[MS-HTML401]:

Internet Explorer HTML 4.01 Standards Support Document

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## Revision Summary

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1 Introduction

This document describes the level of support provided by Microsoft web browsers for the HTML 4.01 Specification [HTML], W3C Recommendation 24 December 1999.

The [HTML] specification contains guidance for authors of webpages and browser users, in addition to user agents (browser applications). Statements found in this document apply only to normative requirements in the specification targeted to user agents, not those targeted to authors.

1.1 Glossary

MAY, SHOULD, MUST, SHOULD NOT, MUST NOT: These terms (in all caps) are used as defined in [RFC2119]. All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

1.2 References

Links to a document in the Microsoft Open Specifications library point to the correct section in the most recently published version of the referenced document. However, because individual documents in the library are not updated at the same time, the section numbers in the documents may not match. You can confirm the correct section numbering by checking the Errata.

1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact dochelp@microsoft.com. We will assist you in finding the relevant information.


Note This document is obsolete

1.2.2 Informative References


[MS-CSS21] Microsoft Corporation, "Internet Explorer Cascading Stylesheets (CSS) 2.1 Standards Support Document".

1.3 Microsoft Implementations

The following Microsoft web browser versions implement some portion of the HTML specification:

- Windows Internet Explorer 7
- Windows Internet Explorer 8
- Windows Internet Explorer 9
- Windows Internet Explorer 10
- Internet Explorer 11
- Internet Explorer 11 for Windows 10
- Microsoft Edge

Each browser version may implement multiple document rendering modes. The modes vary from one to another in support of the standard. The following table lists the document modes supported by each browser version.

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For each variation presented in this document there is a list of the document modes and browser versions that exhibit the behavior described by the variation. All combinations of modes and versions that are not listed conform to the specification. For example, the following list for a variation indicates that the variation exists in three document modes in all browser versions that support these modes:

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

Note: "Standards mode" in Internet Explorer 7 and "IE7 mode" in Internet Explorer 8 refer to the same document mode. "IE7 mode" is the preferred way of referring to this document mode across all versions of the browser.

1.4 Standards Support Requirements

To conform to [HTML], a user agent must implement all required portions of the specification. Any optional portions that have been implemented must also be implemented as described by the specification. Normative language is usually used to define both required and optional portions. (For more information, see [RFC2119].)

The following table lists the sections of [HTML] and whether they are considered normative or informative.

<table>
<thead>
<tr>
<th>Sections</th>
<th>Normative/Informative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>Informative</td>
</tr>
<tr>
<td>4-18</td>
<td>Normative</td>
</tr>
<tr>
<td>19-23</td>
<td>Informative</td>
</tr>
<tr>
<td>24</td>
<td>Normative</td>
</tr>
<tr>
<td>Appendices A-B</td>
<td>Informative</td>
</tr>
</tbody>
</table>

1.5 Notation

The following notations are used in this document to differentiate between notes of clarification, variation from the specification, and points of extensibility.

<table>
<thead>
<tr>
<th>Notation</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>C####</td>
<td>This identifies a clarification of ambiguity in the target specification. This includes imprecise statements, omitted information, discrepancies, and errata. This does not include data formatting clarifications.</td>
</tr>
<tr>
<td>V####</td>
<td>This identifies an intended point of variability in the target specification such as the use of MAY, SHOULD, or RECOMMENDED. (See [RFC2119].) This does not include extensibility points.</td>
</tr>
<tr>
<td>E####</td>
<td>Because the use of extensibility points (such as optional implementation-specific data) can impair interoperability, this profile identifies such points in the target specification.</td>
</tr>
</tbody>
</table>

For document mode and browser version notation, see also section 1.3.
2 Standards Support Statements

This section contains all variations and clarifications for the Microsoft implementation of [HTML].

- Section 2.1 describes normative variations from the MUST requirements of the specification.
- Section 2.2 describes clarifications of the MAY and SHOULD requirements.
- Section 2.3 considers error handling aspects of the implementation.
- Section 2.4 considers security aspects of the implementation.

2.1 Normative Variations

The following subsections describe normative variations from the MUST requirements of [HTML].

2.1.1 [HTML] Section 5.2.2, Specifying the character encoding

V0001:

The specification states:

To sum up, conforming user agents must observe the following priorities when determining a document’s character encoding (from highest priority to lowest):

1. An HTTP "charset" parameter in a "Content-Type" field.
2. A META declaration with "http-equiv" set to "Content-Type" and a value set for "charset".
3. The charset attribute set on an element that designates an external resource.

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

The determination of a document’s character encoding is not based on the charset attribute on the LINK or anchor tag. Instead, it is based on the charset of the retrieved resource.

2.1.2 [HTML] Section 6.5, Colors

V0002:

The specification states:

Attribute value type "color" (%Color;) refers to color definitions as specified in [W3C-sRGB].

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

No color conversion is performed before rendering colors to the display.

2.1.3 [HTML] Section 6.6, Lengths

V0003:

The specification states:
**MultiLength:** The value (\%MultiLength; in the DTD) may be a \%Length; or a relative length. A relative length has the form "i*", where "i" is an integer. When allotting space among elements competing for that space, user agents allot pixel and percentage lengths first, then divide up remaining available space among relative lengths.

**All Document Modes (All Versions)**

Relative length values for attribute lengths of type **MultiLength** are not supported.

### 2.1.4 [HTML] Section 6.9, Character encodings

**V0004:**

The specification states:

Values must be strings (e.g., "euc-jp") from the IANA registry (see [IANA-CharSets] for a complete list).

**All Document Modes (All Versions)**

When an invalid value is passed into the **charset** attribute, a valid **SCRIPT** element can still be produced.

### 2.1.5 [HTML] Section 7.4.2, The TITLE element

**V0005:**

The specification states:

User agents must always make the content of the **TITLE** element available to users (including **TITLE** elements that occur in frames).

**All Document Modes (All Versions)**

The **TITLE** element of **IFrames** is not available to users.

### 2.1.6 [HTML] Section 8.1.2, Inheritance of language codes

**V0006:**

The specification states:

An element inherits language code information according to the following order of precedence (highest to lowest):

The **lang** attribute set for the element itself.

The closest parent element that has the **lang** attribute set (i.e., the lang attribute is inherited).

The HTTP "Content-Language" header (which may be configured in a server). For example:

```
Content-Language: en-cockney- User agent default values and user preferences.
```
All Document Modes (All Versions)
Inherited `lang` attribute values are not supported.

2.1.7 [HTML] Section 8.1.3, Interpretation of language codes
V0007:
The specification states:

In the context of HTML, a language code should be interpreted by user agents as a hierarchy of tokens rather than a single token. When a user agent adjusts rendering according to language information (say, by comparing style sheet language codes and `lang` values), it should always favor an exact match, but should also consider matching primary codes to be sufficient. Thus, if the `lang` attribute value of "en-US" is set for the HTML element, a user agent should prefer style information that matches "en-US" first, then the more general value "en".

Quirks Mode and IE7 Mode (All Versions)
The pseudo-class :`lang` is not supported.

IE8 Mode and IE9 Mode (All Versions)
The pseudo-class :`lang` is applied in source order. More exact matches are not favored over less exact ones.

2.1.8 [HTML] Section 8.2.4, Overriding the bidirectional algorithm: the BDO element
V0008:
The specification states:

`bdo` element, Start tag: required, End tag: required

Quirks Mode, IE7 Mode, IE8 Mode, and IE9 Mode (All Versions)
The end tag for the BDO element is optional.

2.1.9 [HTML] Section 9.2.2, Quotations: The BLOCKQUOTE and Q elements
V0009:
The specification states:

Visual user agents must ensure that the content of the Q element is rendered with delimiting quotation marks.

Quirks Mode and IE7 Mode (All Versions)
Content of the Q element is not displayed in quotation marks.

2.1.10 [HTML] Section 9.3.2, Controlling line breaks
V0010:
The specification states:

With respect to bidirectional formatting, the BR element should behave the same way the [ISO-10646] LINE SEPARATOR character behaves in the bidirectional algorithm.

Quirks Mode and IE7 Mode (All Versions)
The [ISO-10646] model for interwoven bidirectional text is not supported.

2.1.11 [HTML] Section 9.4, Marking document changes: The INS and DEL elements
V0011:
The specification states:

The INS and DEL elements must not contain block-level content when these elements behave as inline elements.

All Document Modes (All Versions)
Block-level elements are supported. Instead of being forced into inline mode, block-level elements remain as block-level elements and are permitted to inherit INS styling. INS is treated as a block-level element.

2.1.12 [HTML] Section 11.2.1, The TABLE element
C0001:
The specification states:

If any of the columns are specified in relative or percentage terms (see the section on calculating the width of columns), authors must also specify the width of the table itself.

All Document Modes (All Versions)
If the width of the table is not specified, the columns are sized according to their contents. The column with the largest ratio of actual content width to percentage width is used to resize other columns according to their specified width percentage values. For more information on table layout algorithms, see [MS-CSS21] section 2.1.86.

For example, the following table uses ratios of actual column content width to percentage width of 10 and 20, respectively.

```html
<table>
  <tr>
    <td width="30%">12</td>
    <td width="70%">12345678901234</td>
  </tr>
  <tr>
    <td width="30%">123</td>
    <td width="70%">1</td>
  </tr>
</table>
```

This renders as
(Grid lines are added to the table for clarity.)

The following table uses column ratios of 20 and 17.1, respectively.

```
<table>
  <tr>
    <td width="30">1234</td>
    <td width="70">123456789012</td>
  </tr>
  <tr>
    <td width="30">123456</td>
    <td width="70">1</td>
  </tr>
</table>
```

This renders as

<table>
<thead>
<tr>
<th>1234</th>
<th>123456789012</th>
</tr>
</thead>
<tbody>
<tr>
<td>123456</td>
<td>1</td>
</tr>
</tbody>
</table>

(Grid lines are added to the table for clarity.)

### 2.1.13 [HTML] Section 11.2.2, Table Captions: The CAPTION element

**V0012:**

The specification states:

```
Start tag: required, End tag: required
```

*All Document Modes (All Versions)*

The end tag for the **CAPTION** element is optional.

**V0013:**

The specification states:

```
A TABLE element may only contain one CAPTION element.
```

*All Document Modes (All Versions)*

A **TABLE** element may contain any number of **CAPTION** elements, including zero.

### 2.1.14 [HTML] Section 11.2.3, Row groups: the THEAD, TFOOT, and TBODY elements

**V0014:**

The specification states:
When present, each **THEAD**, **TFOOT**, and **TBODY** contains a row group. Each row group must contain at least one row, defined by the **TR** element.

**Quirks Mode, IE7 Mode, IE8 Mode, and IE9 Mode (All Versions)**

**THEAD**, **TFOOT**, and **TBODY** are not required to contain a row defined by the **TR** element.

V0015:

The specification states:

The **TBODY** start tag is always required except when the table contains only one table body and no table head or foot sections.

