

# TeamsCommunityDay

*Microsoft Teams Community Conference*

[teamscommunityday.de](http://teamscommunityday.de)

@TeamsDay

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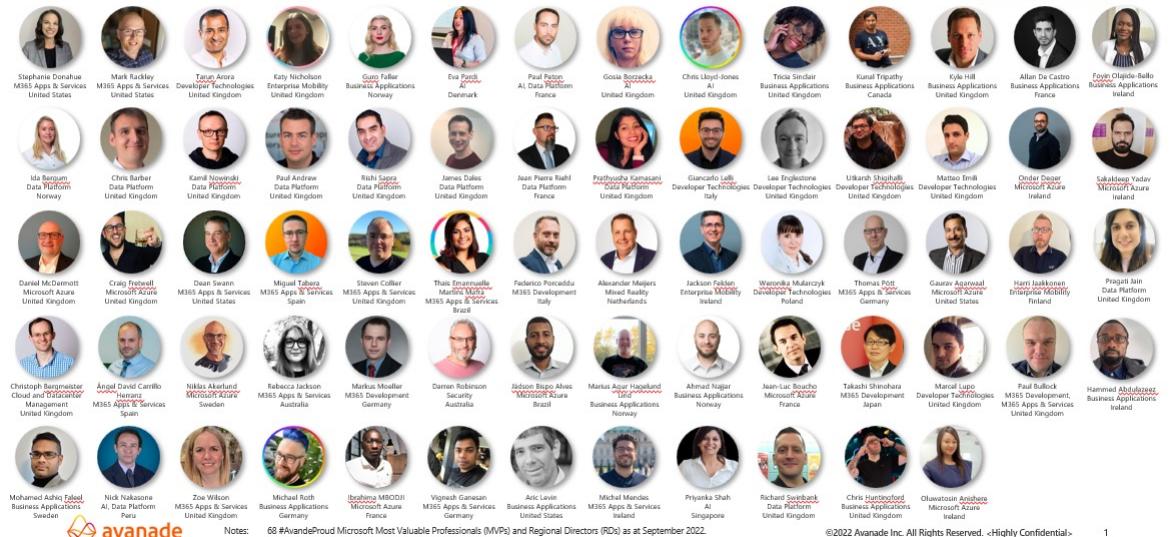
## Many thanks to our sponsors!

# Thank you to Avanade and who we are

- Executive support (Robert Laube and Antonio Stöckel)
- Providing the location and catering
- Supporting all our MVPs



Avanade's Microsoft MVPs and RDs 2022-23



We are 4 MVP's in Germany

We have more than 68 MVP's and RD's globally

Internal MVP Community

Mentoring to become MVP

# About the Speakers from Teams User Group Germany

## Thomas Pött

- Group Manager @ Avanade
- MVP since 2012
- Blogger: [www.uclabs.blog](http://www.uclabs.blog)



## Michael Plettner

- Co-Founder & CEO
- MVP / TalkM365 / Teams UG Germany





# Cross-Tenant Migration KeyNote

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Thomas Pött



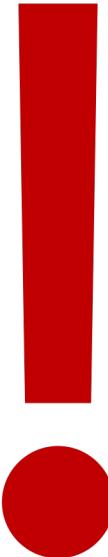
## White Paper Cross Tenant Migration Teams



# Agenda

- Cross-Tenant Migration Consideration and Planning Guide (Thomas Poett)
- Teams Migration for Tenant to Tenant
  - Enterprise Voice Teams Migration for Tenant to Tenant
  - Teams Personal Chat Migration
    - Personal Chat Migration into Azure Data Lake
  - Teams Channel Migration
- User Adoption for Teams Cross-Tenant Migration (Michael Plettner)

# This **MUST** not be underestimated



## **Cross-Tenant migrations are very complex and time consuming.**

- Complexity can even further increase if the migration tenant is in a hybrid configuration.
- Time consuming, especially due to strict performance limitations in reading from and writing into a tenant.
- User Adoption and User Experience are heavily influenced by Cross-Tenant Migrations
- COST impacts: License Grace Period – 90 days and max extension to 180 day

# Cross-Tenant Migration Consideration and Planning Guide

# Tenant to Tenant Comparison

- Technology – what is different between source and target
- User Experience – what changes imply for user
- Hybrid setup in source or target?
- Computer Migration a Do or Don't?

