



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

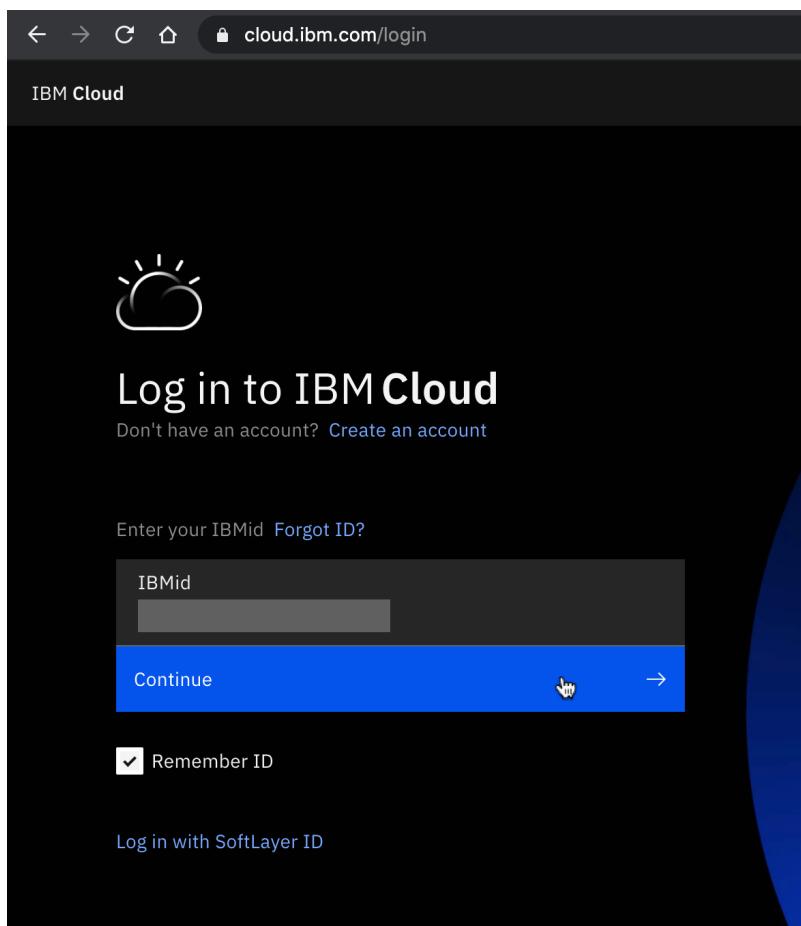
Exercise 1 : Login to IBM Cloud Pak for Data and Create a Project

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

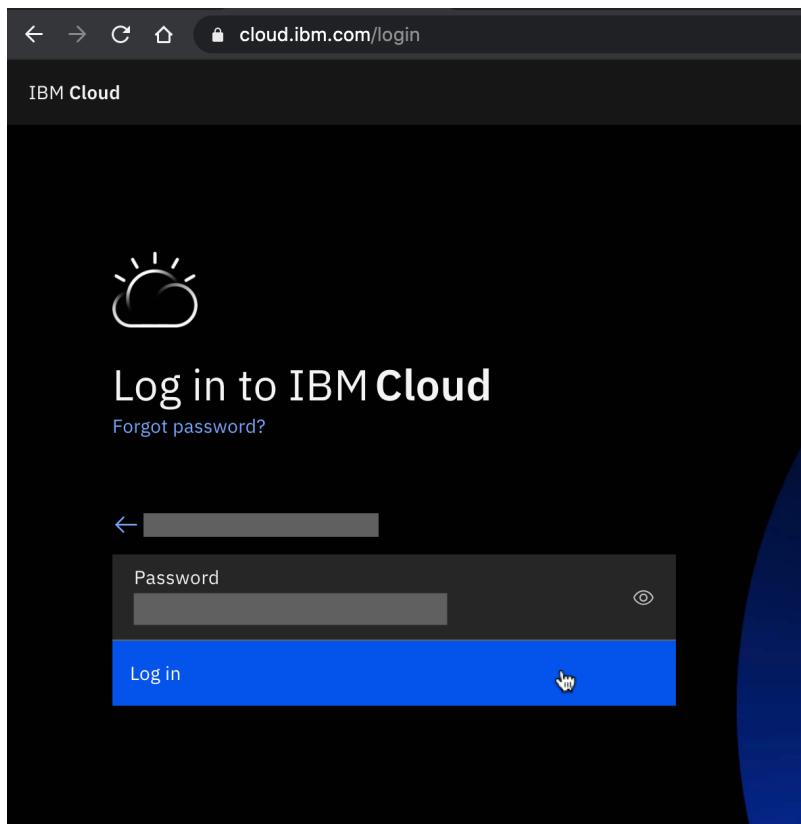
Task A : (optional) Create an Instance of Watson Studio / Cloud Pak for Data

