

# Index

## • System Objects

### ○ book

#### Attributes

Name	Type	Default
barpos	See description	25
<p>May be used to change the position of the navigation bar. If a number alone is specified it determines the distance of the bar to the bottom end of the pages. Additionally a 'top' may precede the number, in which case the bar is put above the pages. The number is, again, the distance between bar and the pages' top edge. E.g.: <code>barpos="top 10"</code> would place the bar above the pages and leave a spacing of ten pixels.</p>		
bgcolor	]-infty, infty[	0xCCCCCC
<p>The default background color for pages in the book. Can be an ARGB or RGB value. While the number may be in any format parseable by ActionScript, it is recommended for readability sake to use a hexadecimal formatted value. Hexadecimal values are marked by prefixing them with <code>0x</code>. Note that using many transparent pages next to each other, causing a deep level of transparency and thus many visible pages, can reduce performance significantly.</p>		
bggradient	{false, true}	true
<p>Determines whether to show the gradient in the background below the book or not.</p>		
buttoncolors	See description	
<p>This attribute allow to define custom colors for page buttons, for buttons representing pages being the start of a chapter or having an anchor id. The format is: <code>/what:color[,what:color]/, what:={"chapter","anchor"}, color:=[0x000000,0xFFFFFFFF]</code> Some examples:</p> <ul style="list-style-type: none"><li>■ <code>chapter:0xFF0000</code>, makes all chapter buttons red.</li><li>■ <code>anchor:0x00FF00</code>, makes all anchor buttons green.</li><li>■ <code>chapter:0x0000FF,anchor:0x999999</code>, makes all chapter buttons blue and all anchor buttons gray.</li></ul>		
centercovers	{false, true}	true
<p>Determines whether to center the book if a cover page is displayed (i.e. the first or last page).</p>		
cornerhint	{false, true}	true

Name	Type	Default
Determines whether to initially show the corner hinting, to let users know they can drag the pages. This hint is only shown until a user clicks somewhere, begins a (possibly automatic) drag or turns a page.		
dragkeepdist	[1, pagewidth]	auto
The distance to keep to the border a drag started from, to avoid glitches. Defaults to page width / 16.		
dragrange	[1, pagewidth]	auto
The distance to the border inside which auto dragging starts (when the user moves the cursor near a corner), and clicking triggers a page turn or drag. Defaults to page width / 4.		
dragspeed	]0, 1]	0.25
The speed of pages while dragged or turning. Higher values mean faster page movement / turning. 1 means instant, i.e. the page turn animation is skipped and while dragging the page is always next to the cursor.		
errorlevel	See description	ERROR WARNING
The error levels which are printed in the console (opened by pressing #). Levels are: ERROR, WARNING and NOTICE. Can be combined by using the binary-or operator ( ). E.g <code>&lt;book errorlevel="ERROR"&gt;</code> would print out all fatal errors in the console, but suppress notices and warning. ALL is a shortcut for ERROR WARNING NOTICE and the default value.		
foldfx	[0, 1]	0.5
The default alpha value of folding effects for pages. If set to zero folding effects are turned off, 1 means 100% opaque.		
handcursor	{false, true}	false
Determines whether to use the default hand cursor (that is also used for links, e.g.), instead of the custom arrow cursors from the interface.swf, when hovering areas that trigger a page drag or turn.		
hidebuttons	{first, fullscreen, help, goto, language, last, mute, next, prev, settings, slideshow}	
All buttons listed here will <i>not</i> be shown in the navigation. Separate entries with a blank. Invalid values will be ignored. first = go to first page, last = go to last page, slideshow = start or pause slideshow, settings = open settings, fullscreen = fullscreen and restore, goto = goto page dialog, mute = mute and unmute, next = next page, prev previous page, help = show help, language =		

Name	Type	Default
language chooser		
ignoresides	{false, true}	false
If set to true, the sides of the book's pages wont be used to trigger page turns on clicks. Only corners will be used. This will open the side areas for interactivity with the pages' contents, e.g. if you use loaded swfs with interactivity such as forms you might consider disabling the sides to gain more interactive space for, say, buttons.		
ignoresyslang	{false, true}	false
If set to true, the system language of the user opening the book will not be regarded when determining the default language, but instead the first entry in the lang attribute will always be used.		
instantjumpcount	[0, infty[	5
The number of pages that can be turned (via navigation or other programmatical means) before the pages are turned instantly, meaning without animation.		
lang	String	en
The id of the localization to use for the GUI tool tips and texts. This can be a list of ids separated by commas (e.g. "en,de,it"). The first entry in the list will be used as the default language. If the system language (i.e. the language set in the operating system of the user) is in the list it will be used as the default language. The engine attempts to load files with the names <code>lang.LANG_ID.xml</code> from the same directory as the <code>megazine.swf</code> file. At least one language must be given (if none are specified the engine tries to load English per default).		
langpath	URL	
Path relative to the engine to a folder containing localization files, i.e. <code>lang.xx.xml</code> files and the corresponding flag images.		
langwarn	{false, true}	false
Determines whether to show warning strings if a localization cannot be found. If no warnings are to be shown, the text will remain blank.		
loadparallel	[1, infty[	4
The number of elements to load at a time.		
lowqualitycount	[0, infty[	2
The number of pages that can be turned at once before falling back to low quality for performance's sake. When any single page is turned, quality changes to medium. As soon as		

