

MKWS: the MasterKey Widget Set

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Add metasearching to your web-site painlessly

The MasterKey Widget Set provides the easiest possible way to enhance an existing web-site with customised searching across multiple sources, ranking and merging the results.

As much of the searching functionality as possible is hosted on <http://mkws.indexdata.com/> so that very simple applications such as <https://example.indexdata.com/simple.html> can have MasterKey searching with minimal effort. All you need to do is pull in our JavaScript and optional stylesheet, then add `<div>`s to your page that have special `class` attributes. We do the rest.

Supported Browsers

Any modern browser will work fine. JavaScript must be enabled.

- IE8 or later
- Firefox 17 or later
- Google Chrome 27 or later
- Safari 6 or later
- Opera 12 or later
- iOS 6.x (iPhone, iPad)
- Android 4.x

Not supported: IE6, IE7

A minimal example

Here is a completely functional (though ugly) MKWS-based searching application [\[link\]](#)

```
<script type="text/javascript" src="http://mkws.indexdata.com/mkws-complete.js"></script>
<div class="mkwsSearch"></div>
<div class="mkwsResults"></div>
```

That's it. A complete metasearching application. Everything else is refinement.

Configuring a client (short version)

The application's HTML must contain the following elements, as well as whatever makes up the application itself:

```
<script type="text/javascript" src="http://mkws.indexdata.com/mkws-complete.js"></script>
<link rel="stylesheet" href="http://mkws.indexdata.com/mkws.css" />
```

These lines pull in JavaScript code and the default styles. (The latter may be omitted or replaced with application-specific styles for the widgets.)

Then the following special `<div>`s can be added (with no content), and will be filled in by MKWS:

- `<div class="mkwsSearch"></div>` – search box and button
- `<div class="mkwsResults"></div>` – result list, including pager/sorting
- `<div class="mkwsStat"></div>` – summary statistics
- `<div class="mkwsSwitch"></div>` – switch between record and target views
- `<div class="mkwsTargets"></div>` – target list, including status
- `<div class="mkwsLang"></div>` – switch between languages, e.g. English, Danish and German

You can configure and control the client by creating an `mkws_config` object. Here is an example showing how to use options to offer a choice between English and German UI languages, and to default to sorting by title ascending:

```
<script type="text/javascript">
  var mkws_config = {
    lang_options: [ "en", "de" ],
    sort_default: "title:1"
  };
</script>
```

Detailed documentation

Apart from [this file](#) and its [PDF version](#):

- The [MKWS manual, including a reference section \[PDF version\]](#)
- The [MKWS developers' guide \[PDF version\]](#)

Source code

The source code for MKWS is [available on GitHub](#).

It is furnished under [the GNU Lesser General Public License v3.0](#).

Widget files

Here are the files that this web-site provides:

- [mkws.js](#) – JavaScript code that powers the MasterKey Widget Set
- [pazpar2/js/pz2.js](#) – Low-level JavaScript library for access to the MasterKey web service.
- [handlebars-v2.0.0.js](#) – A local copy of [the Handlebars templating library](#), since it doesn't like to be hotlinked.
- Local copy of [jquery-1.10.0.min.js](#)
- Local copy of [jquery.json-2.4.js](#)
- Local copy of [jsnlog.min.js](#)
- [mkws-complete.js](#) – A single large JavaScript file containing everything needed for MKWS to work: the widget-set itself, the API library, and the prerequisites jQuery and Handlebars.
- [mkws.css](#) – A stylesheet which styles only MasterKey widgets, and does not otherwise interfere with application-site's styles.

Minified versions of the MKWS JavaScript files are also available:

- [mkws.min.js](#)
- [mkws-complete.min.js](#)

Specific versions

The links above to the various forms of the widget-set JavaScript ([mkws.js](#), [mkws-complete.js](#), [mkws.min.js](#) and [mkws-complete.min.js](#)) together with the CSS file ([mkws.css](#)) are always to the current versions of those files. Applications that rely on a particular version can instead use the specific numbered versions in [the releases area](#), for example [releases/mkws-0.9.1.js](#). and [releases/mkws-0.9.1.css](#).

The current version number is always in [the VERSION file](#).

Version history is in [the NEWS file](#).

Examples using the widget-set

It's worth viewing the source of these to see how small they are and how various things are done.

Simple examples

- A very simple application at <http://example.indexdata.com/simple.html>
- [The absolutely minimal application](#) listed above.
- [A more detailed version](#) that contains a configuration structure instead of accepting the defaults. Includes a custom translation option to present the application in Arabic.
- [A version suitable for mobile devices](#) with a responsive design that moves components around depending on the screen size.

Advanced examples

- An application that [uses lower-level MKWS components](#) rather than the all-in-one `#mkwsResults` division, allowing it to use a rather different layout.
- An application that specifies how to display brief and full records [using Handlebar templates](#). (Read about [the templating language](#).)
- An application that [displays thumbnail images](#).
- An application that [uses a local authentication regime](#) and the corresponding [Apache2 configuration stanza](#).
- [A version that uses a jQuery popup](#).
- An application that [draws together information from several widgets](#) to present a topic page.

Non-standard interfaces

- An application that uses MKWS to [find dictionary definitions of words](#) when you highlight them.
- An application that [runs an automatic search on load](#).
- Another existing web-site, [The Zthes specifications](#), which has been fitted with a popup MKWS search-box.

Real-world examples

- [The One Repo](#), a growing repository that aggregates open-access papers from repositories around the world. (Read more in this blog-post: [The world needs One Repo](#).)

Target selection

MKWS comes pre-configured to search in a set of a dozen or so open-access targets, as a proof of concept. But you'll want to use it to [search your own selection of targets](#) – some open access, some subscription.

We can set that up for you: email us on info@indexdata.com.

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