Microsoft

Modernize your identity infrastructure:

Upgrade from Active Directory
Federation Services to
Azure Active Directory

As businesses adapt to challenges created by increased cybersecurity attacks, the need to balance user productivity while ensuring strong security is critical.

IT and security teams are asked to enable secure access for their users across applications of all types – from on-premises to the cloud. Business leaders are feeling the rising pressures to protect their users and assets across the board.

With security, user experience, and lowering costs taking priority, the need for a cloud-first approach to identity and access management becomes essential. Those who have adopted cloud environments agree that it's the safest place to protect company assets.

As companies consider modernizing their identity and access management systems, IT and security teams must take a hard look at their existing on-premises investments, such as Active Directory Federation Services (AD FS). On-premises applications and infrastructure can be targets for attackers – now is the time to upgrade from AD FS to a cloud-first approach with Azure Active Directory (Azure AD).

81%
of business leaders state they feel pressure to lower security costs

43%
of business leaders noted improving the end-user experience and productivity as their top priorities

41%
of business leaders say security controls to protect app access is their top priority

Source: *Microsoft Security Survey*

Upgrading your app authentication from AD FS to Azure AD

Microsoft's Active Directory Federation Service is a software component of on-premises Active Directory used to authenticate external resources. Organizations can achieve single sign-on across various apps for their employees and partners and provide a streamlined user experience.

While AD FS can help provide single sign-on to applications located across organizational boundaries, it can be a costly and complex solution to maintain and manage compared to cloud-based identity solutions.

Cloud-based identity and access management solutions, like Azure AD, provide more robust security, improved end-user experiences, and reduced costs compared to AD FS.

By upgrading your app authentication from AD FS to Azure AD, you can:

🔒 **Stay secure and resilient across your environment**
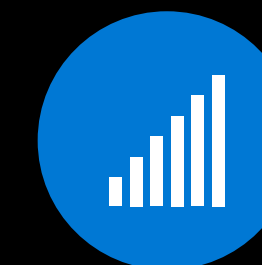
📊 **Improve workforce productivity by providing seamless access**

⚙️ **Reduce cost by retiring legacy infrastructure and increase IT efficiency**

Securing your apps
with Azure AD

Azure AD provides industry-leading security. Using cloud-based AI that automatically detects and responds to compromised accounts, Azure AD can adapt to your business and prevent suspicious user accounts and sign-ins. Admins can enforce strong authentication and risk-based access policies to avoid costly data breaches and efficiently automate user access to apps and data across their journey in your organization.

Azure AD streamlines the user experience to keep your users more productive. By simplifying access to resources with single sign-on, users encounter the same experience whether they are accessing apps from their homes, the office, abroad, on-premises, or in the cloud.

Leveraging a single, comprehensive identity and access management solution like Azure AD improves IT efficiency and reduces your overhead costs. Easily manage your users and their access from the cloud, retiring existing and costly on-premises infrastructure.

Preparing to modernize your identity infrastructure

Before you begin to retire AD FS or upgrade your app authentication from AD FS to Azure AD, be sure to align with key stakeholders – from executives to application owners. Executive buy-in can be vital in ensuring migration is part of a larger organizational change to a more centralized, efficient process. Alignment with key decision-makers and application owners is necessary when prioritizing the migration journey and running proofs-of-concept before a broader rollout.
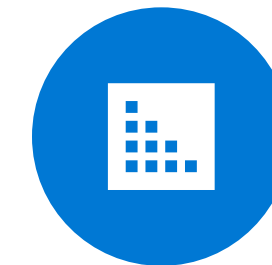
Once you have received stakeholder alignment, we recommend a five-step approach to help you transition your app authentication from AD FS to Azure AD.

