

Dell T640

Dell PowerEdge T640 Tower Server User Manual

Model: T640

1. INTRODUCTION

This manual provides essential information for the safe and efficient use of your Dell PowerEdge T640 Tower Server. It covers setup, operation, maintenance, and troubleshooting. Please read this manual thoroughly before operating the server and retain it for future reference.



Figure 1: Front view of the Dell PowerEdge T640 Tower Server, showcasing the hexagonal ventilation pattern and Dell EMC branding.

2. SAFETY INFORMATION

Always observe the following safety precautions to prevent injury and damage to the equipment:

- Ensure the server is placed on a stable, level surface with adequate ventilation.
- Connect the server to a grounded power outlet.
- Do not open the server chassis unless instructed by qualified personnel.
- Avoid spilling liquids on the server.
- Disconnect all power cables before performing any internal maintenance.

3. SETUP

3.1 Unboxing and Inspection

Carefully remove the server from its packaging. Inspect the server for any signs of physical damage that may have occurred during transit. Retain all packaging materials for future use or return.

3.2 Physical Installation

The Dell PowerEdge T640 is designed for tower deployment. Ensure sufficient clearance around the server for proper airflow. Avoid placing the server in enclosed spaces or near heat sources.



Figure 2: Angled front view of the Dell PowerEdge T640 Tower Server, showing its robust chassis design.

3.3 Connecting Peripherals and Power

Connect the necessary peripherals and power cables:

1. **Power Cables:** Connect the redundant power supply cables to separate, grounded power outlets.
2. **Network Cables:** Connect Ethernet cables to the On-Board Broadcom 5720 Dual Port 1Gb LOM ports.
3. **Monitor, Keyboard, Mouse:** Connect a monitor to the video output port (HDMI or DisplayPort), and a USB keyboard and mouse to the available USB ports.
4. **Remote Access (iDRAC):** Connect a dedicated network cable to the iDRAC port for remote management.