**All Document Modes (All Versions)**

The **TBODY** start tag is always optional and will be implied for any **TR** elements that are direct children of a **TABLE** element.

### 2.1.15 [HTML] Section 11.2.4, Column groups: the COLGROUP and COL elements

V0016:

The specification states:

```
width = multi-length [CN]
```

This attribute specifies a default width for each column in the current column group. In addition to the standard pixel, percentage, and relative values, this attribute allows the special form "0*" (zero asterisk) which means that the width of the each column in the group should be the minimum width necessary to hold the column's contents. This implies that a column's entire contents must be known before its width may be correctly computed. Authors should be aware that specifying "0*" will prevent visual user agents from rendering a table incrementally.

**All Document Modes (All Versions)**

Relative values (such as "2*") and the special form "0*" are not supported. When a cell spanning multiple columns has content, the amount of content in the multi-column cell can increase the width of other cells in any of the spanned columns. For more information on table layout algorithms, see [MS-CSS21] section 2.1.86.

V0017:

The specification states:

```
width = multi-length [CN]
```

This attribute specifies a default width for each column spanned by the current COL element. It has the same meaning as the width attribute for the COLGROUP element and overrides it.

**All Document Modes (All Versions)**

When a cell spanning multiple columns has content, the amount of content in the multi-column cell can increase the width of other cells in any of the spanned columns. In addition, relative widths (such
as 2*) and the special case 0* are not supported. For more information on table layout algorithms, see [MS-CSS21] section 2.1.86.

V0018:

The specification states:

Attributes defined elsewhere

* id, class (document-wide identifiers)
* lang (language information), dir (text direction)
* title (element title)
* style (inline style information)
* onclick, ondblclick, onmousedown, onmouseup, onmouseover, onmousemove, onmouseout, onkeypress, onkeydown, onkeyup (intrinsic events)
* align, char, charoff, valign (cell alignment)

All Document Modes (All Versions)

The attributes char and charoff are not supported.

All Document Modes (All Versions)

The bgcolor attribute is also supported on COL elements.

V0019:

The specification states:

Fixed

A fixed width specification is given in pixels (e.g., width="30"). A fixed-width specification enables incremental rendering.

All Document Modes (All Versions)

Content in cells that span multiple columns can cause the width of cells in one of those columns to become larger than intended. For more information on table layout algorithms, see [MS-CSS21] section 2.1.86.

V0020:

The specification states:

Proportional

Proportional specifications (e.g., width="3*") refer to portions of the horizontal space required by a table. If the table width is given a fixed value via the width attribute of the TABLE element, user agents may render the table incrementally even with proportional columns.

All Document Modes (All Versions)

Proportional width specifications are not supported.

2.1.16 [HTML] Section 11.2.5, Table rows: The TR element

V0021:
The specification states:

Attributes defined elsewhere

* id, class (document-wide identifiers)
* lang (language information), dir (text direction)
* title (element title)
* style (inline style information)
* onclick, ondblclick, onmousedown, onmouseup, onmouseover, onmousemove,
onmouseout, onkeypress, onkeydown, onkeyup (intrinsic events)
* align, char, charoff, valign (cell alignment)

All Document Modes (All Versions)

The attributes char and charoff are not supported. The attributes borderColor, borderColorDark, and borderColorLight are supported on TR elements.

2.1.17 [HTML] Section 11.2.6, Table cells: The TH and TD elements

V0022:

The specification states:

```plaintext
table
rowspan = number [CN]
```

This attribute specifies the number of rows spanned by the current cell. The default value of this attribute is one ("1"). The value zero ("0") means that the cell spans all rows from the current row to the last row of the table section (THEAD, TBODY, or TFOOT) in which the cell is defined.

All Document Modes (All Versions)

If the rowspan attribute for a TD or TH element is specified with a value of 0, this value is ignored and a default value of 1 is used instead.

This causes the HTML4 Test Suite [W3C-HTML4-TS] "Test 11_2_6-BF-01 Table cells: The TH and TD elements" test case to fail. For more information about the failure, see section 3.2 in Appendix A: Test Case Failures.

Quirks Mode and IE7 Mode (All Versions)

Values for rowspan greater than 1000 will be ignored.

IE8 Mode (All Versions)

Values for colspan greater than 1000 will cause the entire table to fail to render.

V0023:

The specification states:

```plaintext
table
colspan = number [CN]
```

This attribute specifies the number of columns spanned by the current cell. The default value of this attribute is one ("1"). The value zero ("0") means that the cell spans all columns from the current column to the last column of the column group (COLGROUP) in which the cell is defined.

All Document Modes (All Versions)

[MS-HTML401] - v20180828
Internet Explorer HTML 4.01 Standards Support Document
Copyright © 2018 Microsoft Corporation
Release: August 28, 2018
If the `colspan` attribute for a `TD` or `TH` element is specified with a value of 0 (zero), this value is ignored and a default value of 1 (one) is used instead.

This causes the HTML4 Test Suite [W3C-HTML4-TS] "Test 11_2_6-BF-01 Table cells: The TH and TD elements" test case to fail. For more information about the failure, see section 3.3 in Appendix A: Test Case Failures.

**Quirks Mode and IE7 Mode (All Versions)**

Values for `colspan` greater than 1000 will be ignored.

**IE8 Mode (All Versions)**

Values for `colspan` greater than 1000 will cause the entire table to fail to render.

V0024:

The specification states:

```plaintext
width = length [CN]
```

Deprecated. This attribute supplies user agents with a recommended cell width.

**All Document Modes (All Versions)**

When a cell spanning multiple columns has content, the amount of content in the multi-column cell can increase the width of other cells in any of the spanned columns. For more information on table layout algorithms, see [MS-CSS21] section 2.1.86.

V0025:

The specification states:

```plaintext
height = length [CN]
```

Deprecated. This attribute supplies user agents with a recommended cell height.

**All Document Modes (All Versions)**

When a cell spanning multiple rows has content, the amount of content in the multi-row cell can increase the height of other cells in any of the spanned rows. For more information on table layout algorithms, see [MS-CSS21] section 2.1.86.

V0026:

The specification states:

Attributes defined elsewhere

* `id`, `class` (document-wide identifiers)
* `lang` (language information), `dir` (text direction)
* `title` (element title)
* `style` (inline style information)
* `onclick`, `ondblclick`, `onmousedown`, `onmouseup`, `onmouseover`, `onmouseout`, `onmousemove`
  `onmouseout`, `onkeypress`, `onkeydown`, `onkeyup` (intrinsic events)
* `align`, `char`, `charoff`, `valign` (cell alignment).

**All Document Modes (All Versions)**
The attributes `char` and `charoff` are not supported. Additional attributes `background`, `borderColor`, `borderColorDark`, and `borderColorLight` are supported.

### 2.1.18 [HTML] Section 11.3.2, Horizontal and vertical alignment

**V0027:**

The specification states:

```html
align = left|center|right|justify|char [CI]
```

This attribute specifies the alignment of data and the justification of text in a cell.

*All Document Modes (All Versions)*

The values `justify` and `char` are not supported in `TABLE` elements. To justify the content of a cell, use a child element that supports `justify` as a value.

**V0028:**

The specification states:

```html
char = character [CN]
```

This attribute specifies a single character within a text fragment to act as an axis for alignment.

*All Document Modes (All Versions)*

The `char` attribute is not supported.

**V0029:**

The specification states:

```html
charoff = length [CN]
```

When present, this attribute specifies the offset to the first occurrence of the alignment character on each line.

*All Document Modes (All Versions)*

The `charoff` attribute is not supported.

### 2.1.19 [HTML] Section 12.1.3, Specifying anchors and links

**V0030:**

The specification states:

The `LINK` element may only appear in the head of a document.

*All Document Modes (All Versions)*

`LINK` elements that are defined in the `BODY` of the document are also supported.
2.1.20 [HTML] Section 12.2.1, Syntax of anchor names

V0031:
The specification states:

Comparisons between fragment identifiers and anchor names must be done by exact (case-sensitive) match.

All Document Modes (All Versions)
Case-sensitive matching is not required for comparisons between fragment identifiers and anchor names.

V0032:
The specification states:

Anchor names should be restricted to ASCII characters.

All Document Modes (All Versions)
Non-ASCII characters are allowed in anchor names.

2.1.21 [HTML] Section 12.2.2, Nested links are illegal

V0033:
The specification states:

Since the DTD defines the LINK element to be empty, LINK elements may not be nested either.

All Document Modes (All Versions)
Internet Explorer recognizes nested LINK elements and closes the outer LINK element before processing the inner LINK element.

2.1.22 [HTML] Section 12.2.3, Anchors with the id attribute

V0034:
The specification states:

The id attribute may be used to create an anchor at the start tag of any element (including the A element).

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

Navigation to the following elements is not supported in the specified document mode:

<table>
<thead>
<tr>
<th>Element</th>
<th>Quirks Mode</th>
<th>IE7 Mode</th>
<th>IE8 Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLET</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
2.1.23 [HTML] Section 12.4, Path information: the BASE element

V0035:

The specification states:

The base URI is given by meta data discovered during a protocol interaction, such as an HTTP header (see [RFC2616]).

All Document Modes (All Versions)

The use of the HTTP entity-header fields **Content-Location** and **Content-Base** is not supported.

V0126:
The specification states:

In HTML, links and references to external images, applets, form-processing programs, style sheets, etc. are always specified by a URI. Relative URIs are resolved according to a base URI, which may come from a variety of sources. The BASE element allows authors to specify a document's base URI explicitly.

IE 7 Mode, IE8 Mode, IE9 Mode (all versions)

The BASE element has no effect on image loading (for example, an IMG element or URL in CSS) in IE7 Mode, IE8 Mode, or IE9 Mode (all versions).

2.1.24 [HTML] Section 12.4.1, Resolving relative URIs

V0036: The specification states:

Additionally, the OBJECT and APPLET elements define attributes that take precedence over the value set by the BASE element. Please consult the definitions of these elements for more information about URI issues specific to them.

All Document Modes (All Versions)

The codebase attribute of OBJECT or APPLET elements is not combined with any other attributes of OBJECT or APPLET elements in order to generate a new BASE URI. The BASE element is applied in order to resolve relative URLs.

V0037: The specification states:

Note. For versions of HTTP that define a Link header, user agents should handle these headers exactly as LINK elements in the document. HTTP 1.1 as defined by [RFC2616] does not include a Link header field (refer to section 19.6.3).

All Document Modes (All Versions)

The Link HTTP header is not supported.

2.1.25 [HTML] Section 13.3, Generic inclusion: the OBJECT element

V0038: The specification states:

```
codebase-uri[CT]
```

This attribute specifies the base path used to resolve relative URIs specified by the classid, data, and archive attributes. When absent, its default value is the base URI of the current document.

