NAME

db2sac, db2ah – conversion routine for css information

SYNOPSIS

db2sac [-sc *sta-cha***] [-ts** *start-time***] [-te** *end-time***] [-w** *wf_dir***] [-gap** {*none* | *zero* | *interp*}**] [-counts]** *input_db output_db*

db2ah [-sc *sta-cha***] [-ts** *start-time***] [-te** *end-time***] [-w** *wf_dir***] [-gap** {*none* | *zero* | *interp*}**] [-counts]** *input_db output_db*

DESCRIPTION

Db2sac and **db2ah** are conversion utilities which convert *CSS* format waveform files into *SAC* or *AH* format, and also creates a new *CSS* wfdisc table incorporating these files. Note that this new *CSS* wfdisc table is consistent with all the other tables in original database, and programs which use a *CSS* database should continue to run.

The newly created AH files are *architecture independent xdr* ah files.

Each *CSS* database can create a number of *SAC*/*AH* files. These files are named using the following convention:

YYYYJJJHHMMSS.SS.STN.CHAN

Where the fields have the following meanings:

YYYY	Year
JJJ	Julian Day
HH	Hour
MM	Minute
SS.SSSS	Seconds.Fractional-Seconds
STN	Station
CHAN	Channel

OPTIONS

-h | -help

Gives a summary of the command usage.

-v | -version

Print the version number and last modification date.

-sc

Select station-channel pairs with expressions of the form "*station*:*channel*,*station*:*channel*,..." *Station* and *channel* may be either explicit names, "*", or a regular expression in the style of egrep.

-ts *start-time*

-te *end-time*

These may be used to select a subset of the waveforms based on a starting time and ending time. The time specification format consists of a day field optionally followed by a time field, <*day time*>, where the two fields are separated by a blank character (this normally requires the use of quotes in the command line). The *day* field can be specified in a number of ways, e.g. MM/DD/YY or julian day, and the time field is usually specified as HH:MM:SS.SS.

-w *waveform-dir*

You may specify the name of waveform directory explicitly; otherwise a default is used -- "sac" for **db2sac** and "ah" for **db2ah**.

-gap {*none* | *zero* | *interp*}

This specifies how internally flagged gaps are treated. Small internal waveform segment gaps (usually caused by radio telemetry drops) are treated in a consistent fashion within the database. They are flagged with maximum positive values for the format of the data so that they are clearly identifiable and distinct from other valid sample values (such as zero). In converting

to SAC or AH, these gap values can be left as is, set to zero or they can be interpolated according to this argument. If this argument is omitted, then the default behavior is to set gap values to zero.

-counts

If this flag is specified, then the data will be written to SAC/AH files in floating counts instead of the default behavior which is to convert data to floating ground units (nm, nm/sec, or nm/sec^2).

EXAMPLE

```
lemond% db2ah -sc CHM:HHZ -ts 1/20/92 -te 1/30/92 knet.1992.jan-apr ah
Translating...
Writing: 1992028045438.50.CHM.HHZ
Writing CHM, HHZ,  6200 samples, starting 1992 028 04:54:38:5000 UT
Translating...
Writing: 1992029060349.50.CHM.HHZ
Writing CHM, HHZ,  6200 samples, starting 1992 029 06:03:49:5000 UT
Translating...
Writing: 1992029075333.00.CHM.HHZ
Writing CHM, HHZ,  6600 samples, starting 1992 029 07:53:33:0000 UT
Translating...
Writing: 1992029080238.50.CHM.HHZ
Writing CHM, HHZ, 13450 samples, starting 1992 029 08:02:38:5000 UT
Translating...
Writing: 1992029081530.00.CHM.HHZ
Writing CHM, HHZ,  6400 samples, starting 1992 029 08:15:30:0000 UT
Translating...
Writing: 1992029082145.50.CHM.HHZ
Writing CHM, HHZ,  5300 samples, starting 1992 029 08:21:45:5000 UT
lemond% ls ah*
ah.wfdisc

ah:
1992028045438.50.CHM.HHZ      1992029080238.50.CHM.HHZ
1992029060349.50.CHM.HHZ      1992029081530.00.CHM.HHZ
1992029075333.00.CHM.HHZ      1992029082145.50.CHM.HHZ
```

SEE ALSO

sac2db(1)

BUGS

When specifying a time range, you must specify a beginning and ending *time*, not a date. For instance, the time range from 11/26/91 to 11/26/91 is actually the time from midnight 11/26 to midnight 11/26, a total period of zero seconds, not, as you might think, the entire day of November 26, 1991.

AUTHOR

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