

When can I get the "java.net.SocketException: Permission denied:connect" message? And how can it be avoided?

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The "java.net.SocketException: Permission denied: connect" exception message may happen when you are working in Application Server or with a client/server environment via VPN connection.

This message is returned because isCOBOL uses the IPv4 type of sockets and support for IPv6 sockets was added to Windows in Java 7 and above. So, when you attempt to connect to an IPv4 address, "behind the scenes" Java will use an IPv4-mapped IPv6 address.

If the VPN product doesn't support IPv6 sockets, you may get this exception.

For example, if you want to connect via thin-client and you use any of the following commands:

```
iscclient -hostname host -port port progrname
```

```
java com.iscobol.gui.client.Client -hostname host -port port progrname
```

Or if you want to access the Veryant UDBC server started on the server machine and you run the command:

```
visql -cstring jdbc:veryant:udbc-server-ip:udbc-server-port:database -u user
```

To solve this problem you need to use the java property `java.net.preferIPv4Stack=true`, telling Java you want it to try to use IPv4 when available.

Here are some examples:

```
iscclient -J-Djava.net.preferIPv4Stack=true -hostname 10.234.10.18 MAIN_PROGR
```

```
java -Djava.net.preferIPv4Stack=true com.iscobol.gui.client.Client -hostname  
10.234.10.18 MAIN_PROGR
```

```
visql -J-Djava.net.preferIPv4Stack=true -cstring
```

```
jdbc:veryant:10.234.10.18:6789:VERYSAMPLE -u admin
```