

# Cisco Virtualized Infrastructure Manager

Prepare for the 5G Era with Cisco 5G support

MIG Technical Marketing & Product Management

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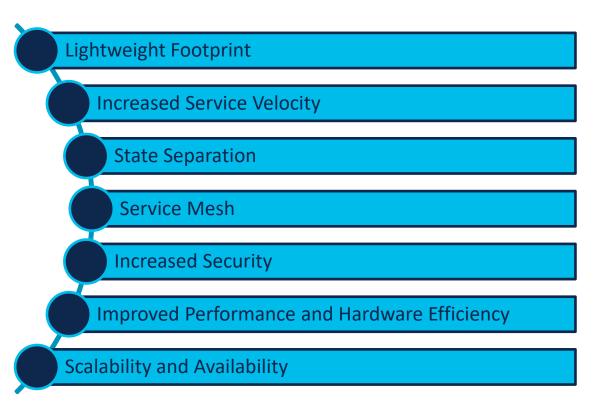
# Cisco Ultra Cloud 5G Architecture

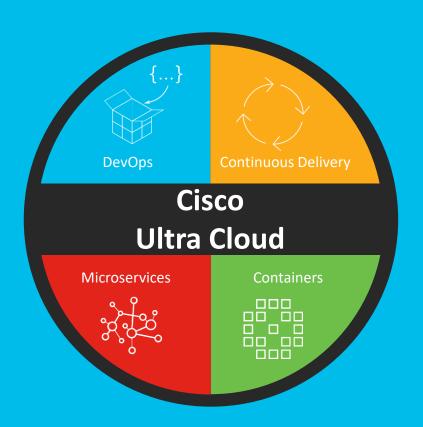
An evolutionary jump, delivering advanced automation, higher resiliency, greater security, and deployment simplicity into the Service Provider infrastructure.

# Cloud Native – Key Benefits for 5G

#### Translates to:

- Easier upgrades
- Faster Time to Market
- Faster Security Responses
- True scalability





#### Cloud Native 5G Tenets

#### **Microservices**

- Immutability, config is code
- Modular, loosely coupled software services
- Individually deployed and lifecycle managed

#### **Kubernetes**

- Declarative management
- Automated scheduling and scaling

#### **Continuous Delivery**

 Automated continuous integration, validation and availability of containers

#### **DevOps**

- Automate and manage rapid deployments
- Isolate production changes and deploy once validated

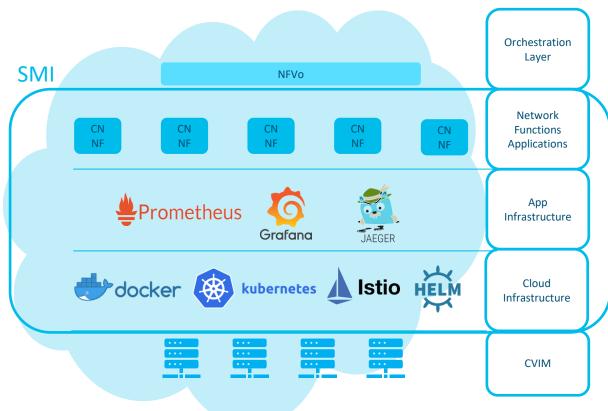
### Cisco Cloud Native Platform

Subscriber Microservices Infrastructure (SMI) over Cisco Virtualized Infrastructure Manager (CVIM)

Vertical stack designed specifically for high performance, low latency, GeoHA applications.

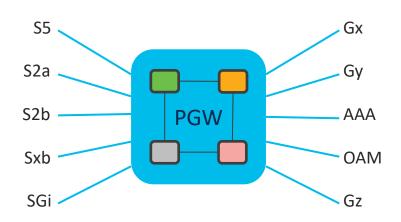
Validated Kubernetes ecosystem and integrated utilities – deployed as private, onprem cloud.

Full lifecycle of hardware and software comprising your infrastructure.



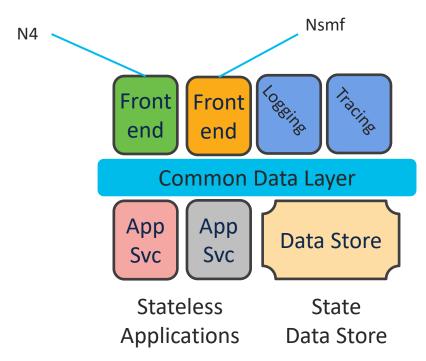
# Cloud Native – 5G Software Separation

#### Monolithic Software



State and application are in single process

#### Microservice Container Software



# SMI over CVIM: Beyond just integrating open source

# SMI Cluster Manager

Manages pod
deployments in
cluster,
configuration,
health monitoring,
resource
scheduling, and life
cycle management

# NF Ops Center(s)

Common API for deployment, configuration, and management, to enable automation

#### CEE

Common Execution Environment shared by all applications for non-application functions (data storage, telemetry, alarming)

