

Project Server 2010 Migration

Presented by Chad Olson, Director of Technical Services



Microsoft Partner
Silver Project and Portfolio Management

Agenda

- Reasons to Migrate
- Types of Migrations
 - Best Practices
 - Lessons Learned
- Post Migration Considerations
- Backwards Compatibility Mode (BCM)
- Overview of Project Server 2013 Migration Process
- Common Misperceptions
- Planning
- Q&A



Objectives & Takeaways

➤ Objectives:

- Education on the migration process
- Share lessons learned & best practices



➤ Key Takeaways:

- Avoid common pitfalls during a migration
- Better prepare yourself for future Project Server deployments



About Me



➤ Chad Olson, MCTS MCSE MCP

- Director of Technical Services at Sensei Project Solutions
- Been involved with Project Server platform since 2001
- Focus Primarily on Technical Services
 - Installation
 - Design
 - Architecture
 - Configuration
 - Migration
 - Integration
 - Reporting
- 50+ Microsoft Project/Project Server Deployments
 - ~20 migrations



Sensei Project Solutions

- Microsoft Partner with deep expertise in PPM solutions
- 100+ Microsoft Project/Project Server deployments
- 1,000+ Project Managers/Team Members trained
- Certified on entire technology stack + Project Management:
 - PMP/PMI-SP, MCP, MCT, MCTS, MCSE

Microsoft® Partner
 Silver Project and Portfolio Management



How do we help our clients?

- Deployment Services
 - Microsoft PPM solution
 - On-going support services
- Training
 - Role-based, Process-focused
 - Coaching and Mentoring
- Solutions
 - 'Jumpstart' solutions ('project in a box')
 - Report Packs



Reasons to Migrate



- New Features
- Product Support
- Compatibility with other software or add-ons
- Performance
- Better Hardware
- New Architecture
- Maintenance
- Deployment
- Licensing

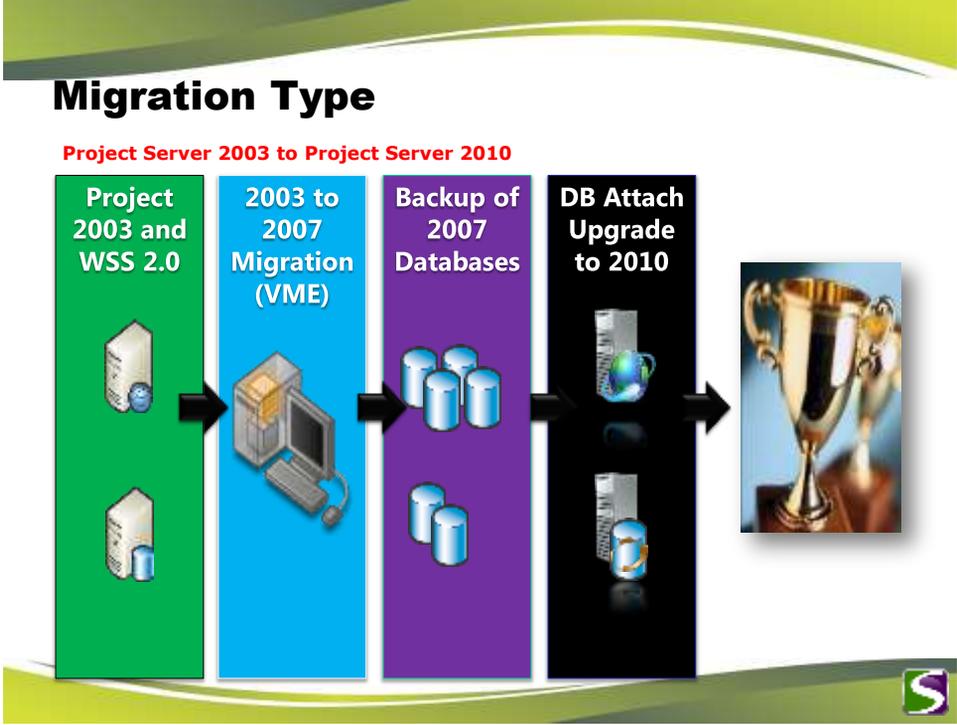


Types of Migrations/Upgrades

High Level

- 2003 -> 2007 -> 2010
 - **Migrate from Project Server 2003 to 2010**
 - Virtual Migration Environment (VME)
 - Uses Project Migration Tool (Project Pro 2007 component)
- 2007 -> 2010
 - **In-Place Upgrade**
 - **Database Attach Migration**
 - Project and SharePoint Content Databases
 - **Database Attach Core Migration**
 - Project Databases Only





