

TestPoint with SeaMAC:

It is very easy to use any SeaMAC card with TestPoint. Install the card as per the directions in SeaMAC.hlp or your manual, and use the "SeaMAC Drivers" icon in the control panel to find out what port the card is installed as.

The method of attaching external APIs, (or any arbitrary .DLL,) to TestPoint is given in chapter 23 of the manual. For each call into the DLL, a separate "CODE" icon is brought into your list of objects. The "DLL filename" is SEAMAC32.DLL, and the "Subroutine Name" is any of the calls listed in the API. (Do not include the parentheses in the "Subroutine Name.")

Lets get started. First drag four "Pushbutton" objects to the objects list and name them as shown in the examples.







Now that we have the Buttons on the form lets add the code that makes it all work! Drag four "Code" objects to the object list.



Double clicking on one of the code objects will bring up the object property dialog box. Open all the code property dialog boxes and set up as per the examples below.



| Object "SEAMAC_PortOpen" [App. #1] | <u> </u> |
|---|----------|
| Name SEAMAC_PortOpen | Help |
| DLL Filename SEAMAC32.DLL | |
| Subroutine Name SEAMAC_PortOpen | |
| Argument Types word, byte, var dword | |
| Return Type dword | |
| Preload | |
| | |
| Settings (Actions () Comments () XBef (| |
| | |
| UDJect SEAMAL_PortClose [App. #1] | |
| Name SEAMAC_PortClose | Help |
| DLL Filename SEAMAC32.DLL | |
| Subroutine Name SEAMAC_PortClose | |
| Argument Types dword | |
| Return Type dword | |
| Preload | |
| | |
| Sattings Astigns A Comments A YBot | |



| 🕮 Object "SEAMAC_PutData" [App. #1] |
|--|
| Name SEAMAC_PutData Help |
| DLL Filename SEAMAC32.DLL |
| Subroutine Name SEAMAC_PutData |
| Argument Types dword, var char, dword |
| Return Type dword |
| Preload |
| |
| Settings Actions Comments XRef |
| Object "SEAMAC_GetData" [App. #1] |
| Name SEAMAC_GetData Help |
| DLL Filename SEAMAC32.DLL |
| Subroutine Name SEAMAC_GetData |
| Argument Types dword, var char, dword, var dword |
| Return Type dword |
| Preload |
| |
| Settings Actions Comments XRef / |

Now that the code properties are setup correctly we can setup a couple of "Containers" to store data. Drag five "Container" objects to the object list and name them as per example.





Lets add some "Display" objects so that we can view what is going on in our program. Drag three "Display" objects to the objects list and name as per example.





Lets get back to the "Pushbuttons". Double clicking on the pushbutton icons in the objects list will bring up their property dialog box. Click on the "Actions" tab and setup the four pushbuttons as per examples.



| 🗪 Object "Open" [App. #1] | |
|--------------------------------|-------|
| Name Open Help | |
| Exec. actions at initialize | |
| Visible Enabled | |
| Click on the "Actions | " tab |
| Settings Actions Comments XRef | |

Here are the settings for each button.

| Contect oben [wh | ·p. #∠] | | |
|--------------------|---------------------|---------------------------|----------|
| 1) Call 9 | SEAMAC_PortOpen | with "ASYNC530",1 | ,hDevice |
| 2) Set I | Error Code | to SEAMAC_PortOpen | |
| 3) Set 1 | Port Status | to "Open" | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | Δ | | |
| Settings Actions | / Comments / XR | lef / | |
| | | | |
| | | | |
| e Ubject "Llose | " [App. #2] | | |
| 1) Call | SEAMAC_PortC | lose with hDevice | _ |
| 2) Set | Error Code | to SEAMAC_PortClos | e |
| 3J Set | Port Status | to "Closed" | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | KHer | |
| | | | |
| Diect "Send "Hello | o World"" [App. #2] | | |
| 1) Store in K | lv Buffer | from "Hello World" | |
| 2) Store in d | w enath | from 11 | |
| 3) Call S | EAMAC PutData | with hDevice.Mv Buffer.dw | Lenath |
| | | | |
| 4) Set E | rror Code | IO SEAMAL PUIDAIA | |
| 4) Set E | rror Code | IO SEAMAL_PUIDAIA | |
| 4) Set E | rror Code | O SEAMAL_PULVALA | |
| 4) Set E | rror Code | O <u>SEAMAC_FUIDala</u> | |
| 4) Set E | rror Code | O SEAMAL_FUIDAIA | |
| 4) Set E | rror Code | O <u>SEAMAC_FUIDala</u> | |

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| 🔤 Object "Get Data | " [App. #2] | |
|--------------------|-------------------|---|
| 1) Store in | dwLength | from 1024 , |
| 2) Call | SEAMAC_GetData | with hDevice,pBuffer,dwLength,dwRetLength |
| 3) Set | Error Code | to SEAMAC_GetData |
| 4) Store in | My Buffer | from pBuffer , |
| 5) Set | Char Receive | to dwRetLength |
| | | |
| | | |
| | | |
| | | |
| Settings | s / Comments / Xf | Ref |

Now that we have everything set up correctly, lets do some cosmetic cleanup. Here is an example of how ours turned out.

| 📟 SeaMac Echo | [App 🗆 🗙 |
|------------------------|--------------|
| Open | Close |
| Port Status | |
| Closed | |
| Send "Hello World" | |
| | Char Deseive |
| Get Data | Char Receive |
| Get Data Error Code | |

The SeaMAC example distributed here, SeaMacEcho.TST, works with with the SeaMAC driver set to "Async" protocol. The "Get Data" function in the example assumes that an external loopback is in place, but is not necessary for running the driver.