

Hands-on Lab : Getting Started with Cognos Dashboard Embedded

Estimated time needed: 20 minutes

IBM Cognos Dashboard Embedded (CDE) is an AI-fueled business intelligence service that supports the entire data analytics cycle, from discovery to operationalization. It provides users with data discovery capabilities to visually explore and interact with their data to identify the key insights for improving data driven decisions. Users can perform data discovery and then quickly assemble that information into interactive, visually appealing dashboards; all without the need of formal training.

In this lab, first you will learn how to login to IBM Cloud Pak for Data platform through IBM Cloud and create a project there. Next, you will learn how to add a Cognos Dashboard Embedded (CDE) service and upload external data files to your project(supports CSV file only). Finally, you will learn general navigation around the CDE user interface (UI), and how to start a new dashboard with a template in CDE, populate it with a data visualization as well as save the dashboard.

Software Used in this Lab

Since for the assignment of this module you will be using IBM Cognos Dashboard Embedded (CDE), so in this lab you will get started with IBM Cognos Dashboard Embedded (CDE) Lite plan service through IBM Cloud as this is available **at no charge for 50 sessions/month**. A session is a **60 minutes period** where users can perform unlimited interactions with an embedded dashboard. Lite plan services are deleted after **30 days of inactivity**.

Dataset Used in this Lab

The dataset used in this lab comes from the following source: <https://www.kaggle.com/kyanyoga/sample-sales-data> under a [CC0: Public Domain license](#).

Objectives

After completing this lab, you will be able to:

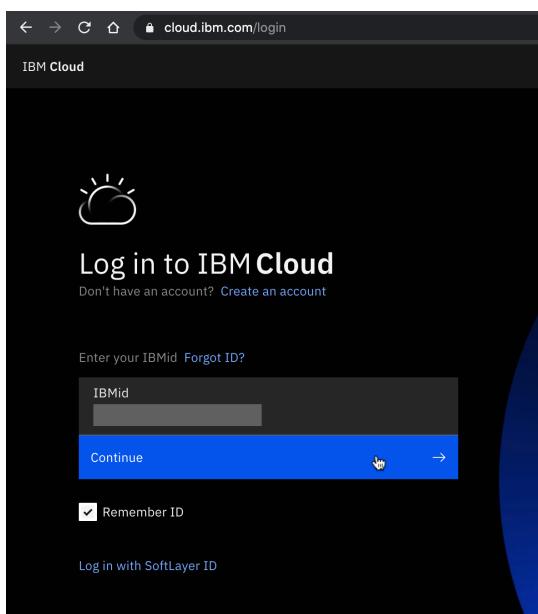
- Login to IBM Cloud Pak for Data platform through IBM Cloud
- Create a project in IBM Cloud Pak for Data
- Add a Cognos Dashboard Embedded (CDE) service to your created project
- Navigate around the Cognos Dashboard Embedded (CDE) user interface
- Upload external data files to your created project (Supports .CSV files only)
- Start a new dashboard with a dashboard template and populate it with a data visualization

Exercise 1 : Login to IBM Cloud Pak for Data and Create a Project

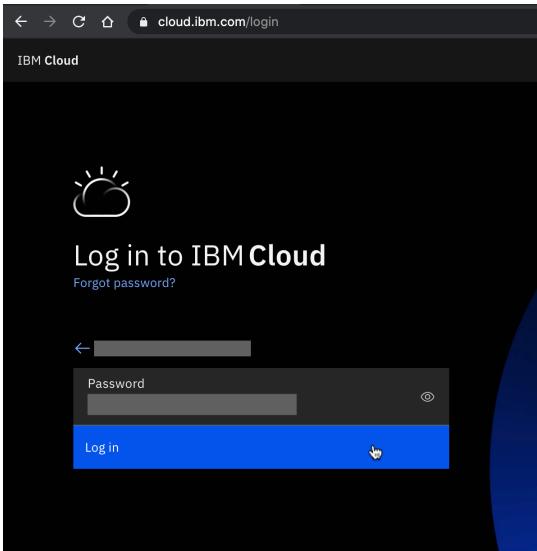
In this exercise, you will how to login to IBM Cloud Pak for Data platform through IBM Cloud and create a project there.

Task A : (optional) Create an Instance of Watson Studio / Cloud Pak for Data

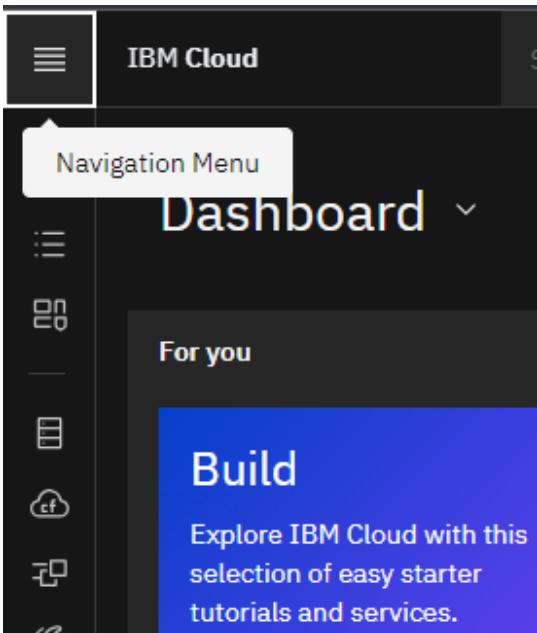
- If you already have an instance of Watson Studio / Cloud Pak for Data , skip Task A.
1. Go to cloud.ibm.com/login.
 2. Enter your **IBMid** (the email ID you used to sign up for IBM Cloud) and click **Continue**.



