

IEEE 802.3 New Ethernet Applications (NEA) Ad Hoc Closing Report

Jon Lewis
Dell Technologies
Atlanta, GA, USA
March 13, 2025

IEEE 802.3 NEA Ad hoc

- Ad hoc Organization

 - Jon Lewis, IEEE 802.3 NEA Ad Hoc Chair

 - John D'Ambrosia, IEEE 802.3 NEA Ad Hoc Vice-Chair

- Ad hoc Web and Reflector Information

 - Home Page - http://www.ieee802.org/3/ad_hoc/ngrates/index.html

 - Reflector Information – http://www.ieee802.org/3/ad_hoc/ngrates/reflector.html

 - Approved ICAID – http://www.ieee802.org/3/ad_hoc/ngrates/IC15-005-802d3_NEA_ICAID_approved_051218.pdf

 - NEA Ad hoc Calls - https://www.ieee802.org/3/ad_hoc/ngrates/public/calls/index.html

- “Ethernet for AI” Assessment

 - Activity Chair – John D'Ambrosia

 - Home Page - https://www.ieee802.org/3/ad_hoc/E4AI/index.html

 - Reflector - https://www.ieee802.org/3/ad_hoc/E4AI/reflector.html

Activities this week

- N/A

Request to Establish Liaison Relationships / Coordinators

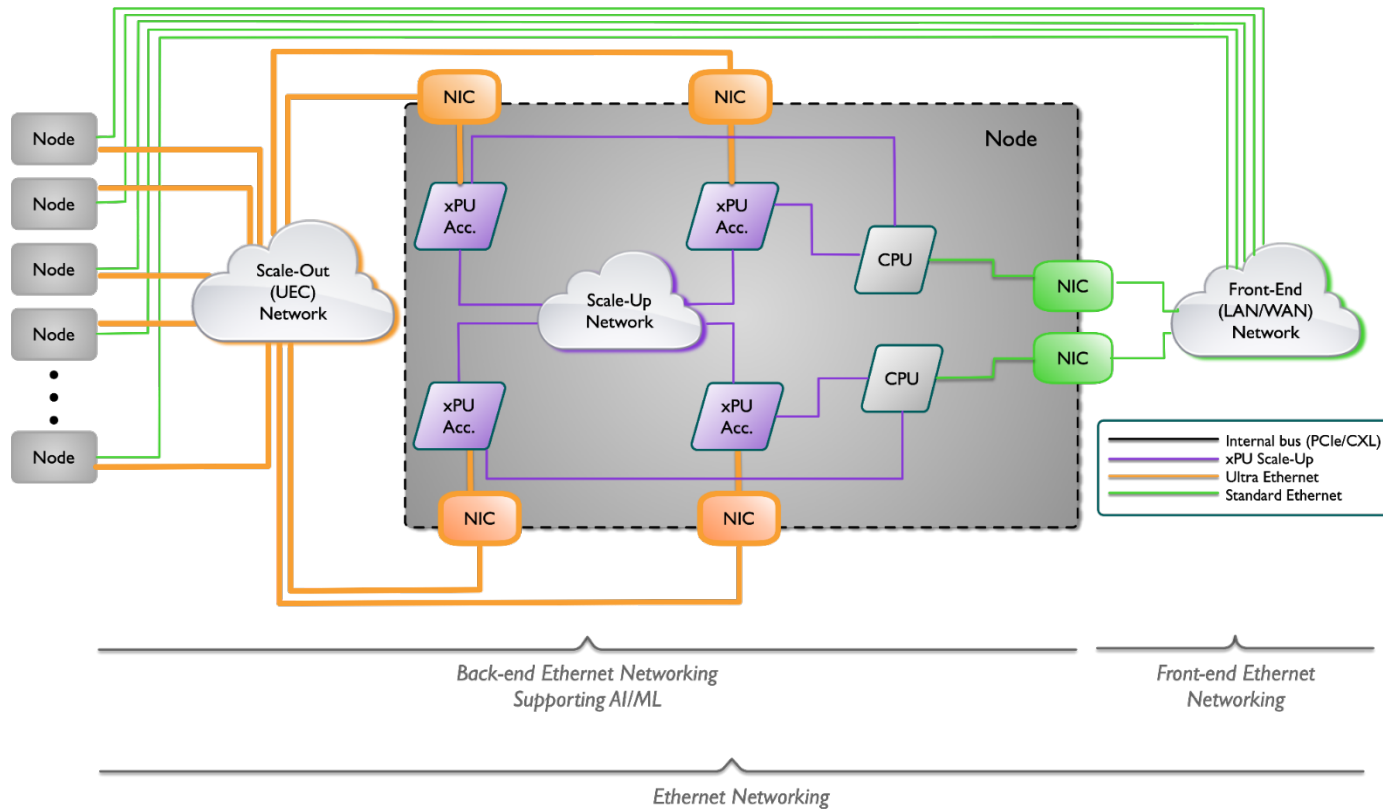
John D'Ambrosia

Futurewei, U.S. Subsidiary of Huawei

13 Mar 2025

Introduction - “Ethernet for AI” Assessment

General Purpose vs. Scale-Up versus Scale-Out (UEC) Networks



Source: Ultra Ethernet Consortium

- “802.3 Ethernet Interconnect for AI” with an emphasis on >200 Gb/s signaling per lane
- Potential topics
 - AI Networks & Performance Requirements
 - Market Potential
 - What AI interconnects are target interconnects for Ethernet
 - Priorities
 - Exploring Technical Feasibility
 - Others.....
- Other organizations have information related to these topics that would be beneficial for this activity

Justification – Request for Liaison Relationship / Officers

These organizations are either exploring or defining technologies related to AI applications / networks or related signaling and interconnects:

- Open Compute Project (OCP) Foundation
- Ultra Ethernet Consortium (UEC)
- SNIA / SFF
- Ethernet Alliance
- Optical Interworking Forum (OIF)
- UALink Consortium