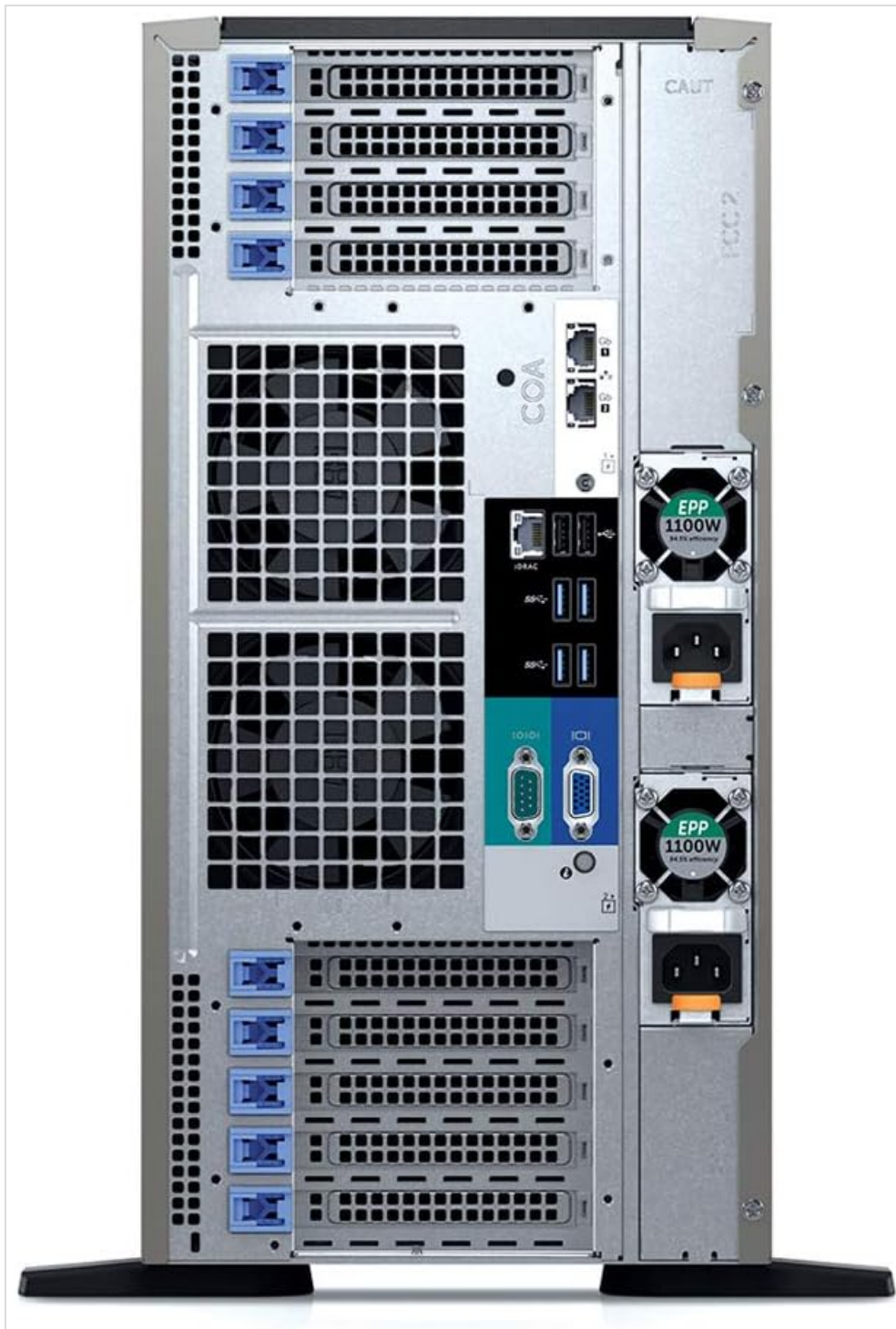


Figure 3: Rear view of the Dell PowerEdge T640 Tower Server, highlighting the power supply units, network ports, and other connectivity options.

3.4 Initial Power On

After connecting all necessary cables, press the power button located on the front panel of the server. Observe the boot sequence and LED indicators for any errors.

4. OPERATING THE SERVER

4.1 Operating System

Your server comes pre-installed with Windows Server 2019 Standard. Follow the on-screen prompts for initial setup, including administrator password creation and network configuration.

4.2 iDRAC9 Express Remote Management

The Integrated Dell Remote Access Controller 9 (iDRAC9) Express provides remote management capabilities. Access iDRAC via a web browser using its assigned IP address. Refer to the Dell iDRAC documentation for detailed configuration and usage.

4.3 RAID Configuration

The server is equipped with a PERC H730P 12Gb/s RAID Controller. The 3.2TB storage is configured with 4 x 800GB Enterprise SAS SSDs. Verify the RAID configuration through the server's BIOS/UEFI or the PERC controller utility during boot-up. Ensure data redundancy is maintained according to your requirements.

4.4 Network Configuration

Configure the network settings within Windows Server 2019 to integrate the server into your existing network infrastructure. This typically involves setting IP addresses, subnet masks, gateways, and DNS servers.

5. MAINTENANCE

5.1 Regular Checks

- Periodically check for dust accumulation in ventilation areas and clean as necessary to ensure optimal cooling.
- Verify all cables are securely connected.
- Monitor server health indicators through iDRAC or the operating system.

5.2 Component Replacement

For component replacement (e.g., RAM, SSDs), consult the detailed service manual available on the Dell support website. Always power down the server and disconnect power cables before opening the chassis. Hot-swappable components like SSDs can often be replaced without powering down the entire system, but refer to specific instructions.

5.3 Software and Firmware Updates

Regularly update the operating system (Windows Server 2019) and server firmware (BIOS, iDRAC, RAID controller) to ensure security, stability, and optimal performance. Dell provides updates through its support website.

6. TROUBLESHOOTING

6.1 Common Issues

- **No Power:** Check power cable connections, power outlets, and power supply status LEDs.
- **Boot Failure:** Observe POST messages. Check for recent hardware changes. Access BIOS/UEFI settings to verify boot order.

- **Network Connectivity Issues:** Verify network cable connections, network adapter status in the operating system, and network configuration.

6.2 Error Indicators

The server's front panel and internal components feature LED indicators that provide diagnostic information. Consult the Dell PowerEdge T640 documentation for a comprehensive list of error codes and their meanings.

7. SPECIFICATIONS

Feature	Description
Brand	Dell
Model	PowerEdge T640
Processors	Dual (2) Intel Silver 4110 8-Core 2.1GHz 11MB CPUs
Memory	256GB DDR4 PC4-21300 2666MHz Registered Memory
Storage	3.2TB (4 x 800GB) Enterprise SAS SSDs
RAID Controller	PERC H730P 12Gb/s with 2GB NV Cache
Network Interface	On-Board Broadcom 5720 Dual Port 1Gb LOM
Remote Access	iDRAC9 Express
Operating System	Windows Server 2019 Standard
Dimensions (Item)	31 x 24 x 18 inches
UPC	840104325865
Internal Model Number	ASISVR75

8. WARRANTY AND SUPPORT

This Dell PowerEdge T640 server is a renewed product. For specific warranty details and technical support, please contact the seller, TekBoost Certified, directly. They can provide information regarding the warranty period and support procedures for renewed equipment. Additional resources, including drivers, firmware, and detailed documentation, can be found on the official Dell support website by searching for the PowerEdge T640 model.