



# **Mastering Pega DX API V2: Streamlining Case Management with Smarter Integrations**



# CONTENTS

1. Introduction
2. What is Pega DX API V2?
3. Setting Up Pega DX API V2
4. Update Cases



## Introduction

Pega is a robust platform for case management, automation, and business process management. With **Pega's DX API V2**, developers can seamlessly integrate external systems, enabling them to create, update, and manage cases programmatically.

This API offers a **RESTful interface**, simplifying interactions with Pega's case management system. It streamlines automation and external integrations, making it easier to connect Pega with other platforms in just a few steps.

## What is Pega DX API V2?

Pega DX API V2 (Digital Experience API Version 2) is a **RESTful API** that enables developers to **create, retrieve, and update cases**, as well as interact with data within Pega. Designed for seamless integration with third-party applications, it streamlines communication and automates processes, making Pega more adaptable to external systems.

**Create Case:** Pega offers a **powerful Case Management API** that allows developers to programmatically **create, manage, and update cases**. One of its key capabilities is **case creation** through Pega's **RESTful API**, enabling seamless automation and integration with external systems.

In Pega, a **case** is an instance of a work item that is created and processed through various steps until completion. When creating a case via the Pega OOTB API, you interact with the `/cases` endpoint.

End point URL:

[https:// <your-pegas-instance>/api/v2/cases](https://<your-pegas-instance>/api/v2/cases)

## Setting Up Pega DX API V2

Before creating cases, you need to set up and configure Pega DX API V2 in your application:

### Ensure API Access

Verify that you have the necessary permissions to access Pega DX API V2 endpoints.

### Authenticate with OAuth 2.0

Configure a client ID and client secret to generate an access token for API requests.

### Create an OAuth 2.0 Client Registration Rule

This security rule is required to authenticate API requests and manage access control.

The screenshot shows the 'Edit OAuth 2.0 Client Registration' page in the Pega DX API V2 interface. The page has a dark header with the title and a sub-header showing the ID and associated ruleset. Below the header, there are tabs for 'Client Information' and 'History'. The 'Client Information' tab is active, showing the 'Client Credentials' section. This section includes fields for 'Type of client' (Confidential and Public), 'Client ID' (80003932751672048233), and 'Client secret' (a masked string). It also lists several endpoints: Authorization endpoint, Access token endpoint, Token revocation endpoint, JWKS endpoint, and Token introspection endpoint. At the bottom of the form, there are three buttons: 'Regenerate client secret', 'Revoke access and refresh token', and 'View & download'. A sidebar on the left shows a list of favorites, including 'Identity Mapping', 'Keystore', 'OAuth 2.0 Client Registration' (highlighted), 'OAuth 2.0 Provider', 'OAuth Client', 'Privilege', 'Property Security', 'Rule Analyzer Regular Expression', and 'Setting'.

**Edit OAuth 2.0 Client Registration:** [ID: 80003932751672048233] RS: No associated ruleset [Edit]

**Client Information** History

**Client Credentials**

Type of client:  
☒ Confidential  
☐ Public

Client ID:  
80003932751672048233

Client secret:  
.....

Authorization endpoint:  
https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/authorize

Access token endpoint:  
https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/token

Token revocation endpoint:  
https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/revoke

JWKS endpoint:  
https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/token/keys

Token introspection endpoint:  
https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/token/introspect

A secure TLS access token endpoint is required at runtime.

Regenerate client secret Revoke access and refresh token View & download

**Favorites**

- Identity Mapping
- Keystore
- OAuth 2.0 Client Registration
- OAuth 2.0 Provider
- OAuth Client
- Privilege
- Property Security
- Rule Analyzer Regular Expression
- Setting

**Edit OAuth 2.0 Client Registration:** [\[Client ID\]](#)  
ID: [\[Client ID\]](#) RS: No associated ruleset [\[Edit\]](#)

[Client Information](#) [History](#)

---

**Client Credentials**

Type of client  
☒ Confidential  
☐ Public

Client ID  
**80003932751672048233**

Client secret  
.....

