

ConnMan – MeeGo Connection Manager

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Samuel Ortiz <sameo@linux.intel.com>

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Agenda

- What is ConnMan
- ConnMan architecture
- Ofono integration
- Roadmap

What is ConnMan ?

- A Linux connectivity daemon
 - Full network control, from loopback to DNS resolving.
 - GPLv2, 100% C code.
 - MeeGo's network manager.
- A 2 years old project
 - Original author and current co-maintainer: Marcel Holtmann.
 - Funded by Intel and Nokia.
 - Code controlled by Intel.

Design Goals

- Few dependencies
 - C library, D-Bus, and some optional libraries.
 - Small footprint.
- Easily extensible
 - Designed around plugins.
 - Stay far away from the core code.
 - One feature, one plugin.

Design Goals

- Simple interfaces
 - D-Bus based.
 - Simple APIs (scan, connect, disconnect...).
 - No more than one way to do it.
- Dumb UIs
 - ConnMan keeps the logic.
 - Stateless UIs.
 - One flat list of services, sorted by ConnMan.

Current Features

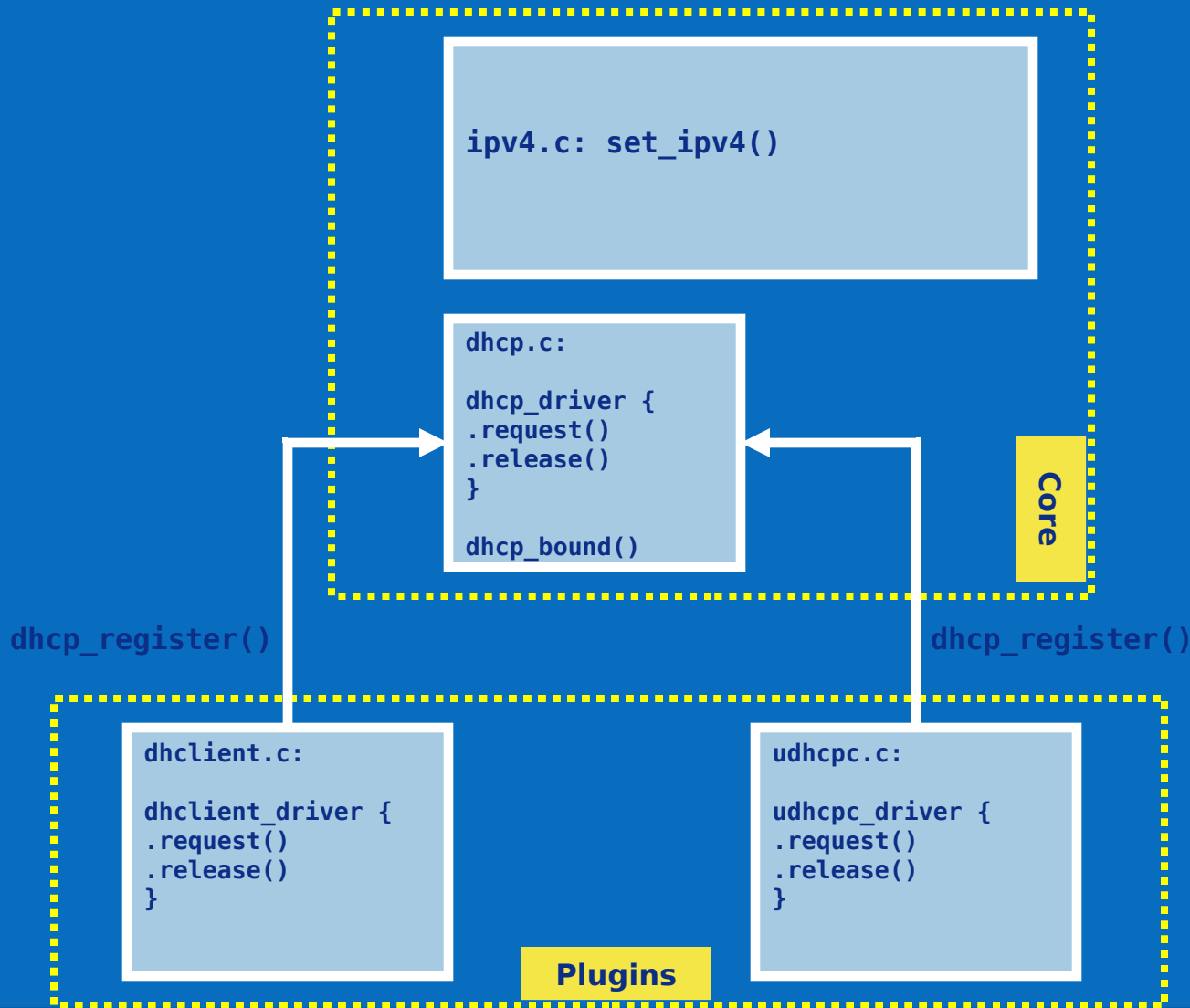
- Technologies
 - Ethernet, WiFi, BT (PAN), 3G, WiMAX, VPN.
- DHCP and manual IP settings.
- DNS proxy.
- Portal detection.
- Session support.
- Flight mode, OSPM, PolicyKit.



