Power365®

Prerequisites
November 2019
Table of Contents

Basic Migration / Advanced Migration Prerequisites ......................................................... 4
Browser ................................................................................................................................. 4
Internet Requirement for Online Help and Video Tutorials .................................................. 4
Application Service Account Requirements ......................................................................... 4
Binary Tree PowerShell Account Requirements ................................................................. 4
Mailbox Licenses .................................................................................................................. 5
Target Mailboxes .................................................................................................................. 5
Source & Target Mailbox Delegation ..................................................................................... 5
Test Mailbox Accounts .......................................................................................................... 5
Source & Target User Mappings (Basic Migration) ............................................................... 5
Source and Target Domain Pairing (Advanced Migration) .................................................... 5
Source & Target User Matching Attributes (Advanced Migration) ......................................... 5
Source Active Directory Groups (Advanced Migration) ........................................................ 6
Outlook Configuration (Outlook Setup Pro) ......................................................................... 6
Target Account Credentials .................................................................................................. 7
Modern Authentication Requirements .................................................................................... 7

Premium Integration Prerequisites ..................................................................................... 8
Browser ................................................................................................................................. 8
Internet Requirement for Online Help and Video Tutorials .................................................. 8
Application Service Account Requirements ......................................................................... 8
Binary Tree PowerShell Account Requirements ................................................................. 8
Power365 Directory Sync Lite Active Directory Account Requirements .............................. 9
Mailbox Licenses .................................................................................................................. 9
Target Mailboxes .................................................................................................................. 9
Source & Target Mailbox Delegation ..................................................................................... 9
Test Mailbox Accounts .......................................................................................................... 9
Source and Target Domain Pairing ....................................................................................... 9
Automatic Licensing ............................................................................................................. 9
Source & Target User Matching Attributes ......................................................................... 9
Source & Target Distribution Lists Matching Attributes ....................................................... 10
Source Active Directory Groups .......................................................................................... 10
Email Rewrite Services (Premium Integration) .................................................................... 11
Power365 Directory Sync Lite ............................................................................................... 12
Email Signatures .................................................................................................................. 16
DNS TXT Record .................................................................................................................... 16
SSL Certificates ................................................................................................................... 16
Domain Cutover and Certificates .......................................................................................... 17
Outlook Configuration (Outlook Setup Pro) ...................................................................... 17
Target Account Credentials ........................................................................................................ 18
Support for Exchange Hybrid Deployments ............................................................................... 18
On-Premises Migration ................................................................................................................ 19
Modern Authentication Requirements ......................................................................................... 19

Learn more about Binary Tree................................................................................................... 20
Binary Tree Social Media Resources .......................................................................................... 20
Basic Migration / Advanced Migration Prerequisites

The Binary Tree Power365 Mail Migration service (Basic Migration/Advanced Migration) is facilitated through a 100% Microsoft Azure-based Software-as-a-Service (SaaS) platform for Office 365, providing the capability of copying the entire contents of one mailbox to another mailbox, across tenants or within the same tenant. Address Translation is dependent upon proper mapping between source and target accounts. The following requirements are specific to “Basic Migration” or “Advanced Migration” project types in Power365.

Browser

Power365 is a cloud-based service. We recommend using Chrome v48.0 (or newer) or Firefox v44.0 (or newer) for the best cloud-based platform experience.

Internet Requirement for Online Help and Video Tutorials

An internet connection is required to access the online help system and video tutorials.

- Within the Power365 interface, the online help system can be accessed by clicking “HELP” in the pull-down menu and the video tutorials can be accessed by clicking the icons found throughout the application.

- The online help system and video tutorials can be accessed outside the Power365 interface at https://help.binarytree.com/power365/default.htm.

- Windows Server operating systems will need to have the Desktop Experience feature (or a video codec) installed to view the video tutorials.

Application Service Account Requirements

- **Account:** One Application Service Account dedicated to Power365 Project Management or existing account.

- **Office 365 Administrator Role:** Global Administrator

- **Office 365 License Requirements:** One available license (E1 minimum) for destination tenants.

**Important Note:** For the best application experience, it is always recommended to use the Global Administrator role. However, this account only requires the Global Administrator role during the initial Project setup, reconnections to the tenant or during a Domain Cutover event, where more authority is required. All account and role management is strictly the responsibility of the tenant administrators.

**Note:** Basic Migration Projects using the Basic Authentication option do not require the Global Administrator role.

Binary Tree PowerShell Account Requirements

- **Account:** One Cloud-only account will automatically be created during project setup.

