RAS

Properties

Help for RAS

Events

<u>Methods</u>

Frequently Asked Questions

Registration Information

Order Form Getting Custom Controls Written Licensing Information

Description

The RAS control gives your programs easy access to the RAS sub-system. Your program can select an Internet service from your phone book, dial and connect to the server, do any processing necessary (using our other Internet controls), and then disconnect.

File Name

MRAS1.VBX, MRAS32.OCX

ActiveX / OCX Object Name

Mabry.RASCtrl

ActiveX Compatility

VB 4.0 (32-bit) and 5.0

ActiveX Built With

Microsoft Visual C++ v4

ActiveX - Required DLLs

MFC40.DLL (October 6th, 1995 or later) OLEPRO32.DLL (October 6th, 1995 or later) MSVCRT40.DLL (September 29th, 1995 or later)

VBX Object Type

mRAS

VBX Compatibility

VB 2.0, 3.0 and 4.0 (16-bit)

VBX Built With

Microsoft Visual C++ v1.5

Distribution Note When you develop and distribute an application that uses this control, you should install the control file into the user's Windows SYSTEM directory. The control file has version information built into it. So, during installation, you should ensure that you are not overwriting a newer version.

RAS Properties

Properties that have special meaning for this control or that only apply to this control are marked with an asterisk (*).

*Action Property *Blocking Property *CallbackNumber Property *ConnectState Property *ConnectStateString Property *Domain Property *EntryConnected Property *EntryCount Property *EntryList Property *EntryName Property *Handle Property *LastError Property *LastErrorString Property *LogonName Property *LogonPassword Property *PhoneBook Property *PhoneNumber Property *RASAvailable Property *Version Property

RAS Events

Events that have special meaning for this control or that only apply to this control are marked with an asterisk (*).

*AsyncError Event

*Done Event

*Progress Event

RAS Methods

Methods that have special meaning for this control or that only apply to this control are marked with an asterisk (*).

*AboutBox Method *Connect Method *CreateEntry Method *Disconnect Method *EditEntry Method *GetEntry Method *Refresh Method

Frequently Asked Questions

General Questions

I note that you can't change the dial-up networking (DUN) information as the details are held in the registry. Do you have a control that will let me change the DUN information?

Can RAS select the DUN setting to use to connect?

Is the Done event supposed to fire after I execute the Disconnect method?

How do I determine if a connection is already established?

When a "Connection Lost" dialog box pops up, I can't get RAS to re-dial. What do I do?

How can I monitor the status of a RAS connection?

Why am I still presented with the Win95 post dialup login screen, even though I've set the LogonName and Password properties?

<u>Under NT, the modems connect but it does not authenticate.</u> It appears to just sit there. <u>What should I do?</u>

I'm trying to use the RAS control in Windows 3.x but it says the file RASAPI16.DLL cannot be found. Where can I get this file?

Can I use the RAS control in Windows 3.x to access Internet Explorer's dialer?

<u>I am using the TerminateProcess API call to allow the user to interrupt a connection</u> <u>attempt. However, the next time I try to establish the connection, I get an error 20602</u> <u>"Port is already open". What can I do?</u>

How can I use the RAS control to terminate a connection that it did not establish?

How can I "save Password" in the Entry? Each time I connect, I am asked for the Login and Password.

Internet Pack - General Questions

Why won't my Internet Pack VBXes load into VB?

Why do I get a GPF when I try to unload my form (or control) from the Done event?

With which TCP/IP stacks have your Internet controls been tested?

How do I enable/disable the Windows 95 Dial-Up Networking connect prompt when my application issues a Connect method?

Why won't my Internet Pack VBX load?

How do I convert my code from BLOCKING (Synchronous) to NON-BLOCKING (Asynchronous)?

How can I detect whether someone has entered an IP or host name?

What is the meaning of Error 20002 "unexpected server response"?

<u>Can you recommend any good books that will help me understand Internet programming</u> <u>better?</u>

Internet Pack - Blocking

I'm unclear on blocking. Can you explain it to me?

