The 1.2 release of the markup validator is an enhancement and bug fix release. Changes include:

- New feature: limited support for IRI's.
- Enhancement: several updates to validator's internal DTD library and catalog, including <u>XHTML modularization</u> 1.1 second edition, <u>XHTML Basic</u> 1.1 second edition, and XHTML + RDFa 1.1 20101109 working draft.
- Enhancement: undefined entity errors from libxml are no longer suppressed as support for external entities is enabled in it since validator version 1.0.
- Enhancement: minor configuration parsing performance improvements.
- Enhancement: <u>MooTools</u> JavaScript library updated to version 1.2.5 + MooTools more 1.2.5.1.
- Enhancement: CSS and JavaScript files are now content negotiated and served in gzip compressed form to user agents that indicate support for gzip in their Accept-Encoding header.
- Enhancement: the "Home Page" configuration parameter is no longer required or used.
- Enhancement: list of the parsers actually used for a validation is now included in valid results.
- Enhancement: documentation improvements, code cleanups.
- Bug fixes to <u>Unicorn</u> and <u>SOAP</u> output templates.
- Dependency changes: new minimum required versions: CGI 3.40, URI 1.53.

2010-07-07 — 1.1 release:

The 1.1 release of the markup validator is an enhancement and bug fix release. Changes include:

- Enhancement: XML wellformedness check is now run only if other stages of the validation process report no errors. This is to further mitigate a <u>performance issue</u> related to the XML wellformedness check.
- Enhancement: improved error output performance.
- Enhancement: error/warning location information now <u>makes it clearer</u> whether the error occurred in the validated document or an external resource related to it.
- Enhancement: improved <u>heuristics</u> for incomplete input URLs.
- ... and as usual, assorted minor spelling, code cleanup, link and the like fixes.

2010-06-14 — 1.0 release:

The 1.0 release of the markup validator is an enhancement and bug fix release. Changes include:

- Enhancement: when passing its internal transcoded document to external validators, validator now reflects the transcoding by modifying character encoding information included in the passed document.
- Enhancement: updates to validator's internal DTD library.
- Enhancement: XML wellformedness check now supports external entities instead of
 just suppressing error messages about them internally. As a side effect, this should
 work around a specific case of a certain <u>performance problem with XML::LibXML</u>
 1.70.

- Bug fix: doctype override could place a malformed comment in the modified document.
- Bug fix: error messages were not properly HTML escaped when "show source" was selected.
- Dependency changes: new minimum required versions: HTML-Parser 3.60, XML-LibXML 1.70.
- ... and a whole slew of minor spelling, code cleanup, link and the like fixes here and there.

2010-03-01 — 0.8.6 release:

The 0.8.6 release of the markup validator is an enhancement and bugfix release. Changes include:

- Removed feature: the "fuzzy matching" feature introduced in 0.8.5 has been removed because it produced too many confusing and invalid suggestions.
- Removed feature: the proprietary XML output option has been removed (finally, it was supposed to be gone already in 2006).
- Enhancement: improved error handling and diagnostics for problems occurred when decoding Content-Encodings, when cleaning up markup with HTML-Tidy, and when interfacing with the HTML5 validator.
- Enhancement: recognition of more (non-recommended) aliases for various character encodings.
- Enhancement: the document outline feature is <u>now available for invalid documents</u> as well, and its layout has been improved.
- Enhancement: a <u>direct link for validating an error page</u> has been added to the "this document cannot be checked" error page.
- Enhancement: updated <u>Unicorn</u> output.
- Enhancement: several updates to validator's internal DTD library and catalog, most notably switching to use/reuse more modular DTDs rather than flat ones than before.
- Enhancement: validator can now be configured to do file based caching of its templates, resulting in noticeable performance improvement in non-mod_perl environments.
- Enhancement: the <u>EARL/RDF</u> output format has been updated to <u>version 1.0</u> (20091029 Working <u>Draft</u>).
- Enhancement: the inactivity timeout when retrieving documents has been <u>lowered to</u> 45 seconds.
- Enhancement: support for charsets specified with <a h
- Bug fix: <u>full document doctype was incorrectly in effect</u> when validating a document fragment wrapped in a doctype template.
- Bug fix: recommended <u>system identifier for XHTML 1.1 plus MathML 2.0 documents</u> was incorrect.
- Bug fix: HTML5 validator error messages were doubly escaped.
- Bug fix: direct input when overriding doctype or charset <u>passed an invalid Content-Type header</u> to the HTML5 validator.

- Bug fix: <u>"wide characters"</u> in HTML-Tidy's output caused an error which prevented the whole tidied output from being displayed.
- Bug fix: there were several errors in the JSON output.
- Bug fix: the description for missing xmlns errors contained an example for XHTML documents that was <u>not valid XHTML 1.1</u>.
- Bug fix: bad DC terms namespace prefix in the XHTML+RDFa "badge" example code.
- Bug fix: the state of the "validate error pages", verbosity, error grouping, and "clean up with HTML-Tidy" options were not always preserved.
- Bug fix: several issues in error message locators in shown source snippets as well as showing the actual portion of a line with errors on it have been fixed.
- Bug fix: HTTP responses <u>containing lines longer than 4k bytes</u> could not be processed.
- Bug fix: an error was not issued for <u>standalone XML documents containing external</u> entities.
- Bug fix: the SOAP API produced invalid XML when giving character encoding suggestions.
- Bug fix: various fatal validation errors resulted in <u>internal server errors</u> in non-HTML output modes.
- Dependency changes: new dependency: JSON >= 2.00; new minimum required versions: libwww-perl 5.802, Config-General 2.32, SGML-Parser-OpenSP 0.991; String-Approx is no longer required.
- ... and a whole slew of minor spelling, code cleanup, server error log warning trash, minor performance and the like fixes here and there. Kudos to <u>perltidy</u> and <u>perlcritic</u> for many of these.

2009-03-26 — 0.8.5 release:

The 0.8.5 release of the markup validator is a feature and bugfix release. Changes include:

- UI fix: many of our users were confused by the behaviour of the "More options" arrow. A small UI change should make the user experience less confusing.
- New Feature: fuzzy matching used to suggest corrected markup. Analysis of many invalid pages shows that the most common error comes from invalid (typo or non standard) elements and attributes used. The <u>new feature</u> will help by suggesting possible (valid) alternatives.
- Bug Fix: <u>issues with SVG</u> were creating very large log output when validating SVG documents. The validator code has been amended to limit this log flood.
- Bug Fix: the HTML5 validator integration broke some of the validator's "document type override" functionalities in version 0.8.4. This is fixed in 0.8.5.
- New: the validator icon code, which one can add to web pages, now <u>includes</u> XHTML+RDFa when applicable.
- Bug Fix / New: implementing XML::LibXML Structured Errors. The validator uses
 libxml2 and the XML::LibXML for well-formedness check. Recent versions of the Perl
 library had bugs that made in backward incompatible, causing the validator to not
 output all well-formedness errors reliably. Some code was added to the validator to