

# WorkshopPLUS - Active Directory Federation Services: Deployment, Administration and Troubleshooting



## WorkshopPLUS

### *Target Audience:*

*This WorkshopPLUS is targeted at architects, developers and IT administrators.*

*Attendees must possess knowledge of the following:*

- *Active Directory Domain Services*
- *HTTP Protocol/Troubleshooting*
- *Basic understanding of SQL Server/Active Directory Lightweight Directory Services (AD LDS)*
- *Basic experience on any version of AD FS*

## Overview

This three-day Active Directory Federation Services: Deployment, Administration and Troubleshooting WorkshopPLUS is designed to help customers addressing the significant changes to identity management and control of access to resources, which are caused by usage of proven Web Service (WS-\*) standards and interoperability in new authentication mechanisms.

To enable attendees to identify the optimal solution for various scenarios and avoid common pitfalls, this WorkshopPLUS explains concepts of claims-based authentication and authorization, puts them into action and helps organizations to deploy AD FS.

### Key Features and Benefits

This WorkshopPLUS transfers the knowledge to understand the requirements and approaches involved in implementing federated authentication, and will enable attendees to deploy and troubleshoot AD FS. The WorkshopPLUS covers AD FS up to the version delivered with Windows Server 2016.

### Technical Highlights

This WorkshopPLUS enables students to:

- Understand claims-based identity and authentication.
- Plan and deploy AD FS in an enterprise.
- Configure claims-based applications.
- Troubleshoot AD FS related issues.

# Syllabus

## *Lab Requirements:*

*Participants will require a computer with the following configuration:*

- **Operating system:** Windows 7 or later
- **Peripherals:** USB port
- **Network:** 10 Mbps or faster network adapter
- **Application Software:** At least an evaluation copy of Microsoft Office 2010 Professional and a PDF reader

*Participants also need a Microsoft account to connect to the virtual environment. The classroom must be networked with access to the Internet with at least Internet bandwidth of 10 Mbps. TCP port 443 must be open. We highly recommend a wired network in the classroom.*

This WorkshopPLUS runs for three full days. Students should anticipate consistent start and end times for each day. Early departure on any day is not recommended.

**Module 1: Introduction:** This module provides an overview of why and when to use AD FS, including details on Key Terminology, Identity, and Legacy Authentication protocols.

**Module 2: Deployment:** This module discusses all steps of AD FS deployment, from planning to actual configuration. Included are details for planning AD FS farm roles and topologies, considerations regarding high availability and firewalls, as well as the actual deployment by requesting AD FS certificates, handling SSL certificates and installing and configuring AD FS and Web Proxy servers.

**Module 3: Administration:** This module presents all elements of AD FS administration, such as delegation of administration, configuring relying party and federation trusts, authentication, Device Registration Service, Risk Mitigation Features and more.

**Module 4: OAuth:** This module introduces OAuth 2.0, including Tokens, Flows, OpenID Connect and OAuth support in AD FS.

**Module 5: Migration:** In this module, AD FS related migration scenarios are covered. It describes migrating the AD FS database from WID to SQL and upgrading AD FS installations from previous versions of Windows Server to Windows Server 2016.

**Module 6: Maintenance:** This module on AD FS maintenance includes details on updating AD FS related certificates, backup & restore of AD FS and managing AD FS sync properties.

**Module 7: Troubleshooting:** This module provides details and describes tools for AD FS troubleshooting. It covers event sources, auditing, troubleshooting clients and servers, common AD FS related issues and more.