

# /google/create a custom search engine

Rob Buckley shows you how to make your site the sharpest search engine of them all using Google's Co-op technology. The secret behind it? Refinement and customisation

Knowledge needed Web design basics  
Requires Any web browser, any web page editor  
Project time 45 minutes

When you think of searching, more often than not, you think of Google. It has even become a verb, despite the best attempts of its legal department to prevent it – have you ‘Googled’ someone today? But it has become much more than just a web search engine. Because you can now embed it into your website, it’s also an easy way to add a search facility to your pages.

The ability to use Google as a site search engine has been around for a while now, and is reasonably common. As long as Google can access all the pages on your site and it updates its indexes as often as you update your pages, it’s a great, hassle-free and cheap tool to make your site’s content available to visitors, whether you’re using static pages or a Content Management System.

But recently, Google created a new version of its “embeddable” search engine. As well as being customisable so that it matches your site’s look and feel, Google’s Co-op custom search engine can be set to search a list of sites as well as your own, or it can search the whole web. You can also preload it with search terms so that it favours particular kinds of searches. If your site is about karate, for example, and someone searches for “belt”, the results of the search can favour karate belts, rather than those available from Marks & Spencer.

## Refined searching

As the name suggests, Google Co-op is also a collaborative system. If you want, other people can add more sites to the search engine you’ve developed. You can also add “refinements” to your search engine, which are keywords that narrow searches down even further for greater accuracy.

These refinements are shared with other custom Google search engines, and anyone using Google’s Marker service can tell Google which refinements apply to the websites they visit. This means that searches using your search engine will be even more targeted. Fairly soon, you can develop the leading search engine for a specific niche. In fact, you can develop as many premier custom search engines as you want, and embed them all in your website if you choose – Google won’t stop you. And others can embed your search engine in their sites, too.



**What you’ll build** In this tutorial, you’ll develop a lean and mean search engine using Google’s Co-op custom search engine technology ([www.google.com/coop](http://www.google.com/coop)). You’ll learn how to refine, customise and embed this search facility in your site

In this tutorial, I’ll show you how to get started with Google’s Co-op, so that you can embed custom Google search engines in your web pages and tailor exactly what they look for and where they look for it. All you’ll need is a web browser, a web page editor and a Google account. If you don’t already have one, sign up now at [www.google.com/accounts](http://www.google.com/accounts) and you’re ready to begin. ●



### About the author

Name Rob Buckley  
Site [www.the-word-is-not-enough.com](http://www.the-word-is-not-enough.com)  
Areas of expertise XHTML, PHP and MySQL  
If I were a kitchen implement ... I’d definitely be a whisk



