

BEINVENTIV

BB2e

DGOV  
DE2.0

# BB2e Dynamics Collaboration Solutions

Colorado Public Sector SharePoint Users Group

## Best Practices in upgrading from SharePoint 2007 to 2010

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# Agenda

- **BB2e / Belnventiv**
- **Upgrade Planning Cycle**
- **Choosing an Upgrade Path**
- **Requirements \ Pre-requisites**
- **Internal External Migration Tools**
- **Gotha's \ Advice**
- **Resources**

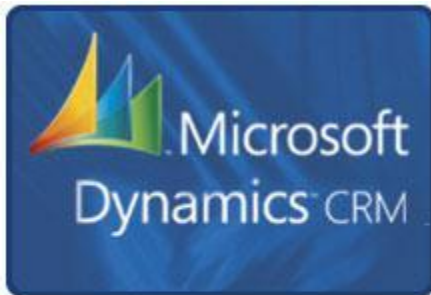


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## BB2e and Microsoft Dynamics SharePoint



## BB2e Dynamics Solution Benefits

Increased Service  
Effectiveness

Reduce Costs  
of Services

Consistent Growth  
in Services

Build Value  
in Services

## BB2e Dynamics Value Add

Customized Service  
Industry Processes

Automation and  
Efficiency

Reporting and  
Dashboards

Knowledge  
Mgt / KPIs

BB2e Dynamics provides Collaboration  
solutions which drive growth and service effectiveness

## BB2e - Focus

- Portals - Information Access, Research, Education
- Document management - Efficiency, Sustainability
- Collaboration - Collecting, Sharing, Change Mgt
- Social Media – Communication, Community building
- Data Management - Aggregating Disparate Data



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# BB2e Dynamics Collaboration Solutions

State of Colorado



State of Washington



State of Massachusetts



State of Texas



State of California



State of Utah



State of New Mexico



State of Kansas



## Who should upgrade

- Business Case – Feature driven
- How much customization done in 2007
  - Content dB and Farm Config dB
- Leveraging WSPs for customized solutions
- Health of existing environment
  - Upgrade will not fix problems
- How well is the environment documented



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## Why Upgrade ? Business Case > Feature

- MS Access \ Excel Services
- Business Continuity Services
- Updated Central Admin
- Digital Asset Management
- Enterprise Search
- Health Monitoring
- Managed Metadata
- Performance Point Services
- Records Management
- Sandbox Services
- Social Computing
- Visio Services
- Windows PowerShell



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# Move, Migrate or Upgrade

- **Move** - Use the procedures for moving a farm or components when you are changing to different hardware (more capacity, performance and x64)
- **Migrate** – From 32bit to 64bit or
  - SharePoint Content from 2003 to 2007 > 2010
- **Upgrade** – Apply new updates and or Service Packs to SharePoint Server 2007 or upgrade to SP2010

