



DiGiCOR

# JUNIPER EXPERIENCE-FIRST DATA CENTERS PRIVATE CLOUD NETWORKING AS EASY AS PUBLIC CLOUDS

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*October 2023*

JUNIPER  
NETWORKS

Driven by  
Experience™



# AGENDA

- JUNIPER VISION AND SOLUTIONS
- INTENT BASED NETWORKING (IBN) WITH JUNIPER APSTRA
- JUNIPER SCALABLE FABRIC
- ZERO-TRUST DATA CENTER
- QUICK APSTRA DEMO

# JUNIPER'S STRATEGY

Automaton and Integration



Experience-First Networking

Product Lines

WAN



WAN Solutions

Data Centre



Apstra Driven Data Center

Campus



AI-driven Enterprise



Connected Security

Go To Market



Cloud Provider

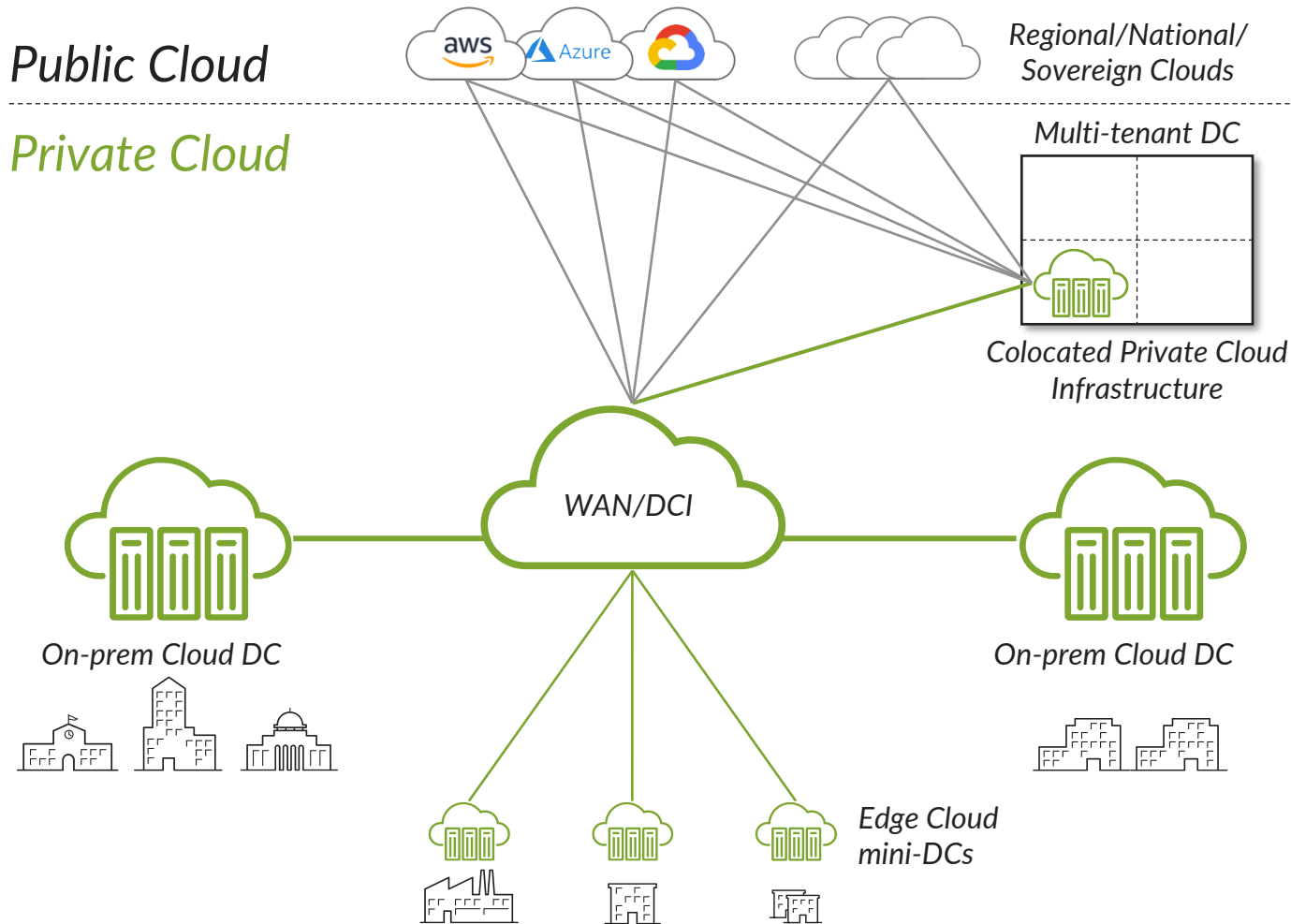


Service Provider



Enterprise (thru Channel)

# Hybrid cloud is the destination for most enterprises



**75%**  
of enterprises will keep most of their apps in private cloud

**88%**  
of enterprises will maintain or grow private cloud DC footprint

Source: Enterprise Strategy Group, 2023 Technology Spending Intentions Survey, November 2022



