



# IMSI Filtering with Cubro Sessionmaster

26 June 2017



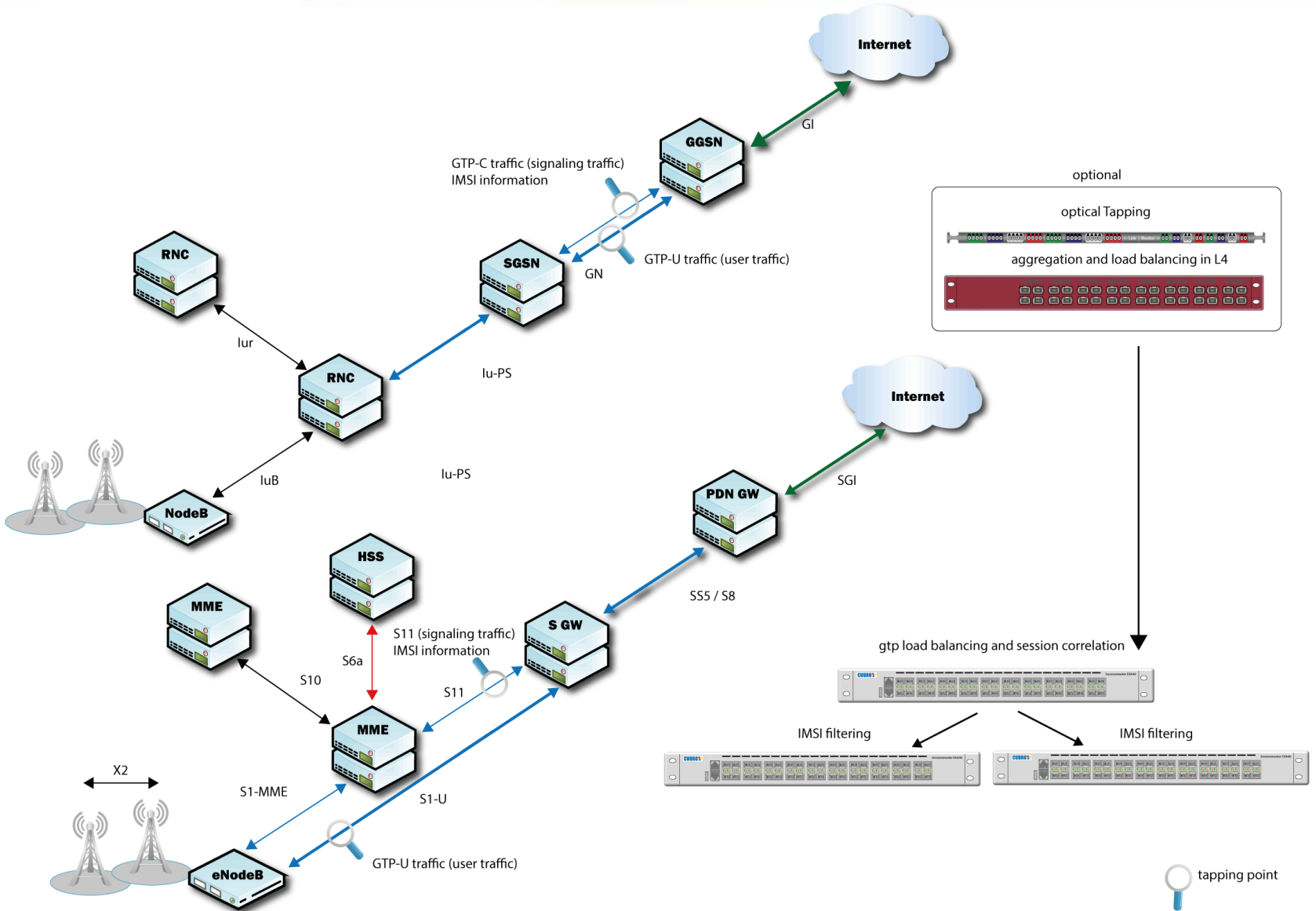
# What is IMSI?

