**Overview** 

# **HPE ProLiant DX2000 Chassis**

The HPE ProLiant DX2000 Chassis along with Nutanix provide a global partnership to deliver hyper-converged solutions in an on premise appliance or through the HPE Greenlake consumption model.. This offering will leverage Nutanix's free AHV hypervisor and Nutanix Enterprise Cloud software to provide customers with a pre-integrated and optimized solution that dramatically lowers total cost of ownership and accelerates operational productivity.

The HPE ProLiant DX2000 Chassis System is a dense, multi-server platform that packs incredible performance and workload flexibility into a small datacenter space, while delivering the efficiencies of a shared infrastructure. It is designed to provide a bridge to scale-out architecture for traditional data centers, so enterprise and SME customers can achieve the space-saving value of density-optimized infrastructure in a cost-effective and non-disruptive manner.

The HPE ProLiant DX2000 Chassis System offers the configuration flexibility to support a variety of workloads, from remote site systems to large HPC clusters and everything in between. And it can be deployed cost-effectively starting with a single 2U, shared infrastructure chassis to meet the configuration needs of a wide variety of scale-out workloads.

The HPE ProLiant DX2000 Chassis System is a density-optimized, 2U shared infrastructure chassis for up to 4 ProLiant DX170r Gen10 and up to 2 ProLiant DX190r Gen10 independent, hot-plug servers with all the traditional data center attributes - standard racks and cabling and rear-aisle serviceability access. A 42U rack fits up to 20 ProLiant DX2000 series chassis accommodating up to 80 servers per rack.

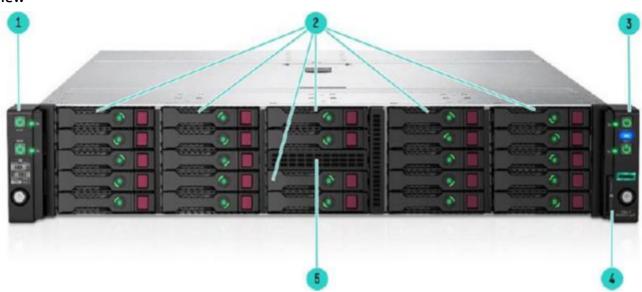
The HPE ProLiant DX2000 Chassis comes pre-configured with select options that maximize performance under Nutanix workloads. With HPE ProLiant DX2000 Chassis System servers there is flexibility to tailor the system to the precise needs of each workload with compute and flexible I/O and storage options..



#### HPE ProLiant DX2200 12 LFF Gen10 CTO Chassis - 12 LFF

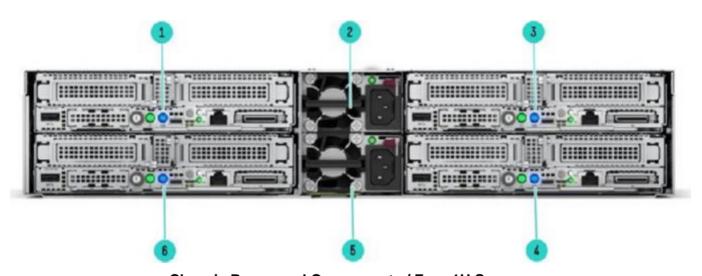
Item	Description	Item	Description
1	Left bezel ear	3	Right bezel ear
2	Low-profile LFF hot-plug drives	4	Chassis serial label pull tab

# Overview



HPE ProLiant DX2600 24 SFF-Prem Gen10 CTO Chassis - 24 SFF

Item	Description	Item	Description
1	Left bezel ear	4	Chassis serial label pull tab
2	SFF hot-plug drives	5	Non-removable bezel blank
3	Right bezel ear		



**Chassis Rear panel Components / Four 1U Servers** 

ltem	Description	Item	Description
1	Server 4	4	Server 1
2	Power supply 2	5	Power Supply 1
3	Server 2	6	Server 3

Overview



Chassis Rear panel Components / Two 2U Servers

Item	Description	Item	Description
1	Server 2	3	Power Supply 1
2	Power Supply 2	4	Server 1



### Standard Features

#### Chassis

### There are 2 chassis options with different storage configurations

- HPE ProLiant DX2200 12 LFF Gen10 CTO Chassis allocated equally across server nodes 12 LFF hot-pluggable SAS/SATA HDD/SSD (Direct Attach)
- HPE ProLiant DX2600 24 SFF-Prem Gen10 CTO Chassis allocated equally across server nodes 24 SFF hot-pluggable SAS/SATA HDD/SSD

