



RFC 125 - Bundle License

Final

9 Pages

Abstract

This RFC defines the format and rules for a Bundle-License header in the manifest

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0.2 Terminology and Document Conventions

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY" and "OPTIONAL" in this document are to be interpreted as described in [1].

Source code is shown in this typeface.

0.3 Revision History

The last named individual in this history is currently responsible for this document.

Revision	Date	Comments
Initial	SEP 27 2007	Initial, Peter Kriens, aQute
Final	2 December 2008	No Changes. Final for CPEG voting.

1 Introduction

This RFC defines a new header for the next release. It was introduced by Bugzilla bug #483, see [3]. The original request was denied during a CPEG meeting because it required the maintenance of a licenses list, this was deemed too cumbersome for the OSGi. However, the use of a Bundle-License header was acknowledged. This small RFC designs a more acceptable form of a Bundle-License header.

2 Application Domain

It is interesting to note how many technically inclined people on software conferences tend to only discuss licensing issues. The advent of open source with its myriad of licenses, combined with the (ab)use of licenses in a very different spirit than intended has created a complex situation. The Open Source Licenses web site, see [4] has a list with 60 open source compatible licenses. Well known licenses are Mozilla Public License, Eclipse Public License, Apache Software License, and of course GPL and LGPL. These licenses differ in a grand scale sometimes, like GPL versus Apache or often quite close.

Currently, licenses are stored in artifacts in an ad hoc way, there are no rules. The requirements on how to handle the licensing of artifacts is a black art. There is very little jurisprudence in this area and there are usual lawyers involved that tend to want to err on the safe side by adding the same information many times and seem to only use upper case fonts for unknown reasons. It is unlikely that a single set of rules can match the requirements of these lawyers.

Most larger corporations have strict policies of what kind of licenses can be used and which licenses are compatible with their policy.

Most licenses are defined available over the internet via a URL. Some examples:

- <http://www.apache.org/licenses/LICENSE-2.0.txt>
- <http://www.apache.org/licenses/LICENSE-1.1>
- <http://www.gnu.org/licenses/gpl-2.0.txt>
- <http://www.gnu.org/licenses/gpl-3.0.txt>
- <http://www.gnu.org/licenses/old-licenses/lgpl-2.1.txt>
- <http://www.eclipse.org/legal/epl-v10.html>
- <http://www.opensource.org/licenses/sunpublic.php>
-

Many licenses do not have a URL, for example, for BSD only a template could be found that was embedded in a more philosophical discussion. Also, many licenses do not take versioning into account or update the URL with a new version without changing the name. For example, the URL <http://www.gnu.org/licenses/gpl.txt> refers to GPL 3 while it used to refer to GPL 2.0.

There are of course also commercial licenses. Where open source libraries have some form of organization, commercial licenses can not be assumed to have a URL. Despite the fact that many licenses have a URL, most software still include the license text in or with the artifact to avoid any confusion.

Licensing can be complicated if the artifact is covered by multiple licenses. There are two possibilities:

- Parts of the artifacts fall under different licenses
- The user has the choice of choosing between difference licenses

I do not think that you ever have the case of multiple licenses that are ALL valid, that is you always accept only one license for each resource?

In certain case, the receiver can accept different licensing rules. For example, the government often gets different conditions than ordinary citizens. Or a company could have a special deal for certain large corporations.

A very common use case that the artifact stipulates that was delivered with a license. I.e., the provider of the artifact has a single delivery artifact but stipulates the license external from the artifact.

3 Problem Description

It should possible for OSGi bundle to include licensing information about the rights of the bundle in such a way that bundles can be machine read and verified to comply with company policies.

4 Requirements

- R001 – Allow parts of the bundle to be licensed differently than other bundles
- R001 – Allow multiple licenses per part
- R002 – Allow unique identification of open source licenses
- R003 – Provide descriptive information so that a processor is not required to go online to show information to the end user.
- R004 – Allow the licenses to be stored in the bundle and connected to the applied licenses.
- R005 – Provide a human readable name that can be used to select the license information in a list
- R006 – Provide a model where licenses can be targeted at certain entities and not to be considered by others.
- R007 – Allow a provider to make it clear that the bundle's license is provided through other means. I.e. the bundle is not self descriptive regarding licenses.
- R008 – Ensure the OSGi Alliance does not have responsibility for the contents

5 Technical Solution

The following header syntax is proposed:

```
Bundle-License ::= "<<EXTERNAL>>" | ( license ( ',' license ) * )  
license       ::= name ( ';' license-attr ) *  
license-attr  ::= description | link | covers | local | exclusive  
description   ::= 'description' '=' string  
link          ::= 'link' '=' <url>  
local         ::= 'local' '=' path // see ...  
covers        ::= 'covers' '=' path | ''' path ( ',' path ) * '''
```

```
exclusive ::= 'exclusive' '=' bsn | ''' bsn ( ',' bsn ) * ''
```

This header has the following aspects:

