WHITEPAPER

A Selection Guide to Binary Tree’s Directory Synchronization Software
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Introduction

Synchronizing Active Directory (AD) environments is a common requirement in enterprises that have multiple AD domains, or are merging, establishing a partnership, or starting an initiative to migrate directories or email.

Synchronizing directories benefits users and administrators. It enables users to find each other in a common address list when they want to send emails, schedule meetings and work together using conferencing and other collaborative applications. And for administrators, directory synchronization saves time and mitigates authentication errors by ensuring that changes made in one directory are automatically mirrored in a synchronized directory.

Given the importance of directory synchronization to our customers and the need to address different use cases, Binary Tree provides six different products that include directory synchronization capabilities. This paper provides an overview of each along with guidance on selecting the right solution for your directory synchronization needs.
Binary Tree Directory Synchronization Software Products

Binary Tree currently provides two software products focused specifically for directory synchronization projects:

- Directory Sync Pro
- Power365® Directory Sync

**Directory Sync Pro**

Directory Sync Pro helps organizations synchronize multiple instances of Active Directory or synchronize Active Directory with a Domino Directory. To start, the tool makes both directories aware of each other. It then synchronizes all mail-enabled objects—users, contacts, distribution lists, shared mailboxes, passwords and much more.

Directory Sync Pro is more powerful and easier to use than free sync tools. It also costs less than confusing identity management products, which often add unneeded complexity. And it’s flexible enough to adapt to any environment, from the simple to the complex, meeting unique needs for any organization.

With Directory Sync Pro, you can do a “dry run” to make sure your directories will sync as you expect. And because it’s an automated sync, you can be confident that your data will stay in sync.

**Power365® Directory Sync**

Power365 Directory Sync is a Software-as-a-Service product that enables synchronizations between Active Directory environments, between Azure AD environments or even between Azure AD and Active Directory. As cloud-based software, Power365 Directory Sync can be set up in a single day to help establish Day 1 productivity and collaboration for mergers, acquisitions and organizations that need a unified Global Address List (GAL).

Power365 Directory Sync synchronizes objects, attributes and passwords, and is highly customizable to configure even the most complex workflows. You can test the sync before it’s run in production with detailed reports that give insights before a sync to quickly identify and resolve conflicts.
Other Binary Tree Software with Directory Synchronization Capabilities

Binary Tree provides four other software products that include directory synchronization capabilities in addition to other capabilities:

- Active Directory Pro
- Power365® Integration
- Power365® Integration Pro
- Notes Integration | CMT

**Active Directory Pro**

The Active Directory Pro software is designed for Active Directory migrations as it lets you merge, consolidate, or restructure Active Directory environments. It securely migrates objects, settings, and properties. You can use it to automate an AD migration while keeping your migrated and un-migrated users, devices, and applications in sync.

Active Directory Pro is tightly integrated with, and includes licenses for, our Directory Sync Pro software. With Active Directory Pro, you can migrate during normal business hours—without interrupting your users. It’s simple to deploy and has an intuitive user interface. Active Directory Pro enables you to customize the transformation to your specific needs, it helps to shorten your project timeline, and it reduces the risk of errors by automating complex tasks.

**Power365® Integration**

Power365 Integration provides Day 1 collaboration capabilities between multiple Office 365 tenants by removing communication blockers that often create challenges for users. You gain a unified workforce with a solution that automates the coordination between different Office 365 tenants with a unified address list and global access to calendar availability between organizations. Power365 Integration orchestrates direct changes to local (on-premises) Active Directory users and mail-enabled groups to control mail routing before and after the mailbox migration. The product also includes capabilities for migrating mail and public folders between tenants as well as moving mail from a local Exchange Server (2013 and above) to a cloud tenant.
Power365® Integration Pro

Power365 Integration Pro includes all the features of Power365 Integration and adds the ability to deliver a unified brand identity through an email rewrite service—on both inbound and outbound email—from different Office 365 tenants. Power365 Integration Pro can maintain existing email addresses before and after the migration to the destination tenant or use a new email domain before the migration even begins. Power365 Integration Pro is a comprehensive tenant-to-tenant integration and migration solution.

Notes Integration | CMT

Notes Integration | CMT integrates Domino with Exchange and/or Office 365 so users can collaborate during a migration. It ensures the high-fidelity interchange of email, directory objects, calendar entries, calendar free/busy availability, and mail-enabled applications between Domino and Exchange, or between Domino and Office 365, to enable migrated and non-migrated users to continue to collaborate during a migration.
How to Select the Right Product for Your Needs

Because there are a wide variety of use cases for directory synchronization, it can sometimes be confusing to select the right Directory Sync product for your situation. The following common use cases will provide some guidance on choosing the right solution to meet your project needs.

