

Modern Data Protection and Rapid Recovery from Ransomware with Infinidat and Veeam

Nine Points of Protection Provide an Industry-Leading Solution

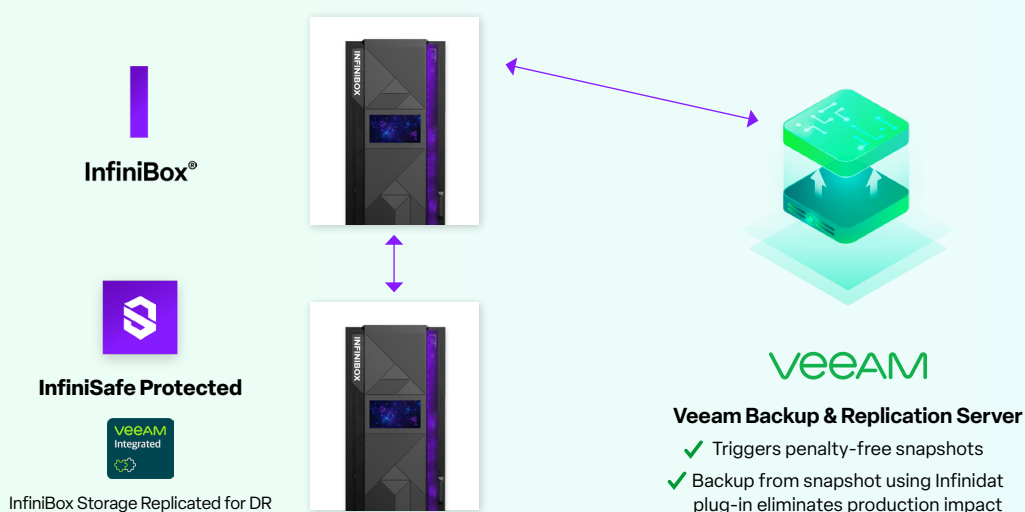
It is said that secure backups are the last line of defense in a cyber security strategy. Bad actors only need to be successful once in their attack strategy and the attack vectors are always changing. In fact, backup data has become a primary target for cyberattacks. Preventing these attacks is always the primary goal, but 100% prevention is increasingly difficult to achieve, making backup security and rapid recovery an extremely important part of the overall security strategy.

Infinidat and Veeam® provide a fully integrated solution with multiple points of protection, the ability to create a secure environment from a backup which can be used for forensic analysis, and rapid recovery of a backup repository to a secure point in time. InfiniBox®, InfiniBox™ SSA II, and InfiniGuard® use Infinidat's patented InfiniSafe® cyber storage resilience technology to protect data with immutable snapshots, virtual air gaps, a fenced forensic environment, and near-instantaneous recovery. Veeam Backup & Replication (VBR), Veeam DataLabs, SureBackup and Secure Restore provides an ideal backup solution and forensic environment for applications. The combined solution provides industry-leading protection for your backup data and minimizes lost time due to a cyber event.

InfiniBox

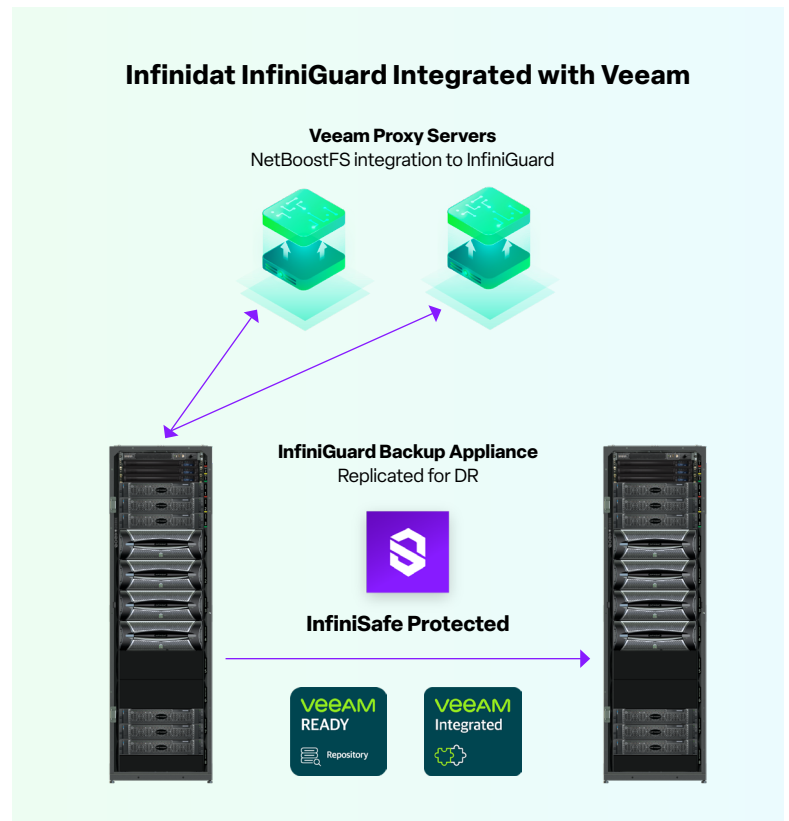
The InfiniBox enterprise storage platform delivers groundbreaking performance, multi-petabyte capacity, 100% guaranteed availability, and cyber storage resilience for a broad range of mixed application workloads. Highly flexible zero-impact snapshots, dependable active/active/active, synchronous and asynchronous replication, and flexible, software-defined quality of service come standard, with guaranteed reliability and data security. Enterprise-class storage with unmatched features and ease of use is included with the added benefit of our performance, 100% availability, and cyber resilience guarantees.

