Content Manager

Software Version 10.1

OpenID Connect authentication



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Contents

Introduction	5
ADFS for Native client	6
Configure ADFS	6
Configure OpenID settings in Content Manager	13
ADFS for Web Client and Service API	16
Create the ADFS application	16
Add the settings to the Web Client	18
Configure ADFS for the Office integration access	18
Add Office integration to the settings of the Web Client	20
Azure AD for WebClient, Mobile App and Service API	21
Create the Azure AD application	21
Configure for mobile	23
Add the mobile redirect URI	
Add the mobile redirect URI to the Service API	
Configure authentication in hptrim.config Enable redirect	
Allow users (Web Client only)	
Logout	
Allow anonymous access in IIS	25
Azure AD for Content Manager desktop	26
Create the Azure AD application	26
Configure authentication in Content Manager Enterprise Studio	27
Configure Azure AD for Office integration access	28
Troubleshooting Azure AD for Office integration access	30
Google authentication	31
Create the Google credentials	31
Configure authentication in hptrim.config	31

OpenID Connect authentication

Enable redirect	32
Logout	32
Allow anonymous access in the IIS	32

Introduction

This document provides high level information for you to configure OpenID Connect authentication with Content Manager.

OAuth authentication is managed via OpenID Connect authentication. The authentication is configured in your Identity Provider (e.g. Azure AD) and then the appropriate details are stored in Content Manager in the **hptrim.config** file for the Web Client and Service API, and in Content Manager Enterprise Studio for the desktop client.

ADFS for Native client

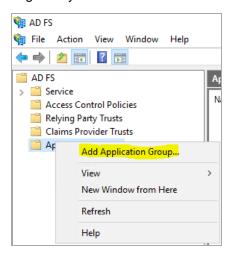
As of Content Manager 10 the Content Manager web applications (Service API, WebDrawer and Web Client) have an OpenID Connect authentication provider built in.

This section describes creating an ADFS application and configuring the Windows native Content Manager client.

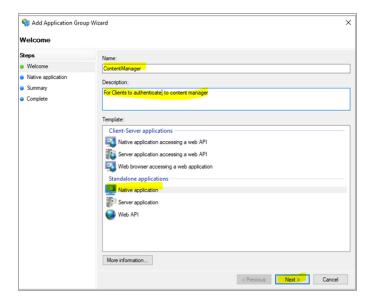
Configure ADFS

To setup ADFS to support OpenID for Content Manager native, perform the following steps:

1. Log on to your ADFS Server and create an application group.

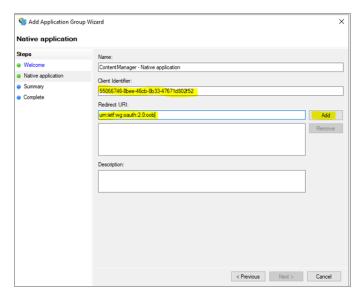


2. Enter the name and the description for the group, then select **Native application**. Click **Next**.

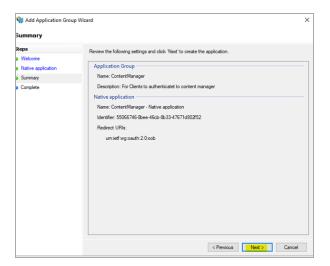


3. Configure the group.

Note the client identifier for later use and enter the value 'https://127.0.0.1' in Redirect URI, click **Add** and then click **Next**.

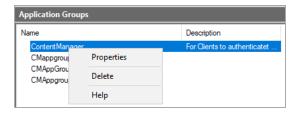


4. Review the settings and click **Next**.

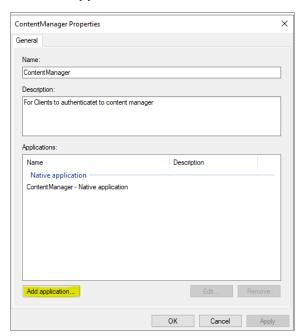


5. Modify application group properties.

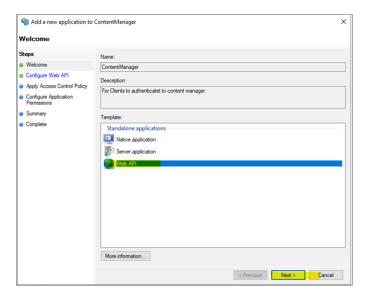
Once this has been completed, right-click the application group and select **Properties**.



