

OpenWrt/LEDE Project Funding Support from prpl

Art Swift, President, prpl Foundation



Project funding support

- Funding for open source projects relating to OpenWrt/LEDE
- Launched in Spring 2016
- Ideas should be of interest to the community and industry
- Projects can be large or small
- First round of projects (4) selected and are in process or complete
- Project proposals for second round due 24 October





Project funding goals

- Expand the OpenWrt/LEDE ecosystem
- Add new features of interest
- Improve existing features
- Build supporting infrastructure
- Grow the roster of active OpenWrt developers and users
- Provide a vehicle for developers, industry and end-users to cooperate





Four projects funded so far (Round 1)

- Integration of Internet Access Scheduling Control into LuCI, August Germar
- Save Power by Disabling Wireless Networks, Nils Koenig
- Implement a Framework Integrating TR-069, CWMP, and Other Remote Management Stacks into OpenWrt and LEDE, Felix Fietkau
- Add Support for Unique Heading Titles to UCI and Integrate TR-069
 Stack into OpenWrt, Luka Perkov



Selection Considerations

- Enhances the community or improves OpenWrt/LEDE project
- Supported by the OpenWrt/LEDE community
- Endorsed by OpenWrt/LEDE core team
- Aligned with the goals of prpl industry members
- Implementer (or company/group) track record
- Project feasibility, time line and funding requirements
- Licenses under a free/open source software license





Some example project ideas

- Adding support for hosting Docker on OpenWrt/LEDE
- Improvements to the Boardfarm testing framework
- Integration of a vendor-neutral data plane abstraction layer
- Integration of a SW fast-path for acceleration of IPv4 /IPv6 packet routing, forwarding, tunneling and termination.
- IoT support (standard protocols to aid IoT device onboarding, glue code, remote management, etc)
- Application environment (including secure support for 3rd party post-loaded applications)
- Provisioning/deployment support (so that end-users can be capable of new hardware self-install without having to be an experienced OpenWrt developer)



More example project ideas

- Auto-upgrade support (detect availability of new packages and enable endusers to automatically or manually accept updates)
- Automated testing (daily build testing of many platforms against trunk)
- Secure firmware upgrade (possibility to perform authenticity check of downloaded firmware image prior to applying the new image)
- Power saving features
- Remote management features (firmware upgrades)
- Hardware- and/or software-based packet acceleration
- Telephony support (VoIP, FXS/FXO, DECT/CAT-iq)
- End-to-end QoS/QoE
- Carrier-grade access (VLANs, hybrid networking, vectoring, etc.)



prpl Foundation – Open source non-profit

About prpl Foundation

- ✓ Truly open community
- ✓ Heterogeneous open source
- ✓ ISA Neutral
- Developing new standard APIs and reference implementations
- Making advanced functionality as portable as possible
- Working with regulators to protect consumer choice and innovation
- Cross-collaboration initiatives



prpl Leadership

- ✓ **Dan Artusi**VP and GM, Intel / Lantiq
- ✓ **Sherman Chen**Vice President Engineering, Broadcom
- ✓ Matt Grob

 Executive VP and CTO, Qualcomm
- ✓ **Jim Nicholas**Executive VP and GM, Imagination
- ✓ Art Swift President, prpl Foundation



Coverage Highlights





OT Agenda

The 10 most valuable IoT **Security Targets**



Why does the Internet of Things need hypervisors? Cloud connectivity and closed source: The Achilles heel of home IoT



25,000 connected CCTV cameras

Security concerns as Amazon prepares for UK drone deliveries



Internet of Things: Humble light bulbs could become a form of attack

SKY NEWS





Securing an ever expanding network





Cyber attacks on UK rail

networks Datamation.



IoT organisation calls

for adoption of basic security framework



World of Information Security



IoT security is a 'ticking time bomb' we're all living with

TP Link Receives Fine from FTC



Industry losing patience as US regulators fail to keep up with security concerns











Event Calendar Q3/Q4

- IoT Evolution Expo, July 11-14, Las Vegas: prplSecurity™ workshop + prpl panel + video interviews
- Microchip MASTERs, Aug 17-20, Phoenix: prpl booth + prplSecurity™ demo + MCHP meetings
- IEEE/SOCC, Sept 8-9, Seattle: banquet keynote + track session presentation
- Cloud Connect China, Sep 20-22, Shanghai: keynote (travel expenses covered by UMB)
- Smart Summit, Sep 21-22, London: Smart Home panel + IoT track presentation + media interviews
- Connect Security World, Sep 26-28, Marseilles, keynote + track presentation + media interviews
- OpenWrt Summit @ELCE, Oct 13, Berlin: full day event hosted by prpl + press tour Italy
- **IoT Security Summit**, Oct 18-19 Boston: prplSecurity™ presentation
- Smart Home Summit, Nov 1-2, Palo Alto: prpl Smart Home report presentation
- RANT Conference, Nov 3, London: security panel + media interviews
- RSA Conference, Nov 15-16, Abu Dhabi: world's #1 security event, prplSecurity™ presentation
- IoTSF Summit, Dec 6, London: keynote + prplSecurity™ live demo session





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