

Device Information

- Summary of device capabilities
- Basis for negotiation and adaptation
- Should restrict to essential
 - Markup, modules, versions
 - Dimensions and limits
- Who decides what is essential?
 - Content managers (markup, plug-ins, versions)
 - Marketing/branding (colours, size, style, weight?)
 - Adapters (markup lineage, modules, anomalies)
 - Operator (compression, multi-part, push methods)
 - QA (memory capacity, limits)
 - App developers (OS, CPU, capacity)
 - Security (protocols, identity, location)
- Impossible to know what is essential.

Device Profiling

- Manual activity to discover device information
- Minimum: assign device to category
- Maximum: Discover everything about device
- Adaptors: capture what is or may be useful for adaptation
- Complex new devices can take hours to profile

Capture request to discover identifying signature

- User Agent header
- Accepts header
- Custom headers
- CC/PP or UAProf
- Headers are not to be trusted

Basic content and interaction tests

- Default handling of content
- Supported features
- Limits
- "Bugs"
- General look & feel
- Usability

Device Evolution

- New generations inherit most features.
- Device information hierarchy is a natural model.
- No single hierarchy is perfect

Access to Device Information

- Expressions in markup (e.g. XPath)
- Custom controls, tag libraries, APIs etc.
- DOM based (e.g. via JavaScript)
- Server side: does it have all of the device information?
- Client side: implies processing is local
- Should device information have namespaces?

Device Information Reliability

- Who validates the information?
- Neutral third party
- Industry consortium
- Open Source activity
- Who is authoritative?
- My idea of "usable" may not match your idea
- What are the official units?
- Conflict resolution issues
- Error correction issues

Device Information Technologies

- W3C
 - CC/PP
 - DSelect
 - CSSMQ
- OMA
 - UAProf
- Other
 - JCP JSR 188
 - WURFL
 - Commercial databases