Network Challenges on Mullti-Cloud And EIE Update

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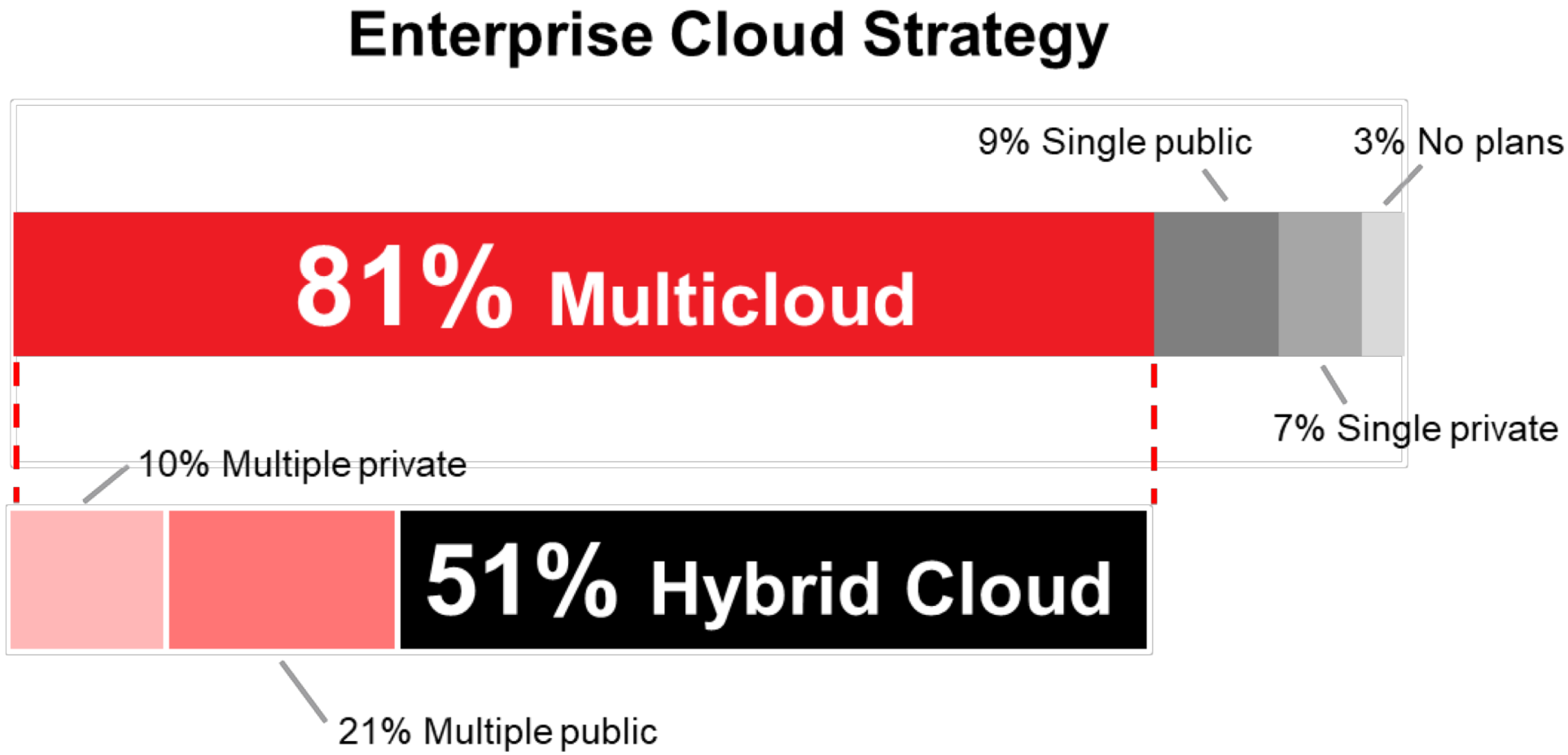
EQUINIX

