

## [RESOLVED] Sending and Receiving Byte Data Using Winsock

Client Code:

Code:

```
Dim b() As Byte
Dim DataSent As Boolean

Private Sub Form_Load()
    Open App.Path & "\mypicture.jpg" For Binary Access Read As #1

    ReDim b(0 To LOF(1) - 1)

    Get #1, , b

    Close #1
End Sub

Private Sub Command1_Click()
    Winsock1.Close
    Winsock1.Connect "xxx.xxx.xxx.xxx", 8888
End Sub

Private Sub Winsock1_Connect()
    DataSent = False
    Winsock1.SendData b
    Do While DataSent = False
        DoEvents
    Loop
    Winsock1.Close
End Sub

Private Sub Winsock1_SendComplete()
    DataSent = True
End Sub
```

Server Code:

Code:

```
Option Explicit

Dim Buffer() As Byte

Private Sub Command1_Click()
    Winsock1.Close
    Winsock1.LocalPort = 8888
    Winsock1.Listen
End Sub

Private Sub Winsock1_Close()
    Open App.Path & "\BYTE_ARRAY.BYT" For Binary As #1
    Put #1, 1, Buffer
    Close #1
End Sub

Private Sub Winsock1_ConnectionRequest(ByVal requestID As Long)
    Winsock1.Close
```

```
Winsock1.Accept requestID
Buffer = ""
End Sub

Private Sub Winsock1_DataArrival(ByVal bytesTotal As Long)
Winsock1.GetData Buffer
End Sub
```

## send hex data to Ethernet or LAN using Visual basic 6.0

```
Private Sub Command1_Click()
Dim boInvalid As Boolean
Dim intI As Integer
Dim intJ As Integer
Dim strHex As String
Dim bytToSend() As Byte
'
' Must be an even number of characters entered
'
If Len(txtdata.Text) Mod 2 = 0 Then
    ReDim bytToSend((Len(txtdata.Text) \ 2) - 1)
    intI = 1
    Do
        strHex = UCase(Mid$(txtdata.Text, intI, 2))
        '
        ' Each character must be A thru F or 0 thru 9
        '
        For intJ = 1 To 2
            Select Case Mid$(strHex, intJ, 1)
                Case "A" To "F", "0" To "9"
                Case Else
                    boInvalid = True
            End Select
        Next intJ
        '
        ' If it's a valid pair of characters
        ' convert the hexadecimal representation to a binary value
        ' and store in the next element of the array
        ' If it's invalid, tell the user and stop processing
        '
        If Not boInvalid Then
            bytToSend(intI \ 2) = Val("&H" & Mid$(txtdata.Text, intI, 2))
            intI = intI + 2
        Else
            MsgBox "Invalid Hexadecimal Value: " & strHex
        End If
    Loop Until intI > Len(txtdata.Text) Or boInvalid
    '
    ' If it was valid hexadecimal data then send it
    '
    If Not boInvalid Then
        Winsock1.SendData bytToSend
    End If
Else
    MsgBox "Invalid Data - Hexadecimal data must be an even number of characters"
End If
End Sub
```

```
Private Sub cmdSendHexString_Click()
If Len(Text1.Text) Mod 2 <> 0 Then
    MsgBox "Must be even number of hex codes"
    Text1.SetFocus
Else
    '
    ' Code to send hex string or convert to actual hex
    '
End If
```

```
End If
End Sub

Private Sub Text1_KeyPress(KeyAscii As Integer)
    Select Case True
        Case Chr$(KeyAscii) Like "[!0123456789AaBbCcDdEeFf]"
            KeyAscii = 0
    End Select
Exit Sub
```

## [RESOLVED] Receive Certain data using Winsock VB6

```
Private Sub tcpProgramServer_DataArrival(ByVal bytesTotal As Long)
    Dim strData As Byte
    For i = 0 To bytesTotal
        tcpProgramServer.GetData strData, vbByte
        Text1.Text = Text1.Text & " " & Right$("0" & Hex$(strData), 2)
    Next i
End Sub
```

## [RESOLVED] converting winsock recieved hex data to string

Code:

```
Private Sub winsock1_DataArrival(ByVal sender As System.Object, ByVal e As
AxMSWinsockLib.DMSWinsockControlEvents_DataArrivalEvent) Handles winsock1.DataArrival
    Dim dat As String 'where to put the data
    ' Dim data As Byte() = System.Text.Encoding.ASCII.GetString(dat)
    winsock1.GetData(dat, vbString, 1000) 'writes the new data in our string dat (
string format )

    'add the new message to our chat buffer
    Form2.TextBox1.Text = Form2.TextBox1.Text & vbNewLine &"Server : " & dat &
vbCrLf
End Sub
```

