

Relate Data Test Task v4

This test task should be completed using the following libraries in React.

AG GRID:

<https://www.ag-grid.com/best-react-data-grid/>

<https://www.ag-grid.com/example.php#/>

RC-COLLAPSE

<https://react-component.github.io/collapse/examples/simple.html>

No backend requirement as data can be read from JSON file.

JSON Structure Explained

```
▼ object {4}
  |   nodeId : SERVER01
  |   pollingIp : 192.168.1.2
  |   templateReference : 1.3.6.1.4.1.8072.3.2.10
  ▼ snmpMonitoringConfig {3}
    |   enabled : ☒ true
    ▼ deviceSnmpMetrics [2]
      |   ► 0 {8}
      |   ► 1 {8}
    ▼ interfaceSnmpMetrics [2]
      |   ► 0 {7}
      |   ► 1 {7}
```

Image: 1

You can **discard** NodeId, pollingID and templateReference information.

Table Header should be called “ SNMP Monitoring Configuration”

snmpMonitoringConfig should be represented as a **checkbox** with label “Enabled”.

deviceSnmpMetrics and **interfaceSnmpMetrics** should be represented as collapsable items. For reference see image 2. For this component, you should use the library **RC-COLLAPSE** library to create collapsable menus or items.

“Instead of Scan Configuration List and Create New Configuration you should have Device Metrics & InterfaceMetrics.”

Available Network Vulnerability Tests						
Selection	Name	Version	Family	Severity	GoD	Vendor
<input type="checkbox"/>	Smile	2.3.1	apache	9.5	som_random_number	gorgeous me
<input type="checkbox"/>	Sica	2.3.1	apache	9.5	som_random_number	gorgeous me

Image: 2

Each Collapsible item opens an AG GRID Table as per the image 3 which represents each item from device and interface snmp metrics of the JSON.

The data for the table content comes from **deviceSnmpMetrics** and **interfaceSnmpMetrics** in the JSON file.

"enabled": true,

"deviceSnmpMetrics": [

{

"metricName": "net-snmp.HOST-RESOURCES-MIB.cpuLoad",

"metricDisplayName": "CPU Load",

"isMonitored": true,

"metricGroup": "CPU",

"monitoredIndices": {

"196608": {

"isMonitored": true

}

},

"pollingInterval": 300,

Metric	Unit	Monitored	Polling Interval
Memory Utilization	%	<input checked="" type="checkbox"/>	300

Tables should be sortable using default functions of AG Grid Library. One table for Device Metrics and one table for Interface Metrics each in its collapsable item.

An illustrative example of how this table may look is as in Image 3.

Device Metrics

Metric	Unit	Is Monitored	Polling Interval
MemoryUtilization	%	<input checked="" type="checkbox"/>	%
IPSLA average latency DS	ms	<input checked="" type="checkbox"/>	ms
Temperature Sensor Value	°C	<input checked="" type="checkbox"/>	°C
IPSLA late packets	packets	<input checked="" type="checkbox"/>	packets
Temperature Sensor State	state	<input checked="" type="checkbox"/>	state
IPSLA packets lost	packets	<input checked="" type="checkbox"/>	packets
IPSLA minimum latency DS	ms	<input checked="" type="checkbox"/>	ms

Image : 3

Each Device or Interface Metric has properties in JSON called "thresholdConfig" that contains information that should be displayed in "MODAL window" (Image 4) when the user clicks on any device or interface Metric.

This information comes from the following in the JSON

```
"thresholdConfig": [  
  {  
    "severity": "MINOR",  
    "value": 60,  
    "message": "value breached minor threshold",  
    "raiseAlarm": true  
  },  
  {  
    "severity": "MAJOR",  
    "value": 80,  
    "message": "value breached major threshold",  
    "raiseAlarm": true  
  },  
  {  
    "severity": "CRITICAL",  
    "value": 90,  
    "message": "value breached critical threshold",  
    "raiseAlarm": true  
  }  
],  
"unit": "%"
```

Metric Configuration

Memory Utilization

Description:

Unit:

Thresholds

Severity	Value	Raise Alarm	Message
MINOR	<input type="text" value="50"/>	<input checked="" type="checkbox"/>	<input type="text" value="value breached minor threshold"/>
MAJOR	<input type="text" value="80"/>	<input checked="" type="checkbox"/>	<input type="text" value="value breached major threshold"/>
CRITICAL	<input type="text" value="90"/>	<input checked="" type="checkbox"/>	<input type="text" value="value breached critical threshold"/>

Cancel Apply

Image: 4

Image 5 shows a representation of the desired solution where Device Metrics and Interface Metrics are collapsible items and contain AG Grid tables.

Device Metrics

Metric	Unit
MemoryUtilization	%
CPU_A message latency (ms)	ms
Temperature Sensor Value	°C
CPU_A idle packets	packets
Temperature Sensor State	state
CPU_A packets lost	packets
CPU_A minimum latency (ms)	ms

Interface Metrics

Metric	Unit
Transmitted Packets	
Transmits	
Errors	
Discards	
Errors	
Receives	
OutErrors	

Metric Configuration

MemoryUtilization

Description:

Unit:

Thresholds

Severity	Value	Raise Alarm	Message
MINOR	<input type="text" value="60"/>	<input checked="" type="checkbox"/>	<input type="text" value="value breached minor threshold"/>
MAJOR	<input type="text" value="80"/>	<input checked="" type="checkbox"/>	<input type="text" value="value breached major threshold"/>
CRITICAL	<input type="text" value="90"/>	<input checked="" type="checkbox"/>	<input type="text" value="value breached critical threshold"/>

Cancel Apply

Image: 5

Expected Results

You can deploy the application as a react app on either Heroku or Github and send a link of the code as well as the deployed application.

Please do not send just code as we will not deploy and check it.

Time limit for this task is maximum 2 days.