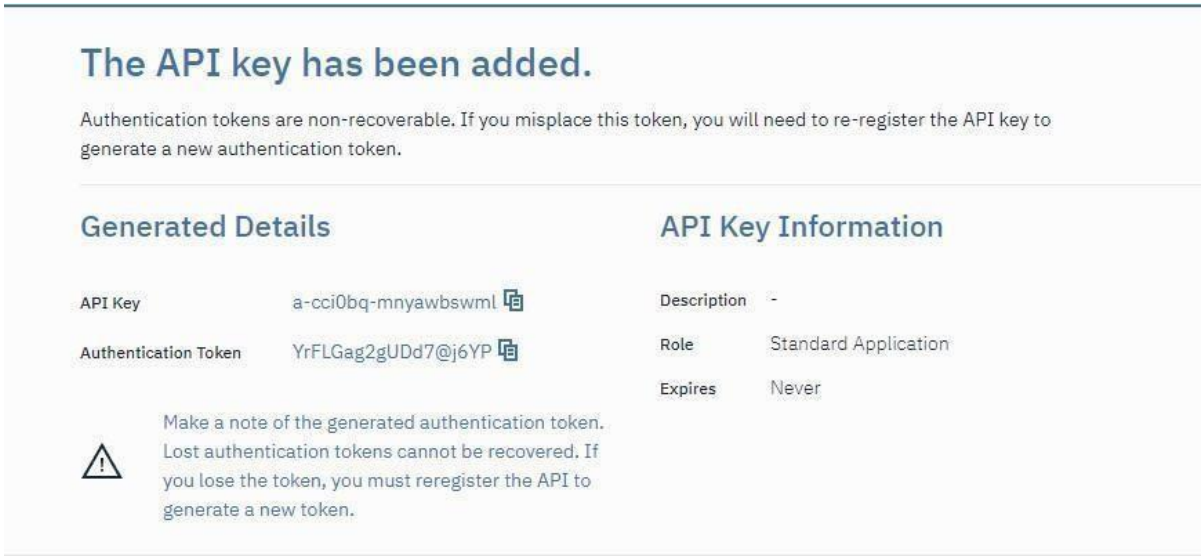
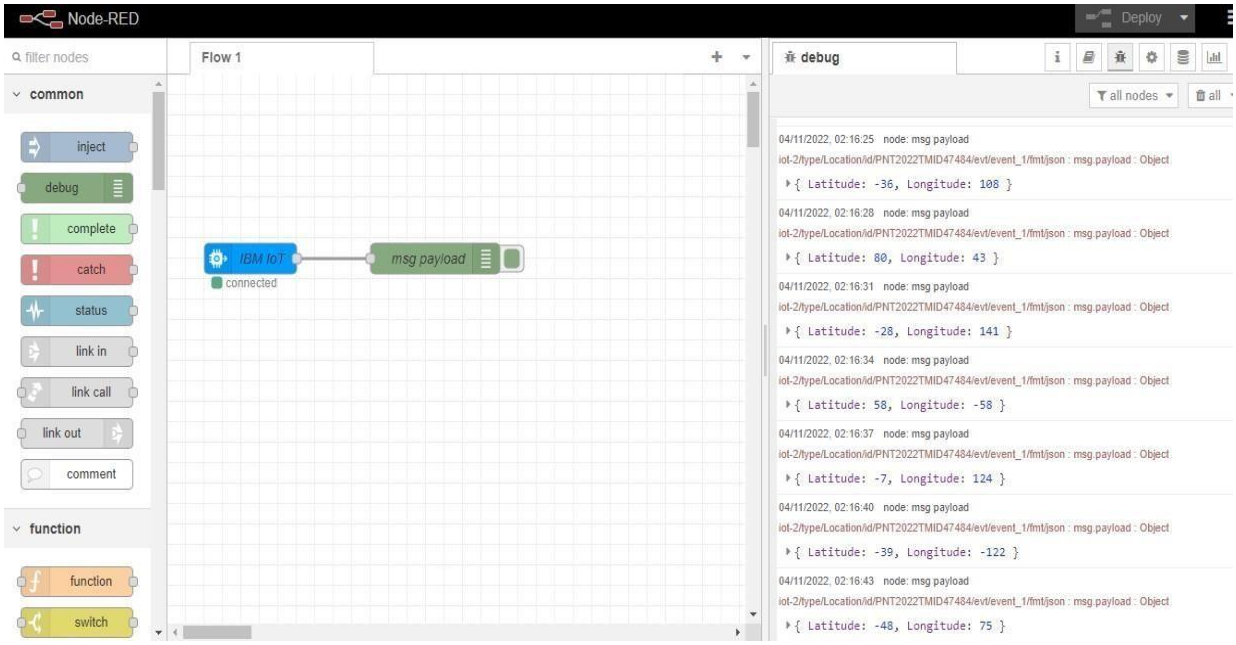
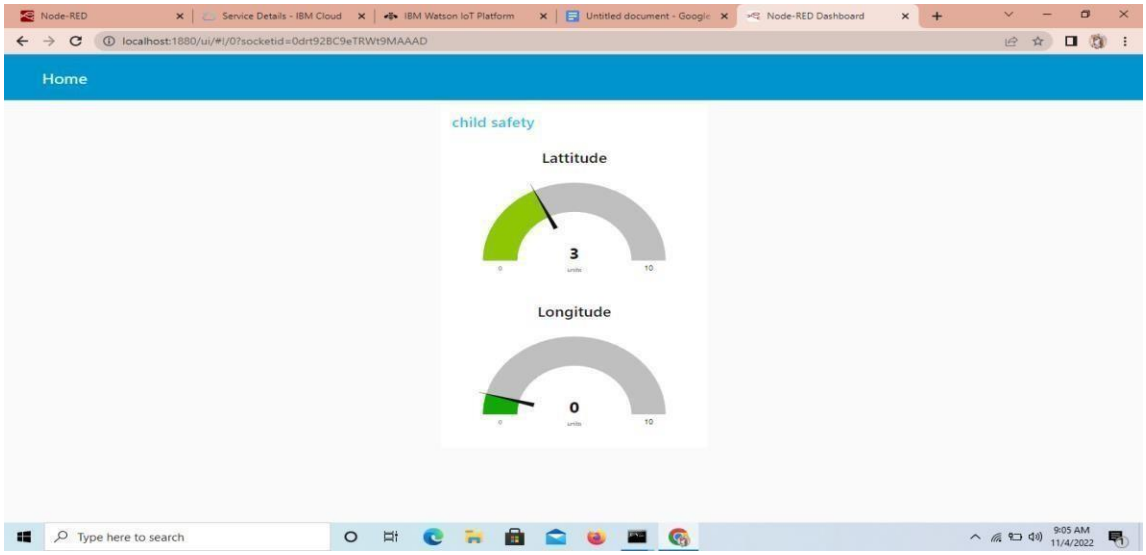
Project Development Phase
SPRINT-2