Project Server 2003 Migration

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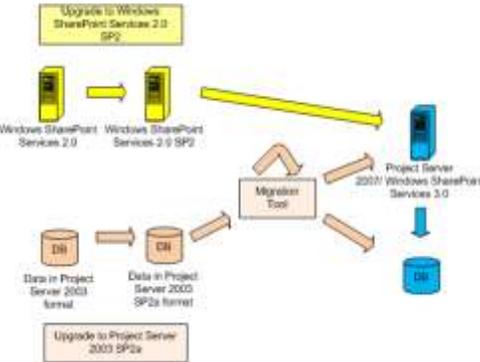
- Need to migrate into Project Server 2007 first
 - Virtual Migration Environment (VME) – A Hyper-V image with Project Server 2007 installed. Contains migration tool and scripts. Provided by Microsoft for [download](#)
 - Can install a new Project Server 2007 on premise if desired
- Migration Tool
 - Included on the Project Professional 2007 media as an optional installation component (P12MigrationTool.exe).
 - Can be ran on a desktop or on the server
 - Includes a configuration .ini file to determine which projects to include or exclude
 - Command line: `P12MigrationTool.exe -c path:\filename.ini`
 - Saves and publishes each project to the queue one-by-one

Project Server 2003 Migration



> Migration Process Overview from 2003 -> 2007

- Project Data Only

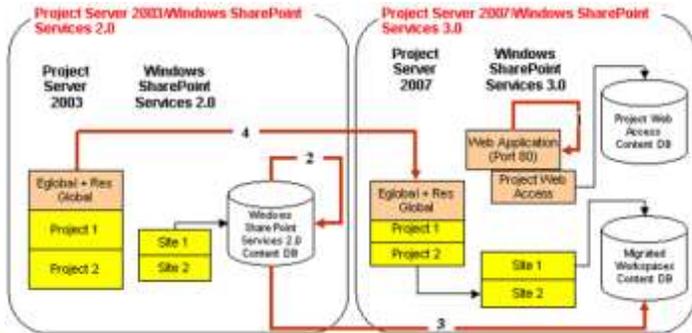


Project Server 2003 Migration



> Full Migration with WSS 2.0 (SharePoint workspaces)

- Steps: 1.Install PS2007, 2.Run Prescan tool, 3.Attach a copy of WSS 2.0 content dbs to PS 2007 farm, 4.Migrate & Publish projects



Project Server 2003 Migration



➤ Pre-Migration Scripts

- Determine any issues with existing 2003 data
- Included in the VME
- Included in the [Project Server 2007 Migration Guide](#)
- Can also be used to filter projects to migrate or exclude



Project Server 2003 Migration

- Run the Pre-Migration Scripts and analyze the results
- Run the migration tool with the -verify switch first
- Fix any issues in the 2003 environment first
- Read the Migration Guide
- Document your migration settings and review with the team for consensus
- Educate admins on what doesn't migrate
 - Status reports, To-Do lists, view filters, project versions, status update rules, saved links, etc.