All Document Modes (All Versions)

The codebase attribute is not used to overwrite the root used in relative path navigations.
V0039:
The specification states:

```
data-uri[CT]
```

This attribute may be used to specify the location of the object's data, for instance image data for objects defining images, or more generally, a serialized form of an object which can be used to recreate it. If given as a relative URI, it should be interpreted relative to the `codebase` attribute.

**All Document Modes (All Versions)**

The `codebase` attribute is not used to establish a new relative path. All paths in the `data` attribute start at the relative root for relative URIs.

**Quirks Mode and IE7 Mode (All Versions)**

If the `data` attribute is used to specify image data, the image is displayed in a frame.

V0040:
The specification states:

```
Type = content-type[CI]
```

If the value of this attribute differs from the HTTP Content-Type returned by the server when the object is retrieved, the HTTP Content-Type takes precedence.

**Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)**

When the value of the `type` attribute differs from the value of the HTTP `Content-Type` returned by the server, the HTTP `Content-Type` does not take precedence.

V0041:
The specification states:

Archives specified as relative URIs should be interpreted relative to the `codebase` attribute.

**All Document Modes (All Versions)**

The relative root is not overwritten with the value in the `codebase` attribute.

V0042:
The specification states:

```
declare
```

When present, this boolean attribute makes the current OBJECT definition a declaration only. The object must be instantiated by a subsequent OBJECT definition referring to this declaration.

**All Document Modes (All Versions)**
The **declare** attribute is not supported in the **OBJECT** element. The object is loaded as if the **declare** attribute was not set.

V0043:

The specification states:

```
standby=text[CS]
```

This attribute specifies a message that a user agent may render while loading the object’s implementation and data.

*All Document Modes (All Versions)*

No **standby** message is rendered while loading an object’s implementation or data.

**2.1.26 [HTML] Section 13.3.1, Rules for rendering objects**

V0044:

The specification states:

If the user agent is not able to render the object for whatever reason (configured not to, lack of resources, wrong architecture, etc.), it must try to render its contents.

*Quirks Mode and IE7 Mode (All Versions)*

The content of the **OBJECT** element renders in a new frame as the frame attempts to navigate to the resource. If the resource fails to resolve, no further fallback will occur.

V0045:

The specification states:

If a user agent cannot render the outermost **OBJECT**, it tries to render the contents, which may be another **OBJECT** element, etc.

*Quirks Mode and IE7 Mode (All Versions)*

The content of the **OBJECT** element renders in a new frame as the frame attempts to navigate to the resource. If the resource fails to resolve, no further fallback will occur.

V0046:

The specification states:

Inline vs. external data. Data to be rendered may be supplied in two ways: inline and from an external resource.

*Quirks Mode and IE7 Mode (All Versions)*

**DataURI**-based objects are not rendered through the **OBJECT** tag.
2.1.27 [HTML] Section 13.3.2, Object initialization: the PARAM element

V0047:

The specification states:

```
valuetype = data|ref|object [CI]
```

This attribute specifies the type of the value attribute. Possible values:
data: This is the default value for the attribute. It means that the value specified by
value will be evaluated and passed to the object's implementation as a string.

All Document Modes (All Versions)

The value of the `valuetype` attribute is not explicitly set to `data`. However, `PARAM` elements which
do not set this value will have a `valuetype` attribute default value of `data`.

V0048:

The specification states:

```
Any number of PARAM elements may appear in the content of an OBJECT or APPLET
element, in any order, but must be placed at the start of the content of the
enclosing OBJECT or APPLET element.
```

All Document Modes (All Versions)

All `PARAM` elements are passed to the associated `OBJECT` element regardless of order or placement
within the object's children.

2.1.28 [HTML] Section 13.3.4, Object declarations and instantiations

V0049:

The specification states:

```
It is possible to specify objects as run-time data for other objects.
```

All Document Modes (All Versions)

When the `valuetype` attribute is specified in the `PARAM` tag, object information is not passed into
other objects.

2.1.29 [HTML] Section 13.4, Including an applet: the APPLET element

V0050:

The specification states:

```
codebase=uri [CT]
```

If this attribute is not specified, then it defaults the same base URI as for the
current document.

All Document Modes (All Versions)
The relative base location is not overridden with the value specified in the `codebase` attribute.

V0051:

The specification states:

Values for this attribute may only refer to subdirectories of the directory containing the current document.

*All Document Modes (All Versions)*

The relative base location is not overridden with the value specified in the `codebase` attribute.

V0052:

The specification states:

An applet should be stopped before it is serialized.

*All Document Modes (All Versions)*

Loading data through the `object` attribute of the `APPLET` element is not supported.

2.1.30 [HTML] Section 13.5, Notes on embedded documents

V0053:

The specification states:

Sometimes, rather than linking to a document, an author may want to embed it directly into a primary HTML document. Authors may use either the `IFRAME` element or the `OBJECT` element for this purpose, but the elements differ in some ways.

*Quirks Mode and IE7 Mode (All Versions)*

`OBJECT` elements without a set width and height are recognized as a zero-sized element. As a result, the contents of the `OBJECT` element will not be rendered.

V0054:

The specification states:

User agents may render selected frames elements in ways that distinguish them from unselected frames (e.g., by drawing a border around the selected frame).

*Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)*

`OBJECT` elements without a set width and height are recognized as a zero-sized element. As a result, the contents of the `OBJECT` element will not be rendered.

*IE8 Mode and IE9 Mode (All Versions)*

When a frame is defined by an `OBJECT` element loading an HTML document, or when a document has a `content-type` of `text/html`, Internet Explorer does not distinguish selected frames from unselected frames.
2.1.31 [HTML] Section 13.6.1, Client-side image maps: the MAP and AREA elements

V0055:
The specification states:

Block-level content. This content should include A elements that specify the geometric regions of the image map and the link associated with each region.

All Document Modes (All Versions)

A elements cannot be used to specify geometries; they can only be used to provide block-level content within a MAP element.

V0056:
The specification states:

Note that the user agent should render block-level content of a MAP element.

All Document Modes (All Versions)

A elements cannot be used to specify geometries; they can only be used to provide block-level content within a MAP element.

V0057:
The specification states:

When a MAP element contains mixed content (both AREA elements and block-level content), user agents must ignore the AREA elements.

All Document Modes (All Versions)

MAP and AREA elements are rendered even if they contain mixed content. AREA and MAP elements may coexist because the use of the A element as a geometric region specifier for a MAP element is not supported.

This causes the HTML4 Test Suite [W3C-HTML4-TS] "Test 13_6_1-BF-02 Client-side image maps: the MAP and AREA elements" test case to fail. For more information about the failure, see section 3.1 in Appendix A: Test Case Failures.

V0058:
The specification states:

If the user agent doesn't support the PNG format, it tries to render the GIF image.
If it doesn't support GIF (e.g., it's a speech-based user agent), it defaults to the text description provided as the content of the inner OBJECT element.

Quirks Mode and IE7 Mode (All Versions)

The content of the OBJECT element renders in a new frame as the frame attempts to navigate to the resource. If the resource fails to resolve, no further fallback will occur.

V0059:
The specification states:

The following example illustrates how anchors may be specified to create inactive zones within an image map. The first anchor specifies a small circular region with no associated link. The second anchor specifies a larger circular region with the same center coordinates. Combined, the two form a ring whose center is inactive and whose rim is active. The order of the anchor definitions is important, since the smaller circle must override the larger circle.

```html
<MAP name="map1">
  <A shape="circle" coords="100,200,50">I'm inactive.</A>
  <A href="outer-ring-link.html" shape="circle" coords="100,200,250">I'm active.</A>
</MAP>
```

**All Document Modes (All Versions)**

A elements cannot be used to specify geometries; they can only be used to provide block-level content within a MAP element.

2.1.32 [HTML] Section 13.6.2, Server-side image maps

V0060:

The specification states:

It is only possible to define a server-side image map for the IMG and INPUT elements.

**All Document Modes (All Versions)**

INPUT elements do not support client-side or server-side image maps. When usemap is used, or an A tag is used as a reference to a server-side map, the transactions are treated as a form submission to the current page.

2.1.33 [HTML] Section 13.7.1, Width and height

V0061:

The specification states:

When specified, the width and height attributes tell user agents to override the natural image or object size in favor of these values.

**Quirks Mode and IE7 Mode (All Versions)**

The height and width attributes are not supported for image files loaded by an OBJECT tag.

V0062:

The specification states:

When the object is an image, it is scaled.
The `height` and `width` attributes are not supported for image files loaded by an `OBJECT` tag.

V0063:

The specification states:

> User agents should do their best to scale an object or image to match the width and height specified by the author.

**Quirks Mode and IE7 Mode (All Versions)**

The `height` and `width` attributes are not supported for image files loaded by an `OBJECT` tag.

**2.1.34 [HTML] Section 14.2.1, Setting the default style sheet language**

V0064:

The specification states:

> User agents should determine the default style sheet language for a document according to the following steps (highest to lowest priority): If any META declarations specify the "Content-Style-Type", the last one in the character stream determines the default style sheet language. Otherwise, if any HTTP headers specify the "Content-Style-Type", the last one in the character stream determines the default style sheet language. Otherwise, the default style sheet language is "text/css".

**All Document Modes (All Versions)**

META declarations and HTTP headers that specify "Content-Style-Type" are not supported.

**2.1.35 [HTML] Section 14.3.1, Preferred and alternate style sheets**

V0065:

The specification states:

> HTML allows authors to associate any number of external style sheets with a document.

**All Document Modes (Internet Explorer 7)**

Alternate stylesheets are not supported.

**All Document Modes (Internet Explorer 8)**

The maximum number of alternate style sheets is 31.

**2.1.36 [HTML] Section 15.2.2, Font modifier elements: FONT and BASEFONT**

V0190:

The specification states:

> The `BASEFONT` element sets the base font size (using the size attribute).
IE7 Mode, IE8 Mode, and IE9 Mode (All Versions)

The **BASEFONT** element is defined to be empty in the DTD [http://www.w3.org/TR/html401/sgml/loosedtd.html#basefont](http://www.w3.org/TR/html401/sgml/loosedtd.html#basefont). In IE9 Mode, the element is not treated as empty.

**BASEFONT** elements are treated in a similar way to **b** and **i** elements when parsing. Additional **BASEFONT** elements might be added to the tree as a consequence of this parsing behavior.

V0066:

The specification states:

> The base font size does not apply to headings, except where these are modified using the **FONT** element with a relative font size change.

Quirks Mode and IE7 Mode (All Versions)

The base font size does not apply to headings, even when the base font size is modified using the relative font size change on the **FONT** element.

IE8 Mode and IE9 Mode (All Versions)

Both the base font size and the relative font size change on the **FONT** element apply to headings.

2.1.37 [HTML] Section 16.5, Inline frames: the IFRAME element

V0067:

The specification states:

```html
name = cdata [CI]
```

This attribute assigns a name to the current frame. This name may be used as the target of subsequent links.

