CDSR Cybersecurity & Content Protection

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Information Security is Not Somebody Else's Problem

Why Traditional Information Security Doesn't Fit Media & Entertainment

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Contiguous Workflow and Polymedia

- Workflows now digital from Dev to Distro
- IP is created now along entire arc
- Distinctions between phases now blurred
- Collaboration begins at Development
- Traditional players and roles are changing
- Technologies popping up to support contiguous and bi-directional workflows
- "Production Speed" now starts at greenlight (or earlier)

The Rise of Metadata Foretold !

- Metadata is no longer incidental or a luxury
- Soon will be part of every workflow
- Metadata used for everything from documentation, to authorization, instructions, logistics, credits, trivia, marketing, copyrights, contract terms, royalties, codec, photo data, forensic info, to archive

Changes in Production Security

- Digital Asset Management (DAM) in some form is part of entire process
- Identity Access Management (IAM) new requirement
- Digital Certificates and Federated ID enable virtual access
- Cloud technologies were primarily object storage or task processing, but now substrate for all production
- We are obviously diverging from traditional Infosec
- Production management, cast, and crew all touch IP
- Content and other Intellectual Property is EVERYWHERE

Innovation of Production Technologies

- Interoperable Mastering Format (IMF)
- SMPTE ST-2110 ST-2059, and others
- Academy Color Encoding System (ACES) workflows
- Tool suites integrate shooting logistics, camera functions, color calibration, and other metadata

- ***Lost Lederhosen***

Post-Production Is Now Virtual

- Production "data" now straight to cloud
- Dailies, VFX, Color, Sound, and Editorial spread to the four winds and all timezones
- Collaboration now also on Zoom and not just Sohonet, TVIPS, VPN, or other custom solutions
- Remote infrastructure is beyond security oversight, so assume it is NOT secure

Global Pandemic Is Forcing Us All Away from Traditional Infrastructure

Local	Shared	Distributed	Cloud
Weak Identity Credentials			Strong Identity Credentials
Direct Control	Shared Control	Delegated Control	federated Control
Dedicated Access	Local Area Network	Wide Area Network	Internet Access
Clear text			Strong Encryption

Production Culture

- Unique technologies and workflows
- Fundamentally different from other industries
- Highly-trained and highly-competent technologists
- Security is not a priority, but is a concern
- Usually required to devote some of creative budgets to security
- No time to talk at "Production Speed"

Audit Drawbacks

- Focuses mostly on Post-Production
- Does not include Production Assets
- Largely lagging workflows and changing digital technologies
- Generally misses metadata, reputation, and project "buzz"
- Most studios STILL performing their own audits
- Threats and Risks always changing
- Unreasonable focus on surveillance and "obstructive" controls
- Audits based on compliance and **NOT RISK**

MOTION PICTURE ASSOCIATION OF AMERICA

Improvement Opportunities

- Demand security built into all tools, networks, storage, collaborations spaces
- Creative budgets include improved (secure) tools
- Don't use any tool that is not proven to be secure
- Do not rely on someone else to manage security for your data (especially cloud)

Push **HARD** on all technology providers for integrated security

- Manage Metadata (because it's IP, too)
- Demand Identity Access Management, perhaps using digital certificates
- Demand encryption of ALL data at rest and in transit
- Cloud tools do not equate to safety

Lead-in to Panel Discussion…

- Infosec policies and "Best Practices" are always behind the threat/risk curve
- Continued focus on infrastructure controls is almost unimportant
- Location of (encoded) data will be irrelevant because data must protect itself
- We are now in collaborative space
- Security is enabling innovation and no longer somebody else's problem
- Partner with productions more than focusing on policies and audit control enforcement