

Real Web 2.0: Mastering the Creative Commons

Select the right license, and find content with the right license

Skill Level: Intermediate

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The Creative Commons (CC) initiative develops popular licenses for content, including Web content. Some people think using these licenses means giving up all your rights to content, but this is just one of many misconceptions. Learn how to choose and use CC licenses for your Web sites and applications and how to process these licenses in code.

If the essence of Web 2.0 is in making it easier to share and re-use information, technology is only part of the conversation. Throughout the history of the Internet, lawyers have proven all too effective at taking away much of what we gain through invention and collaboration. For Web 2.0 to flourish, its community must be diligent about taking matters into its own hands and expressing clearly the rules for sharing specific content, images, video, audio, and other media. If it's easy for a person or for programs to determine the license established by copyright of such resources, it opens things up for creativity, innovation, and collaboration to take center stage.

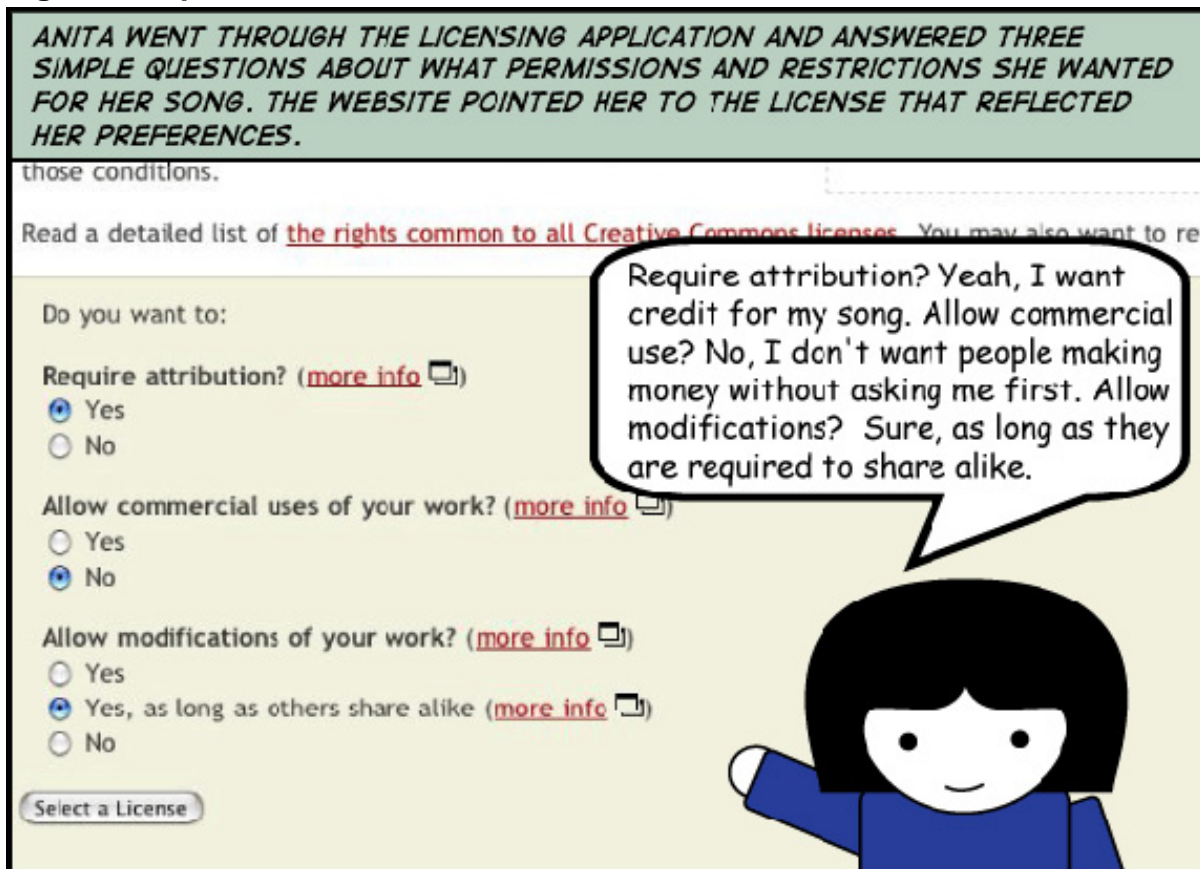
Creative Commons (CC) is an organization of lawyers, technical experts, and managers, with a very broad community, whose goal is to "use private rights to create public goods", by allowing creators to express degrees of licensing between the knee-jerk "all rights reserved" and public domain (in other words, "no rights reserved"). Creative Commons provides the legal framework and text of licenses that allow you to say that "some rights are reserved", and allows this to be clearly discovered by others, so that they can determine whether their use is compatible with your reservations. The lawyers are involved when these reusable licenses are crafted and updated, with support and feedback from the community, with the idea that afterwards, the sharing can proceed on the Web with much less legal