All Document Modes (All Versions)

The value of the **name** attribute is treated as if it were case-sensitive. If an incorrect case is used, then navigation does not proceed correctly.

2.1.38 [HTML] Section 17.3, The FORM element

V0068:

The specification states:

```html
accept-charset = charset list [CI]
```

The client must interpret this list as an exclusive-or list, i.e., the server is able to accept any single character encoding per entity received.

All Document Modes (All Versions)

There is no behavior change based on the contents of the **accept-charset** attribute.

V0069:
The specification states:

The default value for this attribute is the reserved string UNKNOWN.

*All Document Modes (All Versions)*

The default value of the **accept-charset** attribute is an empty string.

**2.1.39 [HTML] Section 17.4, The INPUT element**

V0070:

The specification states:

```
size = cdata [CN]
```

This attribute tells the user agent the initial width of the control. The width is given in pixels except when type attribute has the value "text" or "password". In that case, its value refers to the (integer) number of characters.

*All Document Modes (All Versions)*

The **size** attribute has an impact only on INPUT elements with a type of text, password, and file. For text, password, and file the width of the input text box is set to the (integer) number of characters.

The size attribute has no impact on INPUT elements with a type equal to hidden, checkbox, radio, reset or submit.

V0071:

The specification states:

Attributes defined elsewhere

* id, class (document-wide identifiers)
* lang (language information), dir (text direction)
* title (element title)
* style (inline style information)
* alt (alternate text)
* align (alignment)
* accept (legal content types for a server)
* readonly (read-only input controls)
* disabled (disabled input controls)
* tabindex (tabbing navigation)
* accesskey (access keys)
* usemap (client-side image maps)
* ismap (server-side image maps)
* onfocus, onblur, onselect, onchange, onclick, ondblclick, onmousedown, onmouseup, onmouseout, onmouseover, onmousemove, onmouseout, onkeydown, onkeyup (intrinsic events)

*All Document Modes (All Versions)*

The **ismap** attribute is not supported for the INPUT element.
2.1.40 [HTML] Section 17.5, The BUTTON element

V0072:

The specification states:

\[\text{value} = \text{cdata} \ [CS]\]

This attribute assigns the initial value to the button.

All Document Modes (All Versions)

Although \text{value} is set appropriately as the initial value, the button values are not subsequently passed when the form is submitted.

Quirks Mode and IE7 Mode (All Versions)

The button's content is passed in the form that is submitted.

V0073:

The specification states:

\[\text{type} = \text{submit}|\text{button}|\text{reset} \ [CI]\]

This attribute declares the type of the button. Possible values:

\begin{itemize}
  \item \text{submit}: Creates a submit button. This is the default value.
  \item \text{reset}: Creates a reset button.
  \item \text{button}: Creates a push button.
\end{itemize}

Quirks Mode and IE7 Mode (All Versions)

The button \text{type} defaults to \text{button}.

2.1.41 [HTML] Section 17.6, The SELECT, OPTGROUP, and OPTION elements

C0098:

The specification states:

Attributes defined elsewhere, \text{id}, \text{class} (document-wide identifiers), \text{lang} (language information), \text{dir} (text direction), \text{title} (element title), \text{style} (inline style information), \text{disabled} (disabled input controls), \text{tabindex} (tabbing navigation), \text{onclick}, \text{ondblclick}, \text{onmousedown}, \text{onmouseup}, \text{onmouseover}, \text{onmousemove}, \text{onmouseout}, \text{onkeypress}, \text{onkeydown}, \text{onkeyup} (intrinsic events)

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

The \text{click} event is not supported on \text{option} elements.

All Document Modes (All Versions)

The \text{onmouseover} and \text{onmouseout} events are not supported on option elements.
2.1.42 [HTML] Section 17.6.1, Pre-selected options

V0074:
The specification states:

value = cdata [CS]

If this attribute is not set, the initial value is set to the contents of the OPTION element.

Quirks Mode and IE7 Mode (All Versions)
If the value attribute is missing, it is not set to the contents of the OPTION element.

2.1.43 [HTML] Section 17.13.4, Form content types

V0075:
The specification states:

As with all multipart MIME types, each part has an optional "Content-Type" header that defaults to "text/plain". User agents should supply the "Content-Type" header, accompanied by a "charset" parameter.

All Document Modes (All Versions)
The Content-Type header is omitted except when an INPUT element has type = file. For INPUT elements of type = file, the Content-Type is provided, but charset is omitted and a default of UTF-8 encoding is used.

2.2 Clarifications

The following subsections describe clarifications of the MAY and SHOULD requirements of [HTML].

2.2.1 [HTML] Section 6.2, SGML basic types

V0076:
The specification states:

CDATA is a sequence of characters from the document character set and may include character entities. User agents should interpret attribute values as follows:

- Replace character entities with characters,
- Ignore line feeds,
- Replace each carriage return or tab with a single space.

All Document Modes (Internet Explorer 7 and Internet Explorer 8)
Tabs and carriage returns are not replaced with a single space in CDATA content. Tabs are removed but carriage returns are not removed.

All Document Modes (Internet Explorer 9)
Tabs and carriage returns are not removed in CDATA content.
IE10 Mode and IE11 Mode (All Versions)

CRLF characters are replaced with an LF character.

C0002:

The specification states:

The first occurrence of the character sequence "</" (end-tag open delimiter) is treated as terminating the end of the element's content. In valid documents, this would be the end tag for the element.

All Document Modes (All Versions)

The end-tag open delimiter (</) sequence is sufficient to terminate the element's content only if it is part of the end tag of the element. If only the character sequence is given (without the rest of the closing tag), subsequent content will be consumed until the next tag close (>) delimiter. It is not the character sequence that terminates the content of an element, but the entire end tag.

C0003:

The specification states:

ID and NAME tokens must begin with a letter ([A-Za-z]) and may be followed by any number of letters, digits ([0-9]), hyphens ("-"), underscores ("_"), colons (":"), and periods (".").

All Document Modes (All Versions)

The following clarifications apply:

- ID and NAME tokens do not need to start with A-Za-z. These tokens can start with digits, hyphens, underscores, colons and periods. Additionally, the NAME token can start with or contain non-ASCII characters.

- The ID token can start with or contain a non-ASCII character.

C0004:

The specification states:

NUMBER tokens must contain at least one digit ([0-9])

All Document Modes (All Versions)

Requirements for the NUMBER token exceed those in the specification. Not only must a NUMBER token contain at least one digit, it must also represent a valid number and cannot contain letters of the alphabet. NUMBER tokens containing non-numeric characters are not valid NUMBER tokens because they are not valid numbers. As a result, the values are ignored and replaced with a default (such as 2147483647 for input maxlength).

2.2.2 [HTML] Section 6.8, Language codes

C0005:

The specification states:
White space is not allowed within the language-code.

**All Document Modes (All Versions)**

White space is removed when it is the leading character in the `hreflang` attribute. White space located elsewhere in the attribute string, or that trails the string, is not removed. When `hreflang` is accessed from the DOM, trailing white spaces and embedded white spaces are kept.

White space in the `lang` attribute is handled in the same way.

**2.2.3 [HTML] Section 6.12, Link types**

C0006:

The specification states:

> White space characters are not permitted within link types.

**All Document Modes (All Versions)**

White space characters are preserved in `%LinkTypes` (such as `rel` and `rev`), within anchors, and within `LINK` elements.

C0007:

The specification states:

> Link types

    Next

    Refers to the next document in a linear sequence of documents. User agents may choose to preload the "next" document, to reduce the perceived load time.

**All Document Modes (All Versions)**

A link type of **Next** is not interpreted as a reference to the next document in a linear sequence of documents. The preloading of a "next" document is not supported.

C0008:

The specification states:

> Link types

    Prev

    Refers to the previous document in an ordered series of documents. Some user agents also support the synonym "Previous".

**All Document Modes (All Versions)**

A link type of **Prev** (or the synonym "Previous") is not interpreted as a reference to the previous document in a linear sequence of documents. The pre-loading of a "prev" document is not supported.

C0009:

The specification states:
Link types

Contents
Refers to a document serving as a table of contents. Some user agents also support
the synonym ToC (from "Table of Contents").

All Document Modes (All Versions)
A link type of Contents (or the synonym "ToC") is not interpreted as a reference to a document that
serves as the table of contents for a linear sequence of documents.

2.2.4 [HTML] Section 6.13, Media descriptors

V0077:
The specification states:

To facilitate the introduction of these extensions, conforming user agents must be
able to parse the media attribute value as follows:

1. The value is a comma-separated list of entries. For example, media="screen, 3d-
glasses, print and resolution > 90dpi" is mapped to:"screen""3d-glasses""print and
resolution > 90dpi"

2. Each entry is truncated just before the first character that isn't a US ASCII
letter [a-zA-Z] (ISO 10646 hex 41-5a, 61-7a), digit [0-9] (hex 30-39), or hyphen
(hex 2d). In the example, this gives: "screen""3d-glasses""print"

3. A case-sensitive match is then made with the set of media types defined above.
User agents may ignore entries that don't match. In the example we are left with
screen and print.

All Document Modes (All Versions)
Media is not truncated to the character preceding the first non-ASCII character in the sequence, and a
case-sensitive match is not performed.

2.2.5 [HTML] Section 6.16, Frame target names

V0078:
The specification states:

frame target names (%FrameTarget; in the DTD) must begin with an alphabetic
character. User agents should ignore all other target names.

All Document Modes (All Versions)
The value of the target attribute for a FRAME element does not have to begin with an alphabetic
character [a-zA-Z]. A value is not ignored if it begins with a non-alphabetic character.

This causes the HTML4 Test Suite [W3C-HTML4-TS] "Test 6_16-BF-01 Frame target names" test case
to fail. For more information about the failure, see section 3.1 in Appendix A: Test Case Failures.

If the name of the target frame begins with an alphanumeric [a-zA-Z0-9] character, the specified
content is loaded into the target frame. If it begins with a non-alphanumeric character, a new browser
window is opened.
2.2.6 [HTML] Section 9.2.2, Quotations: The BLOCKQUOTE and Q elements

V0079:

The specification states:

User agents should render quotation marks in a language-sensitive manner (see the lang attribute). Many languages adopt different quotation styles for outer and inner (nested) quotations, which should be respected by user-agents.

IE7 Mode and IE8 Mode (All Versions)

Quotation marks are not rendered in a language sensitive manner.

2.2.7 [HTML] Section 9.3.3, Hyphenation

V0080:

The specification states:

Those browsers that interpret soft hyphens must observe the following semantics: If a line is broken at a soft hyphen, a hyphen character must be displayed at the end of the first line. If a line is not broken at a soft hyphen, the user agent must not display a hyphen character. For operations such as searching and sorting, the soft hyphen should always be ignored.

All Document Modes (All Versions)

The soft hyphen is not ignored when searching or sorting.

