



Volantis Systems



Established 2000

~150 employees

- Engineering
- Customer Support
- Sales/Marketing

Privately funded

- Accel Partners
- Kennet Venture Partners
- Softbank Europe Ventures



W3C Credentials

Volantis W3C Member since 2000

Chief Scientist: Rhys Lewis - Chair of Device Independence Working Group (DIWG)

Principal Researcher: Dave Raggett - W3C Fellow and Staff Member

Volantis Device Database™

- Comprehensive database of mobile devices enabling automatic support for a wide cross-section of consumers.
 - 3,000+ devices
 - 530+ attributes per device
 - Includes unique Volantis-added intelligence that goes beyond publicly available information
- Open, accessible database
 - Used by Volantis Intelligent Content Adaptation Platform and Applications
 - Used by independent customer and ISV applications
 - Extensible
 - XML and RDBMS representations
- Live update service over the Internet
 - Updates published every few days
 - Hundreds of devices added per month



*Figures correct on 29.6.2006:

Issues with primary DD sources



Volantis' experience over several years has shown that existing *primary* sources of device description data are often:

- **Inaccessible** (or simply not there)
- **Invalid** (they don't comply with the specifications)
- **Inaccurate** (they contain incorrect values)
- **Incomplete** (they are missing important values)
- **Inconsistent** (they contain varying levels of detail)
- **Inadequate** for the purposes of high-quality content adaptation

The need for an authoritative source of device descriptions is clear

Why a DDR is important to Volantis



- About half of the 530+ device attributes in the Volantis Device Database are considered “advanced properties”. i.e. they provide a finer level of detail than publicly accessible information, in selected areas
 - We do not expect all of these advanced properties to be provided by a DDR any time soon
- Before the advanced property values can be determined for a new device, the basic ones need to be correct, since they are used as the foundation for the process of discovering the advanced properties. Errors in the basic device description could have consequential effects that ripple through the whole analysis process
- Currently, it can take as much time and effort to discover and check the basic capabilities as it takes to research the advanced ones
- If a DDR was able to provide a reliable starting point, less effort would have to be spent on the basics, so more could be spent on researching advanced device properties and increasing their scope
- A DDR should foster a general increase in the usability of mobile web content across the board, which will help the whole space to grow in every dimension

Some thoughts on the proposed DDR



- **Scoping..** The DDR should not attempt to be exhaustive in terms of attribute coverage, or it will fail. Beyond a basic minimum set of properties, timely and wide device coverage is more important than complete attribute coverage.
- **Authority** The DDR should aim to be authoritative but not definitive. Domain specialists will need to extend, supplement and refine the device descriptions with their own data.
- **Extensibility** is important, for the above reason, and to allow the repository to become richer and deeper as it matures. The schema used to represent core DDR data must be easily extensible, and private-namespace extensions should be possible anywhere in the distribution and processing chain.
- **Trust** should be built into the model. The DDR should contain enough information about the provenance of each value for both machines and humans to make informed decisions about whether a given value should be used. These decisions depend on the context in which the data would be used, so it is better to provide the best available data, with source metadata, than to provide only values that are completely confirmed. A proper versioning system must be used, so that changes can be tracked and reversed, and so that a known stable version can be used to avoid unexpected changes during testing.
- **Device manufacturers** should be the main, but non-exclusive, source of DDR content. Where they cannot, or do not provide it accurately, other trusted sources should be used.
- **Disputes** will inevitably arise, so a workable arbitration/resolution system will be required.



End