



Estácio

Universidade Estácio de Sá

- DESENVOLVIMENTO FULL STACK-
 - Disciplina: RPG0027 - Vamos interligar as coisas com a nuvem
 - Repositorio Git: <https://github.com/fontesthebest/rpg0027>
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Missão Prática | Nível 5 | Mundo 4

Vamos interligar as coisas com a nuvem

Microatividade 1: Como Criar um Hub IoT do Azure

Microatividade 2: Como registrar um novo dispositivo no Hub IoT

Microatividade 3: Conectar o simulador online Raspberry Pi ao Hub IoT do Azure

Microatividade 4: Adicionando extensão Hub IoT do Azure para Visual Studio Code

Microatividade 5: Gerenciando e interagindo com o Hub IoT

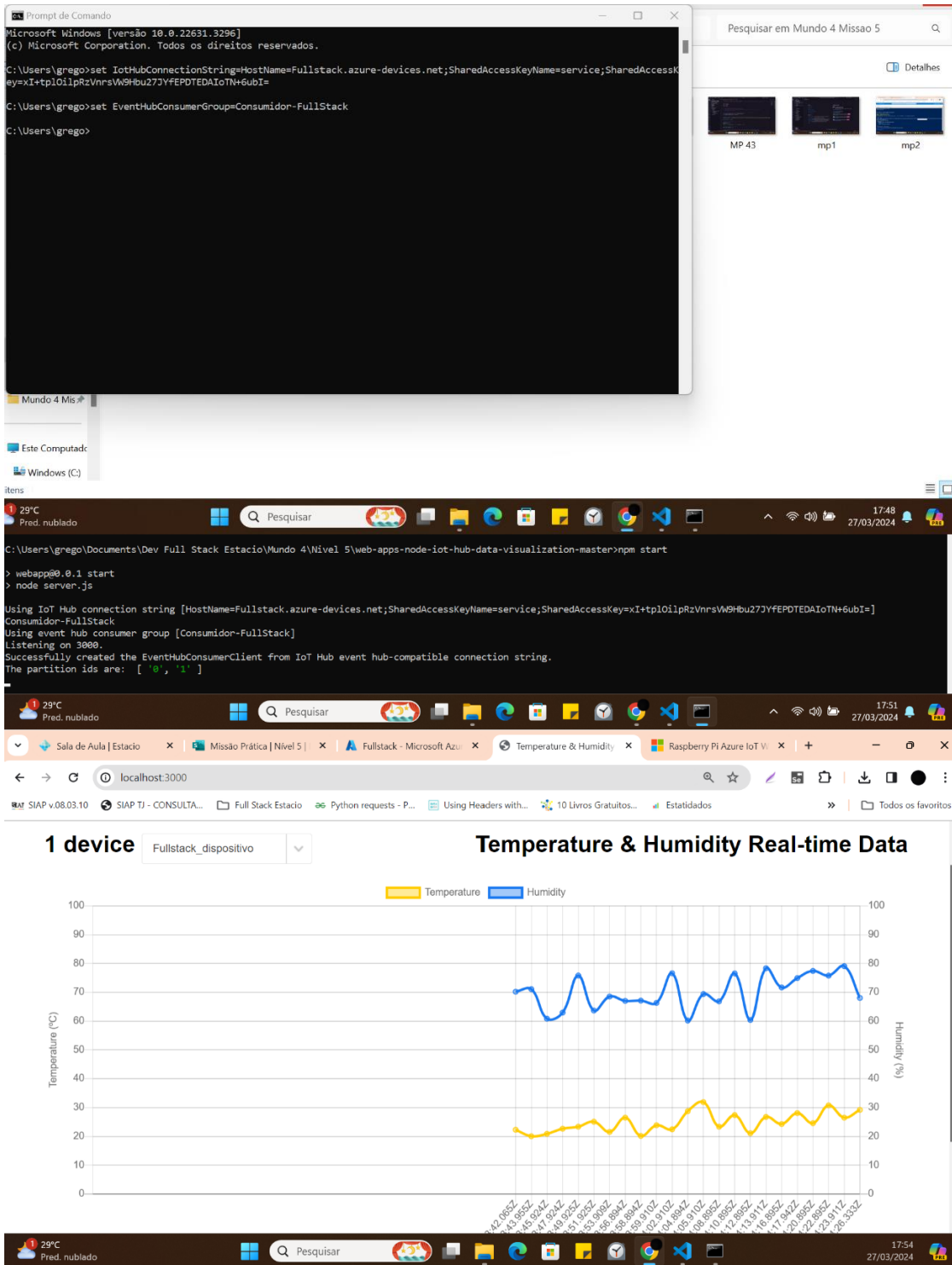


Objetivos da Prática

- Como criar um Hub IoT do Azure;
- Como registrar um novo dispositivo no Hub IoT;
- Adicionando extensão Hub IoT do Azure para Visual Studio Code;
- Gerenciando e interagindo com o Hub IoT .

