# **NETWORKING**

Virtual Technical Meetings



# EUAG and Software Defined Networking Ahmed ElSawaf



# **Survey Demographics**

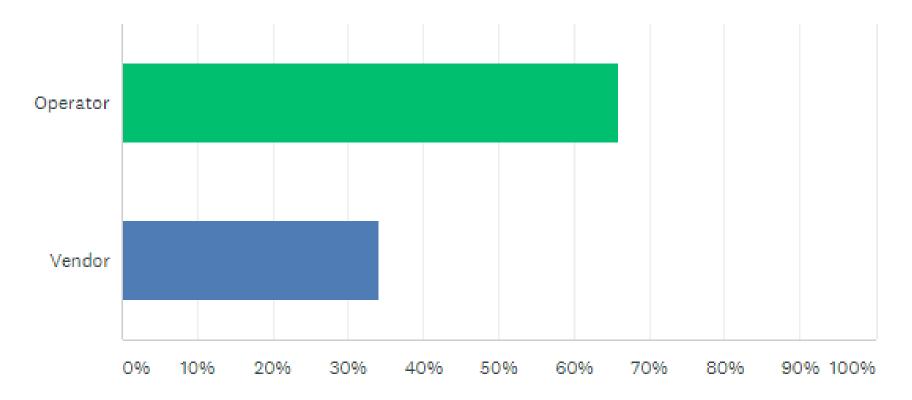
# **More Telco than Vendor**

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Q1

## What type of company do you work for?

Answered: 41 Skipped: 0

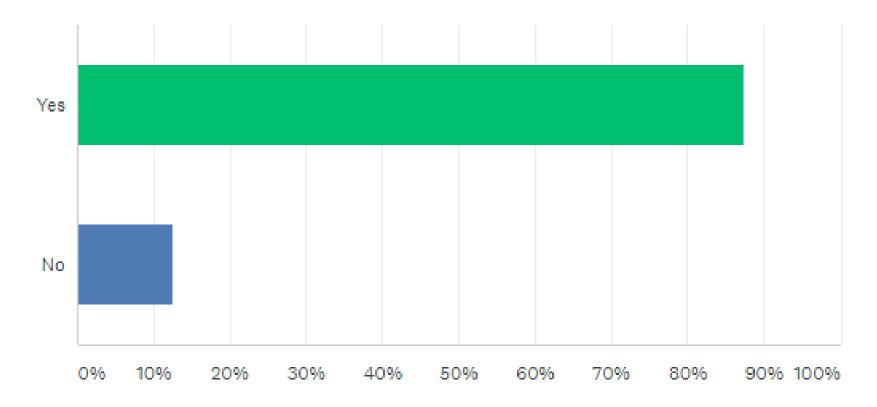


# in Production Today

Q2

## Do you presently (or in the past) use SDN Controllers?

Answered: 40 Skipped: 1



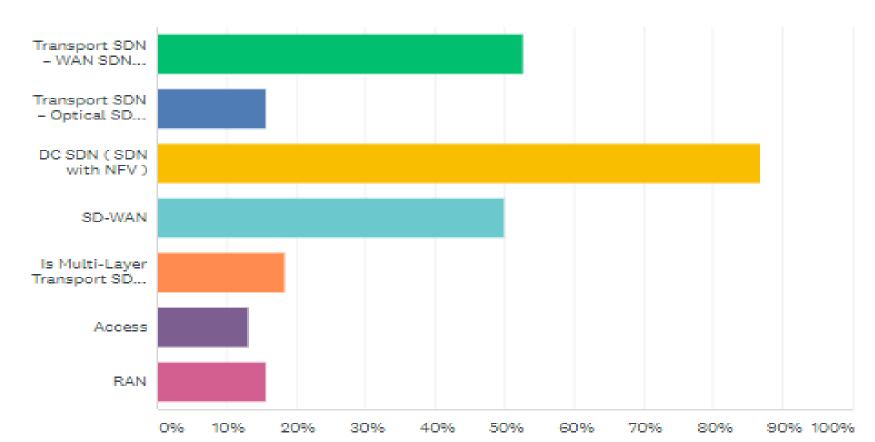
# **Use Cases**

#### Q3

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## If Yes, What type of SDN controller (Use Cases) are used? (Select one or more )