Name	Type	Default
all page turning animations have finished, quality is restored to best.		
ltr	{false, true}	true
Determines the reading order of the book. Left to right reading order (default) means the first page is the leftmost one (topmost in XML), right to left reading order the rightmost one (lowermost in XML). This also effects how the startpage attribute works (left to right: count from the left, right to left: count from the right), as well as the direction of the slideshow.		
maxloaded	[0, infty[	22
<p>The maximum number of pages that may be present in memory at a time. I.e. only this number of pages will be loaded, and after that new pages will only be loaded after changing the current page. Then the pages left and right to the current one will be loaded until this many pages are present in memory again - pages "further away" than half of this number will be unloaded (removed from memory). This helps books with a lot of content such as catalogs to not use so much memory (RAM) at a time. It also reduces bandwidth consumption, because only the necessary pages are loaded - plus some more, so that the used does not have to wait after every page change.</p> <p>For values greater than 0 books with that many pages or less all pages will be loaded and kept in memory. In case 0 is given, all pages of the book will be loaded to memory, regardless of how many pages there are.</p> <p>This value represents the number <i>single</i> pages loaded to memory. In case of the default value (22) the current double page (2) and five more double pages to each the left and the right (2*10) will be loaded.</p> <p>One final remark: Flash caches data once it was loaded on the local drive, which means that once a page has been loaded it will be afterwards be loaded from disk, even if it was removed from memory. It will therefore be displayed again almost immediately, and no additional bandwidth will be used.</p>		
navigation	{false, true}	true
Determines whether to show page navigation/control bar (below pages).		
openhelp	{always, once, never}	false
Determines when to automatically show the help window. <i>always</i> will always open the help window when the engine is loaded. <i>once</i> opens it only the first time the user visits the homepage. <i>never</i> will not automatically open the help window, the user will have to open it himself via the navigation.		
pagewidth	[1, infty[	275
The width of a page in pixels. Content overflowing a page is cut off and not rendered.		
pageheight	[1, infty[	400

Name	Type	Default
The height of a page in pixels. Content overflowing a page is cut off and not rendered.		
pagenumbers	{false, true}	true
Show the numbers of the pages currently visible to the left and right of the pagination.		
pageoffset	]-infty, infty[	0
Number by which to offset the page numbers. This can be used to sync the actual page numbers (displayed below the pages) with page numbers displayed on images used on the pages. The displayed page numbers below the pages will be 'original number + pageoffset'.		
pagesounds	{false, true}	true
Play sounds when dragging / turning pages.		
password	String	
An password that has to be entered before the book is shown. THIS IS NOT SAFE, BECAUSE IT IS READABLE IN PLAIN TEXT IN THE XML FILE (AND IT IS QUITE EASY TO GET THE XML'S URL). Use this only for lowest level safety. Otherwise use an .htaccess file when using an Apache HTTP server, or an equivalent method.		
postpage	URL	
If given, the image from this URL is loaded and displayed to the right of the back cover page. Together with the prepage attribute this can be used to create the effect of fixed covers, i.e. an 'always open' book e.g. (if prepage and postpage represent the inner sides of the cover)		
prepage	URL	
If given, the image from this URL is loaded and displayed to the left of the cover page. This can be used to display instructions on how to use MegaZine for users e.g.		
reflection	{false, true}	false
Default on/off state of the page reflections.		
shadows	[-1,1]	0.25
The intensity of the shadow and highlight effects while turning or dragging a page. The absolute value is the intensity, higher is stronger. If set to 0 those effects are initially disabled. If negative the effects are initially disabled, but if enabled have the intensity of the absolute value of the given value. E.g. -0.5 would initially disable the effects, but if enabled via the menu they'd have the intensity 0.5.		
slidedelay	[0, infty[	5

Name	Type	Default
The wait time in seconds, when using the slideshow (how long a double page is displayed). Can be overwritten by chapters and pages.		
soundcount	String	"3,2,5,1,1"
This tells the engine how many page turn sounds of each type there are (in the snd folder) / how many it should try to load. The order is as follows: drag, restore, turn, dragstiff, endstiff.		
startpage	[0, infity[	0
The default starting page, i.e. which page is displayed when the book is loaded.		
startslide	{false, true}	false
Determines whether to automatically start the slideshow when the book is loaded or not.		
thumbauto	{false, true}	false
This attribute has no effect if all pages are stored in memory at the same time (see maxloaded attribute). Determines whether thumbnails should be generated for all pages in background. This means all pages are loaded once, one after the other, and then discarded again (if not in the current range of active pages). This feature is disabled per default for two reasons: it slightly diminishes performance until all thumbnails have been generated, and it is a potential waste of bandwidth. If deactivated only the required thumbnails will be generated, i.e. the thumbnails that should currently be displayed (when the user hovers a page button in the navigation). Generally pages only have to be loaded once to generate a thumbnail. If a page is unloaded (removed from memory) the last known thumbnail will be used.		
waitfornoturning	{false, true}	true
Determines whether to wait for all page animations (page turns actually, not drags) are finished before beginning to load new pages. This is only relevant if the book has more pages than may be kept in memory at a time. When disabling this the user is less likely to see blank pages when flipping through the pages very fast, but performance will most likely decrease.		
zoomalign	{left, center, right} x {top, middle, bottom}	center middle
Defines how the visible area changes when changing the zoom step. The position given here is the part of the viewport that remains still. I.e. per default when zooming in the center of the visible area remains in same spot, relative to the actual image. If <code>top left</code> were given, the top left corner of the visible area would remain in the same spot, relative to the actual image.		
zoomcontrolalpha	[0, 1]	0.25
Sets the alpha / transparency of the control field and thumbnail preview in zoom mode when it is not hovered by the cursor.		

