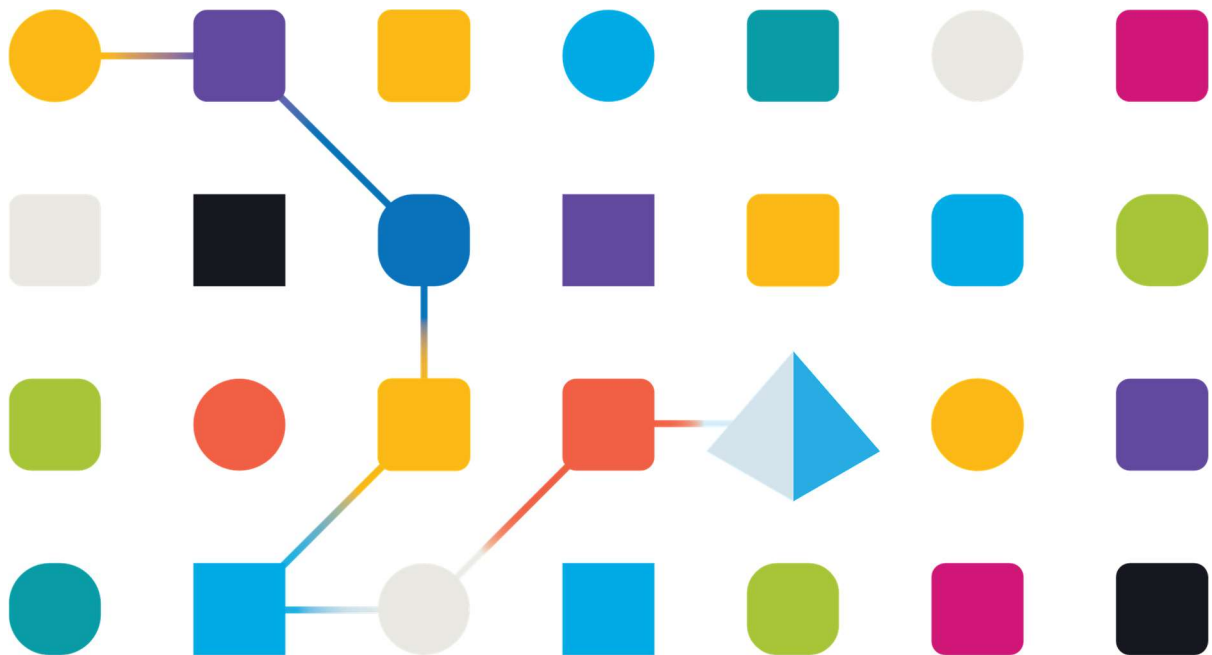# blueprism®

Microsoft Graph – Teams Web API Service

User Guide

Document Revision 1.2

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Contents

Introduction

This document describes the Blue Prism Web API service definition for interacting with 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.

This interface is specific to the Microsoft Graph API for Teams.

NOTE: Only a subset of the available Users endpoints has been implemented in this interface. Additional endpoints will be added in later versions. You may add additional endpoints to this interface by editing the Web API definition within Blue Prism by going to *System → Objects → Web API Services*.

You can find further details about Microsoft Graph, and specifically the Teams endpoints, at the following links:

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

https://docs.microsoft.com/en-us/graph/api/resources/teams-api-overview?view=graph-rest-1.0