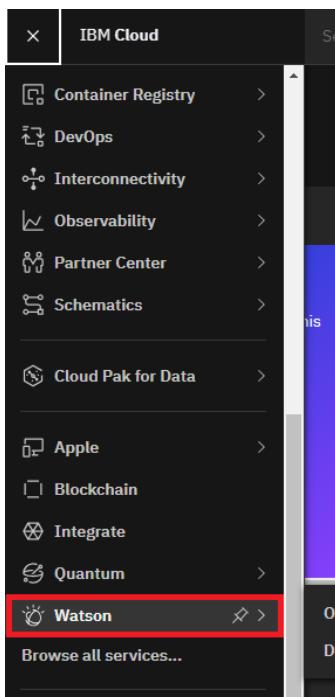
3. Enter your **password** and click **Log in**.



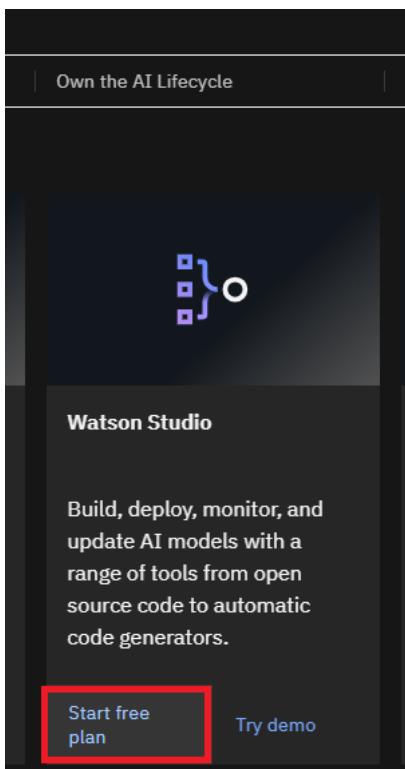
4. Click **Navigation Menu Icon** on the top left side.



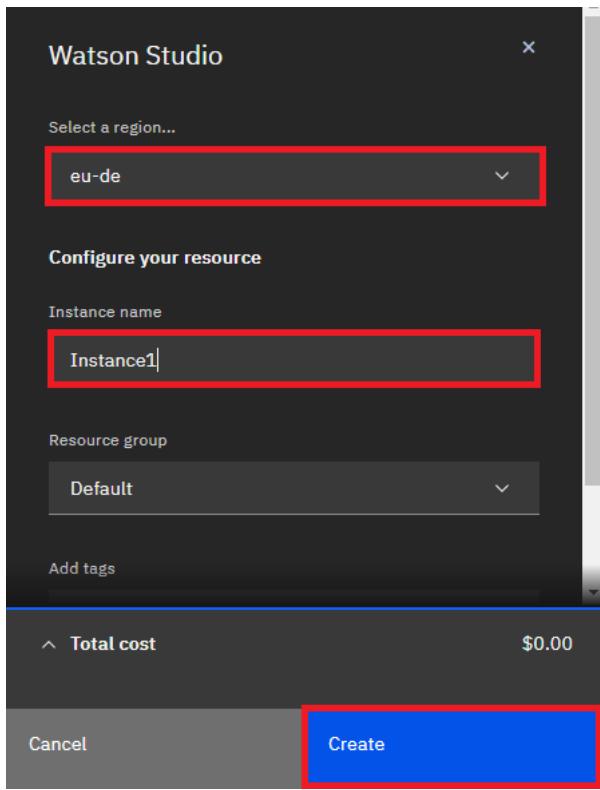
5. From the navigation Menu sidebar, click **Watson**.



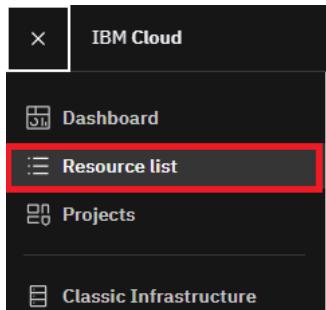
6. Now from the section All Services, click Watson Studio **Start free plan**. You will see a dialog box to enter the region and the name of your Watson Studio instance.



7. **Select a region** matching the region of your IBM Cloud account and provide a name for your Watson Studio instance. Click on the Create button.



8. You will be redirected to IBM Cloud Pak (dataplatform.cloud.ibm.com) for Data platform. In case you are not redirected to IBM Cloud Pak page, you need to go to the Resource List from the Navigation Menu.



9. Select your Watson Studio instance from the AI/Machine Learning section.

Name	Group	Location	Product	Status
<input type="text"/> Filter by name or IP address...	<input type="text"/> Filter by group or org...	<input type="text"/> Filter...	<input type="text"/> Filter...	<input type="text"/> Filter...
Converged infrastructure (0)				
Enterprise applications (0)				
AI / Machine Learning (3)				
Instance1	Default	Frankfurt	Watson Studio	Active
KnowledgeCatalog	Default	Dallas	Watson Knowledge Catalog	Active
WatsonOpenScale	Default	Dallas	Watson OpenScale	Active
Analytics (0)				
Blockchain (0)				
Databases (1+)				
Developer tools (0+)				
Logging and monitoring (0)				