Enterprise hybrid and multicloud adoption

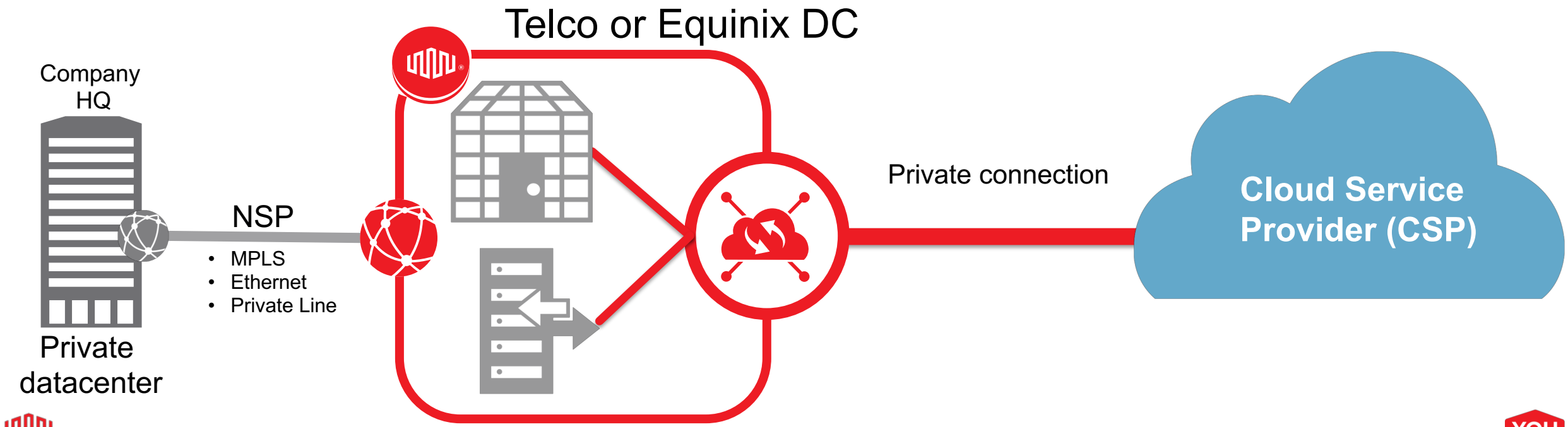
A majority of enterprises have hybrid and multicloud strategies already in place



Source: RightScale 2018 State of the Cloud Report

Single Hybrid Cloud:

1. Network Service Provider can offer CPE router for private connection such as AWS DX or Azure ExpressRoute
2. Hybrid cloud can also mean the ability to connect collocation, managed and/or dedicated services with cloud resources

