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XXII 2026

Networks for AI

Market trends and drivers

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CIENA

TD SYNNEX

In collaboration with

ciena



About Ciena

Ciena is the global leader in high-speed connectivity

We build advanced networks to support exponential growth in bandwidth demand.

With unparalleled expertise and innovation, our **networking systems**, **interconnects**, **automation software**, and **services** revolutionize data **transmission and network management**.

Patents **2,400+**	R&D specialists **4,500+**	Employees **9,000+**
Countries operating in **150+**	FY25 revenue **$4.77B**	Cash and investments **$2.8B**



Enabling AI-ready networks at scale

Optical Systems

WaveLogic
Waveserver
6500/RLS

Routing & Switching

WaveRouter
3000 · 5000 · 8000
Coherent routing

Interconnects, Modules and Components

WaveLogic modules
Vesta
ASICs
Nitro

Automation

Navigator NCS
Blue Planet

Services

Plan
Deploy
Operate
Optimize

Hyperscalers & cloud providers

Carriers

Business & Government

Submarine networks

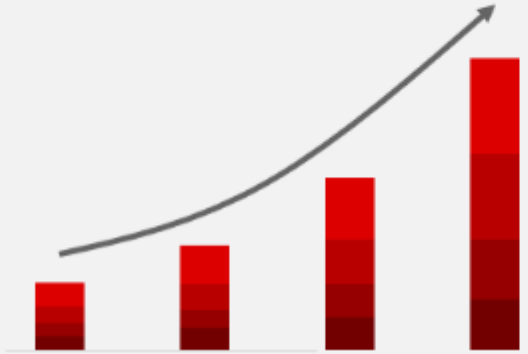


AI investment hypercycle drives connectivity

1

Hyperscaler infrastructure boom

Interconnecting AI factories, record CAPEX, massive scale



2

The rise of neoscalers

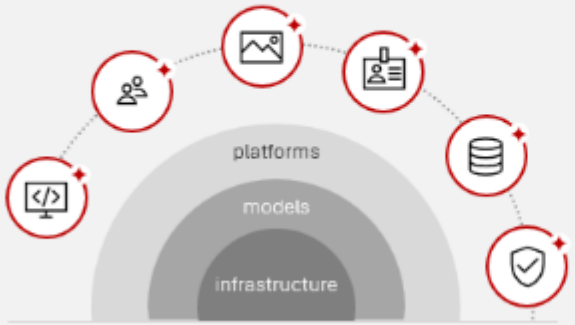
A new wave of specialized players expanding the AI ecosystem



3

Enterprise AI acceleration

Enabling agent customization and accelerating enterprise AI.



