

FreeBSD 7.0, Linux Editor

[FreeBSD 7.0 - Better Performance Than Latest Linux Kernel](#)

Power to the servers!

The long awaited FreeBSD 7.0 has started appearing as of last night on the mirrors worldwide: *"The FreeBSD Release Engineering Team is pleased to announce the availability of FreeBSD 7.0-RELEASE. This is the first release from the 7-STABLE branch which introduces many new features along with many improvements to functionality present in the earlier branches."* This release contains visible performance upgrades, wireless improvements, updated software and a lot of security fixes. Below are some of the most important highlights of this release: X.Org 7.3; KDE 3.5.8; GNOME 2.20.2; GNU C compiler 4.2.1; BIND 9.4.2; Dramatic improvements in performance and SMP scalability shown by various database and other benchmarks, in some cases showing peak performance improvements as high as 350% over FreeBSD 6.X under normal loads and 1500% at high loads. **When compared with the best performing Linux kernel (2.6.22 or 2.6.24) performance is 15% better.** Results are from benchmarks used to analyze and improve system performance, results with your specific work load may vary. Some of the changes that contribute to this improvement are: The 1:1 libthr threading model is now the default; Finer-grained IPC, networking, and scheduler locking; A major focus on optimizing the SMP architecture that was put in place during the 5.x and 6.x branches. Moreover, some benchmarks show linear scaling up to 8 CPUs. Many workloads see a significant performance improvement with multicore systems; The ULE scheduler is vastly improved, providing improved performance and interactive response (the 4BSD scheduler is still the default for 7.0, but ULE may become the default for 7.1); Experimental support for Sun's ZFS filesystem; gjournal can be used to set up journaled filesystems, gvinstor can be used as a virtualized storage provider; Read-only support for the XFS filesystem; The unionfs filesystem has been fixed; iSCSI initiator; TSO and LRO support for some network drivers; Experimental SCTP (Stream Control Transmission Protocol) support (FreeBSD's being the reference implementation); Much improved wireless (802.11) support; Network link aggregation/trunking (lagg(4)) imported from OpenBSD; JIT compilation to turn BPF into native code, improving packet capture performance; Much improved support for embedded system development for boards based on the ARM architecture; jemalloc, a new and highly scalable user-level memory allocator; freebsd-update provides officially supported binary upgrades to new releases in addition to security fixes and errata patches. For more features and known problems, please visit the [Release Notes Document](#) and the [Errata Document](#). **What is FreeBSD?** FreeBSD is an advanced operating system based on the version 4.4 of BSD Lite. FreeBSD was built to work on machines like DEC/Compaq/HP Alpha/AXP computers (alpha), AMD64 and Intel EM64T based PC hardware (amd64), Intel, AMD, Cyrix or NexGen "x86" based PC hardware (i386), Intel Itanium Processor based computers (ia64), NEC PC-9801/9821 series PCs and compatibles (pc98), and UltraSPARC machines (sparc64). The FreeBSD team will prepare versions for the PowerPC (powerpc), and MIPS (mips) architectures in the near future. FreeBSD can be used for everything from software development to games and works with a wide variety of peripherals and configurations. You can download the new version of FreeBSD from [Softpedia](#).