Infinidat InfiniBox integrated with Veeam



InfiniGuard

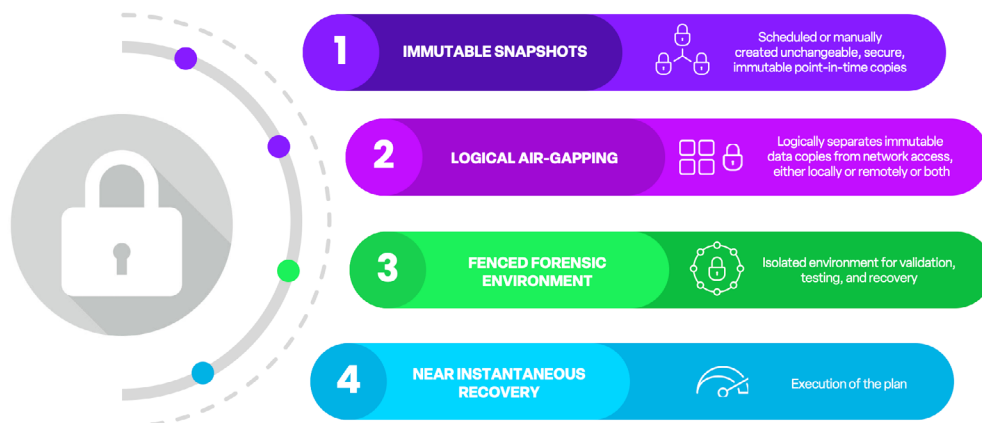
InfiniGuard offers unmatched backup and lightning-fast recovery performance, at scale, for all of your enterprise modern data protection needs and is enhanced by our InfiniSafe cyber recovery technologies to ensure you are always ready in the event of a cyberattack, natural disaster, or basic human error. InfiniGuard is built on the award-winning InfiniBox, an enterprise-proven storage platform that delivers unmatched performance, availability, and a simple, set-it-and-forget-it management experience with unprecedented guarantees. InfiniGuard, along with our InfiniSafe technologies, helps you recover quickly in whatever situation you may encounter. It is both Veeam Ready and Veeam Integrated as a deduplication appliance, selectable from the Veeam console.



InfiniSafe

InfiniSafe protects against the effects of ransomware attacks with four foundational technologies which are key to a cyber recovery solution:

- 1. Immutable Snapshots** – Immutable snapshots cannot be deleted or changed. Infinidat’s expert support works with you to configure your system snapshots to be optimized for your cybersecurity needs, including retention settings, schedules, and associated policies. It is not possible for a malicious actor, or an inexperienced IT staff member, to change these settings or delete any existing immutable snapshot.
- 2. Logical Air-Gapped Protection** – Ensuring that the data being protected is isolated from other areas of the system is of the utmost importance. Other solutions require the data to be moved by copy or replication to a separate system adding cost and complexity. InfiniSafe technology does this locally, saving cost and removing complexity.
- 3. Fenced Forensic Network** – A completely private network that is utilized for data validation and recovery.
- 4. Near-instantaneous Recovery** – Making data available as quickly as possible is key when trying to restore if attacked. InfiniSafe allows you to get all your known good and validated data back and available for restore in minutes, regardless of the backup repository size. You pay no penalty in time, even at petabyte-scale.



Recovery must become systematic, fast, and verifiable with near-instantaneous recovery from any protected point in the history of the data. A simple-to-use, isolated test environment enables businesses to verify data before restoring it to the business operational environment. Additionally, this environment supports routine validation of secure backups without interrupting day-to-day backup operations, all without secondary systems and with no data movement and is all highly orchestrated. InfiniSafe software is included with all InfiniBox, InfiniBox SSA II, and InfiniGuard solutions at NO additional charge.

InfiniSafe Cyber Storage Guarantees

Cyber resilience is one of the top concerns of businesses everywhere. We offer InfiniSafe cyber storage guarantees, building on our InfiniSafe technology. Infinidat guarantees both the immutability of our snapshots and recoverability of those immutable snapshots at under a minute on InfiniBox/InfiniBox SSA and under twenty minutes with InfiniGuard.