- **Office 365 Administrator Roles:** Automatically assigned the Exchange and SharePoint Administrator roles.

- **Office 365 License Requirements:** Automatically assigned one available license (E1 minimum) for destination tenants.

**Important Note:** This account will automatically be assigned the Global Administrator role at the start of a Domain Cutover event, where more authority is required to complete the process.

**Note:** Basic Migration Projects using the Basic Authentication option do not create the Binary Tree PowerShell account; your provided service account will be used for any PowerShell related activities.
Mailbox Licenses

- For mailbox data migrations, only Exchange Online Licenses that allow MAPI/HTTP are supported.

Target Mailboxes

- Target Mailboxes must be provisioned in the target Office 365 multi-tenant prior to data migration.

Source & Target Mailbox Delegation

- The required service account must be granted the Full Access permission to their respective tenant mailboxes to allow a delegate to open the mailbox and behave as the mailbox owner. This will be automatically executed by the Power365 systems during the first synchronization.

- The ApplicationImpersonation role is required for the Global Admin to allow hidden email messages used by the system to be sent.

Test Mailbox Accounts

- As a best practice, we suggest at least 5 populated source Mailboxes for migration testing & validation purposes. Include some sample email messages, some contacts, and some calendar entries.

Source & Target User Mappings (Basic Migration)

- You will need create and upload a spreadsheet of all source users (in scope for migration) matched to all target users using the Exchange Online User address (e.g. username@domain.onmicrosoft.com).

<table>
<thead>
<tr>
<th>Source Email</th>
<th>Target Email</th>
<th>Migration Wave</th>
<th>Profile Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:AlexD@mike414796.onmicrosoft.com">AlexD@mike414796.onmicrosoft.com</a></td>
<td><a href="mailto:AlexD@MEME42226.onmicrosoft.com">AlexD@MEME42226.onmicrosoft.com</a></td>
<td>8-Nov</td>
<td>AllContent</td>
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<tr>
<td><a href="mailto:AllieB@mike414796.onmicrosoft.com">AllieB@mike414796.onmicrosoft.com</a></td>
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<td>8-Nov</td>
<td>AllContent</td>
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<td><a href="mailto:Dorenp@MEME42225.onmicrosoft.com">Dorenp@MEME42225.onmicrosoft.com</a></td>
<td>1-Aug</td>
<td>Mail90days</td>
</tr>
<tr>
<td><a href="mailto:Juliani@mike414796.onmicrosoft.com">Juliani@mike414796.onmicrosoft.com</a></td>
<td><a href="mailto:Juliani@MEME42226.onmicrosoft.com">Juliani@MEME42226.onmicrosoft.com</a></td>
<td>8-Nov</td>
<td>Mail90days</td>
</tr>
<tr>
<td><a href="mailto:Junnih@mike414796.onmicrosoft.com">Junnih@mike414796.onmicrosoft.com</a></td>
<td><a href="mailto:Junnih@MEME42226.onmicrosoft.com">Junnih@MEME42226.onmicrosoft.com</a></td>
<td>1-Aug</td>
<td>AllContent</td>
</tr>
<tr>
<td><a href="mailto:Karif@mike414796.onmicrosoft.com">Karif@mike414796.onmicrosoft.com</a></td>
<td><a href="mailto:Karif@MEME42226.onmicrosoft.com">Karif@MEME42226.onmicrosoft.com</a></td>
<td>15-Sep</td>
<td>Mail90days</td>
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<tr>
<td><a href="mailto:Katiej@mike414796.onmicrosoft.com">Katiej@mike414796.onmicrosoft.com</a></td>
<td><a href="mailto:Katiej@MEME42226.onmicrosoft.com">Katiej@MEME42226.onmicrosoft.com</a></td>
<td>10-Oct</td>
<td>AllContent</td>
</tr>
<tr>
<td><a href="mailto:Mollyo@mike414796.onmicrosoft.com">Mollyo@mike414796.onmicrosoft.com</a></td>
<td><a href="mailto:Mollyo@MEME42226.onmicrosoft.com">Mollyo@MEME42226.onmicrosoft.com</a></td>
<td>15-Sep</td>
<td>Mail30days</td>
</tr>
<tr>
<td><a href="mailto:Pavell@mike414796.onmicrosoft.com">Pavell@mike414796.onmicrosoft.com</a></td>
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<td>10-Oct</td>
<td>Mail30days</td>
</tr>
</tbody>
</table>

This spreadsheet has four columns, the source email address, the target email address, and, optionally, but recommended, the migration wave and profile columns. A migration wave is a way to group many mailboxes into smaller collections so you take administrative actions against them instead of all users. Profiles are used to select the type and date ranges of data to be migrated. During the configuration, we will provide a template that you can download.