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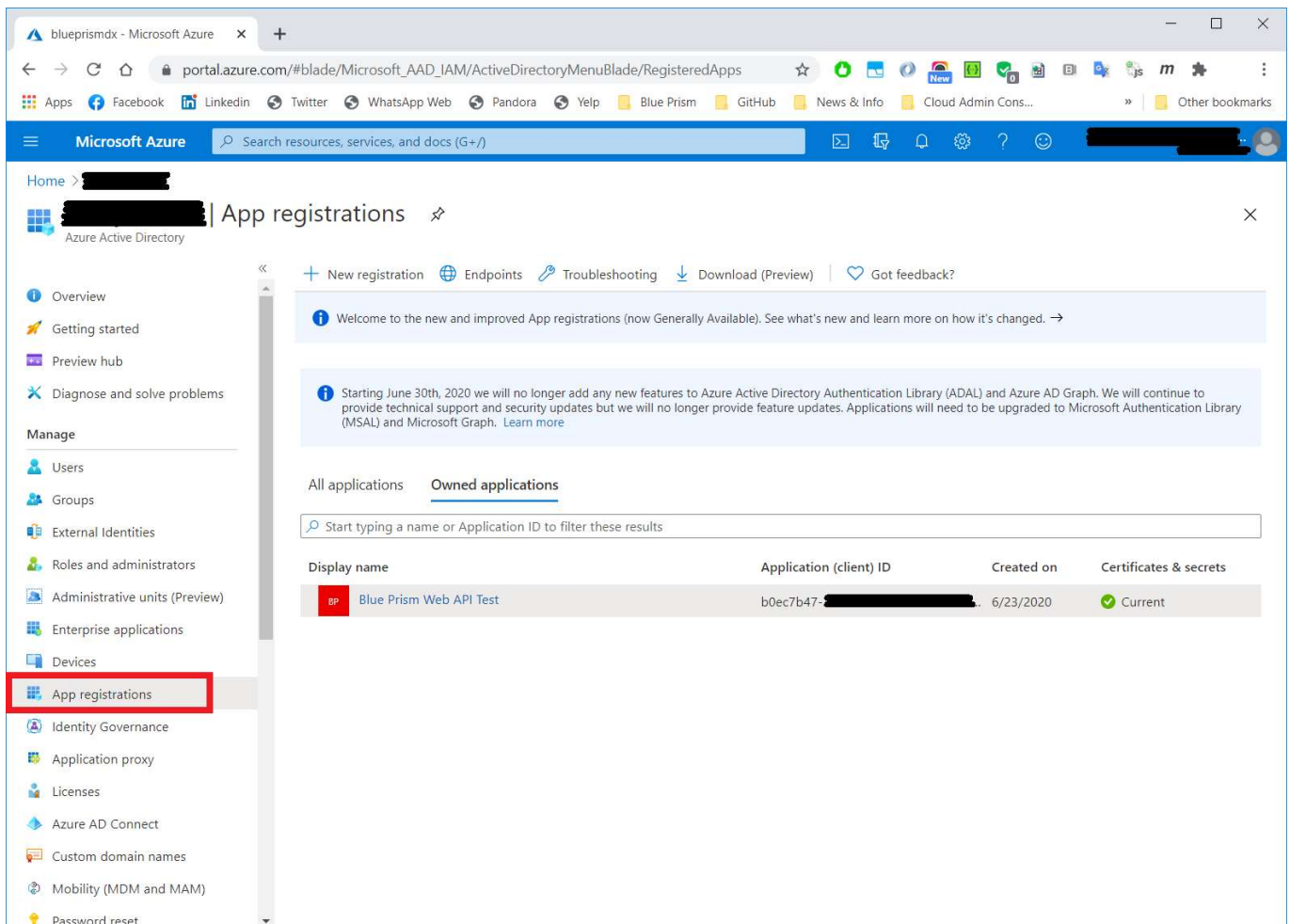
Creation of the App Registration will provide you with the following items you will need to configure the Microsoft Graph Teams Authentication VBO within Blue Prism:

