

# Intorduction to Maemo 5 SDK

Petr Baranov,

Senior SW Engineer in Developer Platform team

Presentation Contents:

- SDK update for Fremantle
- Alternative SDK
- Maemo SDK+

# Diablo → Fremantle

- **Toolkit**
  - New and updated Hildon/Gtk widgets
  - Gtk 2.0 library upgraded to version 2.12
  - Glib upgraded to 2.18
  - Pango upgraded to 1.20
  - Cairo upgraded to 1.6.4
  - gcc upgraded to 4.2
- **UI Framework**
  - New UI framework using Clutter OpenGL library.
  - No left side Task Navigator and plugins.
  - No stylus keyboard. (only finger usable and h/w keyboard)
  - New design of task switching and task handling.
  - Renewal of Home and Status area-
  - New design for incoming event previews and indications
  - Tracker introduced instead of libmetalayer
  - UI style changes
  - Hildon Help dropped
- **Multimedia**

Following components are introduced:

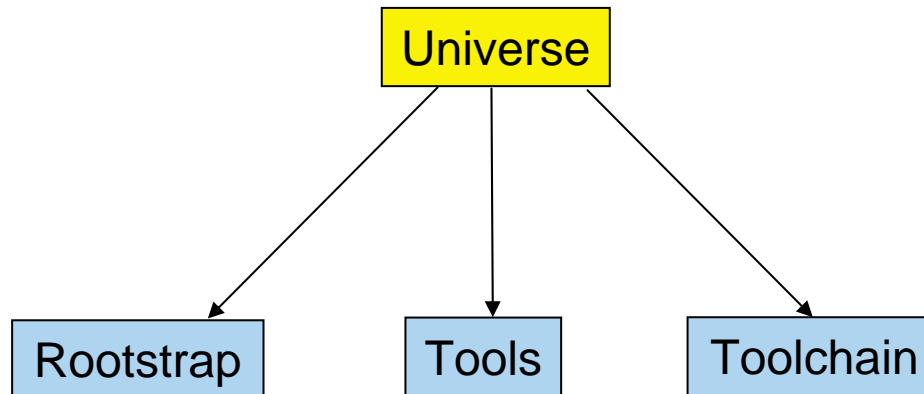
  - PulseAudio, Speex, Gstreamer OpenMAX wrapper
  - New GStreamer plugin introduced that wraps openmax-il components under the gstreamer API.
  - No DSP sink and sources anymore.
  - Esound replaced by libcanberra
  - Media Application Framework : an open flexible and extensible layer to ease the development of multimedia applications.
- **Connectivity**
  - Bluez updated to version 4.x
  - Samba, osso-gwconnect dropped.
  - ClinkC deprecated in favour of GUPnP.
  - Libgpsbt, libgpsmgr and gpsd daemon removed. Instead, there is liblocation API library , gypsy daemon for bluetooth GPS and location daemon for integrated GPS and network based methods.
- **System S/W and Core**
  - Initfs not used anymore
  - Device startup handled by Upstart instead of sysvinit
  - OHM introduced as a policy framework mainly for audio in addition to dsme.
  - Alarm APIs updated.
  - New Profile, Vibra and Device orientation APIs introduced.
  - Kernel upgrade to version 2.6.28
- **RTCOM**
  - Farsight API break. It is upgraded/re-written to Farsight2.
  - Telepathy-glib used instead of telepathy.
  - Libgalago and galago-daemon dropped.

