PROJECT SERVER 2013 UPGRADE PROCESS

This model describes the required steps to upgrade from Microsoft Project Server 2010 to Project Server 2013.

A PLAN & PREPARE

Before starting to upgrade, you must understand what is in your SharePoint 2010 Products farm and set up a new farm based on SharePoint 2013 Products.

1 KEY ITEMS TO NOTE FOR UPGRADE

There is no "in-place" upgrade method. The database-attach method is the only supported method for upgrading from Project Server 2010 to Project Server 2013.

Review hardware and software requirements. The database-attach upgrade method requires you to install a Project Server 2013 "destination environment" to which you migrate your Project Server 2010 data. It is important to understand the requirements needed to install the farm.

Plan for clients. Project Professional 2013 connects to Project Server 2013. There is no backward compatibility feature that allows connectivity from earlier versions of Project Professional. In Project Server 2013, additional Web browsers are supported for Project Web App users. They are the same Web browsers that are supported for SharePoint Server 2013.

There is no direct upgrade path from Project Server 2007 to Project Server 2013. You must first upgrade your Project Server 2007 farm data to Project Server 2010, and then upgrade to Project Server 2013.

2 GATHER INFORMATION & PLAN FOR CUSTOMIZATIONS

Gather current configuration information about your Project Server 2010 environment so that you can create it on your Project Server 2013 destination environment. This includes:

- Alternate access mappings
- Authentication providers and authentication modes in use
- Quota templates
- Customizations
- Managed paths
- Self-service site and management settings
- Incoming and out-going email settings

Identify and evaluate customizations in your environment and determine if you want to reapply them in your Project Server 2013 environment. During the upgrade process, several Windows PowerShell "test" cmdlets can be run on your databases to verify if specific customizations can cause issues with upgrade. In most cases, customizations do not cause the upgrade process to fail.

3 DEPLOY YOUR PROJECT SERVER 2013 FARM

In new farm

Install the software

Install the following on your farm servers:

Database servers: SQL Server 2008 R2 or SQL Server 2012

Web and Application servers: Install the prerequisites for SharePoint Server 2013, and then install SharePoint Server 2013 (which is required for Project Server 2013). Install Project Server 2013.

Configure the farm

Configure the following on your farm on the Central Administration site:

- Start the Project Server Application service on the farm.
- Create the Project Server service application.
- Create a Web Application for the Project Web App site you plan to upgrade.

4 PREPARE YOUR WINDOWS POWERSHELL ENVIRONMENT

You use Windows PowerShell cmdlets to execute many of the procedures required to upgrade to Project Server 2013. On the computer on which you installed Project Server 2013, it is important to verify that you have the ability to open the SharePoint 2013 Management Shell, and that you are able to access the Windows PowerShell cmdlets for Project Server 2013.

You can do this by opening the SharePoint 2013 Management Shell, and then running the following command to list the Project Server 2013 cmdlets:

Get-Command *SPProject*

5 VERIFY THAT YOUR DATABASES ARE IN NATIVE MODE

Your Project Server 2010 databases must be in Native mode (non-backward compatibility mode) in order for them to upgrade successfully.

If you turn off backward compatibility mode (BCM) in your Project Server 2010 environment, you must also open and save the enterprise global template.

After you disable BCM, you cannot re-enable it. If you want to keep BCM enabled in your environment, you can set up an "intermediate" Project Server 2010 farm, restore backup copies of your Project Server 2010 databases on it, and then disable BCM on it.

6 CHECK YOUR DATA FOR KNOWN ISSUES

If your Project Server 2010 Published database contains resource accounts in which the WRES_Account field contains an empty string (the expected value is NULL), upgrade of this database fails. To check for this condition, run the following SQL script on the backup copy of your Project Server 2010 Published database:

```
Use ProjectServer_Published
select RES_Name, RES_TYPE, RES_ID from MSP_RESOURCES where
WRES_ACCOUNT ='
```

If accounts with this condition are found, run the following SQL script on the same database to fix any accounts with this condition:

```
Use ProjectServer_Published
Update MSP_RESOURCES set WRES_ACCOUNT = null where WRES_ACCOUNT ='
```

B COPY DATABASES

After you have prepared the new environment, you can copy and upgrade databases.

