Partners :

NFV/MEC INTRODUCTION

Presented by Dhruv Dhody, Sr System Architect, Huawei-India

Content

- Introduction to NFV
- Introduction to MEC
- A few snippets of Huawei's Efforts!
- Open Standards, Open APIs, Open Source & Interoperability!

NFV – Network Function Virtualization

- Virtualize network services/applications that once ran on dedicated hardware appliances!
  - NFV ISG Vision - *"Leverage standard IT virtualization technology to consolidate many network equipment types onto industry standard high volume servers, switches, and storage"*
- NFV Benefits – Cost efficiency, Service Agility…
- NFV Challenges – a new network management and orchestration model, legacy devices, security, NFV implementation issues, standards & interoperability…

To realize this vision…

Virtualized network appliances should provide high performance…while being portable between servers (& hypervisors)… while providing a more predictable/manageable environment!

VNF Providers

- Realistic performance estimates for different setups

Hardware (& Hypervisor) Providers

- Automated network operations

Network Operators

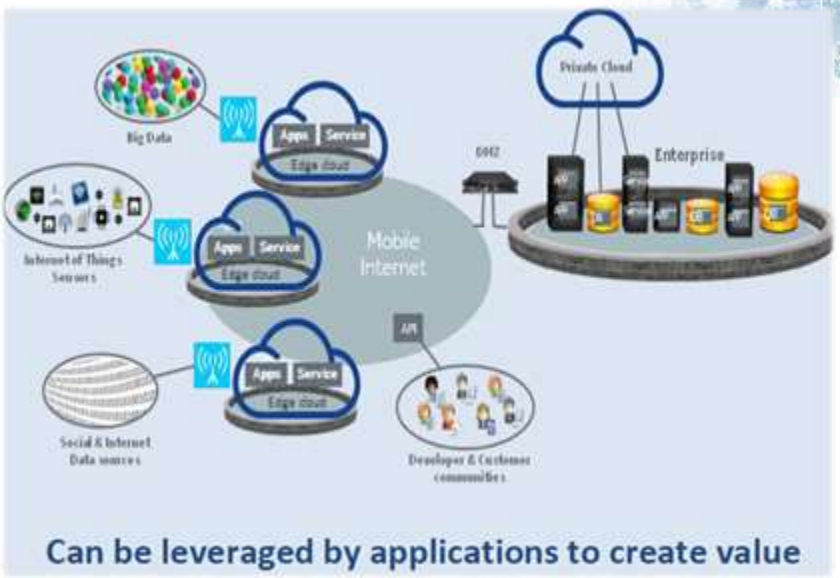
- Requirements for network functions
- Uniform provision and management

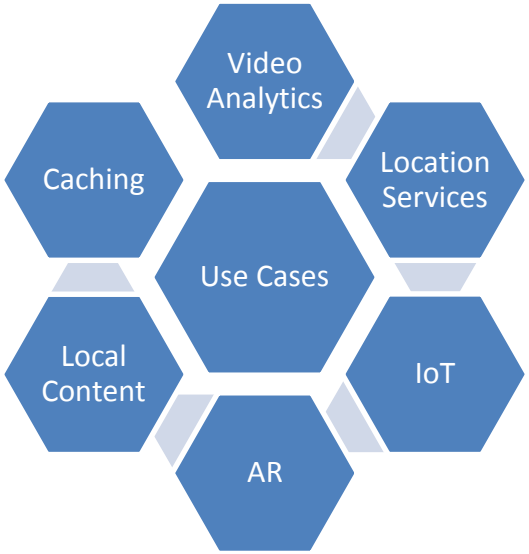
MEC – Multi-access Edge Computing

- MEC offers application developers and content providers cloud-computing capabilities and an IT service environment at the edge of the network.
  - This environment is characterized by ultra-low latency and high bandwidth as well as real-time access to radio network information that can be leveraged by applications.
- MEC provides a new ecosystem and value chain. Operators can open their Radio Access Network (RAN) edge to authorized third-parties
  - allowing them to flexibly and rapidly deploy innovative applications and services towards mobile subscribers, enterprises and vertical segments.

