



10TH MAGNITUDE

Creating a Service Principal for Enabling Pipeline Deployments

Contents

Creating the Service Principal via the Portal.....	2
Create the Service Principal.....	2
Adding Service Principal as a contributor in your Subscription.....	4
Creating the Service Principal via the Azure CLI	6

Creating the Service Principal via the Portal

Create the Service Principal

Prerequisite You must have global administrator privileges to create a service principal (aka register an App).

1. Open a text editor (such as NotePad orTextEdit) so that you can store specific parameters of the service principal that you need to provide to 10th Magnitude.
2. Log in to the [Azure Portal](#).
3. From the left menu, select **Azure Active Directory**.
If a menu entry for Azure Active Directory does not exist, search for it.
4. Select the **App Registrations** tile and then click **New App Registration** from the top of the page.

The screenshot shows the Azure portal's App Registrations blade. At the top, there are navigation links: 'New registration' (highlighted in yellow), 'Endpoints', 'Troubleshooting', and 'Got feedback?'. Below these is a welcome message: 'Welcome to the new and improved App registrations (now Generally Available). See what's new →'. There is also a note about legacy app registrations: 'Looking to learn how it's changed from App registrations (Legacy)? Learn more' and 'Still want to use App registrations (Legacy)? Go back and tell us why'. The main area displays two tabs: 'All applications' (selected) and 'Owned applications'. Below is a search bar with placeholder text 'Start typing a name or Application ID to filter these results'. A table lists the application details:

DISPLAY NAME	APPLICATION (CLIENT) ID
TE TestAzDoServicePrincipal	[REDACTED]



10TH MAGNITUDE

5. Fill out the following fields in the form and then click **Register**:

[Register an application](#)

* Name

The user-facing display name for this application (this can be changed later).

10M-AzureDevOps-Pipeline 

Supported account types

Who can use this application or access this API?

- Accounts in this organizational directory only (Cloudwidth MSDN Directory)
 Accounts in any organizational directory
 Accounts in any organizational directory and personal Microsoft accounts (e.g. Skype, Xbox, Outlook.com)

[Help me choose...](#)

Redirect URI (optional)

We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later, but a value is required for most authentication scenarios.

Web  https://10M-AzureDevOps-Pipeline 

6. When completed, you will see the Application Registration you just created.

- Copy the **Display Name** into the text document.
- Copy the **Application (client) ID** and **Directory (tenant) ID** into the text document.

Display name

10M-AzureDevOps-Pipeline

Application (client) ID

a63b745e-7993-4ad0-a60d-d63011d3340d

Directory (tenant) ID

8054a641-682b-4d1b-8770-079c08515a05

Object ID

5dcde8d4-676c-4af9-834a-59ebca5d3d05

Supported account types

Multiple organizations

Redirect URIs

1 web, 0 public client

Managed application in local directory

10M-AzureDevOps-Pipeline



10TH MAGNITUDE

7. Click **Certificates & secrets** from the left menu, then select **New client secret**.

- Add a key description of **10MPipelineDeployments**. Make sure there are no spaces.
- Select a **1 year** duration.

Add a client secret

Description

10MPipelineDeployments

Expires

- In 1 year
 In 2 years
 Never

Add

Cancel

8. Click **Add**. A value is generated.

9. Copy the **VALUE** into the text document. (Note: Copy the Value now before leaving this screen as the value will become hidden once you come back to this screen after leaving it.)

Client secrets

A secret string that the application uses to prove its identity when requesting a token. Also can be referred to as application password.

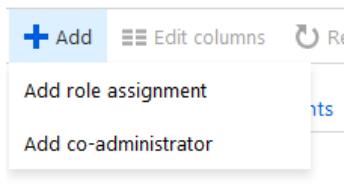
+ New client secret

DESCRIPTION	EXPIRES	VALUE	
10MPipelineDeployments	7/24/2020	-Ah9Vq5_3.wZnzGQ-7x]p?urJ*V7v]vp	 

14. Send text document with information copied from this procedure to 10th Magnitude.

Adding Service Principal as a contributor in your Subscription

1. In the Azure Services menu of the [Azure Portal](#), go to **All Services > Subscriptions**.
2. Select the Subscription name from the list to open it.
3. Select **Access Control (IAM)** from the menu on the left. and click **Add**. Select **Add role assignment**.



4. Fill out the fields as follows:

- Select Contributor from the **Role** drop-down menu.
- Leave **Assign access to** field as “Azure AD user, group or service principal”
- In the **Select** field enter “10M-AzureDevops-Pipeline” and click to select it in the search results.
- Click the **Save** button

A screenshot of the 'Add role assignment' dialog box. It shows the 'Selected members:' section with one item: '10M-AzureDevops-Pipeline'. Below this is a 'Remove' button. At the bottom of the dialog are 'Save' and 'Discard' buttons.

Creating the Service Principal via the Azure CLI

1. Open a command prompt and log into your subscription using the Azure CLI

```
az login
```

2. Validate you are connected to the correct subscription by issuing the following:

```
az account show
```

```
{
  "cloudName": "AzureCloud",
  "id": "00000000-0000-0000-0000-000000000000",
  "isDefault": true,
  "name": "PAYG Subscription",
  "state": "Enabled",
  "tenantId": "00000000-0000-0000-0000-000000000000",
  "user": {
    "name": "user@example.com",
    "type": "user"
  }
}
```

3. If you are not connected to the correct subscription, issue the following command using the correct subscription ID

```
az account set --subscription="00000000-0000-0000-0000-000000000000"
```

4. Create the service principal and grant Contributor RBAC rights at the subscription level using the correct subscription ID.

```
az ad sp create-for-rbac --name "10M-AzureDevops-Pipeline" --role
contributor --scopes /subscriptions/00000000-0000-0000-0000-000000000000
{
  "appId": "00000000-0000-0000-0000-000000000000",
  "displayName": "10M-AzureDevops-Pipeline",
  "name": "http://10M-AzureDevops-Pipeline",
  "password": "0000-0000-0000-000000000000",
  "tenant": "00000000-0000-0000-0000-000000000000"
}
```

5. Copy the resulting JSON-formatted output and send to 10th Magnitude.