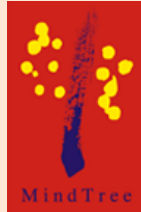


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SHAREPOINT CONFERENCE**

SINGAPORE 26 + 27 OCTOBER 2010

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UPGRADING TO SHAREPOINT 2010 FROM SHAREPOINT 2007



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CONTENT

- What we need to know before upgrade to SharePoint 2010
 - Upgrade Options
 - Upgrade Best Practices
 - Q&A
-
- And the Tips and Tricks along the way



DISCUSSION

- What we need to know before upgrade?



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ROLES AND TOPOLOGIES IN SHAREPOINT 2010 FARMS

- Roles
 - Web Front-End (WFE)
 - Database (SQL)
 - Application Server
 - Central Administration
 - Service Applications (SAs) such as search
 - Office Web Apps
- Topologies
 - Single-server: all roles
 - Single WFE, SQL
 - Two WFEs (redundant web apps and services), SQL
 - Multiple servers providing redundancy and performance optimization based on the allocation of services, SQL cluster

INFRASTRUCTURE REQUIREMENTS

- CPUs: 4-core, 2.5 GHz, 8GB RAM
- 64-bit only
- Operating system
 - Windows Server 2008 SP2 x64
 - Windows Server 2008 R2 [x64]
- SQL Server
 - SQL Server 2005 SP3 with Cumulative Update 3 x64
 - SQL Server 2008 SP1 with Cumulative Update 2 or 5+ x64
 - SQL Server 2008 R2 x64
- Latest service packs and updates
- Details on TechNet
 - <http://go.microsoft.com/fwlink/?LinkID=196879&clcid=0x409>

OVERVIEW OF SHAREPOINT LICENSING

- Windows Server 2008 or Windows Server 2008 R2
 - Server license plus client access license (CAL) for each user
 - Per-user CAL is most common
- SQL Server Express – no license required
- SQL Server
 - Server product license
 - Per-processor license is most common
- SharePoint Foundation 2010 – no additional license required
- SharePoint Server 2010
 - Server product license
 - Standard CAL or Standard+Enterprise CAL for each user
- Licenses for other products and technologies
 - Microsoft Office 2010

ROLE, SOFTWARE AND CONFIGURATION PREREQUISITES

- Server Roles: Web Server (IIS), Application Server
- Hotfix for Microsoft Windows (KB976394 / KB976462)
- Windows Identity Foundation (KB974405)
- Microsoft Sync Framework Runtime v1.0 (x64)
- Microsoft Chart Controls for Microsoft .NET Framework 3.5
- Microsoft Filter Pack 2.0
- Microsoft SQL Server 2008 Analysis Services ADOMD.NET
- Microsoft Server Speech Platform Runtime (x64)
- Windows PowerShell 2.0
- Optional: Microsoft Server Speech Recognition Language
- Optional: Microsoft SQL Server 2008 R2 Reporting Services Add-in for SharePoint Technologies (SSRS)
- <http://go.microsoft.com/fwlink/?LinkID=106209>

TIPS: SHAREPOINT 2010 INSTALLATION WITHOUT INTERNET ACCESS

- Download and copy the prerequisite software into the folder "PrerequisiteInstallerFiles" in SharePoint 2010 installation folder
- Type the following script in one line, with spaces between each switch in notepad and save as name "PrerequisiteInstaller.Arguments.txt" in the SharePoint 2010 installation folder

```
/SQLNcli:PrerequisiteInstallerFiles\sqlIncli.msi  
/ChartControl:PrerequisiteInstallerFiles\MSChart.exe  
/KB976462:PrerequisiteInstallerFiles\Windows6.1-KB976462-v2-x64.msu  
/IDFXR2:PrerequisiteInstallerFiles\Windows6.1-KB974405-x64.msu  
/Sync:PrerequisiteInstallerFiles\Synchronization.msi  
/FilterPack:PrerequisiteInstallerFiles\FilterPack.msi  
/ADOMD:PrerequisiteInstallerFiles\SQLSERVER2008_ASADOMD10.msi  
/ReportingServices:PrerequisiteInstallerFiles\rsSharePoint.msi  
/Speech:PrerequisiteInstallerFiles\SpeechPlatformRuntime.msi  
/SpeechLPK:PrerequisiteInstallerFiles\MSSpeech_SR_en-US_TELE.msi
```

