

Cisco AnyRes Video on Demand Analysis Node

Product Overview

Cisco® AnyRes Video on Demand (VoD) helps expand the revenue potential of video content for service providers, media distributors, and content providers by generating high-quality VoD assets that are compatible with any device. By eliminating the manual bottlenecks typically involved with high-volume, file-based transcoding workflow, which prepares video files for set-top boxes, PCs, and mobile devices, Cisco AnyRes VoD helps lower operating expenses (OpEx). It also produces high-quality assets for every screen with exceptional performance, maximizing advertising opportunities without compromising the viewing experience.

The Cisco AnyRes VoD analysis node performs pre-encoding analysis of input content to automate the routing of incoming media to proper templates and settings. The analysis node is an optional license in the Cisco AnyRes VoD workflow, and it uses decision logic that is customized within a work order according to your needs.

Features and Benefits

The Cisco AnyRes VoD analysis node:

- Organizes incoming assets according to fast file-header reads, or accurate frame-by-frame scanning
- Is an integrated solution that feeds results internally to the server node for further processing
- Is an integrated solution that automates manual processes and filters content according to results
- Is a licensed component of Cisco AnyRes VoD, so no additional hardware is required (but is recommended)
- Positions assets to be transcoded with the Cisco AnyRes VoD encode node or organized into folders by desired parameters to initiate a third-party action
- Scans for resolution, frame rate, file name, audio channels, time code, pixel format, letterbox detection, and more. Refer to Table 2 for a complete list

Platform Support and Compatibility

Cisco AnyRes Video on Demand is optimized for use on Cisco Unified Computing System™ (Cisco UCS™) hardware, such as on the B200 M3 blade server. This provides customers with a single system that encompasses:

- Network: Cisco Unified Fabric
- Industry-standard x86 computing
- Storage with access options
- Virtualization optimization
- Unified management model
- Dynamic resource provisioning
- Efficient scaling
- Lower cost, with fewer servers, switches, adapters, and cables
- Lower power consumption

- Fewer points of management

Licensing

License requirements for Cisco AnyRes Video on Demand vary by node and feature, as outlined in Table 1.

Table 1. License Requirements

| Node | License Requirements |
|----------------------------------|--|
| Client | Unlicensed, but required initially for setup and to operate Cisco AnyRes VoD; can be bypassed by the Cisco AnyRes VoD server API |
| Server | Required for all installations; one license per server or blade |
| Encoding | Transcoding and digital rights management (DRM) |
| Analysis | Pre-encoding analysis and “decision logic” |
| Post-encoding | Quality check, offline packaging, and delivery |
| Enhanced transport stream | Generates CableLabs®-compliant files |
| AC-3 Dolby | Encoding AC-3 files; pass-through does not require license |
| Common format indexing | Generates files compatible with Cisco Videoscape™ Distribution Suite Origin Server (VDS-OS) on-demand packaging |
| IP mode | Puts Cisco AnyRes VoD into “online enhancement” mode for Cisco VDS Optimization Engine (VDS-OE) solution |

Product Specifications

Table 2 lists product specifications for Cisco AnyRes Video on Demand Analysis Node.

Table 2. Product Specifications

| Inputs | | |
|-----------------|---|--|
| Video | <ul style="list-style-type: none"> • Resolutions up to 2048 x 1080 • MPEG-2 elementary, program, and transport streams • QuickTime (all codecs supported by QT 7.2 and later, including Apple ProRes 422, DVCPRO HD, Avid DNxHD, and IMX MPEG-2) • H.264, all profiles • MXF (OP1A and OP-atom) • GXF (SMPTE-360M) • AVI • WMV • AVISynth scripts • Motion and Photo JPEG * With installation of third-party decoders | |
| Audio | <ul style="list-style-type: none"> • AVI, QT, MPEG-2 Program and Transport Streams, and AVISynth scripts with embedded audio tracks • Multichannel AVI • WAV • Extensible WAV • AC-3 • Advanced encryption standard (AES) (SMPTE-302M) | |
| Analysis | Options | Parameters |
| | Active area height | Numerical entry |
| | Active area width | Numerical entry |
| | Audio channels | <ul style="list-style-type: none"> • None • 1 (mono) • 2 (stereo) • 4 • 6 |