Answered: 38 Skipped: 3



# Why not ?

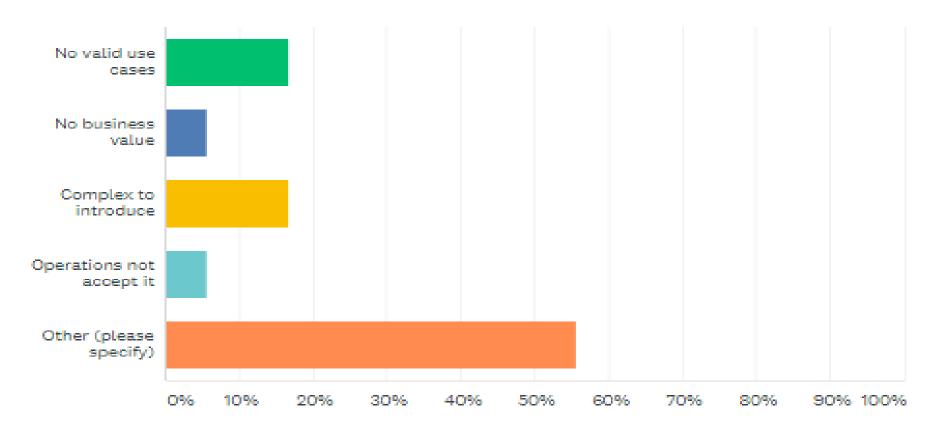
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### Q4



# If No, what is the reason for not adopting a SDN controller?



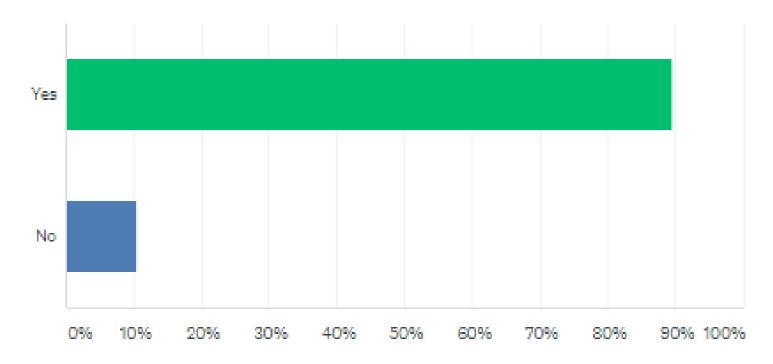


# **Future Plan**

Q5

## Are you planning to deploy SDN in the future?

Answered: 38 Skipped: 3

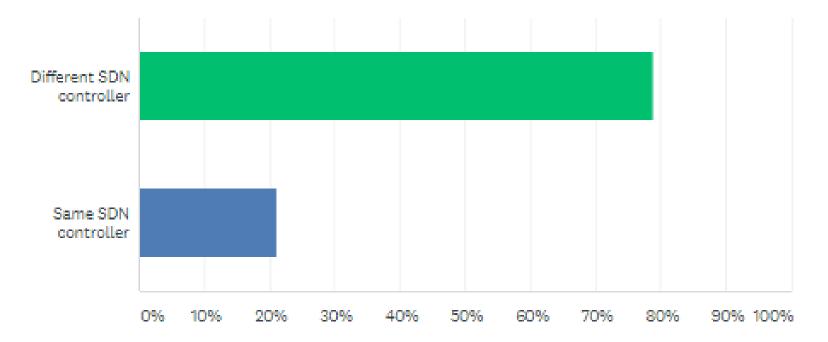


## **Q6**



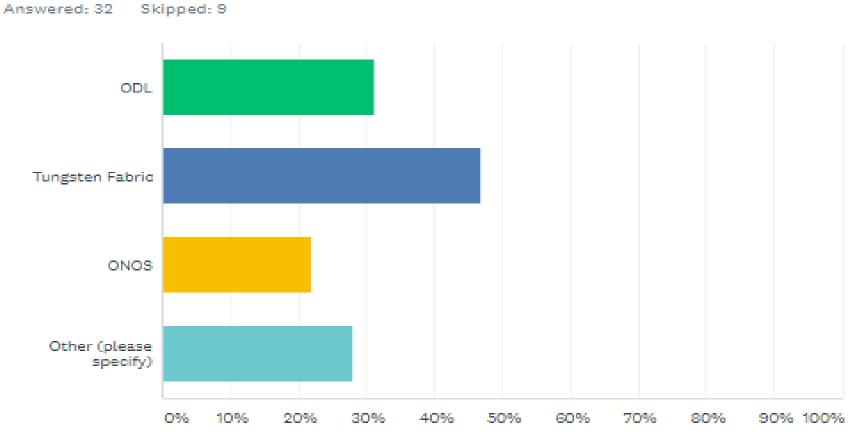
# If you deploy SDN , Do You have different SDN controllers for MPLS and DC ?

