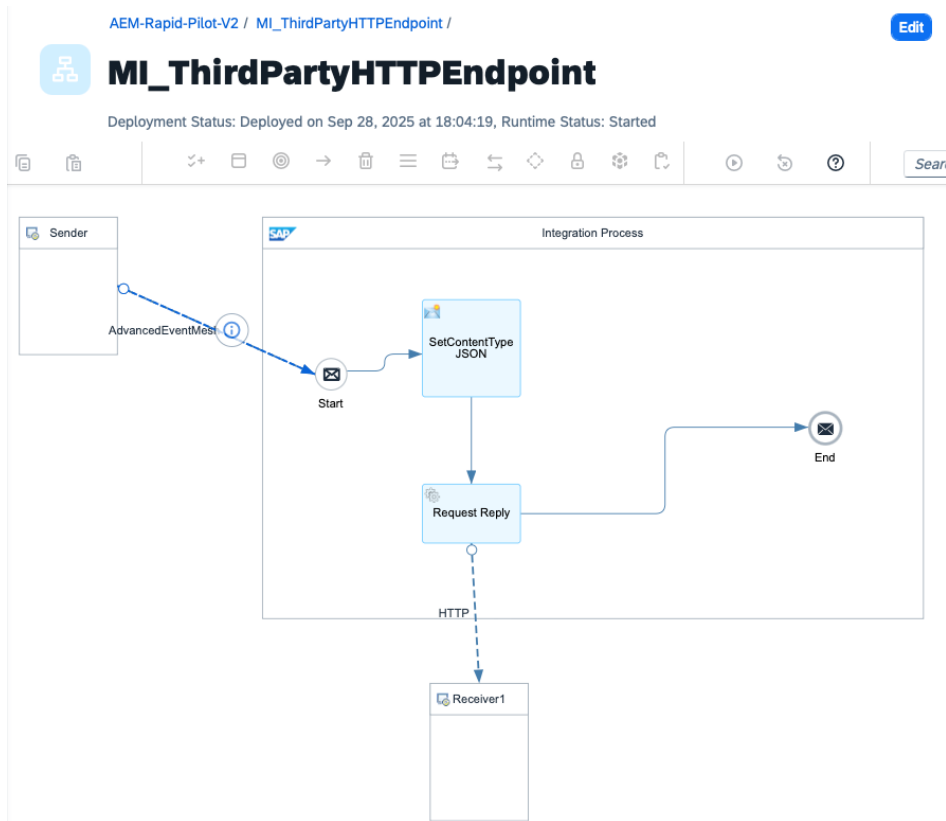


## Table of Contents

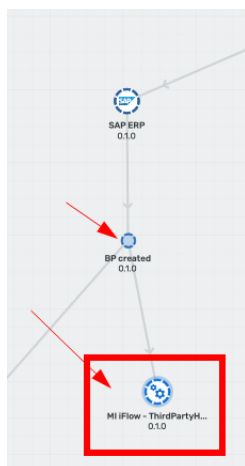
<b>1</b>	<b>OVERVIEW OF MI_THIRDPARTYHTTPENDPOINT .....</b>	<b>1</b>
<b>1.1</b>	<b>PROMOTE SUPPORTING COMPONENTS FROM EVENT PORTAL .....</b>	<b>3</b>
<b>1.2</b>	<b>SET UP PACKAGES WITHIN INTEGRATION SUITE, CLOUD INTEGRATION .....</b>	<b>8</b>
<b>1.3</b>	<b>GATHERING AEM INSTANCE CONNECTION CREDENTIALS .....</b>	<b>11</b>
<b>1.4</b>	<b>ADD SECURITY AND CONNECTION CREDENTIALS FOR MI_THIRDPARTYHTTP .....</b>	<b>13</b>
<b>1.5</b>	<b>DEPLOY THE IFLOW.....</b>	<b>14</b>
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<b>2</b>	<b>APPENDIX – CONNECTING TO THE TRY ME UTILITY .....</b>	<b>20</b>
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# 1 Overview of MI\_ThirdPartyHTTPEndpoint



In this exercise, the requirement is to call a REST API endpoint. We will not configure any error handling here as this is just a basic iFlow. We will delve into details about error handling in the *MI iFlow ErrorHandling* workshop. Note though that you get error handling ‘out of the box’ even though we don’t configure any error specific handling behaviour.

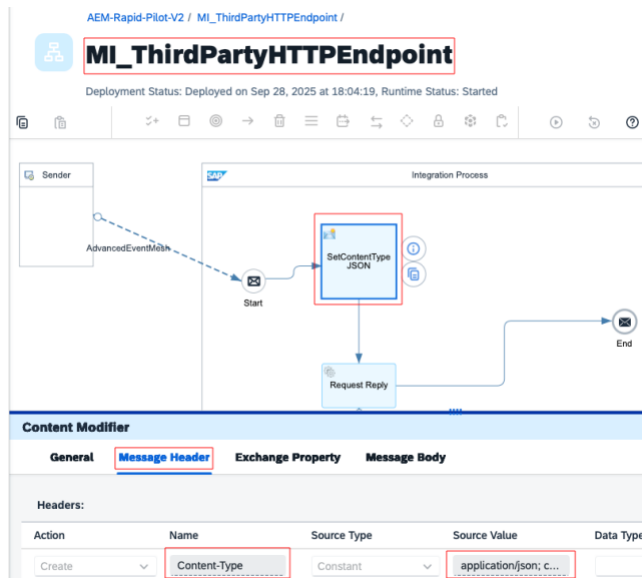
The iFlow subscribes to **BP Created** events (Golden records) published from the SAP ERP system and sends these to the REST API endpoint.



The iFlow calls a mock service and which will respond with a HTTP 200 (ok) status code. Since a successful response is received from the REST service, the iFlow will send an ‘ack’ to the broker and so the broker will remove the message from the input queue. In the *MI iFlow ErrorHandling* workshop, we will talk about how to handle unsuccessful responses from the REST service.

The iFlow that you will download in 1.2.6 below has most of the configuration already in place (so once again, **not much typing to do!**). The iFlow uses the Sender **SAP AEM Adapter** to get events from the `http_endpoint.bp_created` queue on your AEM instance.

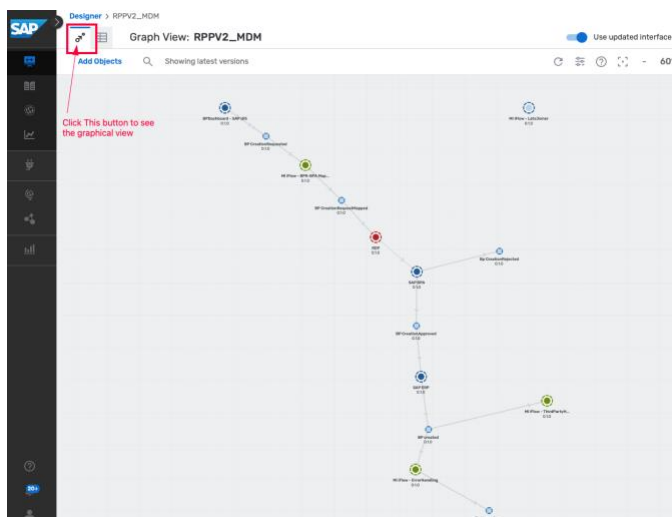
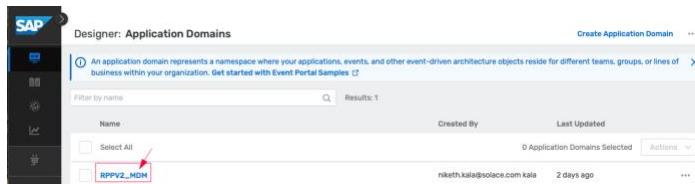
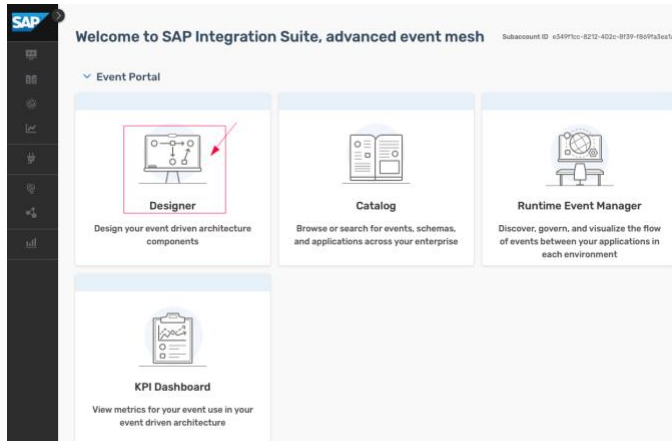
The **Content Modifier transformation step** marks the content of the message as JSON so that the REST endpoint can correctly identify the message as JSON.



