DEBUGGING AND TRACEABILITY

Date	November 18, 2022
Team ID	PNT2022TMID28572
NI	Hazardous Area Monitoring for Industrial Plant powered by IoT

```
[
    "id": "6ed1189c17ed0439",
    "type": "tab",
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    "apiKey": "bf9996433728395e",
    "inputType": "evt",
    "logicalInterface": "",
    "ruleId": "",
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    "applicationId": "",
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  "allCommands": "",
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       "f720c62cad238799",
       "35b263513ea4f373"
    ]
  1
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msg.payload.dist\nglobal.set('d',msg.payload)\nreturn msg;",
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     "noerr": 0,
     "initialize": "",
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     "libs": [],
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"5dcbaf252dc78b06",
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     "type": "function",
     "z": "6ed1189c17ed0439",
     "name": "LOAD cell 1",
     "func": "msg.payload =msg. payload.load\nglobal.set('l',
msg.payload)\nreturn msg;",
     "outputs": 1,
     "noerr": 0,
     "initialize": "",
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     "libs": [],
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  "height": 4,
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  "title": "Distance 1",
  "label": "Cm",
  "format": "{{value}}",
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  "max": "100",
  "colors": [
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    "#e6e600",
    "#ca3838"
  ],
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  "seg2": "",
  "className": "",
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  "y": 240,
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  "type": "ui_gauge",
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"height": 4,
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"label": "KG",
"format": "{{value}}",
"min": 0,
"max": "100",
"colors": [
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  "#e6e600",
  "#ca3838"
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"seg1": "",
"seg2": "",
"className": "",
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"wires": []
"id": "5de18859cabb1a5d",
"type": "http in",
```

},

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  "name": "",
  "url": "/sensor",
  "method": "get",
  "upload": false,
  "swaggerDoc": "",
  "x": 210,
  "y": 420,
  "wires": [
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    ]
  ]
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  "type": "http response",
  "z": "6ed1189c17ed0439",
  "name": "",
  "statusCode": "",
  "headers": {},
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  "y": 400,
  "wires": []
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  "id": "80650c336af78c61",
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global.get('l')}\nreturn msg;",
     "outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 460,
     "y": 420,
     "wires": [
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       ]
     1
  },
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     "type": "ibmiot in",
     "z": "6ed1189c17ed0439",
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     "apiKey": "bf9996433728395e",
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     "ruleId": "",
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```

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  "name": "IBM IoT",
  "service": "registered",
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  "allLogicalInterfaces": "",
  "allEvents": true,
  "allCommands": "",
  "allFormats": "",
  "qos": 0,
  "x": 250,
  "y": 500,
  "wires": [
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       "233a55d8b0e40a46",
       "a5ed197df7ced05a"
    ]
  1
},
  "id": "233a55d8b0e40a46",
```

```
"type": "function",
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     "name": "Distance 2",
     "func": "msg.payload =
msg.payload.dist\nglobal.set('d',msg.payload)\nreturn msg;",
     "outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 450,
     "y": 540,
     "wires": [
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          "9b44a1863803e38a"
       ]
     ]
  },
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     "type": "function",
     "z": "6ed1189c17ed0439",
     "name": "LOAD cell 2",
     "func": "msg.payload =msg. payload.load\nglobal.set('l',
msg.payload)\nreturn msg;",
     "outputs": 1,
     "noerr": 0,
```

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"initialize": "",
  "finalize": "",
  "libs": [],
  "x": 450,
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  "wires": [
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       "40ccb32035a0f55f"
    ]
  ]
},
  "id": "2a22e946c6d5f734",
  "type": "debug",
  "z": "6ed1189c17ed0439",
  "name": "msg.payload",
  "active": true,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "payload",
  "targetType": "msg",
  "statusVal": "",
  "statusType": "auto",
  "x": 650,
  "y": 480,
  "wires": []
```

```
},
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  "id": "9b44a1863803e38a",
  "type": "ui_gauge",
  "z": "6ed1189c17ed0439",
  "name": "",
  "group": "f3b64a4198b3c46c",
  "order": 4,
  "width": 4,
  "height": 4,
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  "title": "Distance 2",
  "label": "Cm",
  "format": "{{value}}",
  "min": 0,
  "max": "100",
  "colors": [
    "#00b500",
    "#e6e600",
     "#ca3838"
  ],
  "seg1": "",
  "seg2": "",
  "className": "",
  "x": 710,
  "y": 540,
  "wires": []
```

```
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  "z": "6ed1189c17ed0439",
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  "group": "f3b64a4198b3c46c",
  "order": 5,
  "width": 4,
  "height": 4,
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  "label": "KG",
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  "max": "100",
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    "#e6e600",
     "#ca3838"
  ],
  "seg1": "",
  "seg2": "",
  "className": "",
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  "wires": []
```

```
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     "method": "get",
     "upload": false,
     "swaggerDoc": "",
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     "y": 660,
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     "z": "6ed1189c17ed0439",
     "name": "function 2",
     "func": "msg.payload = \{ \ \ ''dist\ '': global.get('d'), \ \ ''load\ '': 
global.get('l')}\nreturn msg;",
     "outputs": 1,
     "noerr": 0,
     "initialize": "",
```

```
"finalize": "",
  "libs": [],
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  ]
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  "z": "6ed1189c17ed0439",
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  "y": 660,
  "wires": []
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  "type": "ibmiot in",
  "z": "6ed1189c17ed0439",
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  "apiKey": "bf9996433728395e",
```

