VMware vSphere® Version Comparison

VMware vSphere is available in two standalone editions, VMware vSphere Standard and VMware vSphere Enterprise Plus, and is also included as a component in VMware Cloud Foundation and VMware vSphere Foundation. Note that vSphere Standard and vSphere Enterprise Plus are only available as versions up to the 8 Update 3 release. Currently, vSphere 9.0 features are only available as part of VMware vSphere Foundation 9.0 and VMware Cloud Foundation 9.0.

| vSphere Version Comparison | | | | |
|--|-------------|-------------|-------------|--|
| Key Features / Capabilities | Version 7.x | Version 8.x | Version 9.x | |
| Key Attributes | | | | |
| vCenter Lifecycle Management Service | ✓ | ✓ | ✓ | |
| Kubernetes Runtime and Supervisor Services | | | | |
| vSphere Kubernetes Service (VKS) | ✓ | ✓ | ✓ | |
| VM Service | ✓ | ✓ | ✓ | |
| Storage Service | ✓ | ✓ | ✓ | |
| Network Service | √ | ✓ | ✓ | |
| Container Registry Service | ✓ | ✓ | ✓ | |
| Harbor Image Registry Service | √ | ✓ | ✓ | |
| vSphere Pod Service | √ | ✓ | ✓ | |
| Load Balancer Service | √ | ✓ | ✓ | |
| Service Mesh | | | ✓ | |
| External DNS | ✓ | ✓ | ✓ | |
| ArgoCD | | | ✓ | |
| Secret Service | √ | ✓ | ✓ | |
| laaS Policy Service | √ | ✓ | ✓ | |



| Data Services | ✓ | √ | √ |
|--|--------------|--------------|--------------|
| Al Services | ✓ | ✓ | √ |
| Workload Availability Zones | | √ | ✓ |
| Simplified VKS cluster lifecycle Management | | ✓ | ✓ |
| VKS cluster management | | ✓ | ✓ |
| Customizable base OS Images | | \checkmark | ✓ |
| Supervisor Independent Updates | | | √ |
| Custom Zone Optimization | | | √ |
| Operations Management | | | |
| vSphere Lifecycle | | , | , |
| Manager | \checkmark | √ | \checkmark |
| Live Patching for ESX | | \checkmark | \checkmark |
| vCenter Server Profiles | \checkmark | ✓ | √ |
| vCenter Update Planner | ✓ | √ | √ |
| Content Library | ✓ | ✓ | √ |
| vSphere Configuration Profiles | | √ | √ |
| Host Profiles | ✓ | ✓ | √ |
| Auto Deploy | | √ | √ |
| Virtual Volumes (vVols) | ✓ | ✓ | ✓ |
| Green Metrics | | √ | ✓ |
| Built-in Security | | | |
| Identity Federation | ✓ | √ | ✓ |
| Hardware TPM 2.0 Support | ✓ | ✓ | √ |
| Virtual TPM 2.0 | √ | \checkmark | ✓ |
| FIPS 140-2 and Common Criteria Certification | √ | ✓ | √ |
| TLS 1.2 | ✓ | ✓ | √ |
| TLS 1.3 | | / * | √ * |
| | | | |



| | | | 1 |
|---|--------------|--------------|--------------|
| Virtual Machine Encryption | \checkmark | ✓ | \checkmark |
| Standard Key Provider (External KMS) | ✓ | ✓ | \checkmark |
| Native Key Provider | ✓ | ✓ | \checkmark |
| Secure boot | ✓ | ✓ | ✓ |
| Application Perf | ormance | | |
| Per-VM Enhanced vMotion Compatibility (EVC) | ✓ | ✓ | √ |
| Instant Clone | ✓ | √ | √ |
| Distributed Resource Scheduler (DRS) | ✓ | ✓ | ✓ |
| Storage DRS | \checkmark | \checkmark | \checkmark |
| Distributed Power Management (DPM) | ✓ | ✓ | ✓ |
| Storage Policy-Based Management | √ | √ | √ |
| I/O Controls (storage) | ✓ | ✓ | ✓ |
| Single Root I/O Virtualization (SR-IOV) | | ✓ | ✓ |
| vSphere persistent memory | ✓ | ✓ | \checkmark |
| Memory Tiering | | | ✓ |
| NVIDIA GRID VGPU | \checkmark | \checkmark | \checkmark |
| Accelerated Graphics for VMs | ✓ | \checkmark | \checkmark |
| Dynamic DirectPath IO | ✓ | ✓ | ✓ |
| Vendor Device Group | | ✓ | ✓ |
| Heterogeneous vGPU profiles on same GPU | | \checkmark | \checkmark |
| DRS automation for vGPU workloads | | ✓ | ✓ |
| Support for NVIDIA NVSwitch and NVLink | | ✓ | \checkmark |
| Business Continui | ity | | |
| vMotion | ✓ | ✓ | ✓ |
| Cross-vCenter vMotion ⁴ | √ | ✓ | ✓ |
| | | | |



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| vCenter Enhanced Linked Mode | ✓ | ✓ | ✓ |
|---|--------------|--------------|--------------|
| vSMP | ✓ | \checkmark | ✓ |
| High Availability (HA) | ✓ | ✓ | ✓ |
| Proactive HA | \checkmark | \checkmark | ✓ |
| Storage vMotion | ✓ | ✓ | ✓ |
| Fault Tolerance | \checkmark | \checkmark | ✓ |
| vSphere Replication | ✓ | ✓ | ✓ |
| Support for 4k Native Storage | ✓ | ✓ | ✓ |
| vSphere Quick Boot | ✓ | ✓ | ✓ |
| vCenter File-Based Backup and Restore | ✓ | ✓ | ✓ |
| vCenter Server Appliance Migration | ✓ | ✓ | ✓ |
| Cross vCenter Mixed Version Provisioning | \checkmark | \checkmark | \checkmark |
| Hot and Cold Migration to the Cloud | ✓ | ✓ | ✓ |
| Policy-based Governance | | \checkmark | \checkmark |

^{(*) -} For more information about use of TLS 1.3 with FIPS 140-3 requirements consult the product documentation.



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