Source and Target Domain Pairing (Advanced Migration)

- During configuration, you will be asked to choose your source and target domains for each tenant. This process is called domain pairing.

Source & Target User Matching Attributes (Advanced Migration)

- You will need to select a pair of attributes that will match exact values from the source user object to the target user object to discover and match the appropriate user accounts.
• The available matching attributes are as follows, choose at least 1 with a maximum of 3:
  - userPrincipalName
  - mail
  - extensionAttribute1-15

The userPrincipalName and mail attributes are matched based on the local part of the address and the paired Domains (e.g. Tom.Dean@contoso.onmicrosoft.com would use Tom.Dean@binarytree.onmicrosoft.com as a match against the target account.)

Source Active Directory Groups (Advanced Migration)

To manage eligibility for Mailbox Migrations and other Integration services, Power365 provides the ability to discover users and groups from Active Directory (AD) Group membership. Instead of searching the entire Forest or Domain, Power365 will only act on objects based on group membership. For Premium Integration projects, the group must be created on-premises and synchronized to your Office 365 tenant. Once a user is added to the group and discovery runs again, the user will be added to the list of eligible accounts for migration or related services. All AD groups created should be Mail-Enabled, Universal (scope) Security (type) groups. The following information provides details for each AD Group requirement.

- **Discovery Group:** We recommend creating a group just for this purpose. Create a local mail-enabled Universal Security AD group named, for example, “BTDiscovery”. Then populate the group with all eligible mailbox-enabled Users. Group membership should be limited to mailbox-enabled objects eligible for migration. Other members will be skipped during discovery.

- **Migration Waves Groups:** Optionally, you may sort mailbox-enabled Users into separate local AD Groups so they can be easily assigned to a migration wave and scheduled for migration. If organizing your migration users in this manner, then create each local AD Global Security group with a descriptive name for the migration event.

Outlook Configuration (Outlook Setup Pro)

Power365 provides the user the ability to automatically configure their Outlook client to utilize the new mailbox. For this feature to be successfully installed, the following will be required on each user’s Windows workstation.

**General Requirements**

1. Internet access to download the executable and connect to Office 365.
2. The permission to download and run an executable (OutlookAgent.exe) file.
3. Disable any policies preventing Outlook Profile changes or creation.
4. The end-user will need to be supplied with the new or temporary password for the new account residing in the destination Office 365 tenant. (if applicable)

**Minimum Software Prerequisites**

1. Outlook 2010 (32-bit or 64-bit)
2. Windows XP
3. .NET 4.0.x (4.6.x or above recommended)
End-user Workstation Requirements

1. Internet access using Port 443.
2. Internet access to Power365 Outlook Setup Pro endpoint at https://power365.binarytree.com/api/outlook
3. Internet access to Exchange Online "Autodiscover" endpoints at:
   a. Global: https://autodiscover-s.outlook.com/autodiscover
   b. China: https://autodiscover-s.partner.outlook.cn/autodiscover
   c. Germany: https://autodiscover-s.outlook.de/autodiscover
4. Local access to read\write the following registry keys on the end-user’s workstation:
   a. Outlook 2010: HKEY_CURRENT_USER\Software\Microsoft\Windows NT\CurrentVersion\Windows Messaging Subsystem
   b. Outlook 2013: HKEY_CURRENT_USER\Software\Microsoft\Office\15.0
   c. Outlook 2016: HKEY_CURRENT_USER\Software\Microsoft\Office\16.0
   d. Outlook 32-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Office
   e. Outlook 64-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Office

   During this process, the Outlook Profile will be copied to a new Profile directed to the target account. Due to this configuration, a new OST download will occur based on your current cache settings, if enabled. To avoid network congestion try disabling or curtailing your cache settings to a lower amount of data then slowly increase it as needed. This can be accomplished through policies.

Target Account Credentials

You will need to manage and distribute target account credentials to each end-user prior to mailbox migration cutover. If not distributed prior to cutover, the end-user will not be able to access their new mailbox.

Modern Authentication Requirements

All Power365 project types (excluding Basic Projects using the Basic Authentication option) take advantage of Modern Authentication to help manage your projects. Modern Authentication is the default behavior for all Office 365 tenants. Unless it was disabled, no action is required. However, we recommend the following configuration parameter is validated prior to deployment.

