### **Production Supporting Systems in Factories**

ระบบสนับสนุนการผลิตในโรงงานอุตสาหกรรม

### HTTP Get Request

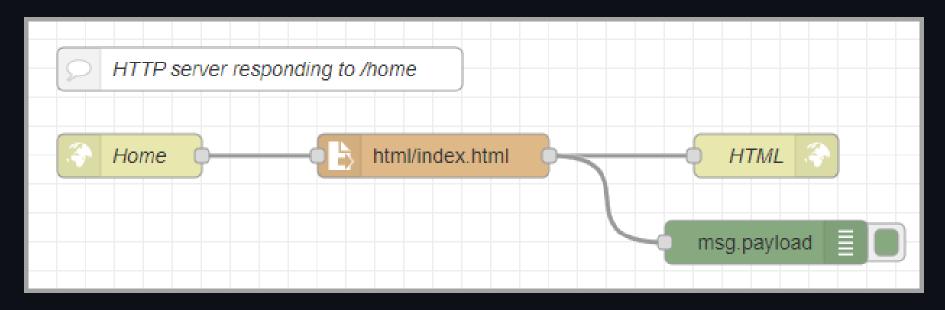
- Send a get request to http://google.com.
- Display a response to a debug panel.
- Write a response to index.html

#### **HTTP Server**

- Create a server that responds to the GET request to /hello.
  - Respond with a static string.
  - Respond with a dynamic string.

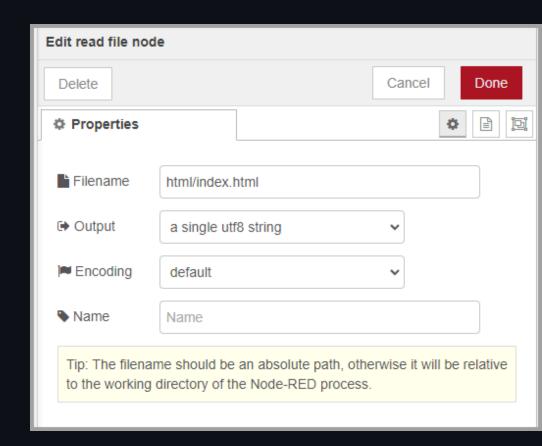
```
const date = new Date();
msg.time = date.toLocaleTimeString();
return msg;
```

- Reponse to /home with an HTML document.
  - Create flow http in , read file , http response , debug



- http in node
  - Method = GET
  - URL = home
- http response node
  - No need to do anything.

- read file **node** 
  - Filename = html/index.html
  - See next page.



- Create a folder html
- Place an index.html in the folder
- Use web browser to the url /home

### Check your friends' computer

- Disable your firewall.
- Open powershell and type ipconfig
- Check if your friends' IP address is in the same subnet as your computer's
   Subnet calculator
- Test your friends' computer by typing test-netconnection 10.10.x.x -port 1880
- If passed, the url is http://10.10.x.x:1880/me