# Technology – what is different between source and target

- **General Technical Aspects:**
  - Permissions/ System Access
  - M365 Throttling/ Throughput
  - Infrastructure Readiness
  - Policies (stronger on target, size limits)
- **Azure Active Directory and Identity:**
  - Cleanup, data/ user reduction
  - Voice/ Video and licensing
- **Personal Services:**
  - EXO, throttling removed
  - Teams Chat migration, extremely time consuming
  - Legal Hold
- **Collaboration and Social:**
  - Embedded Apps in Teams/ SPO
  - Power Platform – Data sources and rebuild
  - Data volume for SPO - throttling
- **Rollout:**
  - Migration days (24x7, 4+1, ??)
  - Support structure
  - User Experience – information, communication, Adoption training
  - Planning and rollout Manager
  - Incorporate business requirements
  - Working Cluster
  - Legal Hold



# User Experience – what changes imply for user

- Migrating user experience from source to target completely depends on the possibilities and feature sets in the target environment. As an experience isn't technical, rather than it is behavioral.
- Work and human culture in the target environment might also differ from source. Only a holistic approach will make users feel comfortable after the migration.
- For more and detailed information read the chapter “User Adoption Process” – Michael Plettner

# Hybrid setup in source or target?

## Hybrid Environments:

- AD migration is more complex than just user objects migration (e.g. permissions or DLs residing on-premise and in the cloud).
- Migration tooling faces several challenges with hybrid environments. Tool suites need to be checked extensively. MFA can be a hinderance for tooling.
- Evaluate the need for SID History migration to keep a user's access to the environment in source (e.g. legacy apps, certain folders on-prem).
- Exchange On-Premises – Remote Mailbox and user AD EXCH Attribute migration

# Computer Migration a Do or Don't?

**Why is this so and what are the impacts:**

- It will extend your migration time line
- It might affect the Licensing Grace Period with Microsoft (becoming more expensive due to double licensing)
- Computer Migration and Profile Migration will take time (approx. 1-5 hours)
- 3<sup>rd</sup> party tools are required for migration
- Computers must be online during the device migration
- If Intune is used for management solutions, a reimaging might be required

Best is **NOT** migrating computers during the user CROSS-TENANT migration !

# Cross-Tenant Teams Migration

# Teams Migration for Cross-Tenant Migration

- Approach for a cross-tenant Migration

# Approach for a cross-tenant Migration

- . Teams channels with conversations and files
- . Standard, private and shared channels
- . Standard & Custom SharePoint sites in Teams
- . Tab's and App's in Teams
- . Private 1×1 chats
- . Private 1×n chats
- . Planner and tasks, Wiki
- . Group mailboxes
- . Teams meetings which contain chats, files, whiteboards,

# Approach for a cross-tenant Migration

## Need to consider/ high-level check-list:

- Know your source Teams environment, incl Voice and App attached application, like Contact Centre
- Analyse what is not necessary to be migrated and can be removed or left behind
- Create the migration setup in a test tenant
- Test the accounts and run migration tests (in test and production tenant)
- Do a tenant to tenant comparison (what can / can't be used in the target tenant)
- Run performance tests (run them in case in parallel with other migration tasks)
- Prepare a Change & Adoption plan
- Create a migration project plan
- Pilot a post migration validation
- What about Teams settings that cannot be migrated with migration tools or are not compatible with the target tenant

