

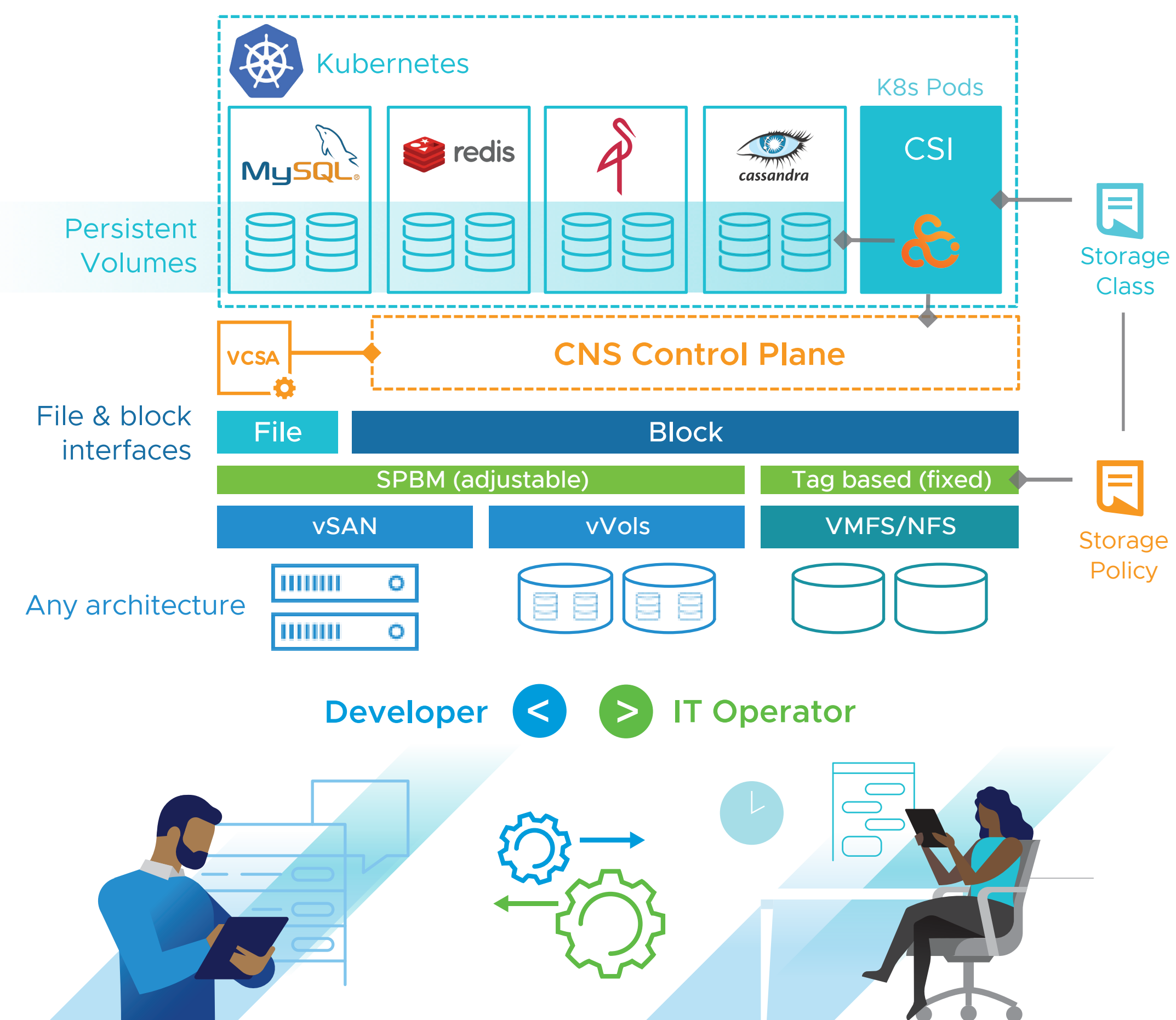
Cloud Native Storage in VMware vSphere and VMware vSAN



Fully integrated platform for modern Kubernetes applications on vSphere

Container environments are high-churn, highly dynamic environments. Tens, hundreds, even thousands of containers can be created and deleted every hour. Managing storage for these as they spin up and down manually is impossible.

With Cloud Native Storage in vSphere and vSAN, storage provisioning for container workloads is automated. Developers get what they need, when they need it. IT operators can run, monitor, and manage the storage for both containers and virtual machines on the same platform.