# Poll no. 1

**WHAT IS YOUR CURRENT PUBLIC  
VS PRIVATE CLOUD STRATEGY?**

# Private DC Cloud: Essential Eight

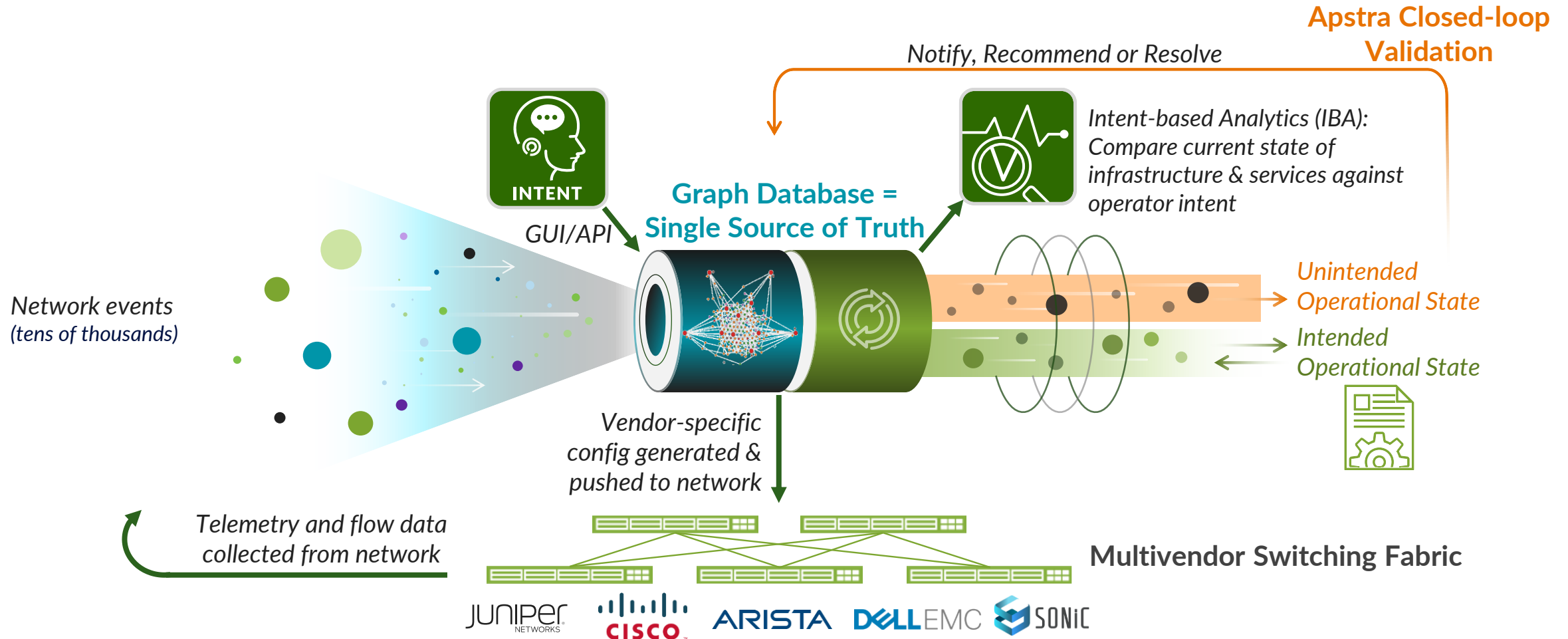




# Poll no. 2

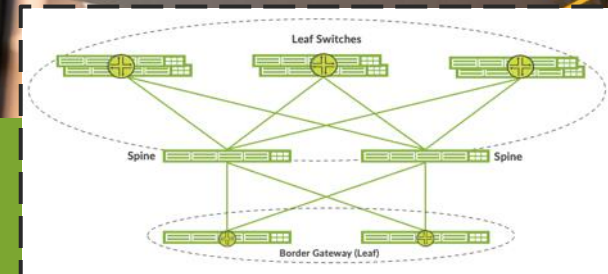
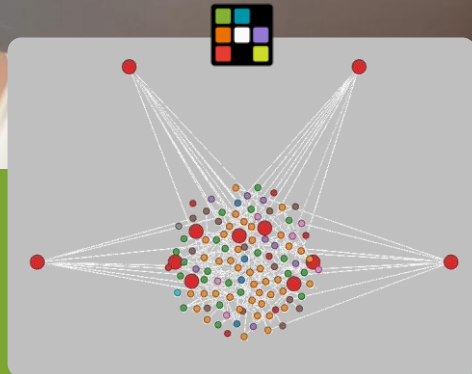
**OUT OF THE EIGHT, WHICH ONES  
ARE MOST IMPORTANT TO YOU?**

# Apstra Intent-Based Networking



Continuous validation of operator intent ensures reliable operations.