10. Click on **Launch in IBM Cloud Pak for Data**.

IBM Cloud

Resource list / Instance1 Active Add tags

Manage

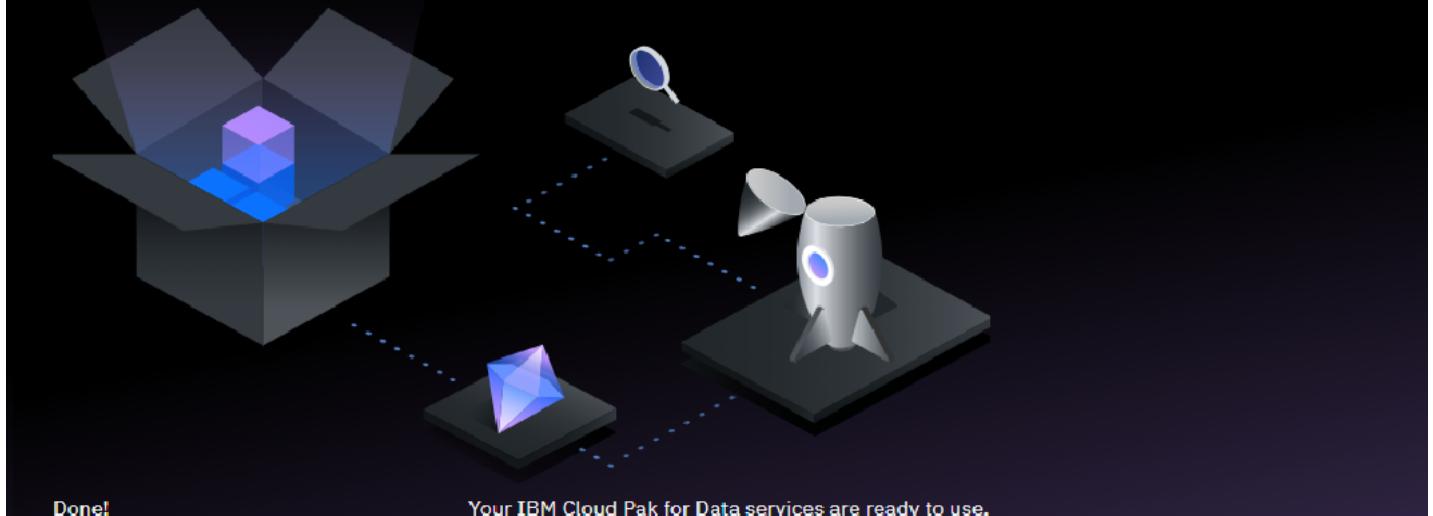
Watson Studio in Cloud Pak for Data

Watson Studio is one of the core services in Cloud Pak for Data as a Service. Build, deploy and manage AI models, and optimize decisions on IBM Cloud Pak for Data.

Launch in IBM Cloud Pak for Data

11. You will be redirected to [IBM Cloud Pak for Data](#)

Preparing Cloud Pak for Data



12. You have successfully logged in to the IBM Cloud Pak for Data platform.

Welcome, Shreya!

Take a tutorial

Step through implementing a Data fabric use case in a sample project.

→

Work with data

Create a project for your team to prepare data, find insights, or build models.

→

Find what you need

Open this interactive map to find the tools that you need for your tasks.

→

Quick start

- 🔗 Create data pipelines with DataStage
- 🔗 Build customer profiles with IBM Match 360 with Watson
- 🔗 Catalog and govern data with Watson Knowledge Catalog

Projects	+
Beta testing Week3 lab 2	Nov 21, 2022 5:28 PM SK
Python Project	Nov 14, 2022 11:21 AM SK

Notifications

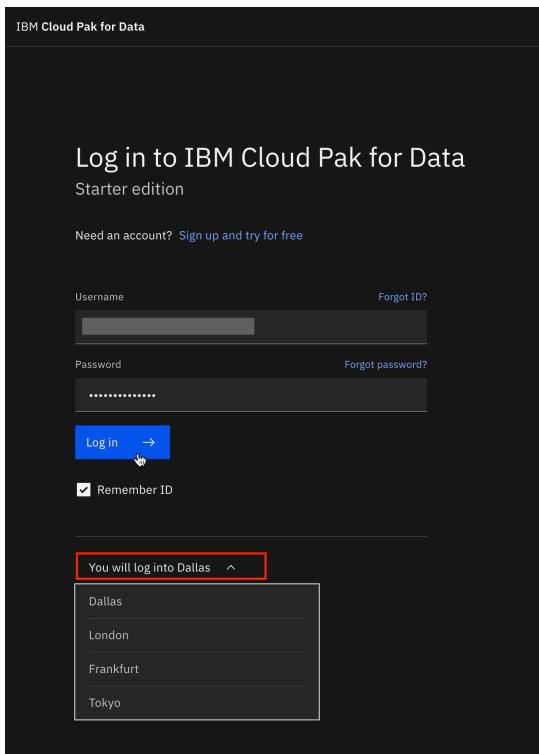
- ✓ **Online deployment ready**
The online deployment test in sp think is ready to accept requests
Oct 27, 2022 4:38 PM

Task B : Login to IBM Cloud Pak for Data

- If you just completed Task A, you will already be logged in, so skip Task B.

