

Packages - Freedom Issue #3562

mkinitcpio microcode support

2023-12-31 03:42 AM - Megver83

Status:	confirmed	% Done:	0%
Priority:	freedom issue		
Assignee:	Megver83		
Category:			
Description			
mkinitcpio default preset and scripts add support for the proprietary microcode images, which are blacklisted by Parabola. We've to patch a [libre] version.			

History

#1 - 2023-12-31 03:43 AM - Megver83

I'll work on this during the next week

#2 - 2023-12-31 04:29 AM - bill-auger

can you show exactly what your referring to? - "support" alone is not a problem - we can support non-free software - many packages do (eg: QEMU supports booting non-free OS images) - we just can not provide anything non-free, or to suggest using any, or to give instructions

another way to look at it, if your-freedom is installed, it is not possible to install the microcode package - people are free to install the microcode package; but your-freedom would need to be uninstalled - but if your-freedom is not installed, then that is no longer a parabola system - it becomes an unsupported franken-system - if some program suggests it, we only need to remove the suggestion

in short, we should not try to prevent people from running non-free software, if they know what they are doing - Freedom #0 says so - we just can not suggest doing so or to instruct how to accomplish it

#3 - 2023-12-31 04:55 PM - Megver83

It contains scripts and presets which use the installed microcode:

https://gitlab.archlinux.org/archlinux/mkinitcpio/mkinitcpio/-/blob/master/kernel-install/40-microcode.install?ref_type=heads

And the default mkinitcpio preset suggest it:

https://gitlab.archlinux.org/archlinux/mkinitcpio/mkinitcpio/-/blob/master/mkinitcpio.d/hook.preset?ref_type=heads

If these are not real issues (if the microcode packages are not installed, nothing will happen, plus linux-libre deblobbed them), then we can safely close this issue.

#4 - 2023-12-31 09:06 PM - bill-auger

strictly speaking, i think those two examples are acceptable - nothing actually suggests installing the microcode, and it does not assist downloading or installing it - it simply detects it and runs it if found - pureos's kernel will do the same with non-free kernel modules, and that is acceptable (apparently - i never could get a straight answer from the FSF about that)

but again, the microcode can not be found on a standard parabola system; because it is not possible to install the microcode package without modifying the system in a way that parabola explicitly says not to do - i do know that many people want to run parabola but with the microcodes installed - i see that as not much different than most pureos users who have purism's non-free kernel modules installed; except that there is a very good security argument for using up-to-date microcodes - it is actually quite bad advice to tell people not to install them IMHO - i would rather not mention it either way - just let people do what they want, if they know what they are doing

we could ask on the FSDG mailing list; but its been pretty much useless for a long time - the FSF hired a new licensing officer just this month after not having one for years - so maybe the FSDG work-group can get back on track now

as another matter of precedent, there is only one part of the FSDG that says we need to remove something simply because it is capable of running non-free software - that is the web browser DRM mechanism - but IMHO the only reason that is a good recommendation is because if it is not disabled at compile time, the browser will prompt like "you must install this DRM to watch this movie", which is a strong suggestion

#5 - 2023-12-31 09:29 PM - bill-auger

i made some patches for mkinitcpio this month to fix ARM; but one of the fixes i found does not require any changes to mkinitcpio - as of now, we only re-package mkinitcpio for nonsystemd; so i was hesitant to actually implement the changes - i would rather propose them to arch so we dont need to re-package it for systemd - if there is another reason to patch mkinitcpio for systemd too, we could actually keep that script, but turn it into a warning

```
if [[ -f "${dir}/${microcode}" ]]; then
-   if (( KERNEL_INSTALL_VERBOSE )); then
-       printf '+ (mkinitcpio) Found microcode image %s\n' "$microcode"
-   fi
+   echo "WARNING: non-free microcode were detected on your computer!"
+   echo "       Did you install them intentionally?"
+   echo "       If not, ask us how to remove them."
```

or if the FSDG workgroup thinks we should remove it:

```
if [[ -f "${dir}/${microcode}" ]]; then
-   if (( KERNEL_INSTALL_VERBOSE )); then
-       printf '+ (mkinitcpio) Found microcode image %s\n' "$microcode"
-   fi
+   echo "WARNING: non-free microcode were detected on your computer!"
+   echo "       This script prevents them from loading."
+   echo "       Did you install them intentionally?"
+   echo "       If not, ask us how to remove them."
-   install -m 0644 "${dir}/${microcode}" "${KERNEL_INSTALL_STAGING_AREA}/microcode-${microcode}" || {
+   # install -m 0644 "${dir}/${microcode}" "${KERNEL_INSTALL_STAGING_AREA}/microcode-${microcode}" || {
```

still some clever monkeys could figure out how to find "this script" and tweak it; but still we are not suggesting it - it is suggesting to remove it