

Web Site Engineering Best Practice Standards (IEEE 2001)

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Abstract

IEEE Std. 2001-2002 Recommended Practice for the Internet—Web Site Engineering, Web Site Management, and Web Site Life Cycle is now approved. This revision of the 1999 version incorporates recommendations on accessibility for persons with disabilities, internationalization and the concept of a site center. All of these will contribute to increased user satisfaction, and decreased site maintenance costs and liability.

1. Best Practice Standards

IEEE Std. 2001 has been developed by the Internet Best Practices working group with the first version approved in 1999. As a recommended practice, the document suggests methods to better engineer web sites for maintenance, access and usability. It is recommended that complex web sites apply standards for software engineering including requirements, life cycle planning, and testing. However all web sites can benefit from application of the recommendations.

2. Accessibility Issues

One significant issue that has increased clarity since the 1999 work is in the area of accessibility for persons with disabilities. The Web Consortium's Web Accessibility Initiative (WAI) [1] project has addressed this in fair detail. IEEE 2001 requires conformance to the 'priority one' WAI guidelines, and recommends conformance to priority two and three. The US Government has mandated that Federal web sites meet web accessibility guidelines as well [2]. This clearly applies to new Federal web sites, and may apply to federally funded institutions (universities). This also sets a target for interpretation of the Americans with Disabilities Act (ADA) for web sites. IEEE 2001 requirements are intended to fulfill these US government requirements. The Standard makes

recommendations beyond these, including in areas of color contrast and color blind access.

3. Internationalization

IEEE 2001 emphasizes the global nature of the web. In this context, place of origin, as well as explicit use of internationally considerate data is encouraged. Metric measurements, date formats, country/area codes, currency designations, time zone and full addresses are all part of this.

4. Site Center

In collaboration with the Consumers Union organization the concept of a site center has been developed. This would be pointed to by all site pages, and would contain administrative, contact and legal details. (Copyright, trademarks, privacy statements, mail addresses, etc.) Commerce sites are expected to present key information about ownership, and a declaration of business interest here to help consumers to understand the site perspective and potential bias'.

5. References and Resources

[1] W3C Recommendation Web Content Accessibility Guidelines --WAI Page Author Guidelines
<http://www.w3.org/TR/WCAG10>

[2] Federal Register Dec. 21, 2000; Code of Federal Regulations (CFR) 1129

<http://www.access-board.gov/sec508/508standards.htm>

For details on IEEE Std. 2001-2002 see:
<http://www.computer.org/standards/Internet>

For the full presentation slides see:
<http://www.JimIsaak.com/wew/index.htm/>