Required Credential Information

- Client ID
- Client Secret

Web API Service Definition Information

- Azure Tenant ID

Figure 1 - Azure App Registration
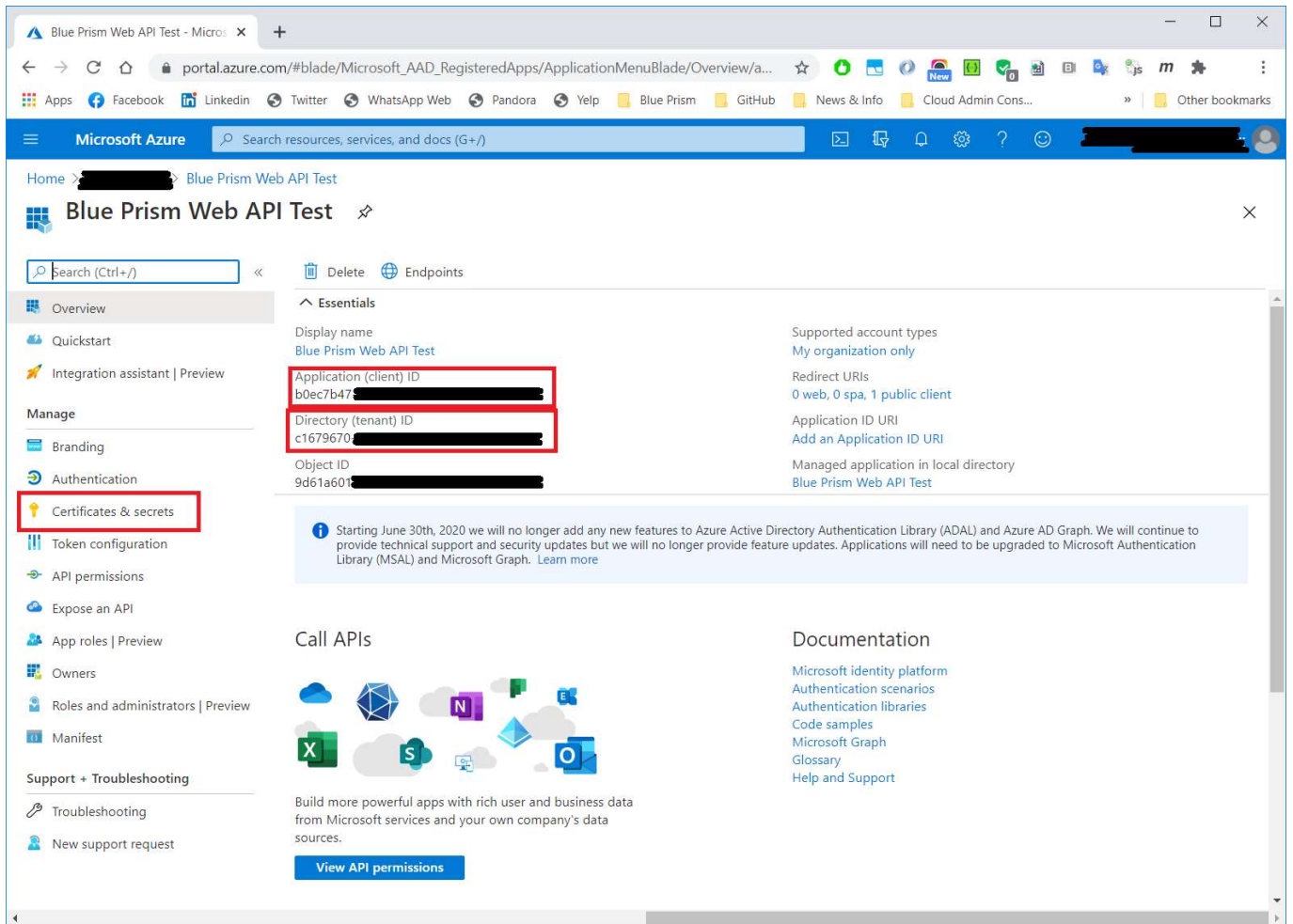
