Changer le serveur SQL d'une ferme SharePoint 2007

Durant la vie d'une ferme SharePoint, le changement de serveur SQL est assez courant, En effet, les volumes de données augmentent et si les serveurs Web tiennent la charge, généralement les serveurs SQL sont à la traine. Il convient donc de préparer la migration de ce type de serveur.

Check avant déplacement des bases de données :

1. Extraction des solutions WSP de la ferme

Contrôle des Solution SharePoint installées sur la ferme

• Central administration – Operations – Solution Management

Si des solutions sont présentes, il faut extraire les fichiers WSP dans un répertoire de travail, avec le script PowerShell :

function Get-Installed-Farm-Solutions ([string]\$SavedPath, [boolean]\$Export)
{
[System.Reflection.Assembly]::LoadWithPartialName("Microsoft.SharePoint") > \$null
[System.Reflection.Assembly]::LoadWithPartialName("Microsoft.SharePoint.Administration") > \$null
\$mySPFarm = [Microsoft.SharePoint.Administration.SPFarm]::Local
Write-Host " "
Write-Host "Build Version:", \$mySPFarm.BuildVersion
Write-Host "Servers Number:", \$mySPFarm.Servers.count
\$mySolutions = \$mySPFarm.Solutions
Write-Host " "
Write-Host "Solutions Total:", \$mySolutions.count
foreach(\$mySolution in \$mySolutions)
{
Write-Host " "
Write-Host " Solution ID:", \$mySolution.SolutionID
Write-Host " Solution Name:", \$mySolution.Name

	Write-Host " Solution File:", \$mySolution.SolutionFile
	Write-Host " Solution Deployed Status:", \$mySolution.Deployed
	if(\$Export)
	{
	[string]\$myOutputPath = \$SavedPath + \$mySolution.Name
	Write-Host " Solution exported to:", \$myOutputPath
	\$mySolution.SolutionFile.SaveAs(\$myOutputPath);
	}
	Write-Host " "
}	
Write-Ho	ost " "
}	
cls	
Get-Installed-Farm	-Solutions "C:\TOOLS\INSTALLED_Solutions\" \$true

Il faut aussi connaître les configurations à fournir pour chacune de ces solutions si elles en ont besoin. Il est aussi bon de supprimer les solutions inutiles qui pourraient encore exister.

2. Listing des Web Applications de la ferme

Afin de pouvoir recréer les Applications Web SharePoint, il faut lister les configurations existantes :

- Nombre de Web App
- Log IIS
- Répertoire de stockage de chaque Web App (pour le cas où les Web.Config doivent être modifiés)
- Liste des comptes ayant des droits sur les Web Applications

3. Listing des Content DataBases pour chaque Web Application

Il faut absolument savoir quelles sont les bases de contenu qui doivent passer sur le nouveau serveur. Pour cela, dans la centrale administration :

• Centrale Administration – Application Management – Content Databases

Central Administration				Welcome	Admin Fabrice Romelard 🝷 🌘
🔆 Central Adm	inistration				
Home Operations Ap	plication Management				Site Actions
	Central Administratio	n > Application ntent Dai	Management > Content tabases	Databases	
View All Site Content	Use this page to manage	content databases	; for this web application. Cl	ick a content databas	e name to change its
Central Administration	properties.				
 Operations 	🛋 Add a content da	atabase	We	eb Application: http	://restart/ •
Application	Database Name	Database Status	Current Number of Sites	Site Level Warning	Maximum Number of Sites
Management	TEMP	Started	41	9000	15000
🙍 Recycle Bin					

On liste alors les paramètres de chacune des bases (Site Level Warning et Max Number of Sites)

Migration des bases de données

Une fois que les paramètres sont connus, il faut détacher les bases de contenu de chaque Web Application en cliquant sur le détail :

• Centrale Administration – Application Management – Content Databases



On clique sur le nom de la base en question, on coche la case « Remove content database »

Use this page to update the properties of a content database in the Web application.

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

Database Information	Database server
Specify database connection settings for this content database. Use the Database status options to control whether or not new sites can be created in the database. When the database status is set to Ready , the database is available for hosting new sites. When the database status is set to Offline , no new sites can be created.	SQL Server database name rumeset Ence_TEMP Database status Ready Database authentication Windows authentication
Database Capacity Settings	Number of sites before a warning event is generated
Specify capacity settings for this database.	9000 Maximum number of sites that can be created in this database 15000
Search Server	Select Windows SharePoint Services search server
You can choose to associate a content database with a specific server that is running the Windows SharePoint Services search service.	
Remove Content Database	Remove content database
Use this section to remove a content database from the server farm. When you select the Remove content database check box and click OK , the database is no longer associated with this Web application. Caution: When	

Une alerte prévient que le contenu de la base ne sera plus accessible aux utilisateurs.

