

Linux-VServer Project Announces New Stable Release and New Website

Benedikt Boehm *hollow@gentoo.org*

September 5, 2006

Today, the Linux-VServer project released a new stable version of its kernel patch featuring support for Bind Mount Extensions, improved filesystem support for JFS, kernel helper improvements and other minor enhancements. The new version also fixes a lot of bugs including potential deadlocks, missing context unhashing and network address removal.

Alongside with the new kernel patch, the project announced the launch of a new and overhauled infrastructure for its web presence. The new project website is now based on MediaWiki using a complete new look and feel and will replace the old wiki in the future. Furthermore, an anonymous FTP archive, Subversion repositories and developer workspace have been added to public infrastructure.

About The Next Stable Release: 2.0.2

After eight months of work the Linux-VServer project released the next version of the stable kernel patch including the following features and bugfixes:

- Add support for Bind Mount Extensions
- Add support for I/O priority per guest
- Add support for persistent contexts
- Add support for JFS file attributes
- Add support for source address remapping
- Add support for vfsmount visibility in the spectator context
- Add support for IA32 resource limit emulation
- Add support for init/reaper flags to `ctx_migrate`
- Add support for `xid` argument to `set_namespace`
- Add support for reboot command and exit code to `vc_wait_exit`
- Improved debug system
- Improved helper state/return code handling
- Force `nodev` mount option of `CAP_SYS_ADMIN` is missing
- Fix context capability handling for non-root users inside guests (CVE-2006-2110)
- Fix kernel thread isolation
- Fix `ptrace` handling
- Fix missing context unhashing on helper failure
- Fix potential deadlock
- Fix context signalling
- Fix removal of network addresses
- Fix NFS `xid` credentials
- Fix check for `utsname` flag
- Fix `vserver` syscall on ARM and MIPS
- Fix memory accounting on IA64
- Remove broken/obsolete filesystem namespace cleanup
- Remove memory split stuff

The new release can be obtained from the Linux-VServer project website at <http://linux-vserver.org>.

About The New Website Infrastructure

The Linux-VServer project is excited to announce that a new website infrastructure with an overhauled look and feel has been setup to serve the needs for a common identity, the growing number of documentation pages as well as developer tools like source control management and a public anonymous FTP archive.

The new *MediaWiki* setup features a complete new look and feel for the Linux-VServer project including consistent fonts, colors and graphics. Furthermore content pages have been reorganized to ease the search on specific topics. Currently not all content has been migrated from the old wiki installation, therefore both installations will be run simultaneous until the migration is considered finished. *The community is encouraged to help with migration by adding new pages or migrating old ones.*

The new website also introduces various new services for developers and the community. A *public anonymous FTP archive* as well as *webspace for developers* has been setup to gather all project related downloads. Additionally various *Subversion repositories* as well as a *GIT tree* have been created to assist developers with source control management and ease tracking of changes for the community.

About Linux-VServer

Linux-VServer provides virtualization for GNU/Linux systems. Virtualization is a framework or methodology of dividing the resources of a computer into multiple execution environments. This is accomplished by kernel level isolation. It allows to run multiple virtual units at once. Those units are sufficiently isolated to guarantee the required security, but utilize available resources efficiently, as they run on the same kernel.

The basic concept of the Linux-VServer solution is to separate the user-space environment into distinct units (sometimes called Virtual Private Servers) in such a way that each VPS looks and feels like a real server to the processes contained within.

Although different Linux distributions use (sometimes heavily) patched kernels to provide special support for unusual hardware or extra functionality, most Linux distributions are not tied to a special kernel.

Linux-VServer uses this fact to allow several distributions, to be run simultaneously on a single, shared kernel, without direct access to the hardware, and share the resources in a very efficient way.

References

1. <http://linux-vserver.org>
2. <http://oldwiki.linux-vserver.org>
3. <http://ftp.linux-vserver.org>
4. <http://svn.linux-vserver.org>
5. <http://git.linux-vserver.org>
6. <http://people.linux-vserver.org>