4

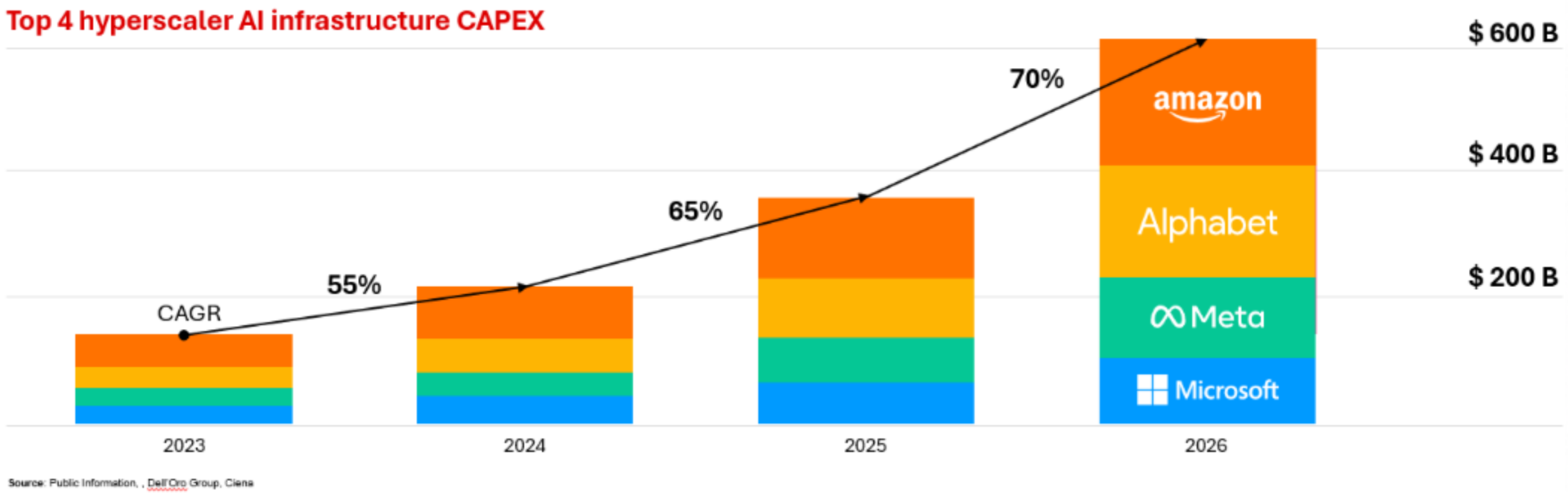
Evolving data center distribution

New routes and locations to interconnect as data centers scale in a new market dynamics



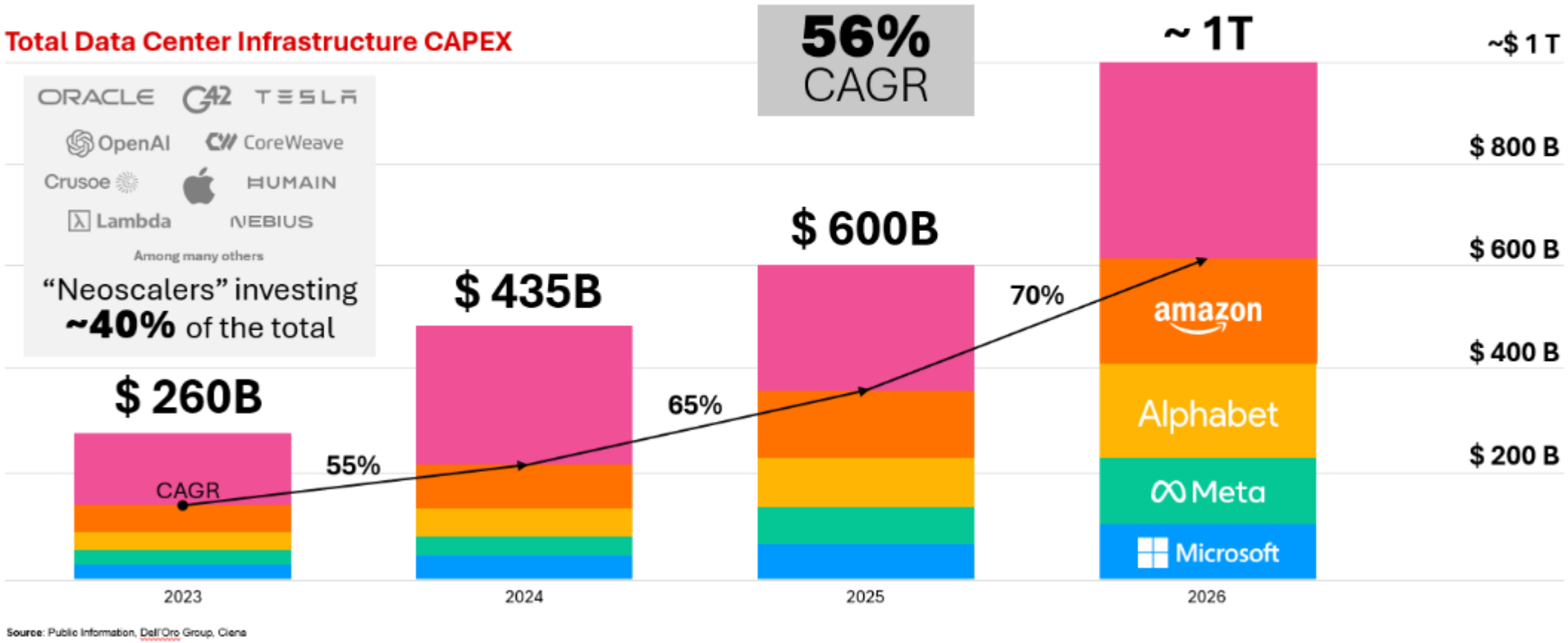
AI driving massive investment...

From the hyperscalers



AI driving massive investment...