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"allApplications": "",
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"allLogicalInterfaces": "",
"allEvents": true,
"allCommands": "",
"allFormats": "",
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"wires": [
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    "fbf611802e58a9d1",
    "231892da1f5ab0fb"
  ]
```

```
]
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  "name": "",
  "url": "/sensor",
  "method": "get",
  "upload": false,
  "swaggerDoc": "",
  "x": 190,
  "y": 900,
  "wires": [
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       "cdea8fe7bd7a2f5e"
    ]
  ]
},
  "id": "c49cd92e337f886b",
  "type": "debug",
  "z": "6ed1189c17ed0439",
  "name": "msg.payload",
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  "tosidebar": true,
  "console": false,
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```
"tostatus": false,
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  "targetType": "msg",
  "statusVal": "",
  "statusType": "auto",
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  "y": 940,
  "wires": []
},
  "id": "c7ddb56ba52e82df",
  "type": "debug",
  "z": "6ed1189c17ed0439",
  "name": "msg.payload",
  "active": true,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "payload",
  "targetType": "msg",
  "statusVal": "",
  "statusType": "auto",
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  "y": 760,
  "wires": []
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msg.payload.dist\nglobal.set('d',msg.payload)\nreturn msg;",
    "outputs": 1,
    "noerr": 0,
    "initialize": "",
    "finalize": "",
    "libs": [],
    "x": 470,
    "y": 980,
    "wires": [
       [
         "c49cd92e337f886b",
         "b88ea394cc4571c3"
       ]
    1
  },
    "id": "fbf611802e58a9d1",
    "type": "function",
    "z": "6ed1189c17ed0439",
    "name": "Distance 3",
     "func": "msg.payload =
msg.payload.dist\nglobal.set('d',msg.payload)\nreturn msg;",
    "outputs": 1,
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"noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 470,
     "y": 780,
     "wires": [
       ſ
          "c7ddb56ba52e82df",
          "240d2e6c8f487fd8"
       ]
     ]
  },
  {
     "id": "231892da1f5ab0fb",
     "type": "function",
     "z": "6ed1189c17ed0439",
     "name": "LOAD cell 3",
     "func": "msg.payload =msg. payload.load\nglobal.set('l',
msg.payload)\nreturn msg;",
     "outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 470,
     "y": 820,
     "wires": [
```

