Amaya User Manual

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This manual presents the user interface of Amaya. The user interface on your computer could be a little different, depending on your system and its configuration. This is not a complete user manual. Its purpose is only to help you to discover the main features of the software.

This document is organized as a book and you can use the Tools/Make Book command to build and print the whole manual.

Many commands in Amaya are the same as those provided by common word processors and editors. They are not presented here. Only the specific aspects of Amaya are described.
1. Browsing

Amaya is mainly an editor with browsing capabilities. It allows you to edit and browse Web documents simultaneously. Browsing with Amaya is similar to browsing with other Web browsers except for activating a link and using forms.

Amaya allows you to display and edit HTML documents as well as some XML document types: XHTML, MathML (mathematical expressions) and SVG (graphics). It also allows you to access other XML document types and to display their content according to their CSS style sheets. For these XML documents some editing functions are available.

1.1. Activating a link

Because Amaya is both a browser and an editor, you get different results when you single-click, double-click, or right-click a link.

- **Single-click** a link to move the cursor to that position in the document. The status bar displays the expanded URI of the link. You can now edit the content of the link.

- **Double-click** a link to activate it and skip to its target. The document retrieved by this operation replaces the current document in the same tab as the original document. If the original document was modified and has not been saved yet, a dialog box is displayed. It allows you to save the changes you have made before replacing the original document.

If you have chosen a profile without the navigation feature, or if you are in help pages, the retrieved document is displayed in a new tab.

- **Right-click** a link (or `Cmd + Single-click` on MacOS X) to activate the link and open the target document in a new tab or a new window (a pop-up menu allows you to choose).

This behavior can be changed through the Browsing tab under the Preferences dialog. By changing option **Double click activates link**, you can browse documents with a single click as you would in a traditional Web browser. You will then not be able to edit the content of a link by clicking it, but you can move the cursor within a link with the arrow keys.

Other browsing preferences such as whether images should be loaded or not, whether CSS style sheets should be applied or not, can be set in the Browsing Preferences dialog.

You can also use the keyboard to select links and to activate them. Key **Tab** allows you to move to the next link or form field in the document. **Shift Tab** allows you to move to the previous link or form field. **Alt ↓** activates the current link. You can choose other keys to perform these commands.

1.2. Access keys

Access keys provide shortcuts for moving the cursor to a form field, an area, or a link. This kind of access is crucial to people with motor disabilities, but there are other conditions where it could be necessary or useful.

When developing a web document, you can associate the accesskey attribute with the following elements: a, area, button, input, label, legend, and textarea.

For example, if you associate the accesskey attribute with a link in a document using `accesskey="n"` or `accesskey="N"`, command **Alt-accesskey** (**Alt-n** or **Alt-N** in this example) will activate that link (on MacOS X, use `Ctrl` instead of **Alt**). If the accesskey attribute is associated to a form element, pressing **Alt-accesskey** moves the focus to that element (or to the following element if associated with a label or legend element).
Access keys overwrite Amaya shortcuts, but not the system shortcuts (shortcuts for menus, for instance). As an example, these Help pages declare the following access keys:

- "n" for going to the next page
- "p" for going to the previous page
- "t" for the table of contents

So, if you have assigned shortcut $\text{Alt-p}$ to an Amaya command, this shortcut won't work in a Help page; it will display the previous page instead.

By default, Amaya uses the $\text{Alt}$ key as the modifier for access keys ($\text{Ctrl}$ on MacOS X). However, you can change this modifier using the Preferences/General dialog box. You can choose the $\text{Ctrl}$ key instead of the $\text{Alt}$ key for a modifier, or you can disable the access key mechanism.

### 1.3. Target anchors

Targets are elements that have been given an $\text{id}$ attribute, or anchors (element $\text{a}$) that have been given a $\text{name}$ attribute. They identify possible targets for links.

You can easily recognize targets and set links to them: Amaya allows you to display target icons in front of all targets. These icons are not part of the document and can be displayed or hidden in two ways:

- Choosing Show targets from the Views menu.
- Using the default keyboard command ($\text{Ctrl-u Ctrl-t}$).

### 1.4. Moving backward and forward

Like most web browsers Amaya maintains a log to keep track of the pages you have visited during the current session. You can move backward or forward through pages in this log in several ways:

<table>
<thead>
<tr>
<th>File menu</th>
<th>Choose Back from the File menu to view the previous page. Choose Forward from the File menu to view the next page.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keyboard shortcuts</td>
<td>Press $\text{Alt-←}$ to view the previous page. Press $\text{Alt-→}$ to view the next page.</td>
</tr>
<tr>
<td>Navigation bar</td>
<td>Click the back button to view the previous page. Click the forward button to view the next page.</td>
</tr>
</tbody>
</table>

Note that each tab has a separate log.

If you have chosen a profile without the navigation feature, or if you are in help pages, these commands are not available.

### 1.5. Reloading a page

Documents can be reloaded by:

- Choosing Reload document from the File menu.
- Using the shortcut $\text{Ctrl-r}$. 

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2. Using forms

As Amaya is an editor, some of the widgets associated with HTML form elements are different from those you are used to in browsers. This section mentions the most notable differences.

2.1. Simple menus

To activate a selector such as this one: apple, you have to click twice on the current entry ("apple" here). This will result in a popup widget showing all the entries. The widget can then be used both with the keyboard and with the mouse.

With the keyboard, you must first select an entry using the arrow keys. Pressing the Enter key validates your choice. You can abort by pressing the Esc key at anytime.

With the mouse, there are two kinds of behavior. A single click allows you to select an entry, whereas a double click on an entry means that you want to activate this entry. To abort, you just need to click anywhere outside of the pop-up widget. With very long menus, you can also use the scroll bar to quickly navigate through the entries.

2.2. Menus with multiple selections

Some menus, like this one: apple orange lemon banana strawberry allow multiple entries to be selected simultaneously. This widget behaves much like a simple menu. When the widget is activated, it shows the current state of selection. You can abort by using either the Esc key or by clicking elsewhere.
3. Viewing documents

Amaya can present different views of a document simultaneously. Each tab corresponds to a document and the document views can be shown by splitting the page so you can clearly see what is happening when you edit complex documents.

The multiple views can also help you move quickly through a document. For example, if you click a heading in the Table of Contents view, the Formatted view will display the document section you selected.

Six views are available.

**Formatted view (default)**

This view is similar to that provided in most browsers. It is a dynamic, direct-manipulation view. At all times it displays the changes you make to the document. This view is always visible in your page.

**Structure view**

This view shows the actual structure of the document. Each element is represented by its tag name, followed by its attributes on the same line. The elements it contains are represented underneath, next to a blue vertical line that shows the extent of the element. You can directly edit any text displayed in black by clicking and typing. You must use the editing commands to change text displayed in blue.

The structure view shows all the elements of the document even those that are not displayed in the formatted view like comments, doctype, processing instructions or the elements of the head section. This view also shows the uri of the namespace used by the author when an element belongs to a namespace that is not the same as its parent.

**Alternate view (not available with the Lite profile)**

This view shows how the document looks when displayed by a text-only browser. It is useful for checking the accessibility of your documents.

**Links view**

This view shows a list of all anchors in the document and the elements each anchor contains. You can focus on it when working primarily on links.

**Table of contents view**

This view shows a list of all headings (Hn elements) in the document. If the document is well structured, it displays an overview of the document.

**Source view**

This view shows the actual source code of the document. You can use it to edit the syntax of your document. (this view is opens by default when you click on the pink area at the bottom of your document)

You can open and close any view at any time.

### 3.1. Opening a View

To open a view, select the appropriate Show menu item from the Views menu:
3.2. Closing a view

To close a view, select the Split view horizontally or Split view vertically command from the Views menu. Another way to close a view is to double-click on the pink bar at the bottom or at the right of your document.

You can also close the tab (File/Close tab or close button on the tab, or right click on the tab, except for the Mac OS X version) if you want to close your document and all its views.

Tip: You can quickly open the source view by clicking on the pink bar at the bottom (Horizontal split/unsplit) or at the right (Vertical split/unsplit) of your document.
4. Selecting

Many commands in Amaya act on the current selection. You can make a selection using the keyboard or the mouse, as described below.

No matter how you make the current selection, Amaya displays the type of the first selected element at the bottom of the window, preceded by the types of the enclosing elements in the structure. This may be helpful when the document structure is complex.

For example, selecting a word in this sentence displays the following message in the status bar:

\[ \text{html > body > div > p} \]

meaning that the selection is within a \textit{p} element, which is within a \textit{div} element in the \textit{body} of the \textit{html} document. This sequence of element names is called a path.

Selecting \textbf{this character string} (for example click on the word "character") displays

\[ \text{html > body > div > p > strong} \]

4.1. Selecting with the mouse

- To set the insertion point, click with the left mouse button.
- To select some text, drag across a region: hold down the left mouse button, move the mouse, and release the button when the desired text is selected.
- To select an entire word, double-click on any character of the word.
- To select a whole element such as this list item, click its bullet or number.
- To extend the selection, click with the left mouse button while holding down the \textit{Shift} key.
- To select a structure element, click within the element you want and then select the desired structure level via the keyboard as described below.

4.2. Selecting in the status bar

- To set the insertion point, click with the left mouse button.
- Click in the status bar (at the bottom of the window) on an element name to select an ancestor (and everything in it).
  In the previous example, when clicking on \textit{div} in the status bar, the enclosing division is selected
  \[ \text{html > body > div > p > strong} \]
- When the selection is changed this way, the path is not updated and you may adjust the final selection on any ancestor or descendant element.

4.3. Selecting with the keyboard

Selecting a structure element

- Press the \textit{F2} key to select the parent element in the document structure. Press that key several times to select ancestors (and everything in them) up the structure towards the root.
- Press \textit{Shift-F2} to select the first child of the current element.
- Press \textit{F4} to select the next element at the same level (sibling), or at the level of the parent element if there is no next sibling at the current level.
- Press \textit{Shift-F4} to select the previous element at the same level (sibling), or at the level of the parent element if there is no previous sibling at the current level.
Moving the insertion point

- To move the insertion point locally, use the four arrow keys. If there is no insertion point, one is set at the top left corner of the window.
- To move the insertion point to the beginning or the end of the line, use keys `Home` and `End` respectively.
- To move the insertion point to the beginning of the previous or next word, use keys `Ctrl←` and `Ctrl→`.

Extending/shrinking the selection

- To extend or shrink the current selection, use the `Shift` key together with the arrow keys (`Shift←`, `Shift→`, `Shift↑`, `Shift↓`).
- To extend the current selection to the beginning of the previous word or to the end of the next word, use `Shift-Ctrl←` and `Shift-Ctrl→`.

Moving across the document

- To scroll the document one line up or down, use `Ctrl↑` and `Ctrl↓`.
- To skip to the beginning or the end of the document, use `Ctrl-Home` and `Ctrl-End`.

4.4. Selecting images

To select an entire image:

1. Click and drag anywhere within the image, and then release the mouse button. Be sure not to drag outside the image before releasing the mouse.
2. Use the copy, cut, and paste commands to move or duplicate the image element along with all its attributes.

To place the cursor to the left or to the right of an image:

- Click the left part of an image to move the cursor to the left edge of that image. This enables you to type text before the image.
- Click the right part of an image to move the cursor to the right side of that image. This enables you to type text after the image.

Note: When using the arrow keys, the cursor moves to one side of the image, and then to the other side.

4.5. Selecting in the structure view

The **Structure view** is especially convenient for quickly selecting large elements or groups of elements within a document.

To select an element in the Structure view:

- There are three ways to select a large element like a complex table or a long list with a single click: Click the blue label that represents the element, click the name of any of its attributes, or click the blue vertical line associated with that element.

To select a character or a text string:

- Click a character in the Structure view to select only that character. To select a text string, click and drag across the text.
To select an attribute value:

- In the Structure view, attribute values that can be edited from the keyboard are displayed in purple. Click and drag across the attribute value to select it. You cannot extend this text selection outside the attribute value, but you can edit the value.
5. Creating and opening documents

5.1. Creating a new document

Amaya allows you to create both local and remote documents. Three types of documents are available:

- **New document**, to create a document including text, links, formulae, etc.
- **New formula**, to create a single mathematical formula
- **New style sheet**, to create a CSS style sheet

**To create a document:**

1. Choose **New** from the **File** menu, and then select the file type you want to create.
2. At the prompt, type the URI or the local path name of the new document (a default name is assigned to the document if no name is specified). You can use the file browser to find a local directory.
3. Choose the location of the new document: Replace current, In new tab or In new Window.
4. If you are creating a new XHTML document:
   - When a **title** of the new document is requested, Amaya generates a default title (the file name without the suffix). That title could be updated later by the **Tools/Change title** command.
   - If you plan to use a **template**, click the **From template** toggle and select a template, either by selecting in the list of registered templates or by typing the URI or file name of a template that is not in the list. To update the list of available templates, see **Preferences/Templates**
   - If you do not want to use a template, you may specify the **Document profile** of the new document (XHTML Transitional, XHTML 1.1, XHTML strict, XHTML basic, HTML transitional, Compound document). You may use the default profile proposed by Amaya.
      If you want to create a XHTML document including either MathML or SVG elements (Compound document), it is recommended to create a document file with a `.xml` suffix.
5. You may select a **charset** to encode strings in the document. Pay attention, if you plan to publish your document on a server, this charset should be selected in accordance with the Web server that will serve the document (contact your web master).
      By default `.html` pages are served with `iso-8859-1` and `.xml` pages are served with `utf-8`.
6. Click **Create**. The new document is open, and a root element is created.

5.2. Opening a document

You can open local and remote documents in several ways:

**File menu**

1. Choose **Open document** from the **File** menu.

   **Note:** You can alternately use a keyboard shortcut to open a document. Press `Ctrl-o ctrl-o`.

2. In the **Open document** dialog, type the full path or URI of the file you want to open, or use the **Browse** button (a file icon) to open a file selection dialog.
3. When the document is correctly specified, click **Open**.
You can also use these steps to create a new local document, by specifying the name of a file that does not exist.

Files browser

A file browser may be displayed in the tools area with Views / Show toolbars / Files. This tool gives access to all local directories. A simple click allows you to open or close a directory and a double click on a file name opens the corresponding document.

Document address field

Note that this method works only if you have chosen a profile with the navigation feature. The address of the current document is displayed at the top of the window. Edit this address to specify the file name or the URI of the document you want to open and press Enter.

You can also create a new document by typing the name of a document that does not exist yet.

Note: You can click the button on the right side of the document address field to display the list of the documents you have opened recently. You can then select an address in this list to open the corresponding document.

Links

By activating a link you load the target document.

Note about character sets

Amaya reads HTML and XHTML documents differently:

- Amaya reads HTML documents by default as ISO-Latin-1 files. If an author does not provide information about the character set (charset) in the HTTP header or in a meta element, Amaya considers an HTML document to be encoded in ISO-Latin-1.

- Amaya reads XHTML documents by default as UTF-8 files. If an author does not provide information about the charset in the HTTP header, in the XML declaration, or in a meta element, Amaya considers an XHTML document to be encoded in UTF-8.

Because the default charset is different for HTML and XHTML documents, authors often create documents using the incorrect charset. For example, consider an XHTML document that uses ISO Latin-1 but does not provide information about the charset. When the XML parser analyzing the document encounters a sequence of bits that does not match a valid UTF-8 character, the document is considered to be not well formed. Parsing stops and Amaya displays an error message that proposes either to reload the document as an HTML document or to show parsing errors. If show parsing errors is chosen, Amaya displays the detected errors.
6. Creating elements

6.1. Editing modes

Amaya offers two editing modes:

- The **XML mode** is very efficient for manipulating different types of XML structures, but it requires from the user a good knowledge of the document structure. The simple manipulations performed through a few keystrokes in the XML mode are generic: they can be performed for any type of element from any XML vocabulary, whatever their semantics. It works well with HTML text, but also with MathML equations or SVG drawings.

- The **Text mode** allows users to handle HTML elements in the same way as in a word processor. That mode does not apply to other XML vocabularies.

You can easily switch editing mode (Text/XML) by clicking on the corresponding button in the bottom right corner of the window.

6.2. Buttons and menus

Entries of the **Insert** menu, and the corresponding buttons in the **Elements** tool, let you create new elements within a document. To use these commands, place the insertion point at the desired position and choose the element type.

The **Elements** tool allows you to immediately

- insert (or replace the current selection by) an XHTML element among the following: division ( ), headings (T₁, T₂, T₃), paragraph (P), table ( ), target anchor or target element ( ), link anchor ( ), bulleted list ( ), numbered list ( ), definition list ( ), definition term ( ), definition ( ), image ( ), object ( ).

- open/close (or enclose the current selection by) a an XHTML inline element: emphasis ( ), strong ( ), code ( ), insertion ( ), deletion ( ), superscript ( ), and subscript ( ).

Note: With the Lite profile, only a subset of these buttons and menu entries are available.

For more information about these elements see the list of all HTML 4.0 elements.

6.3. Insertion point

When creating new elements, it is important to select an **insertion point**, not some text nor a single character: if the current selection is not empty, Amaya tries to transform the selected part into the element type chosen.

Sometimes elements can not be created at the chosen location because of the constraints imposed by the HTML language. Amaya then tries to create the element at the closest valid position in the document structure. For example, if the insertion point is within a paragraph, at the end of the last line, when you click on the heading button T₂, Amaya creates the new heading after the paragraph, not within it.

In some other cases, Amaya changes the existing structure for creating the desired element at a valid position. If the insertion point is somewhere within a list item (li) when you create a heading button T₂, the item and its enclosing list are automatically split, in order to create the requested heading at the chosen position and to comply with HTML contraints.
6.4. Hidden elements submenu

To create elements in the document head, use the Insert/Hidden elements submenu. These elements are displayed only in the structure and source views. The structure view should then be open. Put the cursor at the desired position and choose the element type from the Hidden elements submenu.

The Hidden elements submenu also enables you to create comments. Comments are shown only in the structure and source views, but they can be inserted at any position in the document.

6.5. Generated elements

Some HTML elements are constituted by several other elements of different types. For instance, a table usually contains a caption (caption), several rows (tr), and several cells (td or th) in each row.

When Amaya creates such elements, it also creates their components. To create a table Amaya displays a dialog that lets you choose to create it with or without a caption. You can also choose the number of rows and columns you want and other presentation options. The insertion point is placed automatically in the first generated cell. You can enter the content of that component immediately or later. You can move to the next (empty) component with the mouse or with the arrow keys.

HTML defines inline elements that allow you to attach style to character strings. See Creating HTML Style Elements to create such elements.

6.6. The Enter key

When you are writing a new document or a new part in a document, you can create elements sequentially by pressing the Enter key. The current element is terminated and a new one is created immediately after. The type of the new element depends on the HTML DTD.