From the hyperscalers but also the "Neoscalers" (including GPUaaS)



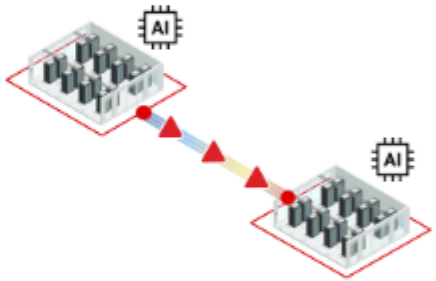
The AI Connectivity Spans Training and Inference

TRAINING:
Scaling for AI development

Concentrated network demand



Massive AI factories

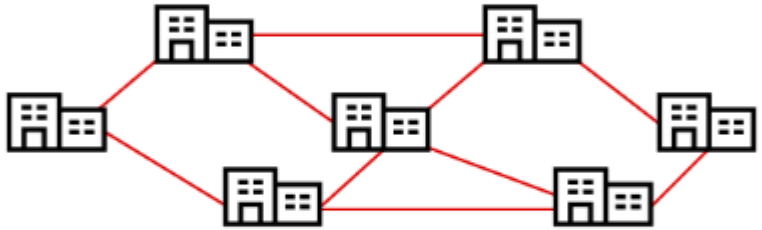


Distributed AI factories must behave as one

- Concentrated in large clusters, a few locations
- Primarily east-west traffic
- Bandwidth-driven

INFERENCE:
Scaling for AI usage

Distributed network demand



Globally distributed inference capacity

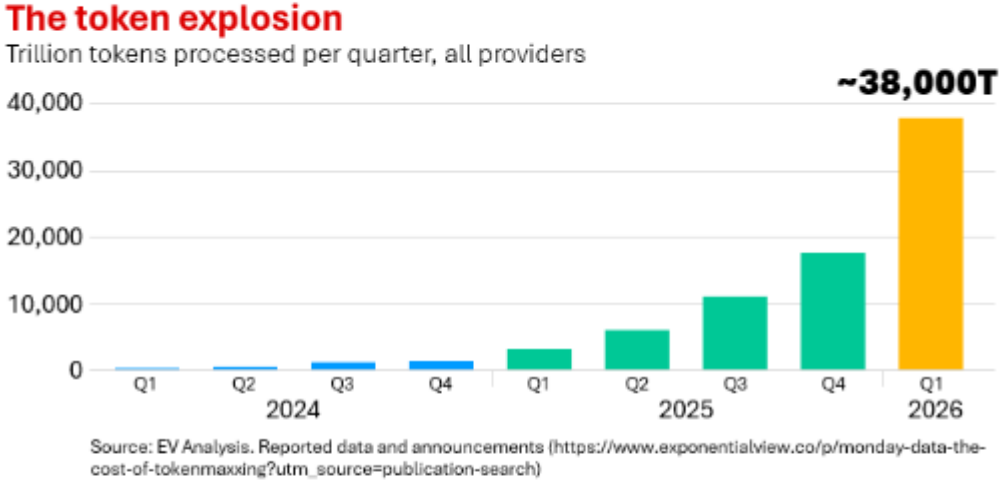
- Distributed closer to end users and data
- Significantly growing north-south connectivity
- More latency-sensitive, dynamic and meshy

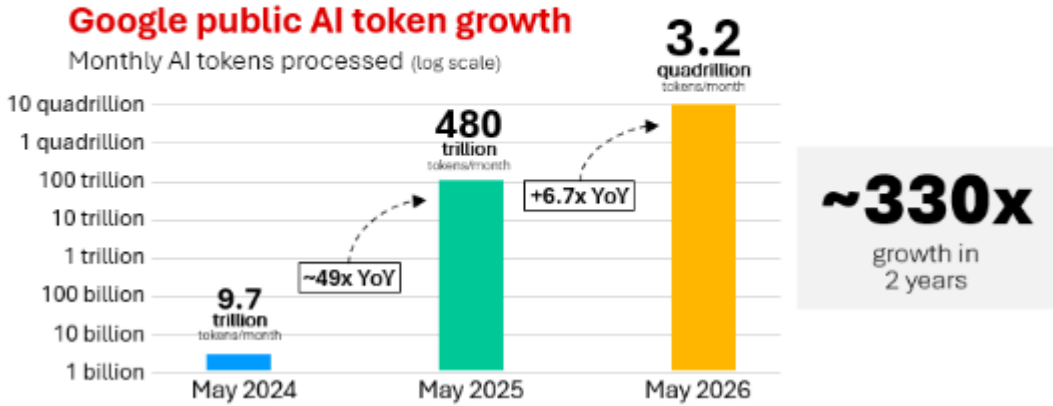
Connectivity between training DCs → Broader set of connectivity demands