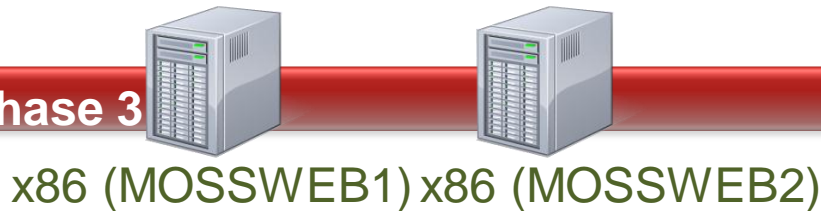


# Migration strategies

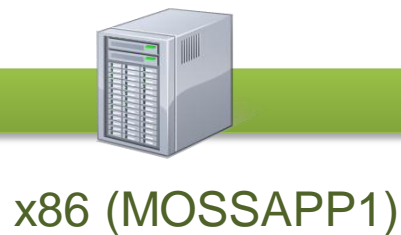
**SOURCE (32bit) FARM A**

**DESTINATION (64bit) FARM B**

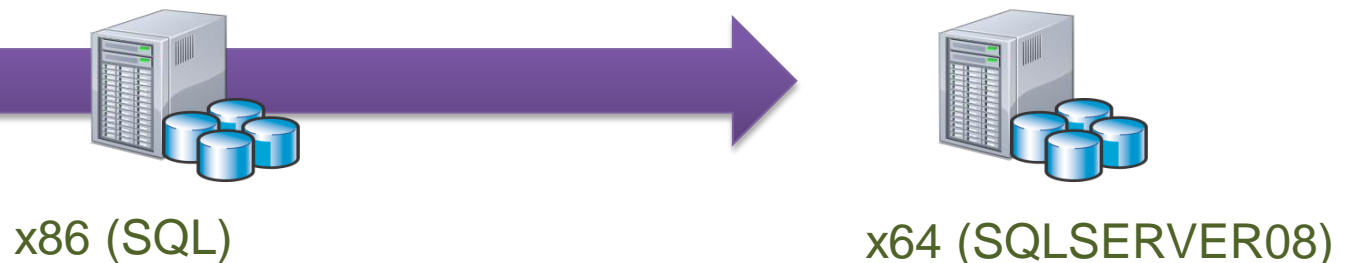
**Tier C – Phase 3**



**Tier B – Phase 2**



**Tier A – Phase 1**



# Preparing the servers

- SQL Server (64bit)
  - SQL 2008 R2 or SQL 2008+SP1+Latest CU
  - SQL 2005 w/SP3 – supported / not recommended
- SharePoint Servers (64bit)
  - SharePoint 2007 SP2 + Latest CU
  - Recommend latest CU
    - CU updates the preupgradecheck STSADM cmd
  - Windows Server 2008 Standard w/SP2 (or greater)
  - WCF Hot fix (not part of the prerequisites installer)
- Plan for sufficient disk space – Upgrades will need temp disk space (lots of)

# Auditing Tools for 2007 Farms

- Central Administration in SharePoint
- SharePoint Administration Toolkit V4.0 (SPDiag)  
<http://tinyurl.com/SPAdminKit>
- Using STSADM and PowerShell
- Pre-Upgrade Check
  - Run the STSADM `-o preupgradecheck` command prior to upgrade (many times)
  - Run STSADM `-o enumallwebs [parameters]`
- Using SharePoint Manager from Carsten Keutmann
  - <http://www.codeplex.com/spm>

# Post Audit Tasks

- Server Administrators – prepare servers and plan SP2010 deployment architecture
- Developers – Re-evaluate custom code solutions and files for SP2010 compatibility
- Project Managers – Review upgrade project plans and estimates – user training etc.



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## Also Consider...

- Move only “content” to brand new farm
- Re-organise
- Standardise
- Clean up
- Decommission – old hardware



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# Environment Cleanup - Spring cleaning

- Delete Stale Sites and Webs (Backup First 😊)
  - stsadm -o DeleteSite [-force] [-gradualdelete]
  - stsadm -o DeleteWeb [-force]
- Remove Extraneous Document Versions
  - Primarily user driven, OM operations or tools help
- Cleanup Templates, Features, & Web Parts
  - Primarily user driven, OM operations or tools help
- Repair Data Issues
  - stsadm -o DatabaseRepair [-deletecorruption]
  - stsadm -o ForceDeleteList
  - stsadm -o VariationsFixupTool

# Upgrade Approaches

- 4 different approaches
- Strengths and weakness of each approach
  - Choose between Level of Customization vs Farm settings
    - Deploying customizations using standard WSPs makes this choice much easier
- Side by side upgrade which was available in 2003 to 2007, not available in 2010



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# Upgrade Approaches - Summary

**In-Place Upgrade**

**Database Attach  
Upgrade**

**Hybrid 1: Database  
attach with  
Read-Only Database  
Upgrade**

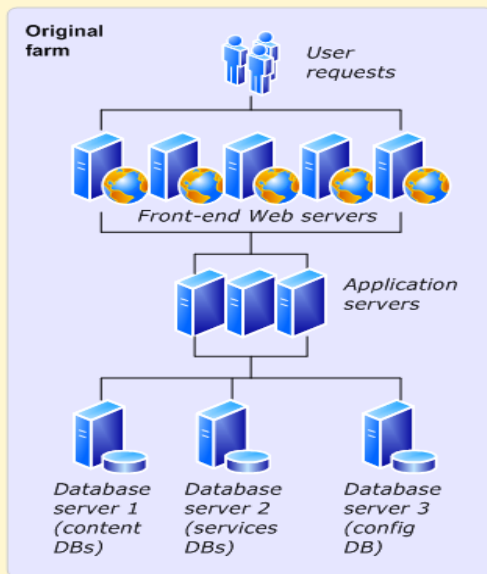
**Hybrid 2:  
In place with  
Detach Database  
Upgrade**



