



Data Center Technical Sales Certification Exam Study Guide (DCP-302C)

Business Partner Edition

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Job Role Description

The **Lenovo Certified Enterprise Server Technical Sales Professional** works as a Lenovo internal or business partner technical seller, an IT architect, or a project/program engineer. This individual can identify and describe the features of Lenovo's server portfolio, and is able to apply their knowledge of Lenovo servers to meet customer needs. He or she can position/identify servers by their intended market and workload, and can use configuration tools to build basic tailored configurations. This individual must also be able to identify and describe concepts and technical aspects of Lenovo's storage and networking products, and apply their knowledge and experience to differentiate between products within the same family, and match basic stated requirements with the correct product. He or she can also utilize reference materials to address customer concerns.

Exam Information

- Number of questions 76
- Time allowed in minutes 105
- Passing score 65%
- Languages English

Recommended pre-requisite skills. This exam is intended for technical sellers with a minimum of one year experience supporting Lenovo servers, storage and networking products.

This exam includes products announced as of July 31, 2016. Any product announcements or withdrawals made after that date are not reflected in this exam.

Exam Objectives

Section 1 – Lenovo x86 Rack and Tower Server Product Knowledge and Positioning (28%)
Identify/differentiate features and technical characteristics of ThinkServer rack and tower servers
Identify/differentiate features and characteristics of System x one and two processor servers
Identify/differentiate features and characteristics of System X6 servers
Identify/differentiate features and characteristics of HX series Nutanix appliances
Identify/differentiate features and characteristics of licensed features
Given a scenario, propose a server solution to meet customer requirements
Section 2 – Lenovo Storage Product Knowledge and Positioning (17%)
Identify/differentiate features, technical characteristics and connectivity options of Lenovo Storage S Series and V Series storage systems
Identify/differentiate features and technical characteristics of Lenovo software defined storage offerings (DX8200N and DX8200C)
Identify/differentiate features and technical characteristics of Fibre Channel switches
Identify/differentiate features and characteristics of licensed features
Identify/differentiate features and characteristics of cabling options
Knowledge of SSIC/Lenovo Solutions Book
Given a scenario, propose a storage solution to meet customer requirements

Section 3 – Lenovo Networking Product Knowledge and Positioning (10%)
Identify/differentiate features, technical characteristics and connectivity options of top-of-rack switches
Identify/differentiate features, technical characteristics and connectivity options of FCoE/iSCSI protocols
Identify/differentiate features and characteristics of cabling options
Given a scenario, propose a networking solution to meet customer requirements
Section 4 – Flex System and NeXtScale (Dense Systems) Product Knowledge and Positioning (24%)
Identify/differentiate features, technical characteristics and connectivity options of Flex Systems (including chassis and compute nodes)
Identify/differentiate features, technical characteristics and connectivity options of NeXtScale (including chassis and nodes)
Identify/differentiate features and technical characteristics and connectivity options of n400/sd350
Identify/differentiate features, technical characteristics and connectivity options of Flex Switches
Identify and address migration opportunities from BladeCenter to Flex
Identify/differentiate features of expansion options
Identify/differentiate features and characteristics of licensed features
Given a scenario, propose a Flex System solution to meet customer requirements
Section 5 – Tools, Resources, Warranty and Support Options (11%)
Ability to use knowledge of reference architectures to match customer requirements to a solution
Know how to utilize pre-sales tools, support structure and resources to address customer needs
<ul style="list-style-type: none"> a. Identify/differentiate features and characteristics of cabling options b. Power configurator c. Sizing tools d. Configuration tools (PSAT, SSCT, LESC, TopSeller)
Identify warranty upgrades and support options available to customers
Recommend the correct RTCS or Lab Services to meet customer requirements
Use ServerProven, Interoperability Matrix, and SPORE to identify supported options
Section 6 – Systems Management (10%)
Describe XClarity including how and when a customer would use it
Describe IMM/TSM including how and when a customer would use it
Describe CMM including how and when a customer would use it
Describe Tools Center including how and when a customer would use it
Describe TDM including how and when a customer would use it

Recommended Training and Study Aids

Recommended training and resources are intended to help you gain knowledge related to the exam objectives. This information, while comprehensive, may not cover all questions on the exam, and completing training alone does not guarantee that you will pass the exam. Experience is a key component of preparation.

