



# Transforming Data Center Operations

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Vice President, Data Center

JUNIPER  
NETWORKS

Engineering  
Simplicity



Juniper is  
transforming  
data centers for  
**EXPERIENCE FIRST**  
**OPERATIONS**



# Data Center Strategy: Products

## Application Integration



- Kubernetes
- VMware integration
- Secure overlay
- Multicloud deployments

## Operations Led



### Automation Practice

- Integrations
- Tools and repositories
- Support and services



### Automation Solutions

- Day 0/Day 1/Day 2
- Intent-based networking
- Closed-loop assurance
- Multivendor

## Foundational



### Platforms

- Cost-optimized 25G/100 Gig
- 400 Gig platforms
- Cloud-optimized software
- Best EVPN-VXLAN fabrics



### Telemetry

- Instrument everything
- Distributed architecture
- Industry standards-based

# Data Center Strategy: Top Juniper Markets



10%  
CAGR

**Large Enterprise**  
**\$4.7B TAM ('20)**

- Fortune 2000, Global 5000, Large Gov't, Education, SP IT
- Top Insertions: Automated DC and 100 Gig transition
- Stand apart with Automation Software



7%  
CAGR

**Cloud Majors**  
**\$2.6B TAM ('20)**

- SAS and large cloud properties
- Top Insertions: DevOps and 400 Gig transition
- Stand apart with Operations and Scalability



**Hyperscaler**  
**\$4.6B TAM ('20)**

- 8 largest cloud providers
- Targeted technology needs

**RICOH**

**ebay**

**Bloomberg**

**YAHOO!**  
JAPAN

next  
layer

**zoom**

# GROWTH DRIVERS

01

Execution  
on 400 Gig



UPGRADE CYCLE

Execution Focus

02

Disruptive acquisition:  
Juniper and Apstra



PORTFOLIO INNOVATION

Product Focus

03

Disruptive  
development

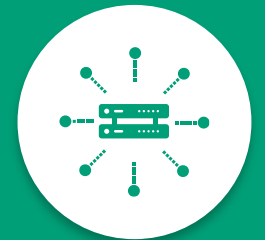


TECHNOLOGY

Product Focus

04

Systems  
integrators



MARKET REACH

Execution Focus



# Growth Driver Execution on 400 Gig

## 100 Gig transition

- Learned from experience

## 400 Gig transition

- First to market with Trident 4 platform
- Streamlined embedded Junos software
- Operations-optimized platforms



**Ram Velaga**  
Senior Vice President and General Manager  
Core Switching Group, Broadcom

*"Juniper is the first to offer its customers a solution with the programmable power of the Broadcom **Trident 4** merchant silicon. By extending the broad array of the Junos OS forwarding functions to a programmable 400G merchant chipset, Juniper is delivering a diverse set of use cases now economically available to more buyers."*



**Rene Avi,**  
CTO, next layer

*"400G is critical to keep up with our customers' exploding traffic growth in data center, metro and long-distance applications. Juniper QFX5220 switches with the extensive and mature IP/MPLS stack deliver the port density, cost-per-bit, and operational simplicity we need to deliver the performance and reliability of services that our customers depend on every day."*

# Growth Driver

## Juniper + Apstra Delivers Customer Value



### Unmatched approach

- Assured operations start with design intent
- Built for purpose by top engineers

### Powerful insertion

- Operational simplicity
- Application transitions
- Multivendor operation and migration

### Business outcomes

*"We went from POC to production in 2 weeks."*

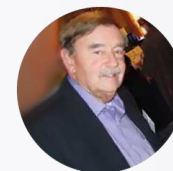


*One operations model, three vendors*



**Adel Al-Saleh**  
CEO, T-Systems

*"Our success depends on rapidly introducing new services, quickly scaling to new demand and delivering the assured experiences our customers count on every day. Juniper Networks and Apstra joining forces as one company helps T-Systems"*



**Tom Nolle**  
Industry Analyst CIMI Corp

*"The thing that makes this smart is the simplicity and clarity of the vision. Unlike Cisco's container strategy, which admitted to multiple possible justifications and thus multiple possible paths to realization, there seems to be one single thing—experience control end to end—that's driving Juniper."*