Resultados:


```
PowerShell | ① ? ⚙️ 📁 📄 {} 🗑️
VERBOSE: Authenticating to Azure ...
VERBOSE: Building your Azure drive ...
PS /home/emerson> az iot hub consumer-group create --hub-name FullStack --name Consumidor-FullStack
{
  "etag": null,
  "id": "/subscriptions/46e8e181-3bf0-4f9c-b55c-c6139f1fa299/resourceGroups/NIVEL4_group/providers/Microsoft.Devices/IotHubs/FullStack/eventHubEndpoints/events/ConsumerGr
ups/Consumidor-FullStack",
  "name": "Consumidor-FullStack",
  "properties": {
    "created": "Wed, 27 Mar 2024 20:42:18 GMT",
    "properties": {
      "name": "Consumidor-FullStack"
    }
  },
  "resourceGroup": "NIVEL4_group",
  "type": "Microsoft.Devices/IotHubs/EventHubEndpoints/ConsumerGroups"
}
PS /home/emerson> az iot hub show-connection-string --hub-name FullStack --policy-name service
(This command has been deprecated and will be removed in a future release. Use 'IoT Extension (azure-iot) connection-string command (az iot hub connection-string show)' in
stead.
[Warning] This output may compromise security by showing the following secrets: connectionString. Learn more at: https://go.microsoft.com/fwlink/?linkid=2258669
{
  "connectionString": "HostName=Fullstack.azure-devices.net;SharedAccessKeyName=service;SharedAccessKey=xI+tp10ilprZvNrsW9Wbu27JYfEPDTEdAIoTn+6ubI="
}
PS /home/emerson> |
```



```
npm start
Consumidor-Fullstack
Using event hub consumer group [Consumidor-FullStack]
Listening on 3000.
Successfully created the EventHubConsumerClient from IoT Hub event hub-compatible connection string.
The partition ids are: [ 0, 1 ]
Broadcasting data {"IoTData":{"messageId":1,"deviceId":"Raspberry Pi Web Client","temperature":22.283947336144447,"humidity":70.20815113053204},"MessageDate":"2024-03-27T20:53:42.065Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":2,"deviceId":"Raspberry Pi Web Client","temperature":20.03872202929,"humidity":71.08079588450252},"MessageDate":"2024-03-27T20:53:43.955Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":3,"deviceId":"Raspberry Pi Web Client","temperature":20.870070828268744,"humidity":60.842878973833365},"MessageDate":"2024-03-27T20:53:45.924Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":4,"deviceId":"Raspberry Pi Web Client","temperature":22.646762423601977,"humidity":62.95397555806769},"MessageDate":"2024-03-27T20:53:47.924Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":5,"deviceId":"Raspberry Pi Web Client","temperature":23.345897297626898,"humidity":75.81099587628457},"MessageDate":"2024-03-27T20:53:49.925Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":6,"deviceId":"Raspberry Pi Web Client","temperature":25.076937268202187,"humidity":63.661876967750366},"MessageDate":"2024-03-27T20:53:51.925Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":7,"deviceId":"Raspberry Pi Web Client","temperature":21.533940072947274,"humidity":68.53016994264529},"MessageDate":"2024-03-27T20:53:53.909Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":8,"deviceId":"Raspberry Pi Web Client","temperature":26.495667218075106,"humidity":67.02035020329825},"MessageDate":"2024-03-27T20:53:56.894Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":9,"deviceId":"Raspberry Pi Web Client","temperature":20.147042083276645,"humidity":67.10790603363117},"MessageDate":"2024-03-27T20:53:58.894Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":10,"deviceId":"Raspberry Pi Web Client","temperature":23.841946770382513,"humidity":66.32496231654052},"MessageDate":"2024-03-27T20:53:59.910Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":11,"deviceId":"Raspberry Pi Web Client","temperature":22.450284971490355,"humidity":76.60167891246275},"MessageDate":"2024-03-27T20:54:02.910Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":12,"deviceId":"Raspberry Pi Web Client","temperature":28.73361923100792,"humidity":60.19389046772803},"MessageDate":"2024-03-27T20:54:04.894Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":13,"deviceId":"Raspberry Pi Web Client","temperature":31.87549129890644,"humidity":69.3849358555852},"MessageDate":"2024-03-27T20:54:06.910Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":14,"deviceId":"Raspberry Pi Web Client","temperature":23.34193590637717,"humidity":66.86774889236472},"MessageDate":"2024-03-27T20:54:08.895Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":15,"deviceId":"Raspberry Pi Web Client","temperature":27.3688644845235,"humidity":76.5421840258123},"MessageDate":"2024-03-27T20:54:10.895Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":16,"deviceId":"Raspberry Pi Web Client","temperature":21.088871789251467,"humidity":60.402589684943855},"MessageDate":"2024-03-27T20:54:12.895Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":17,"deviceId":"Raspberry Pi Web Client","temperature":26.737902027374945,"humidity":78.33697459518476},"MessageDate":"2024-03-27T20:54:13.911Z","DeviceId":"Fullstack_dispositivo"}
Broadcasting data {"IoTData":{"messageId":18,"deviceId":"Raspberry Pi Web Client","temperature":24.27196200370467,"humidity":71.67353537986494},"MessageDate":"2024-03-27T20:54:15.911Z","DeviceId":"Fullstack_dispositivo"}
```

```
PowerShell
Unable to retrieve details of the existing app 'app-IoT'. Please check that the app is a part of the current subscription
PS /home/emerson> az webapp create -n app-IoT2 -g NIVEL4_group -p app-fullstack --runtime "NODE:16LTS" --deployment-source-url https://github.com/Azure-Samples/web-apps-node-iot-hub-data-visualization
Linking to git repository 'https://github.com/Azure-Samples/web-apps-node-iot-hub-data-visualization'
Location is not a known attribute of class <class 'azure.mgmt.web.v2023_01_01.models._models_py3.SiteSourceControl'> and will be ignored
{
  "availabilityState": "Normal",
  "clientAffinityEnabled": true,
  "clientCertEnabled": false,
  "clientCertExclusionPaths": null,
  "clientCertMode": "Required",
  "cloningInfo": null,
  "containerSize": 0,
  "customDomainVerificationId": "837ED9F6528F2FC8AA03574960885445693AE08646F1FEF49638CABC89A16073",
  "dailyMemoryTimeQuota": 0,
  "daprConfig": null,
  "defaultHostName": "app-iot2.azurewebsites.net",
  "enabled": true,
  "enabledHostNames": [
    "app-iot2.azurewebsites.net",
    "app-iot2.scm.azurewebsites.net"
  ],
  "extendedLocation": null,
  "ftpPublishingUrl": "https://wwws-prod-cq1-031.ftp.azurewebsites.windows.net/site/wwwroot",
  "hostNameSslStates": [
    {
      "certificateResourceId": null,
```

