

Lenovo TruScale Hybrid Cloud with Red Hat OpenShift

From the pocket to the cloud, Lenovo TruScale offers everything as a service, and enables you to unleash the power of technology with the simplicity and scalability of a flexible, pay-as-you-go model in many regions around the world.

From Infrastructure as a Service with Converged Infrastructure, ThinkSystem Certified Nodes, ThinkSystem Storage and Lenovo Datacenter Portfolio; to Device as a Service with World-class Devices.

Lenovo TruScale Hybrid Cloud with Red Hat® OpenShift® is an enterprise-ready Kubernetes container platform based on Red Hat OpenShift and enables a cloud-like experience deployed in one end-to-end solution.

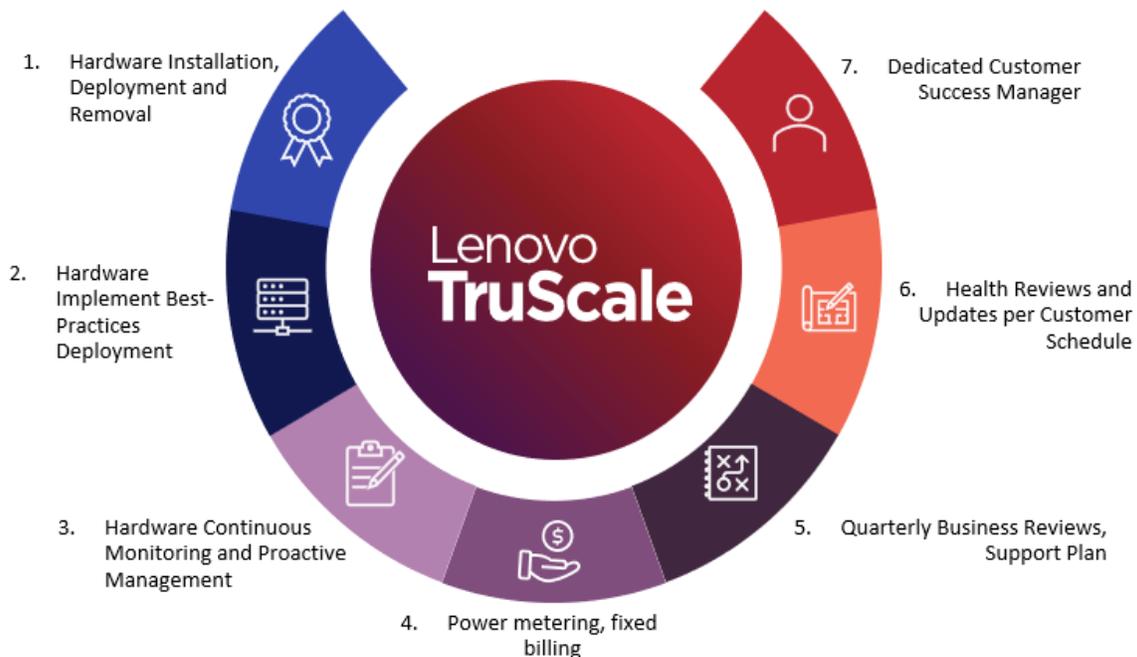
Red Hat OpenShift Platform Plus is a unified platform to build, modernize, and deploy applications at scale. Multicluster security, compliance, application and data management work across infrastructures to provide consistency throughout the software supply chain. Red Hat OpenShift Platform Plus helps you work smarter and faster with a complete set of services for bringing apps to market on your hybrid cloud.

This solution provides container orchestration like scheduling, scaling and lifecycle management.

With this hybrid cloud solution hosted on Lenovo ThinkSystem, ThinkEdge and/or ThinkAgile Servers and Red Hat's industry leading software in container platform, enterprise customers benefit from an on premise, fully managed as-a-service solution for running their business applications in a consumption-base pricing model.

Lenovo

TruScale Hybrid Cloud with Red Hat OpenShift Services Scope



2 | Lenovo TruScale Hybrid Cloud with Red Hat OpenShift

Lenovo TruScale solutions is an all-inclusive service offering covering the full life-cycle of a System will help you to:

- Have flexible IT infrastructure to innovate without limits.
- Keep your vital infrastructure right-sized, all the time.
- Seamless integration with other TruScale solutions such as devices.
- React to changing requirements with a pay-as-you-go approach.