# Leveraging the power of a Digital Twin



# Juniper Validated Designs (JVDs)

Reliable, qualified deployments powered by Apstra

## Qualified Deployments

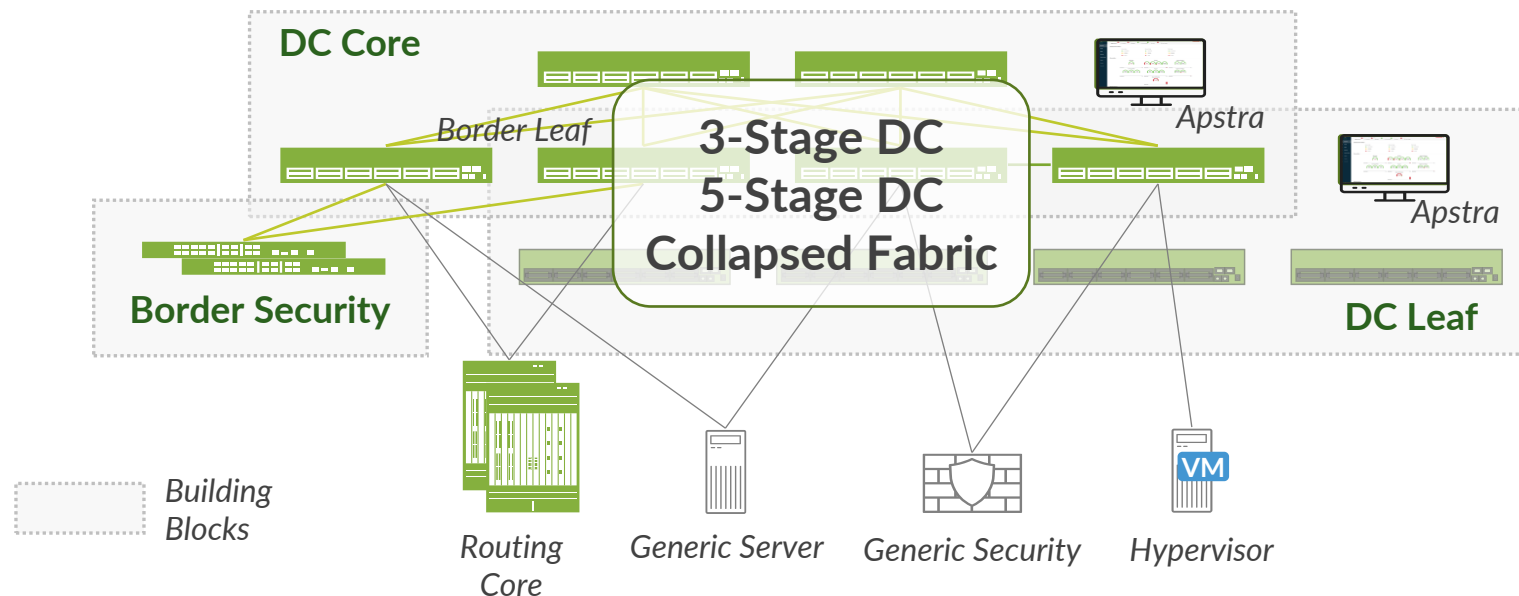
- Data center building blocks
- Prescriptive blueprints
- Reliable, simple, quick deployments

## Risk Mitigation

- Fully tested & validated
- Guides for products, features, tools to create repeatable DC fabric designs
- Best practices are incorporated

## Predictability

- Verified interoperability
- Validated capabilities
- Well-defined expectations



# Scale: IBN & IBA - From Very Small to Very Large



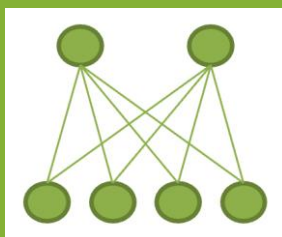
### Collapsed Fabric



(No Spines Required)