Should I use blocking or non-blocking calls?

Why do I keep getting the error "Busy executing asynchronous command"?

Why do I keep getting errors when using an Internet VBX control?

Internet Pack - Debugging

How do I tell what's happening when your control is talking to a server?

I note that you can't change the dial-up networking (DUN) information as the details are held in the registry. Do you have a control that will let me change the DUN information?

Frequently Asked Questions

Our RAS control's GetEntry method extracts the properties of a DUN configuration into the LogonName, LogonPassword, and Domain properties. Further, the EditEntry method brings up the Win95 property window for manual editing of additional properties.

At the present time, we do not have a control for programmatically editing registry keys directly. However, this can be accomplished through the GetSetting function and SaveSetting statement.

Can RAS select the DUN setting to use to connect? <u>Frequently Asked Questions</u>

Yes. The RAS control can be used to select and connect via a particular DUN configuration, using the EntryName property and the GetEntry and Connect methods.

Is the Done event supposed to fire after I execute the Disconnect method?

Frequently Asked Questions

No, the the Done event does not fire after a Disconnect because the Disconnect method executes immediately. Because the Disconnect method executes immediately, there is no need for Disconnect to be non-blocking (asynchronous).

How do I determine if a connection is already established?

Frequently Asked Questions

Set the EntryName property to the name of the connection you wish to check. After you do this, you can check the EntryConnected property. If EntryConnected is True, a connection is established for the entry specified by EntryName. Otherwise, there is no connection.

When a "Connection Lost" dialog box pops up, I can't get RAS to redial. What do I do?

Frequently Asked Questions

When the line is dropped, the Win95 Dialup Networking effectively "takes control" of the socket. Any attempts by the RAS to re-establish control results in an error until the DUN dialog box is either cleared or the connection restored.

You should be able re-establish the connection using the FindWindow/ShowWindow APIs and the SendKeys statement to press the "Re-connect" button.

How can I monitor the status of a RAS connection?

Frequently Asked Questions

There is a boolean property called EntryConnected that returns the status of the connection every time the property is read. You could add a Timer that simply checks the status at regular intervals:

```
Timer1_Timer()
    If RAS1.EntryConnected = False Then
        'do something
        End If
End Sub
```

Why am I still presented with the Win95 post dialup login screen, even though I've set the LogonName and Password properties?

Frequently Asked Questions

If the "Bring up Terminal window after/before dialing" is enabled for an entry, the OS will override the control and display the terminal window. Use the Properties of the entry to disable the terminal window.

Under NT, the modems connect but it does not authenticate. It appears to just sit there. What should I do? <u>Frequently Asked Questions</u>

Make sure the entry is not configured to display a post dialup terminal window.

I'm trying to use the RAS control in Windows 3.x but it says the file RASAPI16.DLL cannot be found. Where can I get this file?

Frequently Asked Questions

The RAS control provides programatic access to the Remote Access Service (RAS) subsystem. RASAPI16.DLL is part of the RAS subsystem. Although Windows NT, Windows 95 and Windows For Workgroups offer RAS (or options to install a RAS), Windows 3.x does not.

Can I use the RAS control in Windows 3.x to access Internet Explorer's dialer? Frequently Asked Questions

No. The dialer that comes with IE is not the same as the RAS subsystem.

I am using the TerminateProcess API call to allow the user to interrupt a connection attempt. However, the next time I try to establish the connection, I get an error 20602 "Port is already open". What can I do?

Frequently Asked Questions

Whenever the RAS control is unloaded from memory, the connection should be cleared. If the TerminateProcess is only terminating the process but not unloading your application, you could place the control on a separate form and unload the form that contains the control in the routine that terminates the process. Then, just reload this form. This way, your application can stay loaded but the connection can be cleared. This would require that all references to the control include the Form. In other words, mRas1.Connect would be changed to Form1.mRas1.Connect.

How can I use the RAS control to terminate a connection that it did not establish?