```
[
          "e18c17929284e061"
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     ]
  },
  {
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     "type": "function",
     "z": "6ed1189c17ed0439",
     "name": "LOAD cell 4",
     "func": "msg.payload =msg. payload.load\nglobal.set('l',
msg.payload)\nreturn msg;",
     "outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 470,
     "y": 1020,
     "wires": [
       [
          "c7a15e2a5bf9c2da"
       ]
     1
  },
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     "type": "function",
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```
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global.get('l')}\nreturn msg;",
     "outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 420,
     "y": 900,
     "wires": [
       [
          "9bfb685be1503933"
       ]
     ]
  },
  {
     "id": "9bfb685be1503933",
     "type": "http response",
     "z": "6ed1189c17ed0439",
     "name": "",
     "statusCode": "",
     "headers": {},
     "x": 690,
     "y": 900,
     "wires": []
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  "id": "240d2e6c8f487fd8",
  "type": "ui_gauge",
  "z": "6ed1189c17ed0439",
  "name": "",
  "group": "f3b64a4198b3c46c",
  "order": 15,
  "width": 4,
  "height": 4,
  "gtype": "gage",
  "title": "Distance 3",
  "label": "Cm",
  "format": "{{value}}",
  "min": 0,
  "max": "100",
  "colors": [
    "#00b500",
    "#e6e600",
    "#ca3838"
  ],
  "seg1": "",
  "seg2": "",
  "className": "",
  "x": 830,
  "y": 800,
  "wires": []
},
```

```
{
  "id": "b88ea394cc4571c3",
  "type": "ui_gauge",
  "z": "6ed1189c17ed0439",
  "name": "",
  "group": "f3b64a4198b3c46c",
  "order": 18,
  "width": 4,
  "height": 4,
  "gtype": "gage",
  "title": "Distance 4",
  "label": "Cm",
  "format": "{{value}}",
  "min": 0,
  "max": "100",
  "colors": [
    "#00b500",
    "#e6e600",
    "#ca3838"
  ],
  "seg1": "",
  "seg2": "",
  "className": "",
  "x": 750,
  "y": 1000,
  "wires": []
},
```

```
{
  "id": "e18c17929284e061",
  "type": "ui_gauge",
  "z": "6ed1189c17ed0439",
  "name": "",
  "group": "f3b64a4198b3c46c",
  "order": 16,
  "width": 4,
  "height": 4,
  "gtype": "gage",
  "title": "LOAD CELL 3",
  "label": "KG",
  "format": "{{value}}",
  "min": 0,
  "max": "100",
  "colors": [
    "#00b500",
    "#e6e600",
    "#ca3838"
  ],
  "seg1": "",
  "seg2": "",
  "className": "",
  "x": 840,
  "y": 840,
  "wires": []
},
```

```
{
  "id": "147146a0342debce",
  "type": "ibmiot in",
  "z": "6ed1189c17ed0439",
  "authentication": "apiKey",
  "apiKey": "bf9996433728395e",
  "inputType": "evt",
  "logicalInterface": "",
  "ruleId": "",
  "deviceId":
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  "applicationId": "",
  "deviceType":
  "DEVICE4",
  "eventType": "+",
  "commandType": "",
  "format": "json",
  "name": "IBM IoT",
  "service": "registered",
  "allDevices": "",
  "allApplications": "",
  "allDeviceTypes": false,
  "allLogicalInterfaces": "",
  "allEvents": true,
  "allCommands": "",
  "allFormats": "",
  "qos": 0,
  "x": 230,
  "y": 1000,
```

```
"wires": [
    [
       "71be31afc89560dd",
       "a0cbff62cdd2e77c",
       "c49cd92e337f886b"
    ]
  1
},
  "id": "c7a15e2a5bf9c2da",
  "type": "ui_gauge",
  "z": "6ed1189c17ed0439",
  "name": "",
  "group": "f3b64a4198b3c46c",
  "order": 19,
  "width": 4,
  "height": 4,
  "gtype": "gage",
  "title": "LOAD CELL 4",
  "label": "KG",
  "format": "{{value}}",
  "min": 0,
  "max": "100",
  "colors": [
    "#00b500",
    "#e6e600",
    "#ca3838"
```

```
],
  "seg1": "",
  "seg2": "",
  "className": "",
  "x": 760,
  "y": 1040,
  "wires": []
},
  "id": "3cec67f2e3359287",
  "type": "http in",
  "z": "6ed1189c17ed0439",
  "name": "",
  "url": "/sensor",
  "method": "get",
  "upload": false,
  "swaggerDoc": "",
  "x": 230,
  "y": 1080,
  "wires": [
    [
       "c08f7bb853942b70"
    ]
  1
},
  "id": "c08f7bb853942b70",
```