These organizations have access to significant technical competence and expertise in the application of Ethernet technology and specifications in AI networks. This knowledge could be beneficial to the IEEE 802.3 Industry Connections New Ethernet Applications Ad Hoc “Ethernet for AI” Assessment activity, which could provide guidance to future IEEE 802.3 projects regarding interconnect needs that could be targeted with new Ethernet specifications. Therefore, the close alignment with these organizations could provide insight that would be beneficial.

Currently, IEEE 802.3 has a liaison relationships with OIF, but no IEEE 802.3 liaison officer has been specified.

WG Motion – Request for Liaison Relationship / Coordinators

Motion:

Establish a liaison relationship with Open Compute Project (OCP) Foundation, Ultra Ethernet Consortium (UEC), UALink Consortium, Storage Networking Industry Association (SNIA)/Small Form Factor (SFF) Committee, and Ethernet Alliance

Appoint:

- John D’Ambrosia as the IEEE 802.3 Liaison Officer to OCP Foundation
- Mark Nowell as the IEEE 802.3 Liaison Officer to UEC
- Kent Lusted as the IEEE 802.3 Liaison Officer to UALink Consortium
- Tom Palkert as the IEEE 802.3 Liaison Officer to SNIA/SFF Committee
- Peter Jones as the IEEE 802.3 Liaison Officer to Ethernet Alliance

- Nathan Tracy as the IEEE 802.3 Liaison Officer to Optical Interworking Forum (OIF)

M: John D’Ambrosia

S: Kent Lusted

Technical (>=75%)

Y: N: A:

WG Motion

- The IEEE 802.3 WG approve:
 - IEEE_802d3_to_UAL_UEC_OCP_SFF_EA_OIF_2503_Redacted.pdf
- with editorial license granted to the Chair (or his appointed agent) as a liaison communication from the IEEE 802.3 Working Group to
 - Open Compute Project (OCP) Foundation
 - UALink Consortium
 - Ultra Ethernet Consortium (UEC)
 - SNIA / SFF
 - Ethernet Alliance
 - Optical Interworking Forum (OIF)

M: John D'Ambrosia

S: Kent Lusted

Technical ($\geq 75\%$)

Y: N: A:

Future Meetings

- [“Consensus Building for 200G/wavelength MMF optical PMDs CFI.”](#)
 - [March 20th 10-12:00 ET US](#)
- [IEEE 802.3 NEA - Ethernet for AI Assessment](#)
 - [March 27th 10-13:00 ET US](#)

- [IEEE 802.3 Call and Meeting Calendar](#)

Questions?

Thank you!