

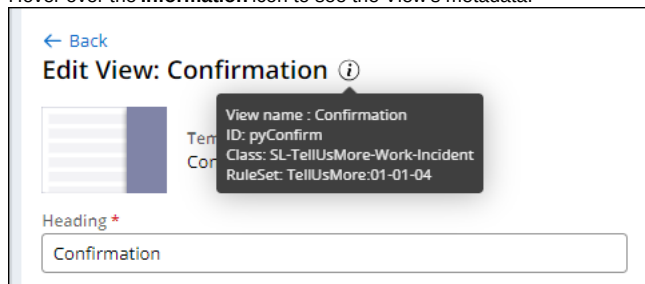
Troubleshooting Constellation

Wednesday, July 3, 2024 10:32 AM

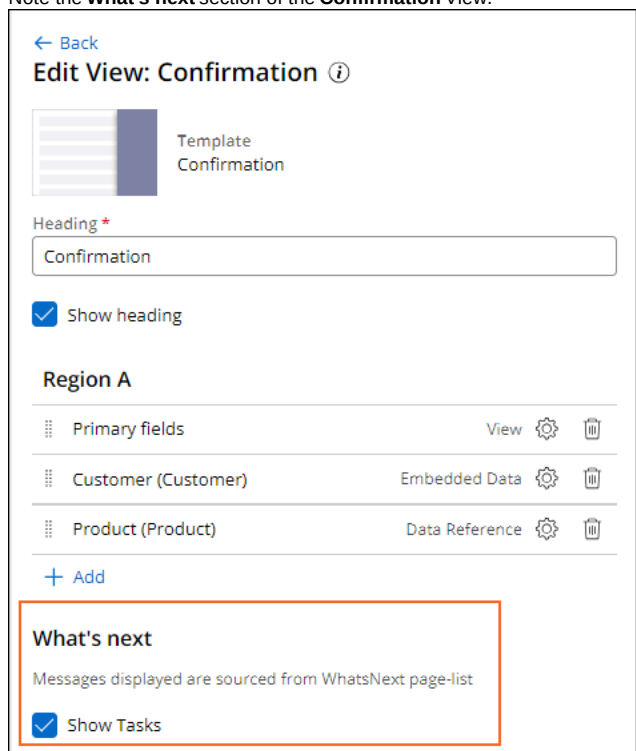
Access View JSON data in Dev Studio

- In the Pega instance for the challenge, enter the following credentials:
 - In the User name field, enter Author@SL.
 - In the Password field, enter pega123!
- In the navigation pane of **App Studio**, click **Case Types > Incident** to open the Incident Case Type.
- On the Case Types **UX** tab, navigate to the **Confirmation** partial View.

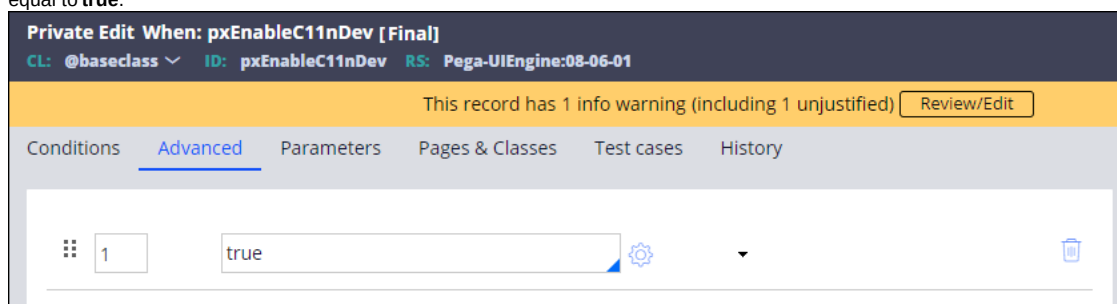
Note: Pega provides several out-of-the-box Views that can be used in developing Case Types. Some of these Views have unusual configurations. An example of this is the **Confirmation** View (ID: *pyConfirm*). This View is responsible for displaying information in the Assignment confirmation.
- Hover over the **Information** icon to see the View's metadata.



- Note the **What's next** section of the **Confirmation** View.

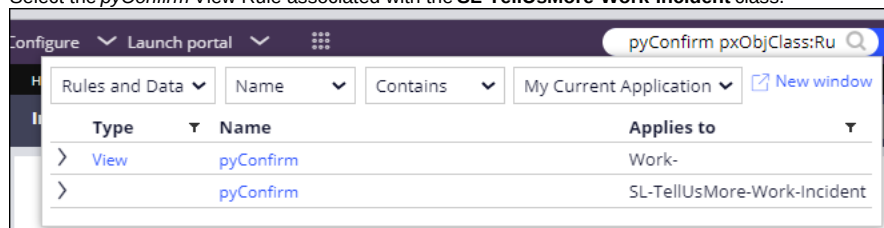


- Switch to **Dev Studio**.
- Search for the Rule named *pxEnableC11nDev*. If the Rule cannot be found in the search menu of Dev Studio, click **Records > Decision > When** and filter the **Name** column by *pxEnableC11nDev* to locate the Rule.
- Open the *pxEnableC11nDev* Rule, continue with a **Private edit**, and then set the value equal to **true**.

