Ciena Research Projects with Dorsal Lab and Brock University

December 2023

Objective: Clarify how important you are

Agenda

1.   Ciena products directly benefiting

2.   Ciena architects and subjects matter experts attending Dec 2023 Progress Report

3.   Our partners

4.   Why?

5.   How?

6.   Conclusion

Ciena products directly benefiting

6500 D/S-Series
Packet-Optical Platform

6500 T-Series

6500 D/S-Series: Broadband and photonics solutions

6500 T-Series: Part of the 6500 family, able to host many of the same cards, while adding a packet switching fabric.

6500 D/S-Series
Packet-Optical Platform

6500 T-Series

6500 RLS – photonics applications

6500 RLS: Targeted for photonics applications, such as line amplifiers and optical switches.

6500 D/S-Series
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6500 T-Series

6500 RLS – photonics applications

Waveserver

Waveserver: Primary application is to connect OTN and Ethernet clients to high-bandwidth WaveLogic coherent interfaces.
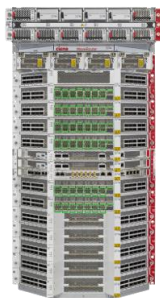
6500 D/S-Series
Packet-Optical Platform

6500 T-Series

6500 RLS – photonics applications

Waveserver

WaveRouter - Highly scalable
routing and switching platform

WaveRouter: Highly scalable routing and switching platform, from 6 to 192 Tb/s.
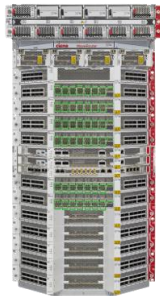
O-NID - OTN network interface

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O-NID: OTN network interface device intended for edge connectivity.

6500 D/S-Series   6500 T-Series
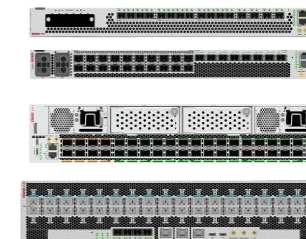Packet-Optical Platform

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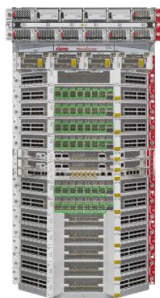
Routing and Switching Portfolio

RSP: Fully programmable, scalable, disaggregated, and SDN-ready platforms to address unique requirements, from access to metro.

Ciena architects and subjects matter experts attending Dec 2023 Progress Report
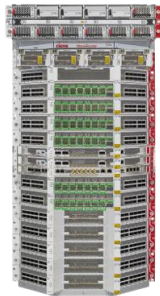
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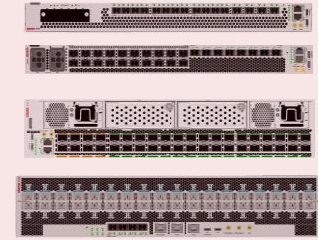

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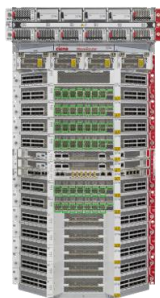
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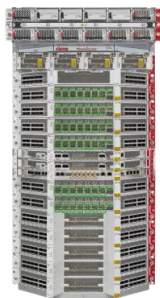
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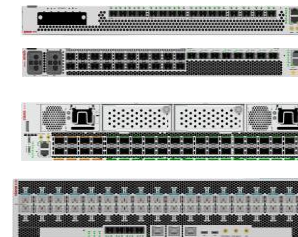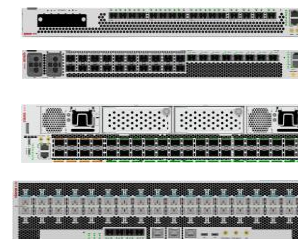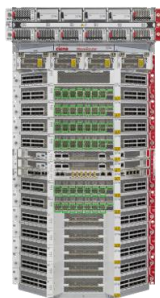Packet-Optical Platform