## 1.1 Promote supporting components from Event Portal

In the next series of steps, you will go through the process of pushing (promoting) all the required components that are required to support the deployment of the iFlow to your AEM instance. You will not be able to successfully deploy the iFlow unless all these are present. The components that will be pushed are **AccessControlLists**, Topics, Queues, Usernames, ACL Profiles.

### 1.1.1 Navigate to the Event Portal and select the Application Domain

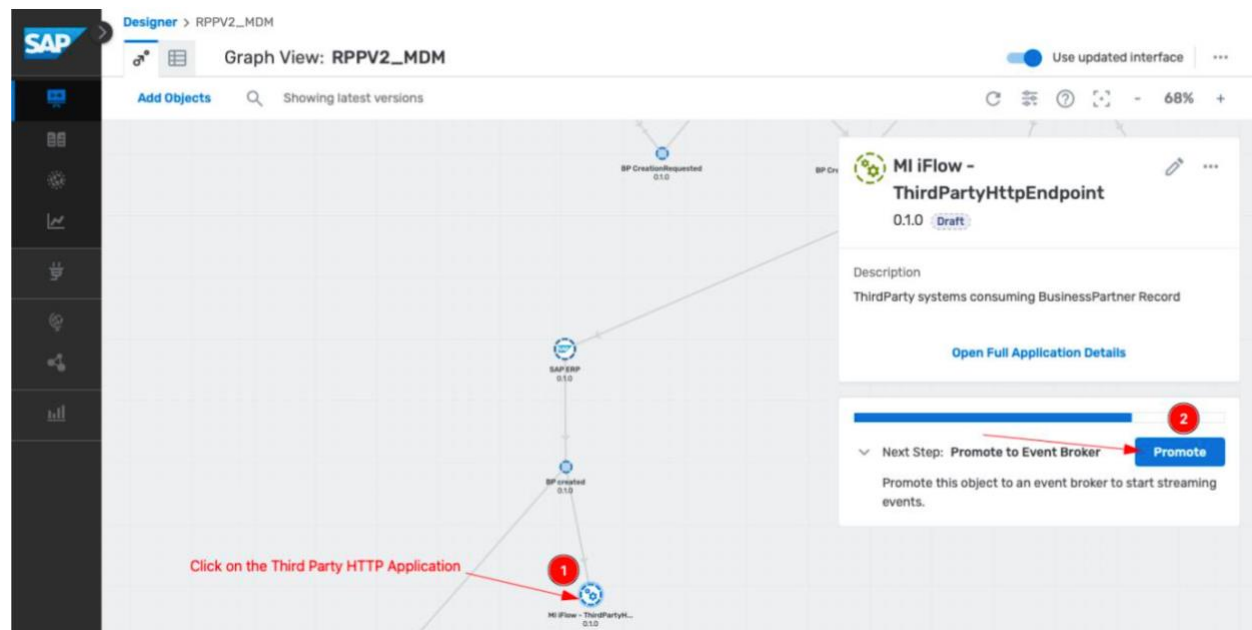


### 1.1.2 Application Queue Names and Client Profile Details

Each application's queue name and client credentials (username and password) are detailed in the table below. The configuration must follow the order indicated in the diagram. So, you must configure “BPCreate-SAP UI5” before “MI iFlow BPA-BPA Mapping” and so on...In this step, we will configure the topics and queues for the Third Party HTTP Endpoint iFlow

	Application	QueueName	ClientUsername	Pwd
1	BPCreate-SAP UI5		user1	user123\$
2	MI iFlow BPA-BPA Mapping	bpr_bpa_mapping.bp_creation_request	user2	user123\$
3	RDP	rdp.bp_mapped_creation_request	user3	user123\$
4	SAP BPA		user4	user123\$
5	SAP ERP	erp.bp_creation_approved	user5	user123\$
6	3rdParty HttpEndpoint	http_endpoint.bp_created	user6	user123\$
7	Error Handling	error_handling.bp_created error_handling.bp_created_dmqr error_handling.bp_created_business_error	user7	user123\$
8	LateJoiner	late_joiner.bp_created	user8	user123\$

### 1.1.3 Open the MI ThirdParty HTTP Endpoint Application



### 1.1.4 Select the Event Broker

Add Objects Showing latest versions

## Promote: MI iFlow - ThirdParty HTTPEndpoint

Which event broker do you want to promote to?

