

Dell Servers v/s Intel Servers – A Review using Practical Experience and Online Sources

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Abstract:- This paper was aimed at critically reviewing Journal Articles to make comparisons between Intel servers and Dell servers with emphasis on the issues related to hardware level as well as to review the user friendly to eliminate issues of failures and servers remote access control.

I. INTRODUCTION

Dell Servers: Dell servers are the most powerful and reliable servers among all, these servers are good in quality and customer support as well. Dell server issues are identified by the Dell Team by verifying TSR report generated by the dell server via IDRAC console.

Types of Dell servers: Power edge R630, R640, R730, R730xd, R740.



Figure.1: Front view of the Dell servers.

Support Processors: Intel Xeon CPU E5-2620 V4, Intel Xeon CPU E5-2650 V4, While installing from V3 processors to V4, firmware should be updated to latest versions.

Size U: Available in 1U, 2U rack servers with good quality of rail kits which easy to remove and mount.

Power Watts: Max capacity of power consumption is 230Watts.

PCI Slots: Supports up to 6 PCI slots with Raid Controller.

Remote Access: Dell servers provide remote on and off features via port called IDRAC. Integrated Dell Remote Access control.

RAM slots: Supports 24 No's of slots, where 12 no's for each processor.

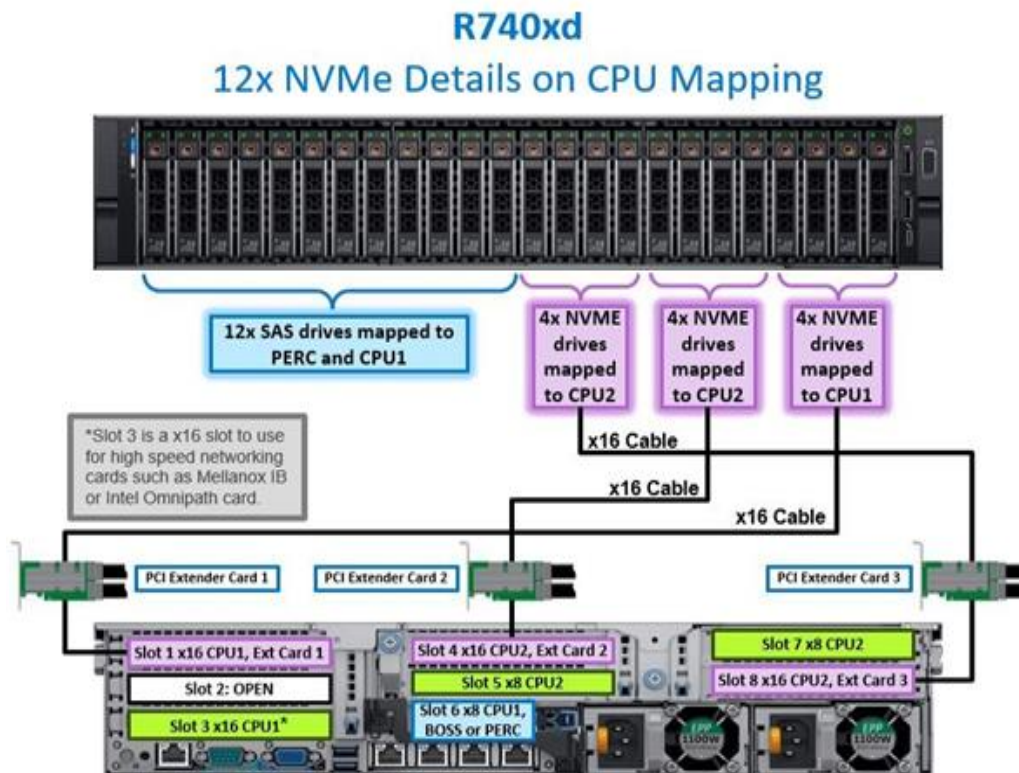


Figure.2: Parts of the Dell servers.



Figure.3: Inside view of the Dell server.

Intel Servers: Storage is simple with the Intel Storage System JBOD2000 family, a 2U form factor system with support for twelve 3.5" LFF or twenty-four 2.5" SFF drives with a single or multi-cable connectivity. The JBOD2000 family includes redundant, hot-swap fans and the option for redundant, hot-swap power supplies. The JBOD2000S2 products support 6Gb/s SAS/SATA connectivity via industry-standard SFF-8088 connectors with the latest JBOD2000S3 version supports up to 12 Gb/s SAS connectivity via industry standard SFF-8644 connectors. All these JBOD offerings are designed to provide highly available and easily expandable storage for Intel servers at an affordable price point.

Types of Intel servers: R220, R221, R-S2600E family, etc.

Support Processors: Intel Xeon CPU E5-2603, Intel Xeon CPU E5-2609, etc.

Size U: Available in 1U, 2U rack servers with good quality of rail kits which difficult to remove and mount than Dell servers.

Power Watts: Max capacity of power consumption is 1300Watts.

PCI Slots: Supports up to 6 PCI slots with Raid Controller.

Remote Access: Dell servers provide remote on and off features via port called BMC. Baseboard Management console.

RAM slots: Supports 24 No's of slots, where 12 no's for each processor.

REFERENCES

- [1]. [www.dell](http://www.dell.com) servers.com
- [2]. [www.intel](http://www.intel.com) servers.com
- [3]. Self-practical working experience.



Figure.4: Front view of the Intel server.



Figure.5 : Inside view of the Intel server.

Main difference between Dell server and Intel server

	DELL Server	INTEL Server
*	Quick boot	Normal boot
*	User friendly BIOS	Difficult to understand BIOS than DELL
*	Rail kits are easier to mount	Rail kits are bit tough to mount
*	3 colors RAM slots	2 colors RAM slots
*	Updating firmware is easy	Updating firmware via shell command
*	Riser slots are very easier to insert	Riser slots bit tough than Dell
*	It makes less sound while booting	It makes more sound than Dell
*	Power consumption is 230 Watts	Power consumption is 1300 Watts

II. CONCLUSION

Dell servers are more convenient than intel servers while using bios, RAID. In the case solving technical issues, Dell servers are easier to understand the issue and to get resolve.