

Sr. No.	Command Name	Description (brief)	Output on terminal	Status (working or not)
01	autostart	Enable and disable the automatic starting of a guest domain when the libvirt daemon starts.	<ul style="list-style-type: none"> <li>• virsh --connect lxc:/// define /http1.xml</li> <li>• virsh --connect lxc:/// autostart http1</li> </ul>	o
02	Console	connect to the virtual serial console for the guest.	<ul style="list-style-type: none"> <li>• virsh --connect lxc:/// define /http1.xml</li> <li>• virsh --connect lxc:/// start http1</li> <li>• virsh --connect lxc:/// console http1</li> </ul>	o
03	create	creates a guest domain from an xml file # does not work. gives error.	<ul style="list-style-type: none"> <li>• virsh create /http1.xml</li> <li>• #error: Failed to create domain from /http1.xml</li> <li>• #error: internal error unexpected domain type lxc, expecting one of these: qemu, kqemu, kvm, xen</li> </ul>	-
04	Define	defines but doesnt start a guest domain from an xml file	<ul style="list-style-type: none"> <li>• virsh --connect lxc:/// define /http1.xml</li> </ul>	o
05	destroy	immediately terminates a running guest domain and releases any resources in use by it. Not to be used lightly	<ul style="list-style-type: none"> <li>• first get a domain running :</li> <li>• virsh --connect lxc:/// define /http1.xml</li> <li>• virsh --connect lxc:/// start http1</li> <li>• then run a destroy. observe in a separate terminal the result of a before and after virt-top</li> <li>• virsh --connect lxc:/// destroy http1</li> <li>• #Domain http1 destroyed</li> </ul>	o
06	attach-disk / detach-disk	attach or detach a disk device Note : Doesnt work. maybe i am doing something wrong.	-	-
07	domjobinfo	info about running guest domain jobs	<ul style="list-style-type: none"> <li>• virsh --connect lxc:/// domjobinfo http1</li> <li>• error: this function is not supported by the connection driver: virDomainGetJobInfo</li> </ul>	-
08	domjobabort	aborts current running guest domain job	<ul style="list-style-type: none"> <li>• root@localhost ~]# virsh --connect lxc:/// domjobabort http1</li> <li>• error: this function is not supported by the connection driver: virDomainAbortJob</li> </ul>	-
09	Dump	Core dump a guest domain	<ul style="list-style-type: none"> <li>• virsh --connect lxc:/// dump http1 abc.delete</li> <li>• error: Failed to core dump domain http1 to abc.delete</li> <li>• error: this function is not supported by the connection driver: virDomainCoreDump</li> </ul>	-

