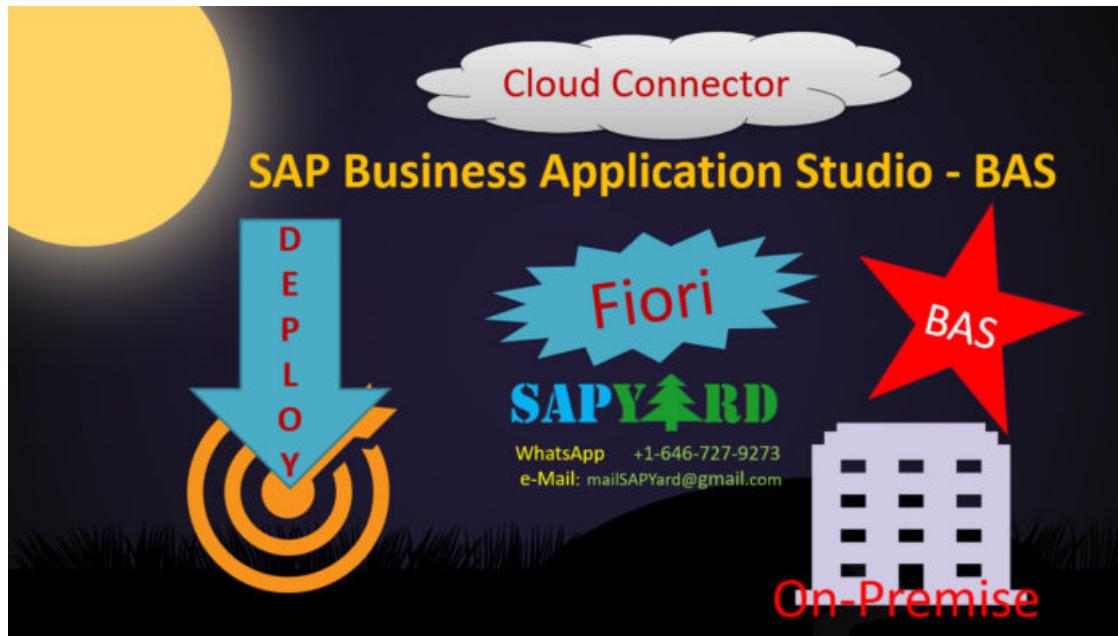


BAS 2 – How to Deploy Fiori App to On-Premise System from SAP Business Application Studio?

By **Rishi** - November 5, 2020



In our other tutorial we showed [how to migrate SAPUI5 Project from the old Web IDE to the new BAS IDE or SAP Business Application Studio](#). After going through the post, many readers asked to put a tutorial on how to deploy SAPUI5 App from SAP BAS to the backend SAP System. And here we are.

But before that, we have a new training announcement to make.

NEW TRAINING ANNOUNCEMENT

ABAP RESTful Application Programming On Cloud & On Premise Training S/4HANA
1909 – Starts 14th Nov 2020

Training Days – 14, 15, 21, 22, 28, 29 Nov, 5, 6, 12 & 13 Dec 2020
Time – 7:30 AM to 9:30 AM IST GMD+5.5

[Pay the Fee & Enroll](#)

[High Level Agenda](#)

Disclaimer : *This is going to be a long post, do bear with us. It is worth the length so that you do not need to hop to multiple tutorials to get all the ends working.*

Deploy Fiori App to On-Premise System from SAP Business Application Studio

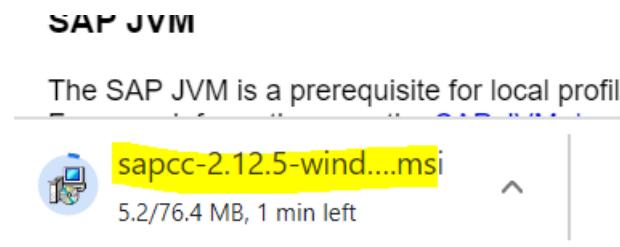
1. **Installing SAP Cloud Connector & Download SAP JVM as well**
2. **Connect to SAP Cloud Platform Trial Account from Cloud Connector**
3. **Add On-Premise System to SAP Cloud Connector (for Cloud to On Premise)**
4. **Provide mandatory roles to CF user**
5. **Create Destination from Cloud Platform to On-Premise via SAP Cloud Connector**
6. **Subscribe to SAP Business Application Studio**
7. **Create Sample Fiori Elements Application by Consuming OData Service from BAS**
8. **Deploy App to On-Premise, troubleshooting**

Step 1: Install SAP Cloud Connector

<https://tools.hana.ondemand.com/#cloud>

The screenshot shows the SAP Development Tools website with the URL <https://tools.hana.ondemand.com/#cloud>. The main navigation bar includes links for HOME, ABAP, BW, CLOUD, CLOUD INTEGRATION, HANA, IDM, ML FOUNDATION, MOBILE, and SAPUI5. The CLOUD menu is currently selected. Below the navigation, there is a table for the Cloud Connector, which lists three operating systems: Linux (x64), Mac OS X (x64), and Windows (x64). Each row shows the version (1.25.0), file size (5.8 MB), and download link (sapcc-2.12.5--x64.tar.gz (sha1)). A note below the table states: "The Cloud Connector is an optional on-premise component that is needed to integrate on-demand applications with customer backend services and is the counterpart of SAP Cloud Platform Connectivity. For more information, see the Cloud Connector documentation." A note also specifies: "Note: The Portable archives for Cloud Connector are meant for non-productive scenarios only. They can be used even if you don't have administrator permissions on the machine, on which you like to use the Cloud Connector. However, those variants do not support upgrades from previous versions." Below this, another table titled "Available Cloud Connectors" lists the same three operating systems with their respective architectures (x86_64) and versions (2.12.5). The download links for Mac OS X (Portable) and Windows (Portable) are highlighted in yellow. At the bottom of the page, a note reads: "Read the [prerequisites](#) page of the documentation in order to inform yourself about the supported operating system versions and JVMs."

Started downloading.



Download SAP JVM:

The SAP JVM is a prerequisite for local profiling with the SAP JVM Profiler. It is a standard compliant certified JDK, supplemented by additional supportability and developer features and extensive monitoring and tracing facilities. For more information, see the [SAP JVM documentation](#).

SAP JVM

SAP JVM is supported for: SUSE Linux Enterprise Server 12 and 15; Redhat Enterprise Linux 7 and 8; Oracle Linux 7 and 8; Windows 10, Windows Server 2012, Windows Server 2012 R2, Windows Server 2016 and Windows Server 2019; Mac OS X 10.13 (High Sierra), Mac OS X 10.14 (Mojave) and Mac OS X 10.15 (Catalina).

*SAP JVM 7 will only be supported till end of the year 2020 – It's strongly recommended to migrate existing workload to a SAP JVM 8 based solution now.

Operating System*	Architecture	Version**	File Size	Download
Linux	x86_64	7.1.072	103.6 MB	sapjvm-7.1.072-linux-x64.zip (sha1)
Linux	x86_64	7.1.072	102.9 MB	sapjvm-7.1.072-linux-x64.rpm (sha1)
Linux	x86_64	8.1.065	123.1 MB	sapjvm-8.1.065-linux-x64.zip (sha1)
Linux	x86_64	8.1.065	119.0 MB	sapjvm-8.1.065-linux-x64.rpm (sha1)
Mac OS X	x86_64	7.1.072	105.4 MB	sapjvm-7.1.072-macosx-x64.zip (sha1)
Mac OS X	x86_64	8.1.065	123.6 MB	sapjvm-8.1.065-macosx-x64.zip (sha1)
Windows	x86_64	7.1.072	120.3 MB	sapjvm-7.1.072-windows-x64.zip (sha1)
Windows	x86_64	8.1.065	150.2 MB	sapjvm-8.1.065-windows-x64.zip (sha1)

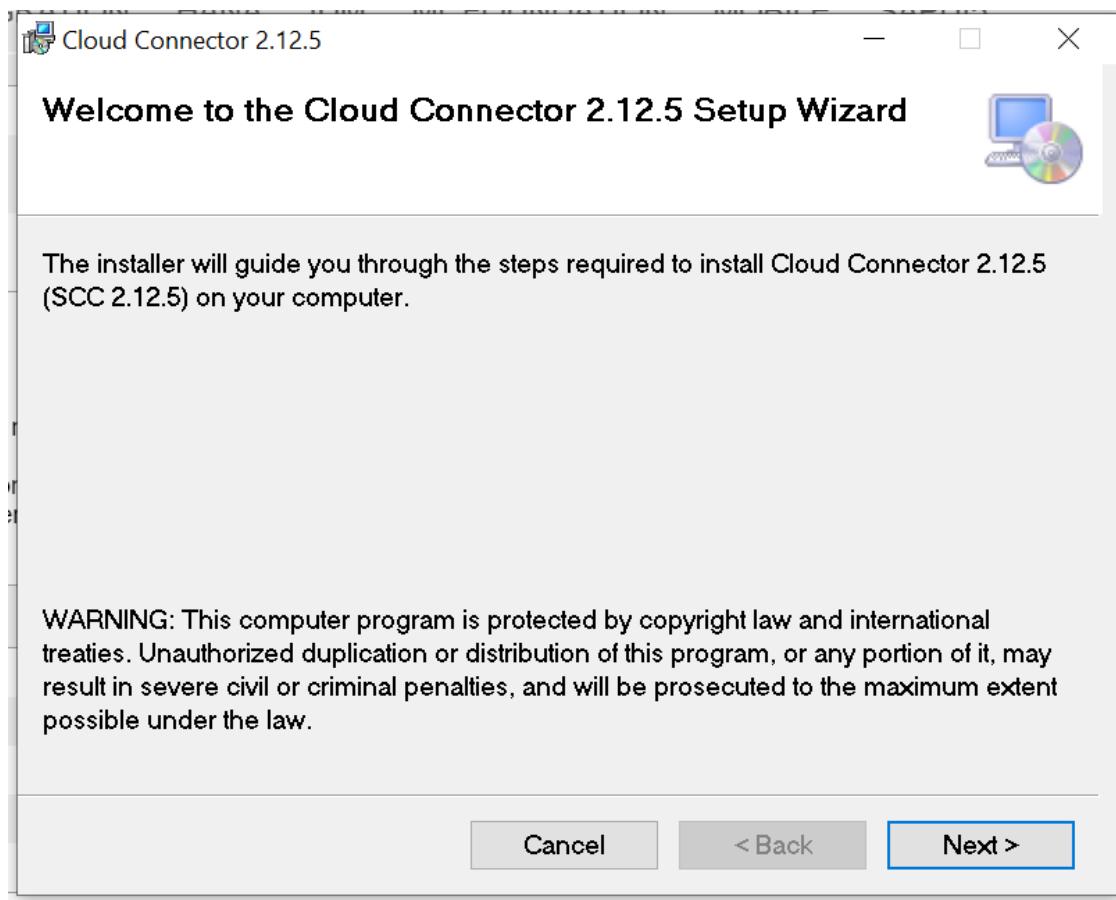
Extract the files into a separate folder.

We have a video explaining all the steps mentioned in this article. You may watch the video below and go through this step by step tutorials simultaneously for more clarity.

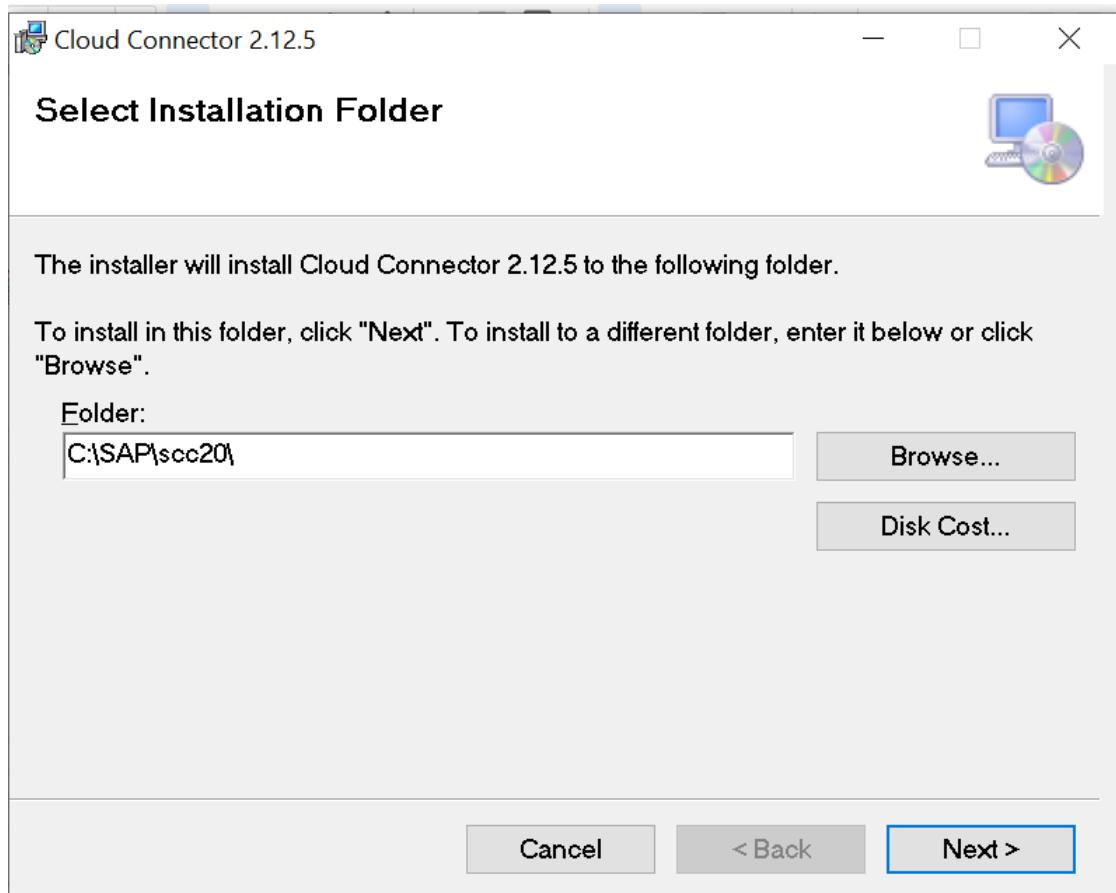
How to Deploy Fiori Apps Using SAP BAS?

