MobileIron Access Cookbook

Access with Office 365 and Microsoft ADFS

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Overview

SAML provides single sign-on capability for users accessing their services hosted in a cloud environment. Generally, a service provider such as Office 365 is federated with an identity provider such as Microsoft ADFS for authentication. The user gets authenticated by ADFS and obtains a token for accessing applications in a cloud environment, such as Office 365. This guide serves as step-by-step configuration manual for users using ADFS as an authentication provider with Office 365 in a cloud environment.

Disclaimer:
This cookbook is informational to help with the setup flow and actual screenshots. The steps might vary in your deployment scenario due to changes in SP/IdP versions.

Prerequisites

Verify that you have the following components in your environment:

- ADFS version 3.0
- Office 365 subscription
- Existing working direct federation between ADFS and Office 365
- **ADFS (IDP) Metadata Files**
  You must download the ADFS metadata files for ADFS (IdP)
  - Download ADFS metadata file from https://<ADFS Server FQDN>/FederationMetadata/2007-06/FederationMetadata.xml
- **Office 365 Metadata Files**
  You must download the metadata files for Office 365 (SP)
  - Download Office 365 metadata file from https://nexus.microsoftonline-p.com/federationmetadata/saml20/federationmetadata.xml

Configuring Office 365 and Microsoft ADFS with MobileIron Access

You must perform the following tasks to accomplish the configuration between Office 365 and ADFS:

- Register Sentry to Access
- Configure Access to create a Federated Pair
- Configure the ADFS
- Configure the Office 365

Register Sentry to Access

You must register Sentry to Access to fetch the latest configuration from Access.

Prerequisite

Verify that you have registered Sentry earlier. If so, then do not perform this step.

Procedure

1. **Clish** Sentry. In the configuration mode, execute the following command for registration.
   (config)#accs registration https:/<FQDN of Access server><Admin Username of Access Server>
2. Enter the **Tenant password** and complete the registration.
3. In **Access**, click the **Sentry** tab.
4. Select the appropriate Sentry instance, then click **Action** > **Assign**.
5. Click **OK**.
6. **Clish** Sentry and execute the following command in configuration mode to fetch the latest configuration from Access immediately:

   (config)# accs config-fetch update

   Note: All the published configuration changes are fetched by Sentry assigned to the profile in fifteen minutes. However, if you want to see the changes immediately, then perform Step 6.

Task Result

Single-sign-on service is now configured using SAML with Office 365 as the service provider and Microsoft ADFS as the identity provider. This configuration lets you fetch the latest configuration from Access.

Configure Access to create a Federated Pair

You must configure Access to select your service provider and the identity provider to create a federated pair.

Procedure

1. In Access, click **Profile** > **Get Started**.
2. Enter the Access host information and upload the ACCESS SSL Certificate. The other fields retain their default values. Click **Save**.
3. Click **Profile** > **Federated Pairs** > **Add New Pair.**
4. Select **Office 365** as the service provider.
5. Enter the following details:

    - Name
    - Description
    - Select the Access Signing Certificate or use the **Advanced Options** to create and upload a new Access Signing Certificate.
    - In Office 365 specifics, select one of the following Office 365 Domain Federation:

Protocol	Settings
WS-Fed	The WS-Fed protocol allows only Microsoft ADFS as an IdP selection. This is the default option. 1. Enter the Original IDP Active Logon Url. For example: https://[ADFS server domain]/adfs/services/trust/13/usernamemixed.
SAML	1. Select the appropriate ECP Backend Type from the drop-down. This option lets Access connect to the IdP. 2. Enter the value for Federated Domain for Office 365. For example, <domain_name>.com. 3. Enter the ADFS Active Logon URL for Original IDP Active Logon URL. For example: https://[ADFS server domain]/adfs/services/trust/13/usernamemixed

    - Upload the metadata file of the service provider downloaded in **Office 365 Metadata Files** section.