Frequently Asked Questions

You can't. The Mabry RAS control uses the RAS subsystem's DLLs to establish/terminate a connection, but like any DLL it can be called by another program and used in a separate address space. The programmers are looking into whether the control *should* terminate somebody else's connection.

How can I "save Password" in the Entry? Each time I connect, I am asked for the Login and Password.

Frequently Asked Questions

If using the VBX version, the OS will always prompt you for a logon name and password because the 16 bit version of the RAS subsystem doesn't support the GetEntry, EditEntry, or CreateEntry methods. You should be able to simply set these values, but you'll have to store them yourself in an INI file. If using the OCX version, it depends on whether or not the entry has the Save Password check box checked.

Why won't my Internet Pack VBXes load into VB?

Frequently Asked Questions

The VBXes are looking for a file called WINSOCK.DLL. This DLL should be in your Windows directory (most DLLs are located in your Windows\System directory -- this one is an exception). Look for WINSOCK.DLL. If it's not in your Windows directory, we recommend moving it there. Be sure to write down where it was, in case something goes wrong.

Also, check the date on your WINSOCK.DLL. If it's 1994 or before, you should look into getting a later version.

Why do I get a GPF when I try to unload my form (or control) from the Done event?

Frequently Asked Questions

This is not uncommon in many controls. If the form containing the control is unloaded but the control's C++ code for the event has to reference the control, the GPF will occur because the control is no longer available after it is has been unloaded. The solution is to enable a timer in the Done event and have the Timer unload the form (or control).

With which TCP/IP stacks have your Internet controls been tested? Frequently Asked Questions

The majority of our internal testing is done on either NT's or Win95's standard stacks. We also utilize a 3.1 machine running Trumpet Winsock.

As part of our beta program, the controls wind up on a variety of stacks like Novell (known to have differences in Winsock, but should be OK with the latest patches from Novell), WFWG (also has a known problem that can cause FTP trouble, but MS has a patch for that product as well (article ID Q122544)).

The controls support the standard Winsock interface, so in general, the 16-bit environments that do not come with a default stack (I.e., Windows 3.x) may involve a bit more setup, but as long as some reputable stack is used, there shouldn't be any problems.

How do I enable/disable the Windows 95 Dial-Up Networking connect prompt when my application issues a Connect method?

Frequently Asked Questions

The fact that the DUN pops up when attempting to establish a network connection is a Win95 OS setting. To change this behavior, choose Dial Up Networking from "My Computer", and select "Settings..." from the "Connections" menu. Set the desired value in the "When establishing a network connection" frame.

Why won't my Internet Pack VBX load?

Frequently Asked Questions

Usually, the Internet VBXes won't load when the WINSOCK.DLL is missing. Make sure you have a current WINSOCK.DLL in the Windows or Windows\System sub-dir. Some versions of Windows 3.x WinSocks may actually require a TCP/IP connection.

How do I convert my code from BLOCKING (Synchronous) to NON-BLOCKING (Asynchronous)?

Frequently Asked Questions

A quick fix for converting Blocking code to non-blocking code is as follows:

```
Blocking=False
```

In the Declarations of the Form, add:

Private fDone as Boolean

In the Done event of the control set the fDone flag as shown:

```
Private Sub FTP1_Done()
    fDone = True
End Sub
```

Then, when invoking a method, just loop until the Done event sets the fDone flag.

```
fDone = False
mMail1.Connect
Do
    DoEvents
    'here is where your application
    'can do other things
Loop Until (fDone)
```

Note: you may want to set a timer in the loop so it will not loop endlessly should some problem occur. Also, depending upon your code you may want to conditionally set the fDone flag in the AsyncError event.

