Migration Guides

Migrate Windows computers to switch Hybrid Join to new Entra tenant (same AD Domain)

Introduction

Below are the high-level steps that you should review and complete at a minimum to migrate a Windows 10 or 11 workstation that is Active Directory joined and Hybrid Joined to the source tenant, so that it remains AD joined to the same domain but is able to Hybrid join the target Entra tenant.

This use case typically happens when you are migrating the Microsoft 365 tenant workloads in advance and will reconfigure the Microsoft Apps for fresh start on the device and may elect to migrate the device to a new Active Directory or Entra joined in a later phase of your overall project.

You might be migrating computers from:

SOURCE	TARGET
Active Directory Domain joined with or without Hybrid Entra join.	Do not leave source Active Directory Domain but Hybrid Entra join different tenant.

PowerSyncPro cannot enforce Hybrid join, this still requires your own target environment configured correctly.

These instructions should be read in conjunction with the latest Configuration Guide
https://downloads.powersyncpro.com/current/PSPMA-ConfigurationGuide.pdf

Create and Configure Directories

Create your source and target directories that you will be working with. You will need to have created an Entra App Registration in advance for any Microsoft Entra ID Directories.

You must ensure that you have scoped the Import Object Types to a minimum of Users and computers / devices.

Create the Bulk Enrolment Token

After you successfully create and save your Entra ID Directory you will need to open the configuration in edit mode and create the Bulk Enrolment Token that will be used to Entra join devices. This is a critical step, and your particular environment might cause you some challenges here so be sure to check the KBs and guides if you have any issues.

Create a Sync Profile for Migrating Users

You must have at least a "Match Only" sync profile with correctly scoped users that are your target for Windows workstation Migrations that have an active Windows profile that will require repermissioning. For repermissioning to happen there must be a User Translation Table, and that is built via the Sync Profiles.

Enable the DirSync Schedule

Configure and enable the sync schedule to ensure that Users and computers will be imported into the PSP Database for you to work with.

Obtain and apply a licence

You will not be able to migrate any workstations without a valid licence. You must be accurate with your domain FQDN and / or Microsoft 365 Tenant information when procuring your licence. Apply the licence at Global Settings\Licences options.

Run an end-to-end DirSync

Be sure that an end-to-end sync cycle has run including Import, Sync and Export

Message Logs

Check the Message Logs for **Warning and Errors**. Confirm or remediate any unmatched users

What If

Confirm the **What If** report has been checked and accepted so that DirSync will run in steady state on the schedule.

Check the Translation Table

Go to the **Translation Table** view (Migration Agent\Reports\Translation Table) and spot check any users that you know are in scope for migration. If your migrating users do NOT appear in the translation table, then **do not migrate their device**. It will **NOT** be re-permissioned.

Single Object Report

Use the single object report to spot check and search for a user or computer you are migrating.

Migration Agent Configuration

Create a pre shared key

The pre-shared key is mandatory requirement for the installation of the Migration Agent on the computer. This sets-up the initial secure channel communication.

Create a Certificate

The private certificate is mandatory requirement for the installation of the Migration Agent on the computer. This ensures that all communication between the workstation and the PowerSyncPro server is secure and encrypted.

Create a Runbook

A Runbook contains all the instructions for the Migration Agent to execute on the computer including the device join state, Intune enrolment, Windows profile repermissioning, application reconfiguration and any pre and post migration scripts.

We would advocate only having one primary runbook (and one pre-requisite Runbook if required). Use your single Runbook in any Batches you have, even if they are Early Adopters, Pilot and Main migration waves and events.

