JavaScript: If you love it, set it free
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Slides available at

`https://libreplanet.org/wiki/User:Johns/Presentations`

Free Software Foundation

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Our goal

At the FSF and in the GNU Project, we want **all** computer users to be able to do **everything** they need to do on **any** computer, using **only** free software. We have been working toward this goal since it was announced in 1983.

We have a problem

We have endorsed a full laptop system, the Thinkpad X60 as sold by Gluglug, described on `http://fsf.org/ryf`.

(We've published an update about other Licensing and Compliance Lab activities at `https://u.fsf.org/t2`.)

"The JavaScript Trap"

Richard Stallman published this article in 2009, and was also given as a talk at LibrePlanet.

The title is drawn from his previous 2004 article, "Free but Shackled: The Java Trap," in which Stallman said: "Your program, though in itself free, may be restricted by nonfree software that it depends on. Since the problem is most prominent today for Java programs, we call it the Java Trap."

JavaScript assumed

Last year, Mozilla Firefox decided to kind of hide the option to disable JavaScript. Too many users were disabling it, then reporting bugs about the resulting chaos.

We don't want to avoid *all* JavaScript anyway. We want to avoid nonfree JavaScript.

JavaScript programs are generally nonfree

As distributed to the user, JavaScript programs are nearly always nonfree. When distributed under a free license, it seems anecdotally that permissive licenses are the most common choice.

The trap hurts

We should never wait for proprietary software owners to abuse us before switching to free software, but in fact such abuses have been demonstrated in the world of JavaScript.

`http://www.gnu.org/philosophy/proprietary` has a "nice" and unfortunately growing list of abuses of proprietary software in general.

Painful examples

- Modify copy and paste buffer
  `http://thejh.net/misc/website-terminal-copy-paste`

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  `http://thejh.net/misc/website-terminal-copy-paste`
- Block browser functions like saving images.
- Record your keystrokes.
- Deliver malware – Tor network exploit
  (`http://resources.infosecinstitute.com/fbi-tor-exploit/`

Benefits of free JavaScript

`userscripts.org` has many examples of great things you can do running your own JavaScripts.

Basic freedom checklist

- Provide a license notice and possibly a copy of the free license

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The failure to do these things is why most JavaScript is nonfree.

My bandwidth is bigger than your freedom

JavaScript is usually minified in order to save on bandwidth and improve page loading speed, and also does not deliver you a copy of the license with every JavaScript file.

Minified JavaScript

Minified JavaScript is not source code. Source code is the preferred form
for modification.

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File Edit View Help

entDocument).document,cl.write((f.support.boxModel?"<!doctype html>":"")+"<html><body>"),cl.close();d=cl.createElement(a),cl.body.appe
")};f.event={add:function(a,c,d,e,g){var h,i,j,k,l,m,n,o,p,q,r,s;if(!(a.nodeType===3||a.nodeType===8||!c||!d||!(h=f._data(a)))){d.hand
ion(a,b){for(var c=0,d;(d=this[c])!=null;c++)if(!a||!f.filter(a,[d]).length)!b&&d.nodeType===1&&(f.cleanData(d.getElementsByTagName("*"

Providing source

For references to corresponding source code, we recommend

```
// @source:
```

followed by the URL. This satisfies the GNU GPL's requirement to distribute source code. If the source is on a different site, you must take care to [handle that properly](). Source code is necessary for the program to be free.

To indicate the license of the JavaScript code embedded in a page, we recommend putting the license notice between two notes of this form:

```
@licstart  The following is the entire license notice for the
JavaScript code in this page.
...
@licend  The above is the entire license notice
for the JavaScript code in this page.
```

Of course, all of this should be contained in a multiline comment.

Providing a free license notice

```
@licstart  The following is the entire license notice for the
JavaScript code in this page.
...
@licend  The above is the entire license notice
for the JavaScript code in this page.
```

Providing a copy of the free license

If you are the copyright holder of the JavaScript, you can do this:

```
Copyright (C) YYYY  Developer

The JavaScript code in this page is free software: you can
redistribute it and/or modify it under the terms of the GNU
General Public License (GNU GPL) as published by the Free Software
Foundation, either version 3 of the License, or (at your option)
any later version.  The code is distributed WITHOUT ANY WARRANTY;
without even the implied warranty of MERCHANTABILITY or FITNESS
FOR A PARTICULAR PURPOSE.  See the GNU GPL for more details.

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may distribute non-source (e.g., minimized or compacted) forms of
that code without the copy of the GNU GPL normally required by
section 4, provided you include this license notice and a URL
through which recipients can access the Corresponding Source.
```

Providing a copy of the free license

If you are the copyright holder of the JavaScript, you can do this:

```
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The JavaScript code in this page is free software: you can
redistribute it and/or modify it under the terms of the GNU
General Public License (GNU GPL) as published by the Free Software
Foundation, either version 3 of the License, or (at your option)
any later version.  The code is distributed WITHOUT ANY WARRANTY;
without even the implied warranty of MERCHANTABILITY or FITNESS
FOR A PARTICULAR PURPOSE.  See the GNU GPL for more details.

As additional permission under GNU GPL version 3 section 7, you
may distribute non-source (e.g., minimized or compacted) forms of
that code without the copy of the GNU GPL normally required by
section 4, provided you include this license notice and a URL
through which recipients can access the Corresponding Source.
```

But you're probably not the copyright holder.

