

# SharePoint Migration

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## Introduction

SHAREPOINT, ONE OF THE MAJOR RELEASES FROM MICROSOFT, HAS CREATED A LOT OF INTEREST AMONG THE BUSINESS USERS DUE TO A VAST NUMBER OF NEW FEATURES, CAPABILITIES AND IMPROVEMENT TO WEB CONTENT MANAGEMENT.

Various versions of SharePoint are used as critical document management repositories, customer extranets, knowledge bases, web content management sites, business reporting tools, and many other use cases. A recent research study conducted by Enterprise Strategy Group, commissioned by Metalogix, identified that 65% of large organizations believe that SharePoint will be one of their top five mission critical business applications in two years' time.

There have been many customers wanting to migrate to this new platform to leverage new offerings like enterprise social collaboration, mobility, and FAST server search. SharePoint migrations also present a good opportunity to restructure the content to provide better management and discoverability – yet there is always pressure to complete migrations as quickly as possible, regardless of potential feature and configuration incompatibilities between the source and destination systems.

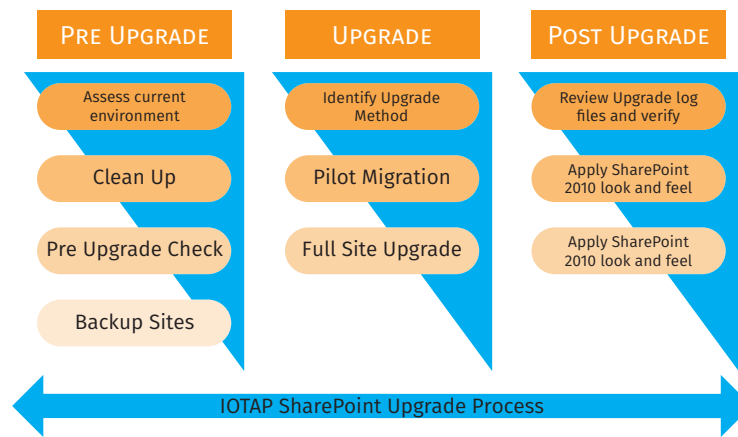


## Modes of Migration

Microsoft provides two different ways to migrate. The first mode is called In-place upgrade, and the other is known as Database Attach and upgrade.

### IN-PLACE UPGRADE

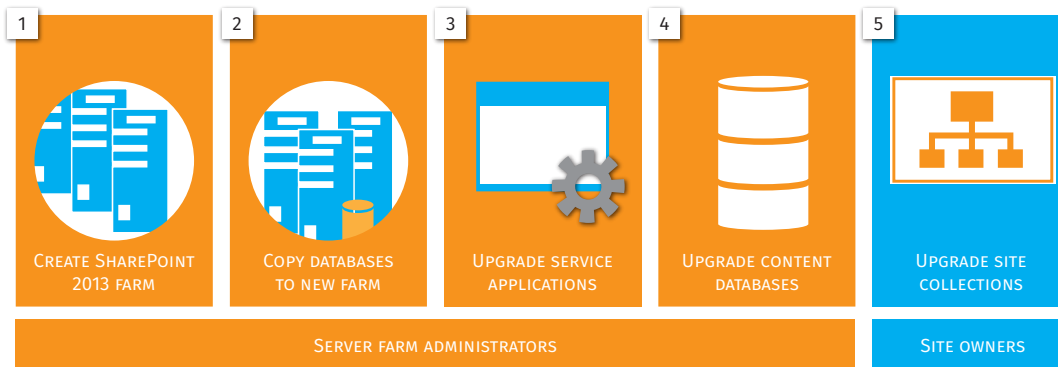
The In-place upgrade approach requires out-of-the-box tools available for upgrading SharePoint to newer version provided by Microsoft. However, In-place upgrade track has been completely ruled out from the latest version i.e.; SharePoint 2013 server. One can only use the Database Attach and Upgrade method to migrate from SharePoint 2010 to SharePoint 2013.



