

SHAREPOINT 2010 UPGRADE PROCESS

Written By:
Pramod Attarde,
SharePoint Practice Lead/Architect
Orion Systems Integrators Inc
www.orioninc.com



WHITE PAPER

INDEX

1. Upgrade Overview	3
a. Upgrade requirement	3
b. Determine Upgrade Approach	5
c. Pre-upgrade checker.....	5
d. Visual Upgrade	6
e. Feature Upgrade	6
2. In-Place Upgrade	6
3. Database Attach	7
4. Hybrid 1	8
5. Hybrid 2	9
6. Other services upgrade	10
7. Hardware Requirement	14
8. Software Requirement	15
9. Checkpoints	16
10. Software Prerequisites	18
11. About Author	19
12. About Orion Systems Integrators Inc	20
13. References	21

SharePoint 2010 Upgrade Plan

Introduction:

In this Whitepaper I will take you through the complete process involved in upgrading your MOSS 2007 to SharePoint 2010. Following are the key points while considering the upgrade plan. We will have a look at each of these points in detail.

UPGRADE OVERVIEW:

As you prepare to upgrade your MOSS 2007 environment to SharePoint 2010, you need to plan the upgrade process; there are new requirements from Hardware, Software and tools. Those who are on 32 bit MOSS 2007 will have additional steps to follow, which we will discuss in this white paper. There are three approaches for upgrade: In-place, Database Attach upgrade and Hybrid upgrade. We will discuss in this white paper. Microsoft recommends that you try upgrade processes on your test environment prior to doing in your production environment.

1. **Upgrade requirement** - Before you perform an In-place upgrade your new environment must meet the following requirements :
 - a) **Hardware Requirement** - Xeon based system that supports 64 bit operating system. SharePoint 2010 runs only on Windows Server 2008.
 - b) **Operating System** - SharePoint Server 2010 must run on a 64-bit edition of Windows Server 2008 or Windows Server 2008 R2. If your current hardware is 64-bit, you can upgrade from Windows Server 2003 to Windows Server 2008 or Windows Server 2008 R2
 - c) **Database Requirement**- SharePoint 2010 requires database must be 64 bit - Microsoft SQL Server 2008 R2, SQL Server 2008 with Service Pack 1 (SP1) and Cumulative Update 2 installed, or SQL Server 2005 with SP3 and Cumulative Update 3 installed.

Detailed Hardware and Software requirements available at TechNet
[http://technet.microsoft.com/en-us/library/cc262485\(office.14\).aspx](http://technet.microsoft.com/en-us/library/cc262485(office.14).aspx)

Note: Before you plan to upgrade make sure—all servers in your farm are running on the same build, services packs and software updates

Note: Make sure all your custom code, web parts, existing 32 bit applications, third party applications are running in a 64 bit environment.

Note: If you plan an In-place upgrade, your MOSS 2007 farm must be running in a 64-bit Windows Server 2008 environment. If your current MOSS 2007 farm is running in 32 bit environment, you cannot perform an In-place upgrade and you will need to do a Database attach upgrade method