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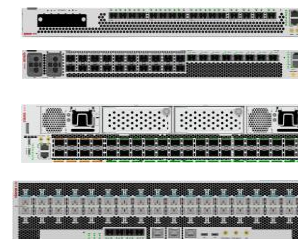
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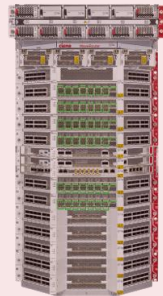
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Hamza Bendaoudi

New industrial interaction with AMD Ottawa

Our partners

Academic Partners

Polytechnique Montréal

Brock University

Academic Partners

Polytechnique Montréal

Brock University

Industrial Research Partners

Ciena

EfficiOS

Ericsson

AMD

Academic Partners

Polytechnique Montréal

Brock University

Industrial Research Partners

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EfficiOS

Ericsson

AMD

Government Agencies

NSERC / CRSNG

Prompt

Mitacs

Why?

To design competitive and outstanding products

To design competitive and outstanding products
To provide first-class customer experience

To design competitive and outstanding products

To provide first-class customer experience

Metrics

To design competitive and outstanding products
To provide first-class customer experience

Metrics
Innovation
Relevance

To design competitive and outstanding products
To provide first-class customer experience

Metrics	
Innovation	Performance
Relevance	Scalability

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To design competitive and outstanding products

To provide first-class customer experience

Metrics		
Innovation	Performance	Availability
Relevance	Scalability	Reliability

To design competitive and outstanding products
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Metrics			
Innovation	Performance	Availability	Customer Response Time
Relevance	Scalability	Reliability	Diagnosability

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How?

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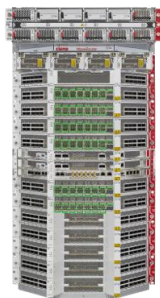Mitacs   ciena   ERICSSON

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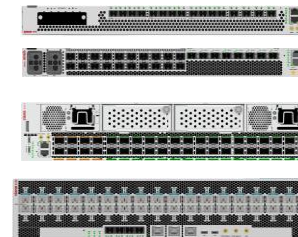Packet-Optical Platform

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Performance Analysis

Memory Leaks and corruption

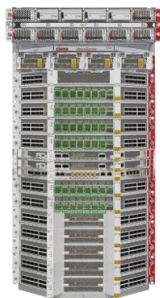EfficiOS

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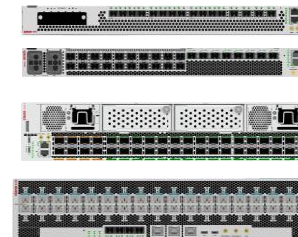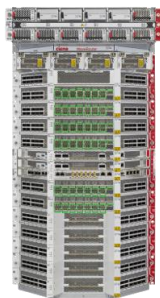Packet-Optical Platform

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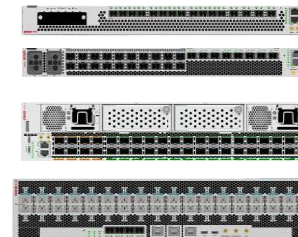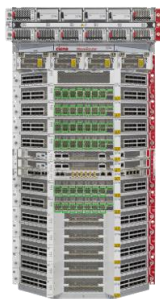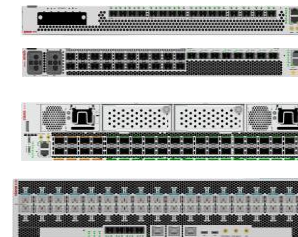
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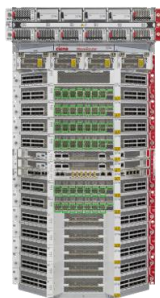Mitacs   ciena   ERICSSON

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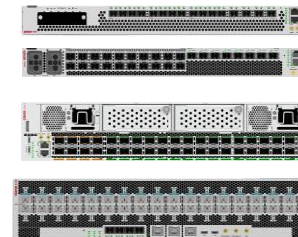
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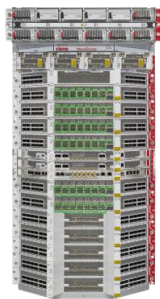
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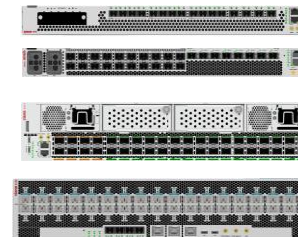
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Visibility into system internals

