

IBM Netfinity NetBAY3

Installation Instructions



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Note

Before using this information and the product it supports, be sure to read the general information under Appendix B, "Product Warranties and Notices" on page 14.

First Edition (March 1998)

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Safety Information

Before installing this product, read the Safety Information book.

Antes de instalar este produto, leia o Manual de Informações sobre Segurança.

安装本产品前请先阅读《安全信息》手册。

Prije instalacije ovog proizvoda pročitajte priručnik sa sigurnosnim uputama.

Pred instaláci tohto produktu si p e t e p íru ku bezpe nostních instrukcí.

Læs hæftet med sikkerhedsforskrifter, før du installerer dette produkt.

Lue Safety Information -kirjanen, ennen kuin asennat tämän tuotteen.

Avant de procéder à l'installation de ce produit, lisez le manuel Safety Information.

Vor Beginn der Installation die Broschüre mit Sicherheitshinweisen lesen.

Πριν εγκαταστήσετε αυτό το προϊόν, διαβάστε το εγχειρίδιο Safety Information.

Installálás el tt olvassa el a Biztonsági el írások kézikönyvét !

Prima di installare questo prodotto, leggere l'opuscolo contenente le informazioni sulla sicurezza.

本製品を導入する前に、安全情報資料を御読みください。

이 제품을 설치하기 전에, 안전 정보 책자를 읽어보십시오.

Пред да го инсталирате овој производ прочитајте ја книгата со безбедносни информации.

Lees voordat u dit product installeert eerst het boekje met veiligheidsvoorschriften.

Les heftet om sikkerhetsinformasjon (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu należy przeczytać broszurę Informacje Dotyczące Bezpieczeństwa.

Antes de instalar este produto, leia o folheto Informações sobre Segurança.

Перед установкой продукта прочтите брошюру по технике безопасности (Safety Information).

Pred inštaláciou tohto produktu si pre ítajte Informa nú brožúrku o bezpe nosti.

Preden namestiti ta izdelek, preberite knjižico Varnostne informacije.

Antes de instalar este producto, lea la Información de Seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

在安裝本產品之前，也請先閱讀「安全性資訊」小冊子。

Introduction

The IBM Netfinity NetBAY3 enclosure provides a convenient cabinet with a 3-U high storage capacity for the installation of computer devices. Vertical measurements are given in rack units (U). One U is equal to 4.45 cm (1.75 in.).

Up to three NetBAY3 enclosures can be installed under certain IBM Netfinity servers. The maximum server weight is 77 kg (170 lb). Devices such as an IBM Netfinity EXP10, an American Power Conversion (APC) uninterruptible power supply (UPS), or various telecommunication devices can be installed in NetBAY3 enclosures.

The NetBAY3 enclosure option contains the following items:

- One NetBAY3 enclosure
- One front bezel
- Four M5 nuts (for attaching a server or stacking a NetBAY3 enclosure)
- Six M6 screws (for installing devices in the NetBAY3 enclosure)
- Six cage nuts (for installing devices in the NetBAY3 enclosure)
- *IBM NetBAY3 Enclosure Installation Instructions* (this book)

Before you begin, read through these instructions to familiarize yourself with the installation procedures.

Note: The illustrations in this book might be slightly different from your hardware.

Installation Requirements

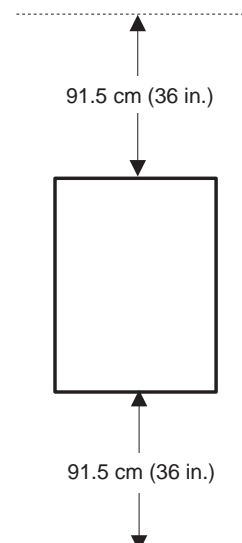
You need the following tools to install the NetBAY3 enclosure:

- A medium flat-blade screwdriver
- An 8-mm open-end or box wrench
- An 8-mm nut driver

Service and Cooling Clearances

The NetBAY3 enclosure requires a minimum service clearance of 91.5 cm (36 in.) in the front and rear. The NetBAY3 enclosure service clearance on the side is determined by the server you install on the NetBAY3 enclosure. Refer to the server documentation for the side service clearance.

The NetBAY3 enclosure requires a minimum cooling clearance of 15 cm (6 in.) on all sides. The server or device you install with the NetBAY3 enclosure might require a greater cooling clearance. Refer to the server or device documentation for the required cooling clearance.



Installing the NetBAY3 Enclosure

When you install the NetBAY3 enclosure, perform the steps in the following order. Detailed instructions are in the following sections.

