Docs » pySerial

pySerial

Overview

This module encapsulates the access for the serial port. It provides backends for Python running on Windows, OSX, Linux, BSD (possibly any POSIX compliant system) and IronPython. The module named "serial" automatically selects the appropriate backend.

It is released under a free software license, see LICENSE for more details.

Copyright (C) 2001-2016 Chris Liechti <cli>cliechti(at)gmx.net>

Other pages (online)

- project page on GitHub
- Download Page with releases (PyPi)
- This page, when viewed online is at https://pyserial.readthedocs.io/en/latest/ or http://pythonhosted.org/pyserial/ .

Features

- Same class based interface on all supported platforms.
- Access to the port settings through Python properties.
- Support for different byte sizes, stop bits, parity and flow control with RTS/CTS and/or Xon/Xoff.
- Working with or without receive timeout.
- File like API with "read" and "write" ("readline" etc. also supported).
- The files in this package are 100% pure Python.
- The port is set up for binary transmission. No NULL byte stripping, CR-LF translation etc. (which are many times enabled for POSIX.) This makes this module universally useful.

- Compatible with io library
- RFC 2217 client (experimental), server provided in the examples.

Requirements

- Python 2.7 or Python 3.4 and newer
- If running on Windows: Windows 7 or newer
- If running on Jython: "Java Communications" (JavaComm) or compatible extension for Java

For older installations (older Python versions or older operating systems), see older versions below.

Installation

This installs a package that can be used from Python (import serial).

To install for all users on the system, administrator rights (root) may be required.

From PyPI

pySerial can be installed from PyPI:

```
python -m pip install pyserial
```

Using the python/python3 executable of the desired version (2.7/3.x).

Developers also may be interested to get the source archive, because it contains examples, tests and the this documentation.

From Conda

pySerial can be installed from Conda:

```
conda install pyserial

or

conda install -c conda-forge pyserial
```

Currently the default conda channel will provide version 3.4 whereas the condaforge channel provides the current 3.x version.

Conda: https://www.continuum.io/downloads

From source (zip/tar.gz or checkout)

Download the archive from http://pypi.python.org/pypi/pyserial or https://github.com/pyserial/pyserial/releases. Unpack the archive, enter the pyserial-x.y directory and run:

```
python setup.py install
```

Using the python/python3 executable of the desired version (2.7/3.x).

Packages

There are also packaged versions for some Linux distributions:

- Debian/Ubuntu: "python-serial", "python3-serial"
- Fedora / RHEL / CentOS / EPEL: "pyserial"
- Arch Linux: "python-pyserial"
- Gentoo: "dev-python/pyserial"

Note that some distributions may package an older version of pySerial. These packages are created and maintained by developers working on these distributions.

References

- Python: http://www.python.org/
- Jython: http://www.jython.org/
- IronPython: http://www.codeplex.com/IronPython

Older Versions

Older versions are still available on the current download page or the old download page. The last version of pySerial's 2.x series was 2.7, compatible with Python 2.3 and newer and partially with early Python 3.x versions.

pySerial 1.21 is compatible with Python 2.0 on Windows, Linux and several un*x like systems, MacOSX and Jython.

On Windows, releases older than 2.5 will depend on pywin32 (previously known as win32all). WinXP is supported up to 3.0.1.