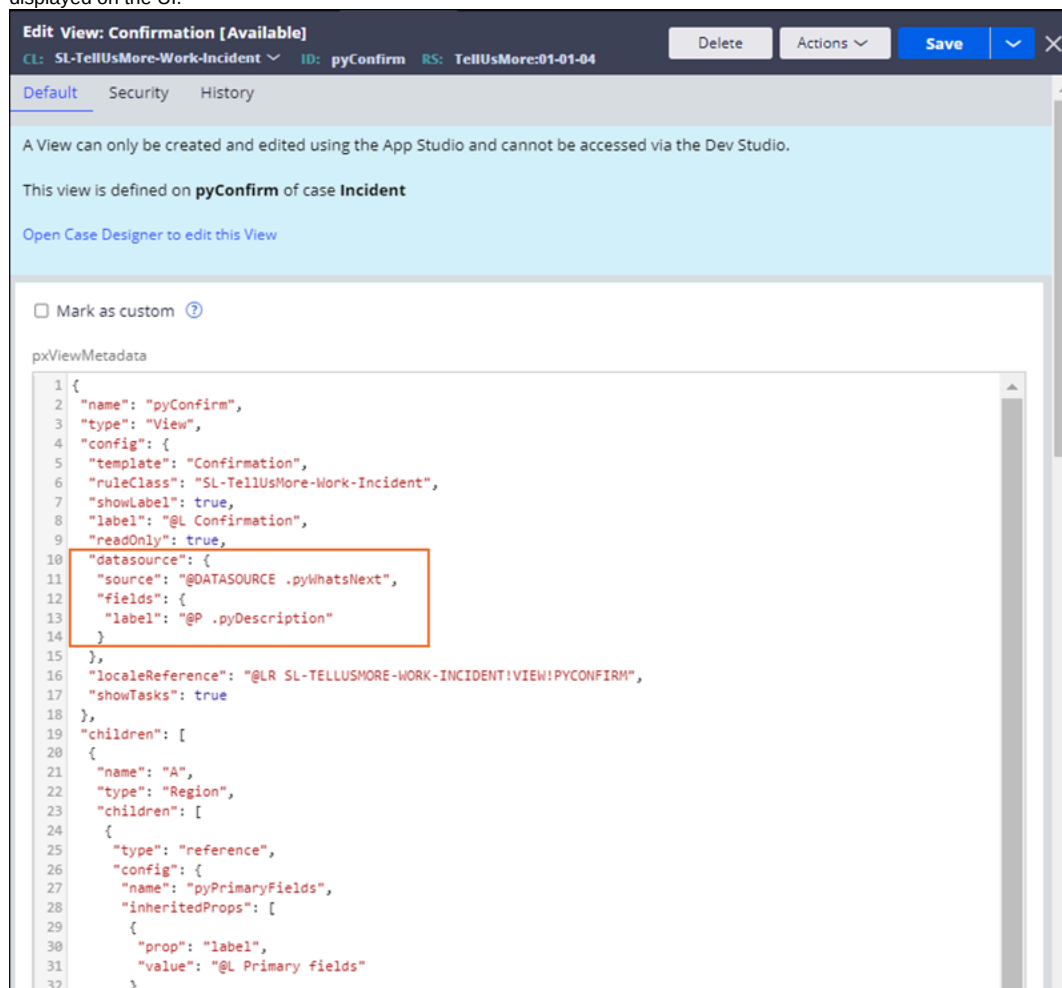


[Add condition](#)

9. In the Search bar of Dev Studio, enter `pyConfirm pxObjClass:Rule-UI-View` to open the `pyConfirm` View.
10. Select the `pyConfirm` View Rule associated with the `SL-TellUsMore-Work-Incident` class.

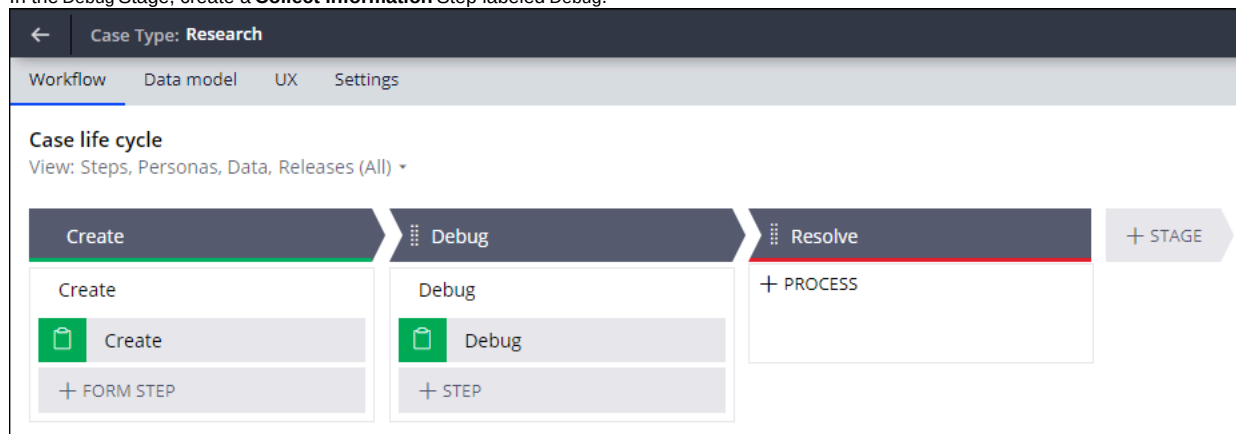


11. In the JSON, find the reference to `.pyWhatsNext` and check which property is taken and displayed on the UI.



2 Create a Research Case Type

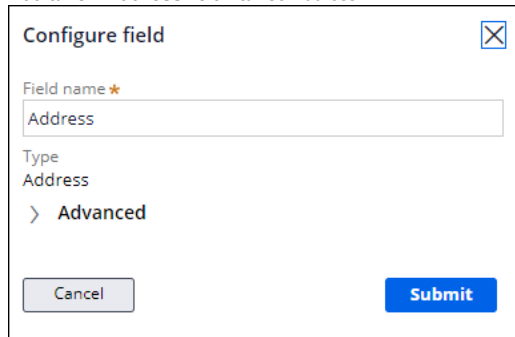
1. Switch to **App Studio**, and in the navigation pane, click **Case Types**.
2. Create a new Case Type named Research.
3. The Research Case Type should have two additional Stages: Debug and Resolve.
4. In the Resolve Stage contextual properties pane, select **Resolve the Case**.
5. In the Debug Stage, create a **Collect information** Step labeled Debug.



6. Click **Save**.

3Examine View Rules using the Tracer

1. In the Research Case Type, open the Case Type Data Model.
2. Add a new **Address** field named Address.



Configure field

Field name *
Address

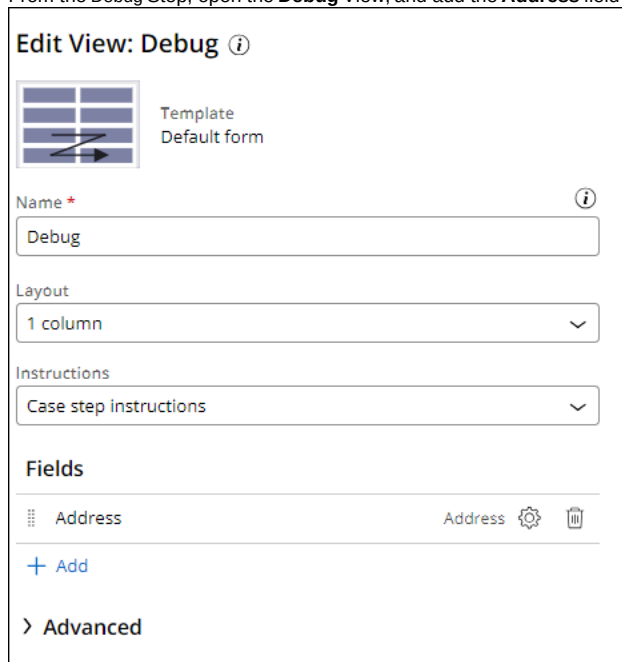
Type
Address

> Advanced

Cancel Submit

Note: By default, the **Address** Field Type has a default View named *pyAddressForm*.