1. If you are going to install the server casters, or the optional caster set, remove the skid pads from the bottom NetBAY3 enclosure, then install the casters on the bottom NetBAY3 enclosure.
2. Install the device in the bottom NetBAY3 enclosure. (It is easier to install the device in the NetBAY3 enclosure before you add another NetBAY3 enclosure or attach the server.)
3. Attach any additional NetBAY3 enclosures (you can stack up to three NetBAY3 enclosures).
 - a. Remove the skid pads from the additional NetBAY3 enclosures.

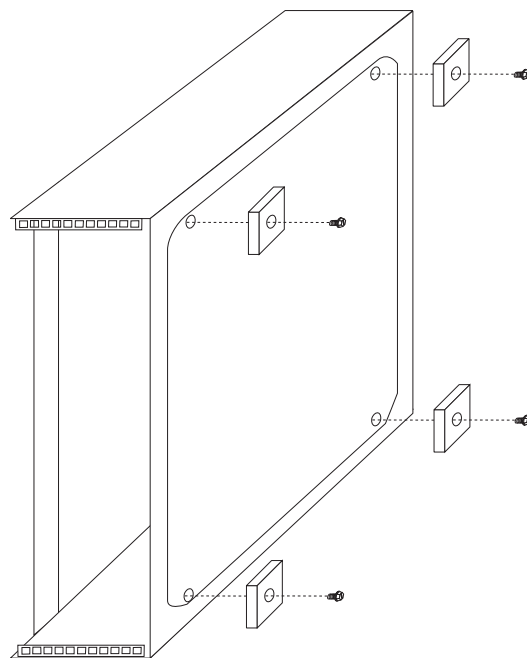
Note: If you are stacking a NetBAY3 enclosure on top of another NetBAY3 enclosure, you must attach them together *before* you install any device in the upper enclosure.
 - b. Attach the second NetBAY3 enclosure to the bottom NetBAY3 enclosure.
 - c. Install the device in the second NetBAY3 enclosure.
 - d. Attach the third NetBAY3 enclosure to the second NetBAY3 enclosure.
 - e. Install the device in the third NetBAY3 enclosure.
4. Attach the server.

Installing Casters on the NetBAY3 Enclosure

To install the server casters or the optional caster set, you must first remove the skid pads from the NetBAY3 enclosure.

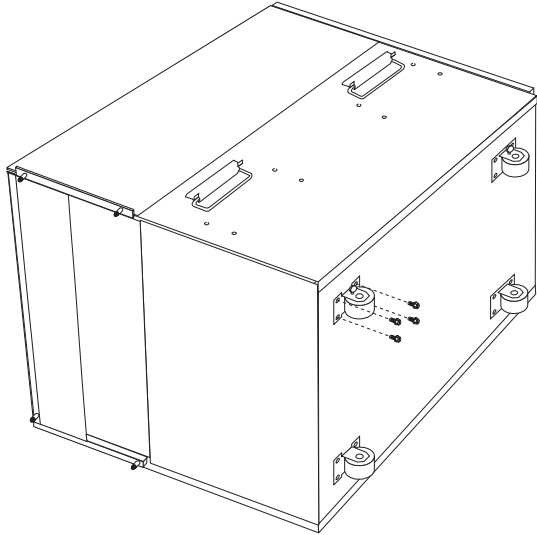
Removing the Skid Pads

1. Turn the NetBAY3 enclosure on its side.
2. Remove the four screws and skid pads as shown below.



Installing the Casters

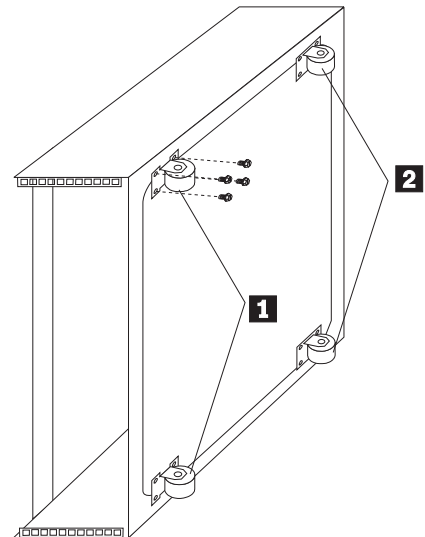
1. If you have a server with casters, remove them.
 - a. Turn the server power off and remove all cables and connectors from the server.
 - b. Depending on your server, you might have to remove the front door and side covers.
 - c. Turn the server on its side.
 - d. Unscrew the four screws holding each caster in place and remove the casters.



2. Turn the NetBAY3 enclosure on its side.
3. Using the 16 screws and four casters from the server or the optional caster set, install the casters.

- Attach the two fixed casters **1** at the front (open end) of the NetBAY3 enclosure.
- Attach the two swivel casters **2** at the rear (covered panel end) of the NetBAY3 enclosure.

Note: Make sure the caster locks face the outside of the NetBAY3 enclosure.



