

Windows Native SSL: Secure Communication

Version 8.16

February 28, 2025

```
(require net/win32-ssl) package: base
```

The `net/win32-ssl` module offers a fraction of the functionality of `openssl` and works only on Windows, but it has the advantage that it works before OpenSSL libraries are installed.

```
(win32-ssl-connect hostname
                  port-no
                  [client-protocol])
→ (and/c input-port? win32-ssl-port?)
   (and/c output-port? win32-ssl-port?)
hostname : string?
port-no : (integer-in 1 65535)
client-protocol : (or/c 'secure 'auto
                       'sslv2-or-v3 'sslv2 'sslv3 'tls 'tls11 'tls12)
                = 'auto
```

Like `ssl-connect`, but without support for client contexts.

```
(win32-ssl-abandon-port in) → void?
in : (and/c win32-ssl-port? output-port?)
```

Analogous to `ssl-abandon-port`.

```
(ports->win32-ssl-ports input-port
                       output-port
                       #:encrypt protocol
                       [#:hostname hostname])
→ (and/c input-port? win32-ssl-port?)
   (and/c output-port? win32-ssl-port?)
input-port : input-port?
```

```
output-port : output-port?
protocol : (or/c 'secure 'auto
             'sslv2-or-v3 'sslv2 'sslv3 'tls 'tls11 'tls12)
hostname : (or/c #f string?) = #f
```

Analogous to `ports->ssl-ports`.

If hostname verification is enabled via `'secure`, the peer server's certificate is checked against `hostname`.

Changed in version 6.3.0.12 of package base: Added the `#:hostname` argument.

```
(win32-ssl-port? v) → boolean?
  v : any/c
```

Returns `#t` if `v` is an SSL port produced by `win32-ssl-connect` or `ports->win32-ssl-ports`.

```
win32-ssl-available? : boolean?
```

A boolean value that reports whether the Windows native SSL library was successfully loaded. Calling `win32-ssl-connect`, etc. when this value is `#f` will raise an exception.