



---

# **Dell OAuth2.0**

## **Technical Specification Guide**

---

**May 08, 2019**

## Contents

<b>1 Overview.....</b>	<b>3</b>
<b>2 Prerequisite .....</b>	<b>3</b>
<b>2.1 Client_ID &amp; Client_Secret .....</b>	<b>3</b>
<b>2.2 Grant Type .....</b>	<b>3</b>
<b>2.3 Access Token URL .....</b>	<b>3</b>
<b>3 Consume API Endpoint using Postman v 7.1.1 &amp; above.....</b>	<b>4</b>
<b>3.1 Get Access token for the Resource (API) .....</b>	<b>4</b>
<b>3.2 Postman Tutorial .....</b>	<b>4</b>
<b>4 Consume API Endpoint using SoapUI v 5.5.0 &amp; above .....</b>	<b>6</b>
<b>4.1 SoapUI Tutorial .....</b>	<b>6</b>
<b>4.2 Token Refresh .....</b>	<b>8</b>
<b>5 Error Codes .....</b>	<b>9</b>
<b>6 Sequence Diagram .....</b>	<b>9</b>

## Revision History

Date	Rev	Scope of Changes	Author
June 20, 2019	1.0	Initial Release Version	Nidhi Arora
Jan 01, 2020	1.1	Section 2.3: Included Sandbox endpoints Section 4: SOAPUI5.5.0 has now OAuth2.0 available for both POST & GET Methods (snippets included)	Nidhi Arora
Sep 02, 2020	1.2	Section 4.2: Inclusion of Note to cache token for 3600 seconds to make multiple warranty endpoint(s) calls	Nidhi Arora

## 1 Overview

OAuth is an authorization method to provide access to resources over the HTTP protocol. It can be used for authorization of various applications or manual user access.

The general way it works is allowing an application to have an access token (which represents a user's permission for the client to access their data) which it can use to authenticate a request to an API endpoint.

## 2 Prerequisite

### 2.1 Client\_ID & Client\_Secret

User has retrieved "client\_id" and client\_secret" from TechDirect API portal - <https://techdirect.dell.com/portal.30/Login.aspx>

Note: API Key = Client ID

### 2.2 Grant Type

grant\_type: Client Credentials (client\_credentials)

### 2.3 Access Token URL

Production Endpoint: <https://apigtwb2c.us.dell.com/auth/oauth/v2/token>

Sandbox Endpoint: <https://apigtwb2cnp.us.dell.com/auth/oauth/v2/token>

Note:

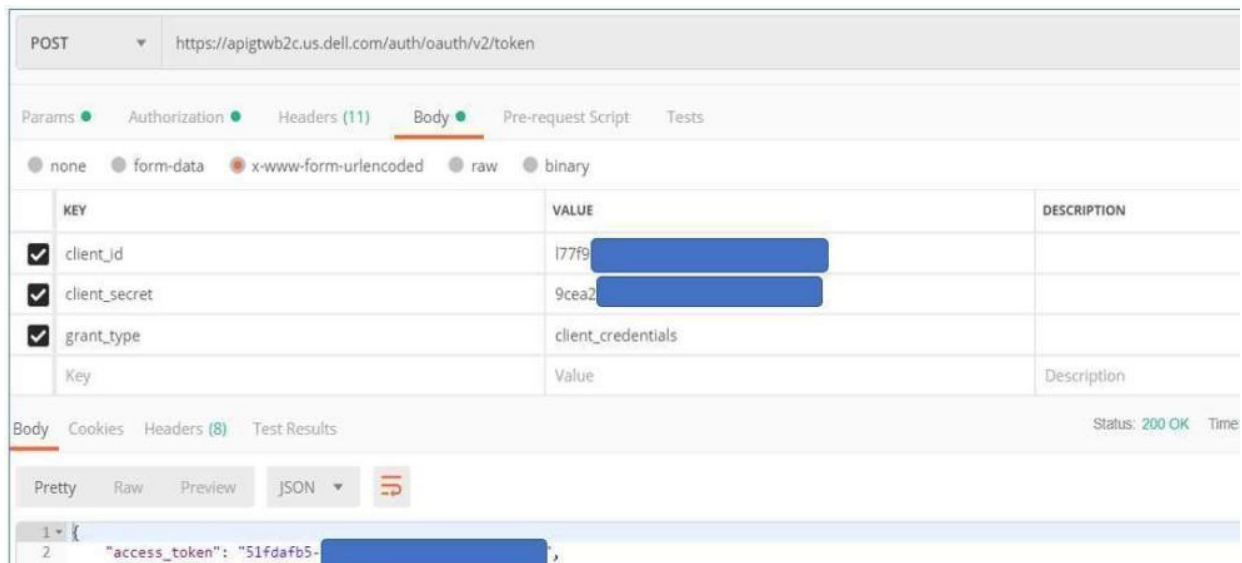
- Warranty API there is no Sandbox or Test endpoint. Hence use Production endpoint
- If you are testing Self-Dispatch, Technical Support Requests, getcaselite or searchcaselite then use sandbox endpoint