| | | |
|------------------------|--|---|
| | | <ul style="list-style-type: none"> • 8 |
| Audio codec | | <ul style="list-style-type: none"> • AAC • AC3 • MPEG layer 2 • None • PCM • WMA |
| Audio high count | | Numerical entry |
| Audio sample rate (Hz) | | <ul style="list-style-type: none"> • None • 8000 • 11,025 • 22,050 • 32,000 • 44,056 • 44,100 • 47,250 • 48,000 • 50,000 • 50,400 • 88,200 • 96,000 • 176,400 • 192,000 • 2,822,400 |
| Audio tracks | | 1-8 |
| Closed captioning | | <ul style="list-style-type: none"> • None • 608 • 708 |
| Commercial black count | | Numerical entry |
| Container type | | <ul style="list-style-type: none"> • ASF • AVI • AVISynth • MPEG2 Program • MPEG2 Transport • MPEG4 • QuickTime • Unknown |
| Display aspect ratio | | Numerical entry |
| Dropped frame count | | Numerical entry |
| Field order | | <ul style="list-style-type: none"> • Top field first • Bottom field first |
| File name | | Open field |
| File size (MB) | | Numerical entry |
| Frame mode | | <ul style="list-style-type: none"> • Interlaced • Progressive • Telecined |
| Frame rate | | <ul style="list-style-type: none"> • 60 • 59.94 • 50 • 30 • 29.97 • 25 • 24 |

| | | |
|--|-------------------------|---|
| | | <ul style="list-style-type: none"> • 23.976 • 15 • 12 • 10 • 7.5 • 6.25 • 5 |
| | Input height | Numerical entry |
| | Input width | Numerical entry |
| | Letterbox bottom height | Numerical entry |
| | Letterbox top height | Numerical entry |
| | Pillarbox left width | Numerical entry |
| | Pillarbox right width | Numerical entry |
| | Pixel aspect ratio | Numerical entry |
| | Video bitrate (Kbps) | Numerical entry |
| | Video codec | <ul style="list-style-type: none"> • AVC/h.264 • Cineform • DVCPro • MPEG-2 • Uncompressed • VC-1 • XD Cam |

System Requirements

Table 3 lists system requirements for the Cisco AnyRes Video on Demand Analysis Node.

Table 3. System Requirements

| | |
|------------------------------------|--|
| Minimum system requirements | <ul style="list-style-type: none"> • Quad-core Xeon processor* • Windows Server 2008 R2 • 8-GB RAM • 500 GB hard drive <p>* Faster processors reduce job time; additional processors increase density.</p> |
| Also supported | <ul style="list-style-type: none"> • vSphere v5.0 or later |

Warranty Information

Find warranty information on Cisco.com at the [Product Warranties](#) page.

Ordering Information

To place an order, visit the [Cisco Ordering Home Page](#) and use the information in Table 4. To download software, visit the [Cisco Software Center](#).

Table 4. Ordering Information

| Product Name | Part Number |
|--------------------------------|------------------------------------|
| Cisco AnyRes VoD Analysis Node | R-ARM-SWK-510-DN=, L-ARM-ANLZ-VOD= |

Cisco Services

Cisco Services brings together the people, processes, tools, and partners to accelerate service providers' success by using their IP Next-Generation Network (IP NGN) architectural platforms. Cisco Services is focused on promoting business outcomes through network, services, and operational transformation. Through a collaborative approach and tailored engagements, Cisco Services can help accelerate time to market, mitigate risk, reduce cost through improving operational efficiencies, and help assure the user experience.

Cisco Services' approach and differentiation in services comes from a heritage of network capabilities and a wealth of experience in providing solutions to service providers in all sectors around the world. That is reflected in over 20 years' involvement in the market with services and solutions that are strategically aligned with those of the service provider. Cisco Services has also made a massive research and development commitment to the service provider community, developing innovative roadmaps and solutions to keep the sector ahead of the competition.

For More Information

For more information about the Cisco AnyRes VoD analysis node, visit <http://www.cisco.com/en/US/products/ps11801/index.html>, or contact your local account representative.



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