- **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.

The screenshot shows the IBM Cloud dashboard. At the top, there is a header with back, forward, search, and home icons, and the URL "cloud.ibm.com". Below the header is the "IBM Cloud" logo and a search bar. A red box highlights the first icon in the sidebar, which is a three-line menu icon. The sidebar contains several icons with labels: a server icon for "Resource summary", a cloud icon for "Welcome!", a gear icon for "Create a resource →", a circular arrow icon, a "vm" icon, a network icon, a checkmark icon, a square icon, and a plus sign icon for "Try spinning up an app using [starter kits](#)". The main content area shows a "Resource summary" section with a large blue hexagon icon.

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

The screenshot shows the IBM Cloud dashboard interface. At the top, there is a header bar with icons for back, forward, refresh, and a lock, followed by the URL "cloud.ibm.com". Below the header is a dark navigation sidebar containing the following sections:

- Dashboard**
- Resource List**
- Classic Infrastructure**
 - Cloud Foundry**
 - Functions**
 - Kubernetes**
 - OpenShift**
 - VMware**
 - VPC Infrastructure**
 - Security and Compliance**
 - Code Engine**
- API Management**
- App Development**
- DevOps**
- Interconnectivity**
- Observability**
- Schematics**
- Apple**
- Blockchain**
- Integrate**
- Managed Solutions**

At the bottom of the sidebar, there is a section titled "Watson" with a red-bordered button labeled "Watson" and a "Try for free" link.

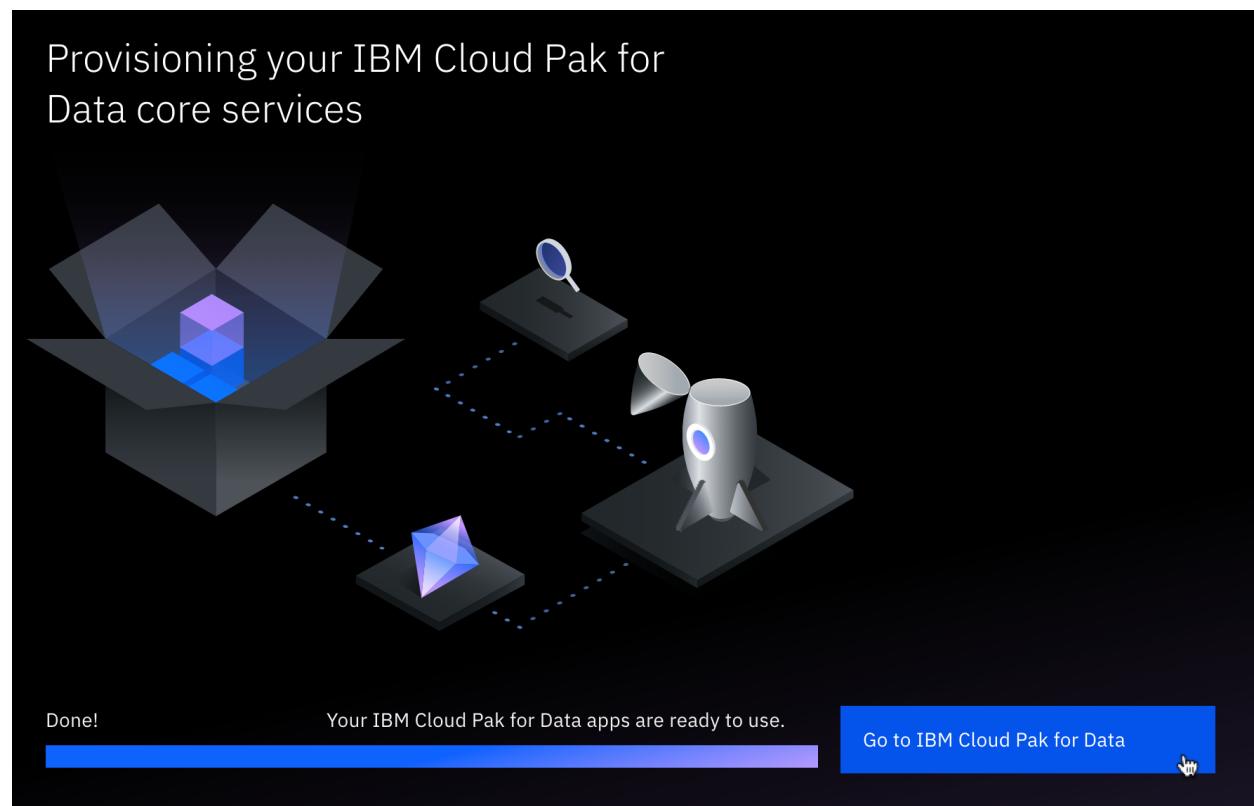
6. Now from the section **Explore our other offerings**, click IBM Watson Studio Try for free. You will be redirected to IBM Cloud Pak (dataplatform.cloud.ibm.com) for Data platform.

