Dell™ PowerEdge™ T300 Systems

Getting Started
With Your System

Guide de mise en route

Primeiros passos com o sistema

Procedimientos iniciales con el sistema

Dell™ PowerEdge™
T300 Systems

Getting Started With Your System

DELL™

Notes, Notices, and Cautions

✐ **NOTE:** A NOTE indicates important information that helps you make better use of your computer.

⊃ **NOTICE:** A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

⚠ **CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.**

System Features

This section describes the major hardware and software features of your system. It also provides information about other documents you may need when setting up your system and how to obtain technical assistance.

Major hardware and software features of your system include:

- One of the following processors:
  - Single-core Intel® Celeron® 445 processor
  - Dual-core Intel® Core™2 Duo E6305/E6405 processor
  - Quad-core Intel® Xeon® X3323/X3353/X3363 processor

  ![NOTE icon] **NOTE:** Use the System Setup program to view processor information. See "Using the System Setup Program" in your *Hardware Owner's Manual*.

- A minimum of 512 MB single- or dual-ranked registered 667-MHz DDR2 memory modules with ECC, upgradable to a maximum of 24 GB by installing combinations of 512-MB, 1-GB, 2-GB, or 4-GB memory modules in six module sockets on the system board.

- The following expansion slots:
  - One PCIe x4 slot with x8 connector (if you have a DRAC card, install it in this slot)
  - One PCIe x4 slot
  - Two PCIe x8 slots
  - One 64-bit, 133-MHz PCI-X (3.3-V) slot

- Two integrated Gigabit Ethernet NIC ports, capable of supporting 10-Mbps, 100-Mbps, or 1000-Mbps data rates, with support for IPMI 2.0 and Wake-on-LAN.

- Seven USB 2.0-compliant connectors (two on the front, four on the back, and one internal) capable of supporting a diskette drive, CD-ROM drive, keyboard, mouse, or USB flash drive.

- An integrated Trusted Platform Module (TPM) version 1.2 used for security applications, capable of generating and storing keys and storing passwords and digital certificates. (Not available in China.)

- An integrated ATI ES1000 SVGA video controller supporting True-color graphics in the following resolutions: 640 x 480, 800 x 600, 1024 x 768, 1280 x 1024, and 1600 x 1200.

- Systems management circuitry that monitors critical system voltages and fan speeds. The systems management circuitry works in conjunction with the systems management software.

- Standard baseboard management controller with serial access.

- Back-panel connectors include serial, video, four USB connectors, and two NIC connectors.

- Two 5.25-inch drive bays for a DVD-ROM, CDRW/DVD combo, or tape backup unit.

  ✍ NOTE: DVD devices are data only.

- One 3.5-inch drive bay for floppy drive.

- Support for the following internal hard-drive configurations:
  - Up to four internal, 3.5-inch, SATA hard drives with integrated drive controllers.
  - Up to four internal, 3.5-inch, Serial-Attached SCSI (SAS) hard drives with an optional SAS controller card or backplane.

  ✍ NOTE: Hot-plug capability is supported only when SATA or SAS drives are connected to the optional SAS controller card or backplane. Either option requires the backplane configuration.

- Optional remote access controller (DRAC 5) for remote systems management. This option requires a dedicated PCI slot (slot #1).

- A 490-W power supply. Also available with an optional redundant 528-W power supply.

For more information about specific features, see "Technical Specifications".

The following software is included with your system:

- A System Setup program for quickly viewing and changing system configuration information. For more information on this program, see "Using the System Setup Program" in the *Hardware Owner's Manual*.

- Enhanced security features, including a system password and a setup password, available through the System Setup program.

- System diagnostics for evaluating system components and devices. For information about using the system diagnostics, see "Running the System Diagnostics" in your *Hardware Owner's Manual*.

- Video drivers for displaying many popular application programs in high-resolution modes.

- SATA or SAS device drivers that allow the operating system to communicate with devices attached to the integrated SATA or SAS subsystem. For more information about these drivers, see "Installing Drives" in your *Hardware Owner's Manual*.

- Systems management software and documentation CDs.

Supported Operating Systems

Your system supports the following operating systems:

- Microsoft® Windows Server® 2003 R2, Standard and Enterprise Editions (32-bit x86)

- Microsoft Windows Server 2003 R2, Standard and Enterprise x64 Editions

- Microsoft Windows Server 2003, Standard, Enterprise, and Web Editions (32-bit x86)

- Microsoft Windows Server 2003, Standard and Enterprise x64 Editions

- Microsoft Windows Small Business Server 2003 R2, Standard and Premium Editions (32-bit x86)

  NOTE: Windows Server 2008 requires a bootable DVD drive to install the operating system recovery media.

