



## Embedding knowledgebase search results in your site

We've developed a method by which any web site operator can include the functionality of a knowledgebase search within their web site without writing any server-side or dynamic code. In other words, searches and their results can be embedded within plain HTML pages.

The mechanism used is that of embedding a JavaScript snippet within the HTML – this JavaScript submits search terms, obtains its “results” from the knowledgebase server in real time, and the browser embeds those results in the page which is displayed. Your server does not have to interface with the knowledgebase at all – everything's done by the browser. (Your visitor must have JavaScript enabled in his or her browser, of course, for this to work.)

The feature is based on Red7 knowledgebase software, which supports the creation of a knowledgebase consisting of web pages and categories, on a central server, and searching of that knowledgebase from a user's browser.

### OVERVIEW – STATIC SEARCH

There are two ways to do embed a search. The first method is to embed a reference to a “static” search – a search for specific, pre-specified words - into your HTML page. You, the HTML-writer, decide what search will be performed, you edit a snippet of JavaScript code that we provide for you, to include your static search word and some formatting information, you embed the JavaScript within your static HTML page, and our server does the rest, in real time, when your site visitor hits your page. If the contents of the knowledgebase change, the results of the search will also change when your visitor views your page.

This is a great way for you to display some special subset of your knowledgebase for your visitor. For instance, let's say you're accumulating a knowledgebase containing movie theater information, and you've classified the theaters under “art films” “foreign films” “popular films” or other categories. You could embed a static search for “foreign films” in your web site and only the records classified this way would be retrieved and displayed on your page.

### OVERVIEW – DYNAMIC SEARCH

The second method permits your site *visitor* to specify what to search for, by typing a search phrase in a text box on a page in your web site, and then displays the results within one of your static HTML pages on your site. The search is performed in real time, using the contents of the knowledgebase at that instant, and is reported within your second (static) HTML page on your web site.

### IMPLEMENTING A “STATIC SEARCH”

A *static search* looks for knowledgebase pages containing specific words you specify in advance. For example, to conduct a search for documents containing the word “apple” and embed the search results within a page on your web site, embed the following JavaScript code in that page:

```
<script language="JavaScript"  
src="http://base.red7.com/base/jsSearchInstant.js?word=apple&user=guest&password=&kb=pax">  
</script>
```

You may change the word you're searching for (word=), and you may use any knowledgebase you have permission to use (kb=). You must have defined a user name (user=) with at least “guest” privileges on your knowledgebase, and you must specify the guest account's password (which is empty in the example).

The *results* of the search will be embedded within your page at the location where the JavaScript snippet appears. This happens at the time the visitor's browser requests the JavaScript – so you will never see the search or its results in your own HTML, or even in the view source of your web page. The browser does all the work.

You have complete flexibility over how the results are formatted and displayed – and even what is displayed. Three additional parameters can be added to the URL for the JavaScript (jsSearchInstant.js), specifying HTML code for three sections of the search report. The sections are the heading ("head"), each document ("document") and the empty-results ("empty") section. The "document" section is repeated for each page retrieved.

The value of each of these parameters ("head", "document", "empty") may contain any HTML you wish, though "&" and "#" and many special characters must be *encoded* – see table at the end of this document.

Here's an example of a static search for the word "apple" with full *head*, *document*, and *empty* sections. The knowledgebase is "pax" the user is "guest" and the password is empty. These fields will have to be adjusted to match your knowledgebase.

```
<script language="JavaScript"
src="http://base.red7.com/base/jsSearchInstant.js?word=apple&kb=pax&user=guest&
password=&head=<font face='Arial,Helvetica,Geneva,Swiss,SunSans-Regular'
color='802020'>Search results for <i><b><word/></b></i> - (<count/>
pages)<br><br></font>&document=<font
face='Arial,Helvetica,Geneva,Swiss,SunSans-Regular'><table width='520'><tr><td
align='left' bgcolor='%23f0f0f0'><a href='<url/>'><title/></a></td><td
align='right' bgcolor='%23f0f0f0'>Score: <score/></td></tr><tr><td
colspan=2><font color=gray
size=2><url/></font></td></tr></table></font>&empty=Nothing found for
<i><b><word/></b></i>"></script>
```

The *head* parameter may contain "<word/>" where you'd like to display the search terms, and may contain "<count/>" where you'd like the number of pages retrieved.