TruScale Hybrid Cloud with Red Hat OpenShift Value

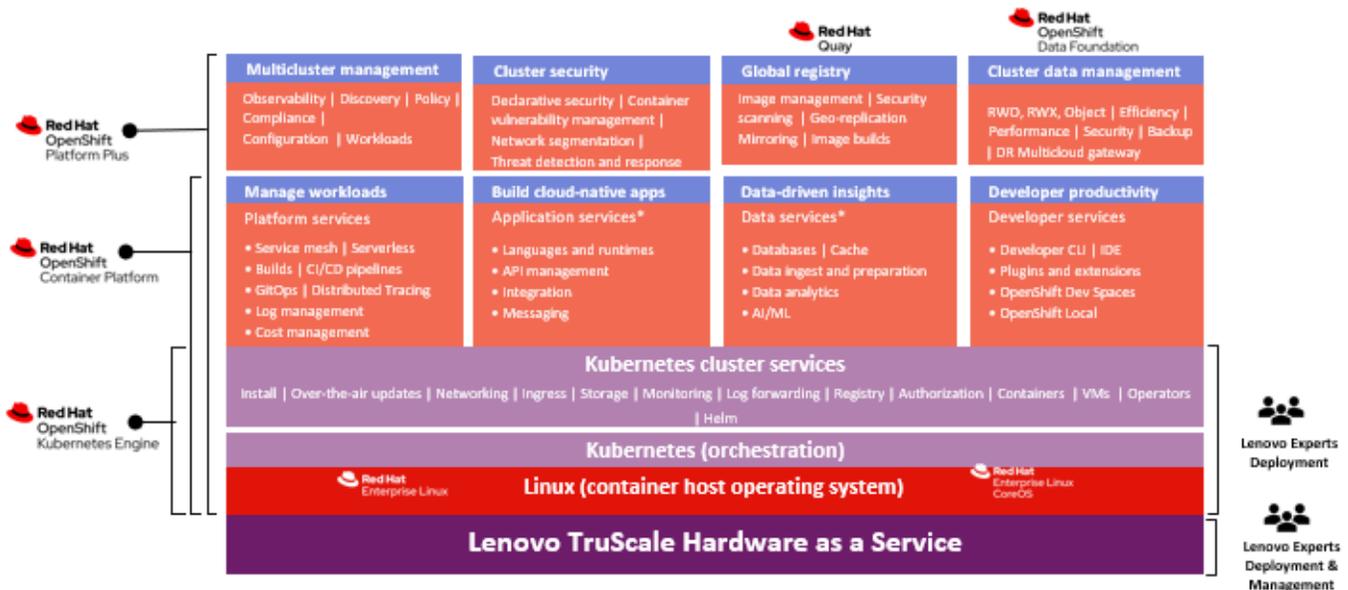
All-inclusive service offering covering the full lifecycle of the systems:

- Initial Deployment and Onboarding for Hardware Hosts (Servers, Networking, Storage).
- XClarity Management Implementation.
- Hardware Proactive 24x7 Remote Monitoring.
- Hardware Maintenance Support and Firmware updates.
- Hardware Proactive 24x7 Incident & Problem Management.
- Hardware Proactive Capacity, Performance, and Availability Management.
- Hardware Configuration and Change Management.

TruScale Hybrid Cloud with Red Hat OpenShift Benefits:

- Predictable Cloud Based Cost Model one cloud as-a-Service from Lenovo.
- Application Portability - Ability to Run Anywhere.
- Intrinsic Security - Container Isolation and Resource Sharing.
- Time to Market - Start, Create, Replicate or Destroy Containers in Seconds.
- DevOps Ready - Improved Developer Productivity - Scalable Workload by extending infrastructure scalability to database and applications.
- Innovation Platform - by keeping the software stack up-to-date.
- Lenovo systems and solutions.

TruScale Hybrid Cloud with Red Hat OpenShift Solution Components



*Red Hat OpenShift includes supported runtimes for popular languages/frameworks/databases. Additional capabilities listed are from the Red Hat Application Services and Red Hat Data Services portfolios.