## 3 Consume API Endpoint using Postman v 7.1.1 & above

### 3.1 Get Access token for the Resource (API)

When application is consuming API without user context, you could use the Grant Type as Client Credentials

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



By default, access token is valid only for 1 hour. If you are looking to invoke resource for more than one hour without asking user to enter credentials, then you could use refresh token to get the new access token.

### 3.2 Postman Tutorial

1. Select Authorization Type as “OAuth 2.0”
2. Click “Get New Access Token”
3. Grant Type – client\_credentials
4. Access Token URL – Refer Section 2.3
5. Client ID – Use your private Client Id received from Dell EMC TechDirect API team
6. Client Secret - Use your private Client Secret received from Dell EMC TechDirect API team

POST

https://apigtwb2c.us.dell.com/auth/oauth/v2/token

Params

Authorization

Headers

Body

Pre-request Script

Tests

TYPE

OAuth 2.0

The authorization data will be automatically generated when you send the request. [Learn more about authorization](#)

Add authorization data to

Request URL

Preview Request

! Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative using variables. [Learn more about variables](#)

Access Token

Access Token

Get New Access Token

GET NEW ACCESS TOKEN

Token Name

Token Name

Grant Type

Client Credentials

Access Token URL ⓘ

https://apigtwb2c.us.dell.com/auth/oauth/v2/token

Client ID ⓘ

177f9

Client Secret ⓘ

9cea2

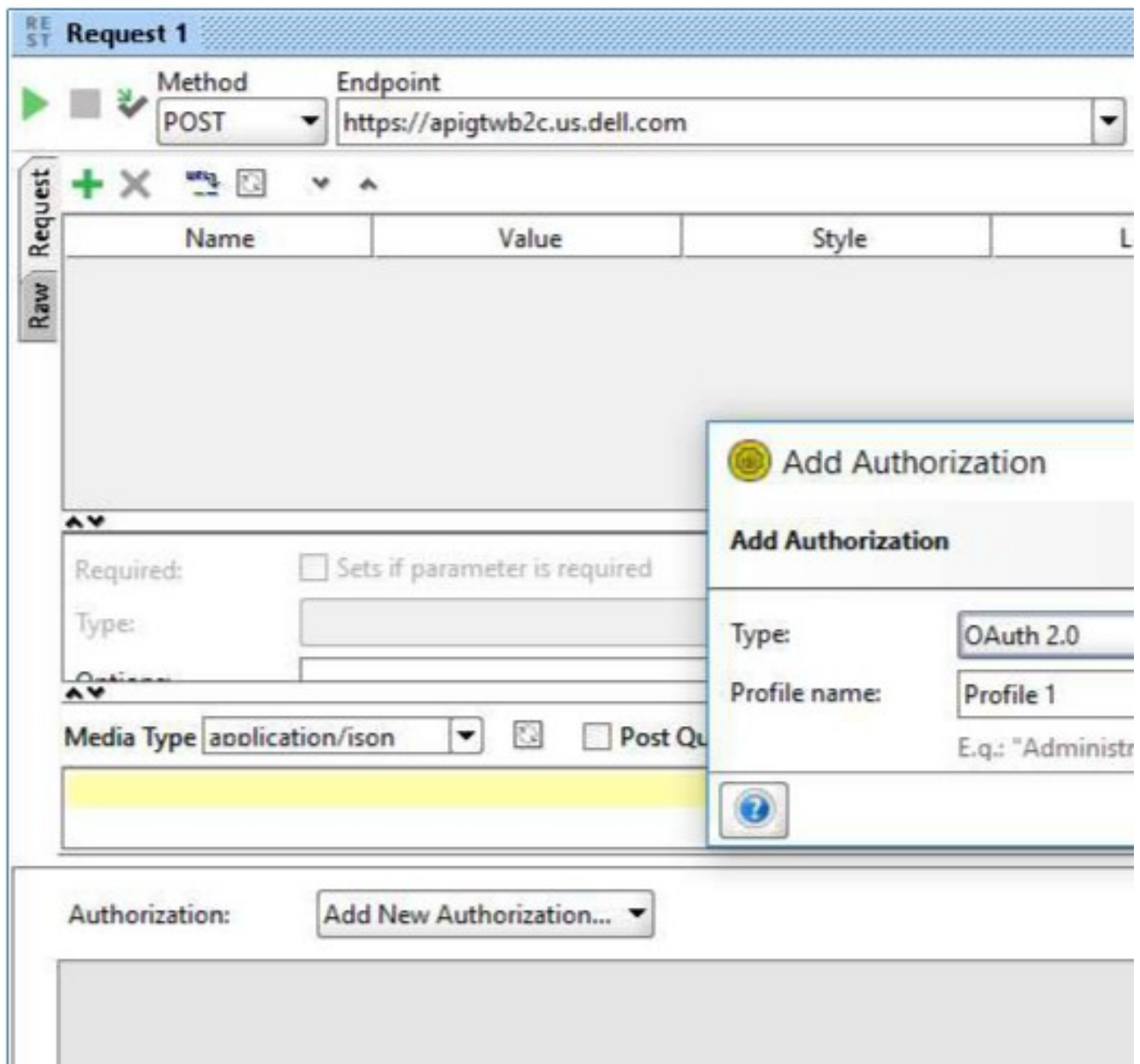
Scope ⓘ

api.read:org

## 4 Consume API Endpoint using SoapUI v 5.5.0 & above

### 4.1 SoapUI Tutorial

1. Under Auth Tab - Select “Add New Authorization”
2. Select Type – OAuth 2.0
3. Click on “Get Token”
4. OAuth 2 Flow – Client Credentials Grant
5. Access Token URL - Refer Section 2.3
6. Client ID – Use your private Client Id received from Dell EMC TechDirect API team
7. Client Secret - Use your private Client Secret received from Dell EMC TechDirect API team



SoapUI will get the access token from server and display it in the Access Token field. When you send the request, the token will be attached to it to authorize with the service

The screenshot shows the 'Authorization' dialog box in SoapUI. At the top, there is a dropdown menu labeled 'Authorization:' with 'Profile 2' selected. Below this, the 'Access Token:' field contains the text '8c4faf42-' followed by a blue redaction bar. A green highlight is visible behind the text in the field. Below the field, there is a text prompt: 'Enter existing access token, or use "Get Token" below.' and a button labeled 'Get Token' with an upward-pointing triangle icon.

