

CONVERGED INFRASTRUCTURE AND ICEE 1.0

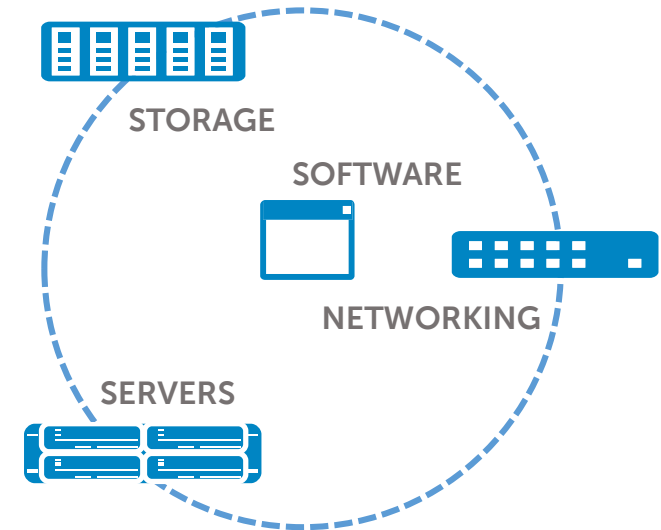
EDG and ESG





Servers.
Storage.
Networks.
+Software.

Converged.





\$30,000,000,000
Michael wants half.

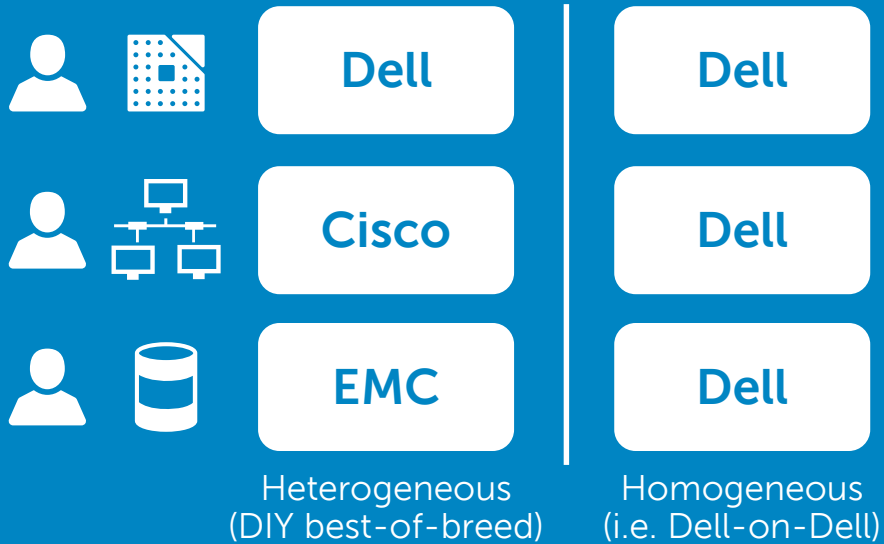


Business needs define IT operational models

FREEDOM

(Configurability & best-of-breed)

Traditional IT model requires a **variety of IT specialists**



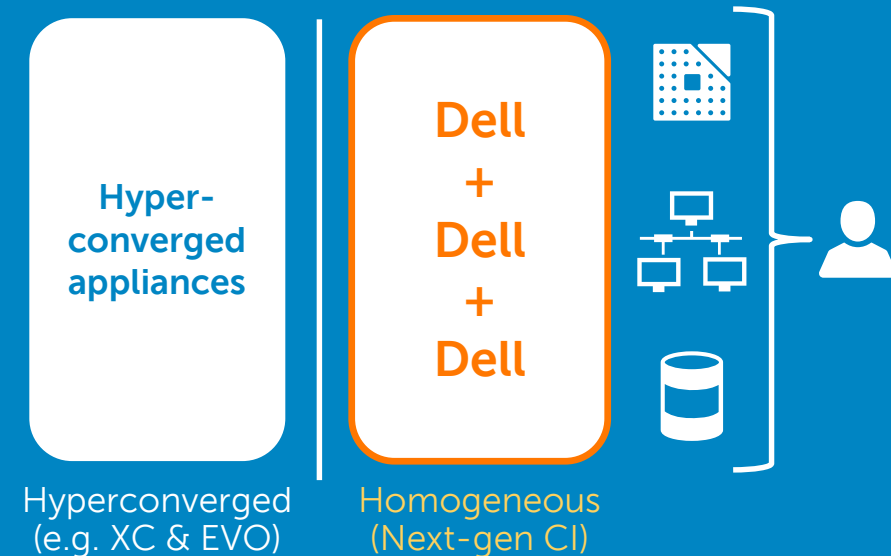
What is the customer's **strategic** priority?



SIMPLICITY

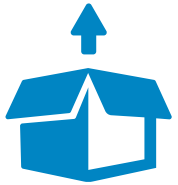
(Agility & predictability)

Highly-integrated CI drives **generalist capabilities**

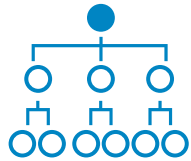


Enabling the next generation of converged IT

Differentiated features



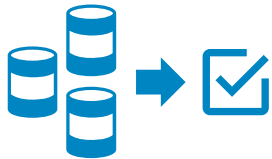
Simple out-of-box experience



Auto-discovery & on-boarding



User-defined performance

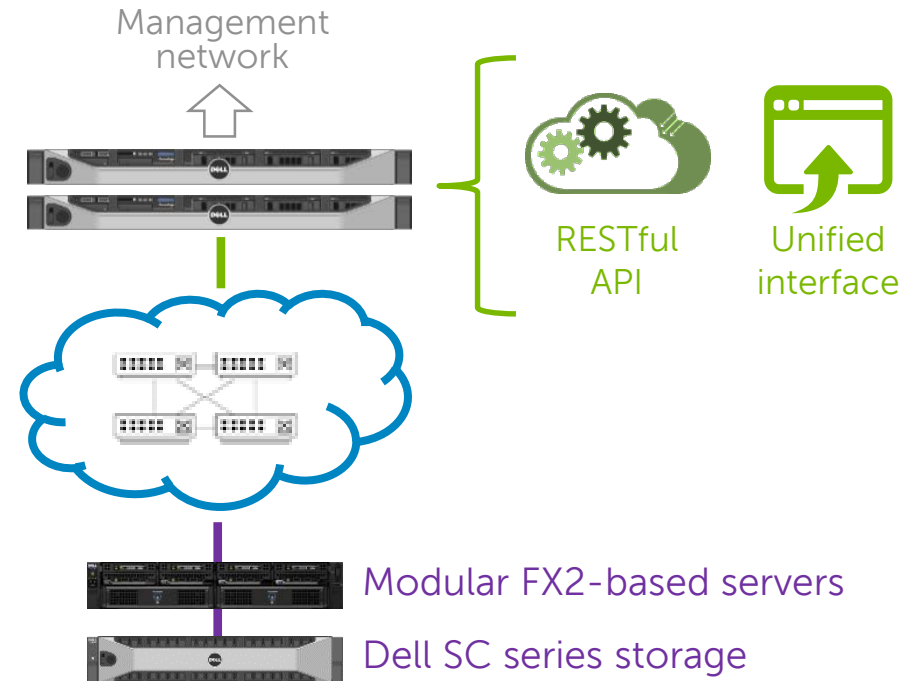


Seamless storage integration



True single point of management

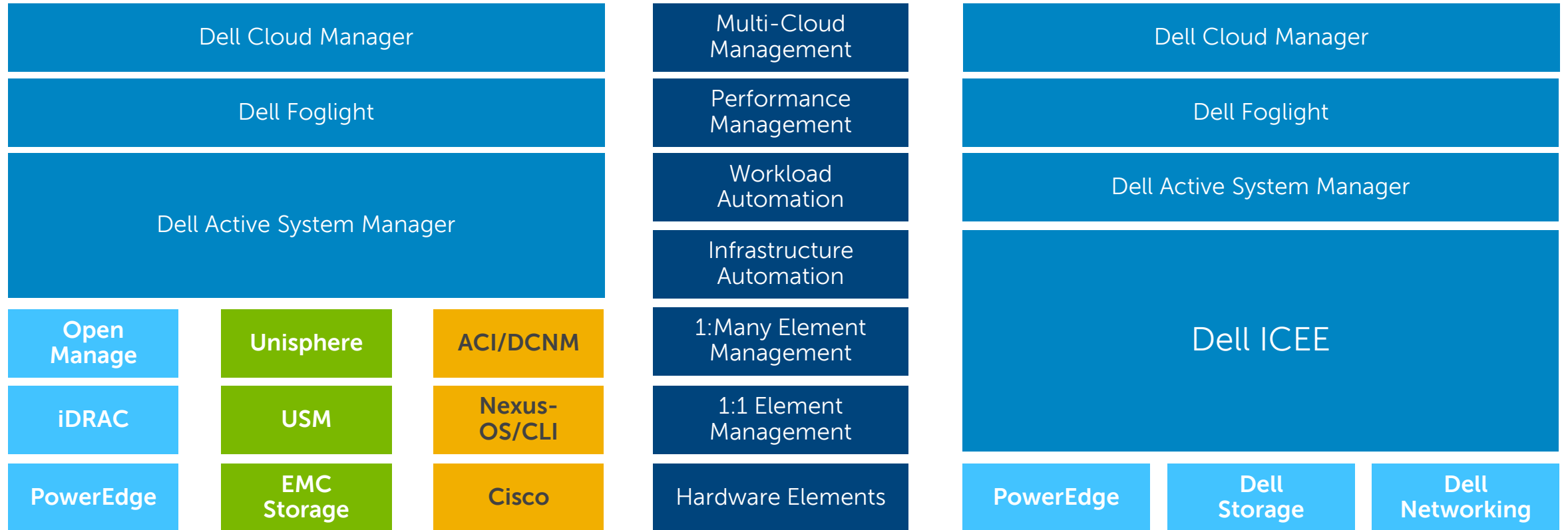
Streamlined architecture



Delivering a **hyper-converged experience without compromising** flexibility, performance or scalability