Answered: 38 Skipped: 3



Q7

# If you deploy an Open Source SDN, which SDN you deploy?



possibly ONF next Gen SDN (planning)

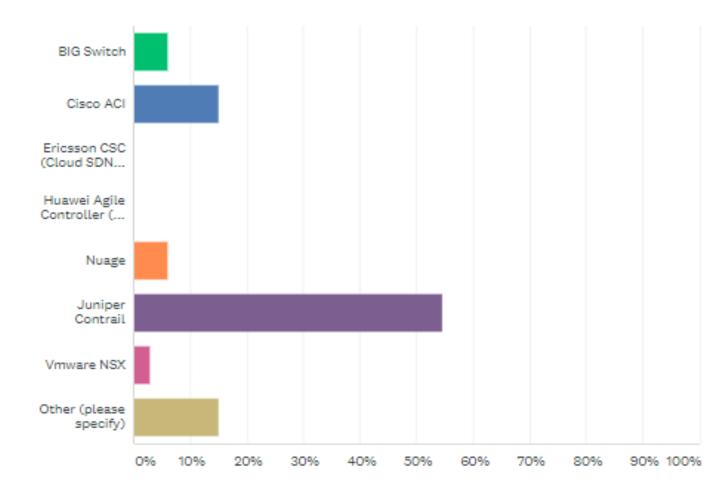
OVN

home grown

#### Q8

## If you deploy SDNs via a vendor, which SDN you deploy?

Answered: 33 Skipped: 8

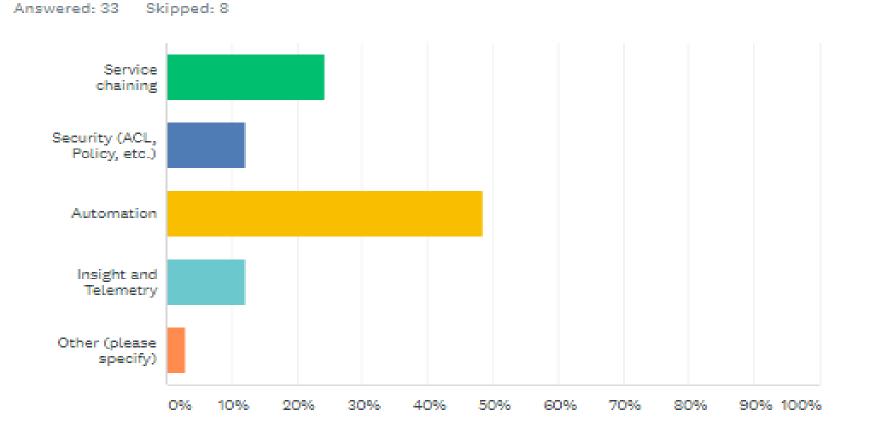


multiple for different use cases, ACI, NSX, Nuage etc..

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#### **Q9**

In case of DC SDN ( SDN with NFV ) , What is the most significant pain point that SDN helps to overcome?

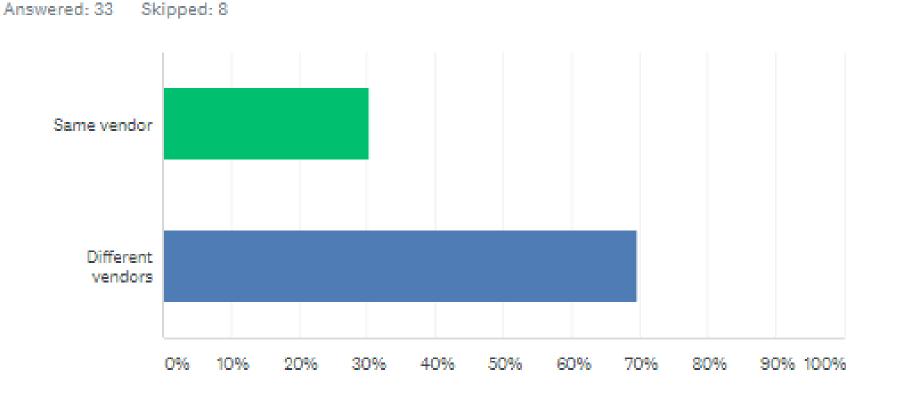


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## Q10

## Q

If you deploy SDN controller , Are the SDN and VIM from same or different vendors ( in case of single SDN & VIM ) ?