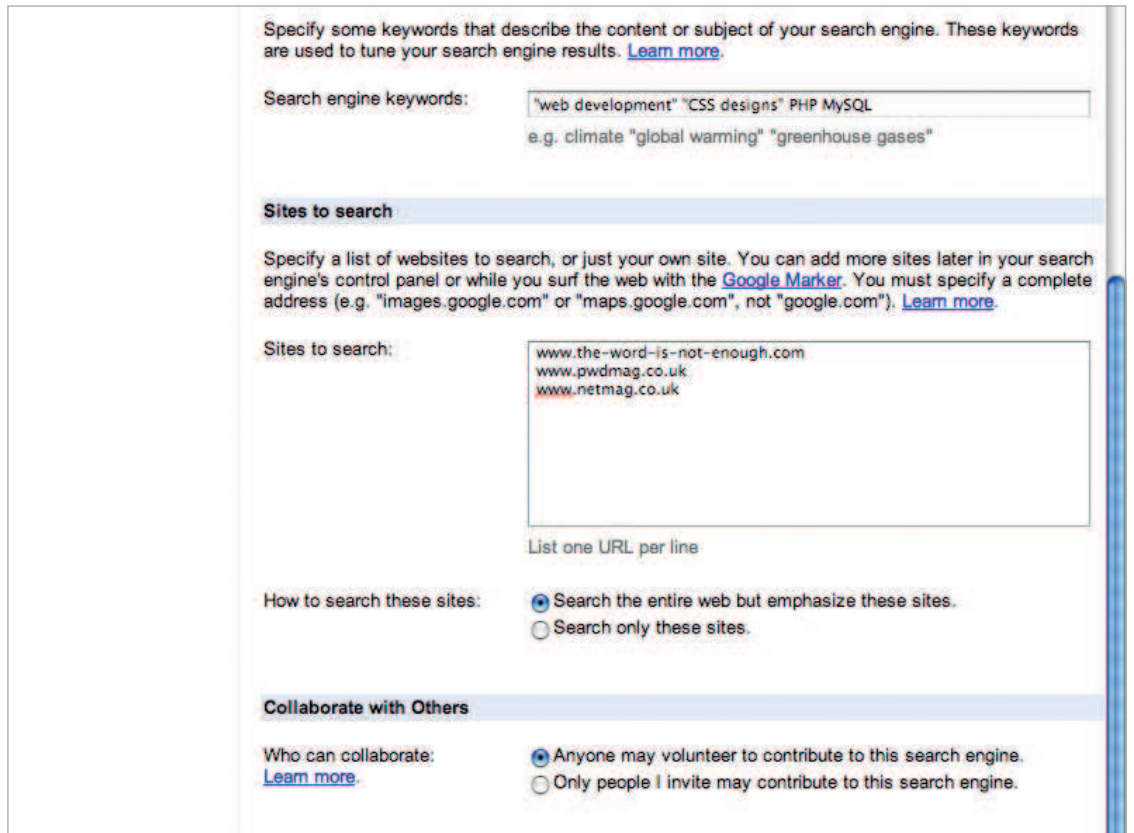
**START Enter your details** Go to [www.google.com/coop](http://www.google.com/coop). Click on Create a Custom Search Engine, then New Search Engine. Log in with your Google account. Under “Basic information”, enter a name and description for your search engine. Note that these will be visible to other users.



**2 Provide default keywords** Enter some keywords to tune the search engine. These are the same syntax as regular Google searches and will be appended to searches made with your search engine. You can enter as few or as many keywords as you like.



**3 Input URLs** Enter some sites to search. If you enter your own site and select "Search only these sites", you'll have created a search engine for just your site. Add more and it will return results from all sites listed. The "emphasizing sites" option means your selected sites will do better in searches.



**4 Decide who to work with** Other people can expand your search engine by adding sites to the list. Whether you want that or not is up to you. If you click on "Only people I invite", you can restrict who can contribute – you don't have to invite anyone, of course. When you're done, agree to the Terms of Service and click Next.



**5 Refine the engine** You'll now be able to test your search engine to see what kind of results it returns. Enter a relevant search and see what it turns up. If you don't like what you see, click on the "back to step 1" link and change or add keywords and sites. Re-test until you receive useful results.



**6 Ready to go** You've created your first custom search engine. On the main Co-op management page, you can create more search engines, modify existing ones and access other features. You should check on your search engine's homepage, as that will be visible within Google as well as on your website.

**Expert tip** **Uploading sites**

As you get more experienced with your search engine, you'll want to add more sites to its list of sources. You can do this manually, but if you want to take them from a social bookmarking site such as Delicious, or you have a long list of sites to add, that can take a long time.

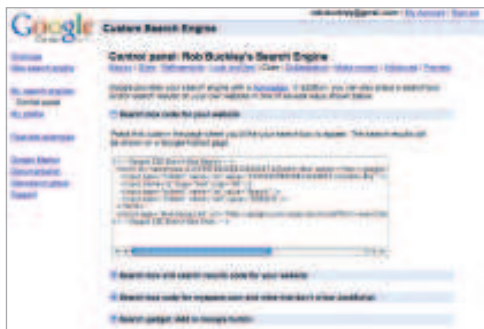
Fortunately, there's an advanced option for uploading site lists. It can accept information in OPML, TSV or XML format, so you can download lists from social bookmark sites and modify them via an XML editor or text editor. If you're feeling advanced, you can create an XML context that defines an entire search engine.



