DellEMC Networking

Amsterdam , 20. January 2017
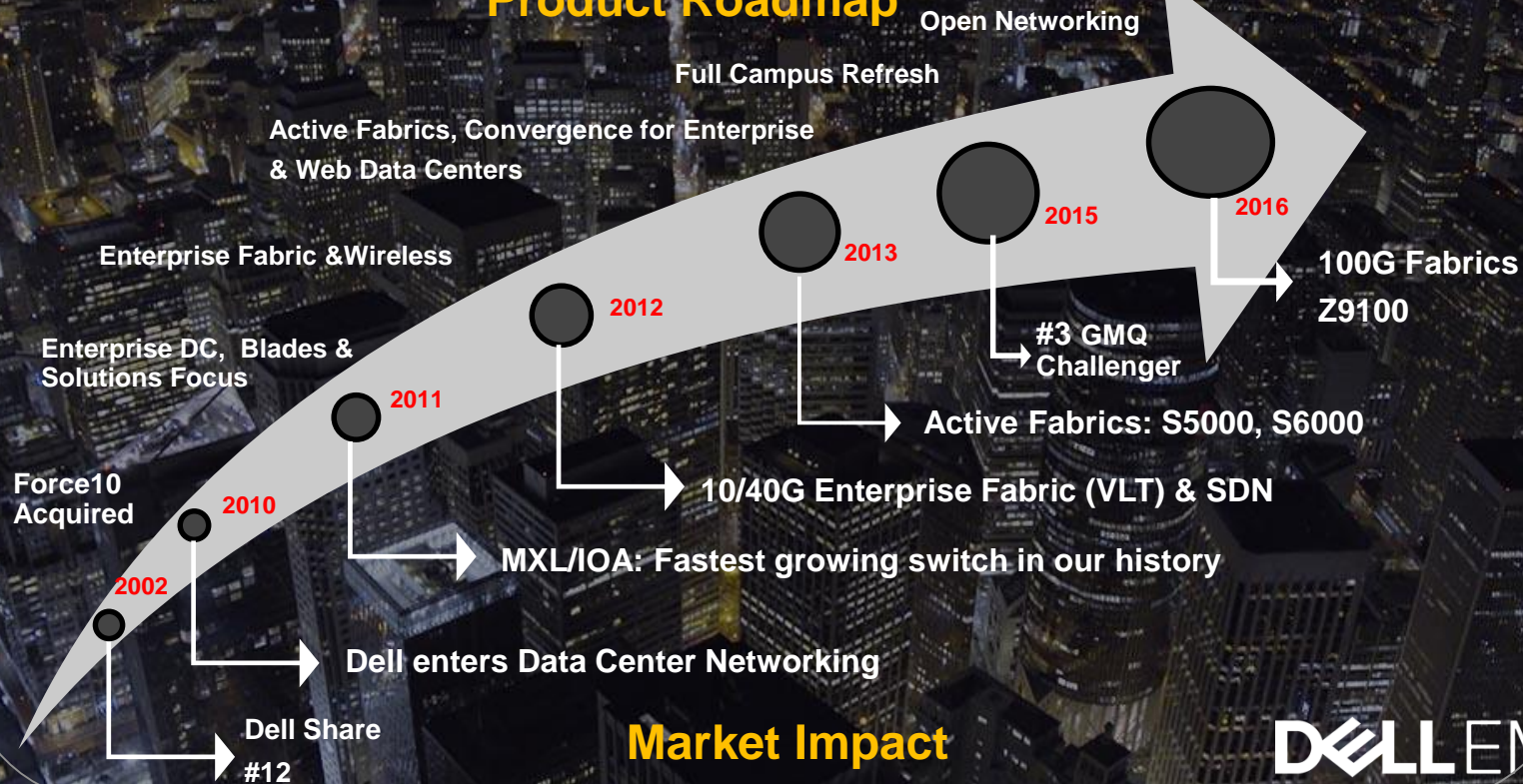
Andreas Falkner, Technical Sales Director Networking EMEA

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Dell EMC Networking: Momentum – 15 Years of Growth