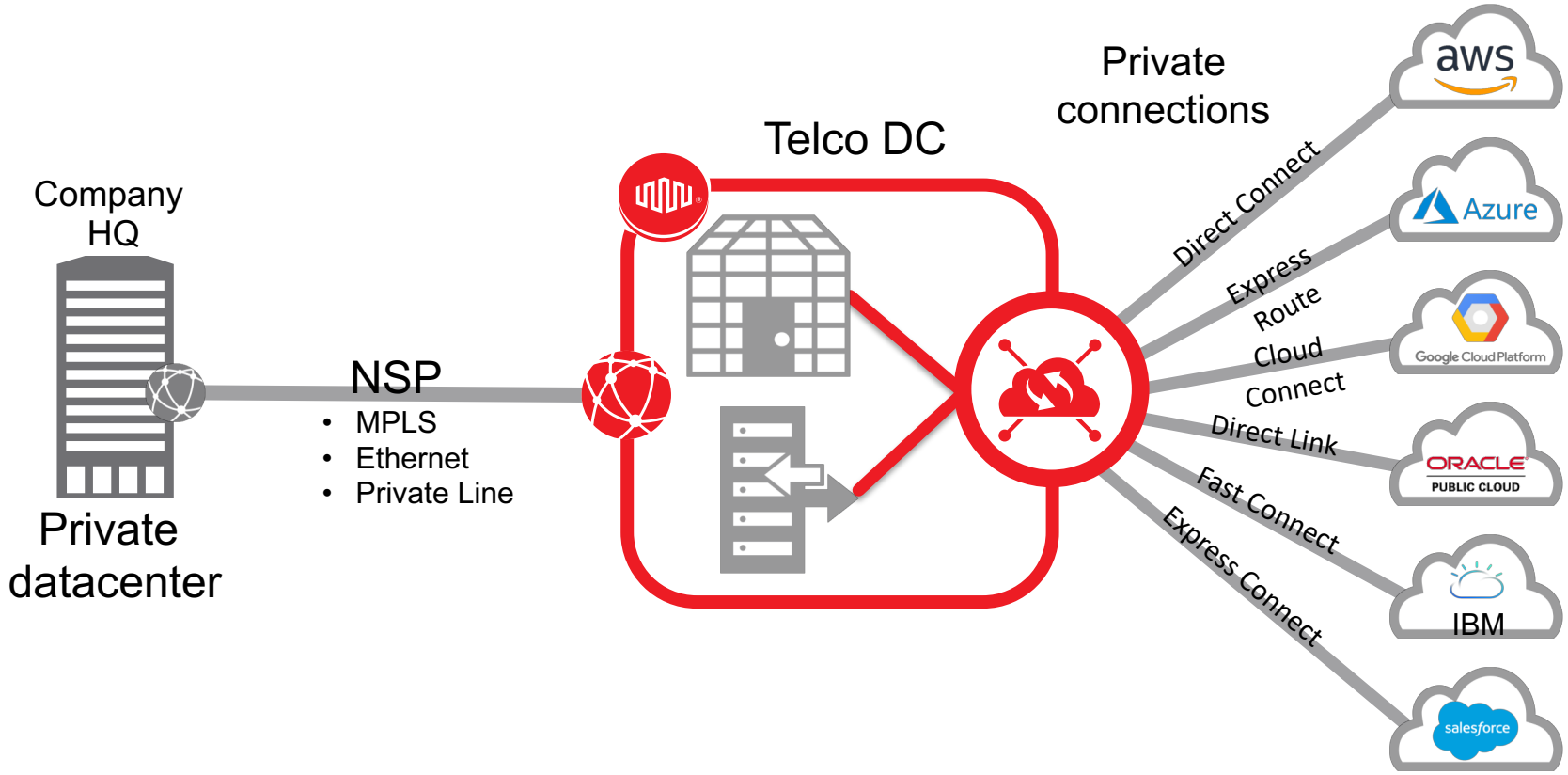


Multicloud Complexity:

The use of **two or more cloud computing** services at the same time, in order to **diversify and provide efficiency** in a company's IT environment

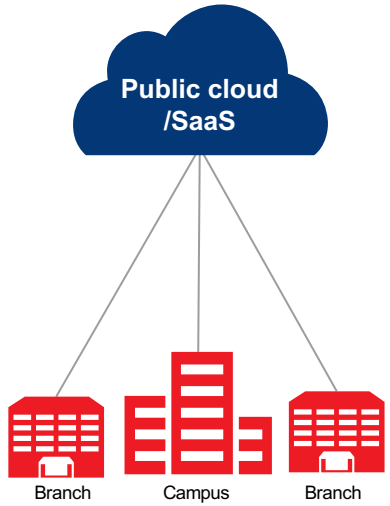
Decisions

- Where is Routing Domain – CPE?
- How to handle SaaS Providers (Internet Only?)
- How about NAT?



