



CCC with Waveform Plotting

Product Description

Over the past 20 years the evolution of the COMTRADE standard has seen many variations, but one commonality remains, misinterpretation caused by format errors. These misinterpretations can lead to issues such as sending restoration crews to the wrong location or providing relay technicians with incorrect settings.

Format errors in COMTRADE records can be defined as any deviation from or misinterpretation of the defined standard format. Comtrade Conformity Check (CCC) was specifically designed to catch these errors in the CFG and DAT files.

For each record checked CCC will create an error report with the same filename as the COMTRADE record but with a .CCC extension. All error reports are saved to a directory specified by the user.

| Code | Line | File | Error Description |
|------|------|------|--|
| 0014 | 0008 | CFG | Channel Unit is not the correct length (must be 1 - 32 characters) in analog channel 6. |
| 0029 | 0020 | CFG | Normal state has to be either 0 or 1 in digital channel 2. |
| 0025 | 0024 | CFG | Incorrect Digital Channel Number (must be successive and sequential, cannot start with 0). |
| 0039 | 0037 | CFG | Day is incorrect in the date and time stamps (must be 1 - 31). |

Example Error Report

Features

- Can check a single COMTRADE record or an entire directory of COMTRADE records.
- Can detect up to 80 types of errors.
- Gives the user the ability to view the CFG file or Plot the DAT file.
- Displays the content of the error report on the application interface.
- Supports all three revisions of the COMTRADE standard (1991, 1999, 2013).

Example Errors

Here are just a few of the 80 possible errors:

- Analog channel unit not listed.
- Incorrect analog or digital channel number.
- Incorrect number of columns (data separators).
- Missing or extra analog or digital channel.
- Missing normal state in digital channels.
- Incorrect fault time.
- Incorrect number of scans in DAT file.
- DAT File incorrect size.
- Each line needs to end with a carriage return, and line feed.
- DAT File type listed in CFG file incorrect.
- And many more...

Requirements and Support Services

- **Requirements** - The software works with Windows 7, 8, 10 and 2008/2012/2016 servers. The software requires 3MB of storage space and, depending on usage, may use up to 9MB of available memory.
- **Technical/Custom Support** - Standard technical support services are available at 609.335.2007 or at support@softstuf.com. For custom development services please contact our support team at support@softstuf.com.
- **Warranties** - Softstuf warrants that the software will substantially achieve the functionality as advertised and described in the Manuals. In the event any future deficiency is discovered in the software then Softstuf shall at its own sole expense make the changes necessary to correct said deficiency within a reasonable time of being notified.

Download, Activation, and Upgrades

- CCC can be downloaded from the Demos page of the Softstuf Website.
- The download of CCC will include ten COMTRADE test records.
- Until activated CCC will only read these ten records.
- CCC is activated by an activation code.
- A unique serial number is listed on CCC's activation dialog box. This is needed to create the activation code.
- Please provide this serial number upon purchase of the software, an activation code will be sent when the serial number and payment has been received.
- Purchasing can be done by email (sales@softstuf.com), phone (609-338-7736) from 9 AM to 5 PM Monday thru Friday, or purchase order.
- Upgrades are available for download from the Upgrades page of the Softstuf website.

Ordering Information

| <i>Item</i> | <i>Part Number</i> | <i>Description</i> |
|-------------|--------------------|---|
| 1 | CCC-WEB | Downloadable zip file containing the software and all software documentation. |

Contact Us

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Hours: Monday thru Friday, 9:00 am to 5:00 pm EST