

Cloud service and hosting providers managing large-scale datacenters face many challenges accelerating their infrastructure and managing multiple systems across different vendors. Updating firmware can be challenging, even across heterogeneous generations of hardware from a single vendor. The simplicity of a single, open embedded system management stack allows for scalable operations, and easier migration paths across different or newer infrastructure.

Dell Open Server Manager built on OpenBMC™ enables open, embedded systems management on select Dell PowerEdge servers. Dell Open Server Manager is designed, tested, and validated to securely run on select Dell PowerEdge platforms and configurations. We offer a cohesive migration path for our customers looking to adopt OpenBMC for their environments while optimizing operations and minimizing management with choices you can count on.

What is OpenBMC?

OpenBMC is an open-source BMC firmware stack designed to run on various infrastructures. It is a Linux Foundation project with the backing of Intel®, IBM®, Microsoft®, and Google™. OpenBMC™ aims to run the same embedded management software on all of your systems to bring consistent management across your environment. Dell Open Server Manager is Dell's implementation of OpenBMC.

Why Dell Open Server Manager?

Dell Open Server Manager built on OpenBMC includes pure OpenBMC plus the security, manageability, and support that our customers expect from PowerEdge servers:

Proven Security:

- Dell-signed firmware with silicon root-of-trust (RoT)
- Root shell access disabled by default

Lifecycle Management:

- BIOS configuration via Redfish™ API
- Firmware update support via Dell Update Packages for BIOS, Backplane, Power Supply, Open Server Manager, and iDRAC

Global Services & Support:

- Standard Dell support and warranties

Improved User Experience

Why choose Dell Open Server Manager built on OpenBMC?

OpenBMC is designed to provide consistent systems management software across heterogeneous infrastructure. Dell Open Server Manager enables OpenBMC to run securely on select PowerEdge servers by leveraging the same BMC silicon that iDRAC uses. In doing so, this added silicon Root-of-Trust ensures that only the Dell version of OpenBMC – thoroughly tested and validated – runs seamlessly on PowerEdge servers, giving our customers the security, support, and manageability, they expect.

Ensuring malicious OpenBMC firmware doesn't make its way onto your servers, Dell lifecycle management is also enabled to install Dell-signed firmware update packages from within Dell Open Server Manager for the BIOS, backplane, power supplies, and BMC. Additionally, the ability to export OpenBMC logs into a log package for SupportAssist allows Dell to provide a full warranty and support.

Dell Open Server Manager provides many core systems management capabilities through multiple interfaces, including Redfish™, IPMI, and a web-based user interface.

- Get an overview of the system
- View event and POST code logs
- Observe hardware status and inventory, including channel firmware devices
- Access the virtual KVM with virtual media capability
- Update firmware
- Perform server power operations and configure power consumption
- Configure settings such as the date, time, network, users, sessions, and policies

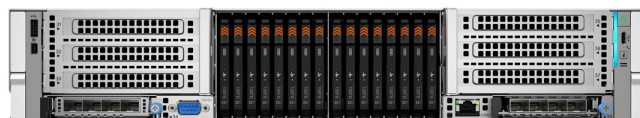
Everything visible in the GUI – except for the virtual KVM and media – is accessible through Redfish.

Redfish allows you to manage the server through a RESTful API programmatically. This feature is vital for autonomous systems management.

Configuring Dell Open Server Manager

Provisioning a new server consists of three activities.

- 1 Configure the hardware.
- 2 Install an operating system.
- 3 Deploy applications and workloads.



Through the Redfish interface, Dell Open Server Manager users can quickly configure BIOS settings using a Server Configuration Profile – just like iDRAC. In addition, firmware can be updated through Redfish or the web interface. Dell Open Server Manager can update the firmware for the BIOS, backplane, power supplies, iDRAC, or Dell Open Server Manager itself.

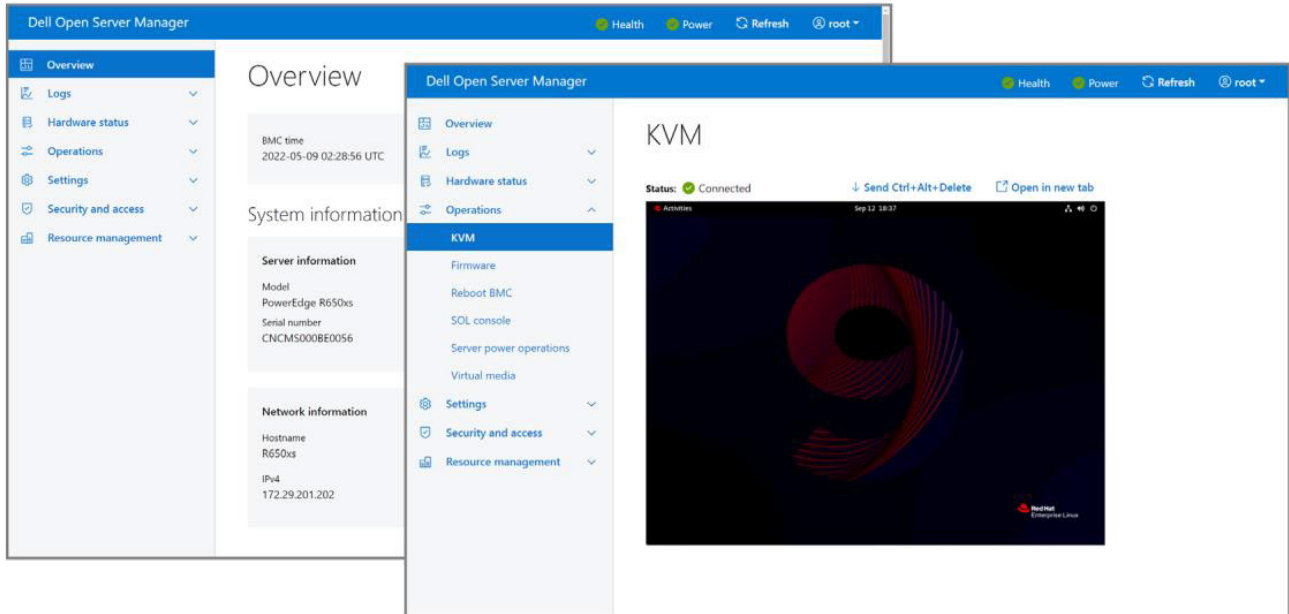
Firmware updates for other devices must be done through the operating system or with device-specific vendor tools. Dell Open Server Manager accepts the same Dell firmware update packages used by iDRAC or for the operating system; and can be downloaded from dell.com/support

An operating system can be installed using the virtual KVM and virtual media capability, or the server can be configured to PXE boot to deploy the operating system and applications over the network.

Getting Started with Dell Open Server Manager

Dell Open Server Manager is available on select PowerEdge configurations as a factory option. Choose the embedded systems management option (iDRAC or Open Server Manager) at the time of purchase. Both options run on the same silicon with the same hardware, and ship directly from the factory. It's your choice.

Contact your Dell account team to learn more about Dell's Open Server Manager built on OpenBMC™ availability or visit Dell.com/CloudScale



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