Figure 2 - App Registration Details
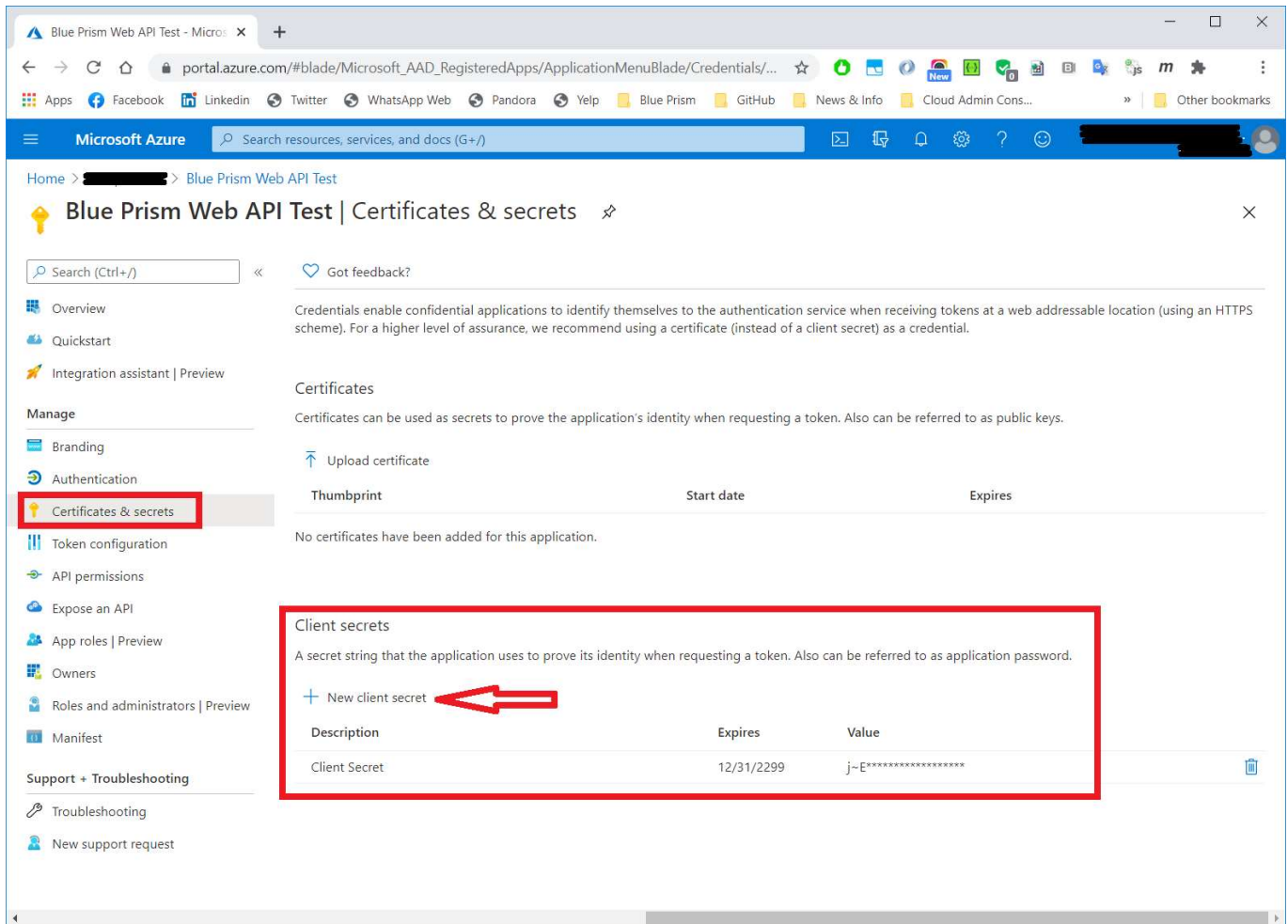
Figure 3 - Client Secret
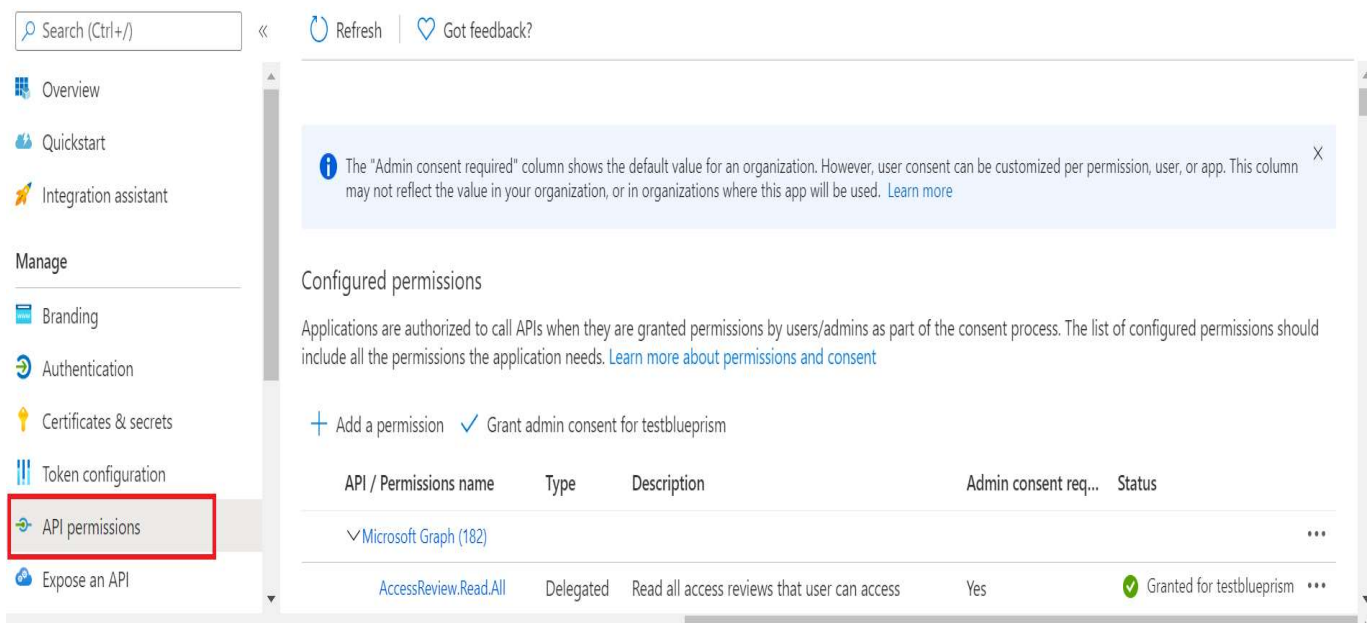
Figure 4 – API Permissions

