Tizen Architecture Overview

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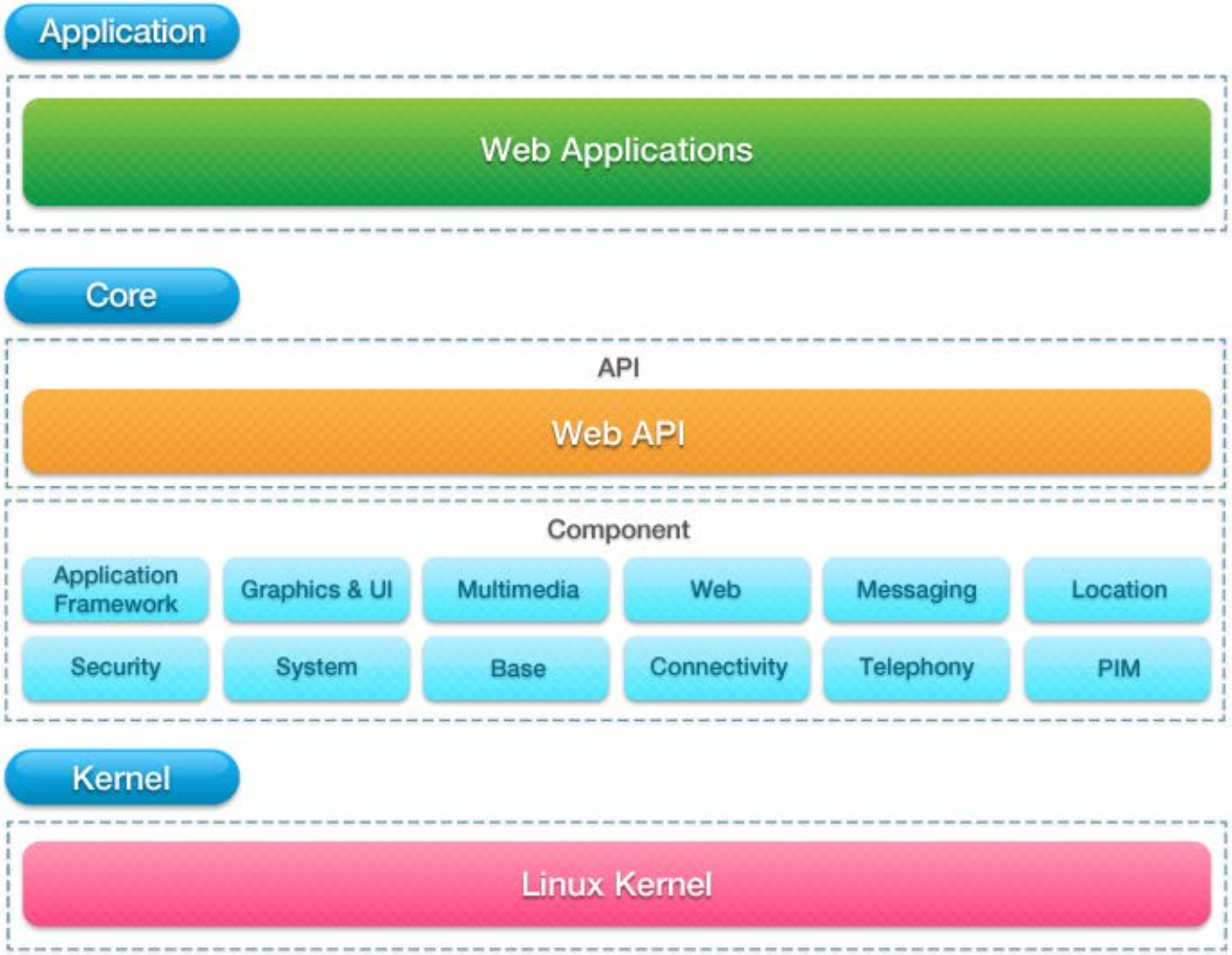
Cross-device, cross-architecture, open software platform based on a true, standards-based HTML5 implementation that delights consumers while enabling ecosystem partners differentiation

Tizen Core Architecture (www.tizen.org)



- **Application Framework**
  - The Application Framework provides application management, including launching other applications using the package name, URI, or MIME type. It also launches pre-defined services, such as the system dialer application. The Application Framework also notifies applications of common events, such as low memory events, low battery, changes in screen orientation, and push notification. Furthermore, database and settings support are provided by Application Framework.
- **Base**
  - Base contains Linux base essential system libraries that provide key features. The Base is defined as self-sufficient and with packages in Base the system is able to boot itself to console/login. It also includes database support, internationalization, and XML parsing.

Tizen Core Services (contd)

- **Graphics and UI**
  - Graphics and UI consist of the system graphic and UI stacks, which includes EFL (Enlightenment Foundation Libraries), an X11-based window management system, input methods, and OpenGL* ES.
  - EFL, the heart of the Graphics component, is a suite of libraries. EFL is used to create rich graphics with ease, for all UI resolutions. The libraries build UIs in layers, allowing for 3D transformations and more. EFL includes the Evas canvas API library and the elementary widget library.
- **Location**
  - Location provides location based services (LBS), including position information, geocoding, satellite information, and GPS status. It is based on GeoClue, which delivers location information from various positioning sources such as GPS, WPS (Wi-Fi Positioning System), Cell ID, and sensors.
- **Messaging**
  - Messaging consists of SMS, MMS, Email, and IM.