Product Roadmap

Open Networking

Full Campus Refresh

Active Fabrics, Convergence for Enterprise & Web Data Centers

Enterprise Fabric &Wireless

Enterprise DC, Blades & Solutions Focus

Force10 Acquired

2002

2010

2011

2012

2013

2015

2016

100G Fabrics Z9100

#3 GMQ Challenger

Active Fabrics: S5000, S6000

10/40G Enterprise Fabric (VLT) & SDN

MXL/IOA: Fastest growing switch in our history

Dell enters Data Center Networking

Dell Share #12

Market Impact

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Dell EMC is challenging the networking status quo
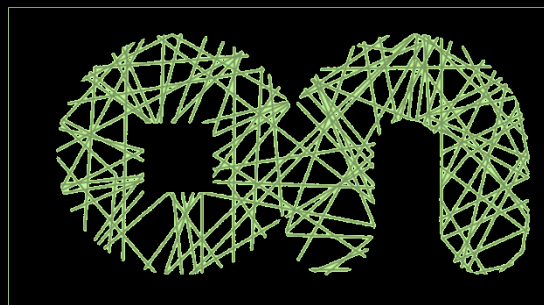
Traditional Networking

Open Networking

Proprietary architectures

Proprietary software

Proprietary ASICs

Investment protection

Innovation velocity

Business agility

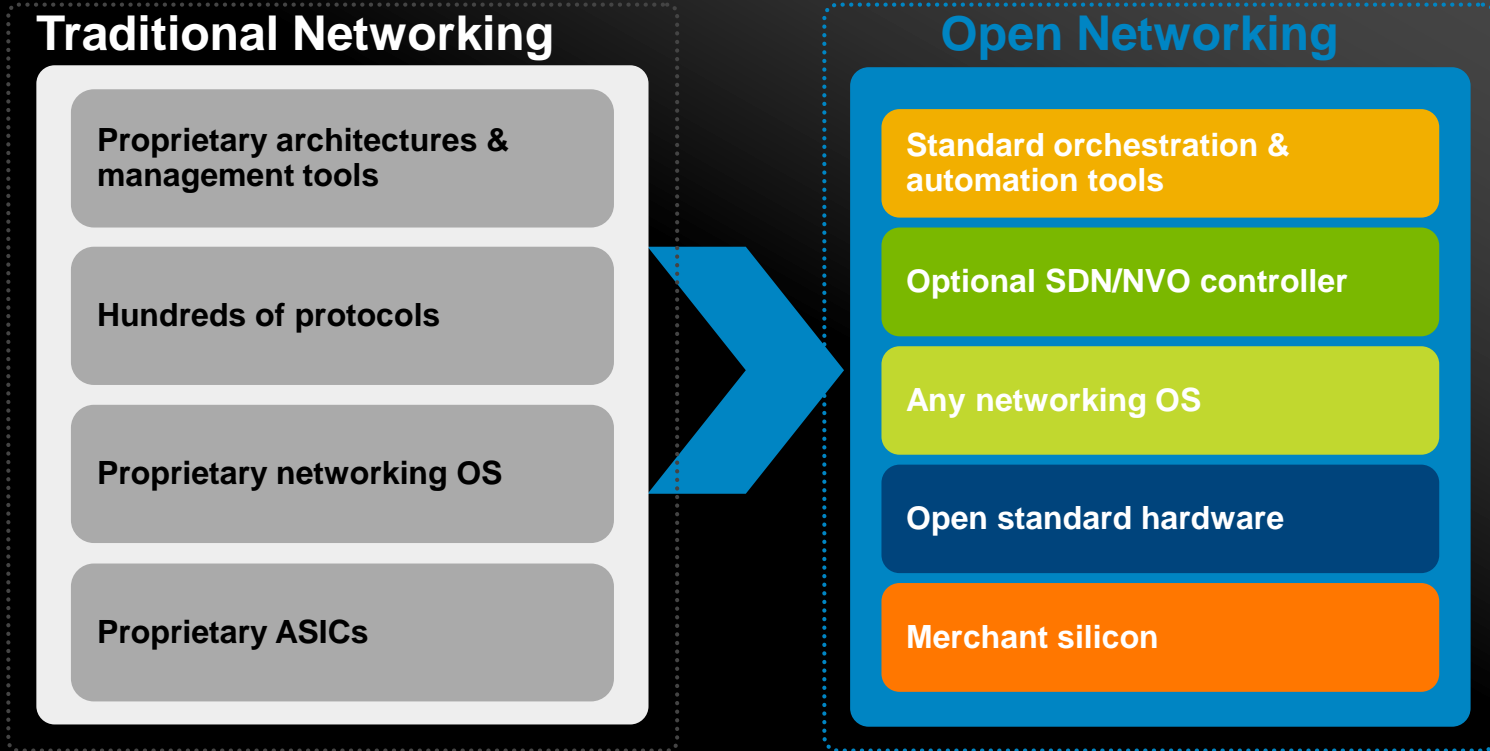Shifting the paradigm →

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Our vision for the network is **OPEN**