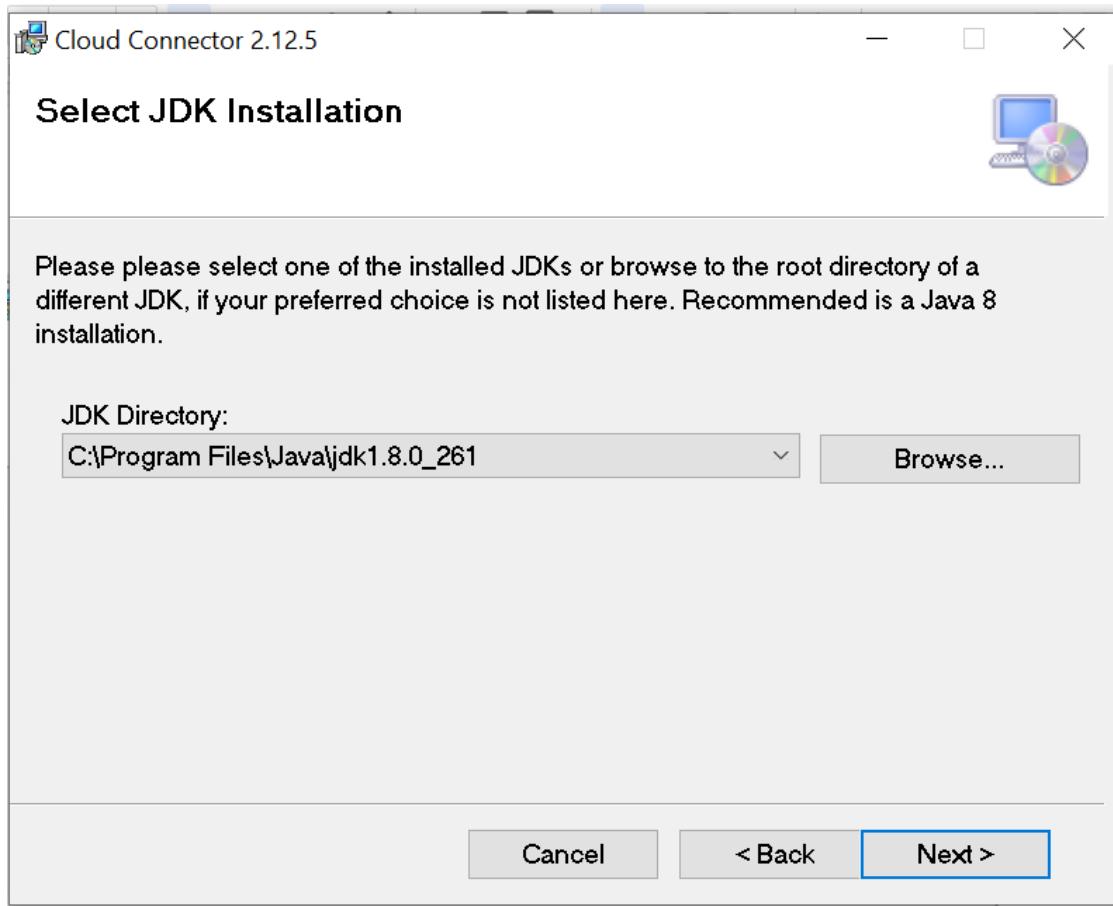
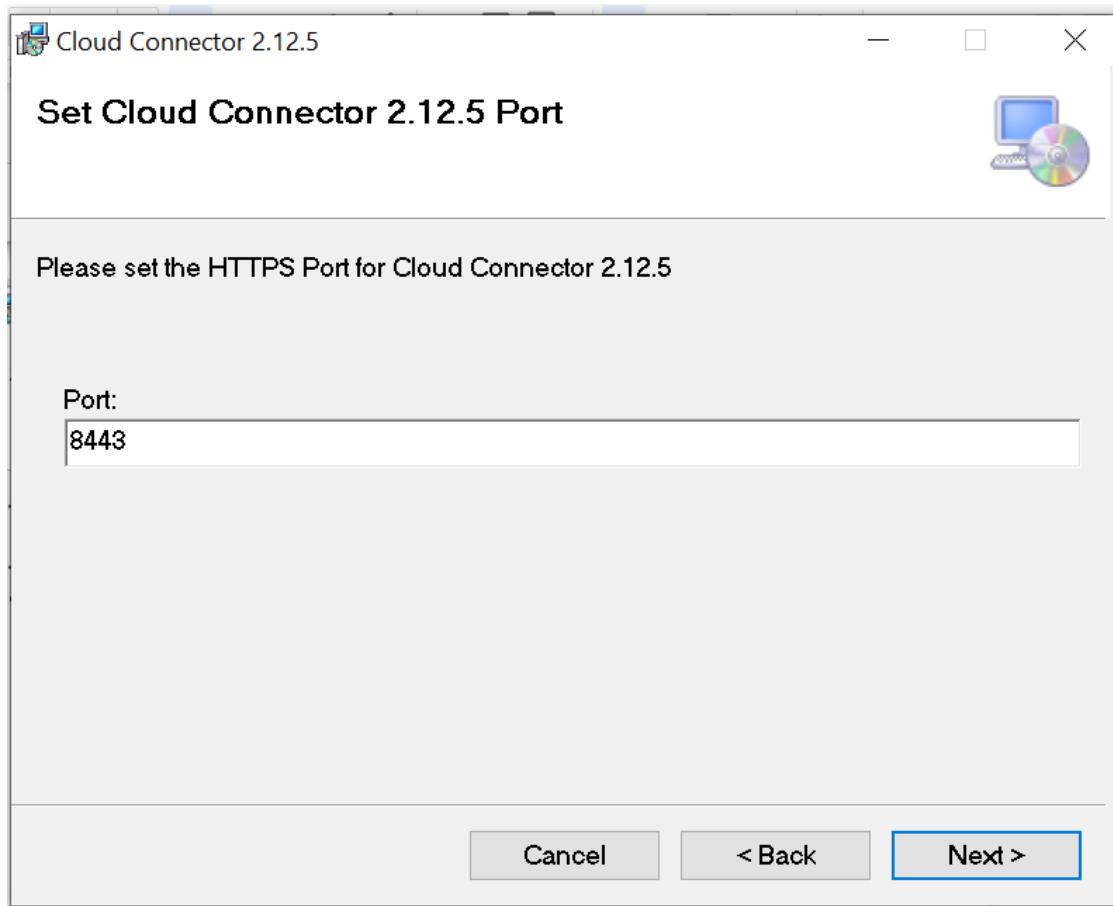
Run SAP Cloud Connector by clicking on the download file (from Step1).

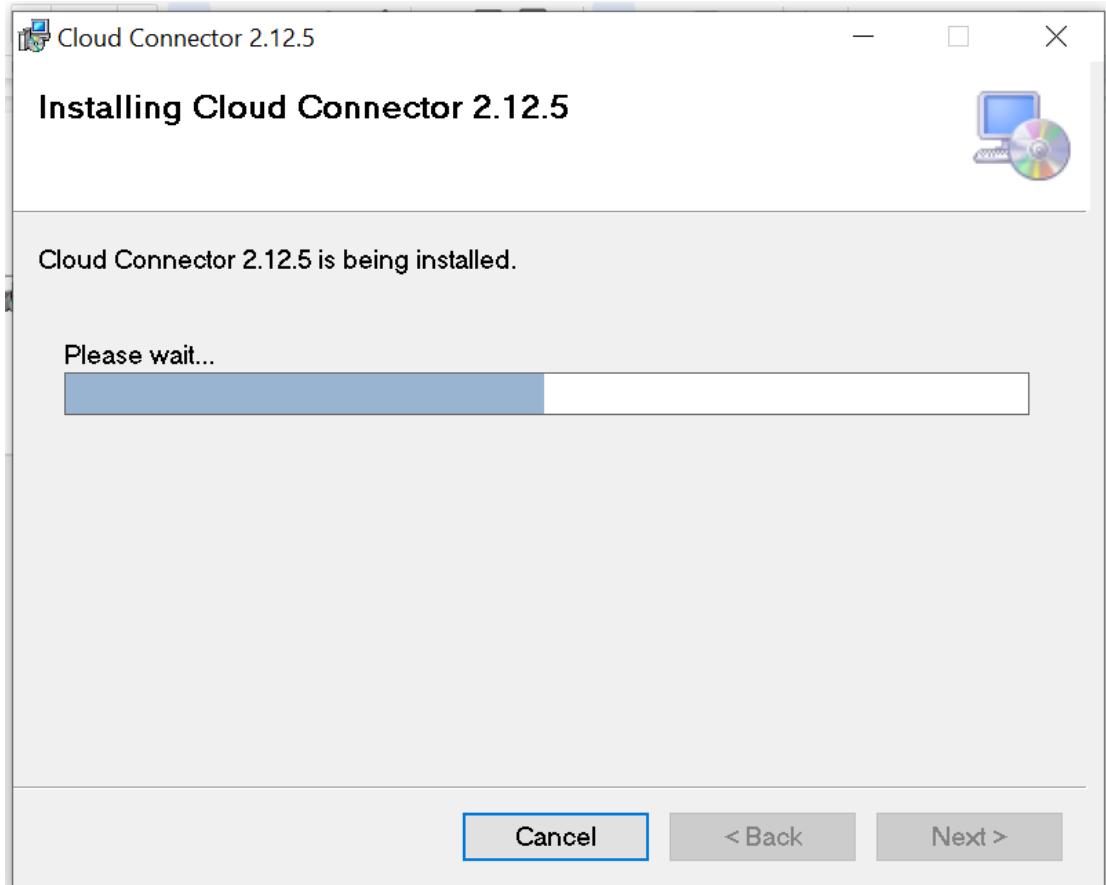
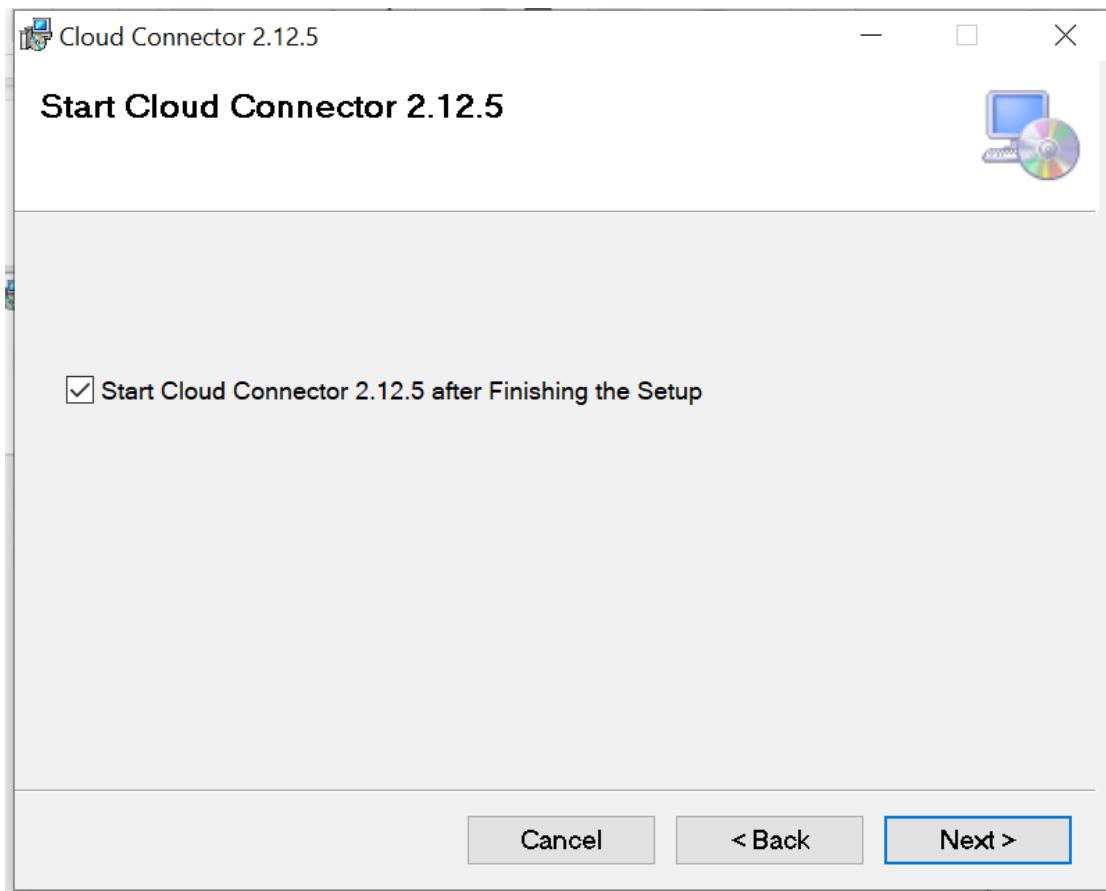
Follow the below dialog boxes



