IBM PowerHA SystemMirror for i

Around the clock availability with simplicity, automation and confidence

Highlights

- Delivers high availability (HA) and disaster recovery (DR) through IBM storage-based clustering
- Provides higher utilization and performance capabilities for scale-up computing
- Easy to use, economical and automated
- Protects critical business applications from outages, planned or unplanned, around the world

IBM PowerHA SystemMirror for i is the Power Systems offering designed for both high availability and disaster recovery. The value proposition is twofold; economics and simplicity. On the economic front, it's the cost of acquisition and subscription as well as the cost of operations. On the simplicity front, PowerHA is highly autonomous, requiring minimal administrative involvement. PowerHA covers all outage types, planned and unplanned, hardware and software. It should be of note that the majority of the current PowerHA customer installations migrated from remote journaling tools.

Consider CapEx; PowerHA is licensed per processor core as a one time charge and the annual software maintenance is set at 20% of the initial list price which includes the 1st year SWMA. PowerHA is an active/passive solutions that enables N+1 licensing, that is, the secondary system in the cluster requires only one IBM i and PowerHA license. From an OpEx perspective, and by the nature of a shared storage cluster technology, PowerHA requires only a small fraction of a person's time to monitor and manage.

PowerHA for i cluster configurations come in many forms. It is the norm for IBM i shops to deploy multi-sitePowerHA clusters where the data is replicated either by IBM storage or by Geographic Mirroring. PowerHA integrates the IBM i operating system with storage replication technologies providing solutions that meet the high availability needs of clients, regardless of size. Configurations range from a simple two-system two-site cluster using Geographic Mirroring with internal storage, to an IBM FlashSystem cluster or a three-site HyperSwap cluster with IBM DS8000 storage. Exploiting IBM storage adds the additional benefit of FlashCopy functionality, which is used to eliminate the backup window, conduct query operations and to create point in time copies for data protection purposes.

The production data, including the local journals, are contained within an Independent Auxiliary Storage Pool (IASP), planned switchovers between nodes in the cluster consists of a single command. Unplanned failovers can be configured to be automatic, requiring minimal operator intervention. The administration domain takes care of synchronizing security and configuration objects such as user profiles. This is all done with the integration between PowerHA and the IBM i operating system, and has no dependency on third-party replication tools. Since there is at least one active operating system on each node in the cluster, you are able to conduct software maintenance and OS upgrades on an alternate node without disrupting production.

Implementing IASPs is a simple task consisting of moving your application libraries and IFS data into the IASP, thus separating business data from the operating system. The application binaries do not change, and most users are completely unaware of the migration in their daily workflow as their jobs automatically have access to libraries both in the system ASP and the independent ASP simultaneously. IBM Systems Lab Services as well as many independent business partners will help you to deploy PowerHA quickly and efficiently. Normally you would do a three-or-four-day workshop and at the end of it, you are largely deployed into the configuration.

Clients that implement PowerHA benefit because they eliminate the fear of doing planned or unplanned switchovers and monitoring and managing the solution typically takes less than a few minutes a week. PowerHA clients do regular switchovers operations weekly, monthly or quarterly.

PowerHA for i has been in the market since 2008, and there were earlier versions going back several years previously. Originally an IBM Systems Lab Services offering for DS8000 deployments, the product evolved over the years and today there are several thousand installs worldwide deployed with Geographic Mirroring with internal disks as well as IBM Spectrum Virtualize. In its most recent versions, the product has been enhanced to enable policy-driven cluster management as well as higher degrees of automation and health monitoring. The product continues to evolve, and the install base continues to expand worldwide. If you're looking for a comprehensive HA/DR solution with the best economic value, with nearly "set and forget" operational benefit, you should consider PowerHA.

PowerHA tools for i from IBM Systems Lab Services enables a range of options and services to enhance and simplify your PowerHA cluster environment. This offering provides pre-written scripts and services for implementing and managing your IBM storage and PowerHA SystemMirror solution environment. The PowerHA tools for i further simplifies your HA/DR operations including FlashCopy.

Gaining the IBM Advantage

PowerHA high availability solutions from IBM provide clients the confidence that comes from integrated design and testing. IBM PowerHA solutions are designed as an integrated exten-sion of the operating system environment. This reduces the risk of failures resulting from combining disparate components from multiple vendors and can be a critical factor for business environments. IBM PowerHA high availability solutions provide the advantage of IBM Power Systems, the IBM AIX® and IBM i operating systems and IBM Storage®. PowerHA clusters are backed by comprehensive offerings and resources that provide value at every stage of IT implementation. These include PowerHA High Availability Cluster implementation services, providing customized assistance designed to meet our customer requirements for on-demand business needs.

For more information

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

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