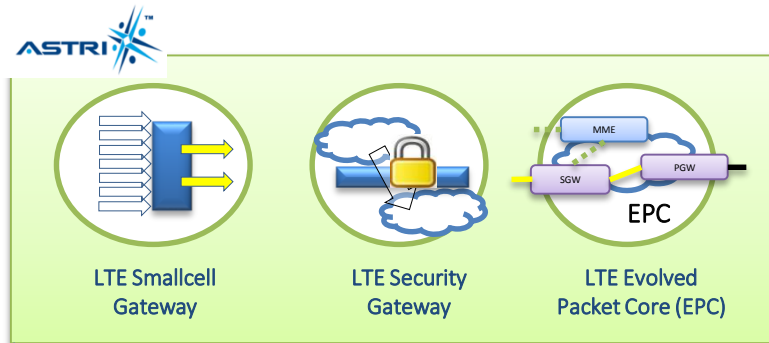


# Introduction of ASTRI's Network Functions Virtualization (NFV) Technologies

# ASTRI LTE NFV Technology Demo on Intel ONP

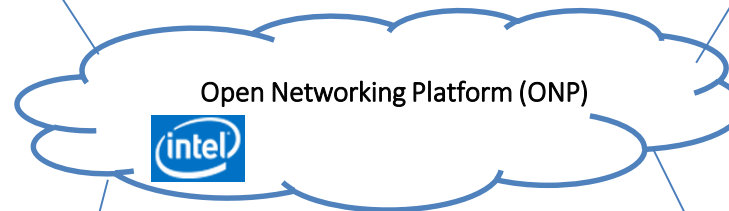
## Virtual Network Functions

Provides LTE Core Network Functions (VNF)



## NFV Platform

Provides Hypervisor, Virtual Switch to VNFs



## Hardware Platform

Intel E5-2600 v3 Series provides latest and greatest features supporting NFV capabilities



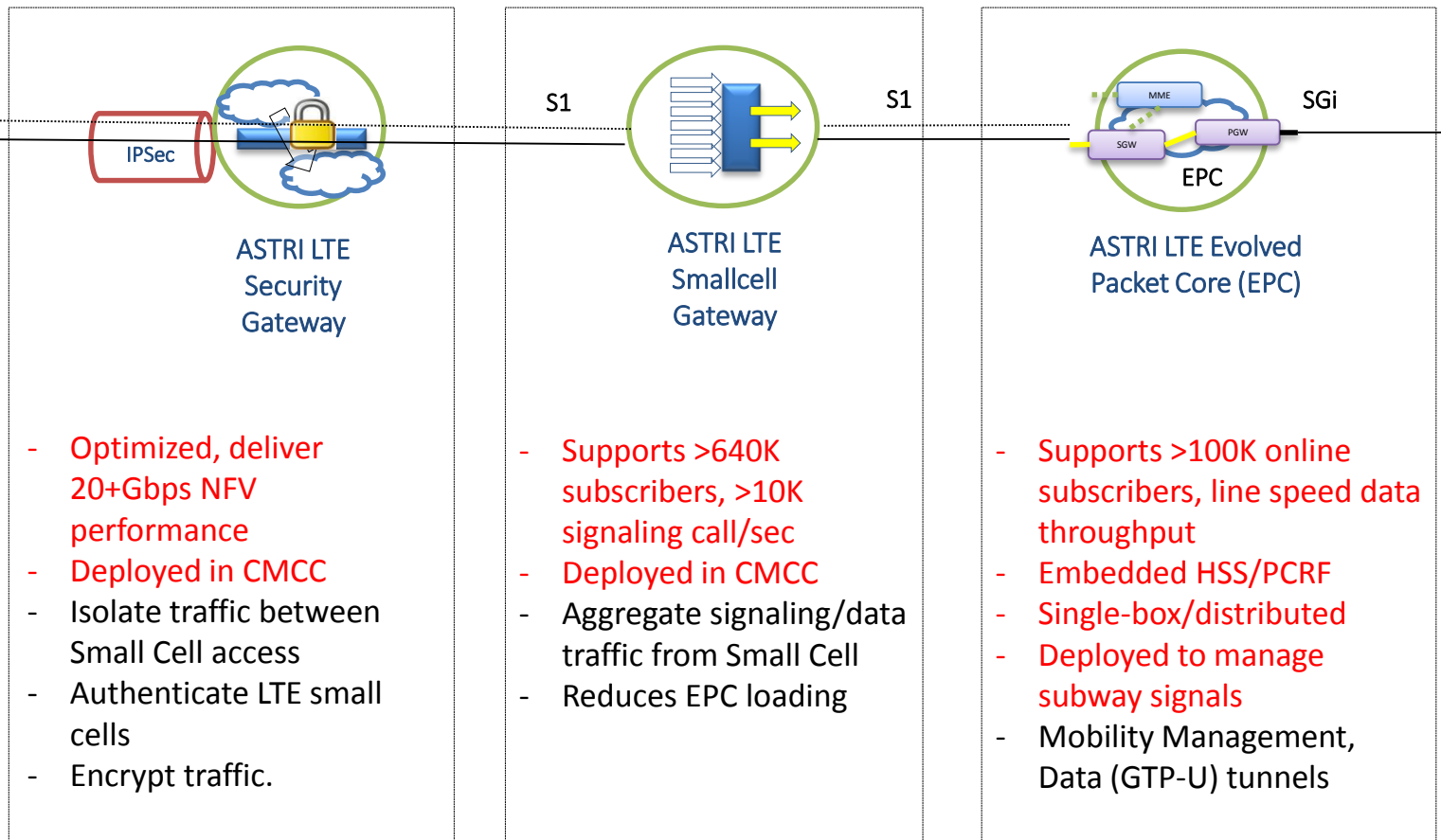
X86 Servers (Dell R730)