Project Server 2003 Migration

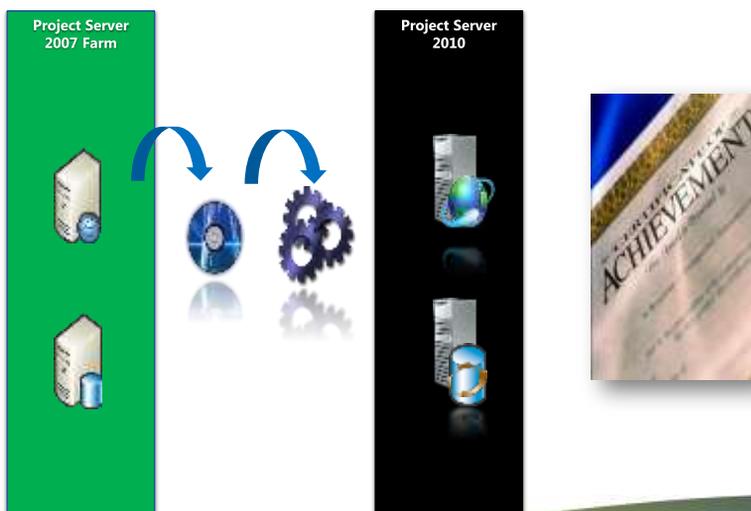


- Virtual Migration Environment (VME)
 - Only Hyper-V with Windows Server 2008 R2
 - Minimum of 4GB virtual memory, pref. 8 GB
 - Minimum of 4 virtual processors (cores)
 - Dedicated drives for .vhd files (Determine needed space for database files)
- Reserved Enterprise Fields in Project Server 2007
 - Project Type, Project Manager, Proposal, State, etc.
- Externally Edited Projects
 - Need to save in Project Professional 2003 before migrating
- Outstanding Status Updates (Task Updates)
 - Default setting is to not migrate projects with outstanding status updates
