

Cisco ACI

Software-Defined Networking für Ihr Datacenter

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Was ist bedeutet Software Defined Networking?

1990s

```

hq>enable
hq# config terminal
hq(config)# interface fastethernet 1/1
hq(config-if)# ip address
    1.1.1.1 255.255.255.0
hq(config-if)# no shutdown
hq(config-if)# exit
hq(config)# router eigrp
hq(config-router)# network 1.1.1.0
hq(config-router)# exit
hq(config)# exit
hq# copy run start
        
```

Today

```

Catalyst>enable
Catalyst# config terminal
Catalyst(config)# interface
    Gigabitethernet 1/1/1
Catalyst(config-if)# no switchport
Catalyst(config-if)# ip address
    1.1.1.1 255.255.255.0
Catalyst(config-if)# no shutdown
Catalyst(config-if)# exit
        
```

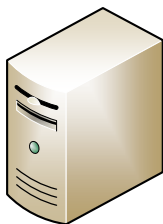
```

Catalyst(config)# router eigrp Test1
Catalyst(config)# interface
    Te 1/1
Catalyst(config-if)# ip router
    eigrp Test1
Catalyst(config-if)# no shutdown
Catalyst(config-if)# end
Catalyst# copy run start
        
```

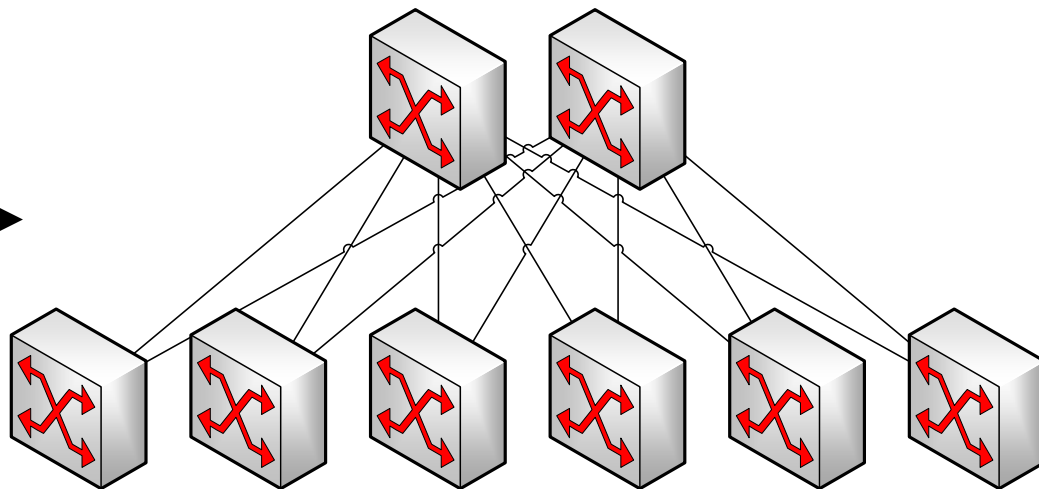
What? How?