PowerShell

```
"virtualNetworkSubnetId": null,
"vnetContentShareEnabled": false,
"vnetImagePullEnabled": false,
"vnetRouteAllEnabled": false,
"workloadProfileName": null
}
PS /home/emerson> az webapp config appsettings set -n app-IoT2 -g NIVEL4_group --settings EventHubConsumerGroup=Consumidor-FullStack IoTHubConnectionString="HostName=Fullstack.azure-devices.net;DeviceId=Fullstack_dispositivo;SharedAccessKey=OGZliw/OsQsbikd4G8LYh7/FZYBsqipVAIoTFCShlg="
App settings have been redacted. Use 'az webapp/logicapp/functionapp config appsettings list' to view.
{
  {
    "name": "WEBSITE_NODE_DEFAULT_VERSION",
    "slotSetting": false,
    "value": null
  },
  {
    "name": "EventHubConsumerGroup",
    "slotSetting": false,
    "value": null
  },
  {
    "name": "IoTHubConnectionString",
    "slotSetting": false,
    "value": null
  }
}
PS /home/emerson> 
```

Botão do contêiner de terminal

28°C
Pred. nublado

Pesquisar

19:43
27/03/2024

Sala de Aula Virtual

Missão Prática | Nível 5

Fullstack_dispositivo - M

Temperature & Humidity

Raspberry Pi Azure IoT Vi

app-iot2.azurewebsites.net

SIAP v.08.03.10 SIAP TJ - CONSULTA... Full Stack Estacio Python requests - P... Using Headers with... 10 Livros Gratuitos... Estatidados

Todos os favoritos

0 devices

Temperature & Humidity Real-time Data

Temperature

Humidity

Temperature (°C)

Humidity (%)

28°C
Pred. nublado

Pesquisar

19:58
27/03/2024