```
"type": "function",
     "z": "6ed1189c17ed0439",
     "name": "function 4",
     "func": "msg.payload = { \"dist\": global.get('d'), \"load\":
global.get('l')}\nreturn msg;",
     "outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 460,
     "y": 1080,
     "wires": [
       [
          "07773f295c5a783c"
       ]
     1
  },
  {
     "id": "07773f295c5a783c",
     "type": "http response",
     "z": "6ed1189c17ed0439",
     "name": "",
     "statusCode": "",
     "headers": {},
     "x": 670,
     "y": 1080,
     "wires": []
```

```
},
  "id": "517648d26c93720d",
  "type": "ui_spacer",
  "z": "6ed1189c17ed0439",
  "name": "spacer",
  "group": "f3b64a4198b3c46c",
  "order": 3,
  "width": 4,
  "height": 1
},
  "id": "e3086afde0717b7f",
  "type": "ui_spacer",
  "z": "6ed1189c17ed0439",
  "name": "spacer",
  "group": "f3b64a4198b3c46c",
  "order": 6,
  "width": 4,
  "height": 1
},
  "id": "329502bdd11bd52a",
  "type": "ui_spacer",
  "z": "6ed1189c17ed0439",
  "name": "spacer",
  "group": "f3b64a4198b3c46c",
```

```
"order": 7,
  "width": 4,
  "height": 1
},
{
  "id": "7321a3216f223378",
  "type": "ui_spacer",
  "z": "6ed1189c17ed0439",
  "name": "spacer",
  "group": "f3b64a4198b3c46c",
  "order": 8,
  "width": 4,
  "height": 1
},
  "id": "f830dc54889698c4",
  "type": "ui_spacer",
  "z": "6ed1189c17ed0439",
  "name": "spacer",
  "group": "f3b64a4198b3c46c",
  "order": 9,
  "width": 4,
  "height": 1
},
  "id": "3e4d0a1c6525c3dd",
  "type": "ui_spacer",
```

```
"z": "6ed1189c17ed0439",
  "name": "spacer",
  "group": "f3b64a4198b3c46c",
  "order": 10,
  "width": 4,
  "height": 1
},
  "id": "f5fa3cc71404c6c2",
  "type": "ui_spacer",
  "z": "6ed1189c17ed0439",
  "name": "spacer",
  "group": "f3b64a4198b3c46c",
  "order": 11,
  "width": 4,
  "height": 1
},
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  "group": "f3b64a4198b3c46c",
  "order": 12,
  "width": 4,
  "height": 1
},
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  "group": "f3b64a4198b3c46c",
  "order": 13,
  "width": 24,
  "height": 1
},
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  "type": "ui_spacer",
  "z": "6ed1189c17ed0439",
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  "group": "f3b64a4198b3c46c",
  "order": 14,
  "width": 24,
  "height": 1
},
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  "order": 17,
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  "group": "f3b64a4198b3c46c",
  "order": 20,
  "width": 4,
  "height": 1
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  "z": "6ed1189c17ed0439",
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  "width": 4,
  "height": 1
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  "width": 4,
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  "type": "ui_spacer",
  "z": "6ed1189c17ed0439",
  "name": "spacer",
  "group": "f3b64a4198b3c46c",
  "order": 23,
  "width": 4,
  "height": 1
},
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  "type": "ui_spacer",
  "z": "6ed1189c17ed0439",
  "name": "spacer",
  "group": "f3b64a4198b3c46c",
  "order": 24,
  "width": 4,
  "height": 1
},
```

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  "z": "6ed1189c17ed0439",
  "name": "spacer",
  "group": "f3b64a4198b3c46c",
  "order": 25,
  "width": 4,
  "height": 1
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  "type": "ui_spacer",
  "z": "6ed1189c17ed0439",
  "name": "spacer",
  "group": "f3b64a4198b3c46c",
  "order": 26,
  "width": 4,
  "height": 1
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  "name": "Gogul",
  "keepalive": "60",
  "serverName": "",
  "cleansession": true,
  "appId": "",
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     "order": 2,
     "disp": true,
     "width": "24",
     "collapse": false,
     "className": ""
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  {
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     "type": "ui_tab",
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     "disabled": false,
     "hidden": false
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