Integrating Office 365 Tenant Environments for Tenant Migrations

Challenge

Company A is merging with company B. Company A and B each have their own Office 365 hybrid tenant and domains. Company A will be migrating their users, resources and domains to company B’s Office 365 tenant. Company A must appear to be company B’s domain once the merger is official. Company A and B require a unified address book and calendar availability for the duration of the coexistence phase of the migration project. The migration project will span nine months and touch over 15,000 users. At the end of the migration, company A’s tenant will be retired.

Solution

Binary Tree Power365 Integration Pro provides the solution for these requirements. With Power365 Integration Pro, company A can easily migrate and share user resources with company B’s tenant. While migrating company B they can share their domain with company A’s users. When a company A user sends external emails, they’ll appear to come from company B’s domain. Once Power365 Integration Pro has migrated all 15,000 users, it can also help them to automatically move their legacy domains into the destination tenant assisting with the decommissioning of the source environment.

Integrating Office 365 Tenant Environments for Long-Term Coexistence

Challenge

Long time business partners companies A, B and C are about to merge into a new company and brand. Companies A, B and C each have their own hybrid Office 365 tenant deployed for their workforce. They have decided due to the minimal time frame and complexity of the technical merger they will maintain their own Office 365 tenants for at least a 1-year period. However, to do this they will require all employees can easily collaborate under one brand, upon approval of the merger. At the end of the user migration, companies A, B and C will move their domains to the new company tenant and finally decommission their respective tenants.
Solution

Binary Tree Power365 Integration Pro is the ideal solution for this project. With Power365 Integration Pro, these companies can deploy long-term coexistence between the multiple tenants and when ready, begin user migrations to the new company tenant. During the project all the users will have a single external email address representing the new unified brand. Full mail reply-ability will be supported at all stages of the user migration, before and after mailbox cutovers to the new tenant. And with 2-way Address Book Sync, everyone will be able to easily collaborate across tenants. After the period of coexistence, when the companies are ready to merge their infrastructure, they can begin migrating mailboxes from each tenant into the new company tenant, all while maintaining domain sharing and coexistence. Once Power365 Integration Pro has migrated all users and resources from each tenant, it can also help them automatically move their legacy domains into the destination tenant, further assisting with the decommissioning of the three source environments.

Integrating Local AD Environments without Network Connectivity

Challenge

Company A is in the process of acquiring company B. Before the acquisition, they cannot legally set up connectivity between their local AD Forests or other systems. However, they will gradually need to grant specific work teams access to systems to plan and manage the merger process. Over the next year, different employees will require user accounts to access systems in the other company, distribution lists to help communicate efficiently and the ability to manage these identities for changes, such as renames, terminations and new hires to the team.

Solution

Power365 Directory Sync is the solution of choice for this challenge. With Power365 Directory Sync, these companies can securely bridge the gap between their AD forests without the normal network requirements associated with on-premises directory sync solutions. As they progress through the merger, Power365 Directory Sync can be leveraged to move their entire user population to the destination forest. After legal approval, when they gain network connectivity, Power365 Directory Sync’s role can expand to include password synchronization and SID history migrations.
Integrating Local AD Environment with Multiple Office 365 Tenants for Long-Term Coexistence

Challenge

Company A acquired companies B and C. Companies B and C are in the cloud only. Their users and data lives in Office 365 and Azure AD. Company A is configured in Hybrid Mode and already has Azure AD Connect synchronizing their users and groups to their own Office 365 tenant. Therefore, they cannot synchronize any of their on-premises or cloud users and groups objects to the 2nd and 3rd tenants. Company A has no current plans to consolidate these tenants, therefore they require a long-term coexistence solution.

Solution

Power365 Directory Sync is the solution for this situation. Power365 Directory Sync can integrate the local hybrid environment of Company A to the Office 365 tenants of companies B and C. Power365 Directory Sync can help these companies to integrate their local and cloud users and groups into the acquired tenants. With Power365 Directory Sync, these companies can keep their identity management capabilities local while providing their users access into the additional Office 365 tenant workloads.

