



DELL EMC READY SOLUTIONS POWERED BY INTEL:

ON-PREMISES IT INFRASTRUCTURE FOR MODERN, DIGITAL BUSINESSES

Addressing IT's desire for improvements in speed, reliability, and security

The modern digital business requires flexible, responsive, and reliable IT infrastructure. Organizations need to move beyond legacy on-premises IT systems that are slow to deploy, require too many IT resources, and are inconsistent. Legacy systems present a barrier to digital transformation efforts because they contain componentry that has been procured independently, often from many sources. Lengthy and costly processes to test, validate, and tune these systems make them a relic of a bygone era.

To keep pace with digital business needs, organizations should consider a next-generation approach to on-premises IT infrastructure: a pre-configured/pre-validated solution. Pre-configured/pre-validated IT infrastructure delivers four fundamental benefits that allow IT organizations to meet and exceed the demands of the organization:

- Speed to solution
- Improved reliability/availability
- Scalability and flexibility
- Security

In addition to meeting business demands, this type of "ready" infrastructure provides substantial benefits for the IT organization itself. Pre-configured/pre-validated infrastructure can greatly reduce the demands on scarce IT resources by eliminating many

tasks within the design/build/deploy activities of IT infrastructure provisioning. These valuable IT resources can focus instead on activities that add real value to the organization, rather than dealing with repetitive, low-value tasks.

However, not all next-generation solutions are created equal. IT buyers must look for solutions that have been put through real-world testing and rigorous validation. On-paper validation may be good for marketing brochures, but untested systems can result in problems that lead to higher costs, project delays, and technical issues. It's important to evaluate the offerings with an eye toward the vendor's efforts to provide solutions that are up to the operational demands of mission-critical production systems.

Dell EMC Ready Solutions: Rigorous engineering to deliver real benefits

Dell EMC Ready Solutions, powered by Intel, embody a best-in-class set of offerings that deliver on the need for faster, more efficient, and more effective on-premises IT infrastructure. The Dell EMC commitment to rigorous testing, validation, and evaluation is a true next-generation approach to designing, deploying, and operating on-premises IT infrastructure. These solutions also can generate substantial cost efficiencies by reducing complexity — the root of higher IT costs.

Intel, a critical partner of Dell EMC, supports the Ready Solution offerings in a number of ways. It begins with Dell EMC and Intel engineers working “hip to hip” to meet specific demands for individual Ready Solutions. One positive output of this collaboration: the improvement in security for many of the data-centric Ready Solutions with the use of Intel’s Trusted Platform Module (TPM) and Intel Trusted Execution Technology (TXT). TPM and TXT are part of Dell’s Cyber Resilient Architecture.

The teams also work together to take the certified platform engineering activities that Intel is driving for SAP, Microsoft, and Cloudera (among others) and improve performance and usability for specific Ready offerings. Dell EMC is leveraging Intel’s AVX 512, a new set of instructions that accelerate performance for demanding workloads. Intel and Dell EMC also work together to ensure that the latest Intel products, such as the Purley server platform, are quickly incorporated into Ready Solutions to provide customer benefit at, or soon after, Intel launches its product.

OVERVIEW OF READY SOLUTIONS

Ready offerings are not “cookie cutter” solutions that force fit customers into a narrow set of options. To be truly useful, a pre-configured/pre-validated IT infrastructure must not only provide the benefits listed above, but also must allow customers to deploy them in a manner that meets their specific needs. For this reason,

Dell EMC offers three classes of Ready Solutions, all using the latest Intel technology:

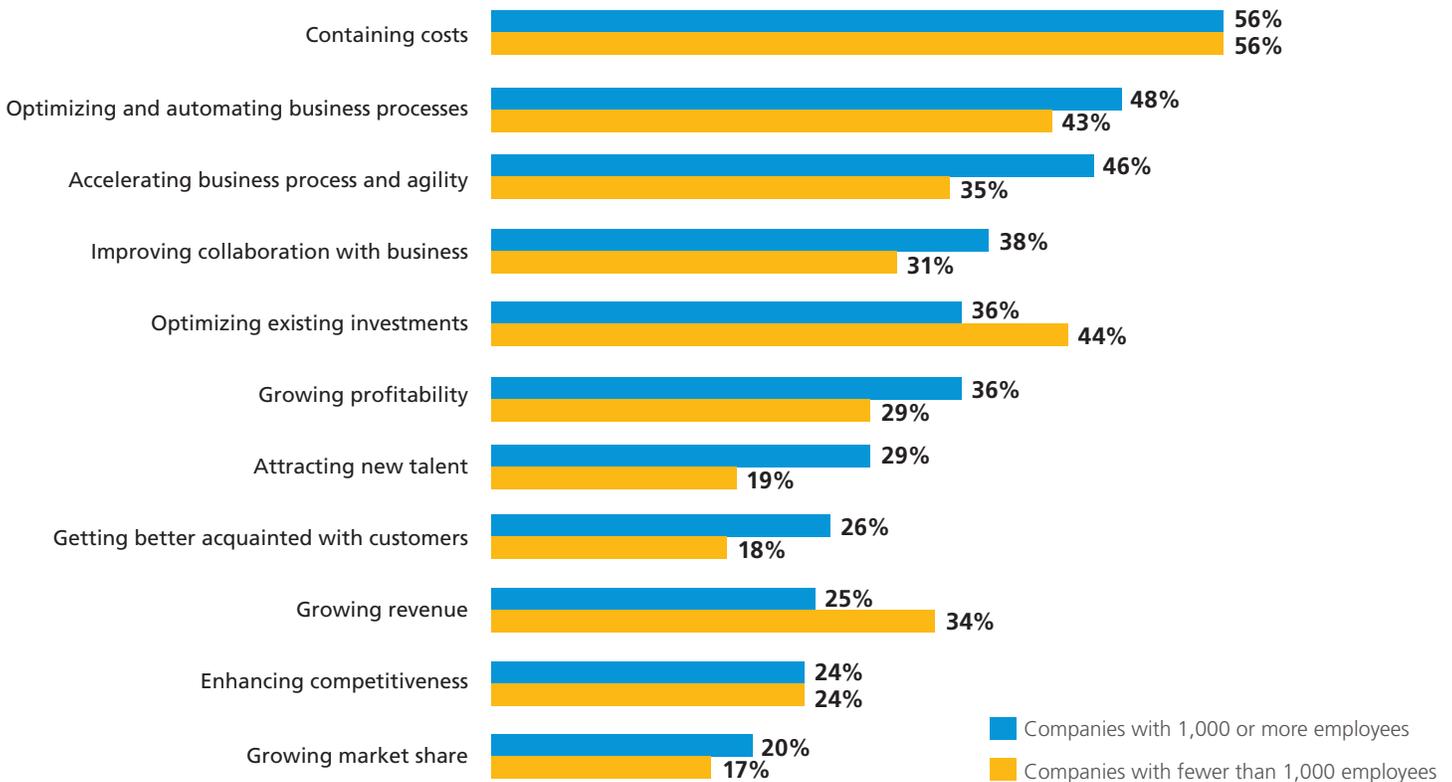
1. **Dell EMC Ready Nodes** are building blocks designed to help an organization start or scale workload-specific deployments. These laboratory-tested and validated solutions are built on Dell EMC PowerEdge servers pre-configured for specific applications to provide performance and resiliency at scale.
2. **Dell EMC Ready Bundles** are also laboratory-tested and validated multicomponent bundles—with servers, storage, networking, software, and services—in optimized configurations for a workload or use case.
3. **Dell EMC Ready Systems** are rack-scale converged or hyper-converged infrastructure (HCI)—including servers, data storage devices, networking functions, virtualization, and management software—in configurations that have been tested and validated for specific use cases or workloads.

THE COMPELLING BENEFITS OF READY SOLUTIONS

All Dell EMC Ready Solutions are designed and conceived to solve many of the drawbacks found in legacy approaches to IT infrastructure and to provide a way to meet the most demanding aspects of digital businesses today and in the future. The *Computerworld* 2016 Forecast Study shows the priorities IT is focusing on to be more aligned with the business (Figure 1).

