

User Mode Linux

Linux inside Linux inside Linux inside...

Muli Ben-Yehuda

`mulix@mulix.org`

IBM Haifa Research Labs

what is UML?

User Mode Linux (UML, hereafter) is a port of Linux (the kernel) to run as a program inside Linux (the system). Instead of working directly with the hardware, UML uses the host's system call interface in place of the hardware. Surprisingly enough, it actually works.

what is it good for?

- testing and debugging kernel patches, without requiring a reboot
- private servers on shared hosts
- experimenting with system administration scenarios
- teaching operating systems ;-)
- UML clusters...

building it

- make oldconfig ARCH=um
- make linux
- ./linux

simple, isn't it? Don't forget you also need the UML utilities and a root file systems. You can get everything (with instructions) from <http://user-mode-linux.sf.net>