

White Paper



The Infosys Approach

for MOSS 2007 to SharePoint 2010 Migration

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Abstract

Organizations seeking to upgrade their applications to derive greater business value are considering migrating from Microsoft Office SharePoint Server (MOSS) 2007 to its improved version - SharePoint 2010. SharePoint 2010 offers several new and improved features and dashboards that enable advanced migration of business applications such as rich media support, extended cross-browser support, synchronized offline support with online sites, developer support, improved user interface, and more.

Driven by the collaborative capabilities of SharePoint 2010, better user interface and document management, and integration with Single Sign-On (SSO) services, companies aiming to grow with the latest portal technologies can leverage SharePoint 2010's out-of-the-box (OOTB) benefits.

This paper provides an overview of the MOSS 2007 to SharePoint 2010 migration and highlights the Infosys approach. Leveraging a custom accelerator developed by the Infosys SharePoint practice, the approach enables a cost-effective, risk-managed and efficient migration to SharePoint 2010.

The Infosys SharePoint 2010 Migration Strategy

The process of online migration from Microsoft Office SharePoint Server (MOSS) 2007 to SharePoint 2010 involves several stages such as content migration, strategy planning, application analysis and learning, migration tool selection, etc. For a successful migration, it is necessary that the technological upgrades meet organizational business needs and goals.

The key business drivers for migrating to an improved technical platform such as SharePoint 2010 are:

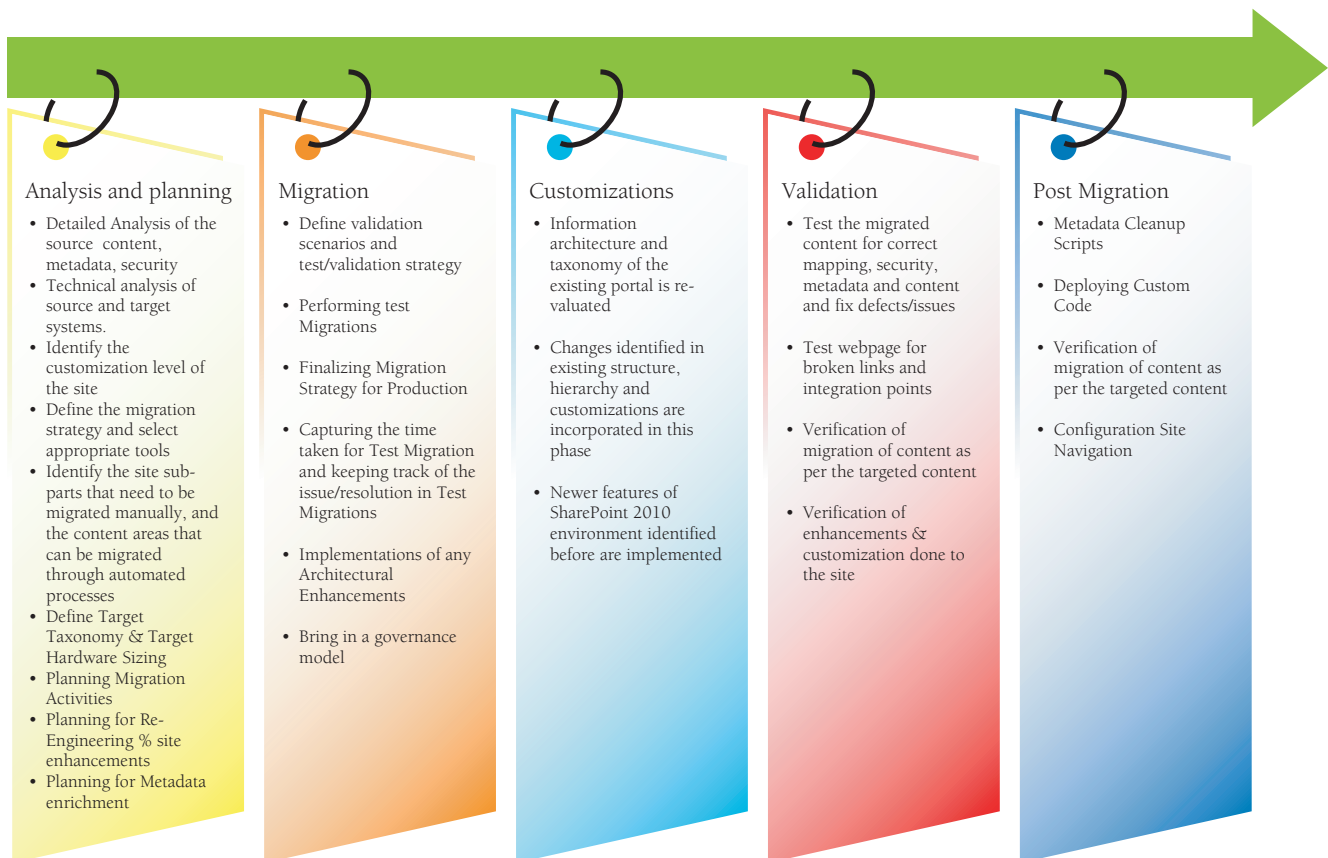
- Better collaboration and information-sharing capabilities within the group and among users
- Improved system scalability for more users and better collaboration
- Re-branding existing systems to meet business needs
- Easy integration with external services
- Better monitoring of the solution space