» Figure 6.1

### DATABASE ATTACH & UPGRADE

Database Attach & upgrade is the only method recommended by Microsoft to upgrade SharePoint from 2010 to 2013 version. The upgrade method involves several steps. First, a SharePoint 2013 farm is to be created, including web applications and service applications. Databases from the old 2010 farm must be copied to the new 2013 farm. The service applications must be upgraded. Next, any required custom solutions should be added and deployed to the new SharePoint 2013 farm. Content databases are then tested and mounted to their respective web application. Finally, applications should be tested and site collections should be upgraded.



» Figure 6.2

## Migrating from SP 2010 to SP 2013

AS DISCUSSED EARLIER, THE ONLY AVAILABLE OPTION FOR MIGRATING FROM SP 2010 TO SP 2013 IS USING THE 'DATABASE ATTACH & UPGRADE' METHOD. THE EARLIER METHOD OF IN-PLACE UPGRADE DOESN'T WORK FOR MIGRATIONS TO SHAREPOINT 2013.

### UPGRADE PREPARATIONS

Some preparations must be made before the actual migration. A clear idea of all farm solutions (Custom solutions) installed on SharePoint 2010 servers will be needed to take it to SharePoint 2013 farm. A plan for every custom or 3rd party package also needs to be in place along with checking their compatibility with the SharePoint 2013 environment. Any missing feature will be reported as such during the upgrade which can potentially cause issues. For each of those added solutions, an inventory of which site collection and web site uses which features will need to be recorded.

### WEB APPLICATIONS

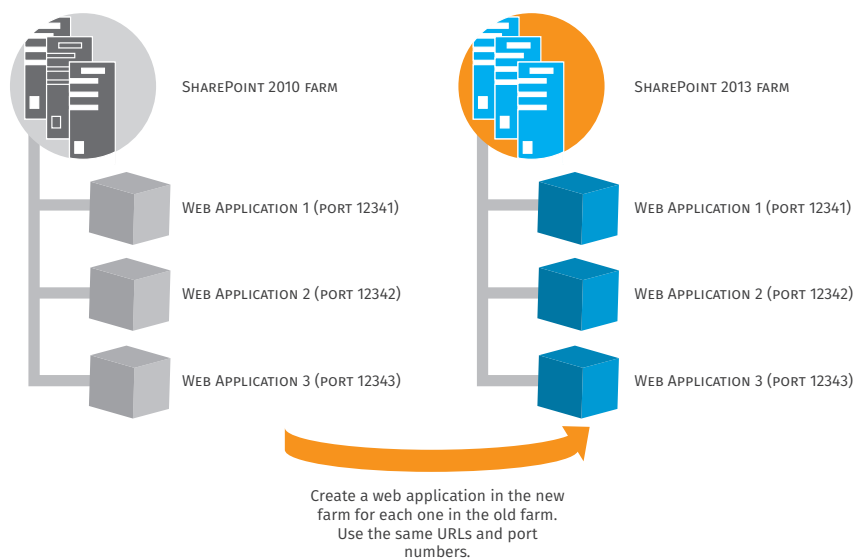
A list of all the web applications, those will be migrated, is listed along with particular notes of their authentication methods, "Any web app still in Classic mode will need to be upgraded to Claims on SharePoint 2013". Alternatively, this can be changed while it is still running on a 2010 farm, if it is safe doing so.

### UPGRADE PROCESS

#### CREATING SHAREPOINT 2013 FARM INCLUDING WEB APPLICATIONS, SERVICE APPLICATIONS:

Now for the actual upgrade process. In the first step, a new farm is set up and configured. The new farm is used to upgrade the data and sites, and becomes the farm that users will connect to going forward.

The system requirements and administrative accounts needed for SharePoint 2013 Products are then reviewed. All the necessary web applications and service applications which cannot be migrated with their configuration databases and configure the farm settings, are then created in the new farm.



