



Phoronix Test Suite

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What is the Phoronix Test Suite?

The Phoronix Test Suite (PTS) is a free and open-source application for testing and benchmarking computers. There are packages for Linux, Mac OS X, FreeBSD, and OpenSolaris.

The current version is 2.2 (released November 2009) that features over 120 test profiles, 50 test suites, and GUI improvements.

<http://www.phoronix-test-suite.com/>



Installation

1. Download the software from:

<http://www.phoronix-test-suite.com/?k=downloads>

2. Extract the downloaded source file using either a GUI application or from the command line:

```
tar -xzvf phoronix-test-suite-2.2.0.tar.gz
```

3. From a terminal session, navigate to the extracted source folder

4. As root, run

```
./install.sh
```

The installation is very quick.

Executable File: `/usr/bin/phoronix-test-suite`

Documentation: `/usr/share/doc/phoronix-test-suite/`

Phoronix Test Suite Files: `/usr/share/phoronix-test-suite/`

5. Install the PHP5 CLI components through your distro's package manager.



Using PTS

PTS uses different applications (referred to as tests) for generating the benchmark numbers. These tests are individually downloaded and installed as needed.

The test results can be saved to disk to be viewed locally and, optionally uploaded to Phoronix. If a test result is uploaded, you can perform the same test on another computer and view the results side-by-side.



List Installable Tests

```
phoronix-test-suite list-tests
```

This will give of list of the tests that can be installed.



100+ Available Tests

aio-stress	- AIO-Stress
apache	- Apache Benchmark
blogbench	- BlogBench
bork	- Bork File Encrypter
build-apache	- Timed Apache Compilation
build-imagemagick	- Timed ImageMagick Compilation
build-linux-kernel	- Timed Linux Kernel Compilation
build-mplayer	- Timed MPlayer Compilation
build-mysql	- Timed MySQL Compilation
build-php	- Timed PHP Compilation
bwfirt	- Bwfirt
byte	- BYTE Unix Benchmark
c-ray	- C-Ray
cachebench	- CacheBench
compliance-acpi	- ACPI
compliance-ogl	- GLEW
compliance-sensors	- LM Sensors
compress-7zip	- 7-Zip Compression
compress-gzip	- Gzip Compression
compress-lzma	- LZMA Compression
compress-pbzip2	- Parallel BZIP2 Compression
...	



Install a Test

```
phoronix-test-suite install test
```

Note: *test* is the name of a test, e.g., ramspeed.



Listing Installed Tests

```
phoronix-test-suite list-installed-tests
```




Run a Test

```
phoronix-test-suite run test
```

Some tests have prerequisites and you will be prompted to install them if they are not installed.

If you want to save the results, you will be prompted for a name for the set of test runs and a unique name for the test run.

The test results are stored at `/home/user/.phoronix-test-suite/test-results/name/`.



View Results

You will be prompted to view the results in a browser:

Processor: Intel Core 2 CPU T7200 @ 1.98GHz (Total Cores: 1), Motherboard: Intel 440BX Desktop Reference Platform, Chipset: Intel 440BX/ZX/DX, System Memory: 1 x 512 MB DRAM, Disk: 6GB VMware Virtual S, Graphics: VMware SVGA II Adapter OS: SUSE LINUX 11.2, Kernel: 2.6.31.5-0.1-desktop (x86_64), Desktop: KDE 4.3.1, Display Server: X.Org Server 1.6.5, Display Driver: vmware 10.16.7, OpenGL: 1.4 (2.1 Mesa 7.6), Compiler: GCC 4.4, File-System: ext4, Screen Resolution: 1670x938 November 19, 2009 12:42 AM 2.2.0 test1 Firefox was running on this system. This system was using VMware virtualization ramspeed-test-opensuse-vmware ramspeed 1.2.0 This benchmark tests the system memory (RAM) performance. Memory RAMspeed 2.5.2 Type: Copy - Benchmark: Integer MB/s HIB BAR_GRAPH ramspeed COPY -b 3-l 10
test1 1130.72 1130.72



Upload Results

You will be prompted if you want to anonymously upload the results to Phoronix Global, their browseable test result repository.

If you do, you can view the results from a link like this:

<http://global.phoronix-test-suite.com/index.php?k=profile&u=anon-5420-13839-26693>

Finally, you will be asked if you want to launch Phoronix Global.



View Uploaded Results

Test Results

RAMspeed 2.5.2

Type: Copy - Benchmark: Integer - Length: 3 Times

RAMspeed v2.5.2

Type: Copy - Benchmark: Integer - Length: 3 Times



Compare these results against your Linux PC. Run **phoronix-test-suite benchmark anon-32225-28335-13449** and wait for the results (with comparative numbers) to appear. It's as easy as that!

Global ID: **anon-32225-28335-13449**



Benchmarking

You can compare different runs by using benchmarking.

```
phoronix-test-suite benchmark id
```

Note: *id* is the unique global identification number of a previously run test.

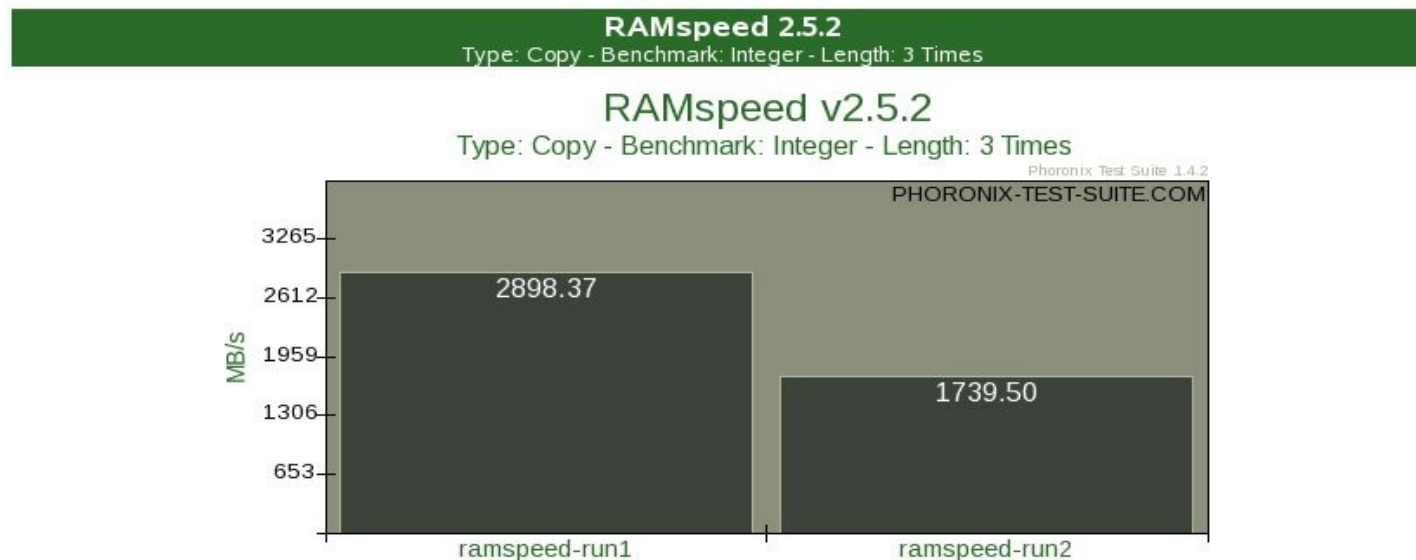


Viewing Benchmark Results

Here is an example of a benchmark comparison:

<http://global.phoronix-test-suite.com/index.php?k=profile&u=anon-22165-25246-985>

Test Results



Compare these results against your Linux PC. Run **phoronix-test-suite benchmark anon-22165-25246-985** and wait for the results (with comparative numbers) to appear. It's as easy as that!

Global ID: **anon-22165-25246-985**



GUI

PTS does have a GUI, initiated with:

```
phoronix-test-suite gui
```

Some dependancies are required:

- gcc
- make
- PHP GTK - <http://gtk.php.net/>
- php-devel



PHP-GTK

To install PHP-GTK, run:

```
./buildconf  
./configure  
make  
make install
```

Problem during configure stage:

```
checking for GLIB - version >= 2.6.0... no  
*** Could not run GLIB test program, checking why...  
*** The test program failed to compile or link. See the file config.log for the  
*** exact error that occurred. This usually means GLIB is incorrectly installed.  
configure: error: PHP-GTK 2.x requires GLib 2.6.0 or higher
```




PTS Live

PTS Desktop Live 2009.3

“the first Linux-based desktop operating system designed exclusively for carrying out automated tests using the Phoronix Test Suite from a live environment”

- Runs off DVD or USB
- Stripped down Linux OS
- Includes 50 tests

<http://www.pts-desktop-live.com/>

New version (2009.4) to be released in November or December 2009.



PTS Live Requirements

System Requirements:

- Intel / AMD x86_64 CPU
- 2GB+ of RAM Recommended
- Internet Connection Recommended
- ATI, NVIDIA, or Intel Graphics



PTS Live Demo

Demo