

GNU/Linux Administration - Support #810

Setup a Bluetooth Keyboard on Arch Linux

05/13/2016 05:30 PM - Daniel Curtis

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|------------------------|---------------|------------------------|------------|
| Status: | Closed | Start date: | 05/13/2016 |
| Priority: | Normal | Due date: | |
| Assignee: | Daniel Curtis | % Done: | 100% |
| Category: | Workstation | Estimated time: | 0.50 hour |
| Target version: | Arch Linux | Spent time: | 1.00 hour |

Description

This is a guide on how I setup a bluetooth keyboard on Arch Linux.

Prepare the Environment

- Make sure the system is up to date:

```
sudo pacman -Syu
```

Install Bluetooth

- Install the bluez packages:

```
sudo pacman -S bluez bluez-utils
```

- Start and enable the bluetooth service at boot:

```
sudo systemctl enable bluetooth
sudo systemctl start bluetooth
```

- Use bluetoothctl for the pairing process:

```
bluetoothctl -a
```

- While in bluetoothctl power up the controller:

```
power on
```

- Next, tell bluetoothctl to look only for keyboards, and make that the default agent:

```
agent KeyboardOnly
default-agent
```

- Next, put the controller (the local dongle) in pairable mode:

```
pairable on
```

- Next, put the keyboard in an active mode, where it is **discoverable**, i.e. pairable.
- Then, let the controller scan the BT frequencies for a suitable device:

```
scan on
```

- Next, actually do the pairing. The address used is the BT-MAC address of the keyboard:

```
pair 01:02:03:04:05:06
```

- Next, make this a trusted device (this allows the device to establish the connection on itself). Again, the BT-MAC address is the address of the keyboard device:

```
trust 01:02:03:04:05:06
```

- Finally connect to the device (keyboard). Again, the BT-MAC address is the address of the keyboard device:

```
connect 01:02:03:04:05:06
```

- Leave the bluetoothctl utility:

```
quit
```

Automatically enabling a Bluetooth Keyboard

NOTE: Remember that you have to pair and trust your device in bluetoothctl to cause autoconnect.

Custom systemd service file:

- Create a bluetooth keyboard config file:

```
sudo vi /etc/btkbd.conf
```

- And add the following:

```
# Config file for btkbd.service
# change when required (e.g. keyboard hardware changes, more hci devices are connected)
BTKBDMAC = "01:02:03:04:05:06"
HCIDevice = "hci0"
```

- Next, create a new bluetooth keyboard service file:

```
sudo vi /etc/systemd/system/btkbd.service
```

- And add the following:

```
[Unit]
Description=systemd Unit to automatically start a Bluetooth keyboard
Documentation=https://wiki.archlinux.org/index.php/Bluetooth_Keyboard
Requires=dbus-org.bluez.service
After=dbus-bluez.org.service
ConditionPathExists=/etc/btkbd.conf
ConditionPathExists=/usr/bin/hcitool
ConditionPathExists=/usr/bin/hciconfig

[Service]
Type=oneshot
EnvironmentFile=/etc/btkbd.conf
ExecStart=
ExecStart=/usr/bin/hciconfig ${HCIDevice} up
# ignore errors on connect, spurious problems with bt? so start next command with -
ExecStart=-/usr/bin/hcitool cc ${BTKBDMAC}
```

```
[Install]
WantedBy=multi-user.target
```

- Then reload systemd and enable the service at boot:

```
sudo systemctl daemon-reload
sudo systemctl enable btkbd
sudo systemctl start btkbd
```

Resources

- <https://wiki.archlinux.org/index.php/bluetooth>
- https://wiki.archlinux.org/index.php/bluetooth_keyboard

History

#1 - 05/13/2016 05:50 PM - Daniel Curtis

- *Description updated*
- *Status changed from New to Resolved*
- *% Done changed from 0 to 100*

#2 - 07/10/2016 10:03 AM - Daniel Curtis

- *Status changed from Resolved to Closed*