SOLUTION BRIEF

Maintain Uptime and Resilience Through Safe Patch Management

Apply critical updates with confidence and near-zero downtime.

Key Benefits

Nonstop Operations During Patch Cycles

- Minimize planned downtime during software updates by using rolling updates with automatic failover between clustered nodes.

Safe, Tested Updates Without Downtime

- Use standby systems to validate patches in real time, allows seamless production updates without compromising uptime or user access.

Resilient Architecture with Built-in Rollback

- Quickly revert to the unpatched node if issues arise, ensuring uninterrupted application performance and data integrity.

Effective patch management is essential for protecting systems from cyberattacks, fixing bugs, enhancing performance, ensuring compliance, and maintaining operational continuity. However, applying patches, especially to mission-critical systems, often requires planned downtime, creating a risk of disruption, lost revenue, and compliance violations.

You also need to test patches thoroughly before applying them to a production environment, posing yet another challenge. QA / test environments may not be available when patches are issued, potentially causing lengthy delays.

HA Clustering in Patch Management

SIOS Technology Corp. delivers high availability (HA) clustering solutions that nearly eliminate the downtime required for patching. With SIOS LifeKeeper and DataKeeper, IT teams can test and apply patches in a rolling update methodology, leveraging failover clustering to ensure continued operation, seamless recovery, and a more secure, resilient infrastructure.

Rolling Updates for Near-Zero Downtime

SIOS clustering software enables you to apply and test patches confidently, without the need for lengthy downtime. In a SIOS HA cluster, applications run on a primary server node that's configured in a cluster with a secondary node. When a new patch becomes available, you can apply it and test it on the secondary node while the applications continues to run safely on the primary node.

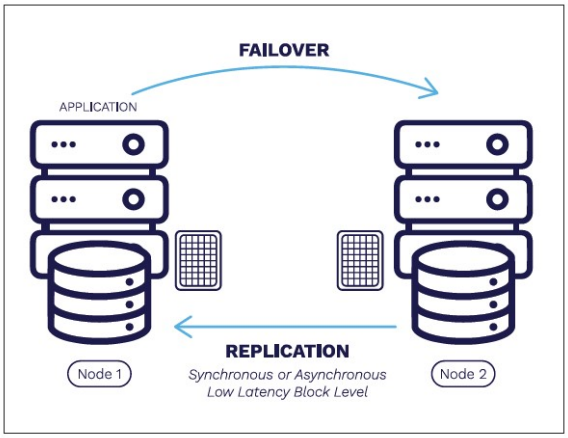
If testing is successful, you simply failover operation from the primary to the secondary and update the other node. If the patch functions as expected, you can then failback operations to the original setup, ensuring both nodes are fully updated. However, if any issues arise during testing, you can immediately roll back to the unpatchedserver node. This approach allows you to investigate and resolve problems without affecting users or application availability.

Apply Patches During Working hours

By enabling rolling updates, IT teams can take individual nodes offline for maintenance—such as testing and applying patches—without

impacting the availability of critical applications. Teams can perform updates during normal business hours without the need for costly weekend and after-hours planned downtime. This not only minimizes disruption to users and services but also allows faster response to emerging security vulnerabilities and system improvements, improving both operational efficiency and business continuity.

With SIOS, you gain a controlled, low-risk environment for testing updates, protecting system integrity while maintaining uninterrupted uptime.



Cross-Platform and Infrastructure Flexibility

SIOS HA supports Windows and Linux in physical, virtual, and cloud environments, enabling consistent protection across hybrid infrastructures. This versatility simplifies patch management and HA deployment.

Conclusion

SIOS clustering solutions take the risk and complexity out of patch management by enabling safe, seamless updates with continuous uptime. With proven high availability and rollback capabilities, organizations can strengthen cybersecurity, maintain compliance, and ensure operational resilience—without disrupting critical business services.

About SIOS Technology

SIOS delivers innovative software solutions that provide application availability and disaster protection for Windows and Linux environments. Essential to any cluster solution, SIOS clustering software provides the flexibility to protect your choice of Windows or Linux environment – and any configuration (or combination) of physical, virtual and cloud storage – without sacrificing performance or availability. SIOS provides unique SANLess clustering software that eliminates both the cost and the single-point-of-failure risk of traditional SAN-based cluster solutions.

Founded in 1999, SIOS Technology Corp., is headquartered in San Mateo, California, and has offices throughout the United States, United Kingdom, Germany, Singapore and Japan.

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