Bluetooth

You can use `bluetoothctl` and `bluetooth` to control bluetooth devices

To check the status of bluetooth

```
rfkill


ID TYPE      DEVICE      SOFT      HARD
 0 wlan      phy0   unblocked unblocked
 1 bluetooth hci0     blocked unblocked
```

To turn bluetooth on (replace on with off to turn bluetooth off)

```
bluetooth on


bluetooth = on
kapper@xps:~/dot$ rfkill
ID TYPE      DEVICE      SOFT      HARD
 0 wlan      phy0   unblocked unblocked
 1 bluetooth hci0   unblocked unblocked
```

```
rfkill


ID TYPE      DEVICE      SOFT      HARD
 0 wlan      phy0   unblocked unblocked
 1 bluetooth hci0   unblocked unblocked
```

To scan and connect to devices, run `bluetoothctl` to enter a bluetooth shell

```
bluetoothctl


Agent registered
[bluetooth]#
```

Now, we can start a scan with `scan on`

```
[bluetooth]# scan on
Discovery started
[CHG] Controller AC:74:B1:85:27:98 Discovering: yes
[NEW] Device 6A:0C:07:6A:09:EC Inspire HR
[NEW] Device 48:FE:3D:EB:C8:C3 48-FE-3D-EB-C8-C3
[NEW] Device EB:28:A2:3E:99:3F One
```

After scanning for some time, type `devices` to see the devices discovered in a list. While doing this, we can stop the scan so our output isn't messed with.

```
[bluetooth]# scan off
Discovery stopped
[CHG] Controller AC:74:B1:85:27:98 Discovering: no
[CHG] Device 6B:98:C9:C1:86:6C RSSI is nil
[CHG] Device 59:A5:50:BA:7E:4E RSSI is nil
[CHG] Device 66:05:2D:A4:AF:D2 RSSI is nil
[CHG] Device 50:32:37:84:CB:D4 TxPower is nil
[CHG] Device 50:32:37:84:CB:D4 RSSI is nil
[CHG] Device 03:0D:0F:0F:E9:51 RSSI is nil
[CHG] Device 6A:81:34:01:76:C0 RSSI is nil
[CHG] Device EB:28:A2:3E:99:3F TxPower is nil
[CHG] Device EB:28:A2:3E:99:3F RSSI is nil
[CHG] Device 48:FE:3D:EB:C8:C3 RSSI is nil
[CHG] Device 6A:0C:07:6A:09:EC RSSI is nil

[bluetooth]# devices
Device 50:32:37:84:CB:D4 50-32-37-84-CB-D4
Device 90:DD:5D:98:3A:E7 90-DD-5D-98-3A-E7
Device F9:EB:78:07:17:4B Dell Keybd KB7221W
Device 28:11:A5:34:08:2C Dumbo
Device 34:82:C5:F8:04:F3 Sam
Device E6:4E:7A:3F:FD:E7 Dell Mouse MS5320W
Device F9:EB:78:08:17:4B Dell Keybd KB7221W
Device E6:4E:7A:57:FD:E7 Dell Mouse MS5320W
Device F9:EB:78:04:17:4B Dell Keybd
Device 6A:0C:07:6A:09:EC Inspire HR
Device 48:FE:3D:EB:C8:C3 48-FE-3D-EB-C8-C3
Device EB:28:A2:3E:99:3F One
Device 6A:81:34:01:76:C0 Family Room TV
```

Now, if we want to pair, simply type `pair` followed by the ID for the device

```
[bluetooth]# pair F9:07:78:DA:17:4B
Attempting to pair with F9:07:78:DA:17:4B
[CHG] Device F9:07:78:DA:17:4B Connected: yes
[agent] Passkey: 221692
[NEW] Primary Service (Handle 0x4461)
    /org/bluez/hci0/dev_F9_07_78_DA_17_4B/service000a
    00001801-0000-1000-8000-00805f9b34fb
    Generic Attribute Profile
[NEW] Primary Service (Handle 0x4461)
    /org/bluez/hci0/dev_F9_07_78_DA_17_4B/service000b
    0000180a-0000-1000-8000-00805f9b34fb
    Device Information
[NEW] Characteristic (Handle 0x4461)
    /org/bluez/hci0/dev_F9_07_78_DA_17_4B/service000b/char000c
    00002a29-0000-1000-8000-00805f9b34fb
    Manufacturer Name String
[NEW] Characteristic (Handle 0x4461)
    /org/bluez/hci0/dev_F9_07_78_DA_17_4B/service000b/char000e
    00002a50-0000-1000-8000-00805f9b34fb
    PnP ID
[CHG] Device F9:07:78:DA:17:4B UUIDs: 00001800-0000-1000-8000-00805f9b34fb
[CHG] Device F9:07:78:DA:17:4B UUIDs: 00001801-0000-1000-8000-00805f9b34fb
[CHG] Device F9:07:78:DA:17:4B UUIDs: 0000180a-0000-1000-8000-00805f9b34fb
[CHG] Device F9:07:78:DA:17:4B UUIDs: 0000180f-0000-1000-8000-00805f9b34fb
[CHG] Device F9:07:78:DA:17:4B UUIDs: 00001812-0000-1000-8000-00805f9b34fb
[CHG] Device F9:07:78:DA:17:4B ServicesResolved: yes
[CHG] Device F9:07:78:DA:17:4B Paired: yes
Pairing successful
[CHG] Device F9:07:78:DA:17:4B Name: Dell Keybd KB7221W
[CHG] Device F9:07:78:DA:17:4B Alias: Dell Keybd KB7221W
[CHG] Device F9:07:78:DA:17:4B Modalias: usb:v413Cp2511d0001
[Dell Keybd ]#
```

This device just happens to be a keyboard, so I'm asked to type the pascode `221692` on the keyboard, then press enter. Once I do this, the pair is completed and the devices are paired.

Next time you enable bluetooth with `bluetooth on`, and then you turn on this keyboard, the devices will automatically attempt to connect.

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