Veeam Backup & Replication

Veeam® Backup & Replication™ is the single backup, recovery and data security solution for all your workloads both on-premises and in the cloud. As the foundation of Veeam Data Platform, Veeam Backup & Replication provides organizations with data resiliency through secure backup and fast, reliable recovery solutions. Eliminate downtime with instant recovery and stay safe from cyberthreats with native immutability and tested backups, all from one software-

Veeam DataLabs

Some of the areas that could really prosper from near-live copies of the production data on performant and efficient storage are security testing, IT administration tasks, DevOps, and analytics.

Veeam DataLabs provides a secure, virtualized environment for executing applications against near-live copies of production data. This gives customers the ability to use backup files or even replicas, and run a copy of the instance in an isolated network to perform any task outside of the production environment. Also included, is the ability to leverage application-consistent storage snapshots from Infinidat storage.

The Infinidat-Veeam Joint Solution

Infinidat's comprehensive guarantees for the performance, availability, and cyber recoverability of InfiniBox and InfiniBox SSA set the new standard for enterprise storage. Building upon our 100% availability guarantee, Infinidat now offers a performance guarantee and InfiniSafe cyber storage recovery guarantees, an industry first for primary storage. These platforms provide the ability to automate the scheduling of immutable snapshots, which provides the first level of data protection – immediate recovery of data.

Replication of production data to a DR site, whether asynchronous, synchronous, or in an active-active configuration, provides a second level of protection. The data at the DR site can also be protected via automatically scheduled immutable snapshot protection, providing a third level of protection.

VBR is fully integrated to InfiniBox, allowing it to very efficiently backup production data from a snapshot without impacting the performance of the production environment. Further, backups can be written to the Veeam Ready InfiniGuard with a 180 terabytes per hour ingest rate. Fast Clone can also be used to perform faster synthetic full backups while reducing the impact on backup network, servers and storage. This can shrink backup times to ensure completion within the backup window, offering the fourth level of protection. While this may not seem like a point of protection, backups which do not complete within the backup window can create a backlog and affect other scheduled backups, potentially creating a vulnerability.

Once a backup has been completed, SureBackup from Veeam takes backup validation well beyond a simple check in the logs to see if the backup successfully completed, or a CRC check to ensure the backup file is not corrupted. SureBackup, the fifth level of protection, allows you to run multiple tests on your backups to confirm the data is malware-free and the data can be recovered. The process can be as simple or in-depth as you need and can be run manually or be scheduled as part of your disaster recovery preparations.

After validating the backup with SureBackup, InfiniGuard can automatically create an immutable snapshot. This does not only protect the shares, but the immutable snapshot protects everything within the Deduplication Engine, including the shares, OS, logs, users, passwords, files, and network configurations. Once again, this is a critical step because it prevents any changes to the backup which was just validated. Further, an immutable copy of the backup can be virtually air-gapped within the InfiniGuard to provide the sixth level of protection.

InfiniGuard can then replicate that backup, deduplicated, compressed, and encrypted, to a second InfiniGuard. If needed, the backup can be replicated to a third InfiniGuard. In this case, the entire InfiniGuard can be physically air-gapped, providing the seventh and ultimate level of protection for very sensitive environments.

For DR purposes, and the eighth level of protection, Veeam can also provide a copy of the backup to the public cloud. AWS, Azure, and Google are all supported targets. In addition, Veeam works with a network of cloud and managed service providers in over 180 countries to provide this service.

Simply put, the above backup strategy follows Veeam's 3-2-1-1-0 Rule that a resilient backup strategy should have at least:

- Three copies of important data
- On at least two different types of media
- At least one of these copies being off site
- At least one copy of data should be resilient either through being air-gapped, offline, or immutable
- The backup should have zero errors to ensure it is valid and usable for recovery

Now that your data is backed up, validated and secure, what happens in the event of a disaster, including a cyber event? The solution from Infinidat and Veeam provides an enhanced level of secure validation, coupled with near-instantaneous recovery to get you back to production as quickly as possible.

The InfiniGuard provides a network fenced environment where backup data can be easily recovered for forensic analysis. Network fencing isolates an additional standby deduplication engine on the InfiniGuard from the network. In this fenced environment, backups can be restored inside a closed and isolated environment for forensic analysis, all without impacting production backup and recovery operations. This can be combined with the Veeam DataLabs Secure Restore capability, which scans the restored data with your antivirus software before restoring to the production environment. Secure Restore allows you to update your preferred antivirus or antimalware software to the latest signature levels, no exclusions, and to verify in the non-production, network-isolated environment. Further, you can mount individual VMs in the DataLabs sandbox environment to ensure they work correctly. This provides the ninth level of protection and additional assurance that you will not re-introduce threats into your data center before restoring data.

Infinidat and Veeam provide an industry-leading solution to protect your most critical asset, your data, from corruption or ransom. As the rate of cyberattacks continue to accelerate, you will need an ecosystem of solutions to provide the modern data protection you need. The combination of InfiniBox for your production data, Veeam Backup and Replication to securely backup your data, and InfiniGuard's modern backup protection and network isolation capabilities provides the strongest ecosystem of solutions in the market.

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