MegaRAC OneTree™ CE

Unified OpenBMC Distribution

Unifying the OpenBMC Landscape

MegaRAC OneTree CE (Community Edition) is a completely open-source OpenBMC distribution maintained by AMI. It unifies the fractured OpenBMC landscape into a single, cohesive source tree that's synchronized both with upstream OpenBMC and with downstream commercial MegaRAC OneTree on a regular cadence.

Utilizing MegaRAC OneTree CE allows CSPs, OEMs, and ODMs to get multiple platforms to market faster and with more maintainability than other completely open-source OpenBMC options.

OneTree CE vs. other OpenBMCs

OpenBMC is a groundbreaking project, but every hardware vendor has their own customized fork. When product lines span multiple vendors, systems providers need to keep up to date with all these separate forks. Ensuring that a dozen different forks all have the latest security and reliability updates to ensure a safe, resilient product is an ongoing engineering challenge.

MegaRAC OneTree CE takes a different approach. AMI has dedicated the engineering to unify dozens of disparate vendor OpenBMC forks into a single, configurable tree. Building BMC firmware for multiple revisions of multiple hardware platforms with different CPUs, chipsets, BMC SoCs, and sensor configurations can be done from *one single tree*. This means critical patches and updates only need to be applied and tracked in one place, simplifying compliance, and also ensures a consistent end user experience across entire product lines.

Key Benefits

- ✓ Fully open-source **OpenBMC** distribution
- ✓ **Open** Licensing (GPL, Apache, etc.)
- ✓ Unified, support multiple CPU architectures, BMC SoC controllers, sensors, and management infrastructure under **a single source tree**
- ✓ **Ongoing security analysis** and updates from upstream OpenBMC and downstream MegaRAC OneTree
- ✓ **Synchronized** with upstream Linux Foundation OpenBMC.
- ✓ **Latest** upstream Linux kernel and tooling
- ✓ Fast **innovation**, fast feature **exploration**
- ✓ **Community** supported

Development Style

- ✓ **Synchronized** with Linux Foundation OpenBMC upstream and MegaRAC OneTree commercial at ongoing, frequent basis.
- ✓ Basis for **new feature development**
- ✓ Ease **upgrade** path to MegaRAC OneTree™

MegaRAC OneTree vs. OneTree CE

MegaRAC OneTree is the fully commercially supported version of MegaRAC OneTree CE that includes things like LTS (long term support) kernels, embargoed hardware support, and additional expansion packs to enable monitoring of hardware like GPGPUs and rack-level monitoring for things like liquid cooling and beyond. AMI provides multiple levels of subscription-based support depending on vendor needs.

MegaRAC OneTree CE receives updates from upstream OpenBMC and periodic updates downstream commercially supported MegaRAC OneTree. Because enabling upcoming processors and SoCs often require embargoed code to support, they are not generally available in MegaRAC OneTree CE at silicon launch. Support for MegaRAC OneTree CE is through the OpenBMC community, with an option of commercial support through AMI or others.

	OpenBMC	MegaRAC OneTree CE	MegaRAC OneTree
Core Features	✅	✅	✅
Additional Modules	❌	❌	✅
Support	Community	Community	Commercial SLA
Engineering Services	❌	Available	✅
Licensing	Open	Open	Open + Commercial
LTS Kernel Support	❌	❌	✅

OpenBMC without the Mess

MegaRAC OneTree CE lets systems developers deploy a unified, completely open BMC firmware for their portfolio while minimizing time to market and ongoing integration, bug fix, and security difficulty.

Key Features

- ✓ IPMI and Redfish® (RESTful API)
- ✓ Active Directory and LDAP
- ✓ iKVM / Virtual and Remote Media
- ✓ Power and Thermal Management
- ✓ NVMe-MI and MCTP
- ✓ Serial over Lan (SoL)
- ✓ Firmware Update
- ✓ Remote Debug
- ✓ DCMI support
- ✓ RAS Support
- ✓ PLDM and SPDM Support
- ✓ Web UI – Vue
- ✓ IPV4 and IPv6 Support

Community

- ✓ https://github.com/ocp-hm-openbmc-opf-ami/meta-ami
- ✓ https://www.ami.com/solutions/open-source-solutions/

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