## Growth Driver Automated Data Center

Unmatched Automation

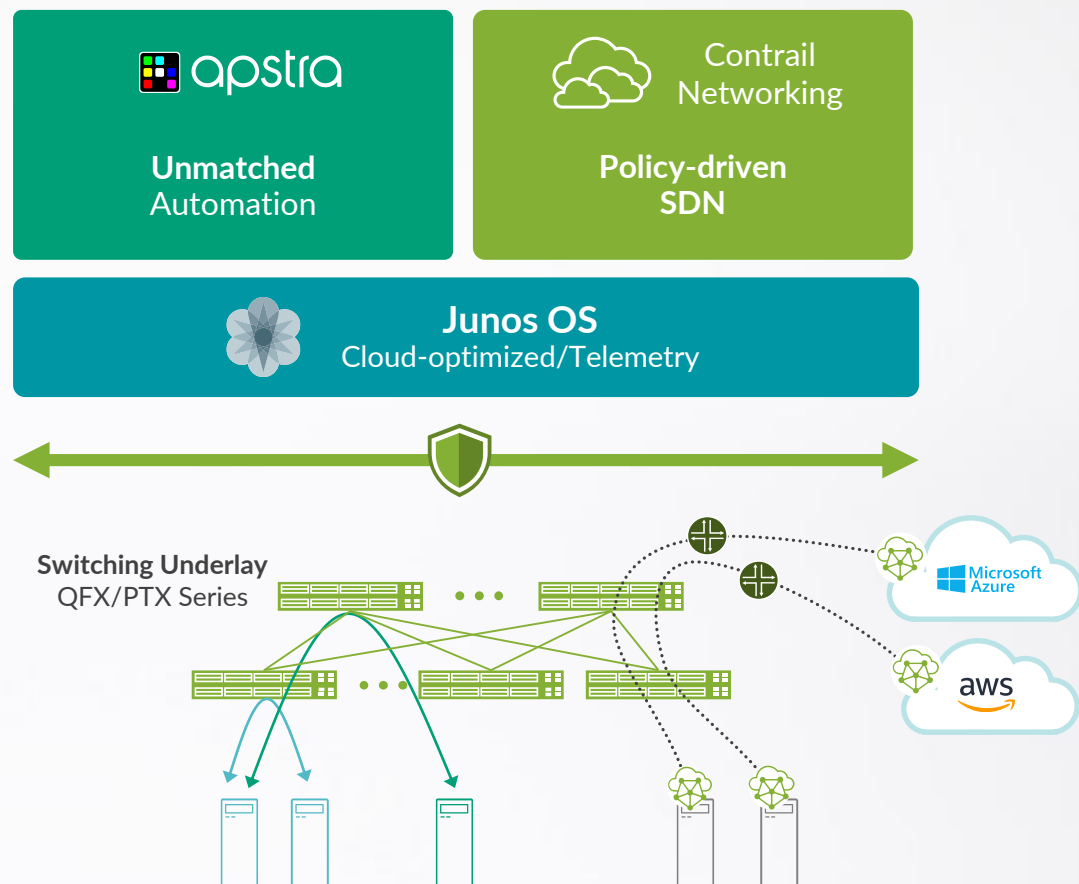
Policy-driven SDN

Cloud-optimized OS

Best Switches

Connected Security

Automated WAN







## Growth Driver Disruptive Development



### AI-driven Operations

Mist + Apstra

On-prem + cloud

Target: Large Enterprise



### Extensions

Contrail/K8s

Edge cloud

Silicon photonics

SmartNICs

Target: All Segments

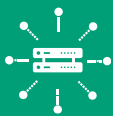


### Disaggregation

SONiC

Containerized routing

Target: Hyperscalers



## Growth Driver Market Reach

### Systems Integrators

- Existing success at major SIs across the globe
- Leverage services strength to support SI motion
- Apstra multivendor management gives SIs a solution across requirements



# EXPERIENCE FIRST



# TOP MARKETS

Cloud Majors



Large Enterprise

# GROWTH DRIVERS



Execution on 400 Gig

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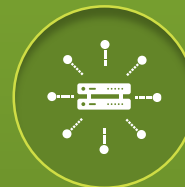
Disruptive acquisition:  
Juniper & Apstra

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Disruptive development

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Systems integrators



# Thank you

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