Traditional Networking

- Proprietary architectures & management tools
- Hundreds of protocols
- Proprietary networking OS
- Proprietary ASICs

Open Networking

- Standard orchestration & automation tools
- Optional SDN/NVO controller
- Any networking OS
- Open standard hardware
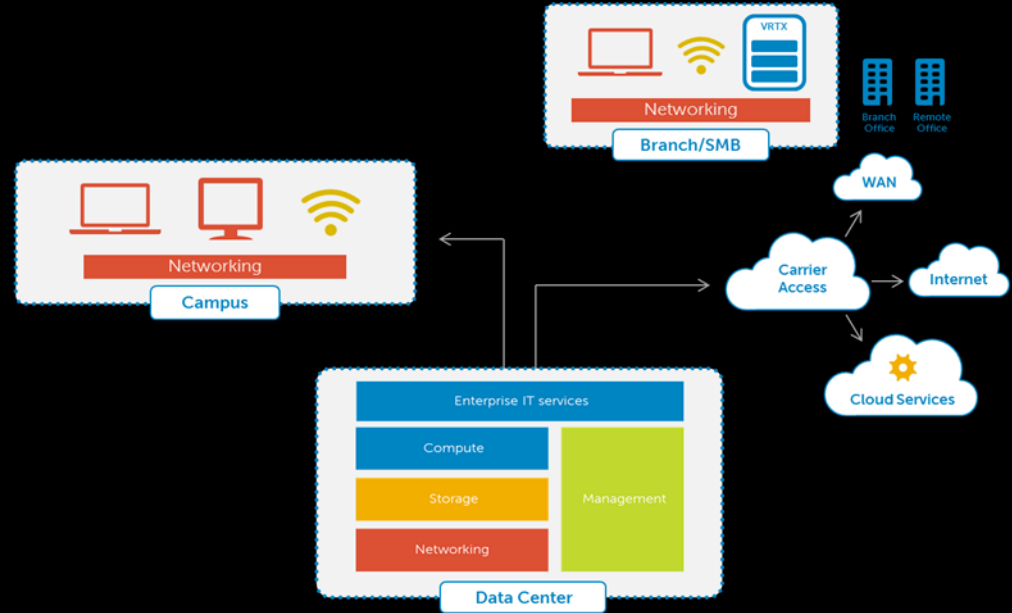- Merchant silicon

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Dell EMC Networking—Foundational elements for the Future-Ready Enterprise

Dell Networking

Open, software-defined networking solutions for the data center, campus and branch/SMB

Fully converged to completely disaggregated solutions for networking at any scale

Future-Ready Enterprise

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How to transform your network with Dell EMC

Data Center		Campus
1	**2**	**3**
Attack the rack with advanced 10/25/40GbE blade, top-of-rack and Open Networking switches from Dell EMC	Stitch the racks together with 10-100GbE SDN-ready Active Fabric, Open Networking and SAN solutions	Simplify end user access with One Network that's infinitely scalable, cost-effective and easy to manage

Networking Product Solution Overview

Datacenter Networking

Fabric Spine	Top-of-Rack/Leaf	Blade IO/Leaf
Z-Series	S-Series	MXL/IOA for M1000e FN-IOM for FX2

