

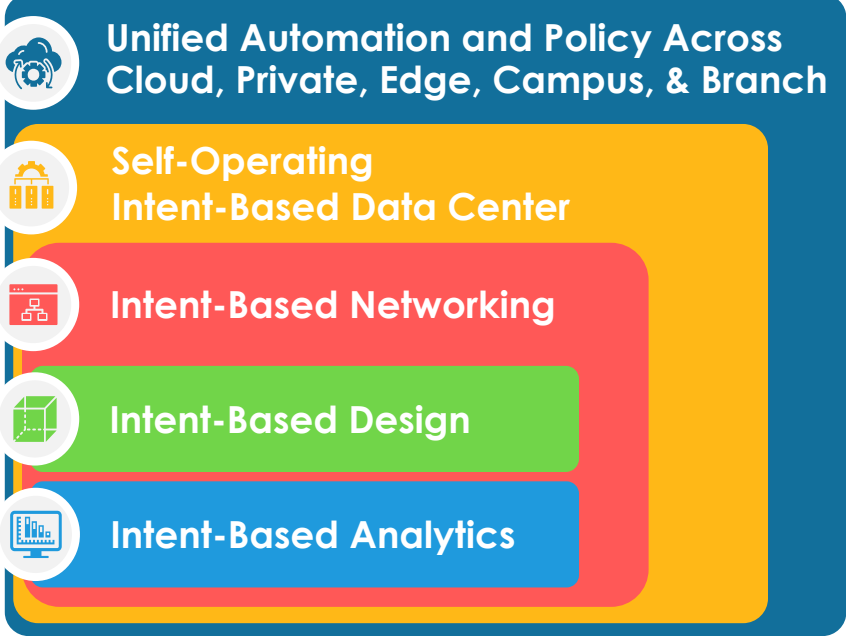
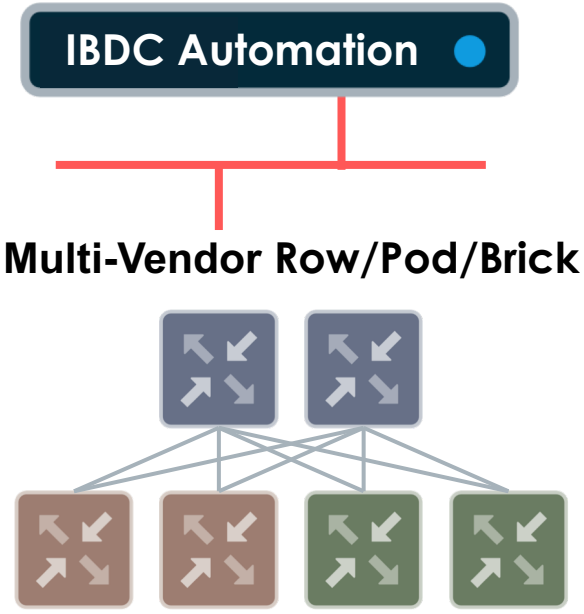
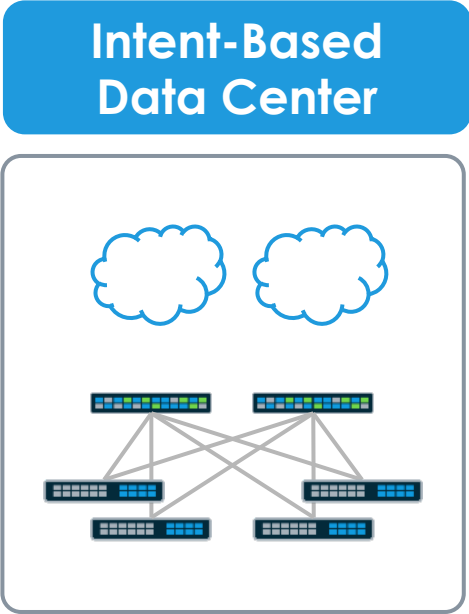


Intent-Based Data Center Automation: Real World Enterprise Deployments

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Intent-Based Data Center Automation



Customer: Large Financial Institution



Large Data Centers



Multi-Vendor Network



OpEx Challenges

High volume processing, large number of distributed endpoints, transactional security, and analytics

Private Data Center

Intent-Based
Networking

Intent-Based Design

Before Intent-Based Data Center Automation

- Difficulty staffing remote sites
- Need to operate PODs as a system
- Complicated heterogeneous environment
- Fear of changes disrupting network

With Intent-Based Data Center Automation

- Centrally located network engineers
- Life cycle automation of complete deployment of 6 PODs
- Seamless multi-vendor support: Dell/EMC, Cisco, VMware
- System is self-documenting

