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Red Hat Enterprise Linux Release 9.2 Manual Pages on 'tuned-profiles.7' command

$ man tuned-profiles.7

TUNED_PROFILES(7) TuneD TUNED_PROFILES(7)

NAME

tuned-profiles - description of basic TuneD profiles

DESCRIPTION

These are the base profiles which are mostly shipped in the base tuned package. They are targeted to various goals. Mostly they provide per? formance optimizations but there are also profiles targeted to low power consumption, low latency and others. You can mostly deduce the purpose of the profile by its name or you can see full description be? low.

The profiles are stored in subdirectories below /usr/lib/tuned. If you need to customize the profiles, you can copy them to /etc/tuned and modify them as you need. When loading profiles with the same name, the /etc/tuned takes precedence. In such case you will not lose your cus? tomized profiles between TuneD updates.

The power saving profiles contain settings that are typically not en? abled by default as they will noticeably impact the latency/performance of your system as opposed to the power saving mechanisms that are en? abled by default. On the other hand the performance profiles disable the additional power saving mechanisms of TuneD as they would nega? tively impact throughput or latency.

PROFILES

At the moment we're providing the following pre-defined profiles:

balanced

It is the default profile. It provides balanced power saving and performance. At the moment it enables CPU and disk plugins of TuneD and it makes sure the conservative governor is active (if supported by the current cpufreq driver). It enables ALPM power saving for SATA host adapters and sets the link power management policy to medium_power. It also sets the CPU energy performance bias to normal. It also enables AC97 audio power saving or (it depends on your system) HDA-Intel power savings with 10 seconds timeout. In case your system contains supported Radeon graphics card (with enabled KMS) it configures it to automatic power sav? ing.

powersave

Maximal power saving, at the moment it enables USB autosuspend (in case environment variable USB_AUTOSUSPEND is set to 1), en? ables ALPM power saving for SATA host adapters and sets the link power management policy to min_power. It also enables WiFi power saving and makes sure the ondemand governor is active (if supported by the current cpufreq driver). It sets the CPU energy performance bias to powersave. It also enables AC97 audio power saving or (it depends on your system) HDA-Intel power savings (with 10 seconds timeout). In case your system contains sup? ported Radeon graphics card (with enabled KMS) it configures it to automatic power saving. On Asus Eee PCs dynamic Super Hybrid Engine is enabled.

throughput-performance

Profile for typical throughput performance tuning. Disables power saving mechanisms and enables sysctl settings that improve the throughput performance of your disk and network IO. CPU gov? ernor is set to performance and CPU energy performance bias is set to performance. Disk readahead values are increased.

accelerator-performance

This profile contains the same tuning as the throughput-perfor?

mance profile. Additionally, it locks the CPU to low C states so that the latency is less than 100us. This improves the per? formance of certain accelerators, such as GPUs.

latency-performance

Profile for low latency performance tuning. Disables power sav? ing mechanisms. CPU governor is set to performance and locked to the low C states (by PM QoS). CPU energy performance bias to performance.

network-throughput

Profile for throughput network tuning. It is based on the throughput-performance profile. It additionally increases kernel network buffers.

network-latency

Profile for low latency network tuning. It is based on the la? tency-performance profile. It additionally disables transparent hugepages, NUMA balancing and tunes several other network re? lated sysctl parameters.

desktop

Profile optimized for desktops based on balanced profile. It ad? ditionally enables scheduler autogroups for better response of interactive applications.

hpc-compute

Profile optimized for high-performance computing. It is based on the latency-performance profile.

virtual-guest

Profile optimized for virtual guests based on throughput-perfor? mance profile. It additionally decreases virtual memory swappi? ness and increases dirty_ratio settings.

virtual-host

Profile optimized for virtual hosts based on throughput-perfor? mance profile. It additionally enables more aggressive write? back of dirty pages.

intel-sst

Profile optimized for systems with user-defined Intel Speed Se?
lect Technology configurations. This profile is intended to be
used as an overlay on other profiles (e.g. cpu-partitioning pro?
file), example: tuned-adm profile cpu-partitioning intel-sst

optimize-serial-console

Profile which tunes down I/O activity to the serial console by
reducing the printk value. This should make the serial console
more responsive. This profile is intended to be used as an
overlay on other profiles (e.g. throughput-performance profile),
example: tuned-adm profile throughput-performance optimize-se?
rial-console

aws Profile optimized for AWS EC2 instances. It is based on the
throughput-performance profile.

FILES

/etc/tuned/*

/usr/lib/tuned/*

SEE ALSO

tuned(8) tuned-adm(8) tuned-profiles-atomic(7) tuned-profiles-sap(7)
tuned-profiles-sap-hana(7) tuned-profiles-oracle(7) tuned-profiles-re?
altime(7) tuned-profiles-nfv-host(7) tuned-profiles-nfv-guest(7)
tuned-profiles-cpu-partitioning(7) tuned-profiles-compat(7) tuned-pro?
files-postgresql(7) tuned-profiles-openshift(7)

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