Echo² High Availability™

"The Echo² solution was affordable and it works…iTera has continuously worked with us to assure 100% satisfaction"

—Joe Bastarache, Data Center Director, WorldTravel BTI

Proven, Superior High Availability

Echo² is feature-rich, remarkably affordable and is built upon the most powerful and efficient replication engine available for the iSeries. Large and small companies around the world rely on iTera's high availability and continuous availability products to keep their systems accessible to users and customers under any circumstances.

It's no secret that downtime can be very costly. For many businesses, the cost can range from thousands to millions of dollars per hour when all direct and indirect costs are taken into account. Of course, this means it doesn't take long to cost-justify a high availability solution—but why pay more than you have to?

Paying More Doesn't Necessarily Get You More

Echo² costs just a fraction of other high availability solutions—but that doesn't mean you get a pared-down system. Echo² is the most powerful, comprehensive, yet easy-to-use high availability solution in the iSeries market.

Sure, it's easy to say a product is the best, but what really matters is what customers think. Many of our customers have made in-depth comparisons of high availability systems, and have even used one or more of our competitor's high availability solutions. They affirm that Echo² is far easier and faster to install, that it replicates data faster and more accurately (even in complex environments) and is significantly easier to manage.

So how do we sell the best high availability solution on the market for a price that is less than half of what our competitors charge? The reason is simple: it wasn't necessary to spend millions developing our own proprietary data replication engine when the very best already existed within the OS/400 operating system. By integrating the extraordinarily powerful and proven data replication capabilities of remote journaling with our comprehensive and highly automated replication management tool, we created a state-of-the-art high availability solution that is extremely adaptable, affordable and easy-to-use.

"Echo2 does a great job of keeping objects in-sync and bringing objects back into sync if a problem occurs. On a day-to-day basis we spend far less time monitoring Echo2 [than with our previous HA software]. The product is truly automated, self healing and self correcting."

—Tim Jensen, Senior Programmer/Analyst, Great Plains Communications

The Power of Remote Journaling

By harnessing the power of remote journaling, Echo² is able to transmit data changes between the production and backup node(s) at the operating system level (machine code) for extraordinary data replication speed. This means that even at extremely high transaction levels, data moves from the production node to the backup node within milliseconds. In fact, with Echo², the amount of data latency (the time between the creation of a transaction and the writing of the transaction on the mirrored node) is so negligible that if the production node suddenly fails or the network drops, it is likely that all transactions that occurred up to the moment of failure will have already reached the backup node.

Because Echo² incorporates remote journaling, it uses virtually none of the production-side processor overhead normally required for a separate, proprietary "harvest-and-send" process. Best of all, remote journaling guarantees 100% data transmission accuracy by continuously auditing data transmissions.

Since Echo² is cluster-enabled, it is automated to the Nth degree, which dramatically minimizes operator intervention: objects are automatically resynchronized when needed, new objects are automatically recognized and mirrored, and much of the "switchover" process occurs quickly and without intervention.

It's true that IBM's iSeries is one of the most reliable systems available, but consider this from IBM:

"According to one IBM study, the iSeries server averages 61 months between hardware failures. However, even this stellar record can be cause for availability concerns. Stated another way, 61 months between hardware failures means that nearly 67 percent of all iSeries servers can expect some type of hardware failure within the first five years."

IBM Redbook, *Clustering and IASPs for Higher Availability on the IBM eServer iSeries Server*

Features	Benefits
Mirrors file changes with remote journaling — the fastest, most reliable data replication engine available	Reduces or eliminates the risk of data loss in the event of a system failure
Adapts easily to all replication environments: single-system via LPAR, one to one, many-to-one, one-to many, multi-directional, or clustered	Echo² has the flexibility to adapt as your systems change and grow, protecting your investment
A fully clustered-design solution — not just a cluster-enabled 'retrofit'	Provides extensive HA automation benefits for all installations — whether using clustering or not
Automatically detects and resynchronizes out-of-sync conditions *without* interruption of the replication process	Operators are freed to attend to other IT priorities
Key information is displayed on intuitive, easy-to-use replication monitor screens	System monitoring requires only an hour or less per day vs. 25+ hours a week with most other HA systems
Automates much of system 'switchover' process ('rollover')	Faster, less error-prone switchovers mean less downtime
Echo² is installed without causing downtime, and in just a few hours can be configured and begin mirroring	Saves thousands of dollars in installation costs and prevented downtime
Continuously mirrors objects that are moved, or libraries that are renamed; also monitors for new objects and automatically synchronizes them to the Backup node	Eliminates potential out-of-sync conditions and lost objects, which translates to smoother switchovers and less exposure to data loss
Costs less than 50% of most other HA solutions, which also means far less expense for annual maintenance; total savings with Echo² can easily exceed $200,000	See a rapid return-on-investment while getting the most powerful and robust high availability solution on the market
Can mirror data between systems that are running on different levels of the OS/400 operating system	Eliminates downtime for operating system upgrades
Replicates program objects, data areas, data queues, IFS, user profiles, spool files, and more in real-time	All objects necessary to a smooth switchover are kept updated on the backup node(s)

You might be amazed at what downtime could really cost your company

Take the average sales lost during an hour of system downtime

+

Add the total hourly wage (including benefits) of all employees that are idle during an hour of system downtime

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Now multiply this figure by the estimated number of hours of system downtime during a year, and then multiply the result by 2 in order to take into account the cost of lost repeat business from your lost customers, your lost reputation, and your lost productivity