UPGRADE VERSION

- The only supported platform you can upgrade to SharePoint 2010 is SharePoint 2007 — and not just any old SharePoint 2007, it has to be at least service pack 2 (build 12.0.0.6421 to its friends) or later
- This is true for both upgrade options: in-place and database attach

SHAREPOINT VERSION

- 12.0.0.6539 WSS 3.0 or MOSS 20071 SP2 + June 10 cumulative Update (KB983311 + KB983310)
- 12.0.0.6535 WSS 3.0 or MOSS 20071 SP2 + April 10 cumulative Update (KB981043 + KB981042)
- 12.0.0.6529 WSS 3.0 or MOSS 20071 SP2 + February 10 cumulative Update (KB978396 + KB978395)
- 12.0.0.6524 WSS 3.0 or MOSS 20071 SP2 + December 09 cumulative Update (KB977027 + KB977026)
- 12.0.0.6520 WSS 3.0 or MOSS 20071 SP2 + October 09 cumulative Update (KB974989 + KB974988)
- 12.0.0.6514 WSS 3.0 or MOSS 20071 SP2 + August 09 cumulative Update (KB973400 + KB973399)
- 12.0.0.6510 WSS 3.0 or MOSS 20071 SP2 + June 09 cumulative Update (KB971538 + KB971537)
- 12.0.0.6504 WSS 3.0 or MOSS 20071 SP2 + April 09 cumulative Update (KB968850 + KB968851)
- 12.0.0.6421 WSS 3.0 or MOSS 20071 SP2 (KB953338 + KB953334)**

If you are running SP1 after 13/Jul/2010 then you are running an un-supported environment

- 12.0.0.6341 WSS 3.0 or MOSS 20071 February 09 cumulative Update (KB961755 + KB961756)
- 12.0.0.6335 WSS 3.0 or MOSS 20071 December 08 cumulative Update (KB960010 + KB960011)
- 12.0.0.6331 WSS 3.0 or MOSS 20071 October 08 cumulative Update (KB957691 + KB957693,KB958567 and KB958569)
- 12.0.0.6327 WSS 3.0 or MOSS 20071 August 08 cumulative update (KB956056 & KB956057)
- 12.0.0.6318 WSS 3.0 or MOSS 20071 Infrastructure Update (KB951695 & KB951297)
- 12.0.0.6303 WSS 3.0 or MOSS 20071 post-SP1 hotfix (KB948945)
- 12.0.0.6301 WSS 3.0 or MOSS 20071 post-SP1 hotfix (KB941274)
- 12.0.0.6300 WSS 3.0 or MOSS 20071 post-SP1 hotfix (KB941422)
- 12.0.0.6219 WSS 3.0 or MOSS 20071 SP1
- 12.0.0.6039 WSS 3.0 or MOSS 20071 October public update
- 12.0.0.6036 WSS 3.0 or MOSS 20071 August 24, 07 hotfix package
- 12.0.0.4518 WSS 3.0 or MOSS 20071 RTM

2010 UPGRADE SCENARIOS AND METHODS

Supported Scenarios

- In-Place Upgrade
- Database Attach Upgrade:
 - Content Database
 - Profile Service Database
 - Project Service Database
- Improvement
 - Restartable!
 - Common blocking time outs removed

Unsupported Scenarios

- Upgrade from earlier than WSS v3 SP2/MOSS 2007 SP2
- Direct upgrade from WSS v2/SPS 2003 or earlier
- Side by side installation
- Gradual upgrade