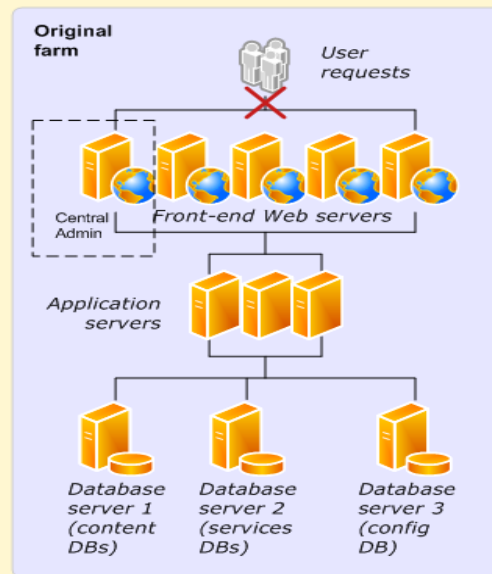
# In-Place Upgrade

- Install SharePoint Binaries on the Server
- Run the Configuration Wizard
- The SSP database is upgraded and data is copied into new user profiles and taxonomy databases.

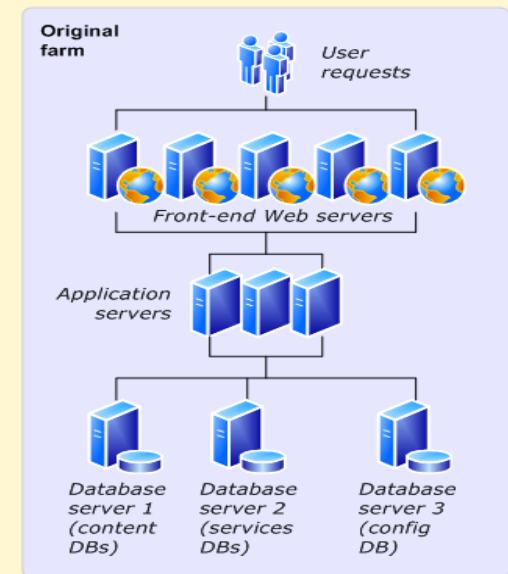
**Farm before upgrade**



**Topology in transition**



**Upgrade complete**



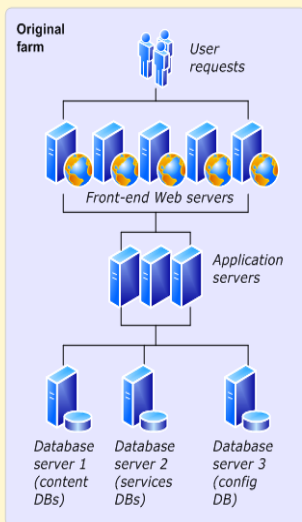
# In-Place Upgrade

- Strengths
  - Simplest \ Least amount of re-work
  - Use existing hardware
  - Configurations and all content upgraded
  - Farm-wide settings are preserved
  - Customizations (WSPs) available after upgrade
- Weakness
  - No Rollback – Only if entire farm backed up
  - Servers farm offline - User requirements
  - Most stress on the system
  - Servers first need to be upgraded 32 -64 bit
- **Recommended for small or non-production environments**

