Remote Console

Everybody has definitely experienced the situation where the system got into a state where it wasn’t able to connect to SSH – be it because of a turned off sshd, incorrectly set rules in iptables or a lost SSH key. Luckily, you can use vpsAdmin to connect directly to the console of the VPS.

The console is available either via an online interface or directly from the terminal using the vpsfreectl utility. If you can choose, I recommend using vpsfreectl to access the console. The console works much more reliably and responsively in the terminal than in a web browser.

The console is persistent. That means that you can use it to follow the process of turning the VPS off and on. Disconnecting from the console does not log the user off unless an intentional logoff takes place before disconnecting.

The Online Interface

You can access the console through the VPS tab (see screenshot).
vpsfreectl

The installation process for vpsfreectl is described in the article about our API.

You can connect to the VPS console using the following command:

```bash
$ vpsfreectl vps remote_console <VPS_ID>
```

Here, substitute `<VPS_ID>` for the ID of the VPS to which you want to connect the console. The console can be closed by pressing the ENTER ESC keys one after another (enter escape period). This is the only way you can disconnect from the console (other than closing the terminal window).

### Ensuring Proper Functioning

In order for the console to work as well as possible, it is important for the VPS to have the same locale that is used by the terminal from which you are connected. The most important thing here is encoding – if the two sides use different encoding, certain characters will be replaced by question marks, etc.

vpsAdmin cannot send the `$TERM` environment variable to the console. However, some TUI apps adapt to the value of this variable. Thus, at first glance it might seem that the app or console is not working properly. For example, in order for the mouse and colors to work in `mc`, you first need to set `TERM=xterm` or force this mode using the `mc -x` option.

You can have the `$TERM` variable automatically set upon console startup using `.bashrc`:

```bash
cat <<EOF >> ~/.bashrc
[ "tty" == "/dev/console" ] && export TERM=xterm
EOF
```

### Enabling Remote Console

Current distro templates mostly have this console preset. In older templates, it’s necessary to enable
it manually.

**Debian**

Add the following line to the `/etc/inittab` file:

```
1:2345:respawn:/sbin/getty 38400 tty0
```

**El (Scientific Linux, CentOS)**

Add the following lines to the `/etc/init/tty.conf` file:

```
stop on runlevel [S016]
respawn
instance $TTY
exec /sbin/mingetty $TTY
```

Then open `/etc/init/start-ttys.conf` and add:

```
start on stopped rc RUNLEVEL=[2345]
env ACTIVE_CONSOLES=/dev/tty[0-6]
env X_TTY=/dev/tty1
task
    script
        . /etc/sysconfig/init
        for tty in $(echo $ACTIVE_CONSOLES) ; do
            [ "RUNLEVEL" = "5" -a "$tty" = "$X_TTY" ] && continue
            initctl start tty TTY=$tty
        done
end script
```

**Gentoo**

Add the following line to the `/etc/inittab` file:

```
# vpsFree remote console
c0:2345:respawn:/sbin/agetty --noreset 38400 tty0
```

The console should work after a restart.

**Ubuntu**

*This is not necessary for the current Ubuntu template.*
Open the file `/etc/init/tty0.conf` and add:

```bash
start on stopped rc or RUNLEVEL=[2345]
stop on runlevel [!2345]
respawn
exec /sbin/getty -L 38400 tty0 vt102
```

Run the service using `sudo start tty0`. It will start automatically after a restart.

**If It Isn’t Working**

If the console isn't working, isn't displaying every character or doesn't allow login, you probably have several instances of getty running and a race condition occurs. This problem can be solved by turning off the extra getty in `/etc/inittab`.