Strategy behind MEC

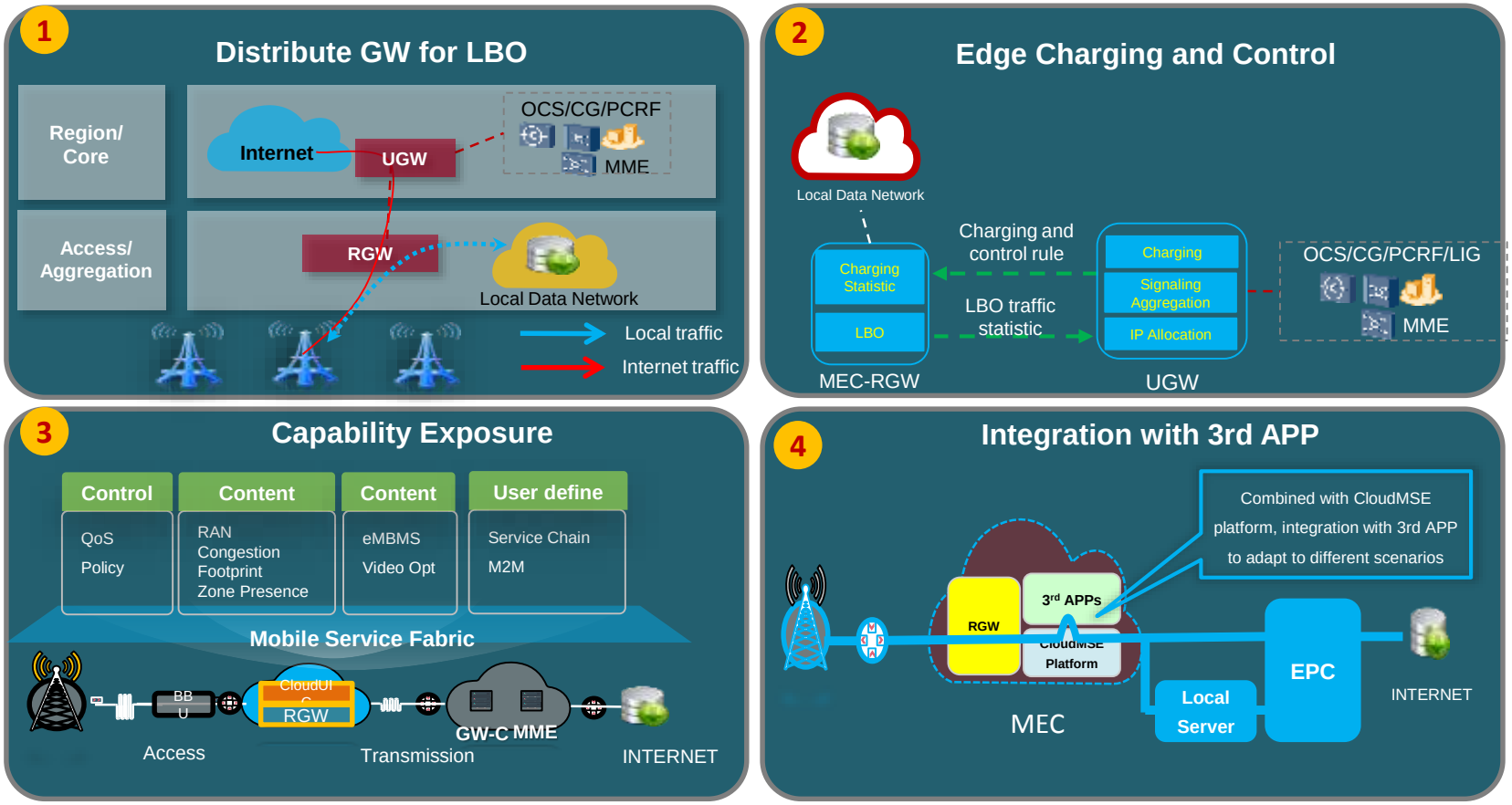
- Evolve mobile base station
- Convergence of IT & telecommunications
- A new business vertical – services for consumers/enterprises!
- Enable application and services to be hosted “on top” of mobile network!