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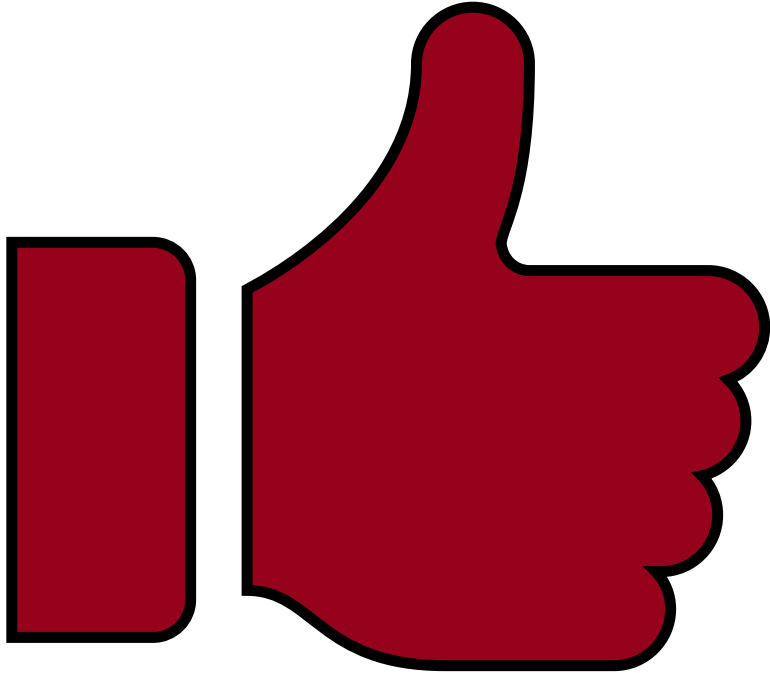EfficiOS

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Conclusion

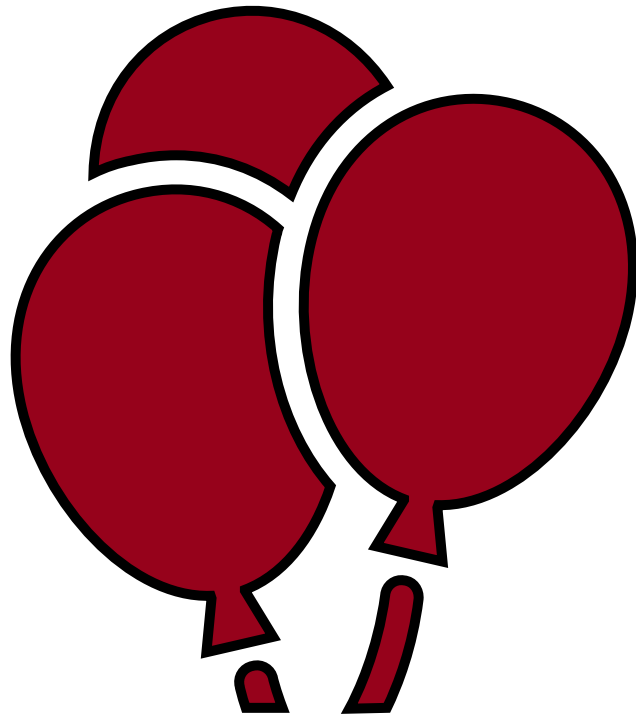- Every single project is important

- Every single project is important
- Everything comes together

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- Everything comes together
- The benefits are manifolds

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- Everything comes together
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Thank you!

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Thank you!

We have been involved for 10 years!

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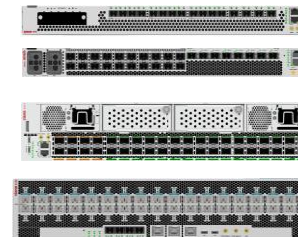
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Performance Analysis
Memory Leaks and corruption   Tracing
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Visibility into system internals

Outstanding

Products   Customer Experience

Performance   Innovation   Relevance

Scalability   Availability   Reliability   Diagnostic ability

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