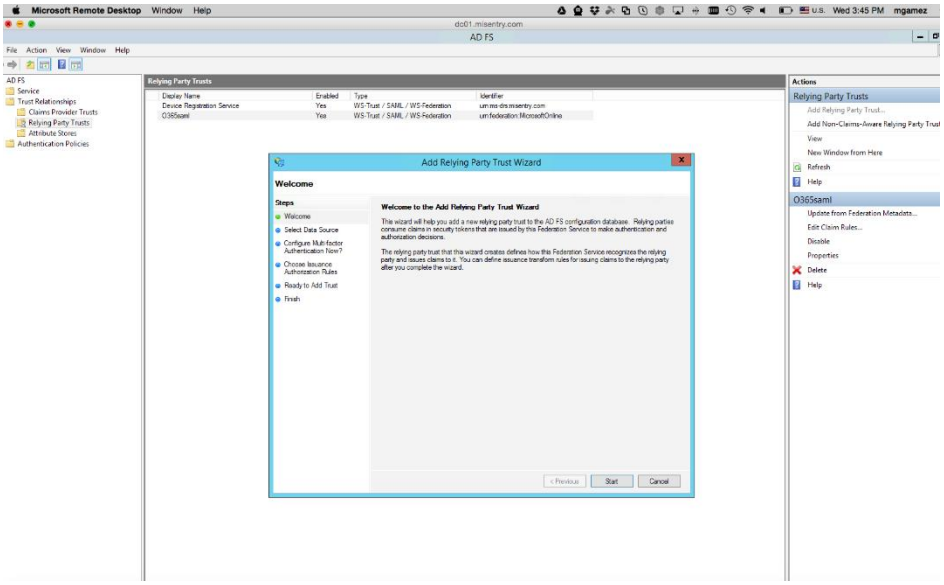
6. Click **Next** and select **Microsoft** as the identity provider.
7. Select the **Access Signing Certificate** or use the **Advanced Options** to create and upload a new self-signed Access Signing Certificate.
8. Add or Upload the **IdP metadata** file that you downloaded.
9. Click **Done**.
10. Download the **Access SP Metadata (Upload to IDP)** and **ACCESS IDP Metadata (Upload to SP)** metadata files.
11. Click **Publish** to publish the profile.

Configure the ADFS environment

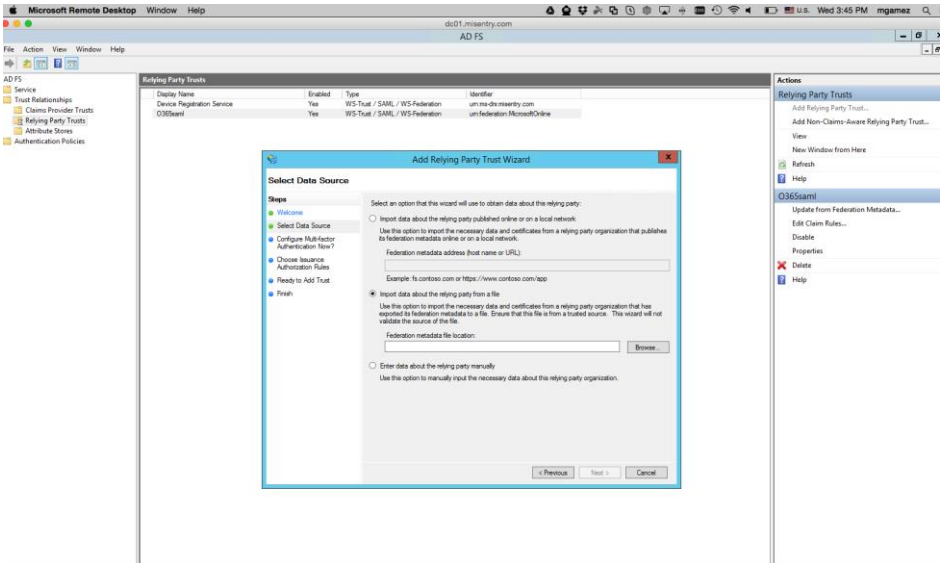
You must configure the identity provider with the service provider metadata file. This builds the trust relationship with the service provider.