3. From the Debug Step, open the **Debug** View, and add the **Address** field to it.



Edit View: Debug

Template
Default form

Name *
Debug

Layout
1 column

Instructions
Case step instructions

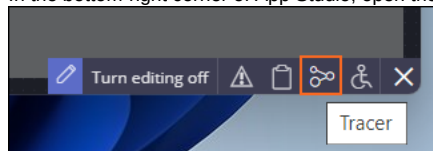
Fields

Address Address

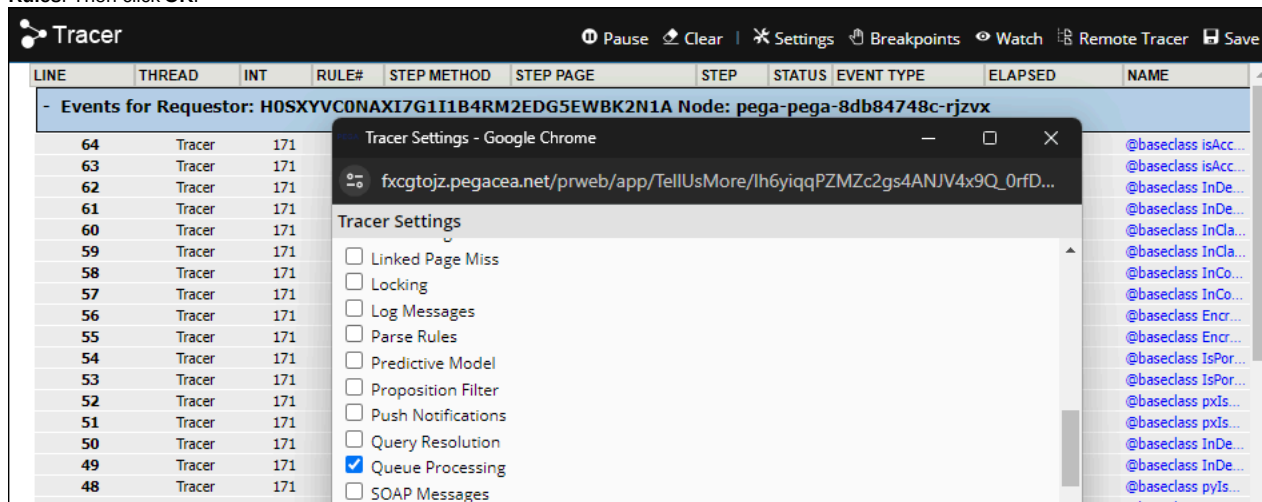
+ Add

> Advanced

4. Click **Submit**, then **Save**.
5. Click the **Preview** button to open the Portal window.
6. Create a Research Case Type. In the **Create-Research** View, click **Submit**.
7. In the bottom-right corner of App Studio, open the **Tracer**.



8. Click **Settings**. In the **EVENT TYPES TO TRACE** section, scroll down and enable the **View Rules**. Then click **OK**.



Tracer

Pause Clear Settings Breakpoints Watch Remote Tracer Save

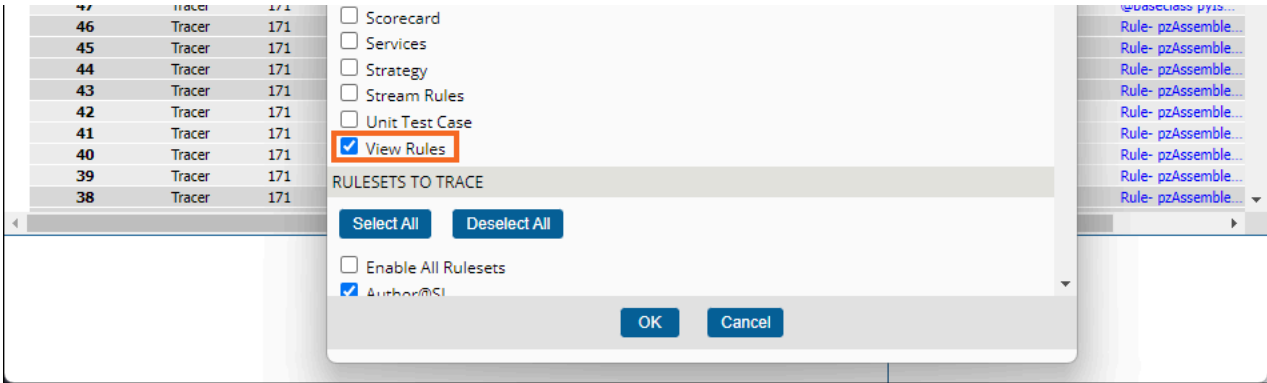
LINE	THREAD	INT	RULE#	STEP METHOD	STEP PAGE	STEP	STATUS	EVENT TYPE	ELAPSED	NAME
- Events for Requestor: H0SXVVC0NAXI7G1I1B4RM2EDG5EWBK2N1A Node: pega-pega-8db84748c-rjzvx										
64	Tracer	171								@baseclass isAcc...
63	Tracer	171								@baseclass isAcc...
62	Tracer	171								@baseclass InDe...
61	Tracer	171								@baseclass InDe...
60	Tracer	171								@baseclass InDe...
59	Tracer	171								@baseclass InCo...
58	Tracer	171								@baseclass InCo...
57	Tracer	171								@baseclass InCo...
56	Tracer	171								@baseclass EnCr...
55	Tracer	171								@baseclass EnCr...
54	Tracer	171								@baseclass IsPor...
53	Tracer	171								@baseclass IsPor...
52	Tracer	171								@baseclass pxIs...
51	Tracer	171								@baseclass pxIs...
50	Tracer	171								@baseclass InDe...
49	Tracer	171								@baseclass InDe...
48	Tracer	171								@baseclass pyIs...

Tracer Settings - Google Chrome

fxctoiz.pegacee.net/prweb/app/TellUsMore/lh6yiqqPZMZc2gs4ANJV4x9Q_0rfD...

