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Deprecating Cgroup v1
Linux Plumbers 2024

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Linux Kernel Development

Oracle Corporation

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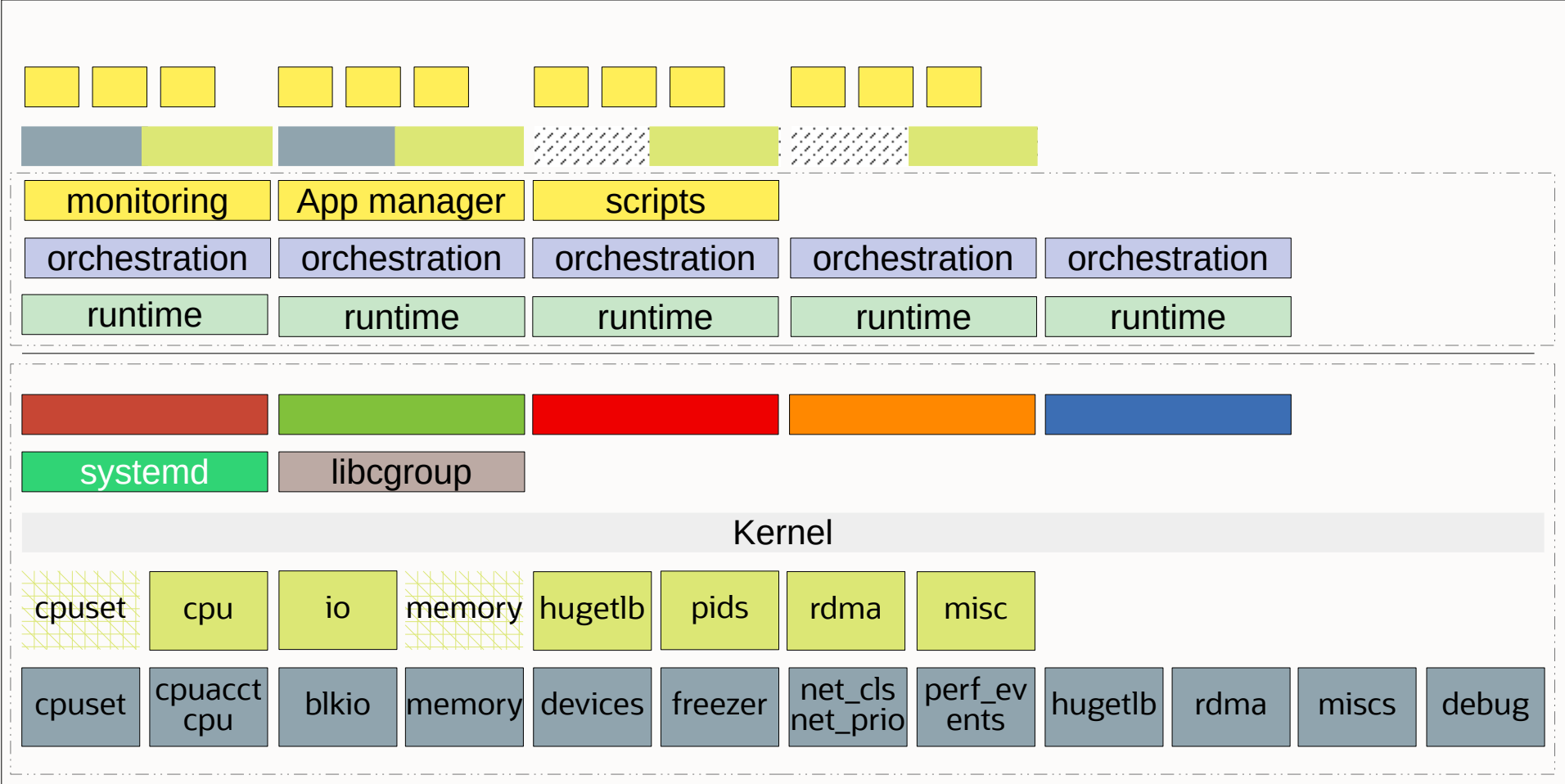   09/19/2024

Deprecating Cgroup v1

Are we ready for v2?

Who
- ~~Why~~ are the users not moving?

- Unknown Unknown dependencies?

- Dependent pieces working is silo's?

- Contention between host/containers?

- When do we drop compatibility mode?

- Can we plan and prepare road map?

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Deprecating Cgroup v1

Ecosystem

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Deprecating Cgroup v1

Open Discussion

- Is there any cgroup v1 Kernel feature blocking you?

- How do we coordinate across the board?

  - Publish Timelines

  - Testing results

  - Migrations Guides

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Thank You

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Backup Slides

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cgroup v2

Controllers		Kernel Version	
memory, I/O, pids controllers		- v4.5	(Mar 2016)
rdma controller		- v4.11	(Apr 2017)
cpu controller		- v4.15	(Jan 2018)
block I/O latency controller		- v4.19	(Oct 2018)
Pressure Stall Information		- v4.20	(Dec 2018)
cpuset v2		- v5.0	(Mar 2019)
freezer		- v5.2	(Jul 2019)
hugetlb		- v5.6	(Mar 2020)
misc		- v5.13	(Jun 2021)

cgroup adoption

Distribution	Release Version	Release Date
Oracle Linux	9	June 2022
RedHat Enterprise Linux	9	May 2022
SUSE Linux Enterprise Server	15 SP6	April 2024
Ubuntu Server	21.10	Oct 2021
Fedora	31	Oct 2019

Disclaimer: Release dates listed may not reflect the latest updates. Visit the official distribution websites for accurate and current information.

 09/19/2024

Distribution EOL

Distribution	Release Version	EOL
Oracle Linux	7	June 2028[1]
Oracle Linux	8	July 2032[1]
RedHat Enterprise Linux	7	June 2024[2]
RedHat Enterprise Linux	8	May 2029[2]
SUSE Linux Enterprise Server	15 SP5	Dec 2027[3]
Ubuntu Server	20.04	April 2030[4]
Ubuntu Server	22.04	April 2027[4]
Fedora	30	May 2020[5]

[1] https://endoflife.date/oracle-linux

[2] https://endoflife.software/operating-systems/linux/red-hat-enterprise-linux-rhel

[3] https://endoflife.date/sles

[4] https://endoflife.software/operating-systems/linux/ubuntu

[5] https://endoflife.software/operating-systems/linux/fedora

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Switching different cgroup mode

Legacy systemd.unified_cgroup_hierarchy=0 systemd.legacy_systemd_cgroup_controller=true

Hybrid systemd.unified_cgroup_hierarchy=0 systemd.legacy_systemd_cgroup_controller=false

Unified systemd.unified_cgroup_hierarchy=0 systemd.legacy_systemd_cgroup_controller=false

$ cgget -m

Unified Mode (Cgroup v2 only).

(libcgroup command to check the current cgroup boot mode)

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