A brief history of OpenEmbedded and the Yocto Project

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1. Introduction
2. Past
3. Present
4. Future
What is OpenEmbedded

- Started as a build system for embedded devices
- Three basic principles
  - Machine
  - Distribution
  - Image
What is the Yocto Project

- Linux Foundation’s first collaborative project
- Membership is limited to Linux Foundation members
- Three membership level Silver, Gold and Platinum
- Provides financial support for testing hardware
- Pays Richard Purdie, Michael Halstead and Steve Sakoman
- Pays Bootlin for documentation and build/integration work.
OpenEmbedded, the early days

- This is before my time, so don’t be angry if I get this wrong!
- Created in 2003 by Chris Larson, Michael Lauer, and Holger Schurig
- Unification of OpenZaurus, Familiar Linux and OpenSIMpad projects
OpenEmbedded, things get serious!

• Richard Purdie create Poky subversion repo at OpenedHand in 2005
• First OpenEmbedded Stand at FOSDEM 2007
• FOSDEM 2008 OpenEmbedded forms an organization to support the project
• MontaVista bases Linux product on OpenEmbedded
OpenEmbedded Developers
Excitement!
In 2010, the Yocto Project is announced at ELCE in Cambridge, UK

- The first of many Linux Foundation Collaborative Projects

The Yocto Project provides an organization for corporate entities to join

- OpenEmbedded is the Yocto Project technical partner

- OpenEmbedded has a representative on Yocto Project governing board.

- Both organizations have Technical Steering committees

- OpenEmbedded represents the people in the community

- Confusing? Yes it is.
Current OpenEmbedded Leadership (1)

- Four member board, three year terms
  - Philip Balister (Crofton) (Oct 2020)
  - Denys Dmytryienko (denix) (Oct 2021)
  - Jon Mason (jonmason) (Oct 2022)
  - Jan-Simon Moeller (dl9pf) (Oct 2022)
Current OpenEmbedded Leadership (2)

- Five member technical steering committee, two year terms
  - Bruce Ashfield (zeddii) (Sep 2023)
  - Jon Mason (jonmason) (Sep 2023)
  - Joshua Watt (JPEW) (Sep 2023)
  - Paul Eggleton (bluelightning) (Sep 2023)
  - Richard Purdie (RP) (Sep 2023)
What really changed

- OpenEmbedded Classic had one layer for all recipe.
  - Yes I know about collections
- Many developers had push access
- Uneven testing
- No concept of a release
- Everyone was frustrated
Process Improvements

- OpenEmbedded-core created with a subset of recipes
- Layer concept extended to collect recipes into subsets
- OpenEmbedded-core tests patches before the merge
- Yocto Project dues fund autobuilder for large testing matrix
- Two releases per year
The Good

- Core layers build consistently
- Healthy job market for developers
- Layers are available for broad spectrum of software
- You can do anything you want
The Bad

- You can do anything you want
- Error reporting can be confusing
- Usability issues persist
The next ten years!

- What features do we need?
- How do we get new people involved?
- How do we communicate with end users?
Become an OpenEmbedded Member

- Membership open to all with an interest in OpenEmbedded
- Benefits of membership ...
- Responsibilities of membership.
  - Vote for OpenEmbedded board members
  - Vote for OpenEmbedded Technical Steering Committee members
  - Vote for Yocto Project Technical Steering Committee members
- Becoming a member.
  - Send a paragraph about who you are and your involvement
  - To board@openembedded.org
  - The members then approve the new members
Encourage your company to join the Yocto Project

- Dues support several areas.
  - Developers
  - Infrastructure
  - Advocacy
  - Community
  - Training/Developer days
  - Administration/Legal
- Recognition for your company.
- Contact Nicolas Dechesne <nicolas.dechesne@linaro.org>
Questions

Answer my Questions!