2.2.8 [HTML] Section 9.3.4, Preformatted text: The PRE element

V0081:

The specification states:

width = number [CN]

Deprecated. This attribute provides a hint to visual user agents about the desired width of the formatted block. The user agent can use this information to select an appropriate font size or to indent the content appropriately.

All Document Modes (All Versions)

The width attribute of the PRE element is not supported.

2.2.9 [HTML] Section 9.4, Marking document changes: The INS and DEL elements

C0010:

The specification states:

User agents should render inserted and deleted text in ways that make the change obvious. For instance, inserted text may appear in a special font, deleted text may not be shown at all or be shown as struck-through or with special markings, etc.
All Document Modes (All Versions)

Inserted text, or text within an **INS** element, is displayed as underlined text. Deleted text, or text within a **DEL** element, is displayed as text with strikethrough applied.

2.2.10 [HTML] Section 11.1, Introduction to tables

V0082:

The specification states:

> User agents may exploit the head/body/foot division to support scrolling of body sections independently of the head and foot sections.

All Document Modes (All Versions)

Scrolling body sections independently of the head and foot sections is not supported.

2.2.11 [HTML] Section 11.2.3, Row groups: the THEAD, TFOOT, and TBODY elements

C0011:

The specification states:

> When long tables are printed, the table head and foot information may be repeated on each page that contains table data.

Quirks Mode, IE7 Mode, and IE9 Mode (All Versions)

The table head and foot information is not repeated on each page; it is only displayed once.

IE8 Mode, IE10 Mode, and IE11 Mode (All Versions)

The table head and foot information is repeated on each page.

2.2.12 [HTML] Section 11.2.6, Table cells: The TH and TD elements

C0012:

The specification states:

> axis = cdata [CI]

This attribute may be used to place a cell into conceptual categories that can be considered to form axes in an n-dimensional space. User agents may give users access to these categories (e.g., the user may query the user agent for all cells that belong to certain categories, the user agent may present a table in the form of a table of contents, etc.). Please consult the section on categorizing cells for more information. The value of this attribute is a comma-separated list of category names.

All Document Modes (All Versions)

The **axis** attribute does not affect the presentation or categorization of a **TD** or **TH** element; the attribute is ignored.

V0083:
The specification states:

```
abbr = text [CS]
```

This attribute should be used to provide an abbreviated form of the cell's content, and may be rendered by user agents when appropriate in place of the cell's content. Abbreviated names should be short since user agents may render them repeatedly. For instance, speech synthesizers may render the abbreviated headers relating to a particular cell before rendering that cell's content.

**All Document Modes (All Versions)**

The value of `abbr` is not rendered in place of the content of the cell.

V0084:

The specification states:

Table cells may contain two types of information: header information and data. This distinction enables user agents to render header and data cells distinctly, even in the absence of style sheets. For example, visual user agents may present header cell text with a bold font. Speech synthesizers may render header information with a distinct voice inflection.

**All Document Modes (All Versions)**

Header cell text is rendered in a bold font and centered by default. Data cell text is rendered in a normal font and aligned left by default.

V0085:

The specification states:

User agents must render either the contents of the cell or the value of the `abbr` attribute. For visual media, the latter may be appropriate when there is insufficient space to render the full contents of the cell. For non-visual media `abbr` may be used as an abbreviation for table headers when these are rendered along with the contents of the cells to which they apply.

**Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)**

The value of the `abbr` attribute is never rendered in place of the contents of the cell.

**2.2.13 [HTML] Section 11.3.3, Cell margins**

V0086:

The specification states:

If a table or given column has a fixed width, cellspacing and cellpadding may demand more space than assigned. User agents may give these attributes precedence over the width attribute when a conflict occurs, but are not required to.

**All Document Modes (All Versions)**

`cellspacing` and `cellpadding` are given precedence over the `width` attribute when a conflict occurs.
2.2.14 [HTML] Section 12.1.3, Specifying anchors and links
C0013:
The specification states:

The A element may only appear in the body.

All Document Modes (All Versions)
A elements are recognized and displayed no matter where they are defined in the document. However, A elements defined within a TITLE element are not recognized.

2.2.15 [HTML] Section 12.1.5, Internationalization and links
C0014:
The specification states:

User agents should be able to avoid presenting "garbage" to the user. Instead, they may either locate resources necessary for the correct presentation of the document or, if they cannot locate the resources, they should at least warn the user that the document will be unreadable and explain the cause.

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)
On Windows XP and Windows Server® 2003, Windows Internet Explorer will prompt to install a language pack installation when navigating to a page for which a character set is not installed. For example, on an en-US Windows XP computer, navigating to a resource with charset=euc-kr will prompt for installation of the Korean language pack. However, if the user chooses not to install the language pack, Internet Explorer might fail to display characters correctly without further explanation.

On Windows Vista® and later, the operating system fonts include a much larger set of language characters. In the rare case that a character set is unsupported, Internet Explorer does not display the language pack installation prompt or any other warning to the user.

2.2.16 [HTML] Section 12.2.3, Anchors with the id attribute
C0015:
The specification states:

The id attribute, on the other hand, may not contain character references.

All Document Modes (All Versions)
The ID attribute can contain character references.

2.2.17 [HTML] Section 12.3, Document relationships: the LINK element
C0016:
The specification states:

Although LINK has no content, it conveys relationship information that may be
rendered by user agents in a variety of ways (e.g., a tool-bar with a drop-down menu of links).

All Document Modes (All Versions)
Only **LINK** elements that have the following `rel` attribute and `type` attribute values are surfaced:

- **LINK** elements of `rel`="alternate" and `type`="application/atom+xml" produce ATOM feed detection.
- **LINK** elements of `rel`="alternate" and `type`="application/rss+xml" produce RSS feed detection.
- **LINK** elements of `rel`="shortcut icon" produce a favorites icon display.

All Document Modes (Internet Explorer 8)
Only **LINK** elements that have the following `rel` attribute and `type` attribute values are surfaced:

- **LINK** elements of `rel`="search" and `type`="application/opensearchdescription+xml" produce search provider discovery.
- **LINK** elements of `rel`="Stylesheet" with an additional `rel`="alternate stylesheet" produce an alternate style sheet selection in the Page menu.
- **LINK** elements of `rel`="default-slice" and `type`="application/x-hatom" set the default Web Slice.

All Document Modes (Internet Explorer 9)
Only **LINK** elements that have the following `rel` attribute and `type` attribute values are surfaced:

- **LINK** elements of `rel`="Stylesheet" with an additional `rel`="alternate stylesheet" produce an alternate style sheet selection in the Page menu.
- **LINK** elements of `rel`="default-slice" and `type`="application/x-hatom" set the default Web Slice.

2.2.18 [HTML] Section 12.3.2, Links and external style sheets

V0087:

The specification states:

> When the LINK element links an external style sheet to a document, the type attribute specifies the style sheet language and the media attribute specifies the intended rendering medium or media. User agents may save time by retrieving from the network only those style sheets that apply to the current device.

All Document Modes (All Versions)
All style sheets are retrieved whether or not they apply to the current device.

2.2.19 [HTML] Section 13.3, Generic inclusion: the OBJECT element

C0017:
The specification states:

To include images, authors may use the OBJECT element or the IMG element.

All Documents Modes (Internet Explorer 8)

The OBJECT element can specify an image if the value of the data attribute is set to the URI of the image. If the classid attribute is also specified, the image is not displayed.

2.2.20 [HTML] Section 13.3.2, Object initialization: the PARAM element

C0018:

The specification states:

```plaintext
  type = content-type [CI]
```

This attribute specifies the content type of the resource designated by the value attribute only in the case where valuetype is set to "ref".

All Document Modes (All Versions)

The information contained in the type attribute is not used directly. However, PARAM elements which do not set a value for the type attribute behave as if the valuetype attribute is set to data.

C0019:

The specification states:

```plaintext
  type = content-type [CI]
```

This attribute thus specifies for the user agent, the type of values that will be found at the URI designated by value.

All Document Modes (All Versions)

The information contained in the type attribute is not used. The value of this attribute is made available to plug-ins loaded through the OBJECT tags. It is the responsibility of the loaded application to conform or not conform to this requirement.

2.2.21 [HTML] Section 13.4, Including an applet: the APPLET element

C0020:

The specification states:

```plaintext
  archive = uri-list [CT]
```

The classes are loaded using an instance of an AppletClassLoader with the given codebase. Relative URIs for archives are interpreted with respect to the applet's codebase.

All Document Modes (All Versions)

The archive attribute is ignored.
V0088:
The specification states:

```
object = cdata [CS]
```

This attribute names a resource containing a serialized representation of an applet's state. It is interpreted relative to the applet's codebase.

**All Document Modes (All Versions)**

The `object` attribute is ignored.

C0021:
The specification states:

```
When the applet is "deserialized" the start() method is invoked but not the init() method.
```

**All Document Modes (All Versions)**

This decision is delegated to Java (or an equivalent plug-in), which chooses whether to call `start()` or `init()`.

**2.2.22 [HTML] Section 13.6.1, Client-side image maps: the MAP and AREA elements**

C0022:
The specification states:

```
The MAP element specifies a client-side image map (or other navigation mechanism) that may be associated with another elements (IMG, OBJECT, or INPUT).
```

**All Document Modes (All Versions)**

An `INPUT` element of type `image` that also specifies a `usemap` attribute acts as a submit button rather than an image map.

C0023:
The specification states:

```
An image map is associated with an element via the element's usemap attribute.
```

**All Document Modes (All Versions)**

An `INPUT` element of type `image` that also specifies a `usemap` attribute acts as a submit button rather than an image map.

**2.2.23 [HTML] Section 14.2, Adding style to HTML**

V0089:
The specification states:
User agents should determine the default style sheet language for a document according to the following steps (highest to lowest priority):

1. If any META declarations specify the "Content-Style-Type", the last one in the character stream determines the default style sheet language.

2. Otherwise, if any HTTP headers specify the "Content-Style-Type", the last one in the character stream determines the default style sheet language.

3. Otherwise, the default style sheet language is "text/css".

All Document Modes (All Versions)
Non-CSS style sheet declarations are ignored.

2.2.24 [HTML] Section 14.2.3, Header style information: the STYLE element
V0090:
The specification states:

\[type = content-type [CI]\]

This attribute specifies the style sheet language of the element's contents and overrides the default style sheet language. The style sheet language is specified as a content type (e.g., "text/css"). Authors must supply a value for this attribute; there is no default value for this attribute.

All Document Modes (All Versions)
If the \textbf{type} attribute is not used it defaults to CSS and applies the style.

2.2.25 [HTML] Section 14.3.1, Preferred and alternate style sheets
V0091:
The specification states:

The author may specify that one of the alternates is a preferred style sheet. User agents should apply the author's preferred style sheet unless the user has selected a different alternate.

All Document Modes (Internet Explorer 7)
Alternate style sheets are not supported.
V0092:
The specification states:

Authors may group several alternate style sheets (including the author's preferred style sheets) under a single style name. When a user selects a named style, the user agent must apply all style sheets with that name. User agents must not apply alternate style sheets with a different style name.

