

Ethernet Alliance



Exploring Power over Ethernet Certification



Disclaimer

- Opinions expressed during this presentation are the views of the presenters, and should not be considered the views or positions of the Ethernet Alliance.



Today's Speakers

Host:

John D'Ambrosia

Chairman, Ethernet Alliance
Chief Ethernet Evangelist, Dell

Presenters:

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System Architect, HP Networking

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Manager, UNH-IOL



Ethernet Alliance Mission and Priorities

A global community of end users, system vendors, component suppliers and academia

➤ Mission

- Promote existing and emerging IEEE 802 Ethernet standards
- Accelerate industry adoption
- Demonstrate multi-vendor interoperability

➤ Strategic Priorities

- Support Existing Technology Deployment
- Support IEEE 802 Standards Development
- Marketing & Education



The Voice of Ethernet

Becoming A Member Is Easy

- To join: <http://www.ethernetalliance.org/about-us/how-to-join/>
- Questions? Contact:
 - Morgan Fricke - Director of Operations
 - morgan@ethernetalliance.org
 - John D'Ambrosia - Chairman of the Board
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- For more information visit: www.ethernetalliance.org;



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Today's Call

- Power-over-Ethernet (PoE) is a name, not a standard!
- IEEE 802.3 Standards-based and non-standards-based PoE solutions exist today.
- What is the industry interest in creating a logo certification program for implementations of IEEE 802.3 “DTE Power via the MDI” Standards?



Proliferating beyond Enterprise

More Powerful Standards

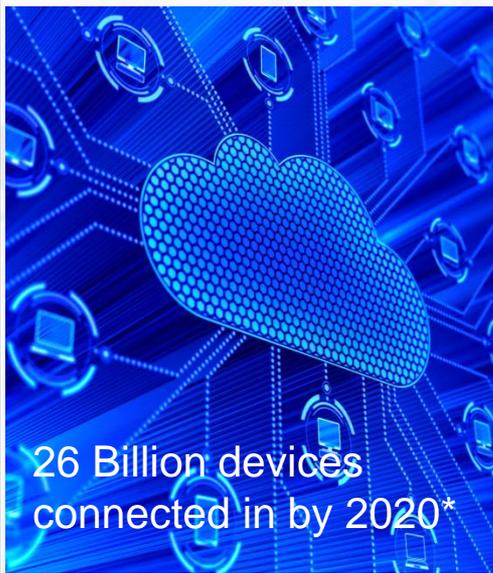


Future: maximum power for devices could exceed 49W



Today: maximum power available = 25.5W

Wide variety of applications



26 Billion devices connected in by 2020*

Diverse Usage



Safe for use in networked environments?



Indoor & outdoor usage?



Power Management available?



PoE Standard vs Non-Standard

PoE Today

Devices Conforming to IEEE 802.3 Standards

Proprietary Devices
variants of IEEE
Specifications

Proprietary Devices
not designed to IEEE
standards & could be unsafe
to deploy

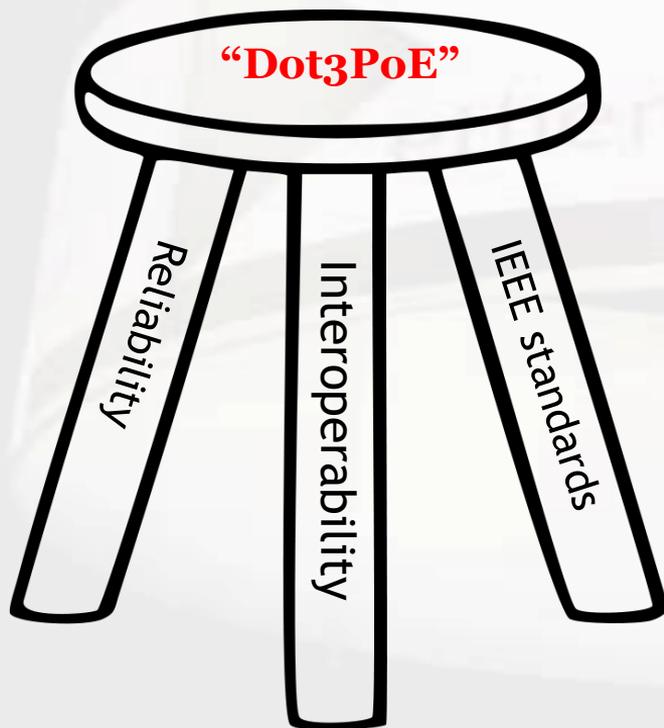
“Dot3PoE”

