

# Securing Next Gen TV

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## Discussion Topics

- Protection Mechanisms
- ATSC 3.0 Standards – notable updates
- Business Focus
- Phoenix Model Market
- Use of DRM, connected/un-connected
- CENC Modes
- What's next

## Protection Mechanisms

- Transport Protection
  - Transport Layer Security (TLS)
- Cryptographic signing
  - Broadcaster Apps
  - Signaling
- Digital Certificates
  - X.509v3
- Content Protection
  - MPEG Common Encryption (CENC)

## Standards Status (notable updates)

- A/324: Scheduler / Studio to Transmitter Link
  - AES with GCM
- A/331: Signaling, Delivery, Synchronization, and Error Protection
  - Signed Multi-table
  - Signaling of the DRMSystemID
- A/344: Interactive Content
  - DRM Operation & DRM Notification APIs
- A/360: Security and Service Protection
  - bsid changed from hex to integer
  - Certification Data Table (CDT)

## Security Testing in Phoenix

- Primary focus is on interoperability and feature verification
- DRM protected, free-to-view content over-the-air
  - Connected Device
  - Un-connected Device
- Application Signing
- Signaling Signing

## What's next

- Reconcile CENC modes - ATSC 3.0, DASH-IF, CTA-WAVE
- Pre-loaded DRM license verification/testing
- Additional DRM guidance and profiling
- Test, Test, Test