Name	Type	Default
zoomfs	{false, true}	true
Determines whether to go into fullscreen mode when a zoom button is clicked or not.		
zoominit	[0, zoommax]	0
Determines the initial zoom step when zoom mode is opened. Setting this to zero (the default) causes the image to fit the display area. Please note that the actual minimal zoom step (when the image fits the display area) depends on the image size and display size, so setting this to anything else than 0 or the same value as set in <code>zoommax</code> is normally not expedient.		
zoommax	[1, infty[	1
Determines the maximal zoom step when zoom mode is opened. E.g. 1.0 (the default) will not allow to get the image to be actually enlarged, but only scaled down until it perfectly fits the display area. Setting it to something bigger than 1 will cause the loaded image to be actually upscaled, which is not a good idea when using raster graphics (such as JPG, PNG and the like). Therefore this attribute is primarily meant to be used when you use vector graphics in zoom mode (such as SWF files).		
zoommousemove	{false, true}	true
This allows you to toggle between the two ways to move around in zoom mode. The first implementation requires the user to drag the image around, and is still available if setting this attribute to false. The new implementation moves the image according to the user's mouse movement, making it faster and easier to scroll around in one image.		
zoomrotate	{false, true}	true
Determines whether or not to show the buttons to rotate the image in zoom mode.		
zoomthumb	{false, true}	true
Determines whether to show the thumbnail in zoom mode when the image is larger than available display area.		

### Childnodes

Must contain at least one chapter node.

### ○ chapter

#### Attributes

Name	Type	Default
anchor	String	





Name	Type	Default
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An example:

`pages/page[0-10].jpg`

Loads all files of the names `pages/page0.jpg`, `pages/page1.jpg`, ..., `pages/page10.jpg` as `img` elements and puts them into 11 automatically generated `page` element.

It is also possible to define multiple intervals, e.g. `pages[2]/page[0-10].jpg` would load the images `pages1/page0.jpg`, ..., `pages1/page10.jpg`, `pages2/page0.jpg`, ..., `pages2/page10.jpg`.

It is also possible to use high resolution variants. Those will have to follow a certain naming, though. To declare high resolution variants, add the following to the end of the String:

`|_postfix`, where `_postfix` is the end of the file name of the high resolution files, and the beginning of the file names has to be the same as for the actual images. If `_postfix` is empty, the same URL that is used for the page image will be used for the zoom mode (i.e. `hires = src`).

An example:

`pages/page[0-10].jpg|_big` would not only load the images as `img` elements and put them into `pages`, it would additionally define a `hires` attribute for each image, accordingly to its name. Also the so created images/pages will be put into one gallery. The equivalent XML would look like so (one page only):

```
...
<page>

</page>
...
```

Additional settings are possible when adding "?", allowing a few of the boolean settings for all images. The possible settings are set to their non-default value by adding the letter they correspond to after the "?". The corresponding pairs are:

a - aa  
b - showbutton  
n - nocache  
s - rasterize

So, to make all images loaded use `rasterize="true"` and `showbutton="false"` use something like this:

`pages/page[0-10].jpg|_hires?bs`

Or, without using `hires`:

`pages/page[0-10].jpg?bs`

Or, using `hires` with the same image as the original one:

`pages/page[0-10].jpg|?bs`

The settings must follow *after* `hires` settings (i.e. after the optional "|").

<code>slidedelay</code>	<code>[0, infty[</code>	5
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The wait time in seconds, when using the slideshow for all pages in this chapter (how long a double page is displayed). Overrides setting in book for this chapter.

## Childnodes

Must contain at least one page node.

- **page**

**Attributes**

Name	Type	Default
anchor	String	
An id that can be used to navigate to this page. Anchor names must be unique, else the last definition is used. Use anchors in the <code>URL</code> attribute of elements supporting it.		
bgcolor	]-infty, infty[	0xCCCCCC
The background color for this page. Overwrites the default value defined in <code>book</code> or the parent <code>chapter</code> . Can be an ARGB or RGB value. While the number may be in any format parseable by ActionScript, it is recommended for readability's sake to use a hexadecimal formatted value. Hexadecimal values are marked by prefixing them with <code>0x</code> . Note that using many transparent pages next to each other, causing a deep level of transparency and thus many visible pages, can reduce performance significantly.		
buffer	{false, true}	false
Determines whether to create a static copy of the page's content while turning or dragging the page. This means that no content of the page will be animated while the page itself is moving (e.g. animations in loaded swfs). On the other hand performance will greatly increase for complex swfs with many animated elements or vectorgraphics. As soon as the page's movement finishes the content's animation will be displayed again.		
buttoncolor	]-infty, infty[	
Can be used to make the button representing this page in the navigation bar have a custom color.		
foldfx	[0, 1]	0.5
The alpha value of the folding effect for this pages. Overwrites the default value defined in <code>book</code> or the parent <code>chapter</code> . If set to zero folding effects are turned off, 1 means 100% opaque.		
shadows	[0, 1]	0.25
The intensity of the shadow and highlight effects while turning or dragging the page. The value is the intensity, higher is stronger. Overwrites the default value defined in <code>book</code> . If set to zero shadow and highlight are turned off, 1 means 100% strength.		
slidedelay	[0, infty[	5
The wait time in seconds, when using the slideshow for this page (how long a double page is		

Name	Type	Default
displayed). Overrides setting in chapter. If two pages of a doublepage have a delay given, only that of the right page (the even part) will be used.		
stiff	{false, true}	false
If true, this page and it's back side make up a stiff page, resulting in a different turning animation. Only has to be defined in one page of the affected doublepage. Stiff pages cannot have folding effects.		

