Key Solutions

HiveIO

Virtualization & On-Premise Cloud

Hive Fabric provides the economics and simplicity of the Public Cloud in your data center. No more VMware Tax or proprietary HCI hardware.

Expensive, proprietary, and complex data center solutions are forcing IT teams to re-evaluate how they deliver applications to the business. Public Cloud solutions initially look attractive with their agility, scale, and promise of reduced cost. In reality, it's a very challenging process to move to a full cloud implementation and customers often find themselves stuck half way with a hybrid approach that ends up being even more complex and have steep learning curves. Never mind the fact that it solves none of the challenges they originally set out to solve.

Hive Fabric can remove the complexity from your data center while providing many of the benefits of public cloud, all within the protection of your own data center and managed by the existing team.

Challenges

The rate of change seen in IT today is increasing at a pace never seen before. This has made IT question some of the data center architectures, deployment models, and 'best practices' that they have historically relied on to deliver what's required for their business.

Teams are looking for a better way because they have been challenged by:

Changing workloads and application architectures have IT questioning the need to buy hardware. Does it continue to make sense to depreciate a server over 3 or 5 years when the applications they are deploying are rapidly changing and their resource requirements with them? Why not simply rent hardware that can be changed out when required? Or move to a consumption-based model that the public cloud offers. Either of these options may be more expensive but provide agility and remove a majority of the CAPEX budget involved with infrastructure. However, they do not reduce the complexity or simplify the number of moving parts that have to be architected and managed.

The promise of Hyperconverged Infrastructure (HCI) has provided a new model to deliver applications, condensing a traditional three-tier architecture into a more bite-sized chunk. Many of the challenges remain though. Proprietary hardware, you don't just get the software but also the large capital expense that goes with the hardware required to run that software. You can't choose the server vendor you want, you must use the re-badged white-label server that the HCI vendor chose for you and hope their support is up to par. If that's not enough, you're then forced to replace perfectly good servers after three years! A realization that hits home for the cutting-edge IT teams that implemented HCI in its infancy three years ago.

The ever more complex software stack – as the number of software vendors involved in delivering a solution capable of meeting the requirements of the business has increased, so has the complexity and management overhead. IT will choose 'best of breed' vendors for each part of the chosen solution hoping to remove the integration challenge as 'everyone else has done this.' Not realizing that everyone else faces the same pain and it's only when it comes to supporting the platform that the pain really kicks in. At that point, many feel committed and stuck with the chosen path.

Challenging End Users – End users come to the business with a better understanding of technology than at any point in history. Easier access to technology at home and during a person's education has raised the bar dramatically on the expectations of today's workforce – tablets, touch screens, even AR and VR interfaces are considered the new norm. IT has to keep up with these and can even provide the business with a competitive advantage when it comes to attracting this workforce if they get the user-experience right. A number of different approaches could be considered when deciding on the solution to deliver the next generation software defined data center and it's important that you choose the right one for your business. However, there is only one that can truly start to help you solve each of the challenges discussed so far and that is a Hyperconverged Fabric.

Why Hive Fabric?

Complexity can be interesting. It can add richness; it can inject ambiguity and variability. It can lead to redundancy. It can be short lived. **Simple is Powerful.**

At HiveIO, we believe that the real journey should begin immediately, and that the promise can be realized. We do not want you to go from the data center team, to the networking team, to the storage team, to the virtualization team, to the Windows or Unix team. We want you to go to a single team that can see you through your journey.

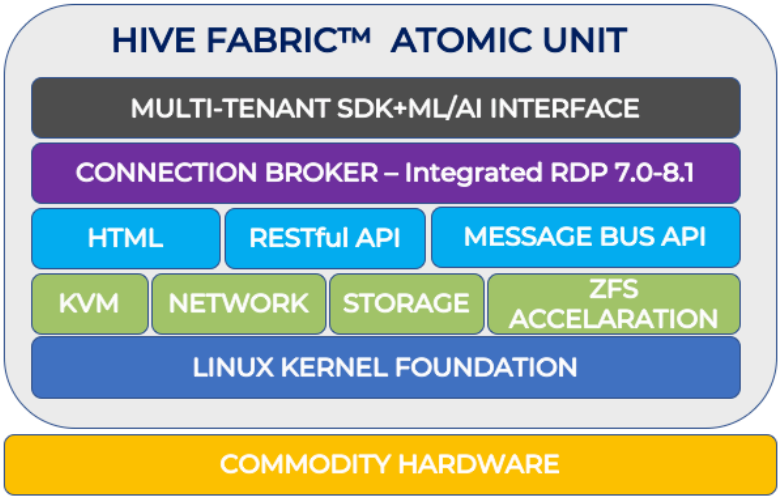
We do not ask for maintenance agreements, support agreements, or multi-year renewals. We do not require complex hardware configurations to get you to the starting line.