interference. In this article, learn how to express CC licenses for your work, how to use public services for finding work from others you can use, and how to identify such work yourself.

Choosing a license

Once you've decided to use CC licenses for your work, the first thing you should do is be sure you understand CC, licensing in general, and copyright itself. The organization has gone to great lengths to educate the public on these matters. It has videos, and even comics. [Figure 1](#) is one of the panels from one of the comics. By the way, I know it's okay to reproduce that artwork in this article because it uses a CC license that merely requires me to provide attribution (see [Resources](#) for the required link back to the original comic page). The organization also provides more sober information about what can be covered by copyright, what CC licenses really mean, and how such matters might vary depending on jurisdiction (in other words, your location and that of your users).

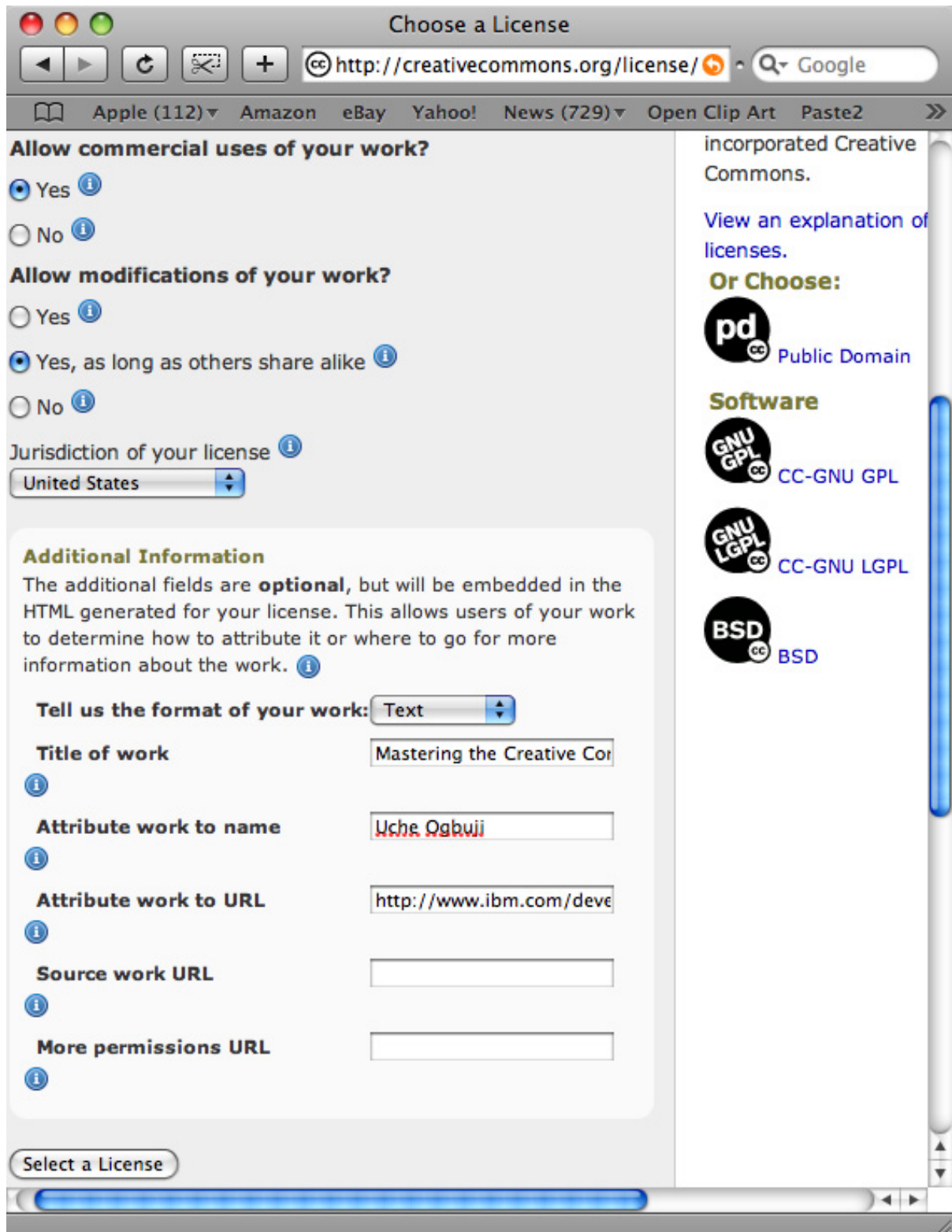
Figure 1. A panel from the Creative Commons 'How it works' comic