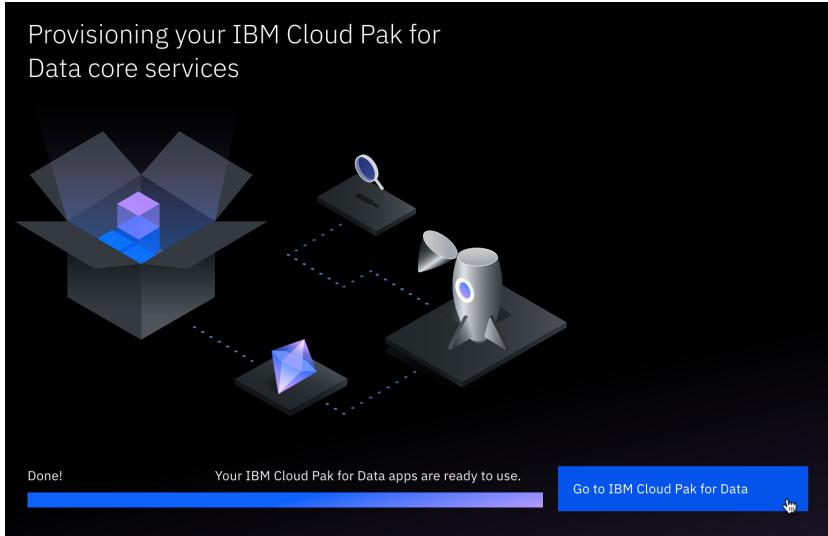
1. Go to dataplatform.cloud.ibm.com.

2. Enter your **IBMid** (the email ID you used to sign up for IBM Cloud), **password** and select a **region**, same one you used for IBM Cloud account and IBM Cloud Pak for Data(if you have completed Task A).



The screenshot shows the 'Log in to IBM Cloud Pak for Data' page. It features a dark background with white text. At the top, it says 'Log in to IBM Cloud Pak for Data' and 'Starter edition'. Below that is a link 'Need an account? [Sign up and try for free](#)'. The login form has 'Username' and 'Password' fields, both with placeholder text. To the right of the password field are links 'Forgot ID?' and 'Forgot password?'. Below the fields is a blue 'Log in' button with a right-pointing arrow. To its left is a checked checkbox 'Remember ID'. At the bottom, there's a dropdown menu with a red border containing the text 'You will log into Dallas ^'. The options listed are Dallas, London, Frankfurt, and Tokyo.

3. Click **Go to IBM Cloud Pak for Data**.



4. You have successfully logged in to the IBM Cloud Pak for Data platform.

Welcome, Shreya!

The screenshot shows the IBM Cloud Pak for Data welcome page. It features a dark background with a blue hexagon icon and a magnifying glass icon. Three main sections are displayed:

- Take a tutorial**: Step through implementing a Data fabric use case in a sample project. An arrow points to the right.
- Work with data**: Create a project for your team to prepare data, find insights, or build models. An arrow points to the right.
- Find what you need**: Open this interactive map to find the tools that you need for your tasks. An arrow points to the right.

Below these sections is a "Quick start" sidebar with three items:

- Create data pipelines with DataStage
- Build customer profiles with IBM Match 360 with Watson
- Catalog and govern data with Watson Knowledge Catalog

The central area contains a "Projects" section with two entries:

Project Name	Date	Last Activity
Beta testing Week3 lab 2	Nov 21, 2022	5:28 PM
Python Project	Nov 14, 2022	11:21 AM

On the right, there is a "Notifications" section with one item:

- Online deployment ready: The online deployment test in sp think is ready to accept requests. Oct 27, 2022 4:38 PM

Task C : Create a New Project

1. On the IBM Cloud Pak for Data welcome page, click **Create new project**.

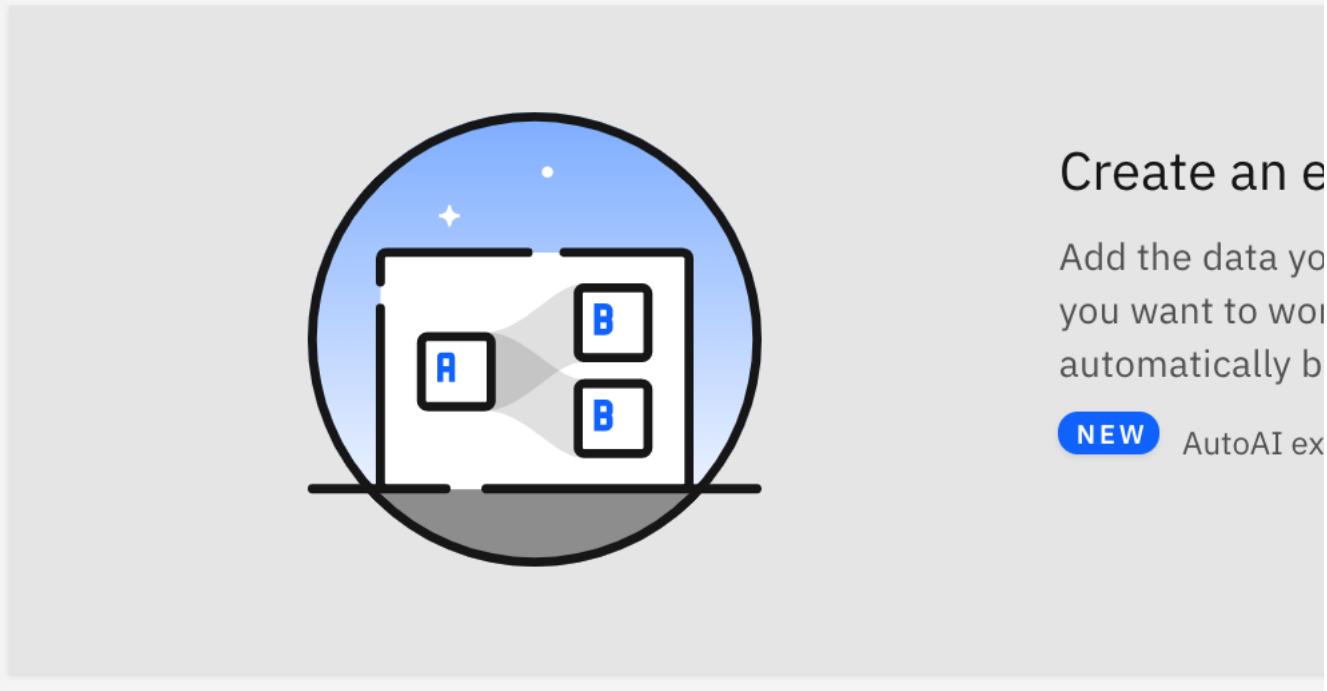
The screenshot shows the same IBM Cloud Pak for Data welcome page as before, but with a red box highlighting the "Create new project" button in the "Projects" section. The "Projects" section now has a red box around the "+" sign.

