

QLF *Live*

MENTORSHIP SERIES

It's Not Just About Embedded! The Yocto Project

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OLFLive

MENTORSHIP
SERIES



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[Mars Insight](#)
[NASA mission](#)
[in 2018](#)

IT'S NOT AN EMBEDDED LINUX DISTRIBUTION,
IT CREATES A CUSTOM ONE FOR YOU.



The Yocto Project™ is an open source collaboration project that helps developers create custom Linux-based systems regardless of the hardware architecture.

yocto .
PROJECT

- An open source, collaborative project
 - Hosted by the Linux Foundation since 2010
 - Vibrant developers community with 1000+ devs, 130+ organizations
 - OpenEmbedded and Bitbake
- Support all major architectures: ARM, x86, PPC, MIPS, with initial RISC-V in OpenEmbedded
- Yocto Project Organization
 - Platinum, Gold and Silver member organizations (Governing Board)
 - Contribute financially to its infrastructure and stability.
 - Technical Steering Committee (TSC)

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PLATINUM MEMBERS



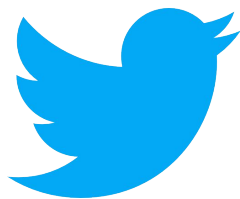
SILVER MEMBERS



GOLD MEMBERS



- [Yocto Project website](#)
- [Yocto Project mailing list](#)
- [Yocto Project documentation](#)



Live Show

- Building and booting from source a custom Linux system for RISC-V
- Stunts performed by trained professionals, don't try at home!

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- Building and booting from source a custom Linux system for RISC-V
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Live Show

- Go Wild!**
- Building and booting from source a custom Linux system for RISC-V
 - ~~Stunts performed by trained professionals, don't try at home!~~

Next slides have a transcript of the commands used during the live demo.

```
$ git clone git://git.yoctoproject.org/poky.git  
$ source poky/oe-init-build-env  
$ env  
$ MACHINE=qemuriscv64 bitbake core-image-minimal  
$ MACHINE=qemuriscv64 runqemu nographic slirp
```

```
$ vim conf/local.conf
```

```
$ time bitbake bc
```

```
$ mc
```

```
$ bitbake-layers create-layer meta-lfm
$ bitbake-layers add-layer meta-lfm
$ mkdir -p meta-lfm/recipes-lfm/images
$ cd meta-lfm/recipes-lfm/images/
$ cp
../.../.../.../poky/meta/recipes-core/images/core-image
-minimal-dev.bb lfm-image.bb
```

```
$ vim lfm-image.bb
```

```
$ cd ..
```

```
$ time bitbake lfm-image
```

```
$ runqemu nographic slirp
```




Thank you for joining us today!

We hope it will be helpful in your journey to learning more about effective and productive participation in open source projects. We will leave you with a few additional resources for your continued learning:

- The [LF Mentoring Program](#) is designed to help new developers with necessary skills and resources to experiment, learn and contribute effectively to open source communities.
- [Outreachy remote internships program](#) supports diversity in open source and free software
- [Linux Foundation Training](#) offers a wide range of [free courses](#), webinars, tutorials and publications to help you explore the open source technology landscape.
- [Linux Foundation Events](#) also provide educational content across a range of skill levels and topics, as well as the chance to meet others in the community, to collaborate, exchange ideas, expand job opportunities and more. You can find all events at events.linuxfoundation.org.