The inference shapes a new era of global connectivity

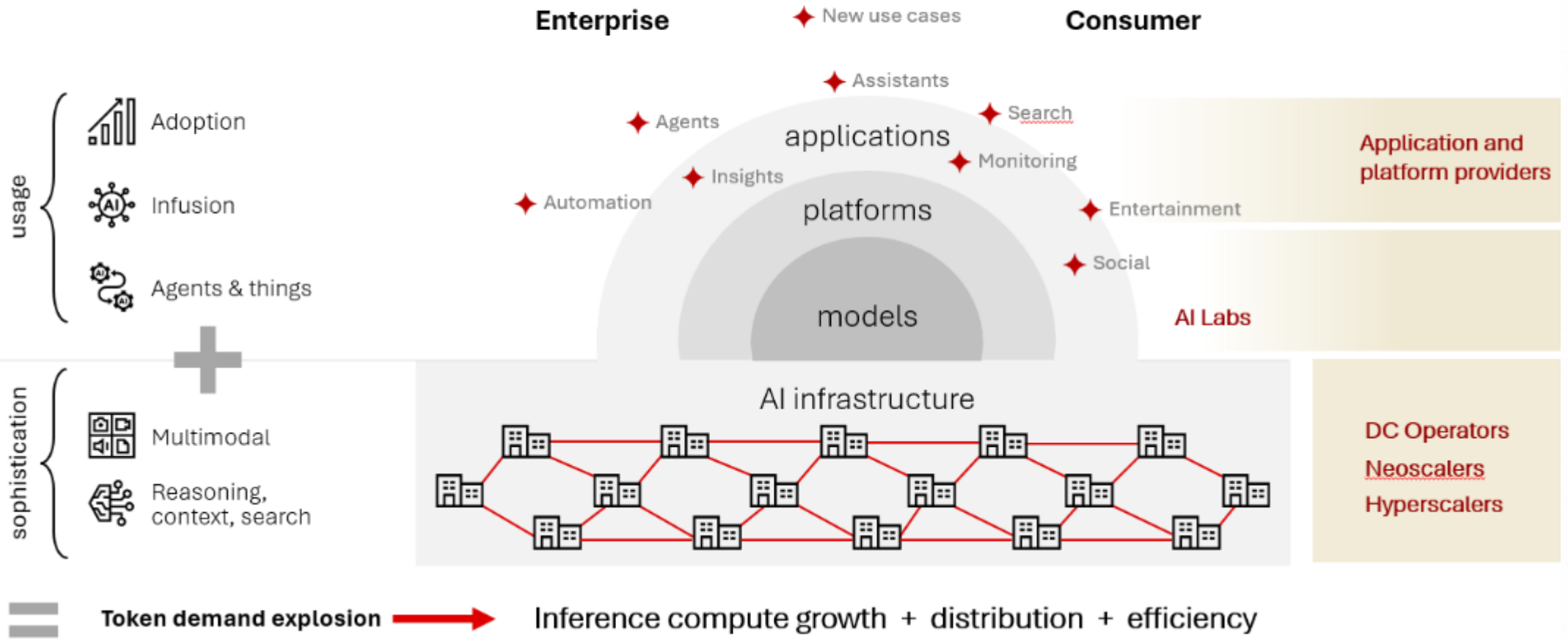
> The inference inflection point has arrived.
>
> Every part of AI, every time it has to think, it has to reason, it has to do, it has to generate tokens, it has to *inference*."
>
> Jensen Huang · NVIDIA · GTC 2026