IEEE 802.3 Standards

Highly Interoperable

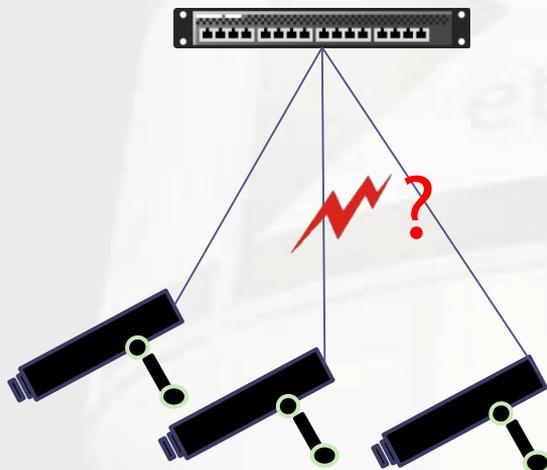
Safe to Deploy

Accelerate Market Adoption



- Dot3PoE logo program would indicate:
 - Predictable Ethernet power and data delivery using IEEE 802.3 standards
 - Confidence in interoperability
 - Device reliability and safe for use in networked environments

Some bad apples...



NEGATIVE/ERRONEOUS COMMENTS FOUND ON AMAZON ABOUT PoE PRODUCTS

- **Review** - Despite the specs and the connector "appearing" to be compatible with the F-----, this did not deliver power on a 10 foot run. **A definite waste of money.**
- **Review** - I wanted to use this device on a 50 feet Ethernet cable going to a camera. It worked fine on much shorter cables (well under 10 feet) when I tested but luckily I tried it on a 50 foot cable before counting on it and installing. **It didn't work** and I just decided to put an outlet out by my camera to provide power.
- **Review** - **Bad Engineering - Ethernet Portion does not work**
- **Review** - **Would not buy. Ethernet did not work**
- **Review** - Gigabit Ethernet uses all 4 wire pairs as data lines, **so it is not possible* to have Gigabit Ethernet and PoE on the same cable.** ← MISINFORMATION

*incorrect



Challenges to Interoperability

Device Types	Challenges	Impact
Power Sourcing Equipment (e.g. switches, PoE injectors)	<ul style="list-style-type: none"> • Power delivery over distance • Short circuit protection • Voltage & current sensing • Pairing correct capability of PSE with powered device 	<ul style="list-style-type: none"> • User dissatisfaction • Device damage • User safety
Powered Devices (e.g. phones, cameras, sensors)	<ul style="list-style-type: none"> • Power draw within 'standard' limits • Safe for use in networked environments • Power management • Short circuit protection 	



Examples of successful Logo Programs



Bluetooth®



Certification shouldn't be a burden

- Should fit the market needs
 - Not a checkbox exercise
- Variables can be controlled
 - Cost
 - Complexity of Testing
 - Self-Declaration vs Third party testing