Five steps to upgrade your apps to Azure AD
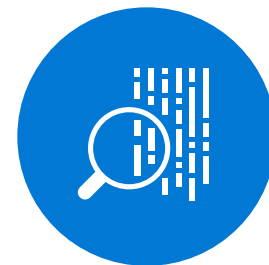
1. Discover

Find all the apps in your ecosystem and scope what needs to be upgraded to Azure AD
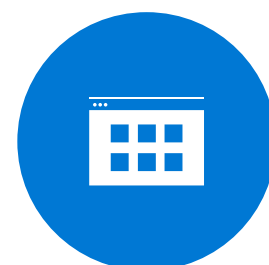
2. Classify

Categorize and prioritize the apps based on usage or business criticality that will be upgraded first to Azure AD
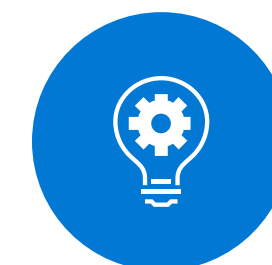
3. Migrate

Execute and utilize migration guidance, tutorial videos, and tools to help transition your apps

4. Manage

Leverage advanced capabilities such as Conditional Access to secure and manage access to your apps

5. Retire

Retire existing infrastructure or redundant solutions to reduce costs and maintenance

Tools to help you upgrade from AD FS to Azure AD

To get started in upgrading your app authentication from AD FS to Azure AD, leverage the following capabilities to help you discover what applications to upgrade, how to best upgrade your apps to AD FS, and how to move to cloud-only authentication with Azure AD.

Discover the apps to upgrade in your environment

Azure AD Connect Health

Azure AD Connect Health provides robust monitoring and insights into your on-premises identity infrastructure. View alerts, usage analytics, and other information about apps used in AD FS to inform what apps to upgrade.

❯ **Learn More**

Upgrade your app authentication

AD FS Application Activity Report

The AD FS application activity report helps you discover which of your applications can be upgraded to Azure AD. It assesses all AD FS applications for compatibility with Azure AD, runs tests, fixes any issues, and guides individual applications for migration.

> **Learn More**

AD FS Application Migration PowerShell Script

If you don't have Azure AD Connect installed, leverage the AD FS application migration PowerShell script. This script can run on your on-prem AD FS server to determine the readiness of apps for migration. It collects the relying party apps from your AD FS server, analyzes the configuration settings, and provides an Excel report of which apps can be migrated to Azure AD.

> **Learn More**

AD FS to Azure AD Application Code Samples

Leverage code samples and accompanying tutorials to help your developers understand how to configure their apps from AD FS to Azure AD and understand the changes required to their code.

> **Learn More**

Upgrade your user authentication to the cloud

AD FS to Password Hash Sync

Allow your users to sign into both on-prem and cloud-based applications by using the same password. It requires no additional on-prem infrastructure outside of your existing AD stores and credentials.

> **Learn More**

AD FS to Pass-Through Authentication

Unlike Password Hash Sync, Pass-Through Authentication requires installing a software agent to connect to passwords stored on-premises for validation so that users can sign into cloud apps with the same username and password for on-premises resources.

> **Learn More**

Staged Roll Out

Upgrade your user's authentication from AD FS to cloud authentication in a controlled manner. Selectively test groups of users with cloud capabilities like multi-factor authentication and apply risk-based access policies.

> **Learn More**

We're all in this together

Modernizing your identity infrastructure is imperative to enabling secure remote work for your business and keeping your company assets safe. As a single identity system for your cloud and on-premises apps, Azure Active Directory can serve as a solution for your business to simplify management, tighten control, and close critical security gaps. By upgrading your application authentication from AD FS to Azure AD, you can protect your business from increased cybersecurity attacks while improving user productivity and reducing costs.

"Moving to the cloud with Azure AD has benefitted both our employees and our IT Department. Thanks to Azure AD, employees can now have streamlined access to the services they need. Meanwhile, our IT department has freed up more resources, now that it no longer has to maintain an on-premises server or AD FS"

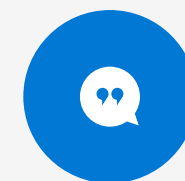– Mr. Ichinose, IT Manager at Mitsui & Co.

Get started:

Five steps for integrating all your apps with Azure AD

Engage with us online:

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Blog

Technical Resources:

Migrating apps to Azure AD

Moving application authentication from AD FS to Azure AD

Application management documentation

Move apps from AD FS to Azure AD