After installing the casters, do one of the following:

- Install a device in the NetBAY3 enclosure. (Go to “Installing Devices in the NetBAY3 Enclosure” on page 4.)
- Stack another NetBAY3 enclosure. (Go to “Installing Multiple NetBAY3 Enclosures” on page 9.)
- Attach a server. (Go to “Installing the Server” on page 10.)

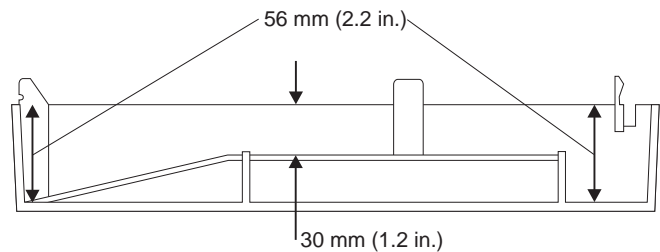
Installing Devices in the NetBAY3 Enclosure

You can install three types of devices in the NetBAY3 enclosure:

- Devices, such as the IBM EXP10, that sit on side rails
- Cantilevered devices, such as a power distribution unit (PDU), that are screwed to the front or rear of the NetBAY3 enclosure
- Devices that sit on the NetBAY3 enclosure base plate

Important:

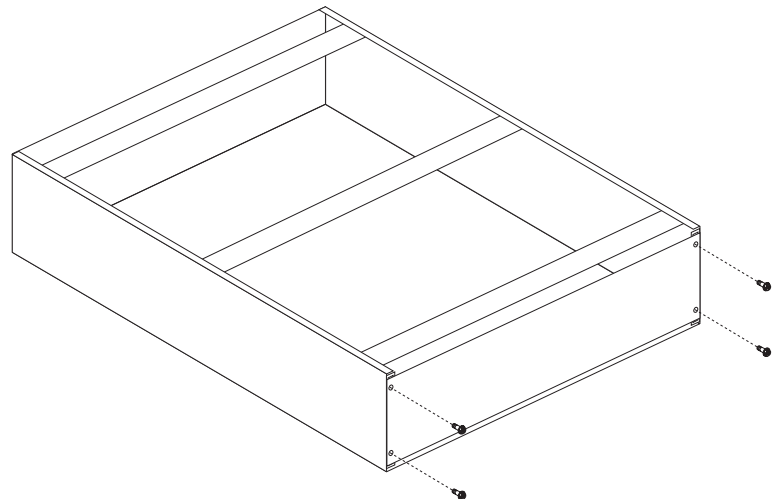
1. Always install the heaviest device in the bottom NetBAY3 enclosure, the next heaviest device in the second NetBAY3 enclosure, and the lightest device in the top NetBAY3 enclosure.
2. To allow the NetBAY3 enclosure front bezel to close, devices with handles must not protrude out more than 56 mm (2.2 in.). This figure of the front bezel top-view cross section shows the clearances.
3. All device cables must exit from the rear of the NetBAY3 enclosure.



Removing the Rear Panel

Note: Do not remove the rear panel if you are not installing a device in the NetBAY3 enclosure.

1. Remove the NetBAY3 enclosure rear panel.
 - a. Remove the four screws.
 - b. Lift the rear panel off.



2. After you remove the rear panel, do one of the following:
 - Install a device on rails in the NetBAY3 enclosure. (Go to “Installing Devices on Side Rails” on page 5.)
 - Install a cantilevered device in the NetBAY3 enclosure. (Go to “Installing Cantilevered Devices” on page 7.)
 - Install a device on the NetBAY3 enclosure base plate. (Go to “Installing Devices on the NetBAY3 Enclosure Base Plate” on page 8.)

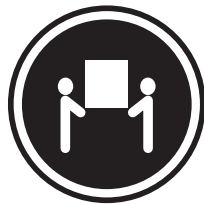
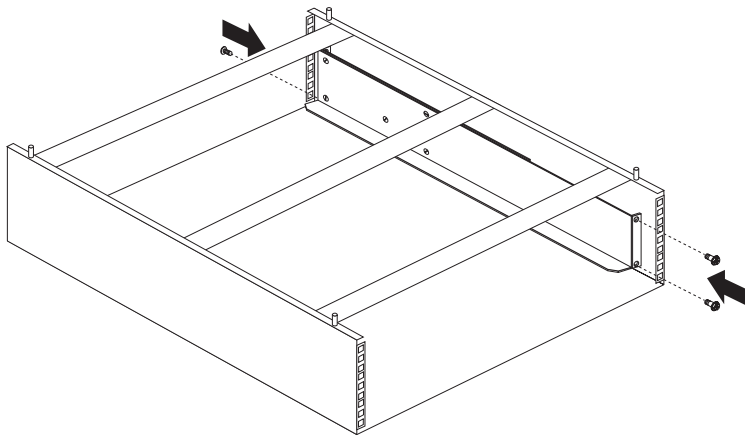
Installing Devices on Side Rails

Installing devices that sit on side rails in a NetBAY3 enclosure is similar to installing these devices in a rack enclosure. The device side rails must be screwed to the NetBAY3 enclosure vertical mounting rails.