Default

1 event broker available

Event Broker

With Configuration Created

AEM\_Broker

Click on this tab

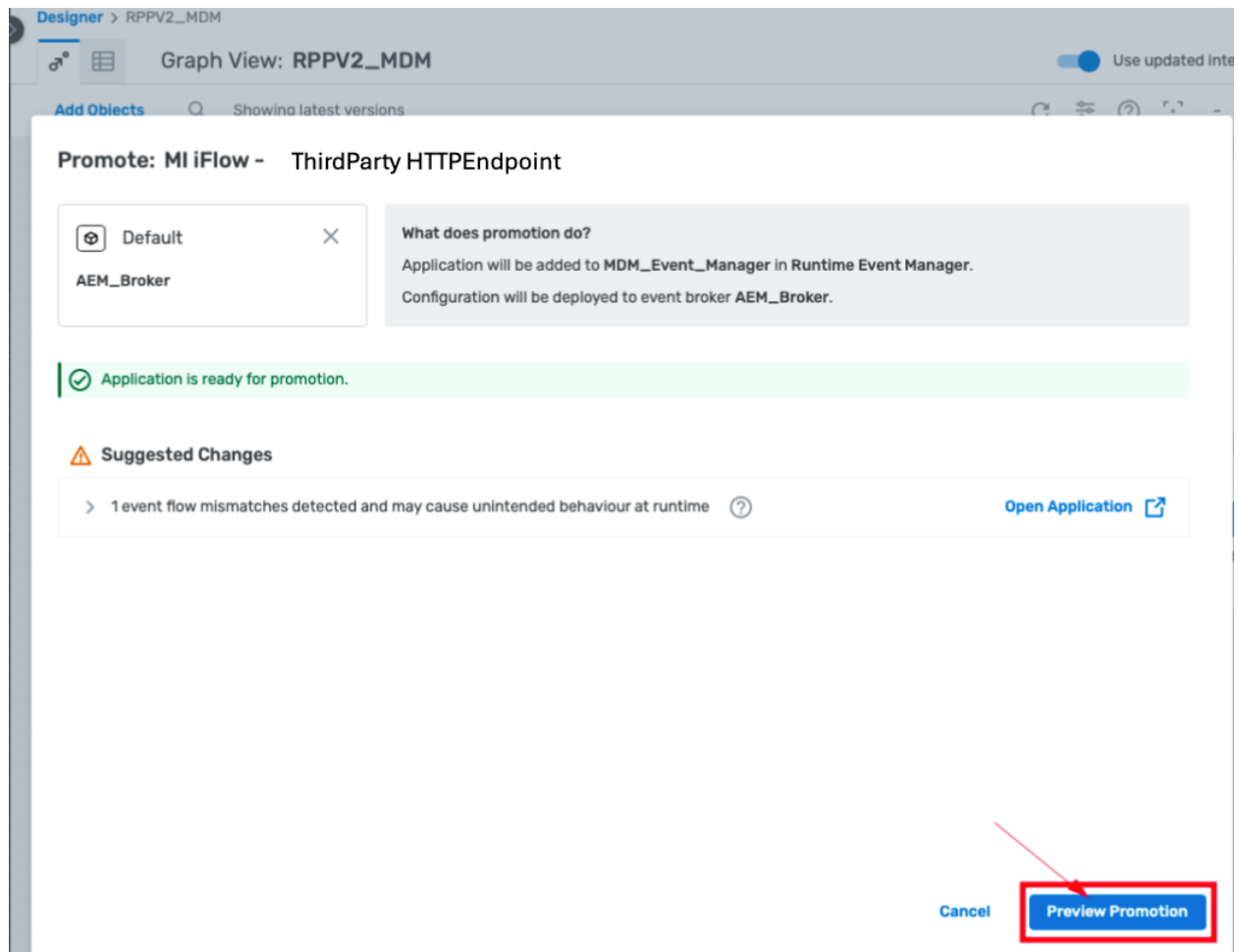
Select the down arrow

Select your AEM instance

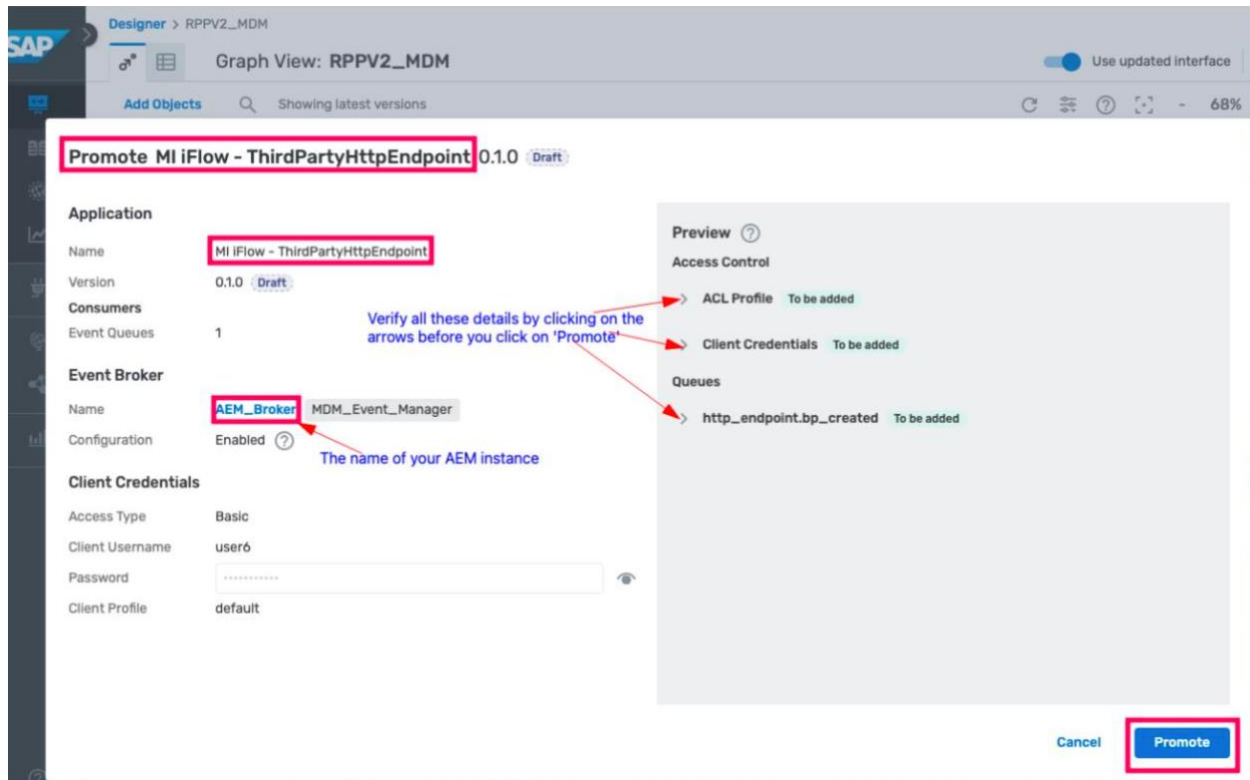
This button will change to 'Preview Promotion' after you select your AEM instance in Step 3

Cancel Validate Promotion Preview Promotion

### 1.1.5 Preview the Promotion and Validate the Application Queue Names and Client Profile Details

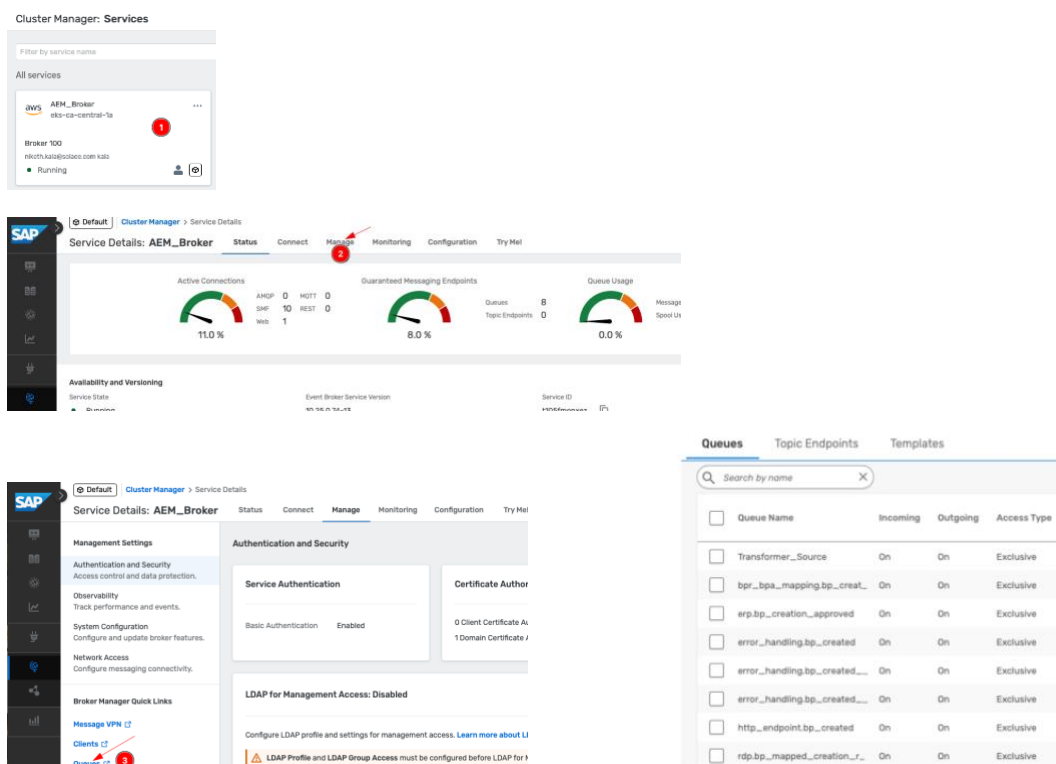


## 1.1.6 Validate Access Control, profile, Client Credentials, Application Queue Names before promoting



Congratulations, you have successfully promoted Application – MI iFlow ErrorHandler to your AEM Broker!