6. Click Add application.

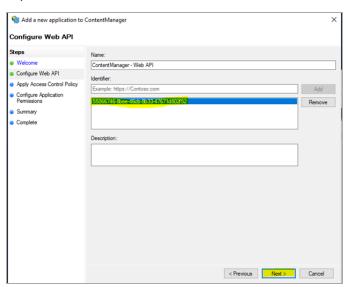


7. Select Web API as the Template.

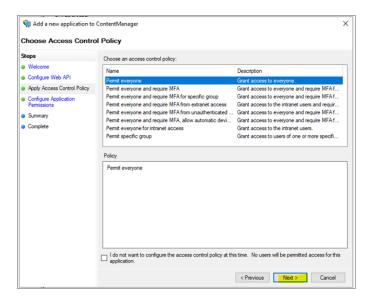


8. Configure the Web API.

Add the Redirect to be the same as the client ID of the Native application that you previously copied. Click **Next**.

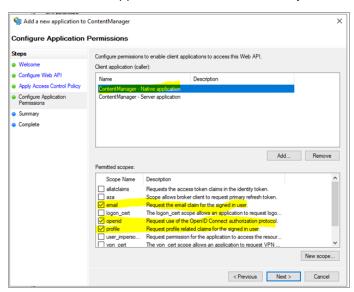


9. Select an appropriate Access Control Policy.

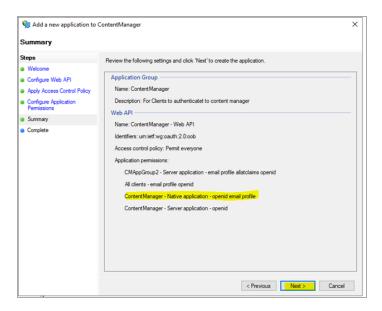


10. Set the scopes.

Select the Native Application and ensure email, openid, and profile are checked.

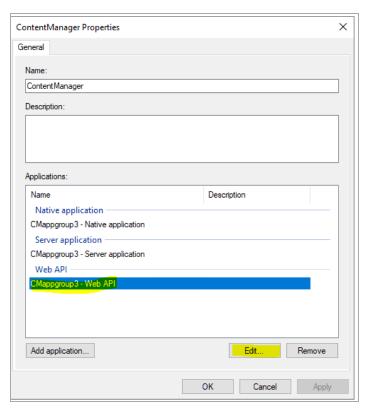


11. Review the configuration, click **Next** and then **Close**.



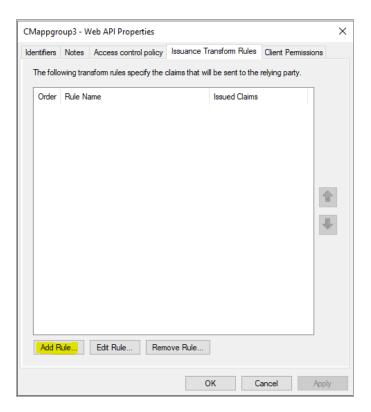
12. Set issuance rules.

Right-click the app group and select **Properties**, highlight the WEB API application and select **Edit**.



13. Add a rule.

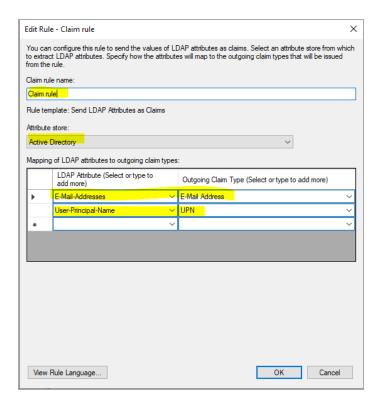
Navigate to the Issuance Transform Rules Tab and click Add Rule.



