

The State of Open Source Licensing and Ways to Improve It

Martin Michlmayr
Hewlett-Packard
t.bm@hp.com



- Why licensing matters
- Open source licensing
 - Contributor agreements
 - Copyright assignment
- Tools for the detection of licenses: FOSSology
- Standard for exchange of license information: Software Package Data Exchange (SPDX)
- Not covered: licenses; legal advice



- Companies using open source, especially those that also distribute it
 - Must understand the importance of honouring licenses
 - Identify licenses and follow them
 - Work with projects to ensure their intentions are followed
- Open source projects
 - Ensure that licensing is done right
 - Work with companies that use and distribute their software
- Researchers
 - Can shed light on best practices
 - Can help improve state of licensing



Why is licensing an important topic?

- Increasing adoption and penetration of open source
- Companies are getting sued, leading to more awareness:
 - SCO: question of code ownership
 - BusyBox, gpl-violations.org: complying with FOSS licenses



Problems with FOSS licensing

- Misunderstanding of FOSS licenses: you have obligations
- FOSS licenses and licensing can be complex and complicated
- Keeping track of what FOSS is being used
- Keeping track of FOSS licenses used by an application and how they interact



- GPL: requires source code to be offered to those who receive binaries
- AGPL: additionally requires that the complete source code be made available to any network user



Your obligations: permissive

- **MIT:** The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.
- **BSD (3 clause):** Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.



Who gets sued?

- Whoever distributes the software without compliance
- No excuses: 'software from ODM in Taiwan'
- Indemnification may help
- But reputation is destroyed quickly



Contributor Agreements

- Make legal questions around contributions explicit
- Often requires copyright assignment or grants



Fedora Project Contributor Agreement (FPCA)

- Defines default licenses that are used unless explicit license is given
- Current defaults:
 - Code: MIT
 - Content: Creative Commons Attribution ShareAlike 3.0 Unported
- Does not assign copyright to Fedora or Red Hat



- Every Debian developer has to agree to the DFSG and Social Contract
- DFSG: Debian Free Software Guidelines
- Social Contract: Debian will remain 100% free (according to DFSG)
- `debian/copyright`: describes upstream copyright/license and that of packaging



Developer's Certificate of Origin

- The contribution was created by me and I the have right to submit under indicated open source license
- The contribution is based on previous work that is also under indicated license
- The contribution was provided directly to me by someone who certified it and I didn't modify it
- I understand that the contribution and project are public and recorded

Signed-off-by: Martin Michlmayr <tbm@cyrius.com>



Why?

- Preserves the ability to relicense code
- Ensures sufficient rights to enforce licences in court
- Avoids and prevents later competing copyright claims

Why not?

- Gives copyright holder a lot of power
- Makes it harder to contribute



- Binary Analysis Tool
- FOSSology
- Open Source License Checker
- Proprietary tools from Black Duck, Palamida, etc

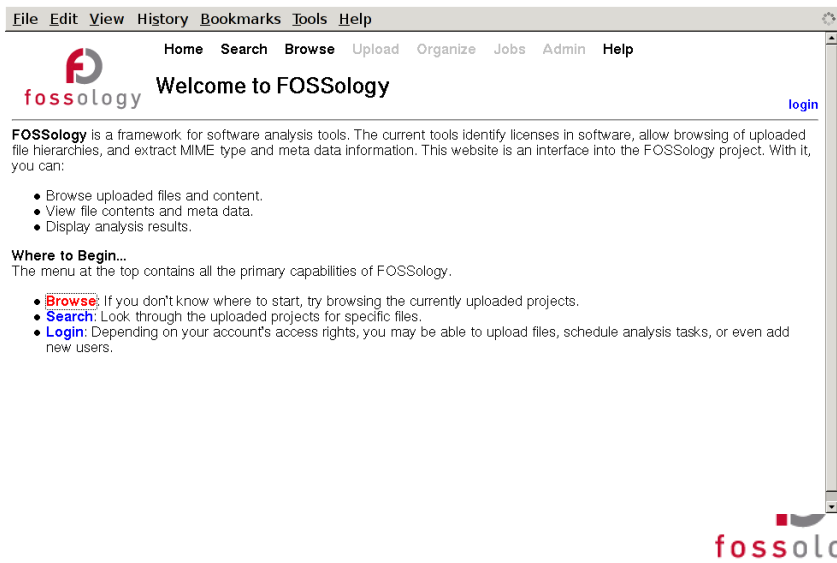


- FOSSology is a framework to study the source code of FOSS applications in a number of ways
- Main functionality: detection of licenses in open source applications
- Originally developed by HP, it is an open project with an open source license



- You load code into the repository
- You analyse it and put the results into a database
- You view the results





The screenshot shows a web browser window displaying the FOSSology homepage. The browser's menu bar includes 'File', 'Edit', 'View', 'History', 'Bookmarks', 'Tools', and 'Help'. The page header features the FOSSology logo, a navigation menu with 'Home', 'Search', 'Browse', 'Upload', 'Organize', 'Jobs', 'Admin', and 'Help', and a 'login' link. The main content area contains a welcome message and a list of capabilities.