Once you've decided what restrictions you want to put on your work, it's pretty easy to identify the closest CC license. Go to the CC home page, and start by selecting

your jurisdiction from the list in the upper right (United States in my case). You will then see an overview page for that jurisdiction including a list of the licenses that have been crafted and reviewed for use there. You can examine each one to determine your preference. If you'd like a little more hand-holding, click on the "License your work" icon on the top banner which leads to the license wizard. [Figure 2](#) is how I might use the license wizard for the article you're reading.

Figure 2. Creative Commons license wizard



Notice that in some cases, such as when you are choosing a license for use in a Weblog or some other series of works, you will want to leave out the specifics in the

"Additional Information" section, to get a generic license. If you'd like, you can then have your publishing software fill in details for each covered work. Click the "Select a license" button and you get a page as in [Figure 3](#), specifying the license that matches your criteria. You can choose an icon to notify viewers of your work and then grab the HTML snippet to add to your page.

Figure 3. Outcome from Creative Commons license wizard



Leaving the door open

Suppose you have chosen a non-commercial license for a photograph, but a company really wants to use it in its ad campaign. Your license asserts that it cannot do so without obtaining a special license. But if the company cannot contact you to negotiate such a license, you may lose an opportunity to receive compensation for your work. Or perhaps you have allowed commercial use, but the company wants to make sure it can obtain releases for any people or private property that appears in the photo. Or perhaps you have forbidden derivative versions of a logo for your open source project, but someone else wishes to use a variant of your logo for a separate project that would benefit yours. Whenever you express copyright and assert any license, whether CC or otherwise, you should always make it easy to determine how to contact you to request exceptions, or to figure out the occasional nuances that lie behind the scope of CC licenses.

Asserting a license

One of the most important points of CC is to signal the applicable license within a work. Whether it's a photo, a video, or a music file, it's important that information about the license goes where the work goes. The easiest case is when the work is the Web page itself. In this case you can just grab the HTML snippet provided by the CC wizard. [Listing 1](#) shows the result given in the text area shown in [Figure 3](#), formatted for this article.

