SharePoint 2003 to SharePoint Server 2007 RTM Gradual Upgrade Demo – Part 1

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Time to complete – Depends on the amount of data in the Site Database but with very little data / small index and each SharePoint server having 700MB memory allocated it takes approx. 3 hours

This Demo works on Upgrading SharePoint Server 2003 SP2 to SharePoint Server 2007 Premium RTM. With 2 Network Load balanced Web Front end servers that are also Search servers and One Index / Job server.
This is Part 1 of the series that deals with installing the SharePoint 2007 environment. In part 2, I will walk you through Migrating the actual Site Collections

If you are limited with memory on your Demo / Test PC then I would advise running the demo with only 1 WFE server and remove WFE2 from the 2003 Farm.

The first discussion here is that although this demo seems fairly straight forward it is because I have no customized code or 3rd party web parts, or customized templates. All these things must be tested prior to upgrading your live environment.

I have been working for several months on upgrade testing in preparation for our Upgrade and Migration Course. I would strongly suggest that anyone who is serious about getting their upgrade right attend this 3 day training course in order to address all the design and technical issues that you will face in an Upgrade.
For more information on this course go here:

http://www.combined-knowledge.com/Sharepoint%202007.htm#sharePoint2007

http://www.mindsharp.com

The singular and most important point about a Gradual Upgrade is that you will need twice the resources on your hardware as you will run both SharePoint 2003 and 2007 side by side. This also includes the database space required. Also consider the time it will take for the databases to be upgraded, the more data you have the longer the upgrade will take.
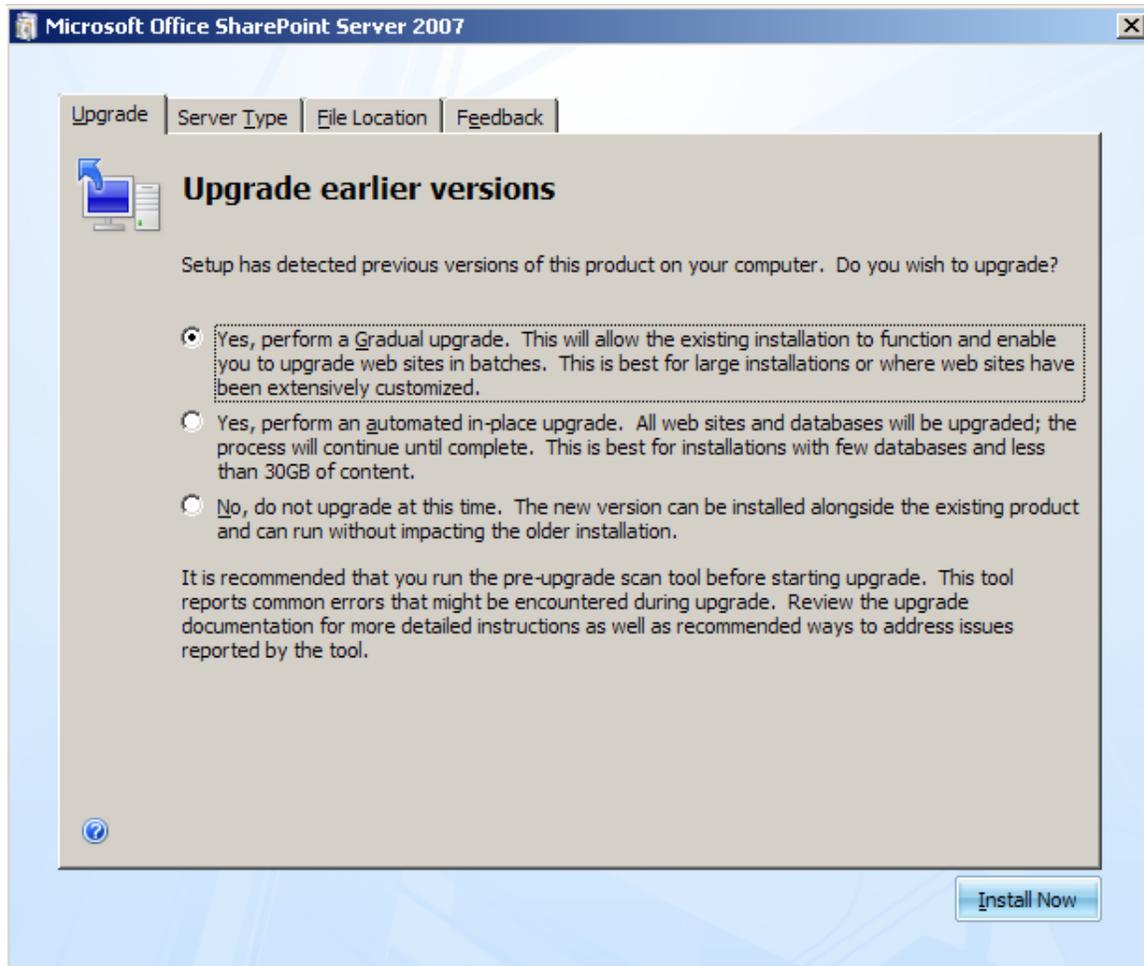Ok so on with the Upgrade:

This was my Environment for this Upgrade.

Server Type	Role	Software
Root Domain Controller	DC , Mail Server	Windows 2003 SP1 Exchange 2003 SP2
SQL Server	Database server	SQL 2000 SP4
SharePoint Server	Index / Job	Windows 2003 SP1 SharePoint Portal Server 2003 SP2
SharePoint Server	Web Front End 1	Windows 2003 SP1 SharePoint Portal Server 2003 SP2
SharePoint Server	Web Front End 2	Windows 2003 SP1 SharePoint Portal Server 2003 SP2

** The two Web front end servers are configured with Network Load Balancing **

1. Ensure your SharePoint 2003 farm is Service pack 2
2. Remove the network load balance service from both web front ends.
3. On all SharePoint 2003 servers install Microsoft .Net Framework 3.0
   - Download
     http://go.microsoft.com/fwlink/?LinkID=72322&clcid=0x409

4. On the front-end WFE1 server running Central Administration, install the Office SharePoint Server 2007 RTM build product from your local copy by clicking **setup.exe**.
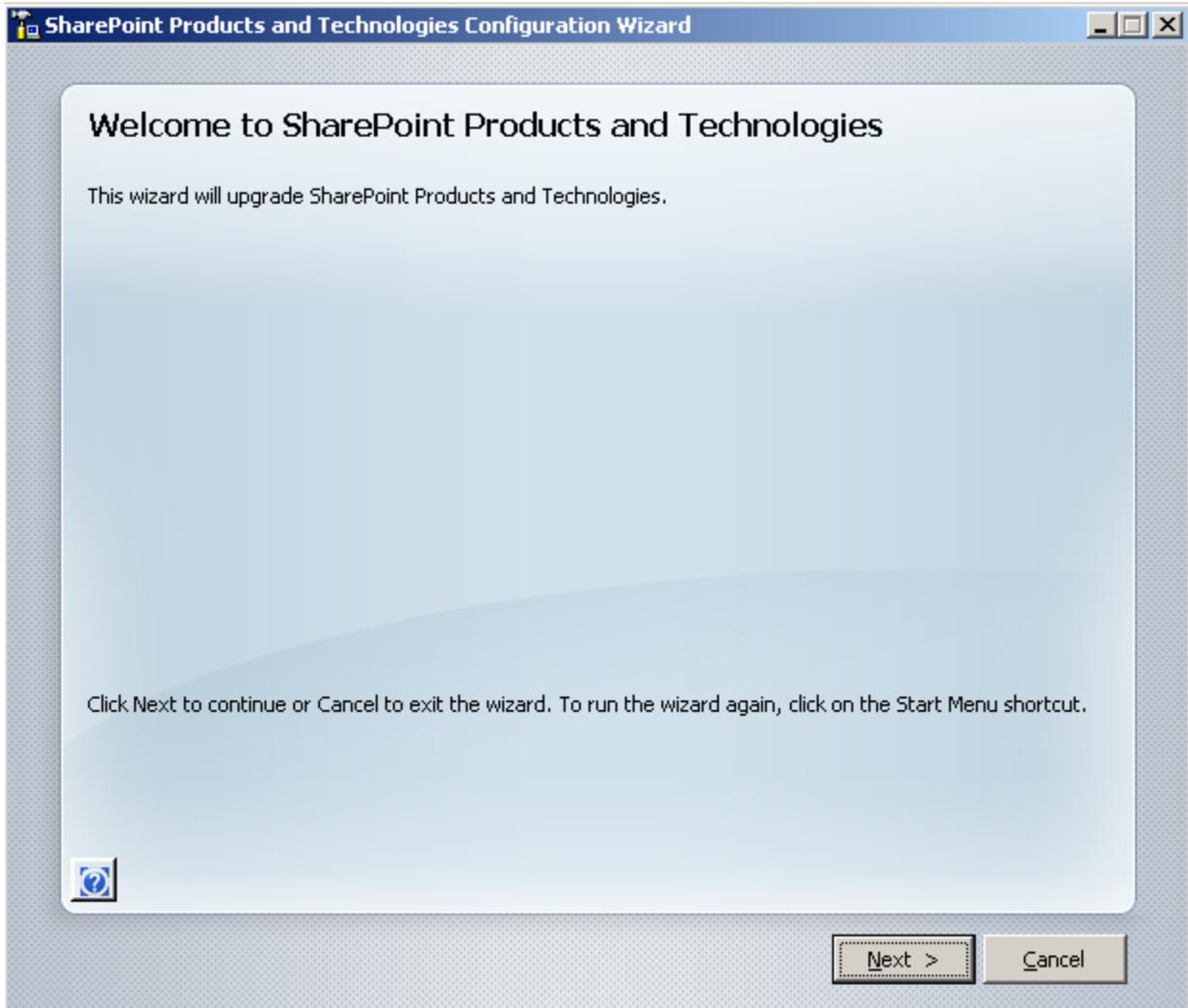5. Select **Yes, perform a Gradual upgrade.**