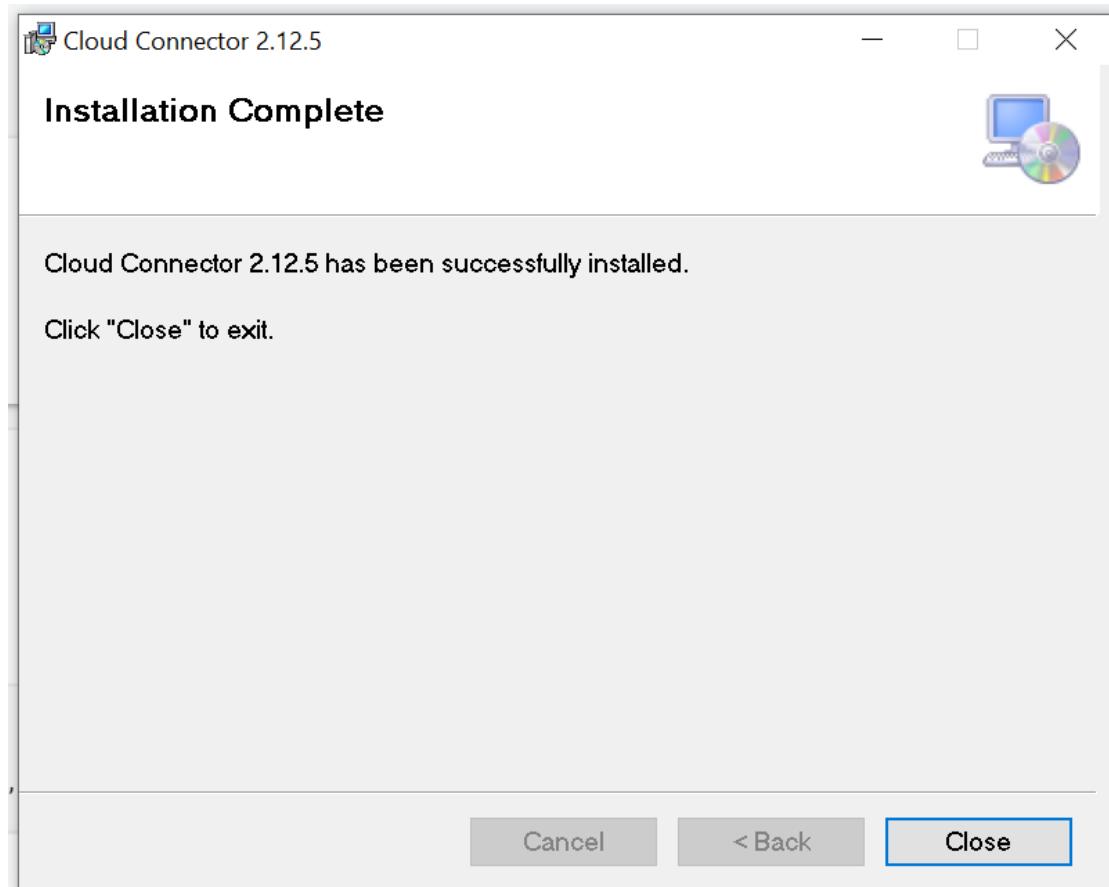
rm yourself about the supported operating system versions and JVMs.



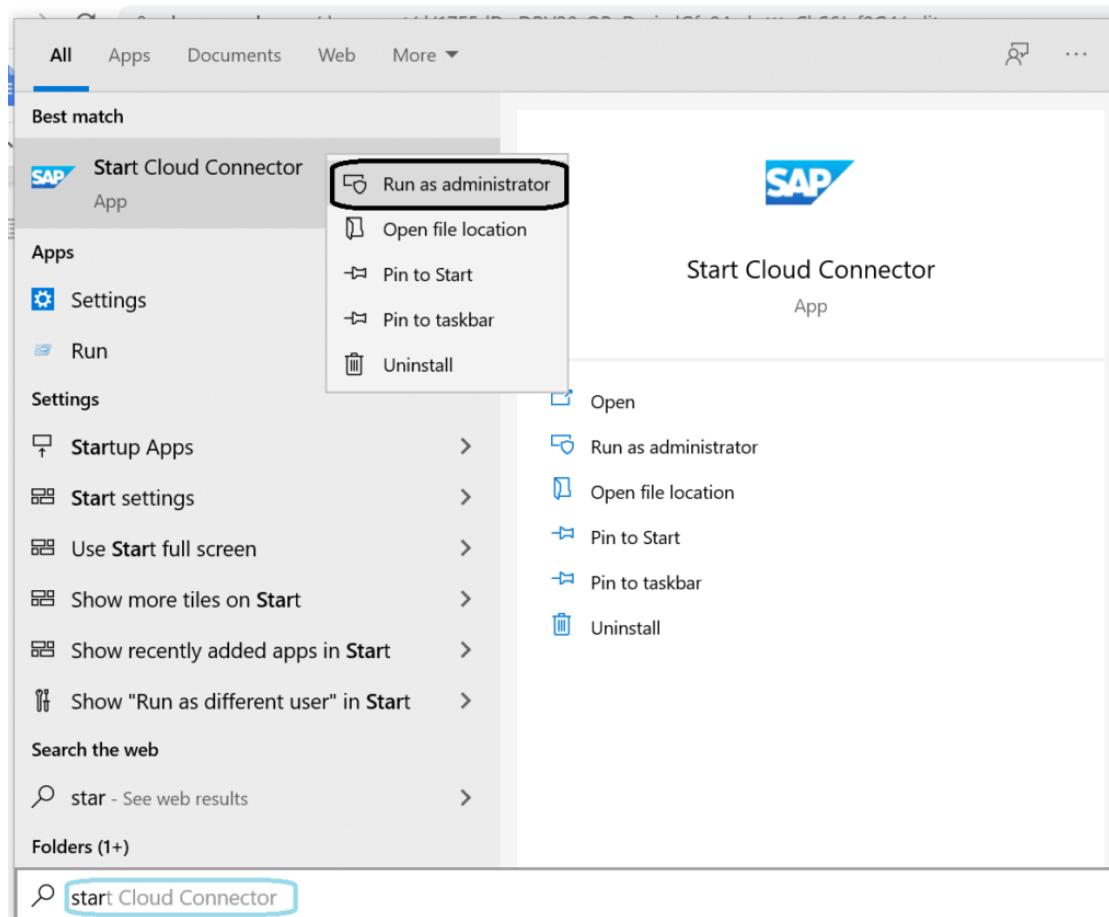




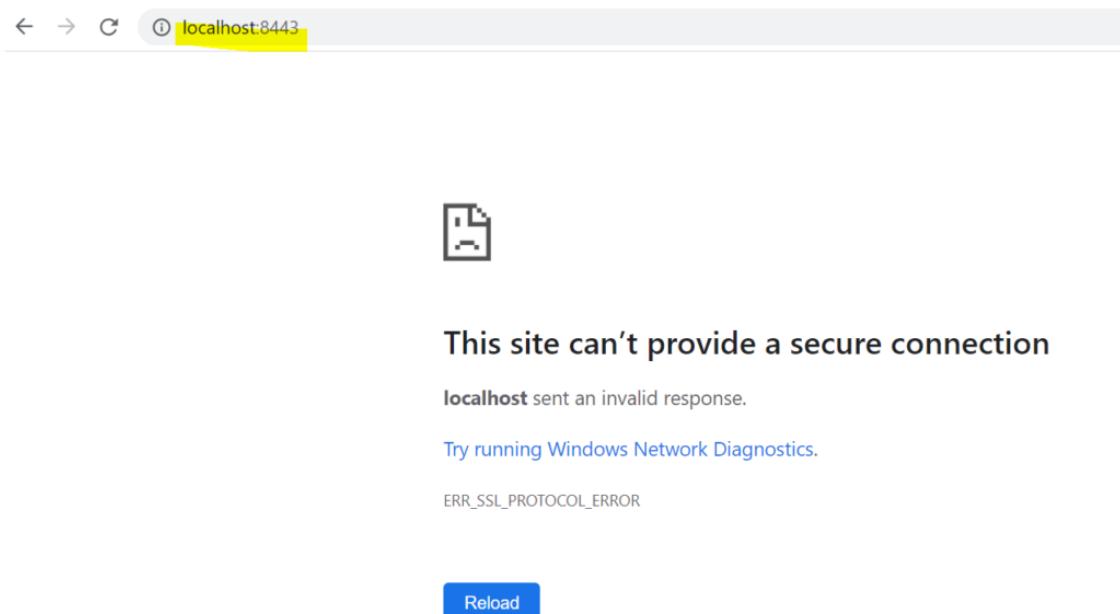
If you get any error or installation failed at this stage please re-install. I have got it successfully on my second attempt.



Try to run 'Start Cloud Connector'



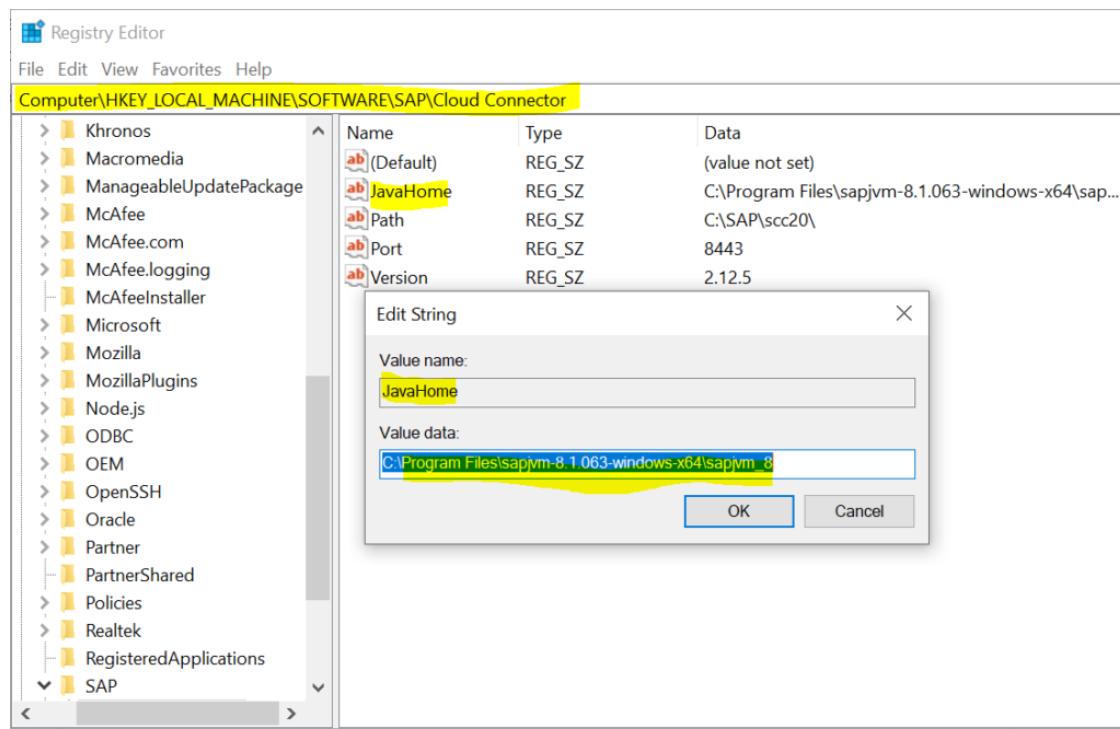
Run the URL: <https://localhost:8443/>



Change Registry Editor Settings.

Windows + S -> Type 'Registry Editor'

Navigate to below Path: Computer\HKEY_LOCAL_MACHINE\SOFTWARE\SAP\Cloud Connector

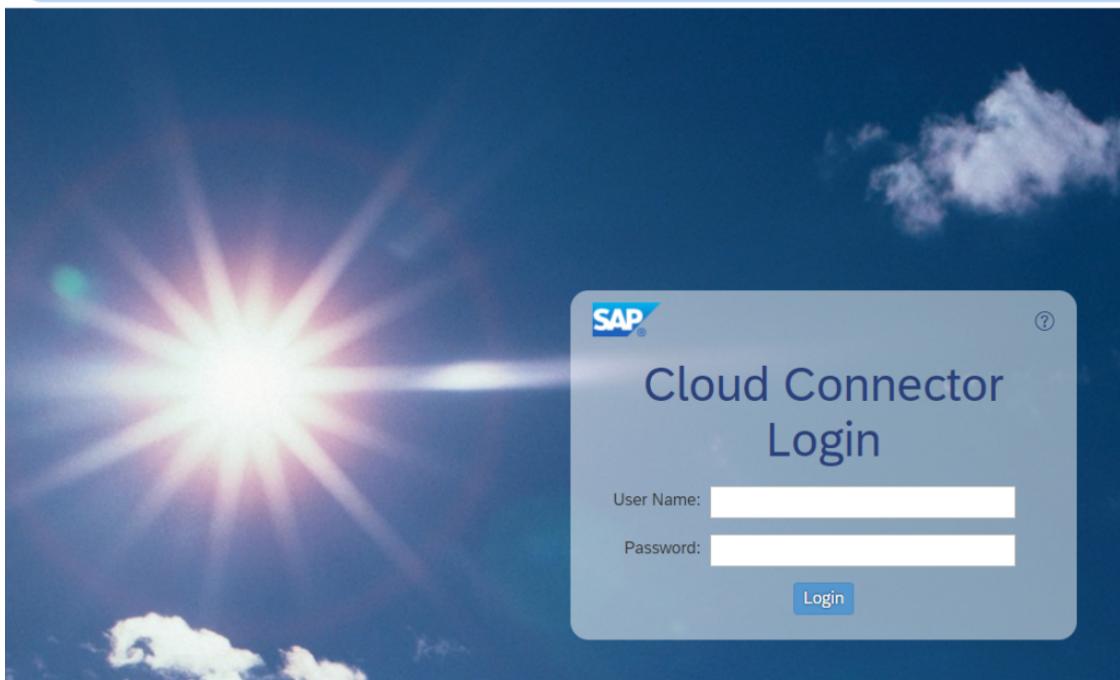


Now restart your system and run 'Start Cloud Connector' again (run as admin).