Code:

```
Private Sub winsock1_DataArrival(ByVal sender As System.Object, ByVal e As
AxMSWinsockLib.DMSWinsockControlEvents_DataArrivalEvent) Handles winsock1.DataArrival
    Dim dat(e.bytesTotal - 1) As Byte '<<< declare a byte array to store the
arriving bytes
    winsock1.GetData(dat, vbByte, dat.Length) ' get the data
    'add the new message to our chat buffer
    Dim msg As String = System.Text.Encoding.UTF8.GetString(dat)
    Form2.TextBox1.Text = Form2.TextBox1.Text & vbNewLine &"Server : " & msg &
vbCrLf
End Sub
```

## Winsock Packet Buffer

Hi there. Googling brings me here a lot, so I figured I'd share some code that is nearly impossible to find information on, as well as ask for some suggestions.

This has to do with buffering TCP data in Winsock. There is a surprising lack of code going around about this subject, and most of it is about using packet delimiters. Well, sometimes you aren't creating the server and simply can't do this.

In my example there are no packet delimiters, but I know the length each packet should be based on the first byte. What I'm looking for are suggestions to make the code better, as this seems like an inefficient way to do things.

Declare a global variable to store incoming data  
Code:

```
Private mainBuffer as string
```

Function to convert a string to hex (I believe I snagged this from these forums, actually)  
Code:

```
Public Function StringToHex(ByVal StrToHex As String) As String
Dim strTemp As String
Dim strReturn As String
Dim I As Long
For I = 1 To Len(StrToHex)
    strTemp = Hex$(Asc(Mid$(StrToHex, I, 1)))
    If Len(strTemp) = 1 Then strTemp = "0" & strTemp
    strReturn = strReturn & strTemp & Space$(1)
Next I
StringToHex = strReturn
End Function
```

As data comes in, add it to the end of our buffer string  
Code:

```
Private Sub wsock_DataArrival(ByVal bytesTotal As Long)
Dim data As String, hexData As String
wsock.GetData data
hexData = StringToHex(data)

mainBuffer = mainBuffer & hexData
ProcessData

End Sub
```

Now I look at the first byte in the buffer, determine the length that the packet should be, and if I've have all the data, pass only the packet data off to a function to process, and remove that piece from the buffer.

You'll see some multiplication and division by 3, that's because each byte is a total of 3 characters (2 characters for the actual byte, and a space to separate them)

Code:

```
Private Sub ProcessData()
Dim packetLen As Integer, packet As String
packetLen = 0
Do Until Len(mainBuffer) / 3 < packetLen
Select Case Left(mainBuffer, 2)
Case "00"
```

```

        packetLen = 131
    Case "01"
        packetLen = 1
    Case "02"
        packetLen = 1
    Case "03"
        packetLen = 1028
    Case "04"
        packetLen = 7
    Case "05"
        packetLen = 9
    Case "06"
        packetLen = 8
    Case "07"
        packetLen = 74
    Case "08"
        packetLen = 10
    Case "09"
        packetLen = 7
    Case "0A"
        packetLen = 5
    Case "0B"
        packetLen = 4
    Case "0C"
        packetLen = 2
    Case "0D"
        packetLen = 66
    Case "0E"
        packetLen = 65
End Select
If Len(mainBuffer) / 3 >= packetLen Then
    packet = Left(mainBuffer, packetLen * 3)
    mainBuffer = Right(mainBuffer, Len(mainBuffer) - packetLen * 3)
    ProcessPacket (packet)
End If
Loop
End Sub

```

Now, this code actually works, but it feels like I'm doing something terribly inefficient, redundant, and/or just stupid. Anyone care to point out the flaws here?

## Re: Winsock Data Arrival issue

in just downloading I parse it all on Winsock Close .. but not sure if that will work in a server project .. once it closes I then handle the response codes, and if its downloading anything other than Text i create a file using the binary.

Also I get the length from the header if I can ..  
small example .. though it may not apply to what you're doing ..?  
I used this on a couple 180mb files last night ..