When the cursor is at the end of a preformatted or a division element (pre or div), hitting the Enter key creates a new line in the pre or a new paragraph in the div.

In some cases the behaviour of the Enter key depends on the current editing mode:

- **XML mode:**
  To create a paragraph after a pre or a division after a div, you have to select the whole pre or div element with the F2 key and to press Enter. In the same way, you can create a new paragraph after a table by selecting the whole table and pressing Enter.
  When a whole element like h2 or li is selected the Enter key creates a new h2 or li after.

  - **Text mode:**
    When the cursor is at the beginning or at the end of a list item (li), a new sibling list item element of same type is created, instead of a new paragraph within the list item. In addition, in an empty list item, the Enter key creates a paragraph that breaks the list.
    When the cursor is within elements such as p, address, dt, h1, h2, etc. (they are called block elements) the Enter key splits the element into two sibling elements of same type.
    When the insertion point is in HTML elements such as strong, em, code, span, a, etc. (they are called inline elements), the Enter key splits the inline element and the event is transmitted to the parent element. As inline elements may be nested in a HTML structure, the split may happen at several levels, until the event reaches a block or list item element, which processes the event as explained above.
    When the Enter key is hit at the beginning or at the end of a block element, a new paragraph (p element) is created, whatever the type of the current block element.

When the new element created is simply a paragraph, you can change the element type by selecting the desired type from the Insert menu or by clicking the corresponding button in the Element tool. You can also keep typing and change the element type later on.
6.6.1. Exiting anchors, inline elements, etc.

When a paragraph or another block of text is terminated by an anchor or a character string in bold, italic or other such inline element, moving the insertion point to the end and typing new text appends characters to the anchor or the inline element.

**In XML mode only**

To exit an inline element and enter plain text:, move the cursor to the end of the anchor or style element, and then press Enter and continue typing after the element.

The same method can be used to enter plain text at the beginning of a block starting with an inline element. Move the cursor to the beginning of the anchor or style element, and then press Enter and continue typing before the element.

**In Text and XML mode**

All Information type and Character elements can be set On/Off with the same command or button of the Elements tool.

The Insert or Append commands of the Edit menu or contextual menu can be used to insert before the beginning or after the end of the inline element.

6.6.2. Creating nested structures

In XML editing mode (only), when the insertion point is in an empty element, pressing the Enter key replaces that element by another empty element at the next higher level in the document structure. This feature allows you to create complex, nested structures very quickly.

As an example, consider the following structure:

1. The first item in the list
   A paragraph in the first item
2. The second item in the list.
   a. First item in the nested list.
   b. Second item in the nested list.
3. Last item in the list

**To create the above structure:**

1. Click the Numbered List button to create the first item in the list.
2. Type in the list item text, and press the Enter key once. Amaya creates a new paragraph within the list item.
3. Type the paragraph text, and press the Enter key twice. The first Enter creates another paragraph element, but the second Enter removes that paragraph and creates a second list item in the original list.
4. Type in the second list item content.
5. Click the Numbered List button to create a new list. The new list is automatically nested within the first list.
6. Type the text for the first item in the new, nested list, and press the Enter key twice to create a new item in the nested list.
7. Type the text for the second list item, and press the Enter key four times to create a new list item in the original list.
8. Type the final list item, and then press the Enter key three times to close the original list and start a new paragraph after the list.

The Enter key works in the same way when the insertion point is at the beginning of an element, but it creates new elements before the current element. For example, to add a list item between the first two items in the above structure, place the cursor at the beginning of the second list item, and press the Enter key twice.

**Note:** In XML mode, this use of the Enter key does not apply only to lists and paragraphs, but to all elements.

### 6.7. The Delete and Backspace keys

The behavior of the Delete and Backspace keys does not depend on the editing mode.

- If the insertion point is at the beginning or at the end of a block element and the Delete or Backspace key is hit, the whole content of the next (resp. previous) sibling element is merged with the content of the element that includes the insert point.
- When the insertion point is in inline elements the Backspace and Delete keys only delete characters, crossing inline element boundaries without any action on the structure. However, when an inline element becomes empty by deletions, it is itself deleted.

### 6.8. Changing the document title

To edit the document title:

- Open the Tools menu and choose Change title.

**Note:**

You can also edit the document title from the structure view.

### 6.9. Insert time stamp

The Tools/Insert time stamp menu entry allows you to insert the current date either in the ISO format (YYY-MM-DD) or in the European format (DD-MM-YYYY). The date format is set by the Preference menu.

Once the date is inserted, Amaya automatically updates it every time the document is saved and so maintains the last update date.
7. Editing attributes

You can edit attributes in two ways:

• Using the Attributes tool.
• Directly in the structure view.

7.1. Editing attributes through the Attributes tool

The Attributes tool can be used to create an attribute, change the value of an existing attribute, or delete an attribute. It displays:

• The list of attributes already applied to the first selected element and their current value. Mandatory attributes are displayed in red and cannot be removed.
• Below, a combo box labelled Insert provides the list of all attributes that may be applied to the first selected element.

To add an attribute to an element:

1. Click within the element and press the F2 key to select the element of interest.
2. When the element is selected, choose in the Insert combo box the attribute you want to add. This attribute is now activated.
3. For boolean attributes (such as ismap for an image), the command is finished.
4. For attributes with a limited set of predefined values (such as lang), you have to select a value in the list of possible values.
5. For other attributes you have to edit the value, then confirm either with the Enter key or with the apply button (✓).

To change the value of an attribute:

1. Click within the element and press the F2 key to select the element of interest.
2. When the element is selected, click on the name of the attribute you want to modify, to display the editing form of its value.
3. For attributes with a limited set of predefined values (such as lang), Amaya displays:
   ◦ A combo box giving the list of possible values.
   ◦ A button (✗) to remove the attribute.
4. For attributes with a free value (such as href for an anchor), Amaya displays:
   ◦ An input box to insert the value.
   ◦ An apply button (✓) to confirm the inserted value. The Enter key can also be used to confirm the value.
   ◦ A button (✗) to remove the attribute.

To remove an attribute from an element:

1. Click within the element and press the F2 key to select the element of interest.
2. When the element is selected, click on the name of the attribute, to display the editing form of its value.
3. Click on the delete button (✗) to remove the attribute.
7.2. Editing attributes in the structure view

All attributes are displayed in the structure view. Attribute values may be displayed in blue or purple. When the value is displayed in blue, you can only change it with the Attributes tool. This ensures that only one of the predefined values is chosen.

Attributes with a free value can be edited in the structure view.

- You can click within the attribute value (displayed in purple) and edit the value like any other character string.
- To select the whole value, you can click within the value then hit the F2 key.
- To remove the attribute, you can select the whole value, then press the delete key twice. The first delete removes the attribute value and the second removes the attribute itself.

7.3. Copying attributes

An attribute is not the same thing as an element, and an attribute can not be copied by the Copy/Paste entries on the Edit menu. Only a textual attribute value can be copied/pasted.

8. Entering characters

To enter characters that are not directly available from the keyboard, Amaya uses the standard services provided by the Operating System. An optional multi-key support is also provided for Motif and Windows versions.

Amaya provides a mechanism for assigning keyboard shortcuts to characters that are not directly available from the keyboard. Some of them are pre-defined:

- To enter a non-breaking space, press Ctrl-space
  This character is displayed in the source view under the form of the following colored character: ~
- To enter a œ (oelig), press Ctrl-o Ctrl-e
- To enter a Œ (OElig), press Ctrl-Shift-O Ctrl-Shift-E
- To enter a «, press Ctrl-[
- To enter a », press Ctrl-]

The input methods for Unix and Mac OS X are presented below.

8.1. About Unix standard multi-key support

If a character is unavailable on the keyboard, you can insert the character by pressing the special Compose key followed by a sequence of two other keys. See the table below for the keys used to insert various characters. Note that in Amaya you can change the order of the two keys.

If your keyboard does not contain a Compose key, you can attach it to an existing key such as Alt-Gr with the following xmodmap command:

```
keycode 113 = Multi_key
```

You can place this command in the $HOME/.Xmodmap file, and Amaya will apply it when you will launch your X server.

<table>
<thead>
<tr>
<th>Name</th>
<th>Code</th>
<th>First key</th>
<th>Second key</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>AElig</td>
<td>198</td>
<td>&lt;Shift&gt; A</td>
<td>&lt;Shift&gt; E</td>
<td>Æ</td>
</tr>
<tr>
<td>Aacute</td>
<td>193</td>
<td>&lt;Shift&gt; A</td>
<td>quote</td>
<td>Á</td>
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<tr>
<td>Character</td>
<td>Code</td>
<td>Key Sequence</td>
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<td>Â</td>
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<td>Å</td>
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<td>star</td>
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<td>&lt;Shift&gt; C</td>
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</tbody>
</table>
8.2. How to type accented characters on Mac OS X

With an international US keyboard (qwerty), accented characters are entered with the Alt key (aka Option key) as follows:

- Acute accent (´): alt-e, then the letter
- Grave accent (´): alt-`, then the letter
- Circumflex accent (ˆ): alt-i, then the letter
- Tilde accent (˜): alt-n, then the letter
- Umlaut accent (¨): alt-u, then the letter
- The letter “c” with a cedilla (ç): alt-c

8.3. About white space handling

As required by the HTML specification, Amaya removes insignificant white-space characters when it loads a document. This applies to (X)HTML, MathML, and SVG documents, as well as MathML and SVG elements included in a (X)HTML document.

The following are considered as insignificant white-space characters:

- End of line characters (#xD and #xA)
- Tab characters (#x9)
- Leading spaces of an element
- Trailing spaces of an element
- Contiguous spaces (one space is preserved)

To preserve all characters for some elements, use the xml:space attribute or the pre element (only in (X)HTML documents). The possible values for the xml:space attribute are default and preserve.

- default means that an applications’ default white-space treatment is acceptable for these elements. In Amaya, the default treatment removes the insignificant white-space characters for all supported DTDs (see above).
preserve indicates that applications must preserve all the characters, except the first one that immediately follows the end tag of the element where it is specified, if that element is an end of line.

The xml:space attribute applies to all elements within the element where it is specified, unless it is overridden with another instance of xml:space.

In an XHTML DTD, the pre element causes the same behavior as the xml:space attribute with the value preserve.
9. Editing with templates

9.1. What is a template?

Templates are used to produce multiple documents of the same type. A template is a skeleton representing a given type of document, expressed in the format of the final documents to be produced (XHTML, for instance). The format of the final documents is called the target language and must be an XML language.

In a template, the skeleton document contains some statements, expressed in the XTiger language (eXtensible Templates for Interactive Guided Editing of Resources), that specify how this minimal document can evolve and grow, while keeping in line with the intended type of the final document. Documents produced from this skeleton following the XTiger statements are called instances of the template. Some parts of the template may be frozen, if they have to appear in document instances as they are. Some parts may be changed when producing an instance document, some others may be added either freely or under some constraints.

The file containing a template must have a .xtd extension.

A template comes often with a set of accompanying resources (images, style sheets, scripts). A template is a web resource, that can be stored in the local file system or shared on a remote web server.

9.2. Creating a template

You can create your own templates, using the XTiger language. However, Amaya provides a specific support for creating or updating templates.

The proposed approach is to:

- Create first a skeleton of the document instance (.html file) you want to generate.
- Select the Template (Tpl) tab of the Elements tool and click on the first entry to generate a template (.xtd file) from that document skeleton.
- When a template document is selected, several entries of the Template tool are available:
  - The Create and use a component entry generates a component that will be displayed in the head of the template document. The current content of the selection becomes the content of the component.
    A use element that allows one to insert that component is created at the current position of the document. The selection must be valid (a set of complete elements or a string). The command asks the user for the component name. That name must be unique.
  - The Create and repeat a component entry generates a component that will be displayed in the head of the template document and a use element inside a repeat element. That command is a shortcut of the Create and use a component and Repeat the current use commands.
  - The Create a new types union entry generates a union which defines a new type as a choice between several basic types (number, string), elements from the target language (div, h1, h2, p,...), or component names. The current selection has no effect. The command asks the user for the union name. That name must be unique.

Note: The content of the component won't be edited in template instances. The user has to insert use and/or bag elements inside the component to define editable areas. These editable areas can be inserted before or after the creation of the component.
• The Create a text area entry generates a use element that includes a string. The command asks the user for a label. That label is free and is used for the selection path displayed in the status bar. The selection must be string and becomes the initial value of the use element.

• The Use a component or an element entry is used to generate a new use.
  If the selection is empty, a dialog proposes the list of elements that can be inserted at that position and asks the user for the label to be associated with the new use element. A use element is generated with an empty content.
  If an element of the target language (div, h1, h2, p, ...) is selected, a use element that allows one to insert this element type is generated at that position. The selected element becomes the initial content of the use element. The command only asks the user for a label.

• The Repeat the current use entry is used to generate a repeat of the current selected use element. The command asks the user for a label. That label is free and is used for the selection path displayed in the status bar.

• The Create a free editing box entry generates a bag element. The command asks the user for a label. That label is free and is used for the selection path displayed in the status bar.

• The created template can be stored anywhere, in your local file system or remotely.

9.3. Visualizing template elements

When a document instance is displayed, Amaya shows the XTiger elements under the form of colored frames that enclose XHTML elements.

• A use element is shown as a dashed blue box
• A bag element is shown as a dashed green box
• A repeat element is shown as a box with a ⬤ on the top left
• The attribute element is not displayed in the main view, as it only impacts the Attributes tool.

The XTiger elements can also be seen in the structure view. Open this view with the Show structure entry of the Views menu. In the structure view, XTiger elements are displayed in gold, while the XHTML elements are in blue. XTiger elements are also shown in the Source view, but with no special color.

Another way to understand the nesting of XTiger elements with XHTML elements is the selection path displayed in the status bar of the window (at the bottom of the window). There, you can see the list of all elements in the structure of the document from the root element to the current selection. It is updated every time the selection is changed. In this path, XTiger elements are displayed in gold and XHTML elements in black. For XTiger elements, it is not the name of the element that is displayed there (use, bag, repeat) but the label of these elements, as declared in the template.

9.4. Selecting templates

You can select your own templates, or use the templates available on the Amaya web site at http://www.w3.org/Amaya/Templates/

To ease selection among your favorite templates, there is a Templates section in the Preferences dialogue (Edit/Preferences, or amaya/Preferences under Mac OS X). Use it to register the templates that Amaya proposes when you create a new document. When registering a local template, you can call a file browser with the browse button to locate and select the files to be added to the list. You can also
enter the URI of remote templates in the input area below the list. Use the buttons on the right side of the list to remove a template or to change the order of templates in the list.

Registering templates in this list is not mandatory. When you create a new document instance, you can also choose a template that is not in that list.

9.5. Creating an instance document

To create a new document instance from a template, use entry New/New document in the File menu. It displays a dialogue where you can select:

- The template, either by selecting in the list of registered templates or by typing the URI or file name of a template that is not in the list.
- The URI or file name of the document instance you want to create.
- Where to open the new document (Replace current, In new tab, In new window).
- The Title of the new document that will be displayed by browsers (a default title is generated when the user doesn't specify it).

9.6. Editing an instance document

Editing is allowed only inside the repeat, use, and bag elements, i.e. within the colored dashed boxes. The rest of the document is the fixed part of the template and can not be modified.

9.6.1. Editing in a repeat element

In a repeat box, you can create new instances of the repeated structure or you can delete one. This is controlled by the template, which may impose a minimum and/or a maximum number of occurrences of the repeated structure.

When creating new occurrences of the repeated structure is allowed, + icons are displayed at locations where you are allowed to create new occurrences. When you click on these icons, you get a pop-up menu that tells you what can be inserted at that position. By clicking in that pop-up menu, you create a new occurrence of the corresponding type. In some cases the template offers only one type of occurrence. The pop-up menu then contains a single entry, to clearly state what will be created. If you click outside the menu, nothing is created.

Another way to create new occurrences of the repeated structure is to select an existing occurrence, or to put the caret at the end of an occurrence, and to press the Enter key. A new occurrence of the repeated structure is then created, provided the maximum number of occurrences is not reached yet. The type of the new occurrence is then the same as the one that was selected when pressing the Enter key.

When an existing occurrence is empty or fully selected and the Backspace or Delete key is pressed, the element is deleted, provided the minimum number of occurrences is not reached yet.

9.6.2. Editing in a use element

Most use elements (blue) allow you just to enter free text or to freely replace/edit existing text. Other use elements offer a choice between different types of elements that can be inserted at that position. In that case, a blue triangle icon is displayed in the top left corner of the box. By clicking this icon, you can select one of the allowed types through a pop-up menu. When you have chosen a type, the corresponding structure is generated and you can freely edit its content.

9.6.3. Editing in a bag element

In a bag box (green), you can insert any number of elements of the types specified by the template. When you want to insert a XHTML element, do it the usual way provided this type is allowed by the template. It may happen that some elements are not allowed by the template. The allowed elements are
listed in the **Insert** and **Append** submenus of the contextual menu. The available template *components* are also listed in the **Insert** and **Append** submenus of the contextual menu.
10. Restructuring documents

10.1. Changing type
To change the type of an existing element, select it and choose the new type in the Insert menu, or in the Elements tool. You can change that way a numbered list (ol) into an unnumbered list (ul) or a paragraph into a heading or a list, for instance.

Element types offered by the submenus Information type and Character element of the Insert menu work as toggles. If you select some plain text and activate one of these commands, the selected text will be turned into an element of the chosen type. Conversely, if you select an element of a type listed in these submenus and you activate the corresponding menu item, the element is removed from the document, but its content is kept.

To select a whole element, put the insertion point anywhere within this element and press key F2.

10.2. The transform command
The Transform command from the Tools menu performs complex structure transformations, based on a language that specifies how a given structural pattern can be transformed into a different structure. For example, nested lists can be transformed into a table and back again.

10.2.1. Available transformations
The available transformations are defined in the file Amaya/amaya/HTML.trans. Please refer to the document "Using the HTML.trans file" for a description of the language in which the transformation rules are written.

Additional transformations may be specified in the HTML.trans file. Some transformations are provided in the HTML.trans file as examples.

10.2.2. Using the transform command
The Transform command displays a menu that lists all the transformations that can be applied to the current selection. You just have to choose the transformation you want.

10.3. Inserting a division
You can easily group a set of paragraphs, headings, lists, tables, and so on within a division. To do this, select the elements you want to group, and then select Division (div) from the Insert menu or use button in the Elements tool.

10.4. Merging elements
You can merge successive elements, even if they are not at the same level in the document structure, by using the Backspace and Delete keys. When the insertion point is at the end of an element, use the Delete key to merge; when it is at the beginning of an element, use the Backspace key. In both cases, these keys do not delete any characters; instead they merge elements previously separated by a structure boundary.