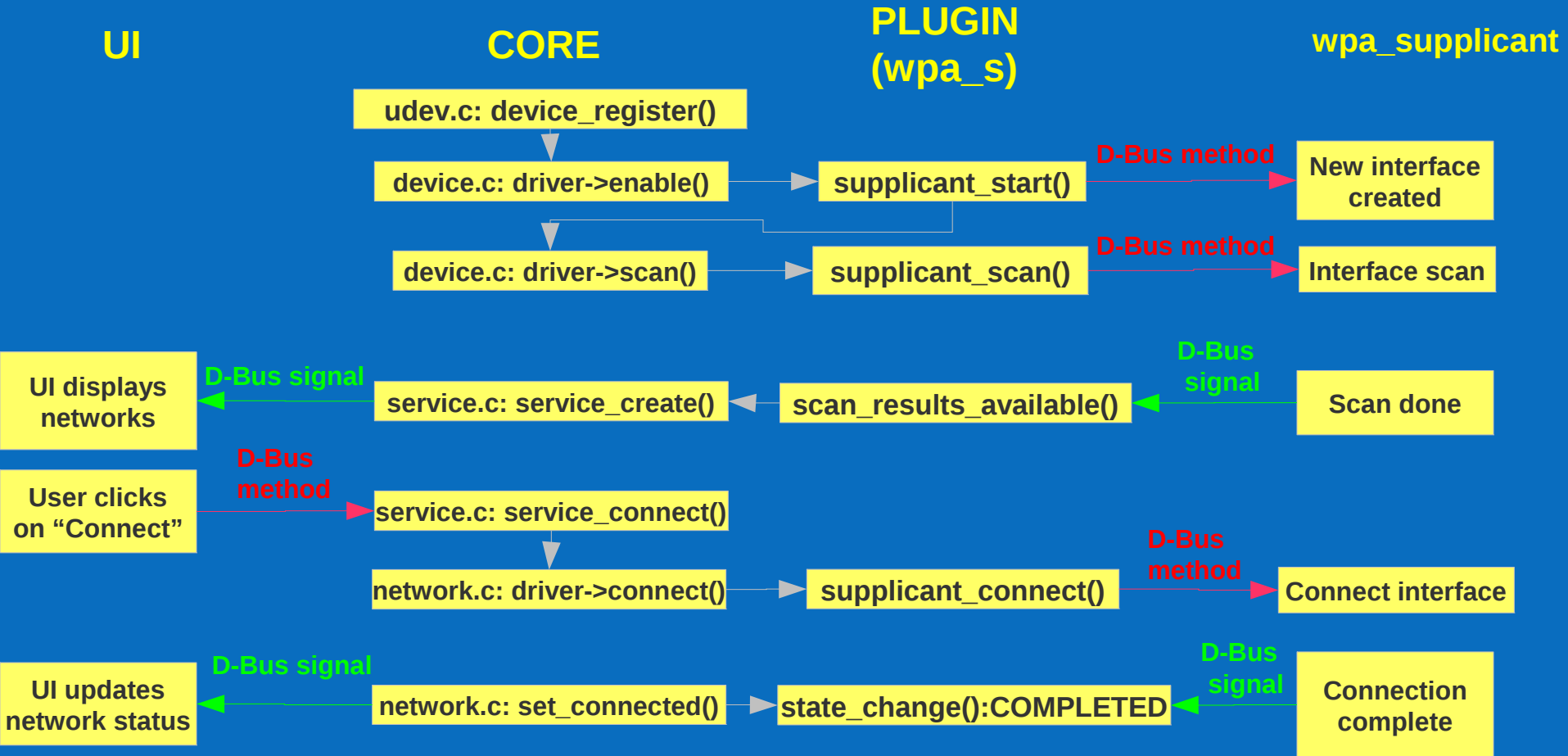
ConnMan Architecture

- Core code clearly separated from plugins.
- Kernel device model inspiration.
- One plugin per feature: dhcp, wpa_supplicant, BlueZ...