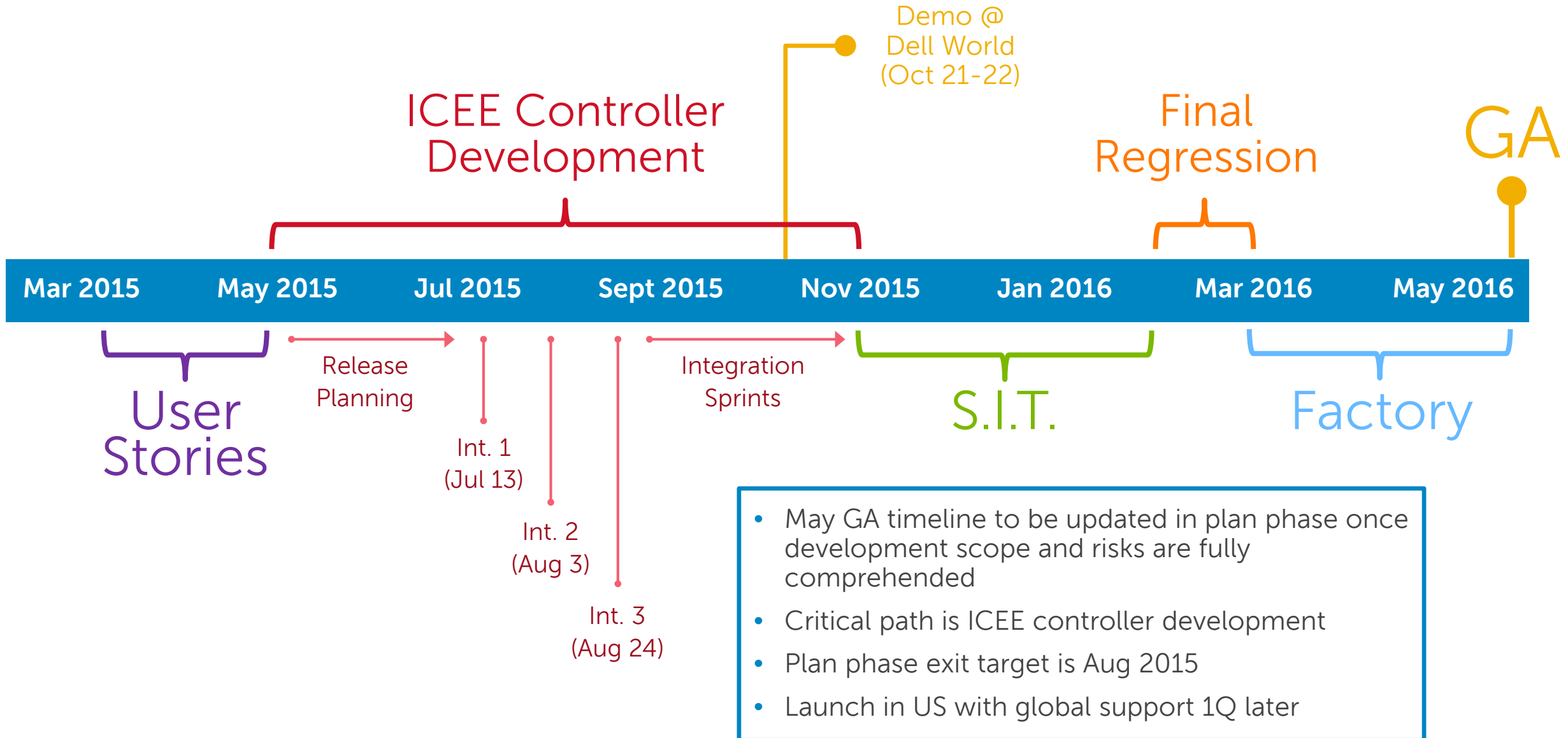


ICEE in the pan-Dell data center portfolio



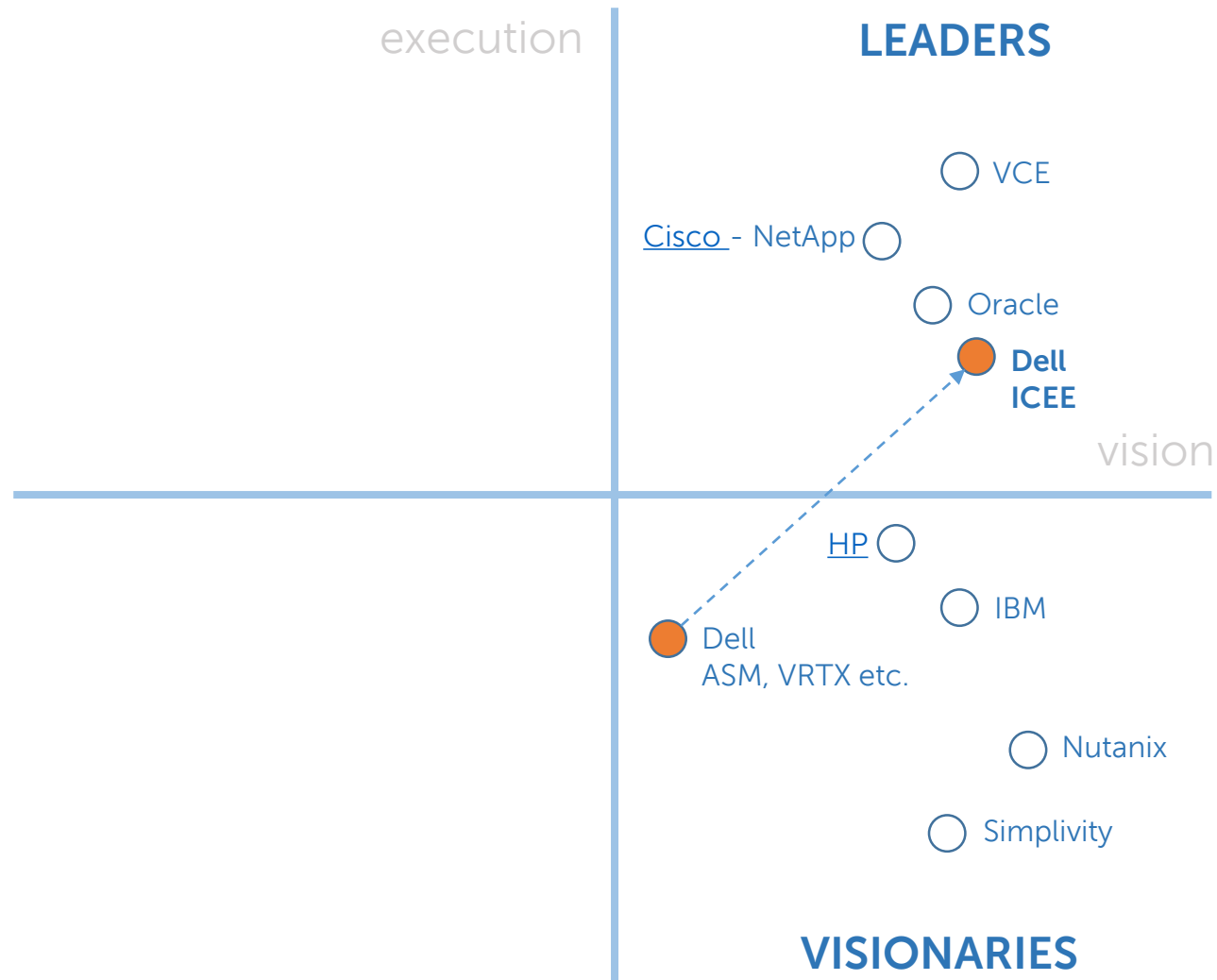
ICEE complements existing portfolio & makes **mainstream infrastructure more transparent** than ever before