2. Determine Upgrade Approach:

- a. In-Place Upgrade - If you have 32-bit MOSS 2007, you cannot perform an In-Place Upgrade. Microsoft recommends upgrading from 32-bit to 64-bit MOSS 2007 and then upgrading to SharePoint 2010. Do not combine an Architecture upgrade, a Product upgrade and a SharePoint upgrade. You can install SharePoint 2010 on the same hardware but the server farm should be offline while the upgrade is in progress. After you begin the In-Place upgrade you cannot stop the upgrade or roll back the previous version. Make sure you have a current and valid back up of your environment before you start the upgrade process.
 - b. Database Attach Approach- You can upgrade the Content on a separate farm but do not upgrade any of the services or farm settings. You must manually transfer the settings from the old farm to the new farm. Any missing customizations may cause unintended losses of functionality or user experience issues.
 - c. Hybrid Approach 1 Read Only Databases - With this approach during the upgrade process, users can access the content in read only mode. Server and farm settings are not upgraded so you will need to upgrade it manually. Any customization must also be transferred and upgraded manually.
 - d. Hybrid Approach 2 Detach Databases - This approach gives you the benefit of both worlds; the in-place upgrade's ability to upgrade content and settings along with the speed of the database attach upgrade. You would use the in-place upgrade to upgrade the farm and settings and to detach and upgrade multiple databases in parallel. This approach requires more labor intensive management.
3. **Pre-upgrade checker** - Microsoft provided this nice tool in SP2 to ensure our environments are ready for the upgrade. The Pre-Upgrade Checker tool calls an extensible set of routines which run against an existing SharePoint 2007 environment. These routines are used to determine potential issues that may prevent you from upgrading successfully. Output text provides you potential issues and possible solutions. It does not perform any repairs.

```
stsadm.exe -o preupgradecheck
```

```
[-rulefiles <rule files delimited by comma or semicolon.>]
```

```
[-litrulefiles]
```

```
[-localonly]
```

The Pre-Upgrade Checker tool provides following information:

- List of all Servers and Components, whether or not the servers meet the requirements for upgrading
- If there are any databases or site orphans in the farm.



- Whether or not there are missing or invalid configuration settings in the farm (such as a missing Web.config files, invalid host names, or invalid service accounts).
 - If there are customizations in the farm that are not supported (such as database schema modifications).
 - Whether or not the databases meet the requirements for upgrade.
 - A list of all site definitions, site templates, features, and language packs that are installed in the farm.
 - List of the alternate access mapping URLs that are being used in the farm.
4. **Visual Upgrade:** This new feature allows the server administrator to decide when the new look of SharePoint 2010 is used for site collection. With the preview option the site owner can have a preview of SharePoint 2010 and if the owner likes the look and functions, the owner can accept the visual upgrade. The owner can revert back the look of the site back to the MOSS 2007 look.
5. **Feature Upgrade:** You can upgrade custom features created in MOSS 2007 to SharePoint 2010 through versioning and declarative versioning actions. Every feature has a version number that is specified in feature.xml file. When the feature is activated at a specified scope, a feature instance is created that is associated with the current version of the feature. When you run a feature upgrade, the feature - instance that needs to be upgraded will be upgraded accordingly to the upgrade actions that are specified in feature.xml file. Features are upgraded in the following order: At the Server farm level, Web application level, Site Collection level, and specific website level. If the error occurs during the upgrade process, the upgrade stops at the specific instance and the error is recorded in the upgrade.log file.

Note: One frequent cause of failures during the upgrade is that the environment is missing customized features, solutions, or other elements. Be sure that any custom elements you need are installed on your front-end Web servers before you begin the upgrade process



IN-PLACE UPGRADE

This upgrade takes place on the same server. Following the process shows what happens when the In-Place upgrade runs:

- 1) Server administrator performs a Pre Upgrade check; administrator runs a set up for SharePoint Server 2010 on the server that hosts the Central Administration website.
- 2) After set up completes on the Central Administration website server, the administrator runs a set up on the remaining front end web servers and application servers in the farm.
- 3) Server administrator runs the configuration wizard on the server that hosts Central Administration website. The server, configuration database, the services and the content database are upgraded sequentially.
- 4) When the configuration wizards finishes, the Central Administration site opens. A timer job schedules the upgrade process to run for each site collection. After all sites are upgraded, the upgrade process ends.
- 5) Server administrator runs the configuration wizard on all other servers in the farm.
- 6) After Configuration wizard has finished, the upgrade process can be monitored for each site from the upgrade status page in the SharePoint Central Administration guide.
- 7) Visual upgrade is applied by site owner or server administrator.

A possible reason for upgrade failure is if you have not installed custom features and/or solutions on all front end web servers before beginning the upgrade process.



