

Definitive guide for SharePoint Migration



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Introduction

SharePoint has evolved as a true enterprise content management system and a collaborative platform in present era and is expanding its wings across multiple dimensions. Now we have SharePoint online, on-premises and even in cloud which is providing versatility and more organization friendly aspects to SharePoint.

SharePoint is improving itself and providing much better features with new releases. It becomes easy to use, fast, incredibly flexible and last but not the least have an impressive impact on your organization work culture. You can access your SharePoint anywhere and anytime, no longer tied to a single network or device due to Office365 and SharePoint online.



So now the question arises that when you are already using SharePoint then why don't you upgrade or migrate your organization platform to new advanced SharePoint environment. Answer is easy and simple yes and should, but organization do face many issues and errors when it comes to migration process. The migration process might seem daunting at first, but, by planning in advance and following a well-defined process, you can ensure that the migration is carried out effectively and efficiently.

We at [Saketa](#) have changed the way customers look at SharePoint as a platform with our next generation thoughts and ideas. Our team consists of SharePoint, Office 365, and Azure Architects and experts with more than 15 years of experience at an average in the industry. As a leading Microsoft Gold partner, our team is amongst the most qualified, technically competent, and certified set of individuals you could potentially find in an organization of our size. So in this eBook we have given our expertise inputs through which you can come to know about the entire migration process it's planning, execution and implementation.



Evaluate



Plan



Implement

We have covered how you can plan for your migration and talk about the industry best practices in the migration game. Migration process is divided into an approach named as “EPI approach”. EPI stands for Evaluation, plan and implementation. In each phase, we have tried to touch upon the different frameworks and approaches one can use for a smooth migration and discussed a detailed roadmap of 6 steps which will help you in completing your migration process in an effective way. Our experts have discussed and presented checklists which you can follow before and during each step of migration and enjoy a hassle free migration. We have discussed migration with help of third party tools also in detail enlisting their advantages and disadvantages.

After going through this E-Book, you will be better informed about how to lead a smooth and successful migration. So let’s have a detailed read about migration process in below sections starting from EPI migration or approach.

EPI Migration Process

The migration process comprises 3 main stages. We call this the EPI process, that is, the Evaluate-Plan-Implement process. If the tasks in these stages are executed well, then your migration will be successful with minimum risks and maximum benefits.

Evaluate

For a successful execution of any process “Evaluation of the system & its environment” is necessary, Migration is no different and hence assessing the complexity of the environment and its use cases is essential. For SharePoint Migration a more common evaluation process follows below

- Assessing the inventory of the existing SharePoint Farm
- Auditing & Defining Access Roles, Privileges & Control Policies
- Tracing of Site Topology and its Relations
- Indexing of performance & Scalability of the Farm
- Plan for Search
- Governance plan
- Validation of Existing constraints & end User requirements



Assess the inventory of the existing SharePoint Farm

The first step here is to build an inventory of what you have. This step is really important because, before actually going ahead with a migration, you need to know the components that you have to migrate and plan for any additional effort later. If you are migrating from an existing On-Premises or Hosted SharePoint, then you will need to keep an inventory of certain items.

At farm level, this could mean understanding the server topology and services, and at site level, this would mean taking stock of the custom web parts, features, workflows and templates. At content level, you might want to note down the volume, versions and permissions granted. The level of detail is up to you, but the more details you have, the simpler and better the migration will be.



Assessment

Perform pre-migration assessments to avoid and then migrate with high fidelity.

To build an inventory, you can either purchase third party products that will do this or build it yourself. You must be extra careful when building your inventory from File Shares. While building your own inventory from File Shares, it is important to be able to identify duplicated items, as it is the most common issue we see in File Shares. Depending on your future Architecture in SharePoint Online and your type of migration, you may or may not need to spend too much time building an inventory of your File Share.

List the Users, User Groups and Application level permission

Make a note of the users and user groups in your environment. This will ensure that no one is missed out during the migration. It is also a good idea to make a note of the permissions that each application entrusts its users with.

Tracing the site topology and its relation

The graphical representation of the SharePoint site structure is essential for the understanding and maintainability. The migration of a site between different SharePoint instances is often a very complex task. Using a graphical model, the same structure can be generated very easily in different sites. Have a clean understanding of the site structure, and the various columns, views, folders, lookups and content types that will have to be migrated. It is also imperative that there is an understanding of the relationships between various components in the structure.

Indexing of performance & scalability

It is also extremely important to note parameters like page load latency and the amount of data needed to be migrated. This will tell you how efficient your current setup is, and could also assist in further tweaking the structure of the site to which in turn optimizes the performance and make the overall site more efficient..

Plan for Search

This relates to how efficient the search is in the current setup, and how much data this search usually works on. This will help refine the search in the new environment, and enable it to get more relevant content faster.

Governance Plan

According to Microsoft's sample governance plan:

BB The SharePoint Governance Plan is a guidebook outlining the administration, maintenance, and support of X Corporation's SharePoint environments. It identifies lines of ownership for both business and technical teams, defining who is responsible for what areas of the system. Furthermore, it establishes rules for appropriate usage of the SharePoint environments. QQ

The creation of an effective governance strategy begins with an analysis of your business. Take the time to understand your business processes and workflows by asking questions such as these:

- How does the business process work?
- What does the process seek to accomplish?
- What is the history behind the process or workflow?
- How does this process plug in to SharePoint (if at all)?

These questions should be answered not only when you first move to SharePoint but also before any and every migration. Develop a migration governance plan and [clean up before you migrate](#). When you analyze your current farm, you will, in all probability, discover a lot of information that does not need to be migrated. At this point, usually, a couple of questions pop up.