FIGURE 1:

Business Priorities for the IT Department in the Next 12 Months

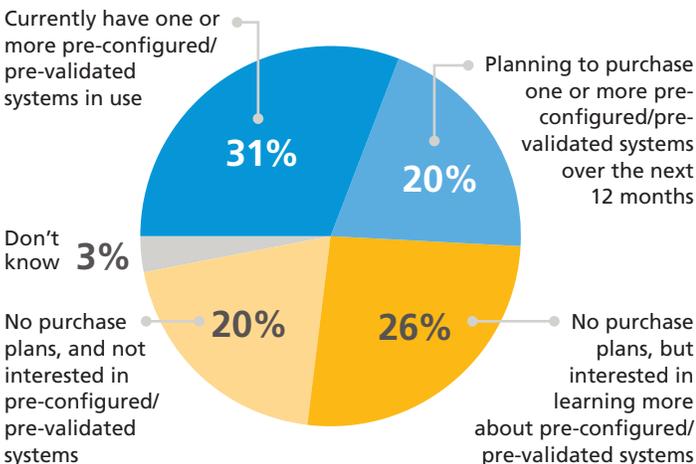


Source: *Computerworld* 2016 Forecast Study

Simply put, this data shows that a new approach to on-premises IT infrastructure is a “must have” as the needs of the organization have fundamentally changed. Ready Solutions deliver on four of the top five needs in the preceding chart. Going into more detail, the compelling nature of Dell EMC’s new approach becomes even more obvious:

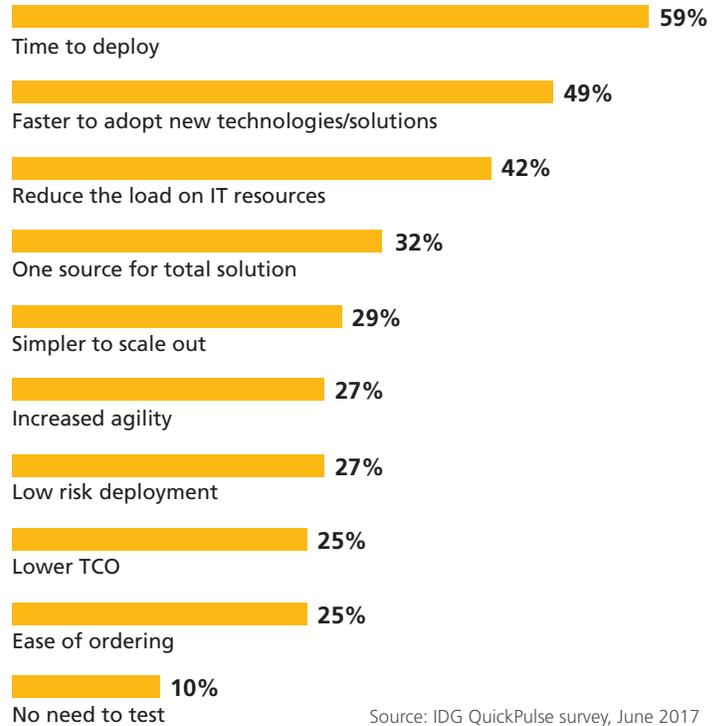
- Speed to solution:** Today’s hyper-competitive business environment is all about speed. How fast can you implement new processes, release new products or services, or change what isn’t working? IT infrastructure must keep up with demand. Legacy on-premises infrastructure deployment approaches can typically take 180+ days to define/design/test/deploy and can often be railroaded by unforeseen and unexpected integration issues and bugs. With Ready Solutions, IT can deploy infrastructure in hours or days, not weeks or months.
- Improving the financial metrics of IT:** Cost certainty has become a key business demand, resulting in greater scrutiny to ensure that IT deploys projects within budget constraints. Unlike some IT infrastructure options that use variable pricing and cost triggers that may result in large, unanticipated bills, Ready Solutions have detailed costs that do not change, and there are no hidden contract clauses that result in cost overruns. In addition, Ready Solutions leverage the existing investments that IT has made in key on-premises hardware, software, and networking solutions and expertise.
- Reliability and continuity:** Digital businesses are dependent on IT infrastructure, so downtime is unacceptable. This is where rigorous testing and validation in real-world scenarios of Ready Solutions makes a significant difference in reliability and continuity.

FIGURE 2:
Use of Pre-configured/Pre-validated Reference Solutions



Source: IDG QuickPulse survey, June 2017

FIGURE 3:
Potential Benefits of Pre-configured/Pre-validated Reference Solutions



Source: IDG QuickPulse survey, June 2017

- Faster deployment:** This benefit focuses on the specific ability to speed the physical deployment and operational readiness. Ready Solutions can deliver a production-grade system in a far shorter time frame because they leverage Dell EMC’s strong partner relationships with key software developers and world-class engineering teams.