Multiple approaches to Cloud Edge are emerging

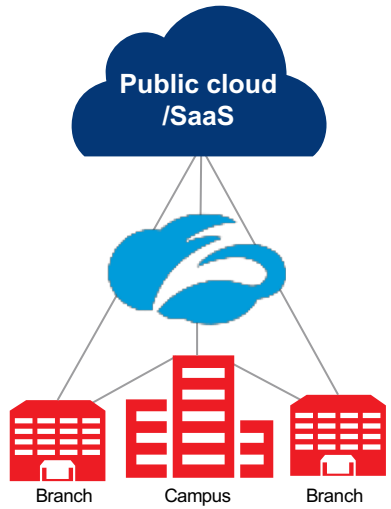
Edge in Public Cloud



Azure aws CISCO

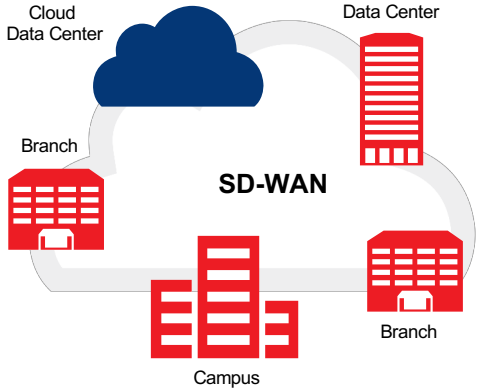
36% ➡ 27%

Cloud-Based Security



zscaler

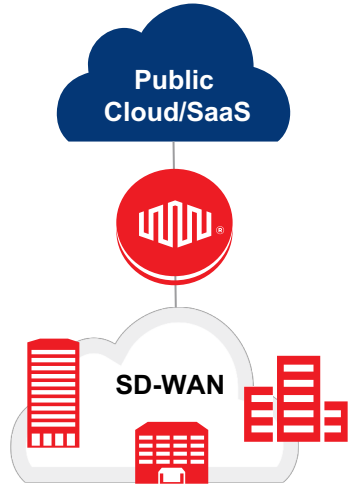
Distributed Cloud Edge (with SD-WAN)



viptela
VERSA NETWORKS
velocloud™

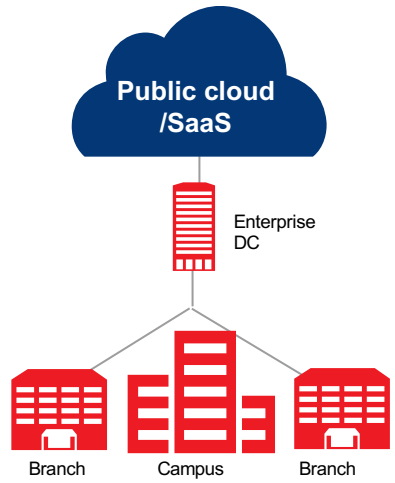
Opportunity for Partners

Centralized Cloud Edge (e.g. Equinix)