Get-OrganizationConfig | Format-Table Name,OAuth* -Auto

If Modern Authentication is disabled it must be enabled prior to any migration activities can proceed. To enable Modern Authentication for Exchange Online, run this command under the correct authority.

Set-OrganizationConfig -OAuth2ClientProfileEnabled:$true

Here is some additional information about how to Enable modern authentication in Exchange Online.
Premium Integration Prerequisites

The Binary Tree Power365 Mail Migration with Integration is facilitated through a 100% Microsoft Azure-based Software-as-a-Service (SaaS) platform for Office 365, which will provide the capability of copying the entire contents of one mailbox to another mailbox, across tenants or within the same tenant. Address Translation is dependent upon proper mapping between source and target accounts. Integration services offer coexistence capabilities between tenants, such as address list synchronization and free/busy sharing. The following requirements are specific to the “Premium Integration” project type in Power365. This document does not cover Public Folder requirements.

At this time, the Power365 Premium Integration project type does not support more than one source AD Forest configured in a single Project.

Browser

Power365 is a cloud-based service accessed via web browser. We recommend using the desktop versions of Chrome v48.0 (or newer) or Firefox v44.0 (or newer) for the best cloud-based platform experience.

Internet Requirement for Online Help and Video Tutorials

An internet connection is required to access the online help system and video tutorials.

- Within the Power365 interface, the online help system can be accessed by clicking “HELP” in the pull-down menu and the video tutorials can be accessed by clicking the icons found throughout the application.
- The online help system and video tutorials can be accessed outside the Power365 interface at https://help.binarytree.com/power365/default.htm.
- Windows Server operating systems will need to have the Desktop Experience feature (or a video codec) installed to view the video tutorials.

Application Service Account Requirements

- **Account:** One Application Service Account dedicated to Power365 Project Management or existing account.
- **Office 365 Administrator Role:** Global Administrator
- **Office 365 License Requirements:** One available license (E1 minimum) for destination tenants.

**Important Note:** For the best application experience, it is always recommended to use the Global Administrator role. However, this account only requires the Global Administrator role during the initial Project setup, reconnections to the tenant or during a Domain Cutover event, where more authority is required. All account and role management is strictly the responsibility of the tenant administrators.

Binary Tree PowerShell Account Requirements

- **Account:** One Cloud only account will automatically be created during project setup.
- **Office 365 Administrator Roles:** Automatically assigned the Exchange and SharePoint Administrator roles.
- **Office 365 License Requirements:** Automatically assigned one available license (E1 minimum) for destination tenants.

**Important Note:** This account will automatically be assigned the Global Administrator role at the start of a Domain Cutover event, where more authority is required to complete the process.
Power365 Directory Sync Lite Active Directory Account Requirements

This account is used for “read and write” access to the destination Active Directory (AD). Directory Sync Lite is used to manage AD changes during the various migration and integration user phases.

- **Account:** One local Active Directory user service account for each forest or domain.
- **Rights:** Domain User with rights to Create and Modify objects in local Active Directory.

**Important Note:** This account is only required if deploying the Premium Integration project type.

Mailbox Licenses

- For mailbox data migrations, only Exchange Online Licenses that allow MAPI/HTTP are supported.

**IMPORTANT:** During a mailbox migration, the source and target user accounts will be licensed in Office365 to provide a mailbox to migrate data into. This means your organization will be consuming two Exchange licenses; one in the source tenant, and one in the target tenant for the duration of the mailbox migration. Once the mailbox migration is complete, the source license can be recovered. Please plan appropriately.

Target Mailboxes

- Power365 with Integration using Directory Synchronization will automate the mailbox provisioning and licensing operations during the “prepare” stage of the migration activity.

Source & Target Mailbox Delegation

- The required global administrator accounts must be granted the **Full Access** permission to their respective tenant mailboxes to allow a delegate (Global Admin) to open the mailbox and behave as the mailbox owner. This will be automatically executed by the Power365 systems during the first synchronization.

Test Mailbox Accounts

- As a best practice, we suggest at least 5 populated **source** Mailboxes for migration testing & validation purposes. Include some sample email messages, some contacts, and some calendar entries.

Source and Target Domain Pairing

- During configuration, you will be asked to choose your source and target domains for each tenant. This process is called domain pairing.