14. Map attributes.

Give the rule a name, select **Active Directory** as the **Attribute Store**, and add the following mapping of LDAP attributes and click **OK**:

- E-Mail-Addresses E-mail Address
- User-Principal-Name UPN

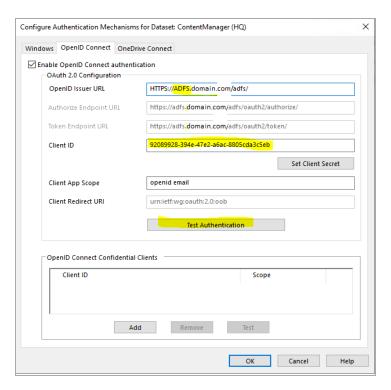


Configure OpenID settings in Content Manager

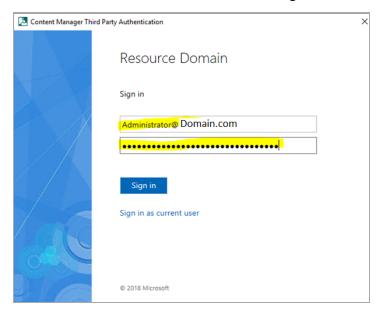
1. Navigate to the Content Manager server and run the Content Manager Enterprise Studio as an Administrator. Right-click the dataset and select **Authentication**.



2. Enter the ADFS URL for the ADFS server, the client identifier which was noted earlier (Native Application) and click **Test Authentication**.



3. Enter the user details for a test user and click Sign in.



The users email in active directory should appear, if successful.



ADFS for Web Client and Service API

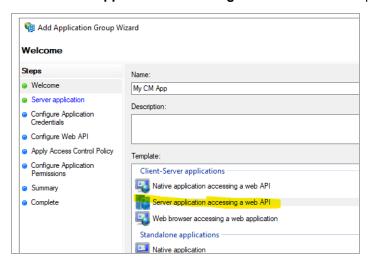
As of Content Manager 10 the web applications (Service API, WebDrawer and Web Client) have a built in OpenID Connect authentication provider.

This section describes creating an ADFS application and configuring the Content Manager web applications.

Create the ADFS application

To create the ADFS application,

- 1. Create a new Application Group.
- 2. Select Server application accessing a web API as the template.



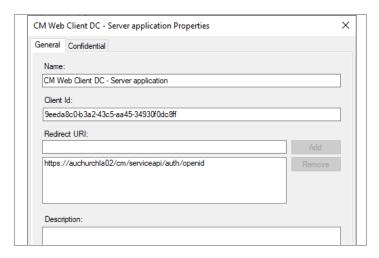
3. Enter a name and click Next.

Note the client identifier.

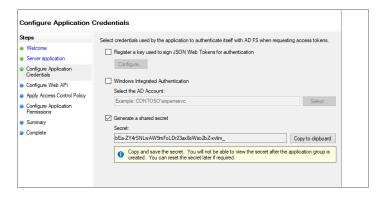
4. Add a Redirect URI.

The redirect URI must be in lowercase and be the URL of the Content Manager web site with the suffix /serviceapi/auth/openid.

For example, https://myserver/contentmanager/serviceapi/auth/openid.



- 5. Click Next.
- 6. Generate a shared secret and note the secret.



- 7. Click Next.
- 8. Add an identifier. For example, https://MyServer/contentmanager/.



- 9. Click Next.
- 10. Choose an access control policy. For example, Give access to everyone.
- 11. In the Configure Application permissions, select email, openid, and profile.
- 12. Complete rest of the steps in the Application Group.

Add the settings to the Web Client

To configure the Web Client, edit the **hprmServiceApi.config** file and add (or edit) the authentication element to look similar to the example below.

- Client ID and secret (noted in the previous section)
- issuerUri is found in the ADFS console Endpoints, in the OpenID Connect section.
- Name must be openid.