VB Code:

```
1. Private ReceiveData          As String
2.
3. Private FileLength           As Long
4.
5. Private FileBytes            As Long
6.
7. Private LengthParsed         As Boolean
8.
9.
10. '/// GET DATA
11.
12. Public Sub WinsockReceive(ByVal bytesTotal As Long)
13.
14.     Dim strData As String
15.
16.     On Error GoTo Err:
17.
18.         '/// GET DATA
19.
20.         fWinsock.Winsock1.GetData strData, vbString
21.
22.         ReceiveData = ReceiveData & strData
23.
24.         FileBytes = FileBytes + bytesTotal
25.
26.         '/// GET THE HEADER
27.
28.         If Not LengthParsed Then
29.
30.             GetLength
31.
32.         Else
33.
34.             '/// DOWNLOAD FILE
35.
36.             Download
37.
```



```
38.         End If
39.
40.         Exit Sub
41.
42.     Err:
43.
44.     '// ERROR HANDLING
45.
46.         UpdateStatus ("Data Error")
47.
48.         WinsockDisconnect
49.
50.         Exit Sub
51.
52. End Sub
53.
54.
55. '// GET FILE LENGTH
56.
57. Private Sub GetLength()
58.
59.     Dim BreakePosition As Integer
60.
61.     Dim vHeaders As Variant
62.
63.     Dim vHeader As Variant
64.
65.     BreakePosition = InStr(1, ReceiveData, vbCrLf &
vbCrLf)
66.
67.     If BreakePosition Then
68.
69.         LengthParsed = True
70.
71.         FileBytes = FileBytes - BreakePosition - 3
72.
73.         vHeaders = Split(Left(ReceiveData,
BreakePosition - 1), vbCrLf)
74.
75.         '// GET THE CONTENT LENGTH
76.
77.         For Each vHeader In vHeaders
78.
79.             If InStr(1, vHeader, "Content-Length") Then
80.
81.                 FileLength = CLng(Mid(vHeader, InStr(1,
vHeader, " ") + 1))
82.
83.                 Exit For
```

```
84.
85.             End If
86.
87.         Next
88.
89.     End If
90.
91. End Sub
92.
93.
94. '/// DOWNLOAD
95.
96. Private Sub Download()
97.
98.     If FileLength > 0 Then
99.
100.         UpdateProgress
101.
102.         UpdateStatus ("Downloading: " & FileBytes & "
of " & FileLength & " bytes " & _
103.
104.             "(" & CInt(FileBytes / (FileLength / 100)) &
"%)" )
105.
106.     Else
107.
108.         UpdateStatus ("Downloading: " & FileBytes & "
bytes")
109.
110.     End If
111.
112. End Sub
113.
114.
115. '/// UPDATE PROGRESS
116.
117. Private Sub UpdateProgress()
118.
119.     fWinsock.ProgressBar1.Value = FileBytes /
(FileLength / 100)
120.
121. End Sub
122.
123.
124. '/// UPDATE STATUS
125.
126. Private Sub UpdateStatus(ByVal StatusType As String)
127.
128.     fWinsock.Caption = StatusType
```

```
129.  
130. End Sub
```

something i use found at vbip.com ..