- Project Versions
 - Determine best method to rename projects with _Published. Look at the Rename Tool.
- Timing
 - Migration Tool takes a long time to save projects
 - ~1 hour per 135 projects



Migration Type

Project Server 2007 to Project Server 2010 – In-Place Upgrade



In-Place Upgrade

➤ Process Overview

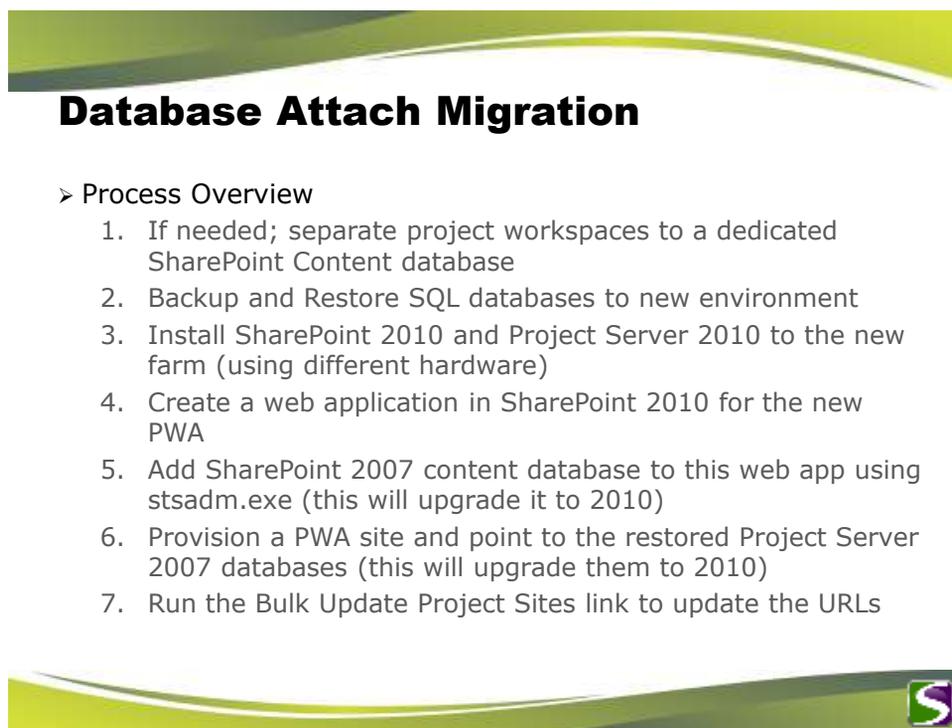
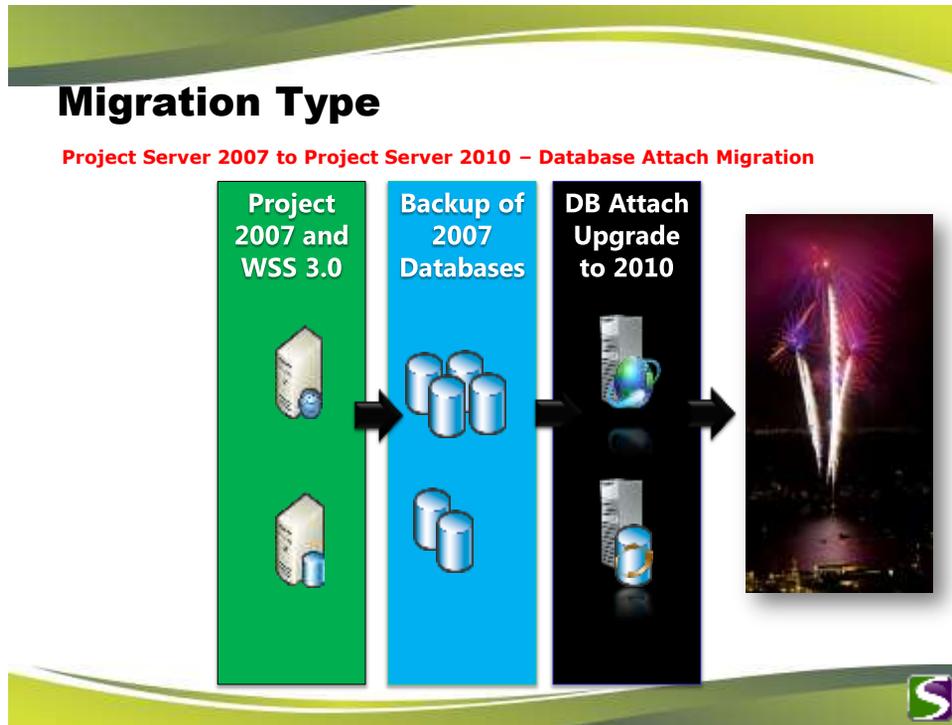
1. Install SharePoint Server 2010 (Ent.) on all servers in the farm
2. Install Project Server 2010 on **all** servers in the farm
3. Run the SharePoint Config. Wizard on server containing CA
4. Run the SharePoint Config. Wizard on remaining servers



