

:mod:`poplib` --- POP3 protocol client

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 1); [backlink](#)

Unknown interpreted text role "mod".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 4)

Unknown directive type "module".

```
.. module:: poplib
   :synopsis: POP3 protocol client (requires sockets).
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 7)

Unknown directive type "sectionauthor".

```
.. sectionauthor:: Andrew T. Csillag
```

Source code: `:source:`Lib/poplib.py``

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 10); [backlink](#)

Unknown interpreted text role "source".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 12)

Unknown directive type "index".

```
.. index:: pair: POP3; protocol
```

This module defines a class, `:class:`POP3``, which encapsulates a connection to a POP3 server and implements the protocol as defined in [RFC 1939](#). The `:class:`POP3`` class supports both the minimal and optional command sets from [RFC 1939](#). The `:class:`POP3`` class also supports the `STLS` command introduced in [RFC 2595](#) to enable encrypted communication on an already established connection.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 16); [backlink](#)

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 16); [backlink](#)

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 16); [backlink](#)

Unknown interpreted text role "class".

Additionally, this module provides a class `:class:`POP3_SSL``, which provides support for connecting to POP3 servers that use SSL as an underlying protocol layer.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 22); [backlink](#)

Unknown interpreted text role "class".

Note that POP3, though widely supported, is obsolescent. The implementation quality of POP3 servers varies widely, and too many are quite poor. If your mailserver supports IMAP, you would be better off using the `:class:`imaplib.IMAP4`` class, as IMAP servers

tend to be better implemented.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 26); [backlink](#)

Unknown interpreted text role "class".

The `mod:poplib` module provides two classes:

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 31); [backlink](#)

Unknown interpreted text role "mod".

This class implements the actual POP3 protocol. The connection is created when the instance is initialized. If *port* is omitted, the standard POP3 port (110) is used. The optional *timeout* parameter specifies a timeout in seconds for the connection attempt (if not specified, the global default timeout setting will be used).

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 42)

Unknown directive type "audit-event".

```
.. audit-event:: poplib.connect self,host,port poplib.POP3
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 44)

Unknown directive type "audit-event".

```
.. audit-event:: poplib.putline self,line poplib.POP3
```

```
All commands will raise an :ref:`auditing event <auditing>`
`poplib.putline` with arguments ``self`` and ``line``,
where ``line`` is the bytes about to be sent to the remote host.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 50)

Unknown directive type "versionchanged".

```
.. versionchanged:: 3.9
   If the *timeout* parameter is set to be zero, it will raise a
   :class:`ValueError` to prevent the creation of a non-blocking socket.
```

This is a subclass of `class:POP3` that connects to the server over an SSL encrypted socket. If *port* is not specified, 995, the standard POP3-over-SSL port is used. *timeout* works as in the `class:POP3` constructor. *context* is an optional `class:ssl.SSLContext` object which allows bundling SSL configuration options, certificates and private keys into a single (potentially long-lived) structure. Please read [ref:ssl-security](#) for best practices.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 56); [backlink](#)

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 56); [backlink](#)

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 56); [backlink](#)

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 56); [backlink](#)

Unknown interpreted text role "ref".

keyfile and *certfile* are a legacy alternative to *context* - they can point to PEM-formatted private key and certificate chain files, respectively, for the SSL connection.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 68)

Unknown directive type "audit-event".

```
.. audit-event:: poplib.connect self,host,port poplib.POP3_SSL
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 70)

Unknown directive type "audit-event".

```
.. audit-event:: poplib.putline self,line poplib.POP3_SSL
```

```
All commands will raise an :ref:`auditing event <auditing>`
`poplib.putline` with arguments ``self`` and ``line``,
where ``line`` is the bytes about to be sent to the remote host.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 76)

Unknown directive type "versionchanged".

```
.. versionchanged:: 3.2
   *context* parameter added.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 79)

Unknown directive type "versionchanged".

```
.. versionchanged:: 3.4
   The class now supports hostname check with
   :attr:`ssl.SSLContext.check_hostname` and *Server Name Indication* (see
   :data:`ssl.HAS_SNI`).
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 84)

Unknown directive type "deprecated".

```
.. deprecated:: 3.6

   *keyfile* and *certfile* are deprecated in favor of *context*.
   Please use :meth:`ssl.SSLContext.load_cert_chain` instead, or let
   :func:`ssl.create_default_context` select the system's trusted CA
   certificates for you.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 91)

Unknown directive type "versionchanged".

```
.. versionchanged:: 3.9
   If the *timeout* parameter is set to be zero, it will raise a
   :class:`ValueError` to prevent the creation of a non-blocking socket.
```

One exception is defined as an attribute of the `mod:poplib` module:

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 95); [backlink](#)

Unknown interpreted text role "mod".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 98)

Unknown directive type "exception".

```
.. exception:: error_proto
```

Exception raised on any errors from this module (errors from :mod:`socket` module are not caught). The reason for the exception is passed to the constructor as a string.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 105)

Unknown directive type "seealso".

```
.. seealso::
```

Module :mod:`imaplib`
The standard Python IMAP module.