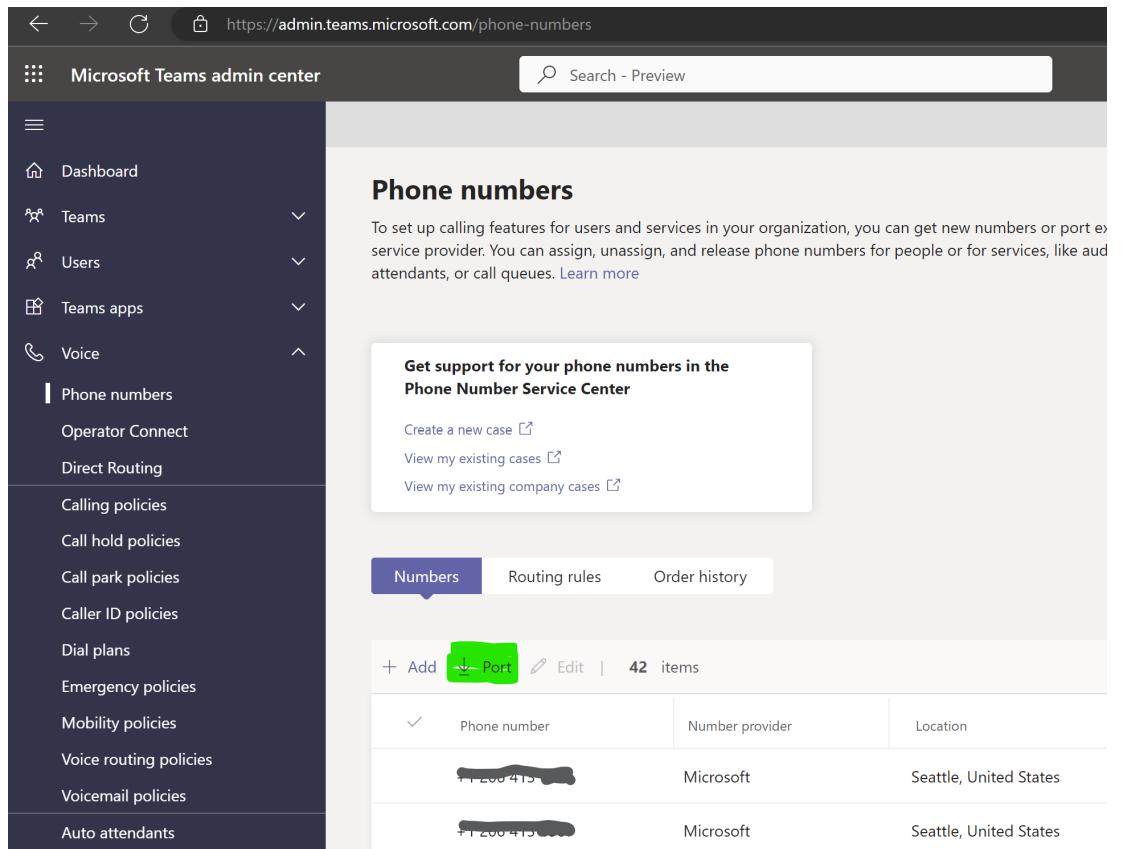
# Enterprise Voice Teams Migration

# Enterprise Voice Migration

- Calling Plan
- Direct Routing
- Operators Connect
- Handling Call Queues

# Calling Plan

- Porting within Microsoft takes usually 1-7 hours.
- Depends on a phone number ownership. In CROSS-TENANT, it could be a merger with different company names.
- Make sure you involved Microsoft Porting Team early and making your process transparent.
- The LOAs (Letters of Authorization) can be found here:  
[Manage phone numbers for Calling Plan - Microsoft Teams](#)
- The approach for calling plan number porting required pre-work with the Microsoft Porting Team.
- Working hours are: 8:00 am until 5:00 pm local



The screenshot shows the Microsoft Teams admin center interface. The left sidebar has a dark theme with white text and includes links for Dashboard, Teams, Users, Teams apps, Voice, and Phone numbers. The Phone numbers link is currently selected. The main content area has a light background and displays the title "Phone numbers". Below the title is a brief description: "To set up calling features for users and services in your organization, you can get new numbers or port existing ones from a service provider. You can assign, unassign, and release phone numbers for people or for services, like audio conferencing, auto attendants, or call queues. [Learn more](#)". A callout box titled "Get support for your phone numbers in the Phone Number Service Center" contains links for "Create a new case", "View my existing cases", and "View my existing company cases". At the bottom of the main content area, there are tabs for "Numbers" (which is selected), "Routing rules", and "Order history". Below the tabs is a table with columns for "Phone number", "Number provider", and "Location". Two entries are listed: one for "+1 200 415" which is associated with Microsoft and located in Seattle, United States; and another entry below it that is partially obscured.

Phone number	Number provider	Location
+1 200 415	Microsoft	Seattle, United States
[Redacted]	Microsoft	Seattle, United States

# Direct Routing

Some requirements are necessary here:

1. **Setup to INTERNET facing SIP Interfaces with different IP's**

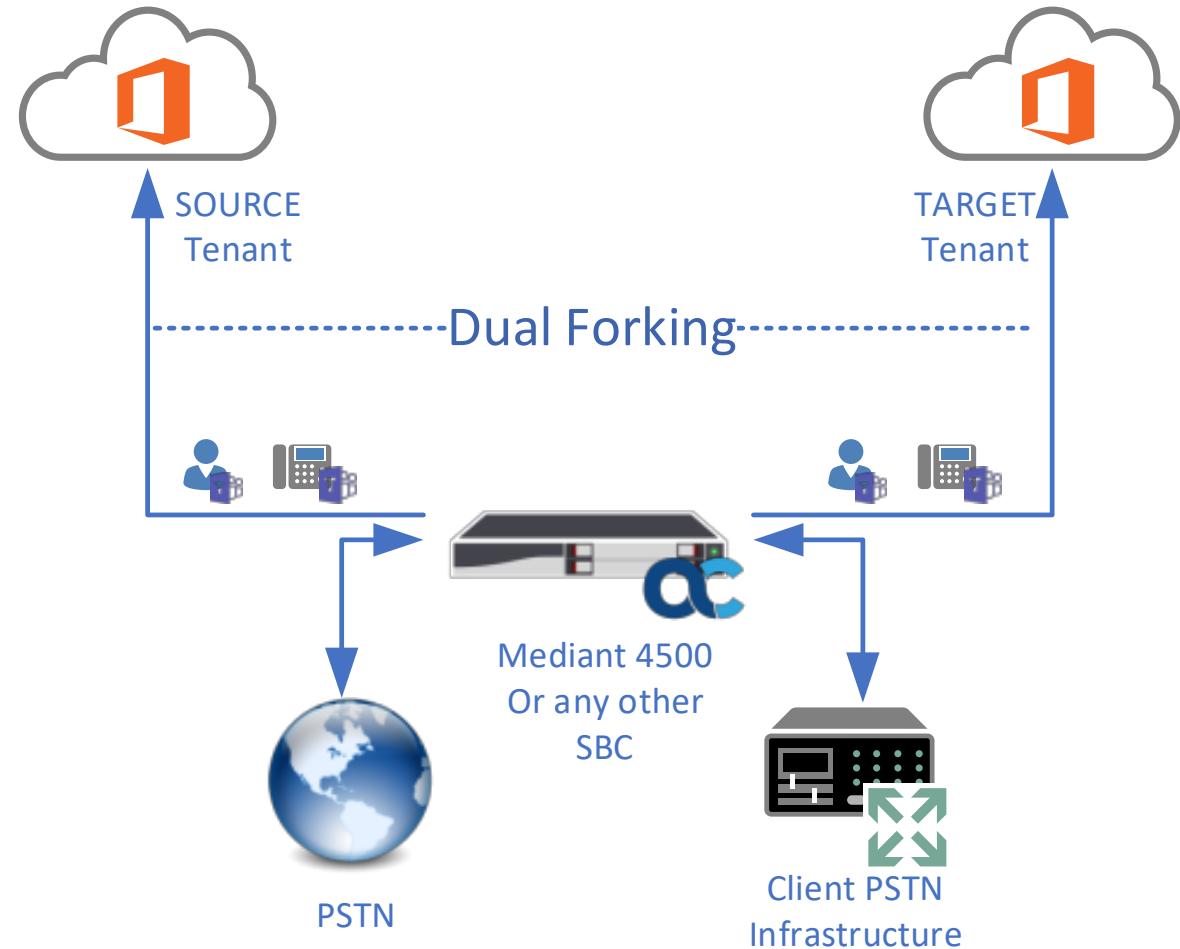
This is a must, because Microsoft Teams SIP Proxy, cannot differentiate a call from a single IP for different tenants.

2. **Use if possible two different Certificates**

(Note: SAN entries will still work, but you will later decommission the source tenant, best keep the new certificate for the target Source Tenants it is)