Microsoft	: Internet Explorer
2	Warning: There are sites stored in this content database. If you remove the database, those sites will no longer be accessible to users. Click OK to remove the database, or Cancel to leave the database connected.
	Cancel

La base sera alors supprimée pour la vue de SharePoint,. Mais reste bien présente dans le moteur SQL Server.

Suppression des Web Applications

Si l'on veut être propre, on peut alors supprimer les Web Applications une par une afin de laisser le serveur propre. Pour cela, il faut aller dans la centrale administration :

Centrale Administration – Application Management – Delete Web Application

Delete Web Application	Central Administration	> Application Management > Delete Web Application
	Delete Web	Application

This page allows you to delete an entire Windows SharePoint Services application, including all of its content and settings.

Web Application Select a Web application.	Web Application: http://rumin-stagemet/ •
Deletion Options Decide if you would like to delete the content databases associated with this web application. If you choose to delete these databases, all of the sites in them will be lost unless you restore the database from a backup. Decide if you would like to remove the association of the IIS Web site with this Web application, or actually delete the IIS Web site. If you choose delete, all IIS metabase entries referring to these Web sites will be deleted, even if other non-SharePoint applications are using them.	Delete content databases O Yes O No Delete IIS Web sites O Yes O No
	Delete Cancel

Une alerte demande la confirmation de cette suppression.

Microsoft	Internet Explorer
2	Are you sure you want to delete this Web application? All access to the sites contained in that Web application will be lost.
	OK Cancel

On peut aussi passer directement à la suppression de la ferme qui fera par défaut cette suppression de toutes les Web Applications de la ferme.

Suppression de la ferme SharePoint

Pour supprimer un serveur d'une ferme SharePoint il faut passer par le Wizard :

• Start Menu > Programs > Administrative Tools > SharePoint Products and Technologies Configuration Wizard

L'assistant se lance

Welcome to SharePoint Products and Technologies	
This wizard will help you repair SharePoint Products and Technologies. Click Next to continue or Cancel exit the wizard. To run the wizard again, click on the Start Menu shortcut.	to

En cliquant sur Next on obtient un message d'alerte que les services peuvent être stoppés durant la procédure, on clique sur Yes.



On arrive sur le choix d'action à effectuer, on sélectionne alors « **Disconnect from this server farm** » et on clique sur Next

SharePoint Products and Technologies Configuration Wizard	
Modify server farm Settings	
This server is connected to the following server farm:	
Database <u>s</u> erver: NUCCOV solution	
Database name: SharePoint_Config	
Select one of the following options.	
O Do not disconnect from this server farm	
Disconnect from this server farm	
< <u>B</u> ack <u>N</u> ext	> <u>C</u> ancel

Une nouvelle alerte nous demande de confirmer

SharePoir	nt Products and Technologies Configuration Wizard	ĸ
2	If you choose to continue, this computer will no longer host the SharePoint Central Administration Web Application (if one exists) and will be immediately removed from this server farm. To join another server farm after disconnecting, run this configuration wizard again. Do you want to continue?	

La procédure se lance alors



Pour se terminer par un message de réussite

narePoint Products and Technologies Configuration Wizard	_[]
Configuration Successful	
Click Finish to close this wizard.	
ন	
	Einish

A ce stade le serveur WEB ne fournit plus aucun service SharePoint.

Nous pouvons donc sauvegarder la base de contenu de notre serveur SQL pour le recharger sur le nouveau serveur SQL.

Création de la nouvelle ferme SharePoint

Il faut maintenant recréer une ferme SharePoint en utilisant le nouveau serveur SQL, pour cela il faut toujours utiliser l'assistant (comme précédemment) :

• Start Menu > Programs > Administrative Tools > SharePoint Products and Technologies Configuration Wizard

Cette fois l'assistant ne présente pas la même interface, mais on clique sur Next

Welcome t	o SharePoint	Products and 1	echnologies	
(n order to config	ure SharePoint Produc	ts and Technologies, you	will require the following inform	mation:
• Name of dat	abase server and data	abase where server farm o	onfiguration data will be store	ed .
• Username ar	nd password for the da	atabase access account th	at will administer the server f	arm
flick Next to cost	inue or Capcel to svik t	the unitated. To sup the unit	and again, click on the Start M	eou chorteut
Lick Next to cont	inue or Cancel to exit t	the wizard. To run the wiz	ard again, click on the Start M	enu shortcut.