The screenshot shows the IBM Cloud homepage. On the left, there's a section titled "Explore our other offerings" with a "Consult with IBM" button. In the center, there's a "IBM Watson Studio" section with a "Try for free" button. A red box highlights the "Try for free" button.

7. Select a region matching the region of your IBM Cloud account. Then click **Log in with your IBMid**

The screenshot shows the "Try IBM Cloud Pak for Data" page. It has a "Pick your region for services and data" section where "Dallas" is selected. Below it are two columns: "Create a new IBM Cloud account to activate" and "Activate your IBM Cloud account". The "Activate your IBM Cloud account" column includes a "Log in with your IBMid" button, which is highlighted with a red box.

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



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

Welcome, Sandip saha!

Learn by example
Step through solving a specific business problem in a sample project.
Take a guided tutorial

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

Extend your capabilities
Add tools, databases, or other features by creating services instances.
Create a service

Overview

Notifications
No notifications
You will see your most recent notifications here.

Deployment spaces
No deployment spaces
After you create spaces, you'll see them here.
New deployment space +

Your services
No Watson services to show
You don't have any Watson services yet.
New Service +

New in gallery
NOTEBOOK
IBM Cloud SQL Query
AUTHOR: IBM
MODIFIED: Oct 05, 2020

Feedback

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 dataplatfrom.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).

IBM Cloud Pak for Data

Log in to IBM Cloud Pak for Data

Starter edition

Need an account? [Sign up and try for free](#)

Username [Forgot ID?](#)