File Edit View History Bookmarks Tools Help

Home Search Browse Upload Organize Jobs Admin Help

fossology Welcome to FOSSology [login](#)

FOSSology is a framework for software analysis tools. The current tools identify licenses in software, allow browsing of uploaded file hierarchies, and extract MIME type and meta data information. This website is an interface into the FOSSology project. With it, you can:

- Browse uploaded files and content.
- View file contents and meta data.
- Display analysis results.

Where to Begin...
The menu at the top contains all the primary capabilities of FOSSology.

- **Browse:** If you don't know where to start, try browsing the currently uploaded projects.
- **Search:** Look through the uploaded projects for specific files.
- **Login:** Depending on your account's access rights, you may be able to upload files, schedule analysis tasks, or even add new users.

fossology

The screenshot shows the FOSSology web interface. At the top is a menu bar with 'File', 'Edit', 'View', 'History', 'Bookmarks', 'Tools', and 'Help'. Below the menu is the FOSSology logo and a navigation bar with 'Home', 'Search', 'Browse', 'Upload', 'Organize', 'Jobs', 'Admin', and 'Help'. A 'login' link is visible on the right. The main content area is divided into two sections: 'Folder Navigation' on the left and 'Uploads' on the right. The 'Folder Navigation' section shows a tree view with 'System Repository' selected and highlighted in red. The 'Uploads' section displays a table with one entry: 'apache-common_1.3.26-0woody6_alpha.deb', which was added by file upload on 2008-02-15 at 12:57. The description indicates it is 'Neal's Test' and contains 452 items.

File Edit View History Bookmarks Tools Help

Home Search Browse Upload Organize Jobs Admin Help

fossology Browse login

Folder Navigation

Expand | Collapse | Refresh

- + System Repository
- baz
- Bobg
- Danger
- Fedora8
- Fedora-8.Test2
- FiveFedora
- FossTest
- FT
- hrdlink
- n1.2
- + Neak
- nktest
- rr1
- symlink
- t2
- Test3
- + Top
- + Two
- VK

Uploads

Upload Name and Description	Upload Date
apache-common_1.3.26-0woody6_alpha.deb Added by file upload: apache-common_1.3.26-0woody6_alpha.deb Neal's Test Contains 452 items.	2008-02-15 12:57

The screenshot shows the FOSSology web application interface. At the top is a menu bar with 'File', 'Edit', 'View', 'History', 'Bookmarks', 'Tools', and 'Help'. Below the menu bar is a navigation bar with 'Home', 'Search', 'Browse', 'Upload', 'Organize', 'Jobs', 'Admin', and 'Help'. The FOSSology logo is on the left, and a 'login' link is on the right. The main content area is divided into two sections: 'Folder Navigation' on the left and 'Uploads' on the right. The 'Folder Navigation' section shows a tree view with 'Neak' expanded, containing 'Debian', 'FreeBSD 6.2', 'OpenLogic', and 'RHEL4-U2-i386' (highlighted in red). The 'Uploads' section is a table with columns 'Upload Name and Description' and 'Upload Date'. It lists four uploads, each with a link to the file, a description of how it was added, and the upload date and time.

Upload Name and Description	Upload Date
RHEL4-U2-i386-AS-disc1.iso/ Added by file upload: RHEL4-U2-i386-AS-disc1.iso <i>No description</i> Contains 3,132 items.	2008-03-25 14:46
RHEL4-U2-i386-disc2.iso/ Added by file upload: RHEL4-U2-i386-disc2.iso <i>No description</i> Contains 138,865 items.	2008-03-25 14:42
RHEL4-U2-i386-disc3.iso/ Added by URL: http://devoss.fc.hp.com/~neak/ISOs/RHEL4-U2-i386-disc3.iso <i>No description</i> Contains 176,605 items.	2007-12-13 15:21
RHEL4-U2-i386-disc3.iso/ Added by file upload: RHEL4-U2-i386-disc3.iso <i>No description</i> Contains 176,605 items.	2008-03-21 11:24
RHEL4-U2-i386-disc4.iso/	