# Maemo 5 Fremantle, New UI style

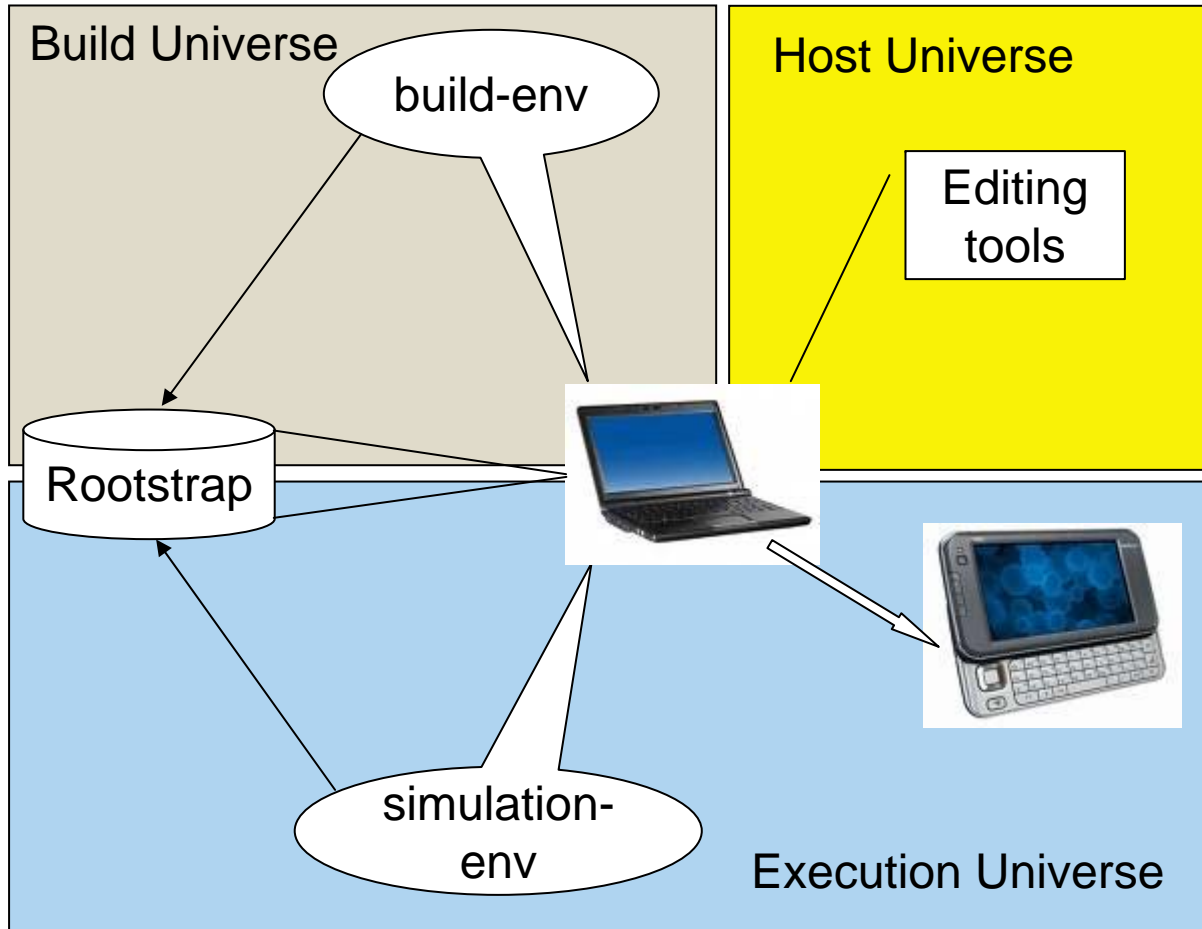
- Animated Ui technologies
- Compositeing window manager
  - Desktop Effects and applications switching
  - Effects works with all existing applications, applications are not affected at all
  - Common technology in power desktops like Macintosh Quartz, Linux Compiz ....
- Qt4.5 from Forum Nokia
  - Home [qt4.garage.maemo.org](http://qt4.garage.maemo.org)
  - Based on Qt4.5 rc 1
  - Hildon input method ( auto completion not implemented )
  - Hildon menus
  - QGTK/Hildon Style ( some things needs improvement )
  - OpenGL-ES2.0 support
  - Lot of Fremantle related fixes and workarounds
  - Installable from [maemo.org](http://maemo.org) extras-devel repository

# Alternative SDK, Maemo SDK+

- Maemo SDK+ is the next generation SDK
  - Scratchbox2 as a cross-compilation engine
- Maemo SDK+ vs. Maemo 5 SDK
  - Development project can be located anywhere in the host environment
  - Build tools are run natively on the host – cross-compilation is fast
  - Specific universes each type of command: build, execution



# Maemo SDK+



- Universe: host, build, execution
- Path remapping
- Simulate runtimes: sudo-, emulate-, developer-runtimes
- *maemo-sdk* – easy access to SDK functionality.
  - Rootstrap, tools, toolchain management.
  - Access to build- and simulation-environments using correct access type.
- Universes allow to stay close to the target execution environment.

# Thank you! Questions?