**7 View your homepage** Your search engine's homepage gives information about its intent, who created it and what sites it searches. It also gives users a chance to edit the engine (if you've allowed it). Once others start adding to the engine, it will list their profiles with your own.



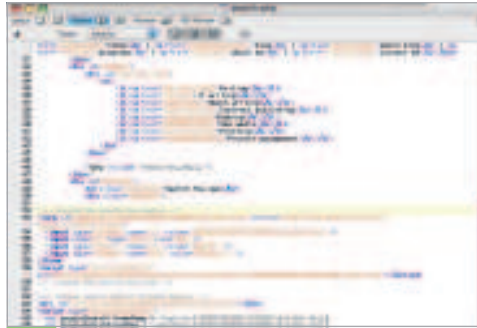
**8 Edit your profile** Click on "Edit profile". Your publicly viewable profile gives you the chance to promote yourself and your site. Enter the details – the Site URL field allows people who have found your engine on Google a way to locate your site, so keep it filled in. You'll need an image of yourself, too.



**9 Get the code** Click back in your browser until you're at the main management page from step 6. Click on Control Panel, which contains all the settings for your search engine. The Code tab holds the information needed to embed your engine in your website's pages, so click on it.



**10 Pick the code** You can use the "Search box code" to embed the search, but not the results, in your site. More likely, you'll want the search box and results in the page. Click the plus box to reveal the relevant code. Choose where you want ads to appear. Enter the URL of the results page and Save.



**11 Embed the code** Open the page in which you plan to embed search results and paste the code from the second text area. Copy and paste the code for the search box into pages you want the box to appear. To customise the text for the Search button, alter the "value" attribute in the fourth line.

**Resources** Find out more online

- The semantic web**  
Google's Co-op technology isn't there yet, but it's a steps towards the 'semantic web'.  
[en.wikipedia.org/wiki/Semantic\\_Web](http://en.wikipedia.org/wiki/Semantic_Web)
- Creating Quality Custom Search Engines**  
Eric Engle's excellent guide to creating a custom search engine that's better than Google's.  
[www.customsearchguide.com/creating-quality-cses.shtml](http://www.customsearchguide.com/creating-quality-cses.shtml)
- Using the Google Marker**  
You can add refinement labels to any site on the web using Google's Marker system.  
[google.com/coop/cse/marker](http://google.com/coop/cse/marker)



**12 Customise the results** Co-op uses JavaScript to embed results in a page. Change the width of the results by altering the value of googleSearchFrameWidth in the results code. You can customise other features using the "Look and feel" tab in the Control Panel and entering hex RGB values.



**13 Set categories** Refinements let users narrow their results using your categories. Use the Refinements tab to create refinements for labelling websites. Refinements can also add keywords to users' searches. You can make refinements restrict searches to your chosen sites, or just favour them.



**14 Ask for collaboration** If you'd like others to help you improve your search engine, click on the Collaboration tab to send out invitations. Once you deploy your search engine and others contribute, you can use this tab to see who's helping, who'd like to help, and who's turned you down.



**15 Make money** You can make some money from your search engine using Google's AdSense. Under the "Make money" tab, sign up for an account or associate your engine with an existing one. It'll take 48 hours before your first ads appear, but any clickthroughs and that commission is yours!

**Expert tip** Take it further

- Use a site map**  
Create a site map to show Google which of your pages are available and when they're updated.  
[www.google.com/webmasters/sitemaps](http://www.google.com/webmasters/sitemaps)
- Create an Ajax search**  
Feeling bold? Use the Google Ajax Search API to create a Web 2.0 interface for your engine.  
[code.google.com/apis/Ajaxsearch](http://code.google.com/apis/Ajaxsearch)
- Advanced tips**  
Google offers vast documentation for its Co-op technology, with explanations and advice.  
[google.com/coop/docs/cse](http://google.com/coop/docs/cse)



**FINISH Off you go!** With the engine fully customised, you can now upload your search and results page(s) to your website and test them out. Over time, you'll be able to improve your search engine so that it gives better and better results. If you've decided to use AdSense ads, that means better targeting, and hopefully more money for you!