

# QuickSpecs

HP nPartitions (nPar), for Integrity and HP 9000 mid-range and high-end cell or cell-blade-based servers

---

## Overview

### Description

A hard partition, also referred to as an nPartition or nPar, physically divides the computer into groups of cell boards (or cell-blades, on the Superdome 2 servers), which operate independently of other groups of cell boards. Hard partitions isolate application environments from single points of failure, meaning applications running within hard partitions are not affected by hardware or software events occurring in other partitions. Each nPartition executes a single operating system image, providing software isolation and enabling alternate nPartitions to execute different versions of the operating system.

---

### Features

- Closely corresponds to a stand alone system
  - Provides electrical isolation and isolates hardware failures to the specific hardware partition (nPartition)
  - Granularity down to 1 cell (or cell-blade on Superdome 2 servers)
  - Enables multiple Operating Systems and applications to be run on the same physical system
  - Each nPartition has independent processor, memory, and I/O resources allocated
  - Resources can be moved using commands without manipulating hardware
  - Can increase/decrease processing power by adding/deleting cells to an nPartition
- 

### Configuration

- Configuration changes may require a system reboot, depending upon configuration
  - Majority of hardware upgrades affect only a specific nPartition.
  - Recommend using Partition Manager, a system management tool for configuring and managing hard partitions
  - **NOTE:**
    1. HP-UX Virtual Partitions and Integrity Virtual Machines cannot be run within the same nPartition
    2. HP-UX Virtual Partitions does not integrate with dynamic nPartitions (on those legacy Integrity mid-range and high-end cell-based servers that are using it)
- 

### Support

Support of nPartitions is included in the hardware support price of the associated server.

---

### Requirements

- Only midrange or high-end cell or cell-blade HP 9000 and HP Integrity servers have nPartitions. That includes:
    - The HP Integrity Superdome 2 servers
    - HP Integrity servers (based on the sx1000 and sx2000 chipsets): HP Integrity Superdome, HP Superdome with sx2000, HP rx8640, HP rx8620, HP rx7640, HP rx7620, HP 9000 servers (based on the sx1000 and sx2000 chipsets): HP 9000 Superdome, HP 9000 Superdome with sx2000, HP rp8440, HP rp8420, HP rp8400, HP rp7440, HP rp7420, HP rp7410, HP rp7405
- 

### Miscellaneous

- Other information:
    - Support of nPartitions is included in the hardware support price of the associated server.
    - [www.hp.com/go/partitions](http://www.hp.com/go/partitions)
    - <http://www.hp.com/go/virtualization-manuals>
- 



# QuickSpecs

HP nPartitions (nPars), for Integrity and HP 9000 mid-range and high-end cell or cell-blade-based servers

---

## Overview

© Copyright 2010 Hewlett-Packard Development Company, L.P.

The information contained herein is subject to change without notice.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained.

