

Power BI Automation

Tenant : Digital Data Marts

Admin : SatyaVelagala@DigitalDatamarts.com

1. Create Group called DDM PBI Apps

The screenshot displays the Microsoft Azure portal interface for managing a group named 'DDM PBI Apps'. The top navigation bar shows the 'Microsoft Azure' logo and a search bar. The left sidebar contains various management options, with 'Overview' selected. The main content area shows the group's details, including its name, description, and various attributes like membership type, source, type, object ID, and creation date. A notification banner indicates that counts may be inaccurate if the group was recently created. Below the notification, the 'Direct members' section shows 0 users, 0 groups, 0 devices, and 0 others. The 'Group memberships', 'Owners', and 'Total members' sections also show 0 members.

DDM PBI Apps
Digital Data Marts Power BI Apps Group

Property	Value
Membership type	Assigned
Source	Cloud
Type	Security
Object Id	82298d33-578e-4f8e-9577-28edcc4aaf71
Creation date	1/13/2022, 9:58:34 PM

Counts may be inaccurate if this group was recently created.

Direct members

Category	Count
0 User(s)	0
0 Group(s)	0
0 Device(s)	0
0 Other(s)	0

Group memberships 0 **Owners** 0 **Total members** 0

2.Power BI Admin Portal – Settings

Power BI Admin portal

Trial: 23 days left

Search

Home

Favorites

Recent

Create

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Apps

Shared with me

Deployment pipelines

Learn

Workspaces

Live

Admin portal

Tenant settings

Usage metrics

Users

Premium Per User

Audit logs

Capacity settings

Refresh summary

Embed Codes

Organizational visuals

Azure connections

Workspaces

Custom branding

Protection metrics

Featured content

principal authentication its service principal must be included in an allowed security group. [Learn more](#)

☒ Enabled

Service principals can use APIs to access tenant-level features controlled by Power BI service admins and enabled for the entire organization or for security groups they're included in. You can control access of service principals by creating dedicated security groups for them and using these groups in any Power BI tenant level-settings. [Learn more](#)

Apply to:

☐ The entire organization

☒ Specific security groups (Recommended)

DDM PBI Apps

X

Enter security groups

☐ Except specific security groups

Apply

Cancel

Block ResourceKey Authentication
Disabled for the entire organization

Admin API settings

Allow service principals to use read-only Power BI admin APIs
Enabled for a subset of the organization

Enhance admin APIs responses with detailed metadata (Preview)
Disabled for the entire organization

Enhance admin APIs responses with DAX and mashup expressions (Preview)
Disabled for the entire organization

Activate Windows
Go to Settings to activate Windows.



3. Service Principal Setup :

Microsoft Azure

Search resources, services, and docs (G+J)

SatyaVelagala@digitald...
DIGITAL DATA MARTS (DIGITALD...

Home > Digital Data Marts >

Digital Data Marts - SP1

Search (Ctrl+J)

Delete Endpoints Preview features

Overview

Quickstart

Integration assistant

Manage

Branding

Authentication

Certificates & secrets

Token configuration

API permissions

Expose an API

App roles

Owners

Roles and administrators | Preview

Manifest

Support + Troubleshooting

Troubleshooting

New support request

Essentials

Display name : Digital Data Marts - SP1

Application (client) ID : e032c2ba-101e-4280-80eb-433472224632

Object ID : 46382d91-5e94-4c62-84da-37ceafd8b2e9

Directory (tenant) ID : ec6637ac-f09c-474c-92bf-3213c1bbec92

Supported account types : My organization only

Client credentials : Add a certificate or secret

Redirect URIs : Add a Redirect URI

Application ID URI : Add an Application ID URI

Managed application in I... : Digital Data Marts - SP1

Welcome to the new and improved App registrations. Looking to learn how it's changed from App registrations (Legacy)? [Learn more](#)

Starting June 30th, 2020 we will no longer add any new features to Azure Active Directory Authentication Library (ADAL) and Azure AD Graph. We will continue to provide technical support and security updates but we will no longer provide feature updates. Applications will need to be upgraded to Microsoft Authentication Library (MSAL) and Microsoft Graph. [Learn more](#)

Get Started Documentation

Build your application with the Microsoft identity platform

The Microsoft identity platform is an authentication service, open-source libraries, and application management tools. You can create modern, standards-based authentication solutions, access and protect APIs, and add sign-in for your users and customers. [Learn more](#)

Call APIs

Build more powerful apps with rich user and business data from Microsoft services and your own company's data sources.

View API permissions

Sign in users in 5 minutes

Use our SDKs to sign in users and call APIs in a few steps. Use the quickstarts to start a web app, mobile app, SPA, or daemon app.

View all quickstart guides

Configure for your organization

Assign users and groups, apply conditional access policies, configure single sign-on, and more in Enterprise applications.

Go to Enterprise applications

Activate Windows
Go to Settings to activate Windows.

