

Unit 8 – Developing with SAP Extension Suite

Certification: [C_CPE_13](#)

Unit 8 – Connecting to SAP S/4HANA Cloud

Agenda

- What have we learned so far
- Connect SAP S/4HANA Cloud system with SAP BTP account
- Create SAP S/4HANA Cloud Extensibility service instance
- Use SAP S/4HANA Cloud destination
- Deploy CAP project using SAP CI/CD servi

Steps involved

1. Initialize full-stack project – Completed (Unit 1, 2)
2. Create the tables – Data Modeling – Completed (Unit 1, 2)
3. Generic handlers – Out-of-the-box CRUD functionality – Completed (Unit 1, 2)
4. Basic UI – Completed (Unit 3)
5. List Report layout – Completed (Unit 3)
6. Custom event handling – Business logic – Completed (Unit 3)
7. Support for external API – Completed (Unit 4)
8. Connecting to Sandbox – Completed (Unit 4)

Steps involved

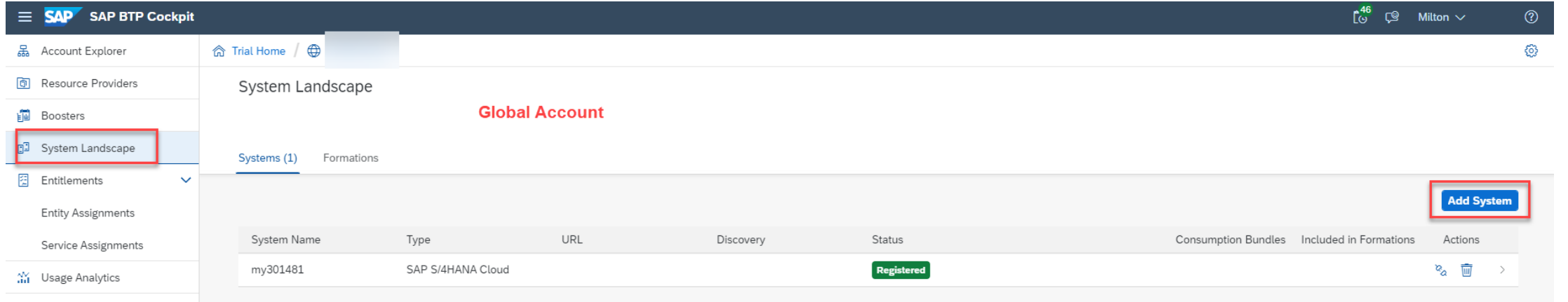
9. Consume external service in UI – Completed (Unit 4)
10. Manual deployment to CF using manifest.yml – Completed (Unit 5)
11. Manual deployment to CF using mta.yml – Completed (Unit 5)
12. Security – Restrictions and Roles– Completed (Unit 6)
13. Security – Authorization and Trust Management– Completed (Unit 6)
14. Creating an AppRouter– Completed (Unit 6)
15. Adding AppRouter to mta– Completed (Unit 6)
16. CI / CD Pipeline– Completed (Unit 7)

Connecting to SAP S/4HANA Cloud



Steps involved:

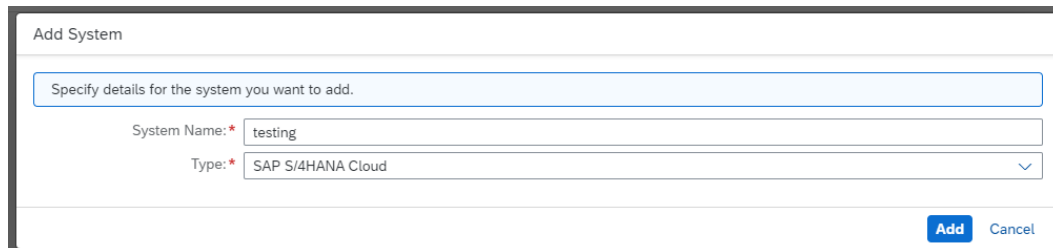
- Connect SAP S/4HANA Cloud system with SAP BTP account
- Create SAP S/4HANA Cloud Extensibility Service instance
- Use SAP S/4HANA Cloud Destination in CAP project
- Deploy CAP project

