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Infinidat and Veeam Availability Protect Your Always-on Business

Today we deal with more data than ever and the pace of data creation is still accelerating with no slowdown in sight. Combine that with the continued backup challenge and the need to further secure your data because of cyber threats and ransomware attacks.

However, 84% of IT decision makers surveyed admitted that their organizations are unable to deliver the uptime and recovery service levels their organizations expect.[1] The sheer magnitude and cost of maintaining SLAs for critical data and applications drains corporate resources, over-burdens IT operations, and pulls funding from initiatives that would otherwise grow your business.

Veeam and Infinidat have collaborated on a verified solution that combines the features of the Infinidat platforms - InfiniBox® and InfiniGuard® with industry-leading Veeam software. This proven combination of technologies enables customers to quickly realize the value of simple and efficient data duplication, backup, recovery, and enterprise DevOps operations, to meet their SLA goals. Infinidat and Veeam unite to create petabyte-scale availability for the Always-On Enterprise to deliver:

▶ Greater ROI from your investment in scalable Infinidat storage

▶ Highly efficient and predictable backup, replication, recovery, and enterprise DevOps

▶ Better operational control with InfiniOps™ to meet guaranteed service level outcomes across your enterprise

Veeam Availability Suite

Veeam Availability Suite™ is a comprehensive data protection solution supporting virtual, physical, and cloud workloads from a single management console for:

▶ High-Speed Recovery–Rapid recovery of what you want, the way you want it

▶ Data Loss Avoidance–Low recovery point objectives (RPO) and streamlined disaster recovery

▶ Verified Recoverability–Recovery of every file, application or virtual server every time

▶ Leveraged Data–Using backup data to quickly create an isolated, exact copy of your production environment for development, testing, and training

▶ Complete Visibility–Proactive monitoring and alerting of issues before operations are impacted

Additional key capabilities of the Veeam Availability Suite include:

Infinidat's InfiniSnap® integration enables you to orchestrate backups as often as needed without affecting the production environment.

▶ Image level VM backup and replication with application consistency

▶ Instant backup and recovery for a virtualized environment including VMware and Hyper-V

▶ Granular recovery for business-critical applications, including Exchange, SharePoint, and Active Directory

▶ Built-in WAN acceleration

▶ Workload mobility between on-premises data centers and cloud

▶ Scale-out backup repository in a single virtual pool

▶ Proactive monitoring and reporting, automated testing and documentation

Veeam enables the recovery of any IT service and related applications and data within seconds and minutes, and with Infinidat integrated data protection, Veeam is paired with storage that scales to keep pace with your ever-expanding data management needs.

Infinidat InfiniBox® and InfiniGuard®

The Infinidat enterprise storage platforms (InfiniBox and InfiniGuard) offer outstanding levels of performance, availability, cyber resilience, ease of use, and cost savings at scale. SLA-based guarantees for performance, 100% availability, and cyber storage recoverability of the Infinidat platforms set the standard for enterprise storage. Infinidat platform is based on a highly innovative, multi-patented, software-defined storage architecture (InfuzeOS) that runs on a high-availability hardware configuration.

Powered by our patented Neural Cache AI/ML algorithms which provide deep learning optimized performance while decoupling from the underlying storage media, the Infinidat platform is a compelling choice for data protection and business continuance, as well as Tier 0/1/2 use cases. Infinidat's unique performance optimized software design eliminates the dependance on the underlying hardware enabling us to use commodity components that outperform custom hardware providing lower acquisition costs, along with greater flexibility and scaling.

Built on the same platform, InfiniGuard adds inline and variable-block deduplication to store up to 85PB+ of effective capacity, with up to 35PB+ of dedicated InfiniSafe® repository for immutable snapshots and up to 50PB+ backup repository, all in a single 42U rack. By leveraging advanced capabilities and smarter design, InfiniGuard delivers high availability, reliable backup, and fast restore at scale, ensuring your data is always there when your business needs it.

Cyber storage resilience is built into all Infinidat platforms with InfiniSafe technology, a set of capabilities to ensure storage recovery in the event of a cyber attack. InfiniSafe includes immutable snapshots, logical air-gapped protection, fenced forensic environment, and near instantaneous recovery of any size backup repository. Infinidat platforms are backed by InfiniSafe cyber storage recovery guarantees.

Terms and conditions apply to all guarantees.

It's All About the Integration

Through Veeam integration with InfiniGuard, customers achieve high performance, highly scalable, backup and recovery operations to meet their growing data needs.