Wait for 5 to 10 seconds.

Then run the URL again. <https://localhost:8443/>

⚠ Not secure | localhost:8443



Provide :

User name: 'Administrator' (case sensitive, it has capital 'A')

Password: 'manage'



Change the password:

Initial Setup

Mandatory Password Change

Choose Installation Type

Master (Primary Installation)

Shadow (Backup Installation)

Description:

Step2: Connect Cloud Trial account to Cloud Connector

Cloud Connector Administration

Administrator

Define Subaccount

First Subaccount

Region: Europe (Frankfurt) - AWS

Subaccount: 2d9261b8-04dc-41a6-9771-a32cca4198b5

Display Name: RishiTrial

Login E-Mail: rishisaprap@gmail.com

Password:

Location ID: Enter location ID to overwrite default

Description:

HTTPS Proxy

Host:

Port:

User:

Password:

Cloud Connector Administration

Administrator

RishiTrial

Network is unreachable: no further information: connectivitynotification.cf.eu10.hana.ondemand.com/64:ff9b:0:0:0:37c:de4d:443

Connect Import Export

Connector State

Region: Europe (Frankfurt) - AWS

Region Host: cf.eu10.hana.ondemand.com

HTTPS Proxy:

Subaccount: 2d9261b8-04dc-41a6-9771-a32cca4198b5

Initiated By: rishisaprap@gmail.com

Location ID:

Description:

Disaster Recovery Subaccount

Status: Not configured

Region Host:

Subaccount:

User:

Tunnel Information

Status: Failed to connect

Important Links

The screenshot shows the SAP Cloud Connector Administration interface for the RishiTrail connector. The left sidebar shows navigation options like Security Status, Alerting, High Availability, and Configuration. Under the RishiTrail section, 'Cloud To On-Premise' is selected. The main panel displays connector state information: Region: Europe (Frankfurt) - AWS; Region Host: cf.eu10.hana.ondemand.com; HTTPS Proxy: None; Subaccount: Certificate valid; System Certificate: Valid. It also shows Disaster Recovery Subaccount status: Not configured. Tunnel Information is listed below.

Step 3: Add On-Premise System to SAP Cloud Connector (for Cloud to On Premise)

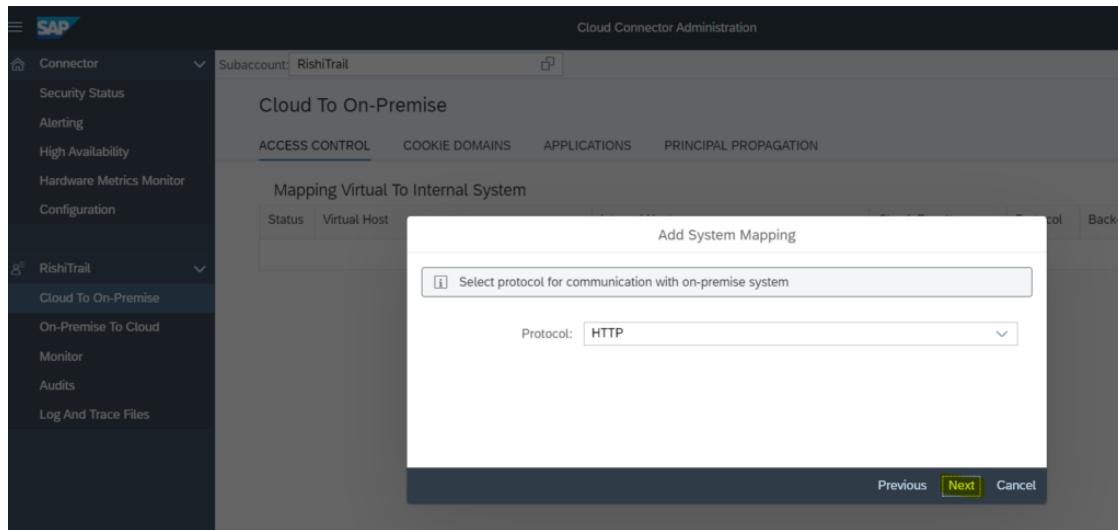
Go to 'Cloud to On-Premise' on the right, now Click '+' to add system details.

The screenshot shows the SAP Cloud Connector Administration interface with the 'Cloud To On-Premise' tab selected. The left sidebar shows the RishiTrail connector details. The main panel displays the 'Cloud To On-Premise' configuration with tabs for ACCESS CONTROL, COOKIE DOMAINS, APPLICATIONS, and PRINCIPAL PROPAGATION. A table titled 'Mapping Virtual To Internal System' is shown, with a '+' button to add new mappings.

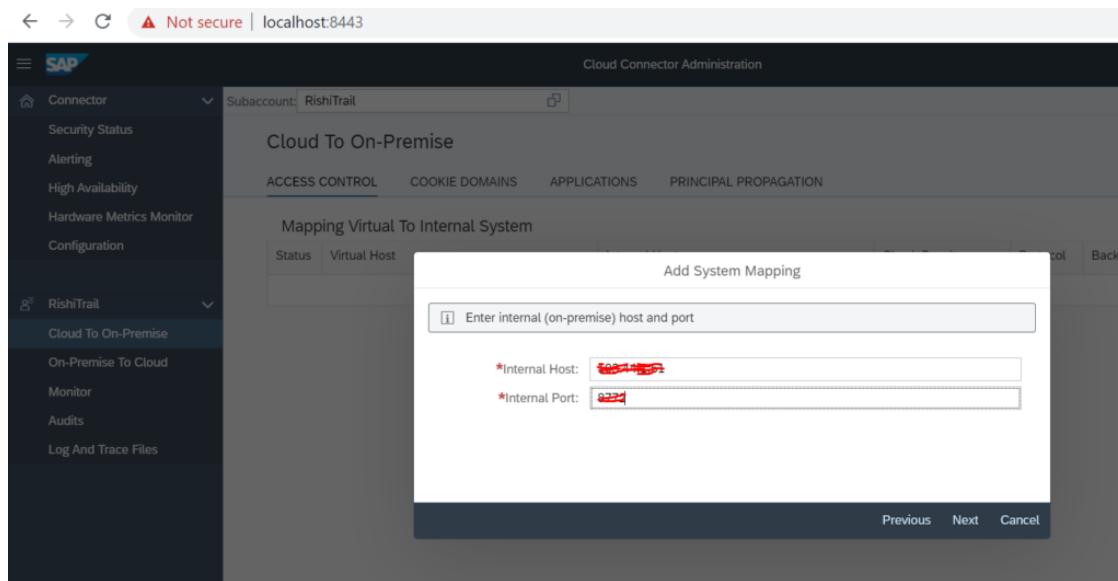
Select ABAP System.

The screenshot shows the SAP Cloud Connector Administration interface with the 'Cloud To On-Premise' tab selected. The left sidebar shows the RishiTrail connector details. The main panel displays the 'Cloud To On-Premise' configuration with tabs for ACCESS CONTROL, COOKIE DOMAINS, APPLICATIONS, and PRINCIPAL PROPAGATION. A modal dialog titled 'Add System Mapping' is open, showing a dropdown menu for 'Select back-end type of on-premise system' with 'ABAP System' selected. Navigation buttons Previous, Next, and Cancel are at the bottom of the dialog.

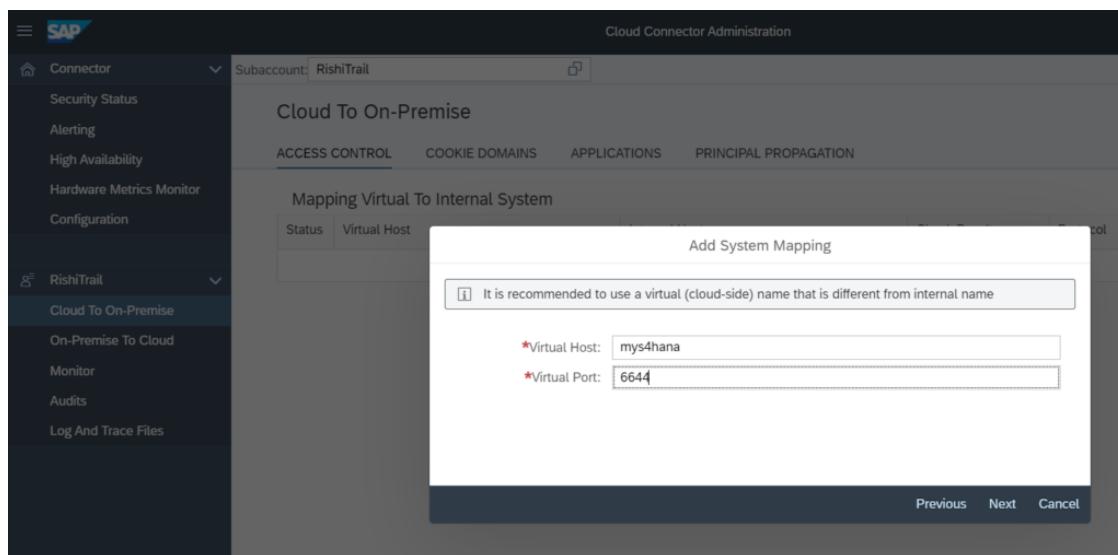
Select protocol as HTTP.

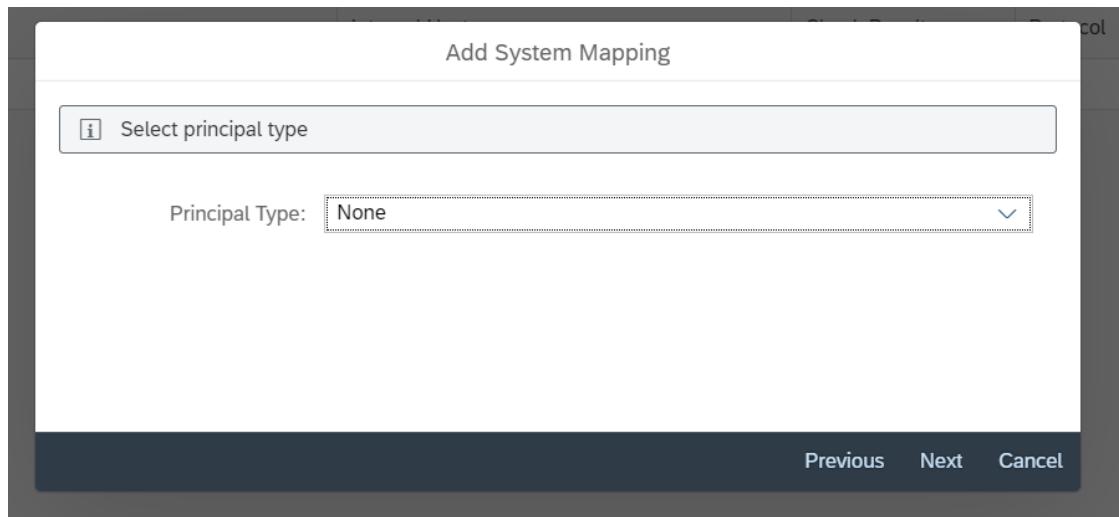


Provide Internal host : Ip address of the server, Internal Port : (check in SMICM -> transaction -> Goto -> Services check port number for HTTP) . Here eg: 8772.



Provide Virtual name & Port for the underlying host. (we can give any name). We provide this virtual host in SAP Cloud Platform, click on Next.



Select 'None'

Choose 'Use Virtual Host'.

Finish.

Test the connection, by clicking on the icon shown below

Subaccount: RishiTrail

Cloud To On-Premise

ACCESS CONTROL COOKIE DOMAINS APPLICATIONS PRINCIPAL PROPAGATION

Mapping Virtual To Internal System

Status	Virtual Host	Internal Host	Check Result	Protocol	Back-end Type	Actions
◇	mys4hana:6644	103.44.1.51:8772	Unchecked	HTTP	ABAP System	

Resources Of mys4hana:6644

Status	URL Path	Access Policy	Actions
		No data	

If the connection is successful, you will get 'Reachable' as shown below.

Subaccount: RishiTrail

Cloud To On-Premise

ACCESS CONTROL COOKIE DOMAINS APPLICATIONS PRINCIPAL PROPAGATION

Mapping Virtual To Internal System

Status	Virtual Host	Internal Host	Check Result	Protocol	Back-end Type	Actions
◇	mys4hana:6644	103.44.1.51:8772	Reachable	HTTP	ABAP System	

Resources Of mys4hana:6644

Status	URL Path	Access Policy	Actions
		No data	

Now add URL path, to access the services. Click on '+' as shown below.

Subaccount: RishiTrail

Cloud To On-Premise

ACCESS CONTROL COOKIE DOMAINS APPLICATIONS PRINCIPAL PROPAGATION

Mapping Virtual To Internal System

Status	Virtual Host	Internal Host	Check Result	Protocol	Back-end Type	Actions
◇	mys4hana:6644	103.44.1.51:8772	Reachable	HTTP	ABAP System	

Resources Of mys4hana:6644

Status	URL Path	Access Policy	Actions
		No data	

Provide : URL Path -> /SAP/

Check 'Active'

Choose the radio button 'Path and All Sub-Paths'

Subaccount: RishiTrail

Cloud To On-Premise

ACCESS CONTROL COOKIE DOMAINS APPLICATIONS PRINCIPAL PROPAGATION

Mapping Virtual To

Status	Virtual Host
mys4hana:664	

Resources Of mys4hana:664

Status	URL Path

Add Resource

*URL Path: /sap/

Active:

WebSocket:

Access Policy:

- Path Only (Sub-Paths Are Excluded)
- Path And All Sub-Paths

Description:

Back-end Type: ABAP System

Save Cancel

Step 4: Provide Mandatory Roles to CF user

Go to your trial account home page.