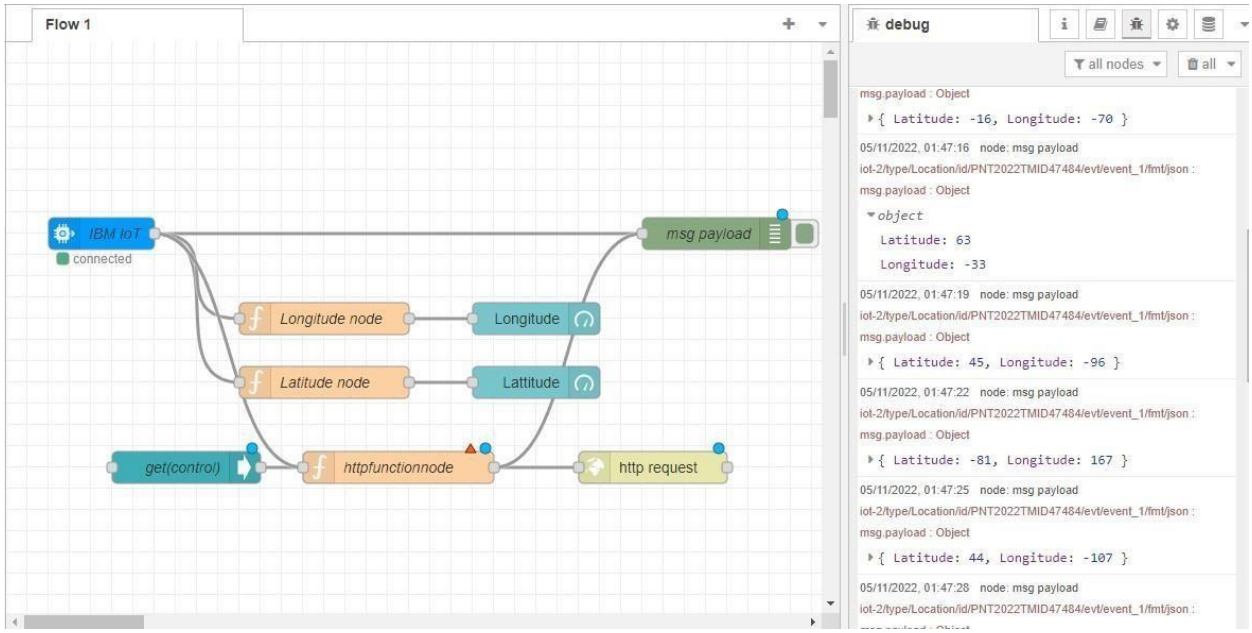
Team ID	PNT2022TMID38874
Project Name	IoT Based Safety Gadget for Child Safety Monitoring & Notification
Maximum Marks	20 marks