### Childnodes

May contain any number of `area`, `img`, `nav`, `snd`, `txt` and `vid` nodes. z-Ordering depends on the order of the nodes, with the first childnode being bottommost (in the back), and the last one topmost (in front).

## • Page Elements

### ○ area

*Used to overlay pages with areas to provide tooltips and links based on areas, not on images.*

### Attributes

Name	Type	Default
height	]0, infty[	
The height of the area. Required, if not given the element does not load.		
id	String	
Meant for programmers. When given the <code>getElementById</code> function in the <code>MegaZine</code> class can be used to reference this element (by this id). Elements are therefore uniquely identified by their id, so no two elements can share one id.		
left	[0, infty[	0
Distance of the element's left border to the left border of the page.		
overlay	See description	0
Determines the overlay type when the element has a URL set and is hovered. The default is a inner glow at the borders. Setting this to "none" suppresses the overlay. The basic structure of the allowed values for this attribute is as follows: <code>type[normal, hover, attr1, attr2, ...]; type[normal, hover, attr1, ...]</code> Please note that attributes (in brackets) may be omitted.		

Name	Type	Default
<p>Each overlay has attributes, the basic ones valid for all overlays being the alpha values for the normal and hovered states.</p> <p>normal The normal alpha, when the object is not hovered.</p> <p>hover The alpha when the object is hovered.</p> <p>Other parameters depend on the overlay type. Available overlays are currently <code>color</code> and <code>border</code>. Their specific attributes are</p> <ul style="list-style-type: none"> <li>■ Overlay "color" <ul style="list-style-type: none"> <li>color The color of the overlay. This should be a value between 0 and 0xFFFFFFFF.</li> </ul> </li> <li>■ Overlay "border" <ul style="list-style-type: none"> <li>type The type of the border. Available types are: <code>glow</code>, <code>solid</code>, <code>dotted</code>. They currently all have the same "subattributes", being the following attributes.</li> <li>color The color of the border. This should be a value between 0 and 0xFFFFFFFF.</li> <li>size The size/width of the border. Can be any positive number.</li> </ul> </li> </ul> <p>Multiple overlay types may be set by separating them with semicolons (;).</p> <p>Examples:  <code>color[0.5,1,0xFF0000]</code>  <code>border[0,1,dotted]</code>  <code>border[0,0.75,solid,0xFF0000,3];color[0.25,0.5,0x6699CC];border</code></p>		
position	{left, center, right} x {top, middle, bottom}	
<p>May be used to position elements relative to the page. Horizontally via left, center and right, as well as vertically via top, middle and bottom. The two values left and top do not have a real effect, but only exist for completeness' sake. If this attribute is present, absolute positioning via attributes <code>left</code> and <code>top</code> will be ignored, if present.</p>		
priority	[0, 50]	5
<p>Determines the priority of the element while loading. Elements where this value is <i>lower</i> will be loaded <i>first</i>. Default values vary by element. Unknown external elements will be given the default priority of 10. In general, internal elements are loaded before external elements, and elements expected to be larger (i.e. which take longer to load) will be loaded after smaller elements. Therefore the default priorities are:</p> <p>area, nav, txt: 5  img, unknown external: 10  snd: 15  vid: 20</p>		
target	String	_blank

Name	Type	Default
<p>If the element is linked externally (has the URL attribute set and the link is not to an internal anchor) this determines where the link is opened. Possible values:            "_self" specifies the current frame in the current window.            "_blank" specifies a new window.            "_parent" specifies the parent of the current frame.            "_top" specifies the top-level frame in the current window.            Other values will be interpreted as window names. This works the same way as it does in HTML.</p>		
title	String	
<p>Tooltip text to display on mouseover. If the URL is given, this replaces the link text being displayed as a tooltip. If left blank, the tooltip is suppressed, even if a URL is given.            Note: if used, existing title child nodes will be ignored! For localization use the title child nodes instead.</p>		
top	[0, infty[	0
<p>Distance of the element's top border to the top border of the page.</p>		
URL	URL	
<p>URL to navigate to if clicked. Can be an absolute or relative path. Relative paths are always relative to the megazine.swf file. Can also be a reference to an anchor of a chapter or page, written as anchor:anchorname, e.g. &lt;img URL="anchor:myAnchor" .../&gt;.            If a number is given after the anchor: prefix, and no anchor with that name exists, the book navigates to the page with that number.</p>		
width	]0, infty[	auto
<p>The width of the area. Required, if not given the element does not load.</p>		

### Childnodes

May contain title nodes to localize the title. If the title attribute is set it will be handled as an english title child node. If an english child node exists it will override the title attribute, meaning it will be ignored.

### o img

Used to load images (JPG, PNG, GIF) and Flash movies (SWF).

