



IDC ANALYST CONNECTION



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Mission-Critical Applications: Why the Right Hardware Platform Matters

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Converged systems encapsulate server, storage, networking, and management software into tightly integrated and more efficiently and easily managed infrastructure solutions. The use of converged systems as an alternative to traditional procurement and delivery models will continue to be one of the most important developments in the evolution of the IT infrastructure market. IDC forecasts that overall spending on converged systems will grow at a compound annual growth rate (CAGR) of 54.7% from \$2.0 billion in 2011 to \$17.8 billion in 2016.

The following questions were posed by Cisco Systems to Carl Olofson, research vice president of IDC's Application Development and Deployment practice, on behalf of Cisco's customers.

- Q. What are the benefits among various hardware server platforms as they relate to mission-critical software packages?**
- A. One of the key considerations when dealing with any server platform for mission-critical software packages is ease of use. The platform needs to be easy to use and administer because one of the biggest costs regarding enterprise applications is system and database administration. Consequently, a significant benefit of easy-to-use hardware server platforms is the lower total cost profile of the enterprise applications that run on those systems.
- Q. What should concern me about a mission-critical application that has its software bundled with a complete self-contained set of server, storage, and network hardware?**
- A. The main concern is that the application hardware bundle — whatever it happens to be — needs to fit into your plans for the datacenter in general. For example, an issue that datacenters often encounter is that there is a general storage management plan in place; then datacenters acquire packages that have built-in storage, so in effect these packages fall outside the storage management plan. This in turn can result in additional complexity as far as administration goes because each package requires a separate policy. In more general terms, any platform should fit into a datacenter's overall plan for administration. A system that fits into a datacenter's management scheme can result in operational efficiencies and cost savings.
- Q. What are my considerations in horizontally scaling a HANA installation?**
- A. Horizontally scaling a HANA installation involves the deployment of excellent networking that is both high performing and easy to administer. With regard to a HANA installation that requires horizontal scaling, the platform should have excellent networking speed and have straightforward, easy-to-manage network administration.

Q. I understand that HANA does not support virtualization, except for nonproduction test/dev instances. What are the benefits of virtualization of SAP software for test/dev, and how hard are they to achieve?

A. The chief benefit of virtualization is that an IT organization can establish a test or development instance of the system on demand just when it is needed. The reverse of this is also true: When you don't need an environment for test or development, you don't need to devote resources to it because virtualization allows you to shut it off. So if you have a dozen applications running on separate HANA databases, and some of them are really large, you can create a really large test instance and then take it down and create another one easily. This is the case if the virtualization solution is sufficiently well organized and easy to manage. Without virtualization, an organization would have to undertake the process of allocating the resources and setting up the system each time or just have the necessary resources running all the time. This latter case represents a huge waste of resources because you use test/dev systems only occasionally.

In addition, database management systems generally aren't designed to be virtualized, so you need special capabilities in the virtualization environment to be able to spin up a test/dev instance unless you have the right environment. Consequently, that's something to look for with HANA databases — having the right virtualization environment to make it relatively easy for you to spin up and take down test/dev instances as needed.

Q. I have enterprise storage management policies centered around my preferred SAN/NAS provider. How can I reconcile these with a HANA deployment?

A. If you have policies centered on your preferred SAN/NAS provider, most of the HANA deployments that are available have built-in storage. Therefore, they will not be part of that SAN/NAS configuration. This requires the establishment of separate policies for those systems. On the other hand, if you can get an SAP-certified HANA configuration that doesn't include or mandate a particular kind of storage, you can then use it with your existing SAN/NAS configuration, and those policies would apply, making for a cleaner and easier environment to administer.

A B O U T T H I S A N A L Y S T

Carl Olofson performs research and analysis for IDC's Information Management and Data Integration Software service within the Application Development and Deployment research group. Mr. Olofson's research involves following sales and technical developments in the information and data management (IDM) markets and database management system (DBMS) markets; data movement and replication software, data management software, and metadata management software; and vendors of related tools and software systems.

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