- How will you decide what content should be removed prior to migration?
- How will you inform the users about these guidelines?

Migration governance plan might be the answer. It sets rules for the migration before it takes place. If you migrate everything without a thorough analysis, you might discover later that you have wasted valuable time and effort migrating things that are unnecessary. It is highly recommended that you clean your farm and consolidate your content prior to migration. This can simplify the migration and reduce project costs and ensure that timelines are met. Perhaps just as important, if not more, this step will make your target environment cleaner and compliant from a governance perspective.

Validating existing Constraints and end-user expectations

It is very important to analyze the constraints that come with each version of SharePoint. It is highly recommended to make a note of all the deprecated features in the new versions, and make the migration plan for those entities separately. You must inform the end user of any limitations in the new version and any changes that have been made to the architecture, before migrating to the new environment.

Plan

Planning is the most critical part of Migration. Chances of risks and mistakes in the migration process is high due to the limitations of out-of-the-box approaches and other aspects like content, database, farm architecture, security configurations and permissions, so an effective strategy is of utmost importance. Effective planning includes, defining the scope, project plan usage with timelines and tasks assigned to the employees i.e. delegating the responsibility.

Set the Goals

It is perfectly understandable that migration goals vary from organization to organization. However, there are few goals which are common and need to be completed, prior to migration process. These are listed below:

- Understand and evaluate the requirements by consulting all stakeholders including IT and business teams, to ensure that the migration process is in sync.
- Engage with various stakeholders throughout the organization to obtain a comprehensive understanding of the purpose of purchasing/upgrading SharePoint.
- Prepare a checklist to ensure smooth and scheduled migration without flaws and problems. Extensive analysis is a must. At minimum, the following should be taken care of.
 - ✓ Ensure a detailed and clear vision of purpose, collaboration, policies, architecture, customization and so on for new platform.
 - ✓ Identify and take inventory of all legacy content, repositories and applications.
 - ✓ Identify which team/business units are ready to migrate.
 - ✓ Prioritize and classify all content and applications.
 - ✓ Properly tag content with its metadata, business unit and other relevant info.
 - ✓ Archive and delete redundant and legacy data.



- Review, edit and document multiple key areas such as, SharePoint permissions, users, features, customizations, and integrations with other systems.
- Concept of “Garbage IN “and “Garbage Out “must be considered to identify critical document stores and audit access to that content so that the security model can be carried forward into SharePoint farm.
- Assess and understand existing content and content which needs to be migrated with detailed knowledge about locations such as, file share, exchange public holders, Legacy ECM systems, and so on. There are a few questions you can ask. The answers to these will help you in assessing your source environment better



The best way of ensuring an error-free migration is to perform a thorough planning stage before you begin.

- ✓ How much information do you have?
- ✓ How much is old or ready for archival?
- ✓ How much is the existing SharePoint content?
- ✓ How much is from the legacy content systems that you want to decommission?
- ✓ How do you assess my existing content to understand its value, risk, and information management requirements prior to migration?
- ✓ How do you search for documents?
- ✓ How is security handled?

- Review, edit and document multiple key areas such as, SharePoint permissions, users, features, customizations, and integrations with other systems.
- Concept of “Garbage IN “and “Garbage Out “must be considered to identify critical document stores and audit access to that content so that the security model can be carried forward into SharePoint farm.
- Identify and evaluate multiple data types and regulations which govern them for the creation of strong information architecture.
- Develop and review your governance plan as per your organization needs. Governance plan depends on multiple factors but you need to prioritize which factors are important for your organization.
- Create a clear, precise and structured workflow to define flow of documents from user to user based on access permissions and authorizations.

Refine the Information Architecture

Information architecture encircles multiple key areas such as, taxonomy, features, permissions, customizations and integrations with other system. These features are important as compatibility plays a major role in migration and so you need to document how each of these considerations can be taken care during the project. Information architecture should have a structured detailed information about these areas along with key contacts related with each area.

With new advancements in SharePoint it is now possible to develop a sophisticated information architecture in SharePoint 2013 and 2016. For example: instead of relying on SharePoint folders for organization, now you have the option of metadata filtering in new versions of SharePoint. Metadata filtering does not suffer from the limitations of the folder approach, which is simplistic, not scalable, and not flexible enough to be able to categorize content in different ways.

SharePoint taxonomy holds an important position in migration. To simplify organization of taxonomy, newer versions of SharePoint have a central store for taxonomy terms which was unavailable in previous versions. In an article on TechNet, the author writes,

BB Planning how to get taxonomy information properly added to documents that are migrated to SharePoint is only half of the battle—getting the information architecture to be properly used and data to be tagged according to the information governance policy of your organization is critical as well. QQ

It is pivotal for organizations to consider the process under which their information can benefit. They should plan their migration in a way that is most efficient and productive, while minimizing cost and time taken. Additionally, post migration, the user adoption rate should be good, and the user should be able to get required information easily from the given data.

Another important point to consider in SharePoint migrations is Content Management, which primarily deals with features and permissions. Content Management refers to document sets which allow users to define relationships between documents. Therefore, when undertaking a migration, do consider which content should be migrated into sites or lists using the new functionality provided by the latest version.

In information architecture, there are two other components that are important. These are customizations and integrations. Unlike custom templates, customizations are not very common in SharePoint. However, you will still need to consider it, especially if they are being used in the existing platform. Customizations can be seen as a part of a document workflow process or as a method of displaying critical data in specific way in the present platform. Due to the aforementioned reasons, estimation and an understanding of customization in present platform are crucial in planning phase. Customization is important even when you want specific content of existing platform like ECM systems to be present in migrated content.