Automatic Licensing

- With a **Premium Integration** project, during account creation, Office 365 licenses will automatically be applied to the target user if the license in the source. This applies only to E3, E4 or E5 licenses.

- Otherwise, you may choose which SKU should be applied to your target mailbox.

Source & Target User Matching Attributes

- You will need to select a pair of attributes that will match exact values from the source user object to the target user object to discover and match the appropriate user accounts.
• The available matching attributes are as follows, choose at least 1 with a maximum of 3:
  
  o  userPrincipalName  
  o  mail  
  o  extensionAttribute1-15

  *userPrincipalName* and *mail* attributes are matched based on the local part of the address and the paired Domains (e.g. Tom.Dean@contoso.onmicrosoft.com would use Tom.Dean@binarytree.onmicrosoft.com as a match against the target account.)

**Source & Target Distribution Lists Matching Attributes**

Power365 can match existing mail-enabled distribution list groups for synchronization of membership or create new groups in a destination tenant. To match existing groups, follow these guidelines.

• You must choose a pair of attributes that will match exact values from the source group object to the target group object to discover and match the appropriate objects if they already exist in the target.

• The available matching attributes are as follows, choose at least 1 with a maximum of 3:
  
  o  ExternalEmailAddress  
  o  Description  
  o  DisplayName  
  o  Mail  
  o  MailNickname  
  o  ProxyAddresses

**Source Active Directory Groups**

To manage eligibility for Mailbox Migrations and other Integration services, Power365 provides the ability to discover users and groups from Active Directory (AD) Group membership. Instead of searching the entire Forest or Domain, Power365 will only act on objects based on group membership. For Integration projects, the group must be created on-premises and synchronized to your Office 365 tenant. Once a user is added to the group and discovery runs again, the user will be added to the list of eligible accounts for migration or related services. All AD groups created should be Mail-Enabled, Universal (scope) Security (type) groups. The following information provides details for each AD Group requirement.

• **Discovery Group**: We recommend creating a group just for this purpose. Create a local mail-enabled Universal Security AD group named, for example, “BTDiscovery”. Then populate the group with all eligible mailbox-enabled Users. Group membership should be limited to mailbox-enabled objects eligible for migration. Other members will be skipped during discovery.

• **Migration Waves Groups**: Optionally, you may sort mailbox-enabled Users into separate local AD Groups so they can be easily assigned to a migration wave and scheduled for migration. If organizing your migration users in this manner, then create each local AD Global Security group with a descriptive name for the migration event. You may nest each migration wave group under the discovery group for ease of management.
• **GAL Sync Groups:** Global Address Lists (GAL) Synchronization depends on Active Directory Group membership to identify mail-enabled or mailbox-enabled User objects. We suggest that you create a group just for this purpose. For example, a local AD group named “BTGALSync”. Then populate the group with all eligible mail-enabled user objects that should be displayed in the other tenant’s Global Address List.

    **NOTE:** If enabling **bidirectional** GAL sync, then both source AND target require a GAL Sync group.

• **Free/Busy Group:** Sharing Calendar Availability (Free/Busy) relies on Active Directory Group membership to identify eligible users. We suggest that you create a group just for this purpose. For example, create a local AD group in the source AD named, “BTFreeBusy”. Then populate the AD Group with any user eligible for calendar availability sharing. If no group is provided, all users will be configured for Sharing Calendar Availability.

• **Email Rewrite Group (Premium Integration only):** After implementation, Power365 with Premium Integration will automatically create two cloud-based groups called “BT-IntegrationPro-DayONE” and “BT-IntegrationPro-DayTWO” in the source tenant. Power365 will also create the same groups automatically in the Target tenant to represent all users eligible for rewrite services. Power365 will manage the groups. These groups allow you to choose which users have their email address rewritten.

    For any source user added to the “BT-IntegrationPro-DayONE” group, their email addresses will automatically be rewritten to match their target SMTP Domain, as if they have already been migrated to the target.

    For any migrated target user added to the “BT-IntegrationPro-DayTWO” group, their email addresses will automatically be rewritten to match their source SMTP Domain, so it will appear as if they have NOT yet been migrated.

    These groups will **not** be prepopulated with membership during creation. This is a manual process, so when someone requires rewrite services, you must add them to the desired group. Or, remove them to stop the service for the user – all in real time.

**Email Rewrite Services (Premium Integration)**

When planning the deployment of Email Rewrite Service (ERS) please take these recommendations into consideration.