Turn the device power off and remove all cables and connectors from the device. Follow the instructions in the documentation that comes with the device and use the following figures as a guide.

If you need to install cage nuts at the front of the NetBAY3 enclosure to hold the rails, go to “Installing Cage Nuts” on page 6.

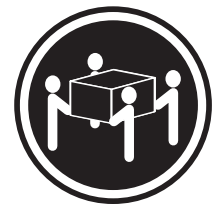
If you need to remove or move the cage nuts at the rear of the NetBAY3 enclosure to hold the rails, go to “Removing Cage Nuts” on page 6.



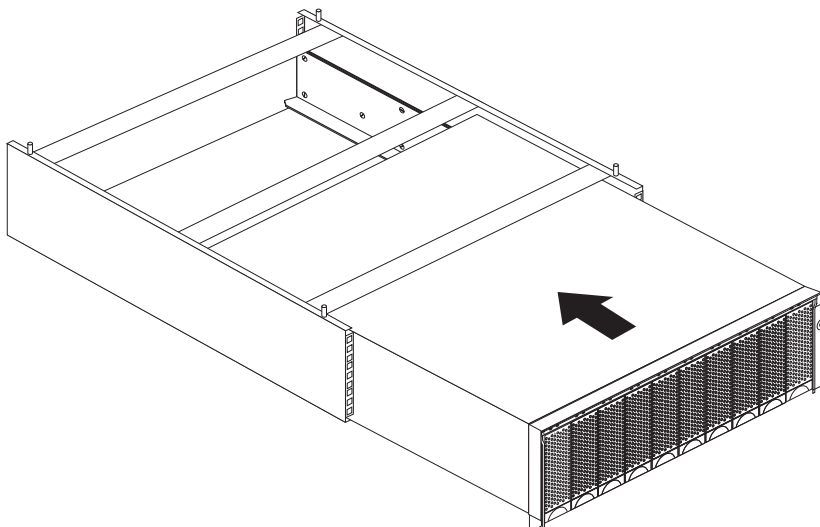
≥ 18 kg (39.7 lbs)



≥ 32 kg (70.5 lbs)



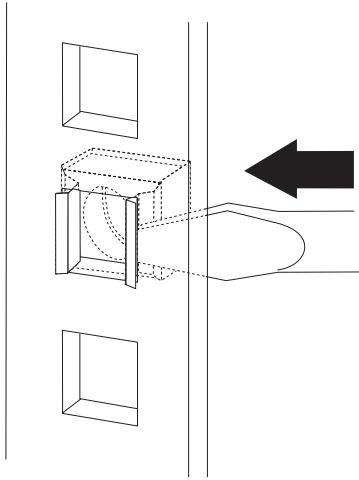
≥ 55 kg (121.2 lbs)



Removing Cage Nuts

Device installation might require the removal of the rear-panel cage nuts.

1. Hold the cage nut in place and compress the cage-nut clip with a flat screwdriver blade.



2. With the cage nut-clip compressed, push the cage nut-clip out of the square hole.
3. Release the screwdriver pressure on the clip. The cage nut is now loose and can be removed from the square hole.

Installing Cage Nuts

Six cage nuts come with the NetBAY3 enclosure option. Install the cage nuts on the NetBAY3 enclosure mounting rails as shown in the previous figure.

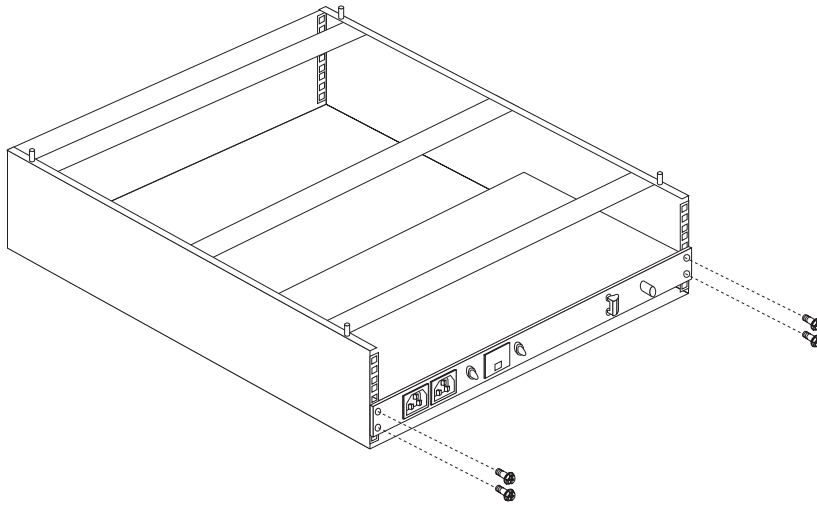
The nuts go toward the inside of the NetBAY3 enclosure. Make sure you install all the cage nuts at the same level on the NetBAY3 enclosure mounting rails.

