# **SUSE**



Fujitsu uSCALE for Containers with SUSE

Flexible solution to help you scale your application development

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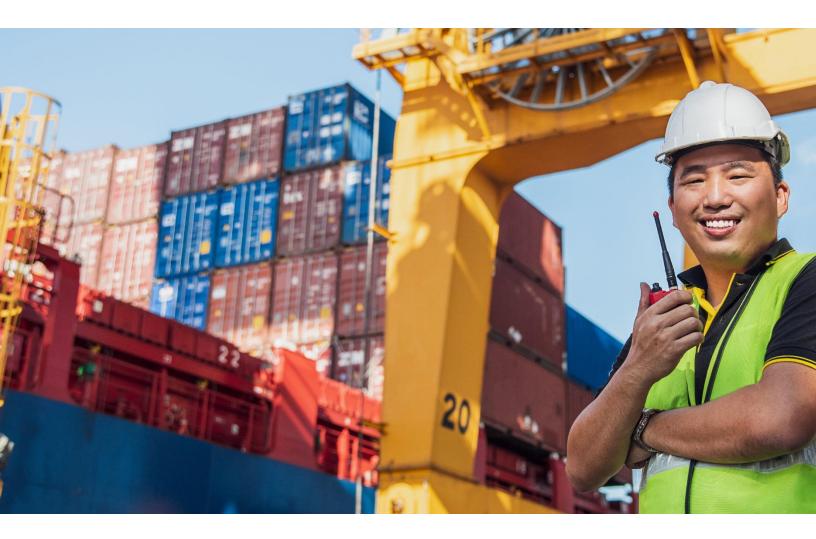
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# Overview

Many organizations are embracing Kubernetes, a container-orchestration system for automating software deployments, to help drive enterprise digital transformation and adopt container and cloud native technologies. Rancher Prime addresses the needs of DevOps teams deploying applications with Kubernetes (K8s) and IT operations delivering enterprise-critical services. It is an open-source enterprise Kubernetes management platform that helps ITOps address the operational and security challenges of managing certified Kubernetes clusters from the core, cloud and at the edge. It also provides DevOps teams with integrated tools for building and running containerized workloads at scale.

However, adopting new platforms is always challenging. In particular, it is difficult to correctly scale hardware requirements for new technologies. What organizations need is a way to consume hardware flexibility to build out their new platforms. It may seem that moving to Public Cloud is a simple solution to that problem. However, that approach is not for everyone. There are often concerns about data sovereignty, unpredictable cost models, or steep technical learning curves. Pay-per-use offerings that combine flexible infrastructure with scalable Kubernetes technology can be a key element in helping organizations solve those challenges.



# **Customer challenges**

## **Enterprises Need to Transform**

Tech leaders need to drive rapid digital transformation with Kubernetes, especially at the edge, but they're concerned by the lack of agility and with lock-in that's inherent to legacy solutions.

There's a huge number of platforms in the ecosystem and many operators are intimidated by the expertise required to leverage platforms in different environments (core, cloud, edge).

#### Inefficient Resource Utilization

Suboptimal use of computing resources leads to wasted capacity and increased costs. Rancher Prime containerization capabilities optimize resource utilization, allowing businesses to scale applications based on demand. This dynamic scaling, coupled with intelligent load balancing, ensures that resources are allocated efficiently, reducing operational expenses, and maximizing ROI.

## Security Concerns in Containerized Environments

Security vulnerabilities in containerized applications can pose significant risks to businesses. Rancher Prime addresses this challenge by implementing robust security features such as network segmentation, encryption, and access controls. It enables businesses to create secure, isolated environments for their applications, mitigating the risks associated with container security breaches.

Most solutions cannot implement role-based access control (RBAC) and security-policy best practices consistently.



## Difficulty of managing containers in hybrid environments

Enterprises with multi-cloud and hybrid environments struggle to manage K8s workloads across different platforms—core to cloud to edge.

Businesses often struggle with managing complex deployments across diverse environments. Rancher Prime simplifies this challenge by providing a unified platform for container orchestration. It streamlines deployment processes, ensuring consistency and reliability across various infrastructure setups, from on-premises servers to cloud environments.

Businesses often face difficulties when migrating applications between different environments. Rancher Prime solves this challenge by providing a platform-agnostic approach to containerization. With it, containerized applications can run seamlessly on any infrastructure, ensuring portability, and eliminating vendor lock-in. This portability simplifies migration tasks, enabling businesses to adapt to changing technology landscapes effortlessly.