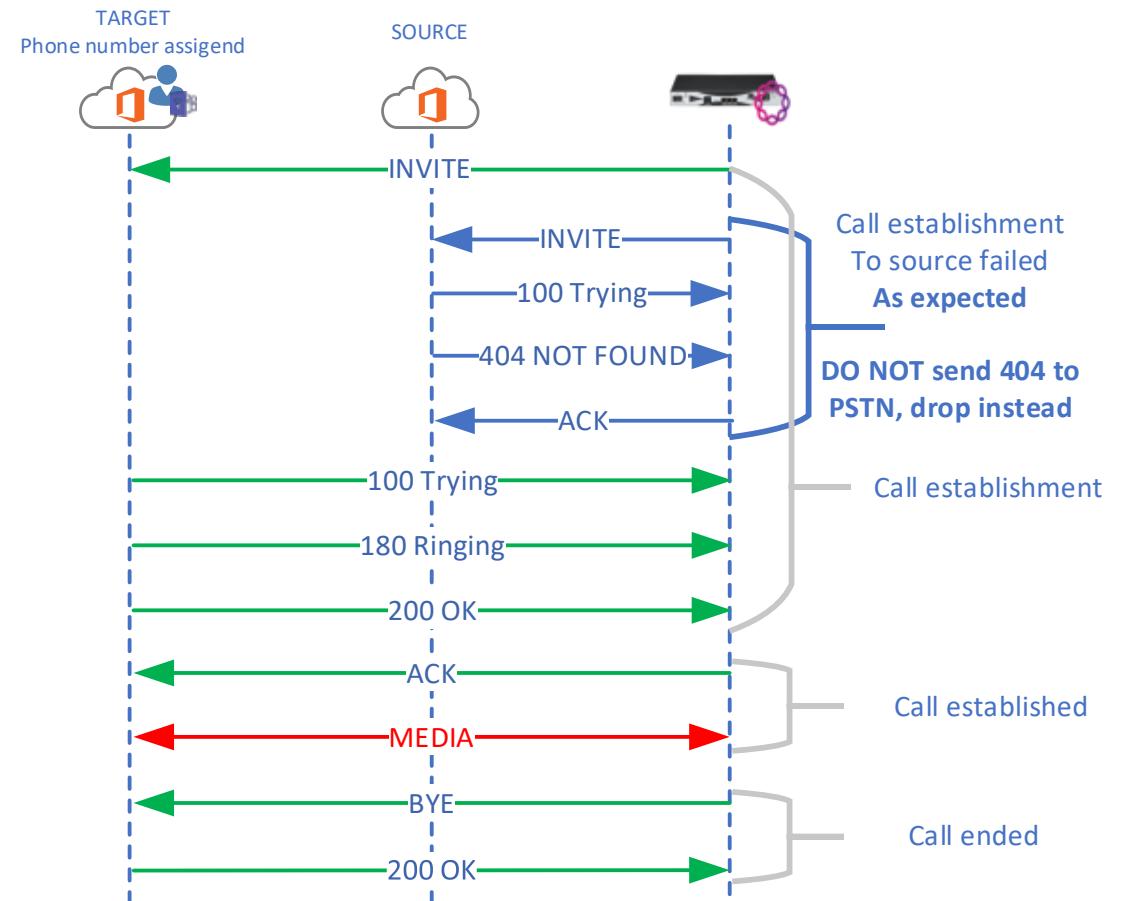
**If you do not follow this advice, the Dual Forking will FAIL !**

In this configuration, it is absolutely required that any **404 Not Found message must be DROPPED** at the SBC.



# Direct Routing

- If a user is migrated incl. his Teams PSTN number, a call send to the source tenant will be dropped due to 404 Not Found.
- In our migration we still want this call to be answered by the target tenant.
- This implies that we need to send an INVITE into it. We can do so with a single SBC configured for Direct Routing.



# Operators Connect

- Literally, you can see Operators Connect as a mixture of Direct Routing and Callings plans.
- The advice towards an operator connect change is, engaging your carrier/ provider very early. They might have their own procedures.

# Handling Call Queues

- Call queues can't be externally chatted with. This is an important information and is the main problem you will have to deal with.
- Nevertheless, there is a feature, where a call is assigned to a Teams Channel. This allows at least the functionality of Guest User Access.

## Steps for handling Call Queues:

1. Identify all Call Queues and Groups/ Channel(Teams)
2. Identify all User assigned to Call Queues
3. Identify Users assigned to multiple Call Queues
4. Identify the purpose of each Call Queue
5. Identify Call Queue used internal, external (phone), internal and external, channel used

# Teams Personal Chat Migration

*The largest challenge I have been facing is migrating  
1:1 chats from one Teams tenant to another.*

# Teams Personal Chat Migration

- API
- Migration Options
- User Experience during and after Migration

# API

## Graph API and Tenant Throttling

- Throttling is a pain in the “behind” and you **ALWAYS** will hit the tenant limitations.

**There is NO way avoiding throttling.**

Can force multiple reads of messages depending on how many chat participants are involved (Group Chat)

### SPO API Principles:

- Allows for incremental migration
- Does not support batch processing
- About the same fidelity of content as the Microsoft Graph API
- Provides faster for reading. See **Microsoft Teams service limits using [Teams Export API](#)**

### Graph API Principles:

- Allows for incremental migration
- Does not support batch processing
- Slower for reading. See **Microsoft Teams service limits using [Graph API](#)**

# API Limits

## **The SharePoint Migration Export (Asynchronous Metadata Read) API**

Teams request type	Limit per app per tenant	Limit per app across all tenants
GET 1:1/group chat message	200 requests per second (RPS)	600 RPS

## **The Microsoft Graph API**

Teams request type	Limit per app per tenant	Limit per app across all tenants
GET 1:1/group chat message	20 RPS	200 RPS

# Migration Options

## 1. Write the private chat messages to a folder in Outlook in the target tenant.

By doing so, there are limitation for users. Outlook folders will display the messages in the Teams client, nor are those messages searchable or readable from the Teams client.