### Small

### 3 Stage Clos

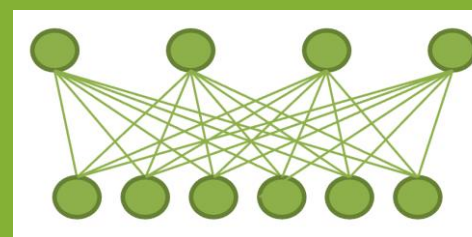


2 x Spine

4 x Leaf

### Medium

### 3 Stage Clos

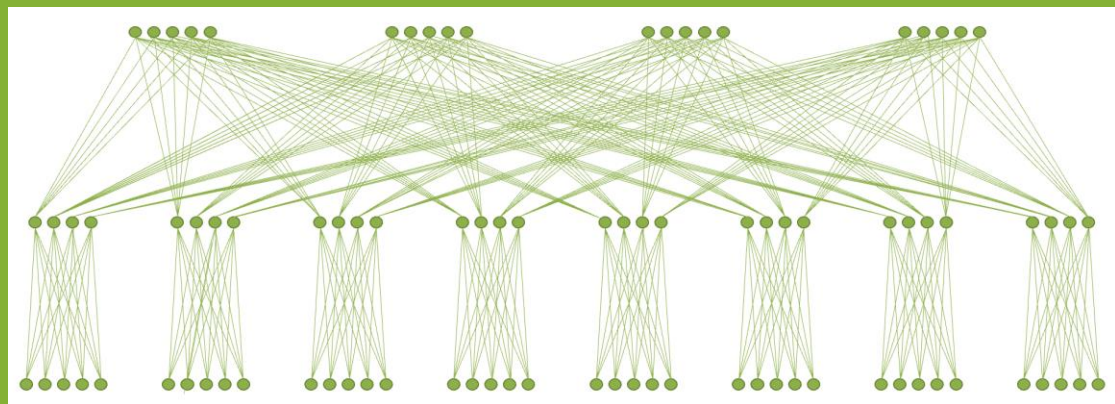


4 x Spine

6 x Leaf

### Large

### 5 Stage Clos



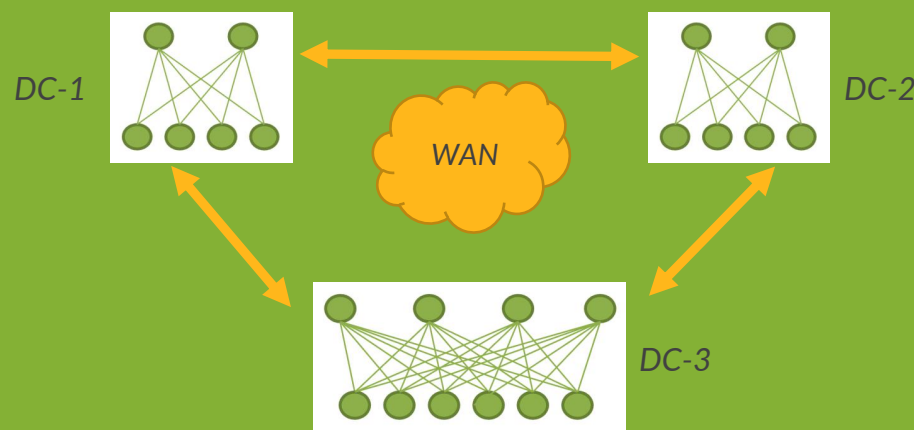
Super Spine

Spine

Leaf

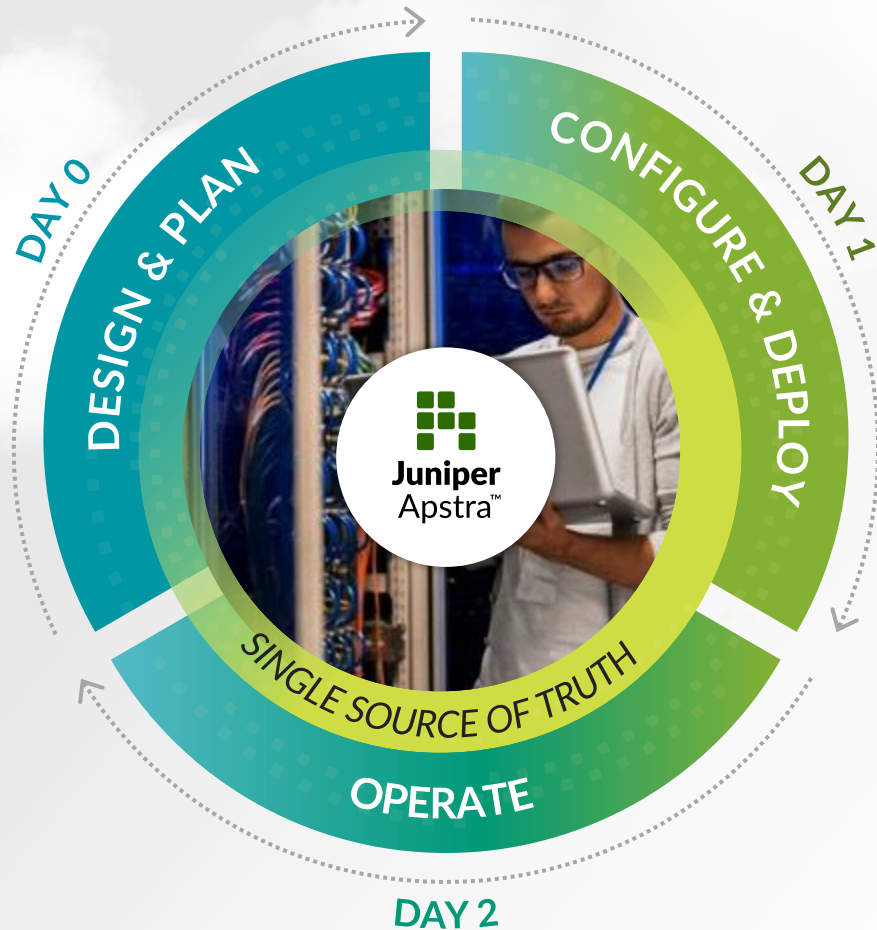
### Very Large

### DCI



### Multiple DCs

# Juniper Apstra: The Experience-First Data Center



## RELIABILITY

→ Speed



## EXPERIENCE

Intent-Based Networking  
→ 320% ROI\*



## MULTIVENDOR

Strategic flexibility



## SECURITY

# Apstra enables pervasive visibility

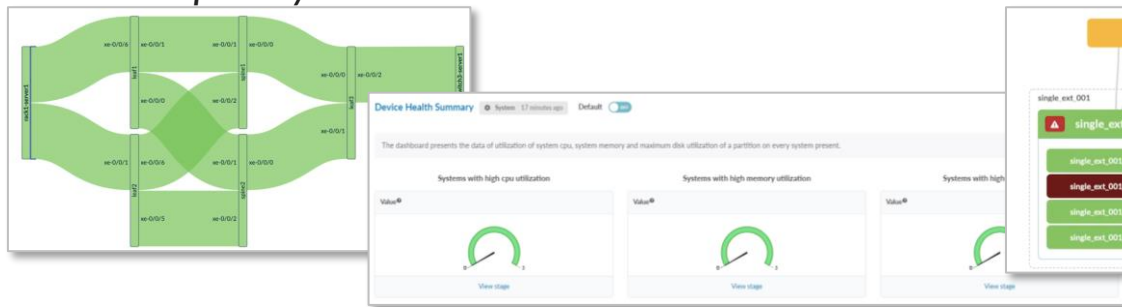
## COLLECT

### Comprehensive telemetry

- Pre-defined probes – easy out-of-box experience
- Fully user customizable – no coding required
- 100% coverage – visualize any available data

### Integrated flow data

- End-to-end flows - gain application insight
- Fully integrated - avoid external system cost, complexity



