# Mass Open Cloud (MOC) Support

October 2018 workshop

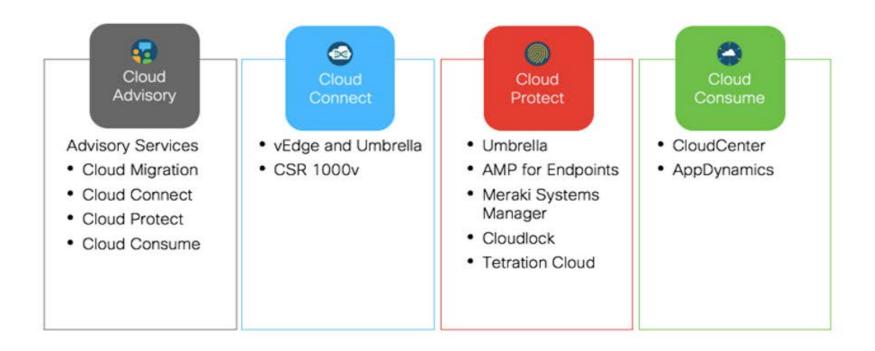


# Agenda





## Cisco Multi-cloud Portfolio





## Past

- Participating member 2016
- Sponsored by Cisco Cloud CTO and CTAO (Research Office)
- Donated equipment (UCS blade servers)
- 3 year commitment on funding

Cisco Unified Computing System (UCS)
Blade Server





#### Present

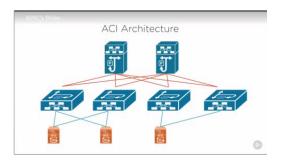
- Renewed commitment 3 year with additional funding
- U.S. Public Sector Research and Education
- Additional hardware (UCS rack servers and N9K w/ ACI)
- Sustainable services (compliant storage, cloud management, workload automation, and cyber platform)













# Services

#### Zadara

- Enterprise quality, resilient, compliant, highly available, consistent performance storage
- Consumed as a Service flexible, dynamic and billable
- Scale out grow to hundreds of Storage Nodes, thousands of drives and multi-Petabyte Storage
- True Multi-tenancy End-user controlled privacy and security.
- Universal Storage Supports all data services on one common infrastructure: Block, File, Object



#### **Cloud Center**



- Enforce multi-cloud governance by guiding user decisions to reduce risk
- Securely automate deployment to reduce manual effort and get consistent results
- Increase feature velocity via integration with developer tools to accelerate time to market
- Optimize cloud consumption to cut pay-per-use cloud costs





# Services

#### **Workload Optimization**

- Designed for virtualized on-premise and public cloud infrastructures
- Supports multiple hypervisors, containers and cloud platforms
- Delivers elastic infrastructure at scale without disrupting workload performance
- Proactive scaling of resources before performance degradation occurs
- 1, 3, and 5 year subscriptions with per workload (VM) tiered pricing



#### Cyber range as a service



- Quickly and easily build an exact copy of any IT infrastructure
- · Ability to re-use, share, and scale
- Ability to bridge physical and virtual environments
- INCS-CoE Capture the Flag Competition (11/1/2018)
- Members Keio University, MIT, Harvard, Northeastern, Oxford University, Stanford, etc.
- https://ctf2018.hyperqube.io





#### **Zadara – One Product, One Solution**

- ✓ Elastic, scalable arrays in the <u>public cloud and on-premises</u>
- ✓ Provision as much and as many as you need, only pay for what you use
- ✓ All protocols and security included, AES 256 Encryption
- √ 100% Isolation between users and use cases
- ✓ Fully Managed with Backup, snapshots and DR built-in.
- ✓ SSD Performance, SATA pricing to align with use cases.
- ✓ HA with 99.999% Availability
- ✓ Hardware refreshes for OPaaS (Storage Immortality) with no downtime or added cost.
- ✓ Competitive Pricing





### **Universal Storage that Evolves with your Business**







### **Future**

 AppDyanmics - managing the performance and availability of applications across cloud computing environments



 Tetration - holistic workload protection for multi-cloud data centers by enabling a zero-trust model using segmentation.



 Kinetics IoT Platform - extract, normalize, and securely move data from those devices to distributed applications (i.e., Transportation, Cities, Retail, etc.)





# CISCO TOMORROW starts here.