



# OAI 5G Userplane Acceleration Using AWS EKS

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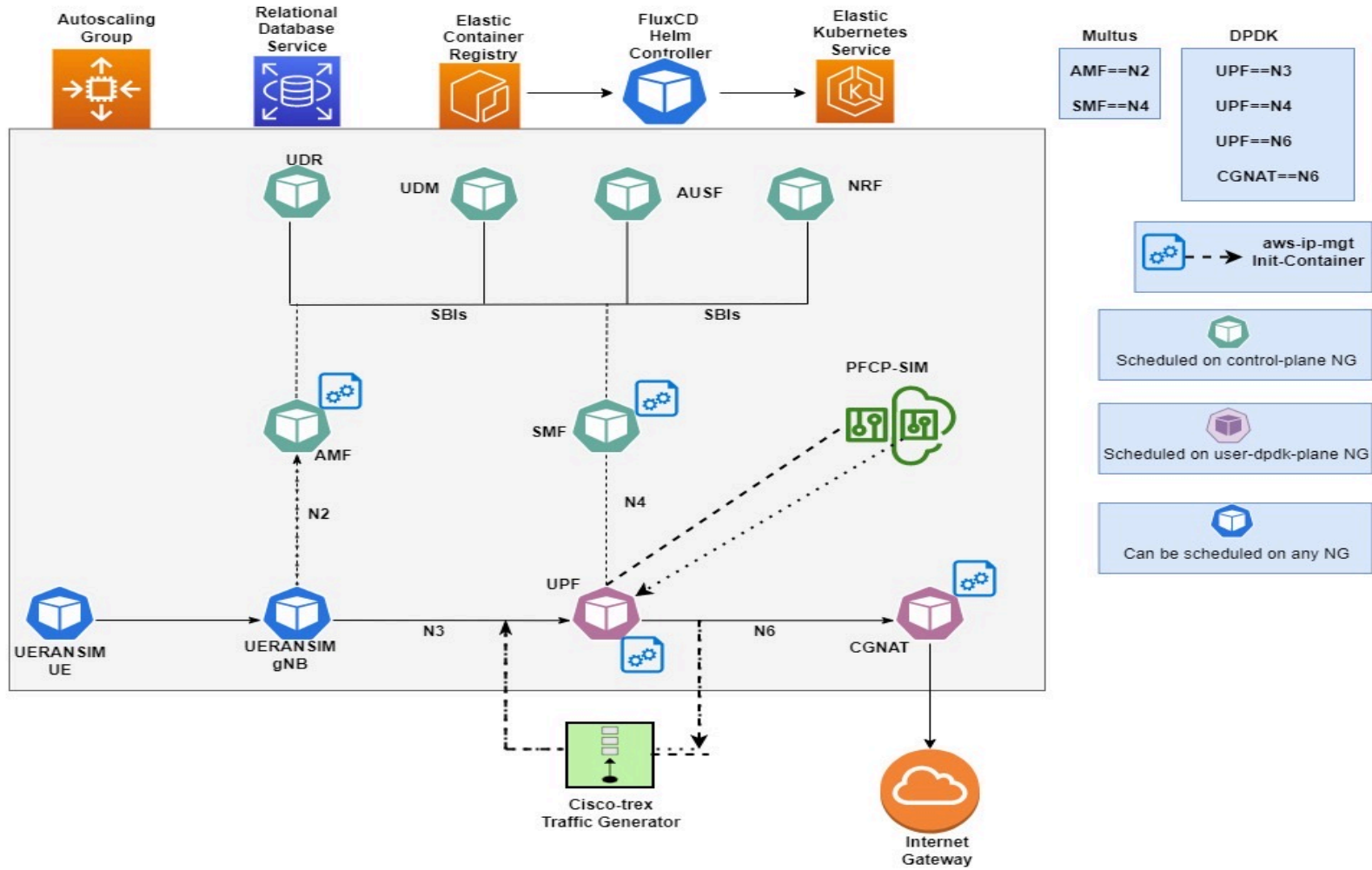
AWS

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# Agenda

- Architecture
- DPDK driver installation
- SRIOV device configuration
- OAI 5G core deployment via FluxCD HelmRelease
- Subscriber creation in the VPP-UPF via SMF simulator
- GTPU load test via Trex

### OAI Traffic Flow



### Global Statistics

```
connection : localhost, Port 4501
version    : ASTF @ v2.97
cpu_util.  : 45.97% @ 4 cores (4 per dual port)
rx_cpu_util. : 0.0% / 0 pps
async_util. : 0% / 7.45 bps
total_cps. : 21.85 Kcps
total_tx_L2 : 9.2 Gbps
total_tx_L1 : 9.4 Gbps
total_rx    : 9.34 Gbps
total_pps   : 1.27 Mpps ▲
drop_rate   : 0 bps
queue_full  : 0 pkts
```

### Port Statistics

port	0	1	total
owner	root	root	
link	UP	UP	
state	TRANSMITTING	TRANSMITTING	
speed	50 Gb/s	50 Gb/s	
CPU util.	45.97%	45.97%	
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Tx bps L2	▲ 415.09 Mbps	8.78 Gbps	9.2 Gbps
Tx bps L1	▲ 480.29 Mbps	8.92 Gbps	9.4 Gbps
Tx pps	▲ 407.52 Kpps	▲ 867.08 Kpps	▲ 1.27 Mpps
Line Util.	0.96 %	17.85 %	
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Rx bps	9.04 Gbps	▲ 297.71 Mbps	9.34 Gbps
Rx pps	▲ 865.69 Kpps	▲ 407.51 Kpps	▲ 1.27 Mpps
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opackets	18610883	35390969	54001852
ipackets	35058668	16944309	52002977
obytes	2361810316	44949247752	47311058068
ibytes	46073414824	1562498347	47635913171
tx-pkts	18.61 Mpkts	35.39 Mpkts	54 Mpkts
rx-pkts	35.06 Mpkts	16.94 Mpkts	52 Mpkts
tx-bytes	2.36 GB	44.95 GB	47.31 GB
rx-bytes	46.07 GB	1.56 GB	47.64 GB
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oerrors	0	0	0
ierrors	0	0	0
status:			