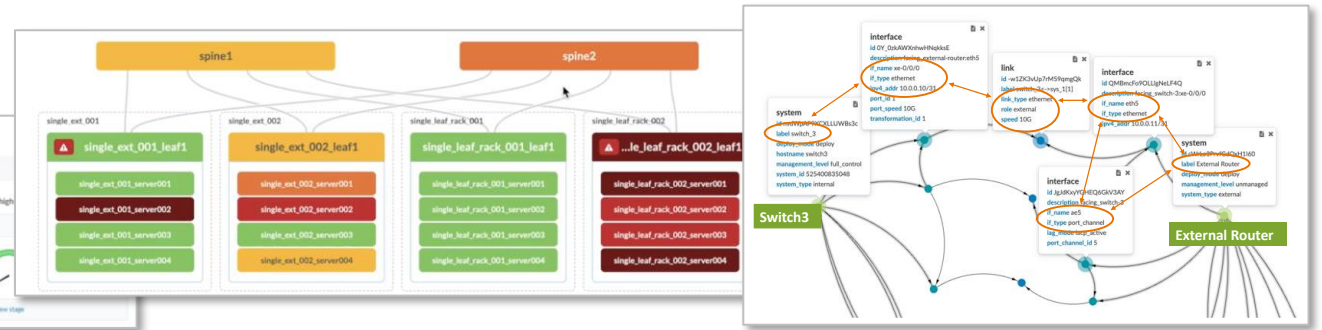
## VISUALIZE & ANALYZE

### Intent-based Analytics (IBA)

- Rich visualization of telemetry and flow data – fast issue identification & resolution

### Graph database query interface

- Explore the powerful Apstra graph database – deepen understanding of network state
- Flexible user-defined queries – no coding required



Faster troubleshooting ❖ Performance, capacity & cost management ❖ Enhanced security & compliance

# Apstra Business Case is Proven



**ROI**  
320%

**Payback**  
<6 months



**Day 0**  
60% savings.

**Day 1**  
From 24 hrs →  
2 hrs per device.

**Day 2+**  
60% savings  
ongoing.



**Apstra Costs**  
\$275K over 3 years,  
includes licenses,  
deployment, training.

**Savings**  
Eliminate existing  
legacy tools.

*Ask your account team for  
a customized TCO model  
for your environment*

Source: Forrester 2022  
The Total Economic Impact™ of Juniper's Apstra Intent-Based Networking Solution

Juniper Confidential

**JUNIPER**  
NETWORKS

# Scalable IP Fabric



400G/800G/1.6T



Silicon



DCI



Telemetry



QFX5K



Shallow buffer fixed  
Merchant  
Leaf/spine

ACX



Deep buffer fixed  
Merchant  
Leaf/spine/DCI

PTX



Deep buffer fixed/modular  
Juniper  
Spine/DCI

MX



Programmable fixed/modular  
Juniper  
DCI/DC edge

Comprehensive  
Datacenter portfolio

Industry-leading  
EVPN-VXLAN

Standards-based  
Inter-operability

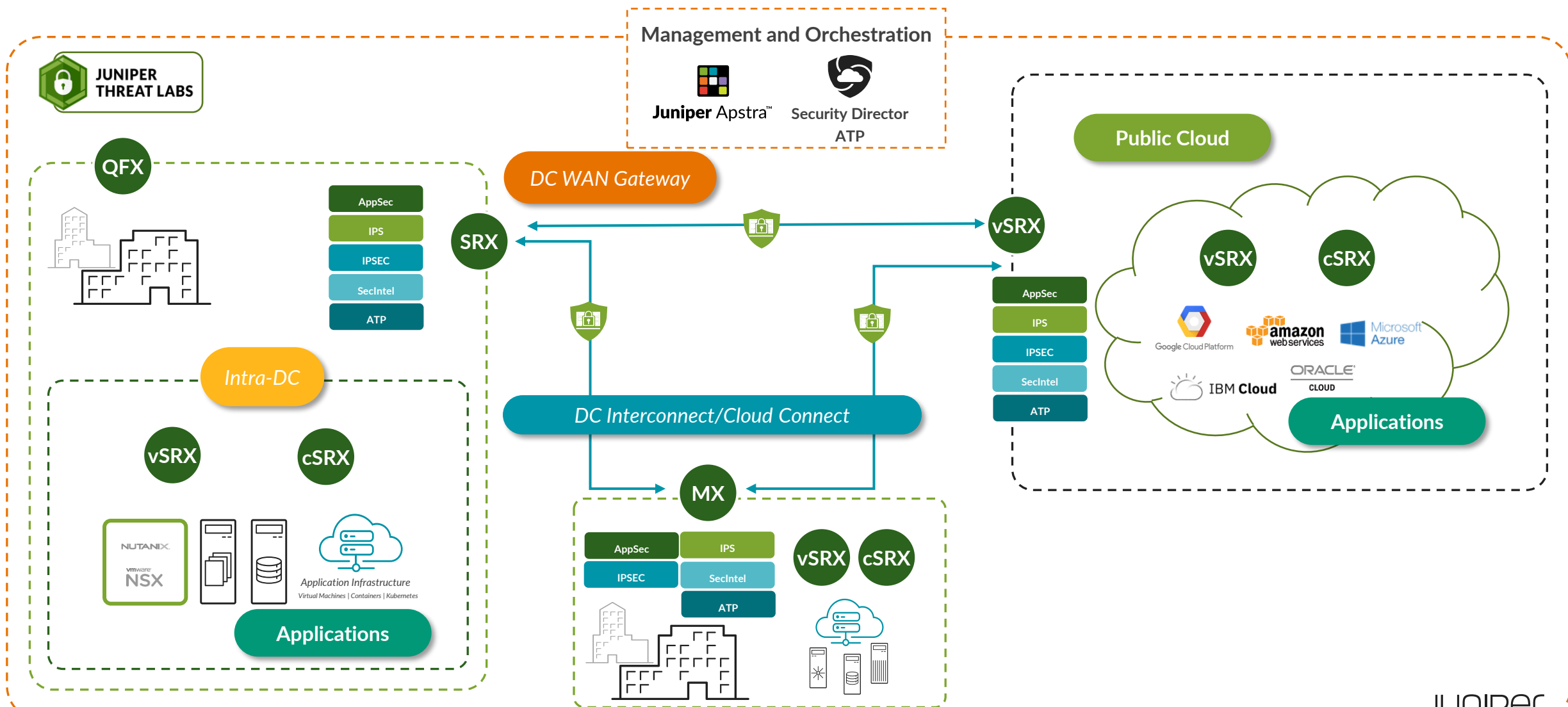
# Network Operating System (NOS)