# Migrating from SP 2010 to SP 2013

## UPGRADE PROCESS

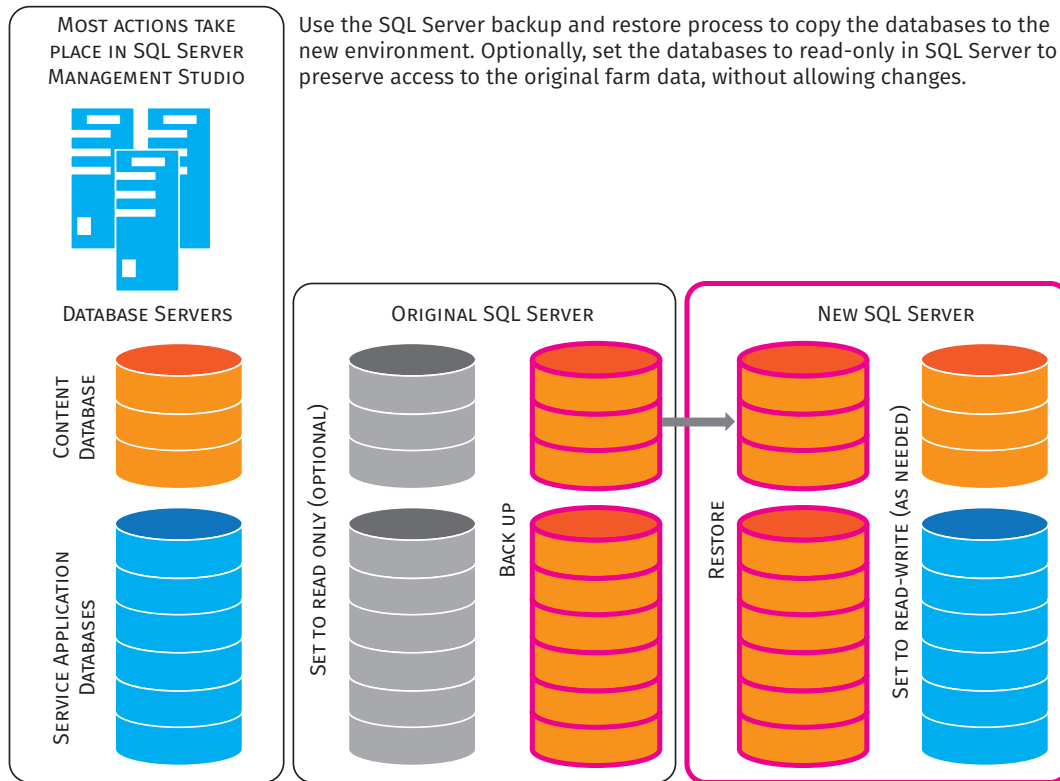
### COPYING DATABASES FROM THE OLD 2010 FARM TO THE NEW 2013 FARM:

All content databases on existing SharePoint 2010 farm are backed up using SQL Server Management Studio. For more information on backing up the DBs, the “Use SQL Server tools to back up a content database” section of back up a SharePoint 2010 content database can be referred to

All content databases backup from existing SharePoint 2010 farm are then restored to the database server of the SharePoint 2013 farm.

### UPGRADING SERVICE APPLICATIONS

Next, a server farm administrator configures the service applications for the new 2013 farm. There are some service applications that have databases which can be upgraded during this process. In SharePoint Server 2010 and SharePoint Foundation 2010, the Business Data Connectivity service application can be upgraded. For SharePoint Server 2010 only the Managed Metadata, PerformancePoint, Search, Secure Store, and User Profile service applications can be upgraded.