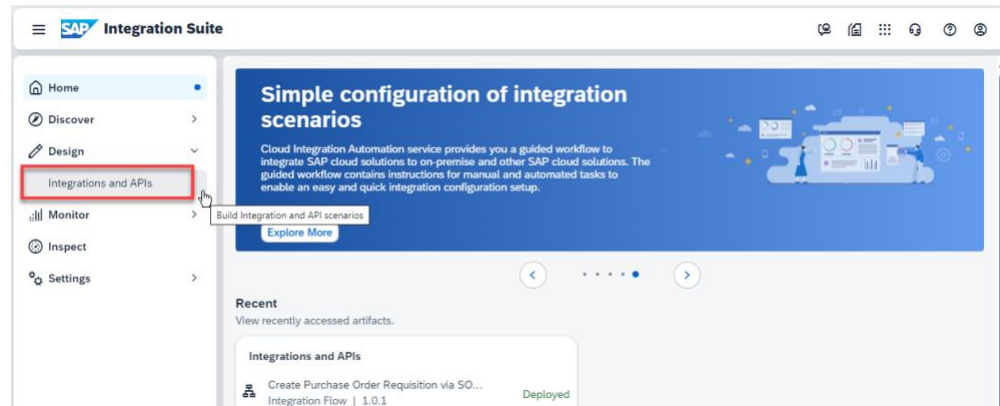
You can verify that these have all been deployed as expected by checking on your AEM instance Cluster Manager => Manage => Queues





## 1.2 Set up packages within Integration Suite, cloud integration

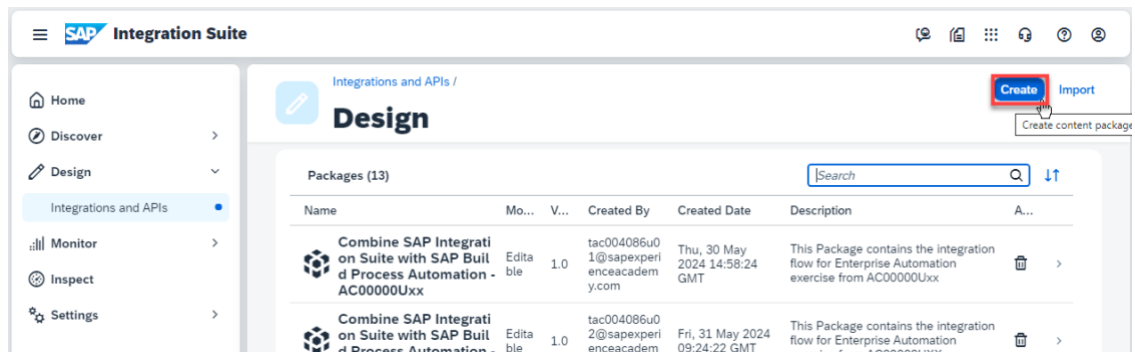
1.2.1 From your SAP Integration Suite tenant service, click on Design section in the left-hand menu. Now click on “Integration and APIs” under Design -



1.2.2 Create the integration package (if you’ve not already created one)

After clicking on “Integration and APIs” you will see a “Design” window on the right-hand side of the screen. This is where you will create your own package.

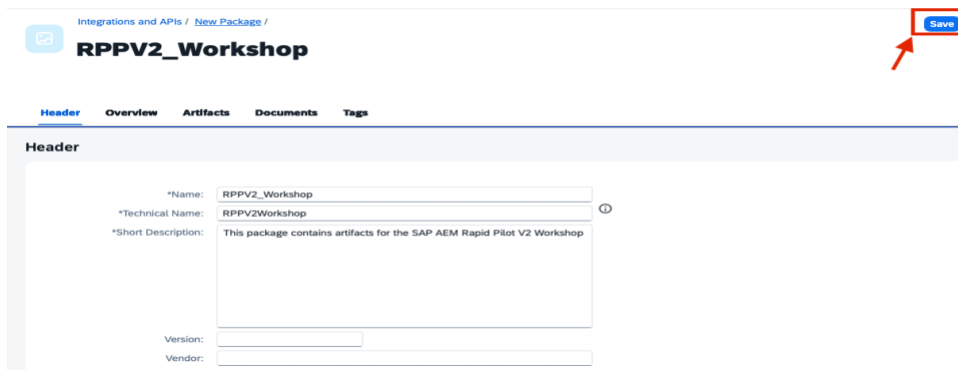
1.2.3 Click on Create to create an integration package.



1.2.4 Provide the following details:

- ⇒ Name: RPPV2\_Workshop
- ⇒ Technical Name will be auto-filled with RPPV2Workshop
- ⇒ Short description: “This package contains artifacts for the SAP AEM Rapid Pilot V2 Workshop.”

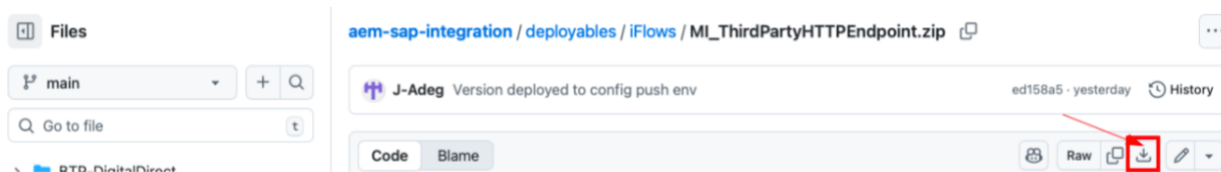
1.2.5 Click on Save once finished.



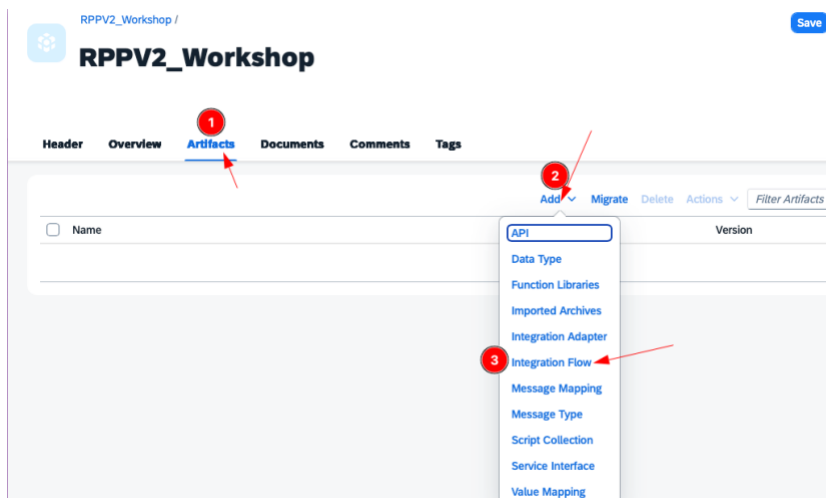
Within an integration package, you can add several artifacts: REST APIs, OData APIs, integration flows, mappings, and more. In our case, we will import templates for integration flows that will be used in the workshop.

- 1.2.6 Download the iFlow template for the 2<sup>nd</sup> iFlow **MI\_ThirdPartyHTTPEndpoint** by clicking on the download link below and then click on the Download raw file icon as shown in the screenshot below; this will download the file to the location you have configured for downloads on your browser

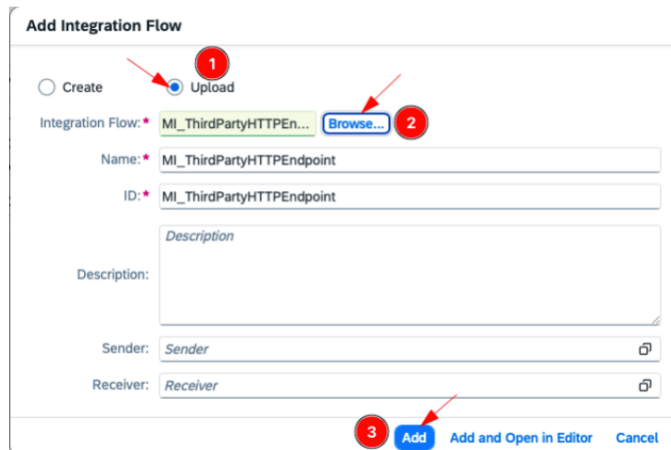
[https://github.com/SolaceLabs/aem-sap-integration/blob/c57d9d07929d8e86a9c879e1fb70688abd0a047b/deployables/iFlows/MI\\_ThirdPartyHTTPEndpoint.zip](https://github.com/SolaceLabs/aem-sap-integration/blob/c57d9d07929d8e86a9c879e1fb70688abd0a047b/deployables/iFlows/MI_ThirdPartyHTTPEndpoint.zip)



- 1.2.7 You now need to bring up the dialogue to import that iFlow template file that you downloaded into your package:



1.2.8 The dialogue for importing the previously downloaded file is now visible as shown in the screenshot below. Upload the file...



