


ANGA COM 2025 | Axians In-Booth Theater

Networking the cloud with Nokia – reliable, secure, and automated

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Networking the Cloud - DC Fabric

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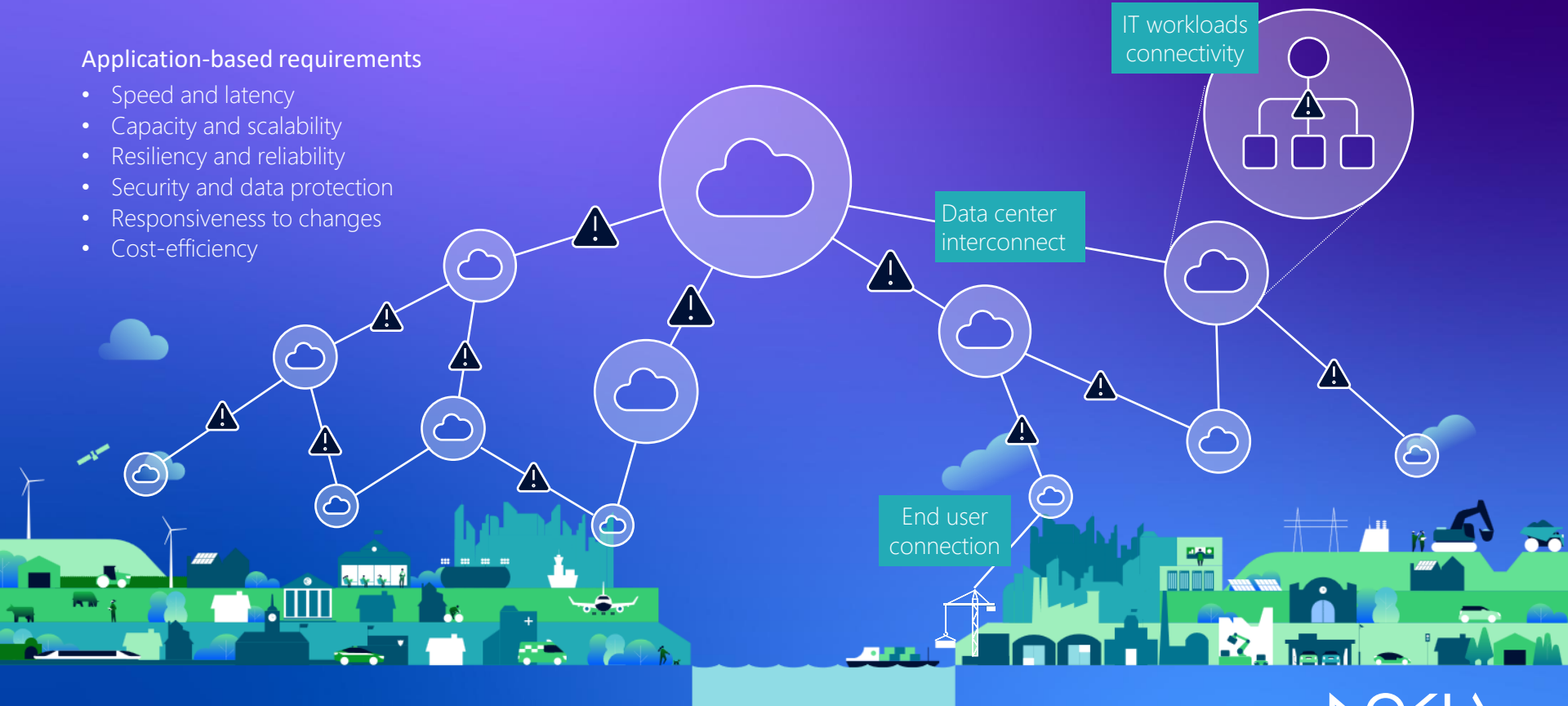


NOKIA

The critical role of the network

Application-based requirements

- Speed and latency
- Capacity and scalability
- Resiliency and reliability
- Security and data protection
- Responsiveness to changes
- Cost-efficiency



Networking for the AI era



Builds on and leverages
kubernetes



Event-Driven-Automation

Intent-Based Network management, automation and orchestration

DDoS Protection

DDoS Detection, Mitigation and scrubbing



AI for network operations



Edge Cloud



WAN



Internet



Public cloud

IP connectivity

Optical connectivity



Data center fabric

Reliable data center switching with predictable and simplified operations for your data center environments



Data center gateway

High performance DC to DC, DC to internet, DC to WAN and DC to clouds interconnect and DDoS mitigation



Optical DCI

Dedicated optical networking enables high bandwidth, very low latency and highly secure data transmission for business-critical applications

Nokia Data Center Fabric solution

Build and operate at scale with confidence

EDA
Fabric Manager



Intent-driven
design and
operations



Digital sandbox
for true
emulation



Cloud-native
integration
model



Cloud-native, Kubernetes-based extensible foundation

Service Router Linux
Network operating
system (NOS)

SR
Linux

Open, scalable
telemetry
framework



Open-source
CLI plugins
(Python)



NetOps
Development
Kit (NDK)