Welcome to SAP Cloud Platform Trial

Learn how to create and deploy cloud apps and gain access to a comprehensive set of platform services.

Enter Your Trial Account

Quick Tool Access

SAP Business Application Studio

Develop business applications using SAP's next-generation, Web-based IDE

CLI for SAP Cloud Platform

Manage your trial account using the command-line interface

APIs for SAP Cloud Platform

Manage, build, and extend the core capabilities of SAP Cloud Platform

Choose your subaccount.

Global Account: **5ea6604trial** - Subaccounts
Subdomain: 5ea6604trial-ga
All: 1

trial

Provider: Amazon Web Services (AWS)
Region: Europe (Frankfurt) - AWS
Description: -none-
Environment: Multi Environment

New Subaccount Switch Global Account Delete Trial Account All Environments Search Subaccounts

Learn how global accounts and subaccounts relate to each other and find recommendations for setting up your account model.

Click on 'Trust Configuration' on the left.

Cloud Foundry

Spaces

Quota Plans

Org Members

Connectivity

Destinations

Security

Trust Configuration

Entitlements

Usage Analytics

Subaccount: trial

Subdomain: 5ea6604trial
ID: 2d9261b8-**5ea6604trial**-41a6-9771-a32cca4198b5

1 (24 available)
Active Subscriptions

Cloud Foundry Environment			Entitlements		
Org Name: 5ea6604trial	Spaces (1)		Create		
Org ID: ef067b6d-b-40c2-a234-441b0620c919	Name	Applications	Service Instances		
Members: 1	dev	2	14		
API Endpoint: https://api.cf.eu10.hana.ondemand.com					
Disable Cloud Foundry					

Click 'sap.default' to assign roles.

Cloud Foundry

Spaces

Quota Plans

Org Members

Connectivity

Destinations

Security

Role Collections

Roles

Trust Configuration

Entitlements

Usage Analytics

Subaccount: trial - Trust Configuration

All: 1

Status	Name	Description	Origin Key	Available for User
Default	sap.default	sap.default	<input checked="" type="checkbox"/>	

Establish Trust Manual Setup: **New Trust Configuration** **SAML Metadata**

Learn more about how to [configure trust](#) and [how to assign role collections](#).

Provide your cloud trial email : and click on 'Show Assignments'

E-Mail Address: * rishisaprap@gmail.com [Show Assignments](#) [Assign Role Collection](#)

No Role Collection Assignments

[Learn more about assigning role collections to users.](#)

Click on 'Assign Role Collection'.

E-Mail Address: * rishisaprap@gmail.com [Show Assignments](#) [Assign Role Collection](#)

Role Collection

Subaccount Administrator

[Learn more about assigning role collections to users.](#)

Assign role 'Business_Application_Studio_Developer'. And click 'Assign Role Collection'.

E-Mail Address: * Assign Role Collection

Role Collection: Business_Application_Studio_Developer [Assign Role Collection](#) Cancel

Role Collection assigned successfully

[Learn more about assigning role collections to users.](#)

Finally it looks as below.

Trust Configuration: sap.default - Role Collection Assignment

All: 2

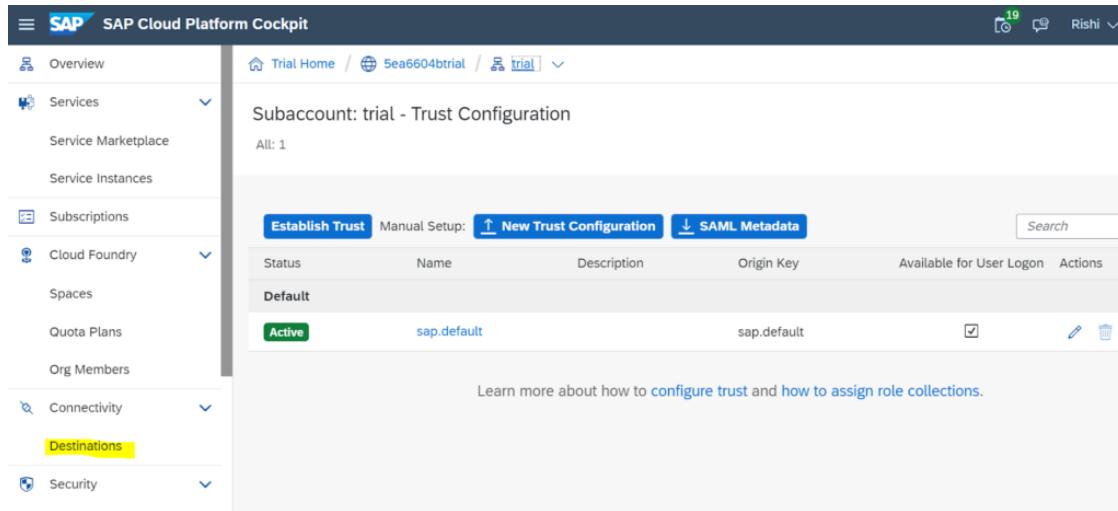
Search 

E-Mail Address: *	rishiaprap@gmail.com	Show Assignments	Assign Role Collection
Role Collection			Actions
Subaccount Administrator			
Business_Application_Studio_Developer			

Learn more about [assigning role collections to users](#).

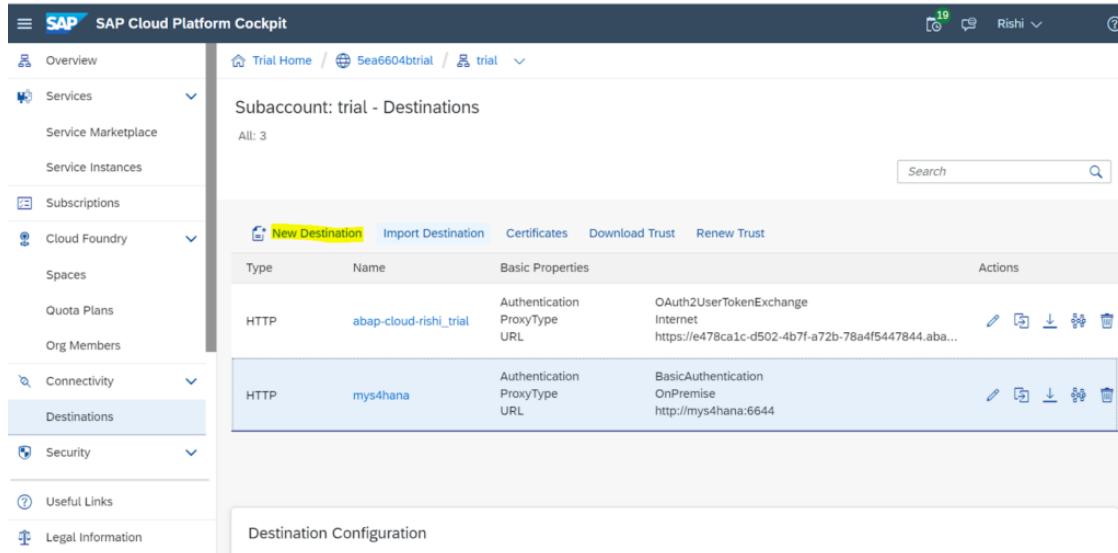
Step 5: Create Destination from Cloud Platform to On-Premise via SAP Cloud Connector

Now Click on 'Destinations' on the right side.



The screenshot shows the SAP Cloud Platform Cockpit interface. The left sidebar is open, showing various service categories like Overview, Services, Subscriptions, Cloud Foundry, Connectivity, Destinations (which is highlighted in yellow), and Security. The main content area is titled "Subaccount: trial - Trust Configuration". It displays one entry: "Default" (Status: Active, Name: sap.default, Origin Key: sap.default). Below the table, there is a link to "Learn more about how to [configure trust](#) and [how to assign role collections](#)".

Click on 'New Destination'.



The screenshot shows the SAP Cloud Platform Cockpit interface. The left sidebar is open, showing various service categories like Overview, Services, Subscriptions, Cloud Foundry, Connectivity, Destinations (which is highlighted in blue), and Security. The main content area is titled "Subaccount: trial - Destinations". It displays two entries: "abap-cloud-rishi_trial" (Type: HTTP, Name: abap-cloud-rishi_trial, Authentication: OAuth2UserTokenExchange, ProxyType: Internet, URL: https://e478ca1c-d502-4b7f-a72b-78a4f5447844.aba...) and "mys4hana" (Type: HTTP, Name: mys4hana, Authentication: BasicAuthentication, ProxyType: OnPremise, URL: http://mys4hana:6644). Below the table, there is a section titled "Destination Configuration".

Here we need to provide on-premise system details. (More details are given below the screen shot).

The screenshot shows the SAP Business Application Studio interface. On the left, there's a sidebar with various navigation options like Overview, Services, Subscriptions, Cloud Foundry, Spaces, Quota Plans, Org Members, Connectivity, Destinations, Security, and Useful Links. The 'Destinations' option is currently selected. The main panel on the right displays the configuration for a new service. The 'Name:' field is set to 'mys4hana'. The 'Type:' is 'HTTP'. The 'Description:' is 'My S41909'. The 'URL:' is 'http://mys4hana:6644'. The 'Proxy Type:' is 'OnPremise'. The 'Authentication:' is 'BasicAuthentication'. The 'Location ID:' is empty. The 'User:' is 'demo' and the 'Password:' is '*****'. Below this, under 'Additional Properties', there are several key-value pairs: 'HTML5.DynamicDestination' is 'true', 'HTML5.Timeout' is '60000', 'sap-client' is '800', 'WebIDEEnabled' is 'true', 'WebIDESystem' is 'mys4hana', and 'WebIDEUsage' is 'odata_abap,dev_abap,ui5_execute_abap,bsp_execute_abap,odata_gen'. Each pair has a small trash icon to its right.

System Details:

Name: mys4hana (you can give any name)

Type : HTTP

Description: any text

URL: http://(yourvirtualhost:port) eg: <http://mys4hana:6644>, as configured in Cloud Connector(shown below)

The screenshot shows the SAP Cloud Connector Administration interface. The left sidebar includes options for Connector, Security Status, Alerting, High Availability, Hardware Metrics Monitor, Configuration, RishiTrail (which is selected), Cloud To On-Premise, On-Premise To Cloud, Monitor, and Audits. The main area is titled 'Cloud To On-Premise' and contains three tabs: ACCESS CONTROL, COOKIE DOMAINS, and APPLICATIONS. Under 'ACCESS CONTROL', there's a table for 'Mapping Virtual To Internal System'. It shows one entry: 'mys4hana:6644' in the 'Virtual Host' column and a redacted URL in the 'Internal Host' column. The 'Protocol' is 'HTTP' and the 'Back-end Type' is 'SAP Gateway'. There are also columns for 'Status', 'Check Result', and 'Actions'. Below this table is another section titled 'Resources Of mys4hana:6644' with a similar table structure, showing a single entry for '/sap/'. The 'Access Policy' is 'Path And All Sub-Paths'.

Properties:

1. HTML5.DynamicDestination – true
2. HTML5.Timeout – 60000
3. WebIDEEnabled – true
4. WebIDESystem – mys4hana (same as destination name)
5. WebIDEUsage – odata_abap,dev_abap,ui5_execute_abap,bsp_execute_abap,odata_gen
6. sap-client – 800

And then click on 'Save'

The screenshot shows the SAP Business Application Studio interface. On the left, a sidebar menu includes 'Overview', 'Services' (selected), 'Service Marketplace', 'Service Instances', 'Subscriptions', 'Cloud Foundry' (selected), 'Spaces', 'Quota Plans', 'Org Members', 'Connectivity' (selected), 'Destinations' (selected), 'Security', and 'Useful Links'. The main panel displays the configuration for a proxy service named 'mys4hana'. The configuration fields include:

- Name: mys4hana
- Type: HTTP
- Description: My S41909
- URL: http://mys4hana:6644
- Proxy Type: OnPremise
- Authentication: BasicAuthentication
- Location ID: (empty)
- User: demo
- Password: *****

Below these fields is a section titled 'Additional Properties' containing a table of destination configurations:

Property	Value
HTML5.Dyna...	true
HTML5.Timeout	60000
sap-client	800
WebIDEEnable...	true
WebIDESystem	mys4hana
WebIDEUsage	odata_abap.dev_abap...

Test the destination, by clicking on



The screenshot shows the SAP Cloud Platform Cockpit interface. The left sidebar menu is identical to the one in the previous screenshot. The main panel shows the 'Subaccount: trial - Destinations' page. It lists two destinations:

Type	Name	Basic Properties	Actions
HTTP	abap-cloud-rishi_trial	Authentication: OAuth2UserTokenExchange ProxyType: Internet URL: https://e478ca1c-d502-4b7f-a72b-78a4f5447844.ab...	
HTTP	mys4hana	Authentication: BasicAuthentication ProxyType: OnPremise URL: http://mys4hana:6644	

If you get the below error. No need to worry, it looks like it's a bug from the cloud platform. We can still use this destination while consuming the service.

The screenshot shows the 'Subaccount: trial - Destinations' page again. A modal dialog box titled 'Check Connection' is displayed over the table. The dialog contains a red circular icon with a cross and the text 'Failure reason: "Could not check at the moment. Please try again later"'.

