MeeGo Technical Overview

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Agenda

- **An overview of MeeGo**

- **The MeeGo Architecture and Technologies**

- **What you can do with it**

- **Why you want to be involved**

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What is MeeGo?

- MeeGo unifies Moblin and Maemo
  - Netbooks, Handsets, Tablets, Media phones, Smart TVs, In-Vehicle Infotainment...

- Full Linux Open Sources Software stack
  - From core OS up to UI libraries and tools
  - Reference user experience and applications
  - Flexibility to support proprietary add-ons

- Standard set of APIs across client devices

- 6 month release cadence
  - Major releases targeted for spring and fall

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MeeGo - Progress So Far

Feb 15,2010
-Project launched

May 26, 2010
-MeeGo 1.0 for Netbooks

July 7, 2010
-MeeGo 1.0 Update 1 for Netbooks

June 30, 2010
-Handset Day 1

Oct 27, 2010
-MeeGo 1.1 Final Release
-N900 support phone calls, SMS, Video/Audio & browsing

Great Progress - and We're Just Getting Started!

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http://meego.com/

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http://meego.com/developers

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MeeGo Compliance Overview

- **Goal of MeeGo Compliance is Application Compatibility between MeeGo devices**
  - All MeeGo devices use the same core software stack
  - Device category profiles describe any category-specific software and hardware requirements
  - Use of reference UX not required for compliance

- **MeeGo compliance spec with test suites to verify compliance**
  - Covers both Applications and Devices / Distributions
  - Use of MeeGo brand granted based on compliance test results
  - Compliance overseen by the MeeGo Technical Steering Group

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What does this mean in practice?

- A MeeGo-compliant application:
  - Must have external dependencies that are satisfied by the MeeGo core stack
  - Native apps must be built for one (or more) supported architectures (today ARMv7 and IA)
  - Must be packaged in either RPM (for native apps) or MeeGo WRT packaging (for Web Run Time apps)

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MeeGo Architecture

UX

Netbook UX	Handset UX	...	Other UX's
Netbook UI + Apps	Handset UI + Apps		Other UI + Apps
Netbook UI Framework	MeeGo Touch Framework		Other UI Framework

MeeGo Core · **OS Middleware** · **SECURITY**

MeeGo APIs

Qt Toolkit	MeeGo WebRunTime

Comms Services	Internet Services	Visual Services	Media Services	Data Mgmt	Device Services	Personal Services
Connection Mgmt *ConnMan*	Layout Engine *WebKit*	3D Graphics *OpenGL / GL ES*	Media Framework *GStreamer*	Content Framework *Tracker*	Device Health *DSME*	PIM Storage *Tracker / QSparQL*
Telephony *oFono*	Web RunTime *WebKit*	2D Graphics *QPainter*	Camera *Gstreamer plug-in*	Context Framework *ContextKit*	Sensor Framework *SensorFW*	Device Sync *Buteo*
VOIP, IM, Pres. *Telepathy*	Web Services *libSocialWeb*	GTK / Clutter	Codecs *Gstreamer plug-in*	Package Manager *PackageKit*	Resource Mgr *System Policy Mgr*	Accts & SSO *Accts-sso*
Bluetooth *BlueZ*	Location Services	X	Audio *PulseAudio*		Backup & Restore	
			UPnP *GUPnP*			

OS Base

Linux Kernel	System Libraries *glibc, glib, etc*	Message Bus *D-Bus*	Platform Info *libudev*	Settings Database *GConf*

HW Adaptation Software

MeeGo UX for Netbook and Handset

UX

Netbook UI + Apps	Handset UX		...	Other UX's
Netbook UI Framework	Handset UI + Apps			Other UI + Apps
	MeeGo Touch Framework			Other UI Framework