How can I detect whether someone has entered an IP or host name? Frequently Asked Questions

You can use the function (below) to check for a host name or IP address.

```
' This Function receives a string argument and
' validates whether the string is a valid IP value,
' by verifying that it is in the format of w.x.y.z and
' that each octet is between 0 and 255
' Returns True if IP there are 4 octets and each is
' between 0 and 255.
' Returns False in all other cases
' Disclaimer -- this function will not detect certain
' values such as netmasks like 255.255.255.255,
' which meet the criteria but are not valid IPs.
Private Function Valid IP(IP As String) As Boolean
    Dim i As Integer
    Dim dot count As Integer
    Dim test octect As String
    IP = Trim\$(IP)
    ' make sure the IP long enough before
    ' continuing
    If Len(IP) < 8 Then
       Valid IP = False
       Exit Function
    End If
    i = 1
    dot count = 0
    For i = 1 To Len(IP)
        If Mid\$(IP, i, 1) = "." Then
            ' increment the dot count and
            ' clear the test octet variable
            dot count = dot_count + 1
            test octet = ""
            If i = Len(IP) Then
                ' we've ended with a dot
                ' this is not good
                Valid IP = False
                Exit Function
            End If
        Else
            test octet = test octet & Mid$(IP, i, 1)
            On Error Resume Next
            byte check = CByte(test octet)
            If (Err) Then
                ' either the value is not numeric
                ' or exceeds the range of the byte
                ' data type.
                Valid IP = False
                Exit Function
```

```
End If
End If
Next i
' so far, so good
' did we get the correct number of dots?
If dot_count <> 3 Then
Valid_IP = False
Exit Function
End If
' we have a valid IP format!
Valid_IP = True
End Function
```

What is the meaning of Error 20002 "unexpected server response"? <u>Frequently Asked Questions</u>

The control has issued some command and the server did not accept it. It could be anything from an improperly formatted e-mail address to an unimplemented command on the server. You'll have to enable debugging to see what the command and reply are.

Can you recommend any good books that will help me understand Internet programming better?

Frequently Asked Questions

Any good book on TCP/IP would be helpful. From personal experience, tech support recommends "TCP/IP" by Dr. Sidnie Feit, published by McGraw-Hill . It is *not* written from a programming standpoint, but does include everything you'd want to know about the lower levels of the OSI stack (including TCP/UDP/IP, etc.).

I'm unclear on blocking. Can you explain it to me?

Frequently Asked Questions

When your application requests data from a network connection, it is hard to predict how long it will take before the data arrives and the call can complete. As a programmer, you have to determine whether to wait for the outcome of the call, or return immediately to your application and get the data *when* the data arrives.

Calls that wait, are called blocking calls. Because the call must complete before the application continues, blocking calls are also referred to as synchronous calls.

Calls that return control to your application immediately are called non-blocking calls. Since your application can perform tasks while the call is retrieving the data, non-blocking calls are also referred to as asynchronous calls.

Mabry Internet controls support both blocking and non-blocking calls.

It is important to note that even when using blocking calls, Windows can send event messages (such as Timer events, mouse clicks, etc.) to your application and it can respond to them. This can result in errors. It is the responsibility of the programmer to minimize the likelyhood of these situations (such as disabling any Timers or command buttons that will interrupt the call) and handle any errors should such conditions arise.

Error handling is very important when issuing calls to a network. Always use some method of On Error handling when invoking blocking calls. For non-blocking calls, normal On Error handling is required in addition to responding to the AsyncError event.

Should I use blocking or non-blocking calls? <u>Frequently Asked Questions</u>

It depends on your application. See the explanation on blocking calls for a complete description of blocking vs. non-blocking.

Why do I keep getting the error "Busy executing asynchronous command"?

Frequently Asked Questions

A call has been invoked but a previous call has not been completed yet. Either set Blocking mode to true or wait for the Done event before issuing subsequent commands.

It is important to note that even when using blocking calls, Windows can send event messages (such as Timer events, mouse clicks, etc.) to your application and it can respond to them. This can result in errors. It is the responsibility of the programmer to minimize the likelyhood of these situations (such as disabling any Timers or command buttons that will interrupt the call) and handle any errors should such conditions arise.

Why do I keep getting errors when using an Internet VBX control?

Frequently Asked Questions

A call has been invoked but a previous call has not been completed yet. Either set Blocking mode to true or wait for the Done event before issuing subsequent commands.