Business Partners can find online training on your region’s learning system (LenovoPartner.com or Lenovo Partner Network). Follow the links for Training and e-learning. Under the Roadmap tab you will find a roadmap that includes all the recommended training for the Data Center Technical Sales Certification Exam.

Reference materials can be downloaded as a single zip file [here](#). If you prefer to download individual documents they can be found at www.lenovo.com/systems in the Reference Library, or from [Lenovo](#)

Press. When reviewing reference materials focus on what will be tested as described in the test objectives. For example, if the objective refers to selecting the correct rack or tower server based on customer requirements then focus on features and positioning of rack and tower servers discussed in associated reference materials.

<input checked="" type="checkbox"/>	Server Products	Course Code	Resource Type	Study Tips
	Online Training			<ul style="list-style-type: none"> • Complete online training to learn basic information about the Lenovo server portfolio. • Know the basic facts for all servers such as memory, drives, and systems management. • Know the differences between servers, general product positioning within the server product portfolio, which servers are typically associated with which workloads, and typical expansion options. • Be able to identify the correct solution based on the customer's business needs and requirements.
	Features and Benefits: Entry Rack and Tower Servers	SXXW2100	15 minute online learning	
	Features and Benefits: Mainstream Rack and Tower Servers	SXXW2101	15 minute online learning	
	Features and Benefits: Performance Rack and Tower Servers	SXXW2102	15 minute online learning	
	Features and Benefits: x3850 X6 and x3950	SXXW2104	15 minute online learning	
	NeXtScale System Features and Benefits	SXXW2109	15 minute online learning	
	Features and Benefits: ThinkServer sd350 and ThinkServer n400	SXXW2110	15 minute online learning	
	Introduction to the Lenovo Flex Enterprise Chassis	LTU49488	12 minute online learning	
	Introduction to the Lenovo Flex Carrier-grade Chassis	LTU49489	10 minute online learning	
	Features and Benefits: Flex Systems x240 M5	SXXW2105	15 minute online learning	
	Features and Benefits: Flex Systems x480 X6 and x880 X6	SXXW2106	15 minute online learning	
	Features and Benefits: Lenovo Converged HX Series	SXSW2119	15 minute online learning	
	Reference Materials			
	Lenovo Server Portfolio		PDF document	
	Lenovo Server Positioning		PDF document	
	Lenovo Server Operating System Interoperability Guide		PDF document	
	Server Product Guides (All servers including Flex Systems, Flex Chassis, and NeXtScale)	lenovopress.com	Search for individual product guides by server or model	
	Lenovo Flex System Products and Technology		PDF document	
	Storage Products			
	Online Training			<ul style="list-style-type: none"> • Complete online training to learn basic information about Lenovo storage products. • Know the basic facts for all storage systems such as
	Lenovo Storage S2200, S3200 Features and Benefits	LTU49498	15 minute online learning	