Preliminary ICEE 1.0 timeline





ICEE PROGRAM COMPETITION



Gartner's magic quadrant for CI, 2014

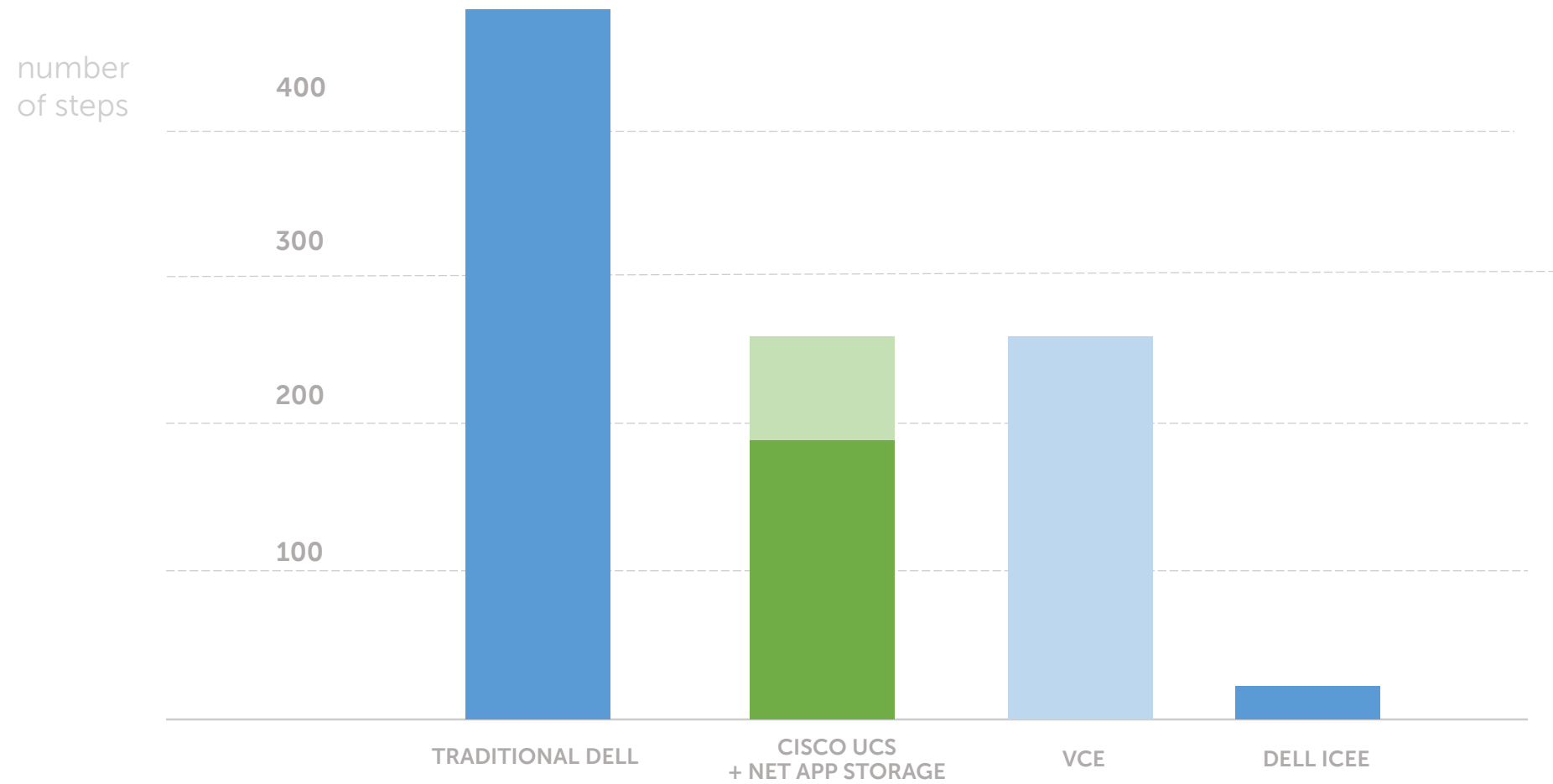
GAPS

- Complex setup
- Services engagement
- Complicated user interface
- Requires IT Specialists
- Multiple management interfaces
- Hundreds of steps and 5+ tools



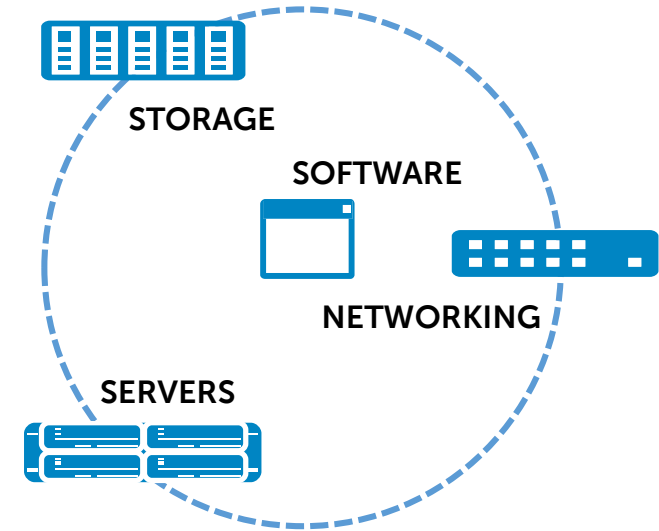
ICEE PROGRAM OPPORTUNITY

SCENARIO Install & Setup Chassis, Blades and VMware™ ESXi Cluster.

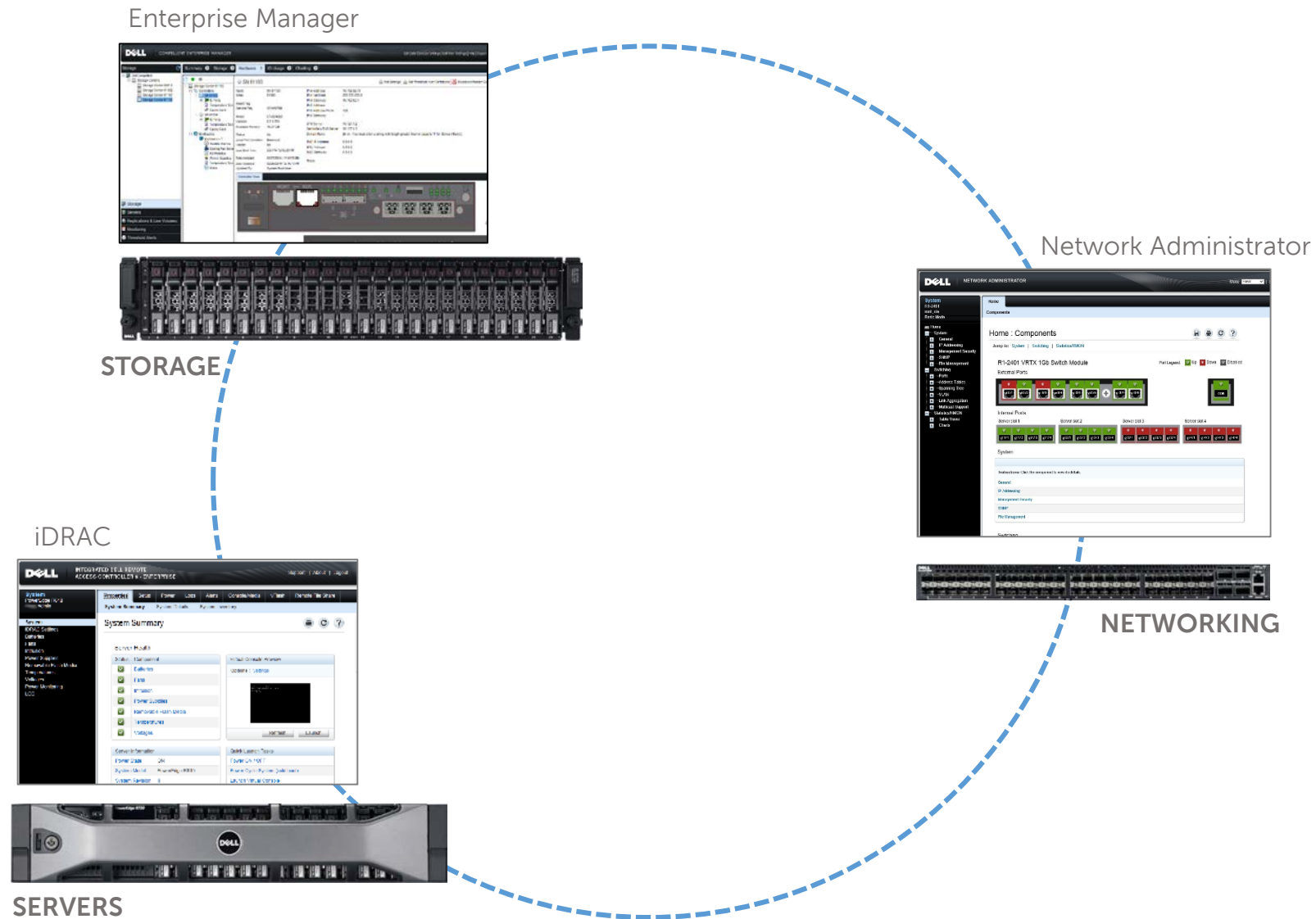




Magically powerful.
Seamless transparency.