1. Hook one side of the cage-nut clip into the rack-mounting-rail square hole.
2. Hold the cage nut in place and compress the cage-nut clip with a flat screwdriver blade.
3. With the cage-nut clip compressed, push the cage-nut clip into the square hole.
4. Release the screwdriver pressure on the clip. The cage nut is now locked in the square hole.

Installing Cantilevered Devices

Installing cantilevered devices in a NetBAY3 enclosure is similar to installing these devices in a rack enclosure. Cantilevered devices can be installed in the front or rear of the NetBAY3 enclosure. The devices must be screwed to the NetBAY3 enclosure vertical mounting rails.

Turn the device power off and remove all cables and connectors from the device. Follow the instructions in the documentation that comes with the device and use the following figure as a guide.



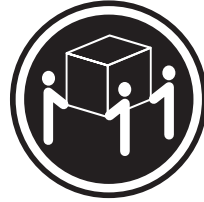
If you need to install cage nuts to screw the cantilevered device to the NetBAY3 enclosure vertical mounting rails, refer to “Installing Cage Nuts” on page 6.

Installing Devices on the NetBAY3 Enclosure Base Plate

Some devices rest on the NetBAY3 enclosure base plate. These devices must be screwed to the NetBAY3 enclosure vertical mounting rails.



≥ 18 kg (39.7 lbs)

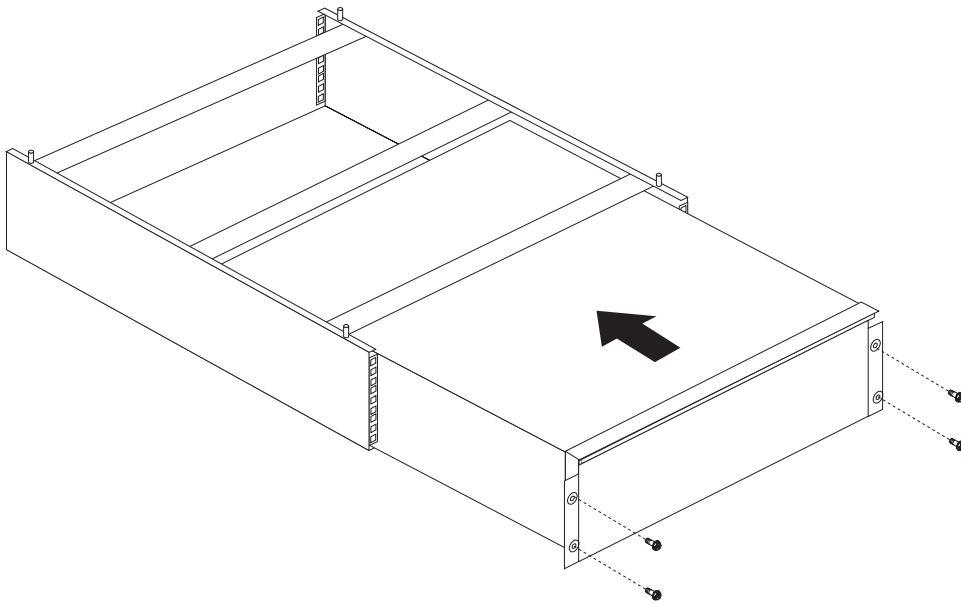


≥ 32 kg (70.5 lbs)



≥ 55 kg (121.2 lbs)

Turn the device power off and remove all cables and connectors from the device. Follow the instructions in the documentation that comes with the device.