- ASTRI focus on networking software R&D, license developed technologies to industry for commercial production.
- ASTRI provides LTE end-to-end Core Network Software
- **FastGate** is ASTRI's high performance and field-proven Network Processing Software Technologies
- ASTRI NFV supports: **WindRiver Titanium Cloud, (Gold member of Titanium Cloud), and Intel ONP**

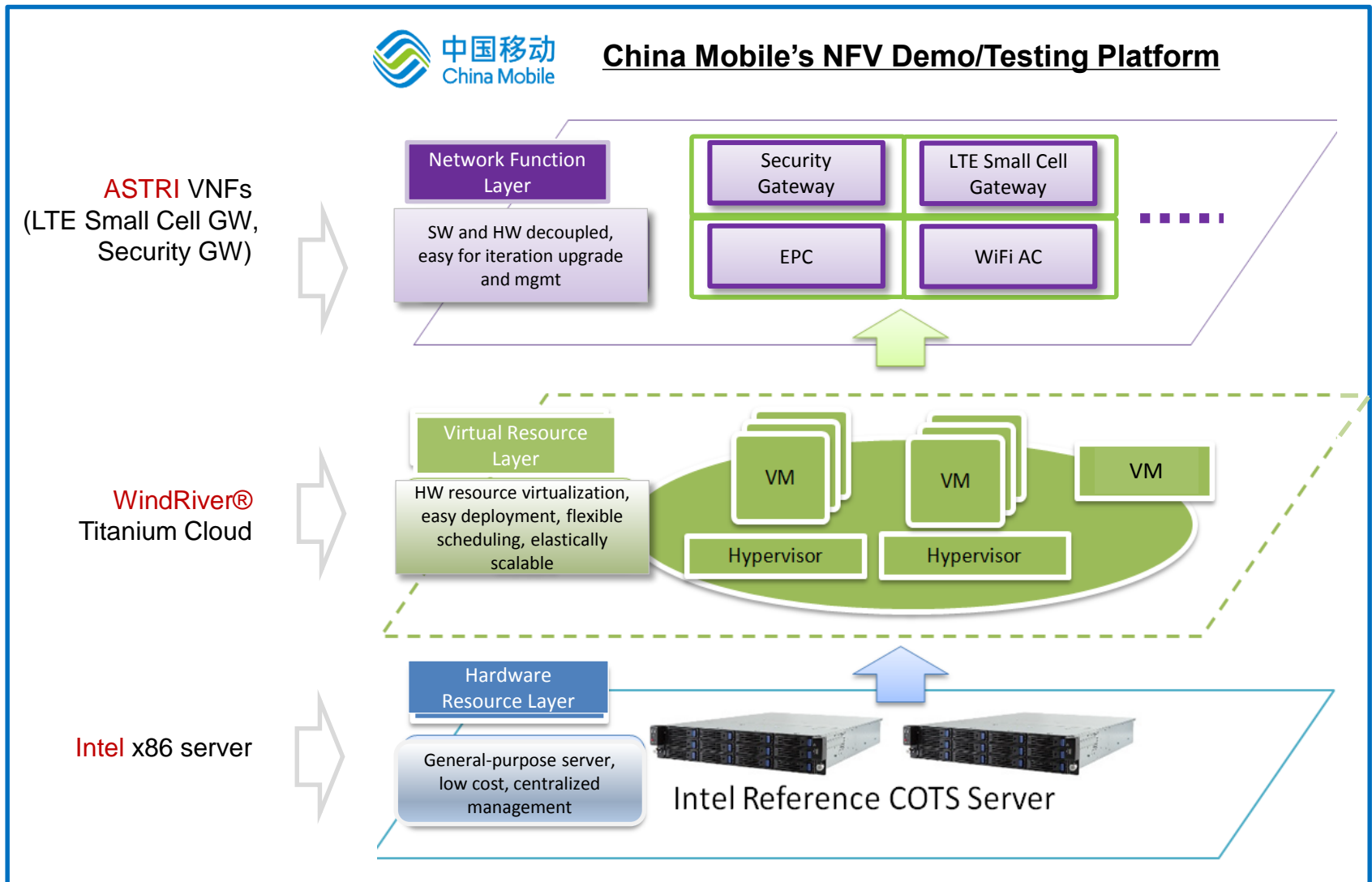
# ASTRI LTE Core Network Solution



TD-LTE Small Cell



# Integrated NFV @ China Nobile's Platform

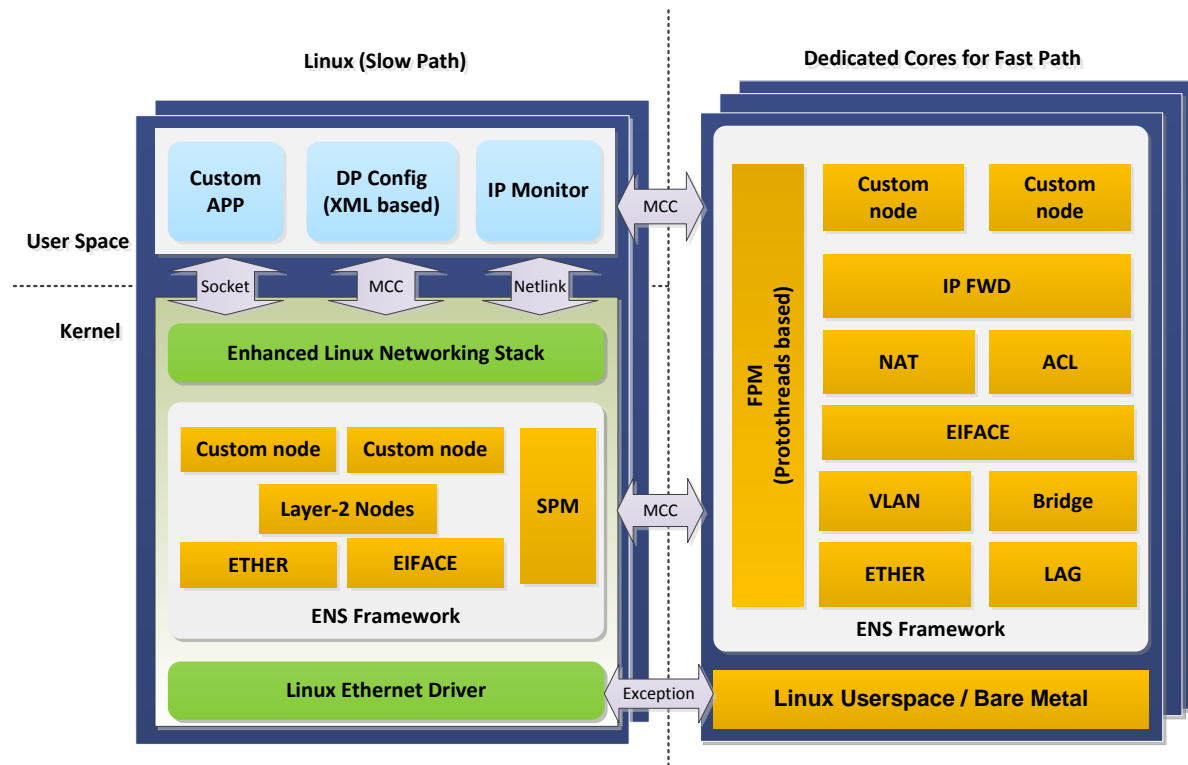