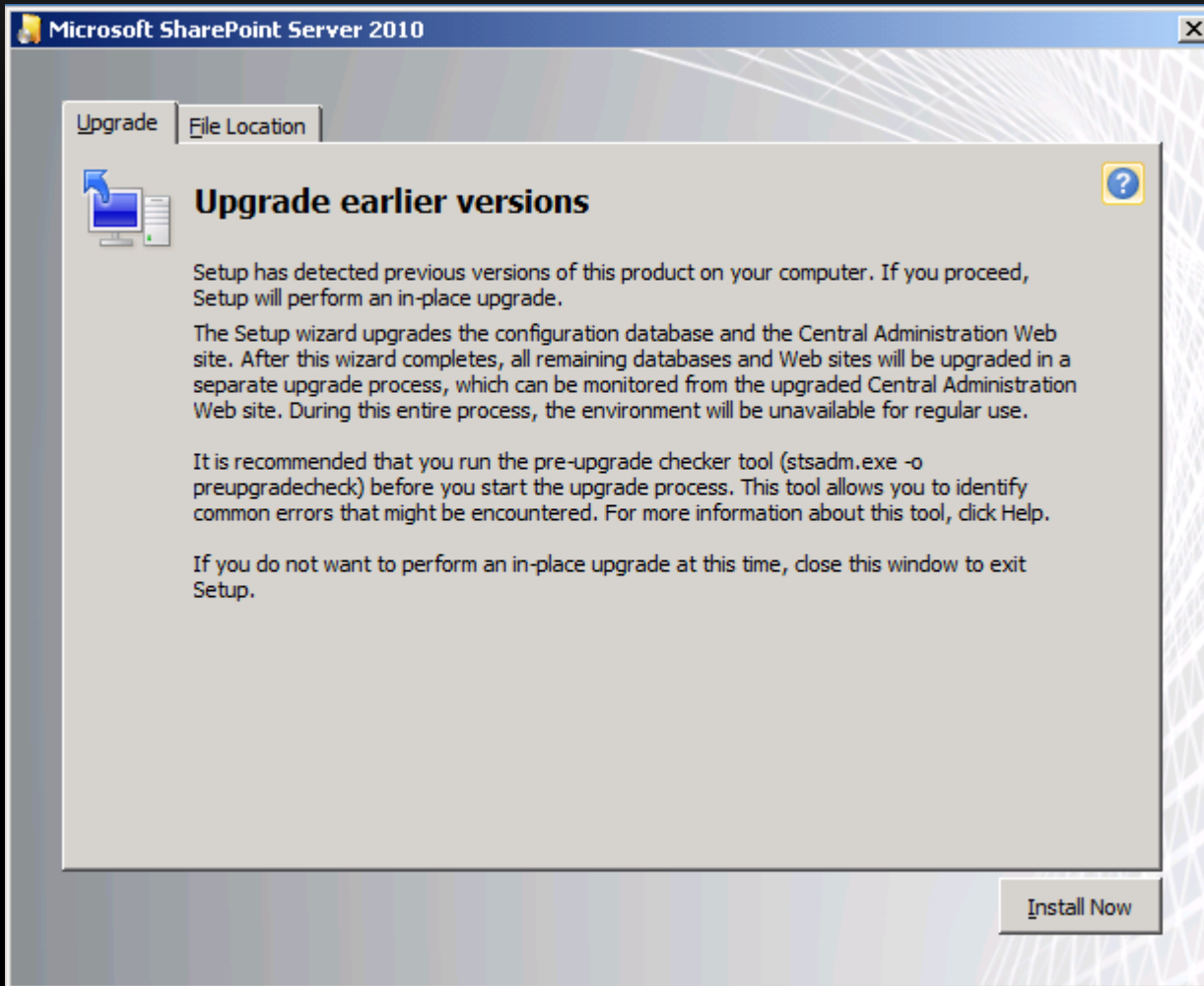
IN-PLACE UPGRADE

- All sites are unavailable during upgrade
- Site visitors continue to use the same URLs after upgrade
- Does require v3 to be 64 bit
 - Whitepaper on moving from 32 bit to 64 bit SharePoint
 - <http://technet.microsoft.com/en-us/library/dd622865.aspx>
- Previous version must be manually removed when upgrade is complete

IN-PLACE UPGRADE STEPS

- Performance a pre-upgrade check
 - "C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\Bin\stsadm.exe" -o preupgradecheck
- Install SharePoint 2010
- Run SharePoint 2010 Product Configuration Wizard
 - Select Visual Upgrade options
 - Upgrade configuration database
 - Upgrade Central Administration web application and content database
 - Upgrade SSP
 - Web Applications -> Site Collections
- What if it fail at one of the site collections?
 - Use PowerShell cmdlet Upgrade-SPContentDatabase after rectify the issue

RUN SHAREPOINT 2010 INSTALLATION




RUN THE SHAREPOINT 2010 PRODUCTS CONFIGURATION WIZARD

SharePoint Products Configuration Wizard

Visual Upgrade

As part of upgrade, administrators can offer visual upgrade to their customers. When users control visual upgrade, the initial data upgrade will preserve the SharePoint user experience (including layout, command organization, and style). After upgrade, farm administrators, site collection administrators, or site owners can update their sites to the latest SharePoint user experience. New sites created after upgrade will always use the new SharePoint user experience. Some sites and features designed to work with specific versions of the SharePoint user experience may upgrade with separate settings.

