

## NAME

mr1011 – convert an older Oracle trace file into 11g format

## SYNOPSIS

```
mr1011 [ --help | -? ] [ --license ] [ --man ] [ --scale=float ] [ --version ]  
file.trc [ output.trc ]
```

## DESCRIPTION

mr1011 reads an Oracle Database extended SQL trace file (*file.trc*) and writes an equivalent file in the modern trace file format established in Oracle Database 11g. Output goes to *output.trc* if you specify it on the command line, or **stdout** if you don't.

mr1011 enables customers who still use older Oracle Database versions to convert their trace files to a modern form that Method R Workbench can consume. Modern-version trace files (11g, 12c, 18c, 19c, 20c) differ from older-version files (10g, 9i, 8i) in two ways:

1. Modern-version timing values are more accurate than older-version timing values.
2. Modern-version files contain new fields that older-version files do not.

mr1011 transforms its input by synthesizing new fields wherever it finds fields that are missing, and adjusting timing values as instructed by the **--scale** option. mr1011 writes, as the first line of its output, the command options used to create the file, in “comment” form:

```
# mr1011 --scale=1.024 ...
```

### New Fields

mr1011 synthesizes the following fields that do not appear in pre-11g trace files:

**sqlid (PARSING IN CURSOR lines)** mr1011 synthesizes a unique **sqlid** value for each PARSING IN CURSOR section.

**plh (dbcall lines)** mr1011 synthesizes a unique **plh** value for each execution plan whose text appears in the trace file. For plans whose text does not appear in the trace file, mr1011 will use **plh=0**.

**tim (WAIT and XCTEND lines)** mr1011 synthesizes an appropriate **tim** value for WAIT and XCTEND lines.

## Time Adjustments

Oracle Database 9i and 10gR2 `tim`, `e`, `ela`, and `c` microsecond (us) values are about 2.3% smaller than they should be, because they're calculated from nanosecond (ns) operating system data using `us=ns>>10` (the equivalent of `us=ns/1024`) instead of `us=ns/1000`.

Such a small error may not sound like much of a problem, but when a `tim` value is supposed to represent the number of microseconds since the beginning of the Unix Epoch (more than 50 years ago), the error amounts to more than a year. This is a big problem when you're using `mrcrop datetime` to isolate a specific time interval within a trace file. `mr1011` fixes the problem by multiplying `tim`, `e`, `ela`, and `c` values by 1.024 (the default `--scale` value).

Oracle Database 8i time values are expressed in 0.01-second units (centiseconds). Use `--scale=10000` to convert 8i time values to 11g-compatible microsecond units. If you notice clock drift with that value, try `--scale=10240`.

## OPTIONS

`--help, -?` Print usage information and exit.

`--license` Print license key information and exit.

`--man` Print the manual page and exit.

`--scale=float` Multiply each `tim`, `e`, and `ela` value in the input by *float*. To bypass the multiplication, use `--scale=1`. The default is `--scale=1.024`.

`--version` Print the version number and exit.

## BUGS AND DEFICIENCIES

`mr1011` does not write exactly the same data that Oracle Database 11g (or later) would have written. For example, the `sqlid` value that `mr1011` synthesizes will not be the same as the value of `V$SQL.SQL_ID`, and the `plh` value that it synthesizes will not be the same as the value of `V$SQL.PLAH_HASH_VALUE`.

`mr1011` does not read through trace file chains that are linked with `*** TRACE FILE CONTINUED FROM FILE` markers like `mrcrop` does. Thus, if a call's execution plan text is not in `file.trc` itself, `mr1011` will use `plh=0`, even if the plan text is present in the `CONTINUED FROM` chain of trace files.

## EXIT STATUS

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

## **AUTHORS**

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## **SUPPORT**

mr1011 9.2.1.2

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