

Service Brief

EverFlex Virtual Machine to Container Migration and Management Solutions



Businesses today have a vast landscape of virtual machines (VMs) that power their business applications. Most IT departments also deploy their new workloads using Kubernetes containers. These groups are looking for more efficient ways to assess and migrate certain workloads from VMs to containers to reduce costs, increase speed to market, gain operational efficiencies, and flexibility. During the process, each technical trade-off, with its cost and performance implications, must be carefully considered and addressed. After migrations, IT is expected to manage a mixed environment of VMs and containers across a multi-vendor landscape at the least cost and with minimal administration.

Road to VM Reduction

It's not just about comparing virtualization to a single alternative; situations require a combination of vSphere, KVM, Hyper-V, and other platforms to power all workloads. While some may be containerized, not all applications can be or should be migrated off VMs. That's why architectural considerations are crucial when deciding the best strategy for leaving some workloads on VMs and moving others, maximizing the result.

Smarter Services-based Migration Solutions

For companies pursuing alternatives to virtualization, Hitachi Vantara has developed a rich collection of solutions to assist in their journey including consulting services, automated assessment methodologies and specific assessment tools. These solutions allow for the analysis of deployments and identify virtualized workloads that can be migrated to Kubernetes (K8s) platforms or alternative hypervisors. Hitachi EverFlex Control has built-in automation tools that streamline the conversion from VMs to K8 containers via an automated and orchestrated workflow hosted on the EverFlex Containers as a Service offering. This service offers a hybrid cloud solution supporting both Hitachi's standard K8s deployment as well as OpenShift.

Like most Hitachi EverFlex offerings, this service also offers a pay-as-you-go model complete with self-service and an extensive observability module providing options for both self-managed and fully managed implementations. Additionally, hybrid cloud FinOps is incorporated to provide insight into the effectiveness of spend on-premises and in the public cloud with the ability to make effective changes towards cost reduction. This complete approach is helping our clients to optimize costs and simplify operations while reducing business risks.

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Giving More Flexible Choices

Fundamentally, Hitachi Vantara provides customers with flexibility and options to virtualize and scale their applications across a hybrid cloud deployment topology. We partner with different technology providers such as Cisco, VMware, RedHat, Azure and commercial and open-source providers of K8 platforms to provide highly integrated solutions for application and storage scale and virtualization. Also, our VSP One Software Defined Storage (SD) solutions provide an additional level of freedom and flexibility.

Understanding and managing infrastructure operations costs holistically is crucial for lasting improvements. By migrating VMs to containers, Hitachi Vantara can optimize performance and efficiency, eliminate licensing costs, and reduce total cost of ownership (TCO). We have streamlined the process of analyzing VMs and aligning them with cost-effective solutions like containers or alternative hypervisors. While we have not automated the conversion from VMs to all hypervisors yet, additional integrations can be easily incorporated into the EverFlex Control platform as needed.

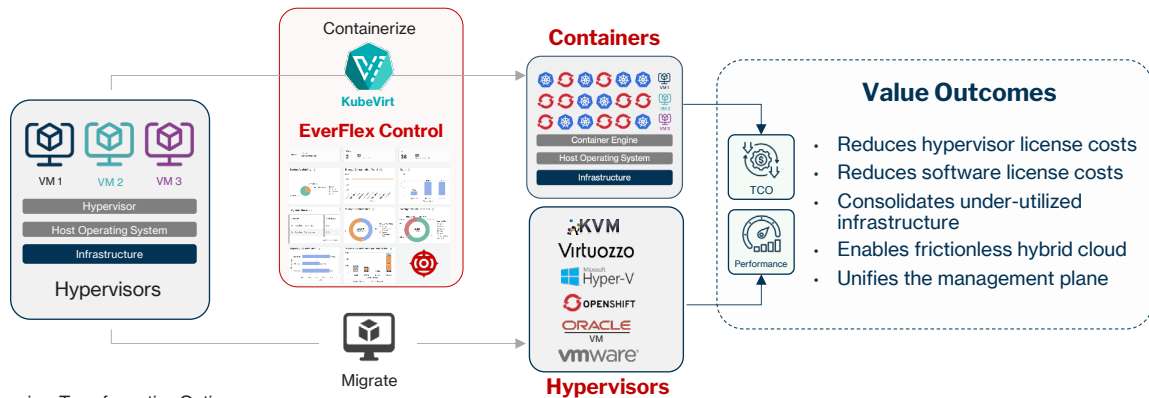


Figure 1: Hypervisor Transformation Options

EverFlex TCO and Sustainability Assessment Overview

To drive migration savings, EverFlex TCO and Sustainability Assessment is a methodology and consultative process used for assessing your compute, storage, network, and virtualized environments. The process includes identifying hardware, software and labor drivers, quantifying TCO reduction opportunities across the enterprise and cloud deployments (TCO reduction typically ranges from 30—50% savings), and developing business cases featuring technical options that drive savings and efficiency.