2. Click **Create an empty project**.

[Back](#)

Create a project

Choose whether to create an empty project or to preload your project with data to accomplish your goals. Add services as necessary.



3. Write **Capstone Project** as name of the project and click **Add** on Select storage service if no storage service appears. If a storage appears..proceed to step 6 directly.

IBM Cloud Pak for Data

New project

Define project details

Name

Description

Define storage

① Select storage service

Add an object storage instance, and then return to this page and click Refresh.

② Refresh

4. You will be redirected to a new page. On the **Create** tab, select **Lite** plan. Then click **Create**.

IBM Cloud Pak for Data

Services catalog /

Cloud Object Storage

Author: IBM • Date of last update: Sep 23, 2020 • [Docs](#) • [API Docs](#)

[Create](#) About

Pricing plan

Displayed prices do not include tax. Monthly prices shown are for country or region: United States

Plan	Features	Pricing
Lite	1 COS Service Instance Storage up to 25 GB/month Up to 2,000 Class A (PUT, COPY, POST, and LIST) requests per month Up to 20,000 Class B (GET and all others) requests per month Up to 10 GB/month of Data Retrieval Up to 5GB of egress (Public Outbound) Applies to aggregate total across all storage bucket classes	Free
Standard	There is no minimum fee, so you pay only for what you use.	See pricing details

The Lite service plan for Cloud Object Storage includes Regional and Cross Regional resiliency, flexible data classes, and built in security.

Lite plan services are deleted after 30 days of inactivity.

Configure your resource

Service name: Cloud Object Storage-iu

Select a resource group: Default

[Create](#) View terms

5. Now you will be redirected to the previous new project page. Click **Refresh**.

IBM Cloud Pak for Data

New project

Define project details

Name: Capstone Project

Description: Project description

Define storage

① Select storage service: Add

Add an object storage instance, and then return to this page and click Refresh.

② [Refresh](#)

6. Once you see a storage service, click **Create**.

IBM Cloud Pak for Data

New project

Define project details

Name: Capstone Project

Description: Project description

Storage

Cloud Object Storage-iu

Choose project options

Restrict who can be a collaborator ⓘ

Project includes integration with [Cloud Object Storage](#) for storing project assets.

[Cancel](#) [Create](#)

7. You have successfully created a project. Click **IBM Cloud Pak for Data** at the top left to go back to homepage.

The screenshot shows the 'Assets' tab selected in the navigation bar. A search bar at the top right contains the placeholder 'Find assets'. Below it, a button labeled 'Add asset' with a plus sign is visible. To its right is a blue button labeled 'New asset' with a '+' sign. On the left, a sidebar displays '0 asset' and a link to 'All assets'. Under 'Asset types', there are three icons: a diamond, a bar chart, and a 3D bar chart. The main area is titled 'All assets' and features a placeholder image of a person interacting with a screen, with the text 'Start adding assets' and instructions to click 'New asset' to create them or 'Add asset' to add existing ones.

Exercise 2 : Add a CDE service and Upload External Data

In this exercise, you will learn how to add a Cognos Dashboard Embedded (CDE) service and upload external data files to your project.

Task A : Add a CDE service

1. From IBM Cloud Pak for Data homepage, got to **Projects** under Quick navigation and click on the Capstone project you had created earlier

The screenshot shows the IBM Watson Studio interface. At the top, it says 'Welcome, Shreya!' and has a search bar. Below, there are three main sections: 'Take a tutorial', 'Work with data', and 'Find what you need'. In the 'Work with data' section, there's a link to 'Create a project for your team to prepare data, find insights, or build models.' The 'Projects' section on the right lists two projects: 'Capstone' (last updated 'Today at 7:21 PM') and 'Beta testing Week3 lab 2' (last updated 'Nov 21, 2022 5:28 PM'). The 'Capstone' project is highlighted with a red box around its card. The 'Quick start' section on the left lists three items: 'Create data pipelines with DataStage', 'Build customer profiles with IBM Match 360 with Watson', and 'Catalog and govern data with Watson Knowledge Catalog'.

2. Click on **Manage** tab , from the **Services and integrations** section click **Associate service**

The screenshot shows the 'Overview' tab selected in the top navigation bar. A red box highlights the 'Manage' tab, which is also circled with a red circle labeled '1'. On the left sidebar, a red box highlights the 'Services & integrations' section, with a red circle labeled '2' around its icon. The main content area displays a message: 'Associate IBM Cloud services with this project to add tools, compute environments, or other capabilities. [Learn more.](#)' Below this is a search bar labeled 'Find services' and a table header with columns 'Name' and 'Service type'. A red box highlights the 'Associate service' button at the bottom right of the table, with a red circle labeled '3' around it. The table body shows a single entry: 'No services' with the sub-instruction 'Click **Associate service** or ask a project Admin to associate one'.

