

The Toolbar

The [toolbar](#) makes DokuWiki easy to use even for novice users. Sometimes you may want to extend the toolbar with another button. This page will tell you a bit how the toolbar works and how to extend it.

How the toolbar is built (and cached)

The toolbar is completely built through [JavaScript](#). Which buttons the toolbar contains, is read from an array called `toolbar`. This array is initialized in `/lib/exe/js.php`. This is simply done by converting the PHP array structure defined in `inc/toolbar.php` to JavaScript using JSON.

This means, the toolbar gets cached like any other JavaScript in DokuWiki. When ever you do changes affecting the toolbar you should invalidate DokuWiki's [cache](#) (eg. `touch conf/local.php`) and refresh your browser cache while editing a page (Hit Shift/Ctrl-Reload and ignore the post warning).

The toolbar array

The mentioned `toolbar` array contains one entry per button. The order of the entries defines the position of the button, with the first entry defining the most left button.

Each entry is an associative array itself, defining the behavior of the button. The following table explains the available fields for the entries.

Name	Description
type	button action type: format ⇒ wiki markup mediapopup ⇒ popup window picker ⇒ picker menu signature ⇒ signature generation and insertion e.g. <code>yourtype</code> ⇒ looks for your custom action function <code>addBtnActionYourtype</code>
title	title of the button, displayed on mouseover
icon	icon to use for the button (based in <code>DOKUBASE/lib/images/toolbar/</code>)
key	(optional) Hotkey for the button, a value of <code>n</code> here would result in the button being pressed when the user presses ALT + <code>n</code> in his browser. (See also the access keys used by DokuWiki)
class	(optional) classname for styling buttons
id	(optional) id added to button, and with a postfix to icon e.g. <code><id>_ico</code>
format type specific parameters	
open	opening tag of wiki markup to insert, cursor will be placed between opening and closing tag
sample	example input to be placed between opening and closing tag, will be automatically selected to be overwritten on first input
close	closing tag of the wiki markup to insert, cursor will be placed between opening and closing tag
insert	wiki markup to insert (for full substitutions)
mediapopup type specific parameters	
url	URL of the popup to open
name	internal name of the popup to open

Name	Description
options	additional options for the popup window (comma-separated name-value-pairs valid as parameters for the JS function <code>window.open</code>)
picker type specific parameters	
list	list of insertable items. can either be an associative array (with the item to insert as the key and an image located in <code>icobase</code> to use as the value) or just a simple array (with the text-items to insert directly displayed)
icobase	subdirectory for item images (based in <code>DOKUBASE/lib/images/</code>).

A look at `inc/toolbar.php` should give you enough examples of what can be defined. Because the array is simply translated from PHP to JavaScript, the above description applies to the PHP array as well as to the resulting JavaScript array from which the toolbar is finally built.

Extending the Toolbar...

The toolbar can be customized in two ways - via JavaScript or PHP. Which method you choose basically depends on your skills and familiarity with the language at hand. For the PHP approach you will always need to write a plugin, the JavaScript method can be used from a [userscript](#) as well.

...using PHP

To extend the toolbar from your plugin you need to write a [Action Plugin](#) which registers as handler for the `TOOLBAR_DEFINE` event with an AFTER advise. Your handler function will receive the toolbar array as described earlier.

Create your button structure according to the above information and add it to the received event data.-function in `inc/toolbar.php`.

Example:

```
function register(Doku_Event_Handler $controller) {
    $controller->register_hook('TOOLBAR_DEFINE', 'AFTER', $this, 'insert_button', array ());
}

// ...

/**
 * Inserts a toolbar button
 */
function insert_button(Doku_Event $event, $param) {
    $event->data[] = array (
        'type' => 'format',
        'title' => $this->getLang('abutton'),
        'icon' => '../plugins/example/abutton.png',
        'open' => '<abutton>',
        'close' => '</abutton>',
        'block' => false,
    );
}
```

...using JavaScript

Adding a button using [JavaScript](#) is similar to doing it in PHP. You just extend the toolbar array.

Because user and plugin scripts will be loaded on all requests, but the toolbar is initialized on editing only, you need to make sure the toolbar array does exist first. Do this by checking if `window.toolbar` is defined. If it is, you can add your button at the end of the array.

```
if (typeof window.toolbar !== 'undefined') {
  toolbar[toolbar.length] = {
    type: "format",
    title: "A Button",
    icon: "abutton.png", // located in lib/images/toolbar/
    key: "",
    open: "<abutton>",
    sample: "Text between the tags",
    close: "</abutton>"
  };
}
```