## 2. Migrate all the private chat messages from source to the target appearinf in Teams.

It is so fare the best user experience option, with the limitation, that the migration account is the “new messages sender”.

## 3. Migrate the most recent messages only

and leave older messages behind in the source tenant. This provides a partial user experience because not all the messages are migrated.

The options commonly are D7, D30, D90, and D180

## 4. Migrate all messages and write the remaining messages to an HTML file.

In Teams chat

A. In Teams chat

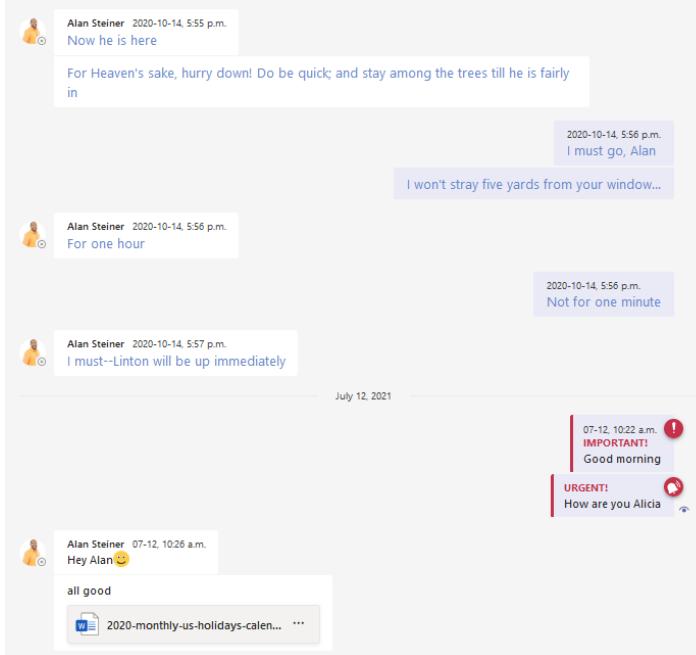
B. in HTML files containing the archived chats

## 5. Write all the private chat messages to an HTML file.

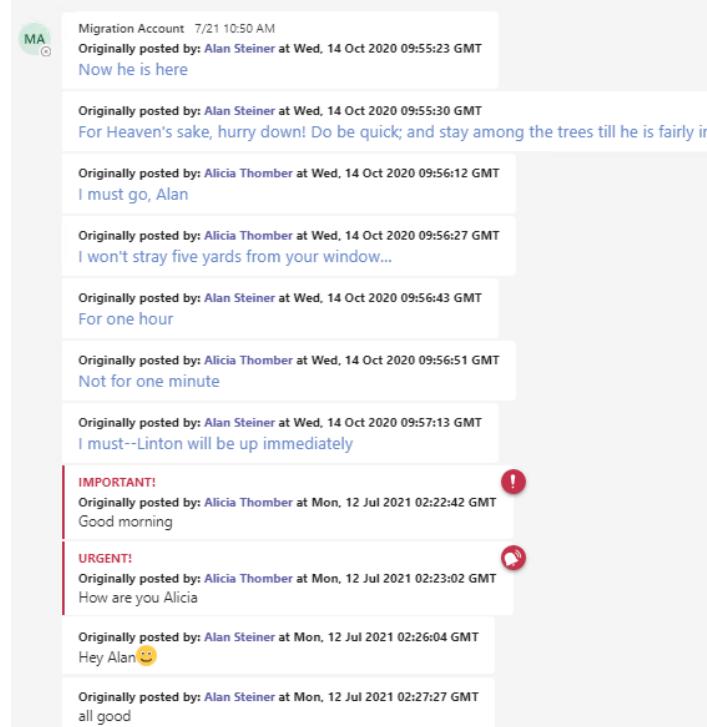
Same as with topic 4., this also provides a partial user experience, but the user cannot access their messages directly in the Teams client (unless the HTML files are added later to a private chat.) Additionally, the user must search for messages in the HTML files containing the archived chats.