End User Networking

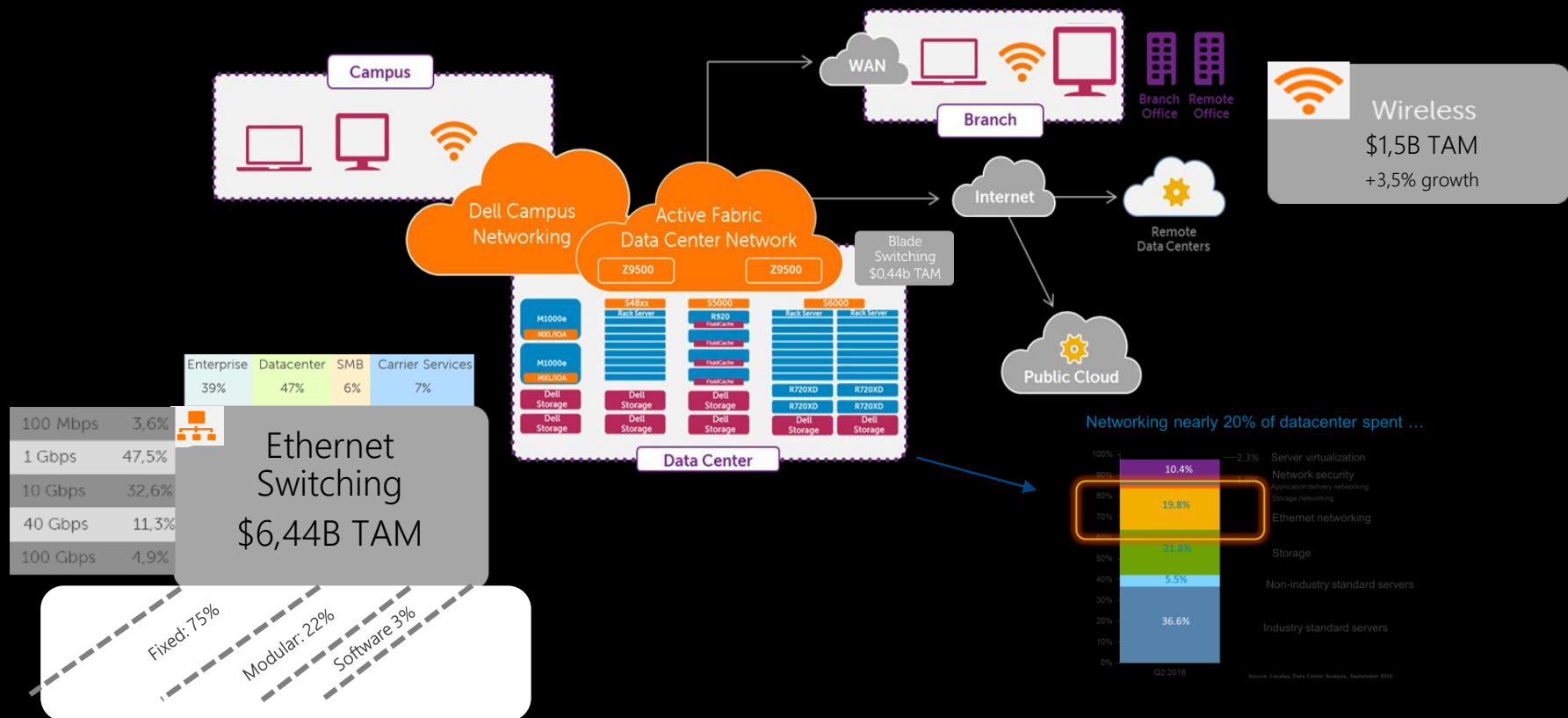| Campus Core	Access/Aggregation	Wireless
C-Series	N-Series & X-Series	W-Series Aerohive

EMEA Networking TAM in FY18 : $7.9b

Sources : Dell'Oro, 1QCY16 Ethernet Switching market, WLAN, Ethernet Location; Crehan Reseach, IDC/Infonetics

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Who is who – Dell EMC Networking (Sales)

