

IBM PowerHA SystemMirror for AIX

Integrated hardware-based HA/DR solution
designed for automation, simplicity, certainty
of outcome, and economics



Highlights

IBM® PowerHA® SystemMirror is the Power solution for mission-critical applications.

Integrated with AIX®, PowerHA provides 24x365 availability for hardware and software, planned and unplanned

GUI enables the monitoring and management of clusters from a single pane of glass

Available in the IBM® Power® Virtual Server

PowerHA SystemMirror provides near-continuous application availability through both planned and unplanned outages. PowerHA V7 is dedicated to keeping mission-critical operations online 24x365 with simplicity, security, with the highest levels of automation while being substantially less expensive and easier to manage than database replication tools.

PowerHA SystemMirror has provided an HA management platform for Power Systems for more than two decades. With each release, PowerHA becomes more powerful, more robust, and easier to use. The V7.2 enhancements feature the GUI/Dashboard which enables you to both monitor and manage your cluster or collection of clusters from a single screen. PowerHA monitors for numerous soft and hard errors within the cluster from various event sources, including problems that are severe enough to impact production. Monitoring and event management are done at the kernel level of the AIX operating system, and thus the cluster is not prone to job scheduling issues or other OS related operations. Resource Optimized High Availability (ROHA) manages resource allocations during failover operations enabling the lowest cost implementation.

PowerHA V7 provides smart assists for easier, out-of-the-box high availability setup and application management for many well-known middleware products such as DB2®, SAP, NetWeaver, and Oracle. The smart assists are high-availability agents for application deployment and management. Smart assists are used to define high-availability policies by discovering software that is deployed within the cluster. Discovery-based information helps define the high availability policy and provides periodic health monitoring, enabling middleware and resource dependencies to be restarted via the specified policy.

PowerHA 7 .2.8 for AIX

PowerHA V7.2 is focused on providing superior economic value, greater automation, and more advanced, robust clustering technology. PowerHA V7.2 is supported in Power Enterprise Pools 2.0 for superior economic value and ease of use. PowerHA SystemMirror AIX Standard Edition is available in PowerVS with a “single click” install.



Highlights

AIX® live update support and cluster-wide updates

Resource-optimized high Availability (ROHA) for automated DLPAR on-premise and in the cloud

Available in Power Virtual Server

Customer Value

The two primary benefits of deploying a PowerHA SystemMirror AIX® solution are OPEX and CAPX.

The primary function of the PowerHA solution is to orchestrate switching production workload between nodes in a cluster, whether locally or to a remote location. Operationally, PowerHA is largely autonomous, meaning that the IT administration can minimize direct day-to-day hands-on management.

Operationally, switching between nodes in the cluster, whether planned or unplanned, is automated. Since all the nodes in the cluster have an active operating system, software maintenance can be done concurrently to production. From a CAPX perspective, the PowerHA licensing can be characterized by N+1, meaning that the secondary cluster nodes require only a single AIX® and PowerHA license.

Conclusion

PowerHA SystemMirror for AIX® is the dominant HA/DR solution approach in the Power Systems and the reasons are clear: it’s less expensive to purchase and maintain and it minimizes the role of IT administrators. There is an extensive worldwide community of technical professionals that implement and support PowerHA.

PowerHA SystemMirror for AIX

What it does	Provides highly automated HA/DR solutions for mission-critical applications
Key Features	Modern GUI for monitoring and managing multiple clusters from a single pane of glass
	Resource Optimized High Availability (ROHA) automates cluster resources for maximum economic value
	Split-Merge options and Quarantine Policies for data integrity
	Modern GUI for monitoring and managing
	Three site configurations with DS8000s Metro and Global Mirror
	Live Kernel Updates cluster integration
	Monitoring and management of non LVM disk such as Oracle ASM
	N+1 licensing and Pools 2.0 to minimize redundant licensing
	Modern GUI for monitoring and managing multiple clusters from a single pane of glass

Why IBM?

With IBM's focus on advancing solutions for high availability and disaster recovery, PowerHA enables the highest level of economical and autonomous HA/DR operations.

For more information

To learn more about IBM PowerHA SystemMirror for IBM, contact your IBM representative or IBM Business Partner or visit <https://ibm.biz/PowerHA-ProductPage>.

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