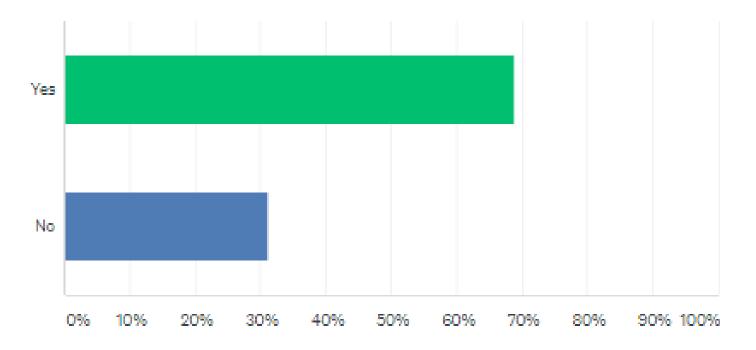


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## Q11

# In case DC SDN , Do you have integration between NFVO and the SDN controller ?

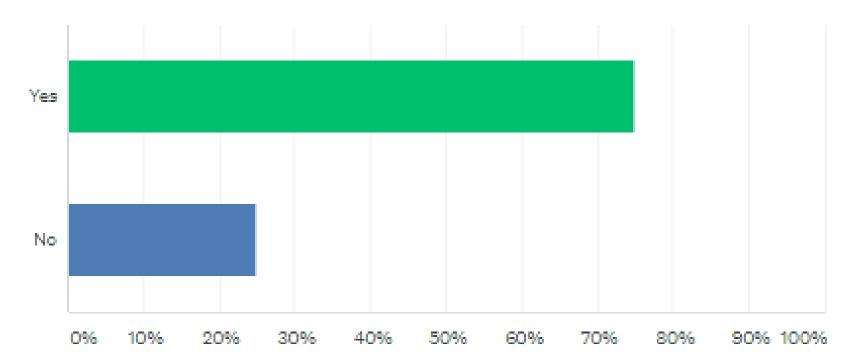
Answered: 32 Skipped: 9



## Q12

# In case DC SDN , do you deploy one SDN controller for both underlay and overlay ?

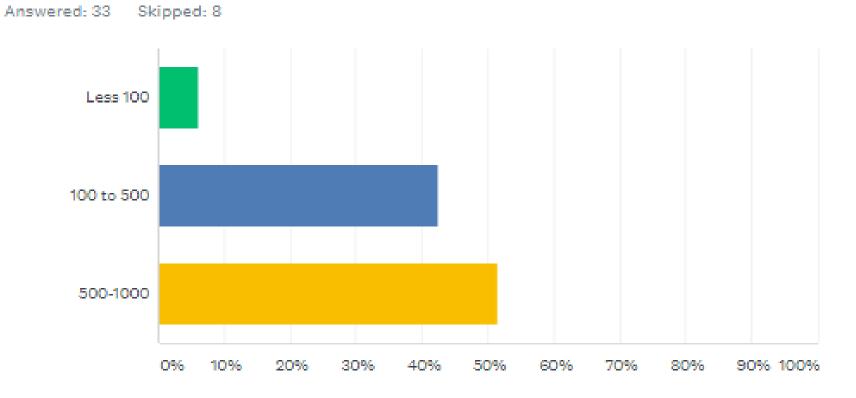
Answered: 32 Skipped: 9



### Q13



What is the size of the environment that the SDN controllers is deployed within the Data Center (number of compute nodes)?