**Add Integration Flow**

☐ Create ☒ Upload

Integration Flow: \* MI\_ThirdPartyHTTPEndpoint [Browse...](#)

Name: \* MI\_ThirdPartyHTTPEndpoint

ID: \* MI\_ThirdPartyHTTPEndpoint

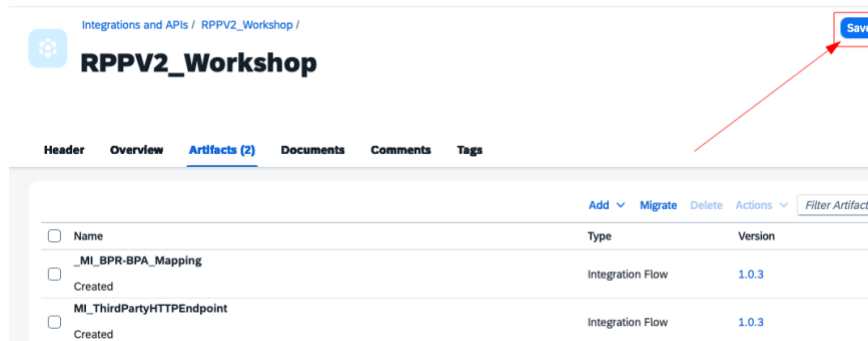
Description:

Sender: Sender

Receiver: Receiver

[Add](#) [Add and Open in Editor](#) [Cancel](#)

1.2.9 The imported iFlow template is now in your package. Save it



Integrations and APIs / RPPV2\_Workshop / [Save](#)

**RPPV2\_Workshop**

Header Overview **Artifacts (2)** Documents Comments Tags

	Name	Type	Version
<input type="checkbox"/>	_MI_BPR-BPA_Mapping Created	Integration Flow	1.0.3
<input type="checkbox"/>	MI_ThirdPartyHTTPEndpoint Created	Integration Flow	1.0.3

[Add](#) [Migrate](#) [Delete](#) [Actions](#) [Filter Artifacts](#)

## 1.3 Gathering AEM instance connection credentials

The iFlow will need to be configured with the connection credentials (URL, vpn name, password) for **your** AEM instance before it can be deployed so we will gather all these details first.

### 1.3.1 Obtain AEM Broker Connection Credentials

Before heading back to Integration Suite, let's head to our **Advanced Event Mesh Console** and go to **Cluster Manager -> {your service}**. Select the connection point and protocol that you want to use to connect your Integration Suite flows by going to the "Connect" tab, order by protocol, then click on Solace Messaging. Make a note of the connectivity details underneath "Solace Messaging" (click on the section to open it up). You will need these details in the next steps when configuring your iFlows.

The screenshot shows the SAP Integration Suite console. The 'Connect' tab is selected, and the 'Solace Messaging' section is expanded. A table lists various client libraries for Solace Messaging. The 'Solace Java API' is highlighted. A red box highlights the 'Connection Details' for the 'Solace Java API', which includes the Username, Password, Message VPN, and Host URIs.

Technology	Library	Language	Get Started
solace	Solace Java API	Java	Get Started
solace	Solace JCSMP API	JCSMP	Get Started
solace	Solace JavaRTO	Java	Get Started
solace	Solace JMS API	Java	Get Started
solace	Solace C	C	Get Started
solace	Solace Python	Python	Get Started
solace	Solace Go API	Go	Get Started
solace	Solace .NET	.NET	Get Started
spring	Spring Boot Java API	Spring	Get Started
spring	Spring Boot JMS API	Spring	Get Started

**Connection Details**

Username: solace-cloud-client

Password: [REDACTED]

Message VPN: broker-for-eda-demo

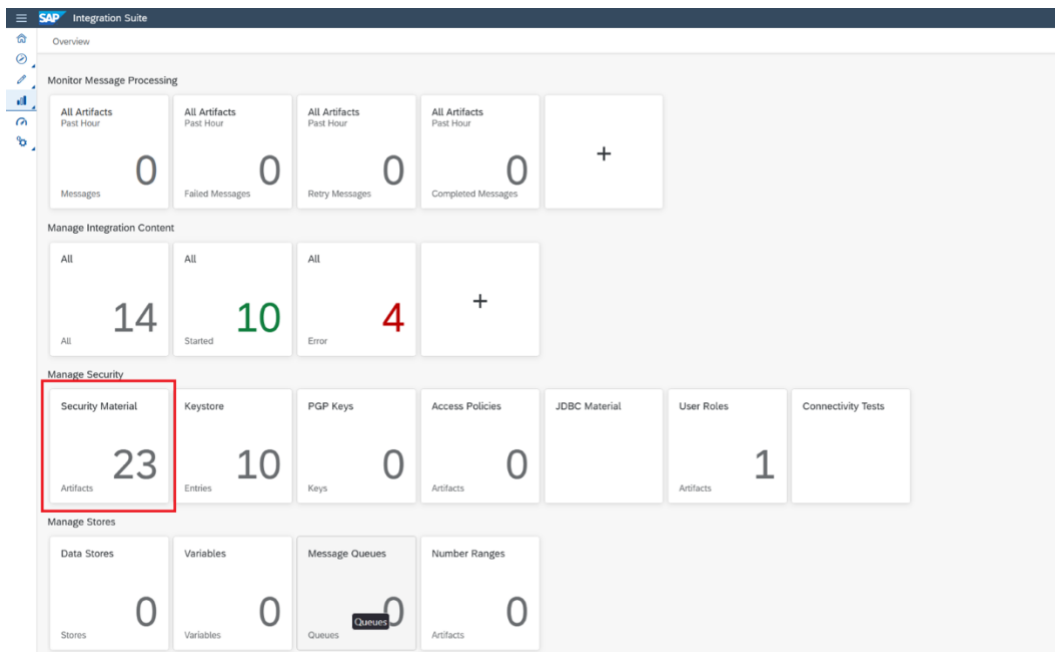
Host URIs: Secured SMF URI: tps://mr-connection-sb2zodlaa7b.messaging.solace.cloud:55443

The connect tab lists all the various connectivity details for the various supported protocols. The SAP Integration AEM adapter uses Solace Messaging Format, which is AEM's very own protocol with a broad feature set support. [Solace Message Format](#) (SMF) is the underlying messaging protocol for SAP Integration Suite, advanced event mesh.

### 1.3.2 Security Configuration

Rather than entering the AEM instance password directly on the iFlow and making it visible to everyone with access to the iFlow, you will create a **SecureParameter** which will store the password securely and we then just reference this in our iFlows.

Go to [Integration Suite](#) -> **Monitor** -> **Manage Security** -> **Security Material**.



In here, create security credentials for your AEM broker service.

Create **SecureParameter** `iflow_3rdPartyHttp` for the iFlow:

Security Material (88)					Filter by Name or Deployed By	1 Create	Upload	Refresh	Settings
Name	Type	Status	Deployed By	Deployed					
aem-rpp-erp-user4-password	Secure Parameter	Deployed	scott.dillon@solace.com	S					
aem-rpp-mapping-user2-password	Secure Parameter	Deployed	scott.dillon@solace.com	S					
aem-rppv2-password	Secure Parameter	Deployed	scott.dillon@solace.com	S					

2

User Credentials

OAuth2 Client Credentials

OAuth2 SAML Bearer Assertion

OAuth2 Authorization Code

Secure Parameter

The credentials are:

Name: **iflow\_3rdPartyHttp**

SecureParameter: **user123\$**

### Edit Secure Parameter

Name:

iflow\_3rdPartyHttp

1

Description:

Connection Credentials for iflow 3rdParty HTTP

2

Secure Parameter:

....

3

Repeat Secure Parameter:

....

