

The logo for SmartDevCon features three stylized, downward-pointing chevrons on the left, followed by the text "SmartDevCon" in a white sans-serif font, with "Dev" in blue. A superscript "2" is positioned to the right of "Con".

SmartDevCon²

12-14th September 2013 - Katowice, Poland

Tizen Architecture

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Outline

Introduction to Tizen

Inside Tizen

Tizen and others

Q&A

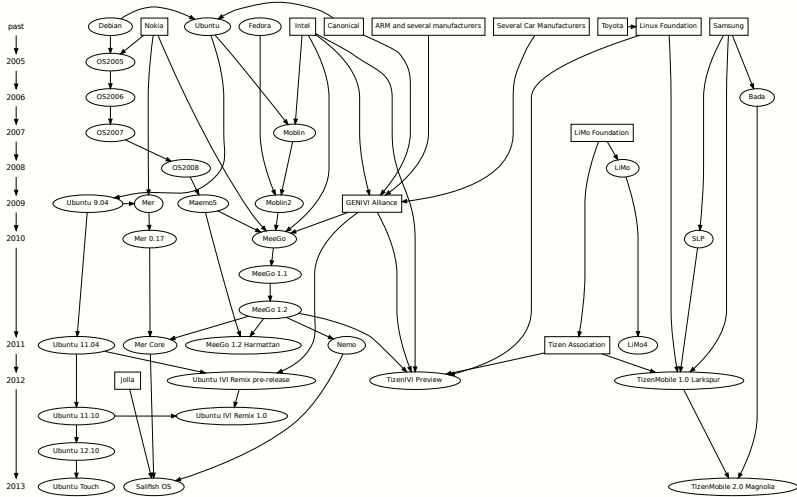


Introduction to Tizen

Tizen

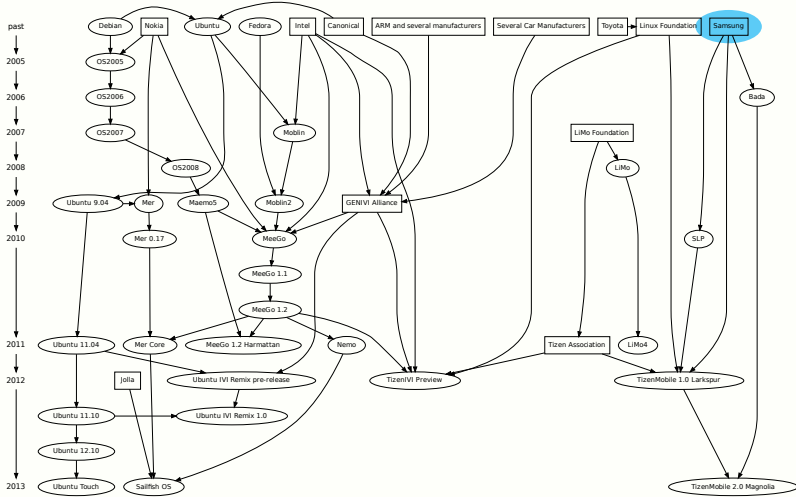
- **Open source**
 - GNU/Linux
 - WebKit
 - EFL
- **Standards-based**
 - POSIX
 - HTML5
- **Smart-embedded**
 - Phones
 - Tablets
 - IVI
 - TV

Family tree <https://github.com/kumadasu/tizen-history>



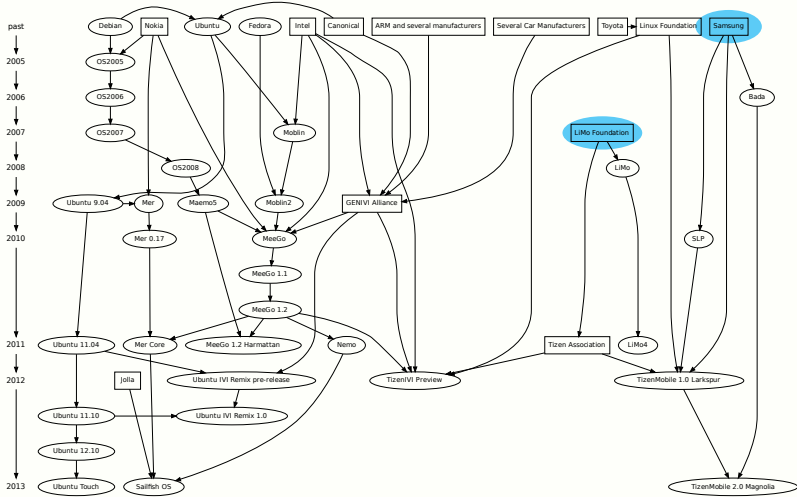
Tizen History (In Construction March, 2013)