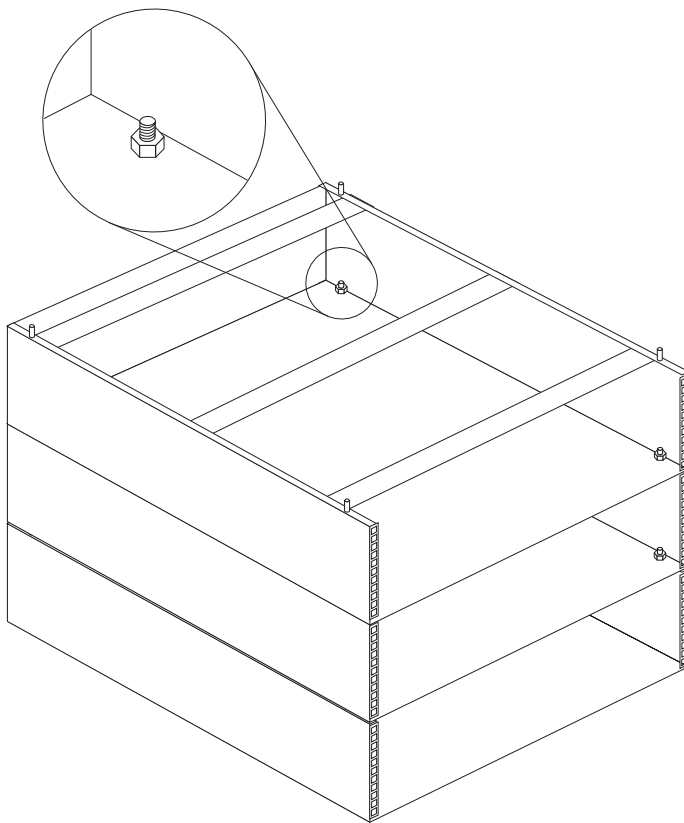


Installing Multiple NetBAY3 Enclosures

You can attach up to three NetBAY3 enclosures. Attach NetBAY3 enclosures in the following order.

1. Install the casters on the bottom NetBAY3 enclosure (if using the server casters or the optional caster kit). See “Removing the Skid Pads” on page 2 and “Installing the Casters” on page 3.
2. Install the device in the bottom NetBAY3 enclosure. See “Installing Devices in the NetBAY3 Enclosure” on page 4.
3. Remove the skid pads from the second NetBAY3 enclosure. Place the second NetBAY3 enclosure on top of the bottom NetBAY3 enclosure. Install and tighten the four M5 nuts that come with the NetBAY3 enclosure.
4. Install the device in the second NetBAY3 enclosure.
5. Remove the skid pads from the third NetBAY3 enclosure. Place the third NetBAY3 enclosure on top of the second NetBAY3 enclosure. Install and tighten the four M5 nuts that come with the NetBAY3 enclosure.
6. Install the device in the third NetBAY3 enclosure.

Note: The figure below shows empty NetBAY3 enclosures, to clearly show the attachment method.

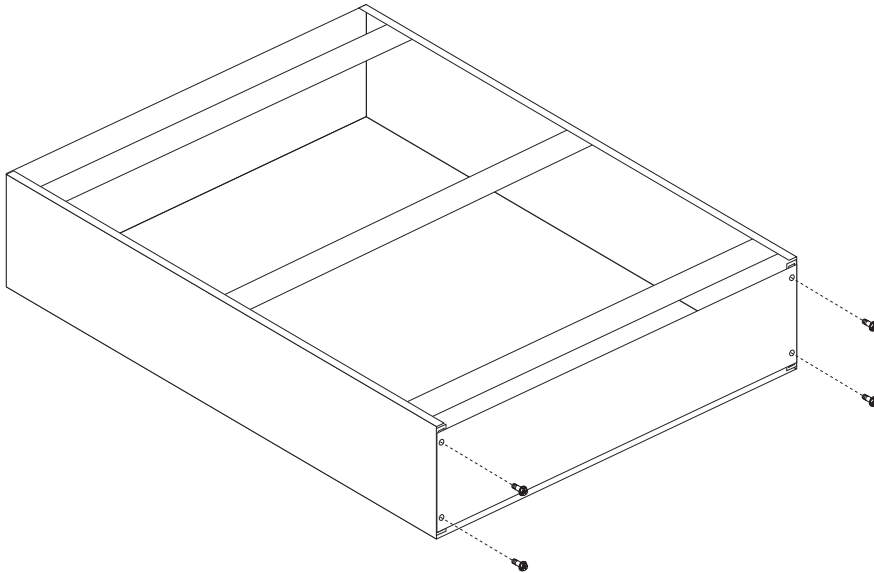


7. Go to “Installing the Server” on page 10

Installing the Server

To attach a server to the top of a single NetBAY3 enclosure or multiple attached NetBAY3 enclosures you must first:

1. Install casters to the bottom NetBAY3 enclosure, if desired. (See “Installing the Casters” on page 3.)
2. Make sure the NetBAY3 enclosures in the stack are securely fastened together. (See “Installing Multiple NetBAY3 Enclosures” on page 9.)
3. Make sure that empty NetBAY3 enclosures (those that have no devices installed) have the rear cover securely attached.



Any one of several different IBM Netfinity servers can be attached to the NetBAY3 enclosure. Have the server documentation handy for reference.