File Edit View History Bookmarks Tools Help	
OpenLogic	
RHEL4-U2-i386	
RHEL4-U2-i386-disc2.iso	Added by file upload: RHEL4-U2-i386-disc2.iso <i>No description</i> Contains 138,865 items. 2008-03-25 14:42
RHEL4-U2-i386-disc3.iso	Added by URL: http://devoss.fc.hp.com/~neak/ISOs/RHEL4-U2-i386-disc3.iso <i>No description</i> Contains 176,605 items. 2007-12-13 15:21
RHEL4-U2-i386-disc3.iso	Added by file upload: RHEL4-U2-i386-disc3.iso <i>No description</i> Contains 176,605 items. 2008-03-21 11:24
RHEL4-U2-i386-disc4.iso	Added by URL: http://devoss.fc.hp.com/~neak/ISOs/RHEL4-U2-i386-disc4.iso <i>No description</i> Contains 148,416 items. 2007-12-13 15:21
RHEL4-U2-i386-source-disc1.iso	Added by URL: http://devoss.fc.hp.com/~neak/ISOs/RHEL4-U2-i386-source-disc1.iso <i>No description</i> Contains 367,651 items. 2007-12-18 14:44
RHEL4-U2-i386-source-disc2.iso	Added by file upload: RHEL4-U2-i386-source-disc2.iso <i>No description</i> Contains 265,522 items. 2008-04-03 12:58

FOSSology demo



The screenshot shows a web browser window displaying the FOSSology interface. At the top is a menu bar with 'File', 'Edit', 'View', 'History', 'Bookmarks', 'Tools', and 'Help'. Below the menu is the FOSSology logo and a navigation bar with links for 'Home', 'Search', 'Browse', 'Upload', 'Organize', 'Jobs', 'Admin', and 'Help'. The main content area shows the current path: 'Folder: System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso'. Below the path is a table with one row of file information. The table has columns for file name, date, time, size, and actions. The file name is 'RHEL4-U2-i386-source-disc1.iso' with links for '[View]' and '[Meta]'. Below the table, it says '1 item'. In the bottom right corner, there is a smaller FOSSology logo.

File Edit View History Bookmarks Tools Help

Home Search Browse Upload Organize Jobs Admin Help

fossology Browse [login](#)

Folder: [System Repository/](#) [Nealk/](#) [RHEL4-U2-i386/](#) [RHEL4-U2-i386-source-disc1.iso](#) Browse • Detail | Simple • Refresh

-----	2007-12-18 14:44:47	545,931,264	RHEL4-U2-i386-source-disc1.iso [View] [Meta]
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1 item

fossology

FOSSology demo

File Edit View History Bookmarks Tools Help

Home Search Browse Upload Organize Jobs Admin Help

fossology Browse [login](#)

Folder: [System Repository/ Neak/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/](#)
[RHEL4-U2-i386-source-disc1.iso](#) [Browse](#) | [License](#) • [Detail](#) | [Simple](#) • [Refresh](#)

---rw-r--r--	91	.discinfo	[View] [Meta]
---rw-r--r--	6,987	EULA	[View] [Meta]
---rw-r--r--	18,416	GPL	[View] [Meta]
---rw-r--r--	1,910	RPM-GPG-KEY	[View] [Meta]
--dwxr-s---		SRPMS/	
---rw-r--r--	1,092	TRANS.TBL	[View] [Meta]

6 items



The screenshot shows the FOSSology web interface. At the top is a navigation menu with 'File', 'Edit', 'View', 'History', 'Bookmarks', 'Tools', and 'Help'. Below this is a secondary menu with 'Home', 'Search', 'Browse', 'Upload', 'Organize', 'Jobs', 'Admin', and 'Help'. The FOSSology logo is on the left, and the word 'Browse' is prominently displayed. A 'login' link is on the right. The main content area shows a folder path: 'System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/ RHEL4-U2-i386-source-disc1.iso/ SRPMS'. Below the path are links for 'Browse', 'License', 'Detail', 'Simple', and 'Refresh'. A table of files is displayed with columns for permissions, size, filename, and actions. The file 'HelixPlayer-1.0.6-0.EL4.1.src.rpm' is highlighted with a red dashed border. The FOSSology logo is also present in the bottom right corner of the interface.

File Edit View History Bookmarks Tools Help

Home Search Browse Upload Organize Jobs Admin Help

fossology Browse login

Folder: System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/
RHEL4-U2-i386-source-disc1.iso/ SRPMS