In-Place Upgrade

- All servers need to be 64-bit hardware and 64-bit software (OS, SQL, etc.)
- Installer will not set up required SharePoint 2010 service applications for you. Do this manually before the upgrade.
- Get backups of your environment before upgrading
- Check Upgrade.log files for information or errors
- Make sure your accounts have SQL permissions to the databases
- Must reconfigure the Analysis Services configuration after upgrade





Database Attach Migration

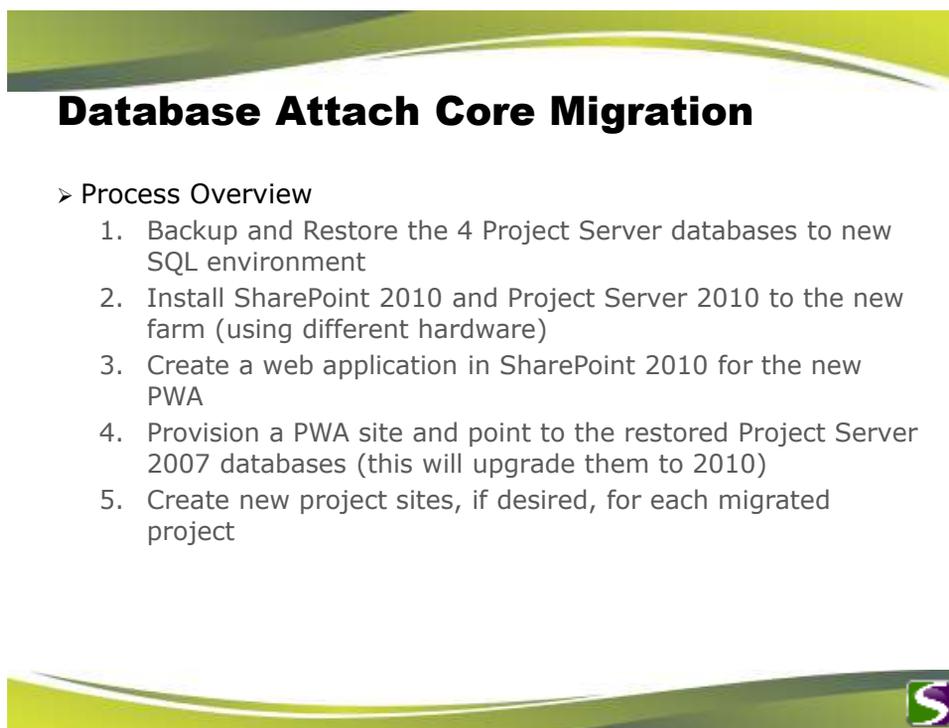
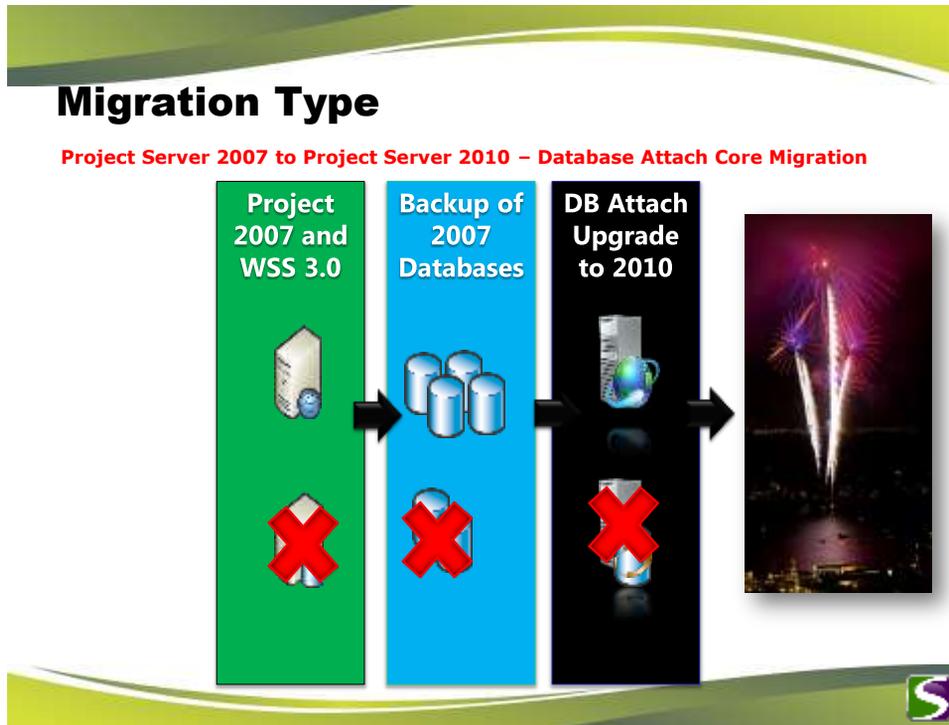
- Most common of all migrations
 - "Database Attach Migration"
- Why?
 - Most organizations didn't have existing 64-bit software/hardware
 - Want to move to faster and more robust hardware
 - A chance to change architecture (WFE, App, Database tiers)
 - A common trend to change from physical to virtual hardware



Database Attach Migration

- Transaction logs can grow really large during a Database Attach migration
- Need to run a switch for new SharePoint UI for migrated project workspaces
- Quick Launch Bar customizations get messed up after migration. Reset to default layout before migration.
- Make sure SharePoint 2010 environment is healthy before the upgrade (check Health Analyzer, ULS logs, event logs, etc.)
- Ensure latest Service Pack and/or Cumulative Updates are installed prior to the migration
- Ensure SQL Server is configured with Best Practices
- If using a customized template for project sites, verify this works after migration. Might need to recreate it manually.





Database Attach Core Migration

- If projects did have a project workspace association and you want to use a new one, you'll need to clear it out using a SQL update command
- Verify you don't need any other SharePoint data from PWA such as documents or a help site. If so, move that manually.
- Common approach for companies that weren't utilizing project workspaces before and want to start new with SharePoint 2010 project sites.



Test

- Before Migrating or Upgrading



TO TEST!!!



