VEGA H264

Content Readiness - From Creation to Distribution

interra systems

Comprehensive Video/Audio Analysis to Reduce Debug Cycle

Addressing the needs of media professionals to debug and optimize digital video products, Interra's Vega H264 provides detailed analysis of video and audio streams.

Reducing development time and costs, and increasing productivity, Vega H264 enables media professionals to quickly bring to market high quality, standard-compliant digital video products.

Vega H264 is an ideal tool for media professionals who need to:

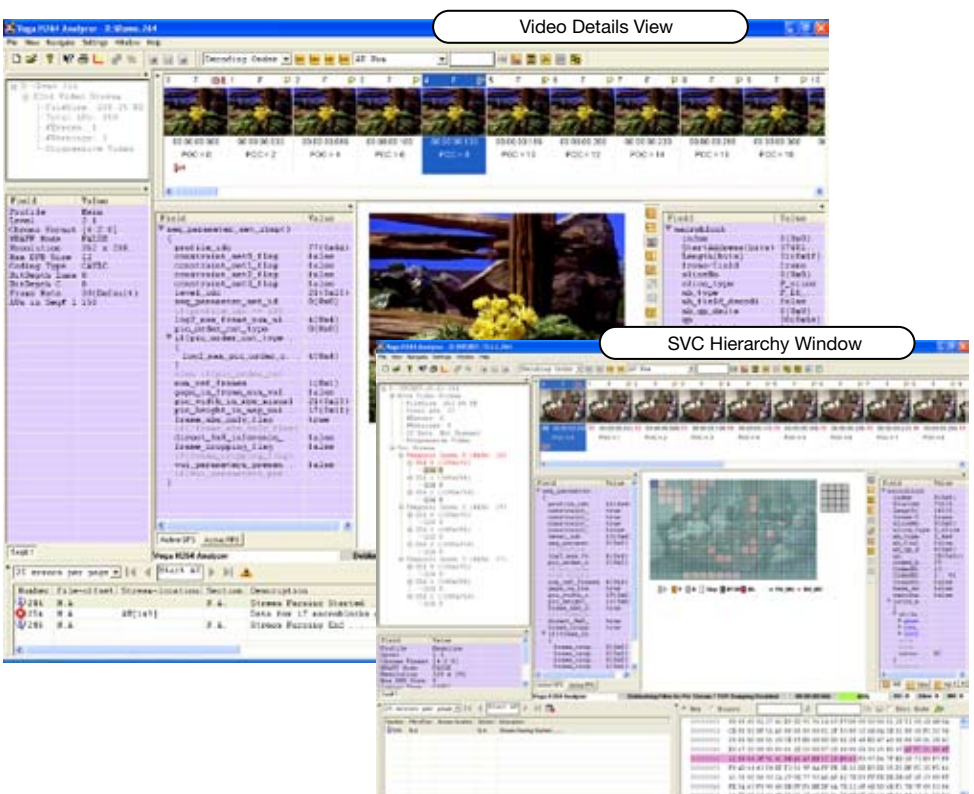
- Verify a stream's compliance with the defined standard
- Debug an encoded stream, or optimize a stream's buffer requirements
- Evaluate and compare the performance and quality of video compression/decompression tools
- Optimize and refine video compression CODEC
- Check interoperability issues

New

- **Multicore support for video stream analysis**
- **Hierarchial view of SVC Layers**
- **Audio Video synchronization check**
- **Additional standard support:**
  - H.264 SVC, AVS, ISDB-T, Teletext, Subtitles, Close Captions, PCAP, HDV, MJPEG 2000, and more...