CISCO EQUINIX verizon

Backhaul to Private DC



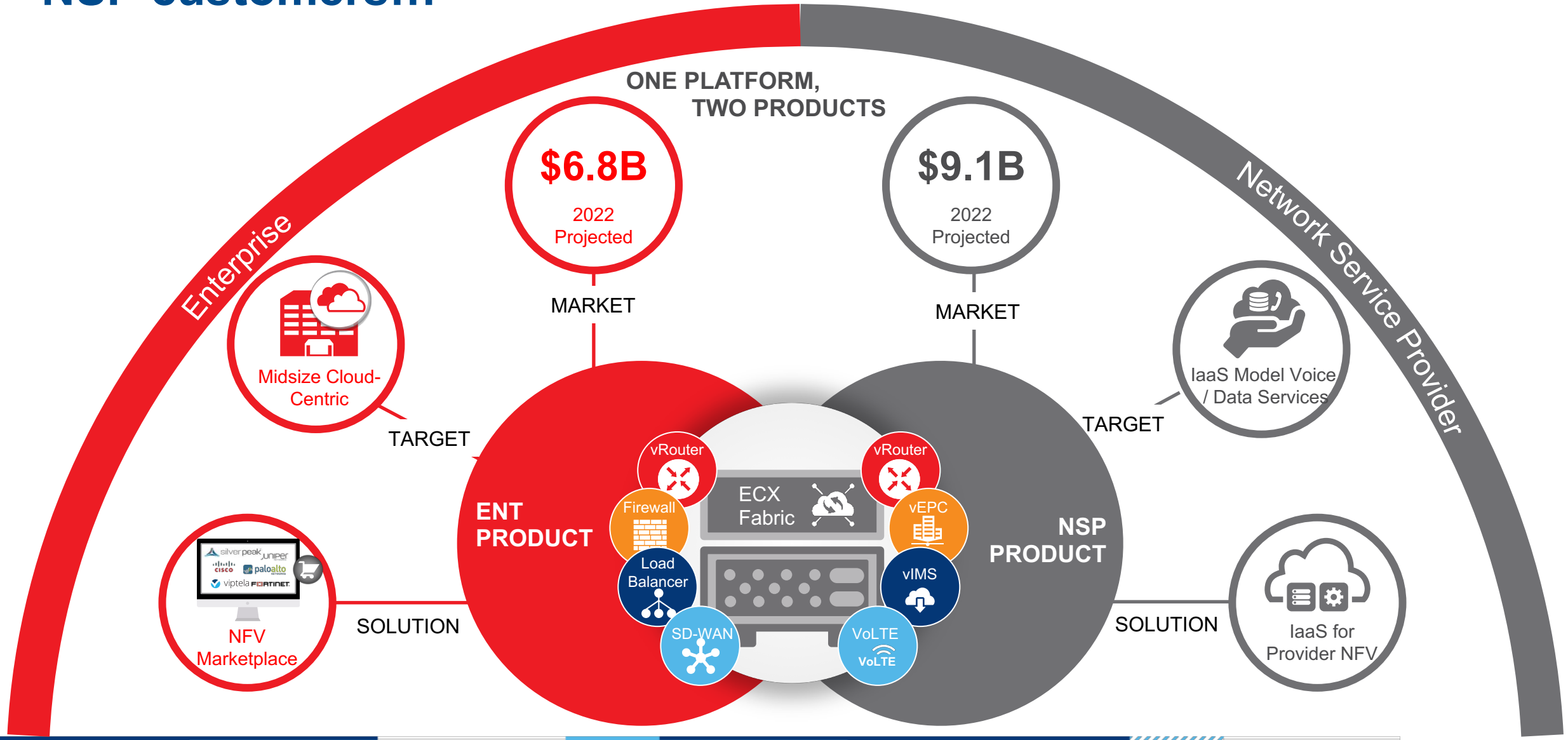
CISCO / networking vendors

17% ➡ 47%

47% ➡ 11%

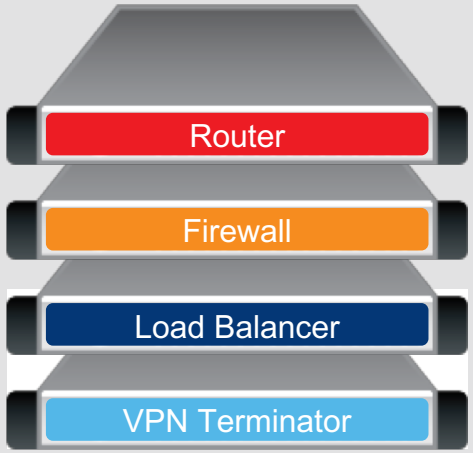
% of "cloud aspirants[1]" 2018-2021

A single NFV Marketplace platform can serve both Enterprise and NSP customers…



What are we building?

Performance Hub

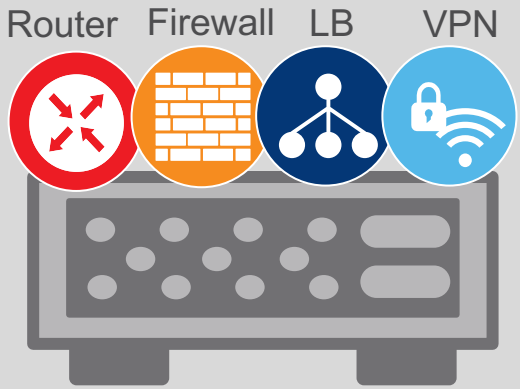


Dedicated, physical networking apps deployed on customer's infrastructure

ECX Fabric

NEW!

