

Microsoft Graph Authentication VBO

User Guide

Document Revision 1.0

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1. Introduction

This document describes the VBO for generating access tokens for Microsoft's Graph API. Microsoft Graph is a RESTful web service interface that can be used to interact with Microsoft's cloud-based Office offerings such as OneNote, Excel, Sharepoint, etc. It supports using delegated and application access tokens.

You can find further details about Microsoft Graph authentication mechanism at the following link:

https://docs.microsoft.com/en-us/graph/auth/

2. Prerequisites

Before using this integration, you must create a service account credential within your Microsoft 365 environment with sufficient permission to interrogate and manage user accounts. This involves creating an *App Registration* within your Azure Active Directory. Additionally set the API permissions as necessary depending upon the API actions that you plan to use.

Creation of the App Registration will provide you with the following items you will need to configure the Microsoft Graph Teams Authentication VBO within Blue Prism:

Required Credential Information

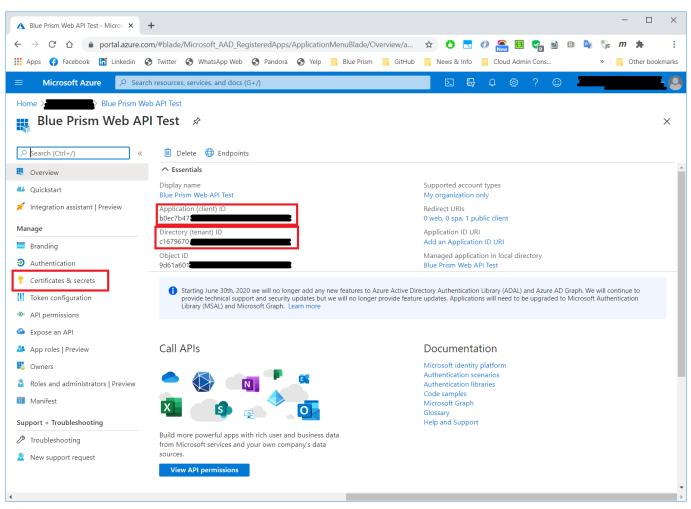
- Client ID
- Client Secret

Web API Service Definition Information

• Azure Tenant ID

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~	🕂 New registration ⊕ Endpoints 🤌 Troubleshooti	ng 🛓 Download (Preview) 🕴 ♡ Got feedback?				
1 Overview	Welcome to the new and improved App registrations (no	w Generally Available). See what's new and learn more on ho	v it's changed. →			
🚀 Getting started	• · · · · · ·		5			
Preview hub						
X Diagnose and solve problems	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					
Manage	(WSAL) and WIClosoft Graph. Learn Hore					
🚨 Users	All applications Owned applications					
A Groups						
External Identities	Start typing a name or Application ID to filter these res	ults				
Roles and administrators	Display name	Application (client) ID	Created on	Certificates & secrets		
Administrative units (Preview)	BP Blue Prism Web API Test	b0ec7b47-	. 6/23/2020	🕑 Current		
Enterprise applications						
Devices						
App registrations						
Identity Governance						
Application proxy						
Licenses						
Azure AD Connect						
Custom domain names						
Mobility (MDM and MAM)						
🕈 Password reset 🔹 🔻						

Figure 1 - Azure App Registration





A Blue Prism Web API Test - Micros X -	+			- 🗆 ×		
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■ Microsoft Azure	h resources, services, and docs (G+/)		N 🕼 Q 🍪 ? 😳 🖥			
Home > Home > Blue Prism Web	^{b API Test} Test Certificates & secre	ts ☆		×		
	♡ Got feedback?					
💐 Overview			service when receiving tokens at a web addressab	le location (using an HTTPS		
🗳 Quickstart	scheme). For a higher level of assurance, we n	ecommend using a certificate (instead of a c	client secret) as a credential.			
💉 Integration assistant Preview	Certificates					
Manage	Certificates can be used as secrets to prove th	Certificates can be used as secrets to prove the application's identity when requesting a token. Also can be referred to as public keys.				
🔤 Branding	↓ Upload certificate					
Authentication	Thumbprint	Start date	Expires			
📍 Certificates & secrets	No certificates have been added for this appli	cation				
Token configuration	No certificates have been added for this appli	cation.				
API permissions						
 Expose an API App roles Preview 	Client secrets					
App roles Preview Owners	A secret string that the application uses to pre					
Roles and administrators Preview	+ New client secret					
III Manifest	Description	Expires	Value			
Support + Troubleshooting	Client Secret	12/31/2299	j~E*********	<u>iii</u>		
Troubleshooting				•		
New support request						
4						

