Open Source, Business Value, and Building a Community

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What Is Open Source?

- aka Free/Libre Open Source Software (FOSS/FLOSS)
  - Now includes hardware, audio/video, text, graphics, other
- Has “open” license
  - GPL/LGPL, BSD, MIT, Apache, EPL
  - CreativeCommons (mainly non-software)
- Source code, hardware specs, other materials, are freely available for use and modification
  - Use restrictions (if any) vary by license
- Freeware/shareware, demo-ware, public domain, are outside of the FLOSS definition
  - If in doubt, READ the license

FOSS Organizations

- GNU and the Free Software Foundation
  - Core free OS components & license philosophy
    - GNU General Public License
    - GNU Affero General Public License
    - GNU Lesser General Public License
- Apache Software Foundation
  - Core free enterprise-grade software & licenses
    - WWW, cloud, HA, developer tools
    - Apache License
- Creative Commons
  - CC base, w/ attribution, commercial use, more
- Linux Foundation / Yocto Project / Arduino

Comm / Govt / EDU

- NASA, NOAA/NWS, NIST, DoD, NSA, DoE
- IBM – software, hardware specs, licensing, developer support, documentation
- Sun - software, hardware specs, licensing
- HP, Dell, Amazon, ebay, Google, FaceBook
- LG, Samsung, Comcast, Linksys, Oracle
- Intel, AMD, TI, Freescale, Broadcom, Apple
- UC Berkeley, Carnegie-Mellon, MIT, Oxford
- World Bank, GFDRR, ETH Zurich, GEM

Information Archives

- Wikimedia Foundation
  - Wikipedia, Wiktionary, Wikibooks (over 800 projects)
- Archive.Org
  - Web, Video, Texts, Audio, Software, OpenLibrary
  - CreativeCommons licensed
  - Home of the WayBack Machine
- CrisisCommons
  - Respond to disasters and improve resiliency
  - Open data and technology
  - Staffed by volunteers

MIT OpenCourseWare

- MIT OpenCourseWare (OCW) is a web-based publication of virtually all MIT course content
- OCW is open and available to the world and is a permanent MIT activity
- *“Through OCW, educators can improve courses and curricula, making their schools more effective; students can find additional resources to help them succeed; and independent learners can enrich their lives and use the content to tackle some of our world’s most difficult challenges, including sustainable development, climate change, and cancer eradication.”*

Yocto Project

- More than just Embedded Linux...
  - An open source collaboration project that provides templates, tools and methods for building embedded products
  - A Linux Foundation Project
  - Supported by a large number of corporate members: Fujistu, IBM, HP, Intel, Oracle, Toyota, Panasonic, Cisco, and more
- Provides build framework, developer tools, documentation, core software layers, BSP layers, and more
- Under the hood of many embedded products

Understanding Risk

- Global Facility for Disaster Reduction and Recovery (GFDRR)
  - Partnership of 41 countries and 8 international organizations to reduce vulnerability to natural hazards
  - Mission is to mainstream disaster risk reduction (DRR) and climate change adaptation (CCA) in developing countries
- Funded by World Bank, UN, and major reinsurance companies, as well as donor countries
- Facilitates global and regional partnerships to support risk reduction, sustainable recovery, and climate change adaptation

Business Value?

- Free as in no cost (just add time)
- Incorporate into commercial products
- Replace non-free licenses
- Rejuvenate old but still functional hardware
- Run on new low-power, low-cost hardware
- Learn something new
- Gain local community support
- Share something with customers and employees
- Use technology and social media to build a community around your business

It's about community

“Creative Commons develops, supports, and stewards legal and technical infrastructure that maximizes digital creativity, sharing, and innovation. Our vision is nothing less than realizing the full potential of the Internet — universal access to research and education, full participation in culture — to drive a new era of development, growth, and productivity.”

“The idea is simple: to publish all of our course materials online and make them widely available to everyone.”

“Understanding Risk (UR) is a global community of experts and practitioners in the field of disaster risk assessment. UR community members share knowledge and experience, collaborate, and discuss innovation and best practice in risk assessment.”

“CrisisCommons seeks to advance and support the use of open data and volunteer technology communities to catalyze innovation in crisis management and global development.”

Questions?

- Where next?
- Specific topics with details and demos?
- Hands-on workshops?
- Take the survey and help shape the future!

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