Other aspect is integrations. Integration of SharePoint with other systems vary from one to other. For example, you find MOSS Business data catalog (BDC) feature in use in existing MOSS 2007 farms, however this feature is outmoded by SharePoint business connectivity services (BCS) in SharePoint 2010. BDC provides only read only service whereas BCS provides both read and write services. So organization can read and write the existed data, manipulate it and can display it within SharePoint. Other means do exist for integrations, but one point which is important is that you should define these steps in early phases to avoid hassles in later phases of the project.

Define Governance Plan

Governance plan acts like a guide for organizations and helps them describe administration, maintenance, and support of their corporation's SharePoint environments. But prior to governance plan development, one needs to analyze their current business requirements, workflows and processes & [the results of having good Governance plans](#) will boost your Business Performance.

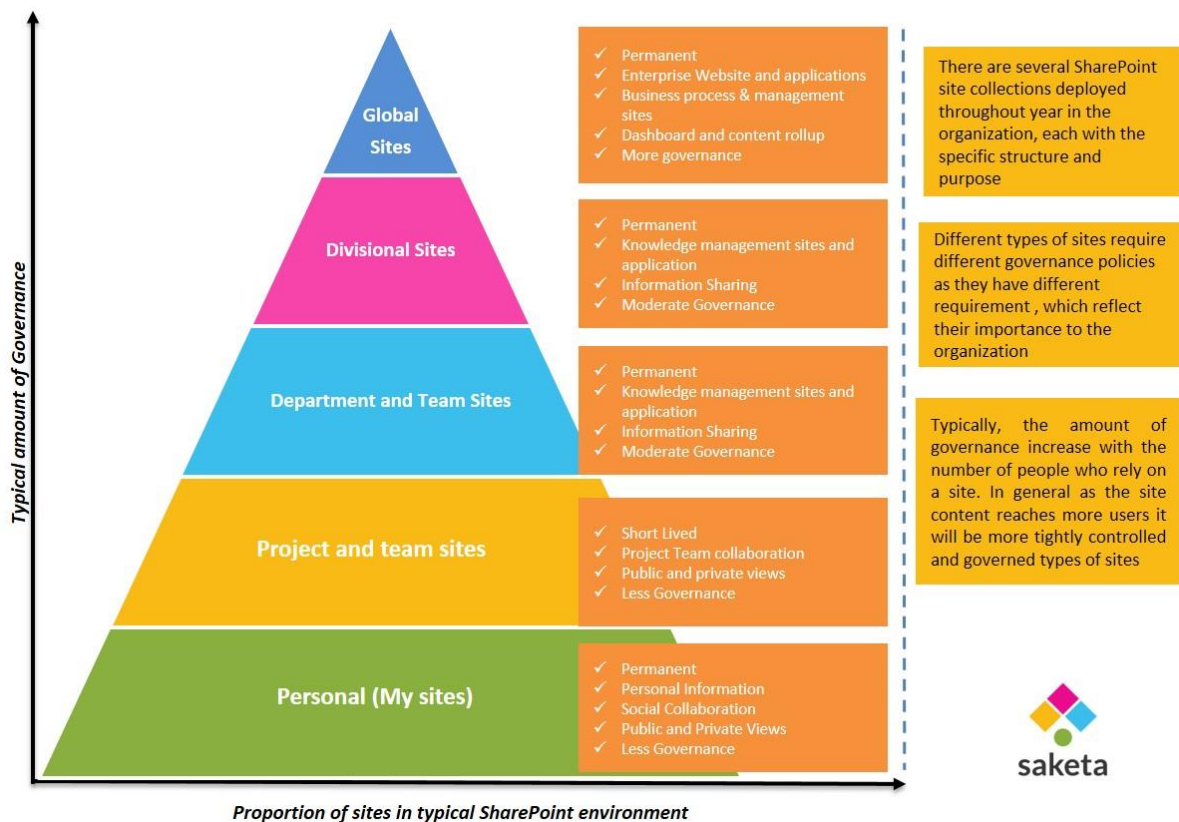
Creation of Governance committee

After analyzing your business process, the second step is the creation of Governance committee. Governance committee comprises of both IT and business professionals who are experts in their areas. This committee is responsible for approval of policies and decisions to be included in the Governance plan. But the most important point to remember while creating governance committee is, to create the roles the organization needs for SharePoint, not just for existing SharePoint team.

Assigning roles and responsibilities

Once governance committee is created, assign roles and responsibilities to individual person. Roles which are a part of Governance committee include server farm administrator, taxonomist, governance compliance officer, user help desk, development team leader, developer or analyst, site designer, site owner, trainer and multiple operation lead (Admin, Content database, Central admin, and so on).

Level of Governance across sites



One needs to define their responsibilities along with names in a detailed way to be precise and clear.