Integrating Local AD Environments for AD Migrations

Challenge

Company A is planning a merger with company B that will involve moving users, groups, devices, OUs, permissions and other AD components from company A’s AD Forest to company B’s AD Forest. The merger also requires user passwords to be synchronized, user workstations both remote and connected to be cutover to the new domain, and SIDHistory to be migrated to maintain a security trust when referring to shared files and resources located in the source. And finally, they have some custom requirements about using local languages for workstation cutover notifications and running some application related scripts post-migration.

Solution

Binary Tree Active Directory Pro, which includes Directory Sync Pro, provides the solution for this initiative. These companies will be able to integrate their AD Forests with Directory Sync Pro and orchestrate it all using Active Directory Pro. Active Directory Pro will help them manage and streamline their AD migrations for users, groups, workstations, servers, NAS devices and more. With flexible extendibility options for custom scripts and actions, Active Directory Pro provides the solution to the most complex migration projects. These companies will be able to customize their end-user notifications when the workstation is moved to the new domain. While Active Directory Pro will give them a toolbox to work from, Directory Sync Pro is the engine that runs the Active Directory integration and synchronization. Directory Sync Pro will provide the Password and SIDHistory move engine and keep their AD objects in sync until the AD
Migration is complete. While they take advantage of Active Directory Pro for managing the migration activities, they will take advantage of the transformative power of Directory Sync Pro for reorganizing, renaming and reformatting AD objects at the attribute level. They can use custom mappings and conversion formulas to control how objects will end up in the destination. Truly with Active Directory Pro and Directory Sync Pro in their hands, they can move and transform their AD Forest into the directory they need to manage their network of users and resources.

**Integrating Local AD Environments for Exchange On-Premises Migrations**

**Challenge**

Company A has multiple Exchange on-premises organizations broken up by regional locations. Company A requires an easy way to schedule and manage mailbox moves between many different Exchange organizations. So, the client chooses Binary Tree **Exchange Pro** to do just that.

However, before they can do that they must create the properly configured user objects in the destination Active Directory before a mailbox move job can be requested. And they will also need a unified address book to share among the different organizations. And on top, they will require password synchronization to ensure that passwords will remain the same when a user is moved.

**Solution**

Binary Tree **Exchange Pro** and **Directory Sync Pro** make up the total solution for this challenge. Exchange Pro will manage the mailbox migrations and notify the end-users when it’s all done. Directory Sync Pro can create the required users, with the proper attributes to meet the mailbox move requirements. It can also make the new users visible to the different organization’s address lists and it can even copy passwords from one Active Directory to another.
Integrating Domino and Office 365 Environments for a Migration and Coexistence

Challenge

Company A is moving their users from Lotus Notes and Domino to Microsoft Exchange Online. They will be setting up Azure AD Connect to synchronize their users from their local AD to Office 365. It will be a 6- to 8-month migration project, spanning all time zones and regions. During this period, company A will require coexistence between Lotus Domino and Exchange Online. They require calendar sharing, mail routing and application coexistence. In addition, company A requires a migration tool to convert and migrate NSF data into Exchange Online mailboxes. And finally, the company will need a method to match their Lotus Notes directory users and groups with their AD directory users and groups then create any that may be missing. They don’t know how many Lotus Notes users will require new AD accounts and which users already have them.

Solution

Binary Tree Notes Migrator, Notes Integration and Directory Sync Pro comprise the solution package needed for this project. While Notes Migrator will be used to migrate the Notes mail and archives to Exchange Online and Notes Integration will provide mail routing and free/busy services, Directory Sync Pro will provide the foundation for all of those to work on.

Directory Sync Pro can be utilized to match and report on their missing AD users. It can easily create and update AD users to prepare them for migrations and coexistence but can also migrate group and group membership to AD with ease.

Next Steps

We hope you found the guidance in this document helpful. If you would like to discuss your specific requirements for synchronizing directory environments, please contact us.
About Binary Tree

Binary Tree is a Microsoft Gold Partner for messaging, cloud productivity and application development and is dedicated to and focused on enterprise transformations to Microsoft platforms. Since 1993, Binary Tree has transformed more than 8,000 global clients and 42 million users, including 7.5 million users to Office 365. The company is a globally preferred vendor for Office 365. Its headquarters is located outside of New York City with global offices in France, Germany, Singapore, Sweden and the U.K. Its award-winning software and services help companies modernize email, directories and applications by moving and integrating them to the Microsoft cloud. The company’s business-first approach helps plan, move and manage the transformation process from end to end so that clients can stay focused on their core businesses. Binary Tree’s experts deliver low-risk, successful IT transformations. Visit www.binarytree.com for more information.

Binary Tree Social Media Resources

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