Procedure

1. Use Remote Desktop services to log into an ADFS machine with Admin credentials.
2. Click **Start** > **Administrative tools** > **ADFS Management** > Expand **Trust Relationships.**
3. Click **Relying Party Trust.** In the right-hand pane, click **Add Relying Party Trust** and follow the prompts.

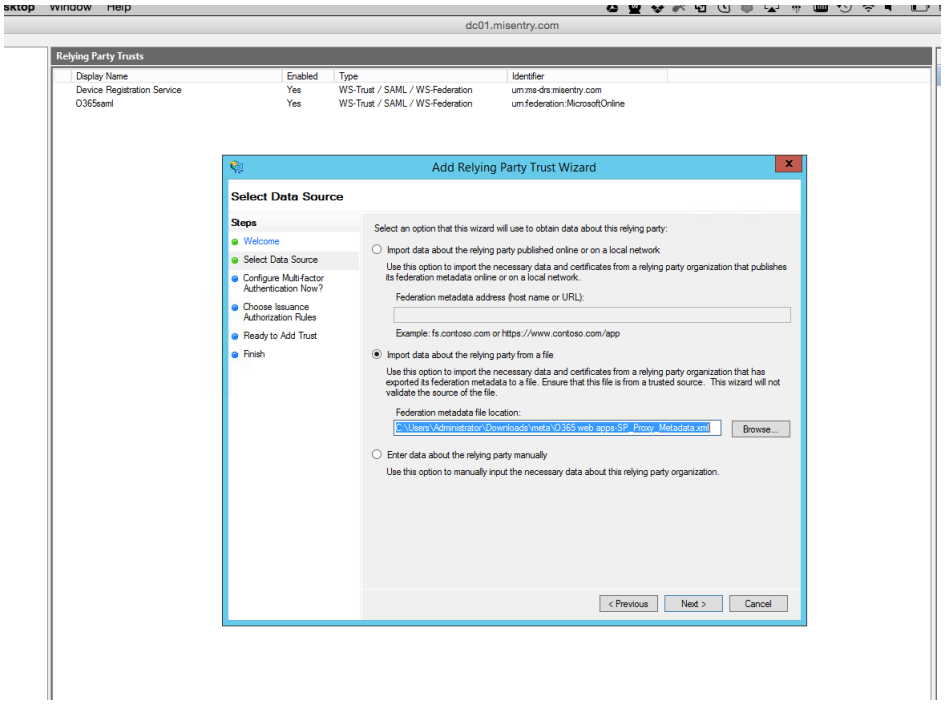


4. Click **Start** and select **Import data about the relying party from a file**. Click **Next**.



5. Click **Browse** and select the service provider proxy metadata file that you downloaded and click **Next**.

Note: The filename for the proxy metadata file name ends with *UploadTo-Microsoft ADFS-IdP.xml*.



6. Enter the **Display Name** and click **Next.**
7. All other fields are set to defaults. Follow the prompts.
8. At the end, select **Open Edit Claim rules dialog for relying party trust**.
9. In the **Claim Rule Template** drop-down, select **Send Claims Using a Custom Rule** and click **Next.**
10. Add **Claim rules** as follows:
    a) **<u>Rule 1:</u>**
    Name: Query AD for ObjectGUID
    Custom Rule Value:
    c:[Type == "http://schemas.microsoft.com/ws/2008/06/identity/claims/windowsaccountname", Issuer == "AD AUTHORITY"]
    => add(store = "Active Directory", types = ("ObjectGuid"), query = ";objectGUID;{0}", param = c.Value);
    b) **<u>Rule 2:</u>**
    Name: Issue ObjectGUID as Name Id claim
    Custom Rule Value:
    c:[Type == "ObjectGuid"]
    => issue(Type = "http://schemas.xmlsoap.org/ws/2005/05/identity/claims/nameidentifier", Issuer = c.Issuer, OriginalIssuer = c.OriginalIssuer, Value = c.Value, ValueType = c.ValueType, Properties["http://schemas.xmlsoap.org/ws/2005/05/identity/claimproperties/format"] = "urn:oasis:names:tc:SAML:2.0:nameid-format:persistent");

c) **Rule 3:**
Name: IDPEmail
Custom Rule Value:
c:[Type == "http://schemas.xmlsoap.org/ws/2005/05/identity/claims/upn"] => issue(Type = "IDPEmail", Issuer = c.Issuer, OriginalIssuer = c.OriginalIssuer, Value = c.Value, ValueType = c.ValueType);

