A growing number of businesses now see cloud as key to successful digital initiatives. But making the transition from a traditional infrastructure can create almost as many challenges as it solves. Organizations typically have a complex mix of compute, storage, and network resources that have evolved over time. And a workable path toward a virtualized and software-defined infrastructure isn’t always clear.

VMware can help you modernize your data center by bringing together previously isolated infrastructure silos so you can manage them as a single entity, and bring cloud-like capabilities back to an on-premises environment. By combining these once disparate elements into a holistic, software-defined, and integrated platform, you realize a wide range of benefits, including:

- **Reducing complexity**: Create a hyperconverged infrastructure where compute, storage, and network components work seamlessly together within the core data center as well as in the public cloud and at the edge.
- **Controlling costs**: Use the same management tools and operational model across your entire infrastructure, and eliminate the need to rip-and-replace infrastructure elements as your needs evolve.
- **Increasing agility**: Meet the accelerating demand for new containerized apps and cloud capabilities for faster business service delivery.
- **Being cloud-ready**: Gain the flexibility to match cloud service delivery and consumption demands as business needs change, new innovations emerge, and your organization considers adopting public cloud and edge environments in the future.

**Benefits of VMware Data Center Modernization**

- **Eliminate Silos**: Leverage existing investments for use in new cloud environments while eliminating extra infrastructure silos.
- **Modernize for Cloud**: Support future evolution with a consistent software stack on-prem that can expand into the public cloud and edge.
- **Run Apps Consistently**: Run traditional and cloud-native applications on infrastructure that delivers a consistent operating model.
- **Leverage Existing Investments**: Eliminate the risk of rip-and-replace by leveraging the same management tools and consistent operating model throughout modernization.
- **Operate Efficiently**: Reduce TCO with automated performance management, optimized capacity utilization, proactive planning and reduced mean time to resolution (MTTR).
- **Market-Leading Solution**: Use best-in-class software defined infrastructure stack with integrated management from a market leader in every component of the stack.
Create the Infrastructure Consistency You Need to Be Cloud-Ready

The job of modernizing the data center requires the tight orchestration of a wide range of services, including compute, storage, networking, security, and cloud management. The more consistent the underlying infrastructure, the more seamlessly these services work together to deliver the benefits of cloud deployment. That’s exactly what VMware provides.

Consolidate Infrastructure

VMware Cloud Foundation™ delivers a pre-integrated solution to modernize the data center and build the foundation for cloud services in public clouds and edge environments. In contrast to a heterogeneous environment that requires extensive modifications and complex integrations, this unified cloud infrastructure combines the resources and services for hybrid cloud as a single, integrated solution from an industry-leading provider. The components include the following:

- **vSphere®**: The industry standard in server virtualization software at the heart of a software-defined data center, purpose-built to help you run, manage, connect, and secure your applications in a common operating environment across clouds
- **vSAN™**: Enterprise-class software-defined storage virtualization that allows you to manage compute and storage as a single platform and joins all storage devices in a shared data pool that scales to meet your changing needs
- **NSX®**: A complete networking and security virtualization platform offering the flexibility and automation inherent in a software-only solution

This more holistic approach reduces the cost, complexity, and risk of running applications and business-critical workloads in the data center while retaining the flexibility to migrate them to the public cloud and edge environments in the future.

Streamline Operations

Establishing consistency in the ongoing operations of the data center can help you centralize management on a global footprint to continuously optimize performance, scale to accommodate changing workload needs, and control costs.

- **vRealize Suite**: A management platform for the modernized data center that enables developers to quickly release, troubleshoot, and optimize the performance of highly distributed microservice-based cloud applications in real time. At the same time, IT can continuously automate and optimize capacity and performance of infrastructure based on changing business needs. Gain increased agility, control, and efficiency in the data center for both traditional and cloud-native applications.

With VMware Cloud Foundation, be cloud-ready.

vmware.com/go/cloud-foundation