



## CASE STUDY

# BlueHat Cyber, A Silicon Sky Company Powers IaaS And DRaaS Offerings With Tintri VMstore™

## Overview

Silicon Sky is an IT infrastructure product and service provider supplying and managing hardware, software and services to organizations of all sizes. BlueHat Cyber, a Silicon Sky company, is an IT infrastructure and managed security services provider that offers a comprehensive cyber security portfolio and assists in planning, design, integration, operation, and optimization of an organization's IT security requirements.

With a broad range of Infrastructure as a Service (IaaS) and Disaster Recovery as a Service (DRaaS) offerings specializing in compute, network, storage, security, backup and disaster recovery, Silicon Sky and BlueHat Cyber have enterprise-grade Managed Cloud Platforms co-located in multiple carrier neutral data centers across the USA.

Using best-of-breed technologies and industry best-practices, Silicon Sky and BlueHat Cyber are more than just a provider, but rather a partner that bridges the gap between business needs and the right technology delivering maximum availability and performance.

## The Challenge: Storage Management, Replication and I/O Challenges

When BlueHat Cyber, a Silicon Sky company, first offered services on its VMware-based Virtual Data Center cloud infrastructure in 2012, the company deployed NetApp storage, and deployed Citrix Cloud hosting for Virtual Desktop Infrastructure (VDI). Soon after, BlueHat Cyber began experiencing I/O and management issues.

"The storage just couldn't keep up," says Tim Averill, chief technology officer, BlueHat Cyber. "I was spending about 40 hours a month just managing storage to keep the workloads balanced. It was ridiculous and my stress levels were through the roof because I was constantly babysitting the storage."

Knowing a change was necessary, Averill and his team began looking for alternative storage solutions and found Tintri. At the time, Averill and his team were using third-party technology to replicate workloads across multiple data centers, but the performance was sub-par.

## The Solution: Tintri VMstore™ Provides Greater Simplicity and Fast Asynchronous Replication

When BlueHat Cyber conducted a proof-of-concept test with Tintri in two of its locations, Tintri became the clear winner among the other vendors.

"Our workload management problems went away immediately once we migrated onto Tintri and enabled the replication," says Averill. "I had a full rack of NetApp and it couldn't keep up with even average workloads. We replaced it with just one 2U box of Tintri and that's a pretty big deal. It was a game changer for us."

BlueHat Cyber also offers its clients cost-effective and simplified disaster recovery services, powered by Tintri. Clients have the flexibility to manage their on-premise VMware VMs, as well as those in the VMware Cloud maintained by BlueHat Cyber, leveraging vCenter and maintain full control of replications from VMware's self-service portal.

"With Tintri's replication technology, I was able to failover an entire data center in less than six hours by myself," Averill adds. "In fact, I liked the technology so much that we became a reseller partner for both on-premise and cloud services. We dropped all of our other storage vendors and started selling Tintri exclusively."

Today, BlueHat Cyber's U.S. Virtual Data Center is running on 100% Tintri storage—

# VMstore



## Challenges

BlueHat Cyber, a Silicon Sky company, is an IT infrastructure product and service provider supplying and managing IT infrastructure hardware, software and services to organizations of all sizes. BlueHat Cyber needed a solution for its Infrastructure as a Service (IaaS) and Disaster Recovery as a Service (DRaaS) offerings that simplifies storage management, improves I/O and replication across data centers.

## Solution

BlueHat Cyber, a Silicon Sky company, implemented Tintri VMstore solutions to offload time-consuming administrative storage tasks and replicate across data centers. The VMstore solutions provided greater simplicity, autonomous operations and fast asynchronous replication allowing admins to focus on providing clients with premium service.

## Results

- Autonomous operations to help save time and reduce administrative overhead
- Fast asynchronous replication and zero data-loss replication
- Simplified and worry-free data management
- Increased business uptime; decreased downtime



including Tintri VMstore T850, VMstore T5040, VMstore T5080, VMstore T6070, and VMstore T7040 systems. BlueHat Cyber plans to purchase another VMstore T7040 in the near future.

## The Result: Increased Uptime, Performance and “Set it and Forget it” Operations

With Tintri VMstore in place, BlueHat Cyber has reaped a multitude of benefits including significant performance improvements for its Citrix Cloud hosting for VDI services.

“We received multiple complaints about how Citrix was slow because one customer environment would impact another customer but with Tintri, we don’t have those issues anymore,” says Averill. “Previously, when we were doing Citrix republishing with Machine Creation Services, a typical republish took anywhere from 30-to-45 minutes. Now, our average republish with Citrix Farms for virtual desktops is five minutes. With such a significant improvement, I’ve had top tier Citrix users comment that our republish times are now phenomenal.”

Tintri VMstore eliminates the need for constant troubleshooting and for anticipating the next crisis, helping BlueHat Cyber with increased uptime.

“We have an incredible record of uptime and are at about 10 hours of unplanned downtime since 2012. This is because of Tintri,” Averill adds.

Since the switch to Tintri VMstore and its simplified and worry-free data management, BlueHat Cyber is able to focus on providing premium service and take on new clients without hesitation, no matter the workload.

“We went from spending 8-10 hours a week managing storage to maybe taking a glance at it once in a blue moon. We basically set it and forget it. When looking at a new client proposal, we consider if we have the capacity to take it on, but we never have to think about I/O performance, regardless of how intense the workload,” says Averill.

“We’ve been with Tintri for a long time, and I still think it’s the best investment anybody can make for a VMware environment,” Averill concludes.

Experience Carefree Virtual Data Management. Experience Tintri. For more information on how Tintri VMstore can turbo-charge your business success, visit [tintri.com/vmstore](http://tintri.com/vmstore).

**“We went from spending 8-10 hours a week managing storage to maybe taking a glance at it once in a blue moon. We basically set it and forget it. When looking at a new client proposal, we consider if we have the capacity to take it on, but we never have to think about I/O performance, regardless of how intense the workload.”**

*Tim Averill, chief technology officer,  
BlueHat Cyber*



| @tintri |

| [www.tintri.com](http://www.tintri.com) |

| [info@tintri.com](mailto:info@tintri.com) |