All Document Modes (Internet Explorer 7)
Alternate style sheets are not supported.

V0093:

The specification states:

Authors may also specify persistent style sheets that user agents must apply in addition to any alternate style sheet.

All Document Modes (Internet Explorer 7)
Alternate style sheets are not supported.

V0094:

The specification states:

User agents should also allow users to disable the author's style sheets entirely, in which case the user agent must not apply any persistent or alternate style sheets.

All Document Modes (Internet Explorer 7)
The user cannot disable the author's style sheets.

2.2.26 [HTML] Section 14.3.2, Specifying external style sheets

V0095:

The specification states:

User agents should provide a means for users to view and pick from the list of alternate styles. The value of the title attribute is recommended as the name of each choice.

All Document Modes (Internet Explorer 7)
Alternate style sheets are not supported.

V0096:

The specification states:

Authors may also use the META element to set the document's preferred style sheet.

All Document Modes (Internet Explorer 7)
Alternate style sheets are not supported.

V0097:

The specification states:

The preferred style sheet may also be specified with HTTP headers.
All Document Modes (Internet Explorer 7)
Alternate style sheets are not supported.

V0098:
The specification states:

If two or more META declarations or HTTP headers specify the preferred style sheet, the last one takes precedence. HTTP headers are considered to occur earlier than the document HEAD for this purpose.

Quirks Mode and IE7 Mode (All Versions)
Alternate style sheets are not supported.

V0099:
The specification states:

If two or more LINK elements specify a preferred style sheet, the first one takes precedence.

Quirks Mode and IE7 Mode (All Versions)

LINK elements are processed in document order, whether or not a title attribute is supplied.

2.2.27 [HTML] Section 14.6, Linking to style sheets with HTTP headers

V0101:
The specification defines Linking to style sheets with HTTP headers:

The HTTP Link header has the same effect as a LINK element with the same attributes and values.

All Document Modes (All Versions)

HTTP Link headers are not supported.

V0102:
The specification defines Linking to style sheets with HTTP headers:

Multiple Link headers correspond to multiple LINK elements occurring in the same order.

All Document Modes (All Versions)

HTTP Link headers are not supported.

V0103:
The specification defines Linking to style sheets with HTTP headers:

It is possible to specify several alternate styles using multiple Link headers, and
then use the rel attribute to determine the default style.

All Document Modes (All Versions)
HTTP Link headers are not supported.
V0104:
The specification defines Linking to style sheets with HTTP headers:

The quote marks are only needed when the attribute values include whitespace.

All Document Modes (All Versions)
HTTP Link headers are not supported.
V0105:
The specification defines Linking to style sheets with HTTP headers:

Use SGML entities to reference characters that are otherwise not permitted within HTTP or email headers, or that are likely to be affected by transit through gateways.

All Document Modes (All Versions)
HTTP Link headers are not supported.
V0106:
The specification defines Linking to style sheets with HTTP headers:

LINK and META elements implied by HTTP headers are defined as occurring before any explicit LINK and META elements in the document's HEAD.

All Document Modes (All Versions)
HTTP Link headers are not supported.

2.2.28 [HTML] Section 16.1, Introduction to frames
V0107:
The specification states:

If the user agent can't display frames or is configured not to, it will render the contents of the NOFRAMES element.

All Document Modes (All Versions)
Frameset content is blocked for sites that belong to the Restricted sites zone. When this is the case, content in the NOFRAMES element is also ignored.
2.2.29 [HTML] Section 16.2.2, The FRAME element

V0108:

The specification states:

This attribute provides the user agent with information about the frame border. Possible values:

1: This value tells the user agent to draw a separator between this frame and every adjoining frame. This is the default value.

0: This value tells the user agent not to draw a separator between this frame and every adjoining frame. Note that separators may be drawn next to this frame nonetheless if specified by other frames.

All Document Modes (All Versions)

When the frameborder attribute is set to 0, the style of the frameborder changes to light gray and remains visible.

C0024:

The specification states:

Attributes defined elsewhere

* id, class (document-wide identifiers)
* title (element title)
* style (inline style information)
* onload, onunload (intrinsic events)

All Document Modes (All Versions)

The onunload event is not supported for the FRAME element.

2.2.30 [HTML] Section 16.3, Specifying target frame information

V0109:

The specification states:

```html
target = frame-target [CI]
```

The target attribute may be set for elements that create links (A, LINK), image maps (AREA), and forms (FORM).

All Document Modes (All Versions)

The value of the name attribute for a FRAME element is not a valid value for the target attribute of a LINK element. Identifying a FRAME element as the target of a LINK element does not expose the content of the FRAME element to the LINK element.

2.2.31 [HTML] Section 16.3.2, Target semantics

V0110:

The specification states:
User agents should determine the target frame in which to load a linked resource according to the following precedences (highest priority to lowest):

If an element has its target attribute set to a known frame, when the element is activated (i.e., a link is followed or a form is processed), the resource designated by the element should be loaded into the target frame.

If an element does not have the target attribute set but the BASE element does, the BASE element's target attribute determines the frame.

If neither the element nor the BASE element refers to a target, the resource designated by the element should be loaded into the frame containing the element.

If any target attribute refers to an unknown frame F, the user agent should create a new window and frame, assign the name F to the frame, and load the resource designated by the element in the new frame.

All Document Modes (All Versions)
If any target attribute refers to an unknown frame F, the resource is loaded in a new window. The resource is not loaded in a new frame and hence does not apply the unknown name F to a new frame.

2.2.32 [HTML] Section 16.4.1, The NOFRAMES element
V0111:
The specification states:

The NOFRAMES element specifies content that should be displayed only by user agents that do not support frames or are configured not to display frames. User agents that support frames must only display the contents of a NOFRAMES declaration when configured not to display frames. User agents that do not support frames must display the contents of NOFRAMES in any case.

All Document Modes (All Versions)
The content of the NOFRAMES element is ignored when a site is a member of the Restricted sites zone.

2.2.33 [HTML] Section 16.5, Inline frames: the IFRAME element
V0112:
The specification states:

The information to be inserted inline is designated by the src attribute of [the IFRAME] element. The contents of the IFRAME element, on the other hand, should only be displayed by user agents that do not support frames or are configured not to display frames.

All Document Modes (All Versions)
The content of the IFRAME element is ignored when a site is a member of the Restricted sites zone.
V0113:
The specification states:
Inline frames may not be resized (and thus, they do not take the noresize attribute).

All Document Modes (All Versions)
The `noresize` attribute for the `IFRAME` element is ignored.

2.2.34 [HTML] Section 17.2, Controls
C0025:
The specification states:

A control's initial value does not change. Thus, when a form is reset, each control's current value is reset to its initial value. If a control does not have an initial value, the effect of a form reset on that control is undefined.

All Document Modes (All Versions)
When a form is reset, controls without default values are set to empty values.

2.2.35 [HTML] Section 17.3, The FORM element
C0026:
The specification states:

```markdown
ectype = content-type [CI]
The value "multipart/form-data" should be used in combination with the INPUT element, type="file".
```

All Document Modes (All Versions)
Files are only transmitted when the `enctype` attribute is set to `multipart/form-data` and the value of the `type` attribute of the `INPUT` element is set to `file`.

C0027:
The specification states:

```markdown
accept-charset = charset list [CI]
User agents may interpret this value as the character encoding that was used to transmit the document containing this FORM element.
```

All Document Modes (All Versions)
The value of the `accept-charset` attribute does not identify the character encoding that is used to transmit the document. Only UTF-8 character encoding is recognized.

C0028:
The specification states:
accept - content-type-list [CI]

User agents may use this information to filter out non-conforming files when prompting a user to select files to be sent to the server (cf. the INPUT element when type="file").

All Document Modes (All Versions)

The information in the accept attribute is not used to filter out non-conforming files that are to be sent to the server. Users may submit any file type.

C0029:

The specification states:

User agents may advise the user of the value of the accept-charset attribute and/or restrict the user's ability to enter unrecognized characters.

All Document Modes (All Versions)

The user is not informed when entering unrecognized characters as based on the value of the accept-charset attribute. Additionally, the user is able to enter unrecognized characters as based on the value of the accept-charset attribute.

2.2.36 [HTML] Section 17.4, The INPUT element

C0030:

The specification states:

value - cdata [CA]

It is optional except when the type attribute has the value "radio" or "checkbox".

All Document Modes (All Versions)

The value attribute is also optional when the type attribute is radio or checkbox. If not defined in the HTML source, the default value is on.

C0031:

The specification states:

maxlength - number [CN]

This number may exceed the specified size, in which case the user agent should offer a scrolling mechanism.

All Document Modes (All Versions)

When the value of the maxlength attribute exceeds the value of the size attribute and the text also exceeds the specified size, the user can scroll in the textbox using the arrow keys. There is no scrollbar control.
2.2.37 [HTML] Section 17.4.1, Control types created with INPUT
C0032:
The specification states:

file
User agents may use the value of the value attribute as the initial file name.

All Document Modes (All Versions)
The value of the value attribute is not used as the initial file name.

2.2.38 [HTML] Section 17.5, The BUTTON element
C0033:
The specification states:

Visual user agents may render BUTTON buttons with relief and an up/down motion when clicked, while they may render INPUT buttons as "flat" images.

All Document Modes (All Versions)
IMAGE and BUTTON elements are rendered identically, with relief as well as up and down motions.

C0034:
The specification states:

It is illegal to associate an image map with an IMG that appears as the contents of a BUTTON element.

All Document Modes (All Versions)
When an image is a child element of a button and defines an image map, the image map is rendered outside the visual boundaries of the button element. When the image map is clicked in this scenario, the onclick event associated with the button is executed in lieu of the onclick event behavior associated with the image map.

2.2.39 [HTML] Section 17.6, The SELECT, OPTGROUP, and OPTION elements
C0035:
The specification states:

size = number [CN]

If a SELECT element is presented as a scrolled list box, this attribute specifies the number of rows in the list that should be visible at the same time. Visual user agents are not required to present a SELECT element as a list box; they may use any other mechanism, such as a drop-down menu.
When a value of the size attribute is specified, a SELECT element is presented as a scrolling list box. If an invalid value is specified for the size attribute, then a SELECT element with option groups is presented as a scrolled list box with a size of 4. Otherwise, SELECT elements are displayed as a drop-down menu by default.

**2.2.40 [HTML] Section 17.7, The TEXTAREA element**

C0036:

The specification states:

```plaintext
cols = number [CN]
```

Users should be able to enter longer lines than this, so user agents should provide some means to scroll through the contents of the control when the contents extend beyond the visible area. User agents may wrap visible text lines to keep long lines visible without the need for scrolling.

*All Document Modes (All Versions)*

Users can enter lines longer than the value of the cols attribute. When the text is longer than the visible rows, Internet Explorer wraps visible lines of text and adds a vertical scrollbar control.