	Lenovo 3700 V2 Features and Benefits	SXSW2156	15 minute online learning	<p>capacity, expansion, host connectivity, RAID levels, licensed features, and management.</p> <ul style="list-style-type: none"> • Know the differences between storage systems, general product positioning within the portfolio. • Be able to identify the correct storage solution based on the customer's business needs and requirements.
	Features and Benefits: V5030	SXSW2157	15 minute online learning	
	Features and Benefits: DX8200N Powered by NexentaStor	SXSW2155	15 minute online learning	
	Features and Benefits: DX8200C Powered by Cloudian	SXSW2158	15 minute online learning	
	Reference Materials			
	S2200/S3200 Product Guides	lenovopress.com	Search for product guide by model	
	Lenovo Storage V3700 V2 and V3700 V2 XP Product Guide	lenovopress.com	PDF document	
	Networking Products			
	Online Training			<ul style="list-style-type: none"> • Complete online training to learn the basics of Lenovo networking products. • Know the basic characteristics of all networking products including top-of-rack, converged and embedded switched such as number and type of ports, connectivity, and features. • Know the differences between networking products, target audience and general positioning within the portfolio. • Be able to identify the correct networking product based on the customer's business needs and requirements.
	RackSwitch G7028 and G7052 Product Overview and Positioning	LTU47841	12 minute online learning	
	RackSwitch G8052 Product Overview	LTU47742	15 minute online learning	
	RackSwitch G8124E Product Overview	LTU47743	12 minute online learning	
	RackSwitch G8264 Product Overview	LTU47744	15 minute online learning	
	RackSwitch G8332 Product Overview	LTU47748	14 minute online learning	
	RackSwitch G8272 Product Overview	LTU47980	16 minute online learning	
	RackSwitch G8296 Product Overview	LTU48280	15 minute online learning	
	Flex System Networking Family Overview	LTU48898	17 minute online learning	
	Introducing Lenovo Flex System IO Whiteboard	LTU48217	7 minute online learning	
	Flex System S14091 Product Overview	LTU48899	13 minute online learning	
	Flex System S14093 Product Overview	LTU48911	15 minute online learning	
	Flex System EN4093R Product Overview	LTU48910	14 minute online learning	
	Flex System CN4093 Product Overview	LTU49060	11 minute online learning	
	Flex System EN2092 Product Overview	LTU49061	10 minute online learning	
	Flex System Interconnect Fabric	LTU48848	13 minute online learning	
	Brocade Fibre Channel SAN Switch Family (300, 6505 and 6510) Technical Launch Overview	LTU49397	60 minute online training	

	Reference Materials			
	RackSwitch Product Guides	lenovopress.com	Search for individual product guides by model	
	Flex System Switch and Module Product Guides	lenovopress.com	Search for individual product guides by model	
	Brocade 6505 and 6510 FC SAN Switches for Lenovo		PDF document	
Systems Management				
	Online Training			<ul style="list-style-type: none"> • It is not necessary to know how to use systems management tools, but knowing when each one would be used is very important. • Know which system management tool is associated with which server, and the major functions and uses of each tool.
	Lenovo XClarity Features and Benefits	SXXW2108	15 minute online learning	
	Reference Materials			
	Lenovo XClarity Administrator Product Guide		PDF document	
	IMM and IMM2 Support on System x and BladeCenter Servers		PDF document	
	Lenovo Flex System Products and Technology		PDF document	
Tools, Resources, Warranty Support Options				
	Resource Materials			<ul style="list-style-type: none"> • It is not necessary to know how to use tools and configurators, but knowing when each one would be used is very important. • Know which configuration or reference tool is associated with which server. • Know the major functions and uses of each tool or resource.
	Pre-Sales Advisor Tool (PSAT)		Link to PSAT tool	
	Standalone Solutions Configuration Tool (SSCT)			
	System x and Cluster Solutions configurator (x-config)		Link to x-config tool	
	ServerProven		Link to ServerProven information	
	xREF		Link to System x Reference	
	3D Virtual Tours		Link to 3D Product Catalog	
	UpdateXpress		Link to UpdateXpress	
	ToolsCenter for Lenovo x86 Servers		Link to ToolsCenter, including information on several additional important tools and resources	
	Lenovo Server Operating System Interoperability Guide		PDF document	
	Flex System Interoperability Guide		PDF document	

Sample Questions

Sample questions provide a quick look at the type of questions presented on the certification exam.

1. What benefit is offered by rack servers when compared with tower servers?
 - a. Rack servers consume less power.
 - b. Rack servers are identified with a rack unit number (U) and Light Path Diagnostics.
 - c. Rack servers mount into a rack cabinet, which densely populates multiple servers into a small space.
 - d. Rack servers support advanced management and PDU management.

