

Synchronize identities, group membership, and passwords between Active Directories.

www.hostingcontroller.com

Active Directory Synchronization

Need for Synchronization

Organizations often require Active Directory objects (users, groups, contacts,) and their passwords to be synchronized between multiple Active Directory forests. Synchronizations may be necessitated by:

- Background mergers
- Acquisitions
- Company divestitures
- Partnerships

Bridging the enterprise directory services of two complex organizations can prove challenging. If they are merged or if one of them acquires the other, can their users access each other's applications? Synchronization of directory services provides an answer. With directory synchronization users of both organizations can remain in their own forests (that they always have been using) but still access applications in the other directory. The same is the case with divestitures and spin-offs. Companies splitting out of their parent companies need to maintain access to resources and applications in parent directories.

Many companies have good reasons to maintain on-premises directory services such as statutory and regulatory restrictions. Highly sensitive data of the companies must reside 100% on the country's soil. For such organizations, it's simply not practical to maintain two disparate sets of identities. Business users don't care where an application they need is hosted or why they need to provide different credentials for two separate sets of identities. Moreover, it's also bad for the IT. The IT department shouldn't have to worry about managing two separate sets of identities. It just adds to the burden.

In other cases, organizations housing a hosted infrastructure such as Microsoft Exchange have customers holding their own Active Directories. The primary requirement for such organizations is to have on-premises users somehow synchronized with the hosted environment.

Whatever the reason cross-forest synchronization has become a reality, making a very compelling argument for IT departments to be ready, should the need arise.

Why AD Connect Sync Plus?

By design or because of events beyond the control of an organization, Active Directory synchronization often becomes inevitable. To harness this vertical AD Connect Sync Plus brings a web-based solution for synchronizing identities, group membership, and passwords between Active Directories. However, ADCS Plus stands out from its competition because it can synchronize multiple sources and target Active Directories while still controlling everything centrally through a single interface. This means central monitoring, logging, and reporting for all Active Directories. In addition, unlike most other solutions, it offers a two-way (bi-directional) sync of passwords. Passwords are synchronized from the source Active Directory to the control server and from the control server onward to the destination and vice versa.

Benefits

- ✓ Apart from password hooks, no other installation is required on the domain controllers.
- ✓ Does not require a LAN connection to work. Works over the internet.
- Does not require a two-way trust to be established.
- ✓ Allows a two-way sync of passwords.
- ✓ Allows only the synchronization of required attributes. Unwanted attributes can be excluded.
- Employs LDAPS to establish communication with the domain controllers.

Case Study

See how a government organization simplified user management across ministries with AD Connect Sync.

https://hostingcontroller.com/Resources/Casestudies/Government-Facilitator-Case-Study.pdf

System Requirements

Control Server

This server will host the ADCS Plus Portal. The control server can either be a standalone machine or a domain controller. Hence, the ADCS Plus Portal can be installed either on a standalone machine or a DC. If the Portal is being installed on a standalone machine, then that standalone machine should be able to access the DC which will save the ADCS Plus Portal admin's security group and admin users. Software Requirements:

.NET Core 8 Runtime Hosting Bundle

(https://dotnet.microsoft.com/enus/download/dotnet/thankyou/runtime-aspnetcore-8.0.11windows-hosting-bundle-installer)

- .NET 4.8 (installed through the Add Roles and Features option in Server Manager on Windows Server)
- IIS Web Server (installed through the Add Roles and Features option in Server Manager on Windows Server)
- IIS URL Rewrite (https://download.microsoft.com/ download/1/2/8/128E2E22-C1B9-44A4-BE2A-5859ED1D4592/rewrite_amd64_e n-US.msi)

Erlang/OTP 26: (https://github.com/erlang/otp/reeases/download/OTP-26 2 5 6/otp, win64 26 2 5 6 exe)

RabbitMQ: (https://github.com/rabbitmq/rabbitmq-server/releases/download/v3.13.

Features

✓ Web Based Solution

Users can access the central portal anytime through a web browser.

✓ Multiple Active Directories

Identities can be synchronized between multiple Active Directories (sources and targets).

✓ Central Management

Administrators can control all Active Directories from one central location.

✓ Password Write Back

User passwords can be synchronized from the source Active Directory to the destination and vice versa (bi-directional sync).

✓ Multi-User Access

Multiple users can access the solution to perform administrative tasks.

√ Highly Available

In case of failure, the central portal can remain highly available by automatically switching to an available node.

✓ Security

No unwarranted installations on domain controllers apart from password hooks.

✓ Mediation Servers

By bringing in mediation servers, domain controllers can largely be spared from unwanted exposure.

✓ Effective Mapping

Specific source OUs can be mapped to specific target OUs. Users, groups, contacts, and devices in the source OU will be synchronized to the specified target OU.

√ Two-Factor Authentication

Users can use two different authentication factors to identify themselves.

✓ Comprehensive Reports

Useful reports showing the number of users, passwords, groups, and contacts synchronized across Active Directories.

