IBM PowerHA SystemMirror for i

Automated hardware based high availability and disaster recovery solution for on-premise, hybrid and IBM Power Virtual Server

Highlights

Replaces third-party software replication tools

Simple automated HA and DR operations

Automate FlashCopy/BRMS operations

GUI for a single pane of glass management

Available in IBM Power Virtual Server for cloud-to-cloud HA/DR managing GRS

Hybrid cloud DR with geographic mirroring

Organizations running IBM® Power® processor-based servers on-prem and in cloud environments need a high availability and disaster recovery (HA/DR) solution for IBM i to replace complex and expensive third-party logical replication tools. IBM® PowerHA® SystemMirror® for i provides hardware-based HA/DR solutions for mission-critical applications and workloads. PowerHA technology is deeply integrated within the operating system. IBM SAN storage manages data resiliency while PowerHA provides the orchestration making failover and failback operations simple and repeatable with minimal dependencies on IT administrators. PowerHA also automates FlashCopy® operations integrated with BRMS to provide offline backup and recovery operations.

How does PowerHA make HA/DR more economical?

PowerHA is an active/passive configuration whereby only the production nodes (LPARs) can access the data while the secondary nodes stand ready to take over in the event of a planned or unplanned outage event. Storage-based HA/DR consumes no processing overhead therefore the secondary nodes in the cluster are CBUs enabling N+1 licensing for each of the secondary LPARs. PowerHA is also supported in Enterprise Pools 2.0 for even further economic benefits.

Differences between Full System Replication and PowerHA

	Full System Replication	IBM PowerHA SystemMirror for i
Orchestration	Controlling LPARs	PowerHA
Replication	Global Mirror, Metro Mirror, Policy Based Replication (PBR)	Global Mirror, Metro Mirror, Policy Based Replication (PBR), Geographic Mirroring
Data/Application Volumes	System ASP	Independent ASP
HA/DR Coverage	Hardware outages	Software and hardware outages
Security and configuration object synchronization	System ASP	Administrative Domain
Concurrent software updates	No, secondary nodes are inactive	Yes, all nodes in the cluster have active IBM i operating systems
Licensing	N+0, CBU or DBM	N+1, CBU and Pools 2.0
Backup/Recovery	Full System FlashCopy	IASP FlashCopy
Hybrid HA/DR	No	Geographic Mirroring
Cloud to Cloud HA/DR	DR only (active/inactive)	HA and DR via GRS
RTO	IPL	IASP "IPL" + application restart
RPO	0 with synchronous mode, seconds with async mode	0 with synchronous mode, seconds with async mode

IBM PowerHA SystemMirror for i

What it does	Orchestrates IBM storage-based HA/DR operations for integrated automation
Key Features	Automated or administrator-initiated failover operations
	Administrative domain synchronizes non IASP objects such as user profiles
	Manages IBM storage replication, switchable LUNs and FlashCopy automation
	Manages the process of switching users and applications between local or remote nodes
	Modern GUI for monitoring and managing
	Three and four site configurations with PowerHA, DS8000 & Expert Labs
	Automated or administrator-initiated failover operations

Conclusion

IBM PowerHA SystemMirror for i delivers a proven, hardware-based high availability and disaster recovery solution that is simple, automated, and deeply integrated with Power processor-based infrastructure. By eliminating the complexity and overhead of third-party replication tools, PowerHA helps organizations safeguard mission-critical workloads, streamline operations, and reduce total cost of ownership. Its tight integration with IBM SAN storage, FlashCopy, and BRMS ensures continuous data resiliency and efficient backup management across on-prem and hybrid environments. Whether deployed within IBM Power Virtual Server or a local data center, PowerHA provides the reliability, flexibility, and performance needed to keep businesses running without interruption so IT teams can focus on innovation instead of recovery management.

For more information

To learn more about IBM PowerHA SystemMirror for i, please contact your IBM Representative or IBM Business Partner, or visit:
https://www.ibm.com/products/powerha