Promoting the adoption of AES67
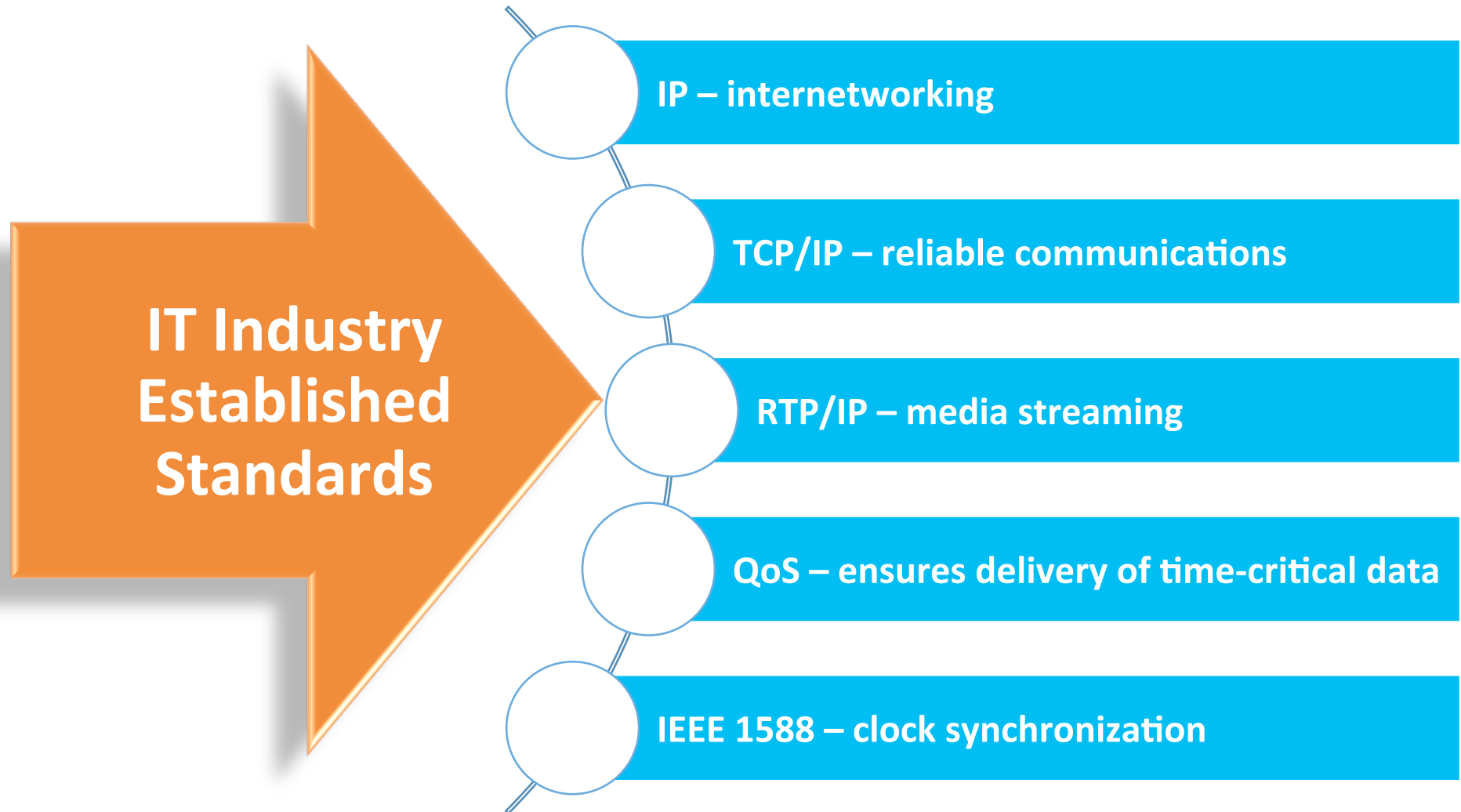
Audio-over-Ethernet Technology