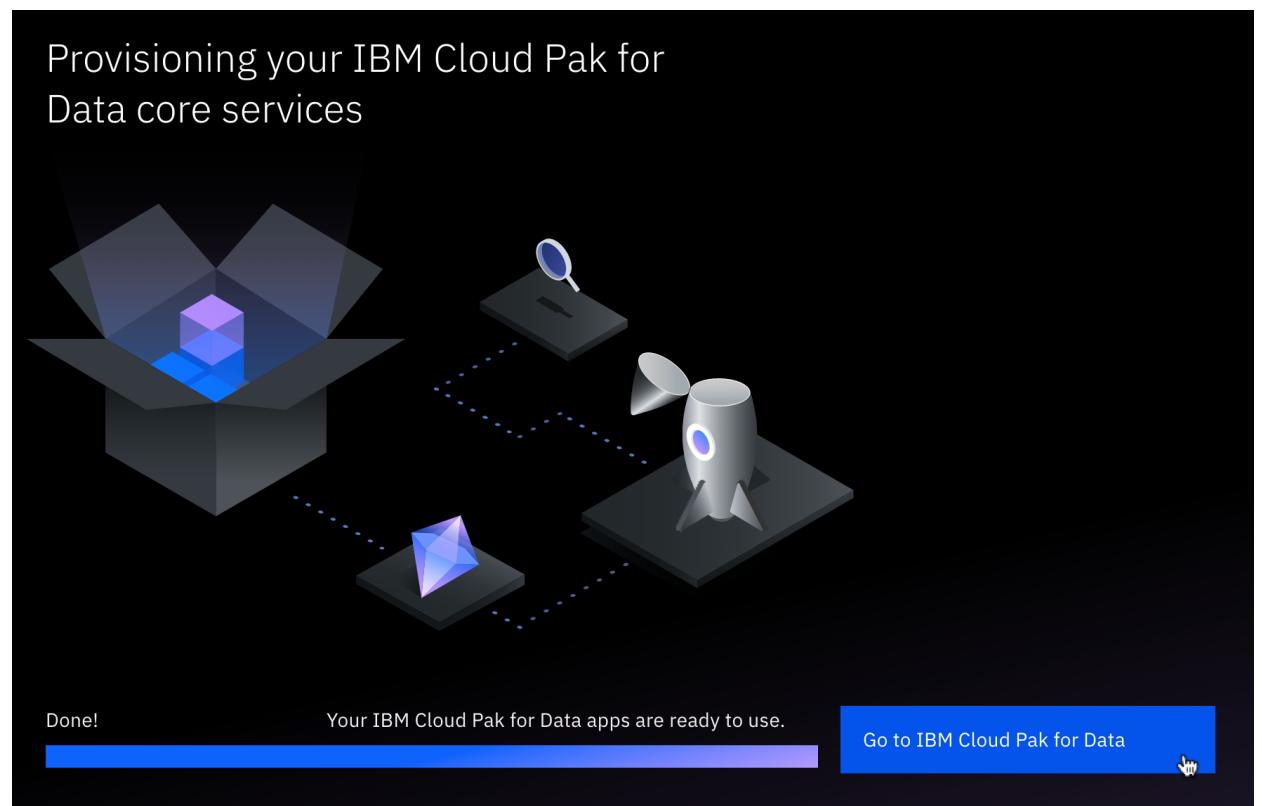
Password [Forgot password?](#)

Remember ID

You will log into Dallas ▾

- Dallas
- London
- Frankfurt
- 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, Sandip saha!

IBM Cloud Pak for Data

Sandip Saha Joy's Account

Learn by example

Step through solving a specific business problem in a sample project.

Take a guided tutorial

Work with data

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

Create a project

Extend your capabilities

Add tools, databases, or other features by creating services instances.

Create a service

Quick navigation

Projects

Deployment spaces

Support

- Documentation
- FAQ
- What's new
- Give feedback
- Stack overflow
- Manage Tickets

Feedback

Overview

Notifications

No notifications

You will see your most recent notifications here.

Deployment spaces

No deployment spaces

After you create spaces, you'll see them here.

New deployment space +

Your services

No Watson services to show

You don't have any Watson services yet.