Companies seeking a successful migration must consider technical and business drivers while designing and implementing their migration strategy. Accordingly, the MOSS 2007 to SharePoint 2010 migration strategy requires a phased approach, which is illustrated and discussed in detail below.

The Infosys SharePoint 2010 Migration Approach

Infosys leverages a phased approach for migration that comprises five steps as illustrated in Figure 1. The approach is based on Infosys' extensive experience and deep domain knowledge, thereby ensuring a structured and successful migration.

Figure 1: Infosys' SharePoint 2010 Migration Approach



PHASE 1

Analysis and Planning

As shown in Figure 2, this first step analyses the scope of migration by assessing several tasks such as sites to be migrated, relevancy of web content and extent of customization. The migration plan is designed by identifying the various component tasks such as identification and estimations, and resource planning, among others. Each identified task is further analyzed for complexities, customizations and dependencies that are executed in the migration phase.

This phase also involves ideation, learning the existing application, mapping existing features to new SharePoint 2010 features, and defining strategies needed to replace existing features with new ones.

In situations where out-of-the-box (OOTB) features or complex requirements exist, a technical Proof of Concept is undertaken and a 'Decision Analysis Report' created.

Figure 2: Analysis and Planning

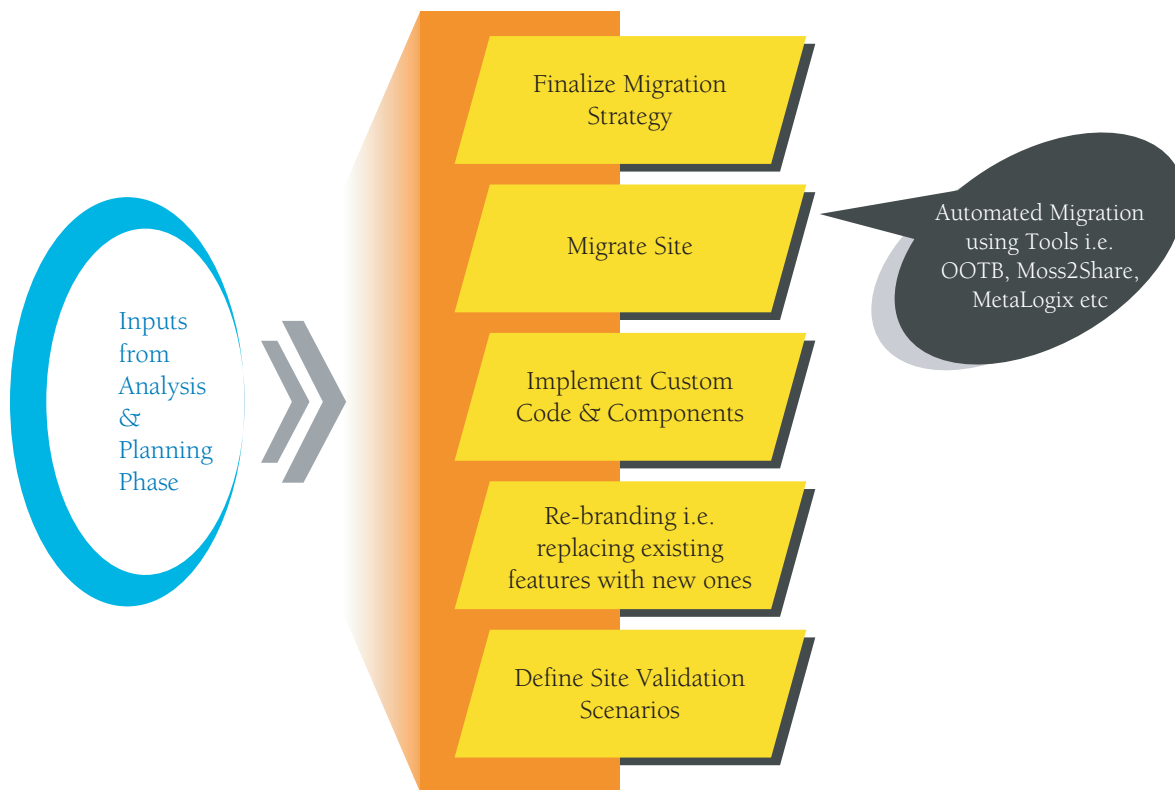


PHASE 2

Migration

