

# Create and configure IBM cloud services

## Creation of Node-Red

Team ID	PNT2022TMID18013
Project Name	IOT Based Real-Time River Water Quality Monitoring and Control System

## NODE - RED:

## CREATION OF CLOUD FOUNDRY

The screenshot displays the IBM Cloud console interface. The top navigation bar includes the IBM Cloud logo, a search bar, and links for Catalog, Manage, and the user's account (Sharon S's Account). The main content area is titled "Resource list" and features a table with columns for Name, Group, Location, Product, and Status. The table lists various services under different categories, including Analytics, Blockchain, Databases, Developer tools, Logging and monitoring, Migration, Integration, and Internet of Things. The "Internet of Things" category is expanded, showing a single resource: "Internet of Things Platform-sv". This resource is located in London, belongs to the "Default" group, and is currently "Active". A sidebar on the right provides additional details for the selected "Internet of Things Platform-sv" resource, including its status (Active), product name, creation date (2022-09-26), creator (sheronget\_cs@mepcoen...), plan (Lite), CRN (cm:v1:bluemix:publiciotf-s...), and GUID (7f14d52d-8472-4129-b0...). A "View full details" button is also present at the bottom of the sidebar.

Name	Group	Location	Product	Status
Internet of Things Platform-sv	Default	London	Internet of Things Platform	Active

# NODE RED APP

The screenshot displays the IBM Cloud console interface for a resource named "Node RED ILRXU 2022-10-10". The top navigation bar includes the IBM Cloud logo, a search bar, and links to "Catalog", "Manage", and "Sheron S's Account". The main content area is divided into several panels:

- Details:** A table showing application metadata.

Property	Value
App URL	<a href="https://node-red-ilrxu-2022-10-10.eu-de.mybluemix.net">https://node-red-ilrxu-2022-10-10.eu-de.mybluemix.net</a>
Source	<a href="https://us-south.git.cloud.ibm.com/sheronget_cs/NodeREDILRXU...">https://us-south.git.cloud.ibm.com/sheronget_cs/NodeREDILRXU...</a>
Resource group	Default
Deployment target	Node RED ILRXU 2022-10-10
Created	10/10/2022
- Services:** A section for managing services, featuring a "Cloudant" service card with links to "Open dashboard", "Documentation", and "API reference". It also includes a "Credentials" dropdown and buttons for "Connect existing services" and "Create service".
- Deployment Automation:** A section showing deployment configurations. It lists two pipelines: "pr-pipeline" and "ci-pipeline", both with a status of "No stages detected".
- Getting started quickly:** A sidebar panel providing instructions on how to configure the app, including steps for connecting services, downloading code, and deploying the app.

The right side of the console features a vertical "ASK A QUESTION" button.

The screenshot shows the "Node-RED on IBM Cloud" landing page. The header is dark grey with the text "Node-RED on IBM Cloud". The main content area has a red background with the "Node-RED" logo and the tagline "Flow-based programming for the Internet of Things". Below this, there is a light grey section with the following text:

Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways.

This instance is running as an IBM Cloud application, giving it access to the wide range of services available on the platform.

More information about Node-RED, including documentation, can be found at [nodered.org](https://nodered.org).

On the right side, there is a red button labeled "Go to your Node-RED flow editor" and a link labeled "Learn how to customise Node-RED".

## NODE RED WINDOW

The screenshot displays the Node-RED web interface. At the top, a black header bar contains the Node-RED logo and a "Successfully deployed" notification. Below the header, a search bar labeled "filter nodes" is visible. The main workspace, titled "Flow 1", shows a flow diagram on a grid. The flow consists of two nodes: an "INPUT" node (blue) connected to a "msg.payload" node (green). The left sidebar contains two categories of nodes: "common" and "function". The "common" category includes nodes like inject, debug, complete, catch, status, link in, link call, link out, and comment. The "function" category includes function, switch, change, and range. The right sidebar features a "debug" console with a "debug" button and a "Deploy" button. The console displays two log entries, each showing a timestamp, node ID, and a message: "HELLO : msg.payload : number" followed by the value "16691227611".

Node-RED

Successfully deployed

You have some unused configuration nodes. Click here to see them

Deploy

filter nodes

Flow 1

common

- inject
- debug
- complete
- catch
- status
- link in
- link call
- link out
- comment

function

- function
- switch
- change
- range

debug

all nodes

all

11/22/2022, 6:42:46 PM node: f2f2649a.0d0d98  
HELLO : msg.payload : number  
16691227611

11/22/2022, 6:42:50 PM node: f2f2649a.0d0d98  
HELLO : msg.payload : number  
16691227611