New Service +

New in gallery

NOTEBOOK

IBM Cloud SQL Query

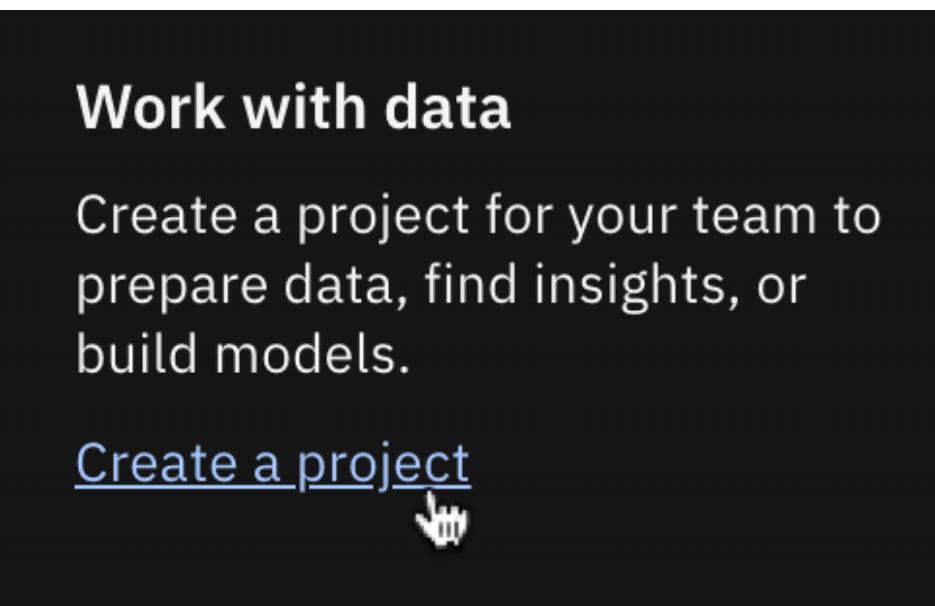
AUTHOR: IBM

MODIFIED: Oct 05, 2020

View all (0)

Task C : Create a New Project

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



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

← Back

Create a project

Choose whether to create an empty project or to preload your project with data and analytical assets. Add collaborators and data, and then choose the right tools to accomplish your goals. Add services as necessary.

Create an empty project

Add the data you want to prepare, analyze, or model. Choose tools based on how you want to work: write code, create a flow on a graphical canvas, or automatically build models.

NEW AutoAI experiment tool: Fully automated approach to building a classification or reg...

USE TO

- Prepare and visualize data
- Analyze data in notebooks
- Train models

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
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

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

The screenshot shows the IBM Cloud Pak for Data Services catalog. On the left, under the 'Cloud Object Storage' service, the 'Create' button is highlighted with a red box. The 'Pricing plan' section shows a 'Lite' plan with various storage and request limits. The 'Features' section lists '1 COS Service Instance', 'Storage up to 25 GB/month', and 'Up to 2,000 Class A (PUT, COPY, POST, and LIST) requests per month'. The 'Pricing' section indicates it's 'Free'. On the right, the 'Summary' panel shows the service name as 'Cloud Object Storage', region as 'Global', plan as 'Lite', and resource group as 'Default'. Below the summary, there are 'Create', 'View terms', and a 'Create' button in a blue box.

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

The screenshot shows the 'New project' page. In the 'Define storage' section, step 1 'Select storage service' is shown with an 'Add' button. Step 2 'Refresh' is highlighted with a red box. The 'Add' button has a tooltip: 'Add an object storage instance, and then return to this page and click Refresh.' Below the storage section, there is a 'Project description' field containing placeholder text.

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

The screenshot shows the 'Define project details' section where the 'Name' field is set to 'Capstone Project'. Below it, the 'Storage' section is highlighted with a red oval, showing 'Cloud Object Storage-iu'. Under 'Choose project options', there's a checkbox for 'Restrict who can be a collaborator' which is unchecked. A note below states: 'Project includes integration with [Cloud Object Storage](#) for storing project assets.' At the bottom right, there are 'Cancel' and 'Create' buttons, with the 'Create' button being highlighted with a red oval.

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 of the 'Capstone Project' dashboard. The 'Overview' tab is also visible. The 'Assets' tab is highlighted with a blue border. On the left, a sidebar shows '0 asset' and a 'All assets' button. The main area shows 'All assets' with a count of 0. Below it, there's a section titled 'Asset types' with icons for data and models. To the right, there's a 'Start adding assets' callout with an illustration of a person holding a tablet with a plus sign. It says: 'To get started with project assets, 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, click **Projects** under Quick navigation.

The screenshot shows the IBM Cloud Pak for Data homepage. At the top, it says "Welcome, Sandip saha!". Below that are three main sections: "Learn by example", "Work with data", and "Extend your capabilities". Under "Learn by example", there's a link to "Take a guided tutorial". Under "Work with data", there's a link to "Create a project". Under "Extend your capabilities", there's a link to "Create a service". On the left side, there's a "Quick navigation" sidebar with "Projects" highlighted and a red box around it, indicating it's the selected tab. Other options in the sidebar include "Deployment spaces". To the right of the sidebar, there are two sections: "Overview" and "Notifications".

