Setting Up Test User For Online SharePoint Tenant

The basic steps required to configure test users for the RQC Access App are:

1. Create and configure a new Azure AD user (portal.azure.com)
2. Add user to groups
3. Assign accounting units to each user
4. Create a new user in your tenant with Microsoft Azure AD
   1. Log onto <https://portal.azure.com/#home>
   2. Click on “View” under the **Manage Azure Active Directory section**
   3. On the left menu, click on “Users”
   4. On the Users page, click “New ” and select “Create user”
   * Enter the user email prefix in “User name”
   * Enter the username in “Name”
   * Enter the user first name and last name
   * The initial password is: K\_123456789
   * Fill as needed
   * Click “create”

* Current Users:
  1. [Kristin.collins@jaxspdev.onmicrosoft.com](mailto:Kristin.collins@jaxspdev.onmicrosoft.com)
  2. [hutchl@jaxspdev.onmicrosoft.com](mailto:hutchl@jaxspdev.onmicrosoft.com)
  3. [lucie.damaris@jaxspdev.onmicrosoft.com](mailto:lucie.damaris@jaxspdev.onmicrosoft.com)
  4. [Lisa.Ross@jaxspdev.onmicrosoft.com](mailto:Lisa.Ross@jaxspdev.onmicrosoft.com)
  5. [Lingna.Wang@jaxspdev.onmicrosoft.com](mailto:Lingna.Wang@jaxspdev.onmicrosoft.com)
  6. [brenda.parsons-landry@jaxspdev.onmicrosoft.com](mailto:brenda.parsons-landry@jaxspdev.onmicrosoft.com)
* Accounting units assignment
  1. Brenda Parsons-Landry
     1. Email: [brenda.parsons-landry@jaxspdev.onmicrosoft.com](mailto:brenda.parsons-landry@jaxspdev.onmicrosoft.com)
     2. Initial password: K\_123456789
  2. Richard Santos
     1. Email: [richard.santos@jaxspdev.onmicrosoft.com](mailto:richard.santos@jaxspdev.onmicrosoft.com)
     2. Initial password: K\_123456789
  3. Justin Spaulding
     1. Email: justin.spaulding@jaxspdev.onmicrosoft.com
     2. Initial password: K\_123456789
  4. Lisa Ross -
     1. Email: [Lisa.Ross@jaxspdev.onmicrosoft.com](mailto:Lisa.Ross@jaxspdev.onmicrosoft.com)
     2. Initial password: K\_123456789
     3. Accounting units:
        + 111100
        + 111200
        + 111300
        + 111400
        + 111500
        + 111600
  5. Kristin
     1. Email: [Kristin.collins@jaxspdev.onmicrosoft.com](mailto:Kristin.collins@jaxspdev.onmicrosoft.com)
     2. Initial password: K\_123456789
     3. Accounting units:
        + 111100
        + 111200
        + 111300
        + 111400
        + 111500
        + 111600
  6. Ligna
     1. Email: [Lingna.Wang@jaxspdev.onmicrosoft.com](mailto:Lingna.Wang@jaxspdev.onmicrosoft.com)
     2. Initial password: K\_123456789
     3. Accounting units:
        + 111100
        + 111200
        + 111300
        + 111400
        + 111500
        + 111600

1. Configure permissions for Microsoft Graph on the newly registered application
   1. Logon to your tenant account using <https://portal.azure.com>
   2. Go to App registrations then click on your new app
   3. Click on “Authentication” on the left menu
   4. On the “Authentication” page, under the “Implicit grant”, select the two check boxes (access tokens, and ID tokens)
   5. Click on “Certificates & secrets”
   6. Click “New client secret” then enter a name for the secret key
   7. Click “Add” to generate the ticket
   8. Copy and save the generated key for later use
   9. Set API permissions to application level for both graph and SharePoint access – this requires admin consent
      1. Microsoft graph - <https://docs.microsoft.com/en-us/graph/>
      2. Sharepoint
2. Grant Admin consent - Requesting Admin consent:
   * + - 1. Paste this link on your browser:
         2. https://login.microsoftonline.com**/tenant\_id**/adminconsent?client\_id=**app\_client\_id**&state=12354&redirect\_uri=aut\_redirirect\_id

In our example :

* tenant\_id = b56bc27e-6da9-4384-9cad-73117b11b0b3
* app\_client\_id = 21954173-f0ec-4d81-943a-f9d91d322713
* aut\_redierct\_uri = https%3A%2F%2Flocalhost%3A4321
  + - * 1. Then click access

