Instruction how to call L2S integration API Test endpoint via Postman

1. Prerequisites

- {{Tenant ID}} – L2S environment id.

  For Test environment value is: 6a2f7009-2835-4786-8853-2c5a5d637d13.

- {{Application ID}} – Authentication application client id.

  For Test environment value is: 7048a0bb-6046-4c38-91da-f05361e5cbb3.

- {{Client ID}} – Yours company service principal client ID.

- {{Base URL}} – L2S Integration API URL.

  For Test environment value is: https://apis-test-l2s.collabor8.no.

- Certificate – Yours company private part of the certificate (a file with the extension ".pfx").

- Certificate password - a password of the private part of the certificate.

2. Converting certificate into client assertion.

To obtain an access token, you need to convert your certificate into client assertion.

To achieve this, you could read the following documentation https://docs.microsoft.com/en-us/azure/active-directory/develop/msal-net-client-assertions#alternative-method or use simple console application which is listed below:

```
using Microsoft.IdentityModel.JsonWebTokens;
using Microsoft.IdentityModel.Tokens;
using System;
using System.Collections.Generic;
using System.Security.Cryptography.X509Certificates;

namespace ClientAssertionGenerator
{
  public class Program
  {
    private const string _tenantId = "{{Tenant ID}} ";
    private const string _clientId = "{{Client ID}} ";
    private const string _password = "Certificate password";
    private const string _privateCertificateFileName = "testexternalapi1.pfx";
    public static void Main()
    {
      var certificate = ReadCertificate();
      var clientAssertion = GetClientAssertion(certificate);
      Console.WriteLine(clientAssertion);
    }
    private static X509Certificate2 ReadCertificate()
```

```
        {
            var privateCertificate = new X509Certificate2(_privateCertificateFileName, _password);
            return privateCertificate;
        }
        private static string GetClientAssertion(X509Certificate2 certificate)
        {
            var claims = new Dictionary<string, object>()
            {
                { "aud", $"https://login.microsoftonline.com/{_tenantId}/v2.0" },
                { "iss", _clientId },
                { "jti", Guid.NewGuid().ToString() },
                { "sub", _clientId }
            };
            var securityTokenDescriptor = new SecurityTokenDescriptor
            {
                Claims = claims,
                SigningCredentials = new X509SigningCredentials(certificate)
            };
            var handler = new JsonWebTokenHandler();
            var clientAssertion = handler.CreateToken(securityTokenDescriptor);
            return clientAssertion;
        }
    }
}
```

After you run this console application, the client assertion in JWT format will be printed in console. Copy it for next step.

3. Postman setup to obtain an access token.

To get an access token, you need to create a new POST request in Postman.

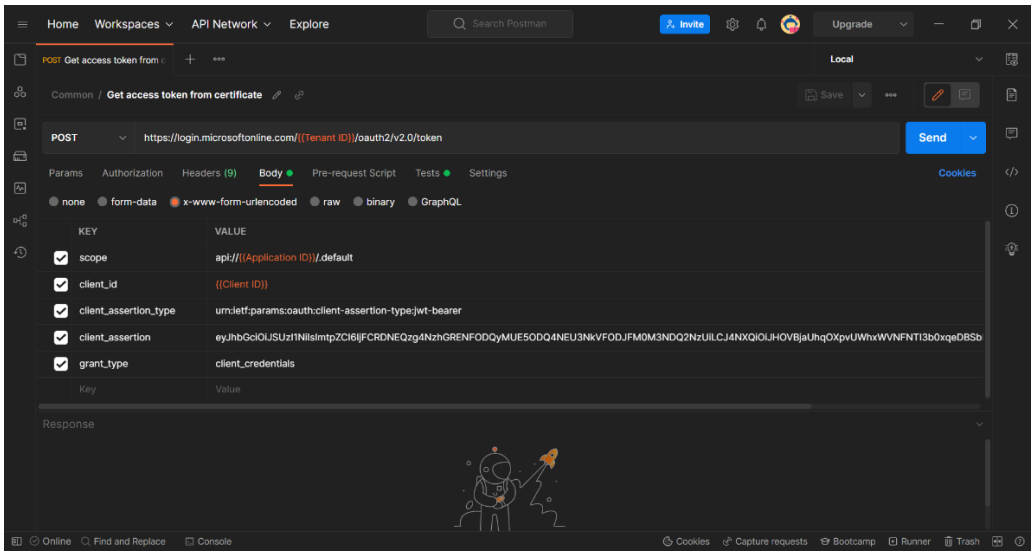
Enter the following URL in the request URL:

https://login.microsoftonline.com/{{Tenant ID}}/oauth2/v2.0/token.

