Windows Native SSL: Secure Communication

Version 9.4.0.4

November 5, 2026

```
(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 of *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.