Browse | License • Detail | Simple • Refresh

---rw-r--r--	3,007,721	FreeWnn-1.10pl020-5.src.rpm	[View] [Meta]
---rw-r--r--	1,740,994	GConf2-2.8.1-1.src.rpm	[View] [Meta]
---rw-r--r--	13,967,378	HelixPlayer-1.0.6-0.EL4.1.src.rpm	[View] [Meta]
---rw-r--r--	5,785,369	ImageMagick-6.0.7.1-12.src.rpm	[View] [Meta]
---rw-r--r--	4,215,721	Omni-0.9.1-7.1.src.rpm	[View] [Meta]
---rw-r--r--	48,267	TRANS.TBL	[View] [Meta]
---rw-r--r--	665,725	VFlib2-2.25.6-25.src.rpm	[View] [Meta]
---rw-r--r--	596,567	Xaw3d-1.5-24.src.rpm	[View] [Meta]
---rw-r--r--	2,341,790	a2ps-4.13b-41.src.rpm	[View] [Meta]
---rw-r--r--	681,080	alsa-lib-1.0.6-5.RHEL4.src.rpm	[View] [Meta]
---rw-r--r--	155,592	alsa-utils-1.0.6-4.src.rpm	[View] [Meta]
---rw-r--r--	53,688	amtu-1.0.2-2.EL4.src.rpm	[View] [Meta]
---rw-r--r--	3,280,417	anaconda-10.1.1.25-1.src.rpm	[View] [Meta]
---rw-r--r--	74,612	anaconda-product-4-2AS.src.rpm	[View] [Meta]
---rw-r--r--	37,482	anacron-2.3-32.src.rpm	[View] [Meta]
---rw-r--r--	773,181	apr-util-0.9.4-21.src.rpm	[View] [Meta]
---rw-r--r--	223,404	ash-0.3.8-20.src.rpm	[View] [Meta]

fossology

The screenshot shows the FOSSology web interface. At the top is a navigation menu with links: File, Edit, View, History, Bookmarks, Tools, Help. Below this is a secondary menu: Home, Search, Browse, Upload, Organize, Jobs, Admin, Help. The FOSSology logo is on the left, and the word "Browse" is prominently displayed in the center. A "login" link is on the right. The main content area shows a folder path: System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/ RHEL4-U2-i386-source-disc1.iso/ SRPMS/ HelixPlayer-1.0.6-0.EL4.1.src.rpm. Below the path are links for Browse, License, Detail, Simple, and Refresh. A table lists files with permissions, sizes, names, and links to view or get metadata. The file "hxplay-1.0.6.tar.bz2" is highlighted in red. At the bottom left, it says "8 items".

File Edit View History Bookmarks Tools Help

Home Search Browse Upload Organize Jobs Admin Help

fossology Browse [login](#)

Folder: [System Repository/](#) [Nealk/](#) [RHEL4-U2-i386/](#) [RHEL4-U2-i386-source-disc1.iso/](#) [RHEL4-U2-i386-source-disc1.iso/](#) [SRPMS/](#) [HelixPlayer-1.0.6-0.EL4.1.src.rpm](#)

[Browse](#) | [License](#) • [Detail](#) | [Simple](#) • [Refresh](#)

--- rwx-rw-r--	502	HelixPlayer-1.0-ppc-build.patch	[View] [Meta]
--- rwx-rw-r--	1,022	HelixPlayer-1.0.3-exec-shield.patch	[View] [Meta]
--- rwx-rw-r--	450	HelixPlayer-1.0.6-ppc-build.patch	[View] [Meta]
--- rwx-rw-r--	724	HelixPlayer-1.0.beta20040615-cvs-no-update.patch	[View] [Meta]
--- rwx-rw-r--	2,136	HelixPlayer-up2date-to-RealPlayer.patch	[View] [Meta]
--- rwx-rw-r--	10,722	HelixPlayer.spec	[View] [Meta]
--- rwx-rw-r--	35	buildrc	[View] [Meta]
--- rwx-rw-r--	13,982,078	hxplay-1.0.6.tar.bz2	[View] [Meta]

8 items



The screenshot shows a web browser window displaying the FOSSology interface. At the top, there is a navigation menu with links: File, Edit, View, History, Bookmarks, Tools, and Help. Below this is a secondary menu with: Home, Search, Browse, Upload, Organize, Jobs, Admin, and Help. The FOSSology logo is on the left, and the word "Browse" is prominently displayed in the center. A "login" link is on the right. The main content area shows a folder path: System Repository/ Neak/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/. Below the path, there are links for RHEL4-U2-i386-source-disc1.iso/ SRPMS/, HelixPlayer-1.0.6-0.EL4.1.src.rpm/, and hxplay-1.0.6.tar.bz2. A table lists a file: --d-----S--- 2005-09-16 15:41:54 hxplay-1.0.6/. Below the table, it says "1 item". The FOSSology logo is also visible in the bottom right corner of the browser window.