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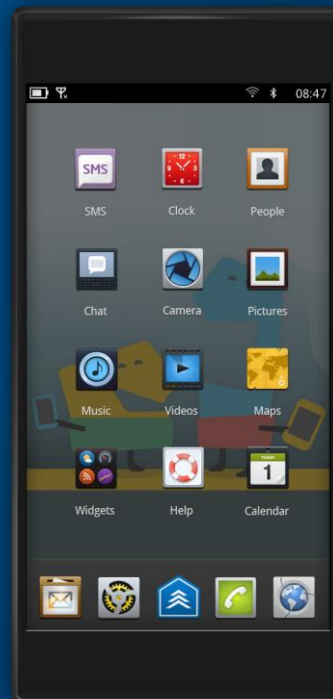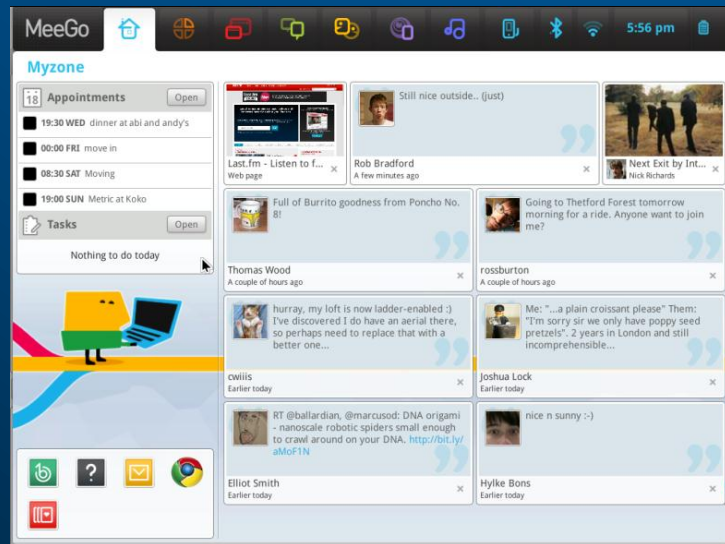
MeeGo Component Projects

Segment Specific User Experiences

Connection Manager for data connectivity

Telephony Framework

Cloud-device sync of PIM Data

Integrated Social Networking

Application Development Environment
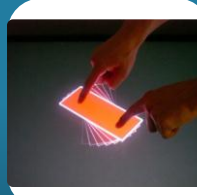
Improved Power Management

Fastboot & Shutdown Optimization

Support for Multiple Multimedia Framework

International-ization with UI guidelines

Gesture & MultiTouch Framework

Sensor Framework

Note: Some features listed may be segment-specific

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Overall MeeGo Platform Ecosystem