Veeam customers can create Veeam repositories on the InfiniGuard system, and Veeam eliminates the inefficiencies most legacy solutions suffer, to deliver better backup performance when using server-side optimization.
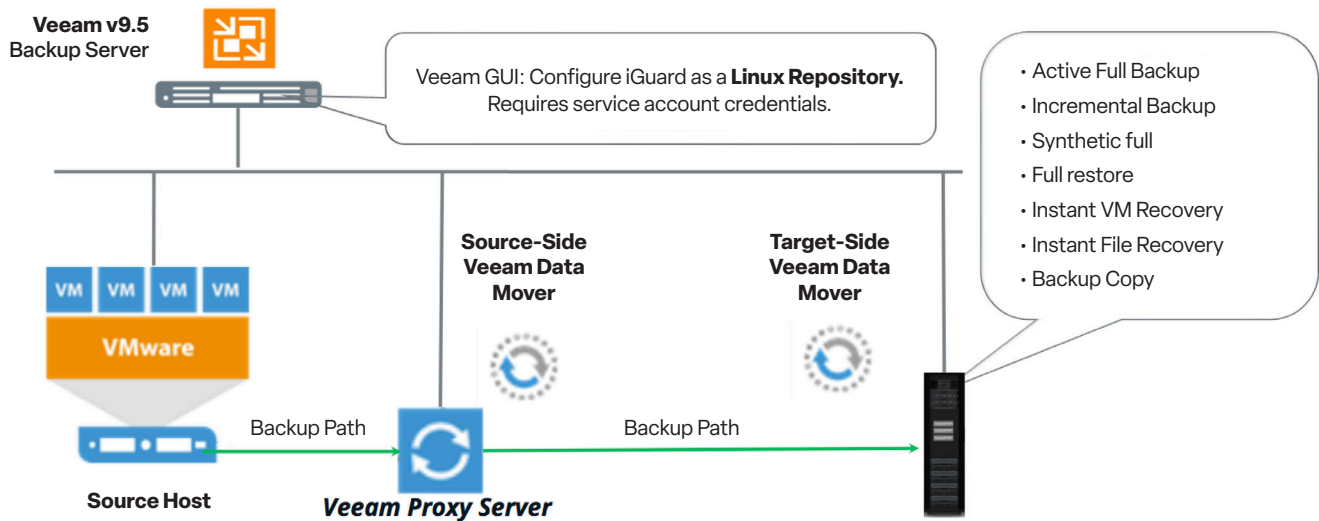

Key features of Infinidat InfiniBox platform include:

▶ Groundbreaking, real-world application performance mainly contributed by architecture innovations, neural cache design, and real- time analytics

▶ SLA-based outcomes, guarantees 100% availability, performance, and cyber storage recoverability

▶ Storage densities, capacities, and efficiency that maximize floor space and storage platform consolidation to lower TCO and create a greener data center

▶ InfiniOps enable ease-of-use and automation that significantly increases the petabyte (PB) per full-time-employee (FTE) management ratio

▶ An economy of scale that dramatically lowers TCO and increases ROI for large-scale data-intensive IT operations resulting in best time-to-value.

Key features of Infinidat InfiniGuard include:

▶ Purpose-built on the Infinidat platform, the InfiniGuard is a modern data protection platform with smarter availability design and lightning-fast performance

▶ Consistent and balanced performance design under all workloads for both backup copy and restore jobs

▶ Industry-leading performance for data protection and backup with in-line ingest rates of up to 180TB/hr*

▶ Maximum consolidation and footprint reduction to enable aggressive TCO savings

▶ With InfiniSafe technology we guarantee your cyber storage recovery with built-in immutable snapshots, logical air gap, a fenced forensic environment, and near instantaneous recovery, at no additional cost.

▶ Target-side Veeam Data Mover Services (VDMS) integration

▶ InfiniSafe technologies provide comprehensive cyber storage recovery guarantees which ensure recovery of immutable snapshots with a guaranteed recovery SLA of 20 minutes or less! Providing your customers with a more cyber secure environment.

▶ Verified as Veeam backup storage that supports all Veeam backup and restore features

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*Performance based on use of netboost technology

Veeam v9.5
Backup Server

Veeam GUI: Configure iGuard as a **Linux Repository.**
Requires service account credentials.

• Active Full Backup
• Incremental Backup
• Synthetic full
• Full restore
• Instant VM Recovery
• Instant File Recovery
• Backup Copy