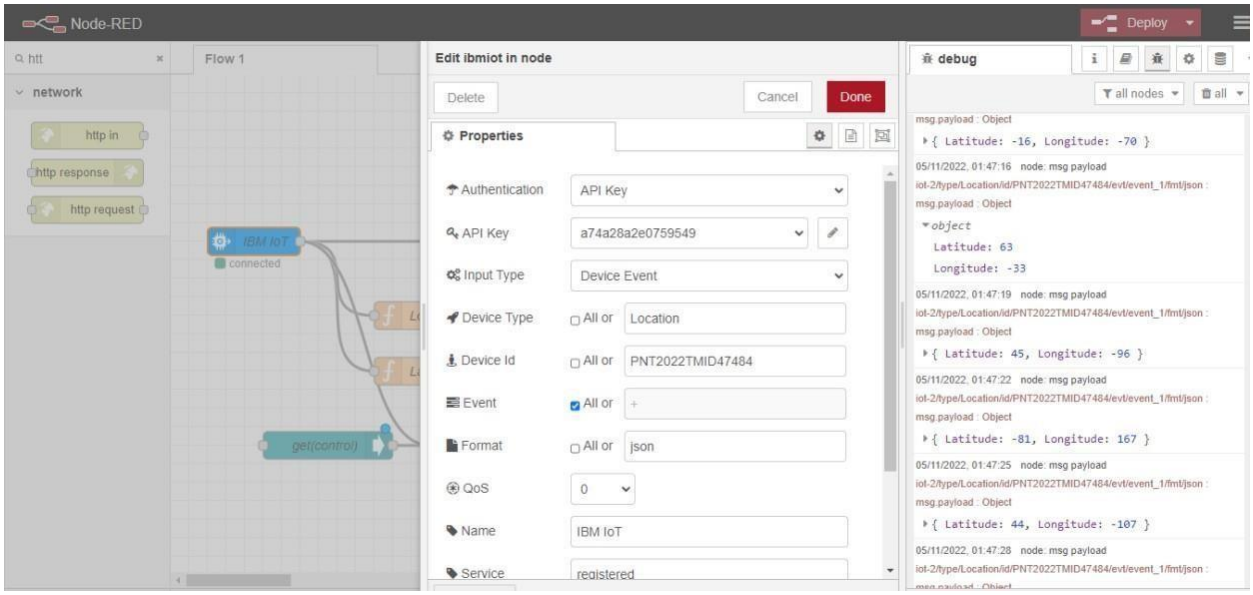
Sprint-2	US-1	Configuration the connection security and create API keys that are used in the Node-RED	10
Sprint-2	US-2	Service for accessing the IBM IoT platform. Create a Node-RED service.	10