During this phase, the migration plan defined in Phase 1 is executed - and the site is migrated from MOSS 2007 to SharePoint 2010. It involves defining validation scenarios, migrating and implementing custom code to support the migrated site, and any architectural/ metadata enhancements required as well as implementing OOTB features.

Figure 3: Migration



Migration - The SharePoint OOTB Way

SharePoint 2010 is equipped with an OOTB functionality to migrate MOSS 2007 sites to SharePoint by providing two major upgrade options:

- **In-Place Upgrade** - This is a basic upgrade option provided by Microsoft whereby the sites and server are upgraded simultaneously after which the 'SharePoint Products and Technologies Configuration Wizard' is run on the server that hosts the central administration website. Following this, the main up-grade/ migration begins where each Shared Service Provider and its settings are upgraded and converted into new service applications. This entire migration can be executed offline in a single and combined process.
- **Data Migration Upgrade** - The database migration upgrade is an isolated process that does not impact the existing 2007 applications and is executed on new servers, making it one of the safest migration approaches. However, custom components such as web parts, timer jobs, etc., require manual migration. Thus, limitations in this approach need to be evaluated before implementing it as a migration strategy.

Upon successful implementation, the above two approaches offer benefits such as:

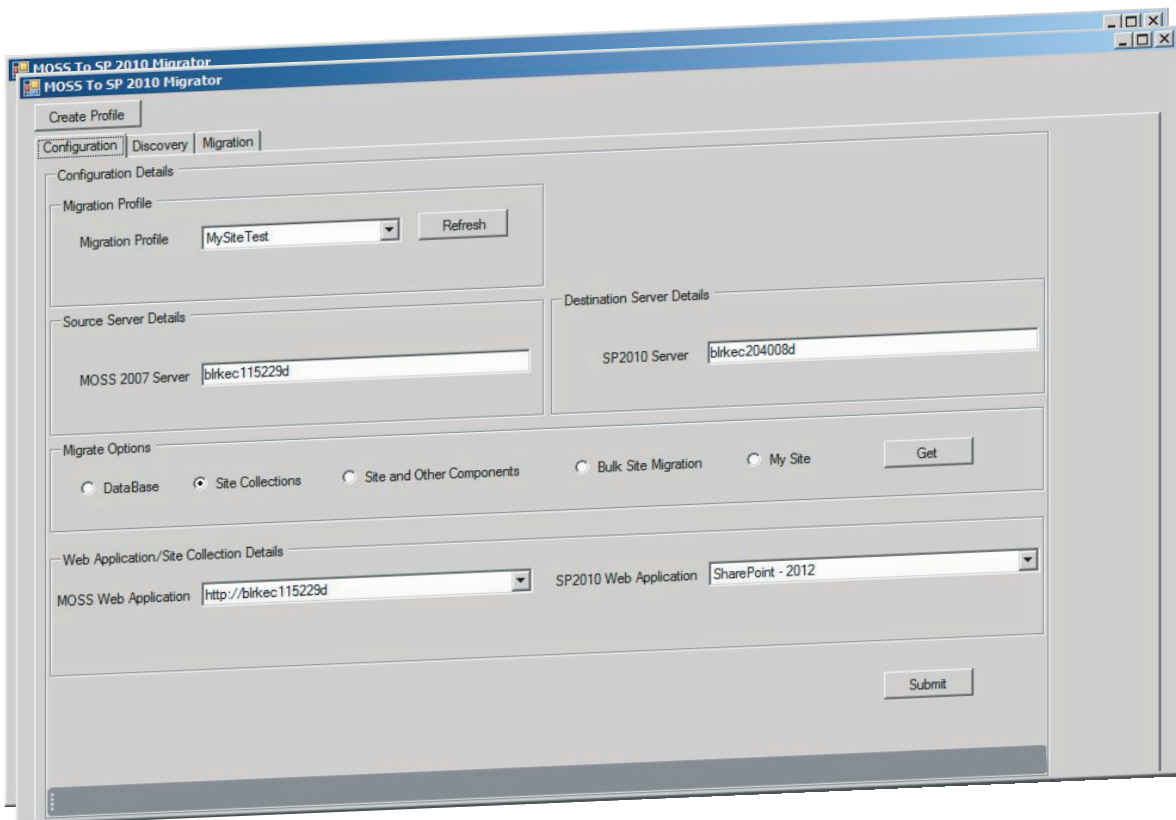
- Preserving and upgrading farm-wide settings
- Preserving prior customizations
- Migration of multiple content database
- Minimal downtime and faster upgrade time