The following database types are required to upgrade to Project Server 2013:

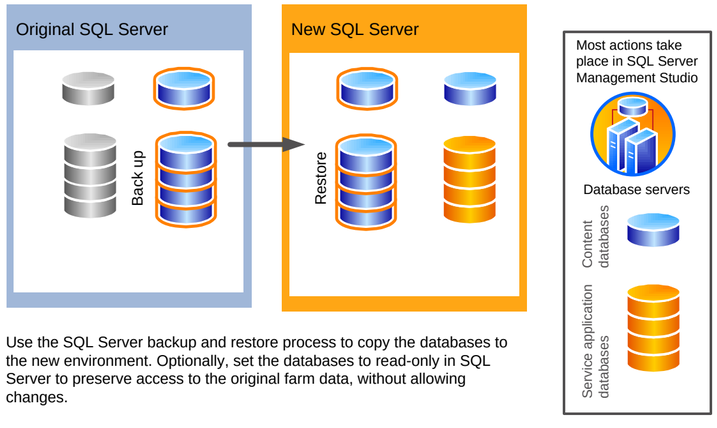
Content databases

- Content Database containing PWA site data

Project Server 2010 databases

- Project Server 2010 Archived Database
- Project Server 2010 Draft Database
- Project Server 2010 Published Database
- Project Server 2010 Reporting Database

To perform a database-attach upgrade, copy your databases from your original farm to your new farm.



Use the SQL Server backup and restore process to copy the databases to the new environment. Optionally, set the databases to read-only in SQL Server to preserve access to the original farm data, without allowing changes.

C UPGRADE DATA

Now that the databases are available in the new farm, you can attach and upgrade them. The upgrade process can be divided into two phases:

- **Content Database Upgrade** – Attach and upgrade the SharePoint Content database that contains your Project Web App site data.
- **Project Server Upgrade** – Consolidate your Project Server 2010 databases, attach them to the Project Server 2013 PWA instance, and then upgrade the data.

1 CONTENT DATABASE UPGRADE PHASE

The following occurs during the Content Database upgrade phase:

Step	Required Windows PowerShell cmdlet
1. Check your SharePoint content database containing your Project Site data for errors that can cause upgrade to fail.	Test-SPContentDatabase
2. Attach and upgrade your SharePoint content database.	Mount-SPContentDatabase
3. Take ownership of the site collection you want to upgrade.	Set-SPSite
4. Migrate users from Windows Classic authentication to claims-based authentication. **Note**: This step is only required if your Project Server 2010 web application is using Classic Windows authentication, and your Project Server 2013 web application is using claims-based authentication.	(Get-SPWebApplication <SPWebAppPipeBind>).MigrateUsers($true)
5. Check your SharePoint site collection for issues that can cause upgrade to fail.	Test-SPSite
6. Upgrade your SharePoint site.	Upgrade-SPSite

2 PROJECT SERVER UPGRADE PHASE

The following occurs during the Project Server upgrade phase:

Step	Required Windows PowerShell cmdlet
1. Consolidate your Project Server 2010 databases to a Project Services database	Convertto-SPProjectDatabase
2. Attach your Project Services database to the web application.	Mount-SPProjectDatabase
3. Check your Project Services database for errors	Test-SPProjectDatabase
4. Upgrade your Project Services database	Upgrade-SPProjectDatabase
5. Connect your Project Web Instance	Mount-SPProjectWebInstance
6. Check your Project Web App instance for errors	Test-SPProjectWebInstance
7. Upgrade your Project Web Instance	Upgrade-SPProjectWebInstance
8. Enable PWA features	Enable-SPfeature

Microsoft Project Server

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