



VIRTUALNINES™

Always Available™ Uptime for Microsoft® Virtualization Solutions



Benefits of VirtualNines

- Provides unprecedented application availability of virtually 100 percent.
- Protects against financial losses by preventing loss of data, transactions, and productivity.
- Proactively protects against the negative effects caused by disasters such as regional outages, construction accidents, natural disasters, maintenance, and other threats.
- Increases network power and flexibility by synchronizing consolidated and virtual servers hosted by multiple service providers.
- Avoids costs for disaster recovery systems that may not prevent downtime.
- Helps meet many of the requirements for compliance with strict federal standards, including Sarbanes-Oxley and HIPAA.
- Capitalizes upon your current Hyper-V or other virtualization environment from Microsoft.

Protecting Your Virtualization Investment from Downtime

Windows Server® 2008 featuring Hyper-V™ virtualization technology benefits businesses of all sizes through decreased costs, increased efficiency, and new capabilities. VirtualNines™ from ZeroNines® works in concert with these solutions, protecting your business-critical consolidated environment from downtime caused by natural disasters, regional outages, construction accidents, maintenance, and other threats.

Events that cause downtime—even a quickly rectified outage—could lead to cascading application failure and potential loss of productivity. Disaster recovery takes time to get a business up and running again. If your business requires high availability, you need to strengthen your virtualized environment and protect your business from loss of data, transactions, and productivity.

The ZeroNines Solution VirtualNines: Exceptional Uptime for Microsoft Virtualization Solutions

VirtualNines provides an alternative to standard disaster recovery by applying patented Always Available™ technology to your virtual network. It enables virtually 100 percent uptime and business continuity even in the event of threats that would normally shut down access and permanently damage your business. VirtualNines is fully compatible with Hyper-V and other virtualization solutions from Microsoft and works with your existing applications, servers, and infrastructure.

VirtualNines helps protect against catastrophic downtime, providing continuous access to hypervisors, data, and applications hosted on consolidated servers, even if you have multiple sites and service providers. VirtualNines also creates a unique networking paradigm, where the loss of access to any part of your network will not hinder performance for end users. Your transactions continue, your people have uninterrupted access to the same applications, and your information flows as normal.

VirtualNines Moves Beyond Disaster Recovery

VirtualNines provides disaster prevention, not disaster recovery. It can't stop a hurricane from destroying a data center, but it can prevent this catastrophe from becoming a disaster for your business.

Standard disaster recovery methods may not provide the protection your business needs. Techniques like remote vaulting and tape backups are expensive and can't always prevent outages, and they only come into play after a downtime event occurs. In some circumstances, there may be delays and costs before you regain full access and productivity. If your business operates under Sarbanes-Oxley, HIPAA, or other regulations, your compliance status may be at risk.

Always Available technology from ZeroNines was built under the assumption that part of your virtualized environment may fail and that your systems must continue to operate at full efficiency and with no interruptions or loss of data, regardless of what happens to servers, applications, databases, or other key elements of your infrastructure.

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VirtualNines™ is integrated with these Microsoft® Virtualization Solutions

- Windows Server® 2008 Hyper-V™
- Microsoft® Hyper-V Server
- Microsoft System Center Virtual Machine Manager 2008

All virtual servers are hot, and all virtual applications are active. All transactions process in parallel in one-to-many sessions. There is no cutover and no server hierarchy, and thus no single point of failure.

How VirtualNines Technology Protects Your Microsoft Virtualized Environment

At the core of VirtualNines is the ZeroNines patented Always Available technology. Always Available enables your transactions, data exchanges, and other network activities to occur equally and simultaneously on multiple consolidated or virtual servers. In IT parlance, all virtual servers are hot, and all are active. There are no cutover events and no server hierarchy, and thus no single point of failure.

If a virtualized server, server cluster, virtualization provider, or data center suffers from an outage or disaster, all activities continue uninterrupted through the virtual applications and hypervisors on other servers. There is no need for failover or recovery because continuity is maintained.

Here's What Happens:

1. Server calls are originated by networked clients: computers, e-mail systems, PDAs, phones, business software, databases, and more.
2. Each transaction passes through the ZeroNines Smart Switch Nodes, which route transactions simultaneously to all virtual servers.
3. Processing and storage take place equally on all servers. All servers and their applications are hot, and all are active. There are no primary or secondary servers.
4. All transactions and data exchanges are recorded, verified, and subjected to security measures.
5. Each virtual server sends its responses back through the Smart Switch Nodes.
6. The Smart Switch Nodes cooperatively eliminate duplicate responses and return a single response to the client that originated it.