2. Select **Capstone Project** you created earlier.

The screenshot shows the "Projects" page in IBM Cloud Pak for Data. At the top, it says "IBM Cloud Pak for Data". Below that, there's a search bar with the placeholder "Which project are you looking for?". A list of projects is shown, with the first item being "Capstone Project", which is highlighted with a red box and a cursor icon pointing at it, indicating it's the selected project.

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

The screenshot shows the 'Manage' tab selected in the top navigation bar. A red box highlights the 'Manage' button, and a red circle with the number '1' is placed above it. On the left sidebar, under the 'Project' section, the 'Services & integrations' option is highlighted with a red box and a red circle with the number '2'. In the main content area, there is a search bar labeled 'Find services' and a table header with columns 'Name' and 'Service type'. A large red box highlights the 'Associate service' button in the top right corner of the table area, and a red circle with the number '3' is placed above it. Below the table, there is a message: 'No services' and 'Click Associate service or ask a project Admin to associate one'.

4. Click New service.

The screenshot shows the 'Associate service' dialog. At the top, it says 'Associate service' and 'Choose an existing or add a new service to associate with your project.' Below this is a search bar and a filter section. The main area is a table with columns 'Name', 'Type', 'Plan', 'Location', 'Status', and 'Group'. A red box highlights the 'New service' button in the top right corner of the table area, and a red circle with the number '4' is placed above it.

5. Click IBM Cognos Dashboard Embedded.

The screenshot shows the 'Find services' search results. The search bar contains 'Find services' and the word 'Analytics' is typed. Under the 'Category' section, 'Analytics' is selected. In the search results, the 'IBM Cognos Dashboard Embedded' service is highlighted with a red box and a red circle with the number '5'. The service card includes a thumbnail, the name 'IBM Cognos Dashboard Embedded', the category 'Analytics', a description 'Bring data to life directly from your application with this powerful and easy-to-use visualization service.', and the status 'Lite • Free'. A red box highlights the service card, and a red circle with the number '6' is placed above it.

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

Services catalog /

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
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

Create

View terms

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

8. 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 ▾

						New service	+
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 (Cloud Data Engine) interface. At the top, there's a navigation bar with 'Projects / IBM_Project'. Below it, a sub-navigation bar has 'Assets' highlighted with a red box and circled with '1'. Other options like 'Overview', 'Jobs', and 'Manage' are also present. To the right of the sub-navigation, there's a button 'Click here to add a Data set' and a 'New asset' button with a plus sign. The main content area shows a message 'Start adding assets' with a small icon of a person interacting with a screen. Below this, there's a section for 'All assets' with a count of '0 asset' and a link 'All assets'. On the left, there's a sidebar with 'Asset types' and some icons.

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.

<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 IBM Cloud Pak for Data interface. At the top, there's a navigation bar with 'IBM Cloud Pak for Data' and a dropdown menu. Below it, a breadcrumb trail shows 'Projects / Capstone Project'. A horizontal menu bar includes 'Overview' (which is underlined), 'Assets', 'Jobs', 'Access Control', and 'Settings'. On the left, a sidebar lists 'Tool type' categories: 'All types' (selected), 'Automatic builders', 'Graphical canvas', 'Code editors', and 'Other'. The main content area displays a card for the 'Dashboard editor'. This card has a red border around its icon and title. It includes a search bar at the top, followed by the title 'Dashboard editor' with a brief description: 'Create a set of visualizations of analytical results on a graphical canvas without coding.' To the right are cards for 'Data Refinery', 'Decision Optimization', and 'Pipelines'. At the bottom of the main content area, there's a section for 'Code editors'. On the right side of the interface, there are summary numbers: '1 Assets' and '1 Collaborators'. The 'Add to project' button in the top right corner is also highlighted with a red box.