2011 ELEMENT MANAGERS



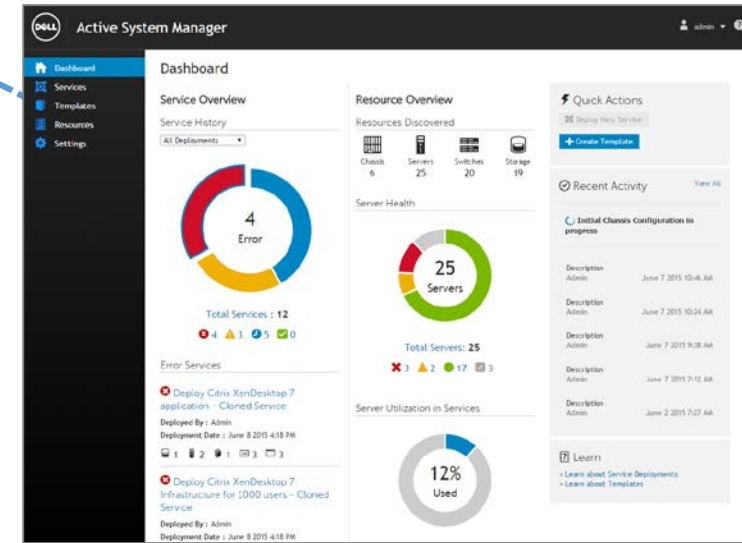
2013 ORCHESTRATORS

Enterprise Manager



STORAGE

ASM 7.X



ORCHESTRATOR

CMC



SERVERS



NETWORKING

Network Administrator



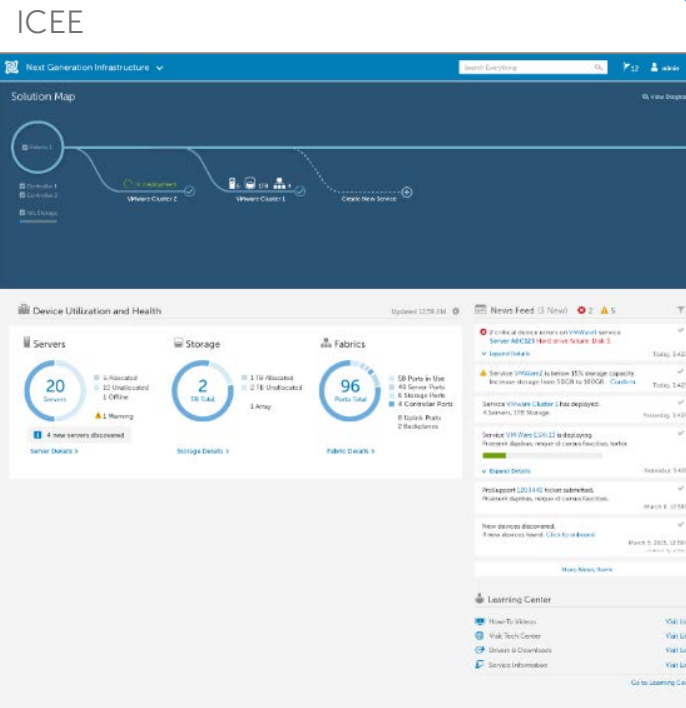
2015 SINGLE PLANE OF GLASS



STORAGE



SERVERS



CONVERGED



NETWORKING



USER INSIGHTS

Cut time to deployment

Less clicks and time to setup the solution

Radically Simple

Right amount of content at the right time

Automate, Automate

Just go ahead and do it for me

Keep me in control

Empower the IT Generalist

Constant User Conversation

Continuous user research and validation

DESIGN PRINCIPLES

Progressive Architecture

Layered flow and dynamic navigation, meaningful transitions

Content, not Chrome

Prioritize real estate on controls and displays, not application UI

Clean and Clear

Reduced visual noise and ornamentation, increased consistency

Actionable Insight

Supporting user decision-making with Insightful BI

Next Gen Visual Design

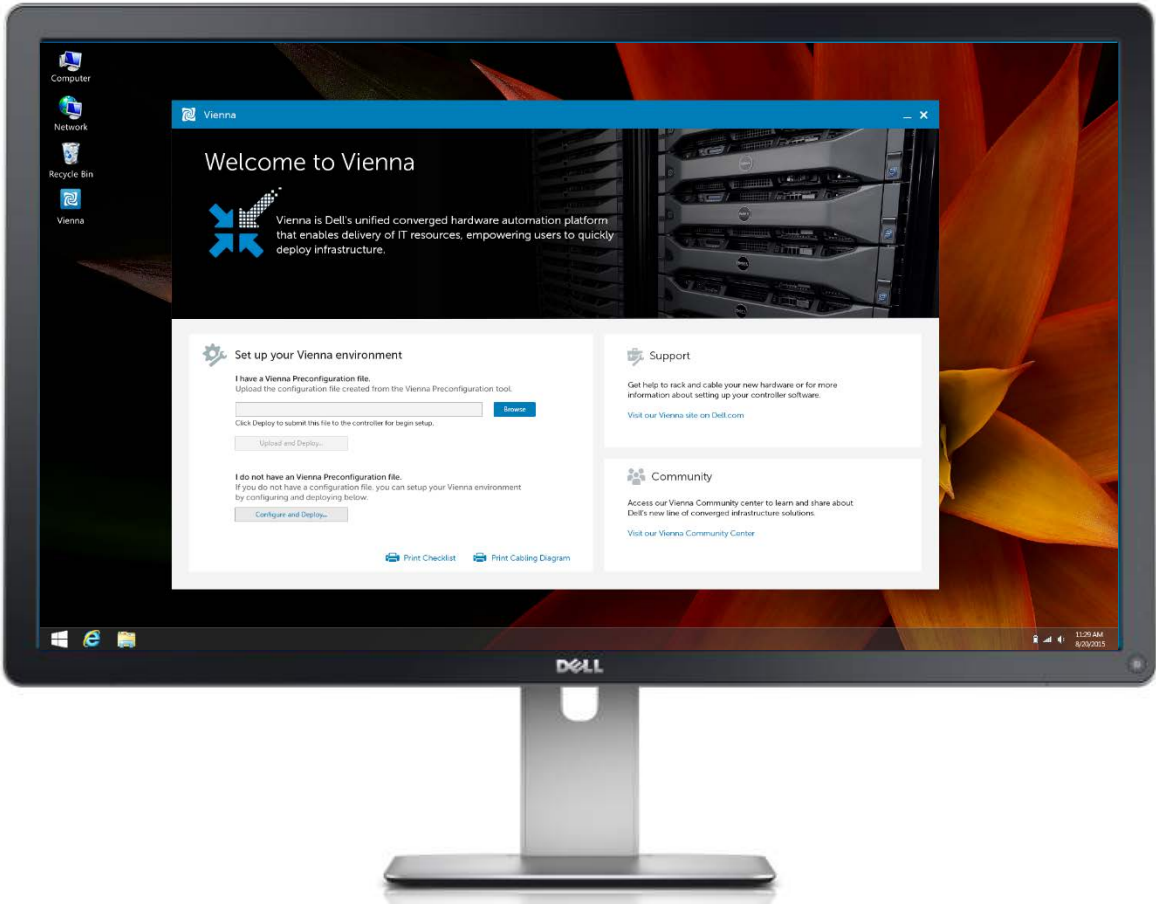
Cross-Dell visual design aligned to entire portfolio



VANGOGH UX THEMES

Cut time to deployment	Radical Simplicity	Automate, Automate	Keep me in control
Progressive Architecture	Content, not Chrome	Clean and Clear	Actionable Insight

