



Published: **May 14, 2007**

Dataupia Joins Appliance Fray

By Madan Sheina

Dataupia has finally come out of stealth mode after launching its first commercial data warehouse appliance into the market today.

Called Satori Server 12000, the appliance is built to work as a turnkey white-box system for data warehousing. (Satori translates from the Zen Buddhist word meaning "individual lasting enlightenment.")

The guts of the system are interchangeable, using commodity hardware and open source software components. The initial release is built on 8 hot-swappable RAID 5 hard drives with 2.2 terabytes of protected storage, 2 dual-core AMD Opteron processors, Gigabit Ethernet, and the Linux open source operating system.

For back-end data integration, sometimes seen as a bugbear of appliances, Dataupia partners with numerous ETL firms. It is working to shore-up these integrations technically in the next year or so.

Satori Server has been in beta with several early adopters in the US and Europe, with customers already building and testing applications for telecoms fraud and compliance. Satori is also the only UK Home Office approved system for regulatory telco data retention.

Coming out of the gate, Dataupia has already signed up three OEM customers: Tektronix, a manufacturer of test and measurement equipment; UK-based Focus Group, a specialist computer forensics firm; and Sendio, an email appliance vendor. More OEMs are expected to be announced later this year.

Dataupia is a venture-backed company headquartered in Woburn, Massachusetts. The company was founded in 2005 by current president and CEO Foster Hinshaw, who knows a thing or two about the appliance having previously served as CTO of Netezza, a pioneering vendor in the space.

Netezza is the most successful of the data warehouses appliances so far and announced its IPO in March. Hinshaw, however, said that its new Satori Server is no clone of Netezza's NPS systems.

"Netezza created NPS to address the problem of extreme performance, specifically for ad hoc queries that used to run for hours or even a day. They're king of the hill in

that niche," he said. "Our platform targets a much broader market enterprise data warehousing, operational data warehousing routine BI like 'Monday morning reporting', and long-term data storage."

Hinshaw also said that Dataupia had designed Satori to be different from other EDW vendors like Oracle that have a "rip-and-replace" mentality by making sure it interoperate well with Oracle DB2 and SQL Server data warehouse environments.

"Oracle is implemented as an SMP [symmetric multi processing] platform which is inherently designed for computing, not data intensive, environments," he said. "What we do is supercharge Oracle and other databases to operate as a [massively parallel processing] platform for big data."

For example, Hinshaw explained that Dataupia leverages the Oracle federation layer to pass queries to the Satori Server appliance.

"We're like cable space to Oracle," Hinshaw said. "The application doesn't change and we keep all the business semantics and storage procedures. Hence, we provide a comfort level for companies by lowering the risk of bringing in new technology."

Like other data warehouse appliance vendors of the same ilk, Dataupia ensures that its system is cost-effective to deploy and use, through the use of commodity blade servers and attractive "price-performance per terabyte" equation.

"We want to make the infrastructure as trivial as screwing in a light-bulb," Hinshaw said. "That allows users to focus on business applications of data and not setting up and managing the system."

Hinshaw explained that any data warehouse appliance that purports to be called a true appliance had to pass what he calls "the Tivo test". Tivo is a popular consumer digital video recorder appliance that allows users to capture TV programs to hard disk storage for later viewing.

"Tivo locks in a hard-drive runs Linux," he said. "Customers don't have to know anything about how its works to use it."

Satori is built on similar design and operation principles, which according to Hinshaw removes the need to employ experts to configure and manage the storage and interconnects. "Because we're delivering a single box that work, that all goes away, as does the expense. That's the beauty of appliances."

The Satori system is also priced on a per-blade basis. The entry level cost is \$19,500 per blade, with each blade scaling up to 2 terabytes of data. Hinshaw said the system has been designed to incrementally scale up to 50 blades, or 100 terabytes, meaning it can handle large EDW deployments.

"Our sweet spot is the five to 30 terabyte, a market with great potential and opportunities," he said.

Our View

A sure sign of a maturing technology is when vendors craft them into pre-configured and optimized appliances. That's clearly the case with data warehousing.

Dataupia is the latest entrant into this rapidly growing market segment which is now awash with appliance products. Netezza, NCR Teradata (perhaps the mother of all appliances, albeit an expensive one) and Datallegro have done most of the early ground-work, setting the stage for newer appliance offerings developed by startups like Paracel and Calpont, as well as established IT vendors like IBM (Balanced Warehouse), Hewlett-Packard (NeoView) and Sun Microsystems (in partnership with open source firm Greenplum).

From a commercial perspective, however, it remains to be seen if appliances are a sustainable business in the long-term. Most of the early proponents are privately-held and therefore are not held governed by the same standards of financial transparency as publicly traded firms. Skeptics assert this is a convenient status, since many are still unprofitable arguing they can afford to undercut the competition on price because they hold no accountability to shareholders (of course most are accountable to their venture capital backers).

But that could now change. Netezza's recent IPO will probably shine a much-needed light on the financial state of the appliance market and whether the strategy of vendors is to maintain a profitable ongoing business or to simply be acquired. Hence many potential appliance customers will be closely scrutinizing Netezza's finances as much as its technology before making the leap of faith.