28 Years!

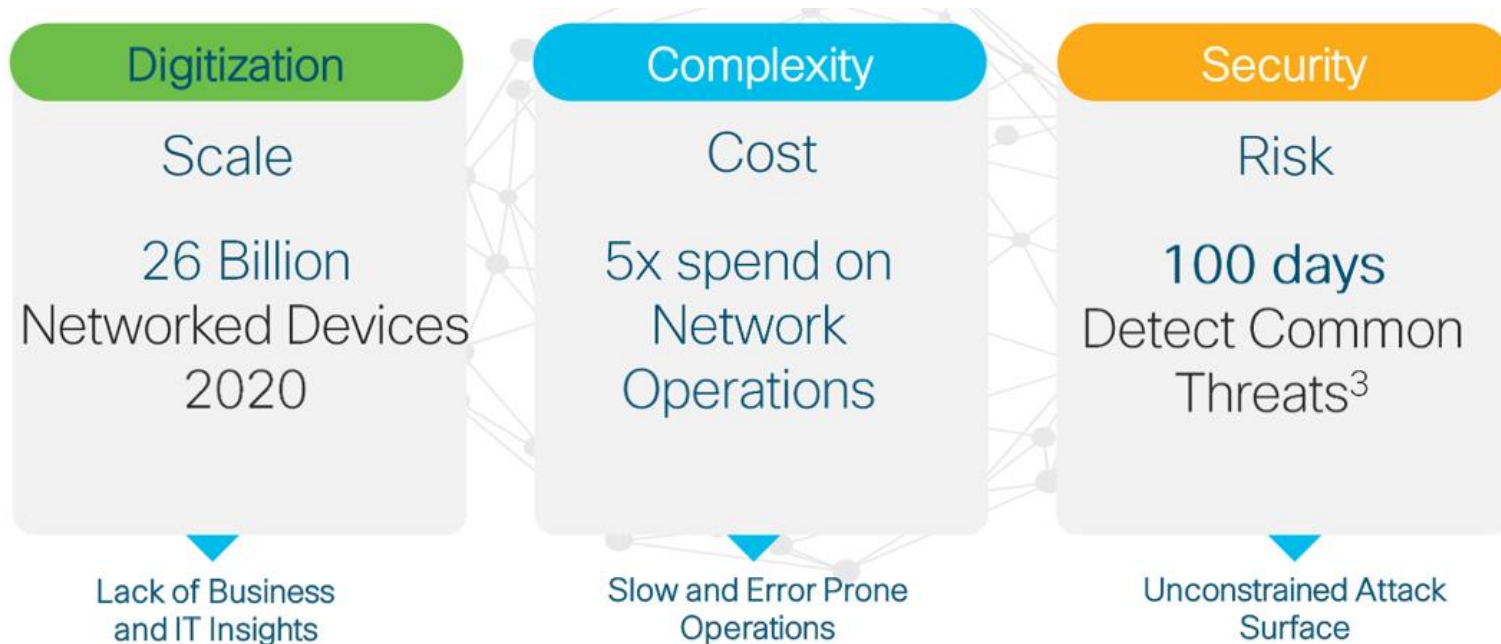
SDN Controller



Network Devices

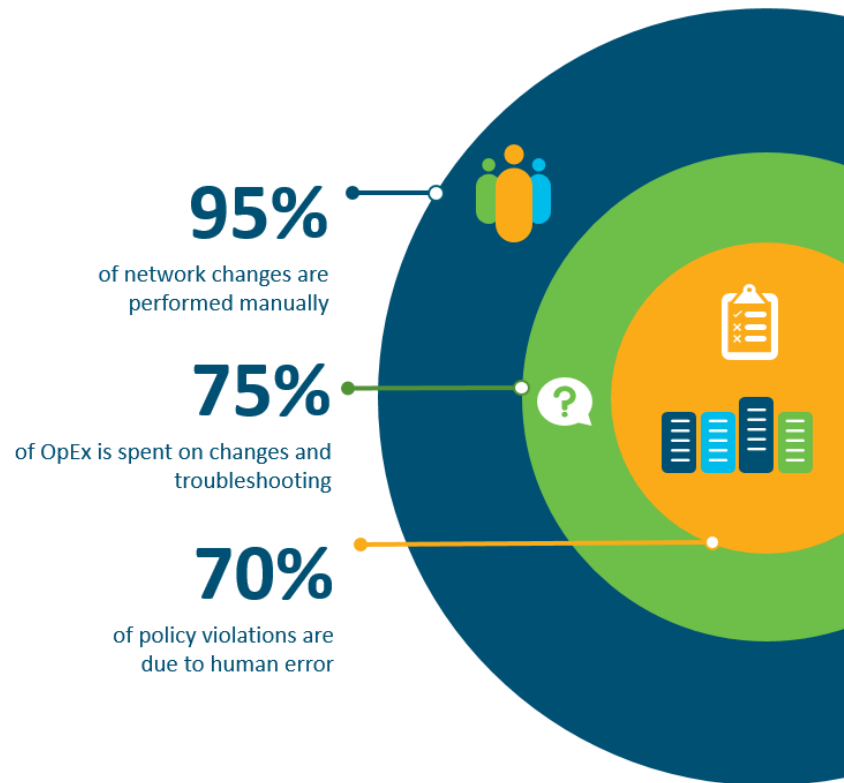


Warum Software Defined Networking?