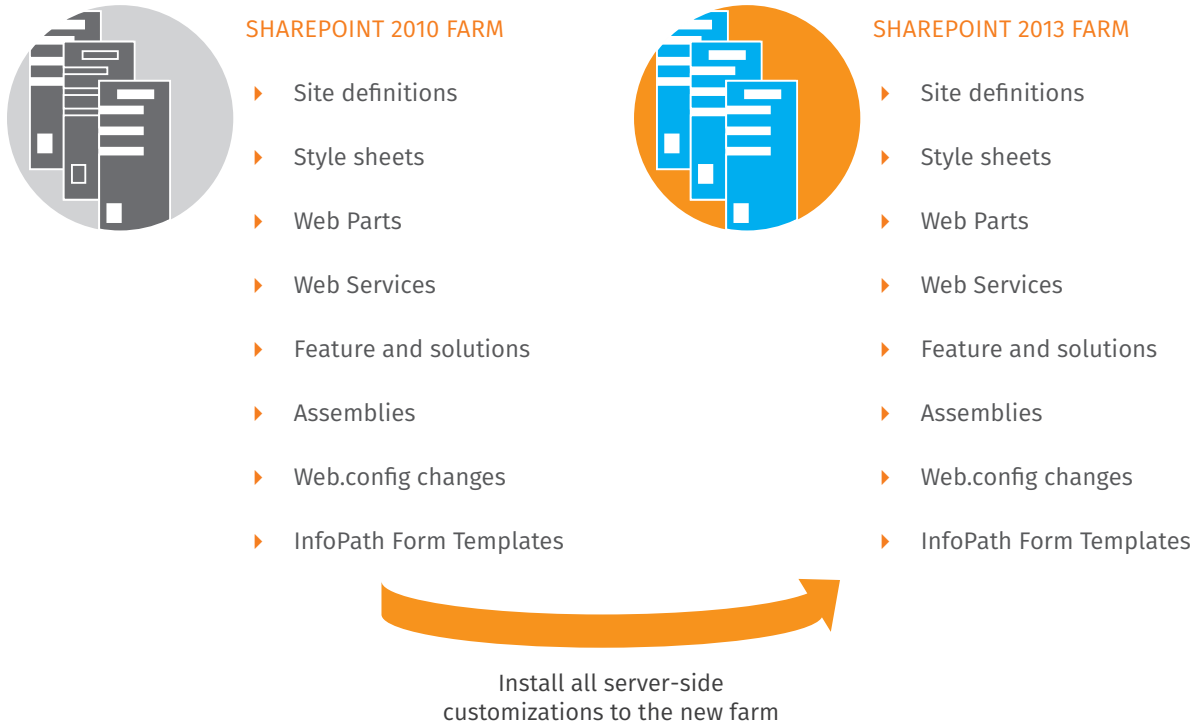


» Figure 6.4

## Migrating from SP 2010 to SP 2013

### ADDING AND DEPLOYING ANY REQUIRED CUSTOM SOLUTIONS ON THE NEW SHAREPOINT 2013 FARM

Next, install/deploy necessary custom solutions for the environment such as solution packages, custom site definitions, style sheets, Web Parts, Web services, features, solutions, assemblies, Web.config changes, form templates, and so on.



» Figure 6.5

### TESTING AND MOUNTING CONTENT DATABASES TO THEIR RESPECTIVE WEB APPLICATION

Now that the databases are available in the new farm, they can be attached and upgraded. Although this upgrades the data, it does not upgrade the user interface for the sites contained in the databases.





# Migrating from SP 2010 to SP 2013

## TESTING APPLICATIONS AND UPGRADING SITE COLLECTIONS

Each of the site collection in the web applications needs to be browsed individually to ensure they display content without any error.