3. Click New service.

This screenshot shows the 'Associate service' dialog. It includes a title 'Associate service' and a sub-instruction 'Choose an existing or add a new service to associate with your project.' Below this is a filter bar with dropdowns for 'Resource Groups' (set to '2'), 'Locations' (set to 'None'), and a search bar. The main area is a table with columns 'Name', 'Type', 'Plan', 'Location', 'Status', and 'Group'. A red box highlights the 'New service' button at the bottom right of the table, with a red circle labeled '4' around it.

4. Click IBM Cognos Dashboard Embedded.

This screenshot shows the 'Analytics' service category in the IBM Cloud service catalog. A red box highlights the 'IBM Cognos Dashboard Embedded' service card. The card features a small icon, the service name, its category 'Analytics', a brief description 'Bring data to life directly from your application with this powerful and easy-to-use visualization service.', and a 'Lite • Free' plan indicator. The entire service card is enclosed in a red box.

5. On the Create tab, select a region and Lite plan. Then click Create.

IBM Cognos Dashboard Embedded

Author: IBM • Date of last update: Aug 17, 2020 • Docs

Create About

Select a region

Select a region

Dallas

Pricing plan

Displayed prices do not include tax. Monthly prices shown are for country or region: United States

Plan	Features	Pricing
Lite	50 sessions/month A session is a 60 minute period where end-users can perform unlimited interactions with an embedded dashboard. Lite plan services are deleted after 30 days of inactivity.	Free <input checked="" type="checkbox"/>
Pay as you go	After 50 sessions Live connection to underlying data Embed dashboards where users are without losing interactivity Smart Creation of Visualizations Interactive exploration of data through filtering and navigation paths	\$0.05 USD/Session

View terms

Create

6. Select **IBM Cognos Dashboard Embedded** service and click **Associate service** to add the service to **Capstone Project**.

Associate service

Choose an existing or add a new service to associate with your project.

Filter by: Resource Groups Locations sandipsahajoy@ibm.com

1 item selected

Name	Type	Plan	Location	Status	Group
<input checked="" type="checkbox"/> IBM Cognos Dashboard Embedded-pe	IBM Cognos Dashboard Embedded	Lite	Dallas	Not associated	Default

Associate service

7. Once the service association status appears green, **close** the associate service page.

Associate service

Choose an existing or add a new service to associate with your project.

Filter by: Resource Groups Locations sandipsahajoy@ibm.com

Name	Type	Plan	Location	Status	Group
<input checked="" type="checkbox"/> IBM Cognos Dashboard Embedded-pe	IBM Cognos Dashboard Embedded	Lite	Dallas	Associated	Default

Task B : Upload External Data Files(Supports .CSV Files Only)

- Download the file [car_sales_data_sample.csv](#).
- On the **Assets** page, click **Find and add data** icon. Click **Drop data files here or browse for files to upload**.

The screenshot shows the CDE UI interface. At the top, there is a navigation bar with 'Projects / IBM_Project'. Below it, there are tabs: 'Overview' (highlighted with a red box), 'Assets' (with a red circle containing the number 1), 'Jobs', and 'Manage'. To the right of the tabs are icons for download, user, and 'Launch ID'. Below the tabs is a search bar with 'Find assets' and an 'Add asset' button. On the left, there is a sidebar with '0 asset' and a 'All assets' button. The main area is titled 'All assets' and contains a placeholder message: 'Start adding assets. To get started with project assets, click **New asset** to create them, or **Add asset** to add existing ones.' There are also icons for a person, a plus sign, and some geometric shapes.

3. Browse to the file download location, select the downloaded CSV file, and click **Open**.

4. Once upload completes, `car_sales_data_sample.csv` will appear under **Data assets** section.

The screenshot shows the 'Data assets' section. It has a header 'Data assets' with a dropdown arrow. Below it, it says '0 assets selected.' A table lists one asset:

<input type="checkbox"/>	Name	Type
<input type="checkbox"/>	CSV car_sales_data_sample.csv	Data Asset

Exercise 3 : Navigate around CDE UI and Start a New Dashboard with a Template

In this exercise, you will learn general navigation around the CDE user interface (UI), and how to start a new dashboard with a template in CDE, populate it with a data visualization as well as save the dashboard.

1. On the **Overview** page of Capstone Project project, click **New asset**.

The screenshot shows the 'Capstone Project' page in the IBM Cloud Pak for Data interface. At the top, there's a navigation bar with 'IBM Cloud Pak for Data' and various icons. Below it, a sub-navigation bar shows 'Projects / Capstone Project' and tabs for 'Overview', 'Assets', 'Jobs', 'Access Control', and 'Settings'. The main content area is titled 'Capstone Project' and shows 'Last Updated: Oct 08, 2020'. It includes a 'Readme' link and a summary section with a '1' icon and 'Assets' text. A red box highlights the 'Add to project +' button in the top right corner.