A Complete Methodology

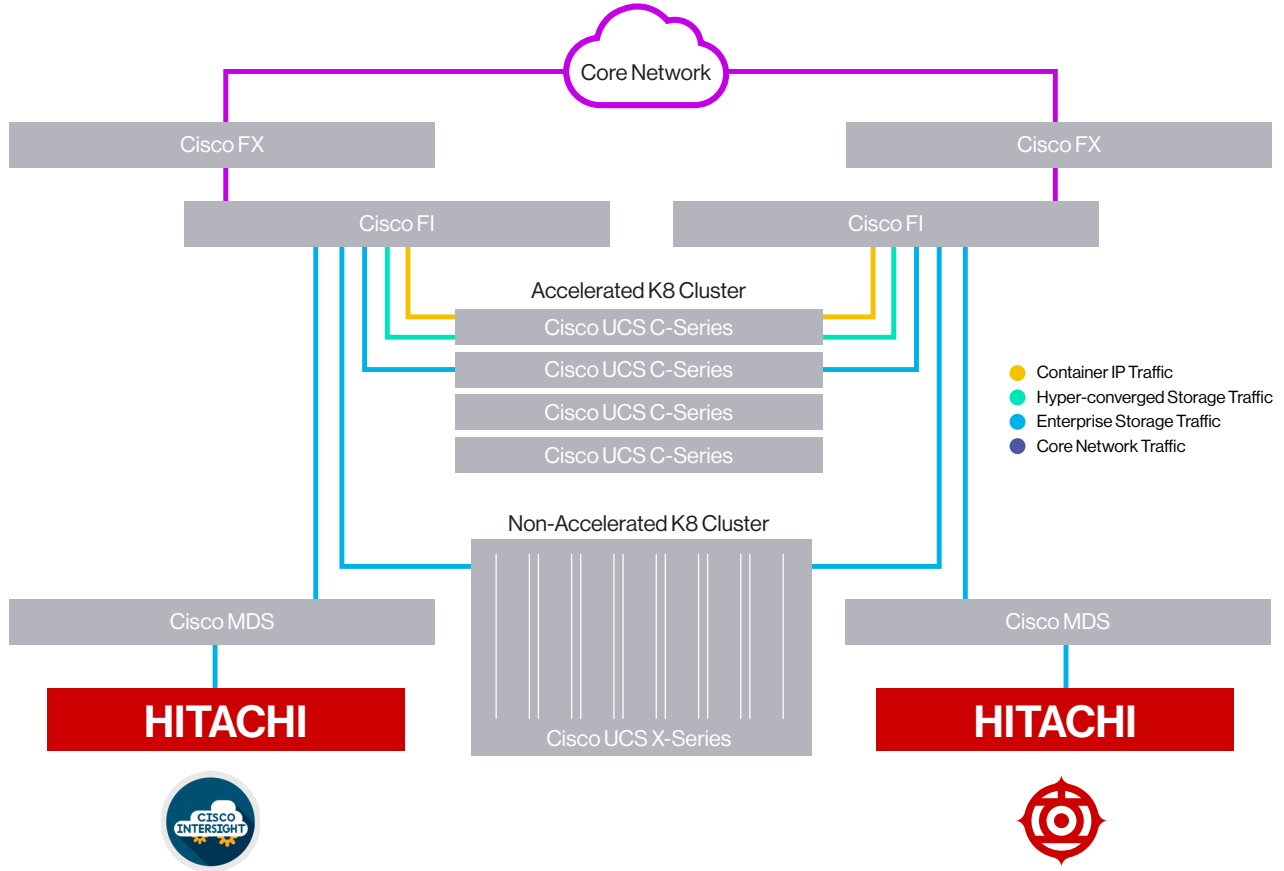
The assessment methodology is a simple process to calculate Total Cost of Ownership using focused tools that:

1. Analyze infrastructure inventory and usage.
2. Calculate life cycle requirements.
3. Estimate other business-as-usual (BAU) costs such as tech refresh migrations, software licensing, maintenance, labor, power, floorspace, cooling and emissions.
4. Project the BAU TCO over time.
5. Compare the existing state to the optimized model.
6. Recommend changes
7. Create containers, automate the migration and observe and manage costs using FinOps.

Hitachi and Cisco Committed All-in Cost Reduction

Hitachi and Cisco have created a powerful partnership focused on Hitachi Vantara EverFlex with Cisco powered Hybrid Cloud solutions. This is an excellent opportunity for partners and customers to leverage our 14 years of experience and excellence in delivering SLA-based, self-service solutions to Fortune 500 companies worldwide. Together, we have extended our current Hitachi Vantara EverFlex Service Catalog to include the Cisco ecosystem of data center solutions. This is now available to any customer or partner, of any size. Our commitment to deliver complete solutions at an industry leading TCO, with SLA's better than other vendors, hasn't wavered in 14 years.

Holistic Process to Convert the Right Workloads and Manage Containers



- Offers **on-premises and public cloud deployment** options
- EverFlex Control **manages containers across multiple hybrid cloud environments**
- HW acceleration **reduces servers up to 50%** while increasing performance
- **Built-in application portability** enables multi-cloud usage

- **Automated VM to container migrations** can avoid the challenges of application refactoring
- **Provisioning and orchestration automation** simplifies building and deploying containers
- **Real-time spend visibility** targets the most cost-effective container environments
- Integrates with **OpenShift**

Contact us today to reduce your costs and drive infrastructure freedom.

Learn more →



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