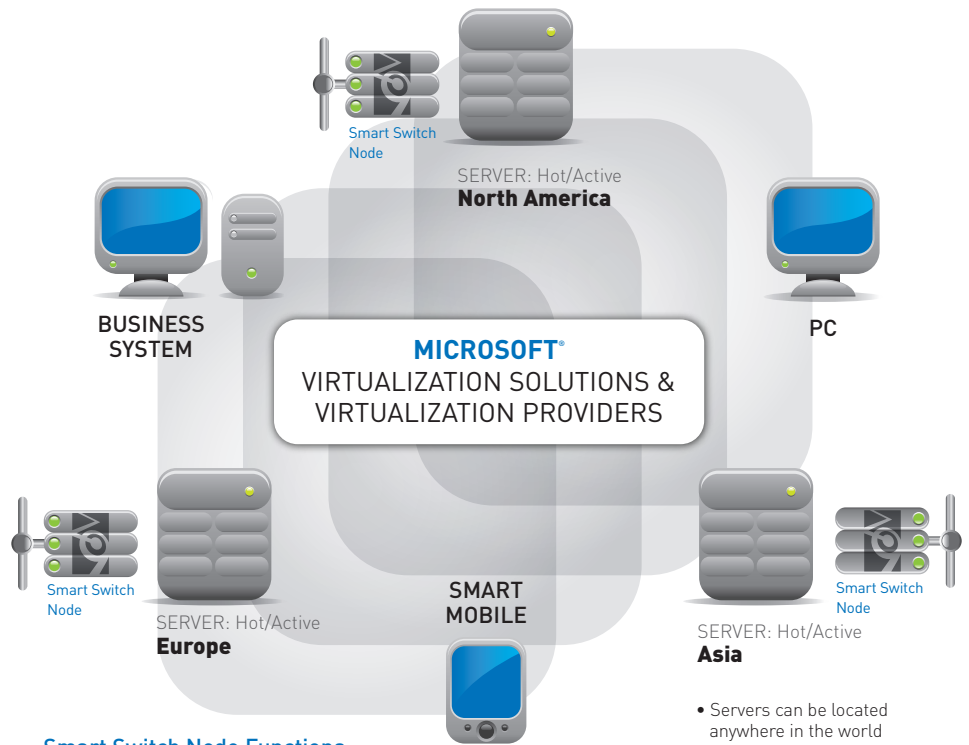
VirtualNines architecture is fully compatible with Windows Server® 2008 Hyper-V™, Microsoft® Hyper-V Server, and other virtualization solutions from Microsoft. It is agnostic regarding applications, operating systems, and platforms, accommodating your existing infrastructure and way of doing business.

You can mix and match old and new hardware without compromising network integrity.

Find out more about VirtualNines and how it can help eliminate downtime at

www.zeronines.com/virtualnines

APPLICATIONS, PROCESSING, HYPERVISOR MANAGEMENT



Smart Switch Node Functions

- Date/Time Stamping
- Highly Distributed
- Routes single response back to user
- Auto-sync any server or virtual server that goes down
- No waiting
- No single point of failure

- Servers can be located anywhere in the world
- Real-time processing
- Transactional synchronization
- No common storage

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About Microsoft Virtualization Solutions

Microsoft virtualization is an end-to-end strategy that can profoundly affect nearly every aspect of the IT infrastructure management lifecycle. It can drive greater efficiencies, flexibility, and cost effectiveness throughout your organization. From accelerating application deployments; to ensuring systems, applications, and data are always available; to taking the hassle out of rebuilding and shutting down servers and desktops for testing and development; to reducing risk, slashing costs, and improving the agility of your entire environment—virtualization has the power to transform your infrastructure, from the data center to the desktop. For more information about Microsoft virtualization solutions, go to: www.microsoft.com/virtualization

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ZeroNines® Technology, Inc. provides a new standard in network disaster recovery, shifting the paradigm from reactive recovery to proactive business continuity. Our Always Available™ information security and availability technology pushes application uptime beyond five nines (99.999%) to virtually 100% anytime, all the time – zero nines. This enables uninterrupted access to business data, applications, and transactions despite disasters or network disruptions that would otherwise cripple the enterprise. Always Available™ processes all transactions in parallel on geographically dispersed servers that are all hot and all active, eliminating single points of failure. It operates agnostically across multiple platforms, leveraging existing processing and storage infrastructure. We also offer enterprise infrastructure assessment, program management

and project implementations. Founded in 2000 and based in Denver, Colorado, ZeroNines' primary target customer base includes Global 2000 companies.

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Contact ZeroNines today to find out how your business can be Always Available!

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