Step 6: Subscribe to SAP Business Application Studio

Go to your trial account home.

Welcome to SAP Cloud Platform Trial

Learn how to create and deploy cloud apps and gain access to a comprehensive set of platform services.

Enter Your Trial Account

Quick Tool Access

- SAP Business Application Studio
- CLI for SAP Cloud Platform
- APIs for SAP Cloud Platform

Go to your sub account (Trial), Select 'Subscriptions'. Search for 'SAP Business Application Studio'.

SAP Cloud Platform Cockpit

Overview

Services

Service Marketplace

Service Instances

Subscriptions

Cloud Foundry

Spaces

Quota Plans

Org Members

Connectivity

Destinations

Security

Useful Links

Trial Home / 5ea6604btrial / trial

Subaccount: trial - Subscriptions

Filtered: 1 of 24

Extension Suite - Development Efficiency

SAP Business Application Studio

Subscribed

Develop, debug, test, and deploy SAP business applications.

trial

Go to Application

Click as shown above, and click on Subscribe (I have already subscribed)

The screenshot shows the SAP Business Application Studio - Overview page. At the top, there are navigation links: Trial Home, Sea6604trial, trial, and SAP Business Application Studio. Below the navigation, it says "Subscription: SAP Business Application Studio - Overview". There are two buttons: "Subscribed" (green) and "Unsubscribe" (blue). The main content area has two sections: "Application Description" and "Availability". The "Application Description" section contains a detailed text about SAP Business Application Studio. The "Availability" section shows regional details: Cloud (US East), Foundry (Europe), and NEO (Current). A "Documentation" link and a "Plan: trial" note are also present.

Now launch Business Application Studio.

The screenshot shows the SAP Cloud Platform Cockpit interface. The URL in the address bar is cockpit.eu10.hana.ondemand.com/trial/#/home/trial. The main heading is "Welcome to SAP Cloud Platform Trial". Below it, a sub-headline reads "Learn how to create and deploy cloud apps and gain access to a comprehensive set of platform services." A blue button labeled "Enter Your Trial Account" is visible. The "Quick Tool Access" section features three icons: "SAP Business Application Studio" (highlighted with a yellow box), "CLI for SAP Cloud Platform", and "APIs for SAP Cloud Platform". Each icon has a brief description below it.

If you are launching BAS for the first time, You need to Create Dev Space.

The screenshot shows the SAP Business Application Studio Dev Spaces page. At the top, there is a header with the SAP logo and "SAP Business Application Studio". Below the header, there is a "Dev Spaces" section with a brief description and a "Create Dev Space" button, which is highlighted with a red box. A loading indicator is shown at the bottom left.

Create a New Dev Space

RISHI_ABAP

What kind of application do you want to create?

-  SAP Fiori
-  SAP Cloud Business Application
-  SAP Cloud Platform Mobile Services
-  Basic

SAP Fiori Dev Space

Develop, test, build, and deploy SAP Fiori freestyle or SAP Fiori elements applications to SAP Cloud Platform. This dev space contains a comprehensive set of tools, such as best practice templates, code assist, code validation, service modeling, and application modeling and preview.

SAP Predefined Extensions

The following extensions are enabled by default.

**SAPUI5 Adaptation Project**

Allows to extend SAPUI5 applications using Adaptation project and Visual Editor

**Basic Tools**

Allows you to optimize your web development workflow. The extension...
[more](#)

**Chromium Browser Tools**

Allows you to use Chromium tools.

Additional SAP Extensions

Select additional extensions to enhance your space.

**CDS Graphical Modeler**

Allows you to design SAP core data services models in SAP clou...
[more](#)

**Launchpad Module**

Allows you to add a launchpad to your multitarget application

**Development Tools for SAP Work Zone**

The development tools allow you...

[Cancel](#)**Create Dev Space**

Initially it will be stopped, click on the 'Run' icon.

SAP Business Application Studio

Dev Spaces

Create and manage your development environment according to the type of applications you want to develop.

You can add extensions and tools to further enhance your development options.

Create Dev Space**RISHI_ABAP**

SAP Fiori

STOPPED

Created On
10/22/2020 7:59 PMID
ws-rqrlid

You can observe the status changed to 'STARTING'.

Dev Spaces

Create and manage your development environment according to the type of applications you want to develop.

You can add extensions and tools to further enhance your development options.

Create Dev Space**RISHI_ABAP**

SAP Fiori

STARTING

Created On
10/22/2020 7:59 PMID
ws-rqrlid

Now it's 'RUNNING'. Click on the Dev space name , here 'RISHI_ABAP' in the example.

Dev Spaces

Create and manage your development environment according to the type of applications you want to develop.

You can add extensions and tools to further enhance your development options.

Create Dev Space**RISHI_ABAP**

SAP Fiori

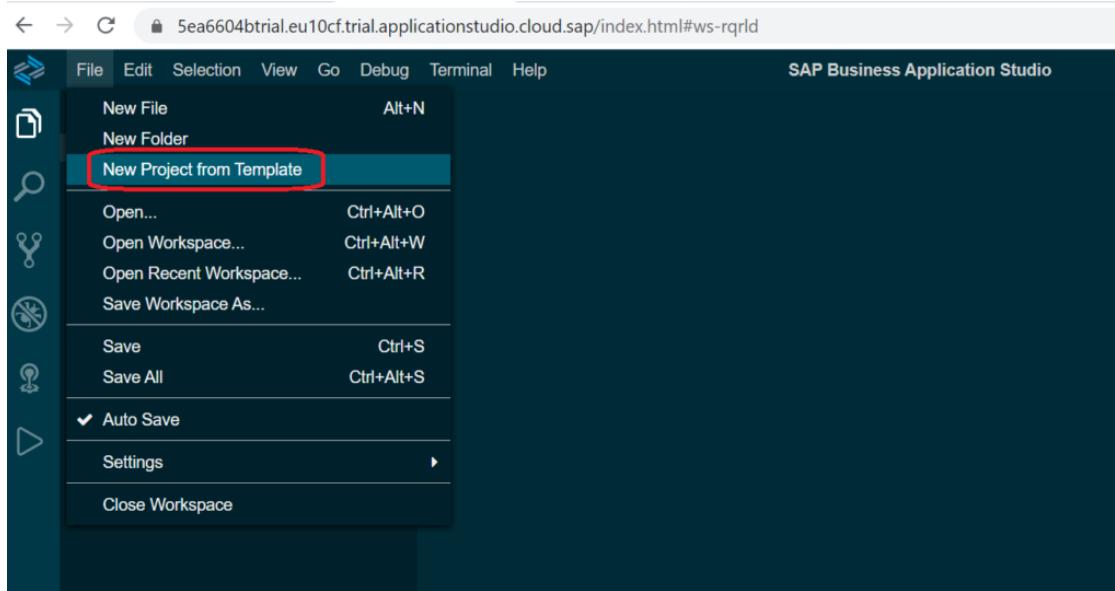
RUNNING

Created On
10/22/2020 7:59 PMID
ws-rqrlid

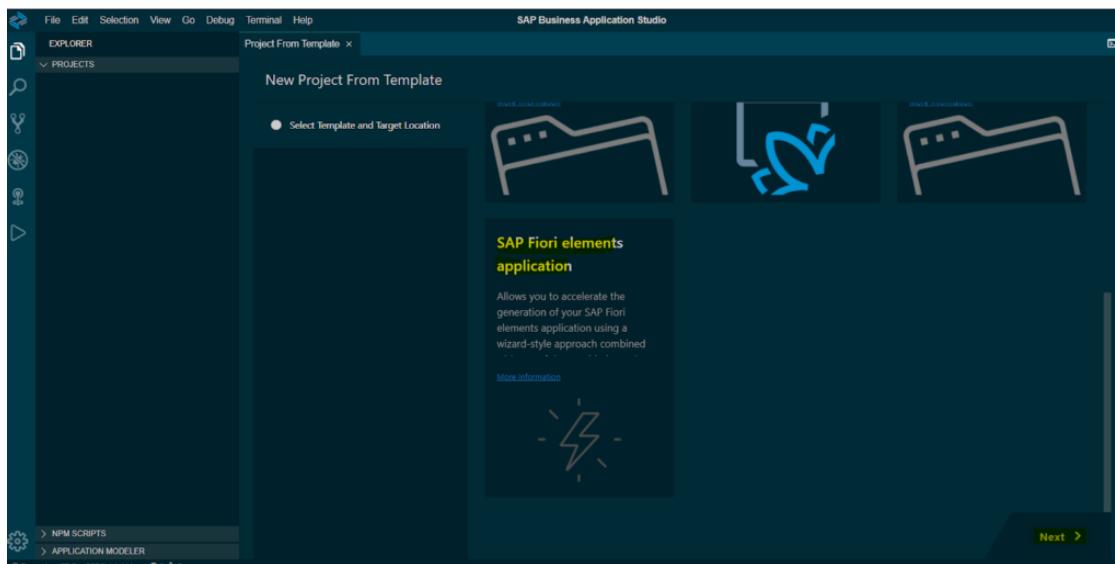
Your BAS is ready to use.

Step 7: Create Sample Fiori Elements Application by Consuming OData Service from BAS

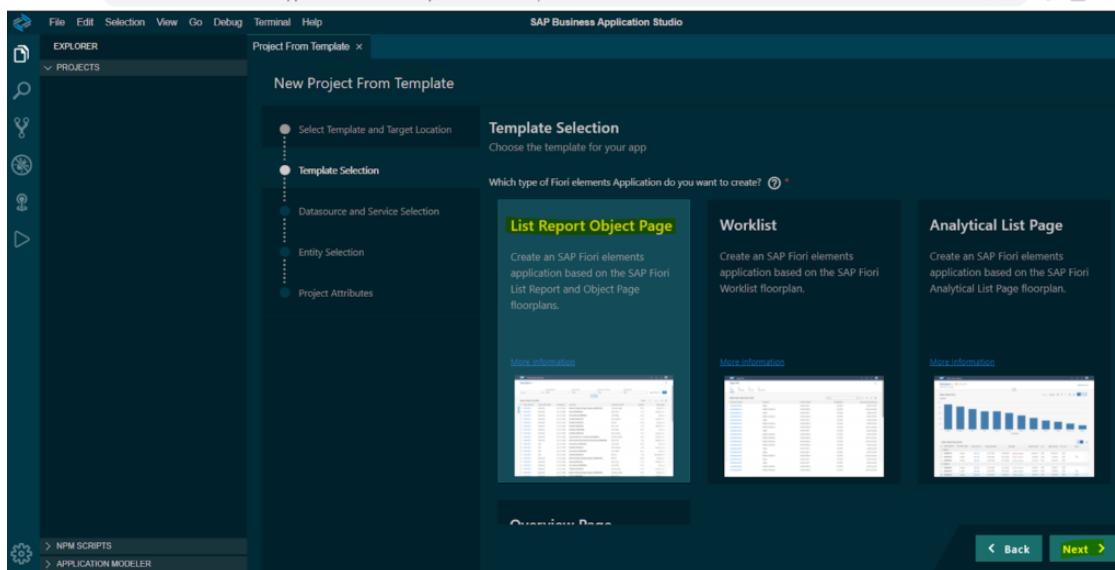
Once you got into BAS, Choose 'New Project from Template'.



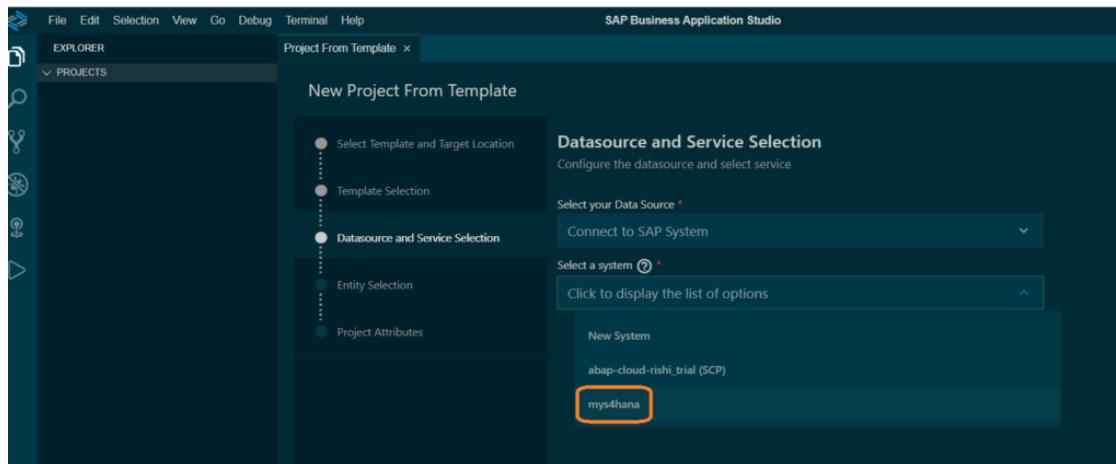
Choose: SAP Fiori Elements application.