DATABASES ATTACH UPGRADE:

In this approach you detach all databases from an existing farm and attach the database to a new server farm, then run the upgrade process. When you perform a database attach upgrade, you are basically backing up and restoring the databases. That is, you back up the databases in the old farm and then restore them in the new farm. When you restore a database and add it to the new farm, the upgrade process runs and upgrades the whole database

One major cause of upgrade failure can be that the environment is missing customized features, solutions or other elements. Make sure you install all customization before you begin the upgrade process. The following process shows what happens when the database upgrade runs:

1. Server administrator installs and configures the SharePoint 2010 farm (like outgoing mail server, any farm level ,included paths, alternate access mapping, quota templates, service settings including search settings).
2. Server administrator copies other customizations from the old environment, transfers all customization to the new farm and test—the environment (customization can include language packs, custom site definitions, custom style sheets, including cascading style sheets, custom web parts, custom web services, custom features and solutions, Administrator-approved form templates (XSN files) and data connection files (UDCX files) for InfoPath).
3. Ensure that you transfer settings from the Web.config file to the new farm.

Note: Before you add the content databases to the web applications, you can use a Windows PowerShell cmdlet to verify that you have all the custom components that you need for that database.

```
Test-SPContentDatabase -Name <database name> -WebApplication <URL>
```

```
[-ServerInstance <ServerInstanceName>] [-DatabaseCredentials <Domain\username>]
```

4. When you add the content database, examine the root of the web application in the original server farm to determine the first site collection. After you add the database that contains the root site you can add other content databases to the web application in any order.
5. Now you can attach and upgrade the database.
6. After you attach the database you can use an upgrade status page in Central Administration to check the status of the upgrade on your site collections. You can review the upgrade log (.log) and upgrade error file (.err), which are located in 14 Hive in Logs folder.



Hybrid Approach 1 (Read Only Databases)

This approach gives users continuous read-only access to their data while you are upgrading. The content databases in the original farm are set to read-only, and copies of the databases are upgraded on a new farm.

1. Server administrator installs and configures the SharePoint 2010 farm (like outgoing mail server, any farm level security, Included paths, alternate access mapping, quota templates, service settings including search settings).
2. Server administrator copies other customizations from the old environment, transfers all customization to the new farm and test the environment (customization can include language packs, custom site definitions, custom style sheets, including cascading style sheets, custom web parts, custom web services, custom features and solutions, Administrator-approved form templates (XSN files) and data connection files (UDCX files) for InfoPath).
3. Ensure that the settings are transferred from the Web.config file to the new farm.
4. Server administrator changes the content database to read only. The administrator then uses SQL Server to back up the content databases on MOSS 2007 farm and restore to the new farm.
5. The server administrator attaches the new copies of the content databases, and the upgrade process runs and upgrades the content.
6. After the upgrade process runs, the server administrator confirms that the upgrade has finished successfully. The administrator then configures the new farm to start serving requests at the new URL and takes the original farm offline (for example, by changing the load balancer or IIS Web applications to stop service requests, or by turning off all of the components and services on each server computer in the farm).



Hybrid Approach 2 (Detach Databases)

This approach enables you to speed up the upgrade process by detaching and attaching databases to upgrade multiple databases at the same time. It is an In-Place upgrade because you are upgrading the original farm; however, you can also use another farm to perform the upgrade and then attach the upgraded databases to your original farm. Note that the original farm cannot serve requests during the upgrade process. As in a standard In-Place upgrade, users cannot access their content while the upgrade is in progress:

1. The server administrator takes the original farm offline.
2. The server administrator detaches the content databases from the original farm.
3. The server administrator runs an In-Place upgrade on the original farm servers, services, and configuration database.
4. The server administrator attaches the content databases to the original farm and upgrades the content.

Alternatively, you can use a separate, temporary small farm to perform the upgrade. In this approach, you attach the databases to the original farm after they have been upgraded.