Note that when the insertion point is within an element, the Backspace and Delete keys delete the next or previous character as usual.
11. Creating and changing links and anchors

11.1. Creating a target anchor

A target anchor is a piece of text that is referred to by a link (a source anchor). Before creating a link to a text string, you must first turn it into a target anchor.

To create a target anchor:

1. Select the appropriate text string.
2. Choose Create target from the Links menu or click the button in the Elements tool. The selected text is now a target.
   In the Formatted view, if Views/Show targets is turned on, the target text is preceded by a target icon. In the Links view, icons that identify target anchors are always displayed.
3. When a target anchor is created, Amaya automatically generates the value of the name attribute by:
   ◦ Extracting a word longer than 3 characters from the anchor text, or
   ◦ assigning a number.
   In both cases, Amaya guarantees that the generated value is unique within the document. But you can change this value, in the same way as the value of any attribute.

Note: If you want to create a link to the last target anchor you have created, choose Link to previous target from the Links menu.

11.2. Creating a target element

In (X)HTML, any element can be used as a target. A target element is an element with an id attribute to which a link can refer (a source anchor). Before creating a link to such an element, you must first turn it into a target element.

To create a target element:

1. Select within the element, then press the $F2$ key to select the entire element. The selection path at the bottom of the window may be useful to select the right element.
2. Open the Links menu and select Create target or click the button in the Elements tool. The selected element now has an id attribute that identifies it as a target element.
   In the Formatted view, if Views/Show targets is turned on, the target element is preceded by a target icon. In the Links view, icons that identify target elements are always displayed.
3. When a target element is created, Amaya automatically generates the value of the id attribute by:
   ◦ Extracting a word longer than 3 characters from the anchor text.
   or
   ◦ assigning a number.
   In both cases, Amaya guarantees that the generated value is valid and unique within the document. But you can change this value, in the same way as the value of any attribute.

Note: You can also directly create the id attribute by selecting the element and using the Attributes list. When you enter an attribute value, Amaya checks it for uniqueness, and changes the value if it is already used by another name or id attribute in the same document.
11.3. Creating an external link

To create an anchor that is a link to another document:

1. Select the text for the link you are creating.
2. Click the Link button, or select entry Create or change link in the Links menu, or use the shortcuts Ctrl-l Ctrl-l.
   - If the target document is displayed in another window in Amaya, and you want to designate it by clicking, use the Click button, then click anywhere within that window or tab to create the link.
   - If the target document is displayed in another tab and you want to designate it by clicking, use the Click button, then change the current tab and click anywhere within the target document to create the link.
   - If the target document is a local file you can use the Browse button to select it.
   - Else type the URI (like http://www.w3.org) of the target document and then Confirm to create the link.

11.4. Creating an Internal Link

To create a link to a target anchor or target element in the same document or in another document:

1. Select the text for the link you are creating.
2. Click the Link button in the Elements tool, or select the entry Create or change link in the Links menu, or use the shortcuts Ctrl-l Ctrl-l.
   - If the target is displayed (you may scroll to display it), activate the Click button then click the target icon to create the link.
   - Else type the URI (like #name) of the local target and then Confirm to create the link.

Note: If you have created the target anchor or target element recently, instead of step 2 above, select Link to previous target in the Links menu: the last target you have created will become the target of the new link.

11.5. Copying a target location

The Links/Copy location command registers the location (URI) of the selected target into the system clipboard. If no target is selected, the current document URL is registered. This location can so be pasted into a dialog box or into another external application.

11.6. Changing a link

Use this procedure to change the target of a link without changing its anchor.

To change a link:

1. Click inside the source anchor.
2. Then click the Link button in the Elements tool, or select the entry Create or change link in the Links menu, or use the shortcut Ctrl-l Ctrl-l.
3. Select the new target as if you were creating a link.
Note: You can also manually edit the href attribute of the anchor either in the Structure view or in the Links view, or use the Attributes tool.

11.7. Removing a link or a target anchor

The Delete link or target entry in the Links menu removes the anchor enclosing the cursor location.

To use this command, put the selection or the insertion point anywhere within the anchor to be removed (it is not necessary to select the whole anchor), and choose Delete link or target. The anchor is removed, but its content remains.
12. Editing tables

Amaya does not contain a separate table editor. To Amaya, a table is simply a structure described by the (X)HTML document type definition (DTD), like any other element, and it is edited as such. The same commands apply to tables as to other HTML structures. However, a few specific commands have been added for more convenient manipulations.

12.1. Creating a new table

To create a new table:

1. Move the cursor to the location in the document where you want to create the table.
2. Click the Table button in the Elements tool, or choose Table from the Insert menu. The Table dialog displays.
3. Enter the initial number of rows and columns for the new table, and specify the border width, etc.
4. Click the Confirm button. Amaya generates a graphical representation of the table.
5. The cursor is automatically placed in the first cell.
6. To insert content into other cells, click inside a cell and then insert the appropriate text, image, etc. Use the arrow keys to navigate from one cell to another.
7. You can also edit the text of the table caption, add it if not already there, or remove it if it is not needed.

12.2. Adding a new column

To add a new column to a table:

1. To create a new column to the left of an existing cell, select the Insert a column entry in the Tools/Edit table submenu, or use the corresponding button in the Elements tool or type Ctrl-t Ctrl-c.
2. To create a new column to the right of an existing cell, select the Append a column entry in the Tools/Edit table submenu, or use the corresponding button in the Elements tool or type Ctrl-t Ctrl-a.

In XML mode, a new column can also be added to a table using the Enter key. When a whole cell is selected (use F2), pressing the Enter key creates a new cell and its corresponding column to the right of the selected cell.

12.3. Removing, copying, pasting a column

When a whole column is selected, you can delete it, copy it, cut it and paste it before or after another column, in the same or in another table.

To select a column:

1. Use the Select column entry in the Tools/Edit table submenu (Ctrl-t Ctrl-c).
2. You can also start the selection in a cell and extend to another cell in the same column (for example start in Cell 1.2 and stop in Cell 2.2). Amaya changes to column selection mode. Hitting the F2 key extends the selection to the whole column.
When a whole column is selected, use the usual commands to copy, delete or cut it.

Two specific commands are available to paste a column:

1. To paste a column before an existing column, click at the beginning of a cell in the existing column and use item **Paste before** of the **Tools/Edit table** submenu (Ctrl-t Ctrl-p).
2. To paste a column after an existing column, move the cursor to the end of a cell in the existing column and use item **Paste after** of the **Tools/Edit table** submenu (Ctrl-t Ctrl-v).

### 12.4. Adding a new row

There are two specific commands to create new rows in a table:

1. To create a new row above an existing row, select **Insert a row** from the **Tools/Edit table** submenu (Ctrl-t Ctrl-i), or the corresponding button in the **Elements** tool.
2. To create a new row below an existing row, select **Append a row** from the **Tools/Edit table** submenu (Ctrl-t Ctrl-n), or the corresponding button in the **Elements** tool.

In **XML mode**, a new row can also be easily added to a table using the **Enter** key. When a whole row is selected (use key **F2** for that), pressing the **Enter** key create a new row after the selected row.

### 12.5. Removing, copying, pasting a row

When a whole row is selected, it is possible to delete it, to copy it, to cut it and to paste it.

**To select a row:**

1. Use the **Select row** entry in the **Tools/Edit table** submenu (Ctrl-t Ctrl-r).
2. You can also start the selection in a cell. Hitting the **F2** key extends the selection to the enclosing row.

When a whole row is selected, you can delete it, copy it, or cut it with the usual commands.

Two specific commands are available to paste a row:

1. To paste a row before an existing row, use the **Paste before** item of the **Tools/Edit table** submenu (Ctrl-t Ctrl-p).
2. To paste a row after an existing row, use the **Paste after** item of the **Tools/Edit table** submenu (Ctrl-t Ctrl-v).

### 12.6. Extending a cell

To extend a cell, the simplest method is to select the set of cells to be merged by dragging and to call the **Merge cells** command in the **Tools/Edit table** submenu, or to click the corresponding button in the **Elements** tool.

Four other specific commands allow you to extend or shrink a cell:

- To extend a cell to the next cell at the right, select **Join with the cell at the right** in the **Tools/Edit table** submenu (Ctrl-t Ctrl-e).
- To extend a cell to the next cell below, select **Join with the cell below** in the **Tools/Edit table** submenu (Ctrl-t Ctrl-j).
To shrink an horizontally extended cell by one column, select **Shrink horizontal extend** in the **Tools/Edit table** submenu (\texttt{Ctrl-t Ctrl-s}), or click the corresponding button in the **Elements** tool.

To shrink a vertically extended cell by one position, select **Shrink vertical extend** in the **Tools/Edit table** submenu (\texttt{Ctrl-t Ctrl-m}), or click the corresponding button in the **Elements** tool.

Cell extensions can be also changed by editing the `colspan` and `rowspan` attributes.

### 12.7. Adding a new table body (tbody)

Function not available in the Amaya Lite profile.

- To create a new table body above an existing table body, click at the beginning of the first cell in the first row of the table body and select the **tbody** item in the **Insert/Table** submenu.
- To create a new table body below an existing table body, move the cursor to the end of the last cell in the last row of the table body and select the **tbody** item in the **Insert/Table** submenu.

In **XML mode**, new table bodies can also be easily added to a table using the **Enter** key. When a whole table body is selected (use \texttt{F2}), pressing the **Enter** key creates a new table body after the selected table body.

**Note:** Amaya implements HTML 4.0 tables. A table may include several table bodies (tbody), table headings (thead), and table footers (tfoot).

### 12.8. Adding something after a table

Many element types may be inserted within table cells. When you click a button in the **Elements** tool or you select an entry in the **Insert** menu, Amaya will try to insert the selected element into the cell that contains the insert point.

To solve that problem in **XML mode**, you can select the table element (use \texttt{F2}) and press the **Enter** key. Amaya creates a new paragraph after the selected table. This paragraph may be replaced by another element.

Another method is to select the table element (use \texttt{F2}) and use the **Append** command in the **Edit** menu or in the contextual menu.
13. Using image and maps

13.1. Adding an image

To insert an image, choose **Image** from the **Insert** menu, click the image button, or use the keyboard shortcut (**Ctrl-h Ctrl-i**). The resulting dialog lets you enter:

- the file name
- the alternate text (**alt** attribute) of the image
- and the position (inline, on the left side, centered, on the right side)

**Note:** the alternate text is mandatory. You must provide a short description of the image in the corresponding field or confirm twice.

To help find an image file you can enter a filter, and use the filter button, and the dialog will list only the files that match your pattern.

To provide a long description for an image presenting complex information, you should do so in a separate document and link it by providing the URI as a **longdesc**. This command is also available on the **Attributes** list.

13.2. Replacing an image

If an image is selected (do so by dragging over the image) when opening the image dialog, the selected image is then replaced by the new image.

13.3. Resizing an image or a map area

After you have inserted an image or defined an area within an image map, you may need to resize it.

To resize the image or map area directly on the screen:

1. Select the image or the area of the image map to display handles.
   - When you click on an image, Amaya selects the left or right border of the image to let you insert a text before or after the image.
   - To display image handles, you have to:
     - either select a border and press **Esc** or **F2**,
     - or drag over the image
   2. When selecting a handle with the left button of the mouse and moving the mouse with the left button down you are able to resize the image or the area as you want.
     - Corner handles let you resize both the width and the height.
     - If the **Shift** key down, the ratio between the width and the height of the image is kept.
     - Other handles let you resize either the width or the height.

You may also edit attributes.

13.4. About alternative text and long descriptions

Without useful alternate text for images, many web pages become difficult or even impossible to navigate, and users are left "feeling their way in the dark."

To prevent this problem, you must provide alternate text for elements such as images and other multimedia objects. The alternate text is usually presented instead of the image by a browser with a voice output system, or on a Braille display used by many people who are blind. It is also common for users
with low-quality connections to request the alternate view, because text is transmitted much faster than images.

The alternate text should replace the image in function as well. For example, if you use the image as an icon that links to a reference point, then the title of the reference itself is a good alternate text.

There are cases where an image is used for purely visual effect, and does not add any information value to the page. In this case, it is appropriate to use a blank alternate text, although you must still define it.

When the image conveys important information that is not available from the text of the document, you must provide a description of the information. The longdesc option in the Attributes tool enables you to link a description to the image. This description can be a URI (a separate document), or named part of the current document.

To view how a page might be presented without the images, use show alternate (Views /Show alternate). If the page is spoken by a voice output system, then the alternate view might simply be read out.

13.5. Using client-side image maps

Amaya enables you to use client-side image maps.

To activate an area in an image map
- Double-click on the area within the image. Amaya finds the URI associated to this area, and opens it in the browser.

To display the existing areas within an image map
- Select Show map areas from the Views menu.

Note: You can also display existing areas directly from the keyboard with Ctrl-u Ctrl-m.
14. Editing mathematics

Amaya proposes a Wysiwyg interface where MathML mathematical expressions are handled as structured components, in the same way as (X)HTML elements. Therefore, you can manipulate math expressions in the same way you manipulate other parts of (X)HTML documents. All editing commands provided by Amaya for handling text are also available for math, but there are some additional controls for entering mathematical constructs. Note that the different browsers don't behave in the same way with MathML: see the browsers compatibility section for more informations.

14.1. Creating mathematical formulae

14.1.1. New formula

Generally, mathematical formulae are not alone but included in a document with text, table, images... to do this, you have to create a XHTML document. Otherwise, you can create a MathML document (mml) for instance to use the formulae in other software tools. To do so, use command File / New / New formula or type Ctrl-n Ctrl-m.

To create a new mathematical expression in a document, move the insertion point to the position where you want to insert an expression, and then click the Math button (the first) from the Math palette, or choose Insert a formula from the Insert/Math submenu. Here are examples with a formula inserted directly in the XHTML document or inside an SVG image:

\[ \Gamma(x) = \int_0^{\infty} t^{x-1} e^{-t} \, dt \]

14.1.2. The Math submenu

The Insert/Math submenu includes presentation MathML elements.

- The first items create new elements of a given type in a mathematical expression: Plain text (mtext), Identifier (mi), Number (mn), Operator (mo). These commands can also change the type of a single element or a sequence of elements.
- The next command, Space (mspace), allows you to add space in a formula. To change its size, you have to modify its width attribute. See spacing.
• The next item, **Character (&xxx;)**, enables you to enter a character that is not available on the keyboard. It displays a dialog where you have to enter the character name (for instance a\textgamma for the Greek character α). Note that you can also use the Special characters tool (command Views / Show/hide toolbars / Special characters).

• The two next commands InvisibleTimes and ApplyFunction are used to enter the corresponding invisible characters. See the special characters section.

Following entries of the **Insert/Math** submenu enable you to create new constructs within a formula. If the insertion point is not in a formula, Amaya first creates a math element to accept the new construct. The available constructs are:

- Root with index, m\text{root} in MathML: $\sqrt[3]{x + 1}$
- Square root, m\text{sqrt}: $\sqrt{x + 1}$
- Enclose, m\text{enclose}: )1234
- Fraction, m\text{frac}: $\frac{1}{x + 1}$
- Expression with subscript and superscript, m\text{subsup}: $x_i^n + i\lim_{t \to \infty}$
- Expression with a subscript, m\text{sub}: $x_i$
- Expression with a superscript, m\text{sup}: $x^n$
- Expression with under- and overscript, m\text{underover}: $\sum_{i=1}^{n}$
- Expression with underscript, m\text{under}: $x$
- Expression with overscript, m\text{over}: $x \xrightarrow{\text{maps to}} y$
- Expression within parentheses, m\text{row}: $(a + b)$
- Expression with prescripts and tensor indices, m\text{multiscripts}: $a_{\text{maps to}} y$

- Finally, the **New matrice (mtable)** entry allows you to create and edit MathML tables: 
  You must then choose the number of lines and columns in the new table through a dialog that pops up. You can manipulate it like a HTML table through the commands available from the Tools/Edit table submenu.

### 14.1.3. The Math palette

Clicking on a button in the Math palette inserts the mathematical construct represented on its icon. Parts in black are really inserted, parts in red represent placeholder, parts in blue are asked through to a specific dialog. Green parts are simply additional information that are not inserted.

The palette contains all constructs described in Content MathML (but the produced code is an equivalent in Presentation MathML, see the known issues section) and even more. You can also save your own constructs in a mml file in order to use them latter. The 6 tabs are:

1. Various constructs
   - new formula
• \texttt{mrow}: used to group elements. See the section about the \texttt{row} construct
• \texttt{mphantom}: used to hide a piece of formula, can be used for alignment. The hidden parts can be viewed if you select the formula:
\[
\begin{aligned}
5x + 3y &= \quad \quad \quad \quad \\
-2x + 7z &= 11 \\
-3x + 2y - 6z &= -7
\end{aligned}
\]
• parenthesis: \((x)\)
• interval: The open, separator and close symbols are asked. \([a; b]\)
• fence: Same, but the number of element is asked. \([1, c, Y, \emptyset, \prod]\)
\[
\begin{array}{c}
a \\
b
\end{array}
\]
• \texttt{mtable}: 
• \texttt{menclose}: )\ a \ or \ b
• selector: The number of coodonnates is asked. \(a_{ij}\)
• piecewise or vertical brace:
\[
|x| = \begin{cases} 
  x \text{ if } x \geq 0 \\
  -x \text{ otherwise}
\end{cases}
\]

2. • relations of equivalence and orders
  • equalities, approx, congru, isomorphic
  • inequalities
  • inf, sup, max and min
• logic
  • True and False
  • equivalence
  • universal and existential quantifiers
  • not, and, or, xor, implies, equivalent to

3. • set theory
  • set/list built by extension/separation, nuple
  • element, subset
  • empty set, powerset
  • complement, difference, symmetric difference
  • intersection, union, cartesian product
  • cardinal, omega, aleph, diagonal intersection
• functions and maps
  • lambda construct
  • map definition, arrows
  • domain, image (range), codomain
  • identity, compose, inverse

4. • arithmetic
  • sum, prod
  • factorial, combination, cardinal
  • factor of
  • lcm, gcd
• reminder, quotient
  ◦ operations
    • elementary operations: plus, minus, times, divide, fraction
    • power, root
    • floor, ceiling
  ◦ complexes
    • abs, arg, conjugate
    • cartesian, polar
    • real and imaginary part
  ◦ constants: \( e, i, \pi, \gamma, \text{NaN} \) (not a number)

5. ◦ analysis
  • differential, partial differential
  • integrals: simple/simple/triple, normal/contour, msub/msupsub
  • equivalence
  • limit, tends to
    • supminus \((-1)\) or supplus \((0^+)\)
  • infinity
  • \( o \) and \( O \)
  ◦ linear algebra
    • direct sum
    • vectorrow, vectorcolumn, matrix
    • transpose, determinant
    • curl, div, grad, laplacian
    • vector product, scalar product, outer product
    • orthogonal, parallel, orthogonal complement, norm
  ◦ statistic: mean, sdev, variance, median, mode, moment

6. classical elementary functions (trigonometric, inverse...)