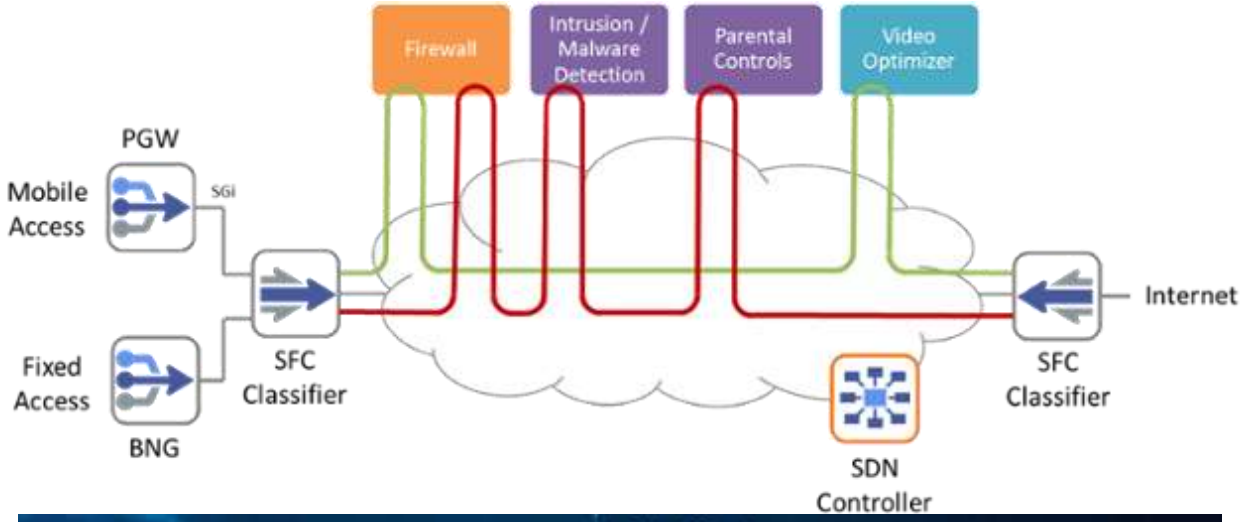
A few snippets…

Huawei MEC@CloudEdge Highlights



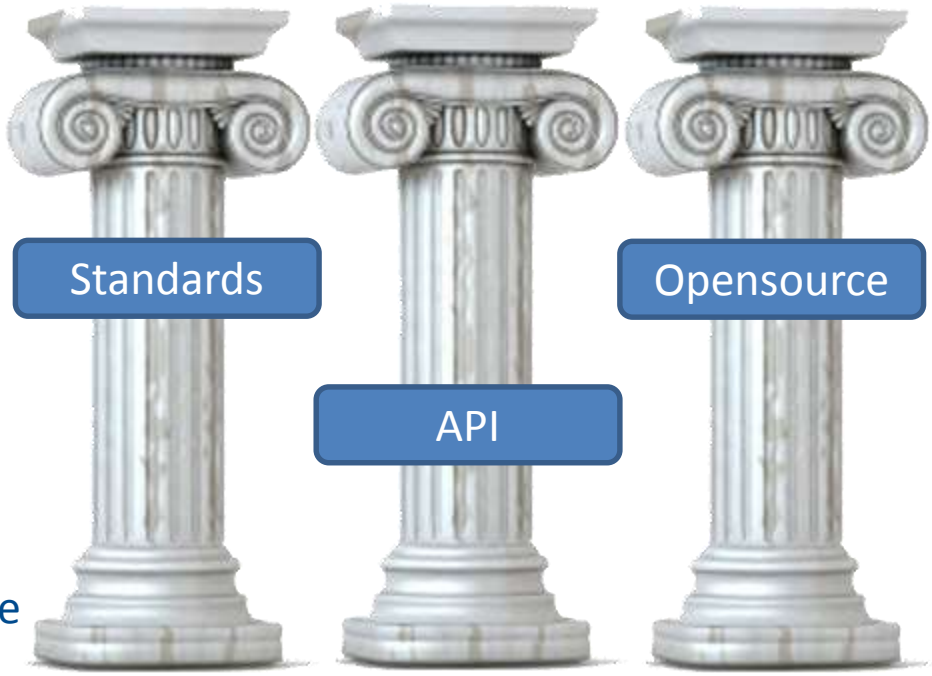
MEC - a Service Container which is termination of user plane and open the capability of control plane…