Le même message d'alerte prévient de l'arrêt des services



On va alors choisir

• « No, I want to create a new server farm »

rePoint Products and Technologies Configuration Wizard		_
Connect to a server farm		
A server farm is a collection of two or more computers that share configurat connect to an existing server farm?	ion data. Do you want to	D
 Yes, I want to connect to an existing server farm No, I want to create a new server farm 		

On fournit alors les paramètres pour accéder au nouveau serveur SQL ainsi que le compte de service de SharePoint qui doit aussi avoir les droits suffisant sur le serveur SQL

name. If the database does not exist empty. For additional information reg please see <u>help</u> .	;, it will be created. To reuse an existing database, the database must be garding database server security configuration and network access
Database <u>s</u> erver:	Research
D <u>a</u> tabase name:	SharePoint_Config
<u>U</u> sername:	CAME TO BE T
Password:	••••••

On spécifie ensuite le port http nécessaire pour accéder au site d'administration SharePoint et le mode d'authentification que l'on souhaite avoir (NTLM ou Kerberos)

	ices and reenhologies	Configuration miza			,
Configure	e SharePoint Ce	entral Adminis	stration W	eb Applica	ation
oornigai	s on a or on te oc	and an indirin	ser across r	op i ipprice	leioii
A SharePoint C farm. The first web application you do not spe	entral Administration Web server added to a server I i hosted on this machine, (cify a port number, a rand	Application allows you farm must host this wel check the box below ar dom one will be chosen.	to manage config b application. To id type a number	guration settings specify a port nu between 1 and 6	for a server mber for the 5535. If
🗖 Spe	cify port number:) 6268				
Configure S	ecurity Settings				
Kerberos is the requires specia application poo	recommended security co I configuration by the dom I account and the default	onfiguration to use with ain administrator. NTLM domain configuration.	Integrated Wind 4 authentication 4 Show me more in	lows authenticati will work with any <u>formation.</u>	on. Kerbero
Choose an auth	nentication provider for th	is Web Application.			
⊙ N <u>T</u> L	M				
C Neg	jotiate (<u>K</u> erberos)				

Un résumé affiche toutes les informations avant de lancer la création de la ferme en cliquant sur Next

e following configuration setti	ings will be applied:		
Configuration Database Serv	/er	RUDGOD.	
Configuration Database Nam	e	SharePoint_Con	
Host the Central Administrat	ion Web Application	yes	
Central Administration UR	RL.	http://	
Authentication provider		NTLM	
ick Next to apply configuration	n settings.		
Advanced Settings			
<u>Havanceu settings</u>			

Les différentes étapes s'exécutent sur le serveur

arePoint Products and Technologies Configuration Wizard	
Configuring SharePoint Products and Technologies	
Please wait while SharePoint Products and Technologies is configured.	
Performing configuration task 2 of 9	
Creating the configuration database	
	Cancel

L'assistant nous confirme la réussite de l'installation en nous affichant un nouveau résumé de cette installation

y	
The following configuration settings were successfully applied:	
Configuration Database Server	PUEBOSS-
Configuration Database Name	RUWSOOC_SharePoint_Confi
Host the Central Administration Web Application	yes
Central Administration URL	http://r uw5001 :2007/
Authentication provider	NTLM
the site. At that prompt, enter the credentials that you used to be of trusted sites when prompted.	ogon to this computer. Add this site to the li
the site. At that prompt, enter the credentials that you used to be of trusted sites when prompted.	ogon to this computer. Add this site to the li

Le site d'administration se lance alors avec sa page d'accueil

🚳 Home - Central Adminis	tration - Micros	oft Internet Explorer			_ 🗆 🗙
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorite	s <u>T</u> ools <u>H</u> elp				1
🕝 Back 🔻 🕥 👻 😫	🏠 🔎 Search	📌 Favorites 🛛 🔗 🚽 🍇 🚍			
Address 🙆 http://forestate	default.aspx			💌 🔁 Go	Links »
Central Administration				Welcome Admin Fabrice Romelard 🔹	- 🔞 🔺
🛞 Central Admi	nistration				
Home Operations Ap	plication Managem	ent		Site Acti	ons 🔻
How All City Contract	·				
View All Site Content	Administra	tor Tasks	-	Resources *	
Administration	Type Orde	r Title	Assigned To	There are currently no	
Operations		1 READ FIRST - Click this link for deployment instructions I NEW		favorite links to display. To add a new link, click "Add new link" below.	
Management		2 Incoming e-mail settings INEW		Add new link	
Docurlo Pin		3 Outgoing e-mail settings I NEW		A Add flow link	
M RECYCLE DIT		4 Create SharePoint Sites I NEW			
		4 Configure Workflow Settings NEW			
	1	5 Diagnostic logging settings I NEW			
	1	3 Add anti-virus protection I NEW			
	🗉 Add new t	ask			
	Farm Topol	nnv	*		
	Server	Services Running			
	Detter	 Windows SharePoint Services Databas 	e		
	R=1145001	Central Administration Windows SharePoint Services Incomin Windows SharePoint Services Web App	g E-Mail plication		
E Done				🖉 🖉 Trusted sites	

Ajout des solutions installées

Pour cela, il faut se placer en commande DOS sur le répertoire où on a extrait la solution WSP et taper la commande

• stsadm -o addsolution -filename xxxxxx.wsp

Le fichier sera alors remonté dans la base de configuration de la ferme et vous pourrez déployer la solution selon votre besoin.