14.1.4. Entering Math constructs using the keyboard

You are not required to use the Math submenu or the Math palette to create and edit mathematical expressions. You can enter mathematical constructs directly from the keyboard because each entry of the Math submenu has a keyboard equivalent. These shortcuts are listed on the menu. See the list of current Linux, Mac OS X, and Windows shortcuts.

You can also use the keyboard arrow keys to move the insertion point from one math construct to another. The right and left arrows move the insertion point according to the structure of the mathematical expression. For example, if you are in a fraction when the insertion point is at the end of a numerator, the right arrow key moves the insertion point to the beginning of the denominator. Moreover, if you use the left arrow to a construct that is not already completed, the insertion point is directly moved to the nearest placeholder.

14.2. Advanced editing features

14.2.1. Entering Math characters

When you type a character string in a MathML element, Amaya parses the string and automatically generates the elements \texttt{mo} (operator), \texttt{mn} (number), \texttt{mi} (identifier), and \texttt{mtext}.

For example, to enter the formula \( x = 2a + b \)

1. If you are not in a mathematical expression, choose Insert a formula from the Insert/Math submenu.
2. Type this sequence of 6 characters: \( x = 2a + b \)

Use the Structure or Source view to display the following structure generated by Amaya:

\[
\langle mi \rangle x \langle /mi \rangle <mo>+</mo> <mn>2</mn> <mi>a</mi> <mo>+</mo> <mi>b</mi> \langle /mi \rangle
\]

If the result is not exactly what you want, select the characters that were misinterpreted and change their type with one of the commands such as **Plain text (mtext)**, **Identifier (mi)**, **Number (mn)**, **Operator (mo)** or **Space (mspace)**.

### 14.2.2. The row construct

The **row** construct from the palette is the equivalent of the braces in LaTeX: it allows you to give informations about how the different part of a formula are grouped together. It does not appear on the screen but have an indirect effect on the rendering.

For instance, when entering brackets as in the following expression:

\[ f(x) = \frac{1}{x} \]

typing the sequence \( f(x) = \ldots \) would lead to:

\[ f(x) = \frac{1}{x} \]

Here, the \((x)\) must be contained in a **mrow** element. You can correct the problem by selecting this part of the formula and then clicking on the row construct. You can also directly get the expected **mrow** if you choose **Parentheses** from the **Insert/Math** submenu or select the button in the **Math palette**.

### 14.2.3. Spacing

Amaya takes care of spacing within math expressions, but in some cases you may need to add some additional space. Move the cursor to the position where you want to insert space and choose **Space (mspace)** from the **Insert/Math** submenu. This creates a default horizontal space. You can then change its **width** attribute to adjust its size or you can add other attributes (height, depth, linebreak) to change vertical spacing. Refer to the MathML specification for more details.

### 14.2.4. Special characters

You can use the **Character** command from the **Insert/Math** submenu to enter mathematical characters and symbols that are not available on the keyboard. Type in the name of the character, as defined in the MathML specification. You may choose to type the Unicode value of the character instead. For entering this value in decimal, start with a '\#'. For entering the value in hexadecimal, start with '\#x'. To type faster, you can also enter the hexadecimal value without any leading '\#x', but note that this may be ambiguous (like 'af', for instance). In case of ambiguity, the string is interpreted as a character name.

You can also use the **Special characters** tool. In this tool, the pull-down menu allows you to choose a group of characters, which are then available in the table below. Click a character in this table to insert it in the formula or anywhere else in the document.

Also, the MathML specification recommends to add invisible characters in order to make it easier for a speech synthesizer to read a formula. These characters are automatically inserted from the palette, but sometimes you have to do it by yourself. You can then use the **Insert/Math** submenu or **shortcuts**. The three invisible characters are:

1. invisible times: \( ab \)
2. apply function: \( f(x) \)
3. invisible comma: \( a_i \)
14.2.5. Changing the structure
You may want to change the structure of an existing expression, such as appending a superscript, putting parentheses around an expression, or turning an expression into the numerator of a fraction. To do that, select the expression and enter the new construct with the Math palette, the Insert/Math submenu or the keyboard.

You can also use Transform from the Tools menu. Select the expression you want to transform and Transform will display a menu with all possible changes. For constructs that are not part of the Presentation MathML markup - i.e. only available from the palette - clicking on the button will put the selected expression in the most natural placeholder.

Changing an expression is useful to keep a recursive structure even when you enter a formula linearly. For instance to enter $x^2 \leq \frac{9}{25} \Rightarrow x \leq \frac{3}{5}$, you can,

- either enter "recursively" (faster but less natural for long expression):
  
  \[
  \Rightarrow \leq \Rightarrow x \leq \Rightarrow x^2 \leq \Rightarrow x^2 \leq \frac{9}{25} \Rightarrow
  \]

  $\circ \ldots$

- or enter "linearly" (you write as you read, but you need to select several times):
  
  \[
  xx^2 \leq x^2 \leq 9 x^2 \leq \frac{9}{25}
  \]

  $\circ \ldots$

Generally, you will use both methods.

14.2.6. Viewing structure in MathML
A MathML structure in a document can be viewed by choosing Show Structure from the Views menu. Choosing this option opens up the Structure view, which reveals the main structure of the document, the math elements, and their contents.

Math expressions can be edited in the main view or in the structure view.

The structure view is especially helpful to avoid ambiguity. For example, in the equation below, placing the cursor after character $b$, it is not clear whether you wish to add something within the square root or after it.

\[
x = \sqrt{a + b + 1}
\]

Selecting (or checking) in the Structure view avoids any misselections. You can also check the status line at the bottom of the window.

14.2.7. Linking in MathML
You can create and use links in mathematical expressions. These links are represented using the XML Linking Language (XLink). Only simple unidirectional hyperlinks are available in Amaya, but you can associate a link with any part of a formula. For example, the fraction in the formula below is a link to the W3C home page:

\[
y = \frac{1}{\sqrt{x^2 + 1}}
\]

Double-clicking or right-clicking any character within the fraction loads the W3C home page.

To create such a link, select a math expression (the fraction in the above example, for instance by clicking on the fraction bar), click the button from the Elements tool, or choose Create or change link from the Links menu, and click the desired target.
If the target is an expression in a formula, you must first turn the expression into a target. Select the expression and choose Create target from the Links menu to create an id attribute for the target expression.

14.3. More about MathML

14.3.1. Browsers compatibility

Several browsers support MathML:

- Internet Explorer with the MathPlayer plugin
- Firefox and other Gecko-based browsers
- Opera since version 9.5

It is necessary to use the .xml suffix to be sure that XHTML documents are managed as XML. Without this suffix some browsers do not display correctly documents that include mathematical expressions. It is also recommended to use the utf-8 charset for all XML documents.

By default Amaya adds the XHTML 1.1 plus MathML 2.0 doctype at the beginning of the document. This doctype is not mandatory but it is useful:

- to validate the document,
- to generate alphanumerical entities (like &int;) for mathematical symbols in the source code. Otherwise mathematical symbols are coded like any other unicode character.

Unfortunately, this doctype is not supported by many browsers. So it could be necessary to remove this doctype with the Amaya command: Tools/Change doctype/Remove the doctype.

IE uses the pmathml.xsl transformation style sheet and a plugin to display the MathML code included in XHTML documents. Amaya adds automatically a link to that transformation style sheet, but the author must store a copy of this style sheet (pmathml.xsl) in the local directory of the document.

14.3.2. Known issues

- Amaya implements only the Presentation part of MathML 2.0, not the Content Markup part.

- A few Presentation tags are not entirely available: mglyph, maction

- All presentation elements and attributes are available, but only the following attributes are rendered on the screen: display, alttext, mathvariant, mathsize, mathcolor, mathbackground, fontsize, fontweight, fontstyle, fontfamily, color, linethickness, numalign, demonalign, bevelled, notation, lquote, rquote, lspace, rspace, largeop, movablelimits, subscriptshift, superscriptshift, form, width (mspace only), height (mspace only), depth (mspace only), align, rowalign, columnalign, frame, framespacing, displaystyle, side, rowspan, columnspan, rowspacing, columnspacing, rowlines, columnlines.

- The class, id, and style attributes are available, with the same semantics as in (X)HTML: you can associate CSS styles with MathML elements (class and style attributes) and a MathML element can be the target of a link (id attribute).

- Amaya uses the STIX fonts to render mathematical symbols, but currently not all symbols are supported.
15. Editing SVG graphics

Amaya enables you to include vector graphics in web pages, following the Scalable Vector Graphics (SVG) specification. The goal is not create all SVG elements and attributes, but to implement a subset of the language that is sufficient for the drawings that scientific authors include in their documents.

Amaya handles SVG elements as structured components, in the same way as HTML elements. Therefore, you can manipulate SVG graphics in the structure view as you manipulate other parts of HTML documents.

All editing commands provided by Amaya for handling text are also available for handling graphics.

**Warning:** SVG authoring is under development. You may find bugs and the user interface may change in the future.

15.1. Creating graphics

To draw graphics, you need a SVG canvas. The canvas can be either the document itself or a `<svg>` element inside a XML document. A SVG document is created by the **File->New->New Drawing** command. A tab of the *Elements* tool allows you to create a SVG canvas and graphic components inside a XML document.

When the user asks the creation of a SVG canvas into a XML document, Amaya looks for a place around the insert point where such a `<svg>` element can be inserted. The element is created with a default width and height. Later, when the SVG canvas is selected, the user can resize it.

If the user tries to create a graphics outside a SVG canvas, a `<svg>` element is automatically generated to include the new graphic component.

When the user clicks within a SVG canvas, the SVG tool is presented and the user can create graphic components:

- connectors: line, simple or double arrow, zigzag.
- text, embedded HTML fragment (*foreignObject*), mathematic formula, image.
- basic shapes: square, rectangle (optionally with rounded corners), diamond, parallelogram, trapezium, triangles, circle, ellipse.
- polygon, polyline, open and close Bézier curves.
- regular polygons: pentagon, hexagon, heptagon, octagon, various stars
- 3D objects: cube, parallelepiped, cylinder, octahedron, pyramid.
- special symbols for electronics, chemistry, etc.

In formatted view, the position and size of all these created components are indicated by direct interaction:

- For connectors (except for lines), basic shapes and 3D objects, you first select the position of the left corner by pressing the left mouse button. While *holding down the button* (drag), move the mouse to the position of the opposite corner, then release the button.
- For text and *foreignObject*, **click** on the position where you want to insert the element.
- For polygon and polyline, you **click** to generate a point at the corresponding position with the left mouse button. To indicate the last point, use a **double-click**. A right click or a **Esc** stops the interaction without an additional point.
For Bézier curves, you process the same way as polygons except that you need to indicate the direction of the tangents too.

When a line, an arrow, a polygon or a polyline is created the shift key may be hit to force an approximation of 15°.

When the selection is in structure view, components are created with default position and size.

15.2. Selecting graphics
In formatted view, the rules to select graphics are the following:

- If the component is hollow then you need to click on outlines. Otherwise you can click inside it.
- If a polyline or a path is selected, then its control points are shown and can be selected individually. If the selected control point is part of a segment of a Bézier curve, then the corresponding Bézier handle is displayed.
- If the shift key is pressed, then each new element you click on is added to the selection.
- Several components can be selected at the same time, using the rectangular selection tool of the SVG panel.
- When components are grouped, these components cannot be selected individually in the formatted view. Only the group can be selected. But you may select them in the structure view.

15.3. Applying transformations to graphics
To apply transformations to a component, you must first select it. Available transformations are proposed in the SVG tool but also in the contextual menu displayed with the right click.

Possible transformations are:

- group/ungroup components
- changing the level of components, to control overlay: send to back, one level down, one level up, bring to front
- rotating
- vertical and horizontal symmetry
- scaling, skewing
- aligning components: left, center, right, top, middle, bottom. If only one component is selected, the alignment is made according to the SVG canvas.
- distributing and spacing components

15.4. Styling graphics
You can change some style attributes of graphic components at any time with the Style panel. When a SVG component is selected, the Style panel changes to display specific style attributes:

- Opacity controls the global opacity of the graphic component (fill and stroke)
- Fill controls the fill color and its opacity
  - If the entry is not checked, the graphics is hollow
  - The colored button displays the current color
  - The palette button allows one to select another color
- Stroke controls the stroke color and its opacity
  - If the entry is not checked, the graphics doesn't have outlines
• The colored button displays the current color
• The palette button allows one to select another color
16. Editing XML documents

16.1. Loading XML documents

Amaya can display any well-formed XML document and can format it if there is an associated CSS stylesheet.

For an XML document that refers to a not-supported DTD or namespace (different from XHTML, MathML and SVG), Amaya offers a limited support for the display and for the edition. Indeed, as Amaya does not analyse the associated DTD, it cannot check the validity of any XML document and cannot get specific information about elements and attributes and about their organization within the document.

16.2. Using style in XML

If the document is associated to a DTD that Amaya does not understand, the content of the document is formatted and displayed in a way that reflects the structure of the document. If there is no style indication, the content of each element will be shown as a block. However, for clarity, the elements that contain at least a character string are considered to be inline and are displayed accordingly. Amaya can associate a CSS style sheet. You can also modify the presentation of the document if you associate a CSS style sheet to it by means of a xml-stylesheet PI (processing instruction).

16.3. Editing XML documents

Generic XML documents editing in Amaya is still experimental. For the supported samples (XHTML, SVG, MathML), editing follows the same rules as for the corresponding document type. For the other elements, only the Enter command is available in this version:

- If the selection is within an element, Amaya splits the selected.
- If a whole non-empty element is selected, Amaya creates a new element with the same type next to the selected element.
- If a whole empty element is selected, Amaya creates a sibling for the parent of the selected element with the same type.

You can also edit your XML documents in the Source view and use the File / Synchronize command. Your modifications are then displayed in the formatted view.
17. Styling documents

The Format menu enables you to change the appearance of your documents using cascading style sheets (CSS)

17.1. Applying/Removing a theme

Amaya provides by default two different themes (Classic, Modern) that allow you to style the current document.

To change the document presentation with a theme:

- Select Classic or Modern in the theme list proposed by the Style tool,
- or select Classic or Modern in the Format/Theme submenu.

To remove the current theme:

- Select No theme in the theme list proposed by the Style tool,
- or select No theme in the Format/Theme submenu.

All these changes can be undone (Edit/Undo or Ctrl-z).

When a theme is applied to a document, Amaya generates a style element whose content comes from Amaya/config/Classic.css or Amaya/config/Modern.css files. You can create your own Classic.css and Modern.css files in the AmayaHome directory. If you do so, Amaya will use them instead of default config files.

17.2. Applying specific style

Some styles properties like color, background color, font, alignment, line spacing, or indent may be applied to a piece of text or to a whole element using either the Style tool or one of the submenus of the Format menu.

To apply a specific style:

1. Select a piece of text or an element.
   - To select an element, click within the element, then use the F2 key until the bottom line of the window displays the type of the element in the first position. You can also use the structure view to select an element.
2. Choose the right entry within the Style tool or in the Format menu.
   - The Style tool provides two buttons for for each color you may set (the text color and the background color). The first button allows you to apply its current color; the second button allows you to choose another color and to apply it.

To remove a specific style:

- The Style tool does not allow you to remove specific style. You have to use the No color or Default entries of the Format submenus.
- In the Advanced editing profile, you can directly edit the attribute style.

17.3. Associating a class to an element

All values available for the class attribute in the document are listed in the Apply class tool.

To apply a class to an element:
1. Choose the value in the **Apply class** tool.

2. If you want to select the class applied to another element, you have to select this element, then click the button. The **Apply class** list is refreshed and the class used by the selected element is highlighted.

3. Select a piece of text or an element.
   To select an element, click within the element, then use the F2 key until the bottom line of the window displays the type of the element in the first position. You can also use the structure view to select an element.

4. Click the button to apply the class to the current selection.
   If a piece of text is selected, Amaya generates a span element to enclose the current text and the class attribute is attached to this new span element.

To associate a class with an element, you can also use the Attributes tool (advanced profile only). This tool also enables you to delete a class attribute from an element or to change it (the class attribute is handled like any other attribute).

**To remove the class of an element:**

- You can edit the class attribute in the Attributes tool.
  When the element is selected, click on the [X] of the entry to remove the class attribute, or click on the entry and edit its value then confirm with the apply button.

- You can also remove or edit the class attribute in the structure view.
  To remove the class attribute, click in the value, F2 lets you select the whole value, then hit the Delete key twice.

### 17.4. Using HTML style elements

Two submenus of the Insert menu enable you to add HTML elements that change the style of text: **Information type** and **Character element**.

#### 17.4.1. Information type elements

The **Information type** submenu lists HTML elements that define abstract styles.

**To apply an information type:**

1. Select a character string in your document.

2. Choose an option from the Information type submenu.
   The selected character string displays in the chosen style.

Five of these Information elements are also available in the Elements tool: emphasis, strong, code, insertion, and deletion.

#### 17.4.2. Character elements

The **Character element** submenu of the Insert menu provides another set of style elements.

**To apply a character element:**

1. Select a character string in your document.

2. Choose an option from the Character element submenu.
   The selected character string displays the chosen style.
Two of these Character elements are also available in the Elements tool: superscript (\textsuperscript{}), and subscript (\textsubscript{}).

17.4.3. Removing information type or character elements

All commands of the submenus Information type and Character Elements are cancelled when you apply them twice.

To remove a style element:

1. Select the character string for which you want to remove the particular style.
2. Reapply the command from the Information type or Character element submenu of the Insert menu, or use the buttons in the Elements tool: emphasis (\textsl{}), strong (\textbf{}), code (\texttt{}), insertion (\textemdash{}), and deletion (\textemdash{}), superscript (\textsuperscript{}), and subscript (\textsubscript{}).

If you want to insert normal text (i.e. without any style), within a styled character string, put the insertion point at the desired position, and activate the command corresponding to the style you want to remove (in the Information type or Character element submenu of the Insert menu, or use the buttons in the Elements tool).

17.5. Using the style editor

Note: The style editor is not available in the Amaya Lite editing profile.

The Style editor entry in the Format menu, or the button in the button bar, enables you to create a list of CSS style properties through a dialog box with 4 different tabs: Characters, Colors, Boxes, Format.