Dependencies

This WebAPI service depends on the following additional components, available from the Digital Exchange:

- Microsoft Graph – Authentication

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:

- Web API Service Definition
  - Microsoft Graph – Teams

NOTE: This Web API service is dependent on the *Microsoft Graph – Authentication* service, also available on the Digital Exchange.

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

For retrieving Application Access Token, pass in the TenantID, ClientID and ClientSecret as input parameters.
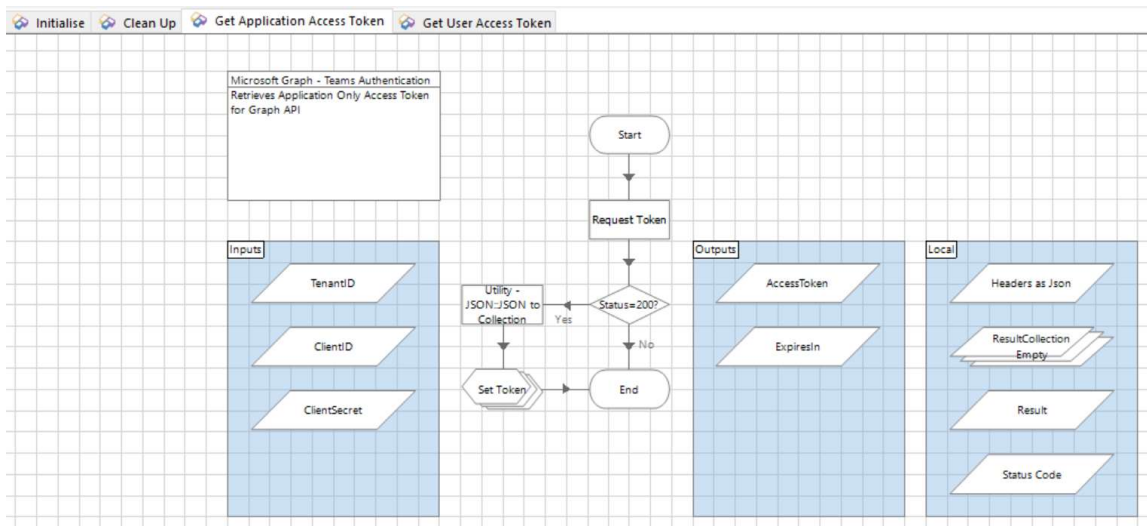
Figure 5 – Application Access Token

