

# Server Hardware Certification Test Cases

Benchmarks tests	
benchmarks/disk/hdparm-cache-read	This test runs hdparm timing of cache reads as a benchmark
benchmarks/disk/hdparm-read	This test runs hdparm timing of device (non-cache) reads as a benchmark
CPU tests	
cpu/clocktest	Test for clock jitter.
cpu/maxfreq_test	Test that the CPU can run at its max frequency using Firmware Test Suite (fwts cpufreq).
cpu/offlining_test	Test offlining CPUs in a multicore system.
cpu/scaling_test	Test the CPU scaling capabilities using Firmware Test Suite (fwts cpufreq).
cpu/topology	This test checks cpu topology for accuracy
Disk tests	
disk/detect	Detects and displays disks attached to the system.
disk/read_performance	Disk performance test
disk/smart	This tests the SMART capabilities (Note that this test will not work against hardware RAID and devices that do not support SMART)
disk/stats	This test checks disk stats, generates some activity and rechecks stats to verify they've changed. It also verifies that disks appear in the various files they're supposed to.
disk/storage_device	Disk I/O stress test
Ethernet Device tests	
ethernet/detect	Test to detect the available network controllers
ethernet/multi_nic	Runs network bandwidth testing on all detected ethernet devices
Floppy disk tests	
floppy/check	Floppy test
Informational tests	
info/hdparm	SATA/IDE device information.
Memory tests	
memory/check	Test and exercise memory.
memory/info	This test checks the amount of memory reported in meminfo against the size of the memory modules detected by DMI.
Miscellaneous tests	
miscellanea/fwts_test	Run Firmware Test Suite (fwts) automated tests.
miscellanea/ipmi_test	This will run some basic in-band connectivity tests against a BMC, verifying that IPMI works.
miscellanea/submission-resources	A meta-job depending on the resources needed for a valid submission.
Optical Drive tests	
optical/detect	Test to detect the optical drives
optical/read-automated	This is an automated version of optical/read. It assumes you have already inserted a data CD into your optical drive prior to running Checkbox.
Power Management tests	
power-management/rtc	Verify that the Real-time clock (RTC) device functions properly, if present
power-management/tickless_idle	Check to see if CONFIG_NO_HZ is set in the kernel (this is just a simple regression check)
Stress tests	
stress/cpu_stress_test	Create jobs that use the CPU as much as possible for two hours. The test is considered passed if the system does not freeze.
USB tests	
usb/detect	Detects and shows USB devices attached to this system.
usb/storage-preinserted	Automated testing of USB 2.0 ports by performing file read/write and compare operations. This test requires that you have inserted a USB 2.0 storage device before running tests.
usb3/storage-preinserted	Automated testing of USB 3.0 ports by performing file read/write and compare operations. This test requires that you have inserted a USB 3.0 storage device before running tests.
Virtualization tests	
virtualization/kvm_check_vm	Test to check that a cloud image boots and works properly with KVM