Post Migration Considerations



- Backwards Compatibility Mode: Turned on after migration/upgrade. Determine when you can deploy Project Pro 2010 to users and when you can train them on the new interface.
- All migrated projects get assigned to "Basic Project Plan" or whatever Enterprise Project Type (EPT) is the default. Need to manually assign those after the migration if desired.
- When to create project sites if no sites were migrated.
- Recreate Data Analysis views in Excel Services
- Have a Test environment to test the migration into and also to add new functionality. Then use Playbooks or Solution Starter tools to move settings into Production after the final migration.
- Do you need Forms Authentication configured?
- Redirect users to new environment



Backwards Compatibility Mode (BCM)

- Allows Project Professional 2007 with SP2 or higher to connect
- Turned on by default after a migration/upgrade (only way to turn it on)
- Once you uncheck it and go into native mode you cannot revert back (greyed out).
- Will need to save the Enterprise Global in Project 2010 after going native
- Features if BCM is ON:
 - All department fields are shown in Project Pro 2007
 - Manually scheduled tasks are not available
 - No inactive tasks
 - Font strikethrough not available
 - New project from SharePoint List disabled in PWA

Project 2007 Compatibility Mode

Project 2007 Compatibility Mode is enabled by default for an upgraded server and allows Project 2007 clients to connect to the server. If all the Project Managers in your organization are using Microsoft Project Server 2010 and you have upgraded the applications that are running on top of Project Server to be Microsoft Project Server 2010 compliant, you can turn this mode off to enable all the new features.

Enable Project 2007 Compatibility Mode

Enable Project 2007 Compatibility Mode



Project Server 2013 – Upgrade Process

➤ A. Plan & Prepare



➤ Items to Note

- No “In-place Upgrade” method. Must do “Database Attach”
- Review Hardware & Software requirements first
- Plan for clients: There is no Backwards Compatibility Mode.
- No upgrade path from Project Server 2007. Must be on 2010.

➤ Gather Info and Plan for Customizations

- Note items such as quotas, managed paths, AAM, authentication modes, customizations, email settings, etc.

➤ Deploy new Project Server 2013 farm

- Database server needs to be SQL Server 2008 R2 or 2012.
- Install SharePoint Server 2013 and prerequisites.
- Install Project Server 2013
- Configure the farm (service apps, web application, etc.)



Project Server 2013 – Upgrade Process



➤ Prepare Windows PowerShell Environment

- Use PowerShell to execute many procedures for the migration

➤ Verify databases are in Native Mode

- Project Server 2010 databases must be Native (no BCM)

➤ Check data for known issues

- Run SQL scripts to check for data issues

➤ B. Copy Databases

- Backup and Restore the SharePoint content databases that contains PWA and Project Sites
- Backup and Restore the 4 Project Server 2010 databases





Project Server 2013 – Upgrade Process



- **C. Upgrade Data**
- Attach and upgrade databases using PowerShell cmdlets
- Attach and upgrade SharePoint content database(s) first
- Project Server Upgrade Phase
 - Project Server 2013 now uses a single database
 - Use PowerShell cmdlets to consolidate databases
 - Attach Project Services database to web application
 - Upgrade database
 - Connect PWA instance
 - Upgrade the PWA instance
 - Enable PWA features
- Upgrade Process diagram can be found [here](#).
- *Note: Based on Project Server 2013 Preview and subject to change.*



Misperceptions: Performance

➤ 64-bits perception... twice as fast as 32-bits?



Project Server 2007



Project Server 2010



Misperceptions: Data Quality

➤ Problems in 2003, 2007, let's move to 2010 !!



INTERNAL ONLY



Planning

- Plan as much as you can
- Determine Roles and Responsibilities
- Mass majority of the effort is in the planning process
- Determine if to have a dedicated test environment or test instance using the production environment
- Have backups!
- Educate users on new functionality
- Practice migrations
 - Capture timings
 - Document any issues
 - Re-test
- Develop a Migration Plan or Checklist



Resources

- [Project Server 2007 Migration Guide](#)
- [Virtual Migration Environment \(VME\)](#)
- [TechNet: Project Server 2010](#)
- [TechNet: Project Server 2010 Migration Resource Center](#)
- [TechNet: Project Server 2010 Demand Management](#)
- [TechNet: Project Server 2010 Update Center](#)
- [TechNet: Upgrade to Project Server 2013 Preview](#)
- [Portfolio Server 2007 Migration Guide](#)



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Questions?



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