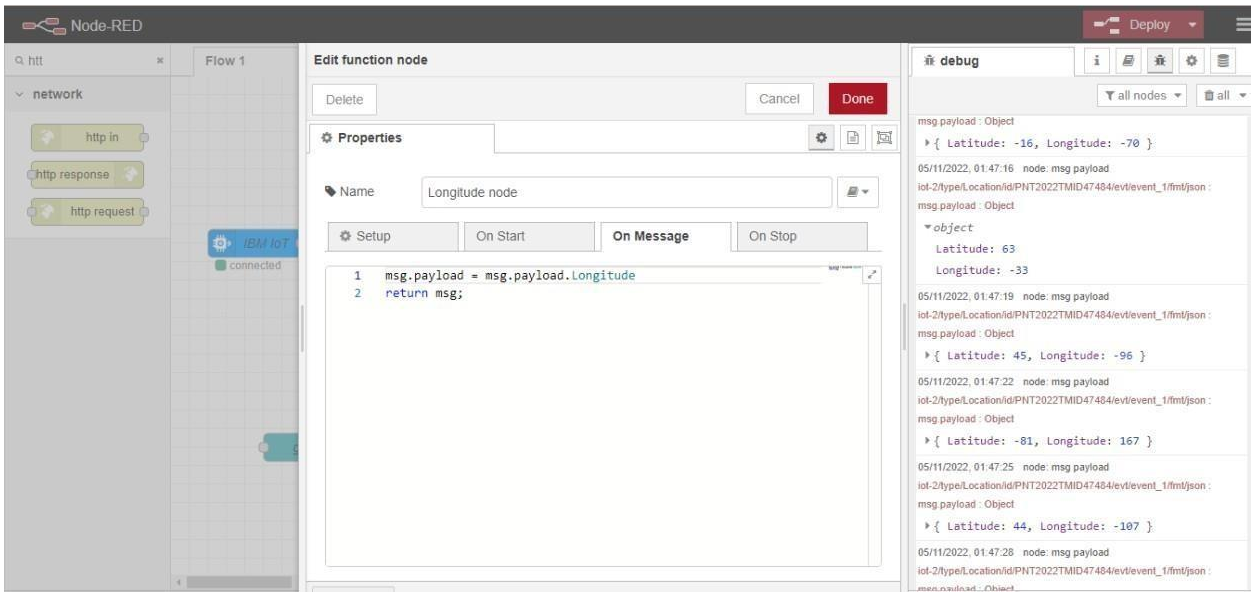


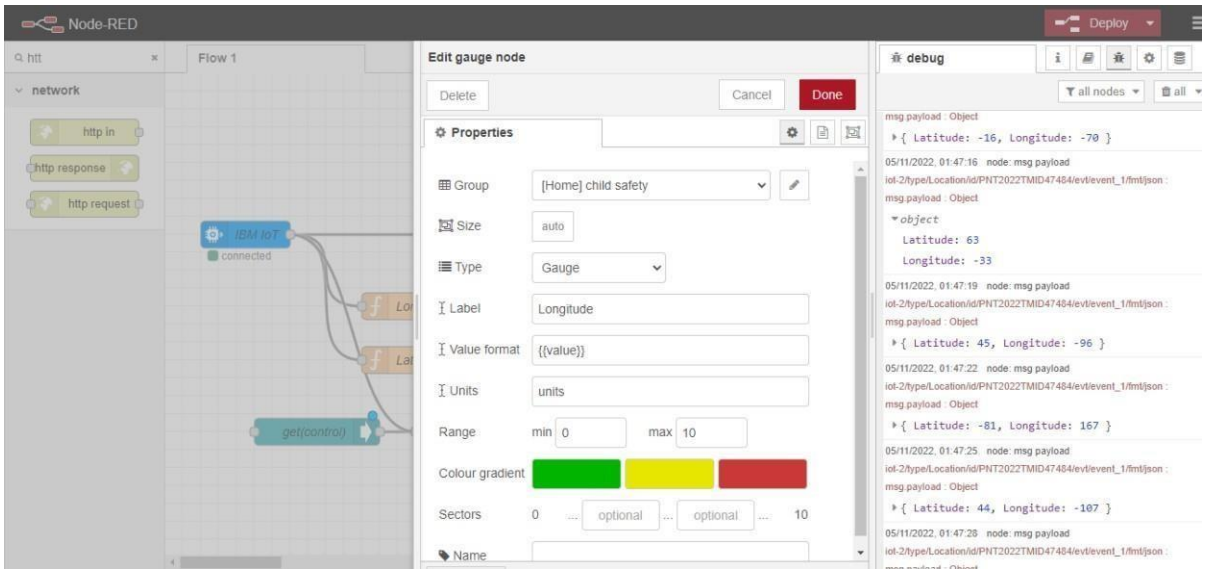

Node-RED
Deploy
filter nodes
Flow 1
debug
common
inject
debug
complete
catch
status
link in
link call
link out
comment
function
function
switch
IBM IoT
connected
msg payload
all nodes
all
04/11/2022, 02:16:25 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json : msg.payload : Object
{ Latitude: -36, Longitude: 108 }
04/11/2022, 02:16:28 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json : msg.payload : Object
{ Latitude: 80, Longitude: 43 }
04/11/2022, 02:16:31 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json : msg.payload : Object
{ Latitude: -28, Longitude: 141 }
04/11/2022, 02:16:34 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json : msg.payload : Object
{ Latitude: 58, Longitude: -58 }
04/11/2022, 02:16:37 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json : msg.payload : Object
{ Latitude: -7, Longitude: 124 }
04/11/2022, 02:16:40 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json : msg.payload : Object
{ Latitude: -39, Longitude: -122 }
04/11/2022, 02:16:43 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json : msg.payload : Object
{ Latitude: -48, Longitude: 75 }

