

Lenovo Cloud Configuration for Microsoft Hyper-V on x3650 M5

Cost effective virtualization performance and reliability

Remove Complexity and Uncertainty

The valuable data your business owns can give you a competitive advantage. But you will only realize that data's full power if your users can analyze and access that information where, when and how they need it.

Providing users with access to business intelligence on virtualized compute platforms can help your business realize the power within its data. But that virtualization can increase demands on IT systems, infrastructure planning and IT staff. Since performance is defined by how well administrators master technical priorities to deliver tangible business benefits, they must find ways to simultaneously reduce this pressure while capitalizing on the insights hidden in the business data.

Breakthrough technology from Lenovo can provide that virtualized power—even with capital and operational resource constraints. The Lenovo Cloud Configuration for Microsoft Hyper-V on x3650 M5 provides outstanding server virtualization performance and security.

Combining standardized hardware, software and server memory advancements, and tested to work with the built-in capabilities of Microsoft Hyper-V, this cloud solution is housed on the latest generation of Lenovo x3650 M5 server platform and is built to be fast, agile and resilient. The result is an ability to meet your cloud infrastructure needs without negatively impacting your IT organization.

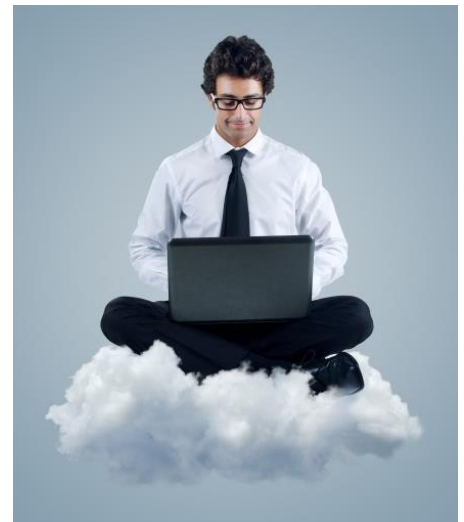
Reduce time to value

Whether you want to virtualize workloads, build a private cloud, scale your services through a public cloud, or combine all three, Microsoft's virtualization and management solutions, can help you better manage resources and offer IT as a service. The Lenovo Cloud Configuration for Microsoft Hyper-V on x3650 M5 provides the power to drive this virtualization environment

Server virtualization has enabled a new generation of datacenters with more efficiency and availability for your most demanding workloads. Microsoft Hyper-V cloud environments go beyond basic server virtualization capabilities, such as consolidating server hardware or creating comprehensive platforms for private and hybrid cloud. It also enables you to take advantage of a unified set of integrated management tools for your physical, virtual, and cloud environments with a single console view. This means your organization can achieve considerable cost savings and operational efficiencies by doing more with less.

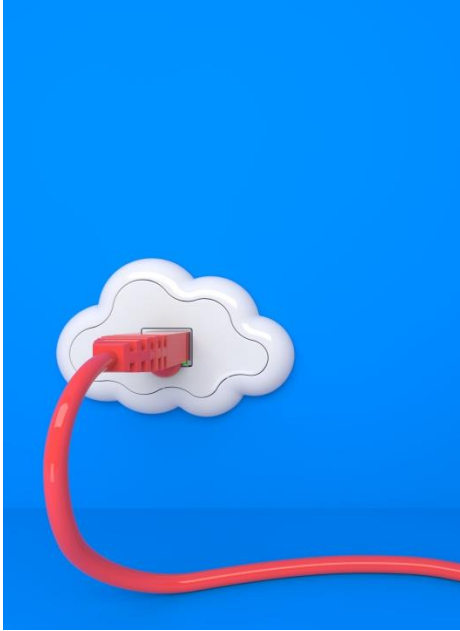
HIGHLIGHTS

- Cloud ready reference configuration on an industry proven platform
- Designed for cost effective performance and scale
- Fully isolated multitenant environment
- Reduced time to value



CONFIGURATION BRIEF

Lenovo Cloud Configuration for Microsoft Hyper-V on x3650 M5



Flexible system design

Faster virtualized server performance is certainly crucial to maintaining your competitive edge. But it is a business reality that you will undoubtedly require more performance capabilities next year than you do now. The Lenovo Cloud Configuration for Microsoft Hyper-V on x3650 M5 has the power and scalability to meet your current and future demands.

Combining balanced performance and flexibility, the System x3650 M5 is a great choice for small businesses, medium businesses and large enterprises. It can provide outstanding uptime to keep business-critical applications and cloud deployments running safely. Ease of use and comprehensive systems management tools help make deployment easier. Outstanding reliability, availability, and serviceability (RAS) and high-efficiency design improve your business environment and help save operational costs.

Fast. Agile. Resilient.

It is no secret your success depends on reliably supporting all your business applications. You must provide those capabilities without detrimentally impacting your system administrators or your bottom line. That makes your choice of server virtualization environment a crucial one indeed.