- Change existing SharePoint sites to use the new user experience. Administrators control the user experience for end users.
 - Preserve customized pages, but update template and application pages to use the new UI.
 - Reset all customized pages to their original templates. This option will delete modifications from customized pages and cannot be undone.
- Preserve the look and feel of existing SharePoint sites, and allow end users to update their sites' user experience.

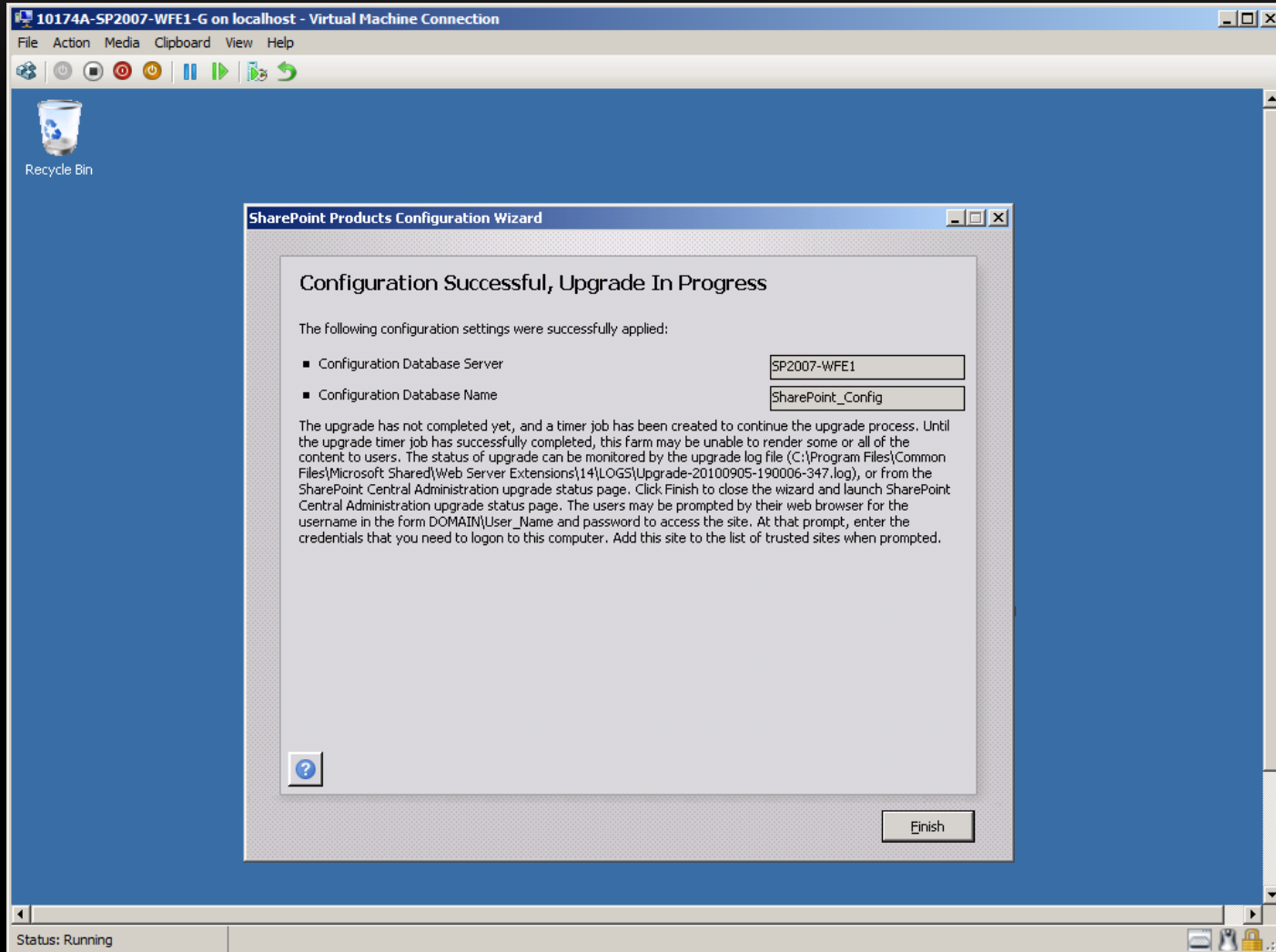


< Back Next > Cancel

RUN THE SHAREPOINT 2010 PRODUCTS CONFIGURATION WIZARD



RUN THE SHAREPOINT 2010 PRODUCTS CONFIGURATION WIZARD



UPGRADE STATUS

The screenshot shows a Windows Internet Explorer browser window titled "Upgrade Status - Windows Internet Explorer". The address bar shows the URL "http://sp2007-wfe1:9999/_admin/UpgradeStatus.aspx". The page content includes a navigation menu on the left with options like "System Settings", "Monitoring", "Backup and Restore", "Security", "Upgrade and Migration", "General Application Settings", and "Configuration Wizards". The main content area displays the following information:

Status	Server	Start	Last Updated	Errors	Warnings
In Progress	SP2007-WFE1	10/24/2010 10:53:20 AM	10/24/2010 11:01:06 AM	0	3

Selected upgrade session details

Status	In Progress
Server	SP2007-WFE1
Start	10/24/2010 10:53:20 AM
Last Updated	10/24/2010 11:01:06 AM
Errors	0
Warnings	3
Starting object	
Current object	SearchAdminDatabase Name=SharedServices1 - Search Service_AdminDB_4c784939a1ac4bf3888086afa0bccb87
Current action	SearchAdminDatabaseSequence
Step within the action	118
Total steps in this action	215