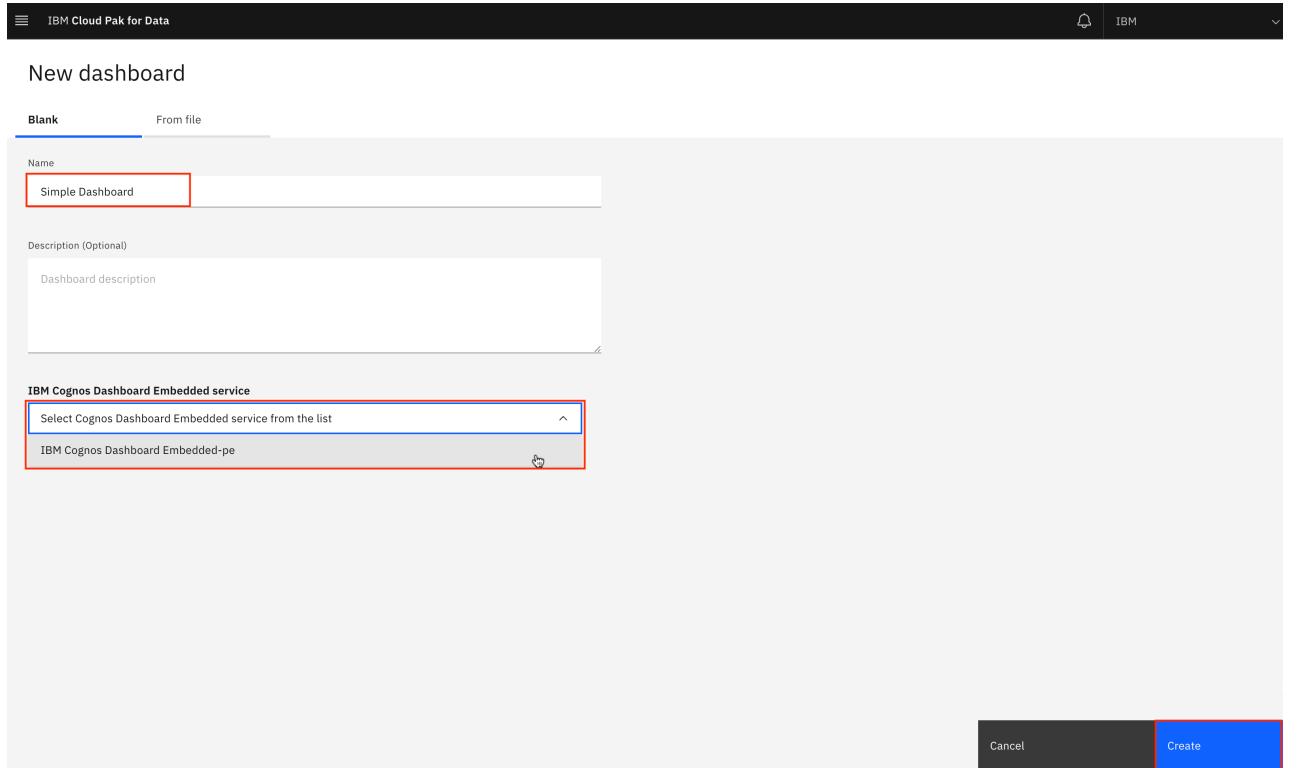
2. Scroll down and select **Dashboard Editor**.