<i>Role</i>	<i>Responsibility</i>
Product Management	Product Management articulates a vision for the service and compiles requirements. This person or team is part of the project team and represents (or defends) end-user interests throughout the project. This role is not necessarily technical.
Program Management	Program Management drives the critical decisions necessary to release the right service at the right time, and coordinates the decision-making process in order to deliver the service in a manner consistent with organizational standards and interoperability goals. This person or team takes a technical role in the products and also coordinates the day-to-day activities of the rollout, providing technical guidance to the team and reporting progress to the Executive Sponsor, a high-level manager who might not necessarily be part of the team. The individual or team comprising Program Management is typically involved full-time and should have project management experience.
Development	Development builds or implements a system that is fully compliant with the Functional Specification. This person or team has several responsibilities in a Web server migration project: <ul style="list-style-type: none"> + Developing and designing the system services and base configuration of the system + Creating profiles, system policies, and the overall system user interface + Designing, testing, implementing, and supporting the system + Selecting, evaluating, migrating, implementing, and supporting Web applications
Test	Test exercises the user interface, applications, and integration of new software into existing systems, ensuring that all issues are known before the release of the service. The test person or team is responsible for developing procedures and guidelines for testing and evaluating all applications in conjunction with new hardware and software systems. This role is responsible for writing the test suites and ensuring project goals have been met.
Logistics	Logistics ensures a smooth rollout, installation, and migration of the system to the operations and support groups. This person or role is responsible for planning the deployment of technology.

<i>Role</i>	<i>Responsibility</i>
User Education	User Education improves the user experience through training and support systems. This person or team is responsible for ensuring that the user education process and documents are completed, including all documentation relative to this installation. This role also creates a knowledge base for support and evaluates the various options, before selecting the best ones for training and education programs.
Executive Sponsor	This is a high-level management official (at the Director, Vice President, or Corporate Information Officer level) who has a great deal of authority and who can support your efforts by providing assistance throughout the project. This individual will not be involved full-time. The Executive Sponsor is not necessarily a team member, but serves as an "external influence" on the team.

Governance committee make decisions on features in the roadmap of migration, evaluate goals and objectives, decide and define responsibilities and also produce multiple reports at various phases of migration. Proper development and implementation of governance plans helps IT in managing SharePoint environment and keeping it away from getting out of control.

Governance plan include reports on entire information architecture and is then involved as a deciding authority related to site owners, responsibilities and permissions associated with them, levels of user and their access permissions, which application to be migrated and in which form (complete or in parts), how migration will proceed, and so on.

Do's and Don'ts

Governance plan also includes a section which define the do's and don'ts based on permissions and roles within an organization. For example, usage of a plugin or tool in particular site, access of particular site like who can access it, read it, modify it or delete it. Security related services like password (Password length and expiration period, Logon policies and auditing, Intruder prevention processes, Ownership/responsibility for user accounts, Methods for key encryption). All specific details about permissions, access, and rights are defined in this section. Also defines Netiquette which refers to guidelines for appropriate network and e-mail use.

Process Flow

Process flow refers to flow of multiple documents or authorities from one level to other to process any request. For example: How and through whom a request from a department should go forward for processing. Multiple process flows across organization which needs to be followed strictly are described and structured in process flow of governance plan. For any modification, a request should be made and then the concerned committee needs to work on it.

Best practices for a successful development of Governance plan



Implementing Governance

A well implemented and practiced governance plan will contribute to increasing organizational efficiency and drive higher user adoption.

- Avoid heavy custom coding as it causes difficulty in migration process
- Select an environment which promotes cross-team and project-based collaboration
- Consider user expectations but do keep technical constraints at the back of your mind
- Perform complete assessment of your information architecture
- Clean up your consolidated content and farm to reduce migration costs and timelines
- Do understand SharePoint technicalities and operational procedures in detail prior to migration process.

Decide Upgrade/Migration Strategy

After successful completion of refining and deciding governance plan, organization do have a list of all their requirements, current architecture, information involved and so on. Now the question arises of the strategy which one can follow to have successful migration process. There are two strategies for same, one is Migration and other is upgrade. In easy words you can say that in migration one opts for restructuring the entire architecture with new features, thresholds and functionalities whereas when one performs upgrade to configure new platform with same logical architecture of the system. An upgrade involves using natively available tools from Microsoft, while a migration requires the use of a tool from a third-party vendor.

To decide the strategy (Migration or upgrade), organization needs to assess various parameters of their current architecture and environment. Few of them are as followed:

- Complete application inventory with key highlights such as list of all SharePoint farms, servers, services running on server, list of users, groups and application level permissions, inventory of web applications and custom solutions.
- Complete evaluation of size and complexity of applications including workflows, custom search apps, integration with external systems, custom solutions like web parts and so on.

To simplify your search process for selection of strategy, we have developed a comparison list which will provide you a detailed view. However, the first point which one needs to be assessed is to determine the business objective for the SharePoint versions deployment.



Ideal Conditions when you should go for Upgradation

- When existing environment is SharePoint 2007 or higher.
- When customization within SharePoint is lower and current environment is stable in your organization.
- Taxonomy is detailed, uniform and well-formed.
- When you want to upgrade from feature to feature not involving entire application.
- Architecture of site collections and content database is structured and stable.
- When you want to shift to new versions of SharePoint, may be from 2010 to 2013, 2013 to 2016.
- When you require faster turn around and less upfront business analysis.
- Content is distributed uniformly and folder structure is not shallow.

Ideal Conditions when you should go for Migration

- Your existing depository or environment is not SharePoint.
- Taxonomy and architecture is not stable and need complete redefining.
- You have a total overhaul unstable environment.
- Content is distributed improperly and folder structures are shallow.
- Performance issues are high and you want to improve your content database performance.
- When you require a modern portal and had a good period of time in hand.

Upgradation

One of the **best examples** which explains where we need upgradation strategy is when you are currently working on SharePoint 2013 version but your organization wishes to launch enterprise content management and application development initiatives in better way. Then you need to opt for upgradation to SharePoint 2016. [Before migration - make sure you fulfill the checklist to avoid pitfalls.](#)

SharePoint provides two approaches for upgradation strategy. Lets' discuss each approach, its process, benefits, challenges in detail.