### Attributes

Name	Type	Default
aa	{false, true}	false

Name	Type	Default
		<p>Enable antialiasing for this image. Does not work for SWF Movies. Enabling this for too many images may result in decreased performance.</p>
gallery	String	
		<p>May be used together with the hires attribute to assign images to galleries. In zoom mode the user can then navigate between all images in the same gallery. There may be any number of galleries in a book. When leaving zoom mode the system automatically navigates to the page containing the current gallery image.</p>
height	]0, infty[	auto
		<p>The height of the image. If left blank the original height of the loaded file is used. If it differs from the original image size, the image is scaled accordingly.</p> <p>If a value smaller than 1 is provided, the image is scaled relativley, i.e. the display height is the original height times the value specified here.</p> <p><b>Note:</b> using absolute size values for loaded SWF files can cause problems. In such cases, either export your SWF files so they have the correct size, or use realtive scaling (values between 0 and 1).</p>
hires	URL	
		<p>Absolute or relative path to a high resolution variant of the image. Relative paths are always relative to the <code>megazine.swf</code> file. This activates the display of a zoom button in the corner of the image. When clicked, the zoom mode is activated and loads the high resolution image. You can use a "template variable" in your URL, <code>{src}</code>, which will be replaced with the content of the <code>src</code> attribute of this image, minus the file extension. So e.g. if you have <code>&lt;img src="folder/myimage.jpg" hires="{src}_big.jpg" /&gt;</code> this is equivalent to <code>&lt;img src="folder/myimage.jpg" hires="folder/myimage_big.jpg" /&gt;</code></p>
iconpos	{bottom, left, right, top} or two positive numbers	bottom right
		<p>When a high resolution version of an image is given a zoom button is displayed in the corner of the image. This value controls in which corner the button is displayed. Any combination of the allowed values is possible, but if two exclusive values are given (i.e. top/bottom and left/right) only the latter one is used. E.g. "top left bottom" shows the button in the bottom left, and is not good style. Use "left" instead (bottom can be left out because it's the default value).</p> <p>Alternatively two positive numbers, separated by a blank may be given. They will be used as the X (first number) and Y (second number) coordinates, with the top left corner of the loaded image or swf is the origin. The given values will thus be the distance from the top left corner of the image to the top left corner of the zoom button in pixels.</p>

Name	Type	Default
id	String	
<p>Meant for programmers. When given the <code>getElementById</code> function in the <code>MegaZine</code> class can be used to reference this element (by this id). Elements are therefore uniquely identified by their id, so no two elements can share one id.</p>		
left	[0, infty[	0
<p>Distance of the element's left border to the left border of the page.</p>		
nocache	{false, true}	false
<p>Flash caches everything it loads internally, that means that every bit of loaded data, in this case images, is stored locally, and will be loaded from the local disk the next time the page is opened. Although this allows to save a lot of bandwidth, and increases loading times drastically, it may be unwanted in cases where content changes frequently (as the content won't be updated for returning users). When this setting is set to true, the internal caching functionality will be ignored, and the image will always be loaded from the server.</p>		
overlay	See description	0
<p>Determines the overlay type when the element has a URL or high resolution version set and is hovered. The default is a inner glow at the borders. Setting this to "none" suppresses the overlay. The basic structure of the allowed values for this attribute is as follows:  <code>type[normal, hover, attr1, attr2, ...]; type[normal, hover, attr1, ...]</code>  Please note that attributes (in brackets) may be omitted.  Each overlay has attributes, the basic ones valid for all overlays being the alpha values for the normal and hovered states.</p> <p>normal  The normal alpha, when the object is not hovered.</p> <p>hover  The alpha when the object is hovered.</p> <p>Other parameters depend on the overlay type. Available overlays are currently <code>color</code> and <code>border</code>. Their specific attributes are</p> <ul style="list-style-type: none"> <li>■ Overlay "color"  color  The color of the overlay. This should be a value between 0 and 0xFFFFFFFF.</li> <li>■ Overlay "border"  type  The type of the border. Available types are: <code>glow</code>, <code>solid</code>, <code>dotted</code>. They currently all have the same "subattributes", being the following attributes.  color  The color of the border. This should be a value between 0 and 0xFFFFFFFF.  size  The size/width of the border. Can be any positive number.</li> </ul> <p>Multiple overlay types may be set by separating them with semicolons (;).</p>		

Name	Type	Default
<p>Examples:  <code>color[0.5,1,0xFF0000]</code>  <code>border[0,1,dotted]</code>  <code>border[0,0.75,solid,0xFF0000,3];color[0.25,0.5,0x6699CC];border</code></p>		
position	{left, center, right} x {top, middle, bottom}	
<p>May be used to position elements relative to the page. Horizontally via left, center and right, as well as vertically via top, middle and bottom. The two values left and top do not have a real effect, but only exist for completeness' sake. If this attribute is present, absolute positioning via attributes <code>left</code> and <code>top</code> will be ignored, if present.</p>		
priority	[0, 50]	10
<p>Determines the priority of the element while loading. Elements where this value is <i>lower</i> will be loaded <i>first</i>. Default values vary by element. Unknown external elements will be given the default priority of 10. In general, internal elements are loaded before external elements, and elements expected to be larger (i.e. which take longer to load) will be loaded after smaller elements. Therefore the default priorities are:  area, nav, txt: 5  img, unknown external: 10  snd: 15  vid: 20</p>		
showbutton	Boolean	true
<p>If the hires attribute is set a small button is displayed on top of the image, which, if clicked, opens the zoom mode. As the whole image is clickable this is actually superfluous, but as it gives the user a good hint of which images are zoomable and which aren't without the need to hover them with the cursor it's visible per default. Use this attribute to hide that button. Note that the button will be shown regardless of this attribute if the image is linked (the URL attribute is set), because then the click on the image opens the URL, so the button is the only possibility to open the zoom mode.</p>		
src	URL	
<p>Absolute or relative path to the file to load. Relative paths are always relative to the <code>megazine.swf</code> file.</p>		
rasterize	{false, true}	false
<p>Determines whether a loaded flash movie (SWF) should be cached as an image. This only makes sense when the loaded SWF-file contains many vector graphics (e.g. text). Animated flash movies will only show the first frame (or rather: the frame that was visible when the snapshot was created; this can vary). Possibility to interact with the loaded SWF is lost.</p>		