Do not plan on utilizing the default “tenant.onmicrosoft.com” domain as your default SMTP domain (User Reply Address) when deploying Power365 Email Rewrite Services (ERS). This is due to concerns regarding the external recipient domain’s having SPF **hard fail** enabled.

Plan to deploy a temporary/vanity domain where the SPF record can be controlled in the event SPF failures become a problem.

Update your existing vanity domain’s SPF record to include the Binary Tree Power365 list of acceptable IPs. This will prevent any hard failures when routing mail through the ERS relays. Please contact Binary Tree support for a current list of IPs.
Power365 Directory Sync Lite

Power365 Premium Integration Projects can only be implemented if both the source and target tenants are synchronizing AD objects from their on-premises environment to Azure AD/Office 365. Power365 Directory Sync Lite will make the appropriate changes to the local AD objects but Azure AD Connect or an equivalent 3rd party sync solution must sync those changes to Azure AD/Office 365. The following attributes must be included in the AADC sync profile so that objects can be provisioned in the cloud correctly after Power365 syncs them into the target AD.

User

If Power365 is configured to create missing users in the destination AD environments then the following attributes will be set during creation. Most attribute values will be based on the source user object values while a few will be calculated.

- adminDescription
- displayName
- givenName
- legacyExchangeDN
- mail
- mailNickname
- msExchArchiveGuid
- msExchArchiveName
- msExchHideFromAddressLists
- msExchRecipientDisplayType
- msExchRecipientTypeDetails
- msExchRemoteRecipientType
- msExchResourceCapacity
- msExchResourceDisplay
- msExchResourceMetaData
- msExchResourceSearchProperties
- objectClass
- proxyAddresses
- pwdLastSet
- samAccountName
- showInAddressBook
- sn
Contact

Power365 will create Mail Contacts based on the project configurations in the destination AD environments. Most attribute values will be based on the source user object values while a few will be calculated.

- adminDescription
- displayName
- givenName
- legacyExchangeDN
- mail
- msExchHideFromAddressLists
- msExchRecipientDisplayType
- msExchRecipientTypeDetails
- msExchResourceCapacity
- msExchResourceDisplay
- msExchResourceMetaData
- msExchResourceSearchProperties
- objectClass
- proxyAddresses
- showInAddressBook
- sn
- targetAddress

Group

If Power365 is configured to migrate Mail Distribution Groups in the destination AD environments then the following attributes will be set during creation. Most attribute values will be based on the source group object values while a few will be calculated.

- adminDescription
- description
- displayName
- `groupType`
- `mail`
- `mailNickname`
- `managedBy`
- `member`
- `msExchCoManagedByLink`
- `msExchHideFromAddressLists`
- `msExchRecipientDisplayType`
- `msExchRequireAuthToSendTo`
- `objectClass`
- `proxyAddresses`
- `showInAddressBook`

**Optional User Meta-Data**

As an option with the Premium Integration project type, the following attributes will remain in synchronization until the user is cut over or the project is closed. The list below references the Active Directory attribute name and corresponding Azure AD parameter name.

- `co` - [Country]
- `company` - [CompanyName]
- `department` - [Department]
- `Info` - [Notes]
- `l` - [City]
- `Mobile` - [MobilePhone]
- `PhysicalDeliveryOfficeName` - [OfficeLocation]
- `PostalCode` - [PostalCode]
- `postOfficeBox` - [PostOfficeBox]
- `St` - [State]
- `streetAddress` - [StreetAddress]
- `telephoneNumber` - [BusinessPhones]
- `title` - [JobTitle]
Power365 Directory Sync Lite installs a Windows service named “Power365 Directory Sync Lite”. This service is the component that communicates with Active Directory and the cloud.

This service can be installed 2 different ways depending on the choice you make at installation time.

1. If you choose “SQL Authentication” the service will be installed to run as “Local System”
2. If you choose “Windows Authentication” the installer will prompt you for domain credentials and run the service as the specified user.

Run as “Local System” is the most common installation scenario but causes an issue if you require http proxy server routing. The service account is treated differently than regular user accounts and doesn’t generally pick up user proxy policy.

Proxy configuration can be done for the service account but is generally avoided.

The easiest way to use a http proxy server with Power365 Directory Sync Lite is to change the service “Log On As” value to a domain user, and configure that user’s proxy information.