**2.2.41 [HTML] Section 17.8, The ISINDEX element**

C0037:

The specification states:

```
User agents may use the value of the prompt attribute as a title for the prompt.
```

*IE7 Mode, IE8 Mode, IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

The value of the prompt attribute is allowed as a visible label for the ISINDEX element.

**2.2.42 [HTML] Section 17.9.1, The LABEL element**

V0114:

The specification states:

```plaintext
for = idref [CS] (case-sensitive)
```

This attribute explicitly associates the label being defined with another control. When present, the value of this attribute must be the same as the value of the id attribute of some other control in the same document. When absent, the label being defined is associated with the element's contents.

*All Document Modes (All Versions)*

The value of the for attribute (the id of the referenced element) is not case-sensitive. Because the value of the id attribute for an element is case-sensitive, the for attribute may reference multiple elements. In this case, the last matching element (in document order) is recognized as the referenced element.

C0038:
The specification states:

Labels may be rendered by user agents in a number of ways (e.g., visually, read by speech synthesizers, etc.)

**All Document Modes (All Versions)**

The label is rendered visually.

**2.2.43 [HTML] Section 17.10, Adding structure to forms: the FIELDSET and LEGEND elements**

V0115:

The specification states:

```html
FIELDSET/LEGEND Start tag: required, End tag: required
```

*Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)*

An empty FIELDSET with a border is rendered to indicate the presence of a FIELDSET element when the start tag is absent but the end tag is present.

V0116:

The specification states:

```html
LEGEND Attribute definitions
align = top|bottom|left|right [CI] (case-insensitive)
```

Deprecated. This attribute specifies the position of the legend with respect to the fieldset. Possible values:

- top: The legend is at the top of the fieldset. This is the default value.
- bottom: The legend is at the bottom of the fieldset.
- left: The legend is at the left side of the fieldset.
- right: The legend is at the right side of the fieldset.

*All Document Modes (All Versions)*

The `align` attribute of the FIELDSET element does not support a value of `bottom`.

*Quirks Mode, IE7 Mode, and IE9 Mode (All Versions)*

A value of `center` for the `align` attribute of the FIELDSET element is also supported.

**2.2.44 [HTML] Section 17.11.1, Tabbing navigation**

V0117:

The specification states:

```html
tabindex = number [CN]
```

This attribute specifies the position of the current element in the tabbing order
for the current document. This value must be a number between 0 and 32767.

All Document Modes (All Versions)
The value can be a number less than 0 or greater than 32767. If the value is less than 0 or greater than 32767, the element is excluded from the tab cycle of the document.
The upper bound for the value of the tabindex attribute is 32768.

C0039:
The specification states:

Tabbing keys. The actual key sequence that causes tabbing navigation or element activation depends on the configuration of the user agent (e.g., the "tab" key is used for navigation and the "enter" key is used to activate a selected element).

All Document Modes (All Versions)
The TAB key is used to navigate between elements and the SPACEBAR is used to activate buttons and input controls. The ENTER key is used to submit a form or navigate a hyperlink or area. For controls like textarea, the ENTER key and SPACEBAR have special behaviors such as adding a new line or a space, respectively.

C0040:
The specification states:

User agents may also define key sequences to navigate the tabbing order in reverse. When the end (or beginning) of the tabbing order is reached, user agents may circle back to the beginning (or end).

All Document Modes (All Versions)
Pressing SHIFT+TAB navigates the tabbing order in reverse. When the beginning of the tabbing order is reached, the tab placement cycles back to the end. Controls such as the Address bar and search box participate in the tab sequence and represent the first elements to receive focus upon cycling back to the end.

2.2.45 [HTML] Section 17.11.2, Access keys

C0041:
The specification states:

```
accesskey = character [CN]
```

This attribute assigns an access key to an element. An access key is a single character from the document character set.

All Document Modes (All Versions)
If the user incorrectly attempts to assign a string to the accesskey attribute, the first character of the string is used as the access key.

C0097:
The specification states:

Pressing an access key assigned to an element gives focus to the element.

All Document Modes (All Versions)

Pressing an access key that is assigned to an element gives focus to that element. If an access key is assigned to more than one element, pressing the access key gives focus to the first element. Pressing the access key again gives focus to the next element that has the same access key. If no other element has that access key, focus is given to a lowercase version of the access key, if there is one.

C0042:

The specification states:

The action that occurs when an element receives focus depends on the element. For example, when a user activates a link defined by the A element, the user agent generally follows the link.

All Document Modes (All Versions)

When the user presses the access key for a hyperlink, focus is shifted to that hyperlink. The link is navigated only when the user activates the focused link by pressing the ENTER key.

C0043:

The specification states:

When a user activates a radio button, the user agent changes the value of the radio button.

All Document Modes (All Versions)

When an access key for a radio button is pressed, the focus is set on that radio button and the radio button is activated at the same time.

C0044:

The specification states:

The invocation of access keys depends on the underlying system. For instance, on machines running MS Windows, one generally has to press the "alt" key in addition to the access key.

All Document Modes (All Versions)

The invocation of any access key is caused by pressing the ALT key simultaneously with the access key.

C0045:

The specification states:

The rendering of access keys depends on the user agent. We recommend that authors include the access key in label text or wherever the access key is to apply. User agents should render the value of an access key in such a way as to emphasize its
role and to distinguish it from other characters (e.g., by underlining it).

All Document Modes (All Versions)

The value of the access key is not automatically underlined or emphasized. The author must specify the markup to be used for emphasis.

2.2.46 [HTML] Section 17.12.1, Disabled controls

V0118:
The specification states:

```
disabled [CI]
```

When set for a form control, this boolean attribute disables the control for user input. When set, the disabled attribute has the following effects on an element:

- Disabled controls do not receive focus.
- Disabled controls are skipped in tabbing navigation.
- Disabled controls cannot be successful.

The following elements support the `disabled` attribute: BUTTON, INPUT, OPTGROUP, OPTION, SELECT, and TEXTAREA.
This attribute is inherited but local declarations override the inherited value.

All Document Modes (Internet Explorer 7)

Child elements (such as `OPTION` elements within a `SELECT` element) cannot disable themselves when their parent is enabled. In other words, the absence of the disabled attribute is inherited but cannot be overridden locally.

All Document Modes (Internet Explorer 8 and Internet Explorer 9)

The behavior differs from previous versions and modes insofar as child elements cannot override an inherited disabled attribute; if the parent is disabled, the child will be as well. However, child elements also inherit the absence of a disabled attribute (that is, the parent is enabled) and can override this by disabling themselves.

2.2.47 [HTML] Section 17.12.2, Read-only controls

C0046:
The specification states:

```
readonly
```

When set, the readonly attribute has the following effects on an element:

- Read-only elements receive focus but cannot be modified by the user.
- Read-only elements are included in tabbing navigation.
- Read-only elements may be successful.

All Document Modes (Internet Explorer 7)

While read-only controls are included in tabbing navigation and can receive focus, the user interface does not indicate that the control is read-only.
2.2.48 [HTML] Section 17.13.1, Form submission method
C0047:
The specification states:

Note. The "get" method restricts form data set values to ASCII characters.

All Document Modes (All Versions)
When submitting form data with the get method, non-ASCII characters are percent-encoded from 8-bit Unicode Transformation Format (UTF-8) octets. For example, the character LATIN CAPITAL LETTER A WITH GRAVE would be represented as %C3%80.

2.2.49 [HTML] Section 17.13.2, Successful controls
C0048:
The specification states:

The current value of a file select is a list of one or more file names. Upon submission of the form, the contents of each file are submitted with the rest of the form data. The file contents are packaged according to the form's content type.

All Document Modes (All Versions)
Form content type = multipart/form-data is supported. Only one file per file select control is supported.

V0119:
The specification states:

The current value of an object control is determined by the object's implementation.

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)
Determining the current value of an object control by the object’s implementation is not supported. Instead, [object] is submitted as the value of the submitted OBJECT element.

IE9 Mode (All Versions)
Nothing is submitted as the current value of a submitted OBJECT element.

C0049:
The specification states:

If a control doesn't have a current value when the form is submitted, user agents are not required to treat it as a successful control.

All Document Modes (All Versions)
Even if a control does not have a current value specified, the control is treated as successful, and submission of the control occurs when the form is submitted.
2.2.50 [HTML] Section 17.13.3, Processing form data

C0050:
The specification states:

User agents should render the response from the HTTP "get" and "post" transactions.

*All Document Modes (All Versions)*
The response is rendered when the server status code is 200 OK.

2.2.51 [HTML] Section 17.13.4, Form content types

C0051:
The specification states:

Each part may be encoded and the "Content-Transfer-Encoding" header supplied if the value of that part does not conform to the default (7BIT) encoding (see [RFC2045], section 6

*All Document Modes (All Versions)*
Only UTF-8 character encoding is recognized.

C0052:
The specification states:

If multiple files are to be returned as the result of a single form entry, they should be returned as "multipart/mixed" embedded within the "multipart/form-data".

*All Document Modes (All Versions)*
Multiple file uploads from a single form input are not supported. When multiple files are uploaded through multiple file *INPUT* elements, each is a separate form-data entry in the *HTTP REQUEST*.

2.2.52 [HTML] Section 18.2.1, The SCRIPT element

C0053:
The specification states:

`defer [CI] (case-insensitive)`

When set, this boolean attribute provides a hint to the user agent that the script is not going to generate any document content (e.g., no "document.write" in javascript) and thus, the user agent can continue parsing and rendering.

*All Document Modes (All Versions)*
If an author incorrectly adds *document.write()* within a deferred script tag, only the script-generated content will be displayed. Rendering of the remainder of the page will fail.
2.2.53 [HTML] Section 18.2.2, Specifying the scripting language

V0120:
The specification states:

Authors should specify the default scripting language for all scripts in a document by including the following META declaration in the HEAD:

```html
<META http-equiv="Content-Script-Type" content="type">
```

where "type" is a content type naming the scripting language.

All Document Modes (All Versions)

META declaration has no effect and is ignored. Rather, if no type is specified for a script tag, JavaScript is used as a default.

V0121:
The specification states:

In the absence of a META declaration, the default can be set by a "Content-Script-Type" HTTP header. Content-Script-Type: typewhere "type" is again a content type naming the scripting language.

All Document Modes (All Versions)
The HTTP header is ignored. If the script tag does not specify a type the browser default is used.

V0122:
The specification states:

User agents should determine the default scripting language for a document according to the following steps (highest to lowest priority):1. If any META declarations specify the "Content-Script-Type", the last one in the character stream determines the default scripting language.

All Document Modes (All Versions)

Any META element that specifies an http-equiv attribute with a value of Content-Script-Type is ignored.

V0123:
The specification states:

User agents should determine the default scripting language for a document according to the following steps (highest to lowest priority):2. Otherwise, if any HTTP headers specify the "Content-Script-Type", the last one in the character stream determines the default scripting language.