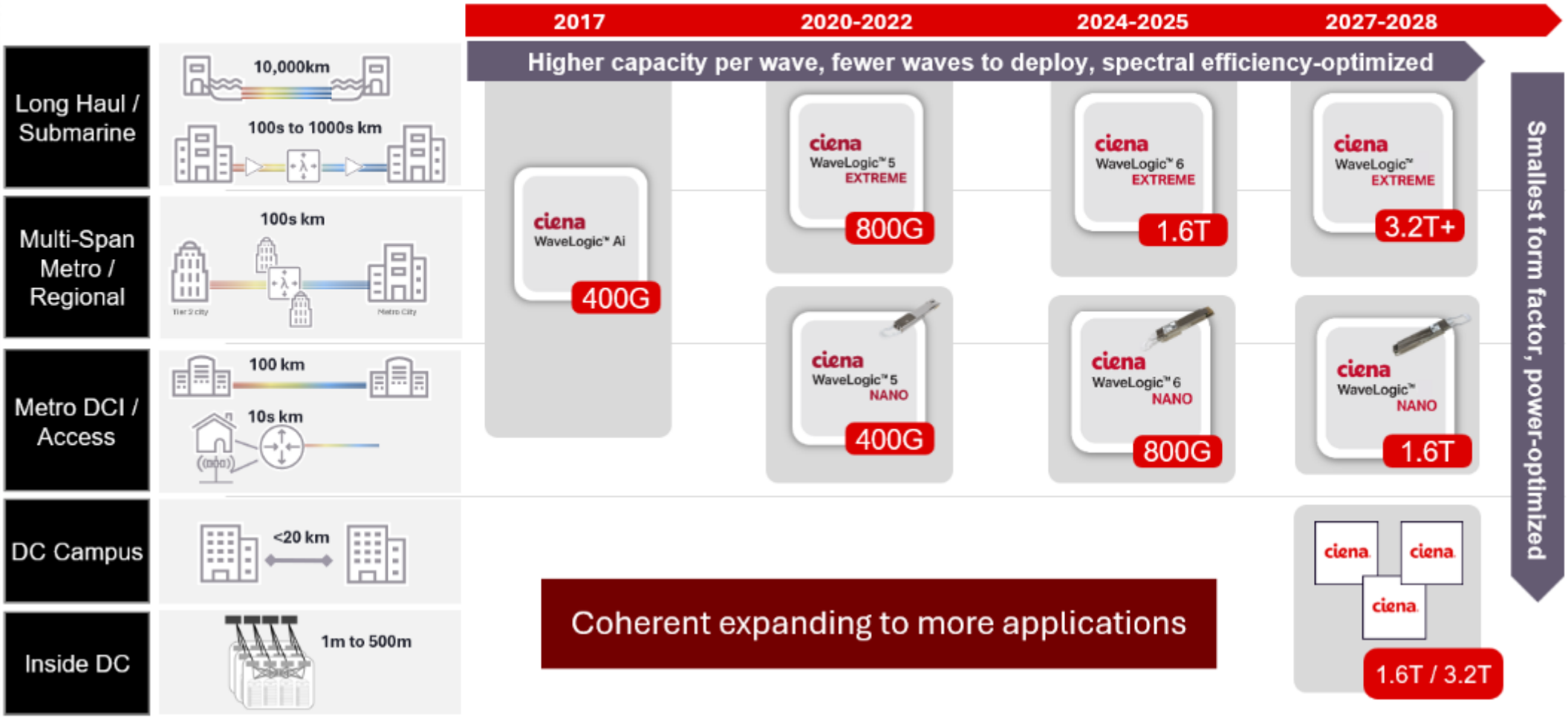




Scaling AI inference



WaveLogic coherent innovation



Networking solutions for Ai

High capacity

High capacity connectivity in a compact platform, with simplified deployment and management.

Waveserver high capacity interconnect -12.8T / 2RU



More speed

Optical modules up to 800 Gb/s, with 1.6 Tb/s planned for the next generation.

WaveLogic 6 Nano	Next Gen
400G - 800G	1.6Tb/s
3nm silicon	2nm silicon





Data protection

Built-in encryption with up to 3.2 Tb/s per module to secure high-capacity connections.