VM **VM** **VM** **VM**

VMware

Source-Side
Veeam Data
Mover

Target-Side
Veeam Data
Mover

Backup Path

Backup Path

Source Host

Veeam Proxy Server

Veeam Availability Suite

Veeam Availability Suite leverages Infinidat's InfiniSnap® a patented, non-locking, snapshot technology that uses timestamps to eliminate the inherent scalability and performance issues common with snapshots. Metadata for volumes and snapshot operations is maintained with a highly efficient implementation of Infinidat's patented Trie data structure. The use of the Trie enables nearly limitless scalability of data operations. This means that your business can create snapshots for all of its data, at any frequency, with ZERO impact on the performance of the array during the snapshot, and all subsequent I/O operations. Infinidat innovation ensures that your data, at any point in time, is always available and always current.
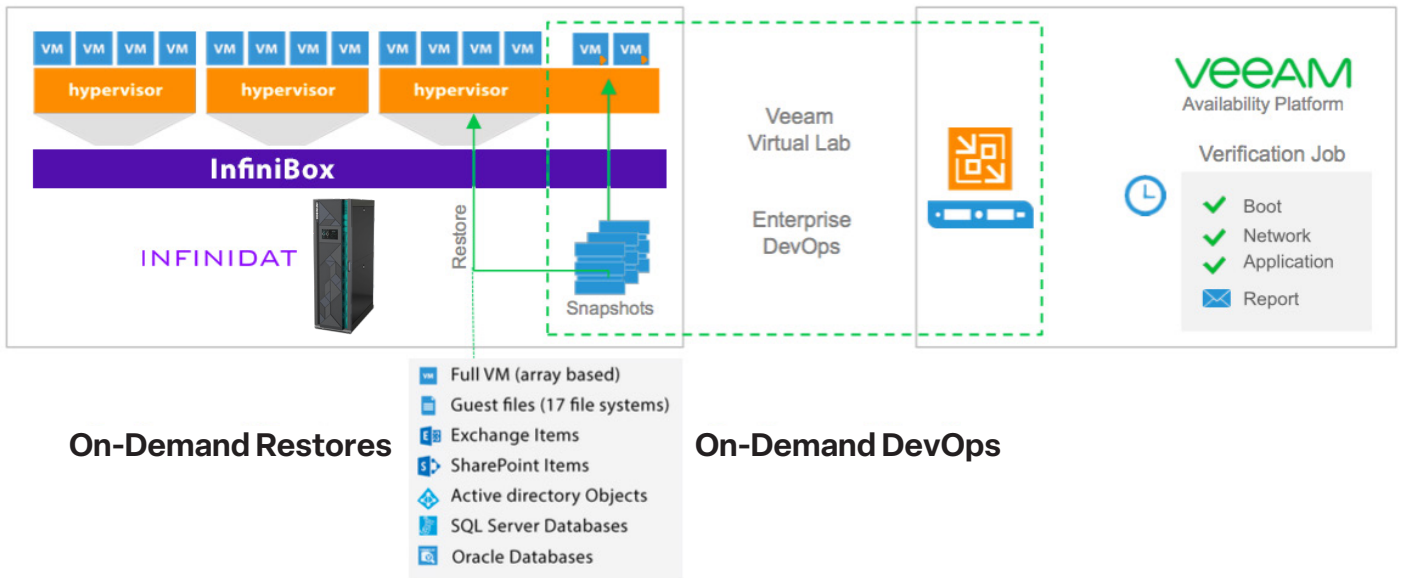
Veeam orchestration of InfiniSnap for backup and storage snapshots simplifies and automates IT operations, helping customers meet more stringent service level agreements (SLAs) and data compliance objectives. Veeam's agentless, application-aware backups combined with InfiniSnap, achieve better recovery point objectives (RPO) and recovery time objectives (RTO) with integrated capabilities, including:

▶ Veeam Backup from Storage Snapshots lowers the impact of backup operations on production environments for VMware, enabling backup at any time, at high frequency, while dramatically accelerating the backup process up to 10x faster than other solutions

▶ Veeam Explorer™ for Storage Snapshot quickly restores entire VMs, files, and individual application items directly from storage snapshots

▶ Veeam On-Demand Sandbox for Storage Snapshots creates complete, isolated copies of your production environment with just a few clicks for development, testing, and troubleshooting

Infinidat InfiniSnap Snapshots at a Glance:

Every Infinidat platform includes the InfiniSnap capability for point-in-time snapshots. Unique to InfiniSnap is:

▶ Fully integrated with the latest Veeam Universal Storage API Framework

▶ Massive scalability, up to 100,000 snapshots per system

▶ Timestamp-based, no metadata locking, no I/O blocking, and no aggressive data relocation

▶ Ability to support dozens of snapshots per second with no performance impact

▶ Thin by default, requiring nearly zero additional capacity

▶ "Fast Overwrite" in-memory updates avoid unnecessary backend I/O and latency penalties common in systems requiring frequent destaging

▶ When destaging is required, InfiniRaid® uses massively parallel I/O operations across all available media capacity

▶ Veeam-enabled application-aware backup, instant recovery, and enterprise DevOps on Infinidat snapshots

▶ Veeam restores VMs (Instant VM Recovery), guest files, application items and databases directly from Infinidat snapshots

▶ Veeam block-level incremental forever backup, direct out of Infinidat snapshot, with use of VMware Change-Block-Tracking

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On-Demand Restores

- Full VM (array based)
- Guest files (17 file systems)
- Exchange Items
- SharePoint Items
- Active directory Objects
- SQL Server Databases
- Oracle Databases

On-Demand DevOps

When dealing with large amounts of data, it is critical to ensure backups are viable and recovery is verified. Veeam automatically tests replication and the recoverability of every file, application or virtual server, every time by running automated recovery verification jobs.

Driving DevOps and Data Protection

Veeam® and Infinidat have collaborated on a verified solution that combines the features of the InfiniBox and InfiniGuard with industry-leading Veeam software. This proven combination of technologies enables customers to quickly realize the value of simple and efficient data duplication, backup, and recovery operations.

Your data is growing exponentially while your IT budget likely is not. Infinidat and Veeam have the right solution to help you cost-effectively answer the never-ending demand for storage, along with any associated data regulatory compliance, while meeting the always-on requirement of your business.

[1] Veeam Availability Report https://go.veeam.com/2017-availability-report

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