Tracer Settings

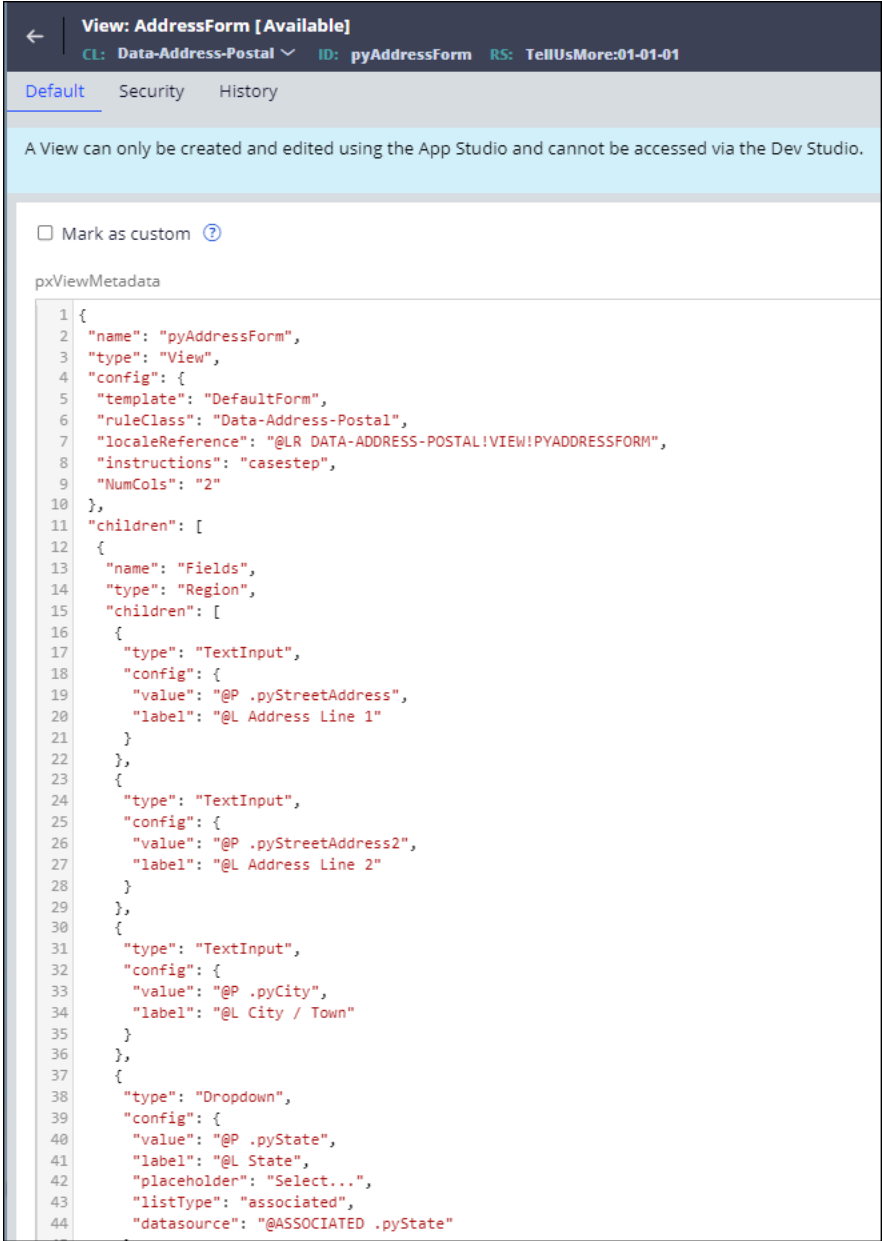
- ☐ Linked Page Miss
- ☐ Locking
- ☐ Log Messages
- ☐ Parse Rules
- ☐ Predictive Model
- ☐ Proposition Filter
- ☐ Push Notifications
- ☐ Query Resolution
- ☒ Queue Processing
- ☐ SOAP Messages



- Navigate back to the Portal and **Submit** the **Debug** Assignment.
- Navigate back to the Tracer, expand **Resource: /application/v2/assignments** and search for view Start to locate the name of all the Views requested for rendering.
- Find the Views associated with the **pyAddressForm**.

View End	View End	SL-TELLUSMORE-WORK-RESEARCH!DEBUG	TellUsMore 01-01-04
View End	View End	DATA-ADDRESS-POSTAL!PYADDRESSFORM	TellUsMore 01-01-01
View Start	View Start	DATA-ADDRESS-POSTAL!PYADDRESSFORM	TellUsMore 01-01-01
View Start	View Start	SL-TELLUSMORE-WORK-RESEARCH!DEBUG	TellUsMore 01-01-04

- Click the DATA-ADDRESS-POSTAL!PYADDRESSFORM link to open the JSON for the **AddressForm** View.



- Close the Tracer tool.

4Explore View metadata with X-Ray

Note: The X-Ray tool provides an intuitive way to debug screen issues, such as metadata, fields metadata, and state properties. X-Ray is primarily used for debugging Views and other UI controls, rather than Assignments.

1. In **App Studio**, open the Research Case Type.
2. Click the **UX** tab, and open the **Details** partial View.
3. Delete the **Primary fields** View and add the **Address** field to the **Details** partial View.
4. Switch to **Dev Studio**, and **Launch** the **Customer Portal**.
5. Create a new Research Case.
6. Navigate to the **Debug** Assignment.
7. Open the **Dev Tools** for your browser - likely using **F12** (for Chrome, Fire Fox, Edge)
8. Navigate to the **Console** tab and clear the window.
9. In the **Dev Tools Console**, enter: `PCore.getDebugger().toggleXRay(true);` to start the X-Ray tool.

Note: If you see the following message: PCore is not defined in the Console, it is probable that you launched the Portal from App Studio. The PCore and PConnect methods are not available in the App Studio shell. For PCore and PConnect to work, you must launch the Portal from Dev Studio.

10. Navigate to the **Details**, tab and then find the partial View that is related to the **Address** property.

The screenshot displays the PEGA Customer Portal interface in Dev Studio. The top navigation bar shows the PEGA logo and a search bar. The main content area is divided into sections: Research (R-13), Urgency (Decimal, 10), Work Status (Text Input, NEW), and Created (Case Operator, Author@SL 1 minute a...). Below these is the Details section, which contains a reference to View: pyPrimaryFields. The Address section contains a reference to View: pyAddressForm. The Dev Tools Console at the bottom shows the command `PCore.getDebugger().toggleXRay(true);` executed.