### Each HPE ProLiant DX2000 Chassis is built with the following:

- Four server slots for a chassis
- Two (2) HPE 1800W-2200W Flex Slot Platinum Hot Plug Power Supplies
- Four (4) single rotor fans standard plus an additional 4 fans for redundancy
- HPE Security Bezel
- HPE Foundation Care Next Business Day Three-year Support Service

### **Server Tray Blank Kit**

A chassis requires that four (4) server tray slots be populated with either an HPE ProLiant DX170r Gen10, DX190r Gen10 server or an HPE ProLiant DX2000 Chassis Server Node Blank Kit.

### **HPE ProLiant DX2000 Chassis**

The increasing power of new high-performance processor technology requires increased cooling efficiency for rack-mounted servers. For maximum cooling, HPE racks are recommended to allow these racks to be fully loaded with servers using the latest processors. For detail information please see HPE ProLiant DX2000 Chassis System User Guide.

**CAUTION:** If a third-party rack is used, observe the following additional requirements to ensure adequate airflow and to prevent damage to the equipment.

**CAUTION:** Always use blanking panels to fill all remaining empty front panel U-spaces in the rack. This arrangement ensures proper airflow. Using a rack without blanking panels will result in improper cooling that can lead to thermal damage.



Service and Support

### **HPE Pointnext - Service and Support**

### Protect your business beyond warranty with HPE Pointnext Operational Service

HPE Pointnext provides a comprehensive portfolio including Advisory and Transformational, Professional, and Operational Services to help accelerate your digital transformation. From the onset of your transformation journey, Advisory and Transformational Services focus on designing the transformation and creating a solution roadmap. Professional Services specializes in creative configurations with flawless and on-time implementation, and on-budget execution. Finally, operational services provides innovative new approaches like Flexible Capacity and Datacenter Care, to keep your business at peak performance. Hewlett Packard Enterprise is ready to bring together all the pieces of the puzzle for you, with an eye on the future, and make the complex simple.

### **Included Service and Support**

3-Year, Next Business Day Support is included with every HPE ProLiant DX2000 Chassis System. This service connects you to HPE during business hours for assistance on resolving issues. It guarantees hardware next business day onsite response as well as iLO Advanced Software support with call back within two hours. Simplify your support experience and make HPE your first call to help resolve hardware or iLO Advanced software problems. Nutanix should be your first call for any issues related to the Nutanix software.

# **Service and Support Enhancement Options**

The following enhanced support services are available tailor your support experience with the needs of your business.

- HPE 3-Year Next Business Day with DMR Hardware Service
- HPE 3-Year 24x7 Hardware Service
- HPE 3-Year 24x7 with DMR Hardware Service
- HPE 5-Year Next Business Day Hardware Service
- HPE 5-Year Next Business Day with DMR Hardware Service
- HPE 5-Year 24x7 Hardware Service
- HPE 5-Year 24x7 with DMR Hardware Service

DMR stands for Defective Media Retention. The defective media retention service allows you to retain defective hard disk or eligible SSD/Flash drive components that you do not want to relinquish due to sensitive data contained within the disk ("Disk or SSD/Flash Drive") covered under this service. All Disk or eligible SSD/Flash Drives on a covered system must participate in the defective media retention. HPE Foundation Care 24x7 gives you access to HPE 24 hours a day, seven days a week for assistance on resolving issues. This service includes need based Hardware onsite response within four hours. The support of HPE ProLiant DX2000 Chassis covers the chassis and included options. Support for the DX170r and DX190r are sold separately.

https://www.hpe.com/h20195/V2/GetDocument.aspx?docname=4AA4-8876ENW&cc=us&lc=en

### **Other Related Services**

#### **HPE GreenLake Flex Capacity**

With HPE GreenLake Flex Capacity, you get the speed, scalability, and economics of the public cloud in the privacy of your data center. Gain the advantages of the public cloud-consumption-based payment, rapid scalability without worrying about capacity constraints. Reduce the "heavy lifting" needed to operate a data center. And retain the advantages that IT provides the business (i.e., control, security). Deliver the right user experience, choose the right technology for the business, manage privacy and compliance, and manage the cost of IT. And, you have the option to use the public cloud when needed.