jährlich 55 Mrd. Euro Netzwerk Betriebskosten

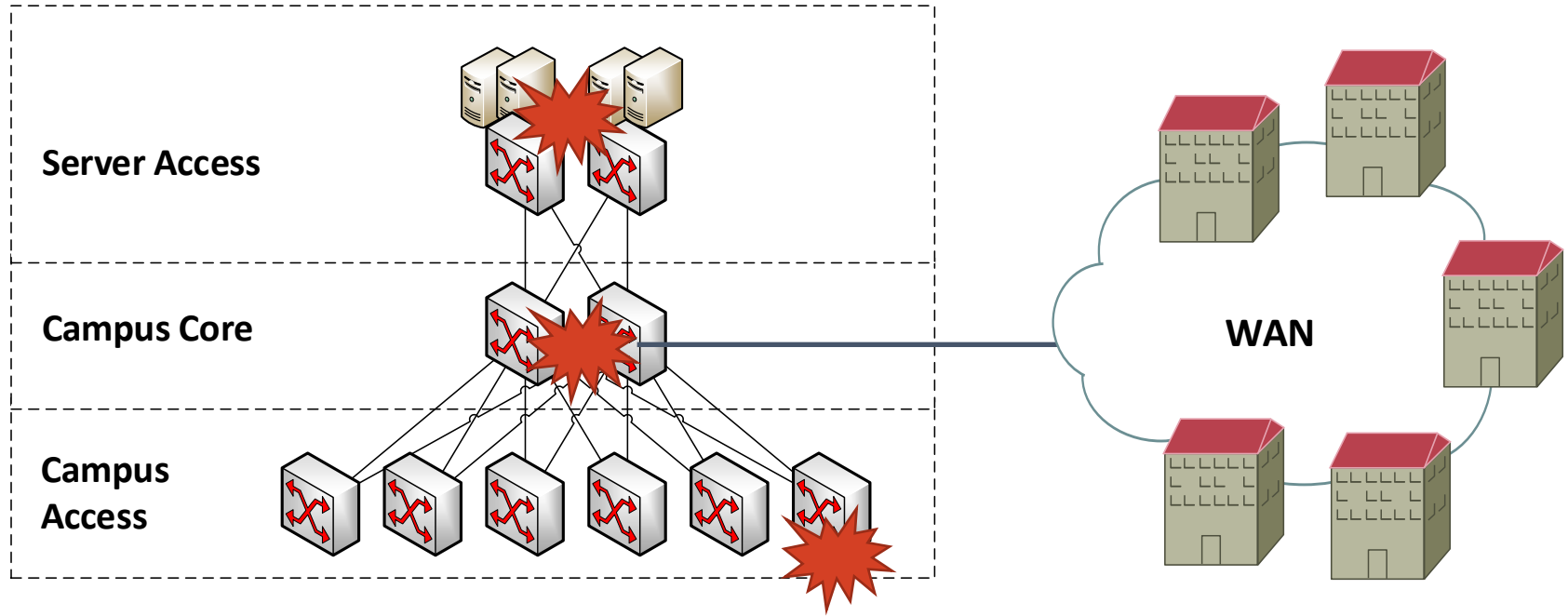
McKinsey Studie



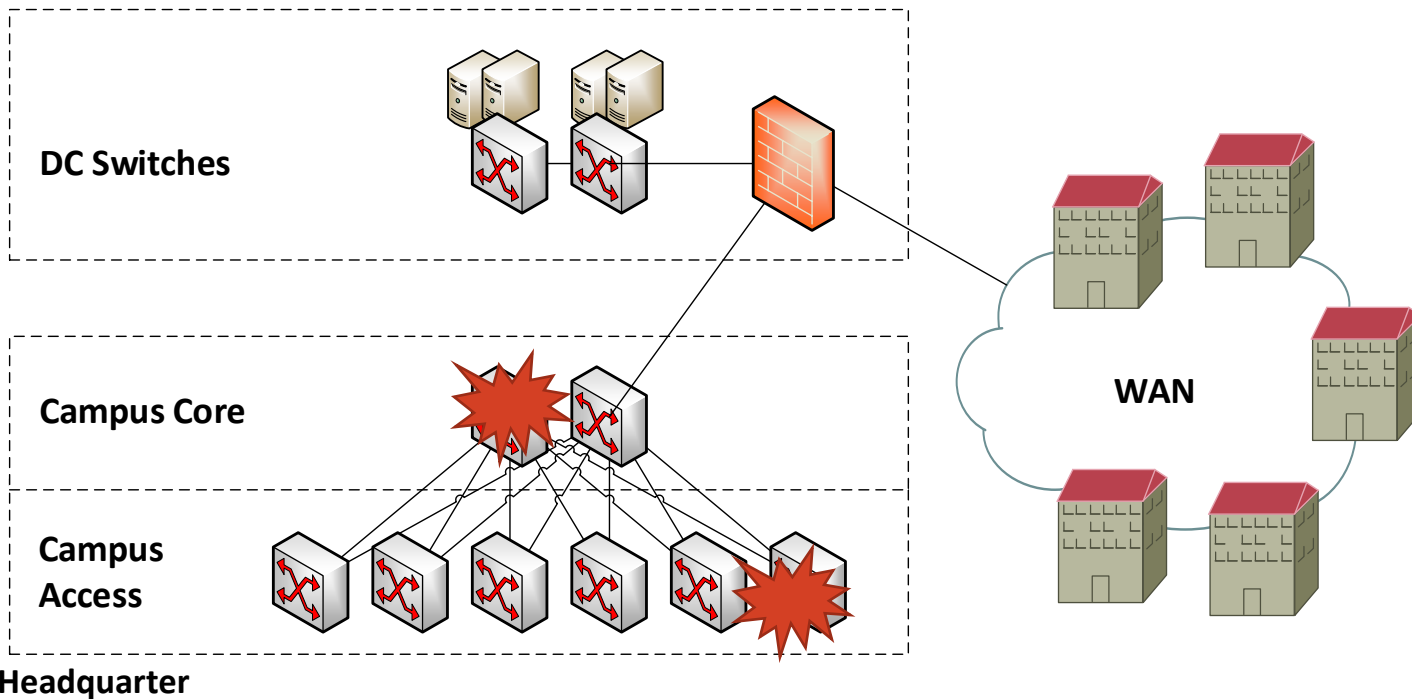
Was ist Cisco ACI?

