



Herzog's Dirty Dozen: IT Issues that Need Cleaning Up

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Biography

Eric Herzog is the Chief Marketing Officer at Infinidat (<https://www.infinidat.com>). Prior to joining Infinidat, Herzog was Chief Marketing Office and Vice President of Global Storage Channels at IBM Storage Solutions.

His executive leadership experience also includes: CMO and Senior VP of Alliances for all-flash storage provider Violin Memory, and Senior Vice President of Product Management and Product Marketing for EMC's Enterprise & Mid-range Systems Division.

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Abstract

If you are at a supermarket, the "dirty dozen" is a list of foods that are considered the most tainted. Similarly, if you are working in an enterprise or for a service provider, the dirty dozen is a list of issues that tarnish IT infrastructure, "contaminating" current enterprise-grade implementations and exposing the dangers and risks associated with them. In this article, the author discusses the range of challenges, gaps, misconceptions and problems that are keeping IT leaders up at night, worried that they don't know what they don't know.

Introduction

Before you can clean up the issues facing enterprises and service providers, you first need to know what they are. Issues can range from: an insufficient level of cyber resilience that sees a disconnection between cybersecurity and enterprise storage; storage proliferation and lack of utilizing flexible consumption models; slow data recovery after a cyberattack and slow application and workload performance; through to a reliance on an outdated architecture and a lag in making storage more green; through to a misunderstanding about hybrid cloud, and a lack of autonomous automation; to underperforming storage vendor IT support. All are factors and challenges facing enterprises and service providers, whether the C-suite is aware of it yet or not.

Any one of these factors can taint an otherwise high-performing IT operation. Inertia can set in. Other problems take attention away from these ongoing matters



Data Centre and Virtualization

that need attention to stay in check, and it is important to have sound strategies to solve each of these Dirty Dozen.

Insufficient level of cyber resilience

Cyber resilience is one of the most important elements of an enterprise's IT strategy today, but too many enterprises have inadequate levels of it to be sufficiently safeguarded against cyberattacks, especially ransomware and malware. Characteristics of a strong cyber resilience solution include: immutable snapshots, air gapping, a fenced forensic environment, and rapid recovery time (minutes, not hours or days).

A cyber resilience solution is deemed effective when it provides guaranteed availability and a fully scaled data restoration for business continuity. Infinidat delivers among the industry's highest cyber resilience with its InfiniSafe® software on both its InfiniBox® and InfiniGuard® platforms for both primary and secondary storage. This includes Infinidat's recently announced InfiniSafe Cyber Storage guarantees.



Disconnect between cybersecurity and enterprise storage

IT leaders and CISOs need to think of storage as part of their overall enterprise cybersecurity strategy. To stay ahead of cybersecurity threats relies on end-to-end approach. This entails evaluating the relationship between cybersecurity, storage, and cyber resilience. Primary storage and secondary storage need to be protected. The average number of days to identify and contain a data breach, according to security analysts, is 287 days. The stakes continue to rise amid daunting threats. Infinidat has fashioned its storage platforms to be seamlessly and intelligently integrated into overall enterprise cybersecurity strategies and comprehensive frameworks. Storage is no longer separate from security.



Storage proliferation

An organization knows it has experienced storage proliferation when it has too many storage arrays. It may have amassed 10, 12, 15, 20, 40 or more storage arrays, implemented over time as the need for data storage capacity increased. With the explosion of data in recent years, this is no surprise, but this high number of storage units inevitably causes inefficiency, excessive costs, overly complex data centres, poor storage management, negative environmental impact, and waste.

Storage consolidation is the strategy to employ to deal with this issue. Infinidat is leading the way to enable storage consolidation – without interrupting an organization’s operations. For example, we can turn a company’s 40 storage arrays into a few InfiniBox solutions for easier management, cost savings, greater efficiency and sustainability aligned with green IT goals.





Lack of utilizing flexible consumption models

An enterprise may be accustomed to consuming storage in a specific way, whether a private cloud or a public cloud, a capital expense or an operational expense. It becomes an “either/or,” locking themselves in. However, flexible consumption models have arisen to give customers more options. An enterprise can now do a mix of CAPEX and OPEX, reaping the financial benefits of only using the storage capacity that is needed. Or it can get high-end storage features and functionality with a pay-as-you-go approach in a cloud-like consumption model.

You should explore the different flexible consumption models available for your organization. Infinidat has a menu of flexible consumption models¹ including Elastic Pricing and FLX. Our Elastic Pricing model is a mix of CAPEX and cloud-like operating expenditures. The user purchases a percentage of storage upfront and then expands or “bursts” month to month, as needed. Our FLX model is OPEX-based with cloud-like, pay-as-you-go consumption – whether up or down in storage capacity. And we have traditional purchase as well.

High total cost of ownership

IT costs are soaring, and IT leaders continue to scramble to find ways to lower costs. Storage is one of those areas that the IT department can look at for substantial cost savings without sacrificing availability, reliability, and performance. Taking a more strategic approach to your storage infrastructure will make a difference to the bottom line.