**Disaster recovery, volume and multicloud encryption, key management service, and support for multiple clusters and off-cluster workloads requires OpenShift Data Foundation Advanced

Lenovo ThinkSystem, ThinkEdge and ThinkAgile Servers

Lenovo ThinkSystem servers and ThinkAgile solutions run Red Hat's operating systems, virtualization technologies, and infrastructure platforms so you can build a highly productive IT environment that can help your business achieve true innovation.

XClarity

A Centralized resource management component of the solution, aimed at reducing complexity, speeding response, and enhancing the availability of Lenovo systems and solutions.

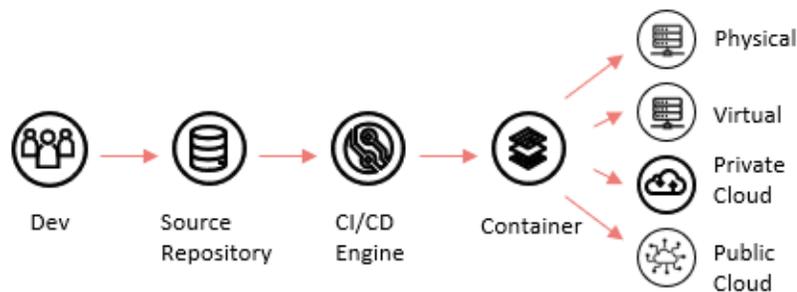
Red Hat OpenShift Platform Plus (among other Red Hat elements):

Red Hat OpenShift Container Platform

Provides many enterprise-ready features like enhanced security, multi-tenancy, virtualization, simplified application deployment, and continuous integration/continuous deployment tools. With Lenovo servers, deployment, provisioning and managing the Red Hat OpenShift Container Platform infrastructure becomes effortless and produces a resilient solution. TruScale Hybrid Cloud with Red Hat will be deployed on the required node BareMetal cluster and it will be responsible to handle master, infrastructure and application workloads.

TruScale Hybrid Cloud with Red Hat OpenShift Benefits.

Emerging software applications are making use of containerization to enable rapid prototyping, testing, as well as deployment to the cloud. The microservice revolution introduced container-based service architecture, which offers many benefits when compared to traditional virtualization technologies. Containers provide a more portable and faster way to deploy services on cloud infrastructures compared to virtualization.



Red Hat was one of the first companies to work with Google on Kubernetes, even prior to launch, and has become the 2nd leading contributor to the Kubernetes upstream project.

<https://www.redhat.com/en/topics/containers/what-is-kubernetes>

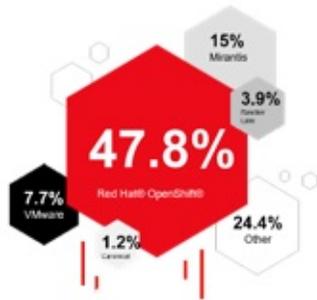
C – level benefits	Faster time to market, innovation, enable Dev/Ops		
Business leaders	Product delivery to customers/ revenue / market penetration		
Enterprise architecture Common platform for Dev and Ops, supports legacy and cloud native			
Developer benefits	Operators benefits	Infrastructure benefits	Security benefits
<ul style="list-style-type: none"> Ideas to users Choice of architectures Choice of programming languages Build and deploy workflows Not having to worry about the Infrastructure 	<ul style="list-style-type: none"> Automated deployments Automated provisioning Automated installations Automated security scanning Automated upgrades Automated back ups 	<ul style="list-style-type: none"> Reduction in VM Costs Higher utilisations Lower VM costs Portability 	<ul style="list-style-type: none"> Critical Bug Fix Minimizing the attack potential Security scanning for Vulnerabilities Containing the container
Speed up application development 33%	20% productivity increases of Development and DevOps teams	3x more functions to internal clients.	Security-focused environment

Red Hat Openshift Benefits.

- Light-weight application run-time environments less resource intensive and highly efficient, compared to VMs.
- Enable developers to package applications and library dependencies to run them; providing a completely self-sufficient environment without any interference.
- Portable across different platforms.
- Standard of operation for some of the well-known public cloud environments including Google, Amazon AWS, and Microsoft Azure.
- Many open-source tools available now to help developers easily create, test, and deploy containerized applications.
- The way to implement a continuous integration/continuous delivery (CI/CD) development pipeline and the DevOps paradigm of combining software development and infrastructure operations.

Read more about Lenovo and Red Hat Reference Architecture at this [link](#).