Step 1 – Connect SAP S/4HANA Cloud with SAP BTP account

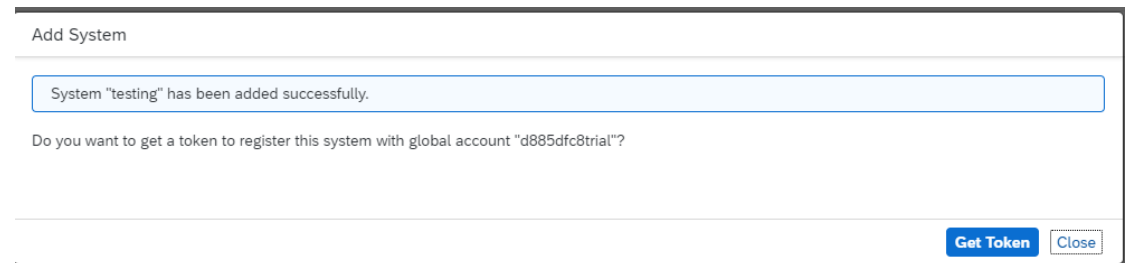


The screenshot shows the SAP BTP Cockpit interface. The left sidebar contains a menu with items: Account Explorer, Resource Providers, Boosters, System Landscape (highlighted with a red box), Entitlements, Entity Assignments, Service Assignments, and Usage Analytics. The main area is titled 'System Landscape' and 'Global Account'. Below this, there are tabs for 'Systems (1)' and 'Formations'. A table lists the systems, with one entry: 'my301481' of type 'SAP S/4HANA Cloud' with a status of 'Registered'. An 'Add System' button (highlighted with a red box) is located in the top right corner of the table area.

System Name	Type	URL	Discovery	Status	Consumption Bundles	Included in Formations	Actions
my301481	SAP S/4HANA Cloud			Registered			  >



The 'Add System' dialog box is shown. It has a title bar 'Add System' and a subtitle 'Specify details for the system you want to add.' Below this, there are two input fields: 'System Name: *' with the value 'testing' and 'Type: *' with a dropdown menu showing 'SAP S/4HANA Cloud'. At the bottom right, there are 'Add' and 'Cancel' buttons.



The 'Add System' dialog box is shown, displaying a success message: 'System "testing" has been added successfully.' Below this, there is a question: 'Do you want to get a token to register this system with global account "d885dfc8trial"?' At the bottom right, there are 'Get Token' and 'Close' buttons.

Step 1 – Connect SAP S/4HANA Cloud with SAP BTP account

SAP Home ▾

< se Event Enablement Business Partner Master Customer Master Sales Orders Mass Maintenance for Product Master Product Master Master Data Administration Outbound Deliver

Communication Management

Communication Arrangements

Communication Systems

Maintain Communication Users
4 Locked users

Maintain Extensions on SAP BTP

Display Connectivity Trace

Monitor bgRFC Queues

Display Communication Scenarios
1 Depreciated in use

< SAP Maintain Extensions on SAP BTP ▾

Search [] Integration Token: [] Description: [] Tenant: [] Changed On: MM/dd/yyyy - MM/dd/yyyy []

Changed By: [] Status: []

Go Adapt Filters

Extensions(44)

Integration Token	Description	Tenant	System Name	Changed On	Changed By	Status
	SAP Extension Suite	my301481.s4hana.ondema...		04/22/2022, 03:05:36 PM	CB9980002882	Enabled

Step 2 – Create SAP S/4HANA Cloud Extensibility Service

The screenshot displays the SAP BTP Cockpit interface. The top navigation bar includes the SAP logo, 'SAP BTP Cockpit', and user information 'Milton'. The left sidebar shows the 'Service Marketplace' with 'Instances and Subscriptions' highlighted. The main content area is titled 'Subaccount: trial - Instances and Subscriptions' and features a 'Create' button. A blue information banner states: 'To manage the Cloud Foundry user-provided service instances, navigate to Cloud Foundry - Spaces, select your space, and then from Services select Service Instances.' Below this is a search bar and filters for 'All Services', 'All Plans', and 'All Statuses'.