The following steps explain what happens during an In-Place upgrade with detached databases and a temporary small farm to upgrade the content databases:

1. The server administrator sets up a temporary small farm that is running the new version. Then the administrator takes the original farm offline
2. The server administrator detaches the content databases from the original farm.
3. The server administrator runs an In-Place upgrade on the original farm to upgrade the servers, services, and configuration database.
4. The server administrator attaches the content databases to the temporary small farm and upgrades them in parallel.
5. The server administrator reattaches the content databases to the original farm.
6. The server administrator confirms that the upgrade has finished successfully.
7. If Visual Upgrade is being used, the server administrator or site owner previews the sites in the Microsoft SharePoint Server 2010 look. When the administrator or site owner is ready, he or she completes the change to the Microsoft SharePoint Server 2010 look.



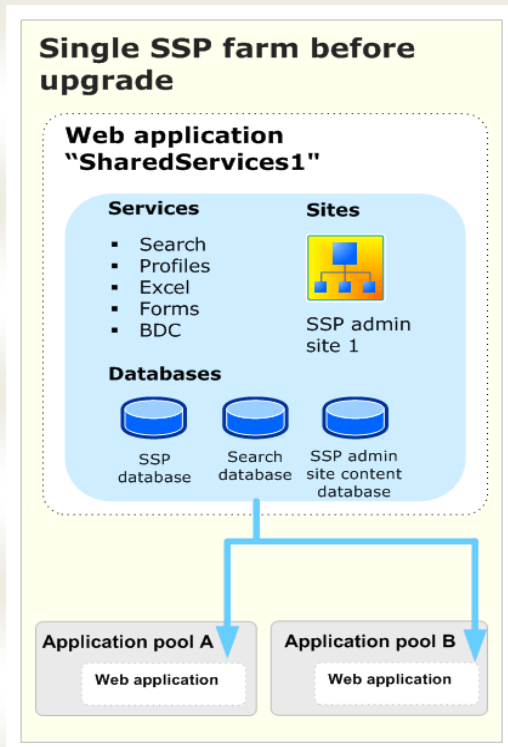
Other Services Upgrade

In SharePoint 2010, we can say SSP is replaced by Service Applications and there are many more services available than in MOSS 2007. This is a major architectural change and upgrading services requires planning and deep thought. Native services can be configured independently and third party companies can also add their services to the platform. Many services have their own database. When you create a new service, a new database is also created to store the data for those services. You can only deploy the services that are required which can be shared across the sites within a farm or in some cases across multiple farms.

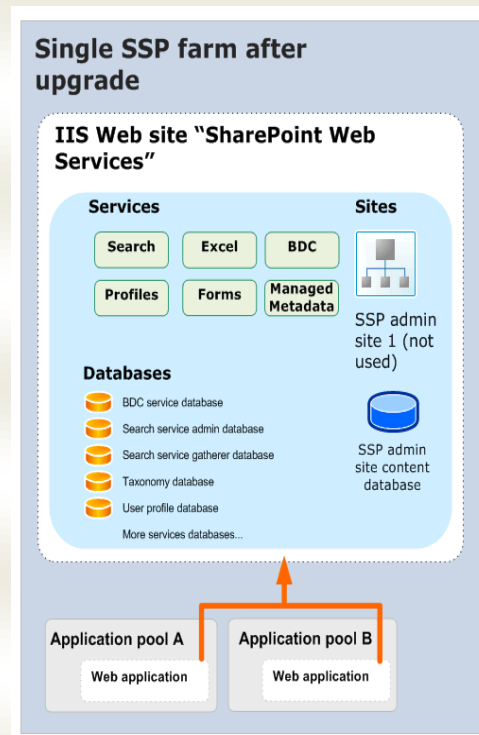
Before you upgrade, determine which new services need to be added and which services need to be updated. Plan the logical and physical architecture you need to support the services and the Service Application you need to host in SharePoint Server 2010.

