Perf subcommands

ORION

```
$ perf
$ perf list
$ perf list cache
```

perf stat

ORION

```
$ perf stat -a -- sleep 2
```

- Cycles: 0.3GHz
- Idle 91.52%
- Instructions: 0.03 insns per cycle

```
$ perf stat ./sudoku medium.sudoku > /dev/null
```

- Cycles
- Instructions
- Idle 5%

```
$ perf stat —a —d sleep 1
```

Good / bad cache utilization

```
# diff —c 2d*

$ perf stat —e cache-misses ./2d-array-good
$ perf stat —e cache-misses ./2d-array-bad
```

- 800'000 vs 11'000'000 ==> 14X

perf top

```
$ ./sudoku hard.sudoku &
$ perf top —F 99 -K
```

perf record

```
$ perf record –a –F 99
$ perf report
$ perf record –a –F 99 –e cache-misses,branch-misses
$ perf report
```

Callstack
```
# perf record –g ./callstack-ok
# perf report
# perf record –g ./callstack-not-ok
# perf report
```

perf script

```
$ perf script –l
```

- Embedded scripts

```
$ perf script –l
$ perf script –g python
$ cat perf-script.py
```

Failed syscalls
```
$ perf script record failed-syscalls
$ perf script report failed-syscalls
```