# User Experience during and after Migration

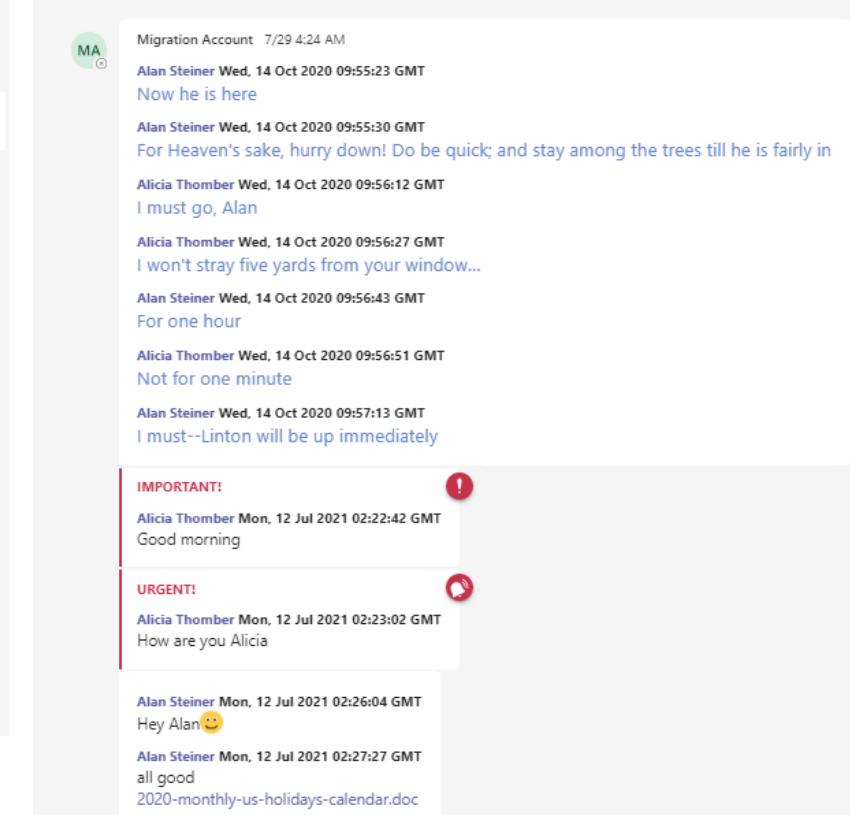
Original Source Messages:



Messages in Target Tenant without merge:



Messages in Target Tenant with merge option:



# Teams Personal Chat Migration

## Personal Chat Migration into Azure Data Lake

# Azure Data Lake

- To be said upfront, this is not a solution you or a consultancy company can do, rather you must engage Microsoft (MCS/PSS). This is an internal Microsoft solution using a private API for export.
- There are several options on how data can be extracted:
  - Single large XML file
  - Individual XML files per Teams user