Standard
Linux
kernel



Ground-up,
model-driven
foundation



Resilient,
field-proven
protocol stacks

SR
OS

7250 IXR, 7220 IXR
Data center platforms



Based on
merchant
silicon



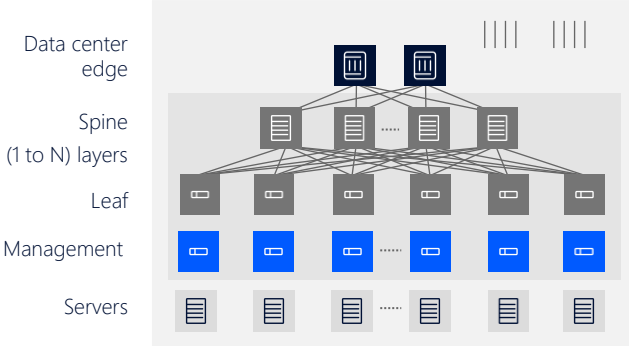
Common
hardware and
software design



Full range of DC
applications



Data Center Fabrics



- Nokia 7750 SR
- Nokia 7250 IXR-6e/10e
- Nokia 7250 IXR-6e/10e
- Nokia 7220 IXR D5/H2/H3/H4/H5
- Nokia 7220 IXR D1/D2L/D3L/D4/D5
- Nokia 7220 IXR-D1
- Nokia 7215 IXS-A1



Super spine/DCI



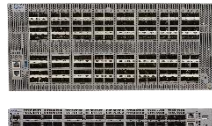
Management ToR



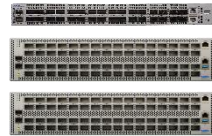
Leaf



Leaf/Fixed spine



Fixed spine



Fixed spine



Fixed spine / DCI

7215 IXS-A1
7220 IXR-D1

- 88G (FD)
- 48x GE
- 4x 10GE

7220 IXR-D2L, D3L

- 2T (FD)
- 48x25GE + 8x100GE + 2x10GE
- 3.2T (FD)
- 32x100GE + 2x10GE

7220 IXR-D4, D5

- 6T (FD)
- 28x 100GE + 8x400GE (D4)
- 12.8T (FD)
- 32x 400GE (D5)

7220 IXR-H2, H3

- 12.8 T (FD)
- 128x 100GE (H2)
- 32x 400GE (H3)

7220 IXR-H4, H5

- 12.8 T (FD)
- 32x 400GE (H4-32D)
- 25.6T (FD)
- 64x 400GE (H4)
- 51.2T (FD)
- 64x 800GE (H5)

7250 IXR-X1b, X3b

- 7.8 T (FD)
- 24x 100GE + 12x400GE (X1b)
- 14.4T (FD)
- 36x 400GE (X3b)

7250 IXR-6e/10e/18e

- 115.2T/230.4T/460.8T (FD)
- Cntrl/Fab Red
- 36 x 400 IMM
- 60 x 100 IMM
- 36 x 800 IMM

M/TD

TD3

TD4

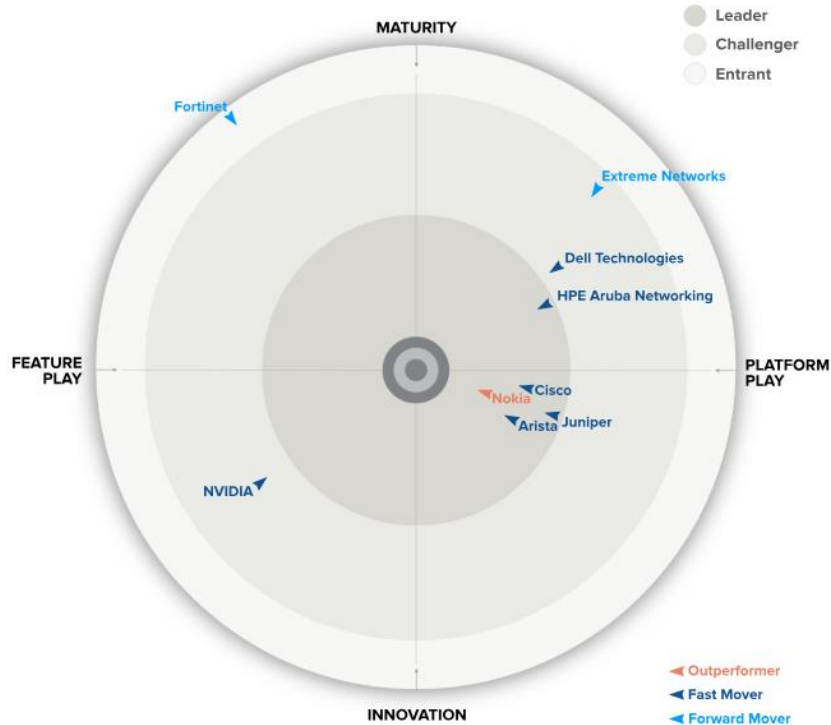
TH3

TH4/5

J2C+ / J3

GigaOm Radar for “Data Center Switching”

Nokia recognized for innovation and broad use case support



MATURITY: Emphasis on stability and continuity; may be slower to innovate

INNOVATION: Flexible and responsive to market; may invite disruption

FEATURE PLAY: Offers specific functionality and use case support; may lack broad capability

PLATFORM PLAY: Offers broad functionality and use case support; may heighten complexity.



Radar Chart Overview:

Nokia was classified as an Outperformer given its large set of features, recognized robustness and innovation in the area of NetDevOps

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**Vielen Dank
für Ihren Besuch!**

**Wie hat Ihnen der
Vortrag gefallen?**

Titel: Networking the cloud with
Nokia Referent: Korhan Kayhan,
Nokia



Jetzt abstimmen