10	managesave / managesave- remove	Save and destroy a running guest domain, so it can be restarted from the same state at a later time. When the virsh start command is next run for the guest domain, it will automatically be started from this saved state	<ul style="list-style-type: none"> <li>• virsh --connect lxc:/// managesave http1</li> <li>• error: Failed to save domain http1 state</li> <li>• error: this function is not supported by the connection driver: virDomainManagedSave</li> </ul>	-
11	Migrate **	migrates a guest domain to another host	<ul style="list-style-type: none"> <li>• virsh --connect lxc:/// migrate http2 http1 ()</li> <li>• error: no connection driver available for No connection for URI http1</li> <li>• error: Reconnected to the hypervisor</li> </ul>	
12	Reboot	Runs a reboot in the guest domain	<ul style="list-style-type: none"> <li>• [root@localhost ~]# virsh --connect lxc:/// reboot http1</li> <li>• error: Failed to reboot domain http1</li> <li>• error: this function is not supported by the connection driver: virDomainReboot</li> </ul>	-
13	Restore	restores a guest domain	<ul style="list-style-type: none"> <li>• [root@localhost ~]# virsh --connect lxc:/// restore http1</li> <li>• error: Failed to restore domain from http1</li> <li>• error: this function is not supported by the connection driver: virDomainRestore</li> </ul>	-
14	Resume	resumes a guest domain	<ul style="list-style-type: none"> <li>• [root@localhost ~]# virsh --connect lxc:/// resume http1</li> <li>• Domain http1 resumed</li> </ul>	○
15	Save	saves the running state of a guest domain to a file.	<ul style="list-style-type: none"> <li>• virsh # save http1 http1.save</li> <li>• error: Failed to save domain http1 to http1.save</li> <li>• error: this function is not supported by the connection driver: virDomainSave</li> </ul>	-
16	shutdown	runs shutdown in a guest domain	<ul style="list-style-type: none"> <li>• virsh # shutdown http1</li> <li>• error: Failed to shutdown domain http1</li> <li>• error: this function is not supported by the connection driver: virDomainShutdown</li> </ul>	-
17	Start	starts a guest domain either form a last managesave or via a fresh boot if no managed save is present	<ul style="list-style-type: none"> <li>• virsh # start http1</li> <li>• Domain http1 started</li> </ul>	○
18	Update-device	update device from an XML file	<ul style="list-style-type: none"> <li>• virsh # update-device http1 /http2.xml</li> <li>• error: Failed to update device from /http2.xml</li> <li>• error: this function is not supported by the connection driver:</li> </ul>	-

			virDomainUpdateDeviceFlags	
19	virt-viewer	display a vnc type interface to running domain	<ul style="list-style-type: none"> <li>• virt-viewer --connect lxc:/// http1</li> <li>• error message pops up in window:</li> <li>• Cannot determine the graphic type for the guest http1</li> </ul>	○
20	maxvcpus	show maximum number of virtual CPUs for guest domains on this connection	<ul style="list-style-type: none"> <li>• virsh # maxvcpus http1</li> <li>• error: this function is not supported by the connection driver: virConnectGetMaxVcpus</li> </ul>	-
21	memtune	gets or sets the current memory parameters for a guest domain	<ul style="list-style-type: none"> <li>• virsh # memtune</li> <li>• error: command 'memtune' requires &lt;domain&gt; option</li> <li>• virsh # memtune http1</li> <li>• hard_limit : 102400</li> <li>• soft_limit : unlimited</li> <li>• swap_hard_limit: unlimited</li> </ul>	○
22	schedinfo	show or set scheduler parameters	<ul style="list-style-type: none"> <li>• virsh # schedinfo</li> <li>• error: command 'schedinfo' requires &lt;domain&gt; option</li> <li>• virsh # schedinfo http1</li> <li>• Scheduler : Unknown</li> <li>• error: Requested operation is not valid: cgroup CPU controller is not mounted</li> </ul>	○
23	setmaxmem	change the maximum memory allocation limit in the guest domain	<ul style="list-style-type: none"> <li>• virsh --connect lxc:/// setmaxmem http1 --size 1024M</li> <li>• Note: If you allocate memory less than the current memory, error message will be displayed:</li> <li>• [root@localhost ~]# virsh --connect lxc:/// setmaxmem http1 --size 1024</li> <li>• error: Unable to change MaxMemorySize</li> <li>• error: invalid argument: Cannot set max memory lower than current memory</li> </ul>	○
24	setmem	change the current memory allocation in the guest domain	<ul style="list-style-type: none"> <li>• virsh --connect lxc:/// setmem http1 --size 64M</li> <li>• Note: if we allocate memory that is invalid, we will get error. by invalid it is understood that the memory range is either</li> <li>• insufficient or out of bounds</li> <li>• [root@localhost ~]# virsh --connect lxc:/// setmem http1 --size 64</li> <li>• error: operation failed: Failed to set memory for domain</li> <li>• [root@localhost ~]# virsh --connect lxc:/// setmem http1 --size 6400M</li> </ul>	○