File Edit View History Bookmarks Tools Help

Home Search Browse Upload Organize Jobs Admin Help

fossology Browse [login](#)

Folder: [System Repository/](#) [Neak/](#) [RHEL4-U2-i386/](#) [RHEL4-U2-i386-source-disc1.iso/](#)
[RHEL4-U2-i386-source-disc1.iso/](#) [SRPMS/](#)
[HelixPlayer-1.0.6-0.EL4.1.src.rpm/](#)
[hxplay-1.0.6.tar.bz2](#)

[Browse](#) | [License](#) • [Detail](#) | [Simple](#) • [Refresh](#)

```
--d-----S--- 2005-09-16 15:41:54 hxplay-1.0.6/
```

1 item

fossology

The screenshot shows the FOSSology web interface. At the top is a navigation menu with links: File, Edit, View, History, Bookmarks, Tools, Help. Below this is a secondary menu: Home, Search, Browse, Upload, Organize, Jobs, Admin, Help. The FOSSology logo is on the left, and a 'Browse' button is in the center. A 'login' link is on the right. The main content area shows a folder path: System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/. Below the path are links for RHEL4-U2-i386-source-disc1.iso/ SRPMS/, HelixPlayer-1.0.6-0.EL4.1.src.rpm/, and hxplay-1.0.6.tar.bz2/ hxplay-1.0.6. At the bottom right of the folder view are links: Browse | License | Detail | Simple | Refresh. A table of files is displayed below:

---rw-r--r--	2005-09-16 15:39:05	164	Makefile	[View] [Meta]
--d-----S---	2005-09-16 14:46:31		audio/	
--d-----S---	2005-09-16 15:39:05		build/	
---rw-r--r--	2005-09-16 15:39:05	0	buildrc	[View] [Meta]
--d-----S---	2005-09-16 14:45:40		client/	
--d-----S---	2005-09-16 14:46:47		common/	
--d-----S---	2005-09-16 14:48:30		datatype/	
--d-----S---	2005-09-16 14:46:17		filesystem/	
--d-----S---	2005-09-16 15:39:05		installer/	
---rw-r--r--	2005-09-16 15:39:05	122	make.bat	[View] [Meta]
--d-----S---	2005-09-16 14:48:30		player/	
--d-----S---	2005-09-16 14:47:01		protocol/	
--d-----S---	2005-09-16 14:45:19		video/	

13 items

File Edit View History Bookmarks Tools Help

Home Search Browse Upload Organize Jobs Admin Help



License Browser

[login](#)

Folder: [System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/ RHEL4-U2-i386-source-disc1.iso/ SRPMS/ HelixPlayer-1.0.6-0.EL4.1.src.rpm/ hxplay-1.0.6.tar.bz2/ hxplay-1.0.6](#)

[Browse](#) | [License](#) • [Detail](#) | [Simple](#) • [Refresh](#)

Count	Files	License	Makefile
3549	Show	RealNetworks Public Source License 1.0 reference	audio/ [224 licenses] build/ [749 licenses]
3330	Show	Apple Public Source License 1.2	builddrc
312	Show	RealNetworks Public Source License 1.0	client/ [801 licenses]
226	Show	OCLC Research Public License 2.0	common/ [2,644 licenses]
123	Show	RealNetworks Community Source Licensing	datatype/ [2,012 licenses]
98	Show	Dual MPL GPL	filesystem/ [131 licenses]
82	Show	Jahia Community Source License	installer/ [98 licenses]
62	Show	SISSL 1.1 reference 1	make.bat
46	Show	MPL 1.1 reference	player/ [1,014 licenses]
43	Show	Sun Microsystems Binary Code License	protocol/ [212 licenses]
42	Show	Phrase	video/ [461 licenses]
41	Show	Zend	
41	Show	NPL 1.1 reference	
41	Show	JasPer	

File Edit View History Bookmarks Tools Help

Home Search Browse Upload Organize Jobs Admin Help



License Browser

[login](#)


Folder: [System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/ RHEL4-U2-i386-source-disc1.iso/ SRPMS/ HelixPlayer-1.0.6-0.EL4.1.src.rpm/ hxplay-1.0.6.tar.bz2/ hxplay-1.0.6](#)

[Browse](#) | [License](#) • [Detail](#) | [Simple](#) • [Refresh](#)

Count	Files	License	Makefile
3549	Show	RealNetworks Public Source License 1.0 reference	audio/ [224 licenses] build/ [749 licenses]
3330	Show	Apple Public Source License 1.2	builddrc
312	Show	RealNetworks Public Source License 1.0	client/ [801 licenses]
226	Show	OCLC Research Public License 2.0	common/ [2,644 licenses]
123	Show	RealNetworks Community Source Licensing	datatype/ [2,012 licenses]
98	Show	Dual MPL GPL	filesystem/ [131 licenses]
82	Show	Jahia Community Source License	installer/ [98 licenses]
62	Show	SISSL 1.1 reference 1	make.bat
46	Show	MPL 1.1 reference	player/ [1,014 licenses]
43	Show	Sun Microsystems Binary Code License	protocol/ [212 licenses]
42	Show	Phrase	video/ [461 licenses]
41	Show	Zend	
41	Show	NPL 1.1 reference	
41	Show	JasPer	