Introducing JavaScript Web Labels

JavaScript Web Labels are a structured format to consistently conveniently convey both a copy of the license and the corresponding source code at the same time.

The description lives at
`http://www.gnu.org/licenses/javascript-labels.html`

The format was announced on February 9, 2012 at
`https://www.fsf.org/news/announcing-js-labels`.

Goal

A Web Label is machine readable, so we can have automated tools to parse this information, but we really wanted to emphasize something that is human readable.
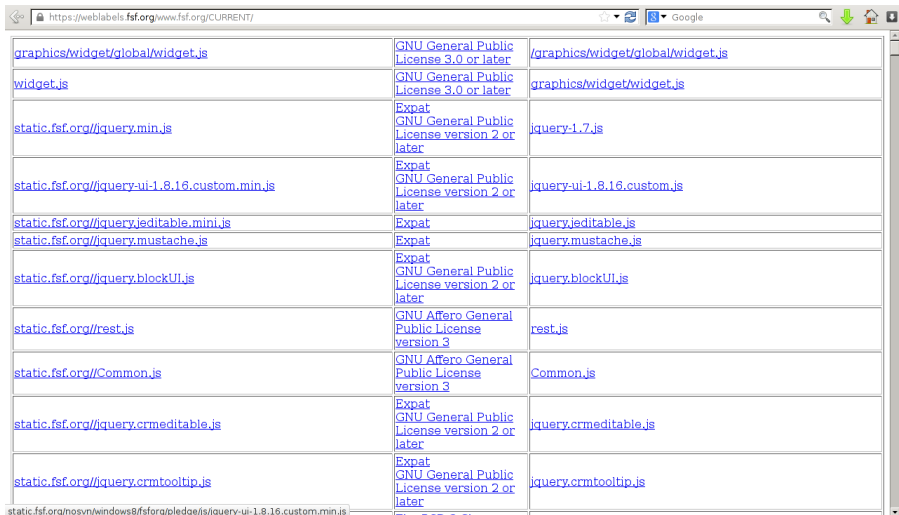
It starts with a link

Under the hood

On each page that uses JavaScript, include a link that points to a labels page. Mark this link with the attribute rel="jslicense", so that automated tools can find it. For example, your final link might look like this:

```
<a href="/about/javascript" rel="jslicense">JavaScript license information</a>
```

Web Labels

graphics/widget/global/widget.js	GNU General Public License 3.0 or later	/graphics/widget/global/widget.js
widget.js	GNU General Public License 3.0 or later	graphics/widget/widget.js
static.fsf.org//jquery.min.js	Expat GNU General Public License version 2 or later	jquery-1.7.js
static.fsf.org//jquery-ui-1.8.16.custom.min.js	Expat GNU General Public License version 2 or later	jquery-ui-1.8.16.custom.js
static.fsf.org//jquery.jeditable.mini.js	Expat	jquery.jeditable.js
static.fsf.org//jquery.mustache.js	Expat	jquery.mustache.js
static.fsf.org//jquery.blockUI.js	Expat GNU General Public License version 2 or later	jquery.blockUI.js
static.fsf.org//rest.js	GNU Affero General Public License version 3	rest.js
static.fsf.org//Common.js	GNU Affero General Public License version 3	Common.js
static.fsf.org//jquery.crmeditable.js	Expat GNU General Public License version 2 or later	jquery.crmeditable.js
static.fsf.org//jquery.crmtooltip.js	Expat GNU General Public License version 2 or later	jquery.crmtooltip.js
	The BSD 2-Clause	

static.fsf.org/nosvn/windows8/fsforg/pledge/js/jquery-ui-1.8.16.custom.min.js

Under the hood

The cell might look like this:

```
<table id="jslicense-labels1">

<tr>
<td><a href="/js/jquery-1.7.min.js">jquery-1.7.min.js</a></td>

<td><a href="http://www.jclark.com/xml/copying.txt">Expat</a></td>

<td><a href="/js/jquery-1.7.tar.gz">jquery-1.7.tar.gz</a></td>
</tr>

</table>
```

Web label in the wild

Introducing GNU LibreJS

GNU LibreJS (`https://gnu.org/s/librejs`) is an extension for Mozilla-based browsers.

Free JavaScript in your browser

Why didn't you do it some other way

We don't claim this to be the one true method. Other methods that satisfy the criteria could work. Some have proposed using RDF, some have suggested using HTTP headers. LibreJS can be extended to support multiple schemas.

How do we close the trap?

The "Java Trap" was essentially solved through a combination of hard work by free software hackers to create a free version of the Java platform, and Sun's wise decision to relicense the official platform as free.

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- Modify minifiers to have option for adding copyright notices
- Submitting patches to upstream free software projects that do intend for their JavaScript to be freely licensed – starter bugs?

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- Currently working with Greenpeace.org.
- Trying to work with reddit.com – you can help by contacting Reddit and asking them to carry out the rest of their commitment to free software.

Support Freedom

Our work is funded primarily by grassroots contributions from thousands of individual members.

- Join our JavaScript Developer Task Force: email `campaigns@fsf.org`.
- Join the FSF at `http://www.fsf.org/join` (use referrer #8096 if you like me).
- Submit patches to free software projects, or to Web sites, that use JavaScript, to fix licensing information.
- Participate by subscribing to our JavaScript campaign announcement list at `http://www.fsf.org/campaigns/freejs`.