Dell EMC: Future-Proof Infrastructure

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**Abstract:** As IT demands mount, IT organizations simply no longer have the luxury of spending resources to verify every vendor promise. Systems just need to work, while delivering a future free from costly data migrations. As a response, IT vendors have begun to offer guarantees in performance, guarantees in data reduction rates, guarantees in data deduplication, or free upgrades. These programs, however, are often limited to a single storage or data protection product offering, typically with all-flash technology. Dell EMC goes one step further with a program that delivers a future-proof infrastructure promise that extends to its larger storage and data protection portfolio and provides support across both generational and architectural transitions.

**Overview**

As the number of applications, user expectations, and the sheer volume of data that must be stored and protected increases, IT organizations are pressured to keep pace. The recent rise of digital products and services as well as increased investment in analytics and application development has further strained IT resources. The IT vendor community has responded with a variety of infrastructure innovations, such as all-flash storage, but there is risk associated with new technologies. Every IT product is delivered with a basic assumption: The technology will work as expected and will not lock you into a dead-end architecture. However, anyone who has worked in IT will tell you that is not always the case. Traditionally, IT organizations have handled this disconnect by responding conservatively to new innovations, using long internal evaluation processes, working only with established and trusted vendors and partners, or simply delaying purchases.

Taking the conservative approach or wasting internal IT resources to verify that a technology will deliver as promised and offers a viable roadmap, however, are luxuries many IT organizations can no longer afford. As a means to mitigate the risk of new technology, some IT storage and data protection vendors have started to offer product guarantees. Many of these programs, however, focus on only one product line, often an all-flash array. Dell EMC has announced a customer loyalty program designed to take this idea of reducing the risk of infrastructure investment an additional step forward. Dell EMC is offering a future-proof promise for not just flash storage but for the bulk of its storage and data protection infrastructure portfolio.

**The Modern Data Center Challenge**

As part of an effort to better understand modern data center storage challenges, ESG recently surveyed 356 IT professionals responsible for evaluating, purchasing, and managing data storage technologies at midmarket (i.e., 100 to 999 employees) and enterprise (i.e., 1,000 or more employees) organizations in North America. When participants were asked to identify their organization’s biggest storage challenges, the top three most commonly identified options were...
data protection (35%), hardware costs (28%), and the rapid growth rate of storage (26%). These three challenges converge to communicate a common theme: Data demands are growing quickly, and storing and protecting this data is both complex and costly. This is not necessarily surprising; the challenges of data growth are well known and seemingly ever-present.

The challenges related to ensuring infrastructure performs as expected may be more surprising. About one in seven identified poor hardware utilization (15%) and/or identified challenges with lengthy storage provisioning time (14%), and about one in eight identified lengthy storage implementations times (12%). Storage can take too long to get up and running, and can be underutilized once it is.

In a separate question, participants were asked to identify how their organization ensures that a potential new storage system will meet the performance and availability requirements. In response to this question, 32% of storage decision makers identified that their IT organization profiles and models workloads and conducts on-premises testing prior to deciding on the organization’s next on-premises storage systems, and an additional 20% cited profiling and modeling workloads but working with vendors and partners to conduct the load testing. The net result is that over 50% of IT organizations dedicate time and resources to ensuring new infrastructure can deliver. While these validation efforts are often prudent, guarantee programs can help to ease the burden of these validation efforts, possibly eliminating the requirements for all but the most mission-critical workloads.

The Dell EMC Future-Proof Loyalty Program

- 3-year Satisfaction Guarantee
- 4:1 All-flash Storage Efficiency Guarantee
- Up to 55:1 Data Protection Deduplication Guarantee
- Never-worry Data Migrations
- Hardware Investment Protection
- All-inclusive Software
- Built-in Virtustream (20% of purchased capacity)
- Predictable Support Pricing

Future-Proof with Dell EMC

The Dell EMC Future-Proof Loyalty Program is designed to reduce the risk of infrastructure investment and to help make new innovations more easily available. Although this program is the feature of a recent announcement, the benefits are inherent to the products and it is not a separate offering. In other words, accessing the benefits of Dell EMC’s program does not require you to pay extra. Additionally, the program is not limited to one product; it covers the bulk of Dell EMC’s product portfolio including PowerMax, VMAX, XtremIO, SC Series, Dell EMC Unity, Isilon, ECS, Data Domain, and the Integrated Data Protection Appliance.

The bottom line is that this program is not designed for a single product or single technology; it is designed to extend through the storage and data protection portfolio. Products change and architectures evolve; to deliver a tangible future-proof promise to the customer, a program not only has to be multi-generational, but also has to continue even if product architectures change. The Dell EMC program consists of eight tenets, which include:

1. **3-year Satisfaction Guarantee**: The product will do what the specification sheet says it will do, or you get your money back (prorated). This offer extends over three years to ensure that IT organizations have all the time they need to verify product performance in all the scenarios that the business demands. Of course, the money back guarantee is not 100% back at any time in the three-year window. If you identify a concern, Dell EMC will work

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1 Source: ESG Master Survey Results, *2017 General Storage Trends*, November 2017. All ESG research references in this solution showcase have been taken from these master survey results.
with you to get it resolved. If it can’t be resolved, the remediation will be based on how long the product has been in service. The key takeaway is that you don’t have to worry about putting the infrastructure through its paces in a short 30- or 60-day window prior to a specific expiration date.

