



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



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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 client 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 a 'Type of client' dropdown set to 'Confidential', a 'Client ID' field with the value '80003932751672048233', and a 'Client secret' field with a masked value. Below these fields, there are several endpoints listed: '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 right contains a list of navigation items: '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: [Client 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](#)

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

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Edit OAuth 2.0 Client Registration: [Client 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](#)

Supported grant types

☐ Authorization code

☒ Client credentials

Set operator context using
☒ Operator ID ☐ Access group

Operator ID
testing1

☒ Password credentials

Identity mapping *
pyDefaultIdentityMapping

☒ 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

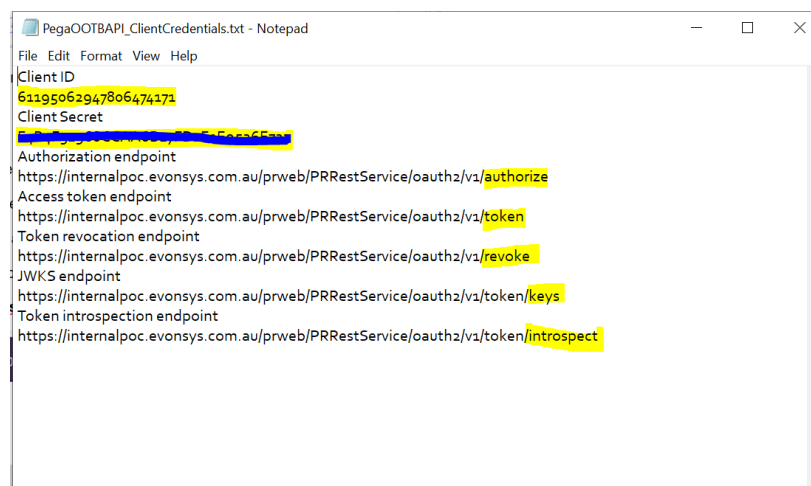
Access token lifetime (in seconds)
3600

Refresh token lifetime (in seconds)
86400

User profile mapping

JWT generation profile
pyDefaultUserInfoMapping

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**.



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.

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Service package

Constellation DX APIs

Application

application 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

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

PATCH /assignments/{assignmentID}/actions/{actionID} Refresh assignment status

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: [REDACTED]@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.

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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:

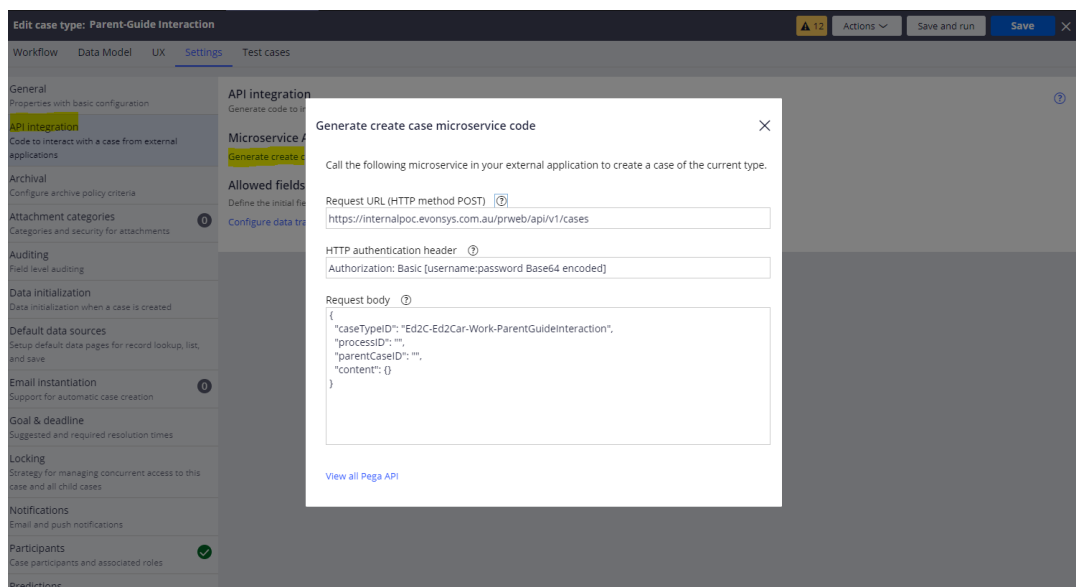
1. From the service package
2. From Service Rest

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": "Iatha",  
    "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.