EMEA Networking GM – Dominique Vanhamme
Assistant to GM – Inge Vanhaeren

Sales Engineering – Andi Falkner
Channel (excl. EMG) – Mark Pearce
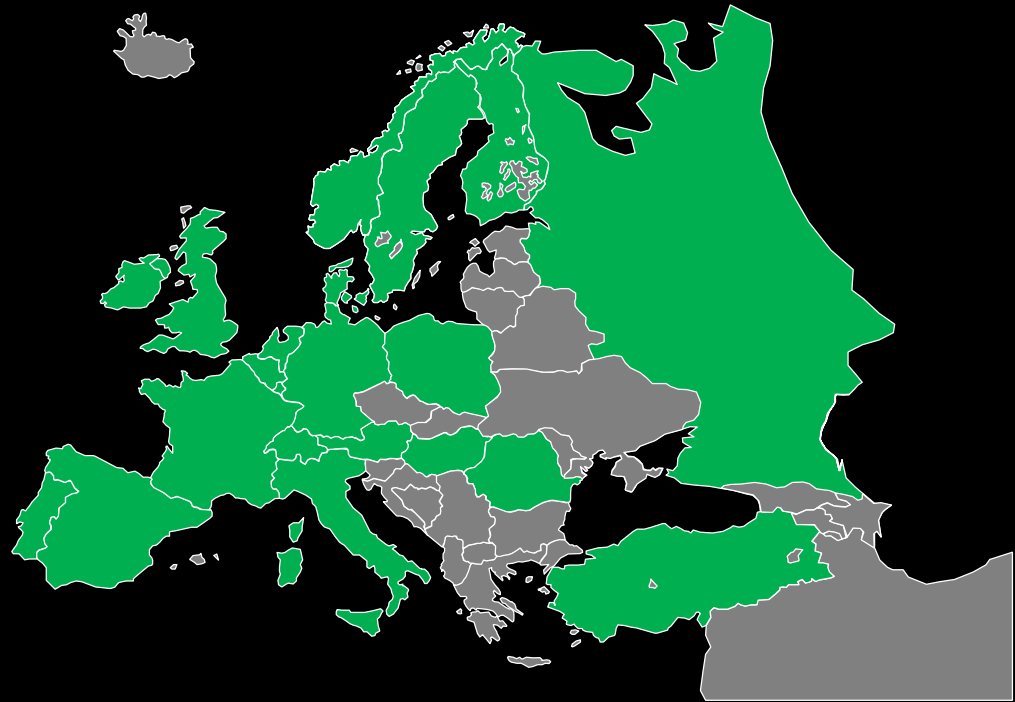**UK** – Lee Larter
Germany – Alexander Thiele
France – Gilles Petit
Western North – Dominique Honnay
Western South – Mario Ueno
Emerging Markets – Shabbir Ahmad

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EMEA Networking FY18 Strategy

Dell Networking Strategy

Open Networking

Choice in SDN

Lead in Convergence

Sales Motions

Cross LoBs Solutions

———————

Pure-breed Networking Projects

Acceleration Areas

Attach
Solutions and Better Together

NEW With HCI
NEW With EMC legacy Storage
- With Modular Server
- With SC, PS, MD3, ..
NEW With Cloud & ECS

Ideally >15% or revenue mix

Run rate
Frictionless, <$25k transactions

- Leverage Inside teams
- Scale velocity in Attach
- Channel partners & programs

Ideally >15% or revenue mix

Projects
Including Deals >$100k & >$1m

NEW Expand on EMC ENT accounts
- Incl Brocade, NSX, …
NEW Moneytize NFV early wins
- Breakthrough in Global Accounts

Ideally >70% or revenue mix

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Where to focus now

- Spine-Leaf for ScaleIO Deployments
  - Software-defined storage solution for large-scale deployments
  - Dell EMC Networking Spine-Leaf design for ScaleIO addresses networking for large deployments

- Isilon Front-End NW
  - All Isilon clusters require a front-end and back-end network, but low attach on front-end network today.
  - Engage Isilon sales team on any opportunity, where front-end NW is always Ethernet

- Dell XC Series and VxRail
  - WW pipeline currently for Nutanix is >$500M and growing (leverage current collateral and deployment guides)
  - Full permission to drive Dell EMC Networking with VxRail
  - Deployment Guide Complete

- FCOE and iSCSI on VMAX, VNX, Unity, and XtremIO
  - Industry-leading storage arrays that currently drive very low non-FC networking attachment
  - E-Labs Certification for S4048, S5000, S6010, S6000, MXL, M-IOA, FN2210S

Cisco is the #1 threat to Dell in the enterprise

How they sell — CISCO

- 60 percent market share in L2/L3 Ethernet switching, which they use to lock-in customers to their proprietary architectures and technology
- Massive networking product portfolio that includes switches, routers, wireless and security
- Strong channel presence
- Technical certifications are the industry standard
- "No one ever got fired for buying Cisco"

DELL EMC — How we win

- Open alternative to Cisco; no vendor lock-in (open standards-based technology)
- Interoperable with Cisco; no rip-and-replace
- Lower acquisition costs (capital expense)
- Lower power and cooling requirements (operating expense)
- Minimal learning curve; common syntax and programmatic interfaces

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Other major networking competitors

ARISTA

High-end Data Center networking vendor

- Position Dell EMC Networking as an open alternative at the top-of-rack
- Position Dell Active Fabric solutions to complement Arista chassis core or as economical alternative
- Position OS10 vs. Arista EOS for advanced customers

hp

Broad base IT solutions provider for Enterprise

- Position Dell EMC Networking as open, innovative, visionary alternative
- Compete at the top-of-rack for server, storage & converged
- Position Dell Active Fabric solutions as cost-effective alternative to legacy HP core

JUNIPER NETWORKS

High-end networking vendor with Carrier appeal

- Position Dell EMC Networking as proven, innovative Enterprise networking supplier
- Compete at the top-of-rack and for scale-out fabric solutions
- Position OS10 vs. JunOS for open programmability for advanced customers

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Harnessing a cloud of opportunity

itconic
Innovate IT

Opportunity:
With the cloud services market continuing to grow, Itconic wanted to create a highly flexible platform on which to bring cloud IT to its customers.