Microsoft Office SharePoint Server 2007

Upgrade earlier versions

Setup has detected previous versions of this product on your computer. Do you wish to upgrade?

- ⦿ Yes, perform a Gradual upgrade. This will allow the existing installation to function and enable you to upgrade web sites in batches. This is best for large installations or where web sites have been extensively customized.
- ○ Yes, perform an automated in-place upgrade. All web sites and databases will be upgraded; the process will continue until complete. This is best for installations with few databases and less than 30GB of content.
- ○ No, do not upgrade at this time. The new version can be installed alongside the existing product and can run without impacting the older installation.

It is recommended that you run the pre-upgrade scan tool before starting upgrade. This tool reports common errors that might be encountered during upgrade. Review the upgrade documentation for more detailed instructions as well as recommended ways to address issues reported by the tool.

Install Now

6. Ensure that **Complete** is selected from the **Server Type** Tab.
7. Click **Install Now**
8. When Setup is complete, the screen displays a check box for starting the Post-Setup Configuration Wizard. **Uncheck** the box , **click** close
9. Run Prescan. open a command window and navigate to the WSS directory <local drive>\Program files\Common files\Microsoft Shared\web server extensions\12\bin. Type the command:

   Prescan /c preupgradescanconfig.xml /all

```
C:\WINDOWS\system32\CMD.exe                                          _ □ X

C:\Program Files\Common Files\Microsoft Shared\web server extensions\12>cd bin

C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>pres
can /c preupgradescanconfig.xml /all
0%
5%
10%
15%
21%
26%
31%
36%
42%
47%
52%
57%
63%
68%
73%
78%
84%
89%
94%
99%
100%
Operation completed successfully.
File Name:C:\DOCUME~1\ADMINI~1.TRA\LOCALS~1\Temp\PreupgradeReport_63297381290390
1923_Log.txt
