virsh Manage libvirt VMs

CONCEPTS

As a normal user virsh talks to qemu:/// session; system VMs live under qemu:///system, so add -c qemu:/// system (or set LIBVIRT_DEFAULT_URI).

Connection -c qemu:///system

Domain (VM) disks, NICs, CPU, RAM

Network, pool, volume shared host resources

destroy only stops a VM like a power cut; the definition stays. undefine removes the definition.

CONNECT

virsh -c qemu:///system *<command>*
Run against the system hypervisor

virsh -c qemu:///session *<command>*
Run against your user session

virsh
Interactive shell

LIFECYCLE

virsh list
Running VMs

virsh list --all
Running and stopped VMs

virsh start *<vm>*
Start a defined VM

virsh shutdown *<vm>*
Graceful ACPI shutdown

virsh reboot *<vm>*
Reboot gracefully

virsh destroy *<vm>*
Force off immediately

virsh autostart *<vm>*
Start with the host

DEFINE & INSPECT

virsh dumpxml *<vm>*
Print the VM's XML

virsh edit *<vm>*
Edit the XML in $EDITOR

virsh define *<file.xml>*
Create a VM from XML

DEFINE & INSPECT (cont.)

virsh undefine *<vm>*
Remove the definition

CONSOLE & NETWORK ACCESS

virsh console *<vm>*
Serial console

virsh domifaddr *<vm>*
IP addresses of the VM

RESOURCES

virsh setvcpus *<vm> <n>* **--config**
Set vCPU count for next boot

DISKS & DEVICES

virsh domblklist *<vm>*
Disks and image paths

virsh attach-disk *<vm> <path> <target>* **--persistent**
Hot-add a disk

SNAPSHOTS

virsh snapshot-create-as *<vm> <name>*
Create a snapshot

virsh snapshot-list *<vm>*
List snapshots

virsh snapshot-revert *<vm> <name>*
Roll back to a snapshot

NETWORKS

virsh net-list --all
List virtual networks

virsh net-start *<net>*
Start a network

virsh net-dhcp-leases *<net>*
Leases handed out

STORAGE

virsh pool-list --all
List storage pools

virsh vol-list *<pool>*
Volumes in a pool

virsh vol-create-as *<pool> <name>* **20G --format qcow2**
Create a disk image