NAME

libvirtd – libvirt management daemon

SYNOPSIS

libvirtd [*OPTION*]...

DESCRIPTION

The **libvirtd** program is the server side daemon component of the libvirt virtualization management system.

This daemon runs on host servers and performs required management tasks for virtualized guests. This includes activities such as starting, stopping and migrating guests between host servers, configuring and manipulating networking, and managing storage for use by guests.

The libvirt client libraries and utilities connect to this daemon to issue tasks and collect information about the configuration and resources of the host system and guests.

By default, the libvirtd daemon listens for requests on a local Unix domain socket. Using the **–l | ––listen** command line option, the libvirtd daemon can be instructed to additionally listen on a TCP/IP socket. The TCP/IP socket to use is defined in the libvirtd configuration file.

Restarting libvirtd does not impact running guests. Guests continue to operate and will be picked up automatically if their XML configuration has been defined. Any guests whose XML configuration has not been defined will be lost from the configuration.

SYSTEM SOCKET ACTIVATION

The **libvirtd** daemon is capable of starting in two modes.

In the traditional mode, it will create and listen on UNIX sockets itself. If the **––listen** parameter is given, it will also listen on TCP/IP socket(s), according to the **listen_tcp** and **listen_tls** options in **/etc/libvirt/libvirtd.conf**

In socket activation mode, it will rely on systemd to create and listen on the UNIX, and optionally TCP/IP, sockets and pass them as pre–opened file descriptors. In this mode, it is not permitted to pass the **––listen** parameter, and most of the socket related config options in **/etc/libvirt/libvirtd.conf** will no longer have any effect. To enable TCP or TLS sockets use either

```
$ systemctl start libvirtd-tls.socket
```

Or

```
$ systemctl start libvirtd-tcp.socket
```

Socket activation mode is generally the default when running on a host OS that uses systemd. To revert to the traditional mode, all the socket unit files must be masked:

```
$ systemctl mask libvirtd.socket libvirtd-ro.socket \
   libvirtd-admin.socket libvirtd-tls.socket libvirtd-tcp.socket
```

OPTIONS

–h, **––help**

Display command line help usage then exit.

–d, **––daemon**

Run as a daemon & write PID file.

−f, **−−config *FILE***

Use this configuration file, overriding the default value.

−l, **−−listen**

Listen for TCP/IP connections. This should not be set if using systemd socket activation. Instead activate the libvirtd−tls.socket or libvirtd−tcp.socket unit files.

−p, **−−pid−file *FILE***

Use this name for the PID file, overriding the default value.

−t, **−−timeout *SECONDS***

Exit after timeout period (in seconds), provided there are neither any client connections nor any running domains.

−v, **−−verbose**

Enable output of verbose messages.

−−version

Display version information then exit.

SIGNALS

On receipt of **SIGHUP** libvirtd will reload its configuration.

FILES

When run as *root*

- **/etc/libvirt/libvirtd.conf**

The default configuration file used by libvirtd, unless overridden on the command line using the **−f | −−config** option.

- **/run/libvirt/libvirt−sock**
- **/run/libvirt/libvirt−sock−ro**

The sockets libvirtd will use.

- **/etc/pki/CA/cacert.pem**

The TLS **Certificate Authority** certificate libvirtd will use.

- **/etc/pki/libvirt/servercert.pem**

The TLS **Server** certificate libvirtd will use.

- **/etc/pki/libvirt/private/serverkey.pem**

The TLS **Server** private key libvirtd will use.

- **/run/libvirtd.pid**

The PID file to use, unless overridden by the **−p | −−pid−file** option.

When run as *non−root*

- **$XDG_CONFIG_HOME/libvirt/libvirtd.conf**

The default configuration file used by libvirtd, unless overridden on the command line using the **−f``|−−**config`` option.

- **$XDG_RUNTIME_DIR/libvirt/libvirt−sock**

The socket libvirtd will use.

- **$HOME/.pki/libvirt/cacert.pem**

The TLS **Certificate Authority** certificate libvirtd will use.

- **$HOME/.pki/libvirt/servercert.pem**

The TLS **Server** certificate libvirtd will use.

- **$HOME/.pki/libvirt/serverkey.pem**

The TLS **Server** private key libvirtd will use.

- **$XDG_RUNTIME_DIR/libvirt/libvirtd.pid**

The PID file to use, unless overridden by the **−p``|−−**pid−file`` option.

If **$XDG_CONFIG_HOME** is not set in your environment, libvirtd will use **$HOME/.config**

If **$XDG_RUNTIME_DIR** is not set in your environment, libvirtd will use **$HOME/.cache**

EXAMPLES

To retrieve the version of libvirtd:

```
# libvirtd --version
libvirtd (libvirt) 0.8.2
```

To start libvirtd, instructing it to daemonize and create a PID file:

```
# libvirtd -d
# ls -la /run/libvirtd.pid
-rw-r--r-- 1 root root 6 Jul  9 02:40 /run/libvirtd.pid
```

BUGS

Please report all bugs you discover. This should be done via either:

1. the mailing list

   https://libvirt.org/contact.html

2. the bug tracker

   https://libvirt.org/bugs.html

Alternatively, you may report bugs to your software distributor / vendor.

AUTHORS

Please refer to the AUTHORS file distributed with libvirt.

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SEE ALSO

virsh(1), virt−install(1), virt−xml−validate(1), virt−top(1), virt−df(1), *https://www.libvirt.org/*