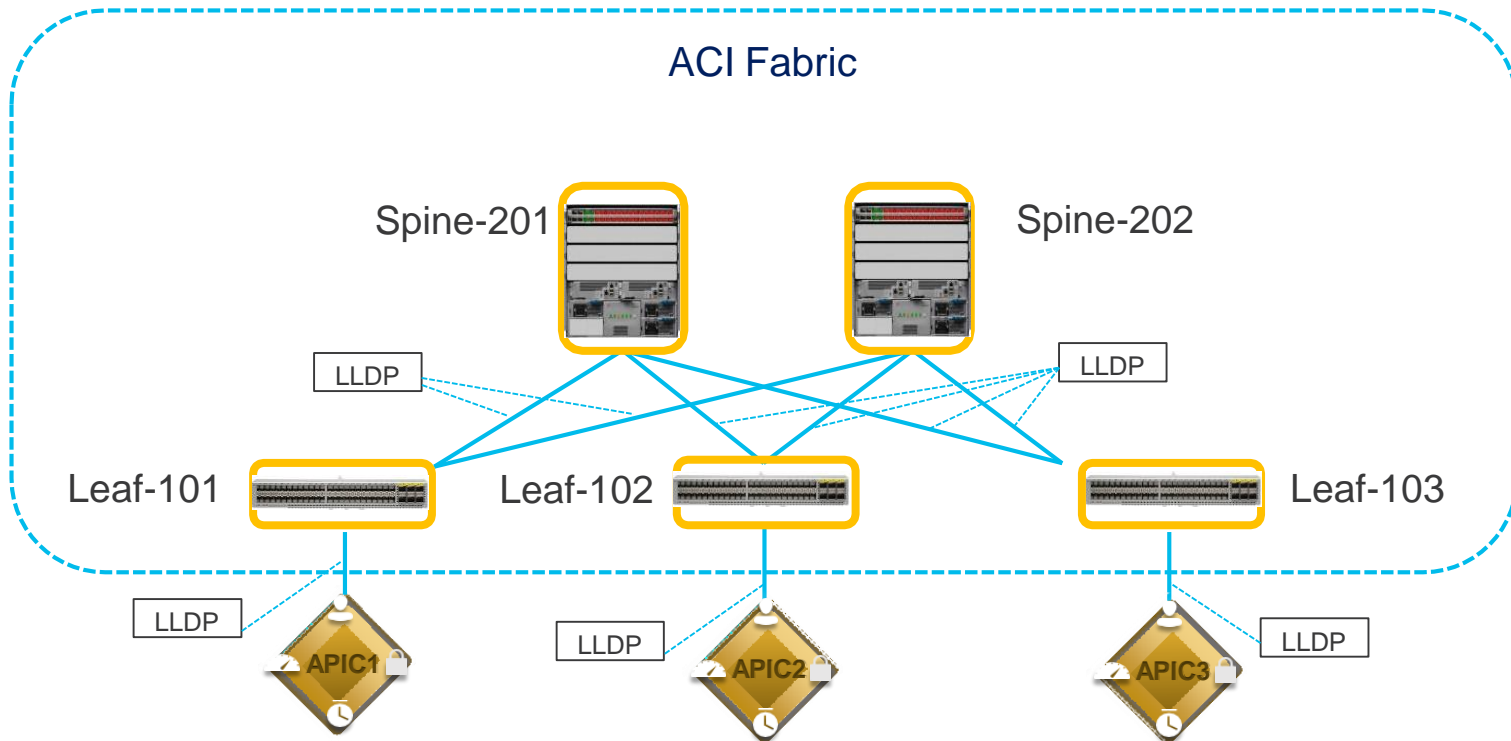
SDN Lösung => Datacenter Netzwerk

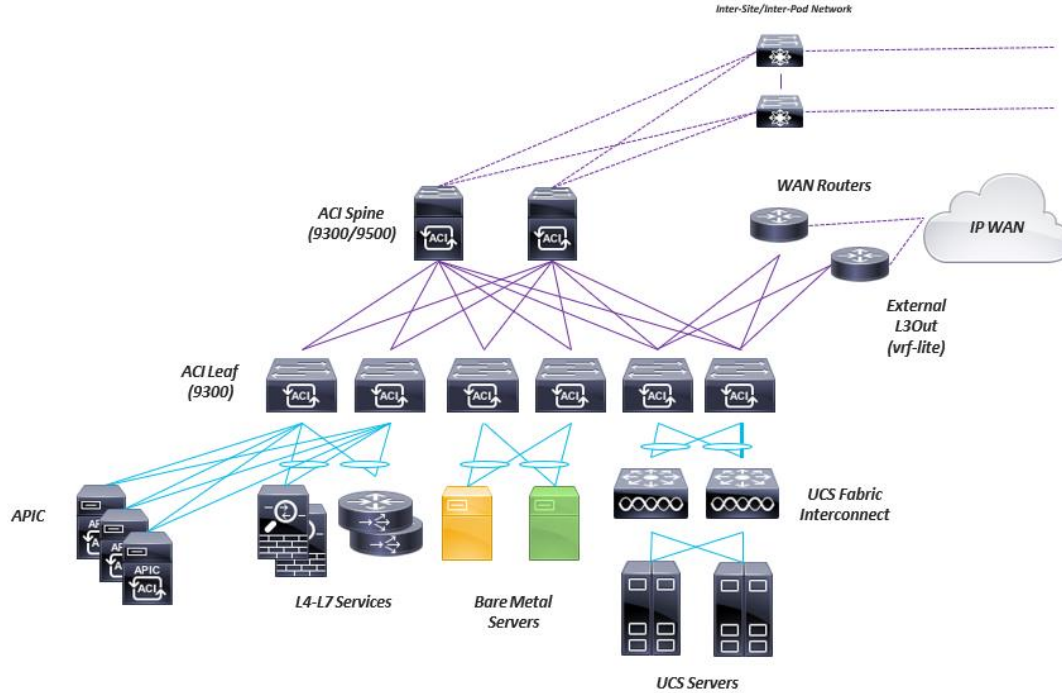
Headquarter



