WorkshopPLUS – Modern Authentication and Authorization

ADAL

Labs prerequisites –

VS.NET 201x

Student Lab Manual

Instructor Edition (Book Title Hidden Style)

Version 1.1

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# Labs prerequisites:

#### Introduction

In this lab, you will use the ADAL library to obtain OAuth2 and OpenIDConnect tokens from Azure AD.

#### Objectives

Obtain ID token and/or access token for various application topologies.

#### Prerequisites (if applicable)

VS.NET 201x and access to Nuget.org

Each task will require some of the following properties:

|  |  |
| --- | --- |
| **Property** | **Value** |
| *URL of authz server* | https://login.microsoftonline.com/ModernAuthn.onmicrosoft.com/oauth2 |
| *Tenant id* | c29c8631-b372-4cf1-91f5-76180b30594b |
| *Confidential client id* | 1c635c96-739f-4a45-8020-0ee6ba133681 |
| *Confidential client secret* | /VEB4SadZvIOJ/ETtFGQR1EN4bKOb2FMDmljAl7c0cs= |
| *Public client id* | 1c767fef-4c4f-406b-81fc-21b6cd7b9eab |
| *Public client redirect URI* | https://modernauthn.com/ |
| *User id* | [user1@modernauthn.onmicrosoft.com](mailto:user1@modernauthn.onmicrosoft.com) |
| *User password* | VeryHard2Guess |

OAuth2 specification: <https://tools.ietf.org/html/rfc6749>

#### Estimated time to complete this lab

30min

#### Scenario

# Exercise 1: Get access token for an application

Use the ADAL library to request the appropriate OAuth2 and OIDC tokens to the <https://graph.windows.net> (Azure AD Graph) resource. Verify token contents using <http://jwt.io> or <http://jwt.ms>.

## Task 1: Confidential client (e.g. a batch service)

1. Create a **Windows Console** application.
2. Use Nuget Manager to add the ADAL library to the project.
   1. Open Nuget Manager
   2. Browse/search for ‘ADAL’
   3. Select Microsoft.IdentityModel.Clients.ActiveDirectory
3. Create the AuthenticationContext class instance. For the purpose of this exercise you do not need to use a token cache.

var auth = new AuthenticationContext(

"https://login.microsoftonline.com/ModernAuthn.onmicrosoft.com/");

1. Choose the appropriate AuthenticationContext method to obtain an access token for this application – you want to use a method that will use the Oauth2 ClientCredentials flow. Use appropriate parameter values from among those listed at the beginning of the lab manual.
2. Run the application and inspect the values of token(s) returned from **Azure AD**.

Note: since this is a batch application, it should NOT prompt the user for credentials.

## Task 2: Rich-client (native) application

1. Create a Windows Console application (or modify the one above)
2. Use **Nuget Manager** to add the ADAL library to the project.
3. Create the AuthenticationContext. For the purpose of this exercise you do not need to use a token cache.
4. Choose the appropriate AuthenticationContext method to obtain an access token for the (human) user of this application.
5. Use appropriate parameter values from among those listed at the beginning of the lab manual.
6. Run the application and inspect the values of token(s) returned from **Azure AD**.