Information brief:
Dell PowerEdge C6320 platform options that affect embedded systems management

October 2015
Revision 2
Executive summary

The Dell PowerEdge C6320 is designed to handle the most demanding high-performance and scale-out workloads. A key part of every PowerEdge server is the integrated Dell Remote Access Controller (iDRAC) which helps IT administrators securely monitor and manage Dell servers, either locally or in remote locations.

While the C6320 shares many attributes with other 13th-generation PowerEdge servers, there are a few system management features that differ. This document highlights those C6320 platform options that affect its embedded systems management.

The C6320 and iDRAC8

The C6320 design offers many configurations options, as noted in the PowerEdge C6320 Spec Sheet. Some of these options are not supported by iDRAC, and may require changes to customer systems management methods. Also, please note that it is not currently possible to order iDRAC8 from the factory with DHCP enabled; iDRAC will ship with a static IP address.

Hardware features

The C6320 does not support the following options/features:

- iDRAC Direct USB port
- iDRAC Quick Sync bezel
- iDRAC Easy Restore (motherboard replacement)
- Real-time monitoring of mezzanine NICs
- vFlash

NOTE: For Dell OEM customers, not having iDRAC Easy Restore will impact the ability to backup and restore an ID Module. OEM customers with ID Modules will need to manually install their ID Module on any systems impacted by motherboard replacement.

iDRAC with Lifecycle Controller details

iDRAC on the C6320 does not support the following:

- Real time monitoring of the mezzanine slot (NIC or other)
- Configuration, updating or monitoring of the LSI® SAS 2008 Controller
- Configuration, updating or monitoring of the Mellanox® Connect X®-3 Pro

NOTE: The VMware EVO:RAIL solution with the C6320 supports only the LSI 2008 mezzanine HBA (in IR mode) and is subject to the same limitations listed above.
Power management details

The C6320 is supported by OpenManage Power Center. Additionally, customers can monitor and manage power capping on the C6320 in two other ways: via the iDRAC’s web interface or by using IPMItool, an open-source tool which provides a simple command-line interface to IPMI-enabled devices such as the C6320. Power capping can be done in two mutually exclusive ways: at a chassis level or by individual sled. With chassis-level power capping, the IPMItool must be used, and, once configured, the chassis limit is translated into individual power limits taking into account the number of powered on sleds, power loading etc. With sled-level power capping, an administrator can set the power cap for the individual sleds.

Interface limitations

There are no limitations as to what interfaces can be used to access the C6320, but the exact commands used would be limited based on the exclusions and supported devices listed previously in this document. For example, RACADM commands will still work, but will not provide responses for items related to the LSI SAS 2008 storage controller.

Hardware sensor limitations

Some sensors, like chassis intrusion, are not present on the C6320. Also, C6320’s power supply units (PSUs) are instrumented to provide information to the iDRAC. This information shows PSU presence and either a “good” or “bad” state. Information on the power supply and redundancy configuration is sent by the chassis to the iDRAC. To retrieve sensor information, the RACADM command “getsensorinfo” is used.

Conclusion

The PowerEdge C6320 is an incredibly flexible and powerful platform. Being aware of these small differences in this platforms’ management relative to other 13th-generation Dell servers will help ensure that you have the best possible server ownership and management experience.