Redirected link: <http://localhost:4321/?admin_consent=True&tenant=b56bc27e-6da9-4384-9cad-73117b11b0b3&state=12354>

https://login.microsoftonline.com**/**b56bc27e-6da9-4384-9cad-73117b11b0b3/adminconsent?client\_id=1ffb5f51-f2ff-482c-bd76-578ebb88d392

&state=12354&redirect\_uri=https%3A%2F%2Flocalhost%3A3000

1. Implement a service to Get an access token – using axios, or ajax, or fetch, …

**Request Header configuration:**

**Method:** Post

**Host:** login.microsoftonline.com

**Content-Type:** application/x-www-form-urlencoded

**Request data configuration:**

**client\_id** = this\_client\_id

**scope** = https%3A%2F%2Fgraph.microsoft.com%2F.default

**client\_secret** = this\_client\_secret

**grant\_type** = client\_credentials

**Example:** In your app, you can implement a service that uses axios to get access token using the configuration below

POST https://login.microsoftonline.com/{tenant}/oauth2/v2.0/token HTTP/1.1

Host: login.microsoftonline.com

Content-Type: application/x-www-form-urlencoded

client\_id=535fb089-9ff3-47b6-9bfb-4f1264799865

&scope=https%3A%2F%2Fgraph.microsoft.com%2F.default

&client\_secret=qWgdYAmab0YSkuL1qKv5bPX

&grant\_type=client\_credentials

// Line breaks are for legibility only

1. Use the access token to call Microsoft Graph

To use MS graph api calls that reads file content stored in MS SP document library on the cloud, your APP should implement a two-step process:

1. Use graph api to get the downloadWebURL of the target file
2. Use axios to get the content of the file using the link returned in step 1

Example: to fetch the content of test.req\_loc.json from <https://jaxdev.sharepoint.com/Shared%20Documents/models>

* Given SP driveId of “Shared Documents” folder is “b!Rz7Occ-V-keEg8HtjjsX6xBg2qwSArxFmxDMOyfVfjwfxVW1KVqCS4YpTePYBj0I”
* Call <https://graph.microsoft.com/v1.0/sites/jaxspdev.sharepoint.com/drives/b!Rz7Occ-V-keEg8HtjjsX6xBg2qwSArxFmxDMOyfVfjwfxVW1KVqCS4YpTePYBj0I/root:/models/test.req_loc.json>

This returns a json response with @microsoft.graph.downloadUrl field which you can use to call axios for data extraction

Response from graph:

{

"@odata.context": "https://graph.microsoft.com/v1.0/$metadata#sites('jaxspdev.sharepoint.com')/drives('b%21Rz7Occ-V-keEg8HtjjsX6xBg2qwSArxFmxDMOyfVfjwfxVW1KVqCS4YpTePYBj0I')/root/$entity",

"@microsoft.graph.downloadUrl": "https://jaxspdev.sharepoint.com/\_layouts/15/download.aspx?UniqueId=8bce2e5c-f6ef-451f-91b9-27e51433d9a2&Translate=false&tempauth=eyJ0eXAiOiJKV1QiLCJhbGciOiJub25lIn0..dXhmM2tPVWN0UWR2bXZHY1hPVUlHakpoOWNRODdRMy9mMDFFVjB5S0h4Zz0&ApiVersion=2.0",

"createdDateTime": "2020-04-25T14:55:32Z", ..}

Appendix:

To get access token manually:

https://login.microsoftonline.com/b56bc27e-6da9-4384-9cad-73117b11b0b3/oauth2/authorize?client\_id=21954173-f0ec-4d81-943a-f9d91d322713&response\_type=code&redirect\_uri=http%3A%2F%2Flocalhost%3A4321&response\_mode=query&resource= 21954173-f0ec-4d81-943a-f9d91d322713&state=12345

To get the access token: https://login.microsoftonline.com/b56bc27e-6da9-4384-9cad-73117b11b0b3/oauth2/authorize?client\_id=21954173-f0ec-4d81-943a-f9d91d322713&response\_type=code&redirect\_uri=http%3A%2F%2Flocalhost%3A4321& state=12345

Sample MS Graph queries :