Preconfiguration Tool





VANGOGH UX THEMES

Cut time to deployment

Radically Simple

Automate, Automate

Keep me in control

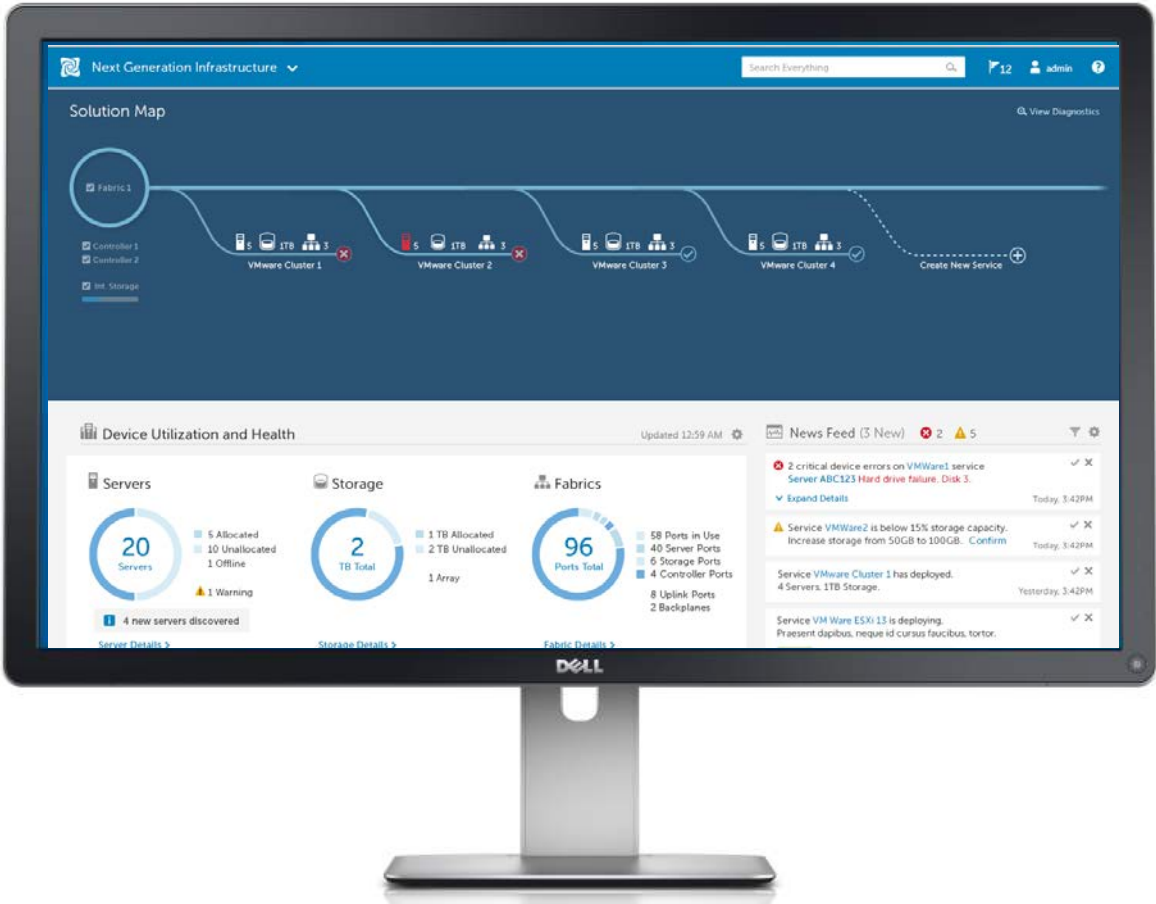
Progressive Architecture

Content, not Chrome

Clean and Clear

Actionable Insight

Dashboard





VANGOGH UX THEMES

Cut time to deployment

Radical Simplicity

Automate, Automate

Keep me in control

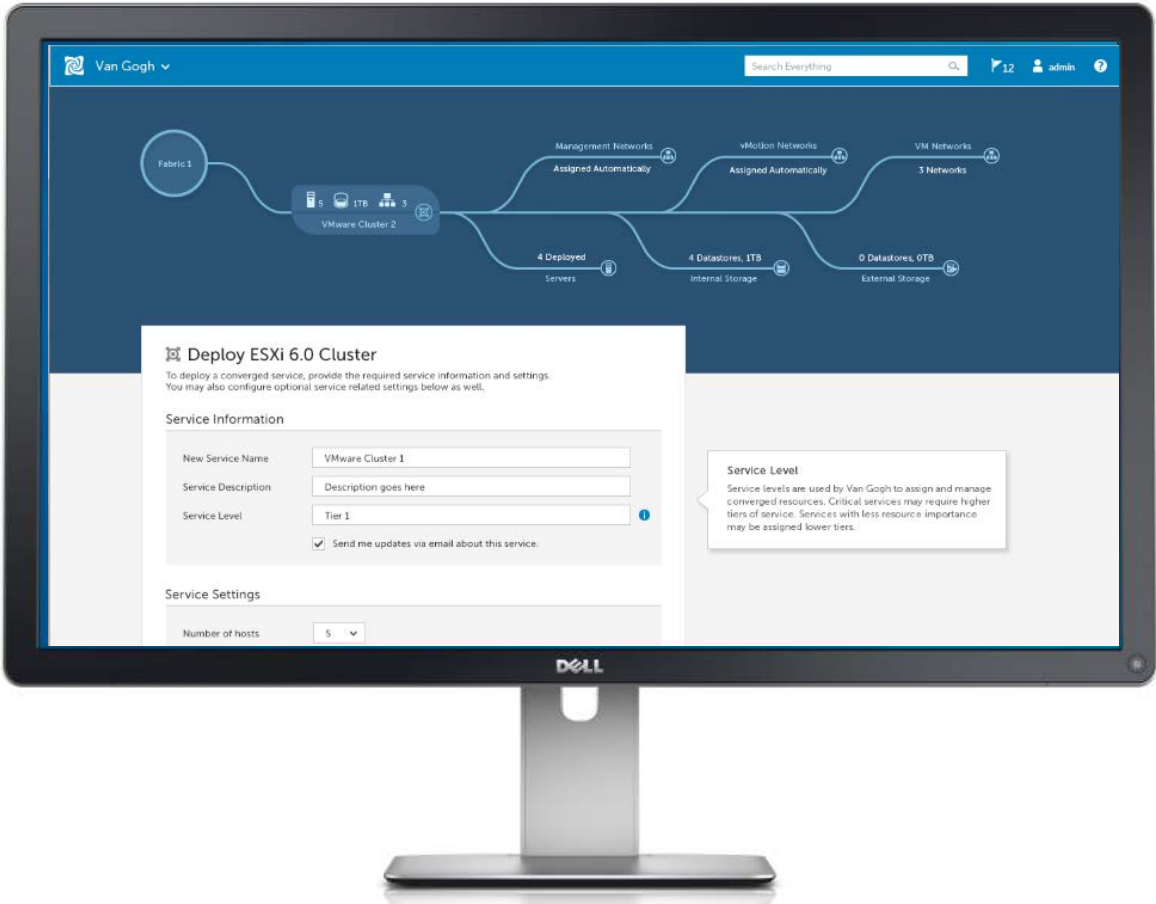
Progressive Architecture

Content, not Chrome

Clean and Clear

Actionable Insight

Service Deployment





VANGOGH UX THEMES

Cut time to deployment

Radical Simplicity

Automate, Automate

Keep me in control

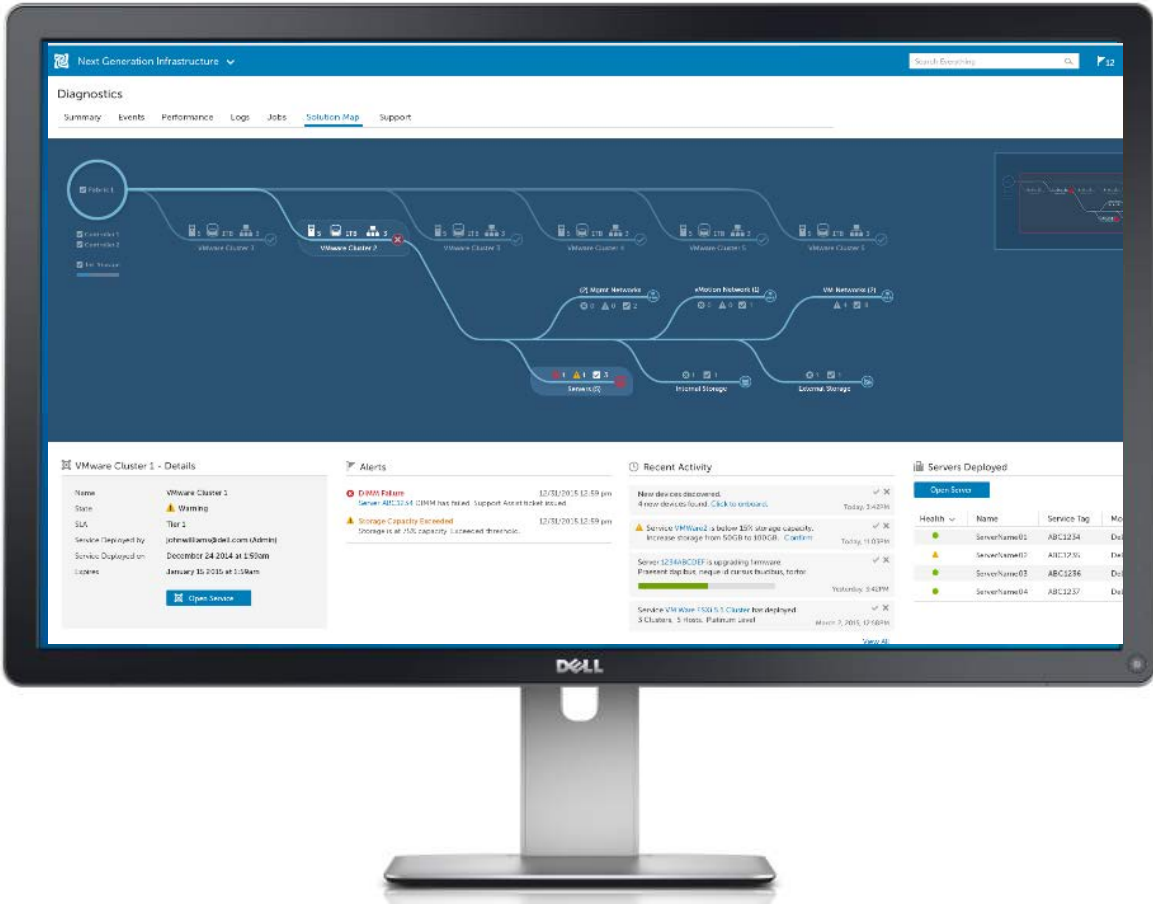
Progressive Architecture

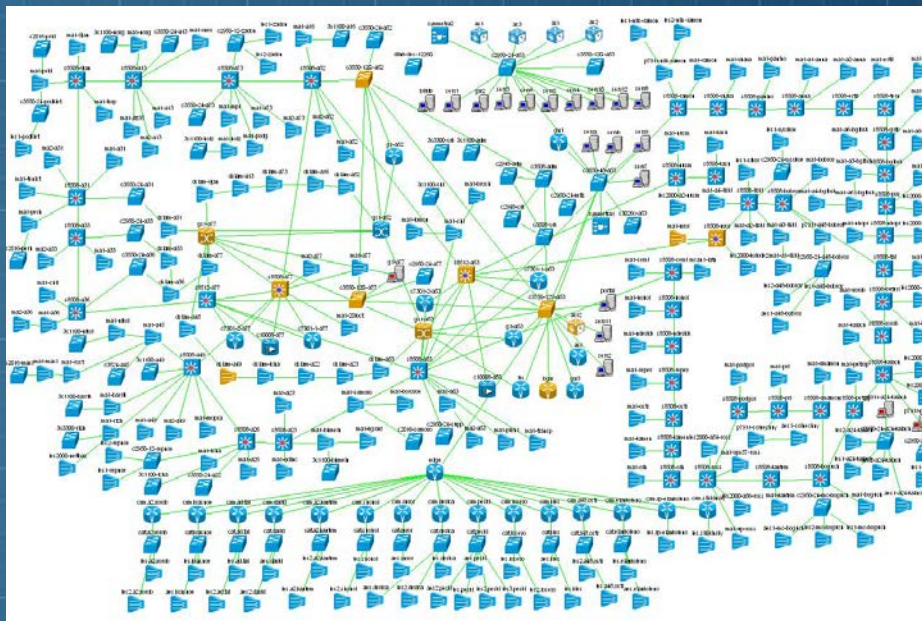
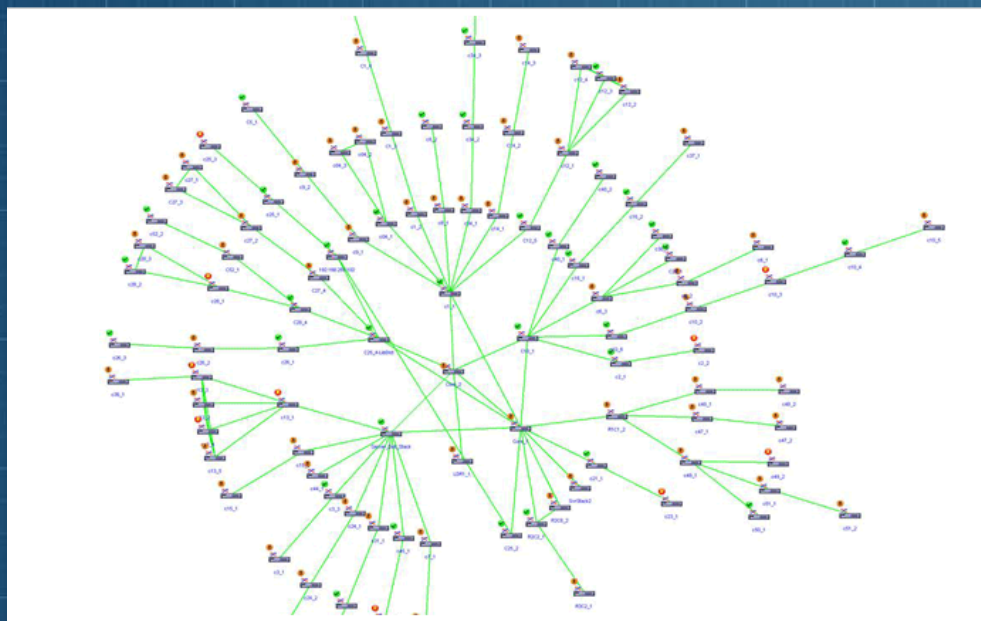
Content, not Chrome