Elapsed Time	00:07:46.6213739
Percentage completed	14.57%
Process Name	OWSTIMER
Thread Id	3100
Process Id	3392
Command Line	C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\14\BIN\msconfini.exe -cmd showcentraladmin

The browser's status bar at the bottom shows "Done", "Trusted sites | Protected Mode: Off", and the system tray with the time "11:01 AM 10/24/2010".

UPGRADE STATUS

Upgrade Status - Windows Internet Explorer

http://sp2007-wfe1:9999/_admin/UpgradeStatus.aspx

CONTOSO\administrator

Status	Server	Start	Last Updated	Errors	Warnings
In Progress	SP2007-WFE1	10/24/2010 10:53:20 AM	10/24/2010 11:04:29 AM	0	15

Selected upgrade session details

Status	In Progress
Server	SP2007-WFE1
Start	10/24/2010 10:53:20 AM
Last Updated	10/24/2010 11:04:29 AM
Errors	0
Warnings	15
Starting object	
Current object	FormsService
Current action	ServiceUpgradeSequence
Step within the action	0
Total steps in this action	1
Elapsed Time	00:12:04.8822237
Percentage completed	91.09%
Process Name	OWSTIMER
Thread Id	3100
Process Id	3392
Command Line	C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\14\BIN\psconfigui.exe -cmd showcentraladmin
Log File	C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\14\LOGS\Upgrade-20101024-105320-861.log

Done

Trusted sites | Protected Mode: Off

11:06 AM 10/24/2010

UPGRADE STATUS

Upgrade Status - Windows Internet Explorer
http://sp2007-wfe1:9999/_admin/UpgradeStatus.aspx

Upgrade Status

CONTOSO\administrator

Central Administration > Upgrade Status
Use this page to see the status of upgrade sessions. This page refreshes automatically every minute. Navigating away from this page does not affect upgrade progress.