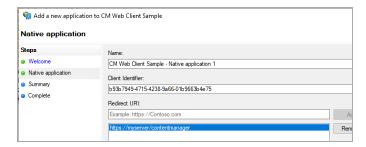
For example,

```
<authentication allowAnonymous="false"slidingSessionMinutes="30">
<openIdConnect>
<add
name="openid"
clientID="CLIENT_ID"
clientSecret="SECRET"
issuerURI="https://MyServer/adfs/.well-known/openid-configuration"/>
</openIdConnect>
</authentication>
```

Configure ADFS for the Office integration access

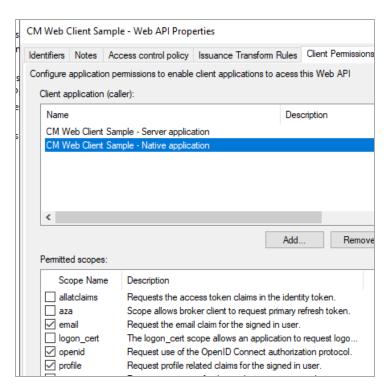
The office integration requires an access token to allow it to authenticate with the Web Client, this can be configured in ADFS.

- 1. Go to the **Application group** configured in the above section.
- 2. Click Add Application to add a native application.

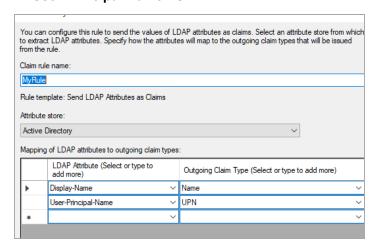


Preserve the Client ID for later use.

- 3. Complete rest of the steps for the native application.
- 4. Edit the Web API application and in the **Client Permissions**, add the new client application selecting the **scopes**, **email**, **openid**, and **profile**.



- 5. In the Issuance Transform Rules, add a new Rule.
- 6. Select the Send LDAP Attributes and click Next.
- 7. Choose the **Active Directory** as the attribute store.
- 8. Map the following two claims:
 - · Display Name Name
 - User-Principal-Name UPN



9. Click Finish.

Add Office integration to the settings of the Web Client

The Office integration authentication settings are stored in the file ADFS\config.xml in the Web Client install directory:

- clientAuthority the URL to your ADFS server
- clientResourceUri the relying party identifier from the ADFS Web API
- clientID the Client ID from the ADFS native application
- The Redirect URI from the ADFS native application

For example,

```
<adfsClient>
<clientAuthority>https://test.com/adfs</clientAuthority>
<clientResourceUri>https://test.com/contentmanager/</clientResourceUri>
<clientID>ab999999-999d-9aeb-a999-999b9999999</clientID>
<clientReturnUri>https://test.com/contentmanager/</clientReturnUri>
</adfsClient>
```

Azure AD for WebClient, Mobile App and Service API

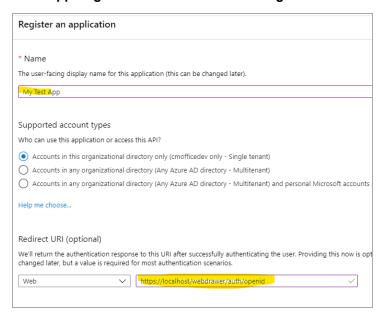
As of Content Manager 10 the web applications (Service API, WebDrawer and Web Client) have a built in OpenID Connect authentication provider.

This section describes creating an Azure AD application and configuring the web application. This document also provides detailed steps required to allow the Content Manager Mobile App to authenticate.

Create the Azure AD application

To create the Azure AD application:

- 1. From the portal.azure.com, go to Azure AD.
- 2. Go to App Registrations and select New Registration.



- 3. Enter a name.
- 4. Under Redirect URI leave Web selected.

The value in the Redirect URI is important. It must be lowercase and must be the URL to your application. For example, https://mydomain.com/cmwebdrawer followed by the path to the authentication provider, for example, /auth/openid.

The /auth/ component is fixed but the 'openid' is the name you will supply in **hptrim.config** later and so can be any string, as long as it matches the value in **hptrim.config**.

For the Web Client the path must include the path to the Service API, for example, https://mydomain.com/contentManager/serviceapi/auth/openid.

