Linux-VServer Project Announces New Development Release

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Today, the Linux-VServer project announced the second release for the development series of its kernel patch including a per-CPU fair/hard scheduling, full JFS and OCFS2 filesystem support, improved limit and accounting system, improved privacy features and much more.

About The Next Development Release: 2.1.1

After one year of work the Linux-VServer project released the second version of the development kernel patch series including the following features and bugfixes:

Additions

- Per CPU Fair/Hard Scheduler
- Per Context System Time
- Dentry Accounting and Limits
- Lock Accounting and Limits
- Slab and Page Fault Accounting
- Context Privacy (Admin)
- Context Locking (reactivated)
- Context Capability Masking
- Full JFS Filesystem Support
- Full OCFS2 Filesystem Support

Enhancements

- CoW Link Breaking (chmod/chown)
- Fake Init and Proc Checks
- Socket Accounting
- Syscall Command Security
- Context Helper
- Persistent Contexts
- Memory/Swap/Cache Info Virtualization
- PID Virtualization for External Code
- Scheduling Monitor
- Runtime History Tracing
- Barrier and Trace Checks/Info
- Improved UTS Virtualization
- Improved Trap Information
- IRQ Context (Un)Tagging

Removals

- Removed devfs legacy
- Obsoleted Memory Split (now in mainline)

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

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