Home
Application Management
System Settings
Monitoring
Backup and Restore
Security
Upgrade and Migration
General Application Settings
Configuration Wizards

Upgrade sessions

Status	Server	Start	Last Updated	Errors	Warnings
Succeeded	SP2007-WFE1	9/5/2010 1:21:37 PM	9/5/2010 1:42:22 PM	0	15

Selected upgrade session details

Status	Succeeded
Server	SP2007-WFE1
Start	9/5/2010 1:21:37 PM
Last Updated	9/5/2010 1:42:22 PM
Errors	0
Warnings	15
Starting object	
Current object	
Current action	

Status: Running

SSP EXPLODED TO SERVICE APPLICATIONS

Manage Service Applications - Windows Internet Explorer

http://sp2007-wfe1:9999/_admin/ServiceApplications.aspx

Manage Service Applications

CONTOSO\administrator

Site Actions | Browse | Service Applications

New | Connect | Delete | Manage Administrators | Properties | Publish | Permissions

Category	Service Name	Application Name	Status
Security	Search Administration Web Service for SharedServices1 - Search Service	Search Administration Web Service Application	Started
Upgrade and Migration	Security Token Service Application	Security Token Service Application	Started
General Application Settings	SharedServices1 - Search Service	Search Service Application	Started
Configuration Wizards	SharedServices1 - Search Service	Search Service Application Proxy	Started
	SharedServices1_ApplicationRegistry	Application Registry Service	Started
	SharedServices1_ApplicationRegistry	Application Registry Proxy	Started
	SharedServices1_BusinessDataConnectivity	Business Data Connectivity Service Application	Started
	SharedServices1_BusinessDataConnectivity	Business Data Connectivity Service Application Proxy	Started
	SharedServices1_ExcelCalculationServices	Excel Services Application Web Service Application	Started
	SharedServices1_ExcelCalculationServices	Excel Services Application Web Service Application Proxy	Started
	SharedServices1_StateServiceApp	State Service	Started
	SharedServices1_StateServiceAppProxy	State Service Proxy	Started
	SharedServices1_Taxonomy	Managed Metadata Service	Started
	SharedServices1_TaxonomyProxy	Managed Metadata Service Connection	Started
	SharedServices1_UserProfile	User Profile Service Application	Started
	SharedServices1_UserProfileProxy	User Profile Service Application Proxy	Started

Status: Running

IN-PLACE PROS/CONS

Pros

- Farm wide settings are preserved and upgraded
- Customizations are available in the environment after the upgrade if they are v4 compatible

Cons

- Servers and farms are offline while the upgrade is in progress
- The upgrade proceeds continuously
- Existing v3 farm must support 64 bit



DATABASE ATTACH

- Databases that can be attached
 - Content database
 - Profile service database
 - Project service database
- V3 databases that cannot be attached
 - Configuration
 - Search

DATABASE ATTACH STEPS

- Stsadm -o preupgradecheck on your 2007 farm
- Backup 2007 Content DB
- Restore to SharePoint 2010 SQL Server, using SQL Tools
- Mount-SPContentDatabase -name wss_content_2007 -webapplication http://2010webapp

UPGRADE STATUS

The screenshot shows the 'Upgrade Status' page in a Windows Internet Explorer browser. The address bar displays the URL: `http://sp2007-wfe1:9999/_admin/UpgradeStatus.aspx`. The page title is 'Upgrade Status - Windows Internet Explorer'. The user is logged in as 'CONTOSO\administrator'.

The main content area is titled 'Upgrade sessions' and contains a table with the following data:

Status	Server	Start	Last Updated	Errors	Warnings
In Progress	SP2007-WFE1	10/24/2010 2:56:38 PM	10/24/2010 2:57:11 PM	0	2
Succeeded	SP2007-WFE1	10/24/2010 2:48:28 PM	10/24/2010 2:51:08 PM	0	0
Succeeded	SP2007-WFE1	10/24/2010 10:53:20 AM	10/24/2010 11:05:32 AM	0	15

Below the table, there is a section titled 'Selected upgrade session details' which provides a detailed view of the 'In Progress' session:

Status	In Progress
Server	SP2007-WFE1
Start	10/24/2010 2:56:38 PM
Last Updated	10/24/2010 2:57:11 PM
Errors	0
Warnings	2
Starting object	SPContentDatabase Name=WSS_Content_Intranet_IT
Current object	SPContentDatabase Name=WSS_Content_Intranet_IT
Current action	SPContentDatabaseSequence
Step within the action	124
Total steps in this action	128
Elapsed Time	00:01:09.5238681
Percentage completed	29.06%

The browser's status bar at the bottom shows 'Done', 'Trusted sites | Protected Mode: Off', and the system tray displays the time as 2:58 PM on 10/24/2010.

