

COURSE OVERVIEW

NETWORKED MEDIA

IP Networked Audio/Video Production and Post Production Infrastructure, Technologies and Practices.
Design, implementation, management and trouble-shooting within digital live and studio IP networked environments.

Desired Outcomes

Commercial, Industry Certification:

SMPTE ST2110

Dante

Ravenna

AES67

Waves (SoundGrid)

MADI (AES10)

Network Media Open Specifications (NMOS) IS-04

Cisco (CCNA)

https://www.matrox.com/video/en/products/developer/hardware/xmio5_Q25/?utm_campaign=SMPTE_Package_1018&utm_content=animated_300x250_X.mio5_Q25&utm_medium=web_banner&utm_source=SMPTE&ref=ad_SMPTE_web_banner_X.mio5_Q25_1118

<https://www.thebroadcastbridge.com/content/entry/10456/audio-over-ip-why-it-is-essential>

Price. B (2018) '*NETWORK2020 - AUDIO NETWORKING FOR STUDIO & LIVE PRODUCTION*'

https://issuu.com/newbayeurope/docs/ami40.digital_edition_dec_2018 Page 21

Academic Qualification:

?

Birmingham – UWE – Westminster

Digital Media Networks (Skills & Knowledge)

Music Production and Beyond



Prerequisite: None

Description:

Introduction to Networks (ITN) covers networking architecture, structure, and functions. The course introduces the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations to provide a foundation for the curriculum. By the end of the course, participants will be able to:

- Explain network technologies.
- Explain how devices access local and remote network resources.
- Describe router hardware.
- Explain how switching operates in a small to medium-sized business network.
- Design an IP addressing scheme to provide network connectivity for a small to medium-sized business network.
- Configure initial settings on a network device.
- Implement basic network connectivity between devices.
- Configure monitoring tools available for small to medium-sized business networks.

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Routing & Switching Essentials

Prerequisite: CCNA1

Description:

Building upon concepts from “Introduction to Networks”, “Routing and Switching Essentials” covers the architecture, components, and operations of routers and switches in a small network. Participants learn how to configure a router and a switch for basic functionality. By the end of this course, participants will be able to configure and troubleshoot routers and switches and resolve common issues with single area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

Participants who complete the Routing and Switching Essentials course will be able to perform the following functions:

- Determine how a router will forward traffic based on the contents of a routing table.
- Explain how switching operates in a small to medium-sized business network.
- Use monitoring tools and network management protocols to troubleshoot data networks.
- Configure monitoring tools available for small to medium-sized business networks.
- Configure initial settings on a network device.
- Configure Ethernet switch ports.
- Implement VLANs.
- Implement static routing.
- Implement DHCP on a router.
- Implement network address translation (NAT).
- Implement access control lists (ACLs) to filter traffic

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Basic Studio Infrastructure

Implementing Audio over Internet Protocol (AoIP) with:

Dante

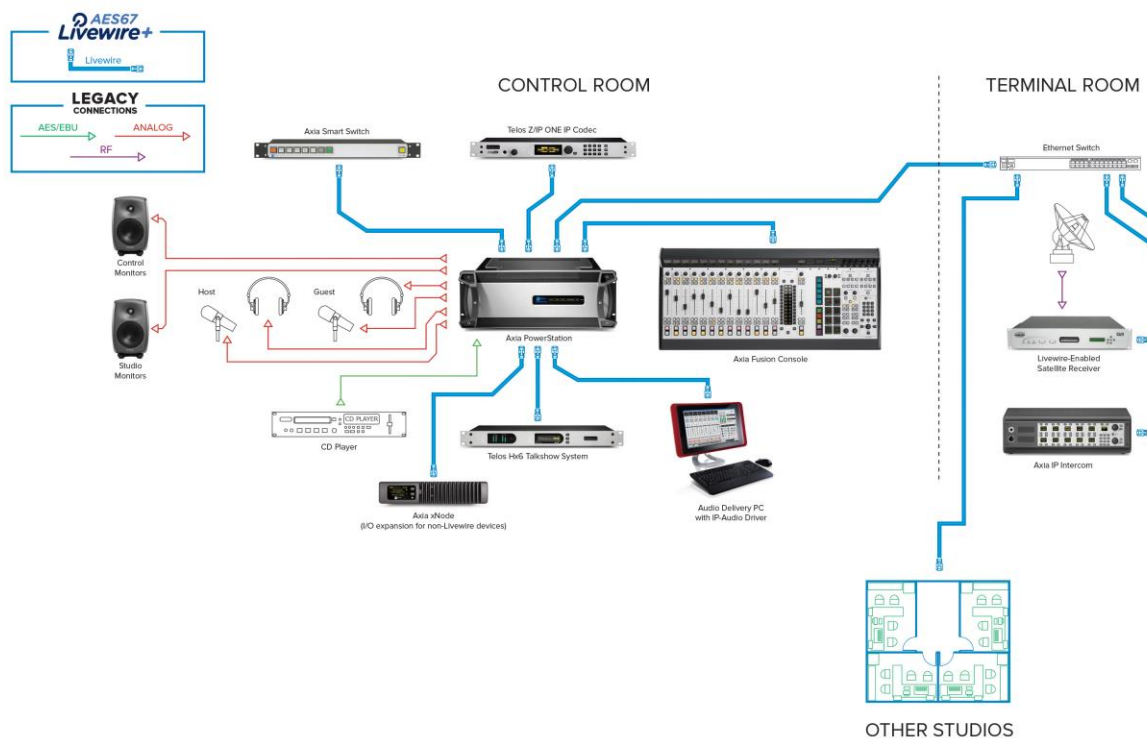
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Bridging Mixed Technologies

SMPTE ST2110

MADI (AES10)

Dante

Ravenna

AES67

Waves (SoundGrid)



DirectOut Technologies PRODIGY.MC
A Flexible Modular Format Converter



Jünger Audio Netbridge UHD
Bidirectional SDI audio to MADI and Dante
format converter



Jünger Audio Netbridge
MADI/Dante format converter
channels of audio



DirectOut Technologies EXBOX.MD
A Bidirectional Dante/MADI Format Converter



ASL Enchorus Dante Interfaces
ENC 1201
Analogue and Digital I/O Interfaces for Use in
Dante Live Sound Systems



DirectOut Technologies:
A SoundGrid/MADI Co



DirectOut Technologies MONTONE.42
A bi-directional MADI/AoIP Bridge



Bel Digital Audio BM-A1-64DANTE
64-channel audio confidence monitor for use in
Dante™ networks



ARG Quarra 1011
PTP-Smart Ethernet Switc

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