There is a need for IT organizations to have comprehensive insights into their containerized applications for effective management. Rancher Prime offers centralized monitoring and management tools that provide real-time visibility into containerized workloads. This visibility empowers businesses with detailed analytics, enabling proactive decision-making, optimizing performance, and ensuring that applications operate at peak efficiency levels.

## **Scalability Challenges**

Businesses often face difficulties scaling their IT infrastructure according to demand, leading to either underutilization or overload. Rancher Prime, combined with Fujitsu uSCALE pay-per-use model, offers seamless scalability. Rancher Prime container orchestration ensures applications can scale dynamically, while uSCALE's flexible payment structure allows businesses to pay only for the resources they consume, eliminating scalability concerns and optimizing costs.

## **Operational Complexity**

Enterprises with multi-cloud and hybrid environments struggle to manage K8s workloads across different platforms—core to cloud to edge. Managing complex IT environments can be daunting, especially when dealing with diverse infrastructures. Rancher Prime simplifies deployment and management of containerized applications. When integrated with Fujitsu uSCALE's transparent billing and usage analytics, businesses gain actionable insights into their operations. This streamlined approach reduces operational complexity, enhances efficiency, and allows businesses to focus on core objectives.

#### **Budget Constraints**

Limited budgets often hinder technology adoption and innovation. Rancher Prime, in combination with Fujitsu uSCALE, mitigates this challenge. Rancher Prime efficient resource utilization optimizes costs by ensuring applications use resources effectively. With uSCALE pay-per-use model, businesses can align expenses with actual usage, eliminating upfront investments and allowing budget-conscious organizations to embrace cutting-edge container solutions without financial strain.

# **About Rancher Prime**

Kubernetes (shortened to K8s) is a common compute platform for the automated deployment, scaling, and management of containerized applications across any infrastructure. Rancher Prime is a complete software stack for teams adopting containers. It addresses the operational and security challenges of managing multiple Kubernetes clusters across any infrastructure, while providing DevOps teams with integrated tools for running containerized workloads. It includes a full Kubernetes distribution but adds value around Kubernetes in three key areas: Cluster Operations and Management, Intuitive Workload Management, and Enterprise Support.



#### **Cluster Operations & Management**

With Rancher Prime, you get a centralized control plane that unifies the management of every Kubernetes cluster running across customer organizations. This solves operational challenges, such as cluster provisioning, upgrades, user management, and policy management.

#### App Workload Management

Kubernetes contains powerful functionality for orchestrating applications and guaranteeing service availability. Rancher Prime adds a complete UI and workload management layer to Kubernetes, that simplifies adoption and integrates CI/CD as well as key open-source projects such as Prometheus, Grafana, and Fluentd.

#### **Enterprise Support**

Quickly adopt Rancher Prime and its integrated cloud-native tooling while complying with corporate security and availability standards. SUSE's enterprise-grade support services give you the confidence you need to deploy Kubernetes in production at any scale. Its tightly defined SLAs ensure you get the help you need from our experts when you need it.

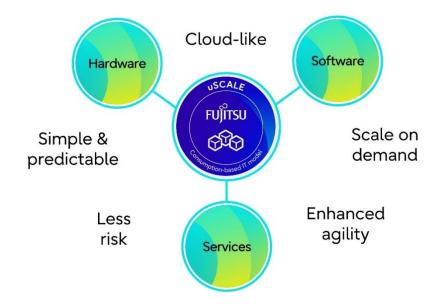
# Fujitsu uSCALE for Containers with SUSE

Fujitsu uSCALE for Containers with SUSE is built on Rancher Prime. In addition to the benefits of Rancher Prime detailed above, businesses will also have access to a flexible, scalable, service that accelerates Kubernetes adoption.

## A Smart Alternative to the Cloud

Fujitsu uSCALE is a smart alternative for a complex and what could sometimes be a disruptive move to the cloud. It will provide you with a financially transparent, technically scalable, and compliant IT setup for your business strategy and your on-premises datacenter with no need to disrupt the smooth operation of your IT department.

