

Profiling, Testing and Certification

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Need for a TV Profile

- **TV Profile**
 - Set of HTML5, CSS, JavaScript features needed to create compelling TV User Experiences
- **Current W3C Spec development focus has been:**
 - PC, Smart-Phone, and Tablets
 - Single User Browsing and Interaction Model
 - 2ft User Interface with Keyboard, Mouse, Touch interfaces
 - Users are used to PC browsing experience, multiple windows and tabs, small fonts, downloading plugins, popup windows, bidirectional internet connectivity
- **Need to consider TV viewing and browsing experience**
 - 10ft User Interface and multiple users enjoying the TV experience
 - 10ft browsing and UI navigation pose new challenges
 - Limited capabilities of interacting devices, Remote Control
 - New interacting devices - Game Consoles, Smart-phones, Tablets
 - Service Provider and Content Providers UI requirements

Need for a TV Profile

- **New Applications add new requirements**
 - Watching free, premium content from Internet, IPTV
 - Advanced broadcasting usages in Japan
 - Social interaction - Video Telephony, SMS
 - Share and Enjoy content from other content sources (DLNA) from home
 - Remoted UI from other devices
 - Web applications, App Store Support, Widgets
- **Other Considerations**
 - HTML5 only is not enough, need CSS, JavaScript available for application development
 - Other standards bodies that implement HTML technologies require TV profile from W3C - for example DLNA

Testing

- **Test Suite Development**
 - Need to happen along with Profile Development
 - Member Companies contribute tests
 - tests need to be freely available and royalty free
- **Test Coverage**
 - TV profile features
- **Refine test suite during TV profile development**
 - Test Suite regressions
 - Provide feedback to W3C (test logs, bug reports)
- **Mature Test Suite to serve as a Certification Test Bed**

Certification

▪ Benefits of Certification

– Device Vendors

- Advertise Enhanced Product Value to Consumers
- Provide Application Developers a known base for creation of Web Applications

– Users

- Confidence that the device is capable of supporting their Web Applications

– Software Developers

- Enables Application Portability through a defined platform for TV centric Web Applications
- Limits standards fragmentation

– Service Providers

- Deploy applications to different TVs, Enable App Stores

Certification

▪ Challenges

- Developing a Compliance Program is not trivial
 - However industry cost of contributing to W3C test suite development is likely to be less than the cost of supporting untested and inconsistent implementations of W3C standards
 - Make test suite development part of TV Profile Development effort
- Additional Overhead of Certification to Device Vendors
- Administering Certification Program is an Overhead to W3C

▪ Suggestion

- Keep it simple
- Consider Self Certification
 - W3C to make the Certification Test Bed accessible to all vendors
 - Device Vendors run the W3C Cert Test Suite for Device under test
 - Submit test log to W3C for approval
 - W3C examines the test log and approves the Device