It is important to note that even when using blocking calls, Windows can send event messages (such as Timer events, mouse clicks, etc.) to your application and it can respond to them. This can result in errors. It is the responsibility of the programmer to minimize the likelihood of these situations (such as disabling any Timers or command buttons that will interrupt the call) and handle any errors should such conditions arise.

How do I tell what's happening when your control is talking to a server?

Frequently Asked Questions

The Internet Pack controls have debugging support built-in. Simply set the Debug property on the control to 1 and then add the following code to the Debug event of the control:

Debug.Print Message

Registration Information

CREDITS

RAS was written by James Shields.

CONTACT INFORMATION

Orders, inquiries, technical support, questions, comments, etc. can be sent to mabry@mabry.com on the Internet. Our mailing address/contact information is:

Mabry Software, Inc. Post Office Box 31926 Seattle, WA 98103-1926 Sales: 1-800-99-MABRY (U.S. Only) Voice: 206-634-1443 Fax: 206-632-0272 or 206-364-3196 Web: http://www.mabry.com

COST

The price of RAS (control only) is US20 (US25 for International orders). The cost of RAS and the C/C++ source code (of the control itself) is US45 (US50 for International orders).

Prices are subject to change without notice.

DELIVERY METHODS

We can ship this software to you via air mail and/or e-mail.

Air Mail - you will receive disks, a printed manual, and printed receipt if you choose this delivery method. The costs are:

US\$5.00	US Priority Mail
US\$10.00	AirBorne Express 2nd Day (US deliveries only)
US\$15.00	AirBorne Express Overnight (US deliveries only)
US\$45.00	International AirBorne Express.

E-Mail - We can ship this package to you via e-mail. You need to have an e-mail account that can accept large file attachments (which includes CompuServe, AOL, and most Internet providers). If you choose this option, please note: a printed manual is not included. We will, however, e-mail a receipt to you.

Be sure to include your full mailing address with your order. Sometimes (on the Internet) the package cannot be e-mailed, so we are forced to send it through the normal mails.

CompuServe E-Mail - CompuServe members can use the software registration forum (GO SWREG) to register this package. RAS' SWREG ID number is 13886. The source code version's ID number is 13887. PLEASE NOTE: When you order through SWREG, we send the registered package to your CompuServe account (not your Internet or AOL account) within a few hours.

ORDER / PAYMENT METHODS

You can order this software by phone, fax, e-mail, mail. For your convenience, an order form has been provided that you can print out directly from this help file.

Please note that orders must include all information that is requested on our order form. Your shipment WILL BE DELAYED if we have to contact you for additional information (such as phone number, street address, etc.).

You can pay by credit card (VISA, MasterCard, American Express), check (U.S. dollars drawn on a U.S. bank), cash, International Money Order, International Postal Order, Purchase Order (established business entities only - terms net 30), or wire transfer.

WIRE TRANSFER INFORMATION

Here is the information you need regarding our account for a wire funds transfer:

Bank Name:	SeaFirst - Stone Way Branch
Bank Address:	3601 Stone Way North
Bank Phone:	Seattle, WA 98103 206-585-4951
Account Name:	Mabry Software, Inc.
Routing Number:	12000024
Account Number:	16311706

If you are paying with a wire transfer of funds, please add US\$12.50 to your order. This is the fee that SeaFirst Bank charges Mabry Software. Also, please ADD ANY ADDITIONAL FEES THAT YOUR BANK MAY CHARGE for wire transfer service. If you are paying with a wire transfer, we must have full payment deposited to our account before we can ship your order.

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RAS Order Form

Use the Print Topic... command from the File menu to print this order form.

	Mabry Software, Inc. Post Office Box 31926 Seattle, WA 98103-1926 Phone: 206-634-1443 Fax: 206-632-0272 or 206-364-3196 Internet: mabry@mabry.com Web: www.mabry.com				
Where did	l you get this	s copy of RAS?			
Name:					
Ship to:					
·					
Phone:					
Fax:					
E-Mail:					
MC/VISA/A	MEX:	exp			
P.O. # (if a	any):	Signature			
qty ordere	ed	REGISTRATION \$20.00 (\$25.00 international). Check or money order in U.S. currency drawn on a U.S. bank. Add \$5.00 per order for shipping and handling.			
qty ordere	ed	SOURCE CODE AND REGISTRATION \$45.00 (\$50.00 international). Check or money order in U.S. currency drawn on a U.S. bank. Add \$5.00 per order for shipping and handling.			