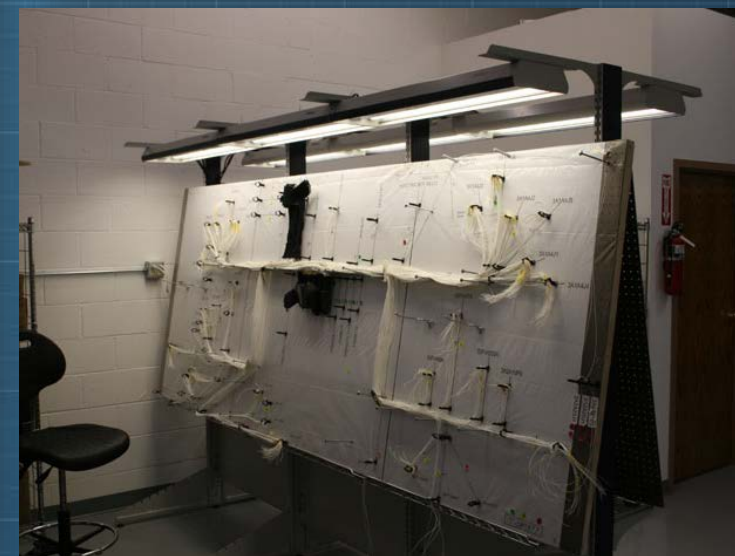
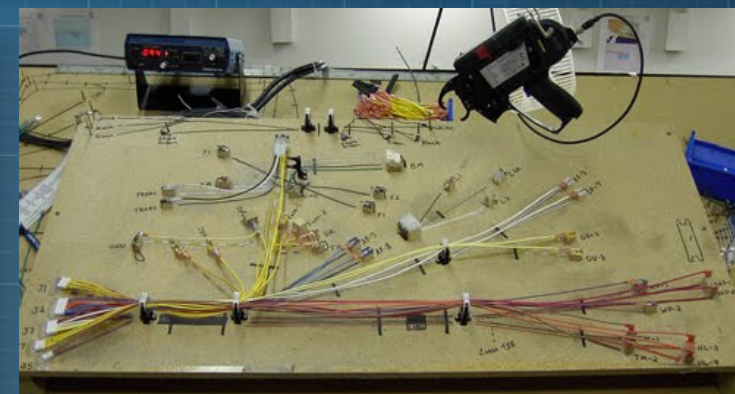
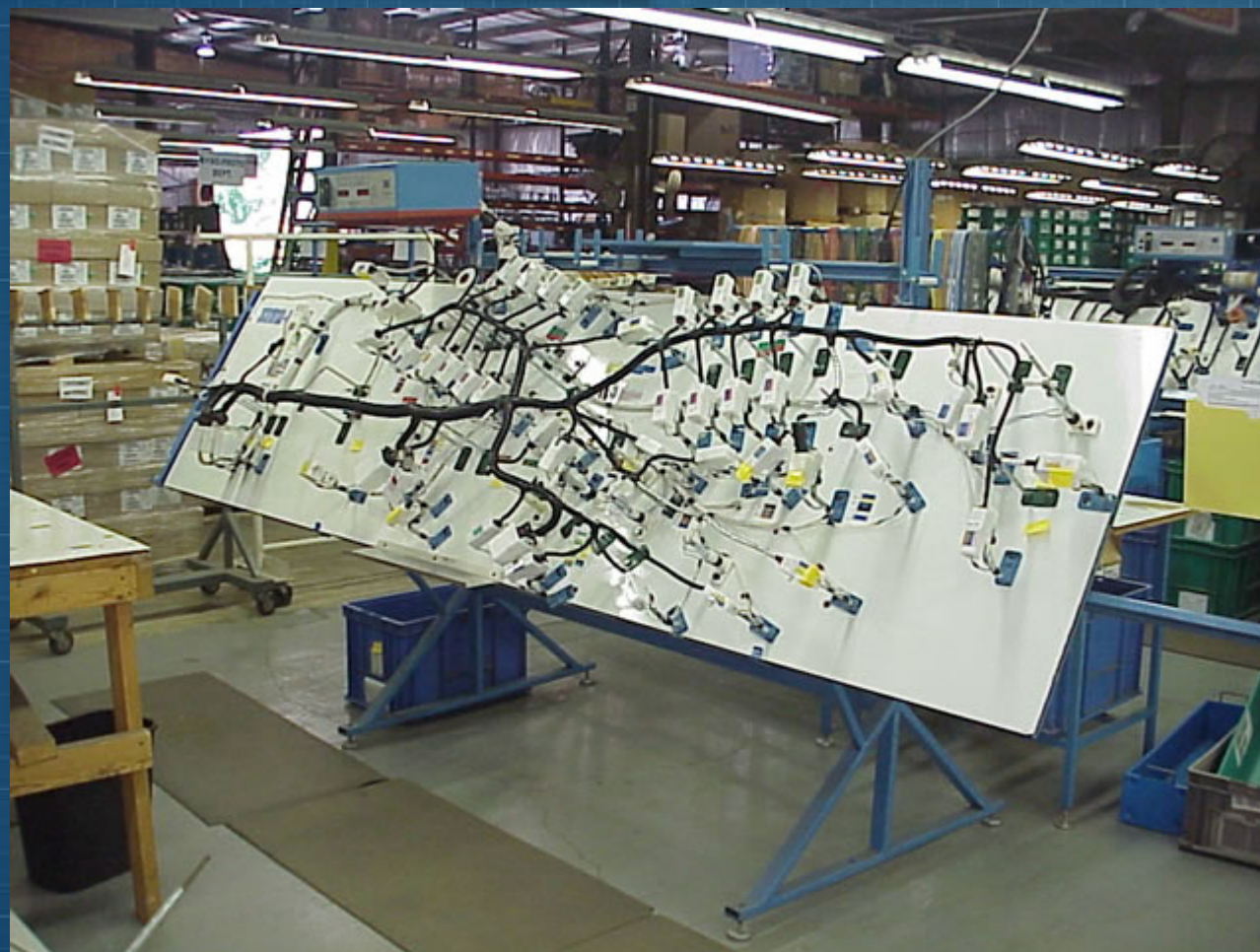
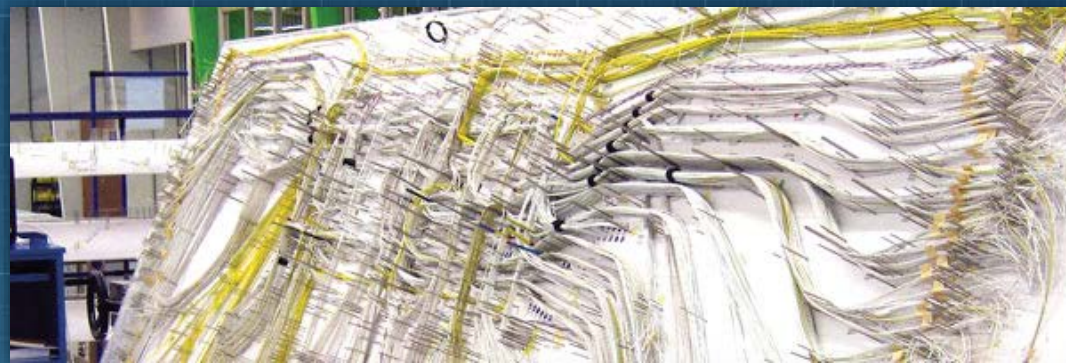
Clean and Clear

Actionable Insight

Diagnostics





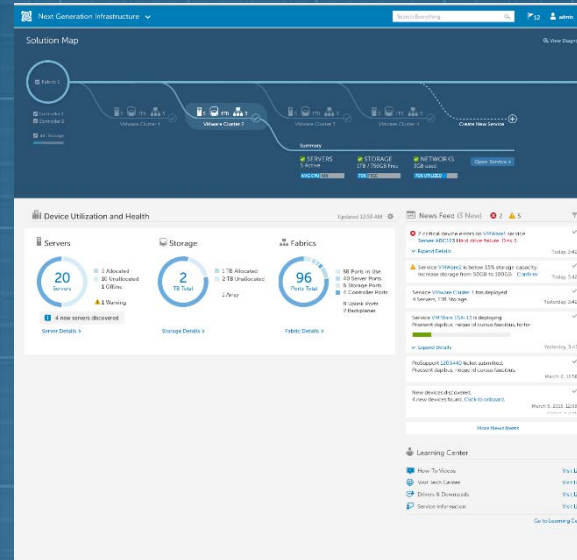
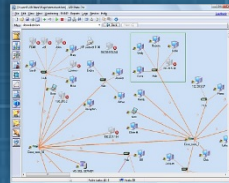




CONNECTIONS

“Plain and simple,
not over
complicated...it’s
perfect...”