Listing 1. The result given in the text area in Figure 3

```
<a rel="license" href="http://creativecommons.org/licenses/by-sa/3.0/us/">

</a><br />
<span xmlns:dc="http://purl.org/dc/elements/1.1/"
  href="http://purl.org/dc/dcmitype/Text"
  property="dc:title" rel="dc:type">Mastering the Creative Commons
</span> by
<a xmlns:cc="http://creativecommons.org/ns#"
  href="http://www.ibm.com/developerworks/web"
  property="cc:attributionName" rel="cc:attributionURL">Uche Ogbuji</a>
is licensed under a
<a rel="license" href="http://creativecommons.org/licenses/by-sa/3.0/us/">
  Creative Commons Attribution-Share Alike 3.0 United States License</a>.
```

The image URL is controlled by the radio button at the top of [Figure 3](#). Notice that the code is not plain HTML, but actually XML with namespaces, with added `property` elements. This is a convention called RDFa, which is designed to be used with XHTML. Even then it will not validate against the standard XHTML DTDs, a very common problem that has much more to do with limitations of DTD than any misstep by CC. In practice you should be able to ignore such minutiae and use this

code in any flavor of HTML, but the RDFa details are interesting from a technical perspective. RDFa is a standard convention for expressing structured metadata as RDF statements within HTML elements. It is an effective way to embed specific machine-readable information, for example in this case that the title of the work is "Mastering the Creative Commons", which is somewhat redundant with the HTML title, and would be omitted if you use the wizard without specifying details of the work itself.

Beyond HTML

The CC community is diligent in figuring out and documenting ways to embed CC licenses in other formats, for example in OGG and MP3 (using ID3 tags), Atom (in the `<link rel="license" ... element`, or using RDFa in the content itself), common image formats and PDF (using XMP--Extensible Metadata Platform), and soon BitTorrent, which should help underline the much-overlooked world of legal file-sharing, never mind all the much-discussed piracy. Some of the media conventions for CC licenses rely on links to the RDF version of the licenses. In the case of the license I've been using for example in this article, the link is to <http://creativecommons.org/licenses/by-sa/3.0/rdf>. Listing 2 is the RDF at that link, with most of the title translations trimmed.

Listing 2. RDF description for Attribution/shareAlike license

```
<?xml version="1.0" encoding="utf-8"?>
<rdf:RDF
  xmlns:cc="http://creativecommons.org/ns#"
  xmlns:foaf="http://xmlns.com/foaf/0.1/"
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:dcq="http://purl.org/dc/terms/"
>
  <cc:License rdf:about="http://creativecommons.org/licenses/by-sa/3.0/">
    <dc:title xml:lang="fr">Paternité - Partage des Conditions Initiales
      Identique</dc:title>
    <dc:title xml:lang="es-mx">Atribución-Licenciamiento Recíproco</dc:title>
    <dc:title xml:lang="de">Namensnennung-Weitergabe unter gleichen Bedingungen</dc:title>
    <dc:title xml:lang="en">Attribution-ShareAlike</dc:title>
    <dc:creator rdf:resource="http://creativecommons.org"/>
    <cc:legalcode rdf:resource="http://creativecommons.org/licenses/by-sa/3.0/legalcode"/>
    <dcq:hasVersion>3.0</dcq:hasVersion>
    <dc:identifier>by-sa</dc:identifier>
    <foaf:logo rdf:resource="http://i.creativecommons.org/l/by-sa/3.0/88x31.png"/>
    <foaf:logo rdf:resource="http://i.creativecommons.org/l/by-sa/3.0/80x15.png"/>
    <cc:permits rdf:resource="http://creativecommons.org/ns#DerivativeWorks"/>
    <cc:permits rdf:resource="http://creativecommons.org/ns#Reproduction"/>
    <cc:permits rdf:resource="http://creativecommons.org/ns#Distribution"/>
    <cc:requires rdf:resource="http://creativecommons.org/ns#Attribution"/>
    <cc:requires rdf:resource="http://creativecommons.org/ns#ShareAlike"/>
    <cc:requires rdf:resource="http://creativecommons.org/ns#Notice"/>
    <cc:licenseClass rdf:resource="http://creativecommons.org/license"/>
  </cc:License>
</rdf:RDF>
```

You can see how the `cc:permits` and `cc:requires` statements break down the specifics of the license very clearly. You can use XPath to check for specific restrictions quite easily against this license detail.