### **Networking overview**

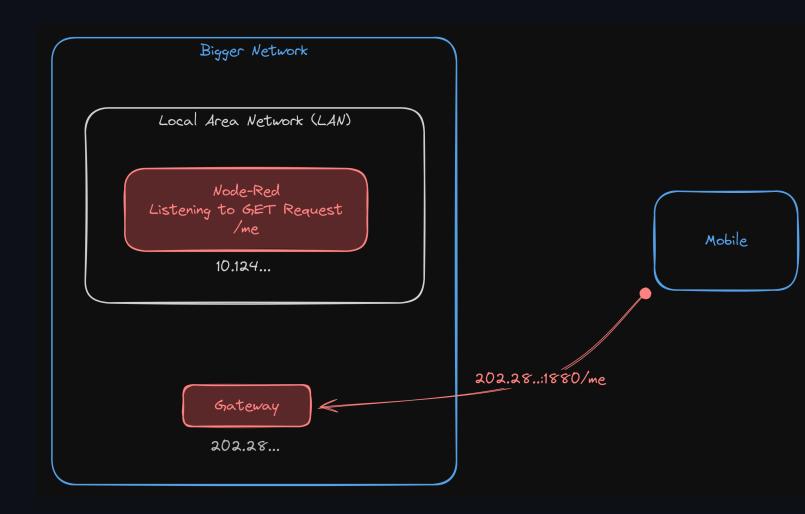
### Localhost



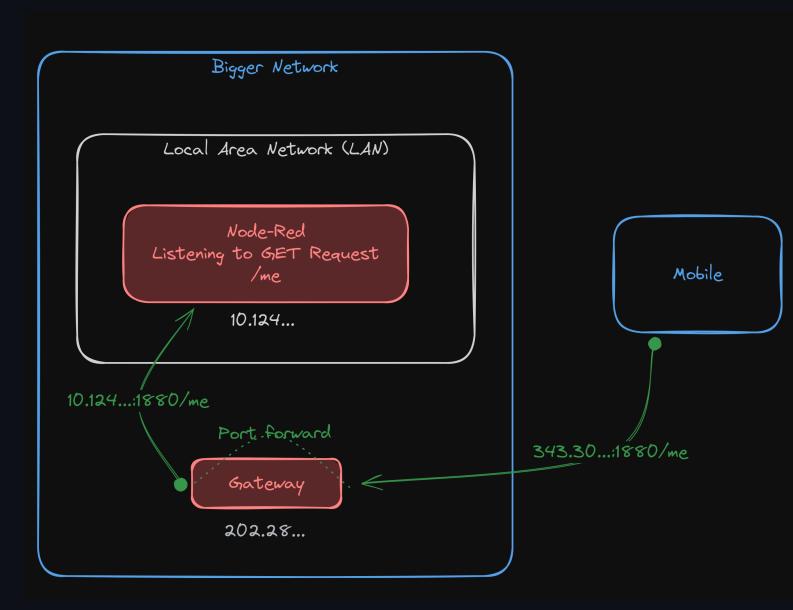
## Local area network



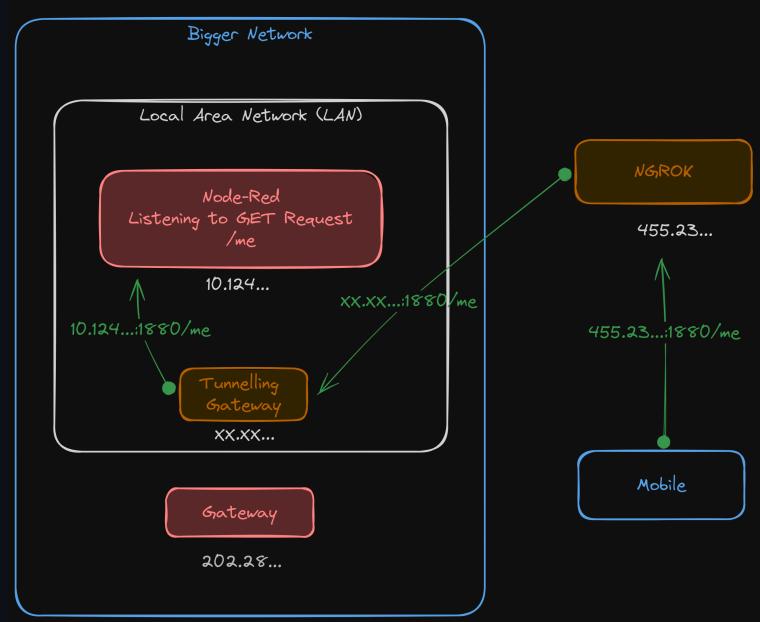
### **Public IP**



# Port forwarding



### **Local tunneling**



255411: Information Technologies for Industrial Engineers

- Get ngrok
  - Create an account at https://ngrok.com/
  - Verify email.
  - Download the program.
  - Extract the program to the project folder.
  - Copy the command below.

#### 2. Connect your account

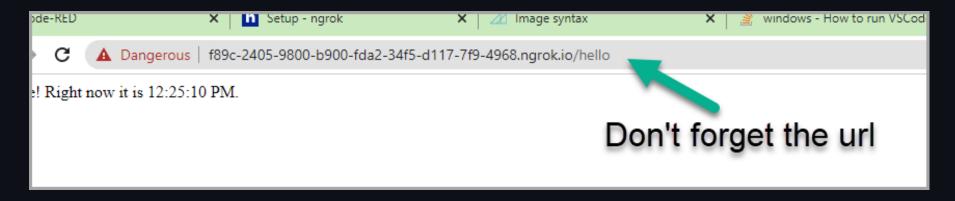
Running this command will add your authtoken to the default ngrok.yml configuration file. This will grant you access
to more features and longer session times. Running tunnels will be listed on the endpoints page of the dashboard.

\$ ngrok config add-authtoken

- VSCode
  - Create New Terminal
  - Run ngrok config add-authtoken <YOUR AUTHTOKEN> (Remove ./ from what you just copied.)
  - O Run ngrok http 1880
- Copy the https address (ctrl + shift + c)

```
(Ctrl+C to quit)
ngrok by @inconshreveable
Session Status
                              online
                              nnnpooh (Plan: Free)
Account
Version
                              2.3.40
                              United States (us)
Region
Web Interface
                              http://127.0.0.1:4040
Forwarding
                              tp://3fe2-2405-9800-b900-fda2-2d0a-b28f-a42c-1971.ngrok.io -> h
Forwarding
                              https://3fe2-2405-9800-b900-fda2-2d0a-b28f-a42c-1971.ngrok.io ->
Connections
                              ttl
                                              rt1
                                                                      p90
                                              0.00
                                                      0.00
                                                              0.00
                                                                       0.00
```

- Paste the address in the browser.
  - Don't forget to add the url in the end.



• Try sharing this link to your friends.