



Enterprise and Cloud Storage

The Ultimate 2025 Checklist for Enterprise Storage

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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

The prospect of a storage migration can seem complex and daunting for any organization with some reporting that projects have failed or exceeded their timelines and budgets due to poor planning or help from their vendor. A well-defined checklist breaks down the daunting process into manageable phases (planning, preparation, execution, post-migration) with clear tasks, assigned roles, and timelines. This structured approach reduces confusion, prevents tasks from being overlooked, and keeps the project on track. But the process doesn't end after the move – a checklist must also include steps for post-migration monitoring, performance optimization, and training for users to ensure the new system delivers the expected business value and Return on Investment (ROI), explains the author of this article.

Introduction

Check the box! It's an age-old adage that IT professionals have been doing for decades, particularly when purchasing an enterprise IT solution. Checking the boxes is essential risk mitigation, meant to ensure that the solution, such as an enterprise storage platform, meets the comprehensive criteria and stringent requirements of an enterprise.



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The “checklist” for something as vital to a data-driven organization as enterprise storage has evolved – and there are some new critical boxes to check.



Core elements of enterprise storage

The most foundational checkboxes should not be a surprise to anyone who buys storage for their enterprise. Enterprise customers want storage that is faster, bigger, simpler, cheaper and the most reliable. Even if a CIO or CISO is not enmeshed in storage, the vast majority of them are familiar with the following essential capabilities:

- Triple redundant storage architecture;
- 100% availability of enterprise storage guaranteed;
- High performance/low latency;
- High capacity for scalability;
- Lower Capital Expenditure (CAPEX) and Operational Expenditure (OPEX);
- Ease of use / ease of management;
- Guaranteed Service Level Agreements (SLAs).

Your critical check list

Look for a vendor that offers the unique feature of a triple redundant storage architecture that is ideally suited for high-end enterprises. A vendor that provides 100% availability and the industry's highest performance at the lowest latency – as low as 35 microseconds of latency. Ideally, identify an enterprise storage solution that operates at multi-petabyte scale and is designed to significantly lower CAPEX and OPEX.



Six essential capabilities

1. Gen-AI Retrieval-Augmented Generation (RAG) workflow deployment architecture.
2. AI and ML-based autonomous automation.
3. AIOps (AI in Operations).
4. Storage-as-a-Service (STaaS).
5. Hybrid multi-cloud.
6. Efficiency-enhancing storage consolidation.

Let's examine the core benefit of this approach in more detail. A RAG architecture helps enterprises make GenAI-centric Agentic AI more accurate and relevant to answer queries. When combined with automation, this makes the storage platform self-learning and able solve issues before you even know they exist.



Cyber storage resilience and recovery

The rise of cyber resilient storage has created a new collection of checkboxes that have become critical for safeguarding storage infrastructure. To have such cyber resilience with a recovery-first approach, you need to have the following checkboxes on your checklist:

- Immutable snapshots (with no “backdoor”);
- Logical air gapping – local, remote, or both;
- Fenced forensic environment;
- Near-instantaneous cyber data recovery – one minute or less on the InfiniBox® G4 and InfiniBox™ SSA G4, regardless of dataset size, and 20 minutes or less on the InfiniGuard, regardless of dataset size;
- Automated cyber protection that seamlessly integrates with your Security Operations Centre (SOC) or your data centre-wide cyber security software applications (SIEM or SOAR);
- Cyber detection built into primary storage;
- Cyber resilience and cyber recovery guarantees.



Integration and ecosystem support

Being able to know the integrations that are possible with a storage platform is also important. A storage platform does not operate in a silo. You may need a driver to plug into a Kubernetes or Red Hat container environment. You may need to integrate with any of the multitude of enterprise backup software packages. It makes sense for you to be able to know clearly what the ecosystem around a storage platform is. That's why the following are included as part of the essentials checklist:

- Integrations with a very broad range of tech alliance partners;
- Container integration;
- Professional services;
- Flexible consumption models.

Storage solution provider as a strategic partner

Do you want your storage provider to treat your purchase as a tactical “transaction” that conveys the message of “Good luck! You’re on your own”? Of course not! As an enterprise customer, you should expect a strategic partnership with your storage provider. You need to know the company’s focus and dedication. You should be able to assess your provider and check off the following boxes that go beyond a platform or a single product capability:

- Long-term commitment to enterprise storage;
- Continuous innovation;
- White glove service;
- Green IT/Sustainability;
- Business value;
- Technical value;
- Market presence expansion.

Identify a vendor that is committed to enterprise storage for the long term – one that regularly demonstrates ongoing, continuous innovation. Look for a vendor that has invested in completely revamping its solution portfolio over the past few years, with a track record of consistently launching pragmatic storage solutions that generate business and technical value.

What box is left to check?

If you do not have all these boxes checked, contact Infinidat without any further delay. As a leader in enterprise storage, we’re here to answer your questions and help you get your checklist right. It does not only feel good to check the right boxes for enterprise storage, but it’s also the right thing to do for your business – and your boss, your Board or your business partners will thank you later.