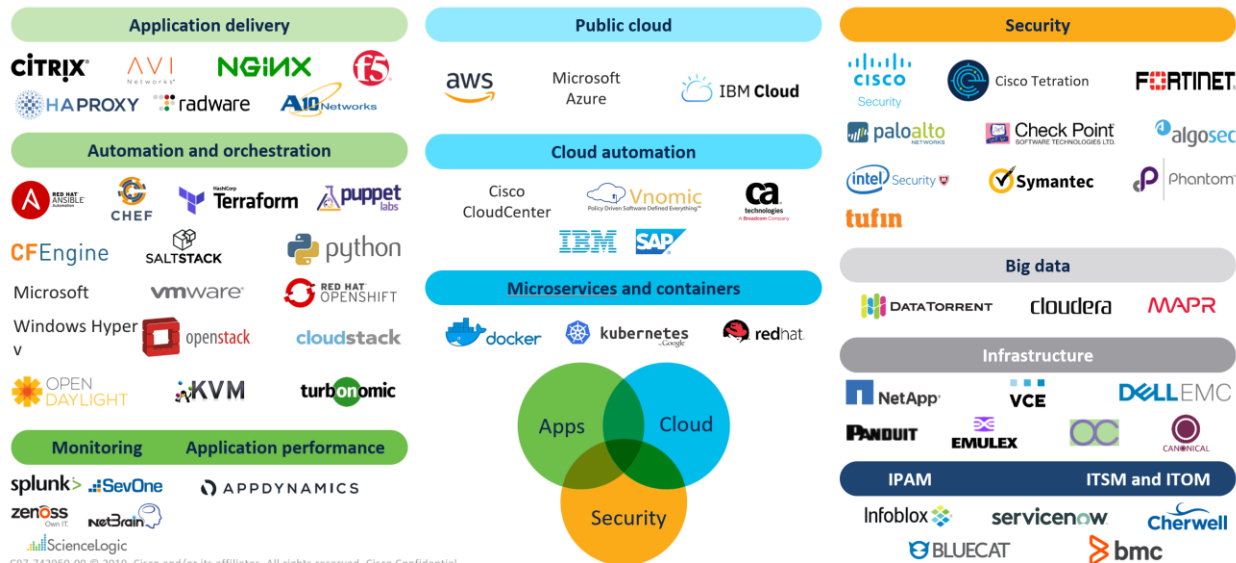
Datcenter



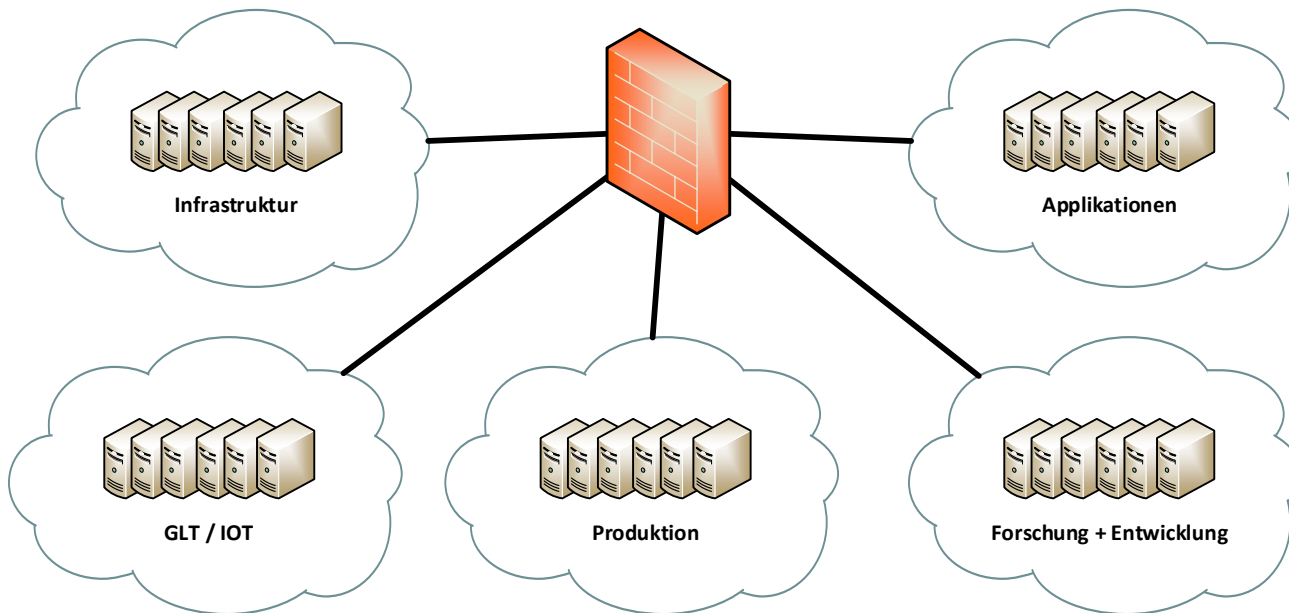


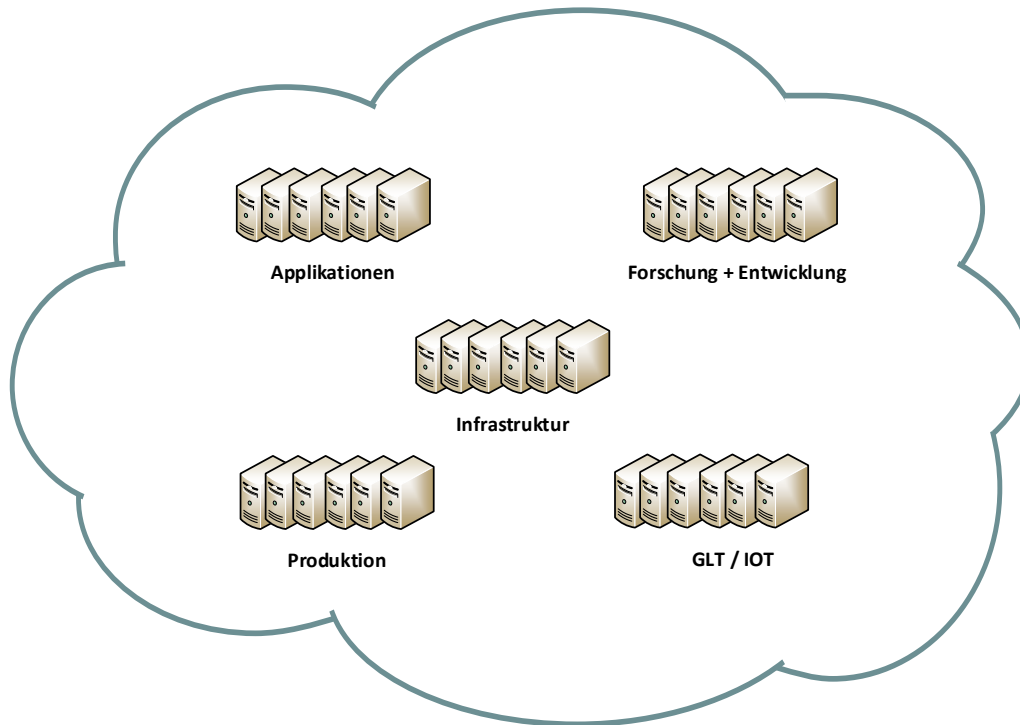


Breadth and depth of ecosystem integrations