- **Disaggregated Modular Software Architecture**
  - *Class Leading BGP*
  - *SP grade Reliability*
  - *Low Risk*
- **One NOS “Network-Wide”** (*DC, Security, WAN, Campus +++*)
- **Open and Programmable** (*Designed from day 1 for Automation*)
- **Greatest Feature Depth** (*Code developed since 1996*)
  - *Operator Friendly*

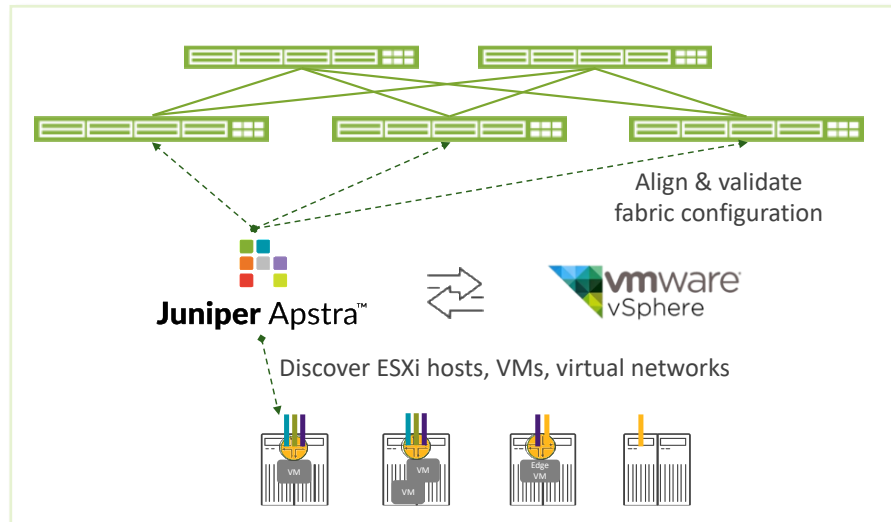
# Zero-trust data center architecture

Comprehensive security integrated with networking for public/private/hybrid clouds



