Combining Xenner, Xen and KVM into a giant furball
About Me

- Alexander Graf
- SUSE Studio team
- KVM and Qemu developer
  - Server class PowerPC KVM port
  - S390x Qemu guest support
  - x86 Mac OS X in KVM
  - Nested SVM
  - ...

Donnerstag, 4. November 2010
Xenner

- Originally written by Gerd Hoffmann
- Run Xen PV guests in KVM
- No requirement for Xen hypervisor
Why?

- SUSE Studio
- Testdrive
Custom Linux, fast & simple

Build an appliance — or your own custom Linux distro — with a few mouse clicks. Customize it to your heart's content, and share it with the world!

Watch a screencast

SUSE Studio builds:

- Your software and everything it needs, in one appliance
- Demo CDs, perfect for trade shows and handouts
- All sorts of things you can dream up!

- A custom distro, with your own software and branding
- Virtual machines, for the data center and the desktop

SUSE Appliance Toolkit

Take control of appliance building! Check out the SUSE Appliance Toolkit, featuring SUSE Studio Onsite.
Xen Architecture

Dom0
- xenstored
- domain builder
- blockback
- netback

User Mode
Kernel Mode

DomU

event channels
Xen Hypervisor
pv clock

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Demo
 pv clock

- KVM PV clock layout = Xen PV clock layout
- Just pass it through!
Why separate?

• Endianness

• Host != Guest
Why unite?

- Bugfixing
- Features
- Interface changes
Domain Builder

- Xen: libxc builds everything
- Xenner: split between qemu and xenner
- endianness
- host != guest
- reuse of infrastructure
  - elf loader
  - page tables
Xenstored

- different needs
- serve all vs serve 1 guest
- exec
- simplicity
- isolation

- safe to reuse?
- split out to separate project?