Name	Type	Default
Has no effect on images.		
target	String	_blank
<p>If the element is linked externally (has the URL attribute set and the link is not to an internal anchor) this determines where the link is opened. Possible values:</p> <p>"_self" specifies the current frame in the current window.</p> <p>"_blank" specifies a new window.</p> <p>"_parent" specifies the parent of the current frame.</p> <p>"_top" specifies the top-level frame in the current window.</p> <p>Other values will be interpreted as window names. This works the same way as it does in HTML.</p>		
title	String	
<p>Tooltip text to display on mouseover. If the URL is given, this replaces the link text being displayed as a tooltip. If left blank, the tooltip is suppressed, even if a URL is given.</p> <p>Note: if used, existing title child nodes will be ignored! For localization use the title child nodes instead.</p>		
top	[0, infinity[	0
Distance of the element's top border to the top border of the page.		
URL	URL	
<p>URL to navigate to if clicked. Can be an absolute or relative path. Relative paths are always relative to the magazine.swf file. Can also be a reference to an anchor of a chapter or page, written as anchor:anchorname, e.g. &lt;img URL="anchor:myAnchor" .../&gt;.</p> <p>If a number is given after the anchor: prefix, and no anchor with that name exists, the book navigates to the page with that number.</p>		
width	]0, infinity[	auto
<p>The width of the image. If left blank the original width of the loaded file is used. If it differs from the original image size, the image is scaled accordingly.</p> <p>If a value smaller than 1 is provided, the image is scaled relatively, i.e. the display width is the original width times the value specified here.</p> <p><b>Note:</b> using absolute size values for loaded SWF files can cause problems. In such cases, either export your SWF files so they have the correct size, or use relative scaling (values between 0 and 1).</p>		

## Childnodes

May contain `title` nodes to localize the title. If the `title attribute` is set it will be handled as an english `title` child node. If an english child node exists it will override the `title` attribute, meaning it will be ignored.

May contain `src` nodes to localize the URL. Relation to the `src` attribute is the same as with `title`.

Both child nodes are meant to be used to localize the element. On the one hand the title, on the other the element data itself (e.g. if there is text in the image that should be localized).

### o **nav**

*Creates a list of links that are automatically positioned.*

## Attributes

Name	Type	Default
<code>align</code>	{center, left, right}	left
The text alignment of the element's text in the list.		
<code>color</code>	]-infty, infty[	0x000000
The text color used for the list elements.		
<code>height</code>	[1, infty[	
Height of the navigational list. If given, elements are spread evenly across the given height. If left blank elements are stacked on top of each other as close as possible.		
<code>hover</code>	]-infty, infty[	0x333333
The text color used for the list elements while the mouse is over the element. Only used if the <code>lnk</code> 's <code>URL</code> attribute has a value.		
<code>id</code>	String	
Meant for programmers. When given the <code>getElementById</code> function in the <code>MegaZine</code> class can be used to reference this element (by this id). Elements are therefore uniquely identified by their id, so no two elements can share one id.		
<code>left</code>	[0, infty[	0
Distance of the element's left border to the left border of the page.		
<code>position</code>	{left, center, right} x {top, middle, bottom}	

Name	Type	Default
<p>May be used to position elements relative to the page. Horizontally via left, center and right, as well as vertically via top, middle and bottom. The two values left and top do not have a real effect, but only exist for completeness' sake. If this attribute is present, absolute positioning via attributes <code>left</code> and <code>top</code> will be ignored, if present.</p>		
priority	[0, 50]	5
<p>Determines the priority of the element while loading. Elements where this value is <i>lower</i> will be loaded <i>first</i>. Default values vary by element. Unknown external elements will be given the default priority of 10. In general, internal elements are loaded before external elements, and elements expected to be larger (i.e. which take longer to load) will be loaded after smaller elements. Therefore the default priorities are:            area, nav, txt: 5            img, unknown external: 10            snd: 15            vid: 20</p>		
top	[0, infty[	0
<p>Distance of the element's top border to the top border of the page.</p>		
width	[1, infty[	auto
<p>The width of the navigational list. If left blank the the list will be as wide as it needs to be. In most cases. But generally it's a good idea to provide a width. If a width is given and the text in a <code>lnk</code> element is too long it gets wrapped.</p>		

### Childnodes

Must contain at least one `lnk` node.

- o **snd**

*Used to load sounds (MP3). This does NOT stop a `bgsound` defined in the chapter of the containing page. Sounds are played in an infinite loop, and continue playing even if the containing page is not visible.*

### Attributes

Name	Type	Default
delay	[0, infty[	0
<p>Time in milliseconds before the sound starts fading in. This does not affect fadeout, which will still begin immediately if the containing page becomes invisible.</p>		
fade	[0, infty[	2000

Name	Type	Default
Time in milliseconds over which to fade in and out the sound when the containing page becomes visible or hidden, respectively.		
id	String	
Meant for programmers. When given the <code>getElementById</code> function in the <code>MegaZine</code> class can be used to reference this element (by this id). Elements are therefore uniquely identified by their id, so no two elements can share one id.		
loop	{false, true}	true
Determines whether the sound runs in an infinite loop or is played only once. If it should not loop, but start again when the page becomes visible a second time, additionally use the restart attribute.		
onlywhenactive	{false, true}	false
When set to true, playback may only commence once the containing page is the main / current page. Normally playback can begin once the page is visible, i.e. even if it is just visible because the user lifts the corner of the page hiding the containing page.		
priority	[0, 50]	15
Determines the priority of the element while loading. Elements where this value is <i>lower</i> will be loaded <i>first</i> . Default values vary by element. Unknown external elements will be given the default priority of 10. In general, internal elements are loaded before external elements, and elements expected to be larger (i.e. which take longer to load) will be loaded after smaller elements. Therefore the default priorities are: area, nav, txt: 5 img, unknown external: 10 snd: 15 vid: 20		
restart	{false, true}	false
When set to true, instead of continuing the playback when the user returns to the containing page, the sound restarted, i.e. playback begins anew at the beginning.		
src	URL	
Absolute or relative path to the sound file to load. Relative paths are always relative to the <code>megazine.swf</code> file.		