4

5

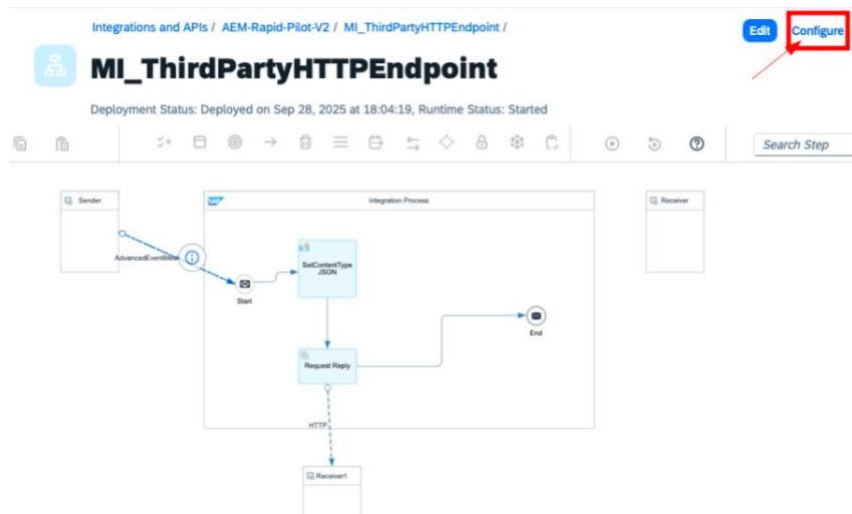
Deploy

Cancel

## 1.4 Add security and connection credentials for MI\_ThirdPartyHTTP

1.4.1 Navigate to the iFlow – Go to Integration Suite -> Design -> Integrations and APIs -> RPPV2\_Workshop -> Artifacts -> MI\_ThirdPartyHTTPEndpoint

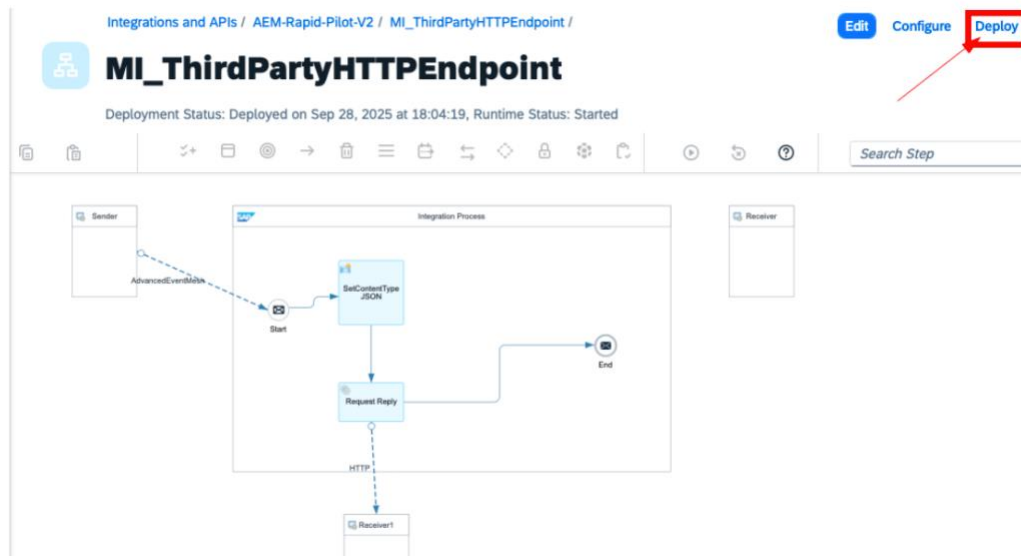
1.4.2 Click on the Configure button to configure the AEM Adapter connection credentials



1.4.2.1 Click on the **Sender** tab and populate the connection credentials.

1. Click on the Sender tab
2. Type in the **AEM connection url** you obtained from 1.3.1 above
3. Type in the **message vpn** you obtained from 1.3.1 above
4. Type in the **user id** that you used to create the Secure Alias in 1.3.2 above
5. Type in the name of the Password Parameter you created in 1.3.2 above
6. Click on Save
7. **Click on the Receiver tab** and just verify that the details there are exactly as they are on the Sender tab.
8. Click on Close

## 1.5 Deploy the iFlow



### 1.5.1 Check on the Deployment progress

Make sure the iFlow goes to a Started state. Use the instructions and screenshots below to guide you.

Go to Integration Suite -> Monitor -> Integrations and APIs -> Manage Integration Content

**SAP Integration Suite**

Overview / Manage Integration Content

**Integration Content (56)**

Filter by Name or ID

Name	Status
BusinessPartnerToCRMiflow	Started
Integration Flow	
MI_ErrorHandling_	Started
Integration Flow	
<b>MI_ThirdPartyHTTPEndpoint</b>	<b>Started</b>
Integration Flow	
SAP_ERP_SIM	Started
Integration Flow	
ERP_SIM	Started
Message Mapping	
MI_BPR-BPA_Mapping	Started
Integration Flow	

**MI\_ThirdPartyHTTPEndpoint** Restart ...

Deployed On: Sep 28, 2025, 18:04:19 ID: MI\_ThirdPartyHTTPEndpoint  
Deployed By: john.adegbile@solace.com Version: 1.0.3  
Package: AEM-Rapid-Pilot-V2

**Endpoints**

There are no endpoints configured.

**Status Details**

The Integration Flow is deployed successfully.

## 1.6 Test the MI\_ThirdPartyHttpEndpoint iFlow

Two of the easiest ways to test your iFlow are 1) Use the TryMe utility, 2) Use the UI5 application. The how-tos for these 2 utilities are shown in sections 1.6.1 and 1.6.3 below. When (not if 😊) you need to troubleshoot if you don't get a response or your message is not processed, refer to the instructions in section 1.6.2 below.

### 1.6.1 Test by using the TryMe tab

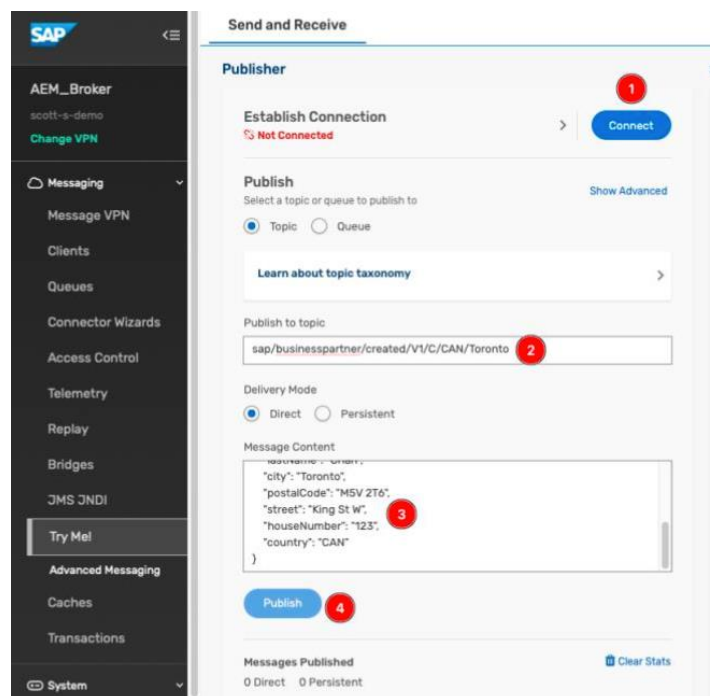
Access the TryMe utility by using the instructions in section 2 below.

After you have navigated to the TryMe utility and connected to your AEM instance, you can paste the sample message below into the publisher window to invoke your iFlow. The topic you publish to is sap/businesspartner/created/V1/{businessPartnerType}/{country}/{city}. So for the sample message below, the topic will be:

sap/businesspartner/created/V1/C/CAN/Toronto

```
{
  "partnerId": "0001234567",
  "validTo": "2025-12-31T23:59:59Z",
  "addressNumber": "0000123456",
  "validFrom": "2025-01-01T00:00:00Z",
  "businessPartnerType": "C",
  "firstName": "Alex",
  "lastName": "Chan",
  "city": "Toronto",
  "postalCode": "M5V 2T6",
  "street": "King St W",
  "houseNumber": "123",
  "country": "CAN"
}
```

The iFlow will process the event message and publish it to the topic sap/businesspartner/created/V1/C/CAN/Toronto. To confirm that your request has been sent and a response has been sent from the REST service, we (the SAP AEM team) will show your request and response as it exists on the mock server.





## 1.6.2 Finding out if your iFlow has processed a message

Go to **Integration Suite -> Monitor -> Integrations and APIs -> Monitor Message Processing**

This is always the place to look to see whether your iFlow has failed or succeeded at processing a message.