4. Add the SPN to the Group as Member

Microsoft Azure

Search resources, services, and docs (G+)

SatyaVelagala@digitald...
DIGITAL DATA MARTS (DIGITALD...

Home > Digital Data Marts > Groups > DDM PBI Apps

DDM PBI Apps | Members ...

Group

Overview

Diagnose and solve problems

Manage

Properties

Members

Owners

Roles and administrators

Administrative units

Group memberships

Applications

Licenses

Azure role assignments

Activity

Access reviews

Audit logs

Bulk operation results

Troubleshooting + Support

New support request

+ Add members

✕ Remove

🔄 Refresh

📄 Bulk operations

☰ Columns

🗨 Got feedback?

Direct members

All members

🔍 Search by name

+ Add filters

	Name	Type	Email	User type
<input type="checkbox"/>	Digital Data Marts - SP1	Service Principal		

Azure Function Code

```
public static class CreateWorkspaceAF

{
    [FunctionName("CreateWorkspaceAF")]
    public static async Task<ActionResult> Run(
        [HttpTrigger(AuthorizationLevel.Function, "get", "post", Route = null)] HttpRequest req,
        ILogger log)
    {
        log.LogInformation("HTTP triggered function processed a request for CreateWorkspaceAF.");

        string name = req.Query["name"];

        string requestBody = await new StreamReader(req.Body).ReadToEndAsync();
        dynamic data = JsonConvert.DeserializeObject(requestBody);
        name = name ?? data?.name;

        string responseMessage = string.IsNullOrEmpty(name)
            ? "Pass a workspace name (name) in the query string to create a new workspace.\n"
            : $"Workspace with name = {name} is getting created.\n";
    }
}
```

```
PowerBiAppIdentity objAppIdentity = new PowerBiAppIdentity();
```

```
objAppIdentity.TenantId = "ec6637ac-f09c-474c-92bf-3213c1bbec92";
```

```
objAppIdentity.ApplicationId = "e032c2ba-101e-4280-80eb-433472224632";
```

```
objAppIdentity.ClientSecret = "2&27Q~NDwl.iZPGAYmKakOybDS48pX_IYTugT";
```

```
PowerBiServiceApi objservice = new PowerBiServiceApi();
```

```
PowerBiClient PbiClientDetails = objservice.GetPowerBiClient(objAppIdentity);
```

```
var ClientWSes = await objservice. GetTenantWorkspacesAsync(PbiClientDetails);
```

```
foreach (Group ws in ClientWSes) {
```

```
    //Console.WriteLine($"ws name = {ws.Name}");
```

```
    if(!string.IsNullOrEmpty(ws.Name)){
```

```
        if (ws.Name.ToLower().Equals(name.ToLower())) {
```

```
            responseMessage = responseMessage + $"The Workspace is already created with this name, created workspace guid is : {ws.Id}";
```

```
            return new OkObjectResult(responseMessage);
```

```
    }  
    }  
}
```

```
Group workspace =null;
```

```
string workspaceName = name;
```

```
PowerBiTenantDetails tenantDetails = new PowerBiTenantDetails();
```

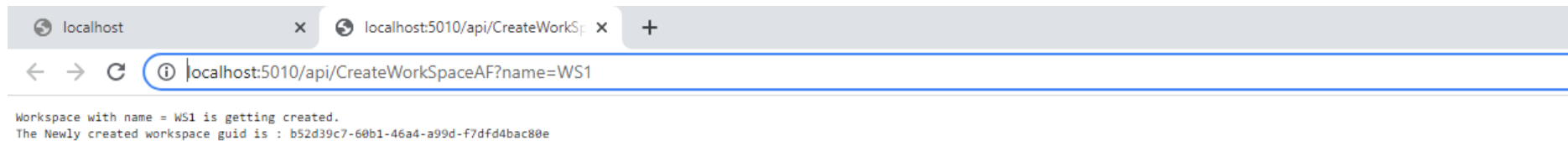
```
workspace = objservice.CreateAndGetNewWorkSpace(objAppIdentity,workspaceName);
```

```
responseMessage = responseMessage + $"The Newly created workspace guid is : {workspace.Id}";
```

```
return new OkObjectResult(responseMessage);
```

```
}
```

```
}
```



Power BI

Groups - Microsoft Azure

+

←

→

↺

https://www.powerbi.com/groups/b52d39c7-60b1-46a4-a99d-f7dfd4bac80e/list

🔍 Search

🔔

⚙️

⬇️

?

😊

Power BI

WS1

⌵

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Workspaces >

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👤 WS1

+ New ▾

🚀 Create a pipeline

≡ View ▾

+

Add content to this workspace

Save reports, dashboards, datasets, and workbooks to this workspace by making something new or uploading existing files.

👤 Access

WS1

Add admins, members, or contributors. [Learn more](#)

Enter email addresses

Member ▾

Add

🔍 Search

NAME	PERMISSION	
Digital Data Marts... (Service Principal) ⓘ	Admin	...
Satya Velagala ⓘ	Admin	...