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# HPE Renew Remanufacturing Process

Quality remanufactured products backed by Hewlett Packard Enterprise



Hewlett Packard Enterprise (HPE) sets very stringent quality standards across the entire technology portfolio to meet the high expectations of our discerning customers. With HPE Renew products, you have our commitment of the same uncompromising high quality and performance that is expected from new HPE products.

## **The HPE Renew Promise**

The HPE Renew portfolio includes Enterprise Servers, Enterprise and Commercial Storage, ProLiant Servers and Options, and Networking products. The vast majority of HPE Renew products are from our HPE Demo pool, and are also sourced from factory excess and customer returns. All HPE Renew products are certified to have passed our rigorous HPE Renew remanufacturing and quality inspection processes, ensuring they are fully restored to meet HPE certified standards. The rigorous building and testing processes verify that all HPE Renew products meet equivalent to new standards. It is only then that they qualify for original same-as-new factory warranty—your mark of HPE quality and reliability. In addition, service and support options are equivalent to that offered with new products and the most current operating system and software revisions are installed.

The checklist below details step by step how the HPE Renew remanufacturing process truly ensures that all products are a true reflection of new HPE products.

### HPE Renew Technical Remanufacturing Checklist

#### INCOMING PRODUCT INSPECTION

1. Products must pass a cosmetic inspection based on strict HPE Factory Standards. If the parts do not meet the following requirements they are replaced with original HPE new parts:

- On visible front-facing surfaces (Class 1), light scratches must measure less than 6cm, deep scratches must measure less than 2mm
- Any areas of blemishes, abrasions or water spots must measure less than 1.5cm
- Any dents on panels
- Any rusts spots

2. System Power up and configuration checks performed

3. Validation of parts against Bill of Materials

4. Component inspections, such as memory and hard disks, must bear manufacturer's seals of authenticity, otherwise they are rejected and scrapped for recycling

5. All cables and accessories are scrapped for recycling and replaced by new ones

6. Perform Engineering Change Notification checks to latest new product factory specifications

#### RECONDITIONING

7. Once required components are removed, accessible areas in the chassis are cleaned

8. Intensive cleaning of all sub-assembly parts and racks

9. Removal of labels and regeneration of new product labels

10. Minor touch up of external surfaces may occur if needed

#### ASSEMBLY & SOFTWARE INSTALLATIONS

11. Product component assembly and system integration

12. Storage drives reformatted and retested to ensure data integrity, every drive is wiped clean of any data and every disk is separately overwritten

13. Restore Factory Default settings and reset all password settings

14. Restore licensed version of Operating System Software and install latest Firmware updates

#### PRODUCT FUNCTIONAL TEST

<ul> <li>Hardwar</li> <li>Unit Ser</li> <li>System a</li> <li>Fans</li> <li>Fan state</li> <li>CMOS</li> <li>PCI Bus/Serial Port/USB Devices</li> <li>Temperature Status</li> <li>Peripheral Interconnect Tests</li> <li>Processor</li> <li>CPU close</li> <li>Memory</li> <li>Memory</li> </ul>	<ul> <li>configuration checks</li> <li>re checks via system LED/LCD displays</li> <li>rial number update</li> <li>and I/O firmware verification and updates</li> <li>rus checks</li> <li>Random data pattern tests</li> <li>Detect and read tests</li> <li>Temperature caution tests</li> <li>All Hot-plug Hard disk slots interconnectivity te</li> <li>DVD/CD-ROM boot and O/S installation checks</li> </ul>
Hardwar Unit Ser System a Fans • Fan state CMOS PCI Bus/Serial Port/USB Devices Temperature Status Peripheral Interconnect Tests Processor • CPU close Memory • Memory	ial number update and I/O firmware verification and updates itus checks • Random data pattern tests • Detect and read tests • Temperature caution tests • All Hot-plug Hard disk slots interconnectivity te
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Peripheral Interconnect Tests Processor • CPU close Memory • Memory	All Hot-plug Hard disk slots interconnectivity te
Processor • CPU clos Memory • Memory	
Memory • Memory	DVD/CD-ROM boot and O/S installation checks
Memory • Memory	
Memory • Memory	LAN connectivity
	• Real-time clock test cycles
·	• Up to 24hr run-in tests
Hard disk • RAID se	y size and slot test • Random address tests
Hard disk • RAID se	Read/write test
Hard disk • RAID se	<ul> <li>March/noise/walk/ECC tests</li> </ul>
Hard disk • RAID se	• Up to 24hr run-in tests
	etup and configuration • Read/write Tests
	<ul> <li>Sequential and random read tests</li> </ul>
	<ul> <li>Short and extended offline Tests</li> </ul>
	<ul> <li>SCSI SMART status checks</li> </ul>
	• Glist tests < 100
Adaptors, Fibre Channel Host Bus adapters, SAN switches, LAN etc, a	Complete disk wiping (meets HPE privacy standards)
datory electrical safety Hipot/Ground bond tests	privacy standards)

#### FINAL PRODUCT INSPECTION AND DELIVERABLES

**18.** Archive test logs and product manifest outputs for test status verifications

19. Include newest versions of product documentations and/or CD kits

20. Optional provision of racking services for storage and server products, inclusive of power distribution unit cabling works

21. Re-packaging in new HPE boxes or wood crates as per HPE factory standard packaging procedures

 ${\bf 22.}$  The warranty period is reset in the HPE Worldwide Service Database upon shipment date

23. Product is ready for delivery and installation

Data sheet



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