Artifact Name	Status
MI_ErrorHandling_	Completed
Sep 29, 2025, 22:03:04	94 ms
MI_ThirdPartyHTTPEndpoint	Completed
Sep 29, 2025, 22:03:04	82 ms
MI_ErrorHandling_	Completed
Sep 29, 2025, 21:36:24	112 ms
MI_ThirdPartyHTTPEndpoint	Completed
Sep 29, 2025, 21:36:24	88 ms
MI_BPR-BPA_Mapping	Completed
Sep 29, 2025, 21:24:53	6 ms
MI_BPR-BPA_Mapping	Completed
Sep 29, 2025, 21:17:52	12 ms

**MI\_ThirdPartyHTTPEndpoint**  
Last Updated at: Sep 29, 2025, 22:03:04

**Status**

Message processing completed successfully.

Processing Time: 82 ms

**Properties**

Message ID: 92112aa2af214982a7500058a6361501

Correlation ID: AGjbOjlc\_un\_BekpOm8oZA9-GkVv

If your iFlow failed during processing, you will see a status of failed. Clicking on the link for the failed message will give more information on the cause of the failure.

There will probably be several requests being sent to the mock server from all the participants but we will still be able to track your request to the mock server. It would help us to track your specific request quicker if you can let us know the correlation id from the message as indicated in the screenshot above.

### 1.6.3 Test by using the UI5 application

#### 1.6.3.1 Access the UI5 app from the following URL

<https://solacedemo-uf1dchbp.launchpad.cfapps.ca10.hana.ondemand.com/c2093459-426f-4c9e-a73c-7c583c931ea5.BPCreate.BPCreate-1.0.0/index.html>

BP CREATE

### Simple Master Data Entry - Business Partner Create

Web Messaging Url VPN Name Username Password **Connect**

**Simple Business Partner Creation**  
Please fill in all fields

**Entry Form**

BP Type: \*  
Select

First Name: \*  
First Name

Last Name: \*  
Last Name

City: \*  
Select

Postal Code: \*  
Select

Street: \*  
Street

House Number: \*  
House Number

Country: \*  
Select

**Submit**

**Business Partners**  
Real Time Business Partner Created

All

**No items available**

**Queue Browser**  
List of messages queued for late joiner use case on queue 'late\_joiner.bp\_created'

**No items available**

#### 1.6.3.2 Connect with your Broker details

To connect with your broker details:

- Open your broker and select the "connect" tab at the top, then under "view by" order by Protocol, then click on "Solace Web Messaging", then click on Javascript. All details needed for connecting the dashboard to your AEM broker will now be revealed.

SAP

Default Cluster Manager > Service Details

### Service Details: AEM\_Broker

Status **Connect** Manage Monitoring Configuration Try Me! [Open Broker Manager](#)

**Connect Using a Supported Client Library**  
Select a connection point and supported client library below to start messaging.

View by Protocol

**Solace Messaging**  
Start messaging with client libraries that use the Solace Message Format (SMF) protocol over TCP.

**Solace Web Messaging**  
Start messaging with client libraries that use the Solace Message Format (SMF) protocol over Web Sockets or HTTP.

Technology	Library	Language	
solace	Solace JavaScript API	JavaScript	<a href="#">Get Started</a>
solace	Solace Node.js API	Node.js	<a href="#">Get Started</a>

**AMQP**  
Start messaging with open APIs that use the AMQP.

**MQTT**  
Start messaging with open APIs that use the MQTT protocol.

**REST**  
Start messaging with the Solace Messaging REST API.

**Connect Using Management Tools**

**Connection Details**

Username  
solace-cloud-client

Password  
\*\*\*\*\*

Message VPN  
scott-s-demo

Host URIs  
Secured Web Messaging URI  
wss://mr-connection-zzdg8xd3fa9.messaging.solace.cloud:443

[Get Started](#)

- Now, you can copy and paste each input into the fields at the top of the dashboard and then finally click "Connect".

- If your credentials are entered correctly, you will get a "Success" message that will verify that you are connected properly to the dashboard. If you do not see a "Success" message, then try again and make sure your details are correct for each input.

After you have populated all the fields and clicked on submit, a business partner create event will be sent to your iFlow and the response will be published to `sap/businesspartner/creationRequestMapped/V1/{businessPartnerType}/{country}/{city}`

The screenshot shows a web form titled "Simple Business Partner Creation" with the instruction "Please fill in all fields". The form is labeled "Entry Form" and contains the following fields, each with a red numbered callout:

- BP Type:** A dropdown menu with "Select" as the placeholder text. Callout 1.
- First Name:** A text input field with "First Name" as the placeholder text. Callout 2.
- Last Name:** A text input field with "Last Name" as the placeholder text. Callout 3.
- City:** A dropdown menu with "Select" as the placeholder text. Callout 4.
- Postal Code:** A dropdown menu with "Select" as the placeholder text. Callout 5.
- Street:** A text input field with "Street" as the placeholder text. Callout 6.
- House Number:** A text input field with "House Number" as the placeholder text. Callout 7.
- Country:** A dropdown menu with "Select" as the placeholder text. Callout 8.
- Submit:** A green button labeled "Submit". Callout 9.

Sending the message via the UI5 app will of course mean your message follows the normal path through the various other applications until it gets to `MI_ThirdPartyHttpEndpoint`:

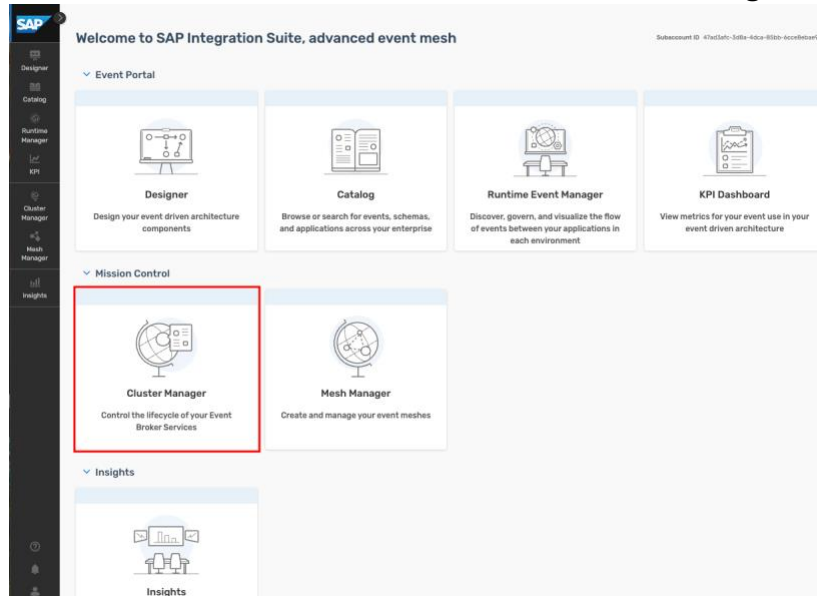


## 2 APPENDIX – CONNECTING TO THE TRY ME UTILITY

### 2.1 Obtain connection credentials

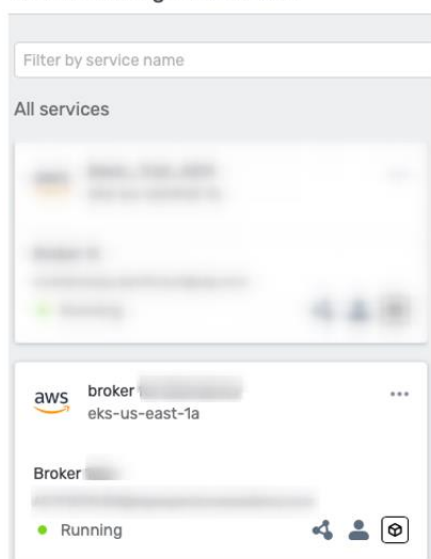
The Try Me! utility is a JavaScript application for quickly getting up and running with testing smart topics. The application uses Web Sockets and so you'll need to select the appropriate connection credentials.

From within the main AEM console, click on **Cluster Manager**



Next, select the AEM broker that you created for this workshop. The screenshot below is just an example. Your AEM instance name and Cloud Provider name will depend on what you chose!