CONTENT



DEMO



WHAT'S
NEXT?

Q&A

Appendix



VISION

Dashboard

Server Profiles 5 >

0 0 5



Status

Server Hardware 14 > x

0 0 3



Status

Servers with profiles 14 >



Servers with profiles

Storage Pools 2 >

0 0 2



Status

Enclosures 1 >

1 0 0



Status

Populated blade bays 16 >



Populated blade bays

Logical Interconnects 1 >

1 0 0



Status

Alerts This Week 2 >

1 1 0



Status

Fault Summary

0 11 32 3

Equipment Servers LAN SAN VM Admin

Filter: All

- Equipment
 - Chassis
 - Chassis 1
 - Fans
 - IO Modules
 - PSUs
 - Servers
 - Server 1
 - Server 2
 - Server 3
 - Server 4
 - Server 5
 - Server 6
 - Chassis 2
 - Fabric Interconnects
 - Fabric Interconnect A (primary)
 - Fabric Interconnect B (subordinate)

New Options Exit

>> Equipment > Chassis > Chassis 1 > Servers > Server 1

Server 1

General Inventory Virtual Machines Installed Firmware Management Logs Faults Events FSM Statistics Temperatures Power

Fault Summary

0 0 0 0

Status

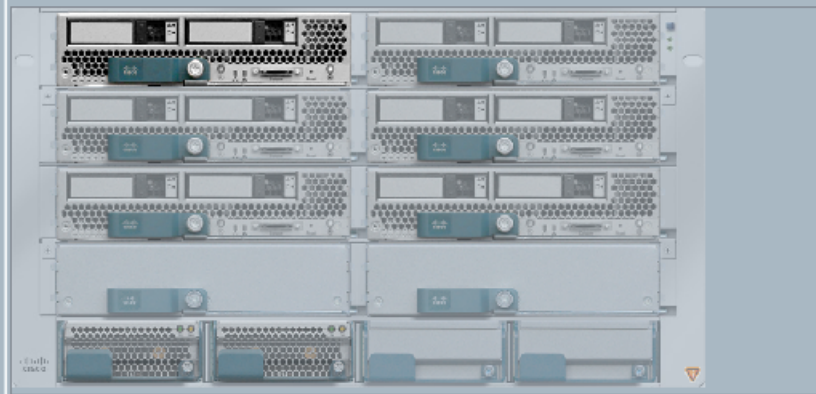
Overall Status: ↑ ok

Status Details

Actions

- Create Service Profile
- Boot Server
- Shutdown Server
- Reset
- Recover Server
- Server Maintenance
- KVM Console
- SSH to CIMC for SoL
- Turn on Locator LED
- View POST Results

Physical Display



Properties

Slot ID: 1 Chassis ID: 1
Product Name: **Cisco B200-M2**
Vendor: **Cisco Systems Inc** PID: _____
Revision: 0 Serial Number (SN): _____
User Label: _____
UUID: _____
Service Profile: _____
Locator LED: ☒

Summary

Number of Processors: 2 Cores Enabled: 12
Cores: 12 Threads: 24
Effective Memory (MB): 73728 Total Memory (MB): 73728
Adapters: 1
NICs: 3 HBAs: 2
Original UUID: _____