The 'Update Instance' form is shown with three steps: 1. Basic Info, 2. Parameters, and 3. Review. The 'Basic Info' step is active, requiring the following information:

- Service: * SAP S/4HANA Cloud Extensibility
- Plan: * api-access
- Runtime Environment: * Cloud Foundry
- Space: * dev
- System Name: * my301481
- Instance Name: * s4hana-cloud-extensibility

Step 2 – Create SAP S/4HANA Cloud Extensibility Service

The screenshot displays the SAP Cloud Connector web interface. On the left is a navigation sidebar with the following items: Connectivity, Destinations (highlighted with a red box), Cloud Connectors, Security, Users, Role Collections, Roles, Trust Configuration, Settings, Entitlements, Usage Analytics, Help and Support, Useful Links, and Legal Information. The main content area shows a table of destinations. The first row, 's4hana-cloud-extensibility' (highlighted with a red box), is selected. Below the table is the 'Destination Configuration' section, which includes a 'Subaccount' label in red and a form for configuring the destination. The form fields are: Name (s4hana-cloud-extensibility), Type (HTTP), Description (empty), URL (https://my301481-api.s4hana.ondemand.com), Proxy Type (Internet), Authentication (BasicAuthentication), User (28B8B86837C943FD94BC23073040453B), and Password (masked with dots). To the right of the form is the 'Additional Properties' section, which contains a table of key-value pairs: communicati... (SAP_COM_0008), HTML5.Dyna... (true), product.name (SAP S/4HANA Cloud), WebIDEEnab... (true), WebIDEUsage (odata_gen), and XFSsystemNa... (my301481). Each property has a trash icon to its right. At the bottom of the configuration section is a checkbox labeled 'Use default JDK truststore' which is checked. At the very bottom of the main area are five buttons: Edit, Clone, Export, Delete, and Check Connection.

Protocol	Destination Name	Authentication	Proxy Type	URL
HTTP	s4hana-cloud-extensibility	BasicAuthentication	Internet	https://my301481-api.s4hana.ondemand.com
HTTP	WM_CF_SPACE_PROVIDER	BasicAuthentication	Internet	https://deploy-service.cfapps.us10.hana.ondemand.com/api/v1/spaces/fa1ff4e5-7455-4

Destination Configuration

Subaccount

Name: * s4hana-cloud-extensibility

Type: HTTP

Description:

URL: * https://my301481-api.s4hana.ondemand.com

Proxy Type: Internet

Authentication: BasicAuthentication

User: * 28B8B86837C943FD94BC23073040453B

Password: *****

Additional Properties

communicati...	SAP_COM_0008	🗑
HTML5.Dyna...	true	🗑
product.name	SAP S/4HANA Cloud	🗑
WebIDEEnab...	true	🗑
WebIDEUsage	odata_gen	🗑
XFSsystemNa...	my301481	🗑

☒ Use default JDK truststore

[Edit](#) [Clone](#) [Export](#) [Delete](#) [Check Connection](#)

Step 3 – Use SAP S/4HANA Cloud Destination

```
},  
"cds": {  
  "requires": {  
    "API_BUSINESS_PARTNER": {  
      "kind": "odata",  
      "model": "srv\\external\\API_BUSINESS_PARTNER",  
      "[development]": {  
        "credentials": {  
          "url": "https://sandbox.api.sap.com/s4hanacloud/sap/opu/odata/sap/API_BUSINESS_PARTNER/"  
        }  
      },  
      "[production]": {  
        "credentials": {  
          "destination": "s4hana-cloud-extensibility",  
          "path": "sap/opu/odata/sap/API_BUSINESS_PARTNER/"  
        }  
      }  
    }  
  }  
}
```

Use the new destination...