## Cisco Service Mesh

Intelligent Service
Mesh to connect
microservices and
containers for
applications and
CEE

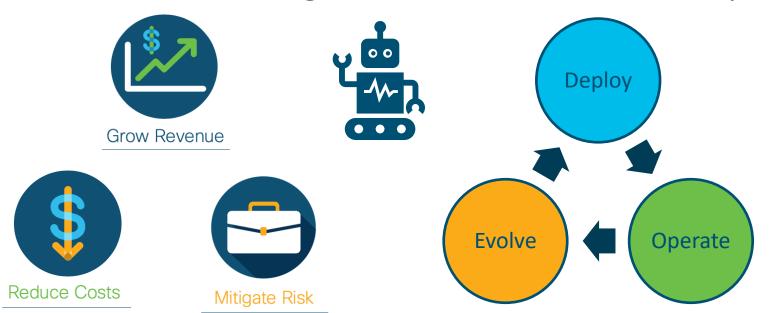
#### 5G DB

Common data
layer built
specifically for
high performance,
low latency
applications like
5G and Cable

# CVIM at-a-glance

Telco cloud platform that can be used to ...

... through automation and focus on lifecycle

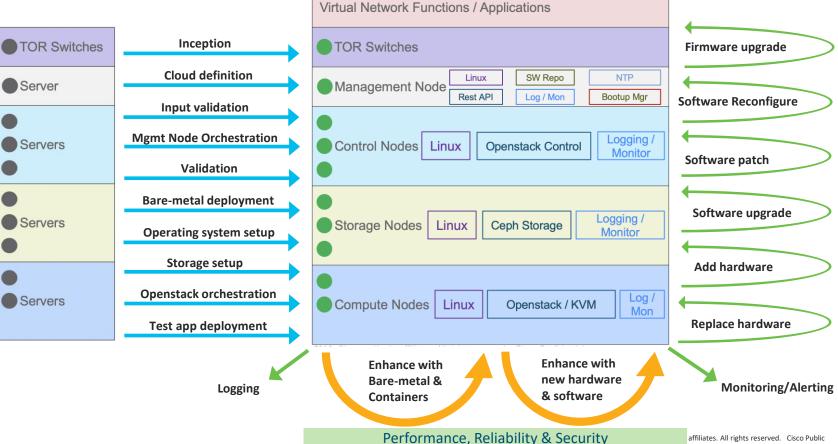


# CVIM : Deploy → Operate → Evolve

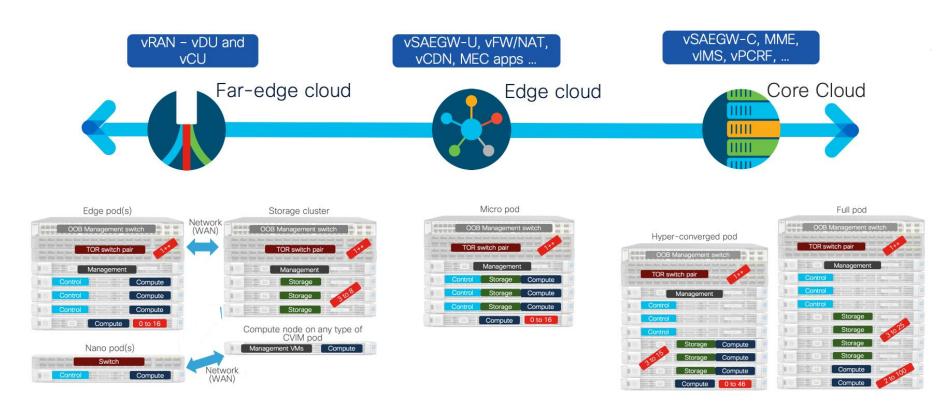






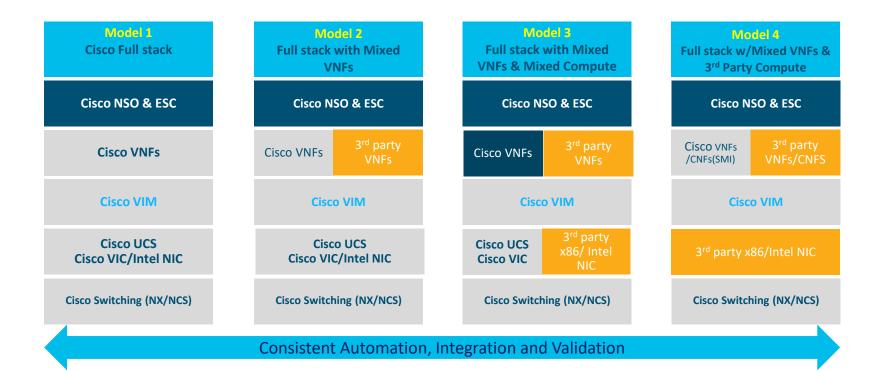


# CVIM Pod Types



← Small optimized form factor with specialized hardware ... Large form factor with standard hardware →

# Cisco VIM – Open Platform



# Thank You!