The Handbook for Cross-Tenant Microsoft Teams Migrations

The popular workstream collaboration application from Microsoft is quickly gaining users amid the ongoing shift to Microsoft 365. As adoption continues to grow, so too does the need to migrate Teams instances as part of the broader tenant-to-tenant migration scenario. In this white paper from BitTitan®, we outline the top pre- and post-migration considerations necessary to ensure a successful project for this new workload.

Introduction

Initially released in 2017, Microsoft Teams is a workstream collaboration platform within the popular Microsoft 365 suite. It is designed to improve the way businesses communicate, interact, and share information. In April 2020, Microsoft announced a daily active user count of over 75 million people, heralding it as one of the fastest growing business applications in company history.

Teams incorporates a blend of functionality from other applications in Microsoft 365: voice-calling and communication replacing functions from Skype for Business; central file storage and management built on top of SharePoint; and, ultimately, a longer-term vision of displacing email as the primary internal communication vehicle.

For IT professionals, Teams adoption means something else: a new workload that must be migrated during tenant-to-tenant migration projects. The conversations, documents, and intellectual property stored within Teams and its underlying SharePoint framework are becoming critical components which must migrate alongside email from Exchange Online and documents from OneDrive or SharePoint.

In this white paper, we outline the top pre-migration considerations to ensure a successful Teams transition to a new Office 365 tenant.

Terminology and Structure

Before we dive into discussing Teams migration projects, it's important to understand the different components of a Teams instance. Here are the key parts we will be referencing in this document:

- **Teams**: the top-level Groups comprised of a user base, file site, and Channels. There may be several Teams in the organization's broader instance and users may belong to multiple Teams.
- **Channels**: within each Team, Channels are individual sections that contain a threaded Conversation tab and file folders. There are two types of Channels: Public and Private.
- **Conversation History:** the central discussion threads specific to each Channel. This does not include private or group chats between users in the same tenant or a federated tenant.
- **Private Chat:** messages directly between two or more individuals. These are separate from the public conversations in Channels.
- **User Permissions:** the governance behind the entire Teams instance, including access control for users to each Team.
- **Files**: documents stored on a SharePoint site specific to each Team with subfolders for each Channel.

- **Tabs**: integrations built into Channels that connect and pull data from another application; examples include Yammer, Planner, OneNote, and Power BI.

A broader overview of Microsoft Teams is available here.

The structure of a typical Team looks like this:

Structure	Compare Path	Folder Type
Team 1	team 1	Contact/Group
➤ General Channel	team1/General	Conversation
➤ Channel 1	team1/Channel1	Conversation
➤ Channel 2	team1/Channel2	Conversation
➤ Shared Documents	team1/Shared Documents	DocumentFile
➤ Shared Document/General	team1/Shared Documents/General	DocumentFile
➤ Shared Document/Channel 1	team1/Shared Documents/Channel 1	DocumentFile
➤ Shared Document/Channel 2	team1/Shared Documents/Channel 2	DocumentFile

Pre-Migration Best Practices

The secret to a successful migration lies in the planning. Teams projects are no different. Here are the top considerations from BitTitan when preparing to migrate Teams to a new Office 365 tenant.

Evaluate Your Source Instance

The first step in any migration is understanding what you need to move. Taking an inventory of all the Teams, Channels, Users, and Files that need to be migrated is a good place to start.

BitTitan provides access to a free Microsoft Teams assessment in Voleer. This assessment will generate a report of important Teams metrics including Teams activity, number of users, number of Teams, guest access, as well as similar team names. The results of this assessment help inform migration strategy by helping understand how many Teams and how much data is involved in the migration while identifying areas to tidy up prior to migrating. More information about that assessment is available here.

Select Individual Teams to Migrate

Not every Teams migration is a complete copy and paste. From scenarios such as a divestiture where only a portion of the Teams will be moved, to an organization who simply wants to clean up their Teams footprint when migrating and leave some Teams behind, being able to select individual Teams is important.

MigrationWiz offers three methods to add Teams to projects:

- **Autodiscover:** automatically scan the Source tenant to identify all teams in the instance. Once autodiscover has completed, users will have the option to directly import all the Teams as line items

into the project or download a CSV file of all the Teams to further manage the Teams. The same CSV file can also be uploaded via Bulk Add.

- **Bulk Add:** A good option for larger projects with more sophisticated mapping, MigrationWiz offers a CSV template file to manage adding Teams, or the option to use the one created during Autodiscover.
- **Quick Add:** For smaller projects or proof of concepts, Quick Add allows you to migrate specific Teams without the full CSV management.

Clean It Up

In conversations with cloud office analysts at Gartner and through our own experience at BitTitan, organizations who were early adopters of Teams often have sprawling and disorganized Teams instances. Channels may be dormant or duplicates of other more active Channels or Teams. Documentation may be out-of-date. Business needs or governance policies might have changed.

The Source assessment with Voleer and the pre-migration phase is an ideal time to clean up Teams, Channels, and the Files within those Channels. This ensures a cleaner, more streamlined instance on the Destination, which helps simplify the migration process.

Identify Conflicts with Naming Conventions

In our experience facilitating Teams migrations, one of the most common roadblocks pertains to naming conventions between the Source and Destination. This affects both Team naming practices as well as individual users.