Figure 3 - Client Secret

Depending on the actions that you need to use, you need to grant application or delegated permissions as below -

Search (Ctrl+/)	×	🖒 Refresh 🔰 🗢 Got feedback?					
R Overview	A						
QuickstartIntegration assistant		i The "Admin consent required" column shows the default value for an organization. However, user consent can be customized per permission, user, or app. This column x may not reflect the value in your organization, or in organizations where this app will be used. Learn more					
Manage		Configured permissions					
🗮 Branding		Applications are authorized to call APIs when they are granted permissions by users/admins as part of the consent process. The list of configured permissions should include all the permissions the application needs. Learn more about permissions and consent				ould	
∂ Authentication							
📍 Certificates & secrets		+ Add a permission 🗸 Grant a	admin consent	for testblueprism			
Token configuration		API / Permissions name	Туре	Description	Admin consent req	Status	
➔ API permissions		✓ Microsoft Graph (182)					•••
Expose an API	•	AccessReview.Read.All	Delegated	Read all access reviews that user	can access Yes	Granted for testblueprism	



3. Configuration

This asset has been made available as a Blue Prism release file. To use the asset you must import the .bprelease file which contains the following:

- VBO
 - Microsoft Graph Authentication

The Graph API actions can work using delegated permission or application permission. Both requires a token to be generated separately. Use the VBO **Microsoft Graph – Teams Authentication** to retrieve the relevant access token and pass it into the relevant Graph Web API as Bearer access token in the Authentication Header when making the call.

For retrieving Application Access Token, pass in the TenantID, ClientID and ClientSecret as input parameters.

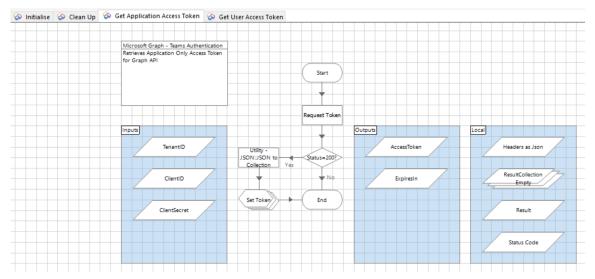
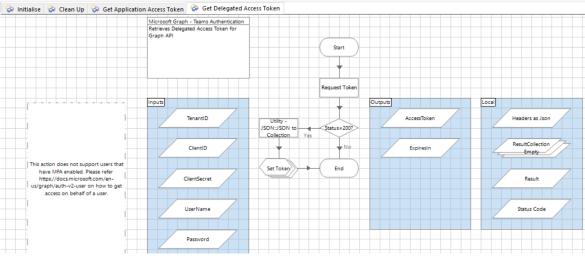


Figure 5 – Application Access Token

For retrieving Delegated Access Token, pass in the TenantID, ClientID, ClientSecret, UserName and Password as input parameters.





4. Actions

4.1 Get Application Access Token

Retrieves Application Only Access Token for Graph API

Parameter	Direction	Data Type	Description
TenantID In Text 1		Text	TenantID of the organization
ClientID In		Text	Client ID of the Azure app
ClientSecret	In	Password	Secret Key for the Azure app
AccessToken	Out	Password	AccessToken for Graph API authorization
ExpiresIn Out Number		Number	Token Expiration time interval

4.2 Get Delegated Access Token

Retrieves Delegated Access Token for Graph API

Туре	In	Text	Set to either 'users', 'groups', or 'sites'.
TenantID In Text		Text	TenantID of the organization
ClientID In 1		Text	Client ID of the Azure app
ClientSecret In		Password	Secret Key for the Azure app
UserName	In	Text	Username of the user granting access
Password	In	Password	Password of the user granting access
AccessToken	Out	Password	AccessToken for Graph API authorization
ExpiresIn Out Number		Number	Token Expiration time interval

5. Support

This asset is provided free-of-charge by Blue Prism. Blue Prism does not provide formal support of this asset. Please direct any questions you have, related to this asset, to the Digital Exchange Community page:

https://community.blueprism.com/communities/community-home?CommunityKey=1e516cfe-4d1f-4de9a9eb-58d15bf38c81