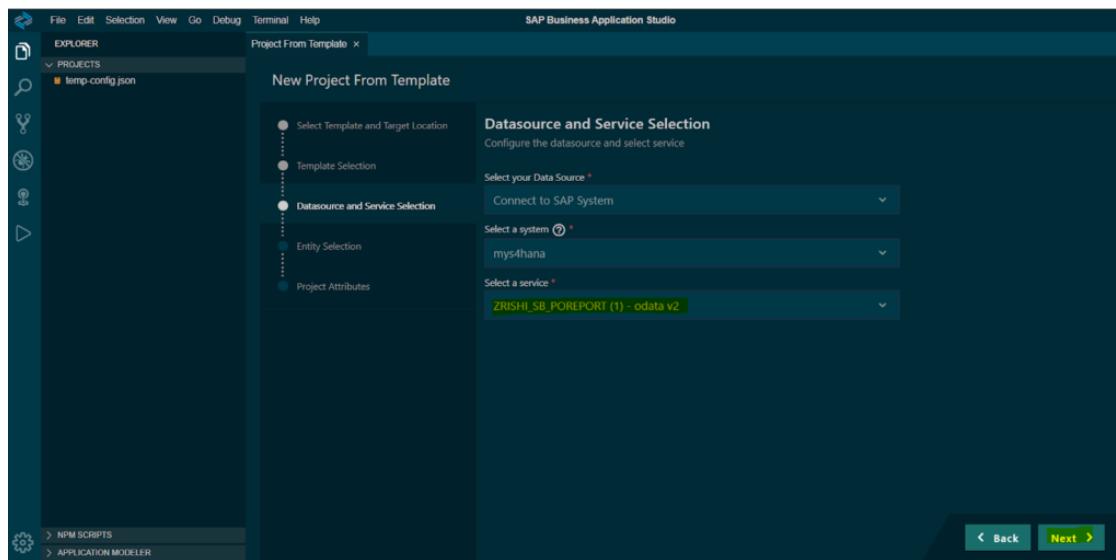
Select 'List Report Object Page'. Next.



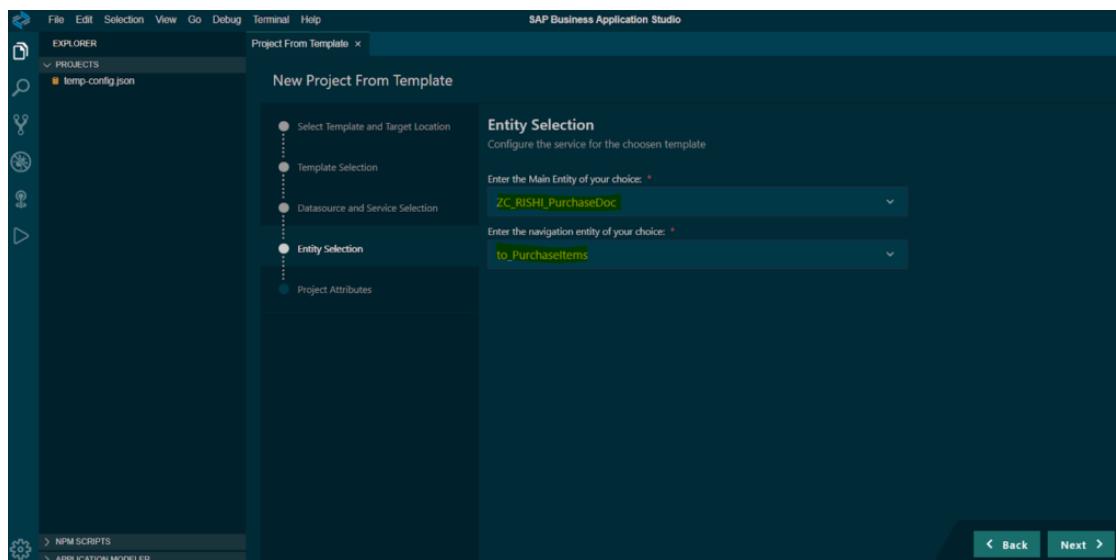
Select Data Source as 'Connect to SAP System' & Select a system 'mys4hana'. This name is the same system name as we provided in Destination.



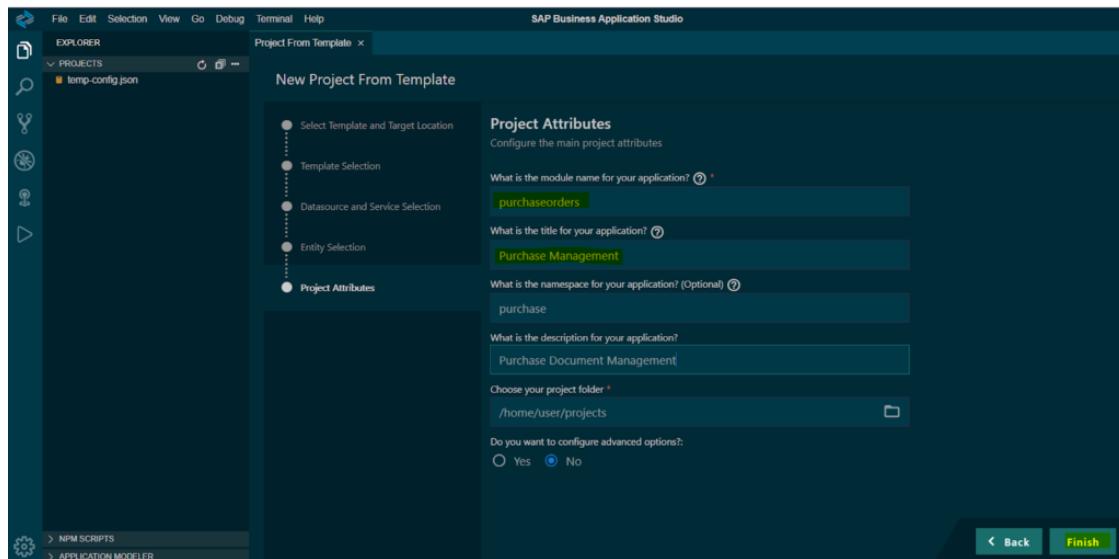
Select the required service , here 'ZRISHI_SB_POREPORT(1)'. Click on Next.



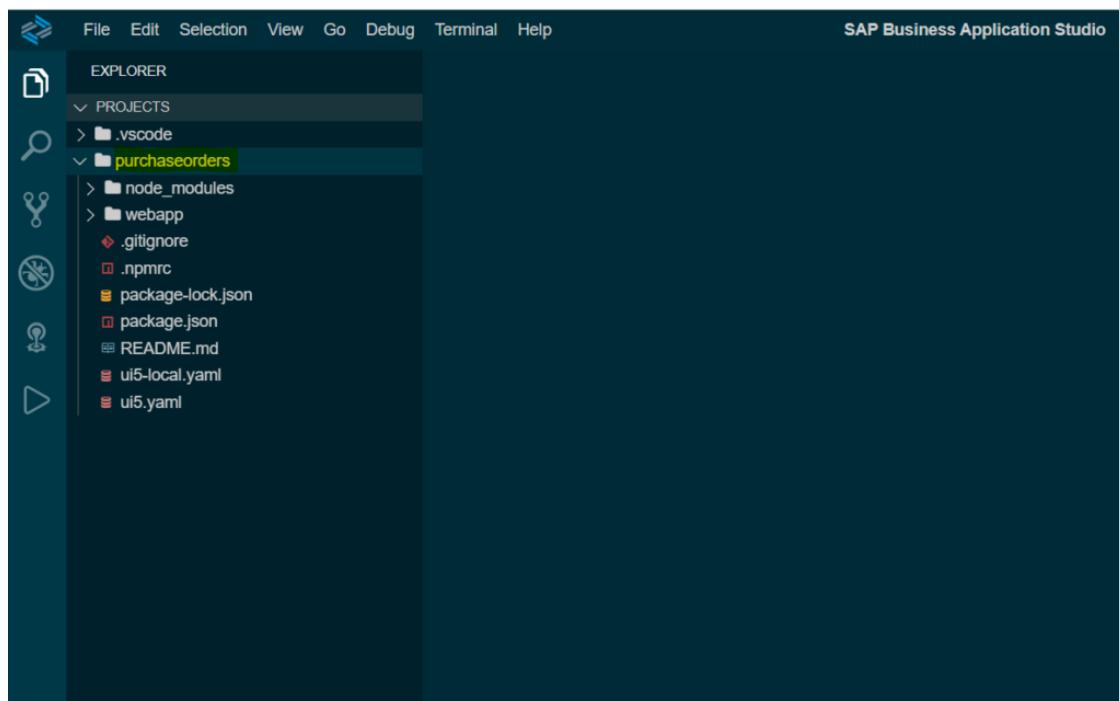
Entity selection. Choose 'ZC_RISHI_PurchaseDoc'. Navigation entity as 'to_PurchaseItems'.



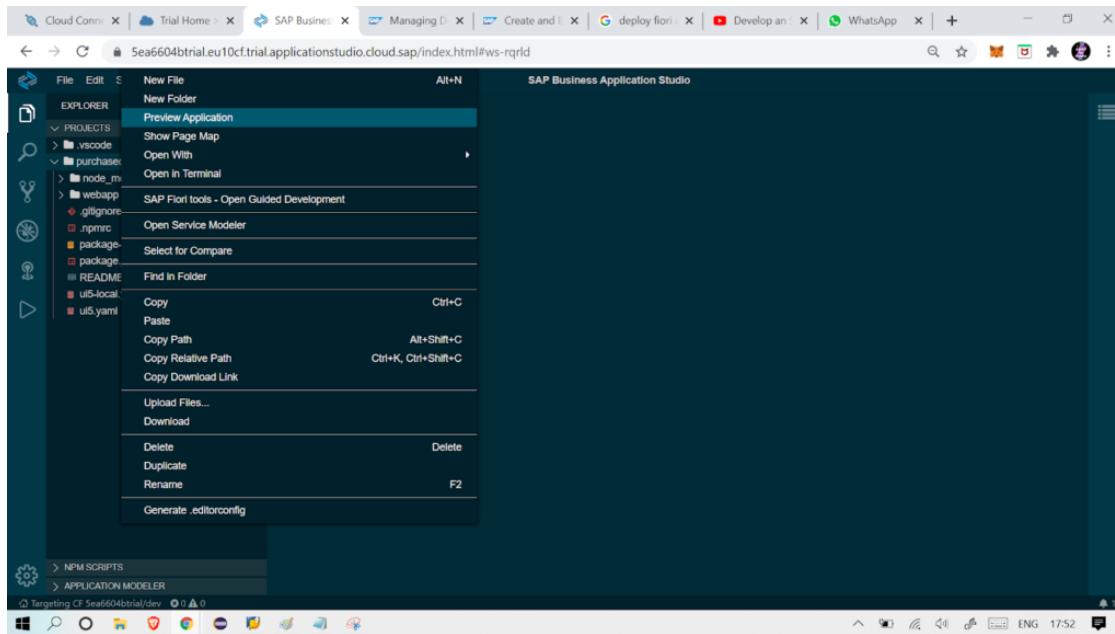
In the next screen, provide project attributes as shown below. & Click on Finish.



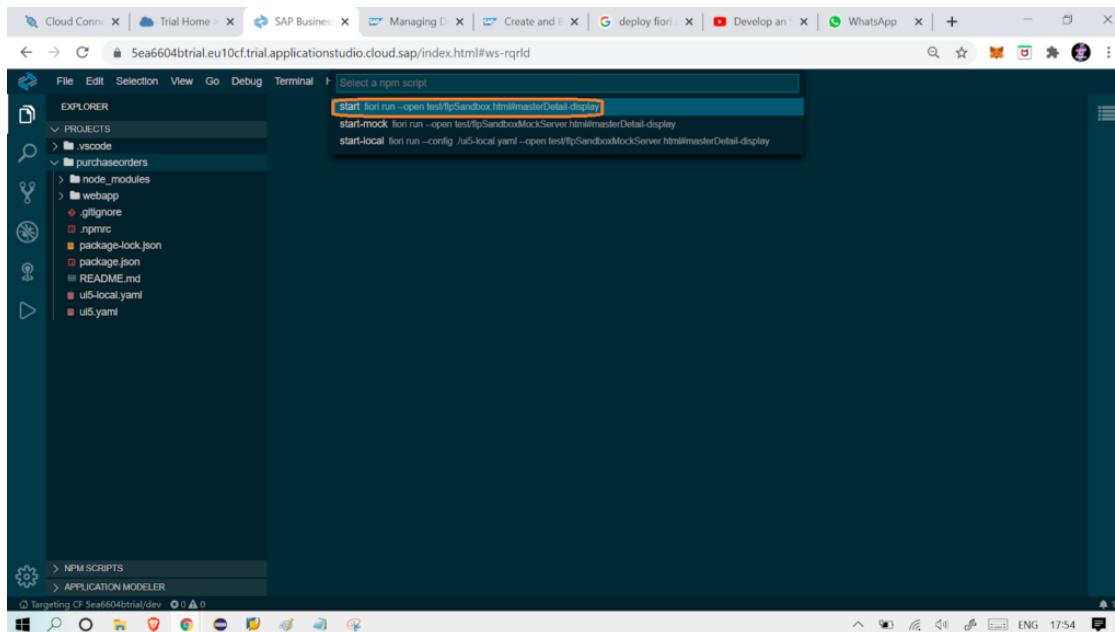
Now you can see your app in the workspace . (if you get a pop up to add project workspace you can choose)



Test the application, right click -> Preview application.



Now select 'Start fiori run' (press enter).



App is running fine.

