



### **Atlantis ILIO looks to boost VDI storage with inline deduplication**

Atlantis Computing today upgraded its ILIO virtual software appliance, which the vendor claims will reduce virtual desktop infrastructure ([VDI storage](#)) requirements while boosting performance. Atlantis tweaked the way its [inline data deduplication](#) works in ILIO 2.0, hoping to mitigate [VDI boot storms](#) by reducing the number of IOPS that move across the wire and hit the storage.

ILIO works with [Citrix XenDesktop](#) and [VMware View](#) VDI deployments. The first version of ILIO shipped in 2009 as a hardware appliance that plugged into each server rack, but ILIO 2.0 is available only as software that works as a virtual appliance, installing either on each server running virtual desktops or at the top of each rack of VDI servers.

Atlantis claims its first version of Atlantis ILIO could offload up to 70% of the writes and 90% percent of the reads hitting the storage infrastructure for VDI, and Version 2.0 improved the writes offload performance by an additional 20%.

Taneja Group senior analyst Dave Bartoletti said ILIO uses deduplication to reduce I/O load by storing only single instances of shared data. "ILIO leverages local disk on the VDI host to both optimize IOPS and reduce capacity, which translates into lower storage costs overall for VDI," he said. "And, better I/O performance means logins and restarts are faster, and applications launch more quickly."

#### **More on VDI storage**

[Capacity and performance requirements for VDI storage](#)

What you need to know to implement [VDI](#)

[VDI licensing](#): Beware under \$40-per-desktop promises

Seth Knox, Atlantis director of marketing, said ILIO is usually implemented top of rack in persistent data configurations. For persistent configurations, the virtual appliance stores unique data such as profile data, default settings and start menus on a DAS, NAS or SAN. For non-persistent data, it installs on each server running VDI desktops. Unique desktop images reside on networked storage while the operating system and applications commonly used throughout an organization, such as Microsoft Office, are separately stored on local drives or general storage.

"ILIO works with shared storage such as NAS or SAN," Knox said. "This is important because persistent deployments only work with NAS or SAN today, and there is a significant percentage of IT organizations that aren't able to move to non-persistent deployments on local disk yet because they first have to virtualize their applications and user profiles."

ILIO uses protocol-layer processing that has a content-aware capability of the Windows NTFS file system. This means the virtual software appliance can recognize a block of data and which application, operating system or user data it is related to, so the device can immediately send the data without having to retrieve it from the storage, said Knox.

Chris Ward, director of solutions architects at Atlantis channel partner GreenPages Technology Solutions, said he has installed Atlantis ILIO 1.x virtual appliances in four customer deployments in

the past nine months and has an ILIO 2.0 in a production deployment. He said he's impressed with ILIO's ability to handle reads and writes compared with traditional storage configurations, where caching is more optimized for reads than writes.

"[Atlantis] improved the efficiency of the reads and writes for better performance," Ward said. "ILIO can handle the writes where no one in this space can. That is huge. Storage administrators normally handle more reads than writes. It's a different way of thinking. In VDI, it's more writes than reads."

Atlantis dropped the hardware appliance after finding customers were reluctant to deal with another physical device.

"I don't think VM infrastructure administrators want another physical appliance," Taneja's Bartoletti said. "A virtual appliance sits at the hypervisor, where it can just as easily intercept storage traffic and plus it gives cross-platform flexibility."

Pricing for ILIO starts at \$150 per desktop.

Original URL:

<http://searchvirtualstorage.techtarget.com/news/2240035161/Atlantis-ILIO-looks-to-boost-VDI-storage-with-inline-deduplication>