### Service and Support

#### **HPE Education Services**

Keep your IT staff trained making sure they have the right skills to deliver on your business outcomes. Book on a class today and learn how to get the most from your technology investment. http://www.hpe.com/ww/learn

# **HPE Support Center**

The HPE Support Center is a personalized online support portal with access to information, tools, and experts to support HPE business products. Submit support cases online, chat with Hewlett Packard Enterprise experts, access support resources or collaborate with peers. Learn more <a href="http://www.hpe.com/support/hpesc">http://www.hpe.com/support/hpesc</a>

The HPE Support Center Mobile App\* allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalize IT support anywhere, anytime.

HPE Insight Remote Support and HPE Support Center are available at no additional cost with a HPE warranty, HPE Support Service or HPE contractual support agreement.

NOTE: \*HPE Support Center Mobile App is subject to local availability

### Warranty

This product is covered by a global limited warranty and supported by Hewlett Packard Enterprise Services and a worldwide network of Hewlett Packard Enterprise Authorized Channel Partners (may vary by region). Hardware diagnostic support and repair is available for three years from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HPE Pointnext operational services or customized service agreements. Hard drives have either a one year or three year warranty.

**NOTE:** Server Warranty includes 3 year Parts, 3 year Labor, 3-year on-site support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at:

http://www.hpe.com/support/ProLiantServers-warranties

### **Parts and Materials**

Hewlett Packard Enterprise will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction.

### **Configuration Information**

### Step 1: Choose a Chassis

HPE ProLiant DX2600 Gen10 24SFF Premium Configure-to-order Chassis

P17974-B21

HPE ProLiant DX2200 Gen10 12LFF Configure-to-order Chassis

P17975-B21

# Options included with each HPE ProLiant DX2000 Chassis

- Two (2) HPE 1800W-2200W Flex Slot Platinum Hot Plug Power Supplies
- Redundant Fan Module adding 4 fans for redundancy
- HPE 2U Security Bezel
- HPE Foundation Care Next Business Day Three-year Support Service

### Step 2: Choose cooling options

# **HPE Cooling Options**

HPE DX2000 Gen10 Server Node FIO Blank Kit

P17979-B21

NOTE: Required for any non-populated slots in the chassis to prevent thermal related issues

### **Step 3: Choose cooling options**

#### **HPE Rail Kits**

HPE 2U Gen9 Hardware Rail Kit

822731-B21

**NOTE:** Hewlett Packard Enterprise recommends that a minimum of two people are required for all rack installations. Please refer to your installation instructions for proper tools and number of people to use for any installation.

### **Step 4: Choose Base configuration**

### **Server Trays**

HPE ProLiant DX170r Gen10 1U Node Configure-to-order Server

P17977-B21

HPE ProLiant DX190r Gen10 2U Node Configure-to-order Server

P17978-B21

**NOTE:** Up to 4 single half width server trays (XL170r Gen10) can be added to the HPE ProLiant DX 2000 Chassis.

Up to 2 half width 2 U height server trays (XL190 Gen10) can be added to the HPE ProLiant DX2000 Chassis. 1U and 2U server trays can not be mixed together.

# **Core Options**

Power Cords	
HPE C15-C14 IN 250V 10Amp 2.5m Black Jumper Cord	R1C67A
HPE C15-C14 IN 250V 10Amp 1m Black Jumper Cord	R1C68A
Power Cords - US	
HPE C15 US 125V 15Amp 2.5m Black Power Cord	Q7F42A
HPE C15 US 250V 10Amp 2.5m Black Jumper Cord	Q7F57A
HPE C15 US 250V 10Amp 0.76m Black Jumper Cord	Q7F59A
HPE C15 US 250V 10Amp 1m Black Jumper Cord	Q7F61A
Power Cords - CN	
HPE C15 CN 250V 10Amp 2.5m Black Power Cord	Q7F53A
Power Cords - EU	
HPE C15 EU 250V 10Amp 2.5m Black Power Cord	Q7F45A
HPE C15 EU 250V 10Amp 2.5m Black Jumper Cord	Q7F58A
HPE C15 EU 250V 10Amp 0.76m Black Jumper Cord	Q7F60A
HPE C15 EU 250V 10Amp 1m Black Jumper Cord	Q7F62A
Power Cords - UK	
HPE C15 UK 250V 10Amp 2.5m Black Power Cord	Q7F46A
Transceivers	
HPE DX 10Gb SFP+ SR FIO Transceiver	P18412-B21
HPE DX 25Gb SFP28 SR 100m FIO Transceiver	P18413-B21
HPE Support Services	
HPE 3 Year Next Business Day with Defective Media Retention DX170r Gen10 Hardware Service	HN4X5E
HPE 3 Year 24x7 DX170r Gen10 Hardware Service	HN4X6E
HPE 3 Year 24x7 with Defective Media Retention DX170r Gen10 Hardware Service	HN4X7E
HPE 5 Year Next Business Day DX170r Gen10 Hardware Service	HN4X8E
HPE 5 Year Next Business Day with Defective Media Retention DX170r Gen10 Hardware Service	HN4X9E
HPE 5 Year 24x7 DX170r Gen10 Hardware Service	HN4Y0E
HPE 5 Year 24x7 with Defective Media Retention DX170r Gen10 Hardware Service	HN4Y1E