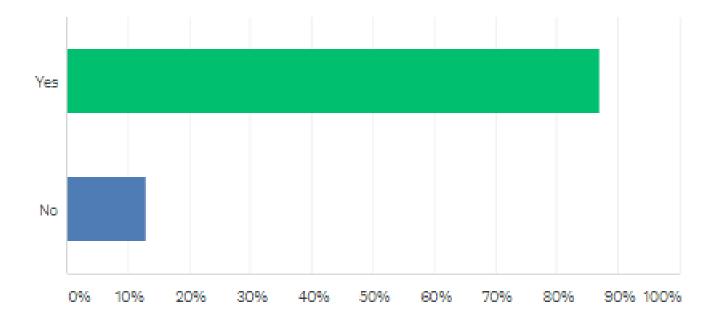
#### Q14

What are the most important missing features that you looking to be part of your current SDN deployment?

- 1. ECMP load balancing among VNFs and CNFs
- 2. better integration with cloud infrastructure, and orchestration
- 3. Managing the underlay and overlay networking using same SDN controller
- 4. Programmbalities
- 5. Security and visibility
- 6. streaming telemetry, data analytics, trafic engineering
- 7. multi site control plane fault isolation
- 8. SFC
- 9. Debug tools
- 10. Integration with NFVO
- 11. Security integration with firewalls to have standard for traffic forwarding not only based on policy but firewall rules as well
- 12. Managed both containers and CM
- 13. full control over underlay
- 14. less number of compute resources during assignment to OVS/VR with DPDK
- 15. SRIOV Managmeent, NBI, Scaling and Operational Perf

## Q15 Do you require SDNs to extend across DCs i.e. towards the Edge?

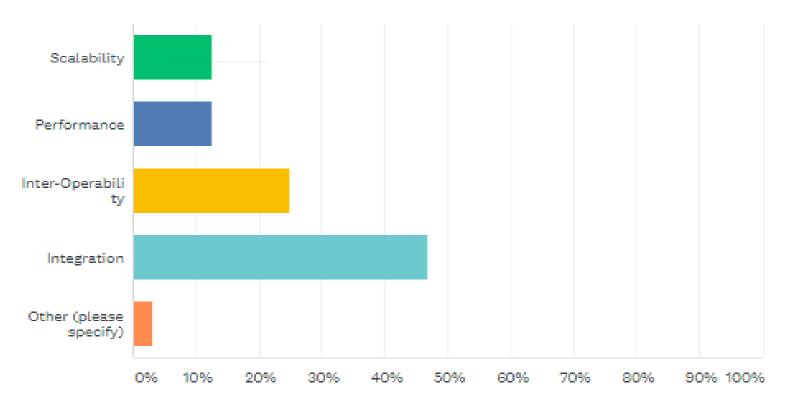
Answered: 31 Skipped: 10



#### Q16

# What is the MOST significant pain point during SDN deployment?





Deployment

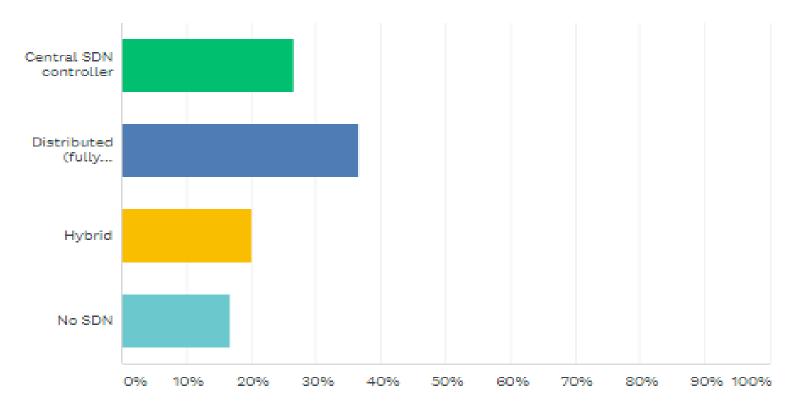
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#### Q17

