FreedomBox
Libre Personal Server

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Outline

- Brief introduction to the project
- Current status / demo
- Technical overview
- How you can help
- Questions
What is FreedomBox?

• A Debian project and pure blend
• Make it easy to run a personal server
• Replace 3\textsuperscript{rd} party services
• Goal: zero admin
What it looks like
Release status

- 1\textsuperscript{st} stable release in Stretch
- Live images for 11 devices / VMs
- Turn any Debian system into a FreedomBox:
  - `apt install freedombox-setup`
    - then run setup script
  - [https://wiki.debian.org/FreedomBox/Hardware/Debian](https://wiki.debian.org/FreedomBox/Hardware/Debian)
Features in Stable

- Infinoted
- Ikiwiki
- XMPP
- SIP
- Mumble
- Radicale
- Let’s Encrypt
- Privoxy
- OpenVPN
- Tor
- Quassel
- Bittorrent
Upcoming features

- Syncthing
- Matrix synapse homeserver
- Tahoe-LAFS
- Diaspora*
- SSO with auth-pubtkt
Supported hardware

- Live images available for:
  - A20 OLInuXino Lime, Lime2, Micro
  - Cubieboard2, Cubietruck
  - Beaglebone Black, pcDuino3
  - Raspberry Pi 2 (with non-free firmware)
  - amd64, i386, Qemu, Virtualbox

- Other devices that can run Debian
Demo
Packages: freedombox-setup

• Depends: plinth, apache2, ...

• setup scripts
  – enable apache modules

• first boot script
  – configure network
  – generate keys
Packages: plinth

- web interface
- python / django
- modular: one module per application
  - installs packages using apt
  - configures packages using debconf/augeas
  - service status and basic config forms
Packages: freedom-maker

- live image builder
- uses vmdebootstrap
- freedombox-customize script
- hardware-specific setup
Infrastructure

- apache2
- augeas
- avahi
- certbot
- etckeeper
- ez-ipupdate
- firewallld

- network-manager
- ntp
- snapper
- openldap
- pagekite
- tor
- unattended-upgrades
How to help: Packaging

- **Web apps**
  - many are not in Debian
  https://wiki.debian.org/FreedomBox/LeavingTheCloud

- **Package setup/config**
  - sane defaults

- **FreedomBox packaging team**
  - freedombox-pkg-team@lists.alioth.debian.org
More ways to help

- Reproducible builds
  - https://tests.reproducible-builds.org/debian/unstable/amd64/pkg_set_freedombox.html

- Security hardening
  - systemd service files
  - selinux/apparmor
More ways to help

- Hardware support
- Documentation
- Translations
Issue: Package configuration

- modified conffiles / upgrade prompts
  - unattended upgrade not possible
  - our users won’t know which version to keep
- generate config files in postinst
  - maintainer handles config merge on upgrade
- debconf
Other things

- Backup/restore application data?
- Promoting blends
- Official live image builds?
- New home for Plinth upstream dev
Links

- Landing page: freedombox.org
- Wiki: wiki.debian.org/FreedomBox
- Mailing List:
  - freedombox-discuss@lists.alioth.debian.org
- IRC: #freedombox on OFTC