NAME
virt−get−kernel – Extract kernel and ramdisk from guests

SYNOPSIS
```
virt-get-kernel [--options] -d domname

virt-get-kernel [--options] -a disk.img
```

DESCRIPTION
This option extracts the kernel and initramfs from a guest.

The format of the disk image is automatically detected unless you specify it by using the −−*format* option.

In the case where the guest contains multiple kernels, the one with the highest version number is chosen. To extract arbitrary kernels from the disk image, see **guestfish** (1). To extract the entire /boot directory of a guest, see **virt−copy−out** (1).

OPTIONS
−−help
> Display help.

−a file
−−add file
> Add *file* which should be a disk image from a virtual machine.
>
> The format of the disk image is auto-detected. To override this and force a particular format use the −−*format* option.

−a URI
−−add URI
> Add a remote disk. The URI format is compatible with guestfish. See ''ADDING REMOTE STORAGE'' in **guestfish** (1).

−−blocksize 512
−−blocksize 4096
> This parameter sets the sector size of the disk image added with −*a* option and is ignored for libvirt guest added with −*d* option. See also ''guestfs_add_drive_opts'' in **guestfs** (3).

−−colors
−−colours
> Use ANSI colour sequences to colourize messages. This is the default when the output is a tty. If the output of the program is redirected to a file, ANSI colour sequences are disabled unless you use this option.

−c URI
−−connect URI
> If using libvirt, connect to the given *URI*. If omitted, then we connect to the default libvirt hypervisor.
>
> If you specify guest block devices directly (−*a*), then libvirt is not used at all.

−d guest
−−domain guest
> Add all the disks from the named libvirt guest. Domain UUIDs can be used instead of names.

−−echo−keys
> When prompting for keys and passphrases, virt-get-kernel normally turns echoing off so you cannot see what you are typing. If you are not worried about Tempest attacks and there is no one else in the room you can specify this flag to see what you are typing.

−−format raw|qcow2|..
−−format auto
> The default for the −*a* option is to auto-detect the format of the disk image. Using this forces the disk format for the −*a* option on the command line.

If you have untrusted raw−format guest disk images, you should use this option to specify the disk format. This avoids a possible security problem with malicious guests (CVE−2010−3851).

−−key SELECTOR

Specify a key for LUKS, to automatically open a LUKS device when using the inspection. `ID` can be either the libguestfs device name, or the UUID of the LUKS device.

−−key `ID:key:KEY_STRING`

Use the specified `KEY_STRING` as passphrase.

−−key `ID:`file:FILENAME

Read the passphrase from *FILENAME*.

−−keys−from−stdin

Read key or passphrase parameters from stdin. The default is to try to read passphrases from the user by opening */dev/tty*.

If there are multiple encrypted devices then you may need to supply multiple keys on stdin, one per line.

−−machine−readable
−−machine−readable=format

This option is used to make the output more machine friendly when being parsed by other programs. See ''MACHINE READABLE OUTPUT'' below.

−o directory
−−output directory

This option specifies the output directory where kernel and initramfs from the guest are written.

If not specified, the default output is the current directory.

−−prefix prefix

This option specifies a prefix for the extracted files.

If a prefix is specified, then there will be a dash (−) after the prefix and before the rest of the file name; for example, a kernel in the guest like `vmlinuz−3.19.0−20−generic` is saved as `mydistro−vmlinuz−3.19.0−20−generic` when the prefix is `mydistro`.

See also *−−unversioned−names*.

−q
−−quiet

Don't print ordinary progress messages.

−−unversioned−names

This option affects the destination file name of extracted files.

If enabled, files will be saved locally just with the base name; for example, kernel and ramdisk in the guest like `vmlinuz−3.19.0−20−generic` and `initrd.img−3.19.0−20−generic` are saved respectively as `vmlinuz` and `initrd.img`.

See also *−−prefix*.

−v
−−verbose

Enable verbose messages for debugging.

−V
−−version

Display version number and exit.

−x   Enable tracing of libguestfs API calls.

MACHINE READABLE OUTPUT

The *−−machine−readable* option can be used to make the output more machine friendly, which is useful when calling virt-get-kernel from other programs, GUIs etc.

Use the option on its own to query the capabilities of the virt-get-kernel binary. Typical output looks like this:

```
$ virt-get-kernel --machine-readable
virt-get-kernel
```

A list of features is printed, one per line, and the program exits with status 0.

It is possible to specify a format string for controlling the output; see "ADVANCED MACHINE READABLE OUTPUT" in **guestfs** (3).

ENVIRONMENT VARIABLES

For other environment variables which affect all libguestfs programs, see "ENVIRONMENT VARIABLES" in **guestfs** (3).

EXIT STATUS

This program returns 0 if successful, or non-zero if there was an error.

SEE ALSO

guestfs (3), **guestfish** (1), **guestmount** (1), **virt−copy−out** (1), http://libguestfs.org/.

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BUGS

To get a list of bugs against libguestfs, use this link: https://bugzilla.redhat.com/buglist.cgi?component=libguestfs&product=Virtualization+Tools

To report a new bug against libguestfs, use this link: https://bugzilla.redhat.com/enter_bug.cgi?component=libguestfs&product=Virtualization+Tools

When reporting a bug, please supply:

• The version of libguestfs.

• Where you got libguestfs (eg. which Linux distro, compiled from source, etc)

• Describe the bug accurately and give a way to reproduce it.

• Run **libguestfs−test−tool** (1) and paste the **complete, unedited** output into the bug report.