USE OF PRE-CONFIGURED/PRE-VALIDATED SOLUTIONS IS STRONG AND GROWING

In order to understand how organizations use and perceive offerings such as the Dell EMC Ready Solutions, IDG conducted a QuickPulse survey featuring IT infrastructure decision-makers from organizations with 500+ employees. More than three-quarters (78%) of all respondents showed interest in the category; more than half are already using or plan to purchase pre-configured/pre-validated systems within the next 12 months (Figure 2).

THE MOST APPEALING ASPECTS OF PRE-CONFIGURED/PRE-VALIDATED SOLUTIONS

The issue of speed is paramount. Nearly 60% of the qualified survey base (those showing interest in the category) chose improved deployment times as the most important benefit. This finding showcases one of the primary benefits of Ready Solutions (Figure 3).

Another important benefit is faster adoption and deployment of new technologies that can provide business advantage. This feature also speaks to the notion of organizational speed, but in a way that is not always top of mind. Leveraging the many software and hardware partner relationships and engineering talent of Dell EMC via the Ready Solutions is clearly desirable.

The third most popular response, reducing the load on scarce IT resources, may become more critical going forward. The oft-repeated maxim – that IT spends 80% of its resources on existing systems and only 20% on new activities – must change. Utilizing this new class of solution will free up IT resources from rote and low-value tasks so that there can be more focus on innovation.

Ready Solutions in Action — Koehler Paper Group Case Study

The [Koehler Paper Group](#) delivers nearly 500,000 tons of paper each year to its customers and is the global leader in numerous product segments. Located in the Black Forest region of Germany, the family-owned company is steeped in tradition and strives to maintain its leading position. It relies on continuous innovations to help it retain a leadership position. State-of-the-art IT systems are central to meeting this goal.

Koehler runs a large-scale, virtualized IT environment that handles numerous business demands every day. Efficiency and effectiveness are critical. Dell EMC delivers on both fronts.

“Giving staff faster access to data on inventory management, sales, technical performance and financial accounting has had a real impact on day-to-day productivity.” — Karl Schindler, Head of IT, Koehler Paper Group

One key need is support for a growing set of analytic workloads that help the company meet current and future customer needs. These demanding workloads require the performance found in Ready Solutions.

“It takes just 5 seconds to activate data with SAP HANA — with BW, that used to take 330 seconds. Data modeling and design is 30% quicker, too,” says Karl Schindler, Head of IT, Koehler Paper Group. “Giving staff faster access to data on inventory management, sales, technical performance, and financial accounting has had a real impact on day-to-day productivity.”

Dell EMC ensures that Koehler’s IT team can provide the performance and responsiveness necessary to support the business’s leadership position.

49% of IT decision-makers say better security would lead them to consider pre-configured reference solutions over public cloud services.

MOST ATTRACTIVE WORKLOADS FOR PRE-CONFIGURED/ PRE-VALIDATED SYSTEMS

One of the appealing aspects of the Dell EMC Ready Solutions is that they support a wide range of workloads and key enterprise software platforms. The survey asked which of these workloads are most likely to be deployed via this new approach to on-premises IT infrastructure.

The workloads emerging as the best fit tend to be more business-centric and mission-critical. These are the “high value” workloads that are essential to the organization. More than half of the respondents see business applications (think CRM, ERP, accounting, inventory, etc.) as well-suited for best-in-class pre-validated/pre-configured infrastructure. That choice makes sense, given that the Intel-based Dell EMC offerings are designed to optimize past investments in key enterprise software platforms.

The second most popular choice, databases, is driven in part by the need to leverage existing investments. Another reason: The ability to more quickly deploy new database technologies such as in-memory processing (HANA and SQL Server 2016).

Keeping mission-critical data on-site is also driven in part by security and privacy concerns. Nearly half (49%) of the QuickPulse respondents said better security would lead them to consider pre-configured reference solutions over public cloud services.

Summary

Dell EMC Ready Solutions, along with Intel technology, meet the demands organizations have for faster, more agile, and more dependable infrastructure, allowing IT teams to respond to the dynamic requirements of the organization they support. Ready Solutions represent a quantum leap forward from legacy on-premises infrastructure. As the IDG survey shows, leading organizations are already moving ahead with this pre-configured/pre-validated approach. It’s clear that an organization’s most critical workloads are a good match for Ready Solutions.

Learn more about [Dell EMC Ready Solutions](#).