### **Technical Specifications**

Non-Operating

**Dimensions** Height 3.45 in (8.76 cm)

> Width 17.64 in (44.80 cm)

Depth 34.62 in (87.93 cm) Height 12.5 in (31.75 cm)

**Shipping Dimensions** Width 23.63 in (60.02 cm)

> **Depth** 39.38 in (100.01 cm)

Chassis **Empty** 28.88 lb (13.1 kg)

Weight

Max **Approximate** 122.19 lb (46.70 kg)

**Enclosure** Weight

**Humidity** 

Temperature 50° to 95° F (10° to 35° C) **Operating** Range

Relative Operating Minimum to be higher (more moisture) of -

12°C (10.4°F) dew point or 8% relative

humidity

Non-Operating 5 to 95% relative humidity (Rh), 38.7°C

(101.7°F) maximum wet bulb temperature,

-22° to 140° F (-30° to 60° C)

non-condensing.

NOTE: Operating temperature has an altitude derating of 1.8° F (1° C) per 1,000 ft (304.8 m). No direct sunlight. Upper operating limit is 10,000 ft (3,048 m) or 70Kpa/10.1 psia. Upper non-operating limit is 30,000 ft (9,144 m) or 30.3 KPa/4.4 psia. Storage maximum humidity of 95% is based on a maximum temperature of 113° F (45° C). Altitude maximum for storage is 70 KPa.

**Acoustic** 

NOTE: Please see QuickSpecs for HPE ProLiant DX170r and DX190r servers

**Noise** 

### HPE ProLiant DX2600 24 SFF Gen10 Chassis - 24 SFF

**Dimensions** Height 3.45 in (8.76 cm)

> Width 17.64 in (44.80 cm) **Depth** 33.02 in (83.87 cm)

Shipping Height 12.5 in (31.75 cm) **Dimensions** Width 23.63 in (60.02 cm)

**Depth** 37.76 in (95.9 cm)

**Chassis Empty** 28.00 lb (12.7 kg)

Weight

Max **Approximate** 103.27 lb (46.84 kg)

**Enclosure** Weight

Temperature **Operating** 50° to 95° F (10° to 35° C)

Range -22° to 140° F (-30° to 60° C) Non-Operating

Relative **Operating** Minimum to be higher (more moisture) of -**Humidity** 

12°C (10.4°F) dew point or 8% relative

humidity

**Technical Specifications** 

**Non-Operating** 

5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.

**NOTE:** Operating temperature has an altitude derating of 1.8° F (1° C) per 1,000 ft (304.8 m). No direct sunlight. Upper operating limit is 10,000 ft (3,048 m) or 70Kpa/10.1 psia. Upper non-operating limit is 30,000 ft (9,144 m) or 30.3 KPa/4.4 psia. Storage maximum humidity of 95% is based on a maximum temperature of 113° F (45° C). Altitude maximum for storage is 70 KPa.

Acoustic

NOTE: Please see QuickSpecs for HPE ProLiant DX170r and DX190r servers

Noise

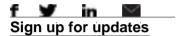
Environmental-friendly Products and Approach - End-of-life Management and Recycling Hewlett Packard Enterprise offers end-of-life <u>product return, trade-in, and recycling programs</u>, in many geographic areas, for our products. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE Directive (2012/19/EU) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the **Hewlett Packard Enterprise web site**.

These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

# **Summary of Changes**

Date	Version History	Action	Description of Change
30-Jul-2019	Version 1	New	New QuickSpecs



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