In-Place Upgrade

In-place upgrade approach provided by Microsoft is a method to upgrade an individual server with all its contents to advanced version of SharePoint in place.

BB You upgrade the Reporting Services components on the servers and instances where they are currently installed. This is commonly called an “in place” upgrade. In-place upgrade is not supported from one mode of Reporting Services server to another. For example, you cannot upgrade a Native Mode report server to a SharePoint mode report server. You can migrate your report items from one mode to another. QQ

This process upgrades SharePoint version and all site content on the server at the same time

Advantages of In-place upgrade

- It has shortest migration time as all data is upgraded at the same time.
- Any additional server hardware is not required.
- However, in-place upgrade approach is not a preferred approach due to multiple shortcomings as mentioned below.
- There is no fall back strategy if any issues come up in in-place migration leading to high level of risks. During the entire process, environment is completely down.
- Can be used only to migrate from WSS 3.0 to SharePoint Foundation or from MOSS 2007 to SharePoint Server 2010. No older versions are supported. This indirectly means that SharePoint 2003 content and portal server cannot be directly migrated to SharePoint 2010.
- If any issues such as power failure and running out of disk come up and process gets interrupted, then the environment could be left in an unstable and unsupported state.



For in-place migration, minimum software requirements are as follows:

- Windows Server 2008 x64 or Windows Server 2008 R2 Operating System.
- Database running on either SQL Server 2005 x64 SP3 w/CU3 or SQL Server 2008 x64 SP1 w/CU2.

Note: It cannot be running on a 32-bit SQL Server. SharePoint 2010 only supports 64-bit hardware.

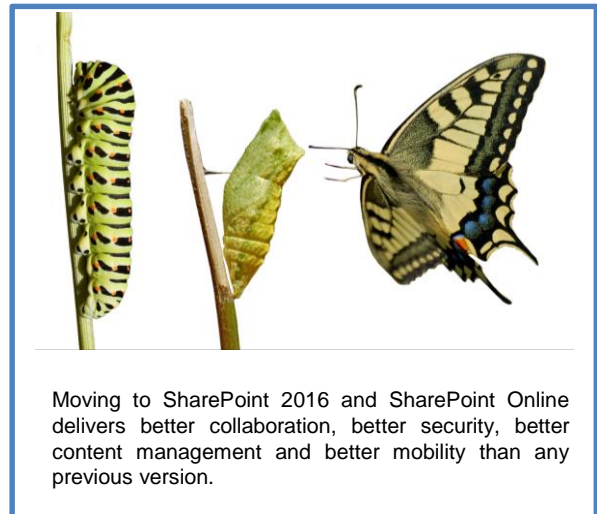
If, after the upgrade, site functionality is undesirable, there is no way to return to the pre-upgrade state except via a complete restore of the farm.

Migration

Migration is the best option to go with if your information architecture is not structured and current environment is not at all stable. However, in case of migration SharePoint doesn't provide the facility of back up in case of any failures, so going for migration with the help of third party tools is most effective and economic.

Migration can be performed in three ways:

1. Manual Migration
2. Scripted Migration
3. Migration through third party tools



1. Manual Migration

Manual migration involves installation of new SharePoint version (2013 or 2016) on separate hardware, configuring new farm and then manually moving content from one environment to other. Power users, site owners, administrators and many others are part of this manual content migration process.

On the one hand, it requires huge amount of time; on the other hand, an extensive training to migrate and maintain both environments, otherwise it may create frustration and confusion among users leading to the delay in migration process. Files are usually migrated one by one and subsequently previous versions, audit history, metadata, and permissions are lost.

Ideal situations for manual Migration

- Migrating content from a non- SharePoint platform (Lotus Notes, Documentum).
- Environments from where very low content is to be migrated.

Advantages of Manual Migration

- Easy data selection is possible during migration process.
- Legacy environment is retained.
- Virtually no downtime, requiring user switch to new environment.

Challenges faced in Manual Migration

- Process is manual so labor intensive and time consuming.
- No backups of prior versions, audit history, item metadata, or unique permissions.
- Requires motivated users and intensive training sessions.
- Requires new server farm and additional SQL Server storage space for new content.

2. Scripted Migration

Scripted migration is an automated method for migration. It is done with the help of scripts written by developers. As SharePoint has rich Application Programming Interfaces (APIs) and PowerShell cmdlets, scripted migration is a very robust option. Depending on the legacy source system, the custom script may also integrate with that system to ensure a more nearly complete migration while preserving configuration and content metadata.

It's a powerful technique but requires highly skilled SharePoint developers. As code is written by one and is custom, it requires high degree of testing to ensure that migration results are up to users and organizational expectations.

Ideal situations for scripted migration

- Environment is highly customized and very precise information is to be migrated.
- Situation where manual and third party tool migration is not feasible.

Advantages of Scripted Migration

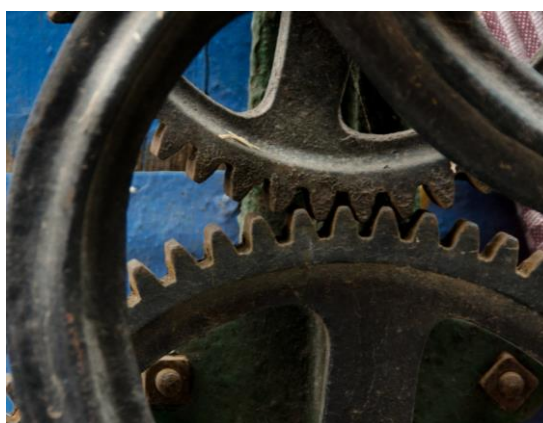
- Flexible in nature.
- Fully automated version can be developed and used.
- Legacy environment can be retained easily.
- Virtually no downtime required.