Intent-Based Data Center Automation Benefits

- Simplified and agile deployment and operations
- Significantly reduced operating costs
- Complete vendor-agnostic life cycle management
- Increased reliability

Customer: Large Multinational Manufacturer

FORTUNE
500



9 PODs Growing to 70+



Application Availability



Private Cloud

Large Fortune 500 multinational corporation that designs, manufactures, and sells equipment globally

Private Cloud

Intent-Based
Networking

Intent-Based Design

Before Intent-Based Data Center Automation

- Challenge scaling storage application rollout
- Difficulty deploying commodity hardware and open source OS
- Complicated system made up of complex components

With Intent-Based Data Center Automation

- Life cycle automation of 9 PODs scaling to 70+
- Successful adoption and deployment of commodity hardware and open source OS
- Able to deliver service level agreements for applications
- Managed complicated underlying storage PODs as one system

Intent-Based Data Center Automation Benefits

- Massive scalability
- Minimal TCO (CapEx and OpEx)
- Highly Reliable Infrastructure rapidly
- Seamless upgrades of PODs

Customer: Large Multinational Energy Enterprise

FORTUNE
500



Global Data Center Refresh



OpEx Challenges



Application Reliability

Exploration, production, manufacturing, transport, and power generation in 175+ countries

Multi-Cloud

Private Data Center

Edge Compute

Colocation

Intent-Based
Networking

Intent-Based Design

Before Intent-Based Data Center Automation

- Application teams deploying in cloud
- Heterogeneous multi-cloud environment
- Many large data centers
- Issues with hardware vendor management system

With Intent-Based Data Center Automation

- Unified policy and automation across heterogeneous multi-cloud environment
- Tight integration with infrastructure and applications
- Simplified and centralized operations across data centers
- Multiple vendors supported: Integration with Cisco, VMware and Microsoft Azure

Intent-Based Data Center Automation Benefits

- Delivering on the requirements of the applications team
- Ability to seamlessly support different workload and cloud vendors with unified policy
- Support for distributed data centers
- Control public cloud costs

Customer: Global Financial Services Company



Data Center Class



Telemetry and Analytics



Application Reliability

Globally distributed financial services, technology, and information company

Smart Buildings

Campus

Intent-Based
Analytics

Before Intent-Based Data Center Automation

- Complicated day 0, 1, & 2 operations
- Limited visibility into network performance
- Unable to predict and prevent disruption in real-time
- Difficult to manage complex network infrastructure

With Intent-Based Data Center Automation

- Complete visibility and self-documentation of network resources and operating system
- Ability to perform maintenance while maintaining availability
- Proactive identification of grey failures
- Vendor agnostic multi-vendor support
- Resilient infrastructure for IoT and other applications

Intent-Based Data Center Automation Benefits

- Proactive problem prevention, not just resolution
- Integration of several peripheral requirements including compliance
- Release supplier network operations and scripting OpEx
- Massive data center scale, set for self-operating

Customer: Largescale Data Center Operations



Data Center Refreshes



OpEx Challenges



Telemetry and Analytics

Multiservice web, advertisement, e-commerce, and mobile payment provider

Private Data Center

Intent-Based
Networking

Intent-Based
Analytics

Intent-Based Design

Before Intent-Based Data Center Automation

- Thousands of devices globally with flat staff
- Challenge scaling development team
- In-house automation tools
- Multiple network switch and OS vendors

With Intent-Based Data Center Automation

- Intent-based Network is able to easily deploy networks based on user intent
- Accelerated feature velocity by up-leveling developer team
- Dramatically optimized post-production (day 2) operations
- Reliably introduce new switch operating systems in the network quickly and seamlessly

Intent-Based Data Center Automation Benefits

- Reduction of deployments from 1 week to 2 hours
- Massively scaled out “cookie cutter” operations
- Improved reliability by avoiding switch vendor bugs
- Multi-Vendor supporting Arista, Cisco, and open alternatives

Intent-Based Data Center Automation Value

**Reduced
OpEx**

83%

Cost Reduction

**Simplified
Deployment**

99%

From **one week** to **2 hours**

**Application
Reliability**

3 switches **out of compliance**

One transceiver **about to fail**

One process on switch **about to run out of memory**

Intent-Based Data Center Automation

Addressing Real World Customer Challenges



Outages
(Availability)



Long hours
(Operations)



Shadow IT
(Control)



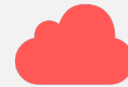
Security & Compliance
(Document)



Operations
(Efficiency)



Client Demands
(Cloud-like)



Multi-Cloud
(Policies)



8:1 Costs
(OpEx:CapEx)

Questions?

Thank You!

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