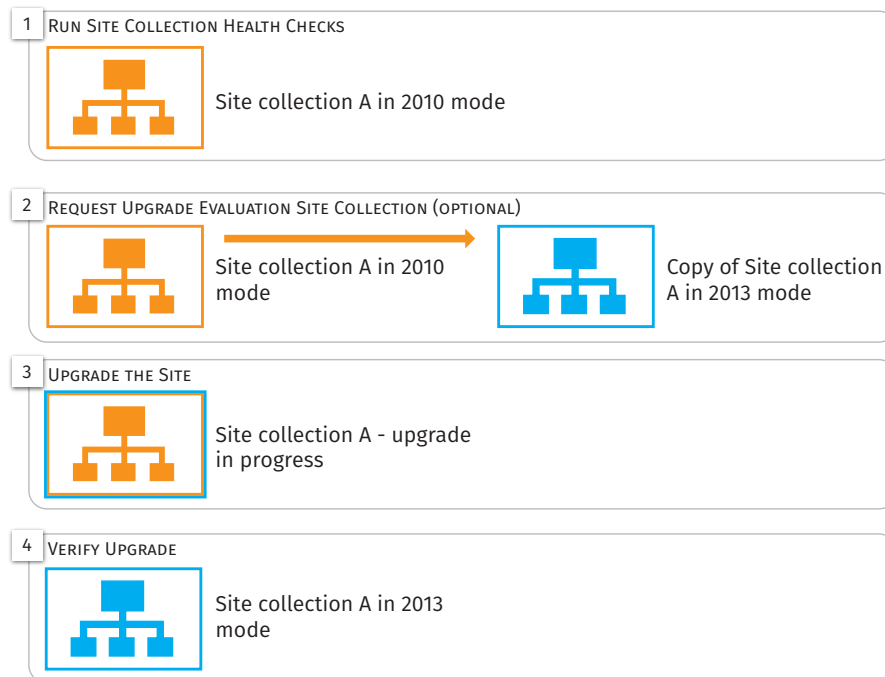
The final stage in the upgrade process is to upgrade the site collections. In SharePoint 2013, site owners are in charge of upgrading their sites. The upgrade process for My Sites is slightly different from for other types of site collections.

SharePoint offers 2 possibilities. The first is the PowerShell command to upgrade all Site Collections to 2013. The second option is the Deferred Site Collection Upgrade, where each Site Collection Administrator upgrades when he's ready.

In "Deferred Site Collection Upgrade", the Site Collection Administrator can request a preview of their site. This is called upgrade evaluation site collection. The site will placed in queue to be copied by a once per day timer job to a SharePoint 2013 mode Site Collection. In other words SharePoint creates a copy of the Site Collection into SharePoint 2013. This will be available for 30 days before another timer job deletes it. Of course the 30 days value can be changed as convenience demands.

The Site Collection Administrator can also choose to upgrade without looking at a preview. Owners of all other site collections can start to upgrade their sites as soon as they see a notification on their site's home page that the new version is available. The following illustration shows four stages for a site collection during the upgrade process.

## STAGES IN UPGRADING SITE COLLECTIONS



» Figure 6.6

## Third Party Migration

THIS DOCUMENT FOCUSES ONLY ON METHODS OF MIGRATION THAT ARE AVAILABLE USING TOOLS PROVIDED BY MICROSOFT TO UPGRADE SHAREPOINT SOLUTIONS. MANY OTHER OPTIONS ARE ALSO AVAILABLE FOR MIGRATION TO SP 2013 BY USING THIRD PARTY MIGRATION PRODUCTS.

### ADVANTAGES OF THIRD PARTY PRODUCTS

There are several advantages to using third party products. Popular products are built after a lot of research and may provide smooth migration. Third party products may also reduce time required for the whole process. Also, evaluation copies can be available for checking outcome early on. These products also have a granular level of migration. In addition, all metadata is retained. The same product may allow transfer of content from other legacy systems as well (like from MS exchange folders, network file shares, etc.)

### CHALLENGES USING THIRD PARTY PRODUCTS

However, there are also some challenges that come with using third party products. Obviously, the third party software will incur an extra cost. There is also a need of a separate server farm for migration. In addition, no support code upgrade is required.



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## About the author

Prashanth Jayanand is a SharePoint Consultant at CompuGain with more than 6 years of experience in SharePoint Solutions. He focuses primarily on administration and user experience and its relation to the SharePoint platform. He also works with SharePoint from a general end user and business analyst perspective, defining requirements and governance as needed. He has also worked on many SharePoint migrations to help business move quickly to the new platforms avoiding potential risks and incompatibilities.



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## About the editor

With an extensive background in technology and communications, Justin R. Schuback has been responsible for the design, development, and production of countless projects during the past 5 years with CompuGain. His technical aptitude coupled with an understanding of contemporary design makes Justin an indispensable asset at our organization.

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