File Name:C:\DOCUME~1\ADMINI~1.TRA\LOCALS~1\Temp\PreupgradeReport_63297381290390
1923_Summary.xml

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

10. Install the binaries at this time on the other servers in the farm starting with the INDEX/JOB server FIRST then WFE2 as done in step 4 onwards.

11. ***DO NOT*** run the configuration wizard , uncheck the box and close the screen. Return to WFE1 and start the SharePoint Products and Technologies Configuration Wizard.
    - Start – programs – Microsoft Office Server
    - Select SharePoint Products and Technologies Configuration Wizard

12. Click Next

Welcome to SharePoint Products and Technologies

This wizard will upgrade SharePoint Products and Technologies.

Click Next to continue or Cancel to exit the wizard. To run the wizard again, click on the Start Menu shortcut.

13. Notice that you can install any language packs at this point , however language packs can also be added later on when you Migrate the site collections.
- http://technet2.microsoft.com/Office/en-us/library/5a2be738-df29-43cd-b361-84b7822164e31033.mspx

14. On the Connect to a server farm page select ' NO' I want to create a new server farm'
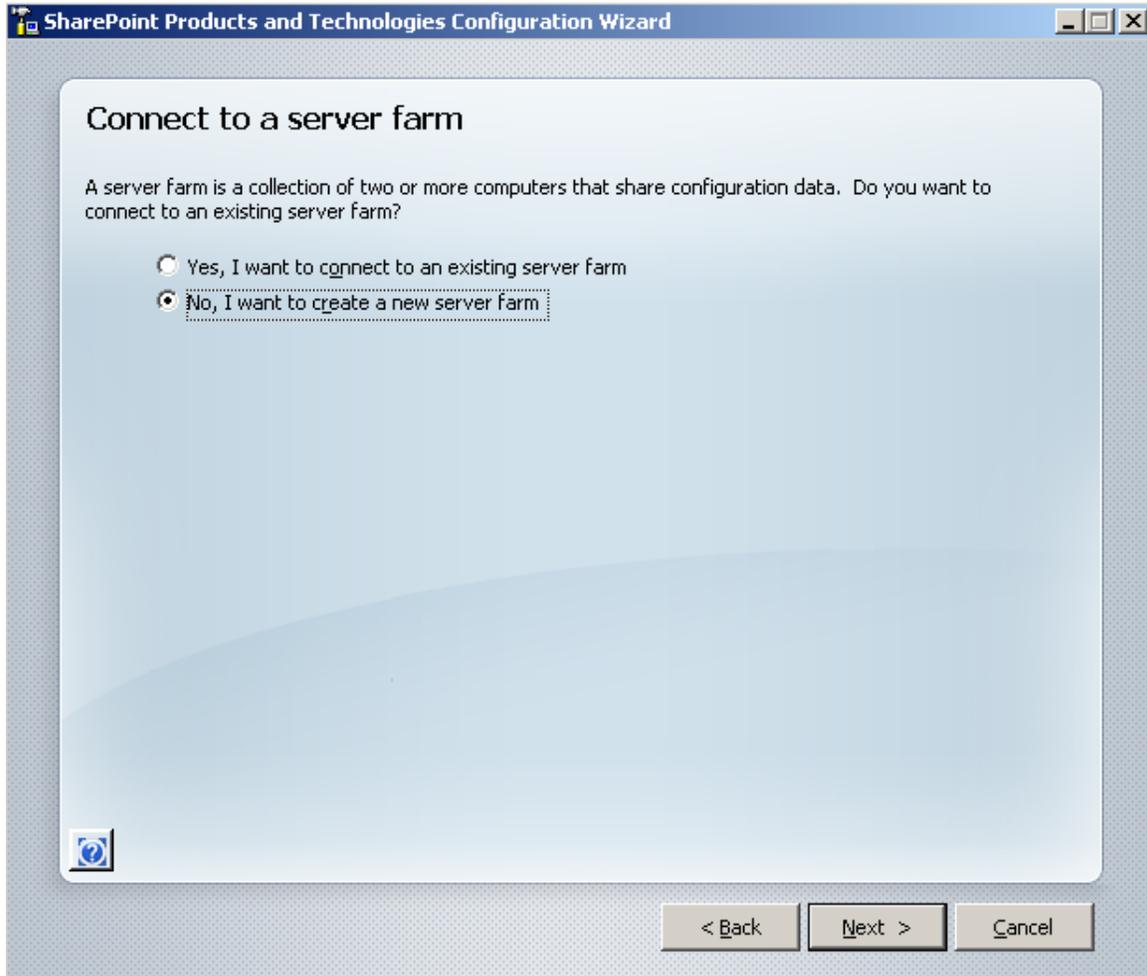
15. On the Specify Configuration Database Settings page, type:
   - The name of your SQL server
   - A name for your configuration database
   - A domain\username and password for the account to connect to the configuration database

This account must have rights to create databases. If SQL Server is running on a separate server from your Web Front end server, then this account must also be a domain account. This user account must be a member of the following SQL Server security roles: Database Creator and Security Administrator

SharePoint Products and Technologies Configuration Wizard

Specify Configuration Database Settings

