EHS6T LAN – Enkom Active Oy demo unit at Upseerinkatu 1, 5. floor electrical distribution cabinet

EHS6T LAN Has been connected to a Raritan BCM unit (Branch Circuit Monitoring)

The BCM measurement data are read In real time, using the http(s) connection

SIM = a fixed, public IPv4 address (Sonera)

Port forward EHS6T LAN – Raritan BCM

Only Http(s) allowed (port 443)

Firewall settings on the Linux side (OpenWRT)

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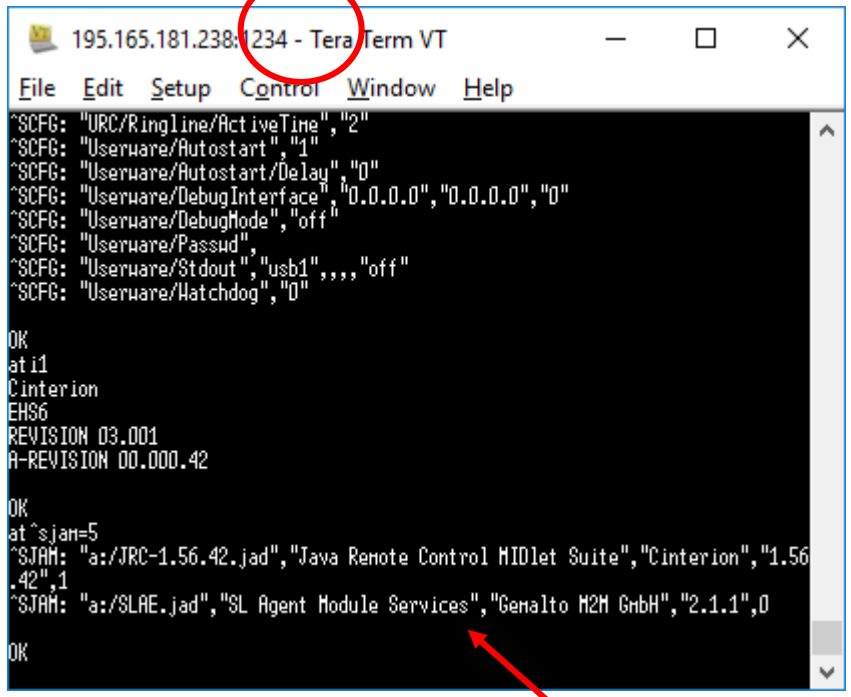

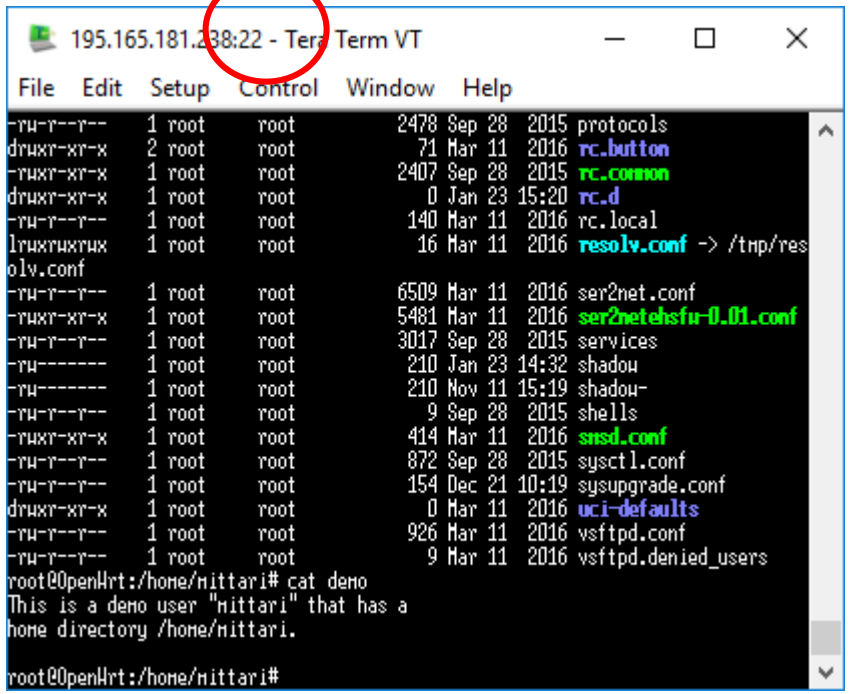

AT-command using Telnet with TeraTerm, port 1234, USB3 at the modem side.

-unprotected connection

Linux (OpenWRT) –connection using SSH:lla (Tera Term)
- User Name, Passphrase and certificate required

-protected connection

Gemalto Sensorlogic Module Services

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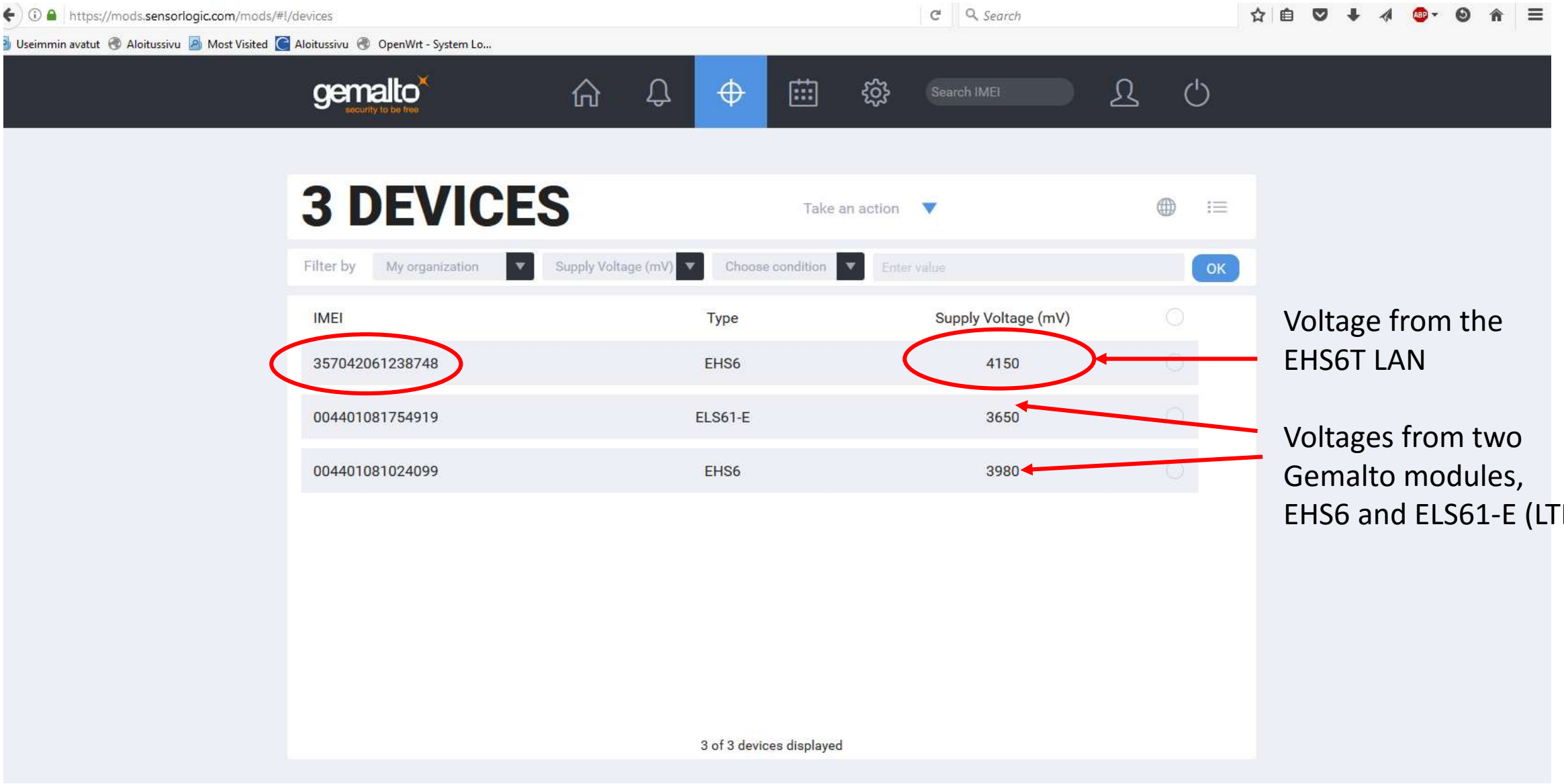
TLS-protected connection to Sensorlogic Module Services – Firefox-browser used (monitoring, updates etc.)



Voltage from the EHS6T LAN

Voltages from two Gemalto modules, EHS6 and ELS61-E (LTE)

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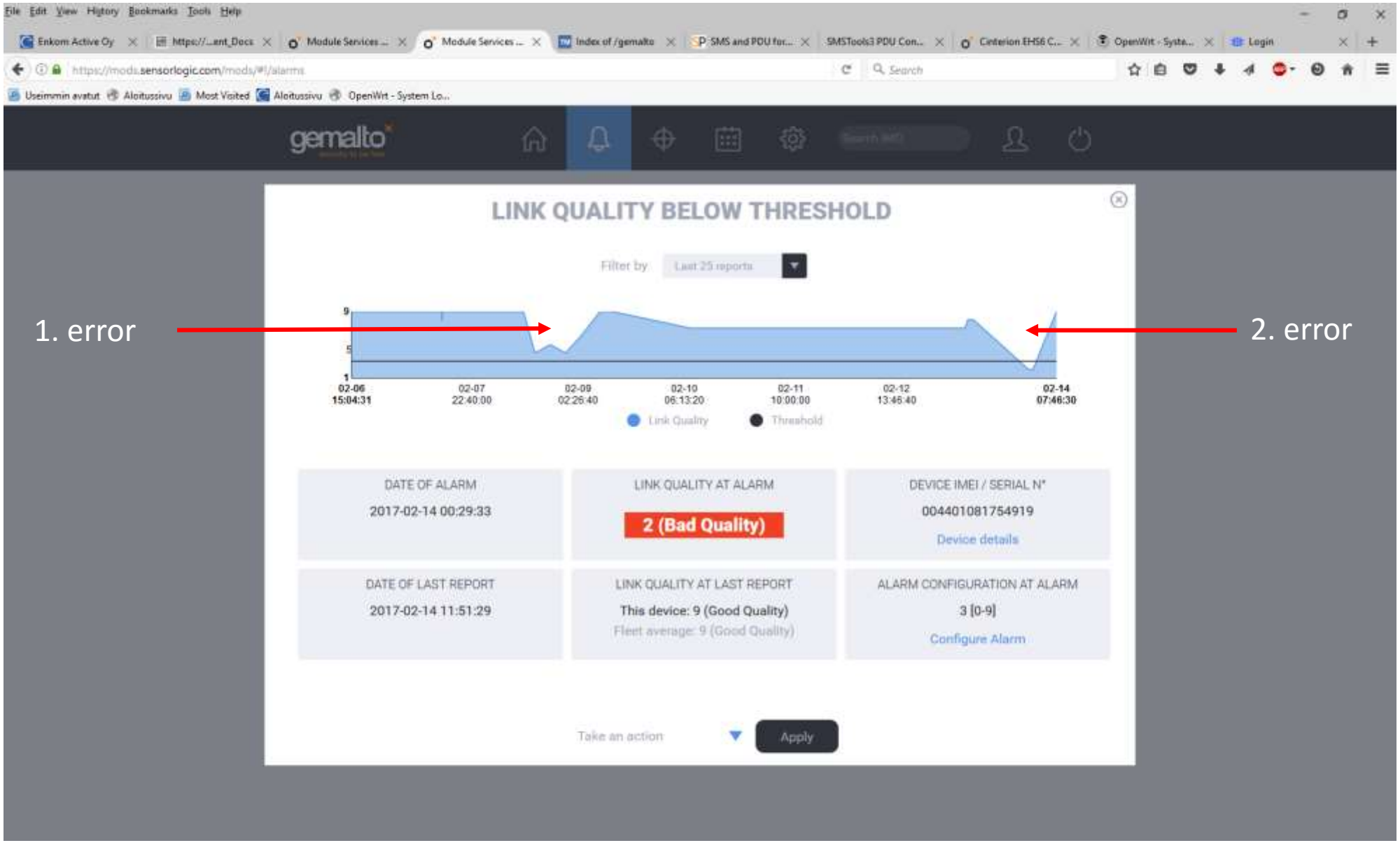
Alarm display – LTE network errors shown



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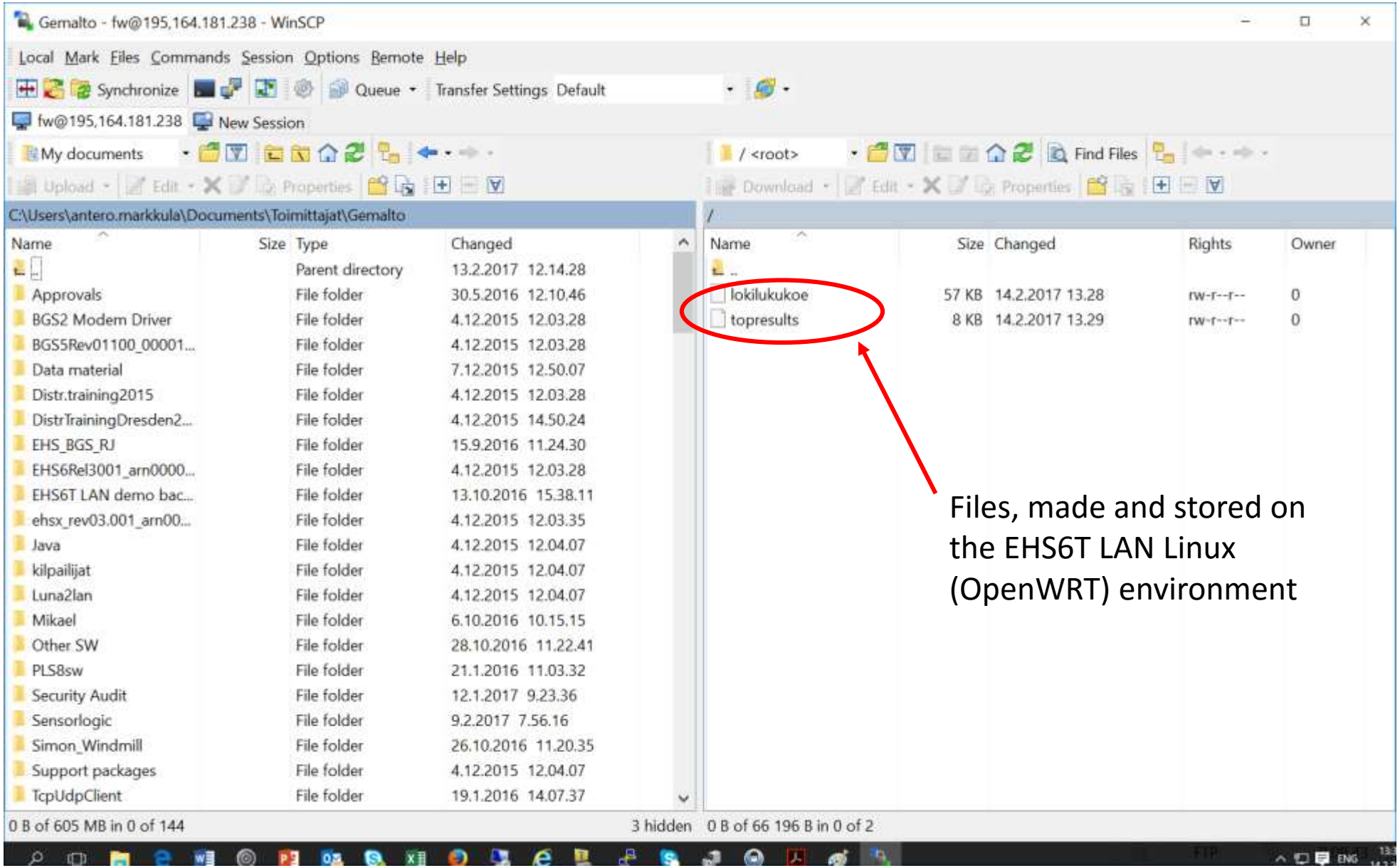
FTP (PASV)-connection with WinSCP, only user/password protection, access limited to one folder only.



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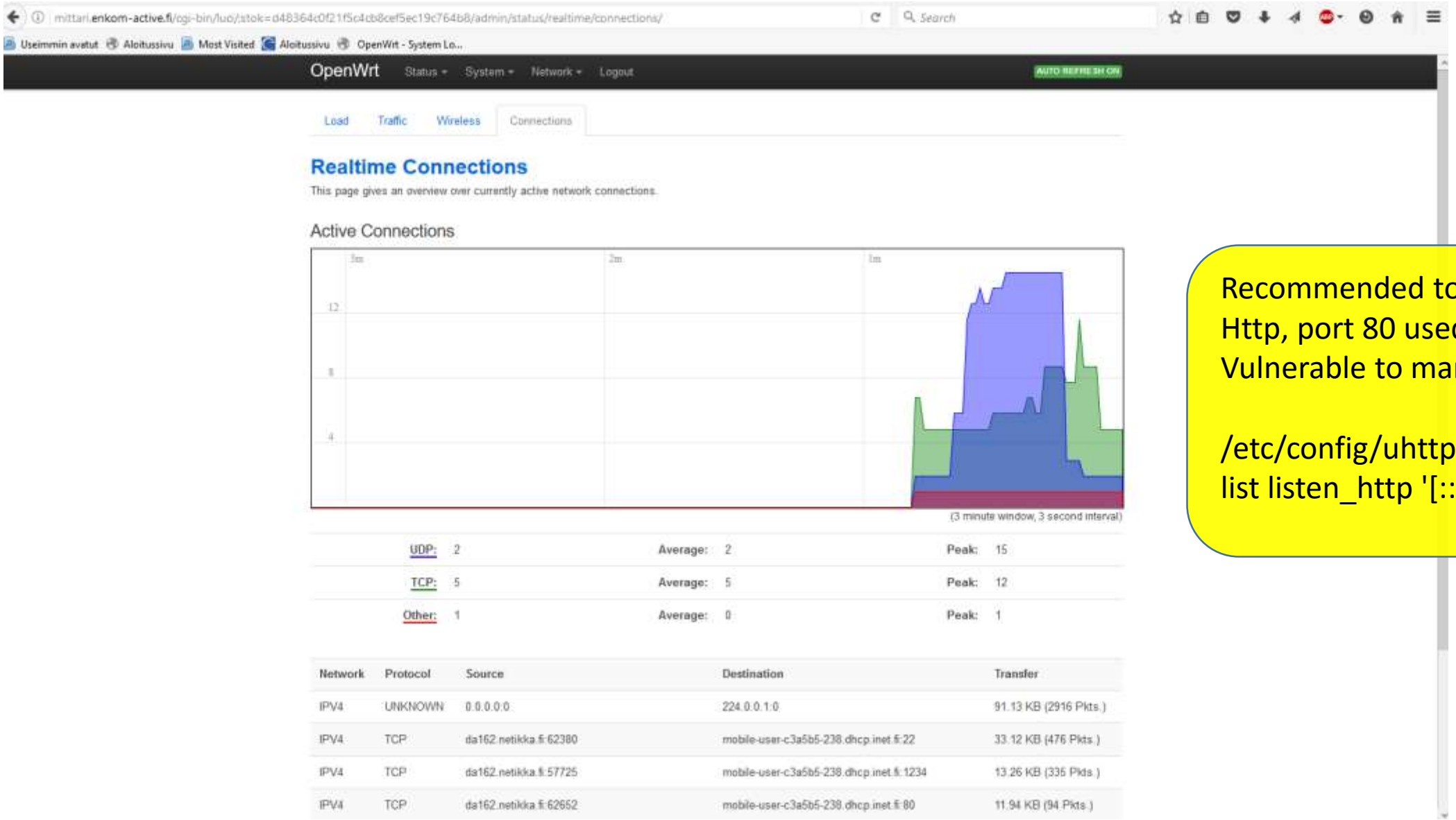
OpenWRT optional graphical user interface used using Firefox (not supported but exists ☺)



Recommended to be disabled.
Http, port 80 used.
Vulnerable to many attacks.

/etc/config/uhttpd file:
list listen_http '[::]:80'<- delete

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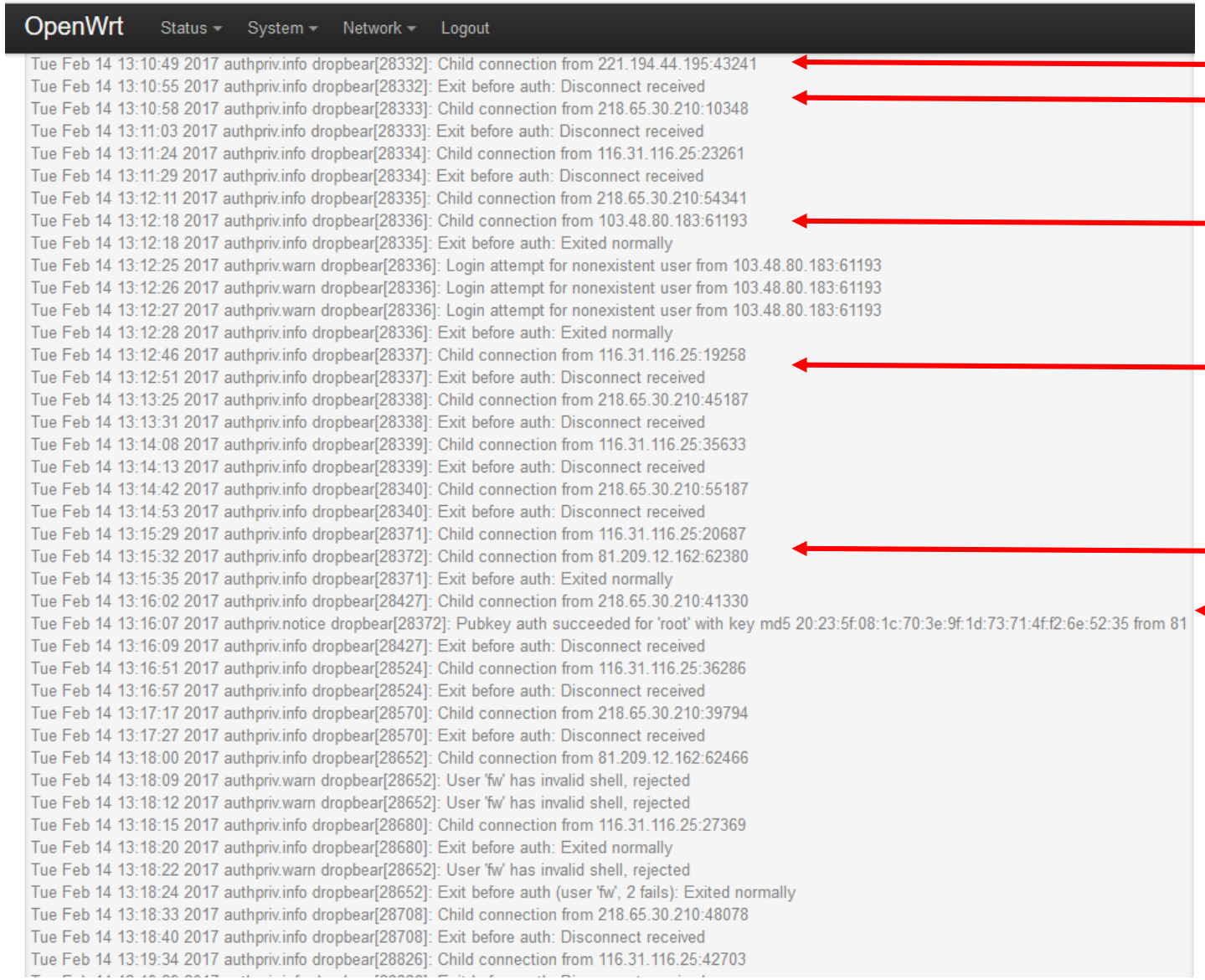
Trials to attack to the system each 3..4 minutes. (none successful, all trials through http)



China

China

Vietnam

China

Finland ☺

My own successful SSH-login

- please use non public M2M SIM Cards and own APN if possible
- Protect and encrypt the communication (SSL/TLS/http(s) and certificates
- close http (port 80)

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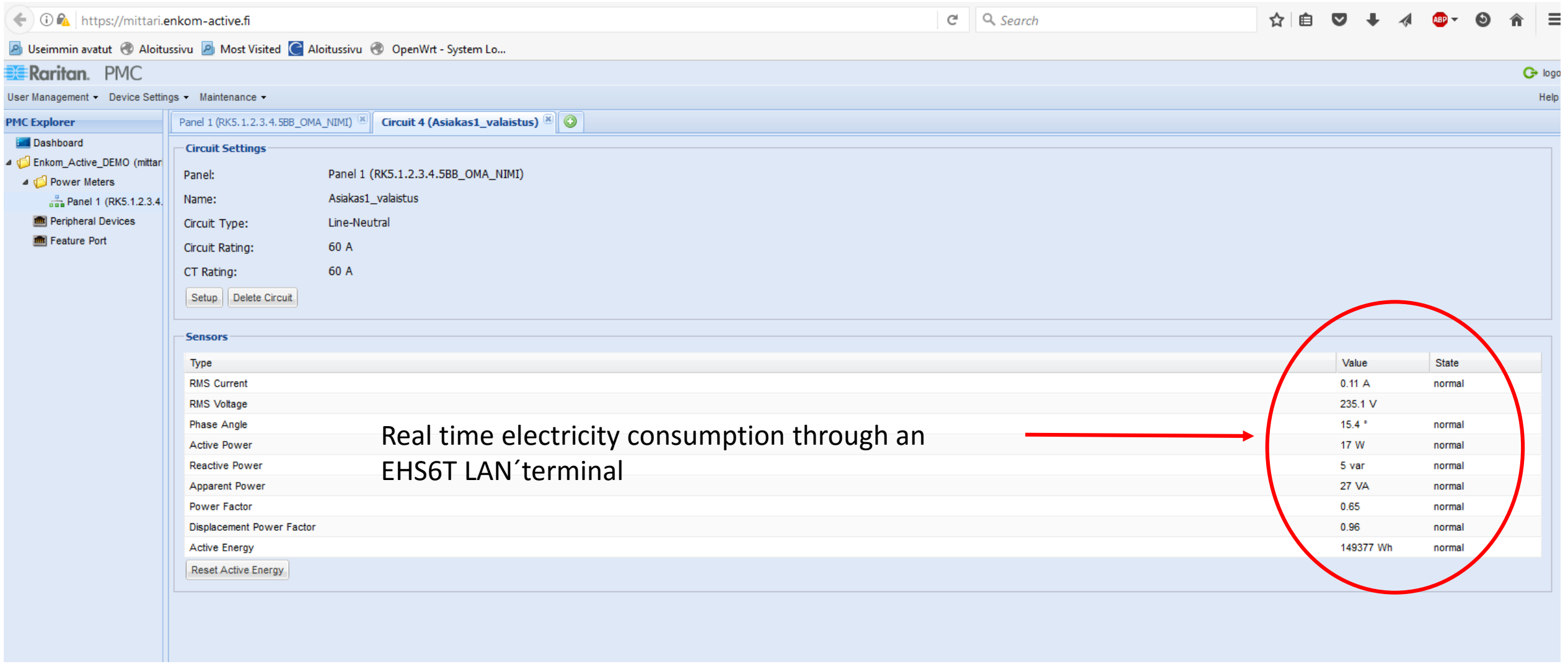
HTTP(S) connection with Firefox browser to the Raritan voltage/current measurement system



Real time electricity consumption through an EHS6T LAN´terminal