Standards Supported

Video	H.264, H.264 SVC, H.263, H.263+, MPEG-4, MPEG-2, MPEG-1, AVS
Audio	AAC, Dolby AC-3, Dolby Digital Plus, AMR, MP3, PCM, LPCM, MPEG-1/MPEG-2 Audio
System Streams	MPEG-2 Transport, MPEG-2 Program/DVD VOB, QuickTime, MPEG-1 Systems, MP4, 3GPP/3GPP2, AVC, AVI, HDV
Broadcast Standards	ATSC, DVB, DVB-T/DVB-H, TR 101 290 Priority 1,2 and 3 Tests, DTS 101-154, ISDB-T
Other formats	PCAP, JPEG, MPEG 2000, Teletext, DVB-Subtitle, XDS, CC608, CC708



Runs on Windows 2000, XP (2-3 GHz CPU and 2GB RAM)

Key Product Benefits

- Extensible architecture to support other audio, video, and system formats
- Powerful debug capabilities to analyze picture-by-picture
- Quick forward/backward navigation; also, vertical navigation down to macroblock level
- Detailed display of coded information along with quick-to-capture summary information: average bits, quantizer, and frame statistics
- Customized trace output to find out syntax-by-syntax data values
- Messages in XML format for ease of distribution
- Extraction of video and audio from system streams for future debugging purposes
- Facility to store analyzed data for future reference
- Fast analysis and Partial analysis mode for large streams
- Interactive buffer analysis capabilities
- Powerful YUV Diff utility to evaluate video quality
- Video Comparator utility to assess the performance of encoders

Vega has been adopted worldwide as the de facto standards compliance tool. 250 plus licences currently in use.

DOLBY DIGITAL

With Dolby certified AC-3, DD Plus analysis

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Highlights

Video Analysis

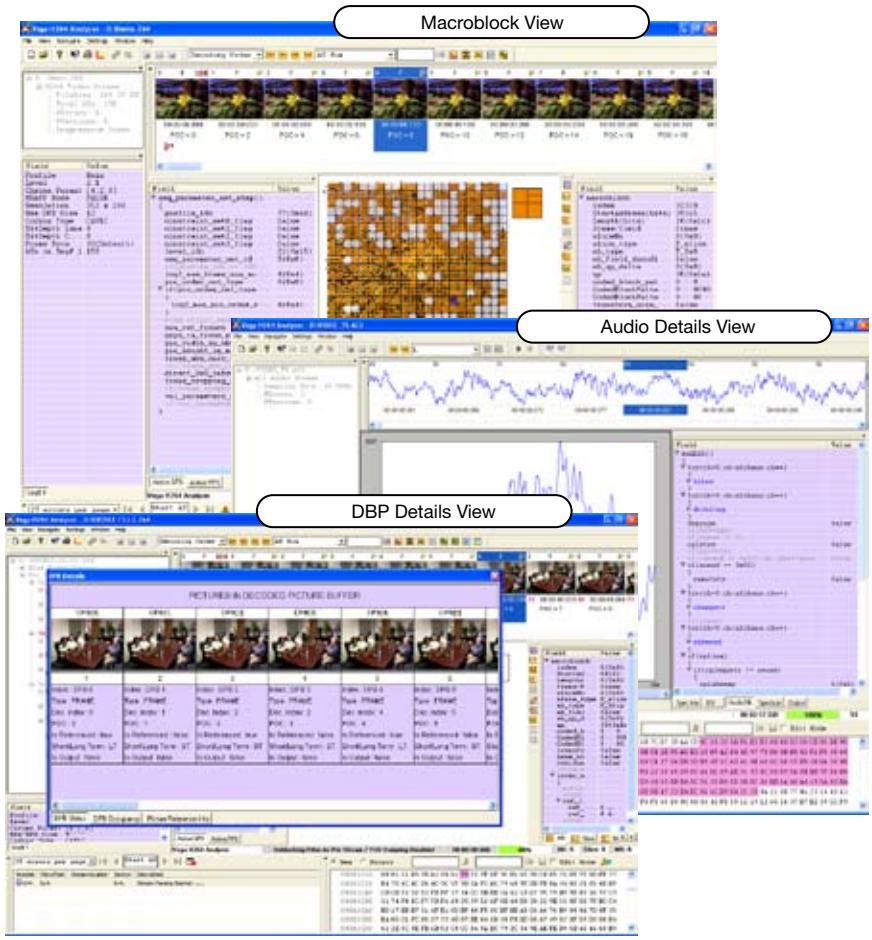
- Supports all Profiles and Levels
- Displays Sequence, VOL, Picture, VOP, Macroblock, Slice, NAL unit, and binary data for each picture
- Displays frame statistics to analyze interpolation, prediction mode, coded bits, and frame size
- Generates encoder performance and quality metrics graphs
- Performs buffer analysis: CPB, VBV, VMV, VCV
- Displays hierarchy for SVC layers