When a set of properties is set, you can Apply them to the current selection:

- If the selection is within a formatted view, Amaya generates a style attribute on the current element, creating a span element if only a character string is selected.
- If the selection is within the source view, or a within a CSS file, Amaya generates the CSS syntax for the chosen properties at the current position.

In any case image paths included in the list of properties (background-image, list-style-image) are transformed into paths relative to the selected document.

17.6. About linking external and user style sheets

Note: These actions are not available in the Lite profile.

A document can link to several external style sheets that are downloaded with the document and applied to it.

An external style sheet can apply to multiple documents. When the same style sheet applies to several displayed documents, Amaya downloads only one instance of the style sheet.

You can define a specific style sheet that applies to all documents downloaded on your system. This style sheet is called the user's style sheet. It is stored in your local environment, in the AmayaHome directory as the local file amaya.css.

For example, if you prefer to display documents in Helvetica on your screen and print them in small size, you can create a user's style sheet with following CSS rules:
17.6.1. Handling external CSS style sheets

The **Format/Style sheets** submenu provides a set of commands which enable you to control external and user's CSS style sheets.

- **Select Link** to link a new CSS style sheet to the current document. This command shows a dialog box.
  - If the target CSS style sheet is displayed in another Amaya window and you want to select it by clicking, activate the **Click** button then click anywhere within that window to create the link.
  - If the target CSS style sheet is displayed in another tab and you want to select it by clicking, activate the **Click** button, then change tab and click anywhere within the target CSS style sheet to create the link.
  - If the target CSS style sheet is a local file you can use the **Browse** button to select it.
  - Otherwise, type in the URI (like http://www.w3.org/file.css) of the target CSS style sheet and then **Confirm** to create the link.

- **Select Open** to open a CSS style sheet applied to the current document.

- **Select Disable** to remove the effect of a CSS style sheet from the current document. This command does not change the CSS link in the document. It simply ignores it.

- **Select Enable** to reapply a disabled CSS style sheet to the current document. This command does not affect the CSS link in the document.

- **Select Remove** to remove an external CSS style sheet. This command is similar to the Disable command, but it also removes the link that attaches the external CSS style sheet to the document.

The **Open**, **Disable**, and **Enable** commands can be applied to the user's preference style sheet, but the **Link** and **Remove** commands apply only to external CSS style sheets.

The **List of style sheets** tool displays the list of style sheets applied to the document. It also lets you link/remove, disable/enable, and open style sheets.

17.7. Showing applied style

When multiple style sheets are attached to a document, it is often difficult to understand why an element is displayed with certain style properties. To help you in this situation, Amaya provides the **Format/Show applied style** command that displays all the CSS style properties applied to the first selected element.

You can then display the CSS rule that generates each property by double clicking on the property. As long as the CSS properties window is open, Amaya updates its content when the selection changes.

By hitting **F2**, you can see the CSS properties applied to enclosing elements. When you change the selection by clicking an element in the path of the status bar, displayed at the bottom of the window, CSS properties are updated too.
17.8. Creating a generic style for an element or a class

When a style attribute is associated with an element, you can use that element as a model for creating or modifying a style rule by using the Format/Create rule command.

To create a generic style for an element or class:

1. Select the element you wish to use as the model. By default the selection is set to the character string, and you have to press the F2 key to select the enclosing element.

   **Note:** You must select only one element and this element must have a style attribute.

2. Choose Create rule from the Format menu. Amaya opens a dialog displaying a list of CSS selectors. This list contains all classes that are defined for the current document (including those defined in the linked CSS style sheets), as well as the element type to which the style is associated.

3. Choose a selector in this list or enter a new class name and click Confirm.

   The style of the selected element is then associated with the chosen selector and the style attribute is removed from the selected element. Its value is moved to the style element, in the document head, and all elements matching the selector are displayed with the new style.

When a new class is created with command Create rule, this class is automatically added to the list of the Apply class tool.
18. Searching and replacing text

You can search and replace text with the Search dialog by choosing Find from the Edit menu or clicking the Search button. You can also use the keyboard shortcut: Ctrl-f.

This dialog enables you to search or replace text using different criteria:

- You must enter the character string for which you want to search in the Search for field.
- If the Ignore case button is selected, a case-insensitive search is performed; otherwise, the string is searched for as it appears within the Search for field.
- Strings can also be replaced using the same operation. Enter the replacement text in the Replace by field and select a replacement mode from the Replace box. The replacement modes are:
  - **No replace:** No replacement occurs even if the Replace field contains a character string.
  - **Replace on request:** When the searched string is found, Amaya selects it. You can then click one of the following buttons:
    - **Confirm** to replace the selected string and carry out the search again.
    - **Do not replace** to search for the next instance without replacing the string that was found.
  - **Automatic replace:** All instances of the searched-for string are automatically replaced within the portion of document defined in the Search where box.
- The Search where box enables you to specify the part of document in which the search occurs:
  - **Before selection:** The search starts at the beginning of the selected part and moves backward to the beginning of the document.
  - **Within selection:** The search only occurs within the selected part, from its beginning to its end.
  - **After selection:** The search starts at the end of the selected part and moves forward to the end of the document.
  - **In the whole document:** The search is carried out in the whole document from the beginning to the end regardless of which part is selected.

To initiate the search operation, click the Confirm button at the bottom of the dialog box. If Amaya finds the searched-for string, it is selected and the document is positioned so as to make this string visible. You can then search for the next instance of this string by clicking the Confirm button again. If the string is not found, Amaya displays a "Not found" message next to the Confirm button.

Search or replace can be abandoned at any time by clicking the Cancel button.

Replacement operations can be undone by choosing Undo from the Edit menu, or by using the keyboard shortcut Ctrl-z.
19. Checking spelling

Amaya provides a multilingual spell checker and selects the appropriate language according to the `lang` attribute. The `lang` attribute can be associated with any element in a document, even with a single word, using the Attributes tool.

To spell check a document, choose Check spelling from the Tools menu.

19.1. The personal dictionary

When you register a new word, the spell checker creates or updates the user's personal dictionary. A user's personal dictionary is located in the \texttt{AmayaHome/dictionary.DCT} file. In read-write mode, the spell checker uses the user dictionary when checking all documents, in addition to the language-specific dictionaries. When you click the Learn button in the Spell checking dialog, the user dictionary is created, if does not already exists, and automatically updated by the spelling checker.

19.2. The spell check dialog

The Tools / Check spelling command displays a dialog that enables you to choose parameters and interact with the spell checker.

- The top left field displays an incorrect word. The list of proposed corrections is displayed in the selector field located below the incorrect word. By default, Amaya selects the first proposed correction. To select another correction, simply click it. The selected correction is displayed below the selector field. This correction can be edited on there. The correction is made when you click the Replace and next button.
  Note that you can also perform the correction by double-clicking a proposed correction.

- The language in which the correction is made is specified in the bottom left corner of the dialog. To change language, apply a `lang` attribute to the text with the Attributes tool, and restart the spell checker.

- The Ignore section tells the spell checker to ignore certain words, for example, words that contain only capital letters, words that contain digits, Roman numerals or words with special characters (you can choose the special characters).

- The Checking section, similar to that in the Search dialog, enables you to specify the part of document on which the checker will work.

19.3. Running the spell checker

Before running the spell checker, make sure the current selection is in the document you want to check. For the spell checker, the source code is different from the formatted document. If the current selection is in the source view, all the markup will be checked, including tags, attributes, etc. If the selection is in the formatted view, only the content of the document will be checked.

To start the checker, click the Search/Skip button at the bottom of the dialog. If an error is found, the incorrect word is selected and highlighted in the document. If no error was detected a message "End of spell checking" is displayed at the bottom of the dialog.

When an incorrect word is detected, you can use a button on the dialog to perform the following operations:

- Search/Skip: The incorrect word is acceptable. No change is made in the text or in the dictionaries. The checker searches for the next error.
• **Learn**: Performs the same action as the **Search/Skip** button, except that the word considered incorrect is added to the user's personal dictionary, and the checker will ignore any subsequent occurrence of this word.

• **Replace and next**: Amaya replaces the incorrect word with the correct word (optionally edited) and the checker searches for the next error.

• **Close**: Amaya closes the dialog box and stops spell checking. Previous corrections are not canceled.
20. Saving and publishing documents

You can save (X)HTML documents either in (X)HTML or as plain text. Other documents (SVG, MathML, XML or CSS) are saved according to their original format. You can save both remote and local documents with three different commands, `Save`, `Save as`, and `Save all`.

In addition, you can change a number of publishing options using the `Publishing Preferences` dialog. Open this dialog by choosing `Preferences / Publishing` from the `Edit` menu (or `amaya / Preferences` on Mac OS X).

Amaya does not provide any global view of a set of pages installed on a server. However, you can save files from a remote server in the same way you save local files, using the `Save as` commands. During these operations, Amaya can also save the resources you have associated with the document (images, style sheets, scripts).

20.1. The save command

The `Save` command saves the current document to its original location, be it local or remote. You can access the `Save` command by choosing `Save` from the `File` menu, clicking the `Save` button on the button bar, or by using keyboard shortcuts `Ctrl-s`. Newly added images are saved in the same directory automatically; confirmation is only requested when the document was downloaded from a web server and its name is unknown.

You can also fetch a document from web servers by specifying only the server directory name, but not the file name. This may be useful when browsing, but a file name is required by the HTTP Put method. In this case, Amaya detects that the document name is missing and asks you either to use a default name or to provide one.

**Note:** Use the `Save As` command to save your document to a different location.

20.2. The save all command

The `Save all` command allows you to save all documents open in Amaya that have been modified and not saved yet. It works exactly like the `Save` command, but for all the modified documents, not only the current one.

This command may be called from the `File` menu or by clicking the button on the button bar.

20.3. The save as command

Choosing `Save As` (`Ctrl-Shift-s`) from the `File` menu opens the `Save As` dialog, which allows you to save the current document with a different format and to a different location.

You can:

- save the document alone or with its resources (images, objects, style, scripts) to a local disk or to a remote web server;
- embedded images and objects can be saved into the same directory as the document or to a different location;
- embedded style (including imported style sheets and images) and scripts can be saved into the same directory as the document or to a different location;
• all URIs used in the document can be updated to take into account the new location of the document and its associated resources.

The dialog box contains two tabs and two buttons. The first tab is about the document itself. The second tab is about its associated resources (images, styles sheets, scripts).

The **Document** tab contains:

• The **Document location** field indicates where the document file has to be written. This can be in the local file system (for example, /pub/html/welcome.html) or a remote URI (for example, http://www.w3.org/pub/WWW/Welcome.html).

  *Note:* Use a complete path for the URI. You should also make sure that you have the rights to do a PUT method if it is a remote location. Refer to the page on configuring your server to accept the PUT method or ask your Web administrator.

• The **Document format** menu offers a choice between HTML, XML (XHTML) and Text for HTML documents. This submenu is not shown when saving a SVG, MathML, CSS, or XML document. By default, Amaya keeps the current document format. Entry *Text* removes the HTML mark-up and produces a plain text document.

• The **Options** menu:
  - The **Transform URLs** toggle transforms all current URIs into relative URIs when possible. Of course, if the document is saved in a local file and URIs point to remote files, URIs will be absolute. This ensures that all the links in the document are preserved by the copy.

    If you save the document locally to publish it by ftp just because your provider or your Webmaster does not allow you to use the HTTP Put method, you must disable this option to not alterate links computed when the document was on the http server.

  - The **Copy Images** toggle indicates whether the images and objects embedded in the current document must be copied along with the document to a new location. You have to keep this switch on when you want to generate a complete copy of the document. When images and objects are copied, Amaya updates automatically all src and data attributes to point new locations. New locations are relative URIs.

  - The **Copy resources (styles and scripts)** toggle indicates whether style sheets (including imported style sheets and images) and scripts embedded in the current document must be copied along with the document to a new location. You have to keep this switch on when you want to generate a complete copy of the document. When these resources are copied, Amaya updates automatically all links and processing instructions to point to these new resource locations. New locations are relative URIs.

• The **Charset** field allows you to choose the charset of the document. This option only works with documents that support the notion of charset, such as HTML and XML documents, but it is not proposed when saving from the source view. This option is available when saving both remote and local documents.

  Very often the charset of Web documents is controlled by the server. It depends either on the document suffix (html, xml, xhtml, svg, mml), or on instructions given in the .htaccess file.

• The **Mime Type** field allows you to select the MIME type of the document. If the MIME type you are looking for is not listed, you can type it in yourself. This menu is only active when saving a document to a remote web server (local file systems do not store the MIME metadata information).
The Images, Styles and Scripts tab contains:

- The field **Where to save images** allows you to specify the directory where images and objects have to be saved. This may be a directory on a remote web server. When the Copy Images button is selected, this field is initialized with the directory of the saved document.

- The field **Where to save resources** allows you to specify the directory where style sheets and scripts have to be saved. This may be a directory on a remote web server. When the Copy resources (styles and scripts) button is selected, this field is initialized with the name of the saved document directory.

Two buttons complete this dialog:

- The Save button starts the process of saving the document. If you have chose to save associated resources too, a list of these resources is displayed and you can choose to remove some resources from the list: they will not be saved.

When saving to a remote location, check that the http_proxy is not set, or that the proxy server and the target server are configured to work with the HTTP Put method.

- The Cancel button terminates the command without doing anything.

### 20.4. Saving and characters encoding (charset)

Three standard encodings are considered:

- **us-ascii** is a 7-bit code that represents 96 printable characters (positions 32 through 127 decimal).

- **iso-8859-1** is a 8-bit code that represents the same characters as **us-ascii**, at the same positions, plus 95 additional printable characters, commonly used in various European languages.

- **utf-8** is a variable length encoding scheme for the Universal Character Set - UCS (ISO10646 aka Unicode). UCS represents thousands of characters. Note that the 96 first characters have the same positions in UCS as in **us-ascii** (and then as in **iso-8859-1**).

If an XML or HTML document contains a character that is not available in the character set (charset) available with the encoding, a special representation is required. XML offers two such representations of characters:

1. Character references represent the position (in decimal or hexadecimal) of the character in the UCS. For example, the greek letter α (alpha) is represented as \&#x3b1; (hexadecimal) or \&#945; (decimal)

2. Entity references use a name to represent a content (in that case a character). For example the greek letter α is represented as \&alpha;

Character references may be used in any XML or HTML document, but entity references are allowed only if the document itself contains a means to resolve the name.

Entity name resolution is provided by the Document type definition which refers to the DTD where names and their associated contents are defined. Practically, this means that you can use entity references only if the `<!DOCTYPE ...>` is present and refers to a DTD that defines the names you use.

By default, Amaya preserves the initial encoding of the document, that is the encoding that was associated with the document at loading time. You can check this encoding with command Views/Document info (Charset field). The Save and Save all commands save the document with that encoding, while the Save As command allows you to choose another encoding (Charset field).
When saving a document (Save, Save all, or Save As commands), all characters that are available in the charset of the encoding are just written using the encoding. Only the other characters are written using character or entity references. The choice between these two options is made according to the doctype. If there is a doctype that refers to a DTD that defines a name for the character, an entity reference is used (i.e. a name), otherwise Amaya generates a character reference in hexadecimal.

Note: command Tools/Change doctype allows you to associate, to change or to remove the doctype of a document at any time. This allows you to make Amaya generate either character references or entity references.

20.5. Saving documents as text

You can save your document as plain text using the Save as command from the File menu. HTML mark-up is replaced by spaces, new lines, and so on. A list of all URIs used in the document is appended to the file.

To save your document as text:

1. Choose Save as from the File menu to open the Save as dialog box.
2. Click the Text button in the Document format section to save the document in text format.
21. Cooperating through WebDAV

21.1. About WebDAV

WebDAV (WWW Distributed Authoring and Versioning) is a set of extensions to the HTTP protocol, which allows users to collaboratively edit and manage web resources on remote servers. It aims to extend the HTTP protocol to develop new distributed authoring tools in the web, specially emphasizing the collaborative authoring of web pages.

The lock mechanism defined in WebDAV has been designed to prevent the resources overwriting (that is, to prevent the lost update problem) using the operations lock and unlock. A lock controls the write access to a resource by limiting HTTP writing operations, like PUT, POST and DELETE. This means that only somebody who knows the lock will be able to execute those operations. The WebDAV protocol also defines two lock scopes: an exclusive and a shared lock. An exclusive lock guarantees that one person possess the lock, and no one else will be able to lock the resource (it does not affect the resource reading). A shared lock allows a group of users to create their locks over a resource, but they must trust each other to prevent access problems. Besides, each lock has a timeout, but the user cannot forget that locks may disappear in the server due to exceptions in the server.

You can find more information about WebDAV in RFC 2518 and also at the WebDAV.org website.

21.2. WebDAV support in Amaya

Amaya has an optional and limited support for WebDAV. This includes the following operations: lock/unlock a WebDAV compliant resource, view the WebDAV properties of a resource, and lock discovery capabilities. Besides, it also includes some awareness functions, that can automatically inform users about locked resources.

21.3. Sharing documents

The WebDAV support present in Amaya intents to help small groups of users to edit collaboratively their web pages. To illustrate how it works, here is an example: suppose that you have a WebDAV server (indeed, you must have a Web server that supports WebDAV to work with it) named davserver.mycompany.com, and you and your colleagues want to edit collaboratively some documents that are in the WebDAV folder /shared/ (WebDAV folders are called collections).

So, imagine that you need to change the document http://davserver.mycompany.com/shared/Doc1.html. To do so, you load the document in your Amaya editor, and then you can lock this document (Lock resource entry in Tools/Cooperation menu. Once you locked the document, if one of your colleagues tries to save some change in this document, s/he will be warned about your lock, and updates will not be lost automatically. Thus, while the document is locked, you can safely modify it, and when you have finished your work and saved the document, you can unlock it, allowing you colleague to lock the document and do his/her modifications.