3.2T of encrypted capacity – QKD & PQC support



Open Line Systems for Ai



Ultra-dense, scalable architecture



- Scales for both small and large sites: “right-size” design
- Ultra-dense configurations
- 2 x Fiber Capacity with L-Band
- Future-proof design, ready for future high-baud signals
- Reduces photonic configuration footprint by >50%

Simple to deploy and operate



- Built-in instrumentation and intelligence
- Zero-Touch Provisioning
- Integrated ASE for predictable performance
- Navigator NCS, Node Essentials, and open API management

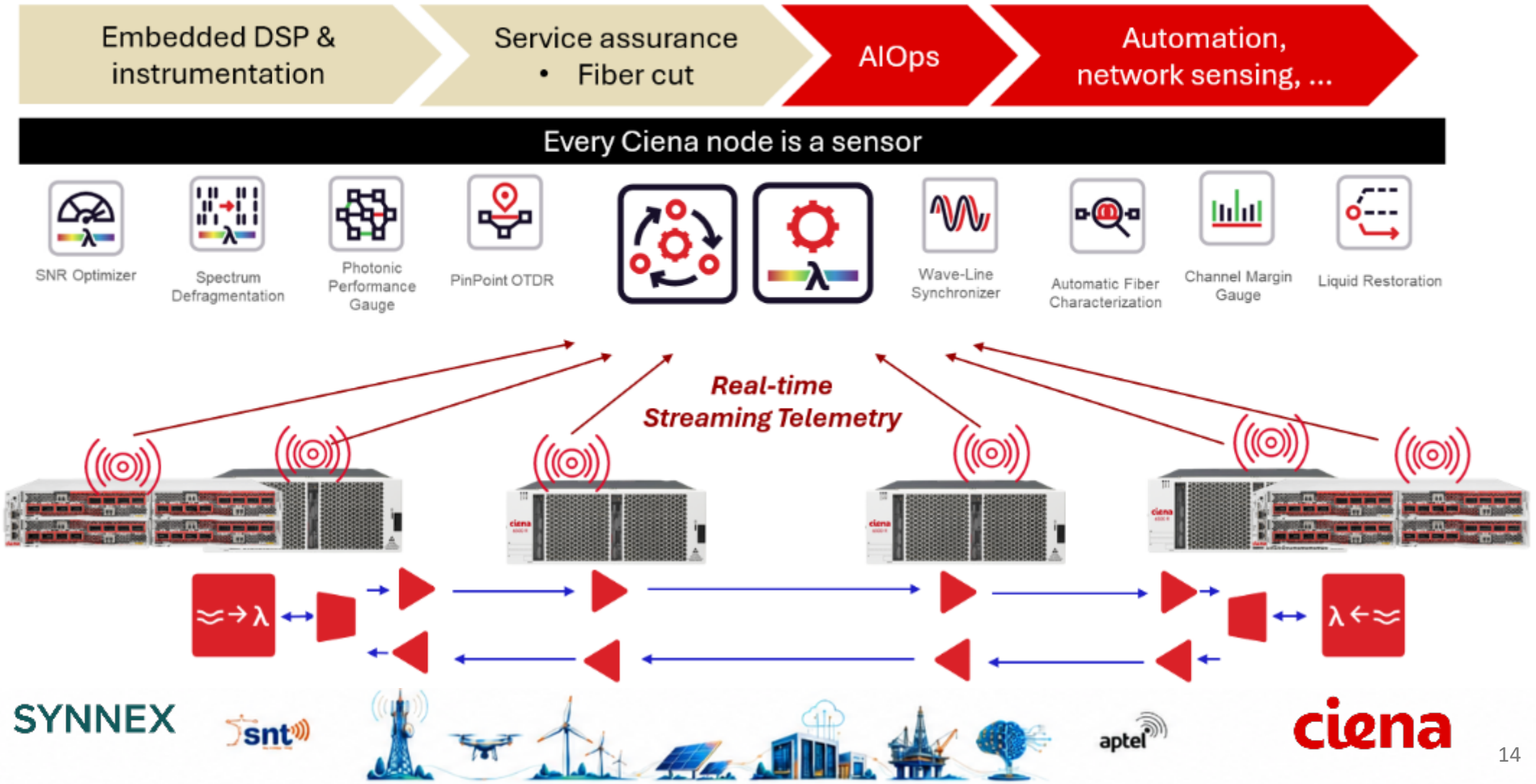
Open and programmable



- Model-driven config and streaming telemetry
- Multi-model
- Multi-protocol
- Architected for 3rd party SW with SDK



