



# Concourse Hosting Scales its Hosted Blackbaud Environments and Greatly Reduces TCO with Tintri and VMware



Tintri VMstore helps improve performance by 99 percent and eliminates the need to manually tune storage

<https://www.concoursehost.com>

## Industry

- Hosting Service Provider

## Geography

- Seattle, Washington

## Virtualization environment

- VMware® vSphere™ 5.1, 20 Dell ESX servers
- Veeam 7 for backups

## VM profile

- Windows servers running
  - SQL Server 2008 R2 databases
  - Remote Desktop Services
  - Active Directory
  - IIS
  - Blackbaud software
- Linux servers running
  - Apache
  - MySQL
  - Mail

## Key challenges

- Performance of existing arrays couldn't support growing customer demands
- High operational overhead to maintain the virtual environment
- Lack of visibility into customer-specific workloads
- Reduce TCO, allowing for expansion into a second datacenter

## Tintri solution

- Two Tintri VMstore™ T540 systems running hundreds of performance-intensive Blackbaud environments

## Primary use case

- Storage for hosting virtualized Blackbaud environments

## Business benefits

- Tintri Flash First design improved database performance by 99 percent, resulting in improved customer satisfaction
- VM-aware storage architecture eliminated manual tuning, greatly increasing administrator productivity
- Tintri VMstore's TCO helped Concourse Hosting expand into a second datacenter to meet growing customer needs

## Overview

Concourse Hosting provides independent Blackbaud hosting, consulting, training and design for products like The Raiser's Edge, NetCommunity and The Financial Edge. Concourse Hosting offers the best of both worlds — Blackbaud expertise and quality service — and provides the knowledge, customization and services that allow Blackbaud users to get more out of their technology investments.

Concourse Hosting found existing storage could not support the growing needs of customers. Concourse Hosting also wanted to deploy a solution for virtual machine (VM) storage that would not only improve performance, but also enable hundreds of VMs from multiple customers concurrently on a single system, while simplifying overall infrastructure management.

## Key Customer Challenges

Concourse Hosting used traditional disk-bound Dell EqualLogic PS4100 storage systems to host customer VMs running Blackbaud software and its related infrastructure VMs, such as Active Directory and IIS servers. "SQL queries which took six hours to finish severely affected our customers' productivity. We also had difficulties scaling the storage to even tens of VMs given the high-performance needs of database VMs," said Glen Kendell, president of hosting and operations at Concourse Hosting. "We wanted a solution that could not only meet our customers' needs now, but also keep up with their growing needs."

"Managing dozens of LUNs and volumes and constantly juggling workloads from one volume to another to make our storage perform well became exceedingly complex and burdensome. We have a team of generalists responsible for the entire IT infrastructure and wanted to avoid having engineers whose entire job was simply to manage storage," said Kendell. "Given that we are 100 percent virtualized, we wanted a storage system that provided VM-level visibility for monitoring and troubleshooting and have one giant pool of storage and put everything on it without worrying about segmentation. That allows us to host workloads from different customers on a single system and meet our SLAs."

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**Glen Kendell**, President of Hosting and Operations at Concourse Hosting

“As we looked to expand our operations to a second datacenter in Dallas, total cost of ownership (TCO) is a major factor in selecting storage for our virtual environment,” said Kendell. “We looked for storage purpose-built for VMs so that can reduce our current operational costs and continue to run smoothly when we scale to support hundreds of customers.”

## Business Benefits

Tintri VMstore helped Concourse Hosting eliminate storage performance issues and measurably increased customer productivity. “Tintri’s Flash First design provides the high performance we need to concurrently host hundreds of Blackbaud environments. We are able to run more than 150 high performance customer environments on a single Tintri VMstore T540,” said Kendell. “SQL queries that used to take six hours now take four minutes — this has greatly improved customer satisfaction.”

Tintri’s VM-level operations and troubleshooting allow generalist IT staff to manage the storage. “Tintri’s VM-aware architecture manages what is happening at a VM-level and optimizes the workloads, eliminating manual intervention and providing actionable per-VM metrics for easy troubleshooting” said Kendell. “Given VMstore management simplicity, Concourse Hosting has been able to avoid increasing administrative staff and instead invest the cost savings in better customer support. Operationally, this is a huge win for us. It is not farfetched to say that beyond initial setup, Tintri VMstore needs no ongoing management!”

Tintri VMstore helped Concourse Hosting greatly reduce operational costs as it grew into a second data center in Dallas, Texas. “Tintri removed storage performance bottlenecks, decreased time spent in administering storage, and greatly reduced our TCO. Tintri helps us focus on customers’ needs rather than on our storage — and that a big win for our infrastructure team.”

## Summary

Tintri VMstore’s VM-aware storage architecture and Flash First design greatly improved database performance, increased VM density allowing hosting of hundreds of customers on a single storage system, and substantially reduced TCO. “Working with Tintri has been nothing short of amazing. VMstore provides stellar performance and is drop-dead simple to use, which allowed us to realize greater efficiency throughout our infrastructure, while reducing the TCO and improving customer satisfaction,” said Kendell.



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