11. Click **Apply** and **OK.**

Configure the Office 365 environment

Office 365 does not let you upload a metadata file. The information must be extracted from the IDP Proxy metadata file. Extract the Entity ID from the IDP Proxy metadata file.

Procedure

1. Use Remote Desktop Services to log in to an ADFS machine with admin credentials.
2. In the PowerShell command window, connect to the Office 365 Tenant:
   Connect-MsolService

3. Download the PowerShell script from MobileIron Access for Office 365 and Microsoft ADFS federated pair to avoid manual editing.
   Note: Run the PowerShell script in a Windows server as an Administrator.

OR

4. Execute the following commands /steps in PowerShell. Edit the settings for ActiveLogOnUri, IssuerUri, LogOffUri, and PassiveLogonUri before executing the commands.

   - *PSC:\>$saml = New-Object -TypeName PSObject*

   - *PSC:\>$saml | Add-Member -MemberType NoteProperty -Name ActiveLogOnUri -Value $saml.ActiveLogOnUri*

- *PSC:\>$saml.ActiveLogOnUri=*https://<domain_name>/MobileIron/acc/a5158d28-0f7c-4579-8ddc-aa59a1f28d13/idp/active

- *PSC:\>$saml | Add-Member -MemberType NoteProperty -Name IssuerUri -Value $saml.IssuerUri*

- *PSC:\>$saml.IssuerUri=*https://<domain_name>/MobileIron/acc/a5158d28-0f7c-4579-8ddc-aa59a1f28d13/idp

- *PSC:\>$saml | Add-Member -MemberType NoteProperty -Name LogOffUri -Value $saml.LogOffUri*

- *PSC:\>$saml.LogOffUri=*https://<domain_name>/MobileIron/acc/a5158d28-0f7c-4579-8ddc-aa59a1f28d13/idp/logout

- *PSC:\>$saml | Add-Member -MemberType NoteProperty -Name PassiveLogOnUri -Value $saml.PassiveLogOnUri*

- *PSC:\>$saml.PassiveLogOnUri=*https://<domain_name>/MobileIron/acc/a5158d28-0f7c-4579-8ddc-aa59a1f28d13/idp

Note: You can extract the above information from Access IDP metadata file. For example,

5. Extract the certificate from the IDP Proxy metadata file and save it in the .cer file.

6. Upload the Access IDP Proxy signing cert in PowerShell.
    a. *PSC:\>$cert = New-Object System.Security.Cryptography.X509Certificates.X509Certificate2("C:\idp-proxy.cer")*
    b. *PSC:\>$certData = [system.convert]::tobase64string($cert.rawdata)*
    c. *PSC:\>$saml | Add-Member -MemberType NoteProperty -Name SigningCertificate -Value $saml.SigningCertificate*
    d. *PSC:\>$saml.SigningCertificate=$certData*
7. Unfederate the domain by executing the command in PowerShell.
   PSC:\>Set-MsolDomainAuthentication -DomainName <domain_name>.com -Authentication Managed

8. Re-federate the domain.
   ps c:\>Set-MsolDomainAuthentication -DomainName -FederationBrandName $saml.FederationBrandName -Authentication Federated -PassiveLogOnUri

$saml.PassiveLogOnUri -ActiveLogOnUri $saml.ActiveLogonUri -SigningCertificate $saml.SigningCertificate -IssuerUri $saml.IssuerUri -LogOffUri $saml.LogOffUri -PreferredAuthenticationProtocol "SAMLP"

9. Verify the new settings.
   ps c:\>Get-MsolDomainFederationSettings -DomainName