Tizen Compliance Overview

Bob Spencer, Intel Hobum (Vincent) Kwon, Samsung

> TIZEN DEVELOPER CONFERENCE 2013 SAN FRANCISCO

Tizen Compliance Goals

- Reduce fragmentation
- Increase quality of Tizen products and Tizen brand
- Communicate Tizen platform and product features
 - Clarify what "Tizen" means via specification and test suite.
- Increase confidence to participate from partners, operators, OEMs, ISVs, and developers





Tizen Compliance Components

Platform requirements and recommendations

- MUST vs. SHOULD
- Hardware features
 - screen resolution, USB, WiFi, etc.
- Software features
 - browser, web runtime, security, UI, etc.

Specification

- Tizen Compliance Specification (TCS)
- <u>http://source.tizen.org/compliance</u> Currently v2.1 for mobile profile only

Test Suite

- Tizen Compliance Tests (TCT).
- See next session for details



Compliance Profiles

Tizen Common

The foundation of features common across all Tizen devices

Tizen Profiles

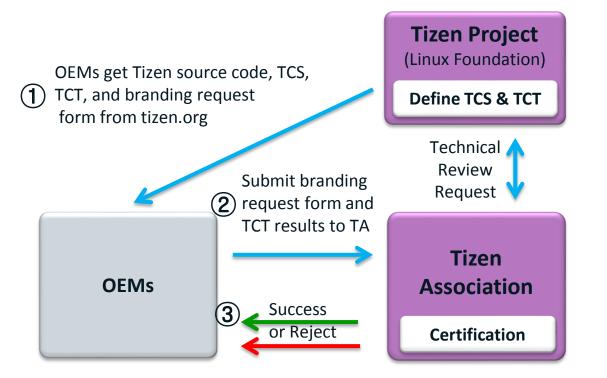
Requirements for specific device categories on top of Common

Mobile (Phone, tablet)	IVI (In-car devices)	TV (DTV, STB, IPTV)	Clamshell (Laptops)	Camera	Printer	Etc		
Tizen Common								

To be Tizen compliant, a device MUST conform to the Tizen common requirements as well as at least one profile



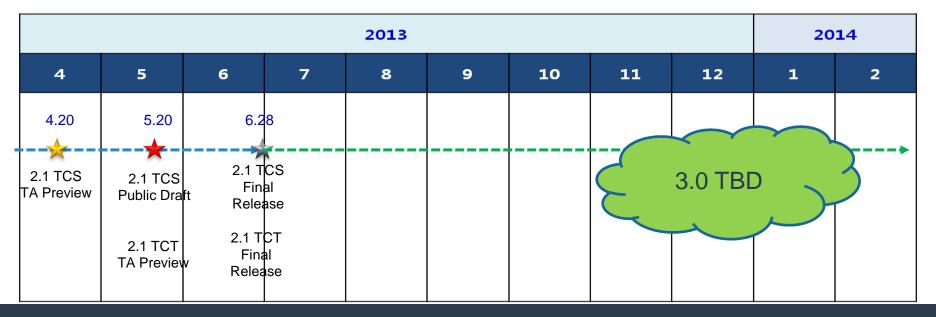
Tizen Compliance: Workflow





Mobile Profile TCS & TCT Schedule

- 2.1 TCS & TCT final release (June 2013)
- 3.0 TCS & TCT final release (TBD)





Tizen Mobile Profile Overview

- Defined for various mobiles devices
- Flexibility to cover low-end to high-end mobile devices
- Introduces two compliance certification models in Tizen Mobile 2.1: Full and Web (TBD)
 - Main difference: availability of 3rd party native applications
- Full version of source code is available at source.tizen.org





Tizen Mobile Profile Features

Hardware Feature	Requirement		
Memory	RAM: 512 MB Storage: 1 GB (3.1.1)		
Sound	Must support one audio output (3.1.2)		
Connectivity	At least one way to connect to the internet. SHOULD be wireless (3.1.3)		
Screen resolution	HVGA, WVGA, HD. Recommend WVGA or higher. (3.1.4)		
USB	2.0 or later (3.1.5)		
Touch screen	Single touch req'd. Multi-touch recommended (3.1.6)		

Software Feature	Requirement			
Web API	Required (2.2)			
Native C++ API	Required for Full (2.3)			
ABI	(ARM or X86) required for Full (2.4)			
Application packaging	wgt(web, hybrid), tpk(native) (2.10)			
Application Control	"view" and "pick" features (A.1)			
WebKit, browser, WRT	Must be based on Tizen reference implementation (2.11)			
Multimedia	Required codecs (2.15)			
Developer tools	Support sdb , Log View, OProfile, dynamic analysis framework, side loading. (2.16)			



Application Compliance?

Compliance is important for developers!

- ...but there is no application compliance or certification
- Compliance defines the platform requirements
- Security, packaging, available API, hardware features, buttons, screen size

Application success is acceptance in the Tizen store

- If accepted in the store, the application has "passed"
- Tizen application checker
 - Tool to check application using the same rules as store validation. Can be used offline now. Eventual online availability







TIZEN DEVELOPER CONFERENCE 2013 SAN FRANCISCO