ECOSYSTEM

PRODUCTS

FUTURE
THE ECOSYSTEM
TIZEN 2.1

- ADDITIONAL HTML5 APIs
- RICH HOME SCREEN EXPERIENCE
- PERFORMANCE OPTIMIZATION
Tizen 2 New Major Features

- [Web] WebKit2 based web framework
- [Web] State-of-the-art HTML5/W3C API support
  - including new features, such as Content Security Policy 1.0
- [Web IDE] Hybrid application development environment and WYSIWYG design environment
- [Native IDE] Comprehensive suite for developing native C++ applications
- [UX] Framework for embedding Dynamic Box in viewer-like applications (e.g., Home screen)
- [Security] Anti-virus framework and Simplified Mandatory Access Control in Kernel (SMACK)
Tizen 2 | WebKit2 based Web Framework

- Web APIs for Browser and Web Apps
  - Best-in-class W3C/HTML5 support
- WebKit2 : Multi-process model
  - smooth user experience and better secure model

WebKit @ Tizen 1

Single Process
- Application
  - API
  - webkit
- WebCore, JS Engine, HTTP

WebKit @ Tizen 2

UI Process
- Application
  - webkit for UI Process

Web Process
- webkit for Web Process
- WebCore, JS Engine, HTTP
Tizen 2 | WebKit2 based Web Framework

- A policy language to declare a set of content restrictions
  - Cutting edge standard feature being enabled in the latest mobile platforms (Tizen 2.1, Chrome for android 25, Firefox for android 19, Blackberry10)
  - Defines white list of the web resources by type (e.g. image, script, media, etc.)
  - Mitigates Cross site scripting (XSS) attacks

CSP example

- `img-src *.tizen.org;
  media-src video.tizen.org;
  script-src trustedscripts.example.com`

- White list

- Image from the while list
  - It’s OK! Render!!

- Image off the while list
  - NO! Do not load!!

- Video from the while list
  - It’s OK! Play!!
Hybrid Application
- Combines a web application and a native service application
  - Web (UI) + Native Service (background logic)

Rapid Development Support
- Supports rapid development by uploading only changed files to the devices

Web UI Builder enhancement
- Supports absolute layout on screen
Tizen 2 | Native IDE

- Native development environment
  - Comprehensive suite for developing native C++ applications
    - Project Wizard
    - Editor and Code Assist
    - Unit Test and Code Coverage
    - Dynamic Analyzer
    - UI Builder
    - UI Effect builder
Tizen 2 | Dynamic Box

- A small app that can be embedded in other apps (e.g., Home Screen)

Dynamic Box

The essential or latest information about applications.

Drop View

(A Advanced feature of Tizen)

A hidden area that appears when the Dynamic Box is flicked down, and allows users to quickly access a detail screen, or perform tasks directly.
Tizen 2 | Security

- **Anti-virus Framework**
  - Provide interface to anti-virus engine & scan function

- **SMACK enabled**
  - Allow or deny access to system resources based on application’s privileges
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GREAT EXPOSURE
SDK AT Tizen.org
GLOBAL PRODUCTS
TIZEN FOR MOBILE
TIZEN FOR IVI
We sell cars...  
... To Customers
Killer Features – Requested in 2011

- Multimodal HMI
  - HD Displays
  - Improved Voice Control
- Connected World
  - Telematics
  - Connected Navigation (augmented offboard)
  - App Store
- Media Management – Online & Local

This is a fully featured home entertainment network...
Killer Features – Requested in 2014

We have no idea...
The POC Platform

JLR / Intel worked together to create a base platform that others can build on:

• Tizen 1.0 with node.js
• HTML5 based application environment using wgts
• Server backend to push / pull apps

• Complete documentation

• Road map to Tizen 3.0 and beyond
The Future

– Keep it open
– Keep it easy
– Keep adding features…
Let’s open up IVI development...

...Together!
THE FUTURE
TIZEN 3.0

• IN DEVELOPMENT NOW
• OPEN TO CONTRIBUTION
STRONG ECOSYSTEM

GLOBAL PRODUCTS

FUTURE DEVELOPMENT