1. Turn the server power off and remove all cables and connectors from the server.
2. Remove the skid pads or casters from the bottom of the server.
3. Remove the server front door.
4. Remove the server side covers to access the mounting holes.

5. Carefully lift the server.



≥ 18 kg (39.7 lbs)



≥ 32 kg (70.5 lbs)



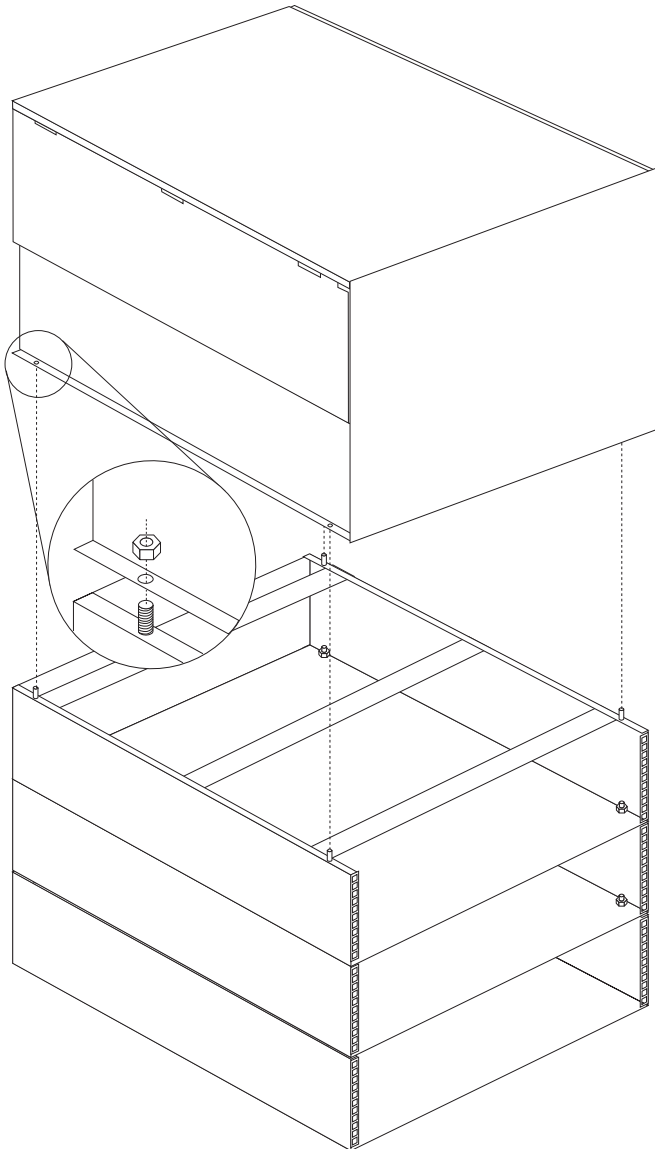
≥ 55 kg (121.2 lbs)

6. Align the server mounting holes with the NetBAY3 enclosure mounting studs.

7. Lower the server onto the NetBAY3 enclosure.

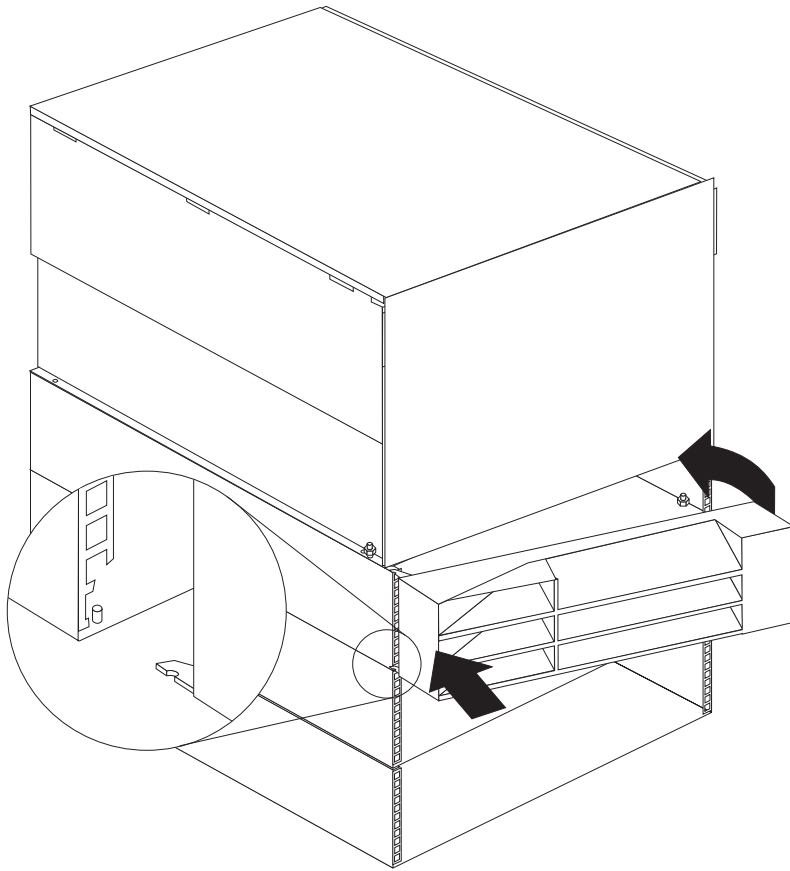
8. Using an 8-mm wrench, install and tighten the four M5 nuts that come with the NetBAY3 enclosure.

