

**TRYHACKME CTF | Industrial Intrusion |
June-27-2025 by Ronna Curelea (Ronna0x)**

<http://www.youtube.com/@ronna0x>
<https://youtu.be/BrEcdBNpxNE>

Bypassing IoT industrial controls by opening gate without HID badge

#1- TASK The Breach

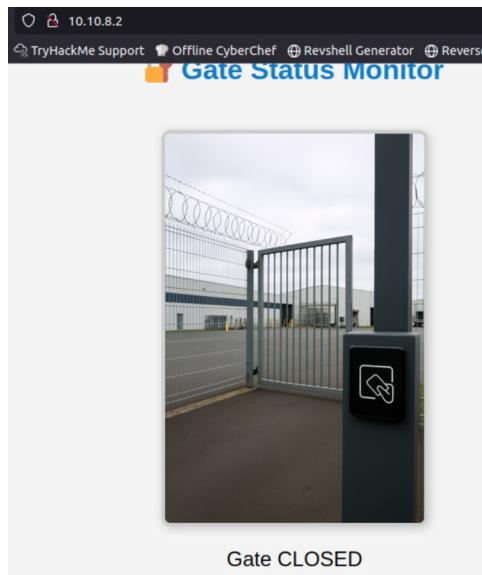
Scan for open ports

```
rustscan -a 10.10.8.2
```

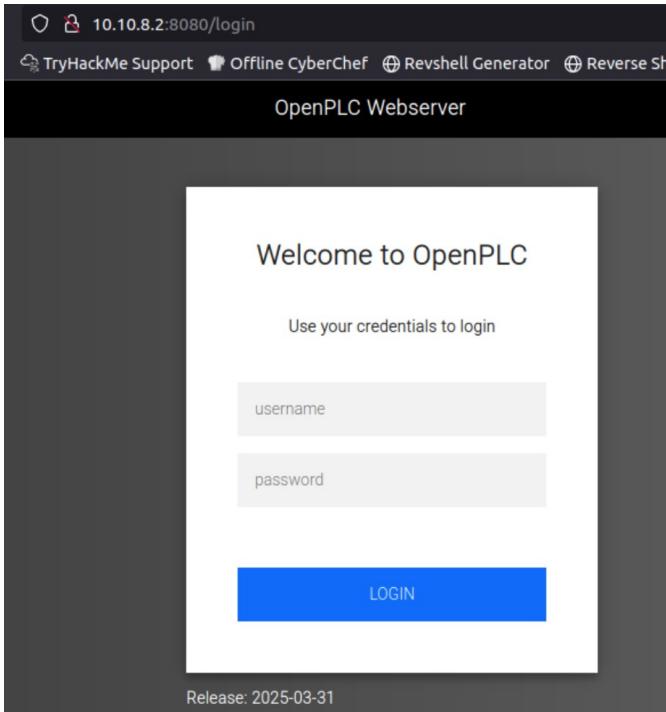
```
Scanned at 2025-06-27 09:43:57 UTC for 0s

PORT      STATE SERVICE      REASON
22/tcp    open  ssh          syn-ack
80/tcp    open  http         syn-ack
102/tcp   open  iso-tsap    syn-ack
502/tcp   open  mbap        syn-ack
1880/tcp  open  vsat-control syn-ack
8080/tcp  open  http-proxy  syn-ack
44818/tcp open  EtherNetIP-2 syn-ack
```

Lets first check out these ports; 80, 8080, and 1880.



Port 80



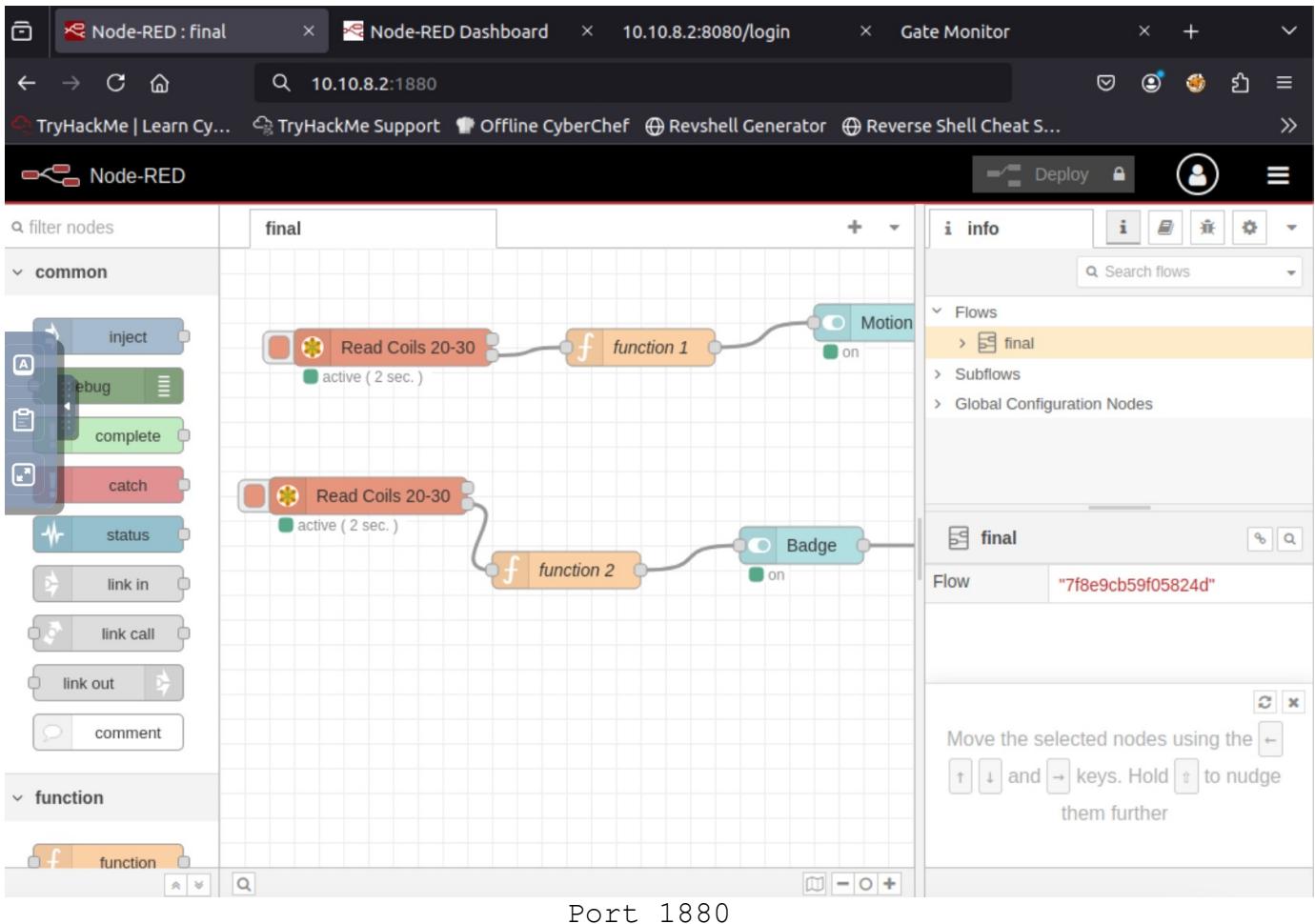
Port 8080

To find out what *OpenPLC* is, I ran an nmap scan of this IoT device.

```
nmap -sC -sV -A -p- [10.10.8.2]
```

```
</HTML>
[http-server-header: Werkzeug/3.1.3 Python/3.12.3
[http-title: Gate Monitor
102/tcp open iso-tsap Siemens S7 PLC
fingerprint-strings:
 TerminalServerCookie:
Cookie: mstshash=nmap
s7-info:
Module: 6ES7 315-2EH14-0AB0
Basic Hardware: 6ES7 315-2EH14-0AB0
Version: 3.2.6
System Name: SNAP7-SERVER
Module Type: CPU 315-2 PN/DP
Serial Number: S C-C2UR28922012
Copyright: Original Siemens Equipment
```

MAC Address: 02:58:E0:8D:53:21



Port 1880

Dashboard of the Gate Opener
Can be interacted with by altering configurations and settings.

I then did a quick manual enumeration on 8080 for common endpoints such as: admin, settings, ui, dashboard, etc

Only <http://10.10.8.2:1880/ui/> worked.

The screenshot shows the Node-RED Dashboard with a section titled "Gate". It displays two toggle switches: "Motion Detector" and "Badge". Both are currently turned on. The dashboard also includes a header with links to TryHackMe Support, Offline CyberChef, Revshell Generator, and Reverse Shell Cheat Sheet.

If I toggle those options I can change the settings for the gate and it will respond accordingly. At this point I can disable the badge and motion detector and the gate will open by default.