Authorization endpoint  
<https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/authorize>

Access token endpoint  
<https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/token>

Token revocation endpoint  
<https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/revoke>

JWKS endpoint  
<https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/token/keys>

Token introspection endpoint  
<https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/token/introspect>

A secure TLS access token endpoint is required at runtime.

[Regenerate client secret](#) [Revoke access and refresh token](#) [View & download](#)

**Supported grant types**

☐ Authorization code

☒ Client credentials

Set operator context using  
☒ Operator ID [Access group](#)  
Operator ID

☒ Password credentials

Identity mapping

☒ Enable refresh token

☐ SAML bearer

☐ JWT bearer

---

**Token management**

**Token issuance**

Refresh token  
☒ Issue once and keep until expiry  
☐ Issue a new refresh token without changing expiry  
☐ Issue a new refresh token and reset expiry

**Token expiry**

Access token lifetime (in seconds)

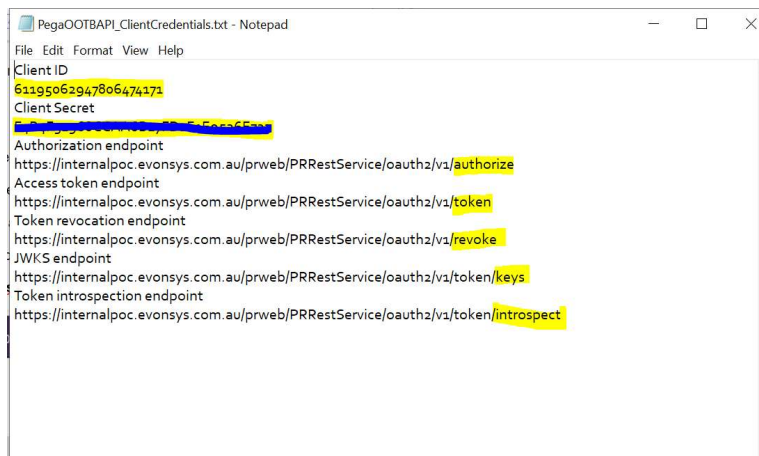
Refresh token lifetime (in seconds)

---

**User profile mapping**

JWT generation profile

By clicking **View and Download**, you can access and download the **Client ID** and **Client Secret**. These credentials also provide additional endpoint URLs for **API interactions**.



```
PegaOOTBAPI_ClientCredentials.txt - Notepad
File Edit Format View Help
Client ID
61195062947806474171
Client Secret
[REDACTED]
Authorization endpoint
https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/authorize
Access token endpoint
https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/token
Token revocation endpoint
https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/revoke
JWKS endpoint
https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/token/keys
Token introspection endpoint
https://internalpoc.evonsys.com.au/prweb/PRRestService/oauth2/v1/token/introspect
```

**Supported Grant types:** To configure your application for authentication, select **Client Credentials** as the grant type. This allows your application to obtain access tokens from the authorization service.

With these credentials, you can securely access **protected resources** in the external application for a defined period.

To exchange user credentials for an access token, select **Password Credentials** as the grant type during configuration.

Use this grant type when your application has a **trusted relationship** with the API provider or if the API provider **does not support other authorization grants**.

## Test the API Before Implementation

If you want to preview how the API functions before creating a REST API, launch Pega API from the developer portal.



Before testing the API in **Swagger**, you must first **authenticate** using the required credentials.

Service package  
Constellation DX APIs

Application

application <sup>3</sup> OAS 3.0

Servers  
(server)/prweb/api/application/v2 - Default Application

Computed URL: <https://internalpoc.evonsys.com.au/prweb/api/application/v2>

SERVER VARIABLES

server <https://internalpoc.evonsys.com.au/prweb/api/application/v2> [Authorize](#)

Assignment

GET	/assignments/next	Get next assignment details	✓	🔒
GET	/assignments/{assignmentID}	Get assignment details	✓	🔒
GET	/assignments/{assignmentID}/actions/{actionID}	Get action details of an assignment	✓	🔒
PATCH	/assignments/{assignmentID}/actions/{actionID}	Perform assignment action	✓	🔒
DELETE	/assignments/{assignmentID}/actions/{actionID}	Remove assignment action	✓	🔒

Live UI

## Available authorizations

Scopes are used to grant an application different levels of access to data on behalf of the end user. Each API may declare one or more scopes. API requires the following scopes. Select which ones you want to grant to Swagger UI.