Note: The figure below shows empty NetBAY3 enclosures, to clearly show the attachment method.



9. Replace the server side covers and front door.

10. Install the NetBAY3 enclosure front bezel.



11. Connect all server and device cables and connectors.

The NetBAY3 enclosure installation is complete.

Appendix A. Help and Service Information

During the warranty period, you can get technical support 24 hours a day, 7 days a week¹, to answer any questions about your NetBAY3 enclosure. If you need warranty service, return or exchange is available. In addition, you might be entitled to service at your location. Your technical support representative can help you determine the best alternative.

Before calling, please prepare for your call by following these steps.

Step 1: Preparing for the Service Call

To assist the technical support representative, have the following information available:

1. Option name, description
2. Proof of purchase
3. Server model and serial number
4. Description of the problem
5. Hardware configuration information for your system

If possible, be at your computer. Your technical support representative might want to walk you through the problem during the call.

Step 2: Getting Help from IBM

Use one of the following:

- Visit the IBM internet support page at <http://www.pc.ibm.com/support>.
- In the U.S. and Puerto Rico, call 1-800-772-2227.
- In Canada, call 1-800-565-3344.
- In all other countries, contact your IBM reseller, IBM marketing representative, or place of purchase.

¹ Response time will vary depending on the number and nature of calls received.

Appendix B. Product Warranties and Notices

The following is the statement of limited warranty for the United States, Canada, and Puerto Rico.

International Business Machines Corporation

Armonk, New York, 10504

Statement of Limited Warranty

The warranties provided by IBM in this Statement of Limited Warranty apply only to Machines you originally purchase for your use, and not for resale, from IBM or your reseller. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. Unless IBM specifies otherwise, the following warranties apply only in the country where you acquire the Machine. If you have any questions, contact IBM or your reseller.

Machine: IBM Netfinity NetBAY3

Warranty Period*: Three Years

**Contact your place of purchase for warranty service information.*

Production Status

Each Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's warranty terms apply.

The IBM Warranty for Machines

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications. The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your receipt is the Date of Installation, unless IBM or your reseller informs you otherwise.

During the warranty period IBM or your reseller, if authorized by IBM, will provide warranty service under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

For IBM or your reseller to provide warranty service for a feature, conversion, or upgrade, IBM or your reseller may require that the Machine on which it is installed be 1) for certain Machines, the designated, serial-numbered Machine and 2) at an engineering-change level compatible with the feature, conversion, or upgrade. Many of these transactions involve the removal of parts and their return to IBM. You represent that all removed parts are genuine and unaltered. A part that replaces a removed part will assume the warranty service status of the replaced part.

If a Machine does not function as warranted during the warranty period, IBM or your reseller will repair it or replace it with one that is at least functionally equivalent, without charge. The replacement may not be new, but will be in good working order. If IBM or your reseller is unable to repair or replace the Machine, you may return it to your place of purchase and your money will be refunded.

If you transfer a Machine to another user, warranty service is available to that user for the remainder of the warranty period. You should give your proof of purchase and this Statement to that user. However, for Machines which have a life-time warranty, this warranty is not transferable.

Warranty Service

To obtain warranty service for the Machine, you should contact your reseller or call IBM. In the United States, call IBM at **1-800-772-2227**. In Canada, call IBM at **1-800-565-3344**. You may be required to present proof of purchase.

IBM or your reseller will provide certain types of repair and exchange service, either at your location or at IBM's or your reseller's service center, to restore a Machine to good working order.

When a type of service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item. Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service. You also agree to ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange.

You agree to:

1. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
2. where applicable, before service is provided —
 - a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provide,
 - b. secure all programs, data, and funds contained in a Machine, and

c. inform IBM or your reseller of changes in a Machine's location.

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.

Extent of Warranty

IBM does not warrant uninterrupted or error-free operation of a Machine.

The warranties may be voided by misuse, accident, modification, unsuitable physical or operating environment, improper maintenance by you, removal or alteration of Machine or parts identification labels, or failure caused by a product for which IBM is not responsible.

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10L9243