Finding works

Web 2.0 is not just about what you produce, but how it can be combined with what's produced by others. CC also makes it easy to find works that match licensing criteria. Suppose you are producing a mashup for commercial purposes, and you want to use images that are okay for such use as one of the sources. You can combine your usual methods for keeping tabs on likely resources, such as following specialized Web feeds, with automated validation of the license, reading the format according to the file type. CC also has several partners among media publishing sites and search engines. You can get to these by clicking on the "Search CC Licensed Work", which includes search forms for Google, Yahoo, Flickr, and more, through iframes.

You can just use these search engines directly, through their "advanced search" interfaces. For example Google offers the following search options:

- not filtered by license (the default)
- free to use or share
- free to use or share, even commercially
- free to use, share, or modify
- free to use, share, or modify, even commercially

Google's image search doesn't seem to provide such an option for CC specifics, and the same is true with Yahoo search, though Yahoo owns Flickr, which has a CC search option. Yotophoto is a good option not listed on the CC page. It aggregates across many sites, including Flickr, search-for-public-domain photographs as well as those licensed under CC, or other free/libre license options. SpinXpress is a search engine partner of CC that covers video, audio, and still images. "OWL music search" is a very interesting CC partner service that seems to match characteristics of music, finding similar music, including CC-licensed tunes. Overall there are many of the usual tools associated with these searches, such as browser toolbars and bookmarklets.

Wrap up

The lifeblood of Web 2.0 is in liberal use, reuse, repurposing, and combining of information streams. For this to work on the scale of the Web, there has to be a

mechanism to accelerate the exchange and matching of agreements, and there has to be enough material available through this mechanism to meet the needs of Web 2.0 sites. The Creative Commons provides this mechanism through pro bono legal work, technical and community leadership, and constant advocacy. Even if you are looking for content and other resources for commercial use to enhance your Web 2.0 sites, you'll be amazed at how much high-quality work is available without the additional hassle of licensing. Of course what advocates of CC hope is that you will appreciate all of this richness and also be generous in licensing your own work. The first step is in learning how to express such licenses, and then how to find other works with compatible licenses, and I hope this article provided what you need to make a good start.

Resources

Learn

- Visit the [Creative Commons home page](#) to learn about the initiative, to select and learn how to assert licenses, and for a variety of ways to find CC licensed work, including specialized gateways to Google, Yahoo, Flickr, OWL music search, and more.
- Check out [Yotophoto](#), a search aggregator for photographs available under free licenses from Creative Commons variants to Public Domain.
- Check out the "[How it Works](#)" comic for a basic idea of Creative Commons. One of the panels from this comic appears in this article.
- [RDFa](#) is a means for embedding metadata in Web pages. Creative Commons uses the embedding of RDFa in XHTML 2, as described in "[Put XHTML 2 to work now](#)," by Bob DuCharme.
- Learn more important background on copyright and licensing matters on the "[Before Licensing](#)" page. For even more detail see the "[Legal Concepts](#)" page.
- "[Atom 1.0 Extensions, Part 2: Copyright licenses, automated processing of links, and syndicating threads](#)" explains how to assert Creative Commons licenses in Atom feeds.
- "[Thinking XML: Microformats the XML way](#)" touches on how to assert Creative Commons licenses using microformats.
- Learn how to express licenses in a [variety of media file types](#).
- For an older discussion of CC, focusing on the semantics of RDF forms of the licenses, see "[Thinking XML: The commons of creativity](#)".
- Expand your site development skills with articles and tutorials that specialize in Web technologies in the developerWorks [Web development zone](#), including previous installments of this column.
- Stay current with [developerWorks technical events and webcasts](#).

Discuss

- Participate in [developerWorks blogs](#) and get involved in the developerWorks community.

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Uche Ogbuji is [Partner](#) at [Zepheira, LLC](#), a solutions firm specializing in the next

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