### PASSWORD (OAUTH2, PASSWORD)

#### Authorized

Token URL: <https://internalpoc.evonsys.com.au/prweb/api/oauth2/v1/token>  
Flow: password  
username: [j.smith@evonsys.com](#)  
password: \*\*\*\*\*  
Client credentials location: basic  
client\_id: \*\*\*\*\*  
client\_secret: \*\*\*\*\*

[Logout](#)[Close](#)

Scopes are used to grant an application different levels of access to data on behalf of the end user. Each API may declare one or more scopes. API requires the following scopes. Select which ones you want to grant to Swagger UI.

### CLIENTCREDENTIALS (OAUTH2, CLIENTCREDENTIALS)

Token URL: <https://internalpoc.evonsys.com.au/prweb/api/oauth2/v1/token>

To create a case, select the **/cases** category in the API.



Case			^
POST	/cases/bulk-actions	Get bulk actions	▼ 🔒
POST	/cases	Creates new case	▼ 🔒
PATCH	/cases	Perform bulk action	▼ 🔒
GET	/cases/{caseID}	Get case details	▼ 🔒
DELETE	/cases/{caseID}	Delete case in create stage	▼ 🔒

You can find the API URL in two locations:

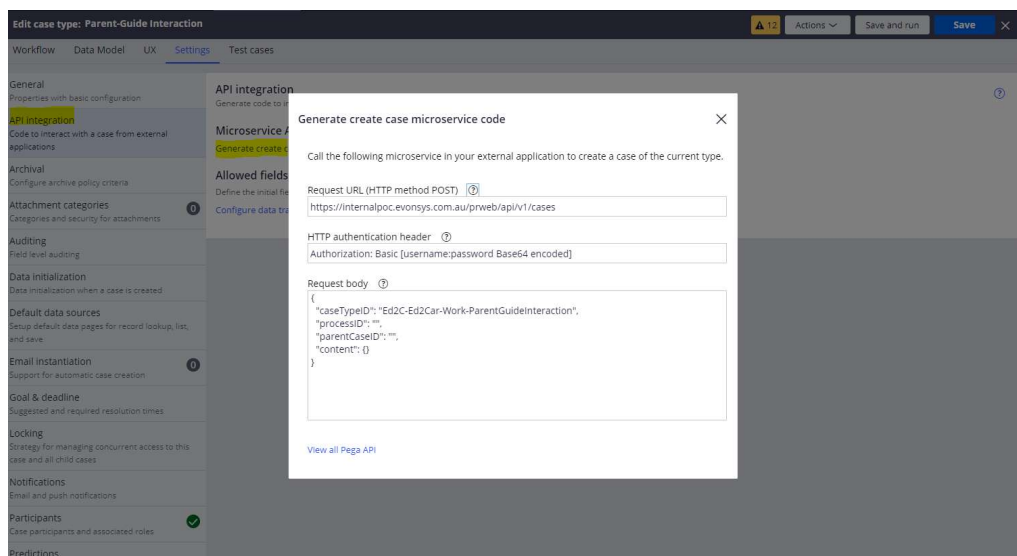
1. From the service package
2. From Service Rest

To create a case, we need to use the following URL with POST method

<https://internalpoc.evonsys.com.au/prweb/api/application/v2/cases>

<https://internalpoc.evonsys.com.au/prweb/api/v1/cases>

In newer versions of **Pega (Constellation)**, the **request payload** is generated directly from the **case type** itself.