			<ul style="list-style-type: none"> <li>error: invalid argument: Cannot set memory higher than max memory</li> </ul>	
25	setvcpus	change the number of virtual cpus in the guest domain	<ul style="list-style-type: none"> <li>[root@localhost ~]# virsh --connect lxc:/// setvcpus http1 --count 1</li> <li>error: this function is not supported by the connection driver: virDomainSetVcpus</li> </ul>	-
26	vcpuinfo	returns basic info about the guest domains virtual CPU's	<ul style="list-style-type: none"> <li>[root@localhost ~]# virsh --connect lxc:/// vcpuinfo http1</li> <li>error: this function is not supported by the connection driver: virDomainGetVcpus</li> </ul>	-
27	dominfo	displays some basic information about the domain specified	<pre>[root@localhost ~]# virsh --connect lxc:/// dominfo http1 Id:      3358 Name:    http1 UUID:    5ad4fdf0-f098-02ad-4419- ce9d0bdc3e21 OS Type:  exe State:   running CPU(s):  1 CPU time: 0.0s Max memory: 102400 kB Used memory: 728 kB Persistent: yes Autostart: disable Managed save: unknown Security model: selinux Security DOI: 0 Security label: System_u:system_r:virtd_t:s0- s0:c0.c1023 (enforcing)</pre>	o
28	dommemstat	displays info about the memory statistics of the domain	<ul style="list-style-type: none"> <li>[root@localhost ~]# virsh --connect lxc:/// dommemstat http1</li> <li>error: Failed to get memory statistics for domain http1</li> <li>error: this function is not supported by the connection driver: virDomainMemoryStats</li> </ul>	-
29	domblkinfo	gets the block device size or a guest domain	<ul style="list-style-type: none"> <li></li> </ul>	o
30	domblkstat	gets device block stats for a running guest domain	<ul style="list-style-type: none"> <li></li> </ul>	o
31	domifstat	gets network interface stat for a running guest domain	<ul style="list-style-type: none"> <li></li> </ul>	o
32	dominfo	gets basic information about a guest domain	<ul style="list-style-type: none"> <li></li> </ul>	o

33	dommemstat	gets memory statistics for a running guest domain	•	○
34	domstate	returns the state of a guest domain i.e. whether running etc	•	○
35	list	returns a list of guest domains	•	○
36	Capabilities	returns the capabilities of the host and guest in xml format	<pre> virsh # capabilities &lt;capabilities&gt; &lt;host&gt; &lt;uuid&gt;4106df86-4245-4f3b-bc63-7efc858e1ddf&lt;/uuid&gt; &lt;cpu&gt; &lt;arch&gt;x86_64&lt;/arch&gt; &lt;/cpu&gt; &lt;power_management&gt; &lt;suspend_disk/&gt; &lt;/power_management&gt; &lt;topology&gt; &lt;cells num='1'&gt; &lt;cell id='0'&gt; &lt;cpus num='2'&gt; &lt;cpu id='0'&gt; &lt;cpu id='1'&gt; &lt;/cpus&gt; &lt;/cell&gt; &lt;/cells&gt; &lt;/topology&gt; &lt;secmodel&gt; &lt;model&gt;selinux&lt;/model&gt; &lt;doi&gt;0&lt;/doi&gt; &lt;/secmodel&gt; &lt;/host&gt; &lt;guest&gt; &lt;os_type&gt;exe&lt;/os_type&gt; &lt;arch name='x86_64'&gt; &lt;wordsize&gt;64&lt;/wordsize&gt; &lt;emulator&gt;/usr/libexec/libvirt_lxc&lt;/emulator&gt; &lt;domain type='lxc'&gt; &lt;/domain&gt; &lt;/arch&gt; &lt;/guest&gt; &lt;guest&gt; &lt;os_type&gt;exe&lt;/os_type&gt; </pre>	○