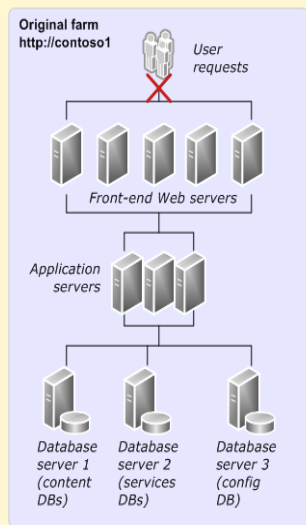
# Upgrade Sequence – Database Attach

- Build new SP2010 farm
- Create Web Application(s)
- Detach content databases from SP2007 farm
- Attach content databases to SP2010 farm
- Re-deploy customisations (WSP files) manually

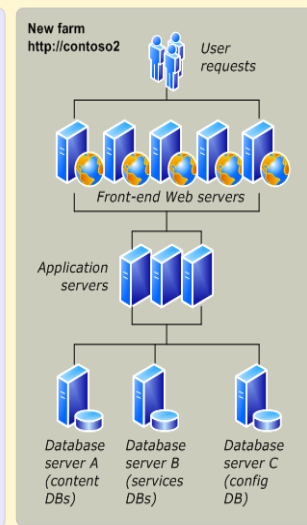
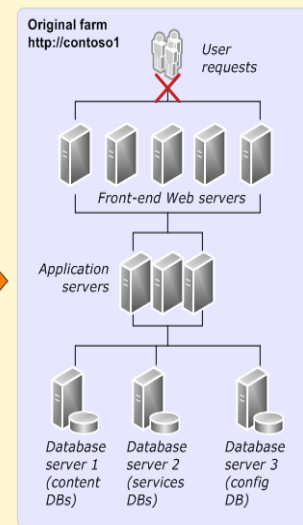
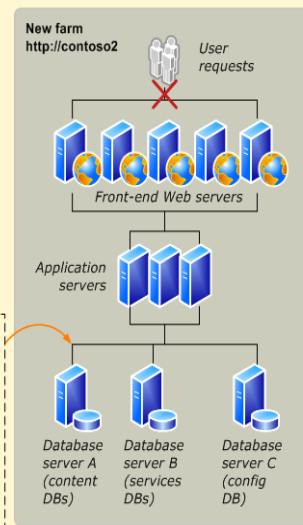
Farm before upgrade



Topology in transition



Upgrade complete



# Database Attach Upgrade

## Strengths

- Created in parallel – Rollback to original if issues
- 2007 can be placed and accessed in read only mode
- User requests
- Customizations (subject to WSPs) moved
- Phased upgrade – planned with clean-up