VB Code:

```
1. '.... in winsock close ..  
2.  
3.  
4.         ReceiveHeader = Left$(ReceiveData, InStr(1,  
        ReceiveData, vbCrLf & vbCrLf) + 1)  
5.  
6.         ReceiveData = Mid(ReceiveData, InStr(1,  
        ReceiveData, vbCrLf & vbCrLf) + 4)  
7.  
8.  
9.  
10.        If GetHttpHeaderFieldValue(ReceiveHeader,  
        "Transfer-Encoding") = "chunked" Then  
11.  
12.            ReceiveData =  
        DecodeChunkedMessage(ReceiveData)  
13.  
14.        End If  
15.  
16.  
17.  
18.  
19. Private Function GetHttpHeaderFieldValue(strHttpHeader  
        As String, strHttpHeaderField As String) As String  
20.  
21.     Dim strBuffer As String  
22.  
23.     Dim intStart As Integer  
24.  
25.     Dim strSearchString As String  
26.  
27.     strSearchString = vbCrLf & strHttpHeaderField & ":"  
        "  
28.  
29.     intStart = InStr(1, strHttpHeader, strSearchString)  
        + Len(strSearchString)  
30.  
31.     strBuffer = Mid$(strHttpHeader, intStart,  
        InStr(intStart, strHttpHeader, vbCrLf) - intStart)  
32.  
33.     If Len(strBuffer) > 0 Then  
34.  
35.         GetHttpHeaderFieldValue = strBuffer
```

```
36.
37.     End If
38.
39. End Function
40.
41.
42. Private Function DecodeChunkedMessage(strMessage As
    String) As String
43.
44.     'This is a scheme of chunked message
45.
46.     '<CHUNK SIZE><CRLF><DATA CHUNK><CRLF><CHUNK
        SIZE><CRLF><DATA CHUNK>...<0 CHUNK SIZE>
47.
48.     Dim lngPosA As Long
49.
50.     Dim lngPosB As Long
51.
52.     Dim intOctetsToRead As Integer
53.
54.     Dim strTempBuffer As String
55.
56.     Const CRLF_LENGTH = 2
57.
58.     lngPosA = InStr(1, strMessage, vbCrLf)
59.
60.     intOctetsToRead = Val("&H" & Left(strMessage,
        lngPosA - 1))
61.
62.     Do Until intOctetsToRead = 0
63.
64.         strTempBuffer = strTempBuffer & Mid(strMessage,
            lngPosA + CRLF_LENGTH, intOctetsToRead)
65.
66.         lngPosB = lngPosA + CRLF_LENGTH +
            intOctetsToRead + CRLF_LENGTH
67.
68.         lngPosA = InStr(lngPosB, strMessage, vbCrLf)
69.
70.         intOctetsToRead = Val("&H" & Mid(strMessage,
            lngPosB, lngPosA - lngPosB))
71.
72.     Loop
73.
74.     DecodeChunkedMessage = strTempBuffer
75.
76. End Function
```

What you need to do is split down your chunks and then work out if the final chunk is the correct length (from the chunk header). If it isn't then store it in a static variable until the next packet arrives. Add the remainder of the last message to the front of the new one and bingo it's in order.

VB Code:

```
1. Private Sub Winsock1_dataarrival(BytesTotal as integer)
2.
3. Static Remainder as string
4.
5. Dim strData as string
6.
7.
8.     'Get your new packet
9.
10.    winsock1.getdata strData
11.
12.
13.    'Merge the remainder of the last one to this new
    one
14.
15.    strData = Remainder & strdata
16.
17.
18.    'Break down you message and until no more chunks
    are complete
19.
20.
21.    'Move any data from an uncompleted chunk to the
    remainder variable for the next arrival event
22.
23.    Remainder = (RestOfChunk) 'Whatever was left
    unprocessed
24.
25.
26.
27.
28.
29. end Sub
```

I know this is an old post I'm replying to, but I've been using the above DecodeChunkedMessage code in a project of mine for a while, and for the first time yet it's encountered a block size over 8192. I've managed to isolate the problem down to this one specific line:

vb Code:

```
1. intOctetsToRead = Val("&H" & Left(strMessage, lngPosA -
    1))
```

Update: In case no-one responds to this and someone else needs this code too, I've written a quick hex to decimal converter:

vb Code:

```
1. Public Function hextodec(str As String) As Long
2. Dim vl As Long, n As Long, b As Double
3. n = 1
4. For b = Len(str) To 1 Step -1
5. vl = vl + (Val("&H" & Mid(str, b, 1)) * n)
6. n = n * 16
7. Next b
8. hextodec = vl
9. End Function
```

## ould vb6 Strings be converted to byte arrays when using Com port communication?

Is it good practice to always convert a vb6 string to a byte array when using Com.output?

Would a string that was converted to a byte array like this:

Code:

```
Dim Sometext As String
Dim b() As Byte

Sometext = "Hello World"

b = StrConv(Sometext ,vbFromUnicode)
```

Be a better approach than simply do this:

Code:

```
Dim Sometext As String
Sometext = "Hello World"

Com.output = Sometext
```

The problem i'm facing is that 98% of commands work. But the device i send commands to, also has an 'internal hardware' that commands can be sent to, to do specific operations. These 'Specifics' dont work, or fail 99.8% of the time (specific number, but kinda accurate)

**It doesn't work on my machine** using vb6, but it does work on the **manufacturer's machine, using .net**

If we 'sniff' the data (using a 3rd party serial port monitor), everything seems to be exactly as we are sending it. ( *Although it doesn't work here, and it DOES work over there.*)

So to exclude the hardware being the problem, we've sent the whole package to the manufacturer. And using our hardware it works there, while it didn't over here. There is no endianness at question here. or is there? it's confusing..

