

Marathon HAvirtual Server™ Software

The next generation clustering alternative

Simple, reliable, and cost effective availability protection for any Windows® application.

Windows has become the enterprise platform of choice for a wide range of critical business applications, including databases, email, and call center management software. Protecting these critical systems from downtime has become a top priority due to the extremely high costs of downtime and the requirements defined by the ever-growing compliance regulations being imposed. Unfortunately most of the options available are overly complex and simply can't provide the levels of protection that businesses need to mitigate the risks associated with failures. Marathon HAvirtual Server™ software provides a better alternative to clustering and elementary failover products; delivering a significantly higher level of protection at a lower cost with much greater ease of management.

Standards Based for Simplicity and Savings

Marathon HAvirtual Server software saves time and money by eliminating the need for specialized hardware, modified or cluster-aware applications, and failover scripting. HAvirtual Server runs on a wide range of affordable, standard Windows servers, requiring only basic internal storage and standard Ethernet network connections. Only basic Windows installation and administrative knowledge are needed as no additional clustering expertise is required. HAvirtual Server configurations also save thousands of dollars in Windows application costs over typical clustering solutions.

- Supports out-of-the-box Windows applications without the need for "cluster-aware" modifications
- Supports standard edition applications instead of the more costly enterprise versions required by clusters
- Requires only a single application license for most applications instead of the multiple licenses required by clusters.

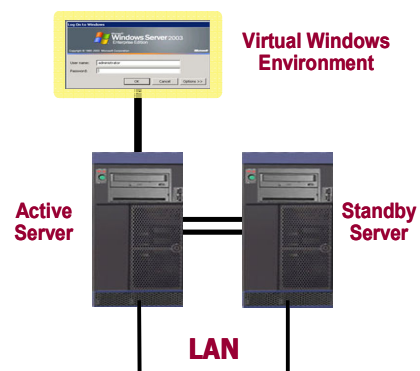
Eliminate Failover Complexity

Marathon HAvirtual Server removes the complexity of cluster failover management by eliminating the need to write, test, and maintain failover scripts every time a hardware or software configuration is changed. HAvirtual Server has an embedded failover policy that is independent of both hardware and software applications. This embedded policy provides an inherently more reliable solution than typical clusters and eliminates the need for time-intensive testing every time an update is made to an application.

Virtual Application Environment

The HAvirtual Server configuration comprises two standard Windows servers connected by a standard Ethernet connection. A virtual Windows environment is created where the application is installed and run. The two physical servers appear to the application and network as a single server, providing redundancy to remove any single point of failure. Unlike typical clusters, HAvirtual Server maintains separate storage devices on each server and synchronizes data between them to prevent any data loss should a failure occur. In the event of most component failures, HAvirtual Server automatically redirects system operations without interruption of service or loss of application state or data. In the event of complete server failure, the entire virtual environment is immediately migrated to the standby server.

Marathon HAvirtual Server Configuration



Continuous Operation

Maintenance is unavoidable as it is required to keep systems up-to-date with the latest software and hardware revisions.

Unfortunately upgrading drivers, bios, and hardware generally requires downtime of systems and applications, causing user and business interruptions. HAvirtual Server allows applications to be seamlessly migrated from one server to the other to maintain availability, allowing one server to be taken offline for maintenance while the application continues to run on the other server. There is no service interruption or loss of application state during the process, allowing maintenance to be performed at any time without affecting availability.

Resiliency to Device Failures

Patented design features of HAvirtual Server provide a level of error detection and isolation that is far superior to other availability solutions. Monitoring operations from within the I/O stream provides visibility into all levels of I/O errors, system errors, and device status to handle error conditions without needing to failover, offering higher levels of application availability over clustering and failover solutions.

HAvirtual Server uses the redundant devices within the standby server to eliminate false failovers and reduce failovers caused by certain device failures. Greater resiliency to failures means less downtime and increased productivity.

Integrated Site Failure Protection

HAvirtual Server can be configured to also protect against a complete site failure. The Marathon SplitSite[®] option allows the active and standby servers to be separated from each other to alleviate the risk of site outages. In the event of a site failure, the virtual Windows server automatically migrates to the standby server at the remote location.

Simplicity Easy to deploy with near-zero maintenance. No need for failover scripting or application modifications and testing.

Scalability SMP support for multi-processor servers for high-performance applications

Flexibility Supports non-identical hardware configurations

Standards-based Uses off-the-shelf hardware allowing flexibility in choosing the best price and performance for specific needs.

Storage Independent Supports SAN and direct attached storage.

Online Repair Components can be repaired or replaced while the application remains online and available to users.

Automated or Manual Migration Fail over the application automatically upon a failure or manually to perform maintenance

Simplified Configuration & Management Embedded policies eliminate the manual process of creating and managing scripts for failover and application integration

Site-Wide Disaster Protection The *Marathon SplitSite*[®] option allows the Active and Standby servers to be separated over long distances to maintain availability during site or regional failures.

About Marathon Technologies

Marathon Technologies is the leading provider of simplified high availability solutions for critical business systems and applications. Marathon has been delivering enterprise-class protection against costly downtime for over 12 years, with a world-wide customer base spanning industries such as financial, healthcare, and manufacturing.

For more information on HAvirtual Server or other Marathon products, please contact us or one of our partners, or visit us on the web at www.marthontechologies.com.

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