Challenges faced in Scripted Migration

- Manual coding is required so time required is high around 8 to 9 months.
- Does not preserve prior versions, audit history, item metadata, or unique permissions.
- Requires additional steps to retain original URLs.
- Requires new server farm and additional SQL Server storage space for new content.

3. Migration through third party tools

Manual migration and scripted migration are good as per the requirement but do have certain pitfalls which lead to the development of third party tools for migration. Few pitfalls are building a new farm and migrating a bit of content every time, high level of trainings, enabling your source and target farm to co-exist during migration and testing, restructuring sites into desired architecture on the destination farm and so on. An analytics tool is advantageous in order to thoroughly assess the environment before these other migration tools take over.



However, with the development of new multiple tools, you need to evaluate the tools and their specifications and then match them with your requirement. There are many challenges in migrating heavy custom-built applications using these tools. A test migration run with each shortlisted tool is recommended to evaluate the various tools being offered.

It is a good idea to assess and take stock of your SharePoint Application Inventory to know your SharePoint Application landscape and Application Inventory. This Tool based Assessment gives various information on the SharePoint Application like SharePoint OOB template used, number of web applications, site collections, sites, sub sites, lists, web parts etc. Most of the Migration Tool vendors have their own Application Assessment Tools to evaluate and recommend the approach.

Pre-Implementation Checklist

By pre-implementation checklist, we here mean the checkpoints which every organization should consider and clear before starting any migration process. In pre-implementation phase, multiple aspects need to be checked which can be categorized under below headings

Content related and Data Externalization



- Check Storage quota- Remove all unwanted, unstructured and useless files and documents from content base.
 - Identify and analyze average size of files, total number of files and their total storage size.
 - Determine document load rates and year-over-year load rate changes.
 - Create jobs/logic to split apart large content databases and site collections to move back within Microsoft stated limitations and reconsider site structure/taxonomy as necessary for business units.
- Leverage SharePoint's data externalization as a part of your cleanup strategy. Transfer large and unused data from SQL server content database to other repositories and for finding out these large data we can make use of content assessment tools.
 - Prepare a matrix describing in detail about the resources consuming space on your current SharePoint environment.
 - Analyze and ensure that there is sufficient storage architecture.

Hardware, software and database related

- Do familiarize yourself with new SharePoint features, process, hardware and software specifications.
- Do pursue MSDN and Microsoft Knowledge base upgrade articles to plan your migration and look at all pitfalls and challenges in the process.
- Run the read-only pre upgrader checker to find possible points of failure and run PowerShell – custom components to find customizations, install all custom components in the target environment.
- Keep an eye on CPU utilization, memory usage (available RAM vs Paged RAM,) available disk space, and disk I/O.

Server related

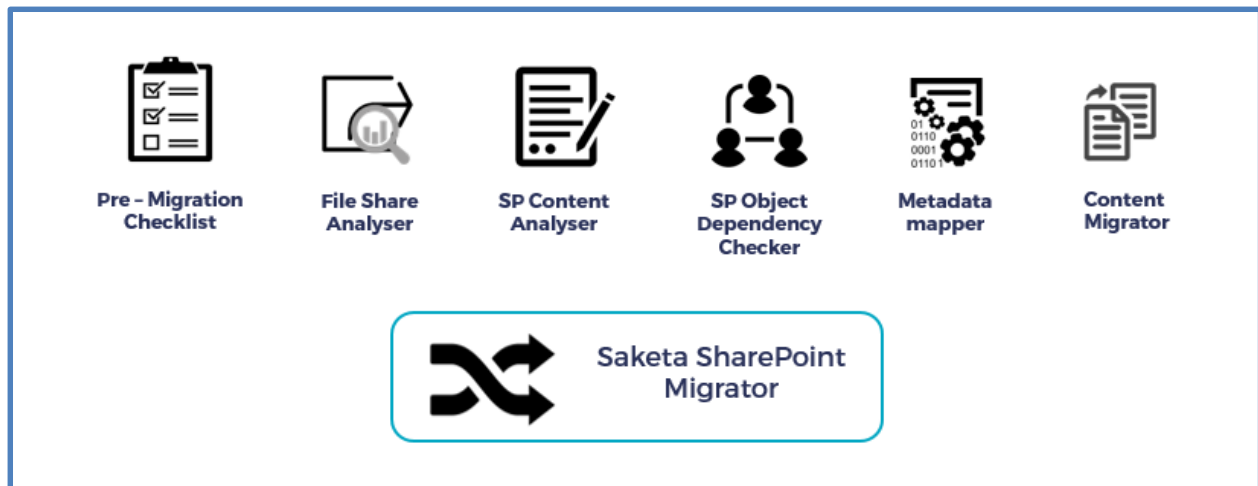
- Please do configure the following in your new upgraded SharePoint server
 - ✓ Configure SharePoint to accept all file types to be migrated (e.g., by default .EXE files cannot be uploaded to SharePoint)
 - ✓ Configure SharePoint to accept the largest file size to be migrated (the default maximum size is 50 MB)
 - ✓ Set up third-party web parts and custom content types on the target server before you migrate.
- Do plan for intense load rate of migration for SharePoint SQL servers as log files will fill up during migration. This can cause the migration to perform erratically or experience errors and end users will also be affected.
- If you want your sites to look as similar as possible, you should set up any customized templates, workflows and themes on the target. Create any custom site columns that you need on the target server.
- If using Migration Manager for SharePoint, it will automatically migrate columns added to lists on the source, but the column type must exist on the target.
- When possible, build out site structures ahead of time to reduce migration time and overhead.
- For SharePoint web servers do estimate the impact that a high-volume migration solution will have on the existing web servers.