`Frequently Asked Questions About Fetchmail <<http://www.catb.org/~esr/fetchmail/fetchmail-FAQ.html>>
The FAQ for the :program:`fetchmail` POP/IMAP client collects information on POP3 server variations and RFC noncompliance that may be useful if you need to write an application based on the POP protocol.

POP3 Objects

All POP3 commands are represented by methods of the same name, in lowercase; most return the response text sent by the server.

A :class:`POP3` instance has the following methods:

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 124); [backlink](#)

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 127)

Unknown directive type "method".

```
.. method:: POP3.set_debuglevel(level)
```

Set the instance's debugging level. This controls the amount of debugging output printed. The default, ``0``, produces no debugging output. A value of ``1`` produces a moderate amount of debugging output, generally a single line per request. A value of ``2`` or higher produces the maximum amount of debugging output, logging each line sent and received on the control connection.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 136)

Unknown directive type "method".

```
.. method:: POP3.getwelcome()
```

Returns the greeting string sent by the POP3 server.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 141)

Unknown directive type "method".

```
.. method:: POP3.capa()
```

Query the server's capabilities as specified in :rfc:`2449`. Returns a dictionary in the form ``{'name': ['param'...]}``.

```
.. versionadded:: 3.4
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 149)

Unknown directive type "method".

```
.. method:: POP3.user(username)
```

Send user command, response should indicate that a password is required.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 154)

Unknown directive type "method".

```
.. method:: POP3.pass_(password)
```

Send password, response includes message count and mailbox size. Note: the mailbox on the server is locked until :meth:`~poplib.quit` is called.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 160)

Unknown directive type "method".

```
.. method:: POP3.apop(user, secret)
```

Use the more secure APOP authentication to log into the POP3 server.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 165)

Unknown directive type "method".

```
.. method:: POP3.rpop(user)
```

Use RPOP authentication (similar to UNIX r-commands) to log into POP3 server.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 170)

Unknown directive type "method".

```
.. method:: POP3.stat()
```

Get mailbox status. The result is a tuple of 2 integers: ``(message count, mailbox size)``.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 176)

Unknown directive type "method".

```
.. method:: POP3.list([which])
```

Request message list, result is in the form ``(response, ['mesg_num octets', ...], octets)``. If *which* is set, it is the message to list.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 182)

Unknown directive type "method".

```
.. method:: POP3.retr(which)
```

Retrieve whole message number *which*, and set its seen flag. Result is in form ``(response, ['line', ...], octets)``.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-

main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 188)

Unknown directive type "method".

```
.. method:: POP3.delete(which)
```

Flag message number **which** for deletion. On most servers deletions are not actually performed until QUIT (the major exception is Eudora QPOP, which deliberately violates the RFCs by doing pending deletes on any disconnect).

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 195)

Unknown directive type "method".

```
.. method:: POP3.reset()
```

Remove any deletion marks for the mailbox.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 200)

Unknown directive type "method".

```
.. method:: POP3.noop()
```

Do nothing. Might be used as a keep-alive.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 205)

Unknown directive type "method".

```
.. method:: POP3.quit()
```

Signoff: commit changes, unlock mailbox, drop connection.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 210)

Unknown directive type "method".

```
.. method:: POP3.top(which, howmuch)
```

Retrieves the message header plus **howmuch** lines of the message after the header of message number **which**. Result is in form `` (response, ['line', ...], octets)``.

The POP3 TOP command this method uses, unlike the RETR command, doesn't set the message's seen flag; unfortunately, TOP is poorly specified in the RFCs and is frequently broken in off-brand servers. Test this method by hand against the POP3 servers you will use before trusting it.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 222)

Unknown directive type "method".

```
.. method:: POP3.uidl(which=None)
```

Return message digest (unique id) list. If **which** is specified, result contains the unique id for that message in the form ``'response mesgnum uid'``, otherwise result is list `` (response, ['mesgnum uid', ...], octets)``.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 229)

Unknown directive type "method".

```
.. method:: POP3.utf8()
```

Try to switch to UTF-8 mode. Returns the server response if successful, raises :class:`error_proto` if not. Specified in :RFC:`6856`.

```
.. versionadded:: 3.5
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 237)

Unknown directive type "method".

```
.. method:: POP3.stls(context=None)
```

Start a TLS session on the active connection as specified in :rfc:`2595`. This is only allowed before user authentication

context parameter is a :class:`ssl.SSLContext` object which allows bundling SSL configuration options, certificates and private keys into a single (potentially long-lived) structure. Please read :ref:`ssl-security` for best practices.

This method supports hostname checking via :attr:`ssl.SSLContext.check_hostname` and **Server Name Indication** (see :data:`ssl.HAS_SNI`).

```
.. versionadded:: 3.4
```

Instances of :class:`POP3_SSL` have no additional methods. The interface of this subclass is identical to its parent.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)poplib.rst, line 254); [backlink](#)

Unknown interpreted text role "class".

POP3 Example

Here is a minimal example (without error checking) that opens a mailbox and retrieves and prints all messages:

```
import getpass, poplib

M = poplib.POP3('localhost')
M.user(getpass.getuser())
M.pass_(getpass.getpass())
numMessages = len(M.list()[1])
for i in range(numMessages):
    for j in M.retr(i+1)[1]:
        print(j)
```

At the end of the module, there is a test section that contains a more extensive example of usage.