General Requirements

- Windows Server 2012 R2 or Windows Server 2016 - US English Operating System
- SQL Server - SQL Server can be a new or existing database. If you choose the “Default Install”, Power365 Directory Sync Lite will download and install SQL Express 2016 SP2 for you if no SQL server is detected on the machine.
- Active Directory Domain Services running on Windows Server 2008 R2 or later. The domain and forest functional levels must be at least Windows Server 2003 native. The Active Directory forest must have the Microsoft Exchange 2010 SP3 (or later) schema extensions applied.

The following SQL Server versions (English versions) are supported:

- SQL Server 2008 R2
- SQL Server 2008 R2 Express with Advanced Services
- SQL Server 2012 SP2
- SQL Server 2012 SP2 Express with Advanced Services
- SQL Server 2014
- SQL Server 2014 Express with Advanced Services
- SQL Server 2016
- SQL Server 2016 Express with Advanced Services
- SQL Server 2017
- SQL Server 2017 Express with Advanced Services

Supported Versions of TLS

- TLS 1.2
**Additional Requirements**

- Power365 Directory Sync Lite must be installed in both the source and target AD Forests.
- Binary Tree will require access to dedicated source and target Windows servers to install and configure the Power365 Directory Sync Lite application for each Office 365 tenant.
- The Binary Tree Directory Sync Lite Servers must be dedicated servers for the Binary Tree solutions. These can be virtual machines.
- Azure AD Connect or another 3rd party synchronization tool must be deployed from local AD Forest to Office 365 to allow modifications to on-premises objects to be reflected in Office 365.
- Outbound port 443 must be open to the following destination: https://power365.binarytree.com/Api/DirSync
- Both the source and target Active Directory schemas must include the schema extensions for Microsoft Exchange 2010 SP3 or later.

**Email Signatures**

Power365’s Email Rewrite Service ensures email transit security and trust by signing messages using a DomainKeys Identified Mail (DKIM) certificate. To properly sign emails, a DKIM certificate will be generated and assigned to an existing selected domain in the source or target tenant. DKIM allows senders to associate a domain name with an email message, thus vouching for its authenticity.

You will need to elect one Accepted SMTP Domain from the source or target tenant to be used for the DKIM email signature. The selected domain will then have a DNS TXT record published for authenticity verification. During configuration, Power365 will provide the parameters of the DNS TXT record during deployment as it is a unique key generated for each tenant and project.

If the TXT record is ever deleted from DNS, email messages will no longer be verified, which will stop rewrite services.

More information on SSL certificate requirements can be found [here](#).

**DNS TXT Record**

To complete the Email Signature requirement, the DNS text record must be included in the source or target public DNS. The public key displayed below is only an example. Your key will be unique to your project.

- **Name:** selector1._domainkey
- **Type:** TXT
- **TTL:** 10
- **Value:** v=DKIM1; k=rsa;
p=MIIGfMA0GCSqGSIb3DQEBAQUAA4GNADCBiQKBgQCmvFUb+Tkozf5dA0dA3AHOwAUydfNVIkBkR72+gqp2Gxw8yYPR/1E1/zp5DD7i/8epWTR/F9u4jDxjLqYF9d8m7qJiFJxzwH27bMQC4VgUfRtq5WAmPurCBdxxvMoOAKQ+aYagtxpv9IlH7PAKxsUFbqGGZ0GQFSvMOGKC7hQIZZQAB

**SSL Certificates**

To successfully setup the Email Rewrite service for Premium Integration, a valid SSL certificate is required for all source and target tenants. A unique certificate that secures a single accepted domain is required for each tenant. The selected certificate cannot contain subject alternative names (SAN). The common name (Subject Name) must match any of the accepted domains configured within the tenant. This certificate is used to create the connector.
to the Email Rewrite service that is part of Premium Integration. This is the reason why the subject name of the certificate does not need to match accepted domains that are configured to be rewritten through the Email Rewrite Service. You will upload the PFX certificate into Power365. PFX files contain the public key file (SSL Certificate file) and the associated private key file (password).

The domain listed on the certificate cannot be moved as part of a Domain Cutover process. If you plan to move all accepted domains, you should plan to acquire a certificate for a newly-created accepted domain to use as a placeholder. This domain will not be moved or used; it will be used only as the subject for the TLS certificate.

The requirements for the certificate are as follows: *(Names are for example only.)*

- Common Name: bluefishresort.com
- Cryptographic service provider: Microsoft RSA SChannel Cryptographic Provider
- Bit length: 2048 or higher
- Must be valid for Server Authentication and Client Authentication.
- Must be signed by a trusted public root CA.
- Must contain a private key (password).
- Must not expire before the end of the project.
- Must have a Friendly Name defined.

