration tool. Until this is done, the Web services will not be available. 	Use Secure Sockets Layer (SSL) O Yes ⓒ No

12. After a short time you should get a Success message box.

Success!

All shared services have been successfully restored.

Some of these services might require additional configuration. You can do this from the administration pages for the shared service. Refer to the product documentation for information on how to configure these services after a restore. To view the shared services administration pages, select this link.

Otherwise, click 'Ok' to return to the Manage this Farm's Shared Services page.

13. Click OK

OK

Step 5 – Re-Associate your Web Applications and Configure your SSP

1. Now you need to repeat the process earlier of associating your Web Applications but this time you need to associate back to the new restored SSP. Follow the steps earlier in this document for the process for Re-Associating Web Applications.

** There is no need to associate any web applications that you created to host the emergency SSP **

Central Administration > Application Management > Manage this Farm's Shared Services > Change Association between Web Applications and SSPs Change Association between Web Applications and SSPs

The association defines which shared services are used by a Web application. A Web application may be associated to one SSP, but each SSP may have multiple Web applications associated with it.			
Shared Services Provider Select the shared services provider with which the Web applications will be associated.	SSP Name SSP1	×	
Web applications Select the Web applications which will be associated with the selected shared services provider.	Select all		
	•	Web application collab	Current SSP Association EmergencySSP (Default)
		emergencysspmysites	EmergencySSP (Default)
	~	mysites2	EmergencySSP (Default)
	N	mysites	SSP1
			OK Cancel

- 2. After Associating your Web Applications back make the restored SSP the default SSP again as per the previous steps earlier in this whitepaper.
- 3. Finally you need to go to your SSP Administration page and re-crawl all your content sources and also re create any of your configured services that have not carried over from the SSP database. As a quick pointer Audiences and Profile information was carried over but Personalization links was not. You should check every one of the options as other settings will also have changed for example Advanced Usage Analysis needs to be re enabled. I will hopefully update this document at a later date that lists every setting that is kept.
- 4. Also you need to logon as a user and check that they can still access the Sites and My Sites. In my testing I did not have any problems accessing Sites or My Sites for users.

Troubleshooting

1. Search – I had a couple of occasions when the crawling service would not show idle. However launching a re-crawl of the default office content source fixed the problem. Alternatively you could try stopping and restarting the search service

I hope you found this article useful, please do feel free to send me comments and keep checking our web site for more downloads on configuring some of the cool new features of Moss2007.

www.combined-knowledge.com

Steve@combined-knowledge.com





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