11. Click the **Information** icon next to the **Address** section to find the metadata related to the Address property.

The screenshot displays the PEGA Customer Portal interface in Dev Studio. The top navigation bar shows the PEGA logo and a search bar. The main content area is divided into sections: Research (R-13), Urgency (Decimal, 10), Work Status (Text Input, NEW), and Created (Case Operator, Author@SL 1 minute a...). Below these is the Details section, which contains a reference to View: pyPrimaryFields. The Address section contains a reference to View: pyAddressForm. The Dev Tools Console at the bottom shows the command `PCore.getDebugger().toggleXRay(true);` executed.

```

coordinates : @P .Address.pyLocation.pyLocation
},
"children": [
  {
    "type": "AutoComplete",
    "config": {
      "value": "@P .Address.pyCountry",
      "label": "@L Country",
      "placeholder": "Select...",
      "listType": "associated",
      "datasource": "@ASSOCIATED .Address.pyCountry",
      "deferDatasource": true,
      "isSearchableOnKey": true
    }
  }
]

```

Address

Country AutoComplete

Address Line 1	--	Address Line 2	--
City / Town	--	State	--
Postal Code	--	Country	--

12. Click the **Information** icon next to the **View:pyAddressForm** section to find the metadata related to the View.

Metadata

▼ Component metadata

```

{
  "name": "pyAddressForm",
  "type": "View",
  "config": {
    "template": "DefaultForm",
    "ruleClass": "Data-Address-Postal",
    "localeReference": "@LR DATA-ADDRESS-POSTAL!VIEW!PYADDRESSFORM",
    "instructions": "casestep",
    "NumCols": "2"
  },
  "children": [
    {
      "name": "Fields",
      "type": "Region",
      "children": [
        {
          "type": "TextInput",
          "config": {
            "value": "@P .pyStreetAddress",
            "label": "@L Address Line 1"
          }
        },
        {
          "type": "TextInput",
          "config": {
            "value": "@P .pyStreetAddress2",
            "label": "@L Address Line 2"
          }
        }
      ]
    }
  ]
}

```

View: pyAddressForm

Address Line 1	--	Address Line 2	--
City / Town	--	State	--
Postal Code	--	Country	--

13. Navigate back to the **Console** and enter \$pConnect;
14. Explore the information provided in the Console related to the **pyAddressForm** View.

Elements Console Sources Network Performance Memory Application Security Lighthouse >> 46 3 3 Issues 3 50 hidden

top Filter

50 messages

6 user messages

45 errors

No warnings

```

> PCore.getDebugger().toggleXRay(true);
< undefined
> $pConnect;
< { meta: {name: 'pyAddressForm', type: 'View', config: {template: 'DefaultForm', ruleClass: 'Data-Address-Postal', localeReference: '@LR DATA-ADDRESS-POSTAL!VIEW!PYADDRESSFORM', instructions: 'casestep', NumCols: '2'}, children: Array(1)}, classID: 'Data-Address-Postal', ... }

```

```

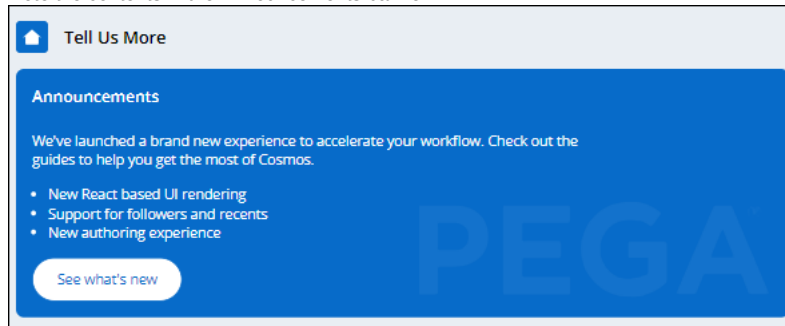
    ▶ options: {containerName: 'primary', hasForm: true, inheritedConfig: {...}, pageReference: 'caseInfo.content.Address
    useCustomContext: undefined
    viewName: "pyAddressForm"
    ▶ xrayInfo: {}
    ▶ _actions: {}
    ▶ _additionalRegisteredProps: {}
    ▶ _caseInfo: Mh {c11nEnv: Kh}
    ▶ _children: [{...}]
    _containerTarget: "app/primary"
    _contextName: "app/primary_1"
    _hasSuggestions: false
    ▶ _inheritedConfig: {disabled: false, readOnly: true, displayMode: 'DISPLAY_ONLY', key: '3435303e-b8b8-42c2-a9ad-6
    _isExpressionExist: false
    _isInsideList: false
    _isRoot: undefined
    _isState: false
    _isValidatorExist: false
    _isWhenExist: false
    _localeRuleName: "DATA-ADDRESS-POSTAL!VIEW!PYADDRESSFORM"
    _pageReference: "caseInfo.content.Address"
    ▶ _rawConfig: {name: 'pyAddressForm', type: 'View', config: {...}, children: Array(1), classID: 'Data-Address-Postal
    _readOnly: true
    _referenceContext: ""
    _referenceList: ""
    _stateProps: {}
    _type: "View"
    ▶ [[Prototype]]: Object

```

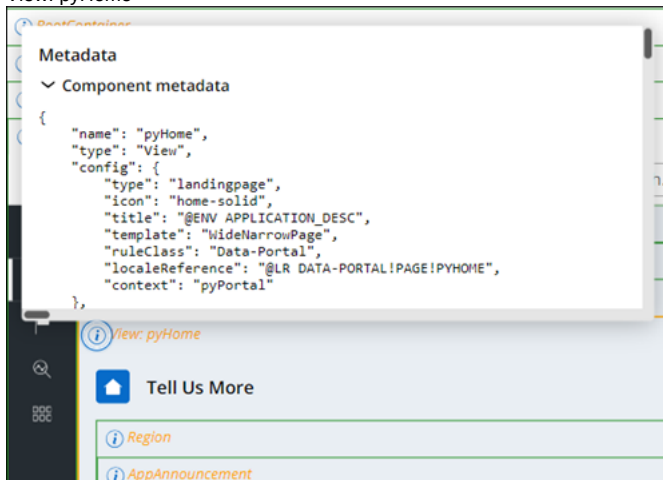
15. To stop the X-Ray tool, enter `PCore.getDebugger().toggleXRay(false);`

5Examine the App Announcement Section of the Portal Home Page

1. In the Customer Portal, navigate to the Portal Home page.
2. Note the contents in the Announcements banner.

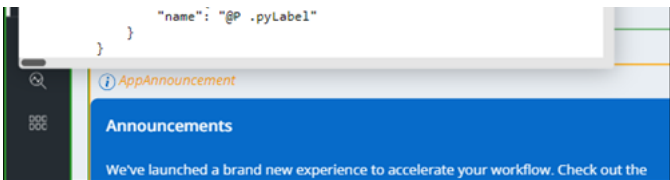


3. Enable your **Dev Tools** (F12), and in the Console, enter `PCore.getDebugger().toggleXRay(true);`
4. Investigate the metadata for the Views associated with the Tell Us More announcements, including:
 - View: `pyHome`