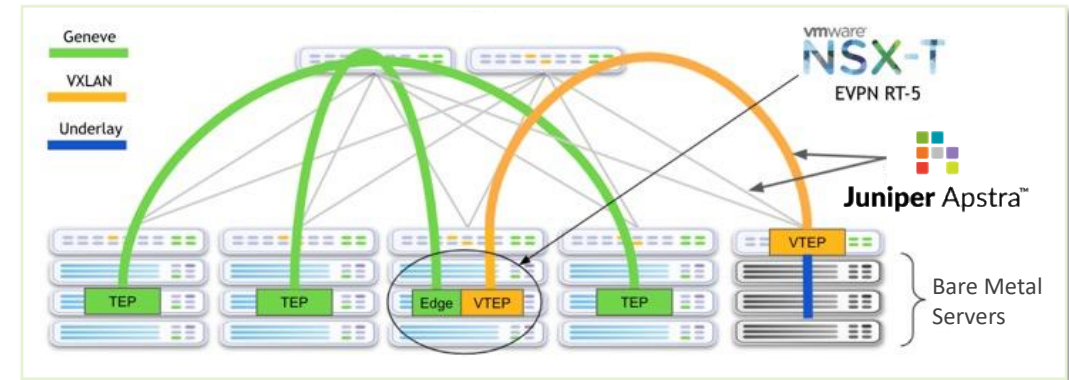
# Apstra + VMware integration

## Apstra + vSphere/ESXi



- *Faster provisioning, eliminate errors*
- *Improve application visibility*

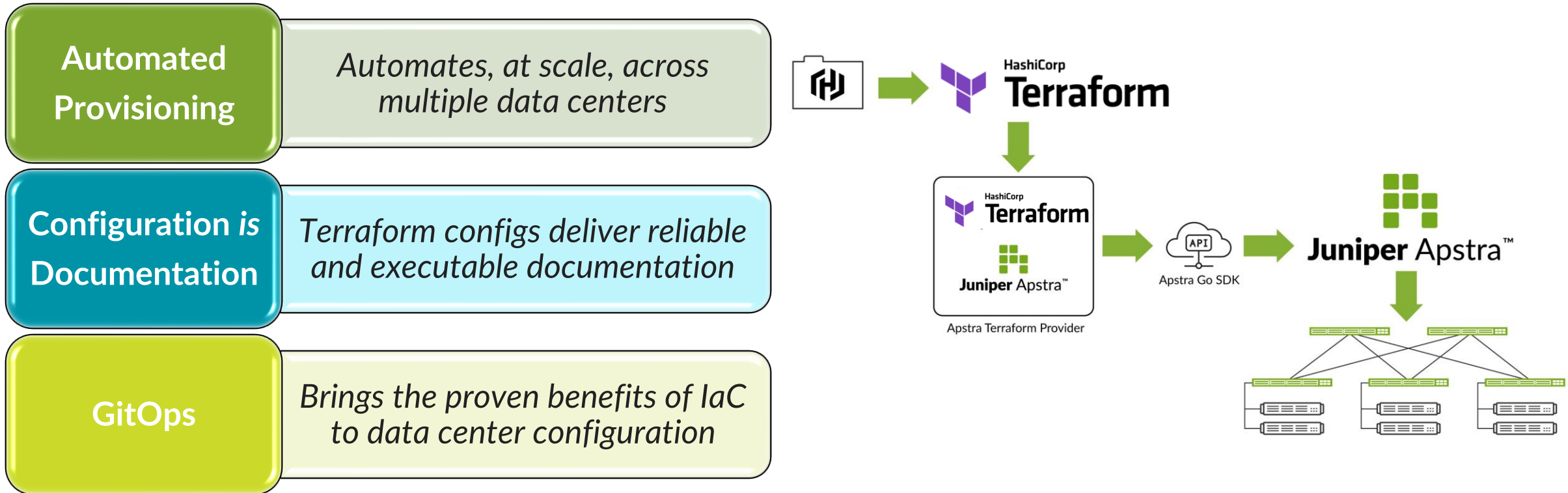
## Apstra + NSX-T



- *Underlay-overlay network integration*
- *Microsegmentation, zero-trust security*

# HashiCorp® Terraform® Provider for Apstra

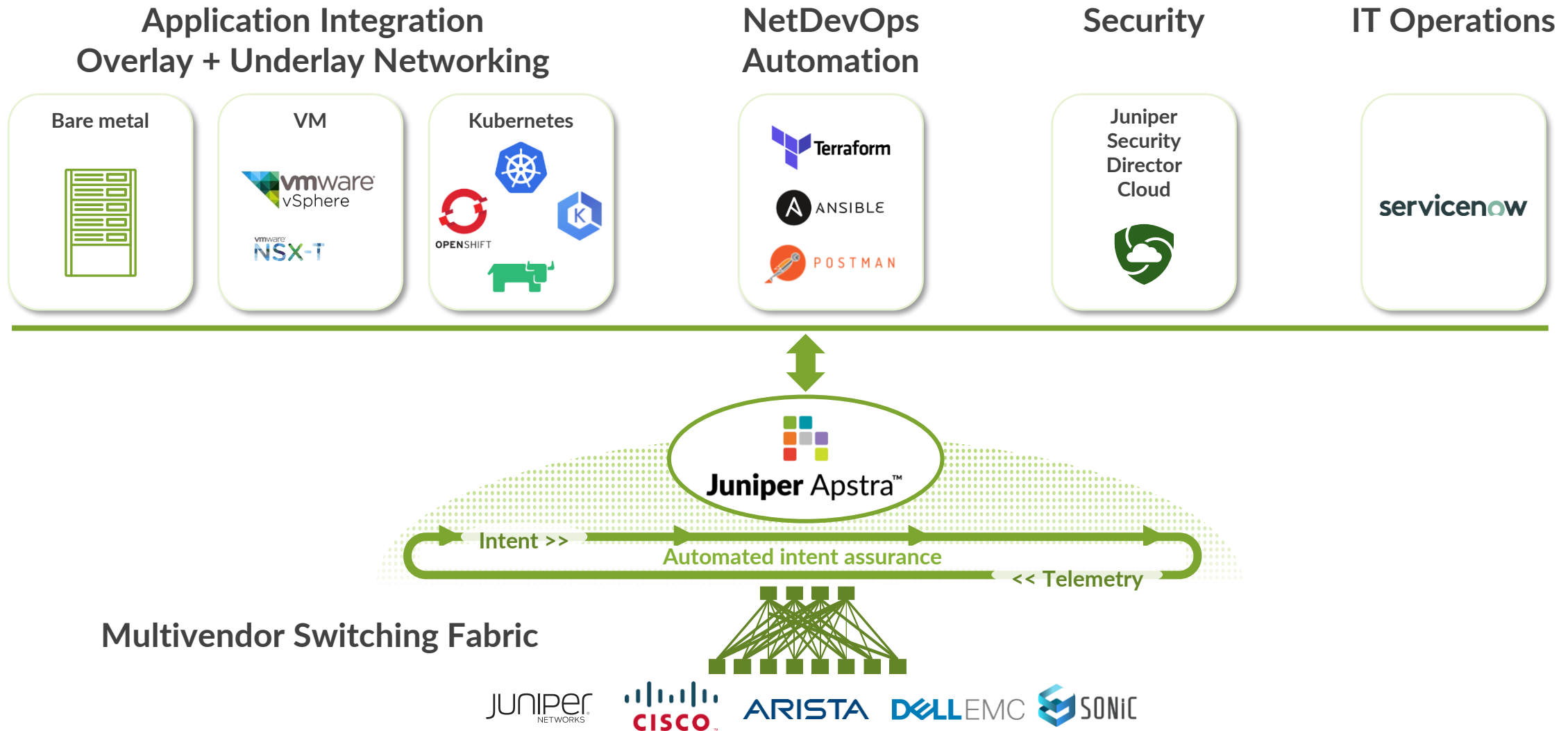
Automate private cloud data centers as easily as the public cloud



Seamlessly integrate Apstra data center fabric management and operations with Terraform and DevOps/SRE/IaC workflows

# Apstra integrations streamline your operations

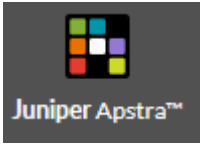
- Automate private cloud data centers as easily as the public cloud





# Poll no. 3

**IN NEXT 6 ~ 12 MONTHS, WILL YOU  
BE REFRESHING OR BUILDING A  
NEW DATA CENTRE (DC)?**



# Apstra Demo

Let us show you:

1. Juniper Apstra Demo: Apstra dashboard and Root Cause Identification – 5:20

<https://www.juniper.net/us/en/the-feed/topics/data-center/juniper-apstra-demo-root-cause-identification.html>

