Inspiring rich and intuitive Internet experiences
Cross platform via Gnome: Case Firefox (tm)

- Introducing my self, who am I?
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- What's was available today
- Gaps identified
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- Lessons learned
- Questions
Who am I

• Sampo Nurmentaus, A Linux geek from Finland
• Msc. from Helsinki University of Technology
• Have been trying to learn embedded Linux for last 6 years
• Currently working for Movial, an end-to-end Linux and Usability solution provider
What am I talking about here

• Have been working together with ARM Inc. to improve cross ARM architecture portability and Internet experience on mobile

• Requirement #1: Have a platform with as good **cross-platform portability** for applications as feasible

• Requirement #2: Provide a **“desktop-like” internet experience** using Firefox on top of that platform
Terhi picks up the device and notices that the battery is still almost full despite few days on stand-by mode. She enters gmail.com URL to browser to read her emails. The device pops up a note listing available WLANs and Terhi picks up the Hotel hot spot and enters the encryption key the receptionist kindly gave her...
The Use Case story (2)

... After login in she gots an email with a link to a “supposed-to-be-funny” video clip on YouTube (tm).
She clicks the link and the another browser window pops up connecting to youtube.com and playing the video clip.
She smiles a little and suspend the device and sticks it into the pocket of her jeans.
What was available today?

- The Gnome Mobile stack
  - Glib
  - GTK+
  - Gststreamer
  - X
  - HAL
  - Cairo
- Firefox Browser Engine
  - Gecko browser engine
  - EAL
Gaps Identified (1)

• There was no mobile connectivity manager available
  – We “embedded” Gnome Network Manager for mobile all-ways-on connectivity

• Device state management
  – HAL was there, but required integration effort to run on top of Mobile processors
  – OHM is a very active project we adopted

• Gstreamer plugins
  – Multimedia is very hardware specific
Gaps Identified (2)

• Some performance issues with Firefox
  – Suprice, suprice..

• Lack of definitions for a good browser experience
  – Our Usability team is working on this currently..
The outcome of all this..
Road Map

• Further optimize the browser user experience
• 1\textsuperscript{st} Open Source release
• Graphics acceleration study on different HW platforms
• Web Bases UI frameworks
Contact Information

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Case NOKIA

- Movial provided Nokia software development services
- Movial competence areas
  - Linux technology research
  - User experience design
  - SDK and development tools (e.g. Scratchbox)
  - Embedded Linux platform
  - GTK+
  - Application development

“MOVIAL has been a very important partner for many years in development process of our platform” says Valtteri Halla, Nokia Multimedia.

“MOVIAL not only delivers superb quality software, but also within budget and schedule”. “Furthermore, MOVIAL has proven to be a very committed and skilled partner and I would highly recommend MOVIAL”.

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Case BMW Group
Live Media Communications solution integrated in BMW car environment

- MOVIAL provided BMW Group with expertise on:
  User experience design
  Device creation services
  Embedded Linux technology
  Application development

- Solution is based on Intel® Ultra Mobile PC (UMPC) Platform

“Using an open Intel® architecture-based platform Movial has been able to implement a solution that offers a seamless digital in-vehicle user experience,” said Staci Palmer of Intel Corporation.