

# VMWARE VSPHERE SCALE-OUT EDITION

## Faster Time to Insights for Big Data and High Performance Computing

### AT A GLANCE

Big Data and High Performance Computing (HPC) workloads are forecasted to be the second fastest growing workload type at 13% CAGR through the year 2020.

With VMware, you can capture the benefits of virtualization for Big Data and HPC workloads while delivering performance that is comparable to bare-metal. Our approach to virtualizing Big Data and HPC adds a level of flexibility, operational efficiency, agility and security that cannot be achieved in bare-metal environments—enabling faster time to insights and discovery.

### KEY BENEFITS

#### Flexibility and Agility

Rapid provisioning of infrastructure on demand enables speedy iteration and scale-out—so you can spend more time attaining insights and less time on setup and retooling.

#### Operational Efficiency

Minimize setup and configuration time with centralized management capabilities. Simplify day-2 operations such as ongoing provisioning and infrastructure maintenance. Eliminate planned downtime through live migration.

#### Data Governance and Control of Sensitive Customer Information

Security isolation prevents VMs from seeing another VM's data in the same cluster. Each VM can only access the virtual disk files that have been designated for it. This means increased VM and host security for you and your data.

### About vSphere Scale-Out

VMware vSphere® Scale-Out offers the industry-leading virtualization platform for Big Data and HPC workloads at a cost effective price point. Key features and components include:

**VMware vSphere Hypervisor (ESXi™)** architecture provides a robust, production-proven, high-performance virtualization layer. It allows multiple virtual machines to *share hardware resources* with performance that can match (and in some cases, exceed) native throughput. The virtualization layer also enables *hardware independence*, allowing customers to provision or migrate any virtual machine to any other physical server. With *encapsulation*, the entire state of the virtual machine can be saved to files. Moving or copying virtual machines is as easy as moving or copying files. In addition, virtual machines have *broad guest OS support*.

**VMware vSphere vMotion®** enables live migration of virtual machines between servers with no disruption to users or loss of service, eliminating the need to schedule application downtime for planned server maintenance.

**VMware vSphere Storage vMotion®** enables live migration of virtual-machine disks with no disruption to users, eliminating the need to schedule application downtime for planned storage maintenance or storage migrations.

**VMware vShield Endpoint™** secures virtual machines with offloaded antivirus and antimalware solutions without the need for agents inside the virtual machine.

**VMware vSphere Content Library** provides simple and effective centralized management for VM templates, virtual appliances, ISO images, and scripts.

**VMware vSphere Virtual Volumes™** enables abstraction for external storage (SAN and NAS) devices making them VM-aware.

**VMware vSphere Storage Policy-Based Management** allows common management across storage tiers and dynamic storage class of service automation via a policy-driven control plane.

**VMware vSphere Storage APIs** provide integration with supported third-party data protection, multipathing and disk array solutions.

**VMware vSphere Host Profiles** allows administrators to define, enforce and change configuration settings easily:

- Captures host level configuration settings and saves them as a template to configure other vSphere hosts.
- Monitors hosts for configuration changes and automatically alerts vSphere administrators if deviations are found. Administrators can then remediate drift in configuration.
- When firmware upgrades or other events happen that require storage, network or security configuration changes on multiple hosts in a cluster, administrators can edit the host profile and apply it across the cluster for consistent configuration updates.

#### LEARN MORE

[www.vmware.com/solutions/high-performance-computing.html](http://www.vmware.com/solutions/high-performance-computing.html)

[www.vmware.com/solutions/big-data.html](http://www.vmware.com/solutions/big-data.html)

#### HOW TO BUY

- vSphere Scale-Out is sold in packs of 8 CPUs.
- Customers can centrally manage their vSphere Scale-Out environment using VMware vCenter Server® Standard.
- Basic and Production Support and Subscription (SnS) are available for vSphere Scale-Out. SnS is sold separately, and a minimum of one year is required.

#### TO PURCHASE VMWARE PRODUCTS

Please contact your VMware sales representative or OEM Partner.

**VMware vSphere Auto Deploy™** performs quick, as-needed deployment of additional vSphere hosts. When vSphere Auto Deploy is running, it pushes out update images, eliminating patching and the need to schedule patch windows.

**VMware vSphere Distributed Switch™** simplifies and enhances virtual-machine networking in vSphere environments through centralized configuration and management.