Application Vendors

Technology Vendors

Device Vendors

3rd Party Apps

Codecs

Closed Source

Upstream Open Source Component Projects

MeeGo Component Projects

Build Environment

MeeGo.com

MeeGo Core

Netbook Reference

Handset Reference

Smart TV Reference

MeeGo on Chipset X

Chipset Vendors

Operating System Vendors

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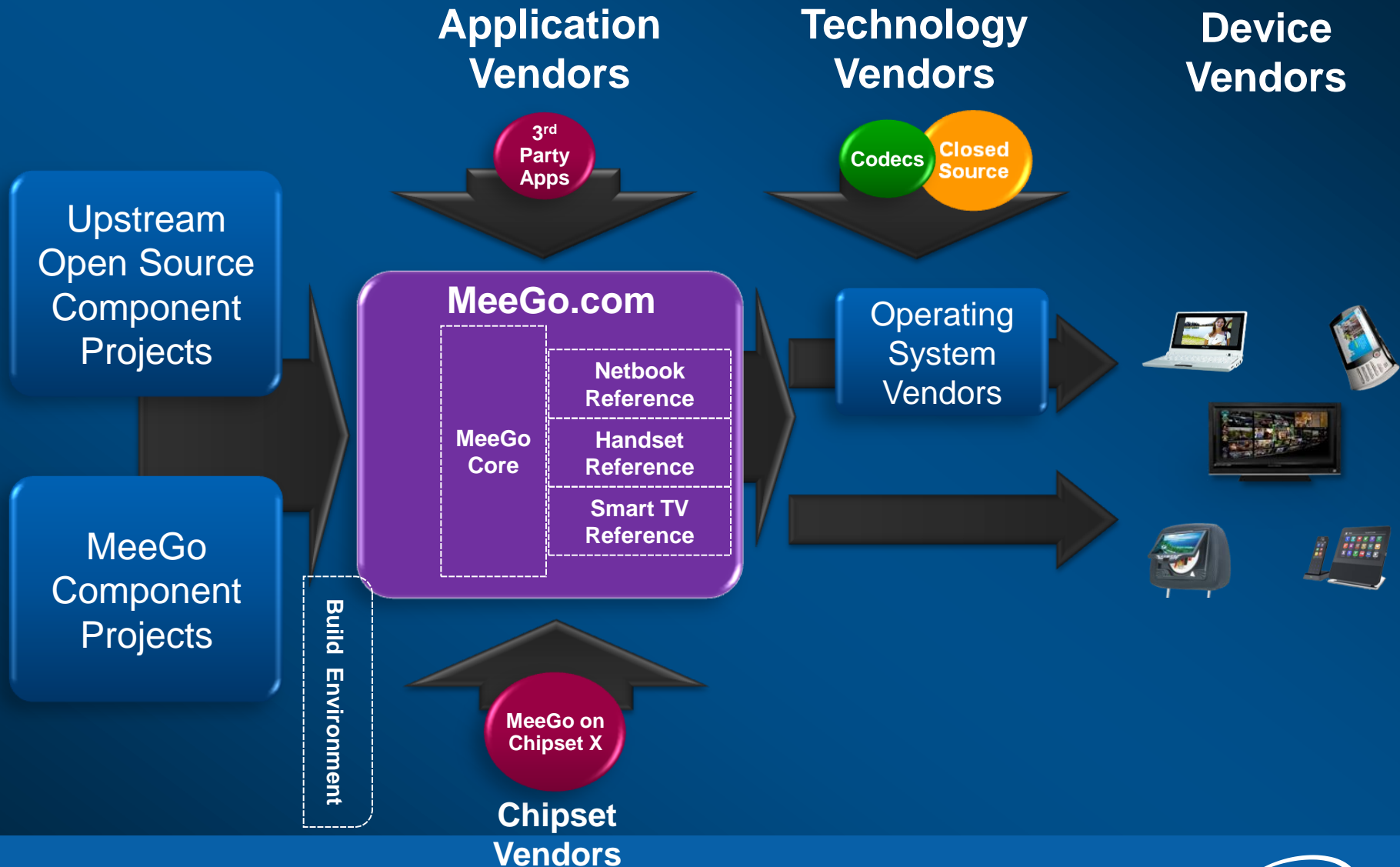
What is the MeeGo SDK?

MeeGo SDK allows developers to write, compile and debug applications using a MeeGo image.

