# SimpleMagic Package

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## **SimpleMagic**

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This package provides some simple magic value features that simulate the Unix file(1) command to determine the type of a file or of bytes from the content. It has an internal set of magic number information or it can process the magic files from local "Unix system configuration

To get started quickly using SimpleMagic, see Chapter 1 [Quick Start], page 2. There is also a HTML version of this documentation.

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### 1 Start Using Quickly

To use SimpleMagic you need to do the following steps. For more information, see Chapter 2 [Using], page 3.

- 1. Download SimpleMagic from the SimpleMagic release page. See Section 2.1 [Downloading], page 3.
- 2. Optionally load in the magic entries from local file(s). By default, if you construct a ContentTypeUtil instance with the default constructor, it will load the internal magic entries file. See Section 2.2 [Loading Magic Entries], page 3.
- 3. Use the ContentTypeUtil class to get content-types for files or byte[]:

```
ContentTypeUtil util = new ContentTypeUtil();
ContentType contentType = util.findMatch("/tmp/upload.tmp");
System.out.println("Content-type is: " + contentType.getName());
```

For somewhat more extensive instructions, see Chapter 2 [Using], page 3.

#### 2 Using SimpleMagic

#### 2.1 Downloading Jar

To get started with SimpleMagic, you will need to download the jar file. The SimpleMagic release page is the default repository but the jars are also available from the central maven repository.

The code works with Java 5 or later.

#### 2.2 How To Load Magic Entries

The library uses various magic byte information to be able to find and determine details about random blocks of bytes. By default, SimpleMagic has a built in version of a magic file that was copied from a CentOS Linux system. It contains, ~2400 magic file entries describing a number of different file types. It also has an additional ~6600 lines which provide more details about the detected content types.

The magic entries are relatively complex but in general look something like the following. The configuration line says to look at the start of the file for the string "GIF8". If it is there then the file is "GIF image data".

O string GIF8 GIF image data

If you do not want to use the internal magic definitions, you can also construct the ContentTypeUtil class with a file or directory to have it parse and use another definition file.

```
ContentTypeUtil util = new ContentTypeUtil("/etc/magic");
ContentType contentType = util.findMatch(uploadedBytes);
```

WARNING: although we've tried to support different types of magic entries, there are local per-OS variations that may not be supported.

### 3 Open Source License

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