#### Cluster Manager: Services



After selecting your AEM instance,

1 - click on the "Connect" tab

2 - order by protocol

3 - click on Solace Web Messaging.

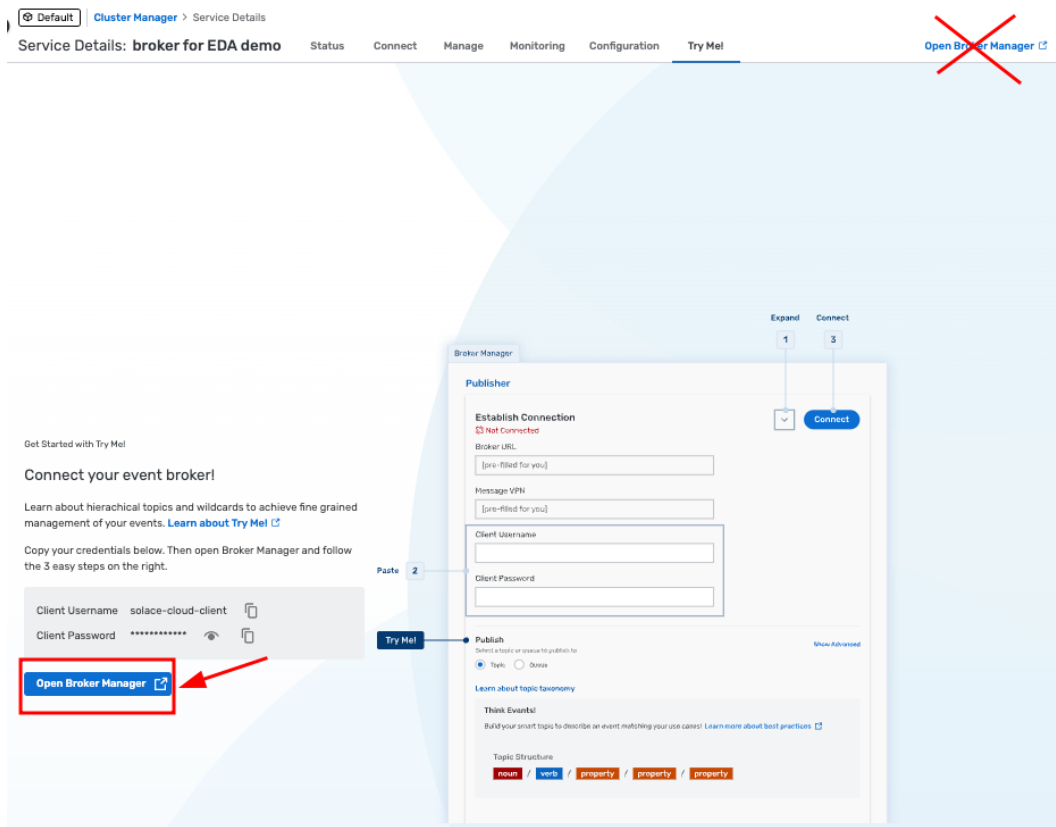
4 - click on "Solace JavaScript API" to reveal the connection credentials

Make a note of the connectivity details underneath "Solace JavaScript API".

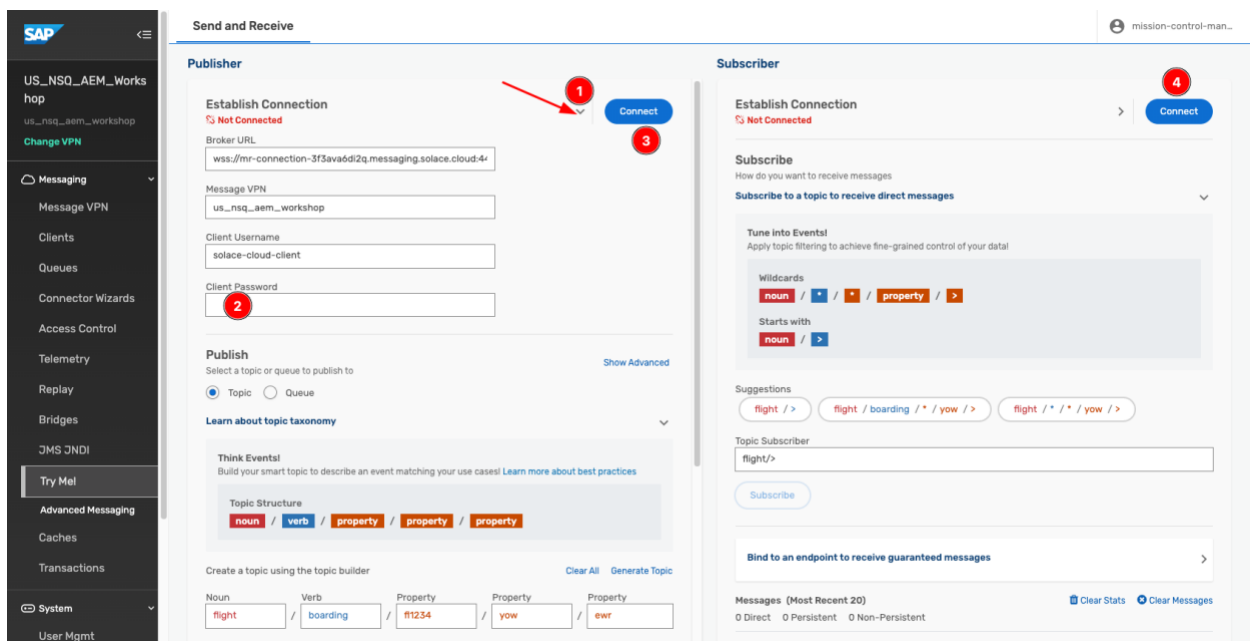
The screenshot shows the SAP Cluster Manager interface. The top navigation bar includes 'Default', 'Cluster Manager', and 'Service Details'. The main header shows 'Service Details: broker for EDA demo' with tabs for 'Status', 'Connect', 'Manage', 'Monitoring', 'Configuration', and 'Try Me!'. The 'Connect' tab is active. Below the header, there's a section 'Connect Using a Supported Client Library' with a 'View by' dropdown set to 'Protocol'. The main content area lists various messaging technologies: Solace Messaging, Solace Web Messaging (selected), AMQP, and MQTT. Under 'Solace Web Messaging', there's a table with columns 'Technology', 'Library', and 'Language'. The table lists 'Solace JavaScript API' (JavaScript) and 'Solace Node.js API' (Node.js). A red box highlights the 'Solace JavaScript API' entry, and a red arrow points to the 'Try Me!' tab. Another red box highlights the 'Solace JavaScript API' entry in the table, and a red arrow points to the 'Try Me!' tab. A third red box highlights the 'Solace JavaScript API' entry in the table, and a red arrow points to the 'Try Me!' tab. A fourth red box highlights the 'Solace JavaScript API' entry in the table, and a red arrow points to the 'Try Me!' tab.

You will use these credentials within the **Try Me Tab**. Select the **Try Me Tab** and proceed with "Open Broker Manager".

The screenshot shows the SAP Cluster Manager interface. The top navigation bar includes 'Default', 'Cluster Manager', and 'Service Details'. The main header shows 'Service Details: broker for EDA demo' with tabs for 'Status', 'Connect', 'Manage', 'Monitoring', 'Configuration', and 'Try Me!'. The 'Try Me!' tab is highlighted with a red box and a red arrow. The 'Connect' tab is also visible. Below the header, there's a section 'Connect Using a Supported Client Library' with a 'View by' dropdown set to 'Protocol'. The main content area lists various messaging technologies: Solace Messaging, Solace Web Messaging, AMQP, MQTT, and REST.



Once the Broker Manager is open, select the “Try Me” option from the left side of the menu. You will then use the credentials that you copied above to populate the left side of the screen...AKA the Publisher Side. Once the publisher side says “connected”, you can simply hit the “Connect” button on the right side to also connect your subscriber.



You are now connected to the AEM service with a publisher and subscriber utilities that can be used to send/receive messages.