meta-flatpak
Flatpak in Yocto, Yocto in Flatpak
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Flatpak

Solution for app packaging, distribution and sandboxing.

- App/runtime split.
- OSTree-based
Flathub

1,407 desktop/mobile apps ready to run on your device.

Or... create your own runtime and your own ecosystem of apps.
meta-flatpak

Created by Intel in 2016, maintained 2016-2017 as part of https://github.com/intel/intel-iot-refkit

Updated by Codethink in 2021, and now moved to https://github.com/flatpak/meta-flatpak

Goal: enable Flatpak in Automotive Grade Linux.
Flatpak in Yocto

Instructions from AGL.md.

**Step 1: add layers**

`bitbake-layers add-layer
  meta-openembedded/meta-oe
  meta-openembedded/meta-gnome
  meta-openembedded/meta-filesystems
  meta-openembedded/meta-networking
  meta-flatpak`
Flatpak in Yocto

Instructions from AGL.md.

**Step 2: update local.conf**

```bash
# Include flatpak in the image.
IMAGE_INSTALL_append = " flatpak"

# Make sure we get the necessary dependencies
DISTROFEATURES_append = " wayland seccomp"

# Include configuration from this repo
include conf/distro/include/flatpak-applications.inc
```

Make sure your rootfs has 1GB or more free for apps & runtimes.
Video demo

https://www.youtube.com/watch?v=6k4jNcmvlWk
I want to build a runtime...

A **Flatpak runtime** is a container image of runtime dependencies, with Flatpak-specific metadata, delivered using OSTree.

A **Flatpak SDK** is the same with build dependencies + devtools.

Most apps use Freedesktop, GNOME or KDE runtimes:
- originally built with Yocto
- later bootstrapped independently using Buildstream
Yocto in Flatpak

SDK and runtime must be a separate targets.

Minimal example (see core-image-flatpak-runtime.bb):

```bash
include ../meta/recipes-core/images/core-image-minimal.bb
IMAGE_FSTYPES = ""

inherit flatpak-image
```
Thanks for listening!

Questions?

https://codethink.co.uk