5. Add a secret.

From Certificates and Secrets, add a secret and note the secret.



6. Configure Tokens.

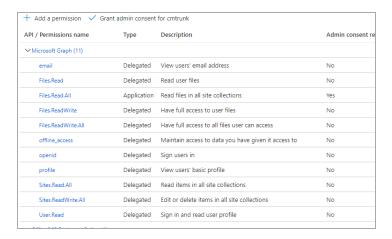
From the **Authentication** section, select the tokens to be issued and check the option **ID Tokens**.

7. Configure permissions.

From the **API Permissions**, add the following delegated Microsoft Graph permissions:

- email
- offline_access
- openid
- · profile
- User.Read
- · Files.Read
- · Files.Read.All
- · Files.ReadWrite
- · Sites.Read.All
- · Sites.ReadWrite.All
- · User.Read

Select **Grant admin consent** to grant access to all permissions.



Configure for mobile

Add the mobile redirect URI

If this Azure app is to be used to connect to the Content Manager Mobile App then,

- 1. Go to the Authentication section and select Add a platform.
- 2. Choose **Mobile and desktop applications** and enter trimapp://mobile in the **Custom Redirect URIs** field.

Add the mobile redirect URI to the Service API

The redirect URI set above must be included in the Service API **hptrim.config**. To do this, add the **authentication and openIdConnect** elements.

For example,

```
<authentication allowAnonymous="false"slidingSessionMinutes="60">
<openIdConnect>
<addname="mobile"
clientID="[CLIENT ID from Azure App]"
clientSecret="[SECRET from Azure APP]"
issuerURI="[OpenID Connect metadata document from endpoints in Azure App]"
redirectUri="trimapp://mobile" />
</openIdConnect>
</authentication/>
```

Configure authentication in hptrim.config

To use the Azure AD app created above, edit the **hptrim.config** (or **hprmServiceAPI.config** in the Web Client) so that it has an authentication similar to the one below:

- 1. The name must match the last segment of the Redirect URI path.
- 2. Client ID is the application ID from the Azure AD Overview.
- 3. The secret is the one saved when creating the App. If it was not saved, created a new one in Certificates and Secrets.
- 4. Get the issuerUri from Overview > Endpoints > OpenID Connect metadata document.

For example,

```
<authentication allowAnonymous="false"slidingSessionMinutes="60">
<openIdConnect>
<add
name="openid"
clientID="ae99999d-99e9-9ecc-b9eb-99d9d999dd"
clientSecret="_MqXXXXXXXXXXXXXXXXG[sp3GrMfD:"
issuerURI="https://login.microsoftonline.com/09999ee9-9999-9d9a-99999999/v2.0/.well-known/openid-configuration"/>
</openIdConnect>
</authentication>
```

Enable redirect

The Web Client will not re-direct the authentication endpoint unless the Html feature is enabled in **hprmServiceAPI.config**, perform the following steps:

- 1. Edit the hprmServiceAPI.config file.
- 2. Find the property named **serviceFeatures**.
- Add the feature Html.

Allow users (Web Client only)

For the Web Client, find the **web.config** file and find the **Location** element with the path **serviceapi** in the **web.config** file. It should contain the element <allow users="*" /> within its authorization element.

For example,

```
<location path="serviceapi">
<system.web>
<httpHandlers>
<add path="*" type="ServiceStack.WebHost.Endpoints.ServiceStackHttpHandlerFactory,
ServiceStack" verb="*" />
</httpHandlers>
<authorization>
<allow users="*" />
</authorization>
```

```
</system.web>
...
</location>
```

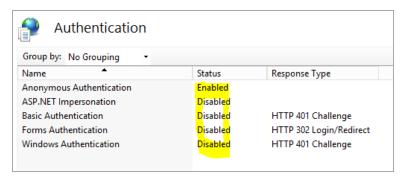
Logout

For WebDrawer the logout link is configured in the uiSettings. It should contain ~/auth/logout. In the Web Client a logout link will be displayed automatically when OpenID Connect authentication is enabled.

```
For example,
<uiSettings
logoutLink="~/auth/logout"
...
/>
```

Allow anonymous access in IIS

The IIS will not handle authentication, so use IIS Manager to allow anonymous access only.