1. NFV- Infrastructure



Shared, virtual network apps deployed on Equinix hosted NFV-infrastructure

2. NFV Marketplace

A marketplace where customers select/procure network apps

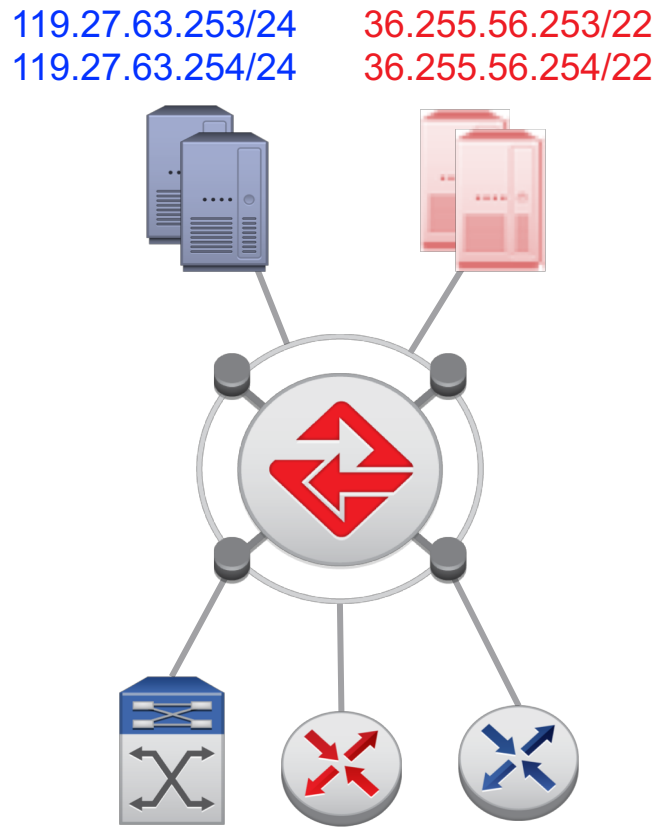
Virtual Network PoPs deployed at the edge, extending interconnection closer to end-users, for improved performance

Equinix Update:
IP Address Renumbering

IP address renumbering - SUMMARY

Equinix Hong Kong

- Parallel run period 1st - 31st March 2019
- Old IP subnet: 119.27.63.0/24
- New IP subnet: 36.255.56.0/22
- Expanding the subnet size to accommodate future growth
- All peering participants have to configure new IPv4 Address and setup peering sessions.
  - First three quadrant and subnet mask of the IP Address will be different. Last quadrant number will be same as old IP address.
- No change in IPv6 addresses
- 1st April 2019 Old Route Servers will be shutdown.