Mediation Agent Server

The Mediation Agent Server consists of two components. These components are ADCS Plus Agent (required component) and ADCS Plus Update Service (optional). Please note that the Mediation Agent Server components will be installed on two different machines. One machine will be for the source DC. Another machine will be for the target DC. The reason behind this is that both DCs are required to be synchronized, which is the main purpose of the ADCS Plus solution. Software Requirements:

- NET Core 8 Runtime Hosting Bundle (https://dotnet.microsoft.com/enus/download/dotnet/thankyou/runtime-aspnetcore-8.0.11windows-hosting-bundle-installer)
- .NET Desktop Runtime 8

 (https://dotnet.microsoft.com/en-us/download/dotnet/thank-you/runtime-desktop-8.0.11-windows-x64-installer)
- NET 4.8 Framework.

Password Hook

This consists of the ADCS Plus Password Filter, which is an optional utility like the ADCS Plus Auto-Update utility. Please note that the ADCS Plus Password Filter will be installed on required DCs (i.e., DCs that will be availing the synchronization services of the ADCS Plus solution), and it is recommended to be installed only if password syncing is turned on for DCs where it will be installed and utilized.

Software Requirements:

NET 4.8 Framework.

ADCS Plus Portal Database

ADCS Plus Portal stores its database in Microsoft SQL Server. It's recommended to have a separate SQL Server cluster to host ADCS Plus Portal's database.

Software Requirements:

❖ Microsoft SQL Server 2014 or above.

✓ One-to-Many Sync

One Active Directory can sync with multiple target Active Directories.

√ Many-to-One Sync

Multiple source Active Directories can sync with one target Active Directory.

√ Interval Based Sync

Objects can be synchronized at convenient time intervals.

√ Required Attributes

Only required user attributes can be made to sync. Unwanted attributes can be omitted.

✓ Custom Attributes

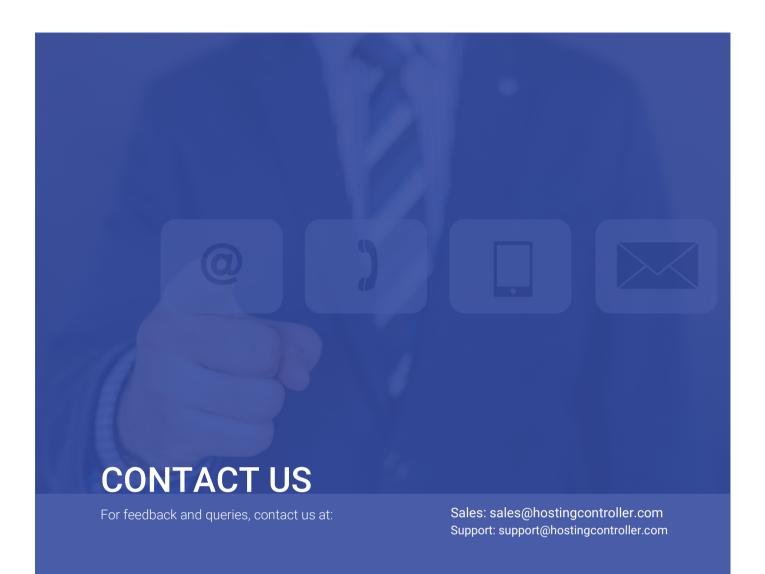
Custom attributes can be added to the database and then made to sync.

✓ Secure Communication

Communication between the mediation and control servers will be over secure channels (HTTPS).

✓ Bilingual Interface

The central interface is available in two international languages English and Arabic.



Worldwide Contacts (Sales Queries)

Canada: +1 (647) 799-1000

USA: +1 (213) 341-8140

Australia: +61 (3) 6364 3907

UK: +44 (0) 207 0961387

Fax: +1 (604) 227 0273

Hosting Controller Inc. Kingston

1056 Gardiners Rd, Kingston, ON, K7P 1R7 Canada.

Founded in 1999 and a pioneer in Windows Hosting Automation, Hosting Controller is a hybrid multi-cloud control panel for enterprises, government organizations and service providers. Hosting Controller transforms your data center into a private cloud, letting your data stay where it is. Hosting Controller's robust and unified control panel offers cross platform support, N-tier user architecture and self-service portals. It has built-in integrations for Microsoft Enterprise Applications MS Exchange, SharePoint, Skype for Business, Active Directory and MS 365 and a full automation solution for laaS offering virtualized partitions on both Windows and Linux based servers through Hyper-V and VMware. Hosting Controller Inc. is based in Ontario, Canada and has customers in 125 countries worldwide.

Copyright © 2025 Hosting Controller Inc. All Rights Reserved. AD Connect Sync Plus is a trademark of Hosting Controller and/or one of its subsidiaries and may be registered in Canada and other countries. Other products and company names mentioned herein may be trademarks of their respective corporations.

www.hostingcontroller.com