For retrieving Delegated Access Token, pass in the TenantID, ClientID, ClientSecret, UserName and Password as input parameters.
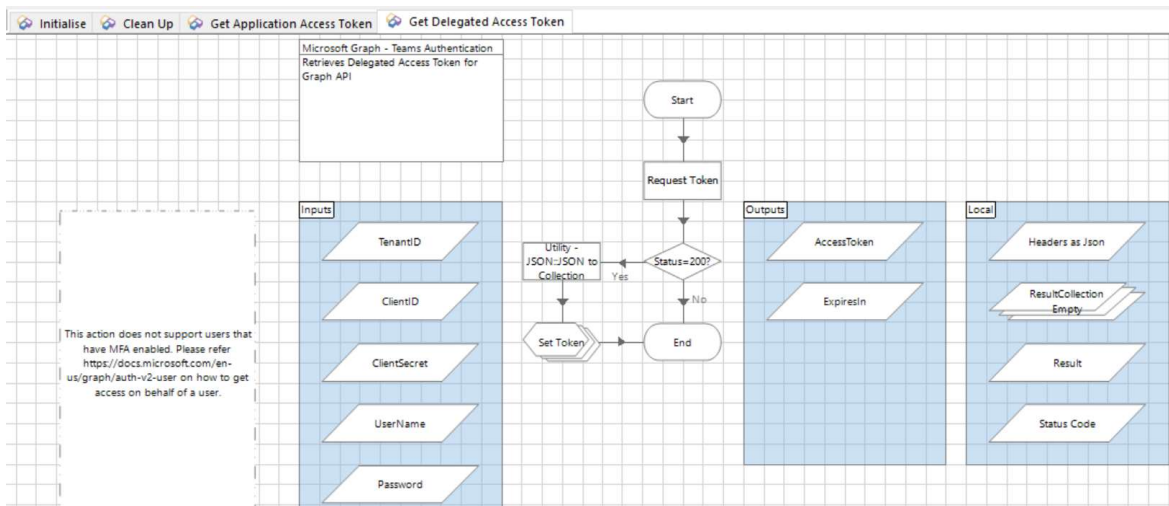
Figure 6 – Delegated Access Token

Using the Asset

The following actions are exposed by the asset.

Add Member to Chat

Add a member to a chat.

Parameter	Direction	Data Type	Description
Chat ID	In	Text	The unique ID of the specific chat.
User ID	In	Text	The ID or user principal name of the specific user.
Role	In	Text	The role to apply to the new member. Supported values are 'owner' and 'guest'. The default value is 'owner'.
Share Chat History	In	Flag	A flag indicating whether the entire chat history should be made available to the new member. Default value is False.
AccessToken	In	Password	AccessToken for the HTTP header
Response Content	Out	Text	The raw content of the response.
HTTP Status Code	Out	Text	The HTTP code that reflects the status of the request.
Response Headers	Out	Collection	The HTTP headers included in the response.

Add Team Member

Adds a new team member

Parameter	Direction	Data Type	Description
GroupId	In	Text	The unique identifier of the specific team.
Request Payload	In	Text	A JSON-encoded payload to submit with the request.
AccessToken	In	Password	AccessToken for the HTTP header

Apps in a Team

Gets the list of apps in a team.

Parameter	Direction	Data Type	Description
Type	In	Text	Set to either 'users', 'groups', or 'sites'.
TeamId	In	Text	The unique identifier of the specific team.
AccessToken	In	Password	AccessToken for the HTTP header
Apps	Out	Collection	A collection containing information about the apps.

Archive Team

Archives the team.

Parameter	Direction	Data Type	Description
TeamId	In	Text	The unique identifier of the specific team.
Request Payload	In	Text	A JSON-encoded payload to submit with the request.
AccessToken	In	Password	AccessToken for the HTTP header

Channel Info

Get the channel information.

Parameter	Direction	Data Type	Description
TeamId	In	Text	The unique identifier of the specific team.
ChannelId	In	Text	The unique identifier of the channel.
AccessToken	In	Password	AccessToken for the HTTP header
id	In	Text	The ID of the channel.
displayName	In	Text	The DisplayName of the Channel.
Description	In	Text	The Description of the Channel.

Clone Team

Creates a clone of the given team.

Parameter	Direction	Data Type	Description
TeamId	In	Text	The unique identifier of the specific team.
Request Payload	In	Text	A JSON-encoded payload to submit with the request.
AccessToken	In	Password	AccessToken for the HTTP header

Create Channel

Creates a new channel in the team.

Parameter	Direction	Data Type	Description
TeamId	In	Text	The unique identifier of the specific team.
ChannelId	In	Text	The unique identifier of the channel.
Request Payload	In	Text	A JSON-encoded payload to submit with the request.
AccessToken	In	Password	AccessToken for the HTTP header

Create Chat

Create a new chat object within the Teams environment.

Parameter	Direction	Data Type	Description
Chat Type	In	Text	Specifies the type of chat. Possible values are: **group** and **oneOnOne**.
Members	In	Collection	List of conversation members that should be added. Every user who will participate in the chat, including the user who initiates the create request, must be specified in this list. Each member must be assigned a role of 'owner' or 'guest'. Guest tenant users must be assigned the 'guest' role. The input Collection should contain two Text columns named 'user' and 'role'.
Topic	In	Text	Optional. The title of the chat. The chat title can be provided only if the chat is of group type.
AccessToken	In	Password	AccessToken for the HTTP header
Response Content	Out	Text	The raw content of the response.