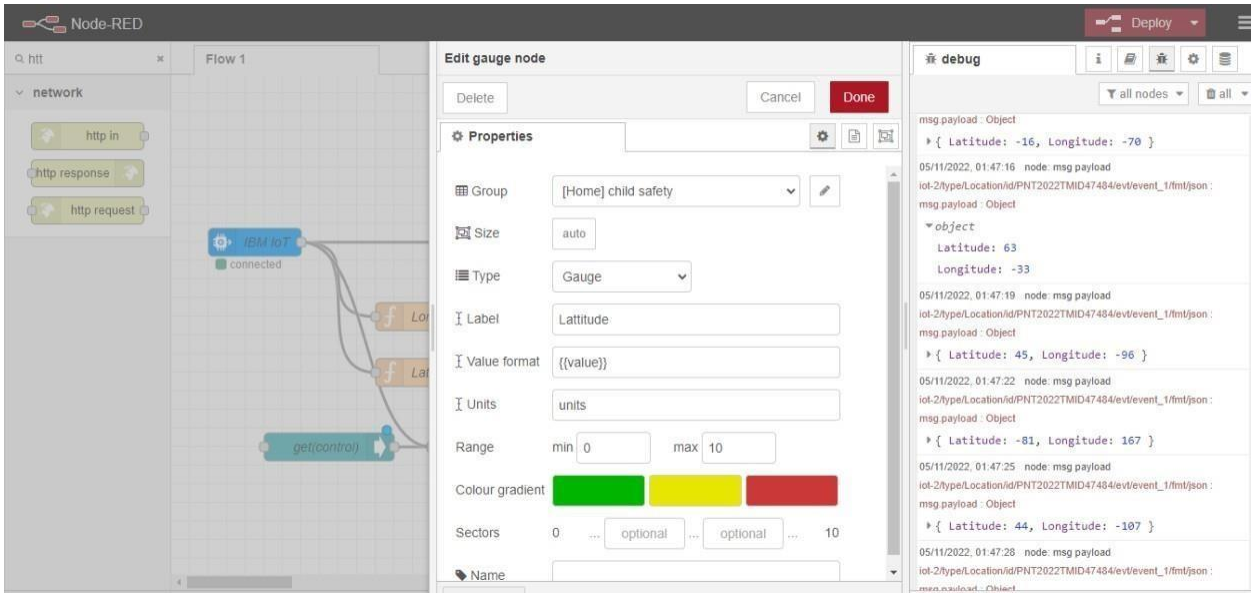

Node-RED
Service Details - IBM Cloud
IBM Watson IoT Platform
Untitled document - Google
Node-RED Dashboard
localhost:1880/ui/#!/0?socketid=0drt92BC9eTRWt9MAAAD
Home
child safety
Lattitude
3
Longitude
0
Type here to search
9:05 AM
11/4/2022

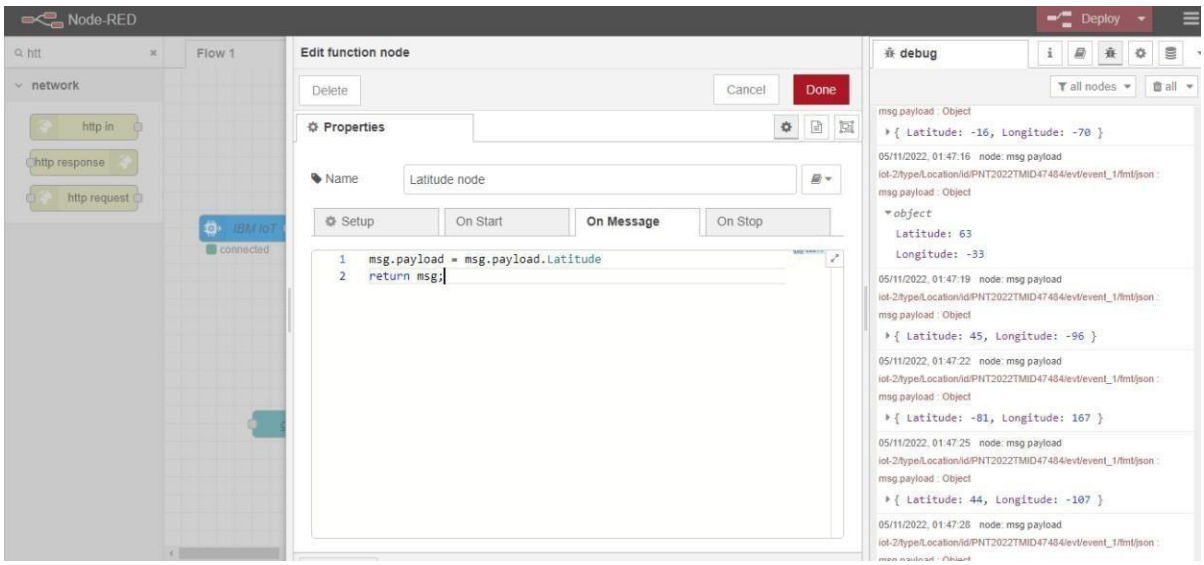

Flow 1
IBM IoT
connected
msg payload
Longitude node
Longitude
Latitude node
Lattitude
get(control)
httpfunctionnode
http request
debug
all nodes
all
msg.payload : Object
{ Latitude: -16, Longitude: -70 }
05/11/2022, 01:47:16 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
object
Latitude: 63
Longitude: -33
05/11/2022, 01:47:19 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 45, Longitude: -96 }
05/11/2022, 01:47:22 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: -81, Longitude: 167 }
05/11/2022, 01:47:25 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 44, Longitude: -107 }
05/11/2022, 01:47:28 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :

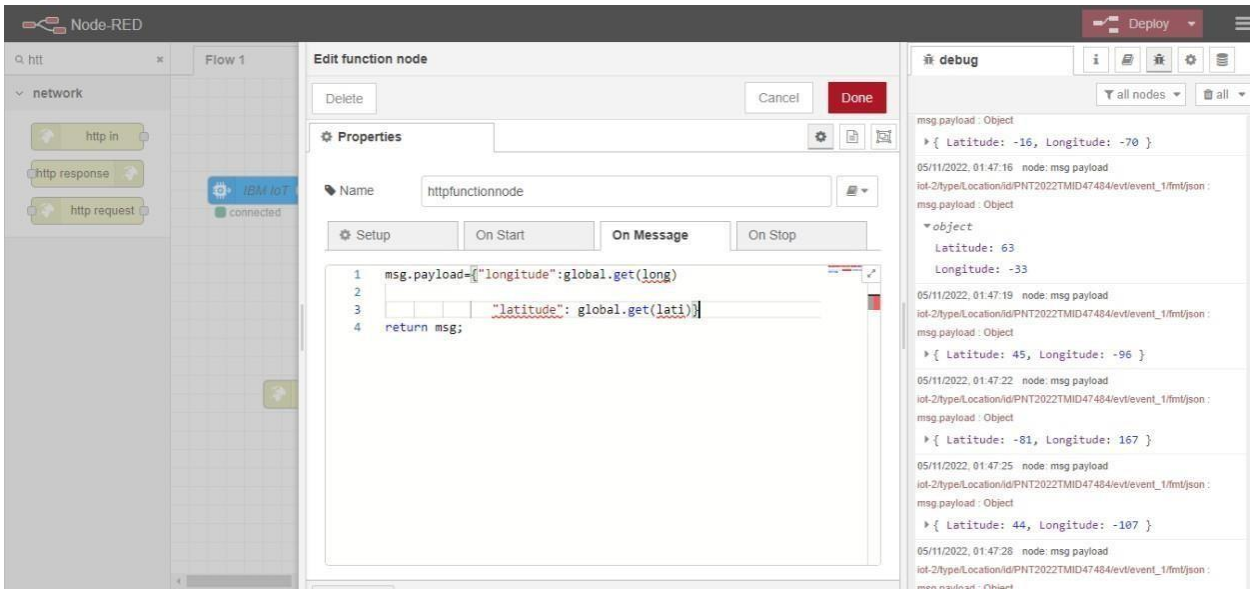

Node-RED
Deploy
htt
network
http in
http response
http request
Flow 1
IBM IoT
connected
get(control)
Edit ibmiot in node
Delete
Cancel
Done
Properties
Authentication
API Key
API Key
a74a28a2e0759549
Input Type
Device Event
Device Type
All or
Location
Device Id
All or
PNT2022TMID47484
Event
All or
+
Format
All or
json
QoS
0
Name
IBM IoT
Service
registered
debug
all nodes
all
msg.payload : Object
{ Latitude: -16, Longitude: -70 }
05/11/2022, 01:47:16 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
object
Latitude: 63
Longitude: -33
05/11/2022, 01:47:19 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 45, Longitude: -96 }
05/11/2022, 01:47:22 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: -81, Longitude: 167 }
05/11/2022, 01:47:25 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 44, Longitude: -107 }
05/11/2022, 01:47:28 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :

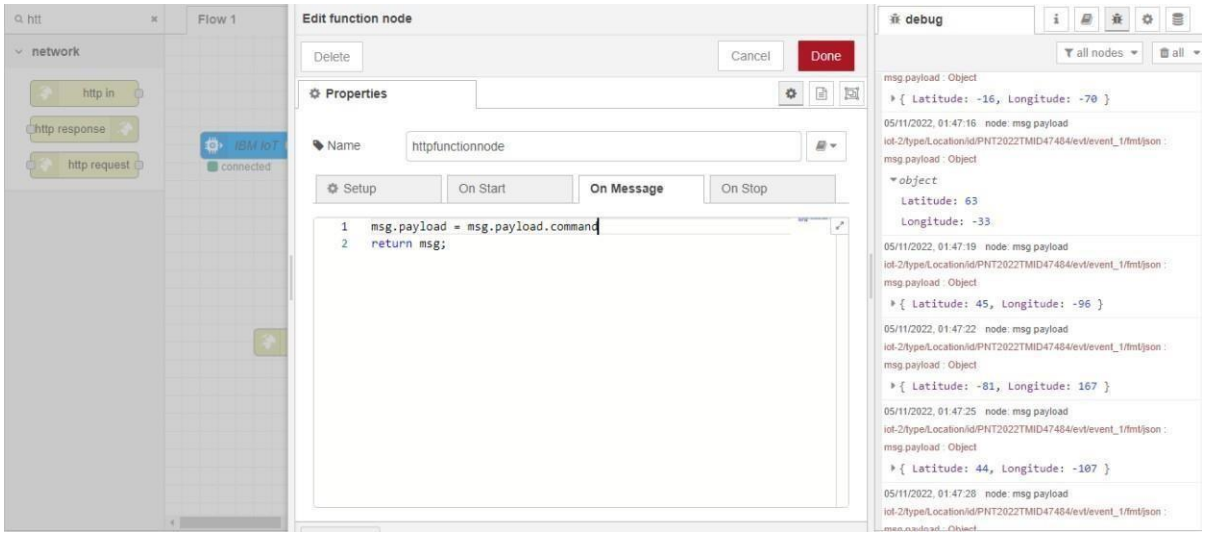

Node-RED
Deploy
Flow 1
network
http in
http response
http request
IBM IoT
connected
Edit function node
Delete
Cancel
Done
Properties
Name
Longitude node
Setup
On Start
On Message
On Stop
1 msg.payload = msg.payload.Longitude
2 return msg;
debug
all nodes
all
msg.payload : Object
{ Latitude: -16, Longitude: -70 }
05/11/2022, 01:47:16 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
object
Latitude: 63
Longitude: -33
05/11/2022, 01:47:19 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 45, Longitude: -96 }
05/11/2022, 01:47:22 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: -81, Longitude: 167 }
05/11/2022, 01:47:25 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 44, Longitude: -107 }
05/11/2022, 01:47:28 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :

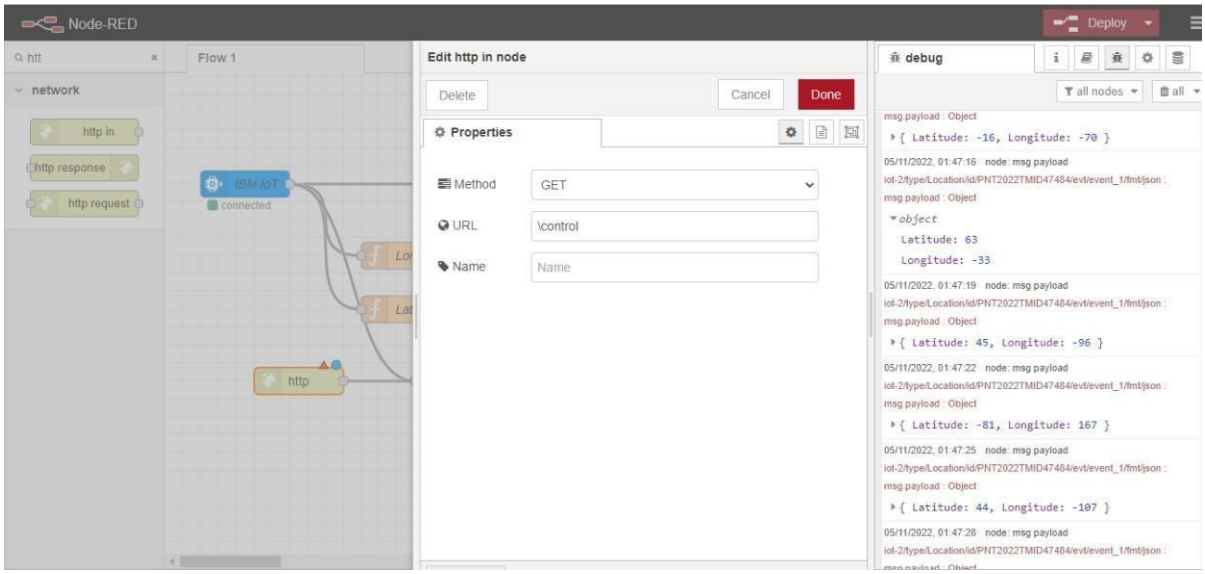

Node-RED
Deploy
Flow 1
network
http in
http response
http request
IBM IoT
connected
get(control)
Edit gauge node
Delete
Cancel
Done
Properties
Group
[Home] child safety
Size
auto
Type
Gauge
Label
Longitude
Value format
{{value}}
Units
units
Range
min 0
max 10
Colour gradient
Sectors
0
optional
optional
10
Name
debug
all nodes
all
msg.payload : Object
{ Latitude: -16, Longitude: -70 }
05/11/2022, 01:47:16 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
object
Latitude: 63
Longitude: -33
05/11/2022, 01:47:19 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 45, Longitude: -96 }
05/11/2022, 01:47:22 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: -81, Longitude: 167 }
05/11/2022, 01:47:25 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 44, Longitude: -107 }
05/11/2022, 01:47:28 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :


Node-RED
Deploy
Flow 1
network
http in
http response
http request
IBM IoT
connected
get(control)
Edit gauge node
Delete
Cancel
Done
Properties
Group
[Home] child safety
Size
auto
Type
Gauge
Label
Lattitude
Value format
{{value}}
Units
units
Range
min 0
max 10
Colour gradient
Sectors
0
optional
optional
10
Name
debug
all nodes
all
msg.payload : Object
{ Latitude: -16, Longitude: -70 }
05/11/2022, 01:47:16 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
object
Latitude: 63
Longitude: -33
05/11/2022, 01:47:19 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 45, Longitude: -96 }
05/11/2022, 01:47:22 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: -81, Longitude: 167 }
05/11/2022, 01:47:25 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 44, Longitude: -107 }
05/11/2022, 01:47:28 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :


Node-RED
Deploy
Flow 1
network
http in
http response
http request
IBM IoT
connected
Edit function node
Delete
Cancel
Done
Properties
Name
Latitude node
Setup
On Start
On Message
On Stop
1 msg.payload = msg.payload.Latitude
2 return msg;
debug
all nodes
all
msg.payload : Object
{ Latitude: -16, Longitude: -70 }
05/11/2022, 01:47:16 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
object
Latitude: 63
Longitude: -33
05/11/2022, 01:47:19 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 45, Longitude: -96 }
05/11/2022, 01:47:22 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: -81, Longitude: 167 }
05/11/2022, 01:47:25 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 44, Longitude: -107 }
05/11/2022, 01:47:28 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :


Node-RED
Deploy
htt
Flow 1
network
http in
http response
http request
IBM IoT
connected
Edit function node
Delete
Cancel
Done
Properties
Name
httpfunctionnode
Setup
On Start
On Message
On Stop
1 msg.payload={"longitude":global.get(long)
2
3 "latitude": global.get(lati)}
4 return msg;
debug
all nodes
all
msg.payload : Object
{ Latitude: -16, Longitude: -70 }
05/11/2022, 01:47:16 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
object
Latitude: 63
Longitude: -33
05/11/2022, 01:47:19 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 45, Longitude: -96 }
05/11/2022, 01:47:22 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: -81, Longitude: 167 }
05/11/2022, 01:47:25 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 44, Longitude: -107 }
05/11/2022, 01:47:28 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :


htt
Flow 1
network
http in
http response
http request
IBM IoT
connected
Edit function node
Delete
Cancel
Done
Properties
Name
httpfunctionnode
Setup
On Start
On Message
On Stop
1 msg.payload = msg.payload.command
2 return msg;
debug
all nodes
all
msg.payload : Object
{ Latitude: -16, Longitude: -70 }
05/11/2022, 01:47:16 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
object
Latitude: 63
Longitude: -33
05/11/2022, 01:47:19 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 45, Longitude: -96 }
05/11/2022, 01:47:22 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: -81, Longitude: 167 }
05/11/2022, 01:47:25 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :
msg.payload : Object
{ Latitude: 44, Longitude: -107 }
05/11/2022, 01:47:28 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :


Node-RED
Deploy
htt
network
http in
http response
http request
Flow 1
IBM IoT
connected
http
Edit http in node
Delete
Cancel
Done
Properties
Method
GET
URL
\control
Name
Name
debug
all nodes
all
msg.payload : Object
{ Latitude: -16, Longitude: -70 }
05/11/2022, 01:47:16 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json : msg.payload : Object
object
Latitude: 63
Longitude: -33
05/11/2022, 01:47:19 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json : msg.payload : Object
{ Latitude: 45, Longitude: -96 }
05/11/2022, 01:47:22 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json : msg.payload : Object
{ Latitude: -81, Longitude: 167 }
05/11/2022, 01:47:25 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json : msg.payload : Object
{ Latitude: 44, Longitude: -107 }
05/11/2022, 01:47:28 node: msg payload
iot-2/type/Location/id/PNT2022TMID47484/evt/event_1/fmt/json :