			<pre> &lt;arch name='i686'&gt; &lt;wordsize&gt;32&lt;/wordsize&gt; &lt;emulator&gt;/usr/libexec/libvirt_lxc&lt;/emulator&gt; &lt;domain type='lxc'&gt; &lt;/domain&gt; &lt;/arch&gt; &lt;/guest&gt; &lt;/capabilities&gt; </pre>	
37	freecell	Display available free memory for a NUMA cell	<ul style="list-style-type: none"> <li>• virsh # freecell</li> <li>• Total: 276180 kB</li> </ul>	○
38	hostname	Display the name of the hypervisor host	<ul style="list-style-type: none"> <li>• [root@localhost ~]# hostname</li> <li>• localhost.localdomain</li> </ul>	○
39	nodeinfo	Returns basic information about the node	<pre> virsh # nodeinfo CPU model:      x86_64 CPU(s):         2 CPU frequency:  3260 MHz   CPU socket(s):      1 Core(s) per socket: 2 Thread(s) per core: 1 NUMA cell(s):   1 Memory size:    1020536 kB </pre>	○
40	iface-define	<p>define a physical host network interface. The file expected is of the type xml. We have an example of how it is executed.</p>	<ul style="list-style-type: none"> <li>• Steps to Reproduce:</li> <li>• 1. Create the file bridgeInterfaceConfig.xml (change interface, ip and mac to correspond to your configuration :  <pre> &lt;interface type='bridge' name='br1'&gt; &lt;start mode="onboot"/&gt; &lt;protocol family='ipv4'&gt; &lt;ip address='192.168.1.15' prefix='24'/&gt; &lt;/protocol&gt; &lt;bridge&gt; &lt;interface type='ethernet' name='eth2'&gt; &lt;mac address='00:1b:21:43:36:b0'/&gt; &lt;/interface&gt; &lt;/bridge&gt; &lt;/interface&gt; </pre> </li> <li>• 2. run "virsh iface-define bridgeInterfaceConfig.xml"</li> <li>• 3. run "iface-start br1".</li> </ul>	○
41	iface-destroy	shutdown and disables a physical host network device	<ul style="list-style-type: none"> <li>• virsh # iface-destroy br1</li> <li>• error: Failed to destroy interface br1</li> <li>• error: internal error failed to destroy (stop) interface br1: failed to execute external program - Running 'ifdown eth0' failed with</li> </ul>	○

			exit code 6: Error: Device 'eth0' (/org/freedesktop/NetworkManager/Devices /0) disconnecting failed: This device is not active	
42	iface-dumpxml	Output information for a physical host network interface, as an XML dump to stdout	<pre>virsh # iface-dumpxml br1 &lt;interface type='bridge' name='br1'&gt; &lt;bridge&gt; &lt;interface type='ethernet' name='eth0'&gt; &lt;mac address='08:00:27:97:13:e1' /&gt; &lt;/interface&gt; &lt;/bridge&gt; &lt;/interface&gt;</pre>	○
43	iface-list	Returns a list of physical host network interfaces	<ul style="list-style-type: none"> <li>• virsh # iface-list</li> <li>• Name            State    MAC Address</li> <li>• -----</li> <li>• lo            active    00:00:00:00:00:00</li> </ul>	○
44	iface-start	Enables and starts a physical host network interface	<ul style="list-style-type: none"> <li>• virsh # iface-start br1</li> <li>• Interface br1 started</li> </ul>	○
45	iface-undefine	Removes the configuration information for a physical host network interface	<ul style="list-style-type: none"> <li>• virsh # iface-undefine br1</li> <li>• Interface br1 undefined</li> </ul>	○
46	net-autostart	Enable or disable the automatic starting of a virtual network, when the libvirt daemon starts	<ul style="list-style-type: none"> <li>• virsh # net-autostart default</li> <li>• Network default marked as autostarted</li> </ul>	○
47	net-define	Adds a new permanent virtual network from an XML file, without starting it	<p>Steps to reproduce :</p> <ol style="list-style-type: none"> <li>1. generate a network XML configuration file using the format as specified in this url (<a href="http://libvirt.org/formatnetwork.html">http://libvirt.org/formatnetwork.html</a>). In the below example i have defined a basic bare network. <pre>&lt;network&gt; &lt;name&gt;examplenetwork&lt;/name&gt; &lt;bridge name="virbr0" /&gt; &lt;forward mode="route" /&gt; &lt;ip address="172.26.126.1" netmask="255.255.255.0" /&gt; &lt;/network&gt;</pre> </li> <li>2. Define the network using the command net-define as below: <pre>virsh # net-define /examplenetwork.xml Network examplenetwork defined from /examplenetwork.xml</pre> </li> </ol>	○