- *name* – Provides a globally unique name for this license, preferably world wide but in minimum for the other clauses. Clients of this bundle can assume that licenses with the same name refer to the same license. This can for example be used to minimize the click through licenses. This name is the cardinal URL of the license, it must *not* be localized by the developer. This URL does not have to exist but must not be used for later versions of the license. It is advised to use the following structure, but this is not mandated:
 - <http://<domain-name>/licenses/<license-name>-<version>.<extension>>
- *description* – (optional) Provide the description of the license. This is a short description that is usable in a list box on a UI to select more information about the license.
- The magic name <<EXTERNAL>> is used to indicate that this artifact does not contain any license information but that licensing information is provided in some other way. This is the default contents of this header.
- *link* –(optional) Provide a URL to a page that defines or explains the license. If this link is absent, the name field is used for this purpose. This field can be localized to allow different URLs for different locales.
- *covers* – (option) Lists the paths of the bundle that are covered by this license. Paths are supposed to include the directory they point to and all sub directories. Paths should not start with a /, they are all assumed to start at the root. The default for covers is empty, indicating the whole bundle. If different licenses have overlapping values for this, then the license is assume to be a choice for the user, any of the overlapping licenses is acceptable.
- *local* – (option) A path to the license inside the bundle. The license include in the bundle has priority over the url or any license defined by the url or name. However, bundle developer must not store a license file that is not identical to the one identified by the name or url, this would be considered malice.
- *exclusive* – (option) This attribute lists the names of entities that can accept this license. In certain cases, for example the government, different licensing rules apply. If this field is set, it should be considered absent if the entity name is not recognized as the accepting party. This name is not formally defined but is assumed to be the domain name of the organization:
 - *gov*
 - *darpa.mil*
 - *ibm.com*
 - *sales.bea.com*
 - *felix.apache.org*

If multiple licenses are listed with an overlapping covers attribute then the user is free to license the resources under any of the listed licenses.

If the Bundle-License statement is absent, then this does not mean that the bundle is not licensed. Licensing could be handled outside the bundle.

A user should accept at least one license for each of the resources in the bundle to consider the bundle as accepted.

6 Proposed Specification Text

The following section is added before 3.2.1.9 Bundle-Location

6.1 Bundle-License Header

The Bundle-License header provides an optional machine readable form of license information. The purpose of this header is to automate some of the license processing required by many organizations like for example license acceptance before a bundle is used. The header is structured to provide the use of unique license naming to merge acceptance requests as well as links to human readable information about the included licenses. This header is purely informational for management agents and must not be processed by the OSGi Framework.

The syntax for this header is as follows:

```
Bundle-License ::= "<<EXTERNAL>>" | ( license ( ',' license ) * )  
  
license        ::= name ( ';' license-attr ) *  
  
license-attr   ::= description | link  
  
description    ::= 'description' '=' string  
  
link           ::= 'link' '=' <url>
```

This header has the following attributes:

- *name* – Provides a globally unique name for this license, preferably world wide but it should at least be unique with respect to the other clauses. The magic name <<EXTERNAL>> is used to indicate that this artifact does not contain any license information but that licensing information is provided in some other way. This is the default contents of this header. Clients of this bundle can assume that licenses with the same name refer to the same license. This can for example be used to minimize the click through licenses. This name should be the cardinal URL of the license, it must *not* be localized by the translator. This URL does not have to exist but must not be used for later versions of the license. It is recommended to use URLs for open source code from <http://www.opensource.org/licenses/alphabetical>. Other licenses should use the following structure, but this is not mandated:
 - <http://<domain-name>/licenses/<license-name>-<version>.<extension>>
- *description* – (optional) Provide the description of the license. This is a short description that is usable in a list box on a UI to select more information about the license.

-
- *link* –(optional) Provide a URL to a page that defines or explains the license. If this link is absent, the name field is used for this purpose. The URL is relative to the root of the bundle. I.e. it is possible to refer to a file inside the bundle.

If the Bundle-License statement is absent, then this does not mean that the bundle is not licensed. Licensing could be handled outside the bundle and the <<EXTERNAL>> form should be assumed.

Clearly, this header is informational and may not have any legal bearing. Consult a lawyer before using this header to automate licensing processing.

7 Security Considerations

The Bundle-License header has no known security implications.

8 Document Support

8.1 References

- [1]. Bradner, S., Key words for use in RFCs to Indicate Requirement Levels, RFC2119, March 1997.
- [2]. Software Requirements & Specifications. Michael Jackson. ISBN 0-201-87712-0
- [3]. https://www.osgi.org/members/bugzilla/show_bug.cgi?id=483
- [4]. <http://www.opensource.org/licenses>

8.2 Author's Address

Name	Peter Kriens
Company	aQute
Address	9c, Avenue St. Drézéry
Voice	+33467542167
e-mail	Peter.Kriens@aQute.biz

8.3 Acronyms and Abbreviations

8.4 End of Document