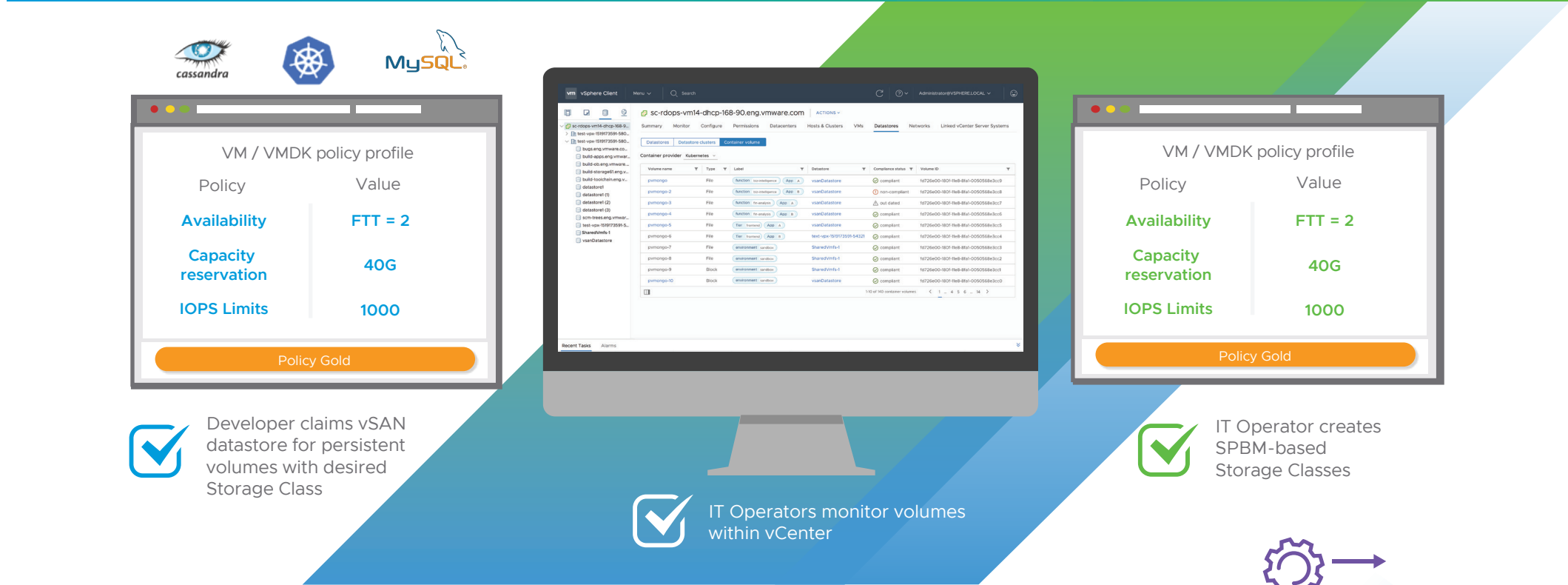
1 Enable developer self-service and high velocity scaling

- **Dynamic and automatic provisioning of persistent volumes** for stateful applications without admin involvement
- **Access to multiple storage classes** that fit application needs with flexibility to adjust later
- **Persistent volumes automatically scale** when applications scale
- **Use the Kubernetes APIs and console:** you don't have to understand the nitty gritty details of storage infrastructure to consume it!

2 Maintain enterprise governance and security

- **One-to-one mapping between storage classes and Storage Policy Based Management (SPBM)** storage policies that IT operators are using to manage VMs today¹, including storage policies that enable encryption of persistent volumes
- **Full visibility and unified management of volumes for both VMs and containers** across all vSAN, vVols, and VMFS/NFS supporting both block and file services
- **Workload centric storage management:** define storage policies and limits/quotas once for a namespace, and let developers self-serve to consume storage within the defined boundaries²
- **Use familiar VMware interfaces:** you don't have to learn Kubernetes command lines to manage Kubernetes!

Benefits in Action: Accelerate App Development with Scalable Storage Provisioning



3 Improve efficiency with a consistent operating model for cloud native storage supporting any vanilla Kubernetes distribution

- **Better traceability and faster troubleshooting** with consistent labeling of volumes for developers and IT operators, delivering a common language between dev and ops teams
- **Consistent operating model for cloud native storage** with support for any vanilla Kubernetes distributions
- **True hybrid cloud experience** with vSAN native services in AWS, Microsoft Azure, and IBM Cloud, which leverage the same tools and processes as users' private clouds



Call to Action:
Learn more about Cloud Native Storage in vSphere and vSAN at vmware.com/products/cloud-native-storage

1. This feature is available when vSAN or vVols is used as the storage backend.
2. This feature is available when Cloud Native Storage in vSphere and vSAN is used with vSphere with Tanzu or VMware Cloud Foundation with Tanzu.