All Document Modes (All Versions)

Any META element that specifies an http-equiv attribute with a value of Content-Script-Type is ignored.
C0054:
The specification states:

The `type` attribute must be specified for each `SCRIPT` element instance in a document. The value of the `type` attribute for a `SCRIPT` element overrides the default scripting language for that element.

**All Document Modes (All Versions)**

There is no support for a default scripting language that can be set by the page author. JavaScript is always used as a default unless explicitly overridden by a `SCRIPT` element.

C0055:
The specification states:

However, scripts should refer to an element according to its assigned name. Scripting engines should observe the following precedence rules when identifying an element: a name attribute takes precedence over an id if both are set. Otherwise, one or the other may be used.

**All Document Modes (All Versions)**

This requirement does not apply to JavaScript or VBScript. These two languages have separate and distinct ways to identify an element by `id` or `name`, based on the author’s requirements.

**2.2.54 [HTML] Section 18.2.3, Intrinsic events**

V0124:
The specification states:

HTML documents are constrained to conform to the HTML DTD both before and after processing any `SCRIPT` elements.

**All Document Modes (All Versions)**

Rendering of the page will be attempted even if the markup does not conform to the HTML DTD, irrespective of script execution. For example, using script to insert frames in an HTML 4 Strict page is technically invalid, but the frame will be rendered anyway.

**2.2.55 [HTML] Section 18.3.1, The NOSCRIPt element**

V0125:
The specification states:

The content of a `NOSCRIPt` element should only be rendered by a script-aware user agent in the following cases: The user agent is configured not to evaluate scripts. The user agent doesn’t support a scripting language invoked by a `SCRIPT` element earlier in the document.

**All Document Modes (All Versions)**
If a language invoked by a `<SCRIPT>` element earlier in the document is not supported, the `<NOSCRIPT>` content will not appear.

### 2.2.56 [HTML] Section 24.3, Character entity references for symbols, mathematical symbols, and Greek letters

C0056:

The specification states:

To support these entities, user agents may support full [ISO-10646] or use other means. Display of glyphs for these characters may be obtained by being able to display the relevant [ISO-10646] characters or by other means, such as internally mapping the listed entities, numeric character references, and characters to the appropriate position in some font that contains the requisite glyphs.

_All Document Modes (All Versions)_

Character entities for symbols, mathematical symbols, and Greek letters is supported by displaying the relevant glyphs from [ISO-10646].

### 2.3 Error Handling

There are no additional error handling considerations.

### 2.4 Security

There are no additional security considerations.
3 Appendix A: Test Suite Failures

This section contains a set of test cases from W3C HTML4 Test Suite [W3C-HTML4-TS] that Internet Explorer, as from version 8 in its default settings, does not pass. Unless otherwise specified, any test case failure from executing this set of test cases does not imply lack of conformance to the HTML specification.

3.1 HTML 4.01 Test: Frame target names must start with an alphabetical character (a-z, A-Z)

Test case: [http://www.w3.org/MarkUp/Test/HTML401/current/tests/6_16-BF-01.html](http://www.w3.org/MarkUp/Test/HTML401/current/tests/6_16-BF-01.html)

The specification states:

Frame target names (%FrameTarget; in the DTD) must begin with an alphabetic character. User agents should ignore all other target names.

The test case states:

Verify that the user agent ignores target names that do not start with an alphabetical character (a-z, A-Z).

Frameset code:

```html
<frameset cols="50%, 50%" rows="50%, 50%">
    <frame src="6_16-BF-01a.html">
    <frame src="6_16-BF-01b.html" name="two">
    <frame src="6_16-BF-01c.html">
    <frame src="6_16-BF-01d.html" name="4four">
</frameset>
```

Bottom left frame code:

```html
<p>This is 6_16-BF-01c.html</p>
<p>When you click on <a href="6_16-BF-01f.html" target="4four">this link</a>, 6_16-BF-01f.html should load in THIS WINDOW, NOT in the window where 6_16-BF-01d.html is now. According to the spec, user agents must ignore target names that do not begin with an alphabetic character.</p>
```

Expected results:

Bottom left frame loads the content of 6_16-BF-01f.html.

Bottom right frame (target="4four") does not load any new content.

Actual results for all document modes (all versions):

Bottom right frame (target="4four") loads the content of 6_16-BF-01f.html.

Conclusion:
The value of the **name** attribute for the bottom right frame of the frameset is set to "4four". Because this string value begins with a numeric character instead of an alphabetic character, the value should be ignored and the content loaded into the bottom left frame (the link container).

Based on the actual results, Internet Explorer fails this test case for all document modes (all versions).

**See Also**

Section 2.2.5

### 3.2 HTML 4.01 Test: rowspan attribute for TD and TH

Test case: [http://www.w3.org/MarkUp/Test/HTML401/current/tests/11_2_6-BF-01.html](http://www.w3.org/MarkUp/Test/HTML401/current/tests/11_2_6-BF-01.html)

The specification states:

```
 rowspan = number [CN]
```

This attribute specifies the number of rows spanned by the current cell. The default value of this attribute is one ("1"). The value zero ("0") means that the cell spans all rows from the current row to the last row of the table section (THEAD, TBODY, or TFOOT) in which the cell is defined.

The test case states:

**Verify the functionality of the rowspan attribute for TD and TH.**

**Table code:**

```html
<table border="1">
<tr><td>row 1</td><td>default</td><td rowspan="0">zero</td><td rowspan="1">one</td><td rowspan="2">two</td><td rowspan="3">three</td></tr>
<tr><td>row 2</td></tr>
<tr><td>row 3</td></tr>
</table>

<table border="1">
<tr><th>row 1</th><th>default</th><th rowspan="0">zero</th><th rowspan="1">one</th><th rowspan="2">two</th><th rowspan="3">three</th></tr>
<tr><th>row 2</th></tr>
<tr><th>row 3</th></tr>
</table>
```

**Expected results:**

The third column (`<td rowspan="0">zero</td>`, `<th rowspan="0">zero</th>`) should span all three rows.
Actual results for all document modes (all versions):
The third column spans only one row.

Conclusion:
The value of the **rowspan** attribute for the table cell is set to 0 (zero). A value of 0 implies that the table cell (**TD** or **TH**) should span all rows.

Based on the actual results, Internet Explorer fails this test case for all document modes (all versions).

**See Also**

Section 2.1.17

3.3 **HTML 4.01 Test: colspan attribute for TD and TH**

Test case: [http://www.w3.org/MarkUp/Test/HTML401/current/tests/11_2_6-BF-02.html](http://www.w3.org/MarkUp/Test/HTML401/current/tests/11_2_6-BF-02.html)

The specification states:

colspan - number [CN]
This attribute specifies the number of columns spanned by the current cell. The default value of this attribute is one ("1"). The value zero ("0") means that the cell spans all columns from the current column to the last column of the column group (**COLGROUP**) in which the cell is defined.

The test case states:

Verify the functionality of the colspan attribute for TD and TH.

Table code:

```html
<table border="1">
<tr><td>column 1</td><td>column 2</td><td>column 3</td></tr>
<tr><td>default</td></tr>
<tr><td colspan="0">zero</td></tr>
<tr><td colspan="1">one</td></tr>
<tr><td colspan="2">two</td></tr>
<tr><td colspan="3">three</td></tr>
</table>
<table border="1">
<tr><th>column 1</th><th>column 2</th><th>column 3</th></tr>
<tr><th>default</th></tr>
<tr><th colspan="0">zero</th></tr>
<tr><th colspan="1">one</th></tr>
<tr><th colspan="2">two</th></tr>
```

Expected results:
The third row (<td rowspan="0">zero</td>, <th colspan="0">zero</th>) should span all three columns.

Actual results for all document modes (all versions):
The third row spans only one column.

Conclusion:
The value of the colspan attribute for the table cell is set to 0 (zero). A value of 0 implies that the table cell should span all columns.

Based on the actual results, Internet Explorer fails this test case for all document modes (all versions).

See Also
Section 2.1.17

3.4 HTML 4.01 Test: Specify an image with an OBJECT element

Test case: http://www.w3.org/MarkUp/Test/HTML401/current/tests/13_3-BF-01.html

The specification states:
To include images, authors may use the OBJECT element or the IMG element.

The test case states:
Verify the codetype and classid attributes for OBJECT element.

Object code:
<p>A JPG image and PNG image, displayed via the OBJECT element, shall appear after this sentence.</p>
<p> <object classid="image.jpg" codetype="image/jpeg"></object> </p>
<p> <object classid="image.png" codetype="image/png"></object> </p>

Expected results:
A .jpg image followed by a .png image should appear after the opening sentence.

Actual results for all document modes (all versions):
An OBJECT element placeholder is rendered for each object instead of the expected images.

Conclusion:
For the first `OBJECT` element, the value of the `classid` attribute is set to `image.jpg` and the value of the `codetype` attribute is set to `image/jpeg`. This specifies that an image object of type jpeg should be displayed.

For the second `OBJECT` element, the value of the `classid` attribute is set to `image.png` and the value of the `codetype` attribute is set to `image/png`. This specifies that an image object of type png should be displayed.

Based on the actual results for both image types, Internet Explorer fails this test case for all document modes (all versions).

See Also

Section 2.1.25

3.5 HTML 4.01 Test: AREA elements are ignored when a MAP element contains mixed content

Test case: [http://www.w3.org/MarkUp/Test/HTML401/current/tests/13_6_1-BF-02.html](http://www.w3.org/MarkUp/Test/HTML401/current/tests/13_6_1-BF-02.html)

The specification states:

When a `MAP` element contains mixed content (both `AREA` elements and block-level content), user agents must ignore the `AREA` elements.

The test case states:

Verify when a MAP element contains mixed content, AREA elements are ignored.

Object code:

```html
<img src="map1.gif" usemap="#map1" alt="map1">

<map name="map1">
  <area alt="circle" shape="circle" coords="20,20,12" href="circle.html">
  <area alt="circle2" shape="circle" coords="12,64,7" nohref>
  <area alt="poly" shape="poly" coords="13,44,32,37,49,48,48,37,63,49,43,67,30,55,23,62,25,49" href="poly.html">
  <a id="area1" shape="rect" coords="0, 0, 30, 30" href="rect.html">rect.html</a>
</map>
```

Expected results:

Because the `MAP` element contains block-level content (the `A` element), the three `AREA` elements should be ignored. There should be no areas of the image that are rendered as hot (can be selected or clicked).

Actual results for all document modes (all versions):
The AREA elements that are specified with an href attribute and value are rendered within the image as hot (can be selected or clicked).

Conclusion:

The MAP element contains an A element (block-level content). This implies that all AREA elements contained within the MAP element should be ignored.

Based on the actual results, Internet Explorer fails this test case for all document modes (all versions).

See Also

Section 2.1.31
4 Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.
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