# What type of networking solution do you use with Kubernetes (k8s) ?

Answered: 30 Skipped: 11

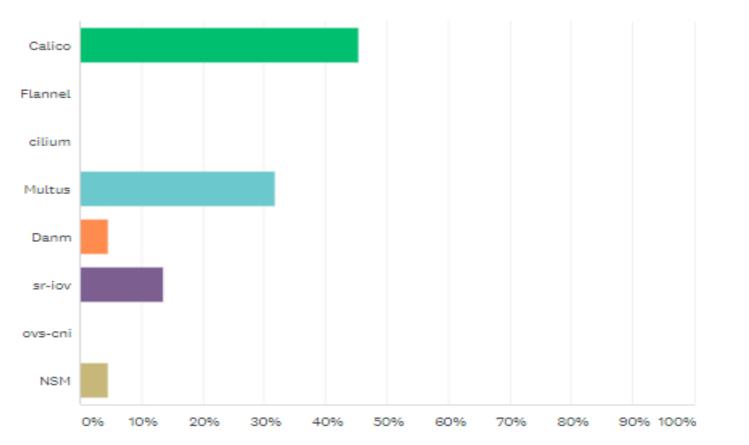


#### Q18

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if You used Distributed SDN controller for K8s, What is the SDN controller is used ?

Answered: 22 Skipped: 19



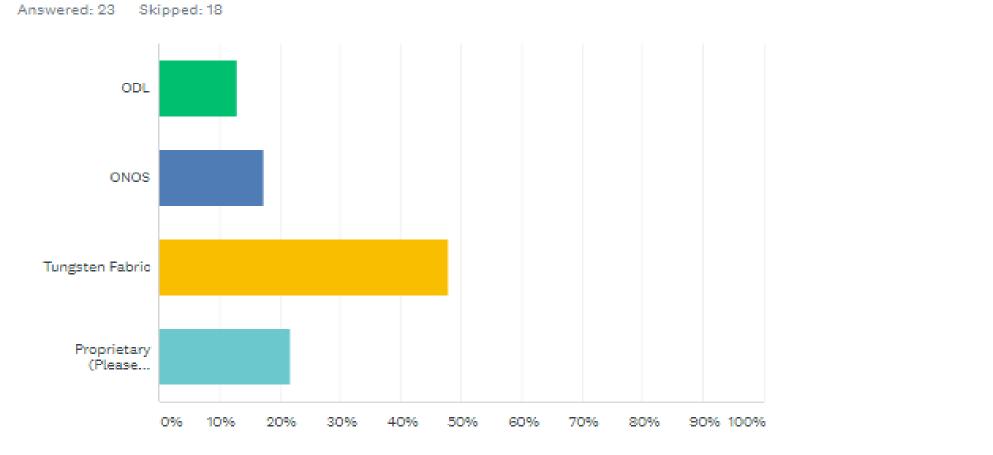
NSX-T

Cisco Aci

Contrail

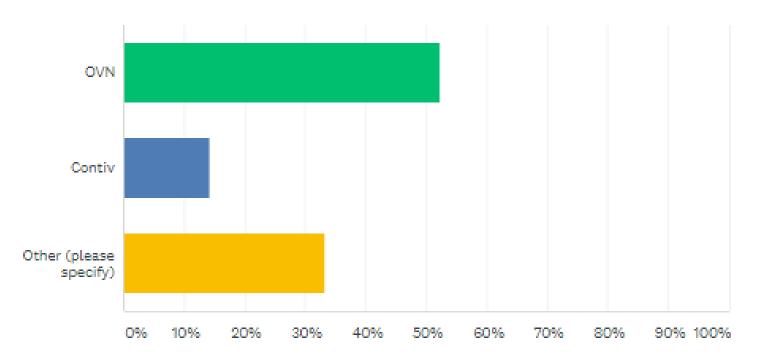
#### Q19

# If you used central SDN controller for K8s , what is the SDN controller used ?



## Q If you used hybrid SDN controller for K8S, what is the SDN controller used ?

Answered: 21 Skipped: 20



Juniper Contrail

NONE

Q20

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## Q21

## What is the most important features you are looking for K8s networking? 1. Multi Tenancy

- 2. security
- Network integration. 3.
- Network and security 4.
- Hybrid cloud with VM support 5.
- custome IP subnet selection based on workload type. microsegmentation 6.
- control- and user plane separation 7.
- 8. Ability to integrate with SDN controllers using standard based protocol
- 9. performance
- **10.** PodDisruptionBudget (PDB)
- 11. Security micro segmentation -
- 12. Plug and Play with CNI
- 13. Multi tenancy
- 14. CRD for NW , NSM , Stateful workloads
- 15. Simplicity, Performance, Interoperability
- **16.** service chaining
- 17. SOme of the questions need to be multi-choice. Q18 AT&T uses Calico and Multuus



# Thanks

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