Literally the same command that is sent over the output is working for an .net application but isn't in my vb6 application.

This string for example (in hex for readability): "530008000460EBAA"

is sent to the output as follows:

Code:

```
str$ = chr(53) & chr(00) & chr(08) & chr(00) & chr(04) & chr(60) & chr(EB) & chr(AA)
com.output = str$
```

Can the result on the other end be different when it was sent like this, in other words, will it be more true to the actual data:

Code:

```
dim b() as byte
```

```
str$ = chr(&h53) & chr(&h00) & chr(&h08) & chr(&h00) & chr(&h04) & chr(&h60) &
chr(&hEB) & chr(&hAA)
b = StrConv(str$, vbFromUnicode)
com.output = b
```

Instead one should use ones own converter-routine for such Hex-Stream-Inputs, like the one below:

Code:

```
Private Sub Form_Load()
    DumpBytesHex HexStrToByteArr("530008000460EBAA")
    DumpBytesHex HexStrToByteArr("53 00 08 00 04 60 EB AA")
End Sub

Public Function HexStrToByteArr(strHex As String) As Byte()
    Dim B() As Byte, i As Long, j As Long, B15 As Byte
    B = Replace(strHex, " ", "") 'remove potential SpaceChars beforehand
    For i = 0 To UBound(B) Step 2 'B contains a WChar-Stream, so we step with 2
        Select Case B(i) + 256 * B(i + 1) 'and re-construct the WChar-Value as
        Select-Case-Input
            Case 48 To 57: B15 = B(i) - 48
            Case 65 To 70: B15 = B(i) - 55
            Case 97 To 102: B15 = B(i) - 87
            Case Else: Err.Raise vbObjectError, , "invalid char in hex-stream"
        End Select
        If i Mod 4 Then B(j) = B(j) * 16 + B15: j = j + 1 Else B(j) = B15
    Next
    If j Then ReDim Preserve B(j - 1)
    HexStrToByteArr = B
End Function

Public Sub DumpBytesHex(B() As Byte) 'to visualize content of short ByteArrays
    Dim i As Long
    For i = 0 To UBound(B)
        Debug.Print Right("0" & Hex(B(i)), 2); IIf(i = UBound(B), vbLf, " ");
    Next
End Sub
```

Here is a simple trick that will get rid of most locale issues. Just *\*always\** pass 3-rd parameter to `StrConv` and *\*always\** read/write byte-arrays from/to the serial port.

Code:

```
Const LOCALE_ID As Long = 1033

Dim b() As Byte
b = StrConv("this is a test - това е проба", vbFromUnicode, LOCALE_ID)
```

Another (better) option would be to use conversion from/to UTF-8 not just en-US locale 1033 with some helper functions like these:

Code:

```
'--- for MultiByteToWideChar
Private Const CP_UTF8 As Long = 65001

Private Declare Function MultiByteToWideChar Lib "kernel32" (ByVal CodePage As Long,
ByVal dwFlags As Long, lpMultiByteStr As Any, ByVal cbMultiByte As Long, lpWideCharStr
As Any, ByVal cchWideChar As Long) As Long
Private Declare Function WideCharToMultiByte Lib "kernel32" (ByVal CodePage As Long,
ByVal dwFlags As Long, ByVal lpWideCharStr As Long, ByVal cchWideChar As Long, ByVal
```



```

lpMultiByteStr As Long, ByVal cchMultiByte As Long, ByVal lpDefaultChar As Long, ByVal
lpUsedDefaultChar As Long) As Long

Public Function ToUtf8Array(sText As String) As Byte()
    Dim baRetVal() As Byte
    Dim lSize As Long

    lSize = WideCharToMultiByte(CP_UTF8, 0, StrPtr(sText), Len(sText), 0, 0, 0, 0)
    If lSize > 0 Then
        ReDim baRetVal(0 To lSize - 1) As Byte
        Call WideCharToMultiByte(CP_UTF8, 0, StrPtr(sText), Len(sText),
VarPtr(baRetVal(0)), lSize, 0, 0)
    Else
        baRetVal = vbNullString
    End If
    ToUtf8Array = baRetVal
End Function

Public Function FromUtf8Array(baText() As Byte) As String
    Dim lSize As Long

    If UBound(baText) >= 0 Then
        FromUtf8Array = String$(2 * UBound(baText), 0)
        lSize = MultiByteToWideChar(CP_UTF8, 0, baText(0), UBound(baText) + 1, ByVal
StrPtr(FromUtf8Array), Len(FromUtf8Array))
        FromUtf8Array = Left$(FromUtf8Array, lSize)
    End If
End Function

```

The OP is now trying to convert this Hex-Input "80" to a ByteArray (with a single Byte and the value 128).