In-Place Upgrade with Services: When you perform an In-Place upgrade, all of your services infrastructure and the settings for the services themselves are upgraded as part of the process. Before In-Place upgrade, collect any settings that must be reapplied, such as scheduled timer job settings. Let's see what happens to the different service components in the upgrade process:

- a) Shared Service Provider (SSP): During the upgrade, SSP are converted to Service Applications and Service Proxies, one per service. When a Service Application is created, a proxy is automatically created for the Service Application. The proxy is a virtual link that connects the web application to the Service Application and a single proxy can be in multiple proxy groups.
- b) All SSPs that are upgraded keep their associations with the web applications that are consumed from that SSP. All SSP administrators are added to the SharePoint Central Administration Web site as delegated administrators.
- c) The SSP database is upgraded and data is copied into new user profiles and taxonomy databases. Other services information is moved into other service databases or the configuration database.
- d) The SSP Admin site is upgraded as a mostly blank site except for the Business Data Catalog profile pages. The site can be deleted after the upgrade occurs if it is not needed for Business Data Catalog pages.
- e) If you have a single SSP, all proxies for service applications are added to the default proxy group. The following diagrams show the changes to your farm that are made during In-Place upgrade.



Services infrastructure before upgrade



Services infrastructure after upgrade

After In-Place upgrade:

- 1) Configure new and upgraded services. You must create service applications to host new services.
- 2) You can use the Farm Configuration Wizard to quickly select and enable several new services in your farm, or you can configure the services manually.
- 3) For Profile Services, upgrade any taxonomy data manually. Taxonomy data from MOSS 2007 was stored in the SSP database as part of the Profile Services data but for SharePoint Server 2010, this data needs to be stored in the managed metadata database. To move and upgrade the data, you must have created a service application for the Managed Metadata Service. After that is complete, you can use a Windows Power Shell cmdlet to upgrade the profile and taxonomy data and move it to the Taxonomy database. This cmdlet reconnects the data to the Managed Metadata and User Profiles service applications.



- 4) For Excel Services, provision a new unattended service account for the Secure Store Service.
- 5) For Business Data Catalog, consider migration of the Business Data Catalog profile pages to a new location.

Database Attach upgrade with Service: Most services settings will need to be reconfigured when you upgrade via database attach. When you move your databases to a new farm and upgrade the content, you must create your services infrastructure in the new farm, and configure the services appropriately for your new farm and new version. You can attach the SSP databases from your old farm, but only the profile information in that database will be upgraded – any search information or other services settings will not be upgraded. You cannot upgrade Search databases by using the database attach upgrade approach.

Steps involved before database attach upgrade:

- 1) When you configure the new farm, you must also configure the new service applications and service application proxies for the farm, and configure the settings for all services that you want to use.
- 2) If you are using Profile Services, and you have taxonomy data in your database, configure the Managed Metadata service before you upgrade. That way, you can upgrade any taxonomy data from the shared services database when you attach that database.
- 3) For InfoPath Forms Services, export any administrator-deployed form templates (.xsn files) and data connection files (.udcx files) from your Office SharePoint Server 2007 farm by using the following command:
Stsadm.exe -o exportipfsadminobjects -filename <path to export CAB>
- 4) For InfoPath Forms Services, import any administrator-deployed form templates and data connection files to your new farm before you attach the content databases. Use the **Import-SPIPAdministrationFiles** Windows Power Shell cmdlet to import the forms.

