Lenovo TruScale
Infrastructure as a Service

Lenovo TruScale
Multi-Cloud with Deloitte

Introduction to TruScale

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.

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.

What you love about the Cloud, On-Prem

On-Prem
- Increased security
- Data ownership
- Legacy workloads
- Cost control

TruScale
- Simplicity
- Flexibility
- Time to value
- Global Coverage
Lenovo TruScale Multi-Cloud with Deloitte is a fully managed multi-cloud service environment designed for public and private clouds that automates cloud operations, helps to manage performance, cost, security, and compliance, available in a consumption-based price model for a full cloud-like experience.

One solution for all hybrid cloud needs from the edge to the core to the cloud with Lenovo TruScale and Deloitte Cloud Managed Services:

- **End-to-end Support** - Managed services provides global technical expertise and consistent support.

- **Business Alignment** - Unique pay as customers go model to align infrastructure with business demands.

- **Private Cloud Managed Services** - Experience a turnkey solution on-premises with support from the edge to the cloud.

- **Public Cloud and OnPrem private cloud** interaction Powered by Deloitte Open Cloud and delivered Through Lenovo’s TruScale Infrastructure
TruScale Infrastructure as a Service vs TruScale Multi-Cloud with Deloitte

TruScale Multi-Cloud with Deloitte included Management Services
- SAP, ERP, Applications Technical & Functional
- SAP, ERP, Applications Management
- DB Management
- OS Management
- VM Management
- Image Management / Cloud Platform
- Management Nodes and Hubs
- Virtual Management (Hypervisor)
- Virtual Networking

Lenovo Manages
- Physical Compute & Storage
- Data Center Infrastructure
- Low Level Infrastructure

Deloitte Manages
- Physical Compute & Storage
- Data Center Infrastructure
- Low Level Infrastructure

End to end management and proactive monitoring focused on hardware, software and applications*.

TruScale Multi-Cloud with Deloitte Solution Components:

**Lenovo ThinkAgile VX Infrastructure and/or Thinksystem Servers.**
Offers flexible configuration choices to match workload and customer needs and Lenovo’s #1 in reliability for 7 years in a row x86 servers.

**VMware Software Stack (vCF, vSAN, vSphere, vRealize).**
Generates an integrated software platform that automates a complete software-defined data center (SDDC) deployment and lifecycle management. This will give not only the capabilities to take advantage of on-premise, consumed as a service infrastructure but also to interact with the public cloud (i.e. VMware Cloud on AWS).

**Deloitte OpenCloud.**
Accelerates and automates best practices across seven multi-disciplinary areas. It provides a one-stop-shop for organizations to Operate, Optimize and Innovate their applications on Cloud

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

**Backup Component.**
A software-defined solution for protecting all data of the infrastructure environment.

The result is a hybrid cloud platform that can span private and public environments, a consistent operational model based on well-known tools and processes and the freedom to run apps anywhere without the complexity of the day-to-day operations.

* Depends on sizing, implementation and contract terms.
TruScale Multi-Cloud with Deloitte Solution Sizes:

<table>
<thead>
<tr>
<th>Size</th>
<th>Hardware Components</th>
<th>Suggested VMs per Node (vCPU, RAM, Storage)</th>
<th>Total VMs per cluster</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>XS</td>
<td>4 x Thinkagile VX Appliance Nodes</td>
<td><strong>50</strong> (2 vCPU, 8GB, 200GB)</td>
<td></td>
<td>Link</td>
</tr>
<tr>
<td>S</td>
<td>3 x Thinkagile VX Appliance Nodes</td>
<td><strong>60</strong> (2 vCPU, 8GB -16GB, 100GB)</td>
<td></td>
<td>Link</td>
</tr>
<tr>
<td>M</td>
<td>5 x 2 Socket Server Node</td>
<td><strong>80</strong> (2 vCPU, 8GB - 16GB, 200GB)</td>
<td>Depends on HA cluster config.</td>
<td>Link</td>
</tr>
<tr>
<td>L</td>
<td>5 x 4 Socket Server Node</td>
<td><strong>100</strong> (2 vCPU, 16GB - 32GB, 200GB)</td>
<td></td>
<td>Link</td>
</tr>
<tr>
<td>XL</td>
<td>5 x 4 Socket Server Node</td>
<td><strong>120</strong> (2 vCPU, 16GB - 32GB, 250GB)</td>
<td></td>
<td>Link</td>
</tr>
<tr>
<td>XXL</td>
<td>5 x 8 Socket Server Node</td>
<td><strong>220</strong> (2 VCPUs, 32GB RAM, 300GB)</td>
<td></td>
<td>Link</td>
</tr>
</tbody>
</table>

Suggested Lenovo Sizes - Specific configuration can be prepared based on customer or workload requirements. Total number of virtual machine depends on final configuration and real scenario based on workloads. This recommended VMs per node do not consider any type of HA configuration.