The *document* parameter may contain "<title/>" where you'd like the title of the document, "<url/>" where you'd like the URL of the page, and "<score/>" where you'd like the relevancy score of the document.

The *empty* parameter may contain "<word/>" where you'd like to display the search terms.

*If you do not include these parameters, a default format will be used for your output.*

## IMPLEMENTING A "DYNAMIC SEARCH"

This method allows your site visitor to specify the words or terms to search for. You are required to have two pages. The first page contains an HTML "FORM" where your visitor will specify the search terms. This FORM is then posted and a second page on your web site is brought up, where the results of the search are displayed.

On the first page, you embed FORM code like this:

```
<form action="http://base.red7.com/base/k7" method="post" name="mySearch">
<input type="text" name="word" size="24" maxlength="128" border="0">
<input type="hidden" name="mode" value="search">
<input type="hidden" name="user" value="guest">
<input type="hidden" name="password" value="secret">
<input type="hidden" name="kb" value="pax">
<input type="hidden" name="max" value="25">
<input type="submit" name="search" value="search">
<input type="hidden" name="target" value="http://yoursite.com/targetPage.html">
<!-- optional parameter contains HTML for empty search result -->
<input type="hidden" name="empty" value="<font
face='Arial,Helvetica,Geneva,Swiss,SunSans-Regular'>No pages contained
<i><b><word/></b></i></font>">
<!-- optional parameter specifies HTML for header on report -->
<input type="hidden" name="head" value="<font
face='Arial,Helvetica,Geneva,Swiss,SunSans-Regular' color='802020'>Search results for
<i><b><word/></b></i> - (<count/> pages)<br><br></font>">
<!-- optional parameter specifies HTML for each document (page) in report -->
```

```

<input type="hidden" name="document" value="<font
face='Arial,Helvetica,Geneva,Swiss,SunSans-Regular'><table width='520'><tr><td
align='left' valign='top' bgcolor='%23f0f0f0'><a href='<url/>'><title/></a></td><td
valign='top' bgcolor='%23f0f0f0' width='72'><font size=2>Score:
<score/></font></td></tr><tr><td colspan='2'
align='top'>%26nbsp%3b%26nbsp%3b%26nbsp%3b%26nbsp%3b<font color=gray
size=2><url/></font></td></tr></table></font>">
</form>

```

The only part of the form that's visible in the page is the box for the "word" the visitor wants to search for. You should put text around this to tell them what to do, of course. As in the static search method, you must create a *guest* user account for your knowledgebase, and must substitute the name of the guest account, the password, and the knowledgebase name in the code. You specify as *target* the full URL of the target page where you wish to display the results of the search. When your visitor clicks the *submit* button, the page posts the parameters to our knowledgebase server, which executes the search (and does not return any results) and then redirects to your target page.

Your target (HTML) page must contain a JavaScript snippet to pick up the results of the search. Like this:

```

<script language="JavaScript"
src="http://base.red7.com/base/jsSearchSession.js">
</script>

```

And the headers on the target page must specify no-cache, or the proper results may not be displayed when your visitor changes their search terms. Put this in the <HEAD> section of the target page:

```

<meta http-equiv="pragma" content="no-cache">

```

Although you may specify *head*, *document* and *empty* parameters on the javascript "src" URL, if you have done so as hidden fields when the FORM was submitted, you do not need to do so again.

Searches and results are keyed to the visitor's session with the knowledgebase server, which is established when the FORM is submitted. The visitor must allow cookies to be stored in their browser for our server to maintain session (and to authenticate your right to use your knowledgebase), and must have JavaScript enabled for either method to work.

**Table of characters for URL encoding:**

\$	%24
&	%26
+	%2B
, (comma)	%2C
/ (slash)	%2F
: (colon)	%3A
; (semicolon)	%3B
=	%3D
?	%3F
@	%40
(space)	%20
(quote)	%22
(less than)	%3C
(greater than)	%3E
#	%23
%	%25
{ (left curly brace)	%7B
} (right curly brace)	%7D
	%7C

\ (backslash)	%5C
^ (caret)	%5E
~ (tilde)	%7E
[ (left square bracket)	%5B
] (right square bracket)	%5D