



## NexaVM Disaster Recovery White Paper

### Turning Disaster Recovery into Business Resilience

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#### Executive Summary

In an era defined by hybrid cloud adoption, cyber threats, and increasing regulatory pressure, disaster recovery (DR) is no longer an IT afterthought—it is a core pillar of business resilience. Enterprises today require more than passive backups or compliance-driven DR checklists. They need fast recovery, continuous verification, automation, and confidence that systems will work when disaster strikes.

NexaVM Hybrid Cloud Disaster Recovery delivers a next-generation DR platform purpose-built for hybrid and multi-cloud environments. By combining block-level data protection, intelligent automation, ransomware-ready recovery, and deep cloud integration, NexaVM transforms disaster recovery from a cost center into a strategic resilience platform.

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#### Why Traditional Disaster Recovery Fails in the Cloud Era

Cloud computing has fundamentally changed how infrastructure is built and consumed. However, many organizations still rely on disaster recovery models designed for legacy, static data centers. This mismatch leads to critical gaps:

- Backups exist, but recovery is slow, unreliable, or untested
- DR systems are idle and outdated when finally needed
- Ransomware encrypts both production and replicated data
- Recovery objectives (RTO/RPO) are not achievable in real incidents
- DR drills are too expensive, risky, or infrequent

In hybrid cloud environments—spanning on-premises data centers, private clouds, and multiple public clouds—these problems are amplified by platform incompatibility, complex networking, and operational silos.



The result: businesses believe they are protected—until they are not.

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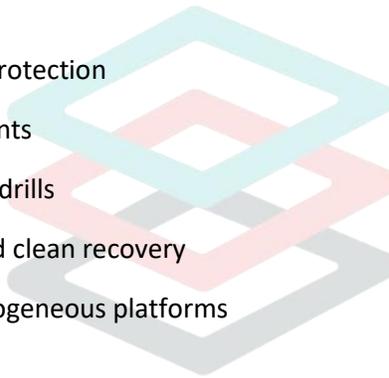
### NexaVM's Approach: From Data Protection to Data Regeneration

NexaVM redefines disaster recovery with a simple but powerful philosophy:

Data is only valuable if it can be recovered, validated, and reused—quickly.

Unlike traditional DR solutions that focus solely on data retention, NexaVM emphasizes data regeneration capability—the continuous ability to restore systems, verify integrity, simulate real disasters, and recover at scale.

Key differentiators include:

- Block-level, application-agnostic protection
  - Multi-version, rolling recovery points
  - Automated recovery, testing, and drills
  - Built-in ransomware detection and clean recovery
  - Full-system recovery across heterogeneous platforms
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### NexaVM Hybrid Cloud Disaster Recovery Platform

Designed for Hybrid and Multi-Cloud Reality

NexaVM is architected from the ground up to operate seamlessly across:

- Physical servers and virtual machines
- On-premises data centers
- Private clouds
- Public clouds (IaaS)
- Multi-cloud and cross-region deployment



Whether workloads run on VMware, physical infrastructure, or public cloud instances, NexaVM delivers a unified DR experience through a single management console.

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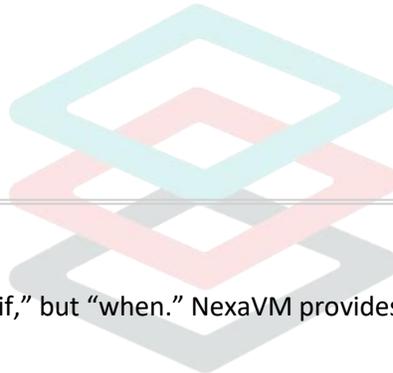
## Key Capabilities and Business Value

### 1. Full-System Disaster Recovery

Protect entire systems—not just files or databases. NexaVM enables rapid recovery of complete servers or virtual machines, dramatically reducing operational complexity and recovery time.

Business value:

- Works for any application
- Minimal implementation effort
- Predictable recovery outcomes



### 2. Automated Ransomware Recovery

Ransomware is no longer a matter of “if,” but “when.” NexaVM provides built-in ransomware-aware recovery by:

- Monitoring system behavior via host-level intelligence
- Automatically triggering recovery from clean historical points
- Preparing recovery environments before administrators intervene

Business value:

- Faster recovery from cyber incidents
  - Reduced data loss and downtime
  - Lower financial and reputational risk
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### 3. Continuous, Automated DR Drills

Manual DR drills are expensive, disruptive, and rare. NexaVM enables automated, non-intrusive disaster recovery simulations—weekly if desired—without impacting production systems.