A few snippets…



Open Standards, Open APIs, Open Source!

- An open standard is a standard that is publicly available, and has been designed via an open process.
- created by domain experts
- be easy to access and adopt
- allowed anyone affected by the standard to contribute

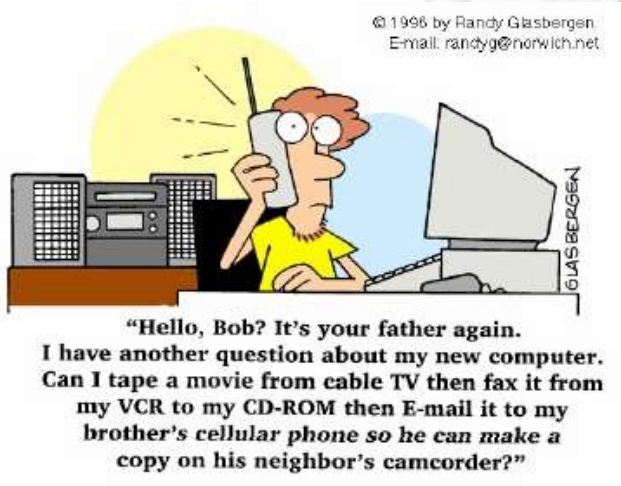


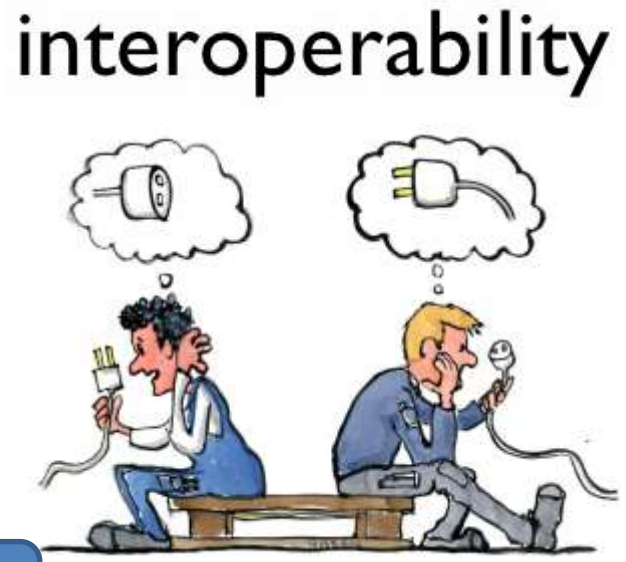
- Open Source MANO is an ETSI-hosted project to develop an Open Source MANO software stack aligned with ETSI NFV.
- OPNFV
- ONAP
- Cloudify

- A publicly available interface that provides developers with programmatic access to a software application or web service.
- Ex open API can help networks become more open, programmable, and application-aware to create a dynamic feedback loop.

Interoperability

- Reduce adoption risks for end-users
- Decrease testing costs by verifying hardware and software platform interfaces and components
- Enhance interoperability !
- Plugfest
- NFV-ITI
- New IP Agency (NIA)
- European Advanced Networking Test Center (EANTC)





Participate & Contribute!

THANK YOU!

www.dhruvdhody.com