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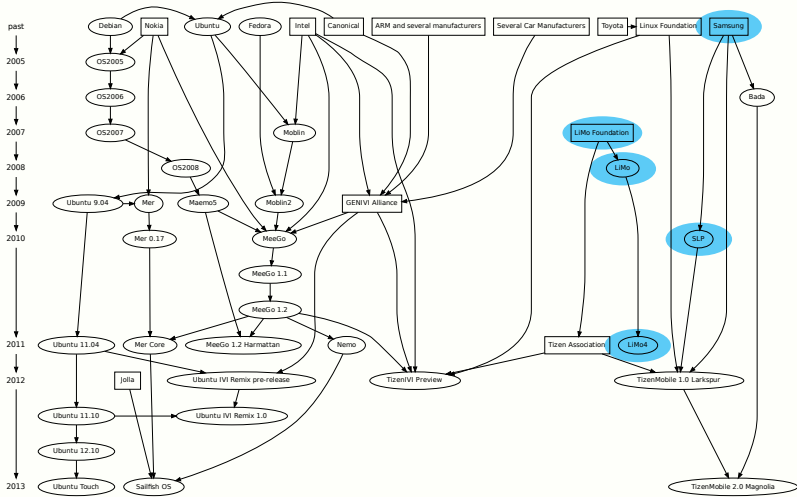
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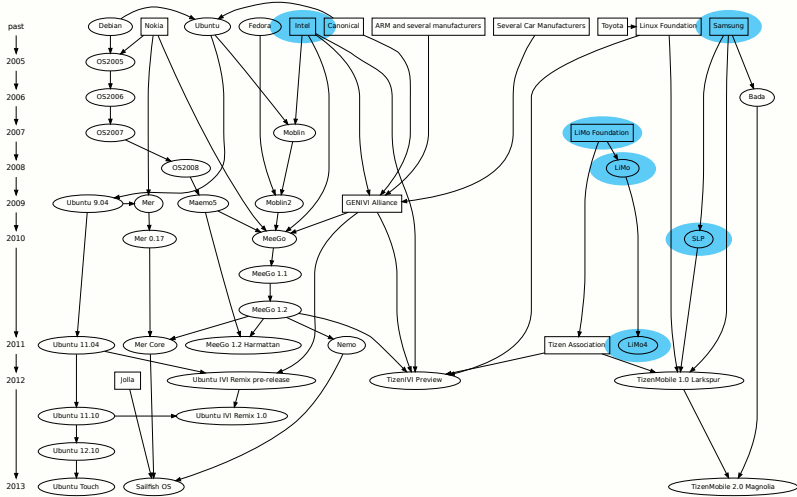
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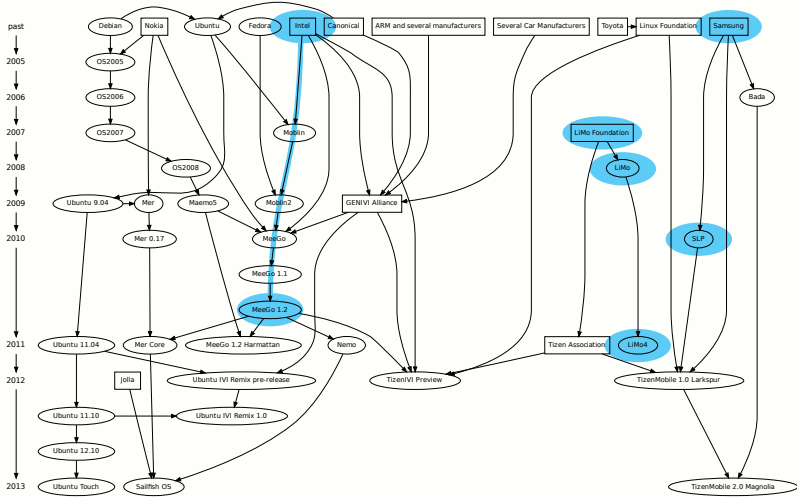
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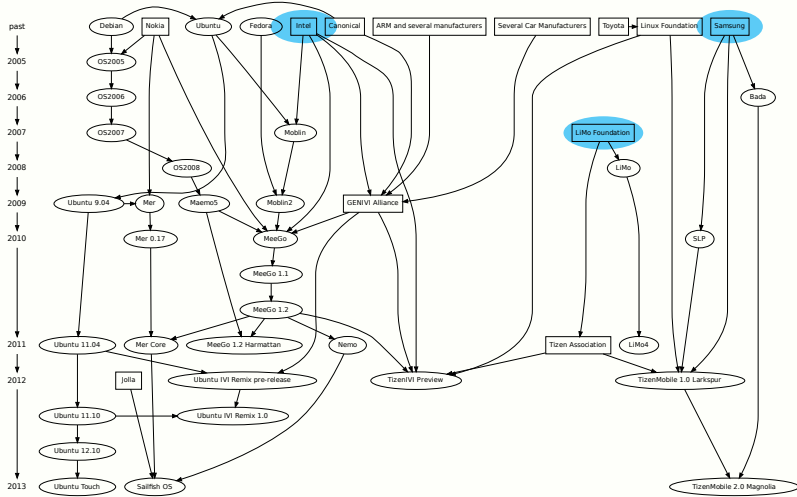
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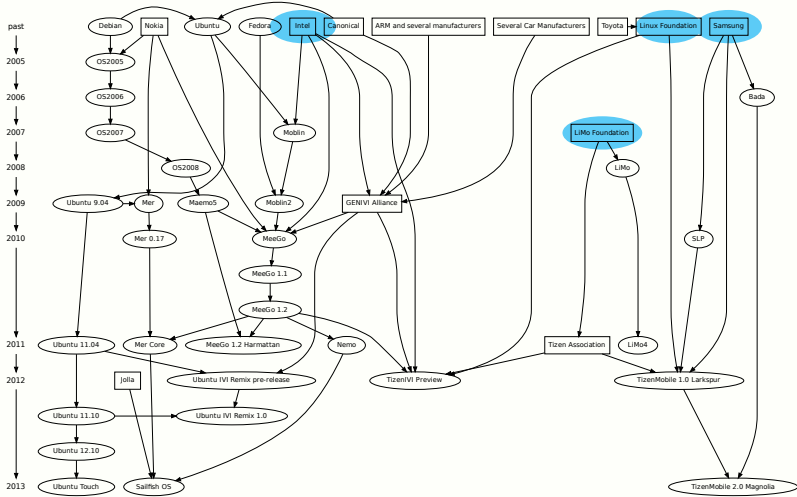
