Data Files for SMPTE VC-2 Conformance Testing

Release 1.0.0

BBC

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This *vc2_conformance_data* module contains data files and test pictures for use in conformance testing procedures.

You can find the source code (and data files) for *vc2_conformance_data* on GitHub[1].

Note: This documentation is also available to browse online in HTML format[2].

1 Static filter analysis data

STATIC_FILTER_ANALYSIS_BUNDLE_FILENAME = "/path/to/bundle.zip"
A `vc2_bit_widths` ([vc2_bit_widths], page 33) bundle containing static filter analyses for all VC-2 codec configurations with a default quantisation matrix.

2 Pictures

Test pictures are provided in the raw format used by the VC-2 conformance software (see `vc2_conformance.file_format` ([vc2_conformance], page 117)). Filenames are given for the `*.raw` file, a corresponding `*.json` metadata file is also provided with the same base name.

First, a synthetic test sprite:

POINTER_SPRITE_FILENAME = "/path/to/picture.raw"
A 128x128 sprite with the following features:

- Saturated white triangle covering the top-left half of the sprite
- A black, perfectly circular hole cut out of the middle of the triangle.
- The letters 'VC-2' in the bottom right half of the sprite on a black background.
- The letters 'V', 'C', and '2' are printed in saturated primary red, green and blue respectively. The hyphen is printed in saturated white.
- All edges are antialiased

[1] https://github.com/bbc/vc2_conformance_data/
[2] https://bbc.github.io/vc2_conformance_data/

Next, a small set of natural images (from photographs) are provided for testing encoders and decoders on realistic picture content. The complete set of files is enumerated in:

`NATURAL_PICTURES_FILENAMES = ["/path/to/picture.raw", ...]`
: A collection of natural test pictures (photographs).

And the individual files are also named as follows:

`BERRIES_PICTURE_FILENAME = "/path/to/picture.raw"`
: A test picture of berries growing from a branch.

This shallow-depth-of-field image contains large amounts of low spatial frequency content, including nearly-flat coloured areas.

`KINGSWOOD_PICTURE_FILENAME = "/path/to/picture.raw"`
: A test picture of a large white building amongst greenery.

This image is an example of a natural scene with broad general features and fine detail.

`TREES_PICTURE_FILENAME = "/path/to/picture.raw"`
: A test picture of deciduous tree branches in winter against a blue sky.

This image contains a large amount of fine detail (i.e. high spatial frequency content).

References

[vc2_data_tables] The vc2_data_tables[3] manual.

[vc2_bit_widths] The vc2_bit_widths[4] manual.

[3] https://github.com/bbc/vc2_data_tables/
[4] https://github.com/bbc/vc2_bit_widths/