An agile business needs agile IT

In today’s disruption-prone global economy, an enterprise’s competitive advantage often erodes faster than it can be acquired. An agile and modern IT infrastructure that enables enterprises to rapidly innovate and respond to market dynamics is critical to stay ahead of the competition and avoid being disrupted.

Now that virtualization has become the de facto standard for IT infrastructure design and consumption, IT faces a new set of challenges—one that requires IT to be agile and an enabler of business outcomes. The traditional reactive IT infrastructure delivery mechanisms, with long provisioning cycles, often results in users consuming IT resources outside of established guidelines, resulting in shadow IT.

In order to avoid such risks and increase developer productivity, IT needs tools and processes that support on-demand, self-service resource consumption across the hybrid cloud environment. Equally important is the need to build the necessary guardrails to ensure that cost, compliance, and governance requirements across IT are adhered to.

Virtualization is not cloud

Virtualization technologies enable IT to virtualize the underlying physical infrastructure to quickly and efficiently meet the IT infrastructure requirements of its users. However, this is no longer enough.

Containers—Better infrastructure utilization and application portability

A primary tenet of the DevOps approach is to seamlessly develop, test, and deliver applications. While VMs have become an integral part of IT infrastructure today, and are ideal for several use cases, they aren’t best suited for DevOps. Containers package an application’s code, configurations, and dependencies into a single package that can be developed, tested, and deployed to heterogeneous IT infrastructure without having to worry about the impact of environment inconsistencies on application stability and functionality.

A fast path to a feature-rich, hybrid-ready cloud platform

HPE ConvergedSystem 750 and HPE OneSphere

Consumers of IT need tools that make it simple to request, acquire, and manage the lifecycle of resources—on demand, and across different technologies, without having to familiarize themselves with the low-level complexities associated with them.

Several tools exist in the market that integrate heterogeneous IT infrastructure and present them as a common consumption platform. However, in most cases such platforms end up needing special tooling and skill sets for their deployment and maintenance. This results in an approach opposite of what enterprises need: something resource intensive and time consuming, instead of being flexible and simple to maintain.
The lightweight nature of containers also allows rapid recycling of the infrastructure while allocating them to meet real-time requirements. Like virtual machines, containers need an ecosystem of tools in order to benefit from the advantages that come with them. Kubernetes, a popular open source container management platform, requires significant technical expertise and tooling to build and maintain the platform. This can prove difficult for IT teams needing to manage a tight budget while still focusing on the future.

**HPE OneSphere integrates with the virtualization layer of the HPE CS750 and presents it as a private cloud resource within HPE OneSphere. This allows administrators to allocate multiple projects that need access to that infrastructure.** End users can easily consume part of the HPE CS750 infrastructure that’s allocated to the projects they belong to by deploying VMs, Kubernetes clusters, and applications from the HPE OneSphere catalog curated by the IT admins.

**Realizing the benefits**

**Rapid time to value**
HPE CS750 solution arrives preconfigured and ready for workload deployment as soon as it arrives at your data center. From there, it only takes minutes to connect to HPE OneSphere to create a hybrid-ready cloud platform. This takes away the overhead of deploying and configuring IT infrastructure for day 0 operations. As a SaaS-based cloud management platform, HPE OneSphere helps ensure customers focus on consuming cloud resources rather than maintaining them.

**Enhanced productivity**
Combining HPE OneSphere and HPE CS750 frees teams from the burden of manual resource provisioning and management, allowing them to focus on more important business objectives. Internal developers and other consumers of IT get access to resources on-demand and reduce resource provisioning cycle times.

What’s more, the solution is built on an API-first approach, allowing the solution to be integrated with your existing tools and processes for faster and programmatic infrastructure management and consumption.

With the ability to create a container cluster from the ground up in real time through the HPE OneSphere catalog, developers can rapidly iterate through resulting in a faster and efficient development cycle. This includes the container cluster creation, and container app deployment (Helm charts/Docker images) and management.

**Cost and control**
The HPE OneSphere plus HPE CS750 solution has built-in robust cost-reporting functionality that provides IT operations and line-of-business managers the much-needed insight into the costs incurred for active projects.

A curated resource catalog allows IT Ops teams to define the guardrails within which development teams operate while giving them the agility and swiftness of a fully featured cloud platform. Templated approaches to cloud provisioning provide IT Ops teams with the visibility and consistency across dev/test and production environments.

**More information**
Are you interested in transforming the way IT is delivered across your organization by making it more agile, developer friendly, and a true enabler of business outcomes? Contact an authorized HPE sales representative to learn how easy it is with the powerful combination of HPE OneSphere and HPE CS750.

Learn more at [hpe.com/onesphere](http://hpe.com/onesphere)