However, to maximize value and address granular migration and content reorganization Infosys has developed MOSS2Share, a tool that enables successful migration of existing sites to SharePoint 2010 and restructures content on the migrated site.

MOSS2Share - The Infosys Approach to Migration

MOSS2Share provides several functionalities as shown in the screen shot in Figure 4. These include a visual user interface, granularity of migration till list-item level, ability to migrate versions of documents selectively, and migration of users and groups.

Figure 4: Infosys MOSS2Share Tool Screen Shot



MOSS2Share provides users with five options to migrate a web application:

- Database migration
- Site collections migration
- Site and other components migration
- Bulk site migration
- My Site migration

Further, the MOSS2Share migration tool has three components as specified below:

- **MOSS Agent:** A command line program that runs in the MOSS 2007 server, this component handles capture of data for migration from the MOSS 2007 server using exposed Application Program Interfaces (APIs) and requires .NET Framework 2.0.
- **SP 2010 Agent:** This is a set of Dynamic Link Library (DLL) code used to capture and add data to the SharePoint 2010 server as part of the migration process. Data access is reserved through the publicly exposed object model of SharePoint 2010. This component is based on Windows Communication Foundation (WCF) services hosted in the Internet Information Server (IIS) of any web-front-end server depending on the server to which the user wants to connect.
- **MOSS2Share Migration Graphic User Interface (GUI) Client:** This is a thick client application that can be installed in any user system provided the system can access both MOSS 2007 and SharePoint 2010 servers. All migration logic and user interactions can be handled by this client and all communication ports are configurable. This client requires an installed .NET Framework 3.5 on the client machine and Structured Query Language (SQL) server 2005 where profile databases for the users performing migration can be created.

Some key benefits of using MOSS2Share for migration are:

- Granular level of migration
- Migration of user profile with related content
- On-the-fly creation of sites, lists and columns
- Automation of database migration

PHASE 3

Customization

After successful migration to the new site is complete, the next phase involves implementing the enhancements and new requirements in the migrated application.

This phase involves implementation of the identified architectural changes and new features mapped to SharePoint 2010 in Phase 1 according to the defined strategy. Rebranding is done for those components that require replacement.

PHASE 4

Validation

The migrated, customized and enhanced site needs to be validated against validation scenarios defined in the analysis phase. This involves regression testing and system integration testing to ensure application integrity.

Despite the high industry standards of SharePoint OOTB approaches or MOSS2Share, organizations need to mitigate risks while migrating web applications and its components. Thus, it is recommended that all migrated applications are validated for integrity, coverage, scalability and business accomplishment before deploying to 'User Acceptance Testing' or production.

PHASE 5

Post-Migration Phase

At this stage, the migrated application is tested and validated for an industry-standard release against functional and non-functional parameters such as performance counters, security compliance, etc. The final phase involves removing testing or invalid metadata using metadata cleanup scripts and writing deployment scripts to deploy newly migrated web applications to the production servers. The migrated applications are validated on the User Acceptance Testing (UAT) or production environments and the new re-branded sites are published online while the 2007 sites are removed.

Conclusion

Web portal companies vying for high industry standards need to ensure their technological infrastructure meets their business requirements. Changing business scenarios and emerging collaboration requirements make it necessary for these companies to upgrade to the latest technology. SharePoint 2010 provides several benefits for companies with a large market presence to improve their business.

Infosys' experience in SharePoint enables it to help organizations migrate from MOSS2007 to SharePoint 2010 while leveraging the advantages of the new environment provided by SharePoint 2010.

Using a five-step approach, Infosys can leverage its vast knowledge and effective tools such as MOSS2Share to improve the migration process by providing granularity and restructuring capabilities. Developed by Infosys, the MOSS2Share tool enables a fast and cost-effective migration with greater predictability.

About the Author

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