IPTV Content Delivery and Digital Rights Management

Tuesday, October 25
3:15 - 4:45 p.m.
Venetian Ballroom I
VeriSign Digital Content Services

• Steve Manning
• Director Product Management
• VeriSign, Inc.
VeriSign: Critical Intelligent Infrastructure Today

Internet DNS
- 38M .com/.net Names
- 18B Queries/day
- 5x9’s True Uptime

SSL
- 450K Websites
- 150K Businesses
- 90% Secure Web Communications

Commerce
- >70 Carrier systems
- Credit, debit, ACH, billing & stored value trxns
- $100 M processed/day

Communications
- 1100 Carriers
- 3B Connections/day
- 12.8B Queries/Qtr
And Tomorrow

2 Factor Authentication
Identity Management
Flexible Token

VoIP Mediation Platform
IP PBX Interoperability
Fixed/Wireless

ONS Root
Supply Chain Web Services
Data Mediation/Brokering

Strong Authentication

RFID

Digital Content

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Global Digital Content Ecosystem

Ecosystem Drivers

- Deep content catalogs (premium through longtail)
- Multi media as an increasing business revenue and brand driver
- Exploding universe of quasi-interoperable devices
- On demand, self programming, personalizing consumers
What Does This Mean for IPTV?

• Is it too late for IPTV (as we know it)?

• Is content king or are consumers king (and what does this mean for DRM)?

• Will consumers go all digital (and what does this mean for content mgmt systems)

• How will convergence define new media models (and how can telcos win)?
Acquiring Content

Glenn Morten
VP Engineer and Chief Technology Officer
Who is Widevine?

- 1st IPTV content security provider: Since 1999
- Content Protection & Encryption: Comprehensive Downloadable CAS & DRM
- Digital Forensics: Watermarking & Content Tracking Services
- Most deployed for IP Television: 1.2M Subscribers
- 70+ global customers: Studios, Aggregators, Telcos, ISPs
What is the difference?

Who do you work with?

What do they look for when considering a deal?

What dynamics come into play?

Why is there no centralized criteria?

What about the MPAA?
Piracy: Revenue loss is large…

- **$3.5B:** Expected global film sales (all forms) via the Internet by 2010.
  Source: Informa Media

- **$3B +:** Average Annual loss of revenue due to piracy
  Source: MPAA & MPA

- **$970 million +:** Loss per year in revenue in Asian pay-TV industry - from channel operators to last-mile operators.
  Source: Telecom Asia, 12/04

- **£400 million:** Loss in 2002 to UK film/video distributors…a piracy infiltration rate of between 20% & 30%.
  Source: www.fact-uk.org.uk

Globally: Theft of service is a major problem!
Requirements:

- Encryption?
- CAS?
- DRM?
- Watermarking?
- Analog controls?
- STB Robustness?
- Software vs. Hardware?
- PC ok? Internet ok?
- What about client security renewal?

Widevine assists our customers with this process
Any digital technology … must be encrypted from head-end to the set top box and support industry standard copy protection…

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Affiliate and each System must have in place…piracy monitoring, detection, and reporting processes and controls for their operations…STB must be robust against attack…has your STB been audited for security or certified?”

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“…want content encrypted from the camera to the eyeball.”

“The broadcasters say…”

“…”affiliate shall encrypt all digital signals…during transport…to the set-top devices or the point of deployment devices…”
The studios say…

- Require comprehensive conditional access and digital rights management for both broadcast and VOD content licensing...

- Want a secure head-end system and assurance the system secures content persistently to the consumer device...

- Playback licenses…shall be generated inside “FIPs 140-1 Level 3 Compliant” hardware…and shall be revocable from individuals devices...

- Encrypt content to the STB and to other devices, in order to protect traditional subscription business models and facilitate new ones…