

Migration Guides

Migrate Windows computers from source Active Directory to target Active Directory

Introduction

Below are the high-level steps that you should review and complete at a minimum to migrate a Windows 10 or 11 workstation from one on-prem Active Directory to the target on-prem Active Directory.

You might be migrating computers from:

| SOURCE | TARGET |
|--|--|
| Active Directory Domain joined (With or without Hybrid Entra join). | Active Directory Domain joined (With or without Hybrid Entra join). |

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 provide the server name and a username and password for the service account. Alternatively, you can configure our Remote Sync Agent on your Active Directory and select it in the Directory creation.

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

Create a Sync Profile for Migrating Users and Groups

You must have at least a "Match Only" sync profile with correctly scoped Users and Groups 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. It is more typical in AD to AD that you would have fully fledged DirSync profiles running as "Create & Update". These profiles will be sufficient for a Translation Table.

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 option.

Run an end-to-end DirSync

Be sure that an end-to-end directory 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, Windows profile repermissioning, application reconfiguration and any pre and post migration scripts. The name you give your Runbook is a label and is seen in reports.

We 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 a Lock Screen image and Admin fallback account and any custom scripts PowerSyncPro can provide a default image if you prefer:
https://downloads.powersyncpro.com/current/PSP_LockScreen_16x9.jpg
Set Legal Notice and Prevent Login as required (RECOMMENDED)
- **Device State:** When migrating from Active Directory to another Active Directory you should ensure that on the device State tab you will need:
 - **Remove From:**
 - **Active Directory or**
 - **All Directories** if you are also leaving a Microsoft 365 tenant where the device is joined.
 - **Domain join: Active Directory.**
- **Permission Updates:** You must ensure that **add and remove permissions** is selected
- **App Reconfiguration:** When migrating from one Microsoft 365 Tenant to another you should **Reconfigure applications** to ensure that the migrated user can access all these apps in the target tenant.
 - If both Source and Target Active Directories are on premises only and not consuming any Microsoft 365 Workloads like Teams, Exchange, OneDrive for Business etc then you do not 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-to-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.

Do not forget to include your prerequisite Runbooks

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 Runbooks | |
| Confirm a working PowerSyncPro server endpoint URL | |
| 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.