HTTP Status Code	Out	Text	The HTTP code that reflects the status of the request.
Response Headers	Out	Collection	The HTTP headers included in the response.
OData Context	Out	Text	The OData context of the response.
ID	Out	Text	The unique ID of the new chat.
Topic	Out	Text	If this is a group chat, this is the topic value.
Created	Out	DateTime	The data and time the chat was created.
Last Updated	Out	DateTime	The date and time the chat was last updated.
Chat Type	Out	Text	The chat type.

Create Team

Creates a new team.

Parameter	Direction	Data Type	Description
Request Payload	In	Text	A JSON-encoded payload to submit with the request.
AccessToken	In	Password	AccessToken for the HTTP header

Delete Team

Deletes the team.

Parameter	Direction	Data Type	Description
GroupId	In	Text	The unique identifier of the specific team.
AccessToken	In	Password	AccessToken for the HTTP header

Get Channel Members

Retrieves the Channel members information.

Parameter	Direction	Data Type	Description
GroupId	In	Text	The unique identifier of the specific team.
ChannelId	In	Text	The unique identifier of the channel.
AccessToken	In	Password	AccessToken for the HTTP header
Members	Out	Collection	Member's information in the channel

Get Items in a Team Drive

Retrieves the items information in a Team Drive.

Parameter	Direction	Data Type	Description
TeamId	In	Text	The unique identifier of the specific team.
AccessToken	In	Password	AccessToken for the HTTP header
Items	Out	Collection	Items information in the team drive

Get List of Teams User has joined

Retrieves the list of teams a user has joined.

Parameter	Direction	Data Type	Description
UserId	In	Text	UserId of the user
AccessToken	In	Password	AccessToken for the HTTP header

Get member of team

Retrieves the member information in a team.

Parameter	Direction	Data Type	Description
GroupId	In	Text	The unique identifier of the specific team.
membership-id	In	Text	Membership ID of the team member
AccessToken	In	Password	AccessToken for the HTTP header

Get Members of a Team

Retrieve a list of all members in a team.

Parameter	Direction	Data Type	Description
TeamId	In	Text	The unique identifier of the specific team.
AccessToken	In	Password	AccessToken for the HTTP header
Members	Out	Collection	Members info in the team

Get Primary Channel

Gets the primary channel information for the team.

Parameter	Direction	Data Type	Description
GroupId	In	Text	The unique identifier of the specific team.
AccessToken	In	Password	AccessToken for the HTTP header
id	Out	Text	The ID of the primary channel
displayName	Out	Text	The display name of the primary channel
description	Out	Text	The description of the primary channel

Get Tabs in a Channel

Retrieve a list of tabs in a channel.

Parameter	Direction	Data Type	Description
TeamId	In	Text	The unique identifier of the specific team.
ChannelId	In	Text	The unique identifier of the channel.
AccessToken	In	Password	AccessToken for the HTTP header
Tabs	Out	Collection	List of tabs in the channel

Get Team Channels

Retrieve information about the channels in the team.

Parameter	Direction	Data Type	Description
GroupId	In	Text	The unique identifier of the specific team.
AccessToken	In	Password	AccessToken for the HTTP header
TeamChannels	Out	Collection	Information about the channels in the team

Get Team Members

Retrieve a list of members in the team.

Parameter	Direction	Data Type	Description
GroupId	In	Text	The unique identifier of the specific team.

| AccessToken | In | Password | AccessToken for the HTTP header |

List Channel Message Replies

Retrieves all the replies for a message in a channel.

Parameter	Direction	Data Type	Description
Team ID	In	Text	The unique identifier of the team.
Channel ID	In	Text	The unique identifier of the specific channel.
Message ID	In	Text	The unique identifier of the message.
AccessToken	In	Password	AccessToken for the HTTP header
Replies	Out	Collection	Replies information for a message
NextLinkToken	Out	Text	A URL token that can be used to move to the next page of data.

List Chat Members

Retrieve a list of the members of the specific chat.

Parameter	Direction	Data Type	Description
Chat ID	In	Text	The unique ID of the specific chat.
User ID	In	Text	The ID or user principal name of the specific user.
AccessToken	In	Password	AccessToken for the HTTP header
Response Content	Out	Text	
HTTP Status Code	Out	Text	
Response Headers	Out	Collection	
Chat Members	Out	Collection	
Count	Out	Number	
Context	Out	Text	

List Chats for User

Parameter	Direction	Data Type	Description
User ID	In	Text	The ID or user principal name of the user.
AccessToken	In	Password	AccessToken for the HTTP header

Response Content	Out	Text	
HTTP Status Code	Out	Text	
Response Headers	Out	Collection	
Context	Out	Text	
Count	Out	Number	
Chats	Out	Collection	

List Groups

Retrieves all the groups information.

Parameter	Direction	Data Type	Description
AccessToken	In	Password	AccessToken for the HTTP header
Groups	Out	Collection	All groups information

List Teams

Retrieves all the team's information.

Parameter	Direction	Data Type	Description
filter	In	Text	Use the parameter to only get the properties of the group you care about
AccessToken	In	Password	AccessToken for the HTTP header
Teams	Out	Collection	All teams information
NextLinkToken	Out	Text	A URL token that can be used to move to the next page of data.

List Users

Retrieves all the users information.

Parameter	Direction	Data Type	Description
AccessToken	In	Password	AccessToken for the HTTP header

My Joined Teams

Retrieves all the teams information the user has joined.

Parameter	Direction	Data Type	Description
AccessToken	In	Password	AccessToken for the HTTP header
JoinedTeams	Out	Collection	Teams information the user has joined

Remove Member from Chat

Parameter	Direction	Data Type	Description
Chat ID	In	Text	The unique ID of the specific chat.
Member ID	In	Text	The ID of the member to remove from the specified chat. NOTE: The Member ID is NOT the same as a User ID or user principal name. The Member ID is a unique ID generated for a user when they are added as a member of a chat. You can retrieve the Member ID for a user by calling the 'List Chat Members' action on the specific chat.

AccessToken	In	Password	AccessToken for the HTTP header
Response Content	Out	Text	
HTTP Status Code	Out	Text	
Response Headers	Out	Collection	

Remove Team Member

Removes the user from the team.

Parameter	Direction	Data Type	Description
TeamId	In	Text	The unique identifier of the specific team.
membership-id	In	Text	Membership ID of the team member
AccessToken	In	Password	AccessToken for the HTTP header

Reply to Channel Message

Replies to a message in the channel.

Parameter	Direction	Data Type	Description
Team ID	In	Text	The unique identifier of the specific team.
Channel ID	In	Text	The unique identifier of the channel.
Message ID	In	Text	The unique identifier of the message to reply to.
Content	In	Text	The content of the reply to send.
Mentions	In	Collection	Optional - A collection of user information related to any @mentions in the reply.
AccessToken	In	Password	AccessToken for the HTTP header

Send Channel Message

Sends a message in the channel.

Parameter	Direction	Data Type	Description
Team ID	In	Text	The unique identifier of the team.
Channel ID	In	Text	The unique identifier of the channel.
Content	In	Text	The content of the message to send.
Mentions	In	Collection	Optional - A Collection of information about the users @mentioned in the Content of the message. NOTE: See the documentation for details regarding the format of a message that includes @mention's and a definition of the Collection.
AccessToken	In	Password	AccessToken for the HTTP header

Send Chat Message

Sends a message in the channel.

Parameter	Direction	Data Type	Description
Chat ID	In	Text	The unique ID of the chat to send the message to.
Message	In	Text	The text content of the message.
AccessToken	In	Password	AccessToken for the HTTP header

Response Content	Out	Text	
HTTP Status Code	Out	Text	
Response Headers	Out	Collection	
ChatResponse	Out	Collection	

UnArchive Team

Unarchives a team.

Parameter	Direction	Data Type	Description
TeamId	In	Text	The unique identifier of the specific team.
AccessToken	In	Password	AccessToken for the HTTP header

Get NextLink

This method retrieves the next page of a multi-page result based on the NextLinkToken received in a prior request.

Parameter	Direction	Data Type	Description
Data	Out	Collection	A collection containing the contents of the next page of data.
NextLinkToken	In	Text	The token data captured from a previous response from the Graph API.
AccessToken	In	Password	AccessToken for the HTTP header

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-4de9-a9eb-58d15bf38c81