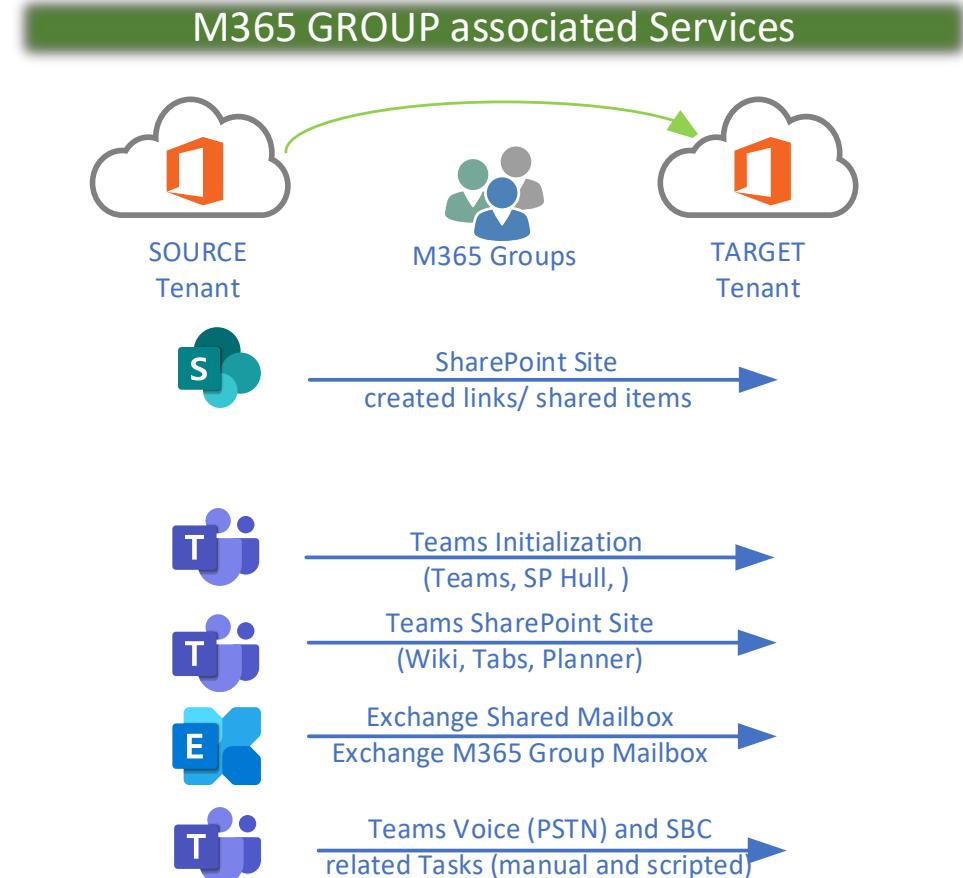
# Teams Channel Migration

# Teams Channel Migration

1. Create a user mapping file and provision target users
2. Provision M365 groups in target tenant  
all member user must exist

**Secondly, Teams has shared channels and private channels. Both have their own complexity.**

- Private channel require a Teams “hull” provisioning and cannot be delta provisioned.
- Shared Channels required a user mapping source to target for Guest User  
Guest User must be provisioned before the provisioning and migration starts





# Cross-Tenant Migration User Adoption

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Michael Plettner



<https://bio.link/plemich>



# User Adoption for Teams Cross-Tenant Migration

# IT



# Users



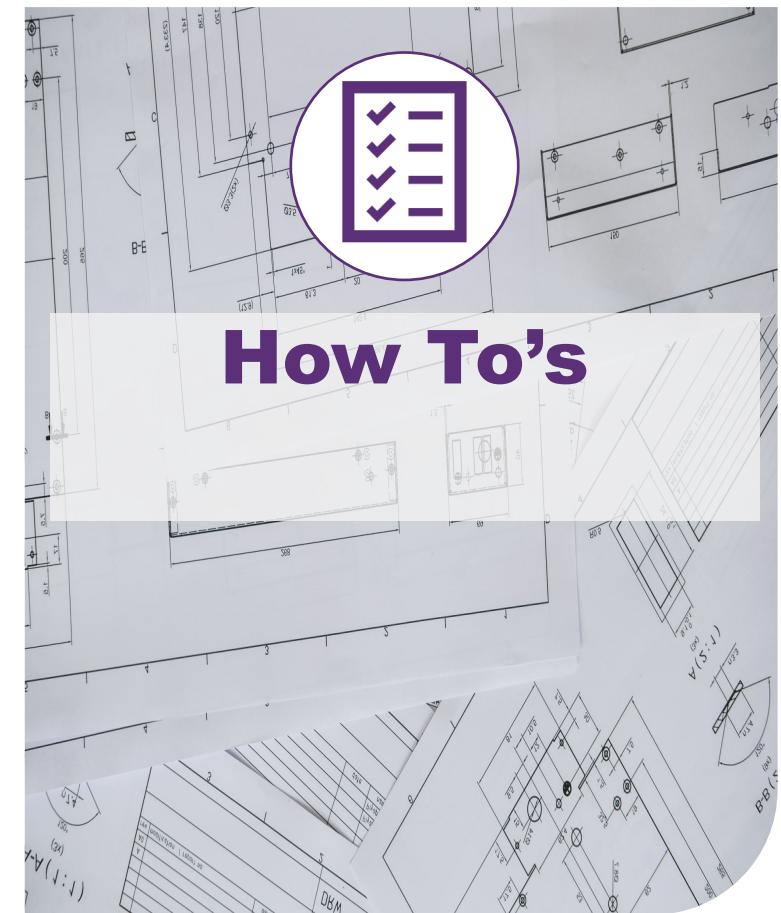
VK.COM/PITERSKII\_PUNK\_WALL

# Identify the changes and ... communicate

- A ton of changes
  - Login
  - Mail / Teams address
  - Mobile Device config
  - Security changes
  - ...
- Show the benefits / productivity
- Communicate HOW TO's separately



# Do you have a plan for this?



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# Feedback

<http://feedback.teamscommunityday.de/>