Other common checklists

- Do import users whenever possible to reduce migration time overhead.
- Create incremental jobs if users will still be active in the source environment and no downtime is possible (if necessary)
- Create PowerShell jobs and scheduled jobs to run at specified time.
- Based on the functionality of the SharePoint API, the checked-out status of documents cannot be preserved during a migration, using third-party products, so it is recommended that all documents be checked-in before they are copied.

Implementation

Implementation phase is carried out in multiple steps across multiple organizations. But in this e book, we at Saketa would like to provide our own framework for migration progress. We are specialists in SharePoint services and with our experiences have designed a Migration methodology. The Migration methodology addresses all the challenges mentioned above, and increases the success rate of the migration program to a greater extent. We have classified the entire process in six steps which will help you in developing a roadmap for migration.



Pre-Migration Checklist

Pre-migration checklist includes all the checkpoints related with content, users, database, and servers. Every organization needs to make this checklist based on their business requirements and current environment architecture.

File Share Analyzer

Once pre-migration checklist is completed, and reviewed, we move forward to next step named as File Share Analyzer. The main feature of this is to analyze your content present in multiple folders in your current environment. Let's take an example to understand it in more detail. If your organization is 10 years old, then chances of having old documents is high. In that case selecting recent documents based on importance and current usage can be filtered out and rest you can archive or save in other database. Like if you have contract details of client which are 10 years old and has not been viewed in last five years then you can go for their archiving.

Similarly, there can be multiple documents which need to be analyzed and filtered out as SharePoint has threshold value for documents and value greater than that can lead to errors during migration and also after migration.

SP Content Analyzer

SharePoint Content Analyzer analyzes all types of content and documents present in SharePoint. This phase is applicable only if your present environment is SharePoint. Content involves all documents, libraries, list and entire data present in SharePoint. In this phase our main focus is on Information Architecture. One needs to restructure information architecture of current environment with respect to migrating platform. Major points to be considered are Taxonomy and naming conventions to avoid last time errors. This can be done with the help of an analyzing tool which offers quick service and low cost.

SP Object Dependency Checker

This phase is critical for Migration process. It involves consideration of few factors in order to migrate complete data from one platform to SharePoint or from SharePoint to SharePoint. It requires correction of taxonomy and information architecture followed in multiple versions of SharePoint (2010,2013 and 2016). For example, if in current environment we have by mistake mentioned client as a vendor then to avoid same mistake in other environment we need to perform changes in meta data and related document. In the same fashion there are many scenarios like this where we need to be analyze well for an effective migration process.

Metadata Mapper



Most of the documents in multiple environments have attached metadata. However, during migration when we migrate content without mapping metadata then structure of documents and also content gets deformed. So to have a complete migration, related metadata needs to be mapped to the concerned document for complete and error free migration.

One of the major advantages of SharePoint is that metadata can be mapped to all documents in SharePoint, rather than only certain file types (such as Word documents, image files, or .PDF files). This maximizes the usability of all the content you migrate. Document-specific metadata can also be set up so that searches are more effective. Metadata helps SharePoint become a more valuable tool. Your data will expand exponentially as people use it. A properly structured SharePoint infrastructure that includes standard metadata for your organization will quickly become a functional collaboration tool instead of a simple file share.

Content Migrator

Content migrator is the final step in which migration occurs. And data is migrated from one environment to other.

Will also like to mention few points which you need to implement during your migration process. They can be summarized in below points:

- Construct new SharePoint farm with optimized architecture and inform all stakeholders about the downtime and migration process to avoid any data loss.
- Based on selected Migration Approach- identify resources required for successful transition.
- Copy required databases to new farm.
- Upgrade content database and compatibility of all custom applications.
- Upgrade site collection and required content structure – Governance, Workflows and Hierarchies.

Saketa SharePoint Migrator



We at Saketa started our journey a few years ago as technology enthusiasts and passionate people, driven by a genuine desire to help our customers realize the true potential of SharePoint as a platform.

We are pioneers in adopting new technologies, and building robust business centric solutions, we love to take on new challenges and have designed and created a “NEXT GEN” application that simplifies and improves SharePoint Migration. Our tool named as [Saketa SharePoint Migrator](#) performs every step as mentioned above in 6 steps roadmap lower your time and efforts required for complete migration. Apart from tool service, we also provide support services to our customers 24/7.

Saketa SharePoint Migrator

High Speed. No Limits.



Business Impact



Business Continuity



Insightful Reports



Resource Utilization



Automate Scheduling

- ❑ Saketa Migrator can migrate any content of your SharePoint like sites, subsites, lists, libraries, views and workflows
- ❑ Saketa migrator have inbuilt pre migration check which test all your potential problems before hand with a click of a button
- ❑ To use Saketa Migrator, you don't need any server side installation, just connect it directly with your SharePoint server
- ❑ Saketa migrator supports a wide range of authentication modes, including Forms-based Authentication and O365 authentication
- ❑ Saketa Migrator helps you in scheduling your tasks. You can queue your migration activities and configure time to start them
- ❑ Saketa Migrator provides a detailed section for reports. Reports includes information like date, time, destination source, migration source, path, status (success, failure), warnings and content type.
- ❑ Saketa Migrator also helps you in pre-defining multiple errors which may occur during migration and their solution (action to be taken) to the tool which saves your migration time

One-Stop solution for all your SharePoint Migration woes



Business
Continuity



Risk of
lost Metadata



Time constraints of
migration project



The Saketa SharePoint Migrator is a point-and-click SharePoint migration tool built by SharePoint migration experts. Our migrator makes migrations effortless, codeless and smooth.