And he does this via:

Code:

```

Dim S As String, B() As Byte
S = Chr(&H80) 'implicit ANSI to Unicode-conversion
B = StrConv(S, vbFromUnicode) 'explicit Unicode to ANSI conversion
Debug.Print B(0) '<- Prints out decimal 128 == &H80

```

This ANSI-Unicode + Unicode-ANSI backconversion works (although still risky), because both parts use the same (default-)locale for the ANSI-mapping-table.

But if we introduce ChrW as the first conversion-function:

Code:

```

Dim S As String, B() As Byte
S = ChrW(&H80) 'UTF16-UnicodeValue to Unicode-WChar-conversion
B = StrConv(S, vbFromUnicode) 'explicit Unicode to ANSI conversion
Debug.Print B(0) '<- Prints out decimal 63 <> &H80

```

Of course the task would be quite easy, when the OP would just do:

Redim B(0) As Byte

B(0) = &H80

Or when the whole thing is part of a (Step 2)-loop over the HexLiteral-InputString, then:

Redim B(0 to Len(HexInput) \ 2 - 1) As Byte

B(i \ 2) = CByte("&H" & Mid\$(HexInput, i, 2))

Or alternatively just using the function I've shown in my first post here...

Olaf

# Events

`Closing()`

**Description:** Triggered when socket is about to close but has not yet been fully closed.

`Connect()`

**Description:** Triggered upon successful connection. Data may now be sent.

`ConnectionRequest(RequestID)`

**Description:** Triggered when a remote host is connecting to a listened port.

`DataArrival(BytesTotal)`

**Description:** Triggered when data has arrived in binary mode.

`Error(Number, Description, sCode, Source, HelpFile, HelpContext, CancelDisplay)`

**Description:** Triggered whenever an internal error occurs.

**NOTE:** Unlike Winsock control, an error does not prevent operation and you are not required to close the connection.

`SendComplete()`

**Description:** Triggered when sending data has finished.

`SendProgress(BytesSent, BytesRemaining)`

**Description:** Triggered as sending data progresses.

`StatusChange(Status)`

**Description:** Triggered when status changes. However, error status is not received in favor of Error event.

`TextArrival(Text, LineChange, ANSI)`

**Description:** Triggered when a line of data has arrived. If text is Unicode, Text can be used directly. If text is ANSI, you must use StrConv or other means to process the text into an usable string.

# Methods

`Accept(RequestID) Boolean`

**Description:** Accepts a connection request from another UniSock control. The socket must be in a closed state before using this function. Upon successful accept Connect event is fired.

**Result:** Returns True if the RequestID was valid.

`Bind([LocalPort], [LocalIP]) Boolean`

**Description:** Binds socket to currently set local port and ip. These may also be given as parameters. LocalIP can be an IP or a hostname.

**Result:** Returns True if the IP and port were binded successfully.

`CloseSocket()` Boolean

**Description:** Cancels all asynchronous activity and closes the socket.

**Result:** Returns True if the socket was closed.

`Connect([RemoteHost], [RemotePort])` Boolean

**Description:** If protocol is TCP, begins connection to currently set remote host and port, or given host and/or port. If protocol is UDP, the current local ip and port are bind.

**Result:** Returns True if the connection could be initialized (TCP) or True if the local ip and port could be bind (UDP).

`GetData(Data, [VarType], [MaxLen])` Boolean

**Description:** Gets current incoming buffer to variable passed to Data. If passed variable is a variant, variable type set into optional VarType will be used. The default datatype is byte array. MaxLen sets the amount of bytes to retrieve. Whole buffer is retrieved if MaxLen is 0 or less, or greater than the buffer size.

Unlike other Winsock control/class implementations, you may use all numeric datatypes and string: Boolean, Byte, Currency, Date, Double, Integer, Long, Single and String. All supported datatypes can be also be passed as arrays. String array separator is automatically detected (CRLF, LF, CR or NullChar). Strings are coerced from ANSI.