## Basic request payload

```
{  
  "caseTypeID": "<casetype calss>",  
  "processID": "",  
  "parentCaseID": "",  
  "content": {}  
}
```

To assign a value to a **property**, **specify** it in the **content type**. If you need to add values to a **Page, Page List, or Page Group property**, define them under **Page Instructions**. Similarly, if you want to attach a file, include it under **Attachments**.

```
{  
  "caseTypeID": "LoanApplication",  
  "content": {  
    "CustomerName": "John Doe",  
    "LoanAmount": 5000,  
    "Priority": "High"  
  },  
}
```

To assign values to page property, the following are the instructions

```
"pageInstructions": [  
  {  
    "target": ".AccountDetails",  
    "data": {  
      "ID": "12345",  
      "StartDate": "2024-11-01"  
    }  
  }  
]
```

To assign values to page property, the following are the instructions

```
{
  "instruction": "ADD",
  "target": "pyWorkParty",
  "groupIndex": "Customer",
  "content": {
    "pyFirstName": "Manju",
    "pyLastName": "latha",
    "pyEmail1": "manjulatha@gmail.com"
  }
},
```

To add some attachments to case, following are the instructions

```
"attachments": [
  {
    "fileName": "loan-agreement.pdf",
    "fileContent": "base64encodedcontent",
    "mimeType": "application/pdf"
  }
]
```

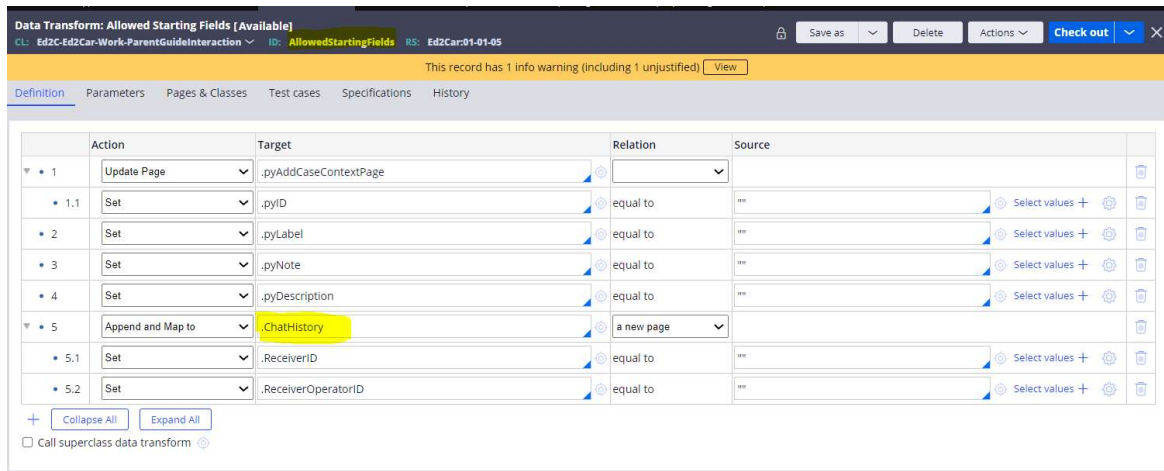
<https://docs.pega.com/bundle/dx-api/page/platform/dx-api/page-instructions-for-page-lists.html>

<https://docs.pega.com/bundle/dx-api/page/platform/dx-api/page-instructions-embedded-pages.html>

<https://docs.pega.com/bundle/dx-api/page/platform/dx-api/page-instructions-page-groups-2.html>

To include these instructions in case creation, update the AllowedStartingFields data transform.  
This data transform must belong to the class where you want to create the case.