File Edit View History Bookmarks Tools Help

Home Search Browse Upload Organize Jobs Admin Help



License Browser

[login](#)

Folder: [System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/ RHEL4-U2-i386-source-disc1.iso/ SRPMS/ HelixPlayer-1.0.6-0.EL4.1.src.rpm/ hxplay-1.0.6.tar.bz2/ hxplay-1.0.6](#)

[Browse](#) | [License](#) • [Detail](#) | [Simple](#) • [Refresh](#)

Count	Files	License	Makefile
3549	Show	RealNetworks Public Source License 1.0 reference	audio/ [224 licenses] build/ [749 licenses]
3330	Show	Apple Public Source License 1.2	builddrc client/ [801 licenses]
312	Show	RealNetworks Public Source License 1.0	common/ [2,644 licenses]
226	Show	OCLC Research Public License 2.0	datatype/ [2,012 licenses]
123	Show	RealNetworks Community Source Licensing	filesystem/ [131 licenses]
98	Show	Dual MPL GPL	installer/ [98 licenses]
82	Show	Jahia Community Source License	make.bat
62	Show	SISSL 1.1 reference 1	player/ [1,014 licenses]
46	Show	MPL 1.1 reference	protocol/ [212 licenses]
43	Show	Sun Microsystems Binary Code License	video/ [461 licenses]
42	Show	Phrase	
41	Show	Zend	
41	Show	NPL 1.1 reference	
41	Show	JasPer	

File Edit View History Bookmarks Tools Help

Home Search Browse Upload Organize Jobs Admin Help



License Browser

[login](#)

Folder: [System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/ RHEL4-U2-i386-source-disc1.iso/ SRPMS/ HelixPlayer-1.0.6-0.EL4.1.src.rpm/ hxplay-1.0.6.tar.bz2/ hxplay-1.0.6](#)

[Browse](#) | [License](#) • [Detail](#) | [Simple](#) • [Refresh](#)

Count	Files	License	Makefile
3549	Show	RealNetworks Public Source License 1.0 reference	audio/ [224 licenses] build/ [749 licenses]
3330	Show	Apple Public Source License 1.2	builddrc
312	Show	RealNetworks Public Source License 1.0	client/ [801 licenses] common/ [2,644 licenses]
226	Show	OCLC Research Public License 2.0	datatype/ [2,012 licenses]
123	Show	RealNetworks Community Source Licensing	filesystem/ [131 licenses]
98	Show	Dual MPL GPL	installer/ [98 licenses]
82	Show	Jahia Community Source License	make.bat
62	Show	SISSL 1.1 reference 1	player/ [1,014 licenses]
46	Show	MPL 1.1 reference	protocol/ [212 licenses]
43	Show	Sun Microsystems Binary Code License	video/ [461 licenses]
42	Show	Phrase	
41	Show	Zend	
41	Show	NPL 1.1 reference	
41	Show	JasPer	

File Edit View History Bookmarks Tools Help



Home Search Browse Upload Organize Jobs Admin Help

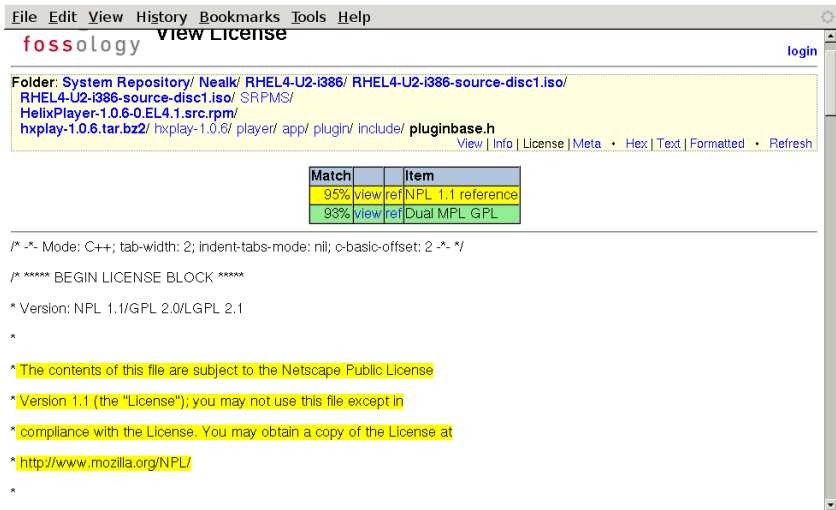
List Files based on License

login

The following files contain the license 'MPL/NPL 1.1 reference'.