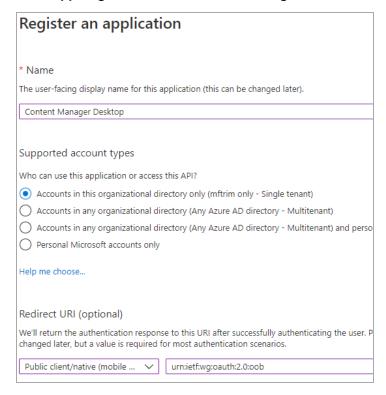
Azure AD for Content Manager desktop

OpenID Connect may be used to authenticate with the Content Manager desktop client, this section describes how to configure this.

Create the Azure AD application

To create the Azure AD application:

- 1. From the portal.azure.com, go to Azure AD.
- 2. Go to App Registrations and select New Registration.



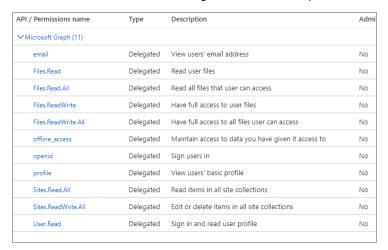
- Enter a name.
- 4. Select Public native client in the Redirect URI.
- 5. Enter the redirect Uri as 'urn:ietf:wg:oauth:2.0:oob'.
- 6. Configure permissions.

From the **API Permissions**, add the following delegated Microsoft Graph permissions:

- email
- · offline_access

- · openid
- profile
- · User.Read
- Files.Read
- · Files.Read.All
- Files.ReadWrite
- · Sites.Read.All
- Sites.ReadWrite.All
- · User.Read

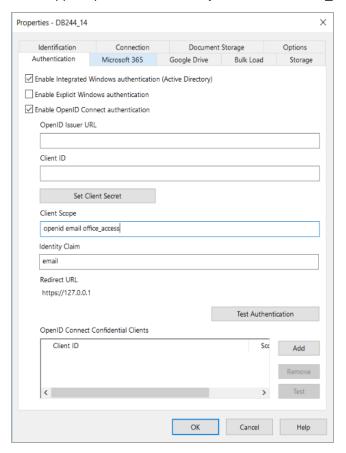
Select Grant Admin Access to grant access to all permissions.



Configure authentication in Content Manager Enterprise Studio

To use the Azure AD app created above, open the Content Manager Enterprise Studio and perform the following:

- 1. From the database, select Authentication > OpenID.
- The OpenID Issuer URL is taken from the Azure App Overview > Endpoints > OpenID
 Connect metadata document.
- 3. The Client ID is taken from the Azure App Overview > Application ID.
- 4. Client secret should be empty.



5. Client app scope should contain **openid email offline_access**.

Configure Azure AD for Office integration access

The office integration requires an access token to allow it to authenticate with the Web Client, this can be configured in Azure AD:

- 1. Create an Azure App for Web Authentication, you may use the one you created to authenticate with the Content Manager Web Client.
- 2. Create (or edit) the file ADFS\config.xml in your Content Manager Web Client installation folder and set it as follows:
 - **clientAuthority** 'https://login.windows.net/' followed by your domain. For example, https://login.windows.net/cmofficetest.onmicrosoft.com
 - clientResourceUri the Application ID URI from your Content Manager Web Client Azure App.
 - clientID the Application ID from your Content Manager Desktop Azure App.
 - clientReturnUri urn:ietf:wg:oauth:2.0:oob
- 3. From the Azure App for Web Authentication,