- The International Mobile Subscriber Identity (IMSI) number is central to identifying users on a carrier network.
- It is a unique number that is assigned to a cell phone or mobile device to identify it on the GSM or UTM network.
- Typically the IMSI number is stored on the SIM card of the mobile device and is sent to the network as required.
- An IMSI number is 15 digits long, and includes the Mobile Country Code (MCC), Mobile Network Code (MNC), and Mobile Station Identification Number (MSIN).



# Why do we need IMSI Filter?

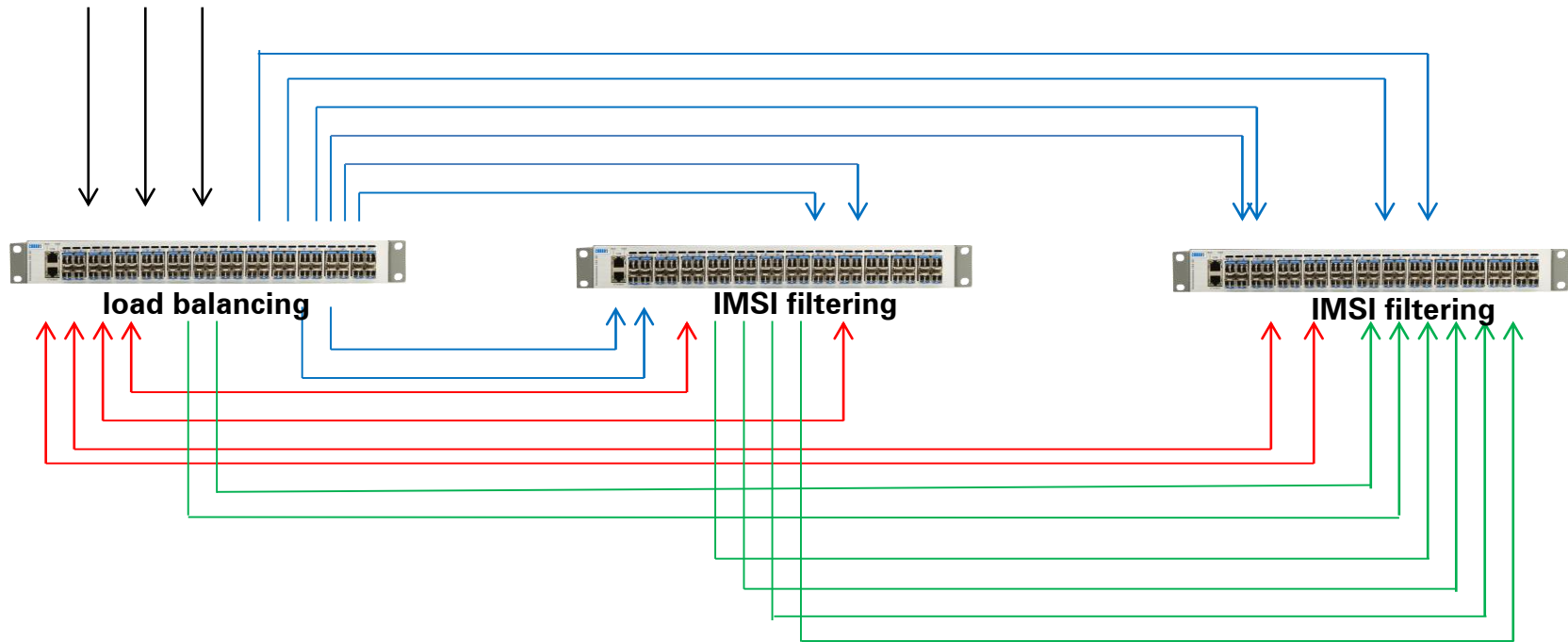
- To reduce the load on monitoring equipment
- To prevent VIP and classified customers from monitoring
- Either for small scale monitoring or to capture a single subscriber with Wireshark or similar tools



- High load and the fact that the IMSI is not found in any packet depending on the network design and used technology (2G/3G/4G).
- The IMSI information is typical on a different logical and physical interface.
- To make IMSI filtering possible, aggregation, load balancing, session correlation and filtering functions must be combined.

