



# Building*i* Improves Efficiency of Storage for Hyper-V with Sanbolic's Kayo FS



Building*i* is a northwest U.S.-based corporate real estate consultancy which provides guidance, tools, and sustaining support to large real estate portfolio management teams in order to help them deliver better operational and financial results. By connecting people, place, and process, Building*i* helps facilities managers and real estate professionals improve customer service, reduce costs, and increase productivity across the enterprise, through management of space, occupancy, moves, maintenance, leases, and property data.

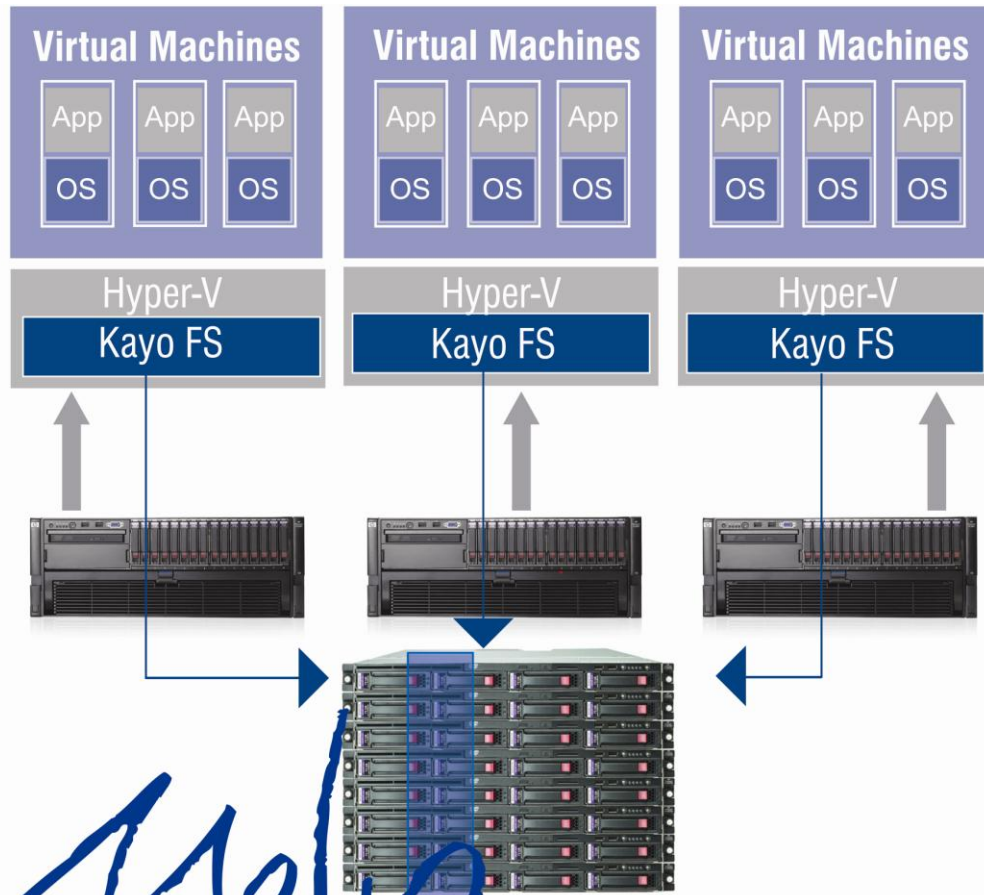
Recognized by *Puget Sound Business Journal* as one of Washington's 25 Fastest Growing Companies, Building*i* is a leader/innovator in the CAFM/IWMS space with over 55 million square feet of space under management. Building*i* helps organizations develop and execute Real Estate Data Management strategies that achieve a higher level of clarity.

In order to efficiently provide these information-based services, Building*i* has deployed Microsoft Hyper-V virtualization using HP Blade Servers and an HP EVA SAN. By using virtual machines the company can improve server utilization and deploy new applications more rapidly. Building*i* also chose to use Sanbolic's Kayo clustered file system and LaScala clustered volume manager to simplify storage management and improve SAN storage utilization.

Microsoft Hyper-V typically requires that each virtual machine have a separate SAN storage LUN in order to utilize Quick Migration to independently migrate virtual machines between hosts. Anticipating the storage needs for a large number of virtual machine images adds complexity and typically leads to poor storage utilization.

Sanbolic's Kayo FS simplifies storage management in virtual environments by allowing all Hyper-V virtual machines to be stored on a single shared LUN, while allowing virtual machines to be moved independently among physical host servers. Kayo FS eliminates the need to create a separate storage LUN for each virtual machine when configuring Hyper-V for Quick Migration. When Kayo and LaScala are used with Hyper-V, the Windows Failover Clustering wizard detects Sanbolic's products and appropriately configures the storage for active-active access to a shared SAN LUN.

“Using Kayo, I am able to have a single LUN and run 20+ servers on it, and I still have the available capacity for growth for any individual VM”, said Tialen Kelly, IT Operations Manager at Building*i*. “It literally has doubled or tripled my VM capacity.”



**Shared LUN using Melio FS**

**Solution Components**

**HP Blade System c7000**

**HP EVA 4400 SAN**

**Windows Server 2008 and Hyper-V**

**Sanbolic Kayo FS**

**Sanbolic LaScala volume manager**

Sanbolic Inc.  
304 Pleasant Street, 2nd Floor  
Watertown, MA 02472  
phone: 617 833 4242  
fax: 617 926 2808  
url: [www.sanbolic.com](http://www.sanbolic.com)  
email: [sales@sanbolic.com](mailto:sales@sanbolic.com)