NAME

usbconfig - configure the USB subsystem

SYNOPSIS

usbconfig [**-v**] [**-a** *addr*] [**-i** *interface_index*] [**-u** *unit*] [*cmds ...*]
usbconfig -d [[**/dev/**]**ugen**]*unit*.*addr* [**-v**] [**-i** *interface_index*] [*cmds ...*]

DESCRIPTION

The **usbconfig** utility is used to configure and dump information about the USB subsystem.

The options are as follows:

-a *addr*

> Limit device range to the given USB device index. Should only be used in conjunction with the unit argument.

-d [[**/dev/**]**ugen**]*unit*.*addr*

> Limit device range to USB devices connected to the given unit and address. The unit and address coordinates may be prefixed by the lowercased word **ugen**, or the full path name **/dev/ugen**.

-h   Show help and available commands.

-i *interface_index*

> Specify interface index as indicated by the command description. If this argument is not specified a value of zero will be used for the interface index.

-u *unit* Limit device range to USB devices connected to the given USBUS unit.

-v   Activate the **dump_device_desc**, **dump_curr_config_desc**, and **show_ifdrv** commands ("verbose mode").

The following commands may be used with **usbconfig**:

set_config *cfg_index*

> Choose the configuration for the USB device. Valid values range from zero to the number reported as the *bNumConfigurations* in **dump_device_desc** output. The special value of 255 unconfigures the device, detaching the interface drivers and reducing the power consumption to minimum, but without going into power saving mode or detaching from the bus. In some cases, it prevents the device from charging.

set_alt *alt_index*

Choose the alternate interface for the selected interface and USB device. Alternative settings for the current configuration are available as the *bAlternateSetting* in **dump_curr_config_desc** output. Usually there is no need to adjust this setting. This command uses the **-i** *interface_index* option.

set_template *template*

Set the global USB device side template. See usb_template(4) for more information.

get_template

Get the current USB device side template.

add_dev_quirk_vplh *vid pid lo_rev hi_rev quirk_name*

Add a quirk by specifying the Vendor ID, Product ID, low and high revision numbers, and the quirk name. See usb_quirk(4) for more information.

remove_dev_quirk_vplh *vid pid lo_rev hi_rev quirk_name*

Remove a quirk.

add_quirk *quirk_name*

Add quirk for the currently selected USB device.

remove_quirk *quirk_name*

Remove a quirk for the currently selected USB device.

dump_all_desc

Display the device and configuration descriptors.

dump_quirk_names

Display the list of supported quirk names.

dump_device_quirks

Display the list of current device quirks.

dump_device_desc

Display the device descriptor.

dump_curr_config_desc

Display current configuration descriptor.

dump_all_config_desc
        Display all the configuration descriptors.

dump_string *index*
        Display string descriptor at selected index.

dump_info
        Display summary information about the device.

dump_stats
        Display USB transfer statistics.

show_ifdrv
        Display the list of interface drivers (such as ukbd(4) or u3g(4)) currently attached to the device.

detach_kernel_driver
        Detach kernel driver for the selected interface and USB device. This command uses the **-i**
        interface_index option.

suspend
        Force the device to suspend.

resume
        Force the device to resume.

power_off
        Turn the device off.

power_save
        Turn the automatic suspend and resume on. This is the default for USB hubs.

power_on
        Turn the device on and disable automatic suspend and resume. This is the default for non-hub
        devices.

reset   Reset the device. This forces the USB stack to reenumerate the bus.

list   List all available USB devices. This is the default if **usbconfig** is called without specifying a
        command.

do_request *bmReqTyp bReq wVal wIdx wLen data...*
> Perform a synchronous control request on the specified device. See
> libusb20_dev_request_sync(3) for more information.

EXAMPLES

List all connected USB devices and their attached interface drivers:

    usbconfig show_ifdrv

Dump device and configuration descriptors for device on USB bus 1 at address 2:

    usbconfig -d ugen1.2 dump_all_desc

Dump HID descriptor for device on USB bus 1 at address 2:

    usbconfig -d ugen1.2 do_request 0x81 0x06 0x2200 0 0x100

Power off the device on USB bus 1 at address 2:

    usbconfig -d ugen1.2 power_off

SEE ALSO

usb(4), usb_quirk(4), usb_template(4)