			<p>3. Check if entry has been made. Also check that it should not be running as soon as it is created.</p> <p>Newly defined virtual networks aren't set to automatically be started, as can be seen here:</p> <pre>virsh # net-list --all</pre> <pre>Name          State    Autostart</pre> <pre>-----</pre> <pre>default        active  yes</pre> <pre>examplenetwork  inactive no</pre> <p>4. Autostart configure, we will now set it to autostart with the command:</p> <pre>virsh # net-autostart examplenetwork</pre> <p>Network examplenetwork marked as autostarted</p> <p>5. Check whether it has autostarted or not</p> <pre>virsh # net-list --all</pre> <pre>Name          State    Autostart</pre> <pre>-----</pre> <pre>default        active  yes</pre> <pre>examplenetwork  inactive yes</pre> <p>6. To disable autostart, we can run a net-autostart --disable to disable any network.</p> <pre># net-autostart --disable examplenetwork</pre> <p>Network examplenetwork unmarked as autostarted</p>	
48	net-dumpxml	Displays the XML configuration for a virtual network (to stdout)	<pre>virsh # net-dumpxml default</pre> <pre>&lt;network&gt;</pre> <pre>&lt;name&gt;default&lt;/name&gt;</pre> <pre>&lt;uuid&gt;cade1299-29aa-4db0-a04b-</pre> <pre>f26281a8b30a&lt;/uuid&gt;</pre> <pre>&lt;forward mode='nat'/&gt;</pre> <pre>&lt;bridge name='virbr0' stp='on' delay='0' /&gt;</pre> <pre>&lt;mac address='52:54:00:9B:B4:F7'/&gt;</pre> <pre>&lt;ip address='192.168.122.1'</pre> <pre>netmask='255.255.255.0'&gt;</pre> <pre>&lt;dhcp&gt;</pre> <pre>&lt;range start='192.168.122.2'</pre> <pre>end='192.168.122.254' /&gt;</pre> <pre>&lt;/dhcp&gt;</pre> <pre>&lt;/ip&gt;</pre> <pre>&lt;/network&gt;</pre>	○
49	net-edit	opens the network config xml for editing by user.	<ul style="list-style-type: none"> <li>• virsh # net-edit default</li> <li>• Network default XML configuration not changed.</li> </ul>	○
50	net-info	displays basic information	virsh # net-info default	○



		about a network	Name default UUID cade1299-29aa-4db0-a04b-f26281a8b30a Active: yes Persistent: yes Autostart: yes Bridge: virbr0	
51	net-start	starts a network	<ul style="list-style-type: none"> <li>• virsh # net-start default</li> </ul>	○
52	net-undefine	undefines a network from the configuration file.	<ul style="list-style-type: none"> <li>• virsh # net-destroy default</li> <li>• Network default destroyed</li> <li>• virsh # net-undefine default</li> <li>• Network default has been undefined</li> </ul>	○
53	Domain snapshot commands (multiple)	Does not work with LXC.	<ul style="list-style-type: none"> <li>• virsh # snapshot-dumpxml http1 abs</li> <li>• error: this function is not supported by the connection driver: virDomainSnapshotLookupByName</li> </ul>	○