Plugin Example: DHCP



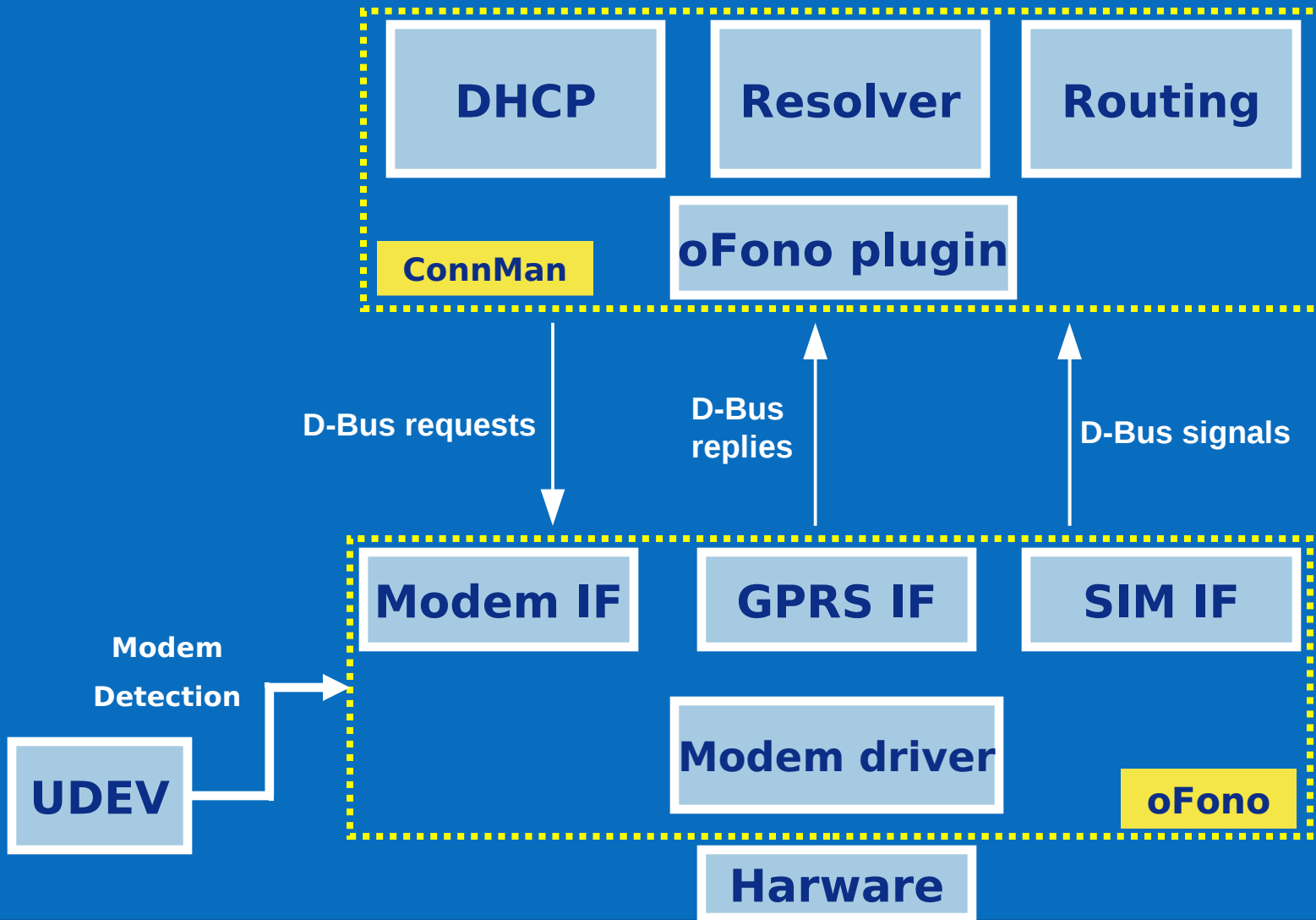
Code Path Example: WiFi Connection



oFono Integration

- oFono is an open source telephony stack.
- ConnMan handles GPRS links through oFono.
- One feature, one plugin: oFono plugin.

oFono Integration



Roadmap

- See connman/TODO
- Short/Mid term
 - IPv6.
 - Tethering.
 - DUN client/server.
 - On-demand connection.
- Long term
 - EAP-SIM/AKA.
 - Fast connect.
 - Element removal

Questions?

- [git://git.kernel.org/pub/scm/connman/connman.git](https://git.kernel.org/pub/scm/connman/connman.git)
- irc: Freenode, #connman
- Mailing list: connman@connman.net
- <http://www.connman.net/>
- Shameless plug: We're hiring !



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