Technology	Purveyor	Date introduced	Synchronization	Transport
CobraNet	Cirrus Logic	1996	Proprietary	Ethernet
Livewire	Telos/Axia	2003	Proprietary	RTP/IP
Dante	Audinate	2006	IEEE 1588-2002	UDP/IP
N/ACIP	EBU	2007	Adaptive (per stream)	RTP/IP
Q-LAN	QSC Audio Products	2009	IEEE 1588-2002	UDP/IP
RAVENNA	ALC NetworX	2010	IEEE 1588-2008	RTP/IP
AVB	IEEE, AVnu	2011	IEEE 802.1AS	Ethernet, RTP/IP
AES67	AES	2013	IEEE 1588-2008	RTP/IP

General Networking Standards

IT Industry Established Standards

- IP – internetworking
- TCP/IP – reliable communications
- RTP/IP – media streaming
- QoS – ensures delivery of time-critical data
- IEEE 1588 – clock synchronization

AES67

Audio Networking Interoperability

What is AES67?

- Interoperability Standard
- Created by engineers from many companies
  - Manufacturers
  - Broadcasters
  - Installers and equipment/facilities managers
- Based on proven techniques and IT industry standards
- Standard published in September 2013
- First "plugfest" held in October 2014
- Relatively easy adoption for manufacturers

Media Networking Alliance

So, is this *another* network?

- Is it a new network?
  - No, It does not have all the pieces of a complete solution

- It is an interoperability mode
  - A means of getting audio from A to B across a network

Is it compatible with standard networks?

- Yes, If your network can handle VoIP it can probably handle AES67

- It operates over "standard" layer 3 Ethernet networks

Media
Networking
Alliance

What brands of switches work with it?

- Since it is "standard" IP Ethernet, switches from all suppliers are compatible with AES67

- This includes companies such as Cisco, HP, Extreme, Brocade, D-Link, Netgear, Arista, Juniper, Avaya, Dell, Huawei…

Media
Networking
Alliance

Why should I use AES67?

- Compatible technology from multiple sources
- Designed to work well on existing IP networks
- Network effect
- All network technology paths lead to open standards

It is important to use Open Standards

- Developed by engineers from many leading manufacturers and leaders
- Not controlled by, or beholden to one company
- An established best practice in the IT industry
- CobraNet is an example of what can happen when the entire industry depends upon one company

Promoting the adoption of AES67

MNA Steering Committee

Our Objectives

- Actively promote the adoption and standardization of AES67 as an audio interoperability standard through:
  - Marketing
  - Education
  - Training
- Develop future AES67 Specifications and other documents that augment, enhance or extend the primary AES67 Specification for the purposes of enabling and promoting increased interoperability and reliability.

Objectives - Cont.

- Provide developer support for AES67 products, and actively support those members producing AES67 compliant products, including, but not limited to:
  - AES67 System Development Kit
  - AES67 Test Tools
- Provide a forum and environment in which members of the alliance can meet to review standards development and compliance programs, and to foster the development of new products based on the AES67 standard.

Media
Networking
Alliance

Objectives – Cont.

- Educate the business and end-user communities about the value, benefits and applications for AES67.

- Establish and maintain relationships with educational institutions and other technology associations and organizations that help to promote the use and development of AES67 products. Infocomm is an example of this!

- The MNA is a non-profit corporation with membership available to all manufacturers, organizations, companies and individuals who are interested in the objectives and purposes of the alliance.

Media Networking Alliance

Current Members

ALC NetworX Gmbh
Archwave Technologies
Attero Tech
British Broadcasting Network (BBC)
Bosch Security Systems, Inc.
Calrec Audio
Cymatic Audio
Digigram
Directout
Focusrite Audio Engineering
GENELEC
Harman Professional Solutions
Lawo

Merging Technologies
NTP Technologies
QSC
Riedel Communications
Shure Incorporated
Swedish Radio AB
SVSi
The Telos Alliance
Walt Disney Imagineering
Yamaha

Media Networking Alliance

How do I become involved?

- Join the Media Networking Alliance
  - Ask one of us about this during the reception
  - Check out our Web Page at:
  - http://medianetworkingalliance.com
- Join the AES working group

http://medianetworkingalliance.com