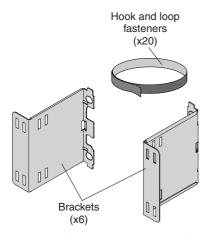


# Cable-Management Bracket for Non-IBM Racks

In this document "IBM racks" includes rack models formerly made by IBM and now made by Lenovo. "Non-IBM racks" denotes racks made by other manufacturers.

The Lenovo Cable-Management Bracket for Non-IBM Racks contains the following items.

Note: The illustrations in this document might differ slightly from your hardware.



- Six cable-management brackets for non-IBM racks
- · Twenty hook and loop fastener strips
- · This document

Store this document with your other product documentation for future reference.

For more information about the rack and NeXtScale n1200 Enclosure, see the documentation that comes with those devices.

IBM maintains pages on the World Wide Web where you can get the latest technical information and download updates. To access these pages, go to http://www.ibm.com/supportportal/ and follow the instructions.

# **Safety information**

#### Statement 4:





#### **DANGER**

Electrical current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- Connect all power cords to a properly wired and grounded electrical outlet.
- · Connect to properly wired outlets any equipment that will be attached to this product.
- When possible, use one hand only to connect or disconnect signal cables.
- · Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following table when installing, moving, or opening covers on this product or attached devices.

#### To Connect:

- 1. Turn everything OFF.
- 2. First, attach all cables to devices.
- 3. Attach signal cables to connectors.
- 4. Attach power cords to outlet.
- 5. Turn device ON.

#### To Disconnect:

- 1. Turn everything OFF.
- 2. First, remove power cords from outlet.
- 3. Remove signal cables from connectors.
- 4. Remove all cables from devices.

#### Statement 12:







#### CAUTION:

See the instructions in the rack documentation before you install devices, remove devices, or relocate the rack.

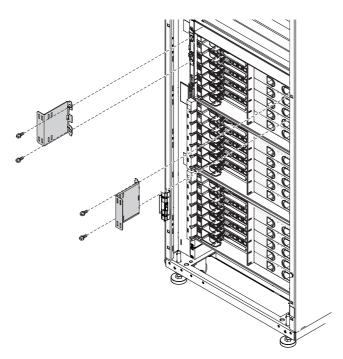
# Installing the cable-management brackets for non-IBM racks

The cable-management brackets help you route and organize cables in the rack. You will need two brackets for each Lenovo NeXtScale n1200 Enclosure in a rack.

**Note:** Depending on your rack model, you might have to remove the rack front door to use the cable-management brackets.

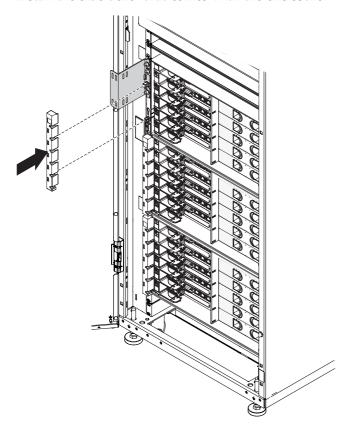
To install the cable-management brackets for non-IBM racks, complete the following steps:

- 1. Install the NeXtScale n1200 Enclosure by using the documentation that comes with the enclosure. Do not secure the enclosure to the rack with the screws until later in this procedure.
- 2. Orient one cable-management bracket for the front left side of the rack, as shown in the following illustration. Then, align the holes in the bracket with the holes on the left side of the enclosure.



3. Use two screws that come with the enclosure to secure the cable-management bracket to the enclosure and to the rack.

4. Install the side bezel that comes with the enclosure.



5. Repeat step 2 on page 3 through step 4 to install the other cable-management brackets and side bezels.

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Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

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## Important notes

Processor speed indicates the internal clock speed of the microprocessor; other factors also affect application performance.

CD or DVD drive speed is the variable read rate. Actual speeds vary and are often less than the possible maximum.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for 1 024 bytes, MB stands for 1 048 576 bytes, and GB stands for 1 073 741 824 bytes.

When referring to hard disk drive capacity or communications volume, MB stands for 1 000 000 bytes, and GB stands for 1 000 000 000 bytes. Total user-accessible capacity can vary depending on operating environments.

Maximum internal hard disk drive capacities assume the replacement of any standard hard disk drives and population of all hard-disk-drive bays with the largest currently supported drives that are available from Lenovo.

Maximum memory might require replacement of the standard memory with an optional memory module.

Each solid-state memory cell has an intrinsic, finite number of write cycles that the cell can incur. Therefore, a solid-state device has a maximum number of write cycles that it can be subjected to, expressed as total bytes written (TBW). A device that has exceeded this limit might fail to respond to system-generated commands or might be incapable of being written to. Lenovo is not responsible for replacement of a device that has exceeded its maximum guaranteed number of program/erase cycles, as documented in the Official Published Specifications for the device.

Lenovo makes no representations or warranties with respect to non-Lenovo products. Support (if any) for the non-Lenovo products is provided by the third party, not Lenovo.

Some software might differ from its retail version (if available) and might not include user manuals or all program functionality.

#### Particulate contamination

**Attention:** Airborne particulates (including metal flakes or particles) and reactive gases acting alone or in combination with other environmental factors such as humidity or temperature might pose a risk to the device that is described in this document.