2. Scroll down and select **Dashboard Editor**.

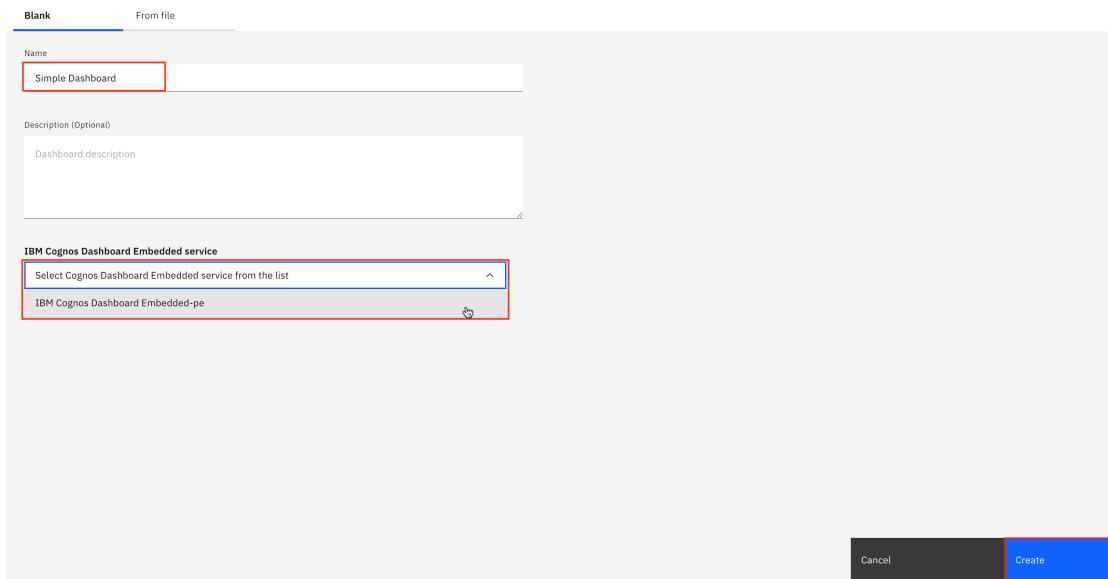
New asset

Select the tool to create an operational or configuration asset.

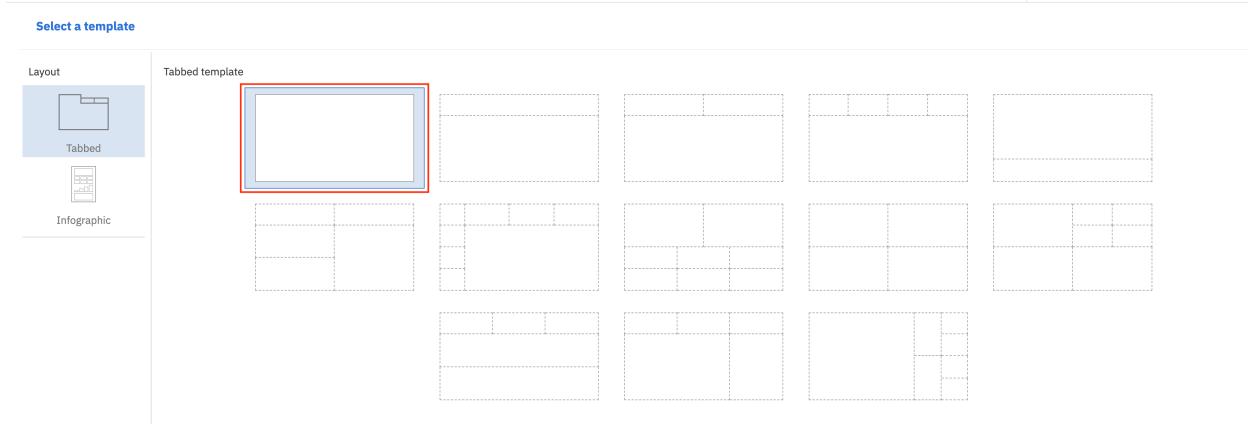
The screenshot shows the 'New asset' selection interface. On the left, a sidebar lists 'Tool type' categories: 'All types' (selected), 'Automatic builders', 'Graphical canvas', 'Code editors', and 'Other'. The main area displays four tool options: 'Dashboard editor' (highlighted with a red box), 'Data Refinery', 'Decision Optimization', and 'SPSS Modeler'. Each option has a brief description and a small icon. A search bar at the top says 'Find tools by name or purpose'. To the right, a partial view of the 'Pipeline' category is visible.

3. Name the dashboard as **Simple Dashboard**. Then select a **Cognos Dashboard Embedded service** from the list and click **Create**.