The Lenovo Cloud Configuration for Microsoft Hyper-V on x3650 M5 provides the speed, scalability and reliability you need. Featuring Lenovo System enterprise servers powered by Intel Xeon processors the solution's hardware has the performance to meet your needs and the dependability you can count on to reliably support the most critical of workloads. Microsoft Hyper-V takes advantage of that hardware to provide built-in, easy-to-administer virtualized performance that helps users increase productivity right from login.

Infrastructure management with Lenovo XClarity

Lenovo XClarity is a centralized resource management solution that enables administrators to deploy infrastructure faster and with less effort. The solution seamlessly integrates into Lenovo x3650 M5 rack server. XClarity provides automated discovery, monitoring, firmware updates and compliance, pattern-based configuration management, and deployment of operating systems and hypervisors to multiple systems.

Lenovo XClarity can help advance data center agility through an open approach to software defined environments. The solution features extensive Representational State Transfer (REST) application programming interfaces (APIs) that provide deep visibility and control over hardware resources from external, higher-level cloud orchestration and service management software tools. Developers can, for example, exploit the REST APIs to centrally orchestrate both the virtual and physical infrastructures to make cloud resources available to tenants faster. Developers can also leverage the APIs, along with Simple Network Management Protocol (SNMP) and Syslog forwarding, to integrate Lenovo XClarity into external, higher level service management software tools in order to apply industrialized IT management processes to physical infrastructure.

CONFIGURATION BRIEF

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Resilient enterprise platform

Virtualized speed and scalability are vital to maintaining a market edge. But because unanticipated or excessive system downtime can neutralize those performance and agility advantages, system dependability is equally important.

The Lenovo Cloud Configuration for Microsoft Hyper-V on x3650 M5 is built on the proven reliability of the Lenovo M5 server architecture. The M5 server platform enables you to choose from flexible storage options, thereby enabling you to configure the server for workload-optimized performance.



With the powerful, versatile 2U two-socket System x3650 M5 rack server, you can run even more enterprise workloads, 24/7, and gain faster business insights. Integrated with up to two Intel® Xeon® processors E5-2600 v4 series with up to 44 cores per system. With its fast TruDDR4 2400MHz Memory and massive storage capacity, the x3650 M5 fast forwards your business. You can select from an impressive array of storage configurations (up to 28 drive bays) that optimize a diverse set of workloads.

By integrating these RAS technologies into a comprehensive solution, the Lenovo Cloud Configuration for Microsoft Hyper-V on x3650 M5 helps you:

- Tackle enterprise workloads with power, efficiency and reliability
- Leverage the massive capacity (up to 120TB) to run storage-hungry workloads
- Reduce unplanned downtime and minimize costs
- Simplify server management with Lenovo XClarity
- Safeguard enterprise data with built-in Lenovo Trusted Platform Assurance, plus optional self-encrypting drives
- Gain superior performance with Intel Xeon E5-2600 v4 processors (up to 44 cores per server), end-to-end 12Gbps RAID support—devices and infrastructure—up to four RAID adapters, up to eight front-mounted NVMe PCIe SSDs and up to four GPUs
- Reduce data center costs with smart energy-efficient features, including extended operating temperature, 80 PLUS® Titanium power supplies (up to 96 percent efficiency), active/standby power supply modes, dual fan zone design, and TruDDR4 Memory (up to 45 percent lower energy use over DDR3), optional Lenovo XClarity Energy Manager
- Run more virtual machines and workloads with up to 22 percent more cores than previous generation



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Highly reliable and customizable virtualization environment with the Lenovo System x3650 M5 and Microsoft Hyper-V



Why Lenovo x3650 M5 Server for Microsoft Hyper-V Cloud

Lenovo offers a wide range of servers and options. The Lenovo Cloud Configuration for Microsoft Hyper-V on x3650 M5 brings together the right mix of technology and software. The x3650 M5 server packs numerous fault-tolerant and high-availability features into a highly flexible platform. The x3650 M5 server helps to optimize the performance and cost to support the network computing operations and simplify servicing that is needed in a 2U platform.

Why Lenovo

Lenovo is a leading provider of x86 servers for the data center. Featuring rack, tower, blade, dense and converged systems, the Lenovo server portfolio provides excellent performance, reliability and security. Lenovo also offers a full range of networking, storage, software, solutions, and comprehensive services supporting business needs throughout the IT lifecycle. With options for planning, deployment, and support, Lenovo offers expertise and services needed to deliver better service-level agreements and generate greater end-user satisfaction.

For More Information

To learn more about the Lenovo Cloud Configuration for Microsoft Hyper-V on x3650 M5, contact your Lenovo Business Partner or visit:

<http://shop.lenovo.com/us/en/systems/solutions/cloud/>



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