Error Codes

	23
Value	Description
20601	Invalid Port Handle
20602	Port Already Open
20603	Buffer Too Small
20604	Wrong Info Specified
20605	Cannot Set Port Info
20606	Port Not Connected
20607	Event Invalid
20608	Device Does Not Exist
20609	Device Type Does Not Exist
20610	Buffer Invalid
20611	Route Not Available
20612	Route Not Allocated
20613	Invalid Compression Specified
20614	Out Of Buffers
20615	Port Not Found
20616	Async Request Pending
20617	Already Disconnecting
20618	Port Not Open
20619	Port Disconnected
20620	No Endpoints
20621	Cannot Open Phonebook
20622	Cannot Load Phonebook
20623	Cannot Find Phonebook Entry
20624	Cannot Write Phonebook
20625	Corrupt Phonebook
20626	Cannot Load String
20627	Key Not Found
20628	Disconnection
20629	Remote Disconnection
20630	Hardware Failure
20631	
20632	
20633	
20634	,
20635	Unknown
20636	5
20637	Bad String
20638	•
20639	
20640	
20641	Server Out Of Resources

20642	Name Exists On Net
20642	Server General Net Failure
20645	Auth Internal
20645	Restricted Logon Hours
20040	Account Disabled
20648	Password Expired
20648	Not Dial In Permission
20649	
20650	Server Not Responding From Device
20652	Unrecognized Response
20653	Macro Not Found
20654	Macro Not Defined
20655	Message Macro Not Found
20656	DefaultOFF Macro Not Found
20657	File Count Not Be Opened
20658	Device Name Too Long
20659	Device Name Not Found
20660	No Responses
20661	No Command Found
20662	Wrong Key Specified
20663	Unknown Device Type
20664	Allocating Memory
20665	Port Not Configured
20666	Device Not Ready
20667	Reading INI File
20668	No Connection
20669	Bad Usage In INI File
20670	Reading Section Name
20671	Reading Device Type
20672	Reading Device Name
20673	Reading Usage
20674	Reading Max Connection BPS
20675	Reading Max Carrier BPS
20676	Line Busy
20677	Voice Answer
20678	No Answer
20679	No Carrier
20680	No Dialtone
20681	In Command
20682	Writing Section Name
20683	Writing Device Type
20684	Writing Device Name
20685	Writing Max Connection BPS
20686	Writing Max Carrier BPS
20687	Writing Usage

20688	Writing DefaultOFF
20689	Reading DefaultOFF
20690	Empty INI File
20691	Authentication Failure
20692	Port Or Device
20693	Not Binary Macro
20694	DCB Not Found
20695	State Machines Not Started
20696	State Machines Already Started
20697	Partial Response Looping
20698	Unknown Response Key
20699	Receive Buffer Full
20700	Command Too Long
20701	Unsupported BPS
20702	Unexpected Response
20703	Interactive Mode
20704	Bad Callback Number
20705	Invalid Auth State
20706	Writing Init BPS
20707	X25 Diagnostic
20708	Account Expired
20709	Changing Password
20710	Overrun
20711	RASMAN Cannot Initialize
20712	Biplex Port Not Available
20713	No Active ISDN Lines
20714	No ISDN Channels Available
20715	Too Many Line Errors
20716	IP Configuration
20717	No IP Addresses
20718	PPP Timeout
20719	PPP Remote Terminated
20720	PPP No Protocols Configured
20721	PPP No Response
20722	PPP Invalid Packet
20723	Phone Number Too Long
20724	IPXCP No Dialout Configured
20725	IPXCP No Dialin Configured
20726	IPXCP Dialout Already Active