Il est préférable de charger toutes les solutions dès le départ, mais de les déployer après que les Web applications soient créées. Il est aussi mieux de déployer les solutions avant d'attacher les bases de données.

Configuration de la ferme

Il faut configurer la ferme selon son souhait :

- Configuration Email
 - Outgoing e-mail settings
 - o Incoming e-mail settings (si le système est implémenté dans votre cas)
- Usage analysis processing
- Windows SharePoint Services Search
- Création des modèles de quota de la ferme

Création de la Web Application

Il faut maintenant créer la Web Application, mais sans créer de collection racine. Pour cela, il faut aller dans la partie « Application Management » de la centrale Administration et cliquer sur :

• Create or extend Web application

On choisit alors « Create a new Web Application

Central Administration > Application Management > Create or Extend Web Application Create or Extend Web Application

Use this page to create a new Windows SharePoint Services application or to extend an existing application to another IIS Web Site. Learn about creating or extending Web applications.

Adding a SharePoint Web Application

Creating a new Web application is the most common option. When creating a new SharePoint Web application, you create a new database to store data, and define the authentication method used to connect the SharePoint application to that database.

Choose Extend an existing web application if you need to have separate IIS Web Sites that expose the same content to users. This is typically used for extranet deployments where different users access content using different domains. This option will reuse the content database from an existing Web application.



Extend an existing Web application

On va fournir tous les renseignements nécessaires pour accéder à la Web Application et cliquer sur OK

- Host Header Port http Path
- Security configuration (NTLM, Anonymous, ...)
- Application Pool avec le compte de service adapté
- Serveur SQL et nom de la base de données
- SharePoint Search

La Web application va alors se créer et la centrale administration nous renvoie un message de succès

Central Administration > Application Management > Create or Extend Web Application > Create New Web Application > Application Created

Application Created

The Windows SharePoint Services Web application has been created.

If this is the first time that you have used this application pool with a SharePoint Web application, you must wait until the Internet Information Services (IIS) Web site has been created on all servers. By default, no new SharePoint site collections are created with the Web application. To create a new site collection, go to the Create Site Collection page.

To finish creating the new IIS Web site, you must run "iisreset /noforce" on each Web server.

On peut alors paramétrer la Web application avec les :

- General Settings (time zone, recycle bin, quota, ...)
- Policy for Web Application
- Paramétrage des logs IIS et déplacement si nécessaire des anciens fichiers de Log

Attachement des anciennes bases de contenu

Une fois que l'application Web est OK et que la configuration de la ferme est faite, il ne reste plus qu'à attacher les bases de contenu. Ce sont les bases qui ont été sauvegardées de l'ancien serveur SQL et restaurées sur le nouveau serveur SQL.

Il suffit donc d'aller dans la centrale administration, rubrique Application Management et cliquer sur « Content Databases »

On se place bien sur la Web Application voulue et on clique sur « Add a content database »

Central Administration > Application Management > Content Databases

Manage Content Databases

Use this page to manage content databases for this web application. Click a content database name to change its properties.

Add a conter	nt database		Web Application: h	ttp://www.coli.sgs.not/
Database Name	Database Status	Current Number of Sites	Site Level Warning	Maximum Number of Sites
RUSEE601DB01	Started	0	9000	15000

On fournit tous les renseignements nécessaires pour accéder à la base existante et on valide par OK

-					
information v	vill be	sent in clear text.	For more information, cont	act your administrator.	

Web Application Select a Web application.	Web Application: http://rusio-getagonet/ -
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.	Database Server Database Name Database Name Database authentication Windows authentication (recommended) SQL authentication Account Password
Search Server You can choose to associate a content database with a specific server that is running the Windows SharePoint Services search service.	Select Windows SharePoint Services search server
Database Capacity Settings Specify capacity settings for this database.	Number of sites before a warning event is generated 9000 Maximum number of sites that can be created in this database 15000
	OK Cancel

La base est alors associée avec la Web application et tout est fonctionnel pour les utilisateurs.

On peut aussi passer par une commande STSADM :

• Stsadm –o addcontentdb



Conclusion

Cette tâche est délicate, mais en respectant cette procédure, les risques sont limités.

Romelard Fabrice [MVP]