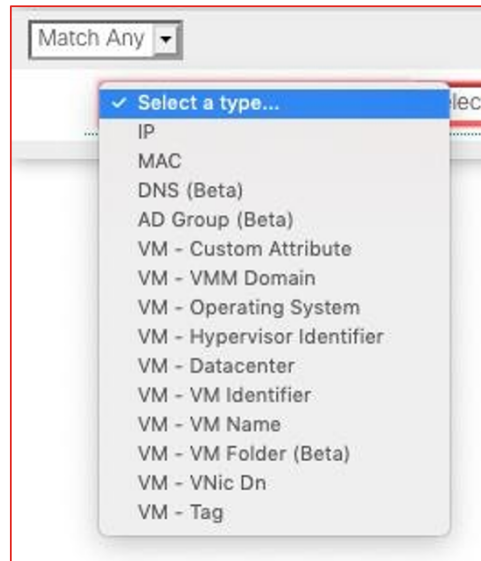
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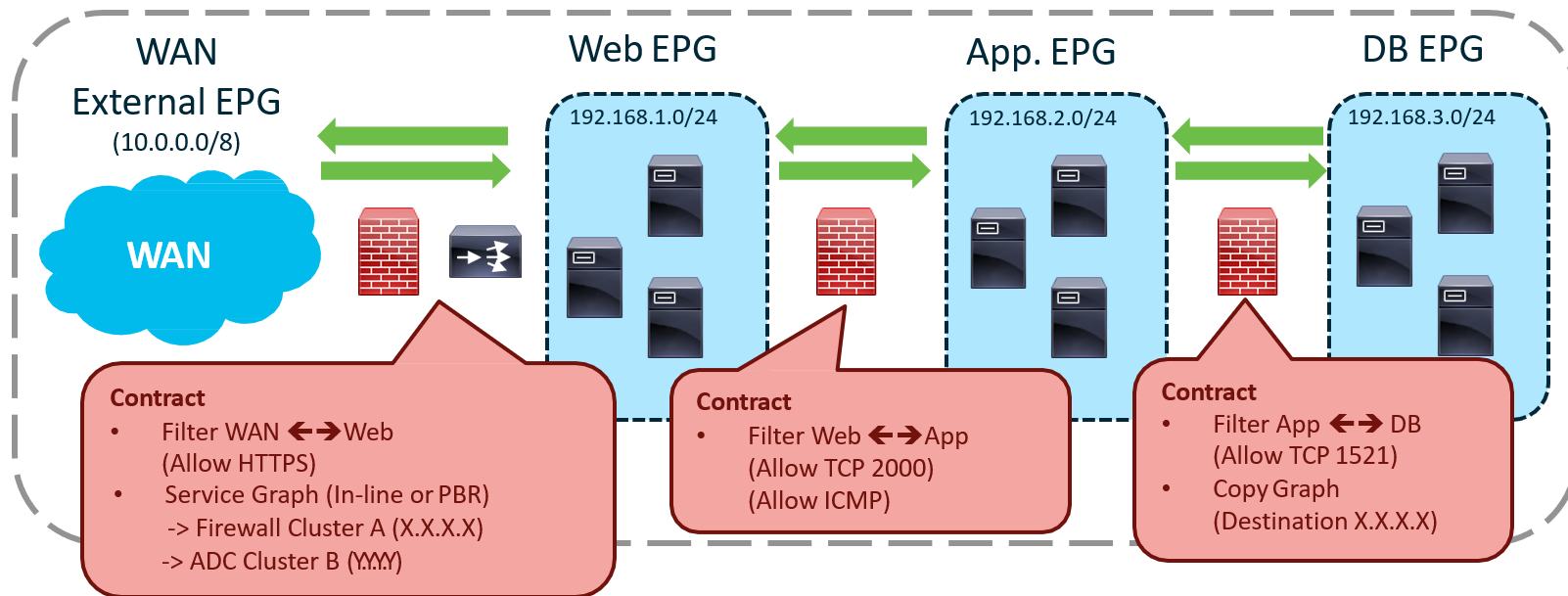