Solution:
The company deployed a Dell end-to-end solution featuring Dell PowerEdge servers and Dell Storage SC Series arrays with Intel® Xeon® processors, and **Dell Networking Z9500, S6000 and MXL switches**. Dell ProSupport helps maximize uptime.
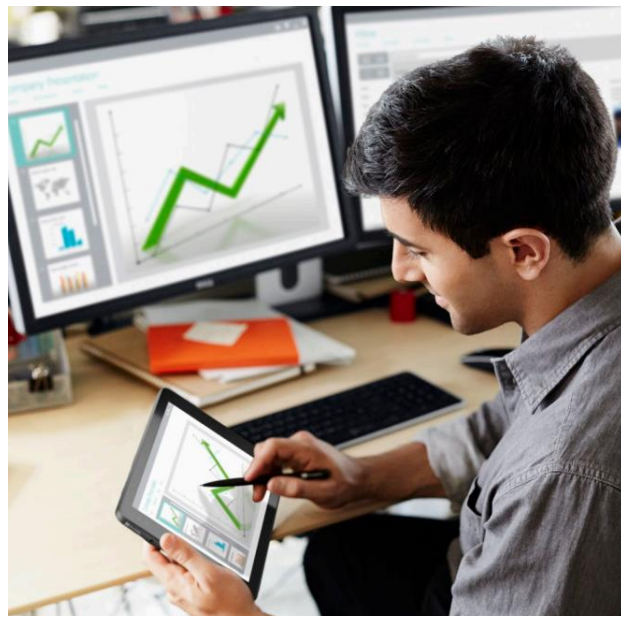
Results:
Supports innovation for customers through flexible IT

Drives up to 50 per cent business growth with cloud services offering

Achieves 50 per cent saving on cost of alternative switching technology

Avoids vendor lock-in to **maintain efficiencies**

Ensures enterprise-class client services with **responsive support**

> **"We wanted to implement a more open solution, specifically on networking, giving us greater freedom to make changes as we needed. "**
>
> – José Ignacio López García, Head of Cloud Services, Itconic

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The network to power intergalactic discovery

EGO — EUROPEAN GRAVITATIONAL OBSERVATORY

Opportunity:
EGO needed a modern network to cope with the expansion of its laser interferometer.

Solution:
The observatory completed a comprehensive upgrade of its data center that included **Dell Networking S-Series and MXL blade switches**, a Dell PowerEdge converged platform with Intel® Xeon® processors, and Dell Storage.

Results:
Faster network with higher throughput allows worldwide scientific community to react to events more quickly

Downtime and related costs virtually eliminated with **resilient network**

EGO has an infrastructure designed to **match its growth** as it explores 1,000 times more of the universe

Virtualized server environment results in threefold **increase in processing power**

> "With the redundant network based on Dell, the risk of unexpected downtime has been virtually eliminated. We sleep soundly."
>
> – Antonella Bozzi, Head of IT Department, European Gravitational Observatory

Learn More >   Biotechnology & Science   #DellStory

Gartner Networking Magic Quadrant
Recognized for our **Vision and Execution**

Dell EMC Networking Strategy

Superior customer benefit

1 Harness 10GbE, 25GbE and 40GbE switching technologies to connect, consolidate and combine in-rack server and storage elements

2 Develop 10-100GbE high-performance, automated data center fabric and open networking solutions to accelerate east-west traffic and lower cost structures

3 Simplify end user access with One Network that's infinitely scalable, cost-effective and easy to manage

- **Maximum efficiency—**Save money, conserve space and reduce power consumption

- **Faster results—**Scale up, down and out on your terms easily and economically

- **Reliable operation—**Get results you expect when you expect them

…Modernize and transform your network on your terms

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Networking Call to Action

Attend the EMEA Networking Bootcamp - Ongoing

Align with your local Networking Team - NOW

EMC Networking Technology Camp - March

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"Go Big, or go home" !!