

# Tungsten Vision and Futures



# TUNGSTEN FABRIC – FUTURES AND VISION

## Goals

## Initiatives

## Capabilities

### Improve NFVi Deployments

- Improve Dataplane Performance
- Improve vRouter Portability
- Offer Extended Orchestration Options
- Update Infrastructure Service Support

- vRouter L3 Multihoming
- Operator Framework
- Intel, Mellanox, SmartNICs, DPDK pps/ flow setup rate increase
- Increased cluster next-hop scaling, dataplane fast convergence
- vRouter eBPF dataplane
- Improved upgradability
- Octavia Support

### Position Tungsten Fabric for 5G

- Provide high performance, flexible Kubernetes SDN
- Improve vRouter Encrypted Dataplane Performance

- Multicluster OpenShift/Kubernetes Support
- High Performance vRouter for Containers (DPDK, ...)
- Dual Stack networking features for containers
- Service Mesh support
- IPsec Offloading/Hardware Acceleration

### Optimize Tungsten Fabric for Edge Compute

- Support massively distributed vRouter compute endpoints
- Support real-time hypervisors, improve vRouter deployment on small servers

- Remote Compute – improved troubleshooting, scalability
- Expand Remote Compute to containers, Bare Metal
- Improved Multi-Cluster SDN
- vRouter low footprint, Real-Time Linux/KVM