GW: Gateway

VNF: Virtual Network Function

VM: Virtual Machine

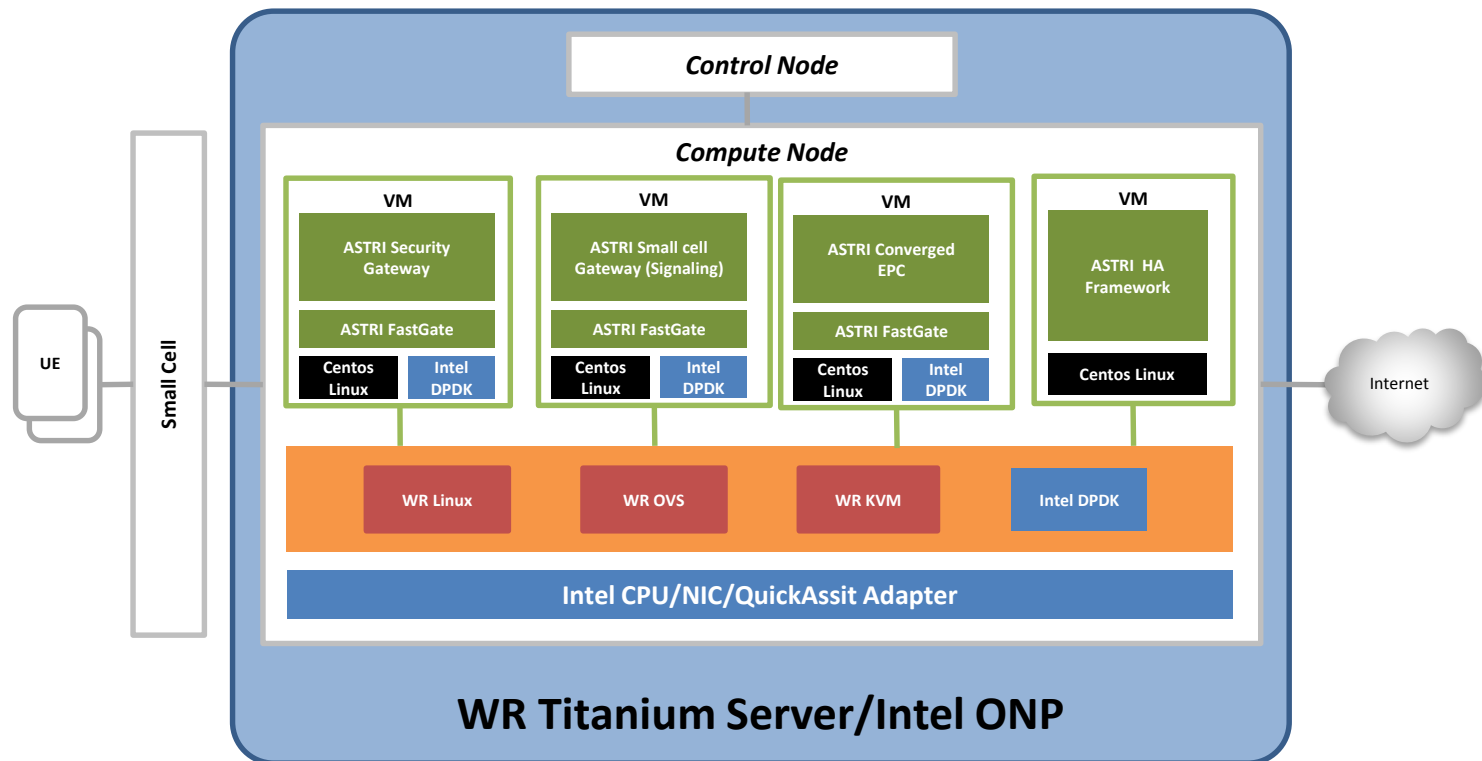
# FastGate – ASTRI Multi-Core Network Processing Software



## ASTRI's **FastGate** Key Features:

- ❑ Deliver line-speed performance (20-40+Gbps on NFV, depends on config)
- ❑ Programmable (wrapped API instead of native API)
- ❑ Optimized for Intel DPDK, and virtualization
- ❑ Foundations for building performance demanding VNF
- ❑ Applications: building LTE EPC, Software Gateway

# ASTRI Mobile Core Network NFV Architecture



## Highlights

- Industry-standard, high-volume servers, switches, and storage platform
- Deliver Stable Performance
- Orchestration – smooth operations to provision resources according to requirements
- Inter-operability (of NFV platform with VNFs)

ASTRI is the **first** to provide carrier-grade VNFs for [LTE SeGW](#) and [LTE Small Cell GW](#).



[www.astri.org](http://www.astri.org)

From **Minds** to **Markets**

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