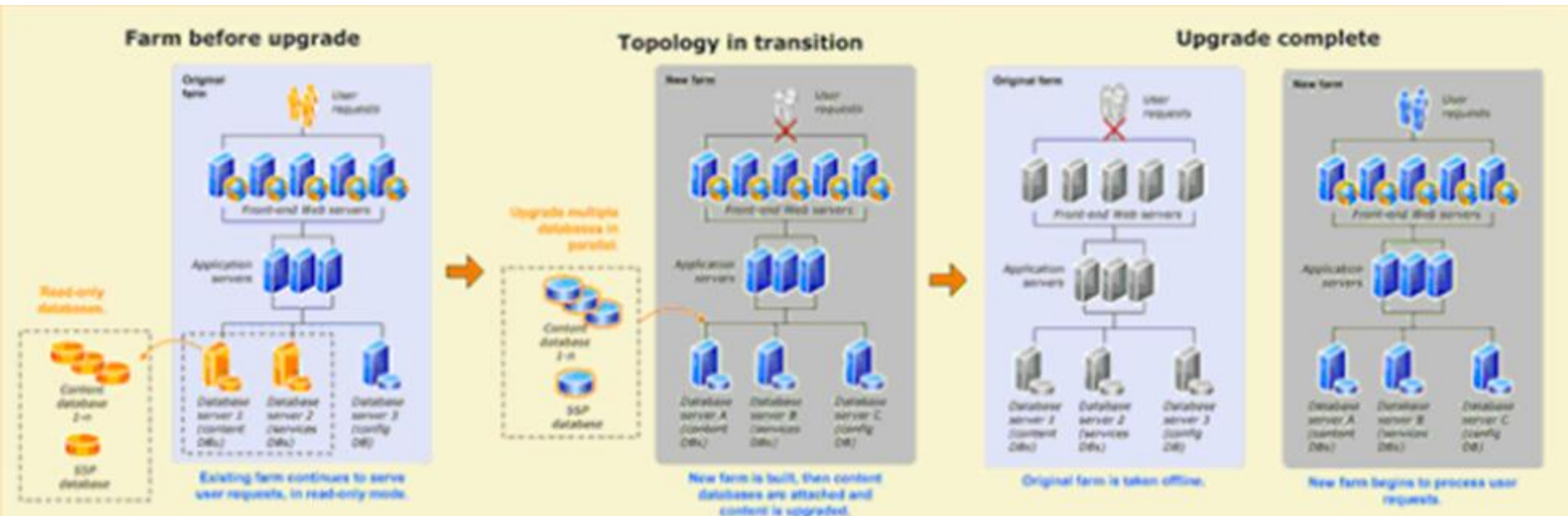
## Weakness

- New hardware and new farm for SP 2010
- Move customizations manually

**Recommended approach if farm level configurations are minimal**

# Hybrid 1 - Read-only database

- Existing farm is put in read only mode
- Create the new 2010 farm
- Create new dB and attached all content databases to 2010
- Take old farm off line



# Hybrid 1 - Read-only database

- Strengths
  - Use Database Attach upgrade to preserve existing farm
  - Existing farm is put in read only mode
- Weakness
  - Server Farm setting not upgraded
- **Recommended over Database Approach when it is Important to keep Farm online for User requests**

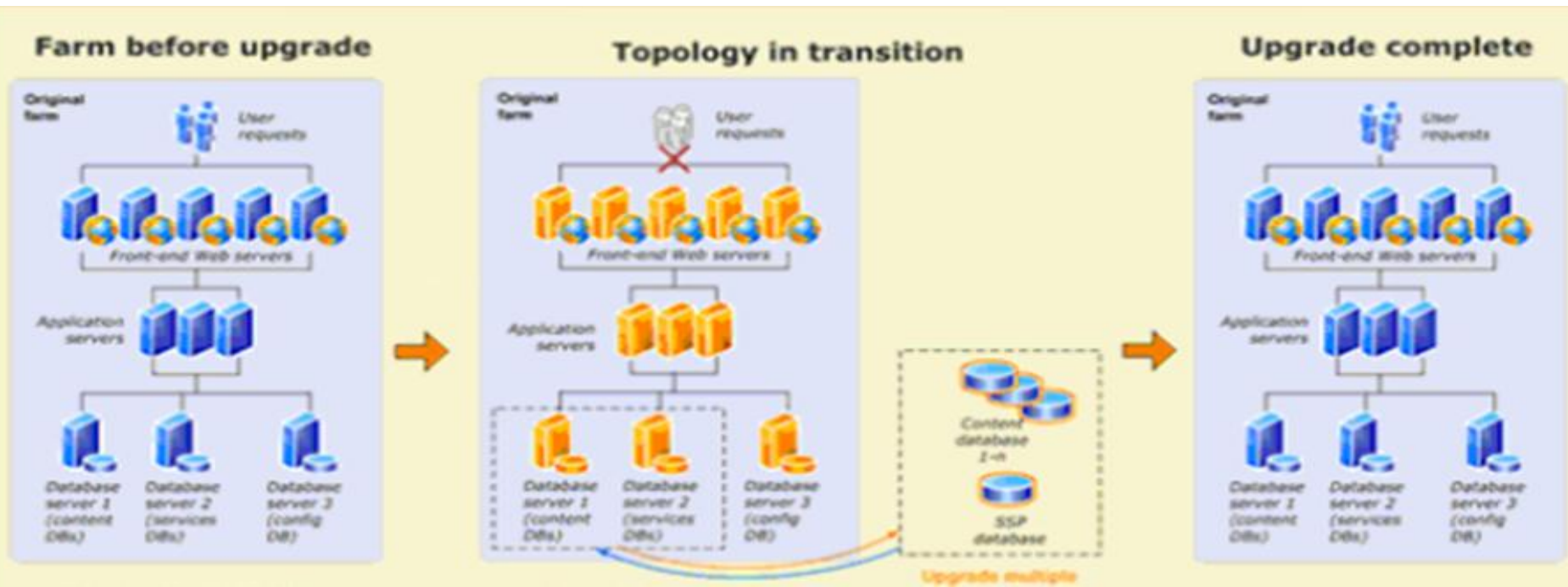


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# Hybrid 2 - Detach database

