

Package VIRT

Version 4.0.0-testing-x86-r60782

Frank Meyer the fli4l-Team
email: frank@fli4l.de email: team@fli4l.de

October 5, 2022

Contents

1	Documentation Of Package VIRT	3
1.1	VIRT – Support For Virtualization	3
1.1.1	Xen	3
1.1.2	Virtio	3
1.1.3	VMware	4
1.1.4	Hyper-V	4
	List of Figures	5
	List of Tables	6
	Index	7

1 Documentation Of Package VIRT

1.1 VIRT – Support For Virtualization

This package supports the use of fli4l as a virtual machine. Using a 64 bit kernel for the x86_64 architecture is required.

For virtualization of a fli4l using *Xen*, *KVM*, *VMware* or *Hyper-V* this package loads the necessary kernel modules. Furthermore you can set additional options, which may be useful for the use as virtual machine.

1.1.1 Xen

OPT_XEN The activation of this variable ensures that the Xen-specific kernel modules are loaded on fli4l. This is necessary if the fli4l system is virtualized using Xen.

The following drivers are loaded:

- netxen_nic
- xen-blkfront
- xen-kbdfont
- xen-netfront

Default Setting: OPT_XEN='no'

Example: OPT_XEN='yes'

1.1.2 Virtio

OPT_VIRTIO The activation of this variable ensures that the KVM-specific kernel modules are loaded on fli4l. This is necessary if the fli4l system is virtualized using KVM.

The following drivers are loaded:

- virtio_balloon
- virtio_blk
- virtio_net
- virtio_pci

Default Setting: OPT_VIRTIO='no'

Example: OPT_VIRTIO='yes'

VIRTIO_QEMU_GUEST_AGENT You can start the QEMU Guest Agent¹ on the virtualized fli4l with this option. This way the host can execute certain management functions,

¹See https://wiki.libvirt.org/page/Qemu_guest_agent

which need support from within the guest system. Retrieving statistics or triggering a clean shutdown or suspend is possible for example.

This option requires correspondent configuration of the virtual machine on the host side. See the documentation of KVM, virt-manager² or Proxmox³ for that.

Default Setting: `VIRTIO_QEMU_GUEST_AGENT='no'`

Example: `VIRTIO_QEMU_GUEST_AGENT='yes'`

1.1.3 VMware

OPT_VMWARE Activating this variable triggers loading of the specific kernel modules required for virtualizing fli4l using VMware.

The following drivers are loaded:

- `vmw_pvscsi`
- `mptsas`
- `mptspi`
- `ahci`
- `ata_piix`
- `vmxnet3`
- `e1000e`
- `e1000`
- `pcnet32`

Default setting: `OPT_VMWARE='no'`

Example: `OPT_VMWARE='yes'`

1.1.4 Hyper-V

OPT_HYPERV Activating this variable ensures that Hyper-V specific kernel modules are loaded. This is necessary for the fli4l system running virtualized using Hyper-V.

The following drivers are loaded:

- `pci_hyperv`
- `hv_storvsc`
- `hv_utils`
- `hv_balloon`
- `hv_sock`
- `hv_netvsc`

Default setting: `OPT_HYPERV='no'`

Example: `OPT_HYPERV='yes'`

²See <https://virt-manager.org/>

³See <https://pve.proxmox.com/wiki/Qemu-guest-agent>

List of Figures

List of Tables

Index

OPT_HYPERV, [4](#)

OPT_VIRTIO, [3](#)

OPT_VMWARE, [4](#)

OPT_XEN, [3](#)

VIRTIO_QEMU_GUEST_AGENT, [3](#)