2. A customer purchased a Lenovo S3200 dual controller storage solution, with two expansion enclosures with a mix of 10K SAS HDD, 7.2K NL-SAS and SSD (SAS) drives. In order to achieve increased performance (higher IOPS), which licensed feature can be purchased?
 - a. Turbo Performance
 - b. SSD Data Tiering Upgrade
 - c. Easy Tier Upgrade
 - d. S3200 1024 Snapshot Upgrade

3. Which two features are present in the RackSwitch G8296? (Select two.)
 - a. 1U form factor
 - b. 2U form factor
 - c. two InfiniBand ports
 - d. ten 40 Gb QSFP ports
 - e. ninety-six 40 Gb QSFP ports

4. A customer has a Flex System with two EN4093R switches installed. Both 40 Gb ports are utilized and there are four Flex System x240 M5 blades. Each blade has one CN4058S with six ports active. The EN4093R base switch has 24 licensed ports. Assuming the customer is using Flexible Port Mapping, how many ports are still available per switch before an upgrade license needs to be applied to the EN4093R switches?
 - a. 0
 - b. 2
 - c. 4
 - d. 6

5. Which statement is true regarding the Lenovo XClarity Administrator?
 - a. It is a Virtual Appliance that does not require a dedicated Flex node.
 - b. It is an Upward Integration module that requires a dedicated Flex node.
 - c. It is a Hypervisor that does not require a dedicated Flex node.
 - d. It is software appliance that requires a dedicated Flex node.

Answers

1. C
2. B
3. B D
4. C
5. A

Online Practice Exam

The online practice exam includes 70 questions of similar content and difficulty as questions on the certification exam. Passing the practice exam does not result in certification. However, taking the practice exam can help you determine whether or not you are ready to sit for the certification exam, or help identify areas where additional study may be needed.

To schedule a practice exam go to www.webassessor.com/lenovo Log in to your Webassessor account, and select Register for an Exam from the menu bar. Practice exams are unproctored and can be taken immediately after scheduling.

Take your first practice exam free! Lenovo is currently waiving the US\$10 test fee for your first practice exam. When scheduling your exam enter coupon code DCP302P100 on the payment screen. This coupon is valid for one attempt only. Any subsequent attempts are subject to the US\$10 test fee.

Register for the Certification Exam

Certification exams can be taken at a Kryterion Testing Network (KTN) center, or online using Kryterion's Online Proctored service (OLP). OLP allows you to take your exam at a time and location that is convenient to you, such as in the evening at home. An online proctor monitors your testing session through your web camera, maintaining a testing environment similar to being in a test center. A stable internet connection and a web camera are required. Lenovo allows the use of internal (built-in) and external (cable-connected) web cameras for OLP testing.

Register for your certification exam at www.webassessor.com/lenovo At the time of registration you will select the KTN site for your exam, or the OLP option. Payment is made by credit card, voucher or coupon at the time of registration.

Cancellation/Reschedule and Refund Policy

If you registered for an exam at a Kryterion Testing Network (KTN) center, you can cancel or reschedule your exam **up to 72 hours** before your scheduled exam time. To reschedule, log in to your Webassessor account, click on the details of your scheduled exam, and select the option to reschedule or cancel your exam.

If you registered to take a Kryterion Online Proctored (OLP) exam, you can reschedule your exam **up to 24 hours** before your scheduled exam time. To reschedule, log in to your account, click on the details of your scheduled exam, and select the option to reschedule or cancel your exam.

You will not be refunded any portion of your exam fee, or any portion of the value of a coupon or voucher, if you do not cancel or reschedule before the deadline for your exam, or if you miss your exam appointment.

Retake Policy

Certification (proctored) exams. There is no waiting period to retake a proctored exam a second time. However, if you do not pass on your second attempt there is a 30-day waiting period before attempting the exam a third and each subsequent time. The full published fee must be paid for all retake exams.

Practice (unproctored) exams. There is no waiting period to retake an unproctored exam. There is no discount for retake exams; the full published fee applies.

Contact Us

Contact the Lenovo Certification Program team at LenovoCerts@lenovo.com with questions or feedback.