- a. Go to Expose an API and select Add a Scope.
- b. Enter the following values:
 - Scope name: access_as_user
 - Who can consent: Admins and Users
 - Admin consent display name: Office can act as the user
 - Admin consent description: Enable Office to call the add-in's web APIs with the same rights as the current user
 - User consent display name: Office can act as you
 - **User consent description**: Enable Office to call the add-in's web APIs with the same rights that you have
- c. Click Add scope.
- 4. From the Content Manager Desktop Azure App, go to **API Permissions** and perform the following:
 - a. Select Add a Permission and choose My APIs.
 - b. Select the Web Client Application.
 - c. Select the access_as_user permissions.
 - d. Select Add permission.
- 5. The Web Client authentication information needs to updated to be made aware of the new client, perform the following steps:
 - a. From the Content Manager Desktop Azure App, copy the **Application ID URI**. For example, api://cf2501bd-19f9-4ad6-96dc-f5cf7b2b3bf9.
 - b. Edit the Web Client hprmServiceAPI.config file.
 - In the add element of the openIDConnect element, add a new attribute called appldURI.
 This is a case sensitive name.
 - d. The value of **appldURI** should be the **Application ID URI** from the Content Manager Desktop Azure App.

For example,

```
<adfsClient>
<clientAuthority>https://login.windows.net/cmofficetest.onmicrosoft.com</clientAutho
rity>
<clientResourceUri>api://testqa99:3000/09f0ec5c-87e9-4568-8b60-
4eb3e20de75e</clientResourceUri>
<clientID>cf9999bd-10f0-4ad6-99dc-f5cf7b2b3bf5</clientID>
<clientReturnUri>http://MyWebClient</clientReturnUri>
</adfsClient>
```

Troubleshooting Azure AD for Office integration access

Error AADSTS500011: The resource principal named https://MYSERVER/contentmanager/was not found in the tenant named XXXX-XXXXX-XXXXX.

If you get this error, try using the Client ID in clientResourceUri, rather than Application ID URI.

Google authentication

As of Content Manager 10 the web applications (Service API, WebDrawer and Web Client) have a built in OpenID Connect authentication provider.

This section describes creating Google credentials and configuring the web application.

Create the Google credentials

To create the Google credentials:

- 1. Go to https://console.developers.google.com/.
- 2. Select Credentials > OAuth Client ID.
- Set Application type as Web Application.
- 4. Add your domain in the Authorized JavaScript origins.

The value in the Redirect URI is important. It must be lowercase and must be the URL to your application. For example, https://mydomain.com/cmwebdrawer followed by the path to the authentication provider, for example, /auth/openid.

The /auth/ component is fixed but the 'openid' is the name you will supply in **hptrim.config** later and so can be any string, as long as it matches the value in **hptrim.config**.

For the Web Client the path must include the path to the Service API, for example, https://mydomain.com/contentManager/serviceapi/auth/openid.

On saving, the Client ID and Client Secret will be displayed, note them for later use.

Configure authentication in hptrim.config

To use the Google credentials created above, edit the **hptrim.config** (or **hprmServiceAPI.config** in the Web Client) so that it has an authentication as follows:

- 1. The name must match the last segment of the Redirect URI path.
- 2. Client ID and secret as noted in above section.
- 3. The issuerURI is: https://accounts.google.com

For example,

```
<authentication allowAnonymous="false" slidingSessionMinutes="2">
<openIdConnect>
<addname="openid"
clientID="999999999999-abcdefghijklmemopqrs.apps.googleusercontent.com"
clientSecret="jl-BiX7685hjgf99999y"</pre>
```

```
issuerURI="https://accounts.google.com"
/>
</openIdConnect>
</authentication>
```

Enable redirect

The Web Client will not re-direct the authentication endpoint unless the **Html** feature is enabled in **hprmServiceAPI.config**. To do this:

- 1. Edit hprmServiceAPI.config
- 2. Find the property named **serviceFeatures**.
- 3. Add the feature Html.

Logout

For WebDrawer the logout link is configured in the uiSettings. It should contain ~/auth/logout. In the Web Client a logout link will be displayed automatically when OpenID Connect authentication is enabled.

```
For example,
<uiSettings
logoutLink="~/auth/logout"
...
/>
```

Allow anonymous access in the IIS

The IIS will not handle authentication, so use IIS Manager to allow anonymous access only.