Realize the Promise

Hive Fabric™ - Hyperconverged Fabric Building the next generation data center

Hive Fabric brings to market an industry first all-in-one software defined data center in an easy to deploy and manage platform. A simple, powerful, and ready solution that installs on a wide range of x86 commodity hardware, Hive Fabric allows customers to quickly and efficiently build out private clouds at significantly lower cost.

Our platform caters to multiple verticals with diverse workload types including VDI, VSI, Grid Computing, and Big Data. It provides a platform to run and manage a wide variety of applications and services. It is the simplest and most efficient way to replace expensive hardware, complex licensing, and vendor bloat with streamlined, distributed management that will predictively scale and auto heal.



Installation - Hive Fabric is a simple bare metal install deployed from an ISO or PXE server supporting a wide range of x86 hardware. The solution is designed to scale from a single server to hundreds of servers and beyond.

Virtualization - Hive Fabric builds on the industry leading KVM hypervisor to virtualize and abstract the physical building blocks in the data center into pools of resource. With one of the lowest overheads of any hypervisor, you can expect improved virtual machine density for both virtual servers and desktops while ensuring they continue to be highly performant. As demand for resources increases, simply add more infrastructure of your choice to increase the size of the various resource pools.

The Message Bus - The Hive Fabric Message Bus creates a distributed management platform. Created and configured during deployment, there is no additional VMs or services to setup and configure. The Message Bus is up and running out of the box and enabled as part of the automated deployment process. It will scale with you as you scale out the deployment continuing to manage itself. The Hive Fabric Message bus is built on a similar concept to that of the NYSE that processes and communicates millions of data points a second – it's built for far more than the scale of any data center available today. The RESTful API allows for easy extension and integration with third parties in a secure and controlled manner.

Cluster Resource Management (CRS) - Building on the power of the Message Bus, CRS delivers intelligent resource management for Hive Fabric, continually monitoring the resource utilization of a server based on CPU, Memory, and Storage. CRS will migrate guests between servers to maximize the utilization and spread the load evenly across the cluster. This results in an optimized infrastructure with less 'over resourcing' required for 'just in time' management. This automated management of the infrastructure maximizes the resource availability for guests and applications

while cutting the OPEX cost associated with data center management. At the same time, it clearly demonstrates how Hive Fabric can reduce complexity in the data center. No complex rules engine to understand, configure, and maintain. A simple toggle to turn the capability on or off is all that is required. Hive Fabric will take on the rest.

Shared Storage - Hive Fabric allows you to build resilient, highly available shared storage from local disks or SSDs in each server. The hyperconverged storage can be used to store guest VMs and user volumes and can be deployed at a fraction of the cost of traditional shared storage. Hive Fabric automatically manages the creation and presentation of the shared storage, further simplifying the data center. As more appliances are added to the cluster, the storage layer automatically scales appropriately.

Desktop Orchestration - The Hive Fabric Connection Broker replaces third party solutions to manage and distribute desktop VMs to users, providing dramatic cost savings over current processes. Tens of thousands of desktops can be managed in a single cluster being carved up into pools for geographic locations or business units or whatever suits your business. Each pool of VMs can have their own resource allocation and security policy applied for the users connecting to their VM. Personalization is saved through our implementation of user volumes allowing settings and documents to seamlessly move between VMs.

Next generation application architecture – Hive Fabric fully supports a microservices architecture powering next generation applications and services. These applications would traditionally be throttled by requirements for disk, memory, or CPU. Hive Fabric can independently scale the resources required to meet the most demanding applications.

When considering how to best utilize the resources you have in your data center, add additional capacity to run more workload, or even entirely transform how IT delivers on business requirements, question the level of complexity that you have in your data center and whether you are increasing or decreasing the overhead on your IT team with the changes that are being made. It's important that your data center works with you, not against you, leverages your resources as you scale, and is capable of intelligently powering outcomes for the business. Hive Fabric can remove a large proportion of this complexity and cost, install on your existing infrastructure, and ease the transformation to a software defined data center.

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