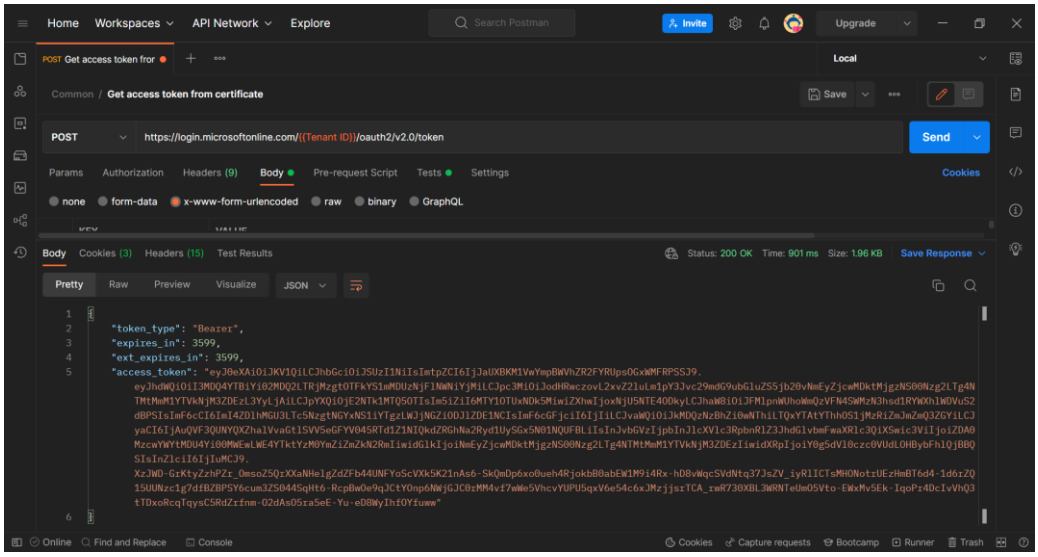
On Body tab select “x-www-form-urlencoded” radio-button and enter following information:

Key	Value
scope	{{Application ID}}/.default
client_id	{{Client ID}}
client_assertion_type	urn:ietf:params:oauth:client-assertion-type:jwt-bearer
client_assertion	Client assertion generated on previous step
grant_type	client_credentials

Client assertion has a short expiration period, so you need to generate it each time when you want to get an access token.



After you click on Send button, you will get a response in JSON format with the access token and the information about it.



Copy “access_token” field value. You will need it on next step.

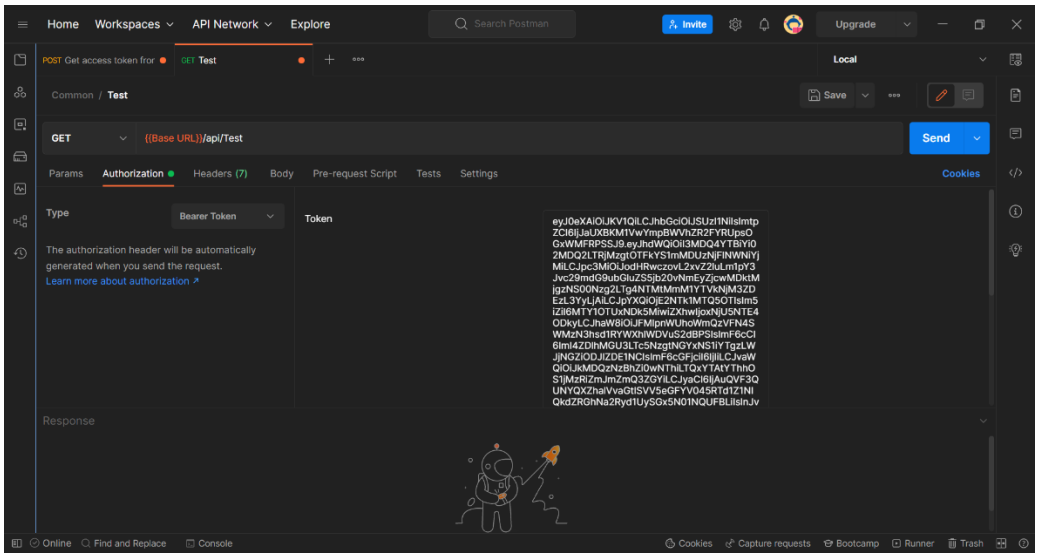
4. Postman setup to call Test endpoint

Create a new Get request in the Postman.

Enter the following URL in the request URL:

{{Base URL}}/api/Test

On Authorization tab, select “Bearer Token” from “Type” drop-down list and paste the access token value from previous step in Token field.



After you click on Send button you will get a following response.