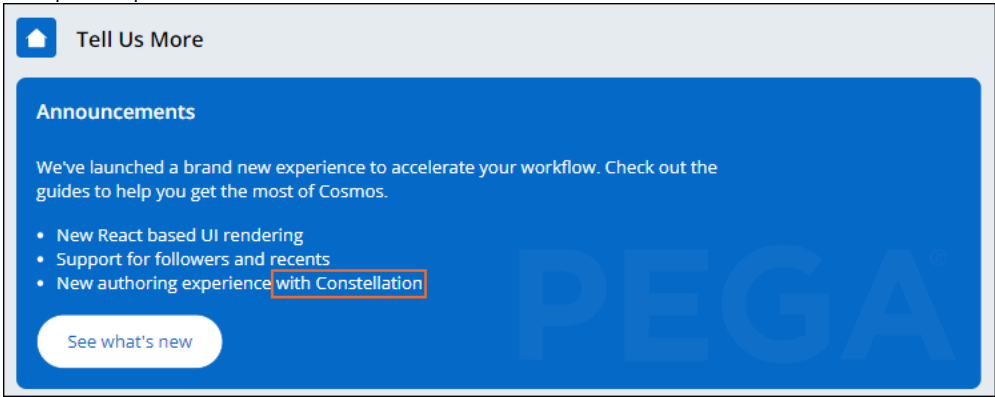


- AppAnnouncement





- 5. Switch back to **Dev Studio**.
- 6. Using the **App** explorer, enter Rule-UI-View.
- 7. From the list of Views, open the **pyHome** View and review the JSON data.
- 8. Note that the datasource for the pyHome Announcements information is driven by the *D_pyAnnouncements* Data Page.
- 9. Using the Dev Studio Search bar, open the *D_pyAnnouncements* Data Page.
- 10. In the Data Sources section, open the *pyInitAnnouncements* Data Transform.
- 11. In line 3.1, update the text in the Source field to read New authoring experience with Constellation
- 12. Launch a new instance of the Customer Portal. On the Home page, note that the third bullet point is updated.



6Debug DX API calls

Note: You can collect more details about the request and response of your DX API with the DebugPegaAPI system setting. When you set the DebugPegaAPI to true, your system captures information about API errors in the PEGA log. The DebugPegaAPI system setting is particularly useful for debugging page instructions and field security errors.

- 1. Switch back to **App Studio**. In the Research Case Type Data Model, create a field named User Reference Test with a Type of **User reference**.

Add field to Research

Field name *

User Reference Test

Type

User Reference

Display as

Search box

> Advanced

Cancel

Submit & add another

Submit

- 2. Add the **User Reference Test** field to the **Debug** Step View.
- 3. Switch back to **Dev Studio**, search for the *DebugPegaAPI* Dynamic System setting and set it equal to true.

Edit Dynamic System Settings: Debug the Pega API REST services

ID: Pega-API • DebugPegaAPI

RS: Pega-ProcessCommander

[Edit]

Delete

Actions

Save

Settings

History

Value

true

- 4. In the navigation pane, click **Records > Integration-Services > Service Rest** to open the Service Rest that handles data Views (URL template: *data_views/{data_view_ID}*).

Service REST: Data views [Final, API]

ID: application • v2 • data_views_var9221668ffe33b795bd9989d2c3c80c49

RS: Pega-API:08-23-01

Save as

Actions

Private edit

Service

Methods

OpenAPI

History

Resource properties

Resource

Pega-API-DataExploration

Service endpoint URL
https://fxcgtozjz.pegacea.net/prweb/api/application/v2/data_views/{data_view_ID}

URI template
data_views/{data_view_ID}

URI path parameters

Name	Description	Map to	Map to key
data_view_ID	Data view ID	Automation input	▼

Processing options

☐ End Requestor When Done

☐ Method is read-only

Execution mode
Execute synchronously ▼

Request processor

Service monitoring
Off

Service package (includes additional processing options)
[application](#)

☐ Enable service SLA with fallback activity

Lightweight clipboard mode

☒ Provide values ☐ Use application settings

☐ Enable

5. Select **Actions > Trace** to start tracing the service.
6. Launch the Customer Portal and create a new Research Case.
7. Navigate to the **Debug** Assignment, and return to the **Tracer**.
8. Expand **Resource: /application/v2/data_views/D_pyC11nOperatorsList** and search for the Automation *pxGetData*.

AutomationpxGetData

Tracer

Pause

Clear

Settings

Breakpoints

Watch

Remote Tracer

Save

LINE	THREAD	INT	RULE#	STEP METHOD	STEP PAGE	STEP	STATUS	EVENT TYPE	ELAPSED	NAME	RULESET
- Resource: /application/v2/data_views/D_pyC11nOperatorsList InteractionID: POST-data_views-											
2809	AutomationTh...	1	14	Property-Set		1		Step Begin		Code-Security ApplicationSetup	Pega-Desktop 08-07-01
2808	AutomationTh...	1	14					Activity Begin		Code-Security ApplicationSetup	Pega-Desktop 08-07-01
2807	STANDARD	1	13	GetData_MV789				Activity Begin		Pega-API-DataExploration pxGetData	Pega-API 08-07-01
2806	STANDARD	1	12	Java	Temp18d5663b06f	1		Step Begin		Pega-API-DataExploration pxGetData	Pega-API 08-07-01
2805	STANDARD	1	12		Temp18d5663b06f			Activity Begin		Pega-API-DataExploration pxGetData	Pega-API 08-07-01
2804	STANDARD	1	6					Activity End	0.1450	Code-Security ApplicationSetup	Pega-Desktop 08-07-01

9. Note that the *pxGetData* Automation returns data related to a list data View.

Automation: Get list data view [Final]

Resource: Data ▼ ID: pxGetData RS: Pega-API:08-07-01

Definition Implementation History

Overview

Operation
Read

Description

Explore or query a list data view

Usage

Used to fetch data based on a given criteria from a list data view

Inputs

Name	ID	Description	Data type	Options / Page class	Required
------	----	-------------	-----------	----------------------	----------

1	Data request	dataRequest	Data view parameters, query and paging	Page	Pega-API-DataExploration		
2	Dataview ID	dataViewID	Unique identifier of a data view	Text	None		

10. Access the Tracer window and select the **DataTransformEnd** Event type and review the list returned as JSON.

Tracer

Pause Clear Settings Breakpoints Watch Remote Tracer Save

LINE THREAD INT RULE# STEP METHOD STEP PAGE STEP STATUS EVENT TYPE ELAPSED NAME

- Resource: /application/v2/data_views/D_pyC11nOperatorsList
InteractionID: POST-data_views-18-03-10-318-A12013CB45A67CCD9427B334B0271E1B0A Node: pega-pega-8db84748c-rjzvx