Certification will provide benefits

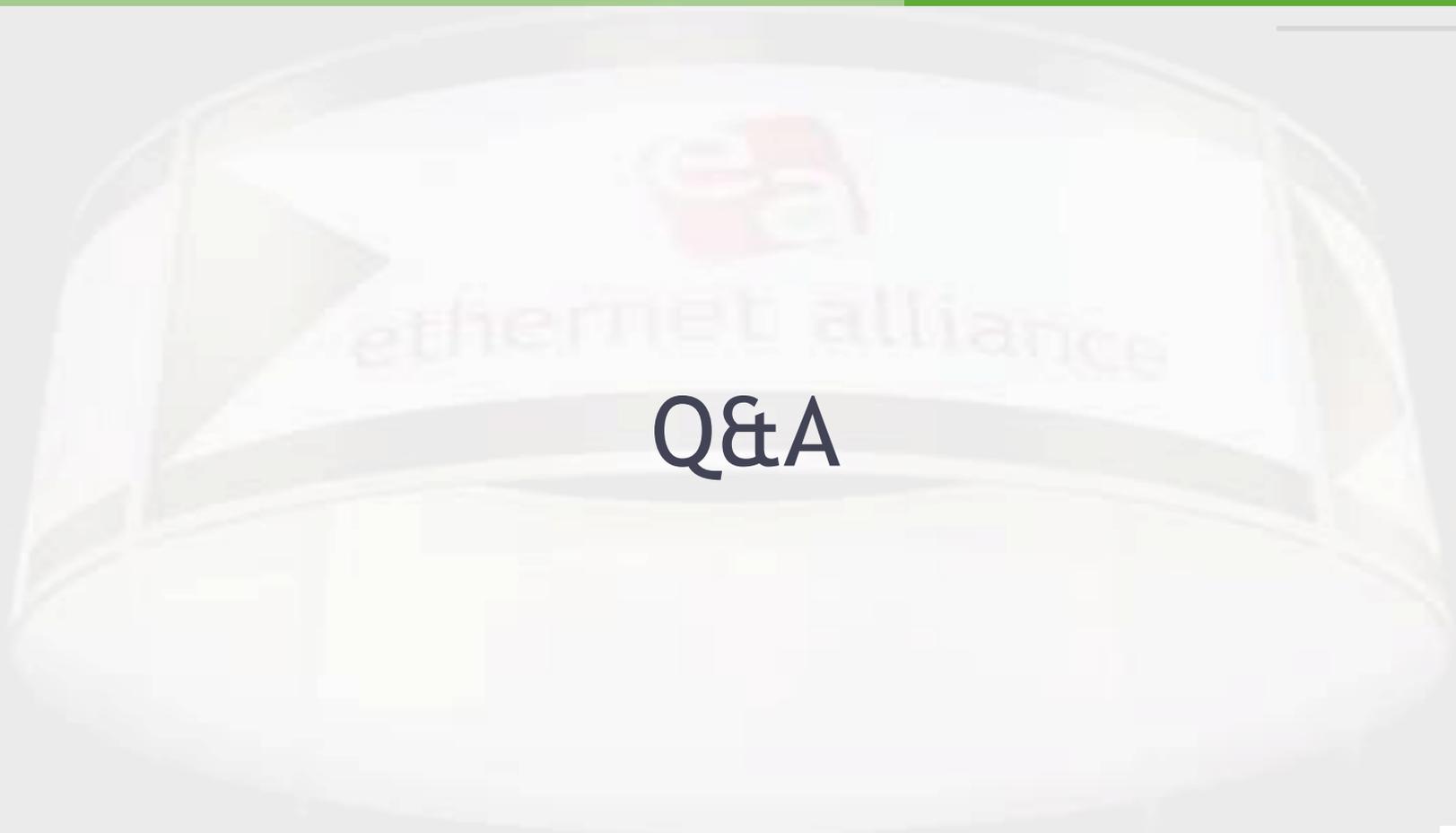
Next Steps

- The Ethernet Alliance is evaluating industry interest & need before proceeding with a program launch

Should the Ethernet Alliance establish a logo certification program for Power over Ethernet products?

- Survey:
<http://survey.constantcontact.com/survey/a07e9r3l8syhzbqhprrt/start>
- Provide feedback and let your voice be heard!
 - Email: POEFeedback@Ethernetalliance.org
 - Twitter: #LogoPoE @EthernetAllianc





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Q&A



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