If you want to be aware whether a colleague has locked a Web page, you can use the View resource properties entry in the Tools / Cooperation menu to see all the properties of the page, or you can configure Amaya to automatically inform you if the page is locked. To do so, you will need to open the Preferences / WebDAV dialog box, mark the General Awareness option and put your shared folder name in the User's WebDAV Resource List field (http://davserver.mycompany.com/shared/, in our example). Once you did this, when loading a page locked by a colleague under http://davserver.mycompany.com/shared/ folder, you will be notified by Amaya about this.
21.4. WebDAV options

The following options can be set with the Preferences / WebDAV dialog box. They are also available in the Amaya registry:

User's personal reference (URL)

An URL that identifies the user. Example: mailto:myself@myhost.com or http://myhost.com/myhomepage.html
Registry: DAV_USER_URL= [ URL ]

Lock Depth

If depth is infinite, a lock over a collection (folder) will affect all components. Otherwise, the lock will affect only the collection, preventing an user that does not know the lock to create or remove components.
Registry: DAV_DEPTH= [ infinity | 0 ]

Lock Scope

The lock scope: exclusive or shared.
Registry: DAV_LOCK_SCOPE= [ exclusive | shared ]

Lock Timeout

The desired timeout for the lock. "Infinite" means that there is no timeout value, and "Other (Seconds)" will try to get a timeout value of $x$ seconds (value $x$ specified by the next field).
Registry: DAV_TIMEOUT= [ Infinite | Second-XXXX ]

General Awareness

Indicates if you want basic awareness information about locked resources
Registry: DAV_AWARENESS= [ yes | no ]

Awareness on exit

Indicates if you want to receive information about your own locks, when you leave a resource.
Registry: DAV_AWARENESS_ONEXIT=[ yes | no ]

User's WebDAV Resource List (URL URL)

A list of the URLs of the resources you use as WebDAV resources.
Registry: DAV_URLS= [ URL URL URL ... ]

21.5. Compiling Amaya with WebDAV

WebDAV support is an optional feature of Amaya. To compile and use it, you need the following:

- Libwww with WebDAV support
- Amaya's configure option
- A WebDAV server to use this functions... Jigsaw and Apache are examples of web servers that support WebDAV.

Once you made the cvs check-out of Libwww with WebDAV support and get Amaya sources, you should follow this bootstrap instructions (under Linux/Unix environments - for windows environments, see Amaya and Libwww homepage):

21.5.1. At libwww folder:

- libtoolize -c -f
- perl config/winConfigure.pl
• aclocal; autoheader; automake; autoconf

21.5.2. At Amaya folder:

• autoconf
• mkdir LINUX-ELF (or GTK, or obj)
• cd LINUX-ELF
• ..configure --with-dav ... (and all other options that you need)
• make
22. Printing documents

Amaya can print documents with or without CSS style sheets, on both Linux and Windows platforms.

**Important**: On Linux platforms, Amaya can only generate a Postscript description, so you must have a PostScript printer or use an application to translate the PostScript into your specific printer language.

You can print a document in three ways:

- **Setup and print** *(File/Setup and print)*, which enables you to set some parameters and options before printing.
- **Print** *(File/Print)*, which prints a document using the current print configuration (defined using the **Setup and Print** command).
- The button on the button bar. On Linux platforms, this is a shortcut to the **Print** command. On Windows platforms, this is a shortcut to the **Setup and Print** command.

For more information on printing with style sheets, see section **About controlling printing with CSS**.

### 22.1. Using the Print command

This command prints the current document with the default printing parameters or with the values previously set using **Setup and print**.

On Windows platforms, the first time you launch the **Print** command, the standard Windows dialog is opened to check that the default printer is correct.

### 22.2. Using the Setup and print command

The **Setup and print** command allows you to change the printer and other options. Depending on your operating system, some parameters and options are reset to their default value when you browse another document.

#### 22.2.1. On Windows platforms

On Windows platforms, the first time **Setup and print** is activated, a dialog allows you to make some choices like:

- generate a table of contents for the document,
- generate a table of links for the document,
- print the document URL on top of each page,
- and print with or without style sheets.

The next times, or when the **Print** command is selected, the standard Windows dialog pops up, and allows you to choose the other printing parameters.

#### 22.2.2. On Linux platforms

Under Linux, the **Setup and print** command allows you to:

- set the paper format (A4 or US),
- set the orientation (portrait or landscape),
- choose the number of pages printed on the same sheet (1, 2, or 4 pages per sheet),
- choose the output (postscript file or printer).
In addition, you can:

- select manual paper feed,
- generate a table of contents for the document,
- generate a table of links, which creates a number after each link in the document that refers to an entry in the table of links and the corresponding URI
- print the document URI on each page,
- print the document with or without style sheets.

When the **Print** command is activated, printing is done with the standard options or the options previously selected.

### 22.3. About controlling printing with CSS

Amaya does not print links as underlined. To make this happen, add the following line to your user style sheet (the `amaya.css` file, located in your [AmayaHome directory](#)):

```css
@media print {a:link {text-decoration: underline} ... }
```

Amaya supports the CSS page break property `page-break-before: always`. When you attach this property to a specific element using a `style` attribute, Amaya generates a page break before that element. When you attach this property to an element type within the style element of the document or within an external CSS style sheet, Amaya generates a page break before each instance of that element.

**Note:** Some CSS properties are not well supported by the print process.
23. Numbering sections

Section headings (h2 to h6 elements) can be automatically numbered to reflect the document structure. The h1 element is supposed to be the document title and is not numbered. Other headings receive a number that is computed according to their type and their position in the document structure. These numbers are generated in the document itself and numbers that were generated previously are removed, every time the Tools/Section numbering command is called.

24. Generating a table of contents

Command Tools/Add-Update table of contents collects all h2 to h6 elements in the document following the current selection and generates a table of contents at the current position. It updates the current table of contents if the selection is already within a table of contents.

This command adds:

- An id attribute to each h2 to h6 element which does not have this attribute.
- A division (with a class="toc" attribute) that contains nested unnumbered lists (ul) at the current position. You can use the class attribute to set a particular style to your tables of contents.
- A list item (li) for each h2 to h6 element including a link which points to the corresponding element in the document. The link element contains a copy of the $h$ element. If the $h$ element is numbered, this number is also copied.
25. Assembling large document collections

Amaya enables you to handle document collections. Such a collection may, for example, represent a technical documentation made up of several web pages. The present manual is a document collection.

One of the web pages in the collection contains the title of the entire documentation (an h1 element), an introduction (some other elements), and a list ol or ul whose items li contain links to each chapter. Chapters are separate documents that can have a similar structure.

This organization is useful for browsing, but has several drawbacks when the entire documentation has to be printed.

Amaya addresses this problem with the Tools/Make book command, which assembles a document collection into a single volume. You use typed links for linking chapters, by associating an attribute rel="chapter" or rel="subdocument" with the anchor that refers to a chapter (create a link and use the Attributes tool for the rel attribute).

Each referred chapter or sub-document may be:

• a full external document,
• a subset of a larger external document.

To refer to a document subset, you usually define a div element to identify the part of the document you want to include, and you create a link to this div element.

Then, when you activate the Tools/Make book command, all blocks (li elements in the above example) containing a typed link to a chapter will be replaced by the corresponding actual web pages (or a part of it), and Amaya will display a unique document containing the whole collection:

• If the link refers to a web page as a whole, Amaya includes all the content of the body element of the target document.
• If the link refers to an element in a web page, Amaya includes this element with its content.
• If the link refers to a target anchor (a element), Amaya includes the content of the anchor, but not the anchor itself.

Before each replacement, the Make book command generates a new div element with an id attribute to clearly separate each included piece.

Pieces of the new generated document may contain normal links, target anchors, and target elements. During the Make book operation, Amaya ensures that each name and id attribute value remains unique in the new document. Amaya changes these values ss needed, and updates all relative links.

Amaya automatically transforms external links referring to external documents or to document parts, into internal links to the part that are now included. For example, if the link originally pointed to an external document, the link will now refer to the div element generated by the Make book command. This ensures that all links are preserved in the new unique document containing the whole collection.

This large document can then be numbered and printed with a complete table of contents and a list of all links.
26. Annotating documents

26.1. What is an annotation?
Annotations are comments, notes, explanations, or other types of external remarks that can be attached to a Web document or to a selected part of a document. As they are external, it is possible to annotate any Web document independently, without needing to edit the document itself. From a technical point of view, annotations are usually seen as metadata, as they give additional information about an existing piece of data. Amaya uses a special RDF annotation schema for describing annotations.

Annotations can be stored locally or in one or more annotation servers. When a document is browsed, Amaya queries each of these servers, requesting the annotations related to that document. Amaya presents an annotation with an icon that is visually embedded in the document. If you single-click this icon, the text that was annotated is highlighted. If you double-clicks the icon, the annotation text and other metadata are presented in a separate window.

An annotation has many properties including:
- Physical location: is the annotation stored in the local file system or in an annotation server
- Scope: is the annotation associated to a whole document or just to a fragment.
- Annotation type: 'Annotation', 'Comment', 'Query', ...

26.2. Local and remote annotations
Amaya can store annotation data in a local file system (local annotations) or it can store annotations remotely, on annotations servers accessed through the Web (remote annotations).

You do not need a server to create local annotations. Local annotations are stored under your AmayaHome directory, in a special directory called annotations, and they can be seen only by their owner (according to the system access right setup).

This directory contains three kinds of files:
- annot.index: Associates URLs with the files containing the metadata of the annotations.
- index + random suffix: Stores the metadata of the annotations related to a given URL. The metadata is specified in RDF.
- annot + random suffix.html: Contains the body of an annotation, stored as XHTML.

At any time, you can convert a local annotation to a shared one by choosing Post to server from the Tools/Annotations submenu. Once this is completed, the local annotation is deleted because it has been moved to an annotation server.

26.2.1. Remote annotations
You can store remote annotations in annotation servers so that the annotations can be downloaded by anyone having the correct access rights, such as is the case of other HTML documents.

Remote annotations are referred to as shared or public annotations, because they can be seen by other people. If you wish to install your own annotation server, please refer to Annotation-Server-HOWTO.

26.3. Creating an annotation
Before creating an annotation, it is recommended to set some parameters in the Preferences (see section Configuring annotations).
Amaya supports two kinds of annotations: annotations that apply to a whole document and annotations that apply to a specific position or a selection in a document.

- To annotate an entire document, choose Annotate document from the Tools/Annotations menu.
- To annotate a position, put the insertion point at that position in the document and choose Annotate selection from the Tools/Annotations menu.
- To annotate a selection, make a selection in the document and choose Annotate selection from the Tools/Annotations menu.

After these operations, an annotation document is displayed, with some initial metadata and an empty body.

The metadata consists of the title of the annotation, the author's name, the title of the annotated document, the annotation type, the creation date, and the last modification date.

Some of the metadata fields have special properties:

- The Source document field is a link that points back to the annotated text. If the user double-clicks it, as when following any other link with Amaya, the annotated document will be displayed with the annotated text highlighted.
- The Annotation types field lets you classify the annotation and change its type. Double-click on the text Annotation type to see the list of types available.
- The Last modified field is updated automatically each time that an annotation is saved.

Below the header area is the annotation body area. It shows the current content and can be edited like any other HTML document.

Some commands that can be applied to a document in the Amaya document window also can be applied to an annotation document in the Annotation window. For example, the body of an annotation can be printed by choosing Print from the File menu, or reloaded by choosing Reload document from the File menu.

**26.4. Saving an annotation**

Saving an annotation is the same as saving any other document with Amaya: choose Save from the File menu (or use its equivalent shortcut or button) or press the Save button.

Local annotations are saved to the annotations directory and remote annotations are saved to the annotation post server, if the user has write access.

To convert a local annotation into a shared one, choose Post to server from the Tools/Annotations menu to save the annotation to the Post server as defined in the Configuration for Annotations dialog. If this operation is successful, the local annotation will be removed and future Save operations will go directly to that annotation server.

**26.5. Deleting an annotation**

The Delete command on the Tools/Annotations submenu enables you to delete the current annotation. You can invoke this command from an annotation window.

You can also delete an annotation from the annotated document. Select the icon of the annotation and call the same command from the Tools menu in the annotated document window.
26.6. Loading and presenting annotations

The Tools/Annotations/Load command tells Amaya to load the annotations that are associated with the URL of the current document. Amaya will query the annotation servers, using the settings from Preferences/Annotations, and ask for any relevant annotation.

Annotations may also be loaded automatically whenever a new page is viewed by selecting the Autoload remote annotations check box in Preferences/Annotations.

Querying an annotation server returns all the annotations that are associated with a document.

26.7. Annotations in the Links window

The link view of the annotated document shows all the annotations.

As with the document window, annotations are identified by a pencil icon. A single-click on the icon selects the annotated text in the document window and a double-click opens the annotation.

26.8. Replying to annotations / discussion thread

Annotations can be seen as comments to web pages. The Tools/Annotations/Reply to annotation command enhances the collaborative workspace by allowing users to reply to annotations or to other replies.

The Reply to annotation command of the Tools/Annotations submenu lets you create a reply to an existing annotation or to a reply. You can invoke this command from an open annotation or a reply window.

As a result a new annotation document opens. The fields in a reply annotation can be edited just like in any other annotation as explained under Creating an annotation.

When the reply is ready, you can post it to a server with the Tools/Annotations/Post to server command or you can save it locally using the File/Save command. To delete a reply, you can use the Tools/Annotations/Delete command.

Replies can also be annotated like any other document, as explained in Creating an annotation.

All replies related to an annotation are shown at the bottom of this annotation, in a thread section. Each item in the thread gives the date of the reply, the author, and the title of the reply.

The content of any of these replies can be retrieved by double clicking the replies in the thread. The selected reply is highlighted and presented in a reply tab. When another selection is made the same reply tab is used.

26.8.1. Known issues: incomplete thread

There is no way to control which replies should be posted. In an ideal world, it should not be possible to save a reply to a reply if the previous reply was not saved in the same server. Likewise, if you delete a reply, you should delete all replies to this annotation. Not doing that leads to having fragments of threads that cannot be correctly attached in the thread.

For example, let R1 be the reply to annotation A1 and R2 a reply to R1. If you post R1, and let R2 be stored locally, then when you browse A1 and only download its local annotations, you will only see R2.

At this point, Amaya does not know that R1 exists, so it assumes that R2 has lost its parent. We identify these "orphan" threads by putting a question mark symbol ? in front of them. If later one, Amaya finds new thread items, for example, if you download R1, Amaya will then sort the thread view, inserting the threads as appropriately. In our example, R2 will become a child of R1, as expected.
26.9. Configuring annotation icons

26.9.1. User-definable icons by Annotation type (aka "dynamic icons")

The icon used to mark the location of an annotation within an annotated document may be changed by the user. The icon that denotes an annotation is chosen as a property of the annotation type. By including an RDF property of each annotation type you wish to use, you select the icon associated with annotations of that type.

The sample configuration associates the following icons:

- Advice
- Change
- Comment
- Example
- Explanation
- Question
- SeeAlso

The property name for adding annotation icons is http://www.w3.org/2001/10/typeIcon#usesIcon. For instance, to specify an icon named file:///home/question-icon.jpg for annotations that have type http://www.w3.org/2000/10/annotationType#Question you would enter the following RDF/XML into a file that Amaya reads at startup is:

```xml
<rdf:RDF
    xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
    xmlns:i = "http://www.w3.org/2001/10/typeIcon#">
  <rdf:Description rdf:about="http://www.w3.org/2000/10/annotationType#Question">
    <i:usesIcon rdf:resource="file:///home/question-icon.jpg" />
  </rdf:Description>
</rdf:RDF>
```

The simplest way to get such RDF loaded into Amaya at startup is to include the file in the config/annot.schemas file in the Amaya program directory. In order to preserve this file so that it will not be overwritten when you install a new version of Amaya, you should copy the config/annot.schemas file into your personal AmayaHome directory.

You may list as many RDF files as you want in annot.schemas. See the comments in the file included in the Amaya kit for more details.

A sample file named typeIcon.rdf declares unique icons for each annotation type declared in the http://www.w3.org/2000/10/annotationType# namespace. To experiment with user-defined icons, it may be easiest to copy this typeIcon.rdf into another directory and modify it. Copy annot.schemas to your AmayaHome directory and change the line near the end to point to your revised icon definition file.

Amaya supports JPEG, PNG, and GIF bitmap graphics formats for icon images. The icon URI may only be a file: URI; that is, the icon must appear in a local or mounted directory to Amaya. Two special forms of non-file: URIs are supported. If the file path name starts with $THOTDIR or $APP_HOME then the corresponding Amaya installation directory or personal Amaya home directory is substituted into the pathname.
26.10. Known issues with annotations and modified documents

When you use annotations with live documents (documents whose contents can be modified), you may encounter two kinds of problems: orphan annotations and misleading annotations. To explain these problems, we must first describe how Amaya attaches annotations to documents.

Amaya uses XPointer to indicate where an annotation should be attached to a document. XPointers are based in the structure of the document. To build an XPointer for a selection, for example, Amaya starts from the first point of the selection and walk backwards through the document's structure, until it finds the root of the document. If an element has an id attribute, Amaya stops building the XPointer and considers the element with the id attribute value to be the beginning of that XPointer.

For example, if you look at the HTML source for this document, you'll notice that this section is enclosed within a div element that has an id attribute with the value "Issues" Here's an extract of the source code:

```html
<div id="Issues">
<h1>Issues with ....</h1>
<p>If you are using...</p>
<p>Amaya uses <strong>XPointer</strong>...</p>
...
</div>
```

This XPointer points to the second paragraph: xpointer(id("Issues")/p[2])

The above XPointer points to the second p element, from the element parent having an id attribute with value "Issues".

Note that the use of the id attribute enables the document author to move the entire reference by the XPointer to another location within the document, without needing to update the XPointer. The XPointer does not depend on the elements that precede it.

### 26.10.1. Orphan annotations

An annotation becomes an "orphan" when it can no longer be attached to a document, that is, when the XPointer does not resolve to any element in the structure. This happens when a document's structure is modified. Amaya displays a warning if it detects any orphan annotations while downloading a set of annotations from an annotation server. All orphan annotations are visible from the Links view and are associated with an icon that shows a question mark superimposed on the annotation pencil 🤔.

### 26.10.2. Misleading annotations

An annotation becomes "misleading" when it points to a wrong piece of information. This problem is common when you annotate a portion of text that may change. In the first release, Amaya does not warn the user if an annotation is misleading. A future release may notify users of the potential for an annotation to be misleading.

### 26.10.3. What can you do to avoid this?

As the author of a document, try to use the ID attribute in strategic places, for example, inside <DIV> and p elements. For example:

```html
<p id="Amaya">Amaya uses...</p>
```

An XPointer that points to this paragraph is: xpointer(id("Amaya"))

Thus, the Xpointer will point to the same paragraph, regardless of its position in the document's structure. Amaya enables you to automatically associate with or remove an ID attribute to/from a set of elements by choosing Add/Remove IDs from the Links menu.
27. Configuring Amaya

Amaya uses different configuration files to get initial values for global parameters, dialogs, shortcuts, window size and position, user's style sheet, and so on. You can change most configuration parameters through various preferences dialogs.

> 27.1. One or more instances of Amaya

By default only one instance of Amaya is allowed to run at a time. Each new invocation is redirected to the running instance. This option can be changed by setting the environment variable AMAYA_MULTIPLE_INSTANCES=yes.

> 27.2. Configuration directory and file conventions

Amaya uses a number of default directories to store configuration information.