* Using graph explorer - <https://developer.microsoft.com/en-us/graph/graph-explorer>
* List all the document Libraries of tenant jaxdev.sharepoint.com
  + <https://graph.microsoft.com/v1.0/sites/jaxspdev.sharepoint.com:/drives>
* List all the document Libraries of the rqcsite sub-site of tenant jaxdev.sharepoint.com
  + <https://graph.microsoft.com/v1.0/sites/jaxspdev.sharepoint.com:/sites/rqcsite:/drives>
* List all the children of the /Shared Documents/ drive of tenant jaxdev.sharepoint.com
  + <https://graph.microsoft.com/v1.0/sites/jaxspdev.sharepoint.com/drives/b!Rz7Occ-V-keEg8HtjjsX6xBg2qwSArxFmxDMOyfVfjwfxVW1KVqCS4YpTePYBj0I/root/children>
  + In the example we use the drive id of /Shared Document/ folder which was collected from the previous query – tenant’s document libraries listing

<https://graph.microsoft.com/v1.0/sites/jaxspdev.sharepoint.com/drives/b!Rz7Occ-V-keEg8HtjjsX6xBg2qwSArxFmxDMOyfVfjwfxVW1KVqCS4YpTePYBj0I/items/01XXZICP5ZB7U62JV3Q5FKD7GZT3YRBSHQ/children> or <https://graph.microsoft.com/v1.0/sites/jaxspdev.sharepoint.com/drives/b!Rz7Occ-V-keEg8HtjjsX6xBg2qwSArxFmxDMOyfVfjwfxVW1KVqCS4YpTePYBj0I/root:/models:/children>

List all the children under /Shared Document/models/ -- models id 01XXZICP5ZB7U62JV3Q5FKD7GZT3YRBSHQ

<https://graph.microsoft.com/v1.0/sites/jaxspdev.sharepoint.com/drives/b!Rz7Occ-V-keEg8HtjjsX6xBg2qwSArxFmxDMOyfVfjwfxVW1KVqCS4YpTePYBj0I/root:/models/active_au.json>

To get a file content : https://graph.microsoft.com/v1.0/sites/jaxspdev.sharepoint.com/drives/b!Rz7Occ-V-keEg8HtjjsX6xBg2qwSArxFmxDMOyfVfjwfxVW1KVqCS4YpTePYBj0I/items/01XXZICP7HNAS6LDRRPZGLJLIR6IGY5KDM?select=microsoft.graph.downloadUrl

{

"@odata.context": "https://graph.microsoft.com/v1.0/$metadata#sites('jaxspdev.sharepoint.com')/drives('b%21Rz7Occ-V-keEg8HtjjsX6xBg2qwSArxFmxDMOyfVfjwfxVW1KVqCS4YpTePYBj0I')/items/$entity",

"@odata.etag": "\"{E52568E7-318E-4C7E-B4AD-11F20D8EA86C},1\""

}

Useful Links:

1. <https://docs.microsoft.com/en-us/azure/active-directory/develop/v2-oauth2-on-behalf-of-flow>
2. <https://docs.microsoft.com/en-us/graph/auth-v2-service>
3. <https://docs.microsoft.com/en-us/sharepoint/dev/spfx/use-msgraph>
4. <https://github.com/microsoftgraph/msgraph-training-reactspa/tree/master/demo/graph-tutorial/src>
5. <https://docs.microsoft.com/en-us/sharepoint/dev/spfx/web-parts/get-started/connect-to-sharepoint>
6. <https://docs.microsoft.com/en-us/azure/active-directory/develop/msal-js-initializing-client-applications>
7. <https://github.com/azureadquickstarts/appmodelv2-webapp-openidconnect-nodejs>
8. <https://docs.microsoft.com/en-us/azure/active-directory/develop/quickstart-configure-app-access-web-apis#add-permissions-to-access-web-apis>
9. <https://docs.microsoft.com/en-us/azure/active-directory/develop/v2-protocols-oidc>
10. <https://github.com/Azure-Samples/active-directory-javascript-graphapi-v2/blob/quickstart/JavaScriptSPA/authRedirect.js>
11. <https://github.com/AzureAD/microsoft-authentication-library-for-js/issues/1288>
12. <https://medium.com/@franciscopa91/how-to-implement-oidc-authentication-with-react-context-api-and-react-router-205e13f2d49>
13. <https://www.koskila.net/how-to-fix-admin-consent-issues-aadsts65001/>
14. <https://docs.microsoft.com/en-us/graph/api/resources/onedrive?view=graph-rest-1.0>
15. <https://bilot.group/articles/authentication-with-azure-ad-using-msal-react-app/>
16. <https://kaboodlesoftware.com/2019/07/24/creating-web-part-that-support-single-part-app-pages-in-sharepoint-online/>
17. How to deploy : <https://docs.microsoft.com/en-us/sharepoint/dev/spfx/web-parts/single-part-app-pages>

Create users:

1. Lisa Ross