

Xiotech – ICON Manager 2.0

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Abstract: The new Xiotech ICON Manager is more than just another pretty GUI. The company has applied UI design principles and interactive web services to stand out as advanced, user friendly and powerful. Additionally, the combination of the easy to manage Magnitude and the new ICON Manager creates a holistic approach to managing storage.

Not Just Another GUI

ESG Lab has tested dozens and dozens of different storage systems including SAN, NAS, CAS, storage virtualization systems, appliances, etc. We know GUIs. Xiotech's storage system has always been easy to use, which is why they've been successful. Additionally, as an organization, they have made it a priority to consider the experience of users and administrators in terms of utilizing the system, integrating it with applications and providing support. However, their previous management software was much like many other competing solutions in the market—it was okay, but not great.

The new ICON Manager provides sophisticated tools without adding complexity. However, it's important to point out that ICON does build upon and complement the Magnitude platform. The common principle shared across the Magnitude storage system, and now its control software, is Xiotech's focus on ease of use. Such a holistic approach to ease of management is rare among storage vendors.

Xiotech's solution stands out as advanced, user friendly and powerful—not just for installation (where many suppliers do well), but also for ongoing management (where many, unfortunately, do not). Certainly, the highly virtualized nature of the Magnitude system—with its single storage pool, easier provisioning and ongoing management—has always lent itself to easy administration. Their focus on ease of management from a holistic system and management perspective is very deliberate and as such, an important part of their value proposition.

Given that one of the few things that *can't* be scaled in modern computing is the people to run it, this combination is very attractive. On the one hand, they are using technology to automate, simplify and remove complexity. On the other, they are still making it easy for sophisticated users to tune and tweak to their hearts content. With ICON Services, a programmatic interface to Magnitude, they can go even further—creating custom functionality based on the needs of their environment.

Based On Solid UI Design Principals

The new ICON Manager was developed with User Interface (UI) principles in mind. There is actually a science behind UI principles, of which Xiotech is well aware. A successful UI must be:

- Functionally correct
- Error tolerant
- Efficient to use
- Easy to learn
- Easy to remember
- Subjectively pleasing

Xiotech paid attention to the above and took a reasoned, well thought out approach to the new ICON Manager. Xiotech's design principles include:

- Know and *design* for your user

- Allow users to explore without catastrophic results
- A good interface is transparent – *intuitive to use*
- Pay attention to aesthetics – *create a sense of quality*
- Function and visuals must enhance each other
- Don't try to be flashy – *less is usually more*
- Use existing UI paradigms – *don't re-invent the interface*
- Observe basic layout principles
- Users should *always* know what to do next
- A good interface is responsive – the user is *always* in control

ICON Manager is rounding out, in a system control and management sense, the ease-of-use approach that Xiotech had already been pursuing with their Magnitude storage system family. Their 'parallel' approach makes it easy for the less sophisticated user to get a lot out of the basic system and also enables the expert user to adjust everything precisely. The Xiotech ICON Manager 2.0 provides:

- A new user interface and wizards developed with UI design best practices to provide an overall experience that makes it easier to manage and optimize the system.
- An MMC snap-in, making it easy for Windows administrators to manage and control using familiar tools.
- The ability for ICON Manager to support multiple Magnitude storage systems.
- Consolidation and simplification of storage provisioning and management tasks including replication, snapshot and Xiotech GeoRAID.
- A range of views including server, storage, physical, environmentals, statistics, system tools and updates. A system administrator can get easy to read, intuitive and in-depth information on the Xiotech Magnitude storage systems on all of these levels. A good example of the diligent focus placed on UI principles is the way Xiotech is providing a view of the storage elements to be controlled from the server perspective. The ICON Manager Server View adopts a server centric (as opposed to storage centric) view of storage and therefore works with Windows Volumes, not virtual disks. Of course, the opposite applies if you work with the Storage View.
- User effectiveness at different levels of detail—from novice to expert administrators

ICON Services

Additionally, Xiotech provides and supports ICON Services—based on an industry standard API—so end-users and partners can develop their own enhancements and customized use of ICON Manager functions.

A very compelling aspect of ICON Services is that it opens ICON Manager up to a community of developers—allowing for the creation of new custom functions and tools to manage their Magnitude systems. While it is not uncommon for system administrators to develop scripts to run data management routines for their storage systems, this takes that concept to another level by providing integration directly into ICON manager to execute purpose-built functions and develop custom reports.

Xiotech also provides a Software Development Kit (SDK) for ICON Services and is looking to create a development community. We're interested to see if Xiotech will be successful in developing such a community with its engineers, users and partners that could share, qualify and/or actually commercialize the highest added-value customized features for ICON Manager and Magnitude.

ESG's View

ESG believes that Xiotech's ICON Manager is an excellent extension to the Magnitude product line. It's sensible to pick something to excel at and for Xiotech, that's ease of management. After all, it's all well and good having lots of features, but you need to be able to get value from them by being able to actually use them! For Xiotech, ease of use isn't a post-engineering 'look and feel overlay' (although they do also maintain a very straightforward

interface), it's an architectural mandate. As such, they should probably market it more as a true differentiator in the crowded storage system space.

Since everyone claims ease of use these days, Xitech must clearly communicate how ease of use is a core competency and architectural factor in everything the company does. This is a serious challenge, since ease of management is hard to quantify. And a number of emerging storage system vendors are providing next generation, highly virtualized solutions touting ease of management as well.

Xitech has evolved both its Magnitude storage systems—adding more functionality to better access, manage and protect data. Now they have turned their attention on the user interface: The human element of managing their storage. As strange as this sounds, most storage vendors haven't figured this out.