27.1. The config directory

Amaya stores most of the default configuration files (fonts, shortcuts and preferences files,) and all of the dialog messages in the config directory. This directory's parent is the one in which Amaya was installed.

<table>
<thead>
<tr>
<th>Unix</th>
<th>Amaya/config where Amaya=binary_path/../.. (e.g. /usr/lib/Amaya/config)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows</td>
<td>$HOMEDRIVE:$HOME\amiya by default C:\Documents and Settings$user_name\Amaya\config</td>
</tr>
<tr>
<td>Mac OS X</td>
<td>/Applications/Amaya.app/Contents/MacOS/Amayax.x/config</td>
</tr>
</tbody>
</table>

27.2. The AmayaHome directory

Amaya stores the user preferences and other user configuration files in a directory called AmayaHome. An existing directory could be selected by the user using the system environment variable AMAYA_USER_HOME. Otherwise Amaya selects a default position.

Default AmayaHome Directory :

<table>
<thead>
<tr>
<th>Unix</th>
<th>$HOME/.amaya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows</td>
<td>$HOMEDRIVE:$HOME\amiya by default C:\Documents and Settings$user_name\amiya</td>
</tr>
<tr>
<td>Mac OS X</td>
<td>~/Library/Application Support/amaya</td>
</tr>
</tbody>
</table>

This directory is preserved even when installing new versions of Amaya. It may contain the following files:

- thot.rc: Contains the user preferences, changed through the Preferences dialog.
- amaya.keyboard (Unix), amaya.kb (Windows) or amaya.kb-mac (Mac OS X): Defines Amaya keyboard shortcuts for the corresponding platform.
- amaya.css: Contains the user's style sheet.
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- **dictionary.DCT**: Amaya provides a multilingual spell checker. By default, the spell checker works with two dictionaries: English and French (you can download other dictionaries from the W3C servers). When you want to register a new word, the spell checker creates or updates this personal dictionary.

**Note:**
The `amaya.keyboard`, `amaya.kb`, `amaya.kb-mac`, and `amaya.css` files are loaded at launch time. If you change them, you must quit and restart Amaya to take the changes into account.

### 27.3. The AmayaTemp directory
Amaya stores all the temporary files it creates in a directory called the AmayaTemp directory. The following table shows where this directory is stored within different architectures:

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Directory Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unix</td>
<td>$HOME/.amaya</td>
</tr>
<tr>
<td>Windows</td>
<td>$HOMEDRIVE:$HOME\amaya</td>
</tr>
<tr>
<td></td>
<td>by default</td>
</tr>
<tr>
<td></td>
<td>C:\Documents and Settings$user_name\amaya</td>
</tr>
<tr>
<td>Mac OS X</td>
<td>~/amaya</td>
</tr>
</tbody>
</table>

Amaya creates files in this directory when browsing or printing a document. The cache is also stored in this directory. You can change the cache directory by using the Cache preferences.

Amaya always tries to delete the temporary files it creates. However, if Amaya crashes, the temporary files are not deleted. This will not impact subsequent executions of Amaya.

### 27.1. Preferences
These dialogs are found under the Preferences entry on the Edit menu (Amaya menu on MacOS X). Nine preferences dialogs are available: General, Browsing, Publishing, Cache, Proxy, Colors, Window geometry, Annotations, WebDAV, Templates, Mail.

Each of these dialogs contains three action buttons:

- **Apply**: Validates and stores the options shown
- **Defaults**: Restores, but does not save, the default values. Use the Apply button to validate the options.
- **Cancel**: Dismisses the dialog.

#### 27.1.1. General preferences

<table>
<thead>
<tr>
<th>27.1.1.1. Profile</th>
</tr>
</thead>
</table>

Amaya may be configured so as to include more or less features, with their corresponding user interface components. The set of features available at a given time is called a profile.

In General preferences a menu allows you to choose the profile that meets your needs (Lite, Lite+Math, etc.). The chosen profile is not applied immediately when pressing the Apply button. You have to restart Amaya to activate the new profile.

<table>
<thead>
<tr>
<th>27.1.1.2. Panel bar position</th>
</tr>
</thead>
</table>

Tool panels can be displayed, on left side of the window, or on the right side of the window, or customizable.
If you select the **Customizable** option, you may:

- Re-order the list of panels: You click on the title of the panel and drag it to the right position in the list.
- Display panels on both sides to get access to all tools at the same time: You can move a tool panel by clicking on its title and drag it to the other window side. The final position of the **cursor** (not the panel) must be exactly on the window side.
- Detach a panel: If you move a tool panel to a different position than a window side, the panel is set floating.
- Remove/Add a panel: When you click on the cross in the panel title, the panel is removed. You can also close and open a panel with the **Show/Hide toolbars** submenu of the **Views** menu.

> 27.1.1.3. Font and language options

This section of the **General preferences** dialog lets you choose the font zoom level and define the dialogue language used in Amaya. These options are explained below.

**Font Zoom.** You can zoom in and out, document window by document window. Each document (text and images) displayed within a zoomed window will be displayed larger or smaller than its real size according to the current zoom. This option enables you to change the font zoom for all windows. This change affects only font sizes but not image sizes, and is reflected immediately in all open document windows.

**Dialogue language.** Specifies the language for all of Amaya's menus and dialogue messages. At the present time, alternate languages are available: American English (en), French (fr), German (de), Italian (it), Spanish (es), Portuguese (pt), Finnish (fi), Hungarian (hu), Russian (ru), Turkish (tr), etc. When launched, Amaya loads dialogue files according to the current dialogue language: en-, fr-, de-, it-, es-, pt-, fi- or tr-, etc. files. These dialogue files are located in the **Amaya/config** directory.

> 27.1.1.4. Home page

This field specifies the URI that Amaya will load when launched or when the user clicks the home page button. An example is [http://www.w3.org](http://www.w3.org)

**Note:** A complete URI must be used.

> 27.1.1.5. Check boxes

The options below can be toggled on or off by clicking the check box next to an option name. A mark in the box indicates that the option is active.

**XML editing mode.** The user can set his/her default editing mode (Text or XML).

**Preserve lines when pasting.** This option concerns the pasting form an external application. When that option is active, Amaya keeps lines in the source application. If not active, newline characters are replaced by spaces. This option is immediately effective.

**Keep multiple spaces.** When that option is active, Amaya generates no-break spaces to keep multiple inserted spaces. This option is immediately effective.

**Generate backup files.** When that option is active, Amaya generates a backup file for each edited document, after a given volume of modification. This option is immediately effective.

**Anti-aliasing.** Controls whether anti-aliased fonts are used (better rendering when this option is used).

**ISO format for date.** Controls whether generated dates are displayed using the ISO format (DD-MM-YYYY) or the American format (YYYY/MM/DD).
Show targets. Controls whether link targets should be shown in all document main views. Show targets may be useful when one wants to create new links.

Display all shortcuts. Controls whether shortcuts sequences should be shown in menus.

Warn when closing multiple tabs. Ask Amaya to display a dialog when several tabs are closed at the same time.

Show "Tip of the day" at startup. Controls whether the "Tip of the day" is shown at startup.

> 27.1.1.6. Access keys
This option lets you specify the Alt or Ctrl modifier used to manage access keys of documents, or says that access keys are ignored.

Note: The Alt modifier could not work because it is used by UI widgets.

27.1.2. Browsing preferences
The Browsing preferences dialog control loading of pages.

> 27.1.2.1. Check boxes
The options below can be toggled on or off by clicking the check box next to an option name. A mark in the box indicates that the option is active.

Check duplicated IDs. Request to check duplicated IDs when loading a document. That option will increase the reading time of documents.

Load images. Controls whether images should be loaded. This option is immediately effective.

Load objects. Controls whether objects should be loaded. This option is immediately effective.

Show background images. Controls whether background images should be shown. This option is only effective when loading a new document.

Apply CSS. Controls whether CSS style sheets should be loaded and applied or not. This option is immediately effective.

Double-click activates link. Since the first version of Amaya, users double-click a link to activate it. This enables you to choose whether to edit a link or activate it. You can override this behavior by deactivating this option.

> 27.1.2.2. Opening location
This option gives the default behaviour selected by the user when:

• A recent document is open from the File/Open document submenu.
• Another URI is selected in the combobox of the navigation toolbar.

> 27.1.2.3. Current screen type
Defines the current screen type. This value has an effect when a CSS style sheet specifies a media. This option is immediately effective.

> 27.1.2.4. Language negotiation preferences
If a document exists in different languages and your server is configured to do language negotiation, you can use this dialog to enter your language preferences (the first one has the highest priority). Try browsing this press release, which is available in French, English, and Japanese versions. By changing the language negotiation to the ISO codes for the above languages (fr, en, or ja) you can transparently request any of these versions.
27.1.3. Publishing preferences

The Publishing preferences dialog lets you set preferences for ETAGS and preconditions, whether to verify each PUT command with a GET, set the default name for URLs ending with a slash, and enable PUT redirections on specified domains. These options are explained below.

> 27.1.3.1. Charset for new documents

Defines the charset used for new documents.

> 27.1.3.2. Check boxes

The options below can be toggled on or off by clicking the check box next to an option name. A mark in the box indicates that the option is active.

Add the xsl stylesheet for MathML elements. Generate a call to a xsl stylesheet able to transform included MathML elements into external objects. This xsl stylesheet was developed by the MathML working group to make Internet Explorer able to display this kind of compound documents.

Use the application/xhtml+xml MIME type for XHTML documents. This option, if enabled, associated the new, official XHTML MIME type to all new XTHML documents that are published on the Web. This option is disabled by default because not all servers can handle this MIME type at the time of this release. Note that this requires also a change in your server configuration, if it's not storing somewhere the metadata associated with each document. This option does not modify the MIME type of existing documents: the MIME type that is received is the same one that will be used when saving the document, except if you do a Save as operation, of course.

Use ETAGS and preconditions. HTTP/1.1 introduces new headers that avoid the lost updates problem when publishing. With this option, you can detect conflicts when two users are publishing the same document.

Verify each PUT with a GET. If you don't trust your server, this option tells Amaya to retrieve each document as soon as it has been published and compare it with the copy stored in your workstation. If the documents differ, Amaya will warn you.

Export CR/LF. This option, if enabled, precedes each line feed by a carriage return (DOS format).

> 27.1.3.3. Fixed line length

That option gives the maximum number of characters expected in lines generated by Amaya when it creates a HTML or XML file. When the value is 0, Amaya uses its own default value (today 78).

> 27.1.3.4. Default name for URLs finishing in '/'

An HTTP server usually associates URLs that finish in '/' with a default name, for example, Overview.html. This option enables you to specify the default name that Amaya should use when publishing such a URL. Ask your Webmaster for the default name for your server.

> 27.1.3.5. Allow automatic PUT redirections on these domains

According to the HTTP/1.1 specification, PUT operations should not be automatically redirected unless it can be confirmed by the user, because this might change the conditions under which the request was issued. You can avoid having Amaya prompt with a PUT redirection warning by entering the name of the server's domain to which you are publishing. You may specify one or more domains, each separated with a space, e.g., www.w3.org groucho.marx.edu.

27.1.4. Cache preferences

Amaya provides a cache through libwww. The cache is enabled by default and is stored in the AmayaTemp/libwww-cache directory. This tab also provides a Flush Cache button for erasing the cache directory.
27.1.4.1. Check boxes

The options below can be toggled on or off by clicking the check box next to an option name. A mark in the box indicates that the option is active.

Enable cache. Activates or deactivates the cache.

Cache protected documents. By default, documents which are protected by a password are stored in the cache. Use this option to override this behavior.

Disconnected mode. Always retrieves documents from the cache.

Ignore Expires: header. Does not expire cache entries.

27.1.4.2. Cache directory

Identifies the address of the libwww-cache directory. Changing this directory does not erase the contents of the previous one. You must remove it yourself.

27.1.4.3. Cache size

Gives the size, in megabytes, of the cache repository.

27.1.4.4. Cache entry size limit

Gives the maximum size for a cache entry.

27.1.4.5. Flush cache

This button allows you to flush the current cache.

27.1.5. Passwords preferences

Amaya allows you to store the connection data typed in the authentication dialog. These data are the user’s name and user’s password associated to a server name/realm name pair.

27.1.5.1. Remember passwords for sites

When this button is on, the authentication dialog asks the user if he wants Amaya to remember the typed password. If off (default option), the user will not be able to store these authentication data.

27.1.5.2. Remove all

This option allows you to remove all the authentication datas stored in Amaya.

27.1.5.3. Sites

This list allows you to remove a name/password pair associated to a server name/realm name pair.

27.1.6. Proxy preferences

You can use this dialog to specify a proxy and a set of domains where the proxy should or should not be used.

HTTP proxy. Identifies the proxy to be used for HTTP requests. You must specify the full name of the server. If the server is running in a port other than 80, then, like in a URL, you need to add a ":" char to the proxy name, followed by the port number. The table below provides two examples.

<table>
<thead>
<tr>
<th>HTTP Proxy Entry</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>groucho.marx.edu</td>
<td>Declares a proxy called groucho.marx.edu running at the default port 80.</td>
</tr>
</tbody>
</table>
Declares a proxy called groucho.marx.edu, running at port 1234.

27.1.6.1. Proxy domain list

Lists space-separated domains where you want to use your proxy. Use the switch buttons to specify if the proxy should or shouldn't be used with this domain list. For example:
harpo.marx.edu zeppo.marx.edu chico.marx.edu

> 27.1.7. Color preferences

This dialog lets you select the default foreground and background colors for documents. It enables you to control the colors used by Amaya to display the current selection.

- **Document foreground color** is the default foreground color of displayed pages.
- **Document background color** is the default background color of displayed pages.
- **Selection color** is the foreground color that shows the selection when it's limited to an insert point.
- **Selection background color** is the background color that shows the current selection when it's extended.

All these colors may be selected by name, hex code, or RGB format:

- Proposed valid names.
- Valid hexcode format is #FF00FF, for example.
- Valid RGB format is rgb(255, 0, 255), for example.

You can also select colors with the associated color palette.

> 27.1.7.1. Check boxe

The options below can be toggled on or off by clicking the check box next to an option name. A mark in the box indicates that the option is active.

**Color source.** Activates or deactivates the coloration of document sources.

**Note:** Color changes will be effective when you open a new document window.

27.1.8. Window geometry preferences

**Save geometry on exit.** Controls whether the current windows geometry should be saved when the application is exited.

Two buttons enable you

- to save the current window size and position of the current window,
- or to restore the default values.

**Note:** These changes take effect when you open new document windows.
27.1.9. Configuring annotation settings

> 27.1.9.1. Annotation user

The author of the annotation. By default, Amaya uses the login name of the user. This field enables you to change your user name to something more meaningful.

> 27.1.9.2. Annotation post server

This setting defines the server to which the annotations are posted. Local annotations are always saved to the local repository, and by default, this setting is empty. The post server is not automatically included in the list of servers, so you should enter the post server name in both places.

> 27.1.9.3. Annotation servers

A list of servers Amaya should contact when looking for annotations. You can specify one or more servers. The reserved server name localhost tells Amaya to search the local annotations, but does not necessarily mean that a local annotation server is running (or it would show a complete URL ). Under Unix, the annotation servers are specified as a space separated list. Under Windows, you can add a new server name by clicking in the Annotations servers list, pressing the Enter key, and then typing the server name. By default, this list is initialized to localhost.

Tip: To temporarily disable an annotation server, add a ".-" char before its URL. Amaya will ignore it.

> 27.1.9.4. Check boxes

The options below can be toggled on or off by clicking the check box next to an option name. A mark in the box indicates that the option is active.

Autoload local annotations. Whether Amaya should request local annotations automatically every time you browse a new Web page. If it is not checked, then you can manually choose Load annotations from the Tools/Annotations submenu.

Autoload remote annotations. Whether Amaya should request remote annotations automatically (by querying the annotation server) every time you browse a new Web page. If it is not checked, then you can manually choose Load annotations from the Tools/Annotations submenu.

Note: You may experience a delay when Amaya loads remote annotations in resolving the DNS name of the annotation servers.

Disable remote autoload at each startup (for offline work). Whether Amaya should reset the autoload remote annotations option at launch time. This option can be useful if you are working offline, but still want to autoload the local annotations as well as the remote ones.
28. Changing keyboard shortcuts

Keyboard shortcuts are useful to invoke menu commands directly from the keyboard. You can accomplish this using keyboard shortcuts files (one per platform). These files define associations between an invoked command and a keyboard sequence. They are located in the Amaya/config directory: amaya.keyboard (Linux), amaya.kb (Windows) and amaya.kb-mac (Mac OS X).

- List of default keyboard shortcuts for Linux
- List of default keyboard shortcuts for Windows
- List of default keyboard shortcuts for Mac OS X

You can modify these files to define your own shortcuts. The syntax to define an association is:

Directive = KeySeq ':' IdentCommand ;
KeysSeq = KeySet [ ',' KeySet ] ;
KeySet = [ Modifier ] [ 'Shift' ] Key ;
Key = '<Key>' KeyValue / '<Key>' SpecialKey ;
Modifier = 'Ctrl' / 'Alt' / 'Meta' ;
KeyValue = 'a' / 'b' / ... ;
SpecialKey = 'Escape' / 'Delete' / 'Space' / 'BackSpace' /
    'Enter' / 'Up' / 'Down' / 'Left' / 'Right' /
    'Home' / 'End' / 'F1' / ... / 'F1' / ... ;
IdentCommand = 'TtcInsertChar(' Char ')' / NAME '()' ;
Char = KeyValue / OctalValue / Entity ;
OctalValue = '\' NUMBER ;
Entity = DecEntity / HexaEntity ;
DecEntity = '&' '#' NUMBER ';' ;
HexaEntity = '&' '#' 'x' HEXADECIMAL ';' ;

The list of available commands is (an up to date list can be found in Amaya's sources: Amaya/amaya/EDITOR.A):

- Moving commands:
  - Move character by character: TtcNextChar, TtcPreviousChar
  - Move word by word: TtcNextWord, TtcPreviousWord
  - Move to then beginning/end of the current line: TtcStartOfLine, TtcEndOfLine
  - Move line by line: TtcNextLine, TtcPreviousLine
  - Move element by element: TtcNextElement, TtcPreviousElement, TtcChildElement, TtcParentElement
  - Scroll from page to page: TtcPageDown, TtcPageUp, TtcPageTop, TtcPageEnd
  - Scroll one line up or one line down: TtcLineUp, TtcLineDown

- Selection extension commands:
  - Select character by character: TtcNextSelChar, TtcPreviousSelChar
  - Select word by word: TtcNextSelWord, TtcPreviousSelWord
  - Select to then beginning/end of the current line: TtcStartOfLine, TtcSelStartOfLine, TtcSelEndOfLine
  - Select line by line: TtcNextSelLine, TtcPreviousSelLine

- Follow a link or activate an HTML form element (menu, button, etc.): DoAction.
- Skip to the next (or the first if there is selection) link or HTML form element in the document: NextLinkOrFormElement.
• In File menu:
  NewXHTML, NewMathML, NewSVG, NewCss, OpenDoc, Reload, GotoPreviousHTML,
  GotoNextHTML, GoToHome, SaveDocument, SaveDocumentAs, Synchronize, SetupAndPrint,
  PrintAs, CloseDocument, AmayaCloseTab, AmayaCloseWindow, AmayaClose.