TruScale Multi-Cloud with Deloitte Solution Scope

All-inclusive service offering covering the full lifecycle of a system.

- Initial Deployment and Onboarding for Hardware Hosts (Servers, Networking, Storage).
- Xclarity Management Implementation.
- Virtual Layer Implementation (VCF, VRealize, NSX, etc)
- Proactive 24x7 Remote Monitoring.
- Maintenance Support and Firmware updates.
- Virtualized Infrastructure Lifecycle Management.
- Proactive 24x7 Incident & Problem Management.
- Proactive Capacity, Performance, and Availability Management.
- Virtualized Infrastructure Lifecycle Management.
- Configuration and Change Management.
TruScale Multi-Cloud with Deloitte
Operated by you. Managed & Supported by us.

- **End-to-end Support**
  Managed services provides global technical expertise and consistent support

- **Business Alignment**
  Unique pay as customers go model to align infrastructure with business demands

- **Cloud Managed Services**
  Experience a turnkey solution on-premises with support from the edge to the cloud

**Delivered Through Lenovo’s TruScale Infrastructure as a Service**

**Simplified Digital Transformation strategy**

- Improved deployment accuracy, quicker provisioning.
- Elasticity and Flexibility, full secure infrastructure benefits
- VM lift and shift through standardized VMware architecture

**Lower operating costs & budget management**

- Single pane of glass for billing & cost views
- Itemized billing and cost trend analysis
- Pay per usage, minimal upfront costs

**Centralized Support, 24x7**

- Common platform Support for public & private clouds
- End to End services: installation, deployment, configuration, monitoring and 24x7 monitoring service desk administration

**Security and Regulatory Compliant**

- Manage sensible data & workloads from the security of your own data center behind a firewall
- Maintain data integrity & reliability with accelerated full-cycle security operations.
Greater operational efficiencies

- One-stop shop from Lenovo for all Customer’s on-premise needs as well as Azure, AWS and Google.
- Latest technology, maximum performance and reliability in the market
- Full-service offering: SLAs up to the OS, DBs & SAP

Simplify IT Talent procurement

- Your IT personnel focused on strategic initiatives due to TruScale managed services simplifying the tasks of highly skilled professionals, set up and running complex environments.
- Deloitte consulting expertise enabling a multi-cloud environment that spans on premises private clouds managed by TruScale to public clouds as Azure, AWS and Google Cloud.

Accelerate Time to Market & Achieve higher ROI

- Improve IT responsiveness with the latest technology providing maximum performance and reliability in the market.
Dedicated customer success manager

Dedicated resource assigned to TruScale customer that helps customers to achieve business goals by Lenovo’s offering:

- **Customer onboarding** - Ensures solution capability on time & fully trained customer IT personnel capable to operate Lenovo’s TruScale IT Services.

- **Account Follow Up** - TruScale Customer’s primary point of contact, advocacy inside Lenovo’s operations on his behalf, management of complexities to simplify the Customer’s experience.

- **Health checks** - Holds quarterly reviews with customer, discussing usage of platform, assessing any new issues, and solving lingering concerns.

- **Planned Growth** - Primary point of contact to identify growth opportunities aligned to customer needs. Where needed, will bring Technical or Field Sales to assist in the motion.

- **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.

**One provider** - Plan, procure & run your entire infrastructure simply, with a single point of global accountability and predictable costs.

**Full Maintenance, Support & Management** - End to end services including installation, deployment, configuration and managed services.

**Absolute control** - Real-time insights that help drive efficiency, with less time in the weeds and more time for the big picture

**Secure by nature** - Lenovo’s foundational security approach protects everything, everywhere, all the time.

**Constant ROI** - Minimum upfront capital costs for anything and a completely flexible, cloud-like consumption model, deployed behind the firewall.
Lenovo TruScale

Multi-Cloud
With Deloitte

Want to find out more?
To learn more about how Lenovo TruScale Multi-Cloud with Deloitte offering can help take your business forward, go to truscale.com or reach out to one of our experts on truscale@lenovo.com