

The Lock Pin

Many applications depend on the Android Os layer lock facilities (pin/fingerprint, etc) instead of implementing their own. This Chapter details ways to deal with AAS lock pin difficulties.

- [Jolla C2 / Xperia AppSupport PIN Workaround](#)

Jolla C2 / Xperia AppSupport PIN Workaround

As detailed by nekron <https://forum.sailfishos.org/u/nekron> on the [forum](#):

This is what needs to be done for **Jolla C2 / Xperia** devices with the latest *appsupport* runtime:

Notes:

Technically speaking the Android security settings application will talk to *gatekeeperd* service that will connect with the *gatekeeper HAL* service. The HAL service will use hardware keystore (TEE) or in case of *appsupport* a software-based keystore for storing your PIN credential.

The problem in current *appsupport* is the launch of GK HAL service that's missing inside the image. There is sadly no *init.rc* service found to launch the service.

```
#
# Jolla C2 / Xperia AppSupport PIN Workaround
#

# 1. enable developer mode, open terminal or ssh into your device. Appsupport container must be running.
# 2. become r00t
devel-su
# 3. launch appsupport shell
appsupport-attach /system/bin/sh
# 4. launch gatekeeper HAL process (GK HAL)
/bin/hw/android.hardware.gatekeeper@1.0-service.software &
# 5. kill gatekeeperd (it will be restarted automatically and connection to GK HAL established, oh well, that's
about it for process isolation with SE extension running this as root vs. system)
pkill gatekeeperd
# 6. launch Android security settings
am start -a android.settings.SECURITY_SETTINGS
# 7. now set a PIN using the security settings UI and your're done!
# NOTE: I tested this with ATOSS Staff Center and after a reboot of C2 without connecting the GK HAL I was able
use the application.
# 8. older appsupport runtime for Xperia devices allows you to set the PIN
# via shell command "locksettings set-pin 1234". You can remove the lock PIN
```

with "locksettings clear --old 1234".