Here is another example defining a picker dropdown (assumes plugin context):

```
if (typeof window.toolbar !== 'undefined') {
  var notes_arr = {
    // 'insertion string as key' : '[path/]filename.extension of the icon'
    '<note></note>\n': 'note.png',
    '<note tip></note>\n': 'tip.png',
    '<note important></note>\n': 'important.png',
    '<note warning></note>\n': 'warning.png'
  };

  toolbar[toolbar.length] = {
    type: "picker",
    title: LANG.plugins.note.note_tb_title, // localisation
    icon: '../plugins/note/images/toolbar.png', //where in lib/images/toolbar/ the
    images are located
    key: "n", //access key
    list: notes_arr,
    icobase: "../plugins/note/images/toolbar" // subdir of lib/images/ where images can be
    found.
  };
}
```

Some notes:

- Be aware of the default locations of the images: `lib/images/toolbar/` and `lib/images/`
- The available options for access keys depends on the [access keys](#) used by DokuWiki and the whether they are reserved by a browser or operation system as short cut. There are many differences.
- More about [javascript localization](#)

Dynamic Data

The above methods work well for adding static buttons that add static data. When you need to do something more dynamic like adding the current date, you can not simply extend the toolbar array. Instead you need to dynamically add your button into the DOM using [JavaScript](#).

The files `lib/scripts/edit.js`, `lib/scripts/toolbar.js` and `lib/scripts/linkwiz.js` contains some useful functions to help you with this.

When adding to the toolbar array you must set a custom value for `type`. You must use characters that are valid in a function name and should capitalize the first character. When the toolbar is constructed it looks at the value of `type` and appends it to the string `addBtnAction` before calling your code. So if you set `type` to `Click` the toolbar will call `addBtnActionClick`. This is an important note because if two plugins use the same `type` they will conflict with each other and cause strange behavior (such as both buttons doing the exact same thing).

The returned string is “the id for in aria-control”. This is explained further in [Accessible Rich Internet Applications](#).

Here is an example partly from the toolbar picker:

```
/**
 * With the first function we create a new button type called Click
 *
 * the function name must be addBtnAction<Your type name>
 * in our case it is addBtnActionClick
 *
 * in the other function we simply use the simple toolbar method with the new type
 *
 * you can easily extend it to complex scripts like the link wizard etc
 */

/**
 * Add button action for your toolbar button
 *
 * @param {jQuery} $btn Button element to add the action to
 * @param {Array} props Associative array of button properties
 * @param {string} edid ID of the editor textarea
 * @return {string} If button should be appended return the id for in aria-controls,
 *                  otherwise an empty string
 */
function addBtnActionClick($btn, props, edid) {
    // initialize stuff if required
    // ...

    $btn.click(function() {
        // your click handler
        alert('hey you clicked me');
        return false;
    });

    return 'click';
}

// add a new toolbar button, but first check if there is a toolbar
if (typeof window.toolbar !== 'undefined') {
    window.toolbar[window.toolbar.length] = {
        type: "Click", // we have a new type that links to the function
        title: "Hey Click me!",
        icon: "../plugins/click/clickme.png"
    };
}
```

Tips

- If you don't want to append your button at the end of the toolbar, you just need to insert your data into the toolbar array at the position where you want your button, shifting the other buttons to the right.
- There are some [predefined global variables](#) available which you can access from your Javascript. For example JSINFO contains the page id and namespace, usage: JSINFO.namespace. This might be handy when doing some more dynamic stuff.
- **Important:** If the button does not appear, expire the cache of your DokuWiki by saving your config in the Config Manager or touching the conf/local.php of your wiki AND delete your browser cache (Ctrl+F5 or Ctrl+R)! Than reload the editor page and your button should appear.

Removing Buttons

If you want to remove some of the toolbar buttons, you can do so by adding the following code into /conf/userscript.js. Note that this is not in any function, simply append this code to the end of the file:

/conf/userscript.js

```
if (typeof window.toolbar !== 'undefined') {  
    var blacklist = ["Bold Text", "Italic Text", "Underlined Text", "Monospaced Text", "Strike-through Text",  
        "Same Level Headline", "Lower Headline", "Higher Headline", "Select Headline", "Internal Link", "External  
Link",  
        "Horizontal Rule", "Add Images and other files (opens in a new window)", "Smileys", "Special Chars", "Insert  
Signature"];  
    window.toolbar = window.toolbar.filter(function(elem){ return jQuery.inArray(elem.title, blacklist) === -1;  
});  
}
```

This is from my personal wiki where I removed almost all the buttons. You can figure out what the title of your button is by running the following snippet in a javascript console:

```
for (i in window.toolbar) { console.log(toolbar[i].title)}
```

Then take the string and append it to the 'blacklist' array in the code.

See also the [toolbarplugin](#) plugin for removing toolbar items.

From:

<http://www.hdip-data-analytics.com/> - **HDip Data Analytics**

Permanent link:

<http://www.hdip-data-analytics.com/help/wiki/toolbar>

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