Yocto Project support for IoT

SUMMER SCHOOL

Outline

Poky

Meta-openembedded

Meta-raspberrypi

Meta-security

Meta-virtualization

Meta-openstack

Meta-oic

Questions

Poky

The core functionality is available inside meta

Build engine source code is available inside bitbake directory

Documentation also available there

The testing BSP is available inside the meta-yocto-bsp.

It contains support for the following MACHINES:

```
beaglebone.conf
edgerouter.conf
genericx86-64.conf
genericx86.conf
include
mpc8315e-rdb.conf
```

```
.gitignore
.templateconf
LICENSE
README
README.hardware
bitbake
documentation
meta-poky
meta-selftest
meta-skeleton
meta-yocto-bsp
meta-yocto
meta
oe-init-build-env
oe-init-build-env-memres
scripts
```

Meta-openembedded

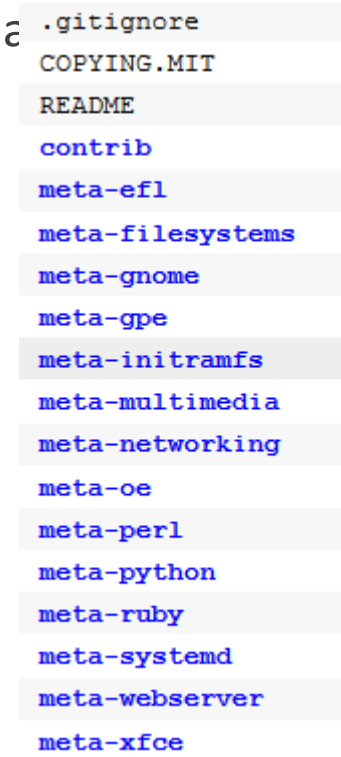
The core functionality is available inside meta-oe

https://layers.openembedded.org/layerindex/branch/master/layer/meta-oe/

The rest of the functionality is divided in specific layers

Some interesting results are availa ch as:

- meta-python
- meta-ruby
- meta-perl
- meta-webserver



Meta-raspberrypi

This is a classical BSP layer

https://layers.openembedded.org/layerindex/branch/master/layer/meta-raspberrypi/

Machines are defined in *conf/machine* directory

The setup for obtaining a Raspberry Pi build is available inside the README file.

It even has a wic configuration.

```
.github
.gitignore
COPYING.MIT
README.md
classes
conf
docs
files
recipes-bsp
recipes-connectivity
recipes-core
recipes-devtools
recipes-graphics
recipes-kernel
recipes-multimedia
wic
```

Meta-security

https://layers.openembedded.org/layerindex/branch/master/layer/meta-security/

```
AppArmor
aircrack-ng
bastille
buck-security
ccs-tools
checksec
checksecurity
clamav
freediameter
images
isic
libdhash
libmspack
libseccomp
nikto
nmap
packagegroup
paxctl
redhat-security
samhain
scapy
smack
sssd
suricata
tripwire
```

```
COPYING.MIT
README
classes
conf
meta-tpm
recipes-core
recipes-devtools
recipes-forensic
recipes-kernel
recipes-perl
recipes-security
```

```
README
conf
recipes-core
recipes-kernel
recipes-tpm
```

Meta-virtualization

https://layers.openembedded.org/layerindex/branch/master/layer/meta-virtualization/

```
cgroup-lite
containerd
criu
docker-distribution
docker
go-digest
go-errors
go-spf13-cobra
go-spf13-pflag
lxc
oci-image-spec
oci-image-tools
oci-runtime-spec
oci-runtime-tools
oci-systemd-hook
riddler
runc
```

```
.gitignore
COPYING.MIT
README
conf
docs
files
recipes-containers
recipes-core
recipes-devtools
recipes-extended
recipes-kernel
recipes-networking
recipes-support
```

Meta-openstack

https://layers.openembedded.org/layerindex/branch/master/layer/meta-openstack/

```
Documentation
README
README.setup
classes
conf
licenses
recipes-connectivity
recipes-core
recipes-devtools
recipes-extended
recipes-graphics
recipes-httpd
recipes-kernel
recipes-support
```

```
README
classes
conf
meta-openstack-aio-deploy
meta-openstack-compute-deploy
meta-openstack-compute-test-config
meta-openstack-controller-deploy
meta-openstack-controller-test-config
meta-openstack-qemu
meta-openstack-swift-deploy
meta-openstack
recipes-connectivity
recipes-devtools
recipes-extended
recipes-support
```

Meta-oic

Contains the support for IoTivity Project

https://layers.openembedded.org/layerindex/branch/master/layer/meta-oic/

Contains IoTivity framework and SDK sponsored by the Open Connectivity Foundation.

Enable seamless device-to-device connectivity

https://www.iotivity.org/

```
COPYING
README
conf
recipes-apps
recipes-core
recipes-kernel
```

Questions?