- Microsoft Windows Server 2008, Standard, Enterprise, and Web Editions (32-bit x86)

- Microsoft Windows Server 2008, Standard, Enterprise, and Web x64 Editions

- Microsoft Windows Small Business Server 2008, Standard and Premium x64 Editions

- Red Hat® Enterprise Linux® ES (version 4) (x86)

- Red Hat Enterprise Linux ES (version 4) (x86_64)

- Red Hat Enterprise Linux ES (version 5) (x86)

- Red Hat Enterprise Linux ES (version 5) (x86_64)
- SUSE® Linux Enterprise Server 9 (x86_64)

   NOTE: SUSE® Linux Enterprise Server 9, prior to SP4, does not support SATA optical devices. Installation must be performed using other methods such as a USB CDROM.

- SUSE Linux Enterprise Server 10 (x86_64)

Other Information You May Need

 CAUTION: The *Product Information Guide* provides important safety and regulatory information. Warranty information may be included within this document or as a separate document.

- The *Hardware Owner's Manual* provides information about system features and describes how to troubleshoot the system and install or replace system components. The *Hardware Owner's Manual* is available on the CDs that came with your system or on **support.dell.com**.

- CDs included with your system provide documentation and tools for configuring and managing your system.

- Systems management software documentation describes the features, requirements, installation, and basic operation of the software.

- Operating system documentation describes how to install (if necessary), configure, and use the operating system software.

- Documentation for any components you purchased separately provides information necessary to configure and install these options.

- Updates are sometimes included with the system to describe changes to the system, software, and/or documentation.

   NOTE: Always check for updates on **support.dell.com** and read the updates first because they often supersede information in other documents.

- Release notes or readme files may be included to provide last-minute updates to the system or documentation or advanced technical reference material intended for experienced users or technicians.

Obtaining Technical Assistance

If you do not understand a procedure in this guide or if the system does not perform as expected, see your *Hardware Owner's Manual*.

Dell Enterprise Training and Certification is available; see **www.dell.com/training** for more information. This service may not be offered in all locations.

Installation and Configuration

⚠ **CAUTION: Before performing the following procedure, read and follow the safety instructions and important regulatory information in your *Product Information Guide*.**

This section describes the steps to set up your system for the first time.

⚠ **CAUTION: Installing the feet on a stand-alone tower system is necessary to provide a stable foundation for the system. Failure to install the feet poses the risk of having the system tip over, possibly causing bodily injury or damage to the system.**

⚠ **CAUTION: Whenever you need to lift the system, get others to assist you. To avoid injury, do not attempt to lift the system by yourself.**
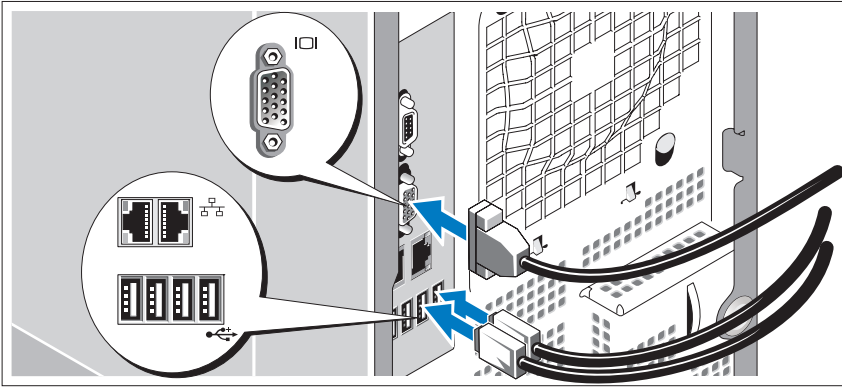
Unpacking the System

Unpack your system and identify each item.

Keep all shipping materials in case you need them later.

See the documentation included with your system on installing the system stabilizer feet.
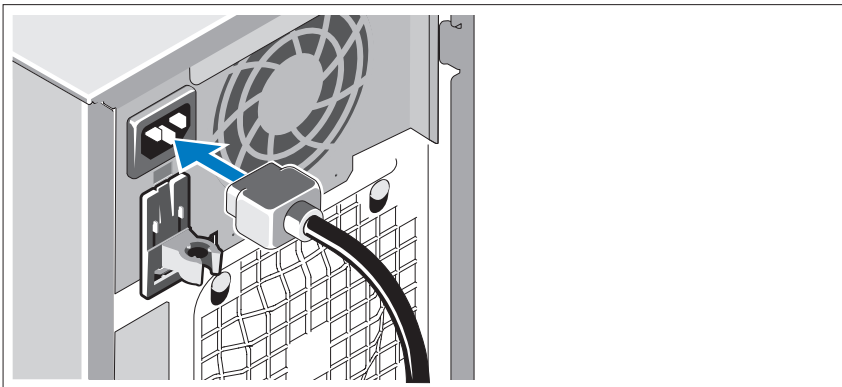
Connecting the Keyboard, Mouse, and Monitor

Connect the keyboard, mouse, and monitor (optional).

