NAME

mrwhen - print timestamps for Oracle extended SQL trace file tim values

SYNOPSIS

```
mrwhen [ --comment ] [ --drift=float ] [ --drift-only ] [ --help | -? ] [
--license ] [ --lines=range_list ] [ --man ] [ --scanmax=n ] [ --start ] [
--tim=tim_value ] [ --verbose | --verbose=level ] [ --version ] file
```

DESCRIPTION

mrwhen prints starting and ending timestamps for each line in an Oracle extended SQL trace file. It is useful for seeing what time your database calls (like PARSE, EXEC, FETCH) and your operating system calls (WAITs) started and ended. mrwhen prints timestamp values in ISO 8601 form (e.g., 2018-04-01T10:42:12.185760) in your shell's local time zone.

Many trace lines have a tim field that identifies the completion time of the call described by the line. But tim values are microsecond interval timer values that are difficult for humans to read. If a trace file contains at least one wall clock timestamp from which a tim-to-time correlation can be established, mrwhen uses the correlation to print easy-to-read timestamps for the tim values you ask it to process.

There are two ways to specify which tim values to process. Running mrwhen *file* with no options causes mrwhen to process each line in *file*. You can restrict which lines to process using the --lines option, or you can enter a single tim value directly on the command line using the --tim option. However, in *every* case, *file* is required for mrwhen to establish a tim-to-time correlation.

If you specify more than one --lines or --tim option, or if you specify both a --lines and a --tim option, mrwhen will process only the final such option that you list on the command line.

mrwhen always checks for non-monotonically increasing tim values and wall clock drift.

OPTIONS

- --comment Print the timestamp as a comment at the end of each output line, using # as the comment operator. The default is --nocomment, which causes mrwhen to print the timestamp at the beginning of each line.
- --drift=float Print clock drift information when the absolute value of the calculated clock drift is greater than or equal to *float* seconds. The default value is --drift=1.

- --drift-only Perform clock drift checks only, without writing any trace output. The default is --nodrift-only.
- --help, -? Print usage information and exit.
- --license Print license key information and exit.
- --lines=range-list Print timestamps for tim values found on input file lines specified in range-list. The list may contain positive integers (like 42), closed ranges of positive integers (like 42-52), or open ranges of positive integers (like -42 or 42-), separated by commas. The default is --lines=1-, which will match all lines in the input file. Examples:

Option specification	Meaning
lines=42	line 42 only
lines=1-42	lines 1 through 42
lines=-42	same as $1-42$
lines=42-	lines 42 through end of file
lines=-5,10-15,20,30-	mix 'em up
lines=13,1-5	out of order is ok
lines=a	illegal; mrwhen will die

--man Print the manual page and exit.

- --scanmax=n Read n lines looking for Oracle trace file meta data information, specifically the time to tim correlation. The default value is 250. Using 0 means read every line in the file.
- --start Print the time that each call began. Use --nostart to suppress the printing of each call's begin time. The default is --start.
- --tim=value Print a timestamp for the given tim value (a many-digit integer).
- --verbose, --verbose=level Print information about each instance of clock drift if *level* is greather than 0. If *level* is absent, then 1 is used. The default is --verbose=0.
- --version Print the version number and exit.

EXAMPLES

```
mrwhen f.trc# process every line in the filemrwhen f.trc --lines=42-48# just lines 42-48mrwhen f.trc --nostart# print only call end timesmrwhen f.trc --comment --nostart# end time only, as a commentmrwhen f.trc --tim=25233260123075# show time of this tim value
```

EXIT STATUS

Exit status is 0 on successful completion, and > 0 if an error occurs.

LIMITATIONS

mrwhen calculates the tim-to-time mapping in an input file only once, irrespective of how many ******* datestamp lines are in the file.

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SUPPORT

 $\texttt{mrwhen} \ 9.2.1.2$

For support, visit https://method-r.com/support.

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