Audio Analysis

- Supports different audio object types and profiles
- Displays separate data for different channels e.g. L, R, C, SCE, CPE, LFE, CCE, etc.
- Displays top-level header e.g. ADIF, ADTS, Sync Info, BSI, WAV, etc.
- Displays Spectrum and Output data for all RDBs, Audio Block, Core Frame, etc.
- Supports playback of decoded audio channels

System File Analysis

- Supports detailed analysis of audio/video stream carried over MPEG-2 Transport /Program/PES/DVD VOB/ HD DVD EVOB/File Formats
- Displays hierarchy in a tree view
- Displays Pack/Packet Header, PES Packet Header, and PSI/PSMap fields
- Performs STD buffer analysis
- Audio Video Synchronization check in Transport streams



Input Formats & Standards Supported

Video Formats

- H.264: ISO/IEC 14496-10
  - Fidelity Range Extensions Amendment to ITU-TRec. H.264 I ISO/IEC 14496-10
- H.263 ITU-T Video coding for low bit rate communication: ITU-T Series H - Recommendations H.263
- H.263+: H.263v2, 1998, Video coding for low bit rate communication
- MPEG-4: Part 2 ISO/IEC 14496-2
- MPEG-2: ISO/IEC 13818-2:1995 and Amendment – 1999-03-01
- H.264 SVC (ITU-T Rec. H.264(11/2007) Advanced video coding for Generic Audiovisual Services, Annex G)
- AVS - Advanced coding of audio and video - Part 2 : Video (GB/T 20090.2 - 2006)

Audio Formats

- AAC: ISO/IEC 14496-3 sub part 1 and 4, Amendment 1
- Dolby AC-3: A/52, A/52A
- Dolby Digital Plus: ETSI TS 102 366 V1.1.1 (2005-02), Digital Audio Compression: (AC-3, Enhanced AC-3) Standard
- Dolby TrueHD: Meridian Lossless Packing, Technical Reference for FBA and FBB streams, version 1.0, October 2005
- AMR: 3GPP TS 26.101 V5.0.0
- MP3: 1172-3 and 13818-3
- LPCM

System Formats

- MP4/AVC: ISO 14496-1, ISO 14496-12, ISO 14496-14, ISO 14496-15
- 3GPP: TS 26.244 V6.0.0, 3GPP2: C.S0050-0 V1.0
- MPEG-2 Transport/Program: ISO/IEC 13818-1 and ISO/IEC 13818-1: 2000/Final Draft Amendment 3
- DVD VOB: DVD Specifications for Read Only Disc/Part 3: Video Specifications Version 1.0
- MPEG-1 Systems: ISO/IEC 11172-1
- AVI
- HDV
- PCAP [RFC 2326(RTSP), RFC 3216(SIP), RFC 2327(SDP), RFC 3550(RTP), MPEG2 TS in UDP (RFC 768)]

Broadcast Formats

- ATSC/DVB
- DVB-T/DVB-H: ETSI EN 301 192 version 1.4.1, DVB Specification for Data Broadcasting
- TR 101 290 Priority 1,2 and 3 Tests: TR 101 290, Digital Video Broadcasting (DVB); Measurement guidelines for DVB systems
- DTS 101-154: Specification for use of Video and Audio Coding in Broadcasting Applications
- ISDB-T Japanese Broadcasting Standard

AVC SMPTE

Backed by Interra's acclaimed pre & post sales support

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