The connectors on the back of your system have icons indicating which cable to plug into each connector. Be sure to tighten the screws (if any) on the monitor's cable connector.
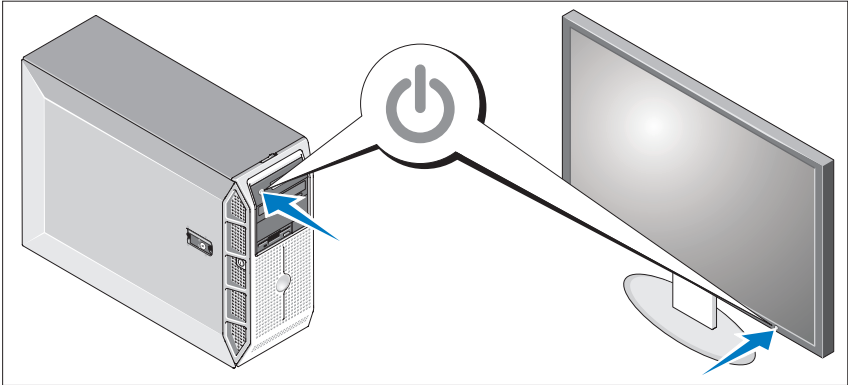
Connecting the Power

Connect the system's power cable(s) to the system.

Plug the other end of the cable into a grounded electrical outlet or a separate power source such as an uninterrupted power supply (UPS) or a power distribution unit (PDU).

Turning on the System

Turn on the system and monitor (optional).

Press the power button on the system and the monitor. The power indicators should light.

Adjust the monitor's controls until the displayed image is satisfactory.

Complete the Operating System Setup

If you purchased a preinstalled operating system, see the operating system documentation that ships with your system. To install an operating system for the first time, see the Quick Installation Guide. Be sure the operating system is installed before installing hardware or software not purchased with the system.

Technical Specifications

Processor	
Processor type	One single-core Intel® Celeron® 445 processor
	or
	One dual-core Intel® Core™2 Duo E6305/E6405 processor
	or
	One quad-core Intel® Xeon® X3323/X3353/X3363 processor

Expansion Buses	
Bus type	PCIe, PCI-X
Expansion slots	
PCIe	One x4 with x8 connector
	One x4
	Two x8
PCI-X	One 64-bit, 133-MHz, 3.3-V

Memory	
Architecture	72-bit, single- or dual-rank, registered DDR2, 667-MHz memory modules with ECC
Memory module sockets	Six 240-pin
Memory module capacities	512 MB, 1 GB, 2 GB, or 4 GB
Minimum RAM	512 MB (one 512-MB module)
Maximum RAM	24 GB

Drives	
Hard Drives	
SATA	Up to four internal, 1-inch-high (3.5-inch form factor) drives connected to integrated drive controller or RAID controller card (non-hot plug) or SAS backplane (hot plug)
SAS	Up to four internal, 1-inch-high (3.5-inch form factor) drives connected to optional SAS backplane (hot-plug) or SAS controller card (non-hot plug) **NOTE:** Mixing of SATA and SAS drives is not supported.
Optical drive	One SATA DVD or combination CD-RW/DVD **NOTE:** DVD devices are data only.
Diskette drive	One optional 3.5-inch, 1.44-MB
Tape drive	One optional SATA or SCSI tape backup unit in the optical drive bay. SCSI tape drive requires the optional PCIe SCSI controller card.

Connectors	
Externally accessible	
Back	
NIC	Two RJ-45 (from integrated Gigabit NIC)
Serial	9-pin, DTE, 16550-compatible
USB	Four 4-pin, USB 2.0-compliant
Video	15-pin VGA
Front	
USB	Two 4-pin, USB 2.0-compliant
Internally accessible	
SATA channels	Six 7-pin
USB	One 4-pin, USB 2.0-compliant

Video

Video type	Integrated ATI ES1000 VGA controller
Video memory	32 MB

Power

AC power supply

Wattage	490 W
	528 W (optional redundant power supply)
Voltage	100–240 VAC, 50/60 Hz
Current consumption	8.0–4.5 A
Heat dissipation	2275 BTU/hr maximum
Maximum inrush current	Under typical line conditions and over the entire system ambient operating range, the inrush current may reach 55 A for 10 ms or less or 25 A at 150 ms or less.
System battery	CR 2032 3.0-V lithium ion coin cell

Physical

Height	44.4 cm (17.4 in)
Width	21.0 cm (8.3 in)
Depth	61.2 cm (24.1 in)
Weight	19.1 kg (42 lb)