Key Summary Points – Unit 8

The screenshot displays the SAP Communication Management dashboard. The top navigation bar includes the SAP logo, a 'Home' dropdown, and several menu items: 'se Event Enablement', 'Business Partner Master', 'Customer Master', 'Sales Orders', 'Mass Maintenance for Product Master', 'Product Master', 'Master Data Administration', and 'Outbound Deliver'. Below this, the 'Communication Management' section features a grid of tiles. The 'Maintain Extensions on SAP BTP' tile is highlighted with a red border. Other tiles include 'Communication Arrangements', 'Communication Systems', 'Maintain Communication Users' (showing 4 locked users), 'Display Connectivity Trace', 'Monitor bgRFC Queues', and 'Display Communication Scenarios' (showing 1 deprecated in use).

Below the dashboard, the 'Maintain Extensions on SAP BTP' sub-page is shown. It features a search bar and several filter fields: 'Integration Token', 'Description', 'Tenant', 'Changed On' (with a date range selector), 'Changed By', and 'Status'. A 'Go' button and 'Adapt Filters' link are also present. The main content area displays a table titled 'Extensions(44)'. The first row of the table has 'Integration Token' and 'Tenant' highlighted with red boxes. The table lists details for the 'SAP Extension Suite'.

Integration Token	Description	Tenant	System Name	Changed On	Changed By	Status
	SAP Extension Suite	my301481.s4hana.ondema...		04/22/2022, 03:05:36 PM	CB9980002882	Enabled

Key Summary Points – Unit 8

Update Instance

1 Basic Info 2 Parameters 3 Review

Enter basic info for your instance or subscription.

Service: * ⓘ

SAP S/4HANA Cloud Extensibility

Plan: *

api-access

Runtime Environment: *

Cloud Foundry

Space: *

dev

System Name: *

my301481

Instance Name: * ⓘ

s4hana-cloud-extensibility

Key Summary Points – Unit 8

Q2. Which service plan of the SAP BTP S/4HANA Cloud Extensibility service do you choose when you want to use the Business Partner API of your SAP S/4HANA Cloud system?

A Cloud Foundry



B SAP_COM_0008



api-access



Correct

Correct. You choose the api-access service plan of the SAP BTP S/4HANA Cloud Extensibility service to use the Business Partner API of your SAP S/4HANA Cloud system.

Key Summary Points – Unit 8

Update Instance

1

Basic Info

2

Parameters

3

Review

Configure instance parameters. ⓘ

Upload a JSON file:

Select JSON file

Browse...

Or specify the parameters in JSON format:

Clear

1 {

2 "systemName": "my301481",

3 "communicationArrangement": {

4 "communicationArrangementName": "CAP_BUPA_COMMUNICATION_ARRANGEMENT",

5 "scenarioId": "SAP_COM_0008",

6 "inboundAuthentication": "BasicAuthentication",

7 "outboundAuthentication": "BasicAuthentication",

8 "outboundServices": [

9 {

10 "name": "Replicate Customers from S/4 System to Client",

11 "isServiceActive": false

12 },

13 {

14 "name": "Replicate Suppliers from S/4 System to Client",

15 "isServiceActive": false

16 },

17 {

18 "name": "Replicate Company Addresses from S/4 System to Client",

19 "isServiceActive": false

20 },

21 }

< Back

Next >

Update Instance

Cancel

Key Summary Points – Unit 8

Q3. What is required when registering an SAP S/4HANA Cloud system in your SAP BTP global account?

- ☒ A token
- ☐ B A coin
- ☐ C A voucher
- ☐ D A developer

☒ Correct

Correct. A token is required when registering an SAP S/4HANA Cloud system in your SAP BTP global account.