Users: By default, we match users from the source to the destination based on the prefix in their User Principle Name (UPN). For example, if the user UPN is "name@domain.com", we match the "name" portion. If there are multiple people with the same prefix at the destination (e.g. name@domain1.com and name@domain2.com, or the prefix of a particular user is changed in the destination (e.g. name@source.com → name.full@destination.com), it is necessary to use the advanced option UserMapping="name@source.com->full.name@destination.com" to set the new or correct name for each user. For instructions on adding this option, see the article, [How do I add support options to a project or to a single item?](#)

Note that the UserMapping command goes in the Support Options section and will require one line per user that needs mapping. Click the + to add additional lines. Replace the UPN address in the example with the actual UPN addresses.

Teams: During the pre-migration phase, MigrationWiz users have the ability to map and/or rename Teams prior to migrating. You may now add a specific team to be migrated, based on the Team Mail Nickname at the source, e.g. TeamAwesome. You will be able to select the mapping at the destination, including renaming teams if desired. For example, TeamAwesome may be mapped to TeamAwesome at the destination, or to TeamFantastic. If TeamFantastic exists at the Destination, the contents from TeamAwesome will be merged to the existing TeamFantastic. If TeamFantastic does not exist at the Destination, it will be created with the data from TeamAwesome.

Understand What Is Migrated...

Depending on your approach to Teams migrations and current API limitations, it's important to understand what will be migrated and what will need to be recreated or configured directly on the Destination.

Through MigrationWiz, IT professionals can migrate the following items:

- Teams
- Channels (Public and Private)
- Conversation History
- Private Chats

- User Permissions
- Files
- OneNote

Note that MigrationWiz does not migrate private channels within Teams by default. If you have private channels you want to migrate, do so by adding the line **TeamsMigratePrivateChannel=1** to the support section of the project's Advanced Options. Note, users will not be added to the private channel on the Destination. This needs to be done manually after the private channel migrates. Due to Microsoft limitations, private channels are not migrated for GCC High tenants.

...And What is Not Migrated

Set expectations with internal teams and end users about what items will not be migrated. Those items include:

- **Planner:** work is underway to support this application and should be concluded in Q2 2021.
- **Tabs:** some integrations with other applications will need to be reconstructed on the Destination. Microsoft provides good documentation for adding Tabs in Teams here.
  Reactions: likes and other indications within the Channel are not migrated. For some organizations, this could be a compliance issue as a reaction such as a "like" is a strong indication of receipt or acknowledgement.

A comprehensive list of what is and what is not migrated, as well as the most up-to-date information on this scenario, can be found in our Teams Migration Strategy Guide.

Communication to End Users

Having an established plan to notify end users and set expectations around a migration project is the final key step in a pre-migration plan. According to a 2018 survey from BitTitan and Osterman Research, many service providers consider this one of the most difficult parts to manage within the project.

Be it information around planned downtime, action items for these users, or simply keeping them in the loop, providing clear and relevant information about the migration is another way to ensure your migration goes smoothly while minimizing post-migration escalations.

Additional Tips for Teams Migrations

Following the pre-migration considerations above, here are other important planning elements for configuring Teams migration projects.

Application Permissions

MigrationWiz now supports read-only Application Permissions for Teams migrations, via use of the support option **UseApplicationPermission=1**, in addition to full control permissions. This new app, with ReadOnly permissions, can only be used at the source to enhance security, and will not export document permissions. The destination permissions will always require FullControl permissions.

This allows for a secure migration **without the use of Global Admin or Site Collection Admin permissions on the source and destination.**

Order of Operations

For Teams migrations, we've discovered utilizing a pre-stage approach similar to a mailbox migration project helps expedite Teams moves as well.

In the case of Teams projects, they are divided into two parts:

1. In a first pass, migrate only the Team and Channel structure of the selected Teams in your project. We refer to this as the "scaffolding" of the Teams instance and helps guide users and data over in the subsequent pass. We also recommend waiting a few hours after this pass is successfully completed before moving to step two.
2. In a second pass (or passes), the rest of Teams content can be migrated: Conversations, Teams Permissions, Documents, and Document Permissions.
3. Private Chat messages are actually stored in Exchange Online and are therefore migrated as part of a standard mailbox migration.

Document Permissions and Migration Speeds

During a Teams migration, permissions for the files in a Channel are inherited from the parent team by default. Some files on the Source may have custom permissions due to cross-team or external partner-sharing. Migrating these custom permissions happens at the file level, requiring more API calls, which increases the likelihood of the migration being throttled. To avoid this, we recommend de-selecting Document Permissions in the item selection window when starting your migration and informing users that custom permissions will need to be re-added post-migration.

Be Patient with Users on the Destination

In some cases where a Team has many users, a migration may complete successfully but leave some members unviewable on the Destination. It is possible to verify that all users were migrated by logging into the Office 365 Admin portal, going to the migrated group (Team), and viewing the user list to verify that the expected users were migrated.

Learn More

For additional technical information and migration guides, see the links below or visit the BitTitan Help Center. Got a project on the horizon? Contact us today! We're happy to help.

- Microsoft Teams End-to-End Migration Guide
- Demo: Microsoft Teams Migration with MigrationWiz

- Feature Spotlight: Microsoft Teams Migrations

About BitTitan®

BitTitan® empowers IT service professionals to successfully deploy and manage cloud technologies through automation. MigrationWiz® is the industry-leading SaaS solution for mailbox, document and public folder migrations between a wide range of Sources and Destinations. Since 2009, BitTitan has moved over 15 million users to the cloud for 40,000 customers in 187 countries and supports leading cloud ecosystems including Microsoft, Amazon, Google and Dropbox. The global company has offices in Seattle and Singapore. To learn more, visit www.BitTitan.com.