1:	95.41%	Folder: System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/ RHEL4-U2-i386-source-disc1.iso/ SRPMS/ HelixPlayer-1.0.6-0.EL4.1.src.rpm/ hxplay-1.0.6.tar.bz2/ hxplay-1.0.6/ player/ app/ plugin/ include/ pluginbase.h
2:	95.41%	Folder: System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/ RHEL4-U2-i386-source-disc1.iso/ SRPMS/ HelixPlayer-1.0.6-0.EL4.1.src.rpm/ hxplay-1.0.6.tar.bz2/ hxplay-1.0.6/ player/ app/ plugin/ include/ npplat.h
3:	95.41%	Folder: System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/ RHEL4-U2-i386-source-disc1.iso/ SRPMS/ HelixPlayer-1.0.6-0.EL4.1.src.rpm/ hxplay-1.0.6.tar.bz2/ hxplay-1.0.6/ player/ app/ plugin/ common/ npp_gate.cpp
4:	95.41%	Folder: System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/ RHEL4-U2-i386-source-disc1.iso/ SRPMS/ HelixPlayer-1.0.6-0.EL4.1.src.rpm/ hxplay-1.0.6.tar.bz2/ hxplay-1.0.6/ player/ app/ plugin/ common/ npn_gate.cpp
		Folder: System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/ RHEL4-U2-i386-source-disc1.iso/ SRPMS/





The screenshot shows a web browser window with the FOSSology logo and a "view LICENSE" header. The breadcrumb path is: Folder: System Repository/ Nealk/ RHEL4-U2-i386/ RHEL4-U2-i386-source-disc1.iso/ RHEL4-U2-i386-source-disc1.iso/ SRPMS/ HelixPlayer-1.0.6-0.EL4.1.src.rpm/ hxplay-1.0.6.tar.bz2/ hxplay-1.0.6/ player/ app/ plugin/ include/ pluginbase.h. Below the path is a table of matches:

Match		Item
95%	view	NPL 1.1 reference
93%	view	Dual MPL GPL

Below the table is a code block showing the license text:

```
/* -*- Mode: C++; tab-width: 2; indent-tabs-mode: nil; c-basic-offset: 2 -*- */
/* ***** BEGIN LICENSE BLOCK *****
 * Version: NPL 1.1/GPL 2.0/LGPL 2.1
 *
 * The contents of this file are subject to the Netscape Public License
 * Version 1.1 (the "License"); you may not use this file except in
 * compliance with the License. You may obtain a copy of the License at
 * http://www.mozilla.org/NPL/
 *
```


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[RHEL4-U2-i386-source-disc1.iso/](#) [SRPMS/](#)
[HelixPlayer-1.0.6-0.EL4.1.src.rpm/](#)
[hxplay-1.0.6.tar.bz2/](#) [hxplay-1.0.6](#)

[Clear](#) • [Browse](#) | [License](#) • [Detail](#) | [Simple](#) • [Refresh](#)

Count	Files	License	Makefile
3549	Show	RealNetworks Public Source License 1.0 reference	audio/ [224 licenses] build/ [749 licenses]
3330	Show	Apple Public Source License 1.2	builddrc
312	Show	RealNetworks Public Source License 1.0	client/ [801 licenses]
226	Show	OCLC Research Public License 2.0	common/ [2,644 licenses]
123	Show	RealNetworks Community Source Licensing	datatype/ [2,012 licenses]
98	Show	Dual MPL GPL	filesystem/ [131 licenses]
82	Show	Jahia Community Source License	installer/ [98 licenses]
62	Show	SISSL 1.1 reference 1	make.bat
46	Show	MPL 1.1 reference	player/ [1,014 licenses]
43	Show	Sun Microsystems Binary Code License	protocol/ [212 licenses]
42	Show	Phrase	video/ [461 licenses]
41	Show	Zend	
41	Show	NPL 1.1 reference	
41	Show	JasPer	



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[RHEL4-U2-i386-source-disc1.iso/](#) [SRPMS/](#)
[HelixPlayer-1.0.6-0.EL4.1.src.rpm/](#)
[hxplay-1.0.6.tar.bz2/](#) [hxplay-1.0.6/](#) [player/](#) [common/](#) [gtk/](#) [po/](#) [zh_TW.po](#)

[View](#) | [Info](#) | [License](#) | [Meta](#) • [Hex](#) | [Text](#) | [Formatted](#) • [Refresh](#)

Match	Item
100% view	Phrase: This file is distributed under the same license as the PACKAGE package

```
# SOME DESCRIPTIVE TITLE.  
# Copyright (C) YEAR THE PACKAGE'S COPYRIGHT HOLDER  
# This file is distributed under the same license as the PACKAGE package.  
# FIRST AUTHOR <EMAIL@ADDRESS>, YEAR.  
#  
msgid ""  
msgstr ""  
"Project-Id-Version: PACKAGE VERSION\n"  
"Report-Msgid-Bugs-To: dev@player.helixcommunity.org\n"  
"POT-Creation-Date: 2004-08-27 17:26-0700\n"  
"PO-Revision-Date: YEAR-MO-DA HO:MI+ZONE\n"  
"Last-Translator: FULL NAME <EMAIL@ADDRESS>\n"  
"Language-Team: LANGUAGE <LL@li.org>\n"  
"MIME-Version: 1.0\n"  
"Content-Type: text/plain; charset=UTF-8\n"  
"Content-Transfer-Encoding: 8bit\n"
```