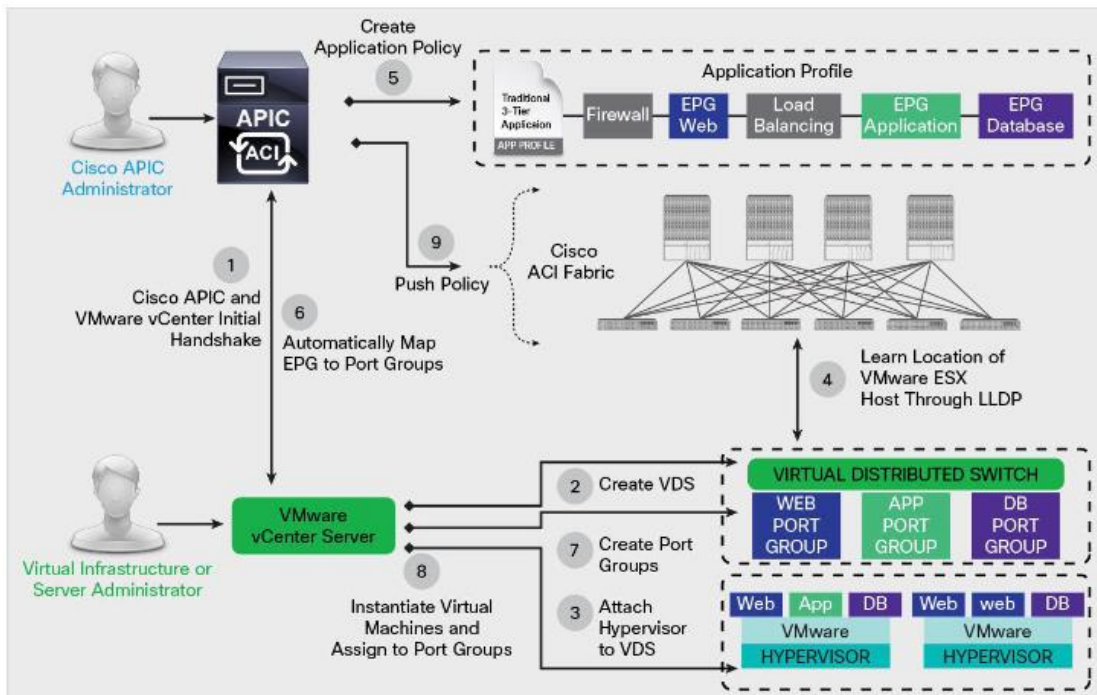


Micro-Segmentation EPGs

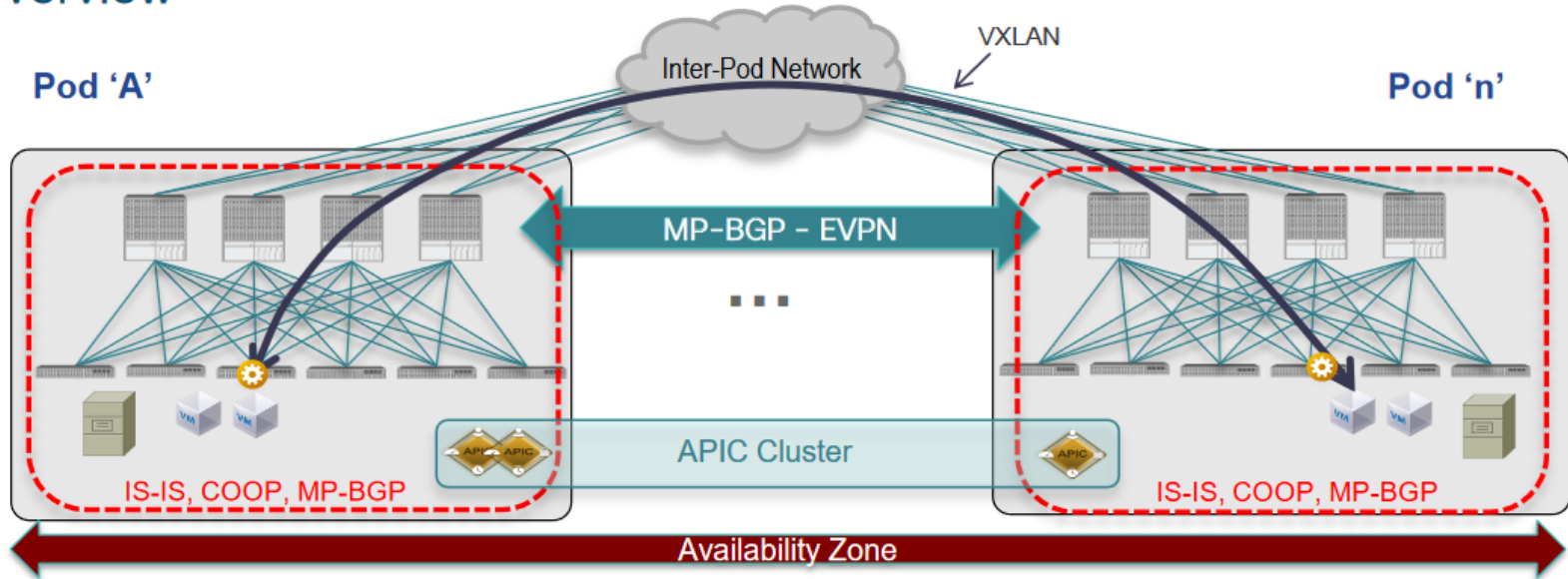
- Sub-IP Network or VLAN Segmentation
- Works across VM, Bare Metal, Containers, Cloud etc
- Use a combination of attributes to create micro-segmentation EPGs
 - IP/MAC
 - DNS
 - AD Group
 - VM Operating System
 - VM Custom Attributes
 - VM Tags