# Mastering Pega DX API V2: Streamlining Case Management with Smarter Integrations



Sample Json:

```
{
  "caseTypeID": "Ed2C-Ed2Car-Work-ParentGuideInteraction",
  "processID": "",
  "parentCaseID": "",
  "content": {
    "pyLabel": "API Testing",
    "pyNote": "Create Case"
  },
  "pageInstructions": [
    {
      "instruction": "APPEND",
      "target": "ChatHistory",
      "content": {
        "ReceiverID": "Chocolate",
        "ReceiverOperatorID": "10"
      }
    }
  ]
}
```

Add a REST response

Choose method

POST

No parameters

No request headers

Run

https://internalpoc.evonsys.com.au/prweb/api/application/v2/cases

Request

Response

Content type

JSON

1 {

2 "caseTypeID": "Ed2C-Ed2Car-Work-ParentGuideInteraction",

3 "processID": "",

4 "parentCaseID": "",

5 "content": {

6 "pyLabel": "API Testing",

7 "pyDescription": "Create Case"

8 },

9 "pageInstructions": [

10 {

11 "instruction": "APPEND",

12 "target": "ChatHistory",

13 "content": {

14 "ReceiverID": "Chocolate",

15 "ReceiverOperatorID": "10"

16 } }

17 ]

18 }

19 }

Cancel

Submit

Add a REST response

Choose method

POST

No parameters

No request headers

Run

https://internalpoc.evonsys.com.au/prweb/api/application/v2/cases

Request

Response

Code: 201

Body

Headers

g", "pyID": "P-4016"}, {"caseTypeID": "Ed2C-Ed2Car-Work-ParentGuideInteraction", "owner": "manjulatha@evonsys.com", "availableActions": [{"name": "Edit details", "links": {"open": {"rel": "self", "href": "/cases/ED2C-ED2CAR-WORK P-4016/actions/pyUpdateCaseDetails", "type": "GET", "title": "Get case action details"}}, "ID": "pyUpdateCaseDetails", "type": "Case"}, {"name": "Change stage", "links": {"open": {"rel": "self", "href": "/cases/ED2C-ED2CAR-WORK P-4016/actions/pyChangeStage", "type": "GET", "title": "Get case action details"}}, "ID": "pyChangeStage", "type": "Case"}, {"name": "Upload student details", "links": {"open": {"rel": "self", "href": "/assignments/ASSIGN-WORKLIST ED2C-ED2CAR-WORK P-4016/CAPTUREINFORMATION\_FLOW", "type": "GET", "title": "Get assignment details"}}, "ID": "ASSIGN-WORKLIST ED2C-ED2CAR-WORK P-4016/CAPTUREINFORMATION\_FLOW", "type": "PUT", "title": "Jump to this stage"}, {"name": "Capture Information", "links": {"open": {"rel": "self", "href": "/assignments/ASSIGN-WORKLIST ED2C-ED2CAR-WORK P-4016/CAPTUREINFORMATION\_FLOW/actions/Create/save", "type": "PATCH", "title": "Save assignment action"}, "save": {"rel": "self", "href": "/assignments/ASSIGN-WORKLIST ED2C-ED2CAR-WORK P-4016/CAPTUREINFORMATION\_FLOW/actions/Create/save", "type": "PATCH", "title": "Save assignment action"}, "open": {"rel": "self", "href": "/assignments/ASSIGN-WORKLIST ED2C-ED2CAR-WORK P-4016/CAPTUREINFORMATION\_FLOW/actions/Create/save", "type": "PATCH", "title": "Save assignment action"}, "ID": "Create", "type": "Flowaction"}], "hasNewAttachments": false, "businessID": "P-4016", "sla": {"goal": "", "deadline": ""}, "widgets": [{"id": "TaskList", "caseTypeID": "Parent-Guide Interaction", "urgency": "10", "createTime": "2025-01-22T05:46:13.020Z", "createdBy": "manjulatha@evonsys.com", "name": "API Testing", "stages": [{"entryTime": "2025-01-22T05:46:13.020Z", "name": "Capture Information", "links": {"open": {"rel": "self", "href": "/cases/ED2C-ED2CAR-WORK P-4016/stages/PRIM0", "type": "PUT", "title": "Jump to this stage"}, "visited\_status": "active", "ID": "PRIM0", "type": "Primary", "transitionType": "create"}, {"name": "Parent-Guide Interaction", "links": {"open": {"rel": "self", "href": "/cases/ED2C-ED2CAR-WORK P-4016/stages/PRIM1", "type": "PUT", "title": "Jump to this stage"}, "visited\_status": "future", "ID": "PRIM1", "type": "Primary", "transitionType": "automatic"}, {"name": "Student Career Transition", "links": {"open": {"rel": "self", "href": "/cases/ED2C-ED2CAR-WORK P-4016/stages/PRIM2", "type": "PUT", "title": "Jump to this stage"}, "visited\_status": "future", "ID": "PRIM2", "type": "Primary", "transitionType": "automatic"}, {"name": "Eligibility and Notifications", "links": {"open": {"rel": "self", "href": "/cases/ED2C-ED2CAR-WORK P-4016/stages/PRIM3", "type": "PUT", "title": "Jump to this stage"}, "visited\_status": "future", "ID": "PRIM3", "type": "Primary", "transitionType": "automatic"}, {"name": "Scholarship and Sponsorship Program", "links": {"open": {"rel": "self", "href": "/cases/ED2C-ED2CAR-WORK P-4016/stages/PRIM4", "type": "PUT", "title": "Jump to this stage"}, "visited\_status": "future", "ID": "PRIM4", "type": "Primary", "transitionType": "automatic"}, {"name": "Job Placement and Profile Viewing", "links": {"open": {"rel": "self", "href": "/cases/ED2C-ED2CAR-WORK P-4016/stages/PRIM5", "type": "PUT", "title": "Jump to this stage"}, "visited\_status": "future", "ID": "PRIM5", "type": "Primary", "transitionType": "automatic"}, {"name": "Conclusion", "links": {"open": {"rel": "self", "href": "/cases/ED2C-ED2CAR-WORK P-4016/stages/PRIM6", "type": "PUT", "title": "Jump to this stage"}, "visited\_status": "future", "ID": "PRIM6", "type": "Primary", "transitionType": "resolution"}}, "ID": "ED2C-ED2CAR-WORK P-4016", "caseTypeID": "Ed2C-Ed2Car-Work-ParentGuideInteraction", "links": {"open": {"rel": "self", "href": "/assignments/ASSIGN-WORKLIST ED2C-ED2CAR-WORK P-4016/CAPTUREINFORMATION\_FLOW", "type": "GET", "title": "Get assignment details"}}, "ID": "ASSIGN-WORKLIST ED2C-ED2CAR-WORK P-4016/CAPTUREINFORMATION\_FLOW"}]