- Use In Place upgrade for farm settings to preserve configs
- Detach content databases
- Alternatively upgrade content databases in temporary farm
- Reattach content databases one at a time in 2010



# HYBRID 2 – Detach database

- Strengths
  - Preserve farm wide settings if significant
  - Less Complex due to less materials to upgrade
  - Apps \ Sites come online faster as each dB reattached
- Weakness
  - Customizations need to be manually upgraded
  - No rollback
- **Not Recommended for heavy customized environments**



# Upgrade Approaches

## In-Place Upgrade

- Easiest
- High system stress
- One Time Shot \ No Rollback
- \* Small \ Non-Production

## Database Attach

- Rollback\Read only\Hardware
- Upgrade content dB \customs
- Manually move farm config db
- \* Heavy dB \ WSP Customs

## Hybrid 1: dB Attach - Read-Only

- Preserve dB custom (AMAP)
- Farm accessible \ Read only
- Manually move farm config db
- \* Heavy dB \ WSP Customs

## Hybrid 2: - In Place - Detach dB

- Preserve Farm sets (AMAP)
- No Rollback
- Manually move dB
- \* Heavy Farm level customs

# Customizations

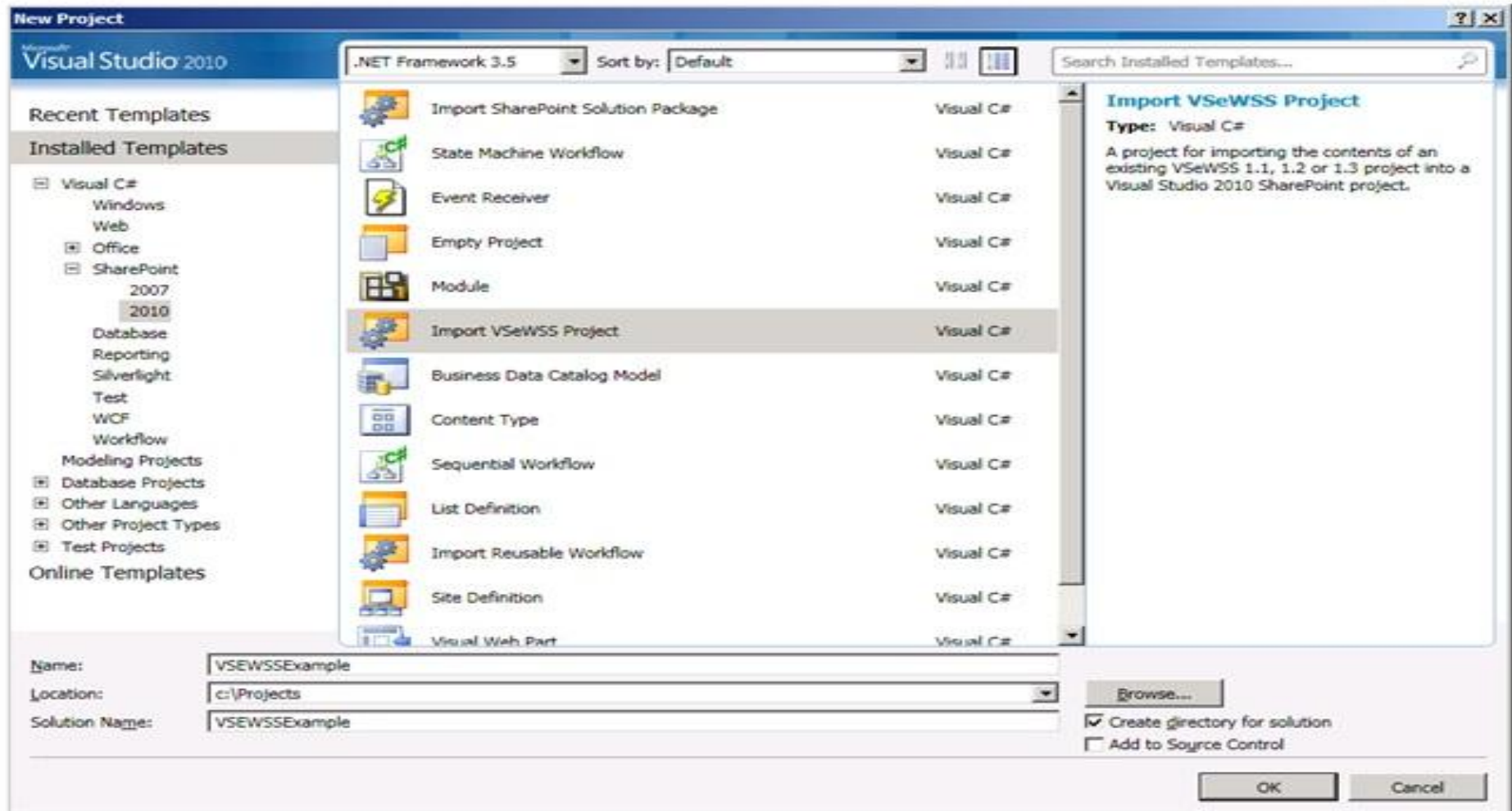
- Some assemblies will not need re-compilation
- Use SharePoint Solution Packages (WSPs)
- Site Templates (STPs) are deprecated
- SharePoint Themes are deprecated
- Changes to OOTB files will not upgrade
- Code performing large queries will not upgrade
- InfoPath admin forms must be upgraded separately
- Consider Visual Upgrade
- Check for 3<sup>rd</sup> party vendor updates