With uSCALE, you will combine the best of both worlds, experiencing the same benefits a move to the cloud would provide, except, it is private, more flexible, and efficient - especially about cost - while ensuring compliance and data security standards. It allows customers to consume infrastructure, on-premises, as-a-



service all as pay-per-use. Fujitsu uSCALE enables organizational agility with the ability to scale your infrastructures up or down, at a rate that represents the best fit to your business needs. Companies can benefit from increased flexibility and operational improvements to introduce new services and solutions faster based on the on-demand scalability.

# Infrastructure-as-a-Service (laas)

laas is a cloud computing model where fundamental computing resources, such as virtual machines, storage, and networking are provided as a service.

laaS enables organizations to access and utilize these resources as needed, providing advantages in terms of scalability, cost-effectiveness, and flexibility.

When combined with Fujitsu uSCALE, IaaS is being taken to a new dimension. Fujitsu uSCALE is designed to provide an infrastructure environment as a service that not only offers the benefits of the cloud but also extends its capabilities by delivering a range of additional services while maintaining control, security, and compliance, primarily within an on-premises data center.

# Containers-as-a-Service

With Fujitsu uSCALE for Containers with SUSE, you can enjoy an as-a-Service offering that encompasses both hardware and software infrastructure, delivering the essential elements required for a highly efficient on-premises Kubernetes platform. This comprehensive solution can seamlessly integrate with cloud environments. This setup enables optimum performance and scalability, catering to even the most demanding workloads, including application modernization and modern large scale application development scenarios ensuring Continuous Integration (CI) and Continuous Deployment (CD). To provide a hassle-free experience, our offering includes comprehensive services such as installation, support, and monitoring. Our dedicated team stands ready to assist, ensuring a smooth setup, providing timely support, and continuously monitoring the installed platforms to maintain peak performance. Adding to the flexibility of our service, we have designed it to be delivered through a managed service financial model, allowing you to administer your budgets efficiently based on your unique business requirements.



#### Seamless Scalability

Rancher Prime provides a robust container orchestration platform that allows businesses to scale applications effortlessly. With uSCALE, Fujitsu's pay-per-use model ensures that resources are allocated precisely as per the demand. This seamless scalability guarantees that businesses can handle varying workloads efficiently, optimizing performance and reducing unnecessary expenses.

## **Enhanced Flexibility**

Rancher Prime containerization capabilities provide businesses with the flexibility to deploy applications across diverse environments, from on-premises servers to cloud platforms. Fujitsu uSCALE complements this flexibility by offering a pay-per-use model that adapts to changing business requirements. This combination ensures that businesses can innovate without being hindered by rigid infrastructure constraints, fostering a culture of creativity and adaptability.

## **Optimal Resource Utilization**

By leveraging Rancher Prime container management, businesses can optimize resource utilization, ensuring that computing power and storage are used efficiently. Fujitsu uSCALE further refines this optimization by allowing organizations to pay only for the resources they consume. This streamlined approach results in reduced wastage, supports sustainability, and maximizes ROI, enabling businesses to invest in strategic initiatives that drive growth.

#### **Enhanced Security**

Rancher Prime prioritizes security, offering robust features such as multi-tenancy and role-based access control with Neuvector Prime. When combined with Fujitsu uSCALE, which includes stringent security protocols, businesses benefit from a comprehensive security framework. Data integrity and confidentiality are maintained, ensuring compliance with industry regulations, and building trust among customers and partners.

#### Simplified Management

Rancher Prime intuitive interface simplifies container management tasks, enabling even non-technical users to deploy and manage applications efficiently. Fujitsu uSCALE complements this user-friendly approach by providing transparent billing and usage analytics with the Fujitsu Customer Success Portal. This combination empowers businesses with the information they need to make informed decisions, enhancing overall operational efficiency.

# **Unlock Your Business Potential**

In the dynamic landscape of modern business, agility, efficiency, and cost-effectiveness are paramount. To address these needs, the powerful combination of Rancher Prime and Fujitsu uSCALE, creates a synergistic solution that revolutionizes how businesses operate in the digital age. The integration of both products offers a transformative solution that empowers businesses to thrive in a rapidly changing digital landscape. By providing seamless scalability, enhanced flexibility, optimal resource utilization, enhanced security, and simplified management, this partnership equips organizations with the tools they need to innovate, compete, and succeed. Embrace the future of business operations with Rancher Prime and Fujitsu uSCALE and unlock unparalleled potential for organizations in all industry segments and public sector.



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