MeeGo SDK contains:
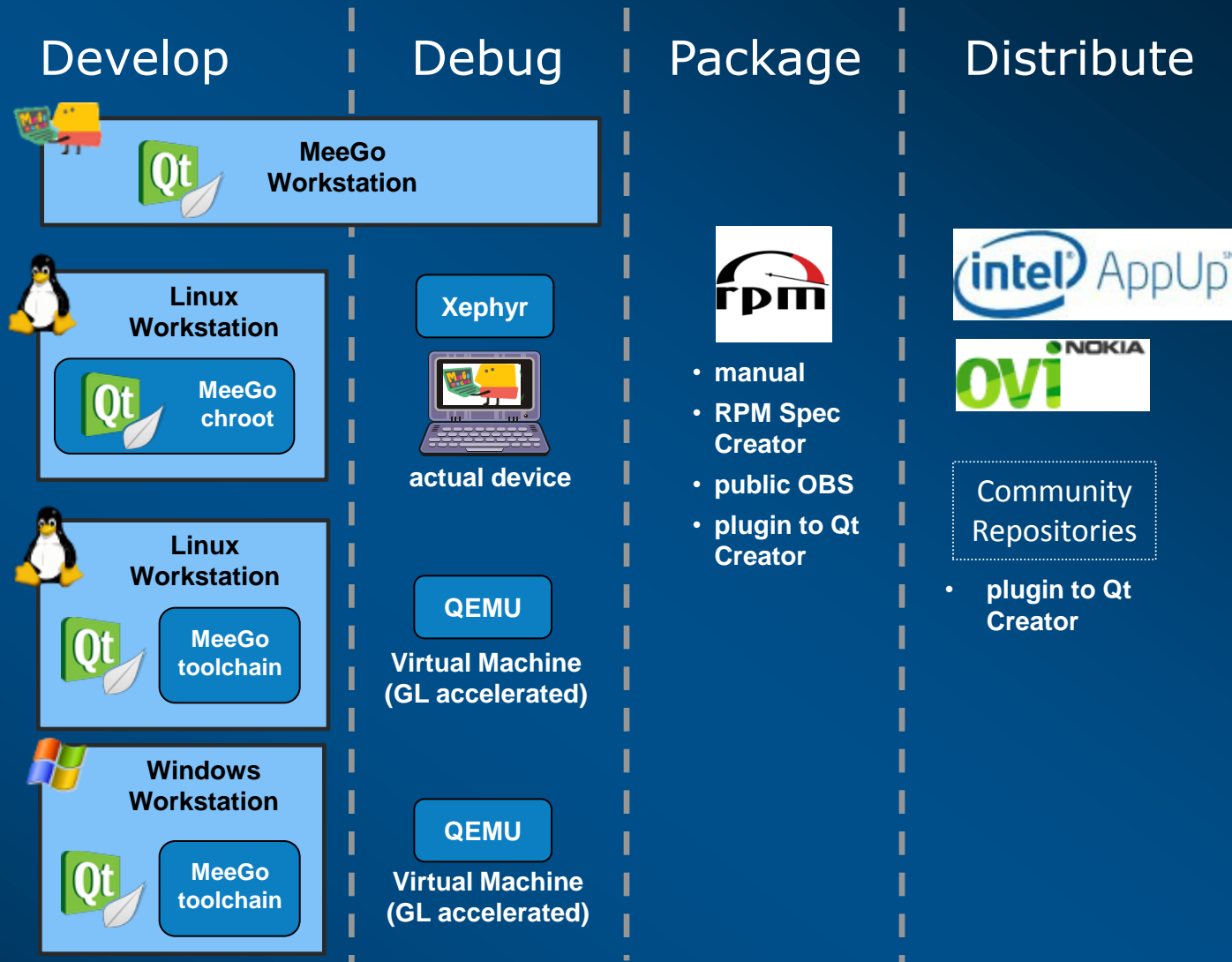- MeeGo Core API -- Includes middleware libraries
- Qt and QtMobility
- MeeGo Touch Framework
- MeeGo Web Runtime (WRT)
- UI Guidelines for Apps

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MeeGo Development Story (SDK)

Develop | **Debug** | **Package** | **Distribute**

Features

- **Cross-OS**
- **Full VM**
- **Any graphics device**
- **Device emulation**
- **Better packaging support**
- **Integration with Qt Creator**

MeeGo Workstation

Linux Workstation
- MeeGo chroot

Linux Workstation
- MeeGo toolchain

Windows Workstation
- MeeGo toolchain

Xephyr

actual device

QEMU
Virtual Machine (GL accelerated)

QEMU
Virtual Machine (GL accelerated)

rpm
- manual
- RPM Spec Creator
- public OBS
- plugin to Qt Creator

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OVI NOKIA

Community Repositories
- plugin to Qt Creator

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Roadmap

MeeGo v1.1
Handset
Netbook, Tablet
Media Phones

MeeGo v1.2
Smart TV

MeeGo v1.0
Netbooks

MeeGo Public
Community Releases

MeeGo Development

4Q'09			1Q'10			2Q'10			3Q'10			4Q'10			1Q'11			
OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR

MeeGo Project Release Cadence: Every 6mo.

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References

- Architecture:
  http://meego.com/developers/meego-architecture

- SDK download:
  http://wiki.meego.com/Getting_started_with_the_MeeGo_SDK_for_Linux

- MeeGo API: http://meego.com/developers/meego-api

- Developer Guides: http://wiki.meego.com/Developer_Guide

- compliance specs and tools can be found at MeeGo.com:
  http://wiki.meego.com/Quality/Compliance#Specification

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Thank You!

Q&A?

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