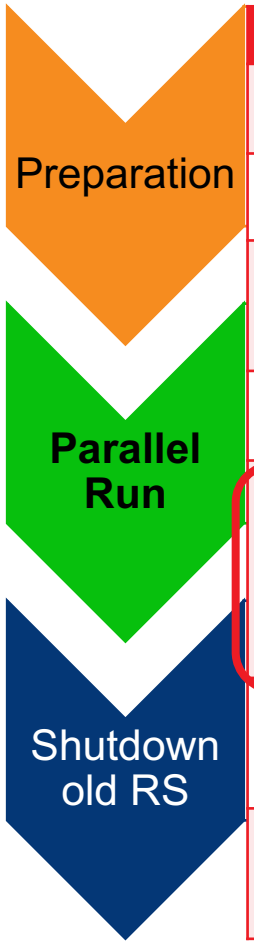
Peering Participants

Old: 119.27.63.1/24

New: 36.255.56.1/22

IP address renumbering - SCHEDULE

Equinix Hong Kong

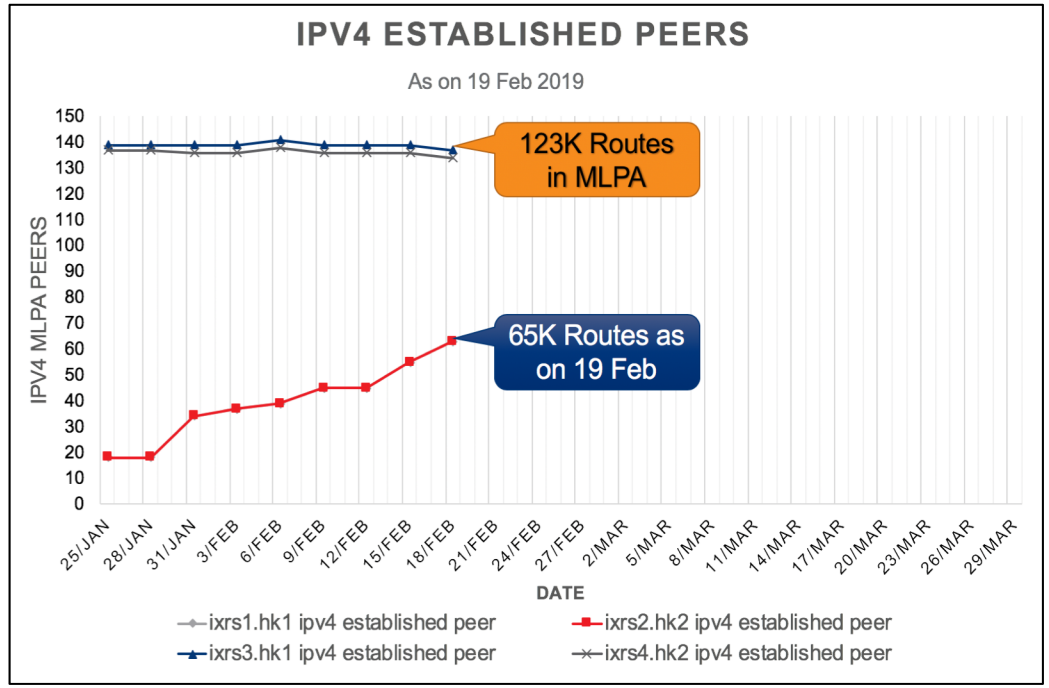


Steps	Tasks
9 weeks before parallel run	First Announcement to all peering participants
Reminders	At every 15-20days interval
Assign new IP	Notify acknowledged participants with new RS details and new IPv4 assignment (Only change first 3 octets. Same 4th octet)
1 week before parallel run	Final reminder email to all IX participants
Parallel Run 1 - 31 Mar 2019	Peering participants to configure new IP and setup MLPA peering with new route servers. Re-establish the BLPA peering (if any) with peering partners using new IP address. Remove old IP address from the equipment configuration.
End of Parallel run	Equinix will disable All peering toward old IP Address
01 Apr 2019	Migrate IPv6 from old server to New Server and shutdown the old Route Servers

IP address renumbering - CURRENT STATUS

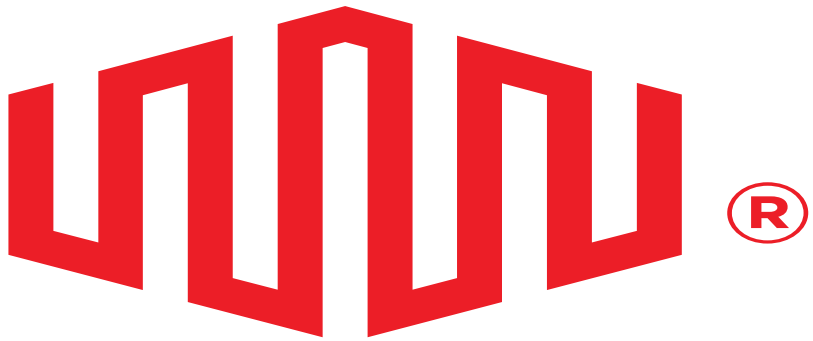
Equinix Hong Kong

- 45% of the peering participants have already configured new IP Address and have setup Multilateral peering before parallel run period.
- 53% of routes are received in the new MLPA route servers



ATTENTION

- Please configure the new IP address and schedule time to bring up MLPA / BLPA peering.
- 1st April 2019 Old Route Servers will be shutdown.



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