2. **4:1 All-flash Storage Efficiency Guarantee**: Dell EMC’s four-to-one guarantee is not limited to deduplication or compression alone. The commitment is on the end result. If you follow best practices, then the effective capacity will be four times that of the system’s usable capacity. This guarantee delivers peace of mind when planning capacity and makes infrastructure costs more predictable. In addition, Dell EMC offers an option to bolster the effective capacity gain with an end-to-end workload assessment. Dell EMC resources evaluate the key performance indicators of each workload and then help tune the infrastructure for an effective capacity that exceeds the four-to-one promise. Understanding the application environment can be a critical piece to best optimizing the storage infrastructure; you can let Dell EMC do this work for you.

3. **Up to 55:1 Data Protection Deduplication Guarantee**: Dell EMC’s Future-Proof Loyalty Program extends peace of mind to data protection infrastructure as well as storage. If you follow best practices, Dell EMC promises that their data protection solutions will provide a data deduplication ratio of up to 55 to 1—or they’ll make it right, helping control the capital cost of infrastructure. The program extends to Dell EMC Integrated Data Protection Appliance (IDPA) and Data Domain. The deduplication guarantee further extends the value of Dell EMC’s comprehensive data protection portfolio, reducing the TCO and risk associated with protecting high data growth environments.

4. **Never-worry Data Migrations**: Dell EMC products already offer the ability to upgrade controllers and add capacity in place without impacting data accessibility. This commitment is designed to go further and deliver an engineering-level design promise. Products will be designed to enable simple data migrations across product generations. This is even included when a generational shift equates to an architectural shift, such as the movement from VNX to Unity, or the design shift from Isilon to Isilon’s Generation 6 hardware design. The bottom line is that few vendors, if any, can accurately predict the future of storage hardware. Dell EMC is ensuring future infrastructure generations will accept data from previous generations, eliminating the risk of being stranded on a dead-end architecture.

5. **Hardware Investment Protection**: Existing Dell EMC infrastructure investments can be leveraged to reduce the cost of accessing the latest Dell EMC offerings. In other words, Dell EMC offers trade-in credits for legacy Dell EMC hardware systems. Dell EMC even offers trade-in credits for select competitive systems. With this capability, modernizing your data center with the latest storage technology becomes less costly. Given the pace of storage innovation with technologies such as flash storage offering transformational benefits over their predecessors, staying current with storage and data protection innovation is becoming increasingly paramount to staying competitive.

6. **All-inclusive Software**: Eliminating the need to manage individual feature licenses reduces the cost of infrastructure management and speeds new storage deployment. For multiple portfolio offerings, Dell EMC is including all software functionality in the base price. This offering extends to Dell EMC Unity and SC All Flash models, XtremIO X2, PowerMax and VMAX All Flash models.

7. **Built-in Virtustream**: Helping to further the trend toward multi-cloud infrastructure, new Dell EMC Unity All Flash storage systems come with one year of Virtustream capacity included. The amount of capacity will be equivalent to 20% of raw system capacity purchased and will leverage Virtustream’s Standard—Infrequently Accessed capacity tier. For organizations new to public cloud services, this capability offers a low-risk on-ramp to the cloud. For file environments, the resulting hybrid solution can tier inactive files to the cloud, increasing the effective capacity. For
block-centric deployments, Virtustream can be used for snapshot archiving, freeing up capacity on the on-premises system. Additionally, Virtustream supports the ability to restore the data to another system for more flexible recovery options. These are only a few examples of the benefits that the added cloud capacity can provide.

8. **Clear Price:** Dell EMC is driving toward predictable product support pricing for its infrastructure products. Support prices can be locked in for up to five years in advance, simplifying infrastructure procurement and improving cost transparency. While important for basic budget planning benefits, transparency into long-term support prices is critical for IT organizations looking to develop an IT service catalog approach.

**The Bigger Truth**

For an industry that was somewhat recently defined by predominantly two offerings, SAN and NAS, enterprise storage now offers a cornucopia of new technology options. Choice can be both a benefit and a detriment. The increased variety offers benefits, but the complexity increases when making a decision. Which technology is the right one? Will the data be stranded if you make the wrong decision? How do you verify the technology is right for your workload? What if demands change?

This complexity hinders the ability to access the critical benefits that these storage innovations provide. The Dell EMC Future-Proof Loyalty Program is designed to eliminate the risks associated with innovation adoption, easing the path to harness the benefits of these new technologies. Among the eight tenets, Dell EMC assures customers that the product will deliver the capability and capacity expected, and ease the procurement process, while ensuring that the data will never be stranded on a defunct architecture. In addition, the added Virtustream capacity offers Dell EMC a differentiator with a “hybrid cloud in a box.” All of these benefits are also built upon Dell EMC’s strong history as a trusted leader in IT innovation. Dell EMC is easing the transition to a modern hybrid cloud infrastructure, delivering the benefits of innovation without the risk.