Steps involved after database attach upgrade:

- 1) Reapply administrator permissions for services. By default, farm administrators have permissions to all services when you perform a database attach upgrade.
- 2) For Excel Services, you must provision a new unattended service account that uses the Secure Store Service to interact with Excel Services.
- 3) For InfoPath Forms Services, update any links that are used in the upgraded form templates by using the **Update-SPIInfoPathAdminFileURL** Windows Power Shell cmdlet.
- 4) For Profile Services, upgrade any taxonomy data. You use the **Move-SPProfileManagedMetadataProperty** Windows Power Shell cmdlet to upgrade profile taxonomy data manually to the Taxonomy database and reconnect the data to the Managed Metadata and User Profiles service applications. The User Profiles service and Managed Metadata service must be in the same proxy group to upgrade and use the data.



- 5) For Business Data Catalog, consider migration of the Business Data Catalog profile pages to a new location.

Consideration for specific Services:

- 1) Two services are now used for user profiles and taxonomy information: the User Profile service and the Managed Metadata service. During the In-Place upgrade, , these two services are automatically enabled and configured. If you are using the database attach upgrade approach, you can enable and configure the Managed Metadata service before you upgrade the User Profile service to upgrade the taxonomy data as part of the upgrade.
- 2) Any scheduled timer jobs will need to be reconfigured after upgrade. During upgrade, they are set back to their default times. Be sure to record your timer job schedules before upgrade so you can reapply the times.
- 3) Databases:
 - a. During In-Place upgrade, user profile data from Office SharePoint Server 2007 is upgraded from the SSP database into a new user profile database. Any taxonomy data is upgraded, and you can copy the taxonomy data into a Taxonomy database for use by the Managed Metadata service after upgrade is complete by using the **Move-SPProfileManagedMetadataProperty** Windows Power Shell cmdlet.
 - b. During a database attach upgrade, user profile and taxonomy data from the SSP database is upgraded when the SSP database is attached, but the database is not copied and renamed. You can copy the taxonomy data into a Taxonomy database for use by the Managed Metadata service after upgrade is complete by using the **Move-SPProfileManagedMetadataProperty** Windows Power Shell cmdlet.
- 4) Persisted properties that relate to the profiles (such as the MySite Host URL) are preserved during an in-place upgrade, but are not upgraded when you use database attach because they are stored in the configuration database, not the services database.
- 5) Before you perform an In-Place upgrade, you should review and adjust your Search topology after upgrade to suit the new recommendations and requirements. You cannot upgrade search data by using the database attach method for upgrading. If you are using database attach upgrade, you must configure Search in your new farm separately from (either before or after) you upgrade your other content.



Hardware Requirement

Item	Requirement	Current Configuration	Remark
Processor	64 bit		
RAM	4 GB		
Hard Disk	200 GB		
Other	DVD Drive		

Software Requirements (Standalone Server - Development Environment)

Item	Requirement	Installed Yes/No	Remark
Operating System	Windows Server 2008 with SP2		
Web Server	IIS		
Framework	.NET Framework 3.5 SP1		
Database	64 bit SQL Server 2005 with SP3 OR 64 bit SQL Server 2008 with SP1		
Framework	Microsoft Geneva		
Framework	Microsoft Sync framework Runtime V 1.0		
Framework	Microsoft Filter pack 2.0		
Framework	Microsoft Chart Controls for .NET Framework 3.5		
Power Shell	Windows Power Shell 2.0 CTP3		
Client	SQL Server Native Client		
Services	Microsoft SQL Server 2008 Analysis Services ADOMD.NET		
Services	ADO.NET Data Services v1.5 CTP2		

