Recover a broken environment

If Termux exits immediately after launch or cannot properly start shell, it is likely that your environment is broken. The cause of which is most likely a a fatal error in a dotfile read by your shell, which causes it to immediately exit. To recover from such errors Termux provides a Failsafe Session.

Launching a Failsafe Session

1. Close all sessions of Termux application.

2. Either long-press the termux launcher icon and then press "failsafe" (only works on recent android versions) or long-press the "new session" button in the left drawer inside the termux app.

You are now in a Failsafe Session. It launches the default Shell of Android `/system/bin/sh` with access to the Termux directory. Despite the fact that Android shell is very limited, you can still save your files to /sdcard or perform some recovery steps.

Fixing the Problem

Now that you have basic access to Termux you can fix the problems. If you don't know which dotfile is broken read the section about about possible broken dotfiles below. It's most likely the one you tinkered with the last. Once you have identified the broken dotfile, move it to a new name. Example:

```
mv .profile .profile.bak
```

Now you can try to launch a normal session again. If it still doesn't work, you'll have to check the other dotfiles again. Otherwise, since you now have access to your Termux programs again, you can edit the file with your text editor and fix the problem. After that you can move the file back to it's original location.

Possible broken dotfiles

If you use bash (default) these dotfiles get loaded:

- `.profile`

0:00 / 0:04

How to start a failsafe session within Termux.
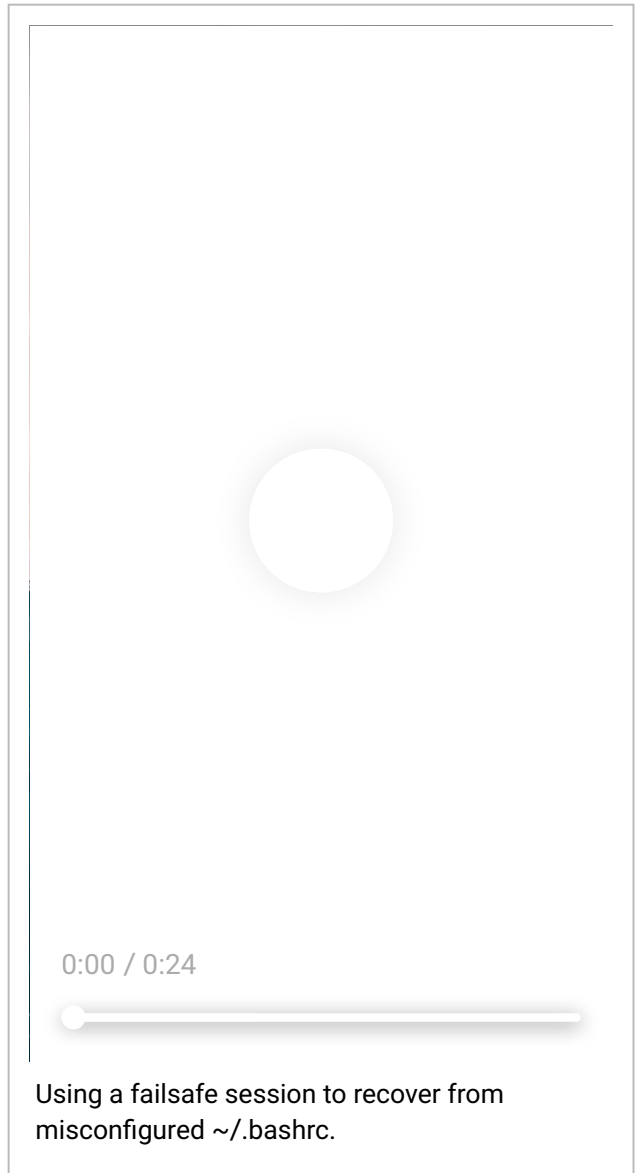
- `.bash_profile`
- `.bashrc`

If you use zsh:

- `.profile`
- `.zshrc`

If you used chsh and set a broken shell

If you used `chsh` to set your default shell to something that doesn't work as a shell your environment will also be broken. In this case use the Failsafe Session to remove

0:00 / 0:24

Using a failsafe session to recover from misconfigured ~/.bashrc.

`~/.termux/shell` and launch a new normal session.

```
rm -rf /data/data/com.termux/files/home/.termux/shell
```

If the problem is not with the dotfiles

If the problem isn't with your dotfiles, you may have a broken `$PREFIX`. This could have happened in various ways. Maybe there was a broken update, something crashed at the wrong time or you messed around int `$PREFIX` yourself. In this case, the best option is to use the nuclear option. Remove `$PREFIX` entirely.

```
rm -rf /data/data/com.termux/files/usr
```

After that you can restart your Termux App completely, which will trigger a reinstallation of the default `$PREFIX` contents. You'll have to reinstall all your programs, but your `$HOME` folder remains untouched, so all your dotfiles are still there.