FOSSology: the new release

- Buckets
- New license algorithm
- Copyright agent





Bucket Browser

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Count	Files	Bucket
52	Show	Approved BAD Licenses (Override all versions)
4	Show	GPL/LGPL version 3 licenses
3	Show	Known commercial licenses and/or packages
3	Show	Package LIKELY to be commercial
2	Show	SHIP-HOLD licenses
1	Show	Suspected bad licenses

Unique buckets: 6

- 16 source packages
- 49 binary packages
- 25 binary packages with no source package

[amtu-1.0.2-2.EL4.ia64.rpm](#)
[anaconda-9.1-8.RHEL.ia64.rpm](#)
[anaconda-help-9.1-3.RHEL.no](#)
[anaconda-images-9.1-2.RHEL](#)
[anaconda-product-3-1AS.noa](#)
[anaconda-runtime-9.1-8.RHE](#)
[aspell-nl-0.50-3.i386.rpm](#)
[aspell-nl-0.50-3.src.rpm](#)
[caching-nameserver-7.2-10.r](#)
[caching-nameserver-7.2-10.s](#)
[comps-4WS-0.20080523.i386](#)
[comps-4WS-0.20080523.src.r](#)
[comps-extras-11.1-1.1.noarc](#)





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Count	Files	Copyright Statements
142	Show	Copyright (C) 2001 the
75	Show	Copyright Notice
69	Show	Copyright Statement
54	Show	Copyright (C) The Internet Society (2003
41	Show	Copyright (C) 1995 1997 Eric Young (eay@mincom.oz.au) All rights reserved .
40	Show	(c)
40	Show	written by Eric Young (eay@mincom.oz.au)
26	Show	Copyright Statement .
26	Show	P. Overell ,
20	Show	Copyright (c) 2001 Carnegie Mellon University . All rights reserved .
20	Show	I. .
18	Show	Copyright (C) The Internet Society (1997
18	Show	P. Hedstrom





Nomos License Browser

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Count	Files	License Name	
4735	Show	No License Found	amtu-1.0.2-2.EL4.i64.rpm
909	Show	(C)Apache	anaconda-9.1-8.RHEL.i686.rpm
858	Show	Apache_v2.0	anaconda-help-9.1-3.RHEL.i686.rpm
812	Show	ATT	anaconda-images-9.1-2.EL4.i686.rpm
787	Show	Misc-Copyright	anaconda-product-3-1AS.i686.rpm
383	Show	(C)U-Washington	anaconda-runtime-9.1-8.RHEL.i686.rpm
289	Show	GPL_v2+	aspell-nl-0.50-3.i386.rpm
247	Show	CMU	aspell-nl-0.50-3.src.rpm
155	Show	CC-BY	caching-nameserver-7.2.2-1.el5.i686.rpm
155	Show	CC-BY	caching-nameserver-7.2.2-1.el5.i686.rpm



Scope of the problem

- Prior to distributing a collection of software, each package needs to be reviewed to ensure compliance with all the licenses.
- Supply chain for products now requires software copyright and licensing information for lawsuit avoidance and risk mitigation.
- A package's declared license may not always match the licenses of individual files inside the package itself.
- A package may consist of thousands of files with different licenses in the files
- Need a standard way of referring to the legal compliance 'bill-of-materials' of a software package and be able exchange information with others.



- Define a file format for license information to accompany open source packages
 - Focus: Just the facts – no interpretations
- Benefits
 - Provides a unified method for exchanging license information
 - Avoids due diligence redundancy where the same source code package is analyzed multiple times by different receivers



Structure of standard

- Identification: meta data to associate analysis results with a specific package
- Overview: Facts that are properties for entire package (e.g. package name, declared license)
- File Specific: Facts that are specific to each file included in a package (e.g. filename, copyright)



- Organizations
 - FSF Free Software Licensing and Compliance Lab
 - FSFE Freedom Task Force (FTF)
 - gpl-violations.org
 - Open Source Initiative (OSI)
 - Software Freedom Law Center
- Communities
 - FOSSBazaar
 - FSFE Legal Network
- News and journals
 - Groklaw
 - International Free and Open Source Software Law Review
- Conferences
 - FSFE ELN (European Legal Network)
 - EOLE - European Open Source Law Event
- Software