New asset

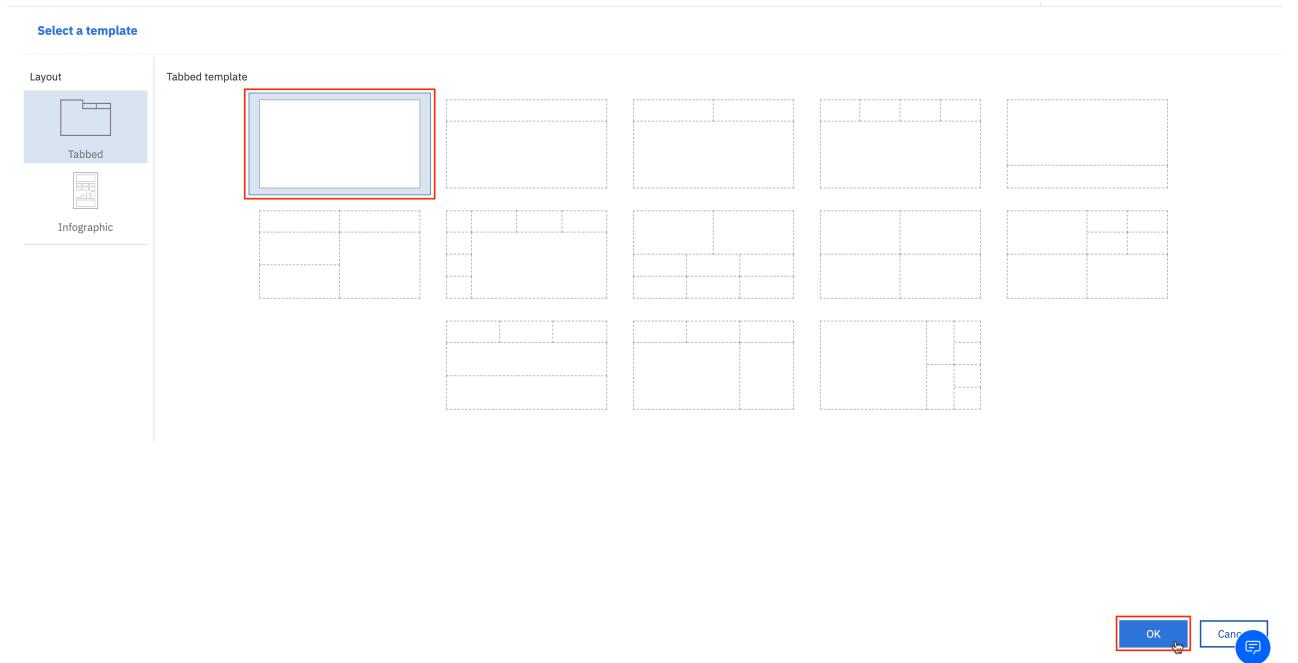
Select the tool to create an operational or configuration asset.

This screenshot shows the 'New asset' selection screen. On the left, a sidebar lists 'Tool type' categories: 'All types' (selected), 'Automatic builders', 'Graphical canvas', 'Code editors', and 'Other'. The main content area contains several tool cards. One card, 'Dashboard editor', is highlighted with a red box. It features a small icon, the title 'Dashboard editor', and a brief description: 'Create a set of visualizations of analytical results on a graphical canvas without coding.' Other visible cards include 'Data Refinery', 'Decision Optimization', 'Pipelines', 'SPSS Modeler', and 'Code editors'. Each card has a small icon and a brief description below it.

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



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.

The screenshot shows a dashboard interface with a header bar and a main content area. The header bar includes a back arrow, a search bar, and several icons for file operations like download, refresh, and settings. Below the header, there are two tabs: 'All tabs' and 'This tab'. The 'All tabs' tab is currently selected. The main content area is a large, empty grid with a light blue background, labeled 'Drag and drop data here to filter all tabs.' At the bottom right of the main area, there is a small blue circular icon with a white speech bubble symbol.

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

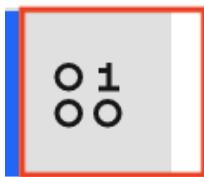
The screenshot shows the 'Sources' panel of a data management tool. The left sidebar has a 'Sources' icon highlighted with a red box and an arrow pointing to it. The main content area displays a message: 'Select a source. Select and add a data source to build your dashboard.' Below this message, there is a small icon representing a data source. The top navigation bar is identical to the one in the previous screenshot, with icons for download, refresh, search, and settings.

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

Select connection source

The screenshot shows a 'Select connection source' dialog box. On the left, there's a tree view under 'Capstone Project' with 'Assets (2)', 'Connections', and 'Data assets'. Under 'Data assets', 'car_sales_data_sample.csv' is selected and highlighted with a red box. At the bottom right of the dialog, there are 'Cancel' and 'Select' buttons, with 'Select' also highlighted with a red box.

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.

Projects / Capstone Project / Simple Dashboard

The screenshot shows a dashboard builder interface. On the left, a sidebar lists a data source named "car_sales_data_sample.csv" with various columns: ORDERNUMBER, QUANTITYORDERED, PRICEEACH, ORDERLINENUMBER, and SALES. The "SALES" column is highlighted with a red box. A red arrow points from this highlighted column to a blue box labeled "SALES" located in the main workspace. The main workspace is titled "Tab 1" and contains a large, empty grid area for visualizations.

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
2022-05-04	1.1	Malika	Updated screenshot
2020-10-07	1.0	Sandip Saha Joy	Initial version created

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