Cancel

Submit

ID*	Short description	Updated on	Updated by
P-4011	API Testing	1/9/2025 1:39 PM	
P-4010	Parent-Guide Interaction	1/9/2025 1:39 PM	
P-4009	Parent-Guide Interaction	1/9/2025 1:38 PM	

## Update Cases

To update a case using DX API, you first need to retrieve the last case update timestamp. This requires calling a separate API to fetch the latest updated date and time:

<https://internalpoc.evonsys.com.au/prweb/api/application/v2/cases/{caseID}> or

<https://internalpoc.evonsys.com.au/prweb/api/v1/cases/{id}>

For this API request, you must provide the pzInsKey of the case as a parameter.)

This is a **GET method API** that retrieves all case details. From the response body, the **LastUpdateTime** field contains the **last updated date** and **time** of the case.

```
200
Response body
{
  "caseTypeID": "Ed2C-Ed2Car-Work-ParentGuideInteraction",
  "createdBy": "manjulatha@evonsys.com",
  "createTime": "2025-01-14T16:56:41.562Z",
  "description": "API Update Case Test",
  "ID": "ED2C-ED2CAR-WORK P-4014",
  "lastUpdatedBy": "manjulatha@evonsys.com",
  "lastUpdateTime": "2025-01-17T14:48:33.923Z",
  "name": "Second Test",
  "pxObjClass": "Pega-API-CaseManagement-Case",
  "stage": "PRIM0",
  "status": "New",
  "urgency": "10",
  "actions": [
    {
      "ID": "pyUpdateCaseDetails",
      "name": "Edit details",
      "pxObjClass": "Pega-API-CaseManagement-Action"
    }
  ],
}
```

The Response Header also includes the case's last update date and time, stored in the etag field.

