#### **NAME**

Net::SSLeay::Handle - Perl module that lets SSL (HTTPS) sockets be handled as standard file handles.

#### **SYNOPSIS**

```
use Net::SSLeay::Handle qw/shutdown/;
my ($host, $port) = ("localhost", 443);

tie(*SSL, "Net::SSLeay::Handle", $host, $port);

print SSL "GET / HTTP/1.0\r\n";
shutdown(\*SSL, 1);
print while (<SSL>);
close SSL;
```

# **DESCRIPTION**

Net::SSLeay::Handle allows you to request and receive HTTPS web pages using "old-fashion" file handles as in:

```
print SSL "GET / HTTP/1.0\r\n";
and
print while (<SSL>);
```

If you export the shutdown routine, then the only extra code that you need to add to your program is the tie function as in:

```
my $socket;
if ($scheme eq "https") {
    tie(*S2, "Net::SSLeay::Handle", $host, $port);
    $socket = \*S2;
else {
    $socket = Net::SSLeay::Handle->make_socket($host, $port);
}
print $socket $request_headers;
```

# **FUNCTIONS**

shutdown

```
shutdown(\*SOCKET, $mode)
```

Calls to the main **shutdown()** don't work with tied sockets created with this module. This shutdown should be able to distinguish between tied and untied sockets and do the right thing.

debug

```
my $debug = Net::SSLeay::Handle->debug()
Net::SSLeay::Handle->debug(1)
```

Get/set debugging mode. Always returns the debug value before the function call. if an additional argument is given the debug option will be set to this value.

```
make socket
```

```
my $sock = Net::SSLeay::Handle->make_socket($host, $port);
```

Creates a socket that is connected to \$post using \$port. It uses \$Net::SSLeay::proxyhost and proxyport if set and authentificates itself against this proxy depending on \$Net::SSLeay::proxyauth. It also turns autoflush on for the created socket.

### USING EXISTING SOCKETS

One of the motivations for writing this module was to avoid duplicating socket creation code (which is mostly error handling). The calls to **tie()** above where it is passed a \$host and \$port is provided for convenience testing. If you already have a socket connected to the right host and port, S1, then you can do something like:

```
my $socket \*S1;
if ($scheme eq "https") {
    tie(*S2, "Net::SSLeay::Handle", $socket);
    $socket = \*S2;
}
my $last_sel = select($socket); $| = 1; select($last_sel);
print $socket $request_headers;
```

Note: As far as I know you must be careful with the globs in the **tie**() function. The first parameter must be a glob (\*SOMETHING) and the last parameter must be a reference to a glob (\\*SOMETHING\_ELSE) or a scaler that was assigned to a reference to a glob (as in the example above)

Also, the two globs must be different. When I tried to use the same glob, I got a core dump.

#### **EXPORT**

None by default.

You can export the **shutdown()** function.

It is suggested that you do export **shutdown()** or use the fully qualified **Net::SSLeay::Handle::shutdown()** function to shutdown SSL sockets. It should be smart enough to distinguish between SSL and non-SSL sockets and do the right thing.

#### **EXAMPLES**

```
use Net::SSLeay::Handle qw/shutdown/;
my ($host, $port) = ("localhost", 443);

tie(*SSL, "Net::SSLeay::Handle", $host, $port);

print SSL "GET / HTTP/1.0\r\n";
shutdown(\*SSL, 1);
print while (<SSL>);
close SSL;
```

### **TODO**

Better error handling. Callback routine?

### **CAVEATS**

Tying to a file handle is a little tricky (for me at least).

The first parameter to tie() must be a glob (\*SOMETHING) and the last parameter must be a reference to a glob (\\*SOMETHING\_ELSE) or a scaler that was assigned to a reference to a glob (\\$s = \\*SOMETHING\_ELSE). Also, the two globs must be different. When I tried to use the same glob, I got a core dump.

I was able to associate attributes to globs created by this module (like \*SSL above) by making a hash of hashes keyed by the file head1.

#### **CHANGES**

Please see Net-SSLeay-Handle-0.50/Changes file.

## **BUGS**

If you encounter a problem with this module that you believe is a bug, please report it in one of the following ways:

- create a new issue <a href="https://github.com/radiator-software/p5-net-ssleay/issues/new">https://github.com/radiator-software/p5-net-ssleay/issues/new</a> under the Net-SSLeay GitHub project at <a href="https://github.com/radiator-software/p5-net-ssleay">https://github.com/radiator-software/p5-net-ssleay</a>;
- open a ticket <a href="https://rt.cpan.org/Ticket/Create.html?Queue=Net-SSLeay">https://rt.cpan.org/Ticket/Create.html?Queue=Net-SSLeay</a> using the CPAN RT bug tracker's web interface at <a href="https://rt.cpan.org/Dist/Display.html?Queue=Net-SSLeay">https://rt.cpan.org/Dist/Display.html?Queue=Net-SSLeay</a>;

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• send an email to the CPAN RT bug tracker at bug-Net-SSLeay@rt.cpan.org <mailto:bug-Net-SSLeay@rt.cpan.org>.

Please make sure your bug report includes the following information:

- the code you are trying to run;
- your operating system name and version;
- the output of perl -V;
- the version of OpenSSL or LibreSSL you are using.

#### **AUTHOR**

Originally written by Jim Bowlin.

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Maintained by Florian Ragwitz between November 2005 and January 2010.

Maintained by Mike McCauley between November 2005 and June 2018.

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# **SEE ALSO**

Net::SSLeay, perl (1), http://openssl.org/