Part Details

Connection Details

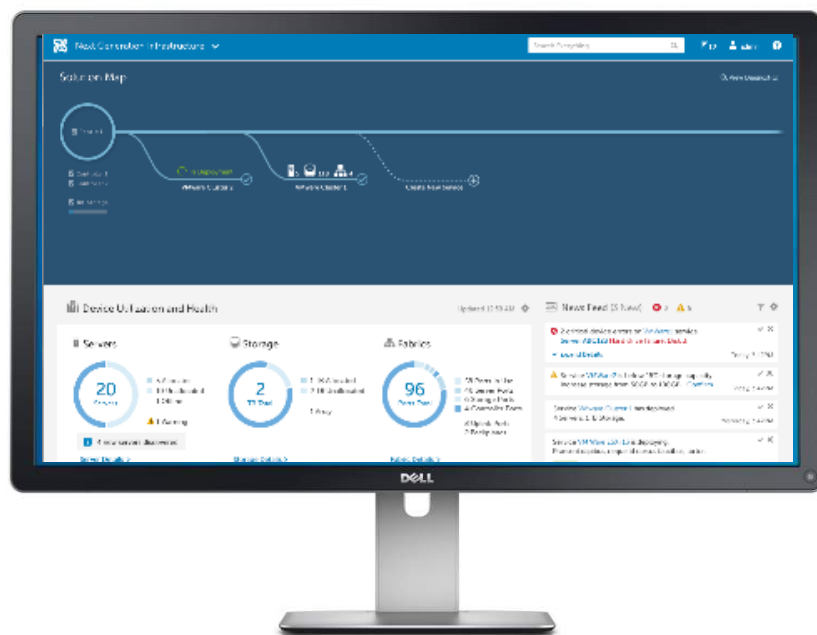
Power Budget

Save Changes

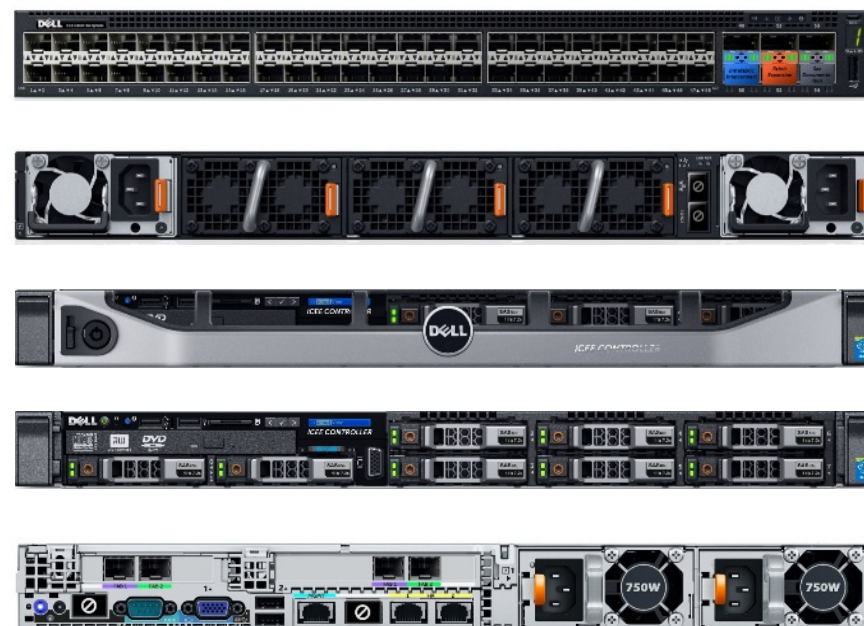
Reset Values

ICEE PROGRAM EDG ROLE

Software research, design
and implementation



Industrial design update for
controllers and backplanes



VANGOGH ID UPDATE

Product badging
Port labeling
Port block offs





ICEE PROGRAM OVERVIEW

INTEGRATED COMPUTE EXPERIENCE for ENTERPRISE



Scalable, modular
compute layer



Advanced fabric
management



Enterprise-class
storage integration



Hyper-converged
experience



Full life-cycle
control system

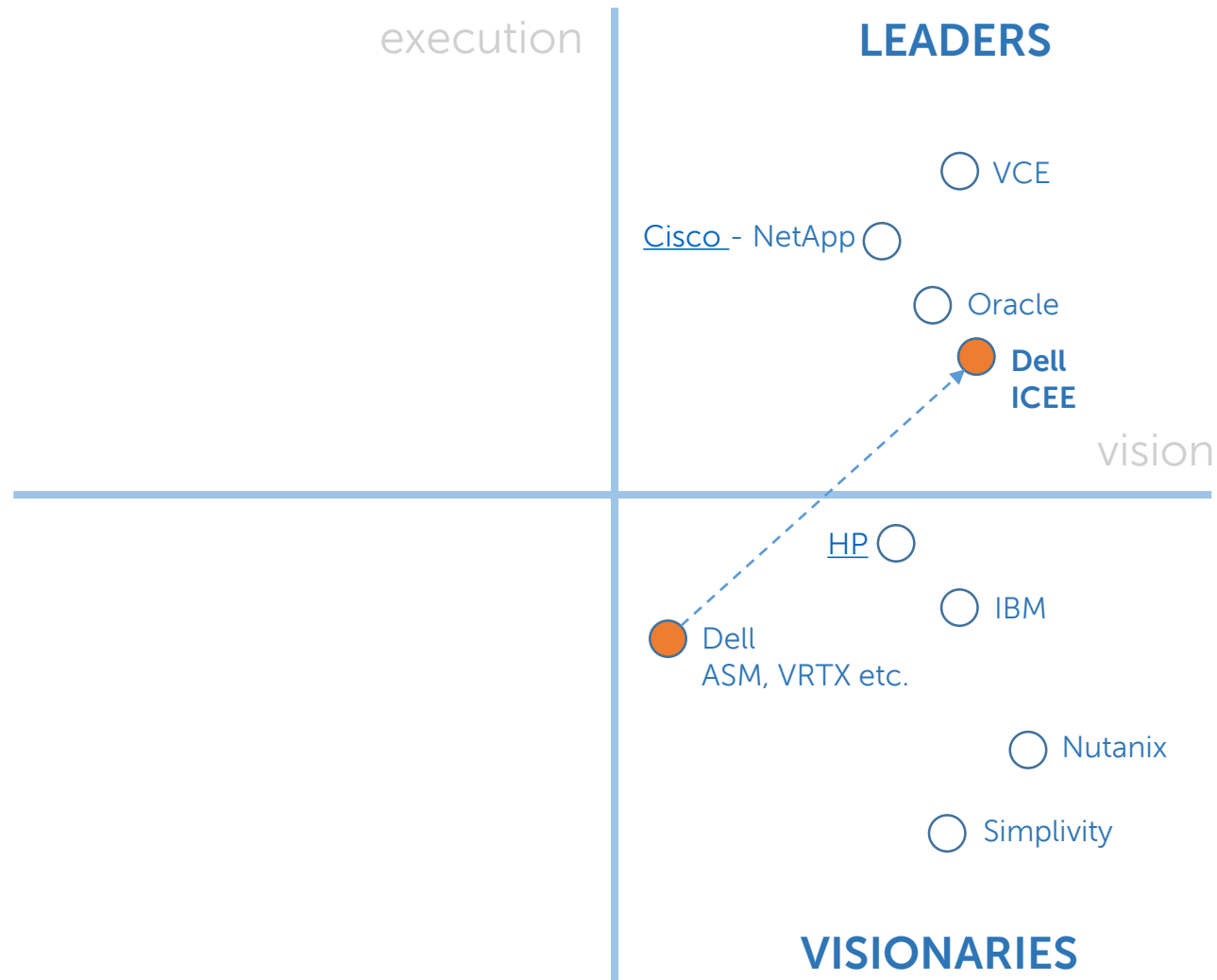


Customer-
deployable

ICEE (Integrated Compute Experience for Enterprise) is a pan-Dell converged infrastructure solution that **fully integrates select server, storage, networking, and software assets** into a massively simplified and unified platform, delivering unique customer benefits for mainstream enterprise workloads



ICEE PROGRAM COMPETITION



Gartner's magic quadrant for CI, 2014

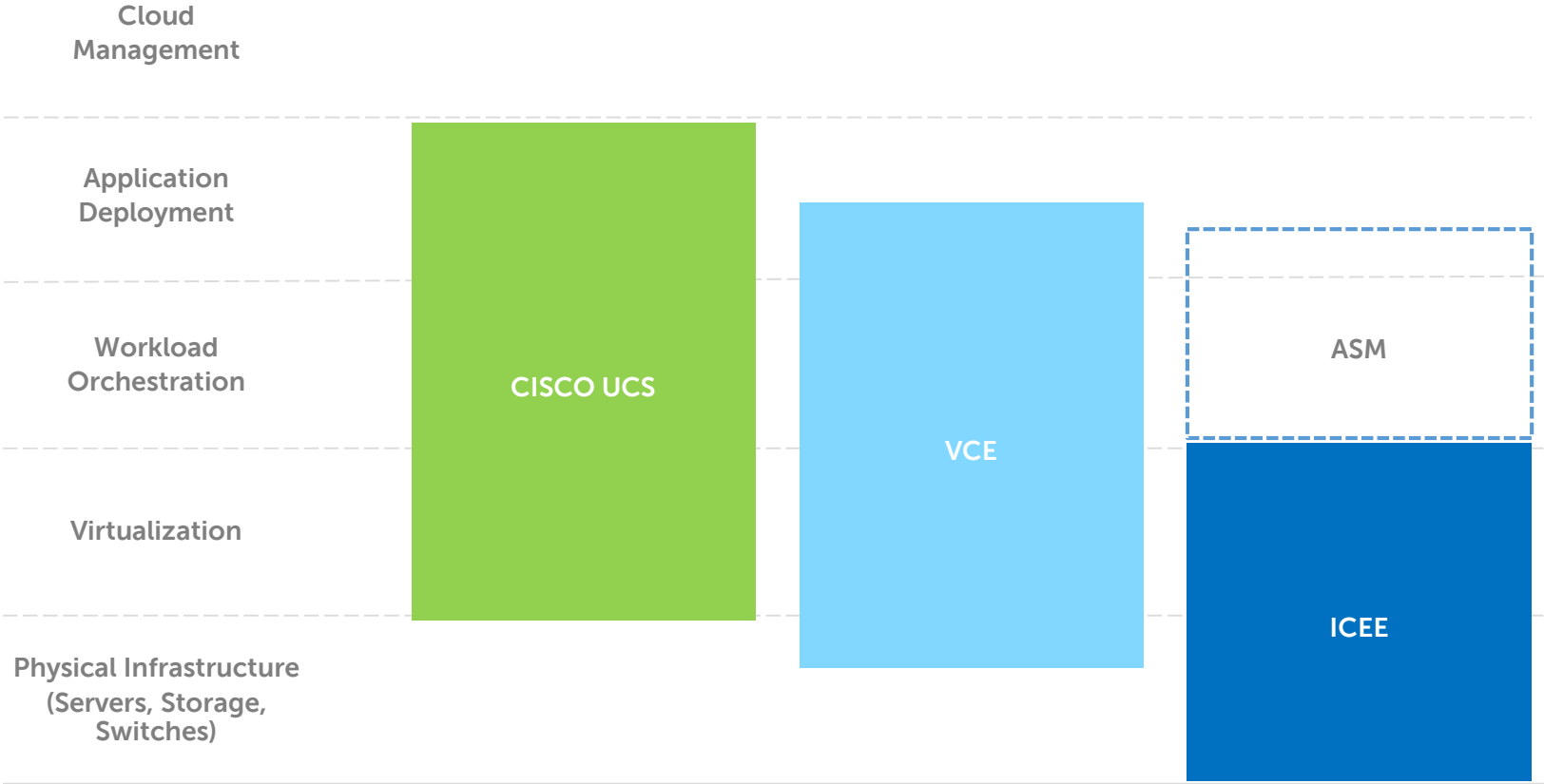
GAPS

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ICEE PROGRAM POSITIONING

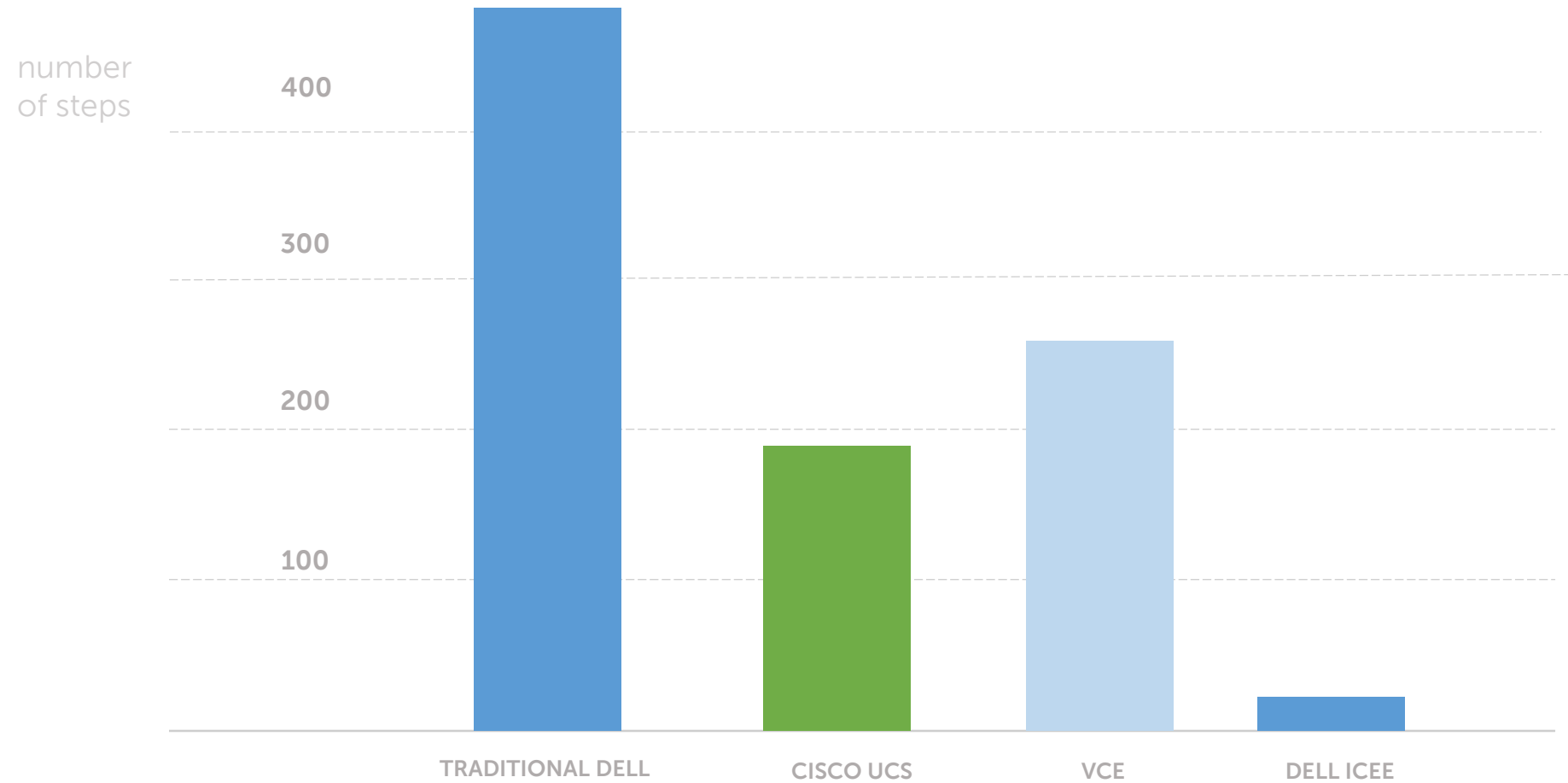
segments





ICEE PROGRAM TARGET

SCENARIO Deploy a service for a VMware™ server cluster with integrated storage and networking.





ICEE PROGRAM TIMING