• In Edit menu:
  TtcUndo, TtcRedo, TtcCutSelection, TtcCopySelection, TtcPaste,
  TtcDeleteSelection, SetBrowserEditor, TtcSearchText, SpellCheck, TransformType,
  ConfigAmaya.

• In Views menu:
  ShowPanel, FullScreen, ShowMapAreas, ShowTargets, ZoomIn, ZoomOut, ShowLogFile,
  ShowFormatted, ShowStructure, ShowAlternate, ShowLinks, ShowToC, ShowSource,
  SplitHorizontally, SplitVertically.

• In Insert menu:
  ◦ CreateAddress CreateParagraph, CreateImage, CreateHorizontalRule,
    CreateBlockQuote, CreatePreformatted, CreateAddress, CreateDivision,
    CreateNOScript, CreateObject, CreateParameter, CreateIFrame,
    CreateBreak, MakeBook, CreateAreaRect, CreateAreaCircle, CreateAreaPoly,
    CreateForm, CreateFileInput, CreateImageInput, CreatePasswordInput,
    CreateHiddenInput, CreateLabel, CreateFieldset, CreateOptGroup,
    CreateToggle, CreateRadio, CreateOption, CreateTextInput,
    CreateTextArea, CreateSubmit, CreateReset, CreateHeading1,
    CreateHeading2, CreateHeading3, CreateHeading4, CreateHeading5,
    CreateHeading6, CreateList, CreateNumberedList, CreateDefinitionList,
    CreateDefinitionTerm, CreateDefinitionDef, CreateObject,
    CreateParameter
  ◦ CreateTable, CreateCaption, CreateThead, CreateTbody, CreateTfoot,
    CreateRow, CreateDataCell, CreateHeadingCell
  ◦ CreateBase, CreateMeta, CreateLinkInHead, CreateScript, CreateStyle,
    CreateComment.
  ◦ SetOnOffEmphasis, SetOnOffStrong, SetOnOffCite, SetOnOffDefinition,
    SetOnOffCode, SetOnOffVariable, SetOnOffSample, SetOnOffKeyboard,
    SetOnOffAbbr, SetOnOffAcronym, SetOnOffINS, SetOnOffDEL.
  ◦ SetOnOffItalic, SetOnOffBold, SetOnOffTeletype, SetOnOffBig,
    SetOnOffSmall, SetOnOffSub, SetOnOffSup, SetOnOffQuotation, SetOnOffBDO.
  ◦ CreateInlineMath, CreateMath, CreateMROOT, CreateMSQRT, CreateMFRAC,
    CreateMSUBSUP, CreateMSUB, CreateMSUP, CreateMUNDEROVER, CreateMUNDER,
    CreateMOVER, CreateMROW, CreateMMULTISCRPT, CreateMTABLE

• In Format menu:
  CreateClass, ApplyClass, LinkCSS, OpenCSS, DisableCSS, EnableCSS, RemoveCSS,
  DoLeftAlign, DoRightAlign, DoCenter, DoJustify.

• In Links menu:
  LinkToPreviousTarget, CreateOrChangeLink, CreateTarget, DeleteAnchor, MakeID.

• In Tools Menu:
  ChangeTitle, DeleteColumn, AnnotateSelection, AnnotateDocument, LoadAnnotations,
  PostAnnotation, DeleteAnnotation, FilterAnnot, ConfigAnnot.
• In Help Menu:
  HelpAmaya, HelpAtW3C, HelpBrowsing, HelpSelecting, HelpSearching, HelpViews,
  HelpCreating, HelpLinks, HelpChanging, HelpTables, HelpMath, HelpSVG,
  HelpImageMaps, HelpStyleSheets, HelpAttributes, HelpPublishing, HelpPrinting,
  HelpNumbering, HelpMakeBook, HelpAnnotation, HelpConfigure, HelpShortCuts,
  HelpAccess.
29. Accessibility

The Amaya user population is extremely diverse. In addition to speaking a variety of languages and operating on several platforms, the population contains users with visual, aural, and motor disabilities.

Because Amaya is an Open Source project, it is important to produce documents that are accessible to all members of the user base. Amaya provides a number of accessibility features to assist you with achieving this goal.

29.1. Accessibility features

Accessibility for people with disabilities is being improved with each release. Currently, you can perform most Amaya functions without using a mouse, and carry out most editing functions (except entering text) without using the keyboard.

Accessibility features in the current version include the ability to:

- Navigate and edit in Alternate, Link, Structure, and Table of contents views of a document, which are all synchronized with the default Formatted view. See Working with document views.
- Edit in the Source view, and manually synchronize it with other views.
- Dynamically add, remove, and edit multiple style sheets, including a user style sheet. See Working with style sheets.
- Assign access keys for form fields, areas, or links. See About access keys.
- Use keyboard shortcuts for menu options, links, and form controls. See Selecting from the keyboard and About keyboard shortcuts.

29.2. Producing accessible content

You can use Amaya to produce content that conforms to the W3C's Web Content Accessibility Guidelines. Some accessibility features are already built in. For example, you cannot add an image until you specify the alternative text because of the requirement for an alt attribute for images and imagemap areas.

Amaya also automatically produces valid W3C-compliant markup. However, you control other features, such as appropriate long descriptions and captioning, through the Attributes tool or the structure view.

The Amaya help currently describes how to use some HTML elements. As additional documentation is written, it will include information on ensuring accessibility for any pages that you produce.

The most thorough guidelines are the W3C's Web Content Accessibility Guidelines. The W3C's Web Accessibility Initiative also publishes the following quick tips for making accessible Web sites:

- **Images & animations.** Use the alt attribute to describe the function of each visual. For more information, see Working with Graphics.
- **Image maps.** Use client-side map and text for hotspots. For more information, see Working with image maps.
- **Multimedia.** Provide captioning and transcripts of audio, and descriptions of video.
- **Hypertext links.** Use text that makes sense when read out of context. For example, avoid using "click here" as the link text.
- **Page organization.** Use headings, lists, and a consistent structure. Use CSS for layout and style where possible. For more information, see Working with style sheets.
• **Graphs and charts.** Summarize the data or use the longdesc attribute. For more information, see [Working with graphics](#).

• **Scripts, applets, and plug-ins.** Provide alternative content in case active features are inaccessible or unsupported.

• **Tables.** Use tables to make line-by-line reading sensible and to summarize data. For more information, see [Working with tables](#).

• **Frames.** Display pages without frames, using `NOFRAMES` and meaningful titles.

• **Check your work.** Validate your documents prior to publishing. You can use the W3C tools, checklist, and guidelines at: [http://www.w3.org/TR/WAI-WEBCONTENT](http://www.w3.org/TR/WAI-WEBCONTENT).
30. An introduction to HTML

This section provides a short introduction to the HTML language. It describes HTML elements and explain how to use them.

30.1. Information types in HTML

HTML 4.0 (Strict) provides elements to denote certain types of information. Although there is a default way each element type is presented, it is possible to use style sheets to change the presentation of any element. The types of information that can be represented by HTML elements are:

**Headings**

There are six levels of headings in HTML, which should be used to mark page or topic headings in order of their importance.

**Lists**

HTML provides two simple list types:
1. numbered lists (such as this one)
2. unordered lists.

It also provides for lists of terms and definitions.

**About the author**

A special element is provided for contact information about the author of an HTML page.

**Definitions**

These can be marked as an inline definition (i.e. defined in a normal paragraph) or in a list of terms and definitions. This list of information types is a definition list itself. It is also possible to use the value glossary in the rel attribute of a link, if that link is to a definition. In Amaya, the Links and Structure views include any rel attributes on links.

**Quotations**

These can be marked inline or as blocks. In each case it is possible to mark the source of the quotation using the cite element or the cite attribute.

**Sample input, output, computer code**

Elements are provided for samples of computer code, variables, text to be entered and sample output.

**Abbreviations and acronyms**

Elements are available to denote abbreviations and acronyms.

**Insertions and Deletions**

There are elements to mark text that has been inserted, or should be deleted (This is useful for collaborative editing document history).

**Emphasis**

HTML provides two levels of emphasis: ordinary emphasis and strong emphasis.

30.2. HTML document structure

HTML documents are fairly flat in structure - rather than having sections that contain subsections, division of text is usually marked by different level heading elements which are alongside paragraph and other block elements.
There is the `div` element which is provided to group together a section into a single division - to use it select the section (including its heading) you want to form part of the group and then select the option Division (div) from the Insert menu (or use the keyboard shortcut `Ctrl h Ctrl v`).

There is a special structure in HTML - the link, which makes the Web a web. Further information about how to create links, and how to create tables, is provided in the user manual section of the documentation.

A normal HTML page should include a title, a level one heading, and an address or some information about the author. It may also include paragraphs, lists, images, tables, and content organised into subsections with different levels of headings.

### 30.3. Heading elements

HTML provides 6 levels of headings: `h1, h2, h3, h4, h5, and h6`. These should be used to mark headings according to their relative importance, with h1 being the most important. Headings are block elements, and can only be created as children of elements that have block-type content. Note that for tables of data there are special elements to mark headings.

The first three levels of heading can be created from the toolbar using the heading images $T_1, T_2, T_3$. All levels of heading can be created from the Insert menu, or using keyboard shortcuts. The default keyboard shortcuts are `Ctrl h Ctrl 1` for h1, `Ctrl h Ctrl 2` for h2, and so on to `Ctrl h Ctrl 6` for h6.

There are default styles for headings in most browsers to give some idea of their relative importance, but the author can also use style sheets to provide a suggested presentation.

### 30.4. List elements

There are three types of list in HTML. The two simple types are ordered and unordered lists, and there is also a definition list. Lists are block-type structures, but they can be created within other lists.

Example:

**Definition list**

This is a definition list - it has definition terms (`dt`) and definitions (`dd`) as children.

One definition term can be followed by a number of definitions.

**Ordered lists**

There are three types of list

1. Ordered Lists (`ol`)
2. Unordered Lists (`ul`)
3. Definition lists (`dl`)

**Unordered Lists**

Unordered lists and ordered lists share some characteristics:

- Simple lists
- Both types have children which are list items (`li` elements)

The three types of list can all be created from the toolbar using the list buttons $\ll, \lll, \llll$. All types of list can be created from the Insert menu, or using keyboard shortcuts. The default keyboard shortcuts for unix systems are `Ctrl h Ctrl l` for an ordered list, `Ctrl h Ctrl n` for an unordered list, and `Ctrl h Ctrl d` for a definition list.
Style sheets can be used to change the presentation of lists, including changing the style of list bullets or using an image as a bullet, and changing the style of text, for example using a different font for definition terms and the actual definitions.

30.5. About the author

A web page should always contain some information which enables a reader to find out who wrote it or is responsible for it. This can include an email address (which can be linked), a URI, or even a physical address. The type address is used to identify this information, and it can contain other block-level elements such as paragraphs, headings, and lists.

There is a default style for address elements in most browsers but the author can also use style sheets to provide a suggested presentation.

30.6. Inline markup

Text within a paragraph, heading, or other block element can be marked up in a variety of ways, for example to emphasise it, or to highlight text that should be entered by a user into a computer. Most of these inline elements are described in this page, although links, which are inline elements, are described separately.

30.6.1. Definitions

The dfn element is used to mark an inline definition (a word which is given as a defining instance)

Style sheets can be used to change the presentation of inline definitions.

30.6.2. Inline quotations

Quotations which are inline can be marked using the information type "quotation" - the HTML element q. This element is selected from the Character elements submenu of the Insert menu, or with the keyboard shortcut Ctrl i Ctrl q. It is possible to give a URI source for the quotation, using the cite attribute.

Style sheets can be used to change the presentation of inline quotations. The HTML specification states that inline quotation should be rendered with the appropriate punctuation marks for the language being represented.

30.6.3. Sample input, output and computer code

Elements are provided to mark computer code, such as statement:do-something, with separate markup for variables, as well as user input and program output - the elements code, var, kbd and samp. These elements are found in the Information types submenu of the Insert menu, and there are keyboard shortcuts for all of them - Ctrl i followed by Ctrl t for code, Ctrl v for variables, Ctrl k for user input and Ctrl m for sample output.

Style sheets can be used to change the presentation of these elements.

30.6.4. Acronyms and abbreviations

Acronyms and abbreviations should be marked as such, using the abbr and acronym elements available in the Information types submenu of the Insert menu. There is also the shortcut Ctrl i Ctrl y for acronym. This allows recognition for different types of systems.

The title attribute can also be used to specify the expansion of the acronym. Select the text to be marked, for example W3C, select the Insert menu, the information types submenu, and the option acronym. Then select the entire element (F2 key), open the Attributes menu, select title, enter World Wide Web Consortium, and apply it.
Style sheets can be used to change the presentation of acronyms or abbreviations.

### 30.6.5. Insertions and deletions

The `del` and `ins` elements are available in the Information types submenu of the Insert menu to mark text which ought to be deleted or which has already been inserted. Style sheets can be used to change the presentation of insertions and deletions.

### 30.6.6. Emphasis elements

HTML has elements to define two levels of emphasis:

1. *Ordinary emphasis*, using the `em` element and
2. *Strong emphasis*, using the `strong` element.

Both types of emphasis can be applied from the toolbar using the `A` and `A` buttons, or from the Information types submenu of the Insert menu. There are also standard keyboard shortcuts - `Ctrl i` for emphasis (because the default rendering is often italicised text) and `Ctrl i Ctrl s` for strong emphasis (because the default rendering is often bold text). If there is a current selection, the emphasis is applied to that, otherwise the appropriate element is created, as a child of the current element.

The emphasis elements are toggled in Amaya - to remove an emphasis select the element and reapply the appropriate emphasis. For example place the cursor somewhere in a `strong` element, use the `F2` key to select the element, and then use the keyboard shortcut, menu item, or the `A` button - the `strong` element will be removed.

Style sheets can be used to change the presentation of both types of emphasis.

### 30.6.7. Span element

The `span` element in conjunction with an `id` (style or class) attribute offers a generic mechanism for adding structure to a document. This element is generated by Amaya when the user applies an attribute to a piece of text. It's removed when the attribute is deleted.

### 30.7. Character style elements in HTML

*What NOT to do and how it should be done...*

HTML 4.0 (Strict) includes some elements which provide character styles. These elements should be replaced by the use of structural elements or style sheets wherever possible.

All the elements in question except `PRE` are found in the Character Element submenu of the XHTML menu:

- `b` and `i`  
  These should be replaced by use of the `strong` and `em` elements where they are used to provide emphasis for a word or phrase. There are special elements to denote headings, terms that are being defined, and certain special uses, such as a quotation, piece of computer code, etc. If the elements are simply being used to provide heavier font style sheets should be used instead

- `big` and `small`  
  In general these effects should be achieved with style sheets. Where they are used to denote specific types of information such as the source of a quotation, sample computer input or output, etc, there are appropriate HTML elements that should be used.
sub and sup

Style sheets should be used to achieve the presentation effects of these elements. In cases such as mathematical expressions, an appropriate markup language such as MathML should be used where possible.

tt and pre

Authors should use style sheets to achieve these effects.

30.8. HTML elements

Amaya recognizes all the elements available in the HTML 4.0 language, but only generates elements that are not deprecated. The following list contains the elements that can be generated in Amaya, each linked to the HTML specification for the element. Help information is also available about these elements.

a

anchor - a link and/or target

abbr

abbreviated form (e.g., WWW, HTTP, etc.)

acronym

an acronym: a type of abbreviation that is usually pronounced as a word. (e.g., laser, WYSIWYG)

address

information about the author

area

client-side image map area

b

bold text style (This effect should be achieved using style sheets or markup that conveys structural information)

base

document base URI

bdo

I18N BiDi over-ride

big

large text style (This effect should be achieved using style sheets or markup that conveys structural information)

blockquote

long quotation

body

document body

br

forced line break

button

push button
caption
table caption
cite
citation
code
computer code fragment
col
table column
colgroup
table column group
definition description
del
deleted text
dfn
instance definition
div
generic language/style container
dl
definition list
dt
definition term
em
emphasis
fieldset
form control group
form
interactive form
h1, h2, h3, h4, h5, h6
heading
head
document head
hr
horizontal rule
html
document root element
italic text style (This effect should be achieved using style sheets or markup that conveys structural information)

iframe
inline subwindow

img
Embedded image

input
form control

ins
inserted text

kbd
text to be entered by the user

label
form field label text

legend
fieldset legend

li
list item

link
a media-independent link

map
client-side image map

meta
generic metainformation
	noscript
alternate content container for non script-based rendering

object
generic embedded object

ol
ordered list

optgroup
option group

option
selectable choice

p
paragraph
**param**
- named property value

**pre**
- preformatted text

**q**
- short inline quotation

**samp**
- sample program output, scripts, etc.

**script**
- script statements

**select**
- option selector

**small**
- small text style (This effect should be achieved using style sheets or markup that conveys structural information)

**span**
- generic language/style container

**strong**
- strong emphasis

**style**
- style information

**sub**
- subscript

**sup**
- superscript

**table**
- A table

**tbody**
- table body

**td**
- table data cell

**textarea**
- multi-line text field

**tfoot**
- table footer block

**th**
- table header cell
thead
  table header block

title
  document title

tr
  table row, containing table cells.

tt
  teletype or monospaced text style (This effect should be achieved using style sheets or markup that conveys structural information)

ul
  unordered list

var
  instance of a variable or program argument

Amaya does not allow the user to create Framesets. It is possible to edit framesets in the structure view - elements can be copied and pasted, and appropriate attributes are available.

frame
  subwindow

frameset
  window subdivision

noframes
  alternate content container for non frame-based rendering

Amaya does not create the following elements which are deprecated in HTML 4.0 Strict (i.e. should no longer be used). They should be replaced as noted for each element:

applet
  Should be replaced by the object element

basefont
  Should be replaced by the use of style sheets

center
  Should be replaced by the use of style sheets

dir
  Should be replaced by the ul element

font
  Should be replaced by the use of style sheets

isindex
  Should be replaced by the use of forms

menu
  Should be replaced by the ul element
s and strike

Should be replaced by the use of `del` (to identify text to be removed) or by `style sheets`.

u

Should be replaced by the use of `style sheets`.