### Childnodes

May contain `title` nodes to localize the title. If the `title` *attribute* is set it will be handled as an english `title` child node. If an english child node exists it will override the `title` attribute,

meaning it will be ignored.

- **txt**

*Used to display plain text.*

### Attributes

Name	Type	Default
align	{center, justify, left, right}	left
The text alignment of the element's text.		
color	]-infty, infty[	0x000000
The text color used.		
content	String	
The text to display.		
height	[1, infty[	0
The height of the text box.		
id	String	
Meant for programmers. When given the <code>getElementById</code> function in the <code>MegaZine</code> class can be used to reference this element (by this id). Elements are therefore uniquely identified by their id, so no two elements can share one id.		
left	[0, infty[	0
Distance of the element's left border to the left border of the page.		
position	{left, center, right} x {top, middle, bottom}	
May be used to position elements relative to the page. Horizontally via left, center and right, as well as vertically via top, middle and bottom. The two values left and top do not have a real effect, but only exist for completeness' sake. If this attribute is present, absolute positioning via attributes <code>left</code> and <code>top</code> will be ignored, if present.		
priority	[0, 50]	5
Determines the priority of the element while loading. Elements where this value is <i>lower</i> will be loaded <i>first</i> . Default values vary by element. Unknown external elements will be given the		

Name	Type	Default
<p>default priority of 10. In general, internal elements are loaded before external elements, and elements expected to be larger (i.e. which take longer to load) will be loaded after smaller elements. Therefore the default priorities are:            area, nav, txt: 5            img, unknown external: 10            snd: 15            vid: 20</p>		
top	[0, infty[	0
Distance of the element's top border to the top border of the page.		
width	[1, infty[	0
The width of the text box. If the text is too long it is automatically wrapped to the new line.		

### Childnodes

May contain `content` tags to localize the content of this text field.

### ○ vid

*Used to load videos (FLV). As of Update 3 for FlashPlayer 9 it is also possible to load h.264 encoded videos if using one of the following container formats: MP4, M4A, MOV, MP4V, 3GP, and 3G2 (Source).*

### Attributes

Name	Type	Default
autoplay	{false, true}	true
Determines whether to automatically start video playback as soon as a context where it may play is entered (i.e. when it's on a visible page if <code>nopause</code> is false, and on the main page if <code>onlywhenactive</code> is true).		
delay	[0, infty[	0
Time in milliseconds before the sound starts fading in and video playback is started. This does not affect fadeout, which will still begin immediately if the containing page becomes invisible.		
fade	[0, infty[	2000
Time in milliseconds over which to fade in and out the sound of the video when the containing page becomes visible or hidden, respectively.		
gui	URL	

Name	Type	Default
guicolor	[0, infty[	0xFF333333
height	[1, infty[	auto
id	String	
left	[0, infty[	0
loop	{false, true}	true
nopause	{false, true}	false
onlywhenactive	{false, true}	false
overlay	See description	0

Name	Type	Default
<p>the allowed values for this attribute is as follows:  <code>type[normal, hover, attr1, attr2, ...]; type[normal, hover, attr1, ...]</code>  Please note that attributes (in brackets) may be omitted.  Each overlay has attributes, the basic ones valid for all overlays being the alpha values for the normal and hovered states.</p> <p><b>normal</b>  The normal alpha, when the object is not hovered.</p> <p><b>hover</b>  The alpha when the object is hovered.</p>		
<p>Other parameters depend on the overlay type. Available overlays are currently <code>color</code> and <code>border</code>. Their specific attributes are</p> <ul style="list-style-type: none"> <li>■ Overlay "color"  <code>color</code>  The color of the overlay. This should be a value between 0 and 0xFFFFFFFF.</li> <li>■ Overlay "border"  <code>type</code>  The type of the border. Available types are: <code>glow</code>, <code>solid</code>, <code>dotted</code>. They currently all have the same "subattributes", being the following attributes.  <code>color</code>  The color of the border. This should be a value between 0 and 0xFFFFFFFF.  <code>size</code>  The size/width of the border. Can be any positive number.</li> </ul>		
<p>Multiple overlay types may be set by separating them with semicolons (;).</p>		
<p>Examples:  <code>color[0.5,1,0xFF0000]</code>  <code>border[0,1,dotted]</code>  <code>border[0,0.75,solid,0xFF0000,3];color[0.25,0.5,0x6699CC];border</code></p>		
<b>position</b>	{left, center, right} x {top, middle, bottom}	
<p>May be used to position elements relative to the page. Horizontally via left, center and right, as well as vertically via top, middle and bottom. The two values left and top do not have a real effect, but only exist for completeness' sake. If this attribute is present, absolute positioning via attributes <code>left</code> and <code>top</code> will be ignored, if present.</p>		
<b>priority</b>	[0, 50]	20
<p>Determines the priority of the element while loading. Elements where this value is <i>lower</i> will be loaded <i>first</i>. Default values vary by element. Unknown external elements will be given the default priority of 10. In general, internal elements are loaded before external elements, and elements expected to be larger (i.e. which take longer to load) will be loaded after smaller elements. Therefore the default priorities are:  area, nav, txt: 5  img, unknown external: 10</p>		