Enterprises can shift to automated and autonomous storage platforms for primary and secondary storage, as well as consolidate arrays many storage arrays down to a few Infinidat platforms. Shifting to storage-as-a-service is also an opportunity to lower costs, while increasing capabilities. Infinidat works with enterprises and service providers to develop and implement strategies to reduce cost of ownership (TCO), CAPEX, and OPEX across the storage estate.

Slow data recovery after a cyberattack

The world has seen all too often when a ransomware attack hits a company and takes the data ransom or corrupts it in some way. Recovering the data is typically too slow, but it has been accepted as “that’s the way it is.” However, near-instantaneous recovery from a cyberattack² is now possible. Data on Infinidat’s InfiniBox and InfiniBox SSA II can be recovered in one minute or less from immutable snapshots, providing an organization with a trusted and accurate recovery of its data. Infinidat’s InfiniGuard® solution also delivers near-instantaneous recovery, redefining modern data protection for the enterprise market.

Slow application and workload performance

IT leaders naturally hear complaints from executives and employees when applications are running slowly. The breakneck pace of business today exposes performance issues in the data infrastructure. Not only are servers important to real-world application performance, but storage is critical. For highly transactional block workloads, there you must focus your efforts on application latency. Latency is the number one determinant for real-world transactional performance. The



new InfiniBox™ SSA II delivers lower latency³ than any other comparable enterprise storage platform in the industry, delivering an unprecedented 35 microseconds of latency.

Reliance on an outdated architecture

If your business is relying on a dual-redundancy storage architecture, then you're using an outdated architecture that does not deliver the level of reliability that is needed in today's digitized world. The best practice in storage has already moved on to the triple-redundancy architecture, even though incumbents are reluctant to acknowledge it because they want to keep their installed base on a dual-mode architecture. But if you want high reliability and durability, triple redundancy is the way to go for enterprises and service providers. Infinidat uses a triple-redundancy architecture, having gained an advantage over the incumbents that push dual-redundancy architectures. Infinidat stands tall on this technology by providing a 100% availability guarantee for its InfiniBox solutions.



Lag in making storage more green

Too many storage arrays mean more physical objects to have to recycle. This inefficiency is the opposite of a green initiative that aims to reduce waste, recycle more efficiently, and lessen the impact on the environment. Too many storage arrays also use up more energy, more space and are higher in costs. However, storage consolidation aligns with going green – less energy, less space, less waste, less to recycle, while reducing costs. Infinidat is helping organizations advance sustainability initiatives by accelerating their ability to go green in the storage estate.



Misunderstanding about hybrid cloud

Too many IT leaders assume that their company needs to go completely “public cloud” and cannot have any private cloud because they think private cloud is no longer relevant – which is untrue. Forward-thinking CIOs and IT decision-makers are realizing the value of a hybrid cloud approach that combines public cloud and private cloud. It does not need to be “all or nothing at all”. The private cloud for storage has evolved to have cloud-like characteristics, namely in terms of deployment, management, and consumption.

Mixing public and private cloud environments gives an enterprise more control, more flexibility, more security, and more cost-effectiveness. Infinidat has transformed the private cloud into a cloud-like experience and enables enterprises to maintain control, lower costs, increase cybersecurity and have an on-ramp to the public cloud, as needed, depending on the applications and workloads.

At the Flash Memory Summit 2022, the InfiniBox SSA II was recognized as “Most Innovative Hyperscaler Implementation⁴,” demonstrating that it meets the most stringent requirements of the hyperscaler, Cloud Service Provider (CSP), Managed Service Provider (MSP), and Managed Hosting Provider (MHP) customer base.



Lack of autonomous automation

Without autonomous automation, storage and the enterprise infrastructure overall are more complex and more costly. Automation alone is no longer enough. Incorporating the autonomous aspect to automation takes it to the next level, paving the way for data centre simplification and AIOps. You can clean up the complexity with this functionality that enables a set-it-and-forget-it approach. Storage essentially becomes self-learning.



Infinidat is among the first storage solution providers to break new ground with autonomous automation, featuring the self-learning Neural Cache, which uses intelligent data placement in a tiered storage design to cost-effectively optimize the storage, eliminate the need for performance tuning, and reduce operational manpower. Our InfiniOps technologies allow you to leverage autonomous automation to dramatically reduce OPEX and CAPEX.

Underperforming storage vendor IT support

Most storage vendors cannot deliver white glove service. They don't value their customers enough to assign a technical advisor right from the start of the relationship at no additional cost. They bump their customers off to a first line of customer support that doesn't have the same knowledge and experience as an L3. Enterprises and service providers should look for a white glove service because, when hands-on support is needed, you want to make sure your supplier will be there for you. Even better, with a white glove service, your vendor will be proactive and fix the problem before you are even impacted by it.

In conclusion

With every purchase of any Infinidat enterprise storage solution, a Technical Advisor (TA) is assigned to serve as the experienced technical account consultant with full oversight to ensure customer success – at no additional cost. Infinidat's L3 development support is the highest level of customer support in the industry.

Reference

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