- **Startup:** Be sure to configure an Admin fallback account, any custom pre-migration scripts, Legal Notice, Prevent Login and a Lock Screen image. PowerSyncPro can provide a default image if you prefer: https://downloads.powersyncpro.com/current/PSP_LockScreen_16x9.jpg

- **Device State:** When migrating to Hybrid Entra joined using Cloud Domain Join (CDJ) you should ensure that on the device State tab you:
    - **Remove From: Entra ID** only, we want to stay joined to the current AD
    - **Domain join: None** as we will still be joined to the source AD
    - **Set Hybrid Controlled Validation**
        - **Hybrid Tenant Name:** Your Target Tenant Microsoft issued *.onmicrosoft.com Domain Name.
            - e.g. contoso.onmicrosoft.com
        - **Hybrid Tenant ID:** Your Target Tenant ID
            - e.g. 9bc4a702-2977-4d17-8f19-64d596b61cbe

> **Note on Entra join and Intune Enrol**
>
> PowerSyncPro **cannot** circumvent Microsoft 365, Entra ID or Intune Enrolment restrictions and policies. You must 100% ensure that your target tenant configuration is set correctly to allow Entra join and Intune Enrol for your computer migrations to succeed.

Your AD Computers must be synchronised from the Source Active Directory to Entra via Entra Connect in advance.

- **Permission Updates:** You must ensure that '**Add and remove permissions'** is selected
- **App Reconfiguration:** If you have already migrated your Microsoft 365 Tenant Workloads and used a PowerSyncPro Migration Runbook to *Reconfigure Apps* only, your users should already be consuming the target tenant apps with their correct account. Therefore, there is no need to reconfigure apps.
- **Completion**: Any post migration scripts

Create a Batch

Batches contain the list of computers in scope, the Runbooks to execute and the start time and date. You can create your batches with an **Enforced After** date far in advance if necessary but have the **Available from** closer to your present time to facilitate self-service migrations and testing. Typically, for Tenant-Tenant migrations you will be performing a cutover migration so you would not use the Available From option.

Batches can have multiple Runbooks. Do not have computers in multiple Batches.

Adding a computer to Batch less than 24 hours before migration is unlikely to be successful unless you restart the PowerSyncPro on the Computer. Always ensure that you have a valid and populated Translation Table for your use case.

Confirm a working migration endpoint URL

If you are using the *default installation,* then your endpoint will be the PowerSyncPro server FQDN with TCP port 5000. Typically, this would be only used for your initial end-to-end testing. E.g. http://pspserver.contoso.local:5000/Agent

If you are using IIS with a reverse proxy your endpoint will be https (TCP port 443) using your friendly DNS name and a valid SSL certificate binding. E.g. https://powersyncpro.contoso.com/Agent

> **To test:** From an in-scope computer open the browser and connect to the URL this should resolve successfully to a landing page

The PowerSyncPro server endpoint URL must be available at the start of the migration to confirm the latest runbooks and scheduling information, and critically to get SID translation data from the server during the migration. Once the computer migration has started, reporting information such as migration status and logging will be written back to the server.

Agent Installation

The .NET 8.x Desktop Runtime prerequisites must be installed. These can be installed separately in advance or bundled with the complete PSP Migration Agent Installer. It is more common to use the bundled version.

Agent Registration

Confirm that Agents are successfully registering on the PowerSyncPro server by reviewing the Agents view and Failed Communications report.

Checklist

TASK	COMPLETE
Create and configure Directories	
Create the Entra join Bulk Enrolment Token	
Create and configure Sync Profile for Users and Groups	
Enable the schedule	
Obtain and apply a software licence	
Run an end-to-end Import/Sync/Export	
Check Message Logs for Warnings and Errors	
Confirm the What If report	
Spot check the Translation Table	
Spot check the Single Object Report	

Agent Preparation	COMPLETE
Create a pre shared key and Certificate	
Create Runbooks and Batches – including prerequisite Runbook	
Confirm a working PowerSyncPro server endpoint URL	
Confirm Microsoft 365 tenant Entra join and Intune Enrol settings	
Confirm Agent Installation with prerequisites	
Confirm Agent Registration and profile harvests	
Test with non-production users and computers	

Documentation

We take a lot of pride on the documentation. If you follow the guides, we believe that you should be able to get yourself up and running. https://powersyncpro.com/documentation

Knowledge Base

We are regularly adding and updating articles in the Knowledge Base, so also try here as a good resource. https://kb.powersyncpro.com/

Support

Support is available from: https://tickets.powersyncpro.com/

If you are logging a ticket, be prepared to send the Migration Event Logs plus Windows Application Event logs from the affected computer and the Server / Agent version.