

Diving In

Real artists ship. Or so says Steve Jobs. Do you want to release a Python script, library, framework, or application? Excellent. The world needs more Python code. Python 3 comes with a packaging framework called Distutils. Distutils is many things: a build tool (for you), an installation tool (for your users), a package metadata format (for search engines), and more. It integrates with the [Python Package Index](#) (“PyPI”), a central repository for open source Python libraries.

All of these facets of Distutils center around the *setup script*, traditionally called `setup.py`. In fact, you’ve already seen several Distutils setup scripts in this book. You used Distutils to install `httplib2` in [HTTP Web Services](#) and again to install `chardet` in [Case Study: Porting chardet to Python 3](#).

In this chapter, you’ll learn how the setup scripts for `chardet` and `httplib2` work, and you’ll step through the process of releasing your own Python software.

```
# chardet's setup.py

from distutils.core import setup
setup(
    name = "chardet",
    packages = ["chardet"],
    version = "1.0.2",
    description = "Universal encoding detector",
    author = "Mark Pilgrim",
    author_email = "mark@diveintomark.org",
    url = "http://chardet.feedparser.org/",
    download_url = "http://chardet.feedparser.org/download/python3-chardet-1.0.1.tgz",
    keywords = ["encoding", "i18n", "xml"],
    classifiers = [
        "Programming Language :: Python",
        "Programming Language :: Python :: 3",
        "Development Status :: 4 - Beta",
        "Environment :: Other Environment",
        "Intended Audience :: Developers",
        "License :: OSI Approved :: GNU Library or Lesser General Public License (LGPL)",
        "Operating System :: OS Independent",
        "Topic :: Software Development :: Libraries :: Python Modules",
```



```

        "Topic :: Text Processing :: Linguistic",
    ],
    long_description = """\
Universal character encoding detector
-----

Detects
- ASCII, UTF-8, UTF-16 (2 variants), UTF-32 (4 variants)
- Big5, GB2312, EUC-TW, HZ-GB-2312, ISO-2022-CN (Traditional and Simplified Chinese)
- EUC-JP, SHIFT_JIS, ISO-2022-JP (Japanese)
- EUC-KR, ISO-2022-KR (Korean)
- KOI8-R, MacCyrillic, IBM855, IBM866, ISO-8859-5, windows-1251 (Cyrillic)
- ISO-8859-2, windows-1250 (Hungarian)
- ISO-8859-5, windows-1251 (Bulgarian)
- windows-1252 (English)
- ISO-8859-7, windows-1253 (Greek)
- ISO-8859-8, windows-1255 (Visual and Logical Hebrew)
- TIS-620 (Thai)

This version requires Python 3 or later; a Python 2 version is available separately.
"""
)

```

chardet and **httplib2** are open source, but there's no requirement that you release your own Python libraries under any particular license. The process described in this chapter will work for any Python software, regardless of license.