Risks that are posed by the presence of excessive particulate levels or concentrations of harmful gases include damage that might cause the device to malfunction or cease functioning altogether. This specification sets forth limits for particulates and gases that are intended to avoid such damage. The limits must not be viewed or used as definitive limits, because numerous other factors, such as temperature or moisture content of the air, can influence the impact of particulates or environmental corrosives and gaseous contaminant transfer. In the absence of specific limits that are set forth in this document, you must implement practices that maintain particulate and gas levels that are consistent with the protection of human health and safety. If Lenovo determines that the levels of particulates or gases in your environment have caused damage to the device, Lenovo may condition provision of repair or replacement of devices or parts on implementation of appropriate remedial measures to mitigate such environmental contamination. Implementation of such remedial measures is a customer responsibility.

Table 1. Limits for particulates and gases

Contaminant	Limits
Particulate	<ul> <li>The room air must be continuously filtered with 40% atmospheric dust spot efficiency (MERV 9) according to ASHRAE Standard 52.2¹.</li> <li>Air that enters a data center must be filtered to 99.97% efficiency or greater, using high-efficiency particulate air (HEPA) filters that meet MIL-STD-282.</li> <li>The deliquescent relative humidity of the particulate contamination must be more than 60%².</li> <li>The room must be free of conductive contamination such as zinc whiskers.</li> </ul>
Gaseous	<ul> <li>Copper: Class G1 as per ANSI/ISA 71.04-1985<sup>3</sup></li> <li>Silver: Corrosion rate of less than 300 Å in 30 days</li> </ul>

<sup>&</sup>lt;sup>1</sup> ASHRAE 52.2-2008 - *Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size.* Atlanta: American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

# **Telecommunication regulatory statement**

This product may not be certified in your country for connection by any means whatsoever to interfaces of public telecommunications networks. Further certification may be required by law prior to making any such connection. Contact a Lenovo representative or reseller for any questions.

#### **Electronic emission notices**

When you attach a monitor to the equipment, you must use the designated monitor cable and any interference suppression devices that are supplied with the monitor.

# Federal Communications Commission (FCC) statement

**Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Lenovo is not responsible for any radio or television interference caused by using other than

<sup>&</sup>lt;sup>2</sup> The deliquescent relative humidity of particulate contamination is the relative humidity at which the dust absorbs enough water to become wet and promote ionic conduction.

<sup>&</sup>lt;sup>3</sup> ANSI/ISA-71.04-1985. *Environmental conditions for process measurement and control systems: Airborne contaminants*. Instrument Society of America, Research Triangle Park, North Carolina, U.S.A.

recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that might cause undesired operation.

## **Industry Canada Class A emission compliance statement**

This Class A digital apparatus complies with Canadian ICES-003.

## Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

## **Australia and New Zealand Class A statement**

**Attention:** This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

## **European Union EMC Directive conformance statement**

This product is in conformity with the protection requirements of EU Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility. Lenovo cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the installation of option cards from other manufacturers.

This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to European Standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.

Lenovo, Einsteinova 21, 851 01 Bratislava, Slovakia

# **Germany Class A statement**

Deutschsprachiger EU Hinweis: Hinweis für Geräte der Klasse A EU-Richtlinie zur Elektromagnetischen Verträglichkeit

Deutschsprachiger EU Hinweis:

Hinweis für Geräte der Klasse A EU-Richtlinie zur Elektromagnetischen Verträglichkeit

Dieses Produkt entspricht den Schutzanforderungen der EU-Richtlinie 2004/108/EG (früher 89/336/EWG) zur Angleichung der Rechtsvorschriften über die elektromagnetische Verträglichkeit in den EU-Mitgliedsstaaten und hält die Grenzwerte der EN 55022 Klasse A ein.

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#### Deutschland:

Einhaltung des Gesetzes über die elektromagnetische Verträglichkeit von Betriebsmittein Dieses Produkt entspricht dem "Gesetz über die elektromagnetische Verträglichkeit von Betriebsmitteln" EMVG (früher "Gesetz über die elektromagnetische Verträglichkeit von Geräten"). Dies ist die Umsetzung der EU-Richtlinie 2004/108/EG (früher 89/336/EWG) in der Bundesrepublik Deutschland.

Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Betriebsmitteln, EMVG vom 20. Juli 2007 (früher Gesetz über die elektromagnetische Verträglichkeit von Geräten), bzw. der EMV EG Richtlinie 2004/108/EC (früher 89/336/EWG), für Geräte der Klasse A.

Dieses Gerät ist berechtigt, in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen. Verantwortlich für die Konformitätserklärung nach Paragraf 5 des EMVG ist die Lenovo (Deutschland) GmbH, Gropiusplatz 10, D-70563 Stuttgart.

Informationen in Hinsicht EMVG Paragraf 4 Abs. (1) 4: Das Gerät erfüllt die Schutzanforderungen nach EN 55024 und EN 55022 Klasse A.

Nach der EN 55022: "Dies ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funkstörungen verursachen; in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen durchzuführen und dafür aufzukommen."

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This is a Class A product based on the standard of the Voluntary Control Council for Interference (VCCI). If this equipment is used in a domestic environment, radio interference may occur, in which case the user may be required to take corrective actions.

# Japan Electronics and Information Technology Industries Association (JEITA) statement

#### 高調波ガイドライン準用品

Japanese Electronics and Information Technology Industries Association (JEITA) Confirmed Harmonics Guideline with Modifications (products greater than 20 A per phase)

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## People's Republic of China Class A electronic emission statement

中华人民共和国"A类"警告声明

声 明

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