Tizen Core Services (Contd)

- **Multimedia**
  - Multimedia is based on GStreamer. It provides support for media, including video, audio, imaging, and VoIP. It also provides media content management for managing media file metadata information.
  - Audio server functionality is based on Pulseaudio
- **PIM (Personal Information Management)**
  - PIM enables managing user data on the device, including managing calendar, contacts, tasks
- **Security**
  - Security is responsible for security deployment across the system. It consists of platform security enablers, such as access control, certificate management, and secure application distribution.
  - SMACK is the ingredient for security in Tizen

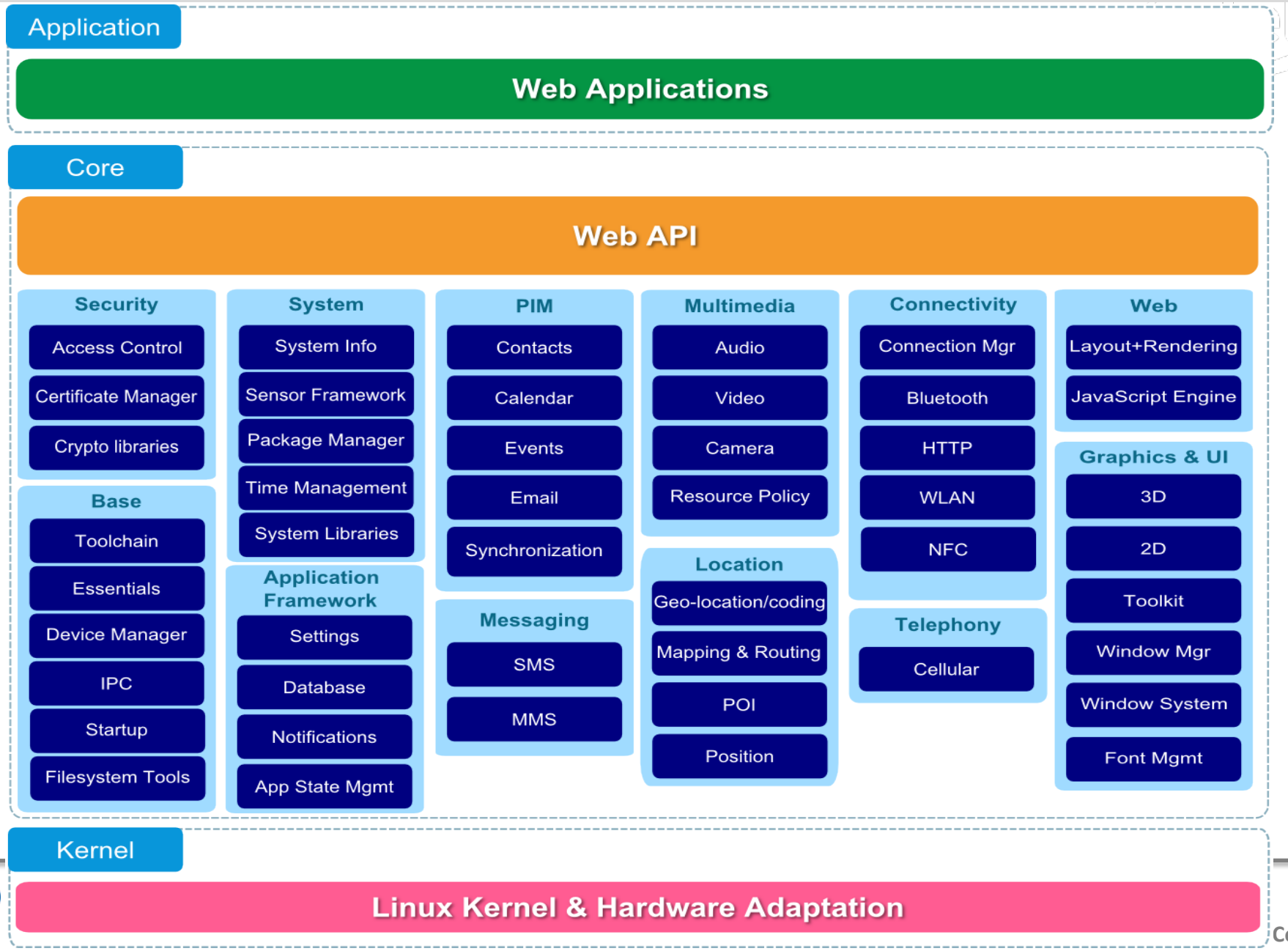
Tizen Core Services (Contd)

- **System**
  - System consists of system and device management features, including: Interfaces for accessing devices, such as sensors, display, or vibrator.
  - Power management, such as LCD display backlight dimming/off and application processor sleep.
  - Monitoring devices and handling events, such as USB, MMC, charger, and ear jack events.
  - System upgrade/package management.
  - Alarm/time management.
- **Web**
  - Web provides a complete implementation of the Tizen Web API optimized for low power devices. It includes WebKit, which is a layout engine designed to allow web browsers to render web pages.
  - It also provides web runtimes for web applications.

Tizen Core Services (Contd)

- **Telephony**
  - Telephony consists of cellular functionalities communicating with the modem: Managing call-related and non-call-related information and services for UMTS and CDMA.
  - Managing packet service and network status information for UMTS and CDMA.
  - Managing SMS-related services for UMTS and CDMA.
  - Managing SIM files, phone book, and security.
  - Managing SIM Application Toolkit services for UMTS.
- **Connectivity**
  - Connectivity consists of all network and connectivity-related functionalities, such as 3G, Wi-Fi, Bluetooth, HTTP, and NFC (Near Field Communication).
  - Connection Manager is based on ConnMan, which provides 3G and Wi-Fi based network connection management.

Tizen Core Services – Summary



Thank You

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