Scaling operations: automation & sensing



Routing & Switching solutions for Ai

Converged Platforms – IP & Coherent technology together

39xx

- Next gen access
- Active Eth & IP CPEs/NIDs



<100G

51xx

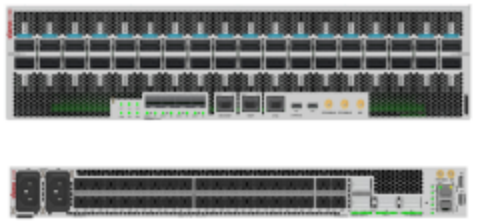
- First tier universal aggregation & larger CPE sites



100G to <2T

81xx

- High scale agg with options for Coherent DWDM integration



2T to 14T

WaveRouter

- Converged Metro w/ integrated Coherent DWDM

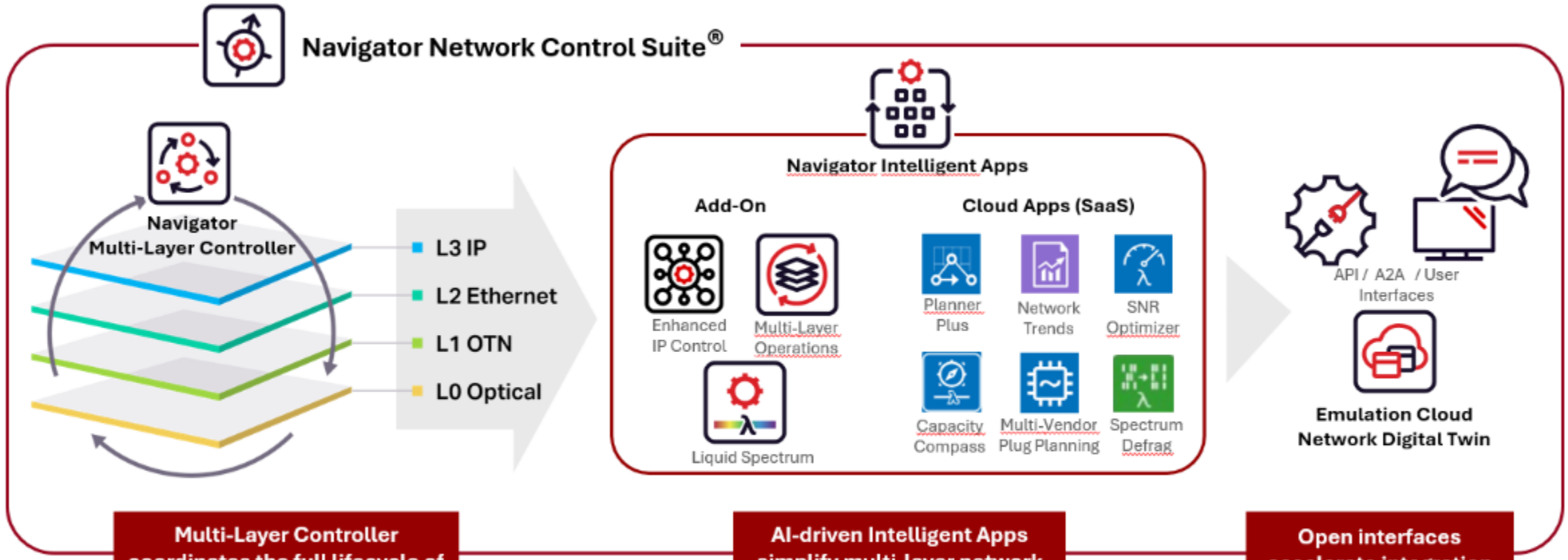


6T to 200T

High Performance, Purpose Built Platforms for Next Gen applications



AI-augmented multi-layer network control



Multi-Layer Controller coordinates the full lifecycle of network operations

AI-driven Intelligent Apps simplify multi-layer network performance optimization

Open interfaces accelerate integration and automation

A single point of control to visualize and optimize multi-layer network operations – reducing costs and improving customer satisfaction

Ciena AIOps addresses multi-faceted scenarios

Reducing OPEX/CAPEX and improving customer experience

Navigator NCS

Front-end for all operational & planning scenarios - **Virtual Network Engineer**

AI Assistant + GenAI user interface | AI-driven insights

Assurance scenarios 1

- Reactive Assurance
- Proactive Monitoring
- Proactive Assurance
- Conversational help

Optimization scenarios 2

- Network Optimization
- Spectrum Optimization
- Planning Optimization
- Network Observability

Automation scenarios 3

- Natural Language Interfaces
- Network Automation

Thank you

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