Automatically Launch Applications on tty

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ABSTRACT

Rundown on how to start an interactive console application automatically on boot using systemd. Useful for unattended Raspberry Pis.

1. General Idea

By default the service `getty` is launched. That will do the magic that opens a login prompt on any tty.

To automatically launch an application instead of that login prompt, one has to *simply* overwrite that behaviour.

2. Create A New Service

Create a file named `/etc/systemd/system/mytui@.service`.

```
[Unit]
Description=Custom user interface on %I
Documentation=https://unix.stackexchange.com/a/318336/5132
Conflicts=getty@%I.service
Before=getty.target

[Service]
ExecStart=/usr/local/bin/mytui
StandardInput=tty
StandardOutput=tty
Restart=always
RestartSec=1
UtmpIdentifier=%I
TTYPath=/dev/%I
TTYReset=yes
TTYVHangup=yes
TTYVTDisallocate=yes
SendSIGHUP=yes

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

Obviuosly adjust the filename and the `ExecStart` parameter.

3. Start Your New Service On Boot

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3.1. Enablind The Service

Simply enable your new service:

```
systemctl enable mytui@tty1.service
```

`tty1` works for debian. It also has to be `tty1` as this is the one that will be selected by default.

Launching on `tty2` would require switching to that tty after boot, and that would be the opposite of "unattended".

3.2. Preventing The Default Behaviour

Prevent systemd from starting the `getty` *at the same time on the same tty*:

```
systemctl mask getty@tty1.service
```