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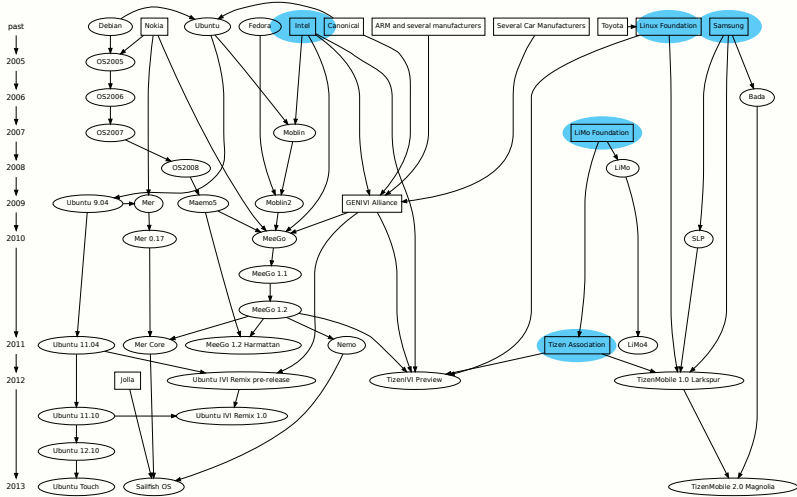
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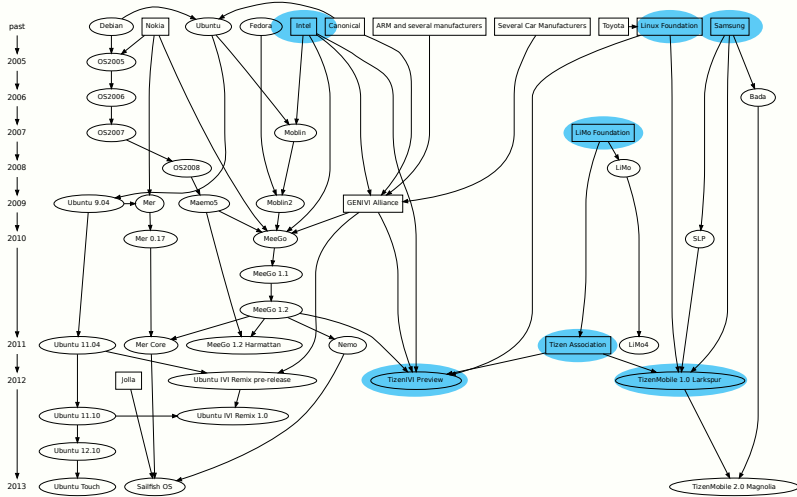
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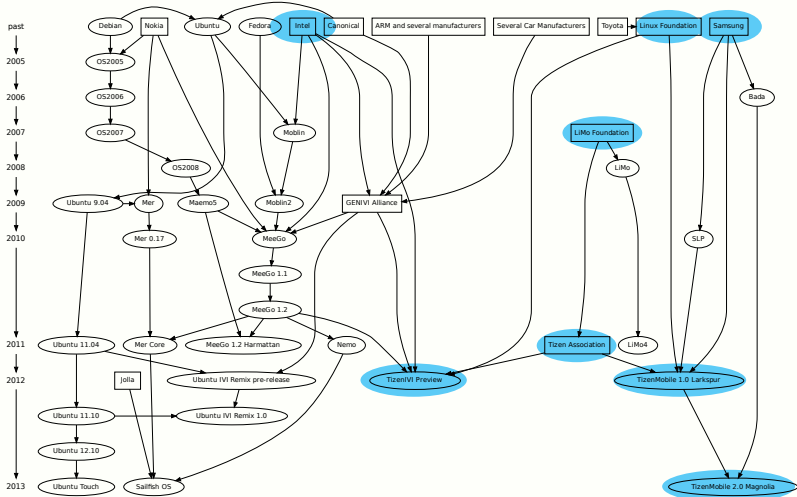
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Tizen History (In Construction March, 2013)

