Creating ADF using Rest API

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Issue

Customer trying to create ADF using Rest API but faces issue with trying to get the access token while following the documented steps in this <u>link</u> \(\to \) and the PowerShell script in the below screenshot.

Authenticate with Azure AD

Run the following commands to authenticate with Azure Active Directory (AAD):

```
SAuthContext = [Microsoft.IdentityModel.Clients.ActiveDirectory.AuthenticationContext]"https://login.microsoftonline.com
$cred = New-Object -TypeName Microsoft.IdentityModel.Clients.ActiveDirectory.ClientCredential -ArgumentList ($appId, $cl
$result = $AuthContext.AcquireTokenAsync("https://management.core.windows.net/", $cred).GetAwaiter().GetResult()
$authHeader = @{
    'Content-Type'='application/json'
    'Accept'='application/json'
    'Authorization'=$result.CreateAuthorizationHeader()
}
```

Error

If a customer using PowerShell 7 and above:

 $Reflection. Assembly] :: Load From ("C:\SignInReport\Tools\Microsoft.IdentityModel.Clients.ActiveDirectory\Microsoft.IdentityModel.Clients.ActiveDirectory.dll")$

If a customer using PowerShell 5.1:

```
Unable to find type [Microsoft.IdentityModel.Clients.ActiveDirectory.AuthenticationContext].
At line:5 char:17
+ ... hContext = [Microsoft.IdentityModel.Clients.ActiveDirectory.Authentic ...
+ CategoryInfo : InvalidOperation: (Microsoft.Ident...ticationContext:TypeName) [], RuntimeException
+ FullyQualifiedErrorId : TypeNotFound

New-Object : Cannot find type [Microsoft.IdentityModel.Clients.ActiveDirectory.ClientCredential]: verify that the assembly containing this type is loaded.
At line:6 char:9
+ $cred = New-Object -TypeName Microsoft.IdentityModel.Clients.ActiveDi ...
+ CategoryInfo : InvalidType: (:) [New-Object], PSArgumentException
+ FullyQualifiedErrorId : TypeNotFound,Microsoft.PowerShell.Commands.NewObjectCommand
```

Cause

Error is noticed while mostly using PowerShell version >7.xx as the AAD module is not yet supported in PowerShell 7. Also Intermittently fails in PowerShell 5.1.

Recommendation:

Current commands provided in the document use the ADAL module to get the token. After discussing with the AAD team, they suggested using the MSAL module as the ADAL module is being deprecated.

Below commands are tested in both versions of PowerShell and work as expected.

1. Install MSAL module

```
Install-module -name MSAL.PS
```

2. Commands to retrieve Bearer Token "

```
$tenantID ="<Tenant-ID>"
$appId = "<AAD APP-ID>"
$clientSecrets = "<APP Client-Secret>" | ConvertTo-SecureString -AsPlainText -Force
$Scopes = "https://management.core.windows.net/.default"
$accessToken = Get-MsalToken -clientID $appId -clientSecret $clientSecrets -tenantID $tenantID -Scopes $Scopes
$accessToken.AccessToken
$authHeader = @{
    'Content-Type'='application/json'
    'Accept'='application/json'
    'Authorization'='Bearer ' + $accessToken.AccessToken
}
```

Powershell 7

PS C:\Users\w-manant> \tenantID = \tenantI

Rest all the steps remain same as per the document.

How good have you found this content?