3514 STANDARD 1 responseData_MQBMR Data Transform End 0.0000 Pega-API-DataEx... Pi

3513 STANDARD 1 responseData_MQBMR Data Transform Be... Pega-API-DataEx... Pi

Properties on Page TraceEvent [3514] - Google Chrome

about:blank

Properties on Page TraceEvent [responseData_MQBMR]

Properties on Page responseData_MQBMR

Name	Value								
fetchDateTime	20240129T180311.673 GMT								
pxObjClass	Pega-API-DataExploration-Data								
pageNumber	1								
pageSize	9								
pzStatus	valid								
data(1)	<table border="1"> <thead> <tr> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>pyUserName</td> <td>Author@SL</td> </tr> <tr> <td>pxObjClass</td> <td>Data-Admin-Operator-ID</td> </tr> <tr> <td>pyUserIdentifier</td> <td>Author@SL</td> </tr> </tbody> </table>	Name	Value	pyUserName	Author@SL	pxObjClass	Data-Admin-Operator-ID	pyUserIdentifier	Author@SL
Name	Value								
pyUserName	Author@SL								
pxObjClass	Data-Admin-Operator-ID								
pyUserIdentifier	Author@SL								
data(2)	<table border="1"> <thead> <tr> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>pyUserName</td> <td>CaseWorker1@SL</td> </tr> <tr> <td>pxObjClass</td> <td>Data-Admin-Operator-ID</td> </tr> <tr> <td>pyUserIdentifier</td> <td>CaseWorker1@SL</td> </tr> </tbody> </table>	Name	Value	pyUserName	CaseWorker1@SL	pxObjClass	Data-Admin-Operator-ID	pyUserIdentifier	CaseWorker1@SL
Name	Value								
pyUserName	CaseWorker1@SL								
pxObjClass	Data-Admin-Operator-ID								
pyUserIdentifier	CaseWorker1@SL								
data(3)	<table border="1"> <thead> <tr> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>pyUserName</td> <td>CaseWorker2@SL</td> </tr> <tr> <td>pxObjClass</td> <td>Data-Admin-Operator-ID</td> </tr> <tr> <td>pyUserIdentifier</td> <td>CaseWorker2@SL</td> </tr> </tbody> </table>	Name	Value	pyUserName	CaseWorker2@SL	pxObjClass	Data-Admin-Operator-ID	pyUserIdentifier	CaseWorker2@SL
Name	Value								
pyUserName	CaseWorker2@SL								
pxObjClass	Data-Admin-Operator-ID								
pyUserIdentifier	CaseWorker2@SL								
data(4)	<table border="1"> <thead> <tr> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>pyUserName</td> <td>Customer1@SL</td> </tr> <tr> <td>pxObjClass</td> <td>Data-Admin-Operator-ID</td> </tr> <tr> <td>pyUserIdentifier</td> <td>Customer1@SL</td> </tr> </tbody> </table>	Name	Value	pyUserName	Customer1@SL	pxObjClass	Data-Admin-Operator-ID	pyUserIdentifier	Customer1@SL
Name	Value								
pyUserName	Customer1@SL								
pxObjClass	Data-Admin-Operator-ID								
pyUserIdentifier	Customer1@SL								

3477 AutomationTh... 1 22 .pyContent.pxIsS... D_py

3476 AutomationTh... 1 22 .pyContent.pxIsS... D_py

3475 AutomationTh... 1 22 Property-Set:XML D_py

3474 AutomationTh... 1 22 Java D_py

3473 AutomationTh... 1 22 Local.queryMode... pega

3472 AutomationTh... 1 22 Local.queryMode... pega

RULEWATCH:
RULE-SERVICE-REST APPLICATION
V2IDATA_VIEWS_VAR9221668FFE33B795BD9989D2C3C80C49
#20230618T211857.098 GMT

11. Close the Tracer windows related to the **DataTransformEnd** Event type.

7Review the Data Page cache

- Return to the Customer Portal and create a new Incident Case.
- Navigate to the **Contact Info** Step.
- Open the Developer Tools (F12), navigate to the Console tab, and enter: `PCore.getDataPageUtils();`
- Explore the Data Pages that are cached at the Contact Info Step.

Create Incident (I-2)

