

Running Java FX in Alarm

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1 Installing Java FX with alarm repos

1.1 *Prep install*

Installing sd card as usual

go into with putty

std upgrade

```
pacman -Sy
```

```
pacman -Su
```

add mc

```
pacman -S mc
```

1.1.1 install openjdk

```
pacman -S jre8-openjdk
```

hints while download

For the complete set of Java binaries to be available in your PATH,
you need to re-login or source /etc/profile.d/jre.sh

Please note that this package does not support forcing JAVA_HOME as former package java-common did

and

Optional dependencies for jre8-openjdk-headless

java-rhino: for some JavaScript support

and

Optional dependencies for xdg-utils

kde-cli-tools: for KDE Plasma5 support in xdg-open

libgnome: for GNOME support in xdg-open

exo: for Xfce support in xdg-open

xorg-xprop: for Xfce support in xdg-open

pcmanfm: for LXDE support in xdg-open

perl-file-mimeinfo: for generic support in xdg-open

and

when you use a non-reparenting window manager,

set `_JAVA_AWT_WM_NONREParenting=1` in /etc/profile.d/jre.sh

Optional dependencies for jre8-openjdk

icedtea-web: web browser plugin + Java Web Start

alsa-lib: for basic sound support

gtk2: for the Gtk+ look and feel - desktop usage

java-openjfx: for JavaFX GUI components support

try of

```
pacman -S java-openjfx
```

unknown package

1.1.2 F....

calling

```

java
java -version
crashes

```

1.2 *Running other jre*

1.2.1 jre_8u6

Runs ... makes screen keyboard error messages on touch

1.2.2 jre_raspbian

Startet ... stoppt bei font problem

after x install → runs

Mouse; touch ok ... no keyboard

1.2.3 jre_b1

Jre 8u91 oracle hard float with self compiled

stoppt auch wegen fonts

```

pacman -S ttf-font
default 1
no Change
lib test

```

```
ldd -r libjavafx_font_freetype.so
```

```

libgtk-x11-2.0.so.0 => not found
libgdk-x11-2.0.so.0 => not found
libatk-1.0.so.0 => not found
libpangoft2-1.0.so.0 => not found
libpangocairo-1.0.so.0 => not found
libgdk_pixbuf-2.0.so.0 => not found
libcairo.so.2 => not found
libpango-1.0.so.0 => not found
libXtst.so.6 => not found

```

```
ldd -r libjavafx_font_pango.so
```

```

libgtk-x11-2.0.so.0 => not found
libgdk-x11-2.0.so.0 => not found
libatk-1.0.so.0 => not found
libpangoft2-1.0.so.0 => not found
libpangocairo-1.0.so.0 => not found
libgdk_pixbuf-2.0.so.0 => not found
libcairo.so.2 => not found
libpango-1.0.so.0 => not found
libXtst.so.6 => not found
undefined symbol: .. a lot

```

pacman -S all not found

after x install

Mouse; touch ok ... no keyboard

1.3 jre_r2

Raspbian jre and self compiled overwritten → same problem ... no fonts

after x install

Mouse; touch ok ... no keyboard

deleted because has no more meaning

1.4 Fontconfig

<http://docs.oracle.com/javase/8/docs/technotes/guides/intl/fontconfig.html>

1.5 arch java switcher

/usr/bin/archlinux-java

defines in head

```
JVM_DIR=/usr/lib/jvm
DEFAULT_NAME=default
DEFAULT_PATH=${JVM_DIR}/${DEFAULT_NAME}
DEFAULT_NAME_JRE=default-runtime
DEFAULT_PATH_JRE=${JVM_DIR}/${DEFAULT_NAME_JRE}
```

2 Takeout xenial

2.1 *jre_xenial_x*

Install and start ubuntu mate on raspi 2

```
apt-get install openjfx
```

run and test in x server

extract with copy by follow links

```
cp -L -R jre /media/manni/KNOPPIX
```

test in arch linux with /root/.xinitrc

```
/mnt/jre_xenial_x/bin/java -jar /mnt/wwt1.jar
```

runs good with x single app and good sized fonts

2.2 *jre_xenial_fb*

adding

```
lib/javafx.platform.properties
```

and

```
lib/arm/libglass_monocle.so
```

runs without x but incredible slow .. not usable

2.3 *jre_xenial_x2*

Adding the extracted from the ubuntu mate xenial .deb packages and combine with sun/oracle 8u91 jre from jrecreate and run as a single x-app

best performance and text view

3 Xorg

Install xorg in arch with optional lxde

```
pacman -S xorg
pacman -S xterm
pacman -S lxde
pacman -S xorg-xinit
```

start with

```
startx startlxde
```

3.1 *xinitrc*

Single command line in /root/.xinitrc

starts a single java app without x decorations

info about display manager

https://wiki.archlinux.org/index.php/Display_manager#Starting_applications_without_a_window_manager

4 Sound

Again test sound with fresh alarm

must install

```
alsa-lib
alsa-utils
```

or javasound does not show the interfaces

then successful run of Scarlett 2i4 and iTwo

alarm needs add on for hifiberry-amp

```
config.txt
```

add line

```
gpu_mem=384
dtoverlay=hifiberry-amp
```