Name	Type	Default
snd: 15 vid: 20		
restart	{false, true}	false
When set to true, instead of continuing the playback when the user returns to the containing page, the video restarted, i.e. playback begins anew at the beginning.		
src	URL	
Absolute or relative path to the video file to load. Relative paths are always relative to the <code>megazine.swf</code> file.		
target	String	_blank
<p>If the element is linked externally (has the URL attribute set and the link is not to an internal anchor) this determines where the link is opened. Possible values:</p> <p>"_self" specifies the current frame in the current window.</p> <p>"_blank" specifies a new window.</p> <p>"_parent" specifies the parent of the current frame.</p> <p>"_top" specifies the top-level frame in the current window.</p> <p>Other values will be interpreted as window names. This works the same way as it does in HTML.</p>		
title	String	
<p>Tooltip text to display on mouseover. If the <code>URL</code> is given, this replaces the link text being displayed as a tooltip. If left blank, the tooltip is suppressed, even if a URL is given.</p> <p>Note: if used, existing <code>title</code> child nodes will be ignored! For localization use the <code>title</code> child nodes instead.</p>		
top	[0, infty[	0
Distance of the element's top border to the top border of the page.		
URL	URL	
<p>URL to navigate to if clicked. Can be an absolute or relative path. Relative paths are always relative to the <code>megazine.swf</code> file. Can also be a reference to an <code>anchor</code> of a chapter or page, written as <code>anchor:anchorname</code>, e.g. <code>&lt;img URL="anchor:myAnchor" .../&gt;</code>.</p> <p>If a number is given after the <code>anchor:</code> prefix, and no anchor with that name exists, the book navigates to the page with that number.</p>		
width	[1, infty[	auto
The width of the video. If left blank the original width of the loaded file is used. If it differs from the original image size, the video is scaled accordingly. Some playback control SWFs may		

Name	Type	Default
require a minimum width.		

### Childnodes

May contain `title` nodes to localize the title. If the `title` *attribute* is set it will be handled as an english `title` child node. If an english child node exists it will override the `title` attribute, meaning it will be ignored.

May contain `src` nodes to localize the URL. Relation to the `src` attribute is the same as with `title`.

Both child nodes are meant to be used to localize the element. On the one hand the title, on the other the element data itself (e.g. if the video should be localized).

## • Element settings

*Some elements may have child tags themselves. This is mostly used for localization purposes. Here is a list of element child tags. See the elements themselves for supported child tags.*

### ○ Ink

#### Attributes

Name	Type	Default
lang	String	
<p>ID of the language for the navigation entry, used for localization (e.g. "en"). <code>lnk</code> nodes of the same language ID are grouped to form the navigation list in the respective language. The order of the elements of other languages is not important. That is to say</p> <pre>&lt;lnk lang="en"&gt;One&lt;/lnk&gt; &lt;lnk lang="en"&gt;Two&lt;/lnk&gt; &lt;lnk lang="de"&gt;Eins&lt;/lnk&gt; &lt;lnk lang="de"&gt;Zwei&lt;/lnk&gt;</pre> <p>is equivalent to</p> <pre>&lt;lnk lang="de"&gt;Eins&lt;/lnk&gt; &lt;lnk lang="en"&gt;One&lt;/lnk&gt; &lt;lnk lang="en"&gt;Two&lt;/lnk&gt; &lt;lnk lang="de"&gt;Zwei&lt;/lnk&gt;</pre> <p>All that matters is the order of the tags with the same language ID.</p>		
target	String	<code>_blank</code>
<p>If the element is linked externally (has the URL attribute set and the link is not to an internal anchor) this determines where the link is opened. Possible values:</p> <p><code>"_self"</code> specifies the current frame in the current window.</p> <p><code>"_blank"</code> specifies a new window.</p>		

Name	Type	Default
<p>"_parent" specifies the parent of the current frame.            "_top" specifies the top-level frame in the current window.            Other values will be interpreted as window names. This works the same way as it does in HTML.</p>		
URL	URL	
<p>URL to navigate to if clicked. Can be an absolute or relative path. Relative paths are always relative to the <code>megazine.swf</code> file. Can also be a reference to an <code>anchor</code> of a chapter or page, written as <code>anchor:anchorname</code>, e.g. <code>&lt;img URL="anchor:myAnchor" .../&gt;</code>.            If a number is given after the <code>anchor:</code> prefix, and no anchor with that name exists, the book navigates to the page with that number.            If left blank or not specified, the list entry will not be highlighted on mouseover.</p>		

### Childnodes

May only contain the text of the link. May be a `<![CDATA[ ]>` node, containing HTML formatted text. E.g.

```
<lnk URL="someURL"><![CDATA[<b>Some text</b>]]></lnk>
```

would show a bold list entry with the text "Some text".

- **src**

*May be used to completely localize elements by assigning a different URL depending on the language.*

### Attributes

Name	Type	Default
lang	String	
<p>ID of the language for the resource loaded from the given URL, used for localization (e.g. "en").</p>		

### Childnodes

May only contain the URL to be used for the specified language.

- **title**

*May be used to localize titles of elements.*

### Attributes

Name	Type	Default
lang	String	
ID of the language of this title, used for localization (e.g. "en").		

### Childnodes

May only contain the text of the title. Must contain plain text.

### ○ content

*May be used to localize text of `txt` elements.*

### Attributes

Name	Type	Default
lang	String	
ID of the language of this title, used for localization (e.g. "en").		

### Childnodes

May only contain the text to be displayed. May be a `<![CDATA[ ]>` node, containing HTML formatted text. E.g.

```
<txt><![CDATA[<b>Some text</b>]]></lnk>
```

would show a the text "Some text" rendered bold.