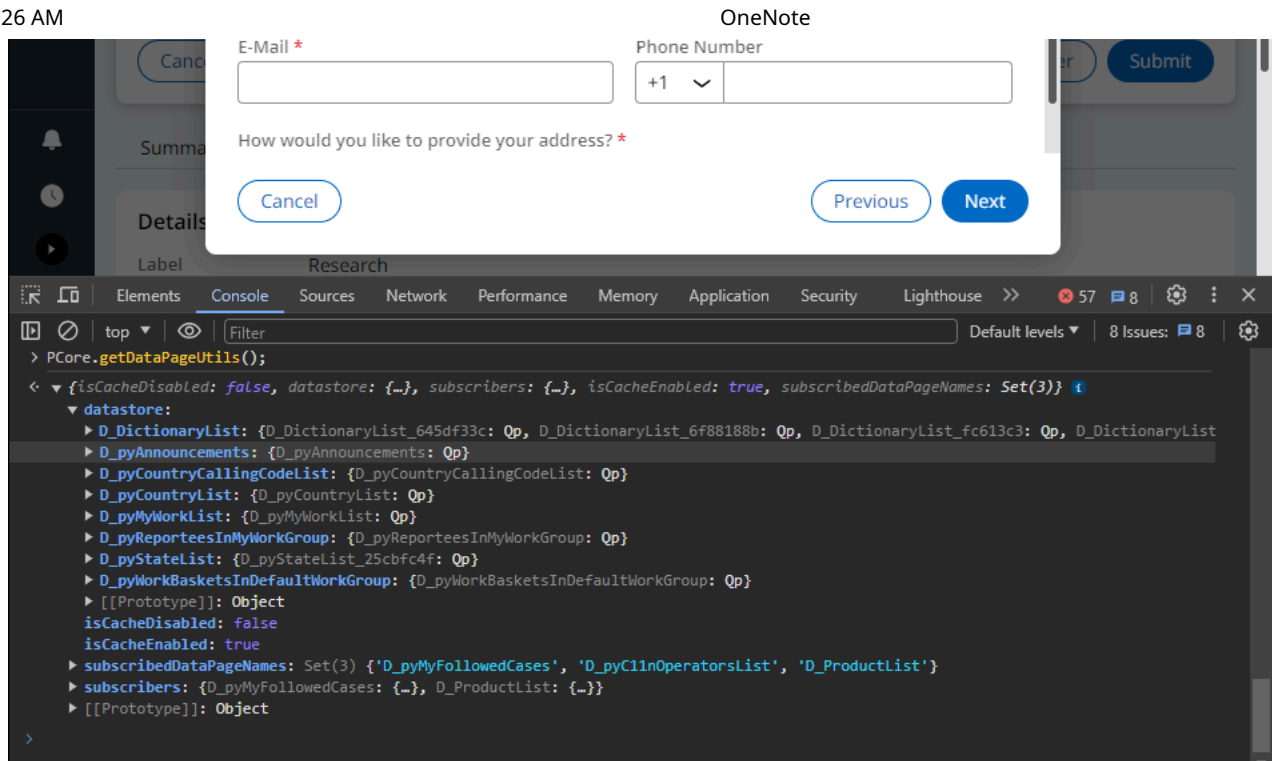
Contact Info

Customer

Main info

First Name * Last Name *

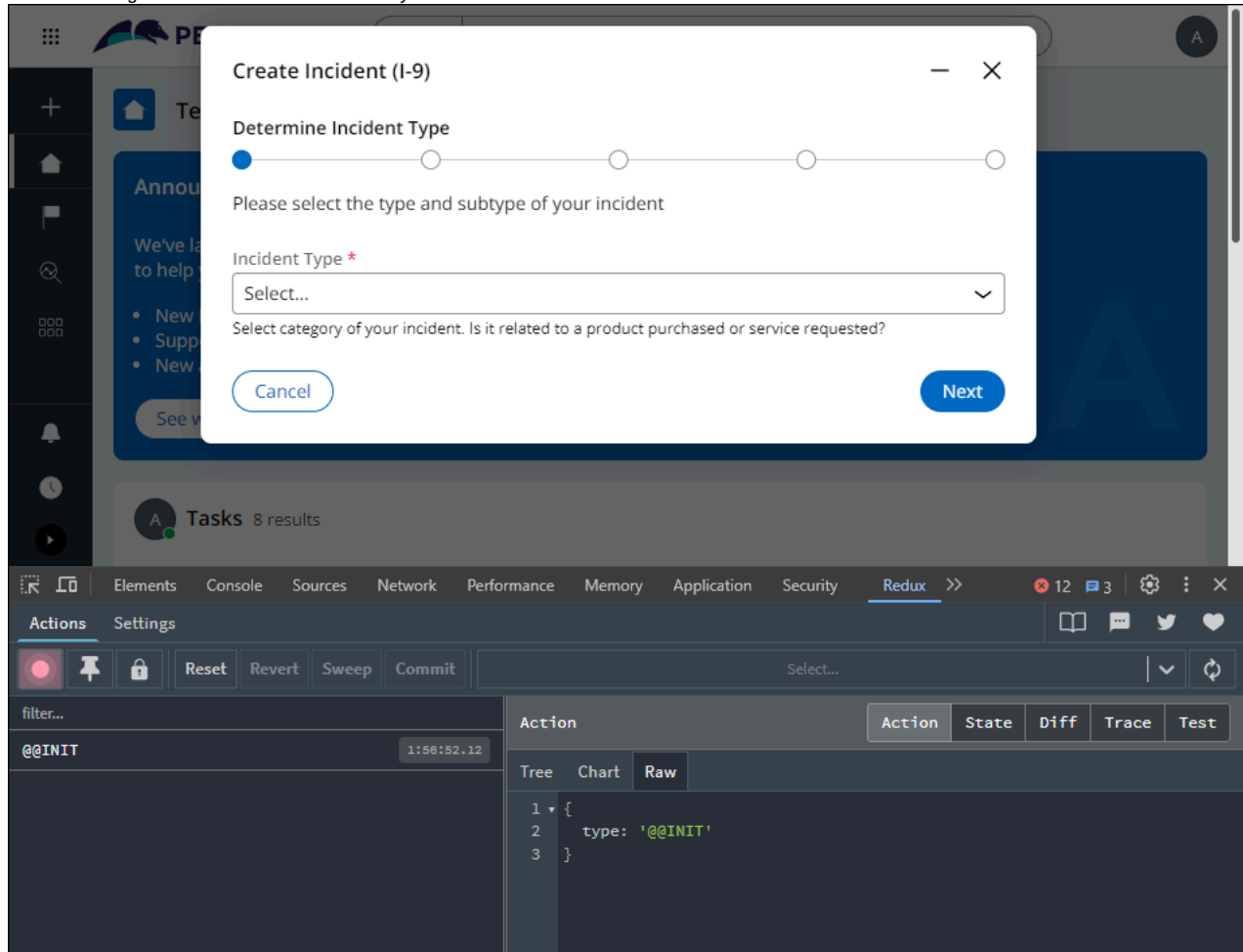
Cannot be blank



5. Close the Developer Tools window.

8Examine React Changes with Redux Dev Tools

1. Install the Redux-DevTools in your browser by searching for Redux DevTools, or:
 - o For Chrome, you can add the Redux DevTools from here: [Google Chrome Store Redux DevTools](#)
 - o For Firefox, you can add the Redux DevTools from here: [Firefox Redux DevTools](#)
 - o For Edge, you can add the Redux DevTools from here: [Edge Redux DevTools](#)
2. Open the Dev Tools (F12) and navigate to the **Redux** Tab.
3. Create a new Incident Case, and navigate to the **Determine Incident Type** Step.
4. Note the changes to the Action information as you fill out the form.



The screenshot displays a Redux DevTools interface with a modal titled "Create Incident (I-9)" in the foreground. The modal has a progress bar at the top with five steps, the first of which is active. Below the progress bar, it says "Determine Incident Type" and "Please select the type and subtype of your incident". There are two dropdown menus: "Incident Type *" with the selected value "Product faulty or unsafe", and "Incident SubType *" with the selected value "Select...". Below these, it says "Select category of your incident. Is it related to a product purchased or service requested?" and "Choosing proper subtype allows for faster resolution". At the bottom of the modal are "Cancel" and "Next" buttons.

In the background, the Redux DevTools interface is visible. The "Actions" tab is selected, showing a list of actions: SET_PROPERTY, SET_PROPERTY, FETCH_DATAPAGE, FIELD_CHANGE, ADD_SHARED_DATA, SHOW_CANCEL_ALERT, and RESET_LOADING. The "RESET_LOADING" action is highlighted. The "Raw" tab is also visible, showing the raw action data:

```
{ type: 'SET_PROPERTY', payload: { reference: 'caseInfo.content.IncidentSubType', value: '', context: 'app/modal_1', isArrayDeepMerge: true, isImplicit: true } }
```

. The Redux DevTools interface also includes a timeline at the bottom with a play button and a "Live" indicator.

5. Continue through the Incident Case and note how changes are recorded in the Redux Dev Tools.

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