Each drill produces measurable insights:

- Actual recovery time (real RTO)
- Resource consumption
- Platform health and optimization recommendations

Business value:

- Always-ready DR
- Audit-ready reporting
- Confidence backed by evidence



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### 4. Deep Cloud Automation

Through native integration with cloud provider APIs, NexaVM automates:

- Cloud compute and storage provisioning
- Snapshot, backup, and rollback operations
- Network and security configuration
- Agentless data acquisition (where supported)
- Cross-platform driver and system adaptation

Business value:

- Lower operational costs
- Faster deployment
- Reduced human error

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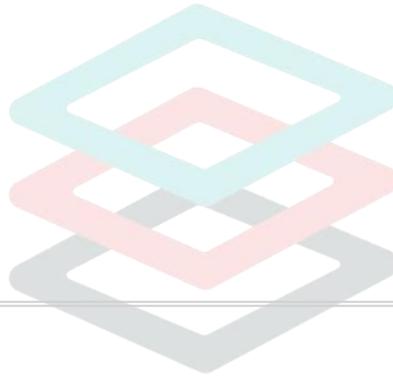
## 5. High-Performance, Intelligent Data Replication

NexaVM uses block-level data replication enhanced by intelligent file filtering:

- Temporary and irrelevant data is excluded
- Deleted blocks are not retransmitted
- Compression and secure WebDAV transport reduce bandwidth usage

Business value:

- Faster synchronization
- Lower network costs
- Scales to large datasets



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## 6. Flexible Network Architecture

NexaVM operates reliably across:

- Internet
- VPN
- Dedicated private links
- Segmented or restricted networks

With support for relay servers, unidirectional transfer, and intelligent network scheduling, NexaVM ensures consistent replication—even in unstable or low-bandwidth environments.

Business value:



Works in real-world network conditions

Supports complex compliance and isolation requirements

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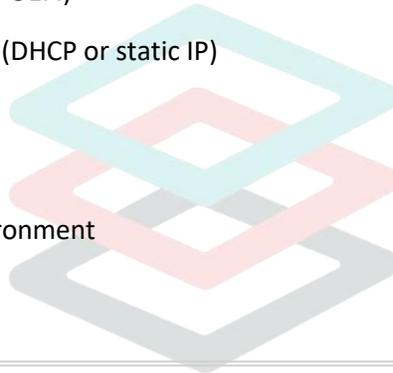
## 7. Intelligent System Conversion

NexaVM enables seamless recovery across heterogeneous platforms by automatically handling:

- P2V, V2V, V2P conversions
- Driver injection for disks, networks, and buses
- Boot mode compatibility (Legacy / UEFI)
- Dynamic network reconfiguration (DHCP or static IP)

Business value:

- True platform independence
- Faster recovery in any target environment



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## Use Cases

- Hybrid cloud disaster recovery
  - Ransomware response and cyber resilience
  - Data center exit or cloud migration
  - Business continuity for regulated industries
  - DR compliance with continuous validation
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### **Conclusion: Disaster Recovery That Actually Works**

In today's hybrid cloud world, disaster recovery must be intelligent, automated, continuously validated, and business-driven.

NexaVM Hybrid Cloud Disaster Recovery goes beyond traditional backup and standby systems. It delivers a living, continuously tested resilience platform—one that enterprises can trust when it matters most.

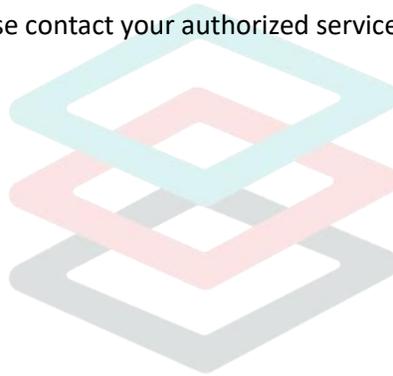
NexaVM doesn't just protect data. It ensures your business can recover, operate, and move forward—no matter what happens.

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#### Technical Support

For NexaVM technical assistance, please contact your authorized service partner or email:

[support@nexavm.com](mailto:support@nexavm.com)



NEXAVM