Tizen's origins, things to remember

- **LiMo** → **Tizen Association**
- **Samsung + Intel**
- **Tizen** ≠ **MeeGo**
- **Tizen has got few bits from MeeGo**
 - Connman
 - oFono
 - BlueZ
 - RPM
 - staff
- **I assure you we are open.** <http://www.tizen.org>



Inside Tizen

Layers

Web Apps

Native Apps

Web API

Native API

Core Services

Linux Kernel

Tizen Core Services

- **Application Framework**
- **Base**
- **Connectivity**
- **Graphics & UI**
- **Location**
- **Messageing**
- **Multimedia**
- **PIM**
- **Security**
- **System**
- **Telephony**
- **Web**

Base

- **A basic self-contained GNU/Linux userland**
- **Boots to console with a login prompt**
- **Toolchain**
- **Support libraries**
 - database access
 - i18n
 - XML and others

Application Framework

- **Application state management**
- **Pre-defined services**
- **Notifications**
- **Package management**
- **Alarm/time management**

Network & Connectivity

- **TCP/IP connection**
- **Bluetooth**
- **HTTP**
- **NFC**
- **Wi-Fi**

Graphics & UI

- **X11**
- **OpenGL**
- **Enlightenment Foundation Libraries (EFL)**
- **Input methods**

Location

- **GeoClue**
 - GPS
 - WiFi
 - 3G
 - GeoIP
 - Geocoding

Messaging

- **SMS, MMS**
- **Email**
- **Push**

Multimedia

- **Video**
- **Audio**
- **Camera**
- **Audio Policy**
- **3D Audio**

PIM

- **Contacts**
- **Calendar**
- **Accounts**
- **Synchronisation**

Security

- **Access control**
- **Certificates**
- **Secure storage**
- **Cryptography**
- **DRM**

System

- **Sensors**
- **Power management**
- **System settings**

Telephony

- **Telephony services**
- **Network communication**
- **SIM management**

Web

- **WebKit: layout + rendering**
- **WebRuntime**

API

- HTML5
- Native C++ (Bada)
- Tizen Common
- Application
- Communication
- Content
- Input/Output
- Social
- System
- User Interface



Tizen and others

The players

- **Android**
- **iOS**
- **RIM (BlackBerry OS, QNX)**
- **Windows Phone**
- **Tizen**

Areas of applications

- **Android: pretty much anything**
- **iOS: iStuff**
- **RIM: Blackberry phones and tablets**
- **Windows Phone: Nokia (mostly)**
- **Tizen: pretty much anything**

Software development

- **Android: Java**
- **iOS: ObjectiveC**
- **RIM: Native (C/C++), HTML5, Adobe AIR, Android (BB10)**
- **Windows Phone: .NET, C++**
- **Tizen: Native (C++), HTML5, (Android via ACL)**

Platform development

- **Android: open (?)**
- **iOS: closed**
- **RIM: closed**
- **Windows Phone: closed**
- **Tizen: open (!)**

Software distribution

- **Android: Play Store**
- **iOS: App Store**
- **RIM: BlackBerry World**
- **Windows Phone: Windows Phone Store**
- **Tizen: Tizen Store (?)**



Q&A

Thank you

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More About Tizen

- **Friday, 2013-09-13**

- 15:15 — *Creating a Tizen Application*, Kamil Grondys (T1)
- 17:30 — *HTML5 Features*, Wojciech Bielawski (T2)

- **Saturday, 2013-09-14**

- 09:00 — *Webruntime in Tizen*, Janusz Majnert (T2)
- 11:15 — *Porting Qt to a new Smarthone for Fun and Fame*, Jarosław Staniek (T1)
- 11:15 — *Solution for Tizen/*, Michał Knapiński and Michał Pawluk (T2)