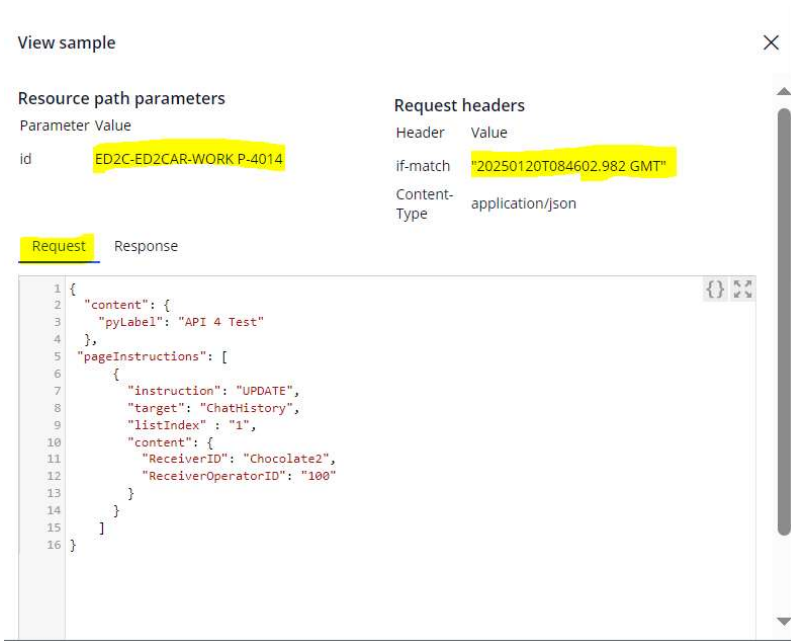
```
Response headers
cache-control: no-cache
content-encoding: gzip
content-length: 2215
content-type: application/json;charset=UTF-8
date: Mon, 20 Jan 2025 07:57:39 GMT
etag: "20250117T144833.923 GMT"
server: nginx
```

If we are going to use the data from Response body property, we need to format it correctly **(2025-01-17T14:48:33.923Z to 20250117T144833.923 GMT)**

Now to update a case

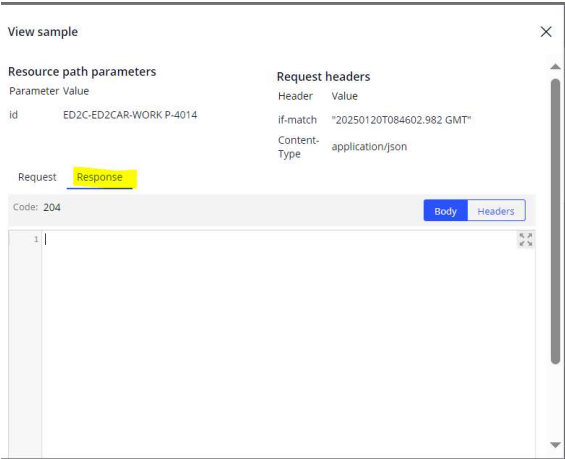
URL: <https://internalpoc.evonsys.com.au/prweb/application/v2/cases/{id}>

Method: PUT



Here is the sample payload:

```
{
  "content": {
    "pyLabel": "API Case Update Test"
  },
  "pageInstructions": [
    {
      "instruction": "UPDATE",
      "target": "ChatHistory",
      "listIndex": "1",
      "content": {
        "ReceiverID": "Chocolate2",
        "ReceiverOperatorID": "100"
      }
    }
  ]
}
```



We won't get any response for this if it is a successful API hit. Here response code is 204, hence it is a successful hit

ID*	Short description	Updated on
P-4014	API Case Update Test	1/21/2025 2:15 AM
P-4013	API Testing	1/14/2025 11:56 AM
P-4011	API Testing	1/9/2025 1:39 PM
P-4010	Parent-Guide Interaction	1/9/2025 1:39 PM
P-4009	Parent-Guide Interaction	1/9/2025 1:38 PM





[www.evonsys.com](http://www.evonsys.com)