New dashboard

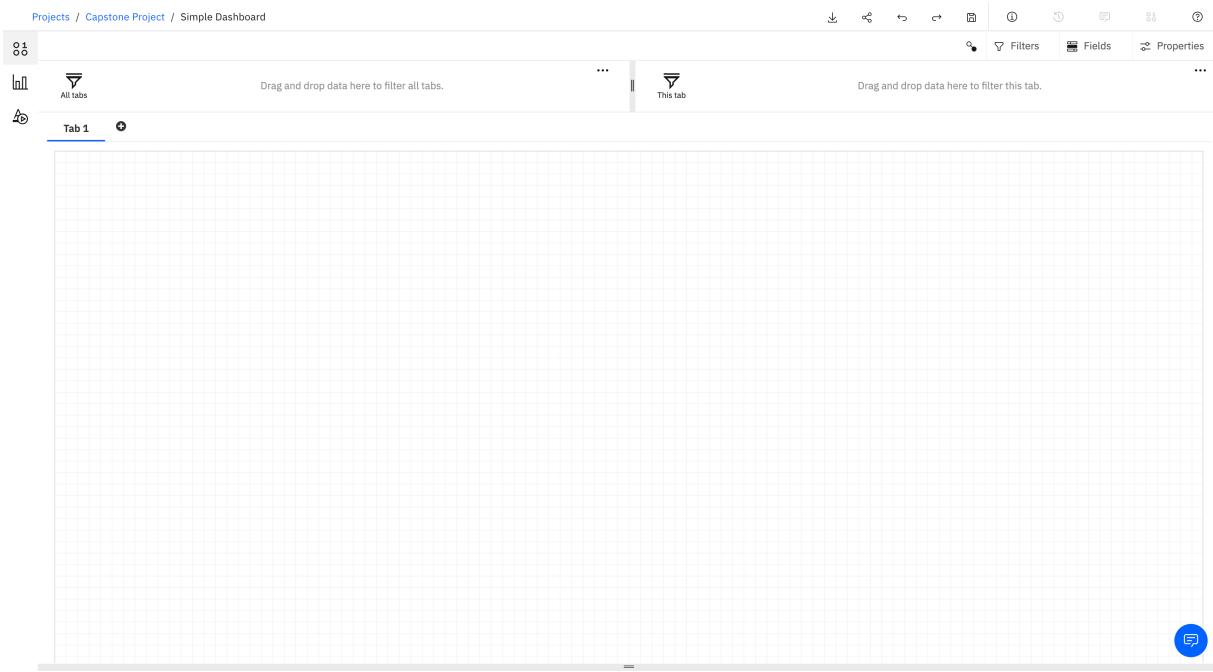


4. Select the **tabbed dashboard style**. This will allow you to have multiple pages for your dashboards. Select the **one-panel template**. Click **OK**.

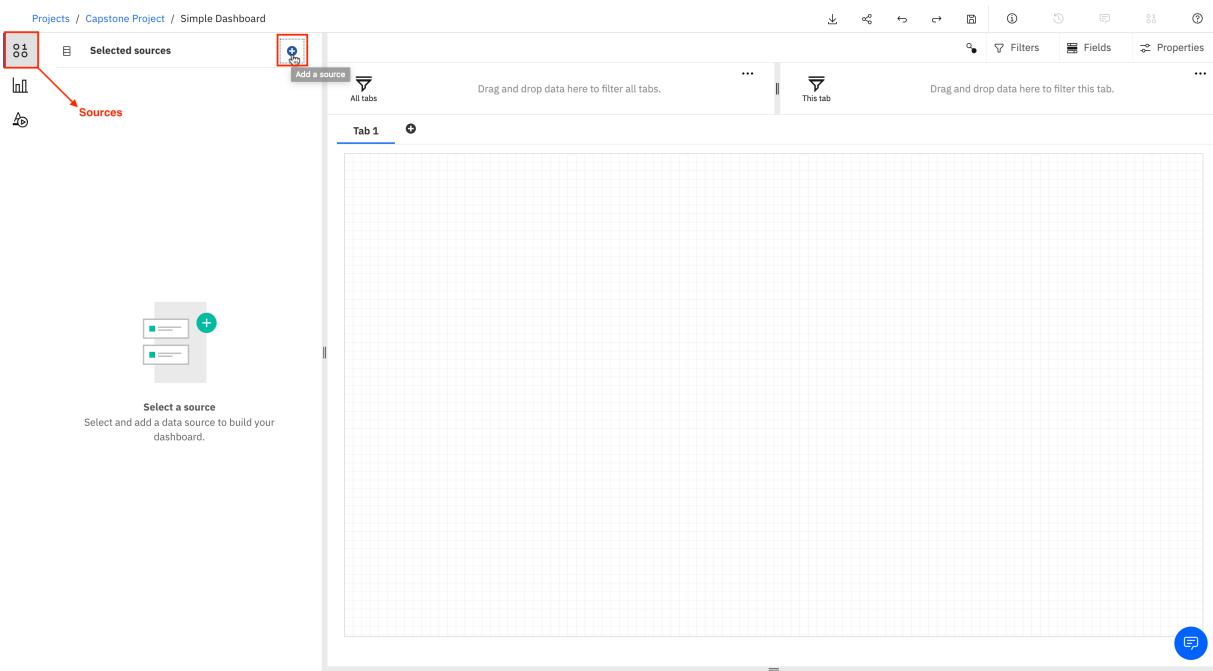


5. Now you have created a new dashboard using the dashboard template.





6. Click **Sources** icon from the **Navigation** panel to open the data source panel. Then click **Add a source** icon.

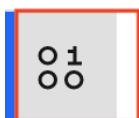


7. Select **Data assets**. Select **car_sales_data_sample.csv** and click **Select**.

Select connection source

The screenshot shows the Data Source panel with a sidebar titled 'Capstone Project'. Under 'Assets (2)', there is a 'Connections' section with a red box around it. Below 'Connections' is a 'Data assets' section with a red box around it. To the right, under 'Data assets', there is a list titled 'Data assets (1)' with one item: 'car_sales_data_sample.csv'. At the bottom right of the panel are 'Cancel' and 'Select' buttons, with 'Select' also having a red box around it.

8. From the **Navigation** panel, select **Sources** to open the data source panel, if it is not already open. The **Data Source** panel displays the file **car_sales_data_sample.csv**. Click on **car_sales_data_sample.csv**.



9. From the **Data Source** panel, select **SALES**. Drag it to the **Panel** and release.

The screenshot shows the Data Source panel with a sidebar titled 'Capstone Project / Simple Dashboard'. Under 'car_sales_data_sample.csv', there is a tree view with 'car_sales_data_sample.csv' expanded. The 'SALES' field is highlighted with a red box and has a red arrow pointing from it to a blue box containing the 'SALES' field, which is positioned over the 'Panel' tab in the main area. The main area has tabs 'Tab 1' and 'All tabs'.

10. Now you have successfully started to populate your dashboard with data visualizations too!

10M

SALES

11. To save the newly created dashboard, click **Save** icon.



Congratulations! You have completed the Lab.

Author(s)

- [Sandip Saha Joy](#)

Other Contributor(s)

Changelog

Date	Version	Changed by	Change Description
2023-06-14	1.2	Shreya	Updated screenshots
2022-05-04	1.1	Malika	Updated screenshot
2020-10-07	1.0	Sandip Saha Joy	Initial version created

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