

Create and configure IBM Watson platform

Project Name	Smart solutions for railways
Maximum Marks	20 marks

Step-1: Creating IBM Cloud

The screenshot displays the IBM Cloud dashboard interface. At the top, there's a navigation bar with the IBM Cloud logo, a search bar, and links for 'Catalog', 'Manage', and 'Kaviya sree M's Account'. The main content area is titled 'Dashboard' and features a 'For you' section with several service tiles. These tiles include 'Build' (Explore IBM Cloud with this selection of easy starter tutorials and services), 'Create and deploy an application' (Browse our starter kits, and then select one to jump start the process to create and deploy your app), 'Build a web app with Watson Speech to Text' (Deploy a conversational interface compatible with any application, device, or channel), 'Get Started with Watson Studio' (Get started with using AI and Cloud Object Storage in 15 minutes), and 'Build a V Cloud (V' (Upgrade to create your own protected space in the IBM Cloud). Each tile has a 'Getting started' button and a time estimate. On the right side, there's a user profile dropdown menu with options like 'Profile', 'Log in to CLI and API', 'Privacy', 'Change theme', and 'Log out'. The bottom of the dashboard shows sections for 'User access', 'News' (IBM Cloud Satellite New Pricing), and 'Planned maintenance'. The Windows taskbar at the bottom indicates the system time as 12:27 on 18-11-2022.

Step-2: Using IBM CLOUD services

The screenshot shows a web browser window displaying the IBM Cloud catalog search results for the term "services". The browser's address bar shows the URL "cloud.ibm.com/catalog?search=services#search_results". The page header includes the IBM Cloud logo, a search bar, and navigation links for "Catalog", "Manage", and the user account "Kaviya sree M's Account".

The search results are displayed in a grid of six service cards:

- Raxak Protect** (By Cloud Raxak, Inc.): Automated Comprehensive Security Configuration Management for [Servers](#). Features: Lite, Free, IAM-enabled, Third party supported.
- Watson Assistant** (By IBM): Watson Assistant lets you build conversational interfaces into any application, [device](#), or channel. Features: Lite, Free, EU Supported, HIPAA Enabled, IAM-enabled, IBM supported.
- QuantaStor Virtual Storage Appliance** (By OSNexus Corporation): QuantaStor VSAs deliver highly-available SAN, NAS, and S3-compat storage via easy to deploy VM instances. Features: OVA Images, VMware vCenter [Server](#), Third party supported.
- Spectrum Protect Plus vSnap Repository** (By IBM): Simplify data backup and recovery for cloud and hybrid-cloud with an IBM data resilience solution. vSnap Server Component. Features: OVA Images, VMware vCenter [Server](#), Free.
- Vantage on VMware Analytics Bundle** (By Teradata): Teradata Vantage is an enterprise analytics platform. Try this accompanying analytics bundle with your Vantage on VMware Dev Tier. Features: OVA Images, VMware vCenter [Server](#), Free.
- Vantage on VMware Dev Tier 17.10** (By Teradata): Teradata Vantage is an enterprise-class analytics platform. Try the free Developer Tier to see how Vantage can work for you. Features: OVA Images, VMware vCenter [Server](#), Free.

The bottom of the screen shows a Windows taskbar with various application icons, a search bar, and system information including the date and time (14:16, 18-11-2022).

Step-3: Configure the IBM CLOUD service and creating IOT platform

The screenshot shows the IBM Cloud 'Internet of Things Platform' creation interface. The left sidebar lists service details: Type (Service), Provider (IBM), Last updated (08/15/2022), Category (Internet of Things), Compliance (IAM-enabled), and Location (Frankfurt, London). The main content area has two tabs: 'Create' (active) and 'About'. Under 'Create', there are two sections: 'Select a location' with a dropdown menu showing 'London (eu-gb)', and 'Select a pricing plan' with a table of available plans.