The screenshot shows the SAP Purchase Management Fiori application. At the top, there is a search bar and filter buttons for 'Purchase Document', 'Status', 'Priority', and 'Created On'. Below the header, a table displays 'Purchase Documents (3)'. The columns are 'Purchase Document', 'Status', 'Purchase Priority', 'Total Purchase Amount', 'Created By', and 'Created On'. The table rows show:

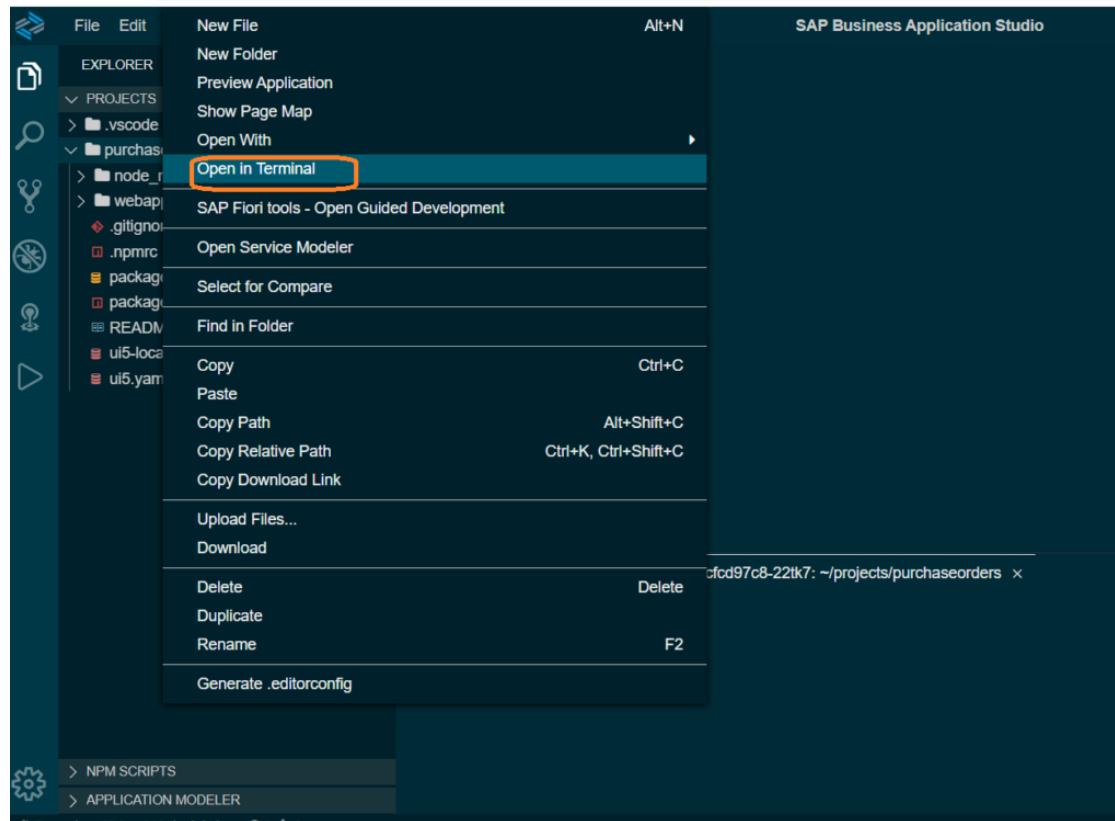
Purchase Document	Status	Purchase Priority	Total Purchase Amount	Created By	Created On
DIGITAL CLINAL THERMOMETERS 1000	IN PROCES	HIGH	2,000.00 USD	RISHI	Sep 26, 2020, 4:28:48 AM
GENERAL EQUIPMENT 1002	OPEN	MEDIUM	250.00 USD	RISHI	Sep 26, 2020, 4:28:48 AM
TEST1 1003	CLOSED	HIGH	100.00 USD	DEMO	Oct 4, 2020, 3:00:46 AM

Step 8: Deploy App to On-Premise System.

We need to execute 3 simple commands to deploy the app.

1. **npm install**
2. **npm run build**
3. **abap-deploy**

Right click on the project folder, choose 'Open in Terminal'.



Now execute 'npm install' in the terminal & press enter. (show below)

The screenshot shows the SAP Business Application Studio interface. The left sidebar has icons for file operations like Open, Save, Find, Cut, Copy, Paste, and Refresh. The top menu bar includes File, Edit, Selection, View, Go, Debug, Terminal, and Help. The title bar says "SAP Business Application Studio". The Explorer view on the left shows a project structure under "PROJECTS": ".vscode" and "purchaseorders". Inside "purchaseorders", there are "node_modules", "webapp", ".gitignore", ".npmrc", "package-lock.json", "package.json", "README.md", "ui5-local.yaml", and "ui5.yaml". The main area is a terminal window with the following text:

```
user@workspaces-ws-rqid-deployment-59cfcd97c8-22tk7: ~/projects/purchaseorders x
user: purchaseorders $ npm install
```

Now build the app, execute 'npm run build' , press enter.

The screenshot shows the SAP Business Application Studio interface. The left sidebar has icons for file operations like Open, Save, Find, Cut, Copy, Paste, and Refresh. The top menu bar includes File, Edit, Selection, View, Go, Debug, Terminal, and Help. The title bar says "SAP Business Application Studio". The Explorer view on the left shows a project structure under "PROJECTS": ".vscode" and "purchaseorders". Inside "purchaseorders", there are "node_modules", "webapp", ".gitignore", ".npmrc", "package-lock.json", "package.json", "README.md", "ui5-local.yaml", and "ui5.yaml". The main area is a terminal window with the following text:

```
user@workspaces-ws-rqid-deployment-59cfcd97c8-22tk7: ~/projects/purchaseorders x
audited 1142 packages in 4.775s
57 packages are looking for funding
  run `npm fund` for details
found 0 vulnerabilities
user: purchaseorders $ npm run build
```

Build is successful.

The screenshot shows the SAP Business Application Studio interface. The left sidebar displays the project structure under 'PROJECTS' with files like '.vscode', 'node_modules', 'webapp', '.gitignore', '.npmrc', 'package-lock.json', 'package.json', 'README.md', 'ui5-local.yaml', and 'ui5.yaml'. The right side features a terminal window with the following log output:

```

user@workspaces-ws-rqid-deployment-59cfcd97c8-22tk7: ~/projects/purchaseorders x
info builder:builder application purchaseorders ↗(5/10) Running task generateManifestBundle...
info builder:builder application purchaseorders ↗(6/10) Running task generateComponentPreload...
info builder:builder application purchaseorders ↗(7/10) Running task createDebugFiles...
info builder:builder application purchaseorders ↗(8/10) Running task uglify...
info builder:builder application purchaseorders ↗(9/10) Running task generateVersionInfo...
info builder:builder application purchaseorders ↗(10/10) Running task generateCachebusterInfo...
info builder:builder Build succeeded in 283 ms
info builder:builder Executing cleanup tasks...

```

Now execute : abap-deploy

This screenshot shows the SAP Business Application Studio interface again. The left sidebar shows the same project structure. The terminal window at the bottom has the following log output:

```

user@workspaces-ws-rqid-deployment-59cfcd97c8-22tk7: ~/projects/purchaseorders x
info builder:builder application purchaseorders ↗(5/10) Running task generateManifestBundle...
info builder:builder application purchaseorders ↗(6/10) Running task generateComponentPreload...
info builder:builder application purchaseorders ↗(7/10) Running task createDebugFiles...
info builder:builder application purchaseorders ↗(8/10) Running task uglify...
info builder:builder application purchaseorders ↗(9/10) Running task generateVersionInfo...
info builder:builder application purchaseorders ↗(10/10) Running task generateCachebusterInfo...
info builder:builder Build succeeded in 283 ms
info builder:builder Executing cleanup tasks...
user: purchaseorders $ abap-deploy

```

The command 'abap-deploy' is highlighted in a red box in the terminal.

Provide details for each question as shown below.

Keep the value '.dst' and press enter.

The screenshot shows the SAP Business Application Studio interface. In the top navigation bar, there are links for File, Edit, Selection, View, Go, Debug, Terminal, and Help. The title bar says "SAP Business Application Studio". The left sidebar has an "EXPLORER" tab selected, showing a tree view of "PROJECTS" with "purchaseorders" expanded. Inside "purchaseorders", you can see "dist", "node_modules", "webapp", ".gitignore", ".npmrc", "package-lock.json", "package.json", "README.md", "ui5-local.yaml", and "ui5.yaml". Below the terminal window, there's a message: "Specify the source folder path for deployment > /dist".

```

user@workspaces-ws-rqid-deployment-59cfcd97c8-22tk7: ~/projects/purchaseorders ×
info builder:builder application purchaseorders ↵(6/10) Running task generateComponentPreload...
info builder:builder application purchaseorders ↵(7/10) Running task createDebugFiles...
info builder:builder application purchaseorders ↵(8/10) Running task uglify...
info builder:builder application purchaseorders ↵(9/10) Running task generateVersionInfo...
info builder:builder application purchaseorders ↵(10/10) Running task generateCachebusterInfo...
info builder:builder Build succeeded in 283 ms
info builder:builder Executing cleanup tasks...
user: purchaseorders $ abap-deploy
? Specify the source folder path for deployment > /dist
  
```

Select our on-premise system from the list. Press enter.

The terminal window shows the deployment process. It lists the steps: generateCachebusterInfo..., Build succeeded in 283 ms, Executing cleanup tasks..., and then asks for the source folder path: "Specify the source folder path for deployment/dist". It then asks to select a target ABAP system, listing "abap-cloud-rishi_trial" and "mys4hana". The "mys4hana" option is highlighted with a yellow box.

```

user@workspaces-ws-rqid-deployment-59cfcd97c8-22tk7: ~/projects/purchaseorders ×
info builder:builder application purchaseorders ↵(10/10) Running task generateCachebusterInfo...
info builder:builder Build succeeded in 283 ms
info builder:builder Executing cleanup tasks...
user: purchaseorders $ abap-deploy
✓ Specify the source folder path for deployment ... ./dist
? Select a target ABAP system > - Use arrow-keys. Return to submit.
  abap-cloud-rishi_trial (https://e478calc-d502-4b7f-a72b-78a4f5447844.abap.eu10.hana.ondemand.com)
> mys4hana (http://mys4hana:6644 : 800)
  
```

Provide your application name starting with 'ZZ1_', as shown below.

The terminal window shows the deployment process. It lists the steps: generateCachebusterInfo..., Build succeeded in 283 ms, Executing cleanup tasks..., and then asks for the source folder path: "Specify the source folder path for deployment/dist". It then asks to select a target ABAP system, listing "mys4hana". It then asks for an application name, with "ZZ1_RISHI_V2" entered and highlighted with a yellow box. Finally, it asks for a description, with "Purchase Management" entered and highlighted with a yellow box.

```

user@workspaces-ws-rqid-deployment-59cfcd97c8-22tk7: ~/projects/purchaseorders ×
info builder:builder application purchaseorders ↵(10/10) Running task generateCachebusterInfo...
info builder:builder Build succeeded in 283 ms
info builder:builder Executing cleanup tasks...
user: purchaseorders $ abap-deploy
✓ Specify the source folder path for deployment ... ./dist
✓ Select a target ABAP system > mys4hana (http://mys4hana:6644 : 800)
? Enter an application name > ZZ1_RISHI_V2
? Enter a description for the application > Purchase Management
  
```

Provide description of the app.

The terminal window shows the deployment process. It lists the steps: generateCachebusterInfo..., Build succeeded in 283 ms, Executing cleanup tasks..., and then asks for the source folder path: "Specify the source folder path for deployment/dist". It then asks to select a target ABAP system, listing "mys4hana". It then asks for an application name, with "ZZ1_RISHI_V2" entered and highlighted with a yellow box. Finally, it asks for a description, with "Purchase Management" entered and highlighted with a yellow box.

```

user@workspaces-ws-rqid-deployment-59cfcd97c8-22tk7: ~/projects/purchaseorders ×
info builder:builder application purchaseorders ↵(10/10) Running task generateCachebusterInfo...
info builder:builder Build succeeded in 283 ms
info builder:builder Executing cleanup tasks...
user: purchaseorders $ abap-deploy
✓ Specify the source folder path for deployment ... ./dist
✓ Select a target ABAP system > mys4hana (http://mys4hana:6644 : 800)
✓ Enter an application name ... ZZ1_RISHI_V2
? Enter a description for the application > Purchase Management
  
```

Enter the package name 'ZRISHI_BATCH1' (choice of your package).

```
user@workspaces-ws-rqrid-deployment-59cfcd97c8-22tk7: ~/projects/purchaseorders ×  
info builder:builder Build succeeded in 283 ms  
info builder:builder Executing cleanup tasks...  
user: purchaseorders $ abap-deploy  
✓ Specify the source folder path for deployment ... ./dist  
✓ Select a target ABAP system > mys4hana (http://mys4hana:6644 : 800)  
✓ Enter an application name ... ZZ1_RISHI_V2  
✓ Enter a description for the application ... Purchase Management  
✓ Enter a package for the deployed application ... ZRISHI_BATCH1  
? Enter a transport request for the deployed application >
```

Provide the transport request number, where you would like to lock. & press enter.

```
user@workspaces-ws-rqrid-deployment-59cfcd97c8-22tk7: ~/projects/purchaseorders ×  
user: purchaseorders $ abap-deploy  
✓ Specify the source folder path for deployment ... ./dist  
✓ Select a target ABAP system > mys4hana (http://mys4hana:6644 : 800)  
✓ Enter an application name ... ZZ1_RISHI_V2  
✓ Enter a description for the application ... Purchase Management  
✓ Enter a package for the deployed application ... ZRISHI_BATCH1  
✓ Enter a transport request for the deployed application ... SY2K900059  
The "ZZ1_RISHI_V2" application is being deployed to ABAP in create mode.  
:: Deploying...
```

The app will be deployed as shown below. If not successful, please repeat the steps from 'abap-deploy'.

You can verify by going to transaction SE80 -> BSP Application -> provide your app name.

Fewwwwhhhh... This is one of the longest articles we have written at SAPYard. If you face any issue, feel free to put your questions in the comment section below.

Also, I run a YouTube Channel named "ABAP for Geeks". Please do consider subscribing to ABAP for Geeks and encourage me.

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Rishi

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