



Frequently Asked Questions for Clients

IBM® Spectrum Accelerate™

"Ultra-flexible software-defined storage deployed fast, anywhere"

Q1: What is IBM® Spectrum Accelerate™?

A: IBM Spectrum Accelerate is a highly-agile software-defined storage (SDS) solution that offers great advantages for new and traditional workloads deployed in enterprises and for customer-built cloud environments. It provides:

- **Speed** - Enables rapid configuration and deployment of data storage environments for new applications
- **Agility** - Enables on premises deployment on existing virtualized datacenter infrastructure, interoperability with in-house XIV® hardware arrays, and off-premises deployment with cloud services
- **Simplicity** - Offers tune-free performance and the ability to dynamically and non-disruptively add storage, managed easily with a world-class management interface and by virtue of an architecture that eliminates many traditional administrative chores

Q2: What are the major advantages of Spectrum Accelerate compared to other SDS offerings in the market?

A: Spectrum Accelerate features a unique combination of features and capabilities that build on the proven XIV architecture successfully deployed on more than 100,000 servers worldwide, and simple, flexible licensing. Spectrum Accelerate comes with a comprehensive feature-set, including advanced snapshots, synchronous and asynchronous replication, multi-tenancy, and QoS, which can be automated via its powerful CLI or REST. Additionally, Spectrum Accelerate features an intelligent data distribution architecture designed to eliminate hotspots so has no need for performance optimization—be it manual or by the system in the background.

Q3: What business value does Spectrum Accelerate offer?

A: Spectrum Accelerate offers use cases that potentially benefit many functions in the enterprise and lower costs:

- **Reduce capital expense (CAPEX):** Leverage existing storage infrastructure rather than mandating new infrastructure acquisition; minimize upfront investments in storage scalability; allow for internal maintenance and hardware replacement rather than external support; and lower training requirements
- **Reduce operational expense (OPEX):** Lower management overhead; facilitate storage self-service; deploy storage more quickly, in on-demand fashion; add storage dynamically, in minutes; easily repurpose storage infrastructure; and minimize the storage expertise required to address setup, planning, administration and support

Q4: Can I deploy Spectrum Accelerate in the cloud?

A: Yes. As noted, Spectrum Accelerate operates across different delivery models—on commodity servers in private cloud, with the XIV system, and can run on public cloud infrastructure such as SoftLayer self-service infrastructure as a service (IaaS).

Q5: What are the roles of Spectrum Accelerate and the other members of the IBM Spectrum Storage family?

A: Spectrum Accelerate speeds up cloud deployment and access to data for new workloads. It is a key component of the IBM software defined storage strategy delivered through the IBM Spectrum Storage family, which provides a complete set of SDS functions needed to address data requirements: the need to virtualize and control existing data, scale and accelerate deployment of new data workloads, and protect and retain existing and new data workloads. The other family members are: IBM Spectrum Virtualize™, IBM Spectrum Control™, IBM Spectrum Scale™, IBM Spectrum Protect™ and IBM Spectrum Archive™.

Q6: Does Spectrum Accelerate work with existing IBM XIV Gen3 integrated systems (IBM XIV® Storage System)?

A: Yes. Spectrum Accelerate and the XIV Gen3 system accommodate complementary use cases—and interoperability between the two lets you realize the power and value of XIV in new ways, such as in consolidated management, remote replication and hybrid cloud solutions. XIV Gen3 has its place as an optimized storage solution with capabilities users know and love for the most demanding of enterprise and cloud-based workloads.



Q7: Does Spectrum Accelerate feature any additional capabilities to the XIV Gen3 integrated system?

A: Yes. Spectrum Accelerate offers support for a larger variety of drive types and a minimal configuration of 3 nodes (compared to 6 modules with XIV).

Q8: What hardware and software does Spectrum Accelerate support?

A: Spectrum Accelerate can run on general purpose x86-based servers that comply with minimal hardware requirements. The solution is deployed as a collection of virtual machines (VMs) (up to 15 VMs per instance, with each VM including up to 12 drives) under a VMware ESXi (5.5), and exposes services via iSCSI. It supports consolidated management of up to 144 instances (translating to more than 40 PB of usable capacity).

Q9: Does Spectrum Accelerate support snapshots?

A: Yes. Spectrum Accelerate features all the snapshot capabilities featured by the XIV Gen3 system, including high-performance writable snapshots, snapshot of snapshot, restore of snapshot from snapshot and more.

Q10: What remote replication options are supported by Spectrum Accelerate?

A: Spectrum Accelerate supports synchronous replication and asynchronous replication; both supporting offline initialization. It offers the ability to perform disaster recovery between two instances of Spectrum Accelerate as well as with the XIV Storage System.

Q11: What security features are supported by Spectrum Accelerate?

A: Spectrum Accelerate features support for LDAP authentication; multi-tenancy; iSCSI CHAP; SSL connections; and certificates; and rich role-based access control (RBAC).

Q12: What management options are available with Spectrum Accelerate?

A: Spectrum Accelerate supports management via IBM Hyper-Scale Manager, GUI, CLI, and RESTful API. The GUI features the same technology used in the rest of the IBM integrated storage offerings, including Storwize and XIV. Spectrum Accelerate features the same powerful reporting capabilities as XIV: reports can be produced via the Spectrum Accelerate GUI and CLI options, allowing for reporting on I/O-related statistics, usage-related statistics, usage trends and more.

Q13: What licensing options are offered for Spectrum Accelerate and do they include advanced functions?

A: Licensing is based on usable terabytes, with no hidden costs, and is available as perpetual and/or monthly. The license is linked to customer ID rather than hardware, enabling its flexible use across servers, sites (subject to software import/export regulations), and public cloud at any time, at the customer's discretion—and is independent of any hardware lifespan. The license covers usable capacity and the advanced functions.

Q14: How do I order Spectrum Accelerate?

A: Spectrum Accelerate is available digitally from Passport Advantage via your IBM salesperson or business partner, or self-service ordering. For a demo of Spectrum Accelerate, please contact your IBM salesperson or business partner.

For more information on IBM Spectrum Accelerate, go to: ibm.com/spectrumstorage