With powerful features, innovative innovative design and iconic performance, the Saketa SharePoint Migrator allows you to migrate and manage your SharePoint environment from a wide variety of sources at an unbelievable speed.

- ❑ Saketa Migrator allows you to export your content from cloud. Popular storages are Google drive, OneDrive, Dropbox, or build your custom connector
- ❑ Saketa Migrator facilitates multi-threading where multiple process can run parallel leading to less time consumption
- ❑ Saketa Migrator enables you to import your SharePoint content directly into your system
- ❑ Saketa Migrator has a feature of incremental load process also where you can migrate only modified content with respect to particular time. Like migrate all those content which are modified after a date

Post Migration Process

After the migration process has taken place, there are multiple parameters or areas which needs to be checked to ensure that migration process is successful. Migration success not only depends on content migration but also the way content is migrated, its structure, and completeness. These parameters may vary from organization to organization, but we have tried to sum them up in few point as mentioned below.

After migration has taken place, key to the success of the project is the verification of the migrated content in the new environment. The ability to compare the source and target environments is critical.

Business users to review migrated content/site

Always get your migrated content reviewed by your business users as migration is officially successful only when business users say that it is successful. They know the content better than any other user and can easily catch the wrong/ missing part.



Perform inventory audits

Do perform a check of your inventory like documents, files, and so on in new environment and verify your entire data. Do visit your pre-migration checklist and match the inventory contents.

Post Migration Analytics/ Fine tuning

By post migration analytics we refer to user adoption. Do check with users and take their reviews and feedbacks about the environment. The more user friendly environment the better user adoption. To perform detail analytics collecting below details will be helpful.

- Average page views per user.
- Average page views per visit.

Schedule regular backups

Once your migration process is over you should take the backup all content databases affected by migration as well as those that are migrated. Always validate your results and maintain an audit trail for same. Backup in SharePoint is important because if in case any failure occurs and migration database gets out of sync then you have no way of proving that migration is successful. Do schedule regular backups to protect your data.

Turn on the full crawl schedule and any incremental jobs created pre-migration

Turn those crawls on Now is the time to configure the full crawl schedule, kick off a full crawl and then configure the incremental/continuous crawls (in that order). You want the full crawl to get started. An incremental crawl on tens of thousands, hundreds of thousands or millions of documents is nothing short of a painful event on the crawl servers, but a full crawl is designed to handle the load of a raw, not-previously crawled content source.

Perform repetitive checks

If your organization has not taken on a migration before, take your time, test, validate, test again, migrate and then validate again. It is very easy to make a mistake that questions the reliability of the migration. If there is any doubt, the doubt must be mitigated. In many cases, there are compliance laws that must be taken into consideration, sometimes some content issues and so on. Be more alert and perform every step effectively.

Industry best Practices

- Communicate with a large cross-section of your user base and weigh the impact, your decision will have on the existing and future content.
- Evaluate total cost and benefits of migration process, current resources and their skills, scope of the process, and extra required skills.
- Map technical changes needed due to migration. Do check your present environment and map the requirements of new environment.
- Understand how an application needs to be modified and migrated. Analyze all your current applications.
- If a tool is to be used, then have deep knowledge about its usage and shortcomings.
- Prepare a testing plan to measure functionality along with performance and its stability tests.



Analyzing your requirements is the most crucial part of your migration project as it will drive your decisions through the entire migration project.

- Monitor process throughout (Before, during, and post)
- Upgrade module-by-module and do test each module as it is being upgraded before continuing migration.
- Schedule end-user training and usage of new features for business scenarios.
- Get all stakeholders and site administrators on the same page so that they understand what they need to do.



Conclusion

Organizations should plan their SharePoint migrations very carefully, as migration is not a small and simple task. The key for a successful migration is involving all the stakeholders including IT and Business users, in the early stage of migration process, so that there is a proper planning and everyone is on board with the vision and goals of the migration project. Ideally, organizations must first do an audit of their inventory before creating an ideal information architecture that will build upon and improve the existing models. Post migration, a thorough testing should be carried out to minimize the risk.

A product like Saketa SharePoint Migrator can greatly assist you in making your migrations smooth. Organizations can easily and safely migrate or upgrade their document management environments using Saketa Migrator. With features that allow you schedule migrations and utilize your system resources optimally, Saketa SharePoint Migrator is built to improve all components of business profitability – time, effort, cost.

About Saketa

Saketa is a best-in-class SharePoint solutions provider. We are product specialists and thought leaders, out to make SharePoint Collaboration Portals & Intranet sites an engaging, productive and intuitive platform for organizations of all sizes, at an affordable cost. Over the last year, our product line has thrilled customers and left MVP's spellbound. Our packaged solutions, add-ins and apps are built on a robust Saketa framework that is easy to maintain, upgrade, customize and are compatible with Office 365 (Cloud), On-premises and hybrid SharePoint deployments.

Other Offerings from Saketa

Business Apps:



Employee Onboarding



Time Sheet



Org Chart



Employee Directroy



Kanban Board



Project Tracker



Idea Board

IT Apps:



SP Security Manager



Active Directory Manager



CAML Query Builder



SP Excel Importer

Intranet:



Intranet

What our customers say

“ Saketa has great tools that does what we expected it to. We have received positive feedback from our end users on it. ”

“ I love your product ,especially the graphic quality. I have also been pleased with the promptness and courtesy of the support team. ”

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