Checkpoints

Software	Required Item	Installed	Remark
SQL 2005 with SP3	Must install Cumulative package 3 for SQL 2005 SP3 http://go.microsoft.com/fwlink/?LinkId=165748	Yes/No	Applicable/ Not Applicable
SQL 2008 SP1	Must install cumulative package 2 for SP1 http://go.microsoft.com/fwlink/?LinkId=165962	Yes/No	Applicable/ Not Applicable
Windows Server 2008 with SP2	Must install hotfix that provides the method to support the token authentication without transport security or message encryption in WCF is available for .NET Framework 3.5 SP1 http://go.microsoft.com/fwlink/?LinkId=160770	Yes/No	Applicable/ Not Applicable
Windows Server 2008 R2	Must install hotfix that provides the method to support the token authentication without transport security or message encryption in WCF is available for .NET Framework 3.5 SP1 http://go.microsoft.com/fwlink/?LinkId=166231	Yes/No	Applicable/ Not Applicable
Power Shell 1.0	If Windows Power Shell 1.0 is already installed while installing Windows 2008, you must uninstall Power Shell 1.0 before you install Windows Power Shell 2.0 CTP 3	Yes/No	Applicable/ Not Applicable
Language Packs	Location:	Yes/No	Applicable/ Not Applicable
Custom Site Definition	Location:	Yes/No	Applicable/ Not Applicable
Custom Style Sheet	Location:	Yes/No	Applicable/ Not Applicable

Custom Parts	Web	Location:	Yes/No	Applicable/ Not Applicable
Custom Services	Web	Location:	Yes/No	Applicable/ Not Applicable
Custom Features and Solutions		Location:	Yes/No	Applicable/ Not Applicable
XSN Files		Location:	Yes/No	Applicable/ Not Applicable
Data Connection Files		Location:	Yes/No	Applicable/ Not Applicable
Alternate Access Mapping		Location:	Yes/No	Applicable/ Not Applicable
Quota templates		Location:	Yes/No	Applicable/ Not Applicable
Search Settings		Location:	Yes/No	Applicable/ Not Applicable
Service Settings		Location:	Yes/No	Applicable/ Not Applicable
Web.config Transfer		Location:	Yes/No	Applicable/ Not Applicable



Software Prerequisites

- Microsoft SQL Server 2008 SP1 (<http://go.microsoft.com/fwlink/?LinkId=166490>)
- Microsoft SQL Server 2005 SP3 (<http://go.microsoft.com/fwlink/?LinkId=166496>)
- Microsoft Windows Server 2008 Standard SP2 (<http://go.microsoft.com/fwlink/?LinkId=166500>)
- Microsoft .NET Framework 3.5 Service Pack 1 (<http://go.microsoft.com/fwlink/?LinkId=131037>)
- Microsoft SQL Server 2008 Express Edition Service Pack 1 (<http://go.microsoft.com/fwlink/?LinkId=166503>)
- Microsoft "Geneva" Framework (<http://go.microsoft.com/fwlink/?LinkId=165752>)
- Microsoft Sync Framework v1.0 (<http://go.microsoft.com/fwlink/?LinkId=141237&clcid=0x409>)
- Microsoft Filter Pack 2.0 (<http://go.microsoft.com/fwlink/?LinkId=166504>)
- Microsoft Chart Controls for Microsoft .NET Framework 3.5 (<http://go.microsoft.com/fwlink/?LinkId=141512>)
- Windows PowerShell 2.0 CTP3 (<http://go.microsoft.com/fwlink/?LinkId=165758>)
- Microsoft SQL Server 2008 Native Client (<http://go.microsoft.com/fwlink/?LinkId=166505>)
- Microsoft SQL Server 2008 Analysis Services ADOMD.NET
(<http://go.microsoft.com/fwlink/?LinkId=130651>)
- Microsoft Silverlight 3.0 (<http://go.microsoft.com/fwlink/?LinkId=166506>)
- ADO.NET Data Services v1.5 CTP2 (<http://go.microsoft.com/fwlink/?LinkId=158354>) for Windows Server 2008 SP2
- ADO.NET Data Services v1.5 CTP2 (<http://go.microsoft.com/fwlink/?LinkId=159780>) for Windows Server 2008 R2



About the Author

Pramod Attarde is a SharePoint Architect with 15 years of IT Experience working at KPMG as a consultant where he is responsible for designing new Architecture for Collaboration sites and writing Best Practices on Performance Optimization of Global Portals. He also runs a SharePoint Practice for Orion Systems Integrators, Inc. and manages the entire onsite and offshore SharePoint team. He facilitates a SharePoint 2010 Discussion Group on LinkedIn and is a member of The International SharePoint Professional Association. Prior to KPMG, he worked with various clients to deploy large SharePoint 2007 implementations. He helped customers achieve extranet deployments, write Governance Plans and develop training documents. He recently started a SharePoint Users Group NJ.