All servers in a server farm must share a configuration database. Type the database server and database name. If the database does not exist, it will be created. To reuse an existing database, the database must be empty. For additional information regarding database server security configuration and network access please see help.

Database server: sql

Database name: SharePoint_Config

Specify Database Access Account

Select an existing Windows account that this machine will always use to connect to the configuration database. If your configuration database is hosted on another server, you must specify a domain account.

Type the username in the form DOMAIN\User_Name and password for the account.

Username: trainsbydave\administrator

Password: ••••••••

< Back   Next >   Cancel

16. On the Configure SharePoint Central Administration Web Application page you have several options to configure:

- If you wish you can specify a Port number to host the Central Administration web site. For large farms it may be wise to choose a standard port number for this.
- Choose an Authentication provider either Kerberos or NTLM. By default NTLM is selected and requires no further configuration. If you select Kerberos then you must complete the additional steps as outlines in this KB article http://technet2.microsoft.com/Office/en-us/library/40117fda-70a0-4e3d-8cd3-0def768da16c1033.mspx?mfr=true

17. Click **Next**
18. Review the summary of the final page and click **Next**
19. The configuration wizard now creates the configuration database and builds the farm. When the wizard is complete click **Finish**
20. Central Administration Home page will now launch. Notice however that only one of the servers is now configured and we still have to complete the Upgrade process on the Index/Job Server and also WFE 2.
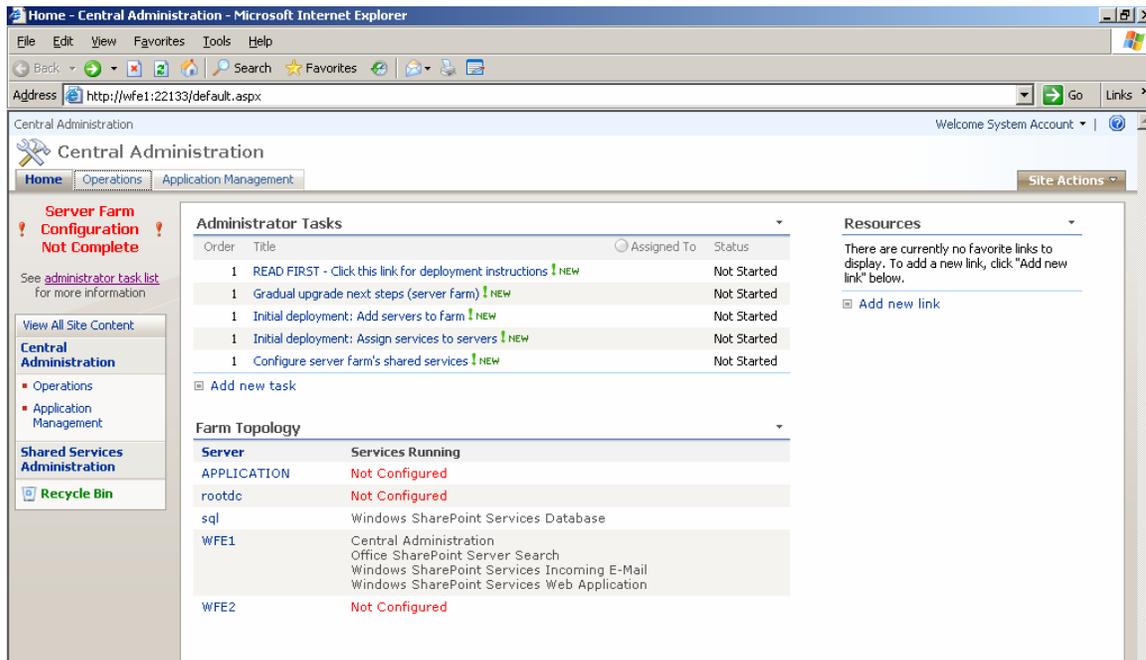
21. On the Index/Job Server launch the Configuration Wizard
22. Click Next and OK and on the Connect to a server farm page select
    - Yes I want to connect to an existing farm

SharePoint Products and Technologies Configuration Wizard

Connect to a server farm