Plan	Features	Pricing
Lite	Includes up to 500 registered devices, and a maximum of 200 MB of each data metric. Maximum of 500 registered devices.	Free

On the right, a 'Summary' panel shows the configuration: Internet of Things Platform, Free, Location: London, Plan: Lite, Service name: Internet of Things Platform-60, and Resource group: Default. A warning box states: 'Existing Lite plan instance. You can have only 1 Lite plan instance of this service per resource group. Delete your current Lite plan instance in Default resource group to create a new one, or view the existing instance.' At the bottom, there is a checkbox for 'I have read and agree to the following license agreements' and a 'Show all' link.

Step4: IBM Watson IOT platform acts as the mediator to connect the web application to IOT devices,hence launching IBM Watson IOT platform.

The screenshot shows the IBM Cloud 'Internet of Things Platform-az' management page. The left sidebar has a 'Manage' tab with sub-options: Plan and Connections. The main content area features a large graphic of a microchip with data lines and the text 'Let's get started with IBM Watson IoT Platform'. Below this is a 'Launch' button and a 'Docs' button. A section titled 'Ready for the next level?' shows the 'IBM Watson IoT Platform Journey' with three stages: 'Lite' (checked), 'Non-Production', and 'Production'. A blue chat icon is in the bottom right corner. The bottom of the page shows a taskbar with various application icons and system information.

Step 5: IBM Watson IOT platform is created

The screenshot shows a web browser window displaying the IBM Watson IoT Platform dashboard. The browser's address bar shows the URL `internetofthings.ibmcloud.com`. The dashboard has a dark blue background with a circuit-like pattern of white lines. In the center, the word "Things" is written in a large, white, sans-serif font. To the left of "Things", the text "Collect data from" is displayed above a small icon of a factory. To the right of "Things", the text "and make value from it" is displayed above a small icon of a person. The top left of the dashboard is labeled "IBM Watson IoT Platform". The top right shows a user profile for "kaviyasree1912@gmail.com" with a dropdown menu for "ID: (select org)". A "Cookie Preferences" button is visible in the bottom right corner of the dashboard area. The browser's taskbar at the bottom shows various open applications, including a document titled "Create and confi....docx", and the system tray displays the date and time as "14:08 18-11-2022".

Step 6: In order to connect the IOT device to the IBM cloud, create device in the IBM Watson IoT Platform and get the device credentials.

IBM Watson IoT Platform

Device Drilldown - MK3J16

Device Credentials

Connection Information

Basic connection information about this device.

Device ID	MK3J16
Device Type	b11m3edevicetype
Date Added	Nov 18, 2022 2:27 PM
Added By	kaviyasree1912@gmail.com

Step-7: Connect the device and start simulating.

Device Drilldown - MKSJ16

Recent Events

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format
event_1	{"available seats":60,"longitude":-14,"latitude":...	jsc
event_1	{"available seats":8,"longitude":-178,"latitude":...	jsc
event_1	{"available seats":45,"longitude":-34,"latitude":...	jsc
event_1	{"available seats":47,"longitude":-111,"latitude":...	jsc
event_1	{"available seats":17,"longitude":21,"latitude":...	jsc

State

This table shows a list of data points that are reported by this device.

Device Type: b11m3edevicetype

Events 1

New event type

Event type name event_1

Send

Schedule

20 Every Minute

Payload

Specify the event payload in the editor window or by uploading a CSV file.

```
0 {
1   "available seats": random(0, 100),
2   "longitude": random(-180, 180),
3   "latitude": random(-90, 90)
4 }
5
```

Upload a CSV file

Cancel Save

SIMULATION:

The simulation shows the available seats , longitude and latitude

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Device Drilldown - MKSJ16

Connection Information

Recent Events

State

Device Information

Metadata

Diagnostics

Connection Logs

Device Actions

Recent Events

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
event_1	{"available seats":-6,"longitude":-37,"latitude":-...	json	a few seconds ago
event_1	{"available seats":-72,"longitude":123,"latitude":...	json	a few seconds ago
event_1	{"available seats":-66,"longitude":-60,"latitude":...	json	a few seconds ago
event_1	{"available seats":-15,"longitude":-138,"latitude":...	json	a few seconds ago
event_1	{"available seats":-105,"longitude":24,"latitude":...	json	a few seconds ago

State

This table shows a list of data points that are reported by this device.

1. Simulation running