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Data Transform: Allowed Starting Fields [Available]
CL: Ed2C-Ed2Car-Work-ParentGuideInteraction ID: AllowedStartingFields RS: Ed2Car:01-01-05

This record has 1 info warning (including 1 unjustified) [View](#)

Definition Parameters Pages & Classes Test cases Specifications History

	Action	Target	Relation	Source
▼ 1	Update Page	.pyAddCaseContextPage		
• 1.1	Set	.pyID	equal to	Select values +
• 2	Set	.pyLabel	equal to	Select values +
• 3	Set	.pyNote	equal to	Select values +
• 4	Set	.pyDescription	equal to	Select values +
▼ 5	Append and Map to	.ChatHistory	a new page	
• 5.1	Set	.ReceiverID	equal to	Select values +
• 5.2	Set	.ReceiverOperatorID	equal to	Select values +

[+ Collapse All](#) [Expand All](#)

☐ Call superclass data transform

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"
      }
    }
  ]
}
```

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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"},"associations":{"follows":false,"lastUpdatedBy":"manjulatha@evonsys.com","assignments":[{"instructions":"","canPerform":"true","assigneeInfo":{"name":"Sreedhar","ID":"manjulatha@evonsys.com","type":"worklist"},"processID":"CaptureInformationFlow","urgency":"10","processName":"Capture Information","isMultiStep":"true","name":"Upload student details","context":"","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","actions":[{"name":"Create","links":{"submit":{"rel":"self","href":"/assignments/ASSIGN-WORKLIST ED2C-ED2CAR-WORK P-4016/CAPTUREINFORMATION_FLOW/actions/Create","type":"PATCH","title":"Submit 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","type":"GET","title":"Get assignment action