DATABASE ATTACH

- DEMO



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DB ATTACH PROS/CONS

Pros

- Upgrade multiple content databases at the same time
- Combine multiple farms into one farm
- Customizations must be transferred manually

Cons

- The server and farm settings are not upgraded
- Customizations must be transferred manually
- Missing customizations



HYBRID APPROACH

- Detach DBs
- Upgrade to 2010 in-place
- DB Attach content DBs

HYBRID PROS/CONS

Pros

- Farm wide settings preserved
- Customizations already in place
- Multiple content databases at the same time
- Non-upgraded sites (in read-only mode) while you upgrade the content

Cons

- Labor intensive
- Direct access to the database servers
- x86 is a lot of work
- Existing hardware may need replacing

WHAT IS “VISUAL UPGRADE”

- A feature that separates data upgrade from UI upgrade
 - Data and code upgrade happens all at once
 - Site UI has two modes: this version and previous version
 - Pages and components make the decision at runtime, and it's safe by default

VISUAL UPGRADE

- In the Site Actions drop-down menu is a new entry, Visual Upgrade. This will be available to site collection administrators.

Visual Upgrade

Choose the user interface of your SharePoint sites. If you choose to update, your sites will use the new interface, which includes the ribbon. Choose Preview the updated user interface to evaluate new features. You will be able to commit the update or to return to the user interface of the earlier version of SharePoint. If you notice that some pages from the earlier version of SharePoint display incorrectly after Visual Upgrade, you can reset the pages or all pages on this site.

Use the previous user interface
 Preview the updated user interface
 Update the user interface

OK Cancel

DEMO - VISUAL UPGRADE

- DEMO



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MASS VISUAL UPGRADE USING POWERSHELL

Upgrade to SharePoint 2010 UI and remove the Visual Upgrade configuration option

```
$site = Get-SPSite http://spdemo/sites/portal  
$web = $site.RootWeb  
$web.UIVersion = 4  
$web.UIVersionConfigurationEnabled = $false  
$web.Update()
```

Upgrade all the UI with loop

```
$db = Get-SPContentDatabase WSS_Content_OOTB_upgrade  
$db.Sites | Get-SPWeb -limit all | ForEach-Object {$_ .UIVersion = 4;  
$_ .UIVersionConfigurationEnabled = $false; $_.update()}
```

Check the UI version

```
$site = Get-SPSite http://spdemo/sites/portal  
$site | Get-SPWeb -limit all | sort-object uiversion -desc | select url, uiversion
```

UPGRADE BEST PRACTICES

- backup and restore
- in-place upgrades, preserving the SharePoint 2007 look and feel is the best option
- PLANNING

HOW TO DEAL WITH CUSTOMIZATIONS WHEN UPGRADING TO SHAREPOINT 2010

Customization	Good Choice	Better Choice
Custom Web Parts	Probably work out of the box with SharePoint 2010	Test on sample server, plan to rewrite for SharePoint 2010
Custom event handlers	Probably work out of the box with SharePoint 2010	Test on sample server, plan to rewrite for SharePoint 2010
Third-party add-ins	Contact vendor for information on SharePoint 2010 support	Contact vendor for information on SharePoint 2010 support
Custom Site Template	Create a site with the Custom Site template before upgrade	Recreate in SharePoint 2010, preferably as a Solution package and Feature
Custom site definition	Create UDF file for upgrade	Migrate to an out-of-the-box site template and deploy customizations as a Solution package and Feature
Customized pages	Reset to site definition	Reset to site definition, and reapply customizations
Custom code or pages in /_layouts	Probably work out of the box with SharePoint 2010	Test on sample server, plan to rewrite for SharePoint 2010

Q & A



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ADDITIONAL RESOURCES

SharePoint 2010 Upgrade Resource Centers

- [Upgrade and migration resource center for SharePoint Foundation 2010](#) - TechNet
- [Upgrade and migration resource center for SharePoint Server 2010](#) – TechNet
- [SharePoint 2010 Upgrade Resource Center](#) – MSDN
- [SharePointUpgrade.com](#) - Community driven wiki based SharePoint 2010 Upgrade resources

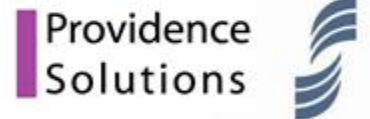
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