



Linux Ubuntu 26.04 Manual Pages on command 'trace-cmd-attach.1'

\$ man trace-cmd-attach.1

TRACE-CMD-ATTACH(1) libtracefs Manual TRACE-CMD-ATTACH(1)

NAME

trace-cmd-attach - attach a guest trace.dat file to a host trace.dat file

SYNOPSIS

trace-cmd attach [OPTIONS] host-trace-file guest-trace-file guest-pid [guest-pid ...]

DESCRIPTION

The trace-cmd(1) attach is used to take a trace.dat file created on a guest and attach it to a trace.dat file that was created on the host. In most cases, trace-cmd-agent(1) can be used to automate this, but if for some reason, the agent isn't appropriate, it may be required to start trace-cmd recording on the guest with trace-cmd-record(1). If the host recording is activated at the same time, one can use trace-cmd attach(1) to connect the guest and host files as if they were created by the trace-cmd agent.

host-trace-file

The trace.dat file created by the host. Must have kvm_exit and kvm_entry events, and use the "tsc2nsec" clock.

guest-trace-file

The trace.dat file created by the guest. Must use the "x86-tsc" clock. For now, this is only supported on x86, it may support other architectures later.

guest-pid

The process ID of the host thread that represents the guests threads. Each process ID that represents all of the guest vCPUs should be listed. Note, you can add more than just the threads that represent the guest vCPUs, as the tool will search the host-trace-file for kvm_exit and kvm_entry events to match these PIDs with the vCPUs that they represent.

OPTIONS

-c cpus

Specify a the number of CPUS the guest has.

-s timeshift

A comma separated list of the format offset,scale,frac,timestamp These values map to what are given in /sys/kernel/kvm/<pid>/vcpu/*

***offset*:** Is the offset of the guest. "tsc-offest" in the directory. Note that the value listed here is the negative of what is listed in the directory.

***scale*:** The scaling factor. "tsc-scaling-ratio"

***frac*:** The fraction bits. "tsc-scaling-ratio-frac-bits"

***timestamp*:** The timestamp to start using the above. In some cases, the values may change over time. By adding a timestamp, it will take effect after the timestamp has been hit. Normally this would be zero.

Currently, only one timeshift is given per CPU. One *-s* option should be given for each CPU. If there are less options than CPUs, then the last option given will be used for the rest of the CPUs. If only one option is given, then the values for that option will be used for all CPUs.

EXAMPLES

Enable all events for tracing:

```
$ # find the process for a given guest
```

```
$ ps aux |grep qemu
```

```
libvirt+ 63170 5.6 1.6 13994848 4257540 ? SI May02 2884:49 /usr/bin/qemu-system-x86_64...
```

```
$ # Use 63170 to find all the PIDs for the give guest
```

```
$ ls /proc/63170/task
```

```
1541591 63170 63198 63209 63211 63213 63214 63215 63216 63217 63218 63219 63234
```

```
$ # Find the tsc offset
```

```
$ su
```

```
# cat /sys/kernel/debug/kvm/63170-15/vcpu0/tsc-offset
```

```
-27950965013436847
```

```
# trace-cmd record -C tsc2nsec -e kvm -e sched -e irq -e timer
```

```
# on guest:
```

```
# trace-cmd record -C x86-tsc -e sched -e irq -e timer sleep 10
```

```
# back on host, hit Ctrl^C to stop tracing after the guest is done
```

```
# # Make the trace.dat user owned by your user account.
```

```
# chown user.user trace.dat
```

```
# exit
```

```
$ scp root@guest:trace.dat trace-guest.dat
```

```
$ # now attach the two files (guest has 8 CPUs)
```

```
$ trace-cmd attach -c 8 -s 27950965013436847 trace.dat trace-guest.dat 1541591 63170 63198 63209 63211
```

63213 63214 63215 63216 63217 63218 63219 63234

```
$ trace-cmd report -i trace.dat -i trace-guest.dat
```

```
$ # now you should see the guest trace interleaved within the host trace.
```

SEE ALSO

trace-cmd(1), trace-cmd-report(1), trace-cmd-start(1), trace-cmd-stop(1),
trace-cmd-extract(1), trace-cmd-reset(1), trace-cmd-split(1), trace-cmd-list(1),
trace-cmd-listen(1), trace-cmd-profile(1)

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RESOURCES

<https://git.kernel.org/pub/scm/utils/trace-cmd/trace-cmd.git/>

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NOTES

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libtracefs

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