About Orion

Orion Systems Integrators, Inc. is a world-class Information Technology resource dedicated to delivering IT solutions that are on target, on time and on budget. Leveraging our vast experience and a "whatever it takes" work ethic, we deliver IT solutions tailored specifically to individual client requirements in a manner that consistently exceeds expectations.

IT Excellence and Strategy Services (ITESS) is dedicated and committed in delivering Global IT Solutions to Drive efficiency using Cutting edge Technologies which improves efficiency through innovation. We will continue to work at the global level to ensure that our deployment efforts are fully aligned with industry defined quality standards and technologies, honoring Orion's Mission.

Our elite team of professionals is dedicated to finding the most effective and cost-efficient solution to any IT need. Orion Systems Integrators, Inc. is a Gold Certified Partner in the Microsoft Partner Program with competencies in Custom Development Solutions and Networking Infrastructure Solutions. As a Gold Certified Partner, we have demonstrated expertise with Microsoft technologies and a proven ability to meet customers' needs. Microsoft Gold Certified Partners receive a rich set of benefits, including access, training and support, giving them a competitive advantage in the channel. As a Gold Certified Partner we have completed the requirements for the Information Worker Solutions Competency under the Microsoft Partner Program. This competency is about deploying Microsoft products and technologies that help people generate, cultivate, and share ideas.

Contacting Orion Systems Integrators Inc

United States: Headquarters

3759 Hwy 1 South

Monmouth Junction, NJ 08852

Tel: 732-422-9922

Fax: 732-422-6445

Email: pramoda@orioninc.com



References

TechNet Articles

About the Upgrade Process:

[http://technet.microsoft.com/en-us/library/ee833948\(office.14\).aspx](http://technet.microsoft.com/en-us/library/ee833948(office.14).aspx)

Preparing for the Upgrade

[http://technet.microsoft.com/en-us/library/cc303429\(office.14\).aspx](http://technet.microsoft.com/en-us/library/cc303429(office.14).aspx)

Perform In-Place Upgrade

[http://technet.microsoft.com/en-us/library/cc303423\(office.14\).aspx](http://technet.microsoft.com/en-us/library/cc303423(office.14).aspx)

Perform Database Attach Upgrade

[http://technet.microsoft.com/en-us/library/cc303436\(office.14\).aspx](http://technet.microsoft.com/en-us/library/cc303436(office.14).aspx)

Post Upgrade Steps

[http://technet.microsoft.com/en-us/library/cc303434\(office.14\).aspx](http://technet.microsoft.com/en-us/library/cc303434(office.14).aspx)

Upgrade Process Overview

[http://technet.microsoft.com/en-us/library/cc262483\(office.14\).aspx](http://technet.microsoft.com/en-us/library/cc262483(office.14).aspx)



© Copyright Orion Systems Integrators, Inc or Pramod Attarde. 2009 All rights reserved.

This guide contains proprietary information, which is protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Orion Systems Integrators Inc or Pramod Attarde, Author of this White Paper

WARRANTY

The information contained in this document is subject to change without notice. Orion Systems Integrators Inc makes no warranty of any kind with respect to this information. Orion Systems Integrators Inc SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTY OF THE MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Orion Systems Integrators Inc shall not be liable for any direct, indirect, incidental, consequential, or other damage alleged in connection with the furnishing or use of this information.

TRADEMARKS

All trademarks and registered trademarks used in this guide are property of their respective owners. Please refer to our Web site for regional and international office information @ www.orioninc.com