Who's Winning in the Container Software Market: <https://www.itprotoday.com/containers/whos-winning-container-software-market>



TruScale Hybrid Cloud with Red Hat dedicated customer success manager

TruScale Hybrid Cloud with Red Hat comes with a dedicated customer success manager to ensure customers achieve their business goals:

- **Customer onboarding** - Ensures on time solution availability & fully trained customer IT personnel capable to operate Lenovo's TruScale IT Services.
- **Account Follow Up** - Customer's primary point of contact, advocate inside Lenovo's operations, simplifying the customer's experience.
- **Health checks** - Quarterly reviews to discuss platform usage, addressing new issues, and solving ongoing concerns.
- **Planned Growth** - Identifies optimization opportunities aligned to customer needs and can engage Technical or Field Sales for support as needed.
- **Contract Renewals** - Typically 6 months prior to contract end date, will lead assessment of customer needs against prevailing capability & renewal options.
- **Credit management** - Cycles for credit validation and credit card billing.

Lenovo TruScale Solutions

- **One provider** - Plan, procure and run your infrastructure with a single point of global accountability and predictable costs.
- **End-to-End Services** - Full maintenance, support and management including installation, deployment, configuration and managed services.
- **Control** - Real-time insights that drive efficiency, freeing up IT resources to focus on innovation.
- **Secure** - Your sensitive data is stored on-premises, protected behind your firewall with the appropriate compliance and security controls.
- **Ongoing ROI** - Minimum upfront capital costs and a flexible, cloud-like consumption model, deployed behind your firewall.

Lenovo TruScale enables businesses to innovate without limits and achieve their bold vision for the future.

Lenovo and Red Hat.

Red Hat and Lenovo have been partners for over 20 years. Together we ensure that the latest Red Hat technologies work perfectly with Lenovo ThinkSystem infrastructure and ThinkAgile solutions to provide the most reliable, secure and high-performing datacenters for our customers. Built with proven Lenovo innovation, Lenovo has experience in developing and delivering Red Hat based solutions that help customers modernize and simplify their IT infrastructure to dramatically drive down operating costs and open the door to cutting-edge innovations. Built around the latest Lenovo ThinkSystem servers and networking hardware, the Lenovo solution with Red Hat provides businesses with an affordable, interoperable, and reliable industry-leading solution to manage their virtualized and containerized workloads.

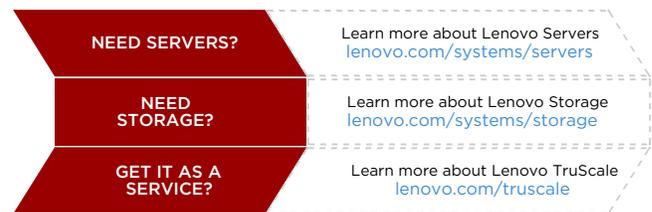
About Lenovo

Lenovo (HKSE: 992) (ADR: LNVGY) is a US\$62 billion revenue global technology powerhouse, ranked #171 in the Fortune Global 500, employing 77,000 people around the world, and serving millions of customers every day in 180 markets. Focused on a bold vision to deliver smarter technology for all, Lenovo is expanding into new growth areas of infrastructure, mobile, solutions and services. This transformation is building a more inclusive, trustworthy, and sustainable digital society for everyone, everywhere.

For More Information

Find out more information related Red Hat products:
www.redhat.com/lenovo

To learn more about how TruScale Hybrid Cloud with Red Hat can help take your business forward, reach out to one of our experts on truscale@lenovo.com



© 2024 Lenovo. All rights reserved.

Availability: Offers, prices, specifications and availability may change without notice. Lenovo is not responsible for photographic or typographic errors. **Warranty:** For a copy of applicable warranties, write to: Lenovo Warranty Information, 1009 Think Place, Morrisville, NC, 27560. Lenovo makes no representation or warranty regarding third-party products or services. **Trademarks:** Lenovo, the Lenovo logo, ThinkAgile®, ThinkEdge®, ThinkSystem®, and XClarity® are trademarks or registered trademarks of Lenovo. Microsoft® and Azure® are trademarks of Microsoft Corporation in the United States, other countries, or both. Other company, product, or service names may be trademarks or service marks of others. Document number DS0177, published October 20, 2023. For the latest version, go to lenovopress.lenovo.com/ds0177.