

NAME

chcpu – configure CPUs

SYNOPSIS

chcpu -c|-d|-e|-g *cpu-list*

chcpu -p *mode*

chcpu -r|-h|-V

DESCRIPTION

chcpu can modify the state of CPUs. It can enable or disable CPUs, scan for new CPUs, change the CPU dispatching *mode* of the underlying hypervisor, and request CPUs from the hypervisor (configure) or return CPUs to the hypervisor (deconfigure).

Some options have a *cpu-list* argument. Use this argument to specify a comma-separated list of CPUs. The list can contain individual CPU addresses or ranges of addresses. For example, **0,5,7,9-11** makes the command applicable to the CPUs with the addresses 0, 5, 7, 9, 10, and 11.

OPTIONS

-c, --configure *cpu-list*

Configure the specified CPUs. Configuring a CPU means that the hypervisor takes a CPU from the CPU pool and assigns it to the virtual hardware on which your kernel runs.

-d, --disable *cpu-list*

Disable the specified CPUs. Disabling a CPU means that the kernel sets it offline.

-e, --enable *cpu-list*

Enable the specified CPUs. Enabling a CPU means that the kernel sets it online. A CPU must be configured, see **-c**, before it can be enabled.

-g, --deconfigure *cpu-list*

Deconfigure the specified CPUs. Deconfiguring a CPU means that the hypervisor removes the CPU from the virtual hardware on which the Linux instance runs and returns it to the CPU pool. A CPU must be offline, see **-d**, before it can be deconfigured.

chcpu -g is not supported on IBM z/VM, CPUs are always in a configured state.

if **chcpu -g** is supported, any **disabled** CPUs should be **deconfigured** to inform the hypervisor that these CPUs won't be used, avoiding potential performance penalties.

-p, --dispatch *mode*

Set the CPU dispatching *mode* (polarization). This option has an effect only if your hardware architecture and hypervisor support CPU polarization. Available *modes* are:

horizontal

The workload is spread across all available CPUs.

vertical

The workload is concentrated on few CPUs.

-r, --rescan

Trigger a rescan of CPUs. After a rescan, the Linux kernel recognizes the new CPUs. Use this option on systems that do not automatically detect newly attached CPUs.

-h, --help

Display help text and exit.

-V, --version

Display version and exit.

EXIT STATUS

chcpu has the following exit status values:

0

success

1

failure

64

partial success

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SEE ALSO

lscpu(1)

REPORTING BUGS

For bug reports, use the issue tracker <<https://github.com/util-linux/util-linux/issues>>.

AVAILABILITY

The **chcpu** command is part of the util-linux package which can be downloaded from Linux Kernel Archive <<https://www.kernel.org/pub/linux/utils/util-linux/>>.