**Domain Cutover and Certificates**

The accepted domain listed as the subject of the SSL Certificate cannot be moved as part of a Domain Cutover process. *(See SSL Certificates above.)*

**Outlook Configuration (Outlook Setup Pro)**

Power365 provides the user the ability to automatically configure their Outlook client to utilize the new mailbox. For this feature to be successfully installed, the following will be required on each user’s Windows workstation.

**General Requirements**

1. Internet access to download the executable and connect to Office 365.
2. The permission to download and run an executable (OutlookAgent.exe) file.
3. Disable any policies preventing Outlook Profile changes or creation.
4. The end-user will need to be supplied with the new or temporary password for the new account residing in the destination Office 365 tenant. *(if applicable)*

**Minimum Software Prerequisites**

1. Outlook 2010 (32-bit or 64-bit)
2. Windows XP
3. .NET 4.0.x (4.6.x or above recommended)
End-user Workstation Requirements

1. Internet access using Port 443.
2. Internet access to Power365 Outlook Setup Pro endpoint at https://power365.binarytree.com/api/outlook
3. Internet access to Exchange Online "Autodiscover" endpoints at:
   a. Global: https://autodiscover-s.outlook.com/autodiscover
   b. China: https://autodiscover-s.partner.outlook.cn/autodiscover
   c. Germany: https://autodiscover-s.outlook.de/autodiscover
4. Local access to read/write the following registry keys on the end-user’s workstation:
   a. Outlook 2010: HKEY_CURRENT_USER\Software\Microsoft\Windows NT\CurrentVersion\Windows Messaging Subsystem
   b. Outlook 2013: HKEY_CURRENT_USER\Software\Microsoft\Office\15.0
   c. Outlook 2016: HKEY_CURRENT_USER\Software\Microsoft\Office\16.0
   d. Outlook 32-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Office
   e. Outlook 64-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Office

   **NOTE:** During this process, the Outlook Profile will be copied to a new Profile directed to the target account. Due to this configuration, a new OST download will occur based on your current cache settings, if enabled. To avoid network congestion try disabling or curtailing your cache settings to a lower amount of data then slowly increase it as needed. This can be accomplished through policies.

Target Account Credentials

You will need to manage and distribute target account credentials to each end-user prior to mailbox migration cutover. If not distributed prior to cutover, the end-user will not be able to access their new mailbox.

Support for Exchange Hybrid Deployments

Power365 currently provides limited support for Exchange hybrid deployments. Environments with an Exchange Server 2013 (or later) hybrid deployment are supported, but with the following limits on functionality:

- On-premises mailboxes will be included in free/busy sharing and GAL synchronization.
- On-premises mailboxes cannot be included in migration activities.
- On-premises mailboxes will not be rewritten as part of the Address Rewrite Service in Premium Integration.
- Support for the Email Rewrite Service is limited to mail flow configurations that use Office 365 for message ingress and egress. Centralized mail flow configurations that use the on-premises Exchange environment for inbound and outbound message delivery may require custom configuration with Binary Tree support.
On-Premises Migration

Power365 offers migration to/from on-premise Exchange environments with the following additional requirements:

- Exchange Server 2013 must be patched to at least Cumulative Update CU17 or later.
- Exchange Server 2016 must be patched to at least Cumulative Update CU7 or later.
- An on-premise Exchange account with the Organizational Management role.
- A Remote Powershell endpoint configured with Basic Authentication. Firewall Port 443 must be open.

More information can be found here:


- An EWS Endpoint - We rely on Autodiscover to provide the correct External URL to connect to.

More information can be found here:


- MAPI/HTTP must be configured.

More information can be found here:


Modern Authentication Requirements

All Power365 project types (excluding Basic Projects using the Basic Authentication option) take advantage of Modern Authentication to help manage your projects. Modern Authentication is the default behavior for all Office 365 tenants. Unless it was disabled, no action is required. However, we recommend the following configuration parameter is validated prior to deployment.

```
Get-OrganizationConfig | Format-Table Name,OAuth* -Auto
```

If Modern Authentication is disabled it must be enabled prior to any migration activities can proceed. To enable Modern Authentication for Exchange Online, run this command under the correct authority.

```
Set-OrganizationConfig -OAuth2ClientProfileEnabled:$true
```

Here is some additional information about how to Enable modern authentication in Exchange Online.
Learn more about Binary Tree

For more information on Binary Tree, visit us at www.binarytree.com/company/about-binary-tree.

Binary Tree Social Media Resources

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