A server farm is a collection of two or more computers that share configuration data. Do you want to connect to an existing server farm?

- ⦿ Yes, I want to connect to an existing server farm
- ○ No, I want to create a new server farm

[< Back] [Next >] [Cancel]
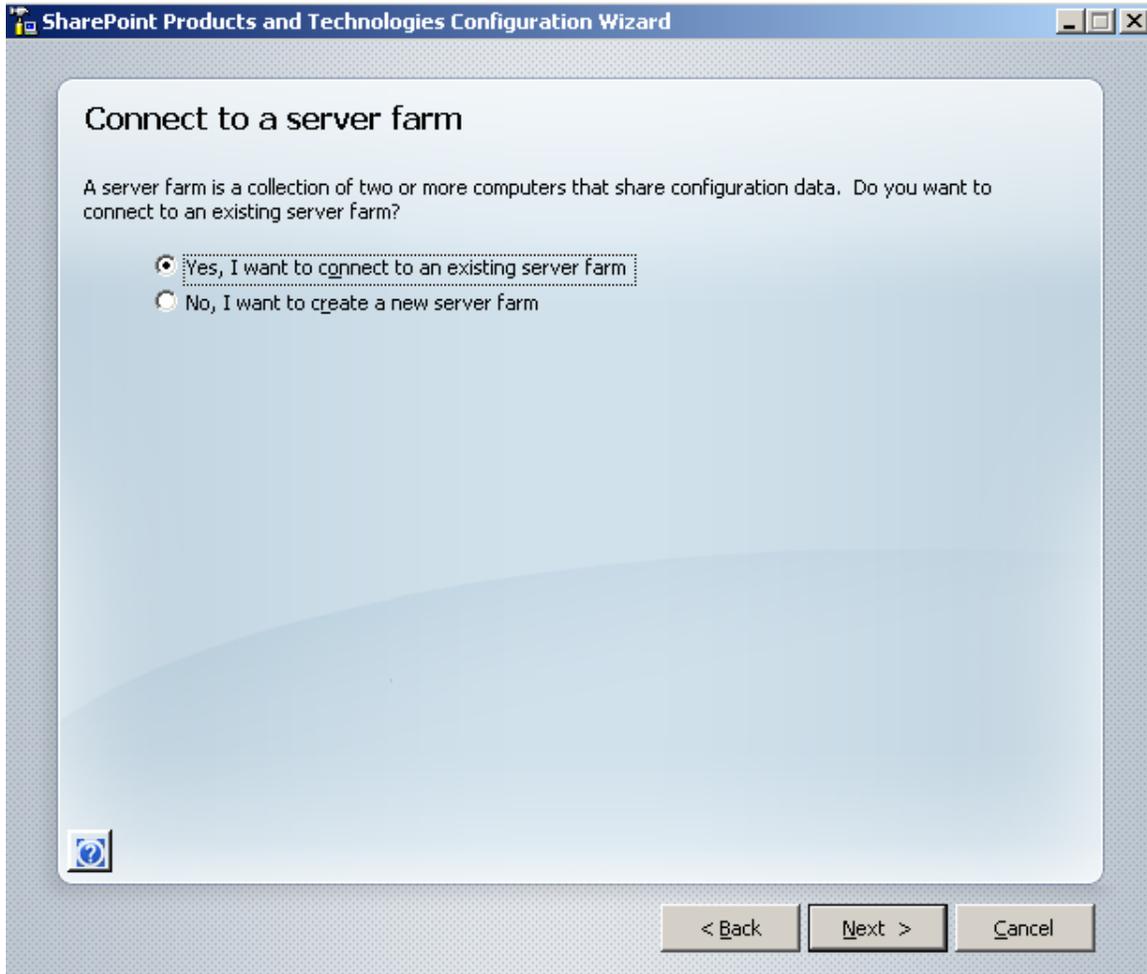
23. Click Next
24. On the specify Configuration Database settings page type the following:
    - The name of your SQL server where we created the configuration database
    - Click Retrieve database names
    - Add the password for the Configuration database account

25. Click Next
26. On the Configure SharePoint Central Administration Web Application page choose the Authentication method that you chose earlier in step 16.
27. Click next
28. Click next
29. On the Configuration successful page click **Finish**

Note – You may find that you get a DNS error when trying to access the central administration home page. Ensure you have used the correct port number for central Administration. You can check this in IIS Manager.

30. On WFE 2 repeat steps 21 to 29
31. Go the Central Administration page on WFE 1 and click refresh, you should now have all servers in the farm showing as configured in the farm topology.

You can now reconfigure the services on each server as you wish. Also you can reconfigure the Network Load Balance service on the two Web Servers.

You have now successfully installed SharePoint Server 2007 using the Gradual Upgrade Method however there are still many steps required in order to complete the Migration. These steps include:

- Site Content Upgrade
- Finalizing Upgrade
- Configure any URL redirects
- Configuring the SharePoint 2007 Farm following the Administrator Task List

Your next tasks will be to decide how to upgrade the Site Collections and Portals in your SharePoint 2003 farm.

In part 2 of this Whitepaper Demo I will take you through this procedure.

Any comments are greatly appreciated for this white paper and I hope you found it useful.

Steve Smith