2. Heat Map for Data Center Traffic & Resource Utilization Monitoring & Management

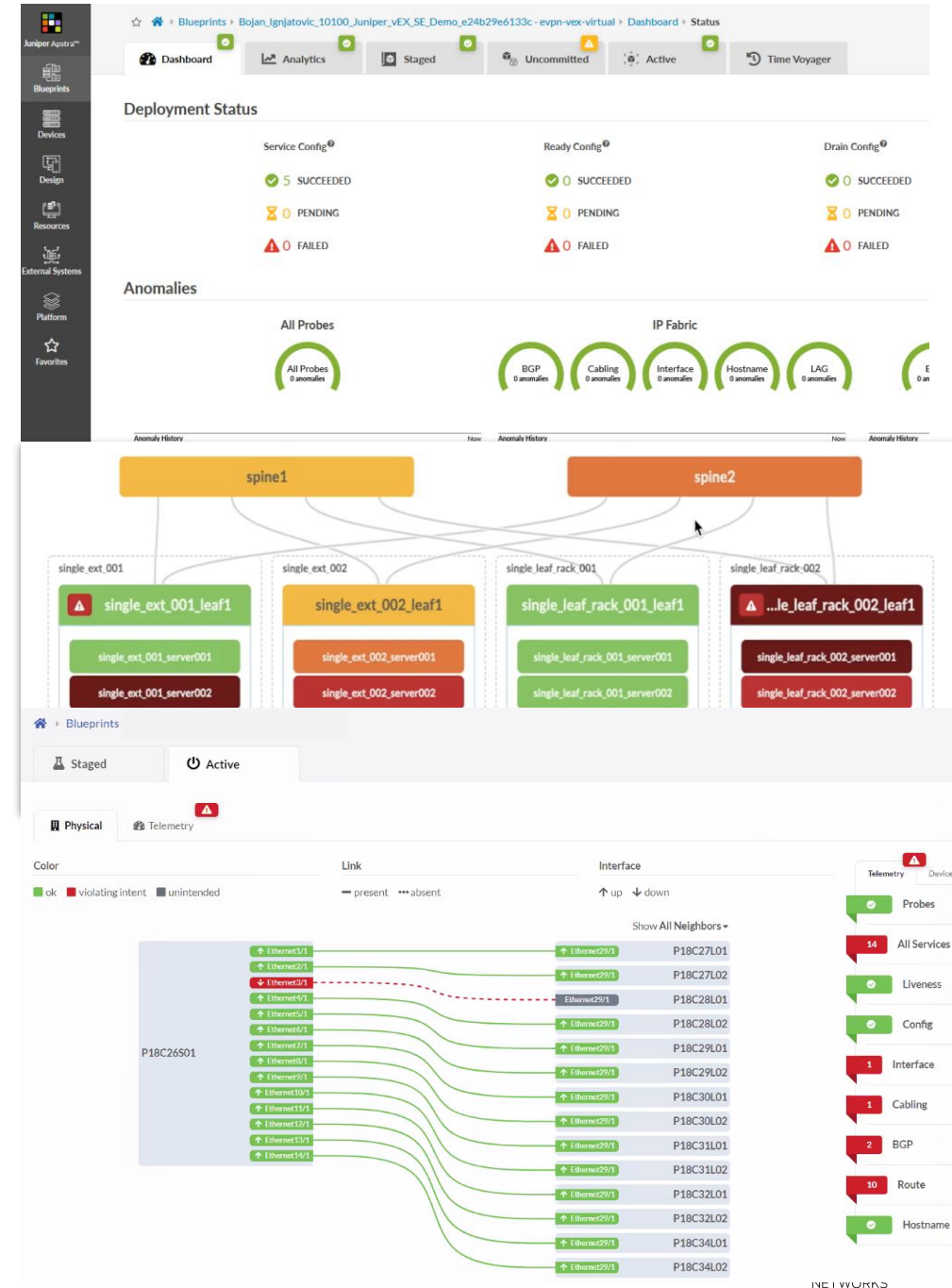
<https://www.juniper.net/us/en/the-feed/topics/data-center/juniper-apstra-demo-heat-map-for-data-center-traffic-resource-utilization-monitoring-management.html>

3. Add a New Server to Your Data Center

<https://www.juniper.net/us/en/the-feed/topics/data-center/juniper-apstra-demo-add-a-new-server-to-your-data-center.html>

4. Juniper Apstra Demo: Revert Network Change with Time Voyager

<https://www.juniper.net/us/en/the-feed/topics/data-center/juniper-apstra-demo-revert-network-change-with-time-voyager.html>



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- DiGiCOR is an Australian IT company that provides a wide range of industry-leading ICT infrastructure and software solutions, to help meet the demands of different industries and enterprises.
- DiGiCOR is proud to partner with Juniper Networks, a leader in AI networking, cloud, and connected security solutions.
- DiGiCOR can help you find the right Juniper solution for your business needs, whether it's for data center, campus, branch, edge, or cloud networking.
- DiGiCOR can also provide you with deployment and maintenance support, ensuring a smooth and seamless experience from start to finish.
- DiGiCOR has a team of certified and experienced engineers, technicians, and consultants who can assist you with any technical or operational issues that may arise.
- DiGiCOR offers competitive pricing, flexible financing options, and customized solutions to suit your budget and requirements.

you can enjoy a seamless and secure networking  
experience

Contact your account manager today to learn more

# Juniper Solutions Made Easy with **DiGiCOR**

<https://digicor.com.au/partner/juniper>



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# THANK YOU

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