Release Notes

Tektronix

MTS4CC
Elementary Stream Compliance Checker

071-2076-02

This document applies to software version 2.0.0

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Release Notes

The MTS4CC Elementary Stream Compliance Checker is a powerful real-time analytical tool for the investigation of compressed video data that has been encoded using the H.264/AVC, MPEG-2, MPEG 4, VC-1, and H.263 video standards. The MTS4CC Elementary Stream Compliance Checker operates as a standalone software application for use on a personal computer (PC) in a Microsoft Windows environment. The software can also be installed on the MTS400 Series MPEG Test Systems.

These release notes provide the following information:

- Related user documentation
- Enhancements
- Known Issues
- Platforms
- Previous enhancements

Related User Documentation

The following user documentation supports MTS4CC software version 2.0:

- *MTS4CC Elementary Stream Compliance Checker User Manual*
  Tektronix part number 071-2075-01
- *MTS4CC Elementary Stream Compliance Checker Tutorials*
  Tektronix part number 001-1415-01
  (available in the online help and from the Tektronix Web site, www.tektronix.com/manuals)

Major Enhancements

The major changes listed below are implemented in software version 2.0:

- Output of decoded video.
  - The decoded video can now be output in a raw format for further analysis.

- ARIB TR-B14 compliance mode.
  - This new mode adds a range of checks to H.264/AVC streams to confirm the stream's conformance to the ARIB TR-B14 standard.
- User interface enhancements:
  - New MB Statistics toolbar allows easy selection of overlays.
- New command line options for greater control and flexibility.

Known Issues

H.264/AVC

The following H.264/AVC stream issues are known:

- An incorrect warning about a repeated SPS is issued if the SPS has been changed in a newly coded video sequence.
- Non 8-bit I_PCM blocks are not fully supported and can cause incorrect decode errors and visual artifacts.
- Frame timings shown in the summary tooltip for streams with HRD information might be incorrect. This does not affect the HRD calculations.
- There is an artificial limit of 396 on the number of slices that may be present in a picture.

Platforms

The MTS4CC software has been verified with the following Microsoft operating systems and service packs:

Table 1: Verified platforms

Operating system	Service pack
Microsoft Windows XP Home	Service Pack 2
Microsoft Windows XP Pro	Service Pack 2
Microsoft Windows 2000 Pro	Service Pack 4

Previous Enhancements

The following minor enhancements were implemented in software version 1.0.2.0:

H.264/AVC

- JM code base updated to version 12.0.
- SEI message parsing added to the Stream Structure view.
- New checks added for the VUI when an SPS is repeated.
- Decode speed improved.
- “Aborting slice decode” problems with some streams fixed.
- “Too many macroblocks per second” alert updated to account for the change in the 2005 edition of the H.264/AVC standard.
- Misinterpretation of hypothetical field rate as a frame rate corrected.
- Incorrect errors for out of range values of mb_qp_delta removed.
- Incorrect parsing of pan-scan rectangle SEI message fixed.

MPEG-4

- Support added for Simple profile Levels 4a and 5.

Other

- Stream auto detection algorithms improved to reduce false matches.

End of document