libvirt: Why?

Reasons to use libvirt

• Stable: isolation from hypervisor API changes
• Standard: portable across hypervisors
• Simple: application development in C, Python, Perl, OCaml
• Portable: Linux & Solaris; Windows and OS-X clients
• Secure: TLS/SSL + x509, Kerberos, SSH, PolicyKit
libvirt: Xen
libvirt: Xen
libvirt: What?

Implemented drivers for:

- Xen: XenD, XenStore, hypercalls
- QEMU: KVM, KQEMU, QEMU and Xenner
- LXC: native Linux containers
- Remote: secure network RPC
- Test: mock hypervisor for testing

Future... VMWare? Hyper-V?
libvirt: How?
libvirt: How?
libvirt: Who?

General purpose admin tools

- virsh: command line administration / scripting
- virt-manager: desktop management UI
- virt-viewer: secure guest console access
libvirt: Who?

Provisioning virtual machines

- virt-install: OS distro install media
- virt-clone: copying existing machine
- virt-image: deploying pre-built appliance image
libvirt: Who?

oVirt data center management

- Web user interface
- Kerberos authentication w/ FreeIPA
- iSCSI / SAN storage
- Host clustering & failover
- Guest clustering & virtual fencing