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# VseWSS Upgrade Tool - Developers



# Upgrade – What to do for Developers

- Covert your custom code to deployable solutions
  - <http://tinyurl.com/SP2010Solutions>
- Visual Studio 2010 support for SharePoint 2010 development
- Follow Coding Best Practices
  - <http://tinyurl.com/CodingBPSP07>
- Download SP2010 SDK
  - <http://tinyurl.com/SP2010DEVSDK>



# Upgrade – What to do for Administrators

- Large content databases and site collections will take longer to upgrade
- Split Content Databases and/or Site Collections into smaller units prior to upgrade
- STSADM's mergecontentdbs command can be used to move a Site Collection to a different Content Database
  - Convert sub site to site collection command
- Archive off any Site Collections, Webs, or Lists that are no longer necessary
- Test your Disaster Recovery strategy before upgrading

# Upgrade Gotchas

- 3<sup>rd</sup> Party vendor solutions – custom development
- 3<sup>rd</sup> Party products – Aggregation web parts or similar
- Forgotten sites with no owners



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# Tips \ Tricks

- Backup \ Trial in Sandbox
- Combo Upgrade – In Place to Test > Attach dB
- Use WSPs for all appropriate customizations
- Leverage Content dB customizations over Admin dB
- Split Content dB \ Site Collections into smaller units
- Standardized and Documented File names
- Use SQL aliases for backup and restore new dB
- Use Network to migrate URLs over AAM



# 3<sup>rd</sup> Party (ECM) Content Migration Tools

Solutions	Relative Cost	ECM Support	SharePoint Support	SharePoint Content	SharePoint Customs
AvePoint	\$\$\$\$	2	1	1	2
MetaLogix	\$\$\$	3	2	2	1
Quest	\$\$	1	3	3	4
Kapow	\$	4	4	4	3

<http://cmsreport.com/content/2010/03/ten-content-migration-tools-sharepoint-platform>

<http://www.sharepointjoel.com/Lists/Posts/Post.aspx?ID=337>

<https://www.nothingbutsharepoint.com/sites/eusp/Pages/head-to-head-sharepoint-migration-tool-demo-videos.aspx>



# Resources

- Upgrade Resource Centre (TechNet)
  - <http://tinyurl.com/SP2010Upgrade>
- Upgrade planning blog post series
  - <http://tinyurl.com/SP2010Blogs>



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