**Result:** Returns True if the buffer was retrieved.

`Listen()` Boolean

**Description:** Binds currently set local ip and port if not bind already and starts listening for incoming connections. Upon connection ConnectionRequest event is fired.

**Result:** Returns True if binding and initializing listening was successful.

`PeekData(Data, [VarType], [MaxLen])` Boolean

**Description:** Identical to GetData, except the data is not removed from the buffer.

`SendData(Data)` Boolean

**Description:** Sends the given data to remote host. See GetData for supported datatypes. Strings are coerced to ANSI.

**Result:** Returns True if inserting data to output buffer was successful.

`SendText(Text, [TextFormat])` Boolean

**Description:** Sends a single line of string data. A line change character determined by LineChange is added to the string. TextFormat determines whether text is converted to UTF-8 or sent as is.

**Result:** Returns True if inserting data to output buffer was successful.

# Properties

BytesReceived() Long

**Result:** Returns the current size of the incoming data buffer.

LineChange() UniSockLineChange

**Description:** Returns/sets the bytes that determine line change or array separator. This value is used when sending string arrays and when using SendText.

LocalHostname() String

**Description:** Returns the current hostname.

LocalIP() String

**Description:** Returns the current local ip.

LocalPort() Long

**Description:** Returns/sets the current local port.

Mode() UniSockMode

**Description:** Returns/sets the mode of the socket. Binary and text modes are supported. In binary mode DataArrival event is triggered. In text mode TextArrival event is triggered.

Protocol() ProtocolConstants

**Description:** Returns/sets the current protocol. TCP and UDP are supported.

RemoteHost() String

**Description:** Returns/sets the host to connect to, or returns the host that has been connected to.

RemoteHostIP() String

**Description:** Returns the remote host IP address as a string.

RemoteIP() Long

**Description:** Returns the remote host IP address as a 32-bit value.

RemotePort() Long

**Description:** Returns/sets the remote port to connect to, or port that has been connected to.

RequestHost() String

RequestIP() String

RequestPort() Long

**Description:** Information available about the remote host that makes a connection request to a listening socket. Use before accepting a connection to determine whether you wish to accept the request.

SocketHandle() Long

**Result:** Returns the current open socket handle, or -1.

State() StateConstants

**Result:** Returns the current connection state of the control.

Okay, I know this is ambitious but this is the deal and it would be great if it were possible.

Is it possible to use VB and Winsock to send raw packets on data as packets (real ones) and not just strings of data.

Ie.

```
0000 00 30 cd 00 07 f1 00 30 bd 64 97 2b 08 00 45 00 .0.....0.d.+..E.  
0010 00 28 4c af 40 00 80 06 c1 60 c0 a8 00 0c 50 e5 .(L.@....`....P.  
0020 db 26 06 ec 00 14 87 93 0e 0c 4a b0 3b b2 50 10 .&.....J.;.P.  
0030 44 8b 5b 87 00 00 D.[...
```

and then send them to an IP to be interpreted? (Considering that IP has the correct open port at that time)

Jordok

This is sending side..

VB Code:

```
1. Private Sub Command1_Click()  
2.  
3. Dim myArr(3) As Byte  
4.  
5. myArr(0) = 97  
6.  
7. myArr(1) = 98  
8.  
9. myArr(2) = 99  
10.  
11. myArr(3) = 100  
12.  
13. Winsock1.RemoteHost = "127.0.0.1"  
14.  
15. Winsock1.RemotePort = 12345  
16.  
17. Winsock1.LocalPort = 12346  
18.  
19. Winsock1.SendData myArr  
20.  
21. End Sub  
22.  
23.  
24. Private Sub Form_Load()  
25.  
26. Winsock1.Bind 12346  
27.  
28. End Sub
```

and this is receiving Side

VB Code:

```
1. Private Sub Form_Load()  
2.  
3. Winsock1.LocalPort = 12345  
4.  
5. Winsock1.Bind 12345  
6.  
7.  
8. End Sub  
9.  
10.  
11. Private Sub Winsock1_DataArrival(ByVal bytesTotal As  
    Long)  
12.  
13. Dim myArr() As Byte  
14.  
15. Winsock1.GetData myArr  
16.  
17. For Each b In myArr  
18.  
19.     Text1.SelText = Chr(b)  
20.  
21.  
22.  
23. Next  
24.  
25.  
26.  
27. End Sub
```