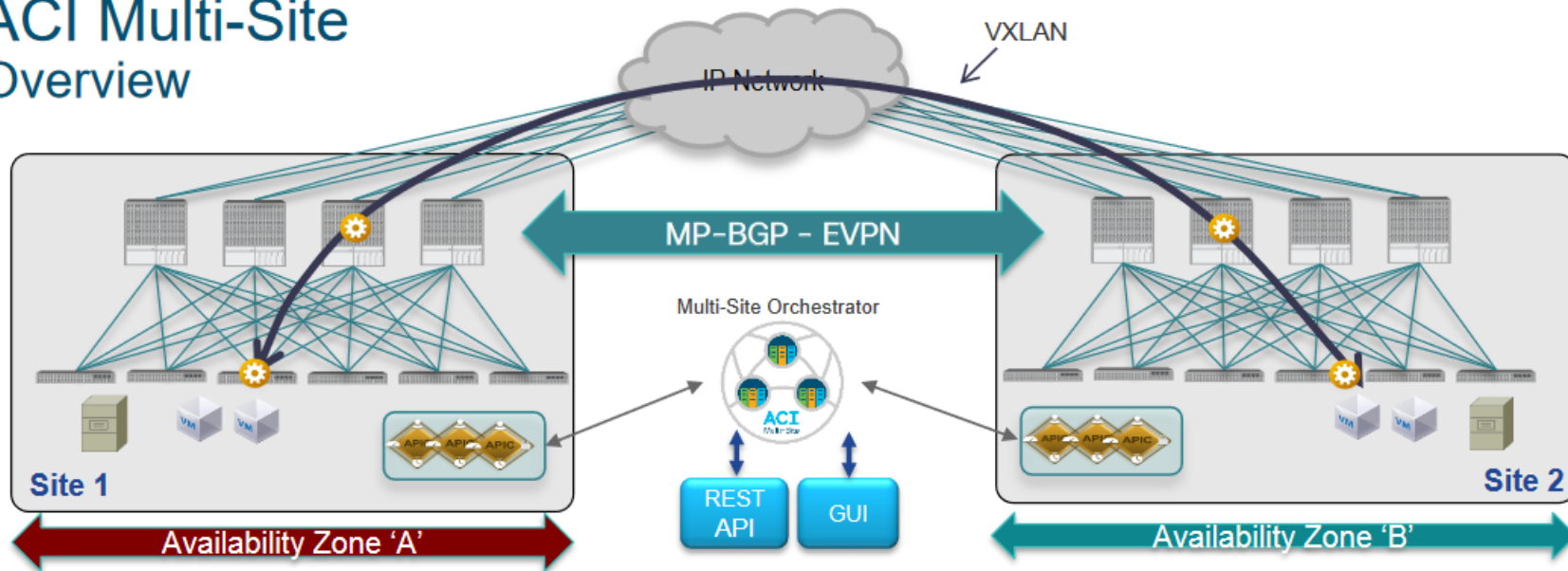


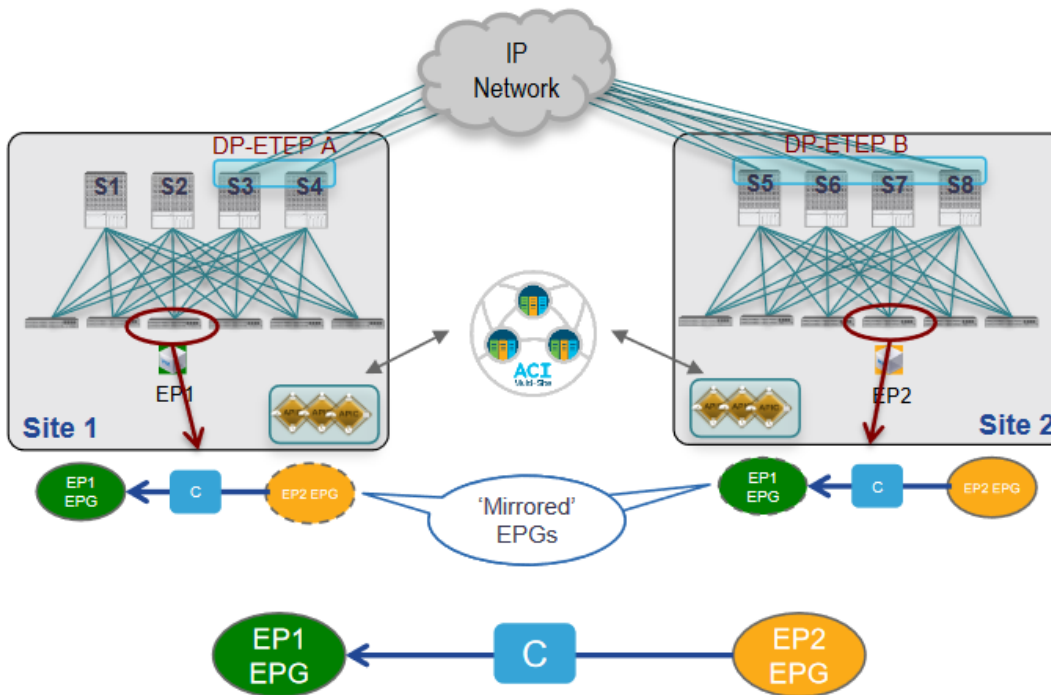


ACI Multi-Pod Overview



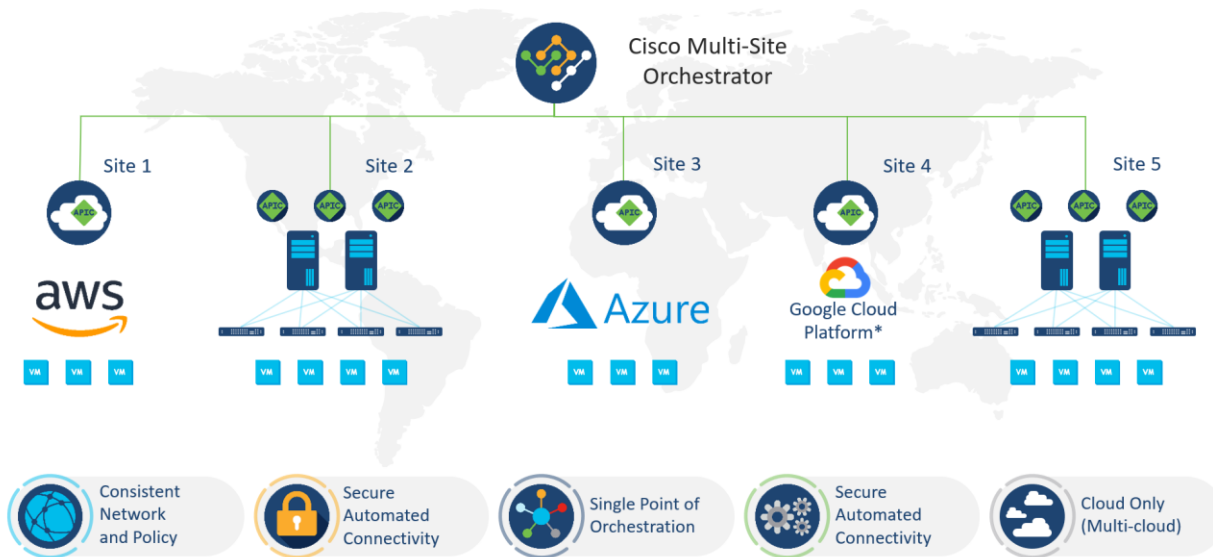
ACI Multi-Site Overview





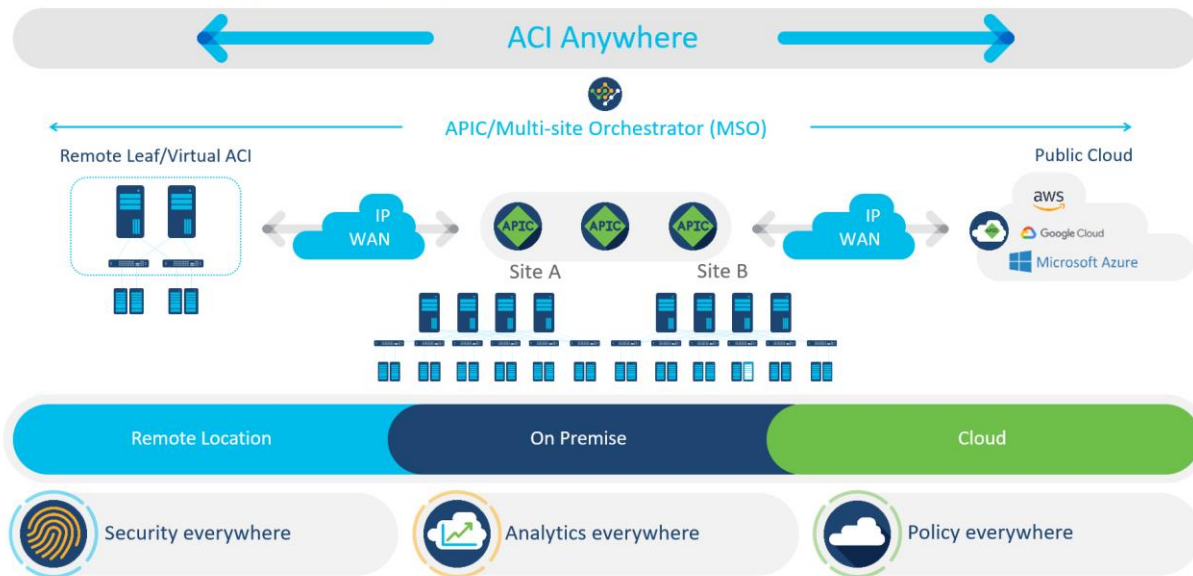
ACI Extensions to Multi-cloud

*Future



Cisco ACI Anywhere

Any Workload, Any Location, Any Cloud



Optimize Your Network



Cisco Application-centric Infrastructure



Optimizes Your Network

Single point for configuration and troubleshooting

Full network and security automation

Scale within and across data centers and geographies

Seamless integration of underlay and overlay networks optimizes management overhead

Open APIs enable an integrated ecosystem to protect your investment