details"},"ID":"Create","type":"FlowAction"}]},"hasNewAttachments":false,"businessID":"P-4016","sla":{"goal":"","deadline":"","widgetsToRefresh":["TaskList"],"caseTypeName":"Parent-Guide Interaction","urgency":"10","createTime":"2025-01-22T05:46:13.828Z","createdBy":"manjulatha@evonsys.com","name":"API Testing","stages":[{"entryTime":"2025-01-22T05:46:13.894Z","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","caseTypeIDIcon":"cmicons/pycase.svg","status":"New","stageID":"PRIM0","stageLabel":"Capture Information","lastUpdateTime":"2025-01-22T05:46:13.928Z","referencedUsers":[{"UserID":"manjulatha@evonsys.com","UserName":"Sreedhar"}]},"ID":"ED2C-ED2CAR-WORK P-4016","nextAssignmentInfo":{"context":"self","className":"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

Page 1 of 2

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

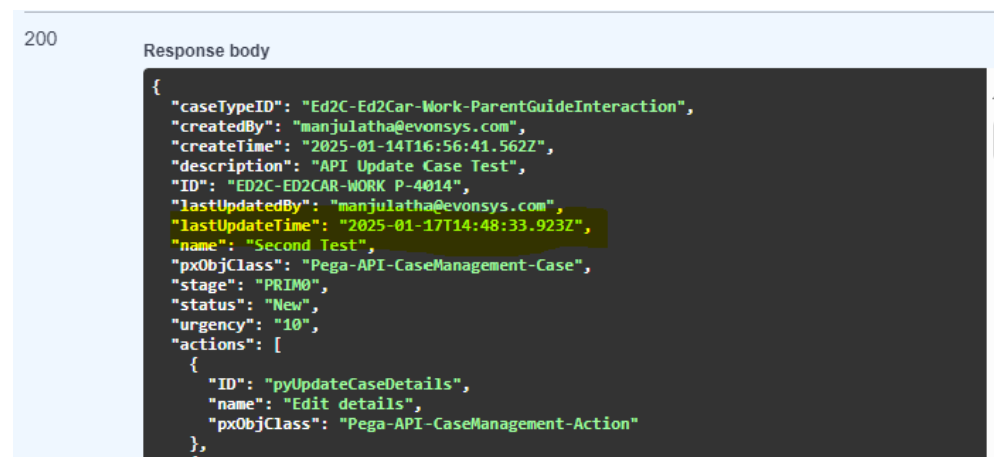
To update a case using DX API, you first need to retrieve the last case update timestamp. This requires calling a separate API to fetch the latest updated date and time:

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

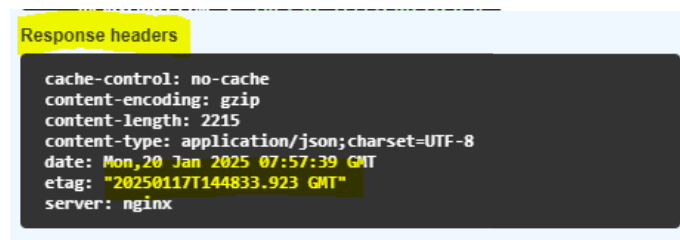
<https://internalpoc.evonsys.com.au/prweb/api/v1/cases/{id}>

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.



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

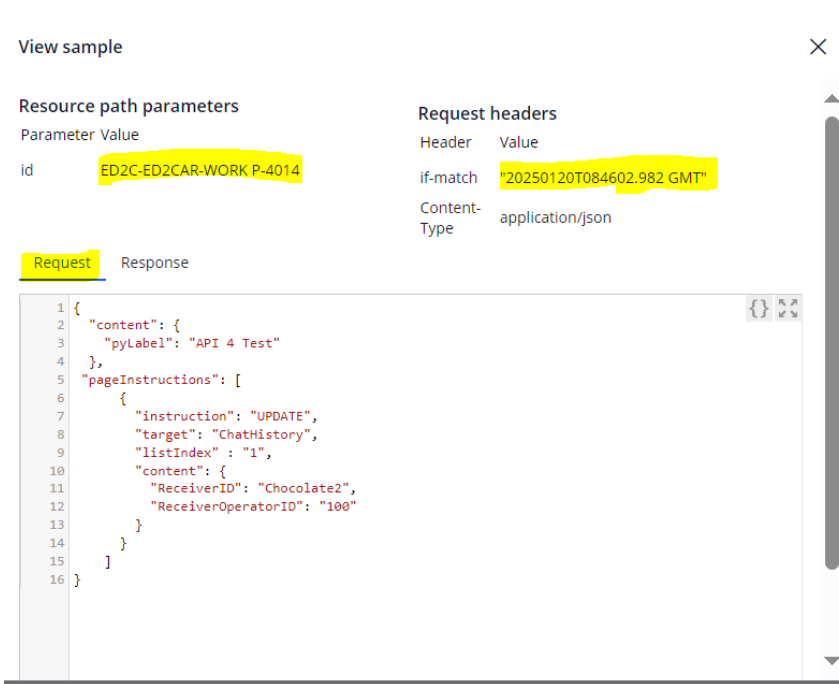


If we are going to use the data from Response body property, we need to format it correctly
(2025-01-17T14:48:33.923Z to 20250117T144833.923 GMT)

Now to update a case

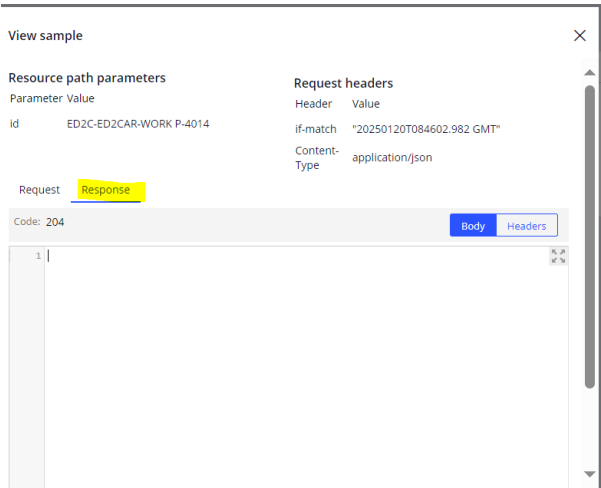
URL: <https://internalpoc.evonsys.com.au/prweb/application/v2/cases/{id}>

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



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