The 'Get Access Token from the authorization server' tab is active, showing the following fields:

- OAuth 2 Flow:** Client Credentials Grant
- Client Identification:** l77f9 [redacted]
- Client Secret:** 9cea [redacted]
- Access Token URI:** https://apigtwb2c.us.dell.com/auth/oauth/v2/token
- Scope:** [empty field]

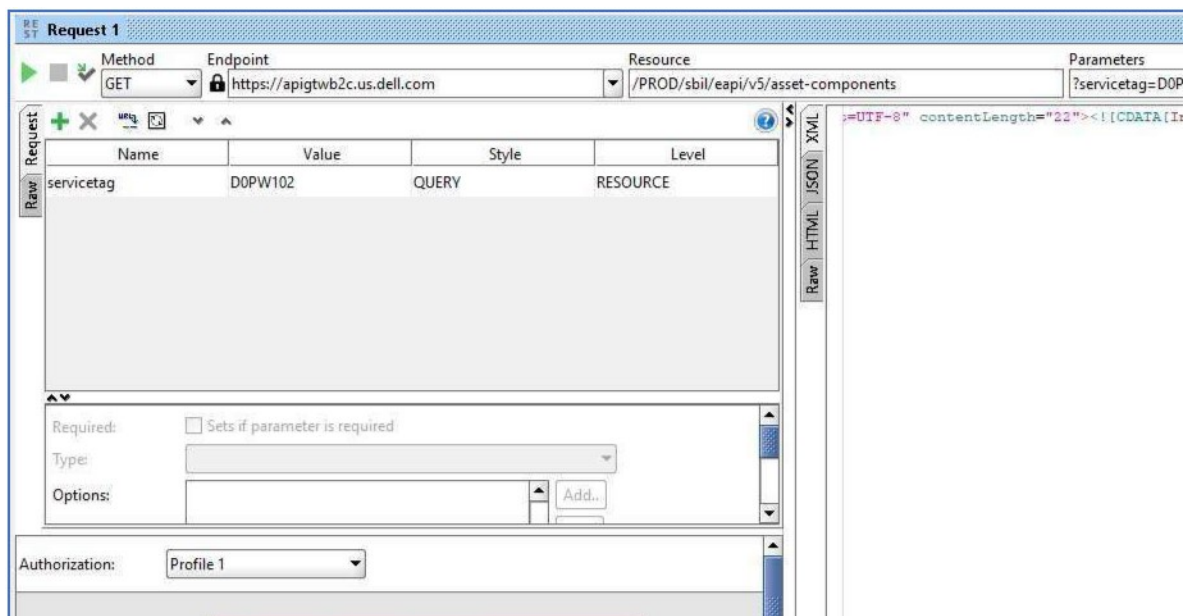
At the bottom of the dialog, there is a button labeled 'Get Access Token'.

## 4.2 Get Access Token

Bearer Token generated shall be valid for 3600 seconds and require generating New Access after the stipulated time. You will receive “Invalid Authentication” error message after the Bearer Token is expired

**NOTE:** This token is valid for 3600 seconds (60 mins) and this Bearer Token should be cached for multiple calls. With OAuth 2.0, new API calls made prior to that 60 min token expiration are to use the same (cached) Bearer token number.

Implementation of bearer token caching prevents impact on customer throughput, backend resource usage and overall API performance



Using the same Client ID and Client Secret - Click on “Get Access Token” to retrieve new token





## 5 Error Codes

ERROR CODE	DESCRIPTION	SOLUTION
200	Successful Service/API Call	
400 (Bad Request)	* Missing/Invalid OAuth2.0 token request parameters * Refresh token expired * Invalid request to backend service (B2B, Core Gateway)	* Kindly review to use correct Client ID & Client Secret and OAuth2.0 endpoint/URL * Refer to section 4.2 * Email to APIs_TechDirect@Dell.com
401 (Unauthorized)	Invalid authentication	Use only OAuth2.0 as Authorization type
500 (Internal Server Error)	Internal Server Error	* Try again later * Email to APIs_TechDirect@Dell.com

## 6 Sequence Diagram