# IMSI Filter external cabling

Mixed Traffic of Gn+S11+S1-U



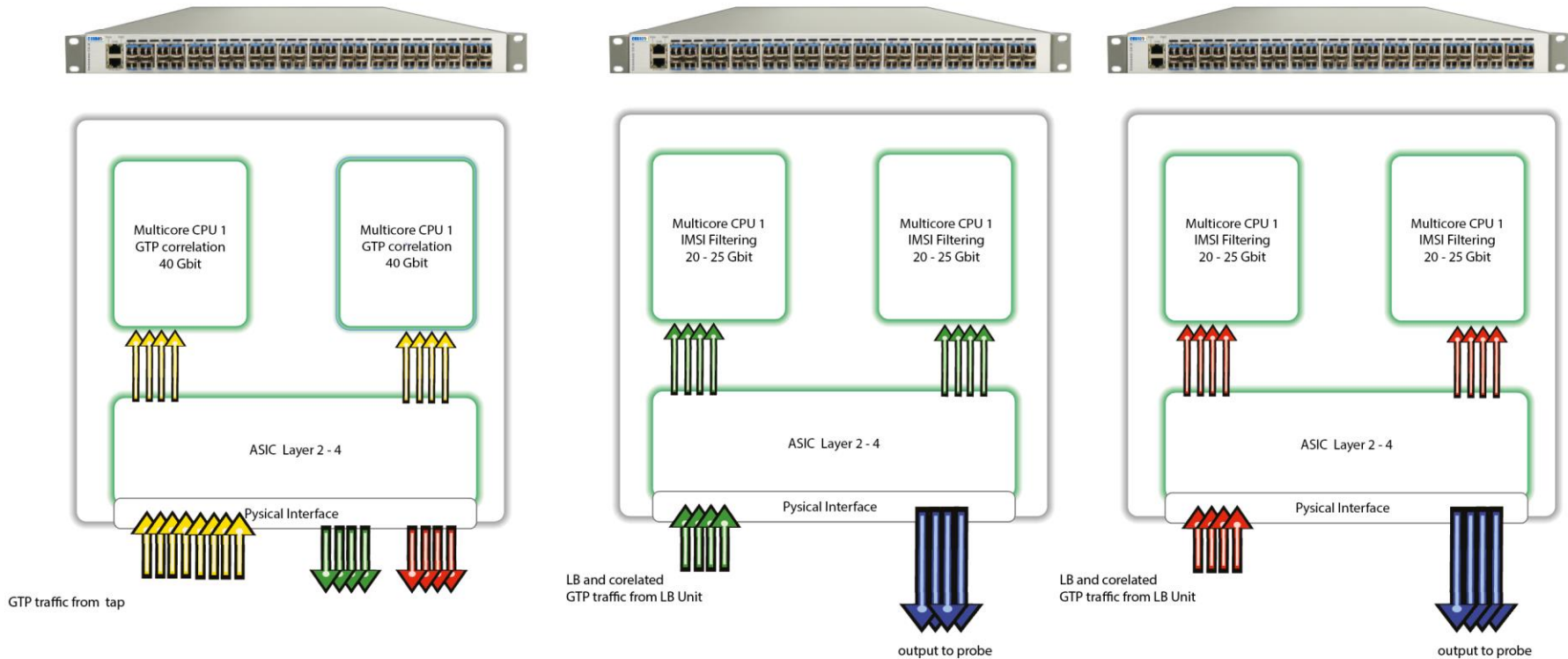
Network	Interface	Type	Element
LTE	S1-U	User Plane	SAE-GW
	S11	Control Plane	MME
UMTS	Gn	Control Plane/User Plane	SGSN/GGSN



# Solution

The **Cubro Sessionmaster** can provide all these functions!

## Solution for up to 100 Gbit and one million IMSI filtered out (white list)







# Rule Format

- Rule Format

Service

```
set access-list user rule 1 imsi xxxxxxxx
```

```
set access-list user rule 2 imsi xxxxxxxx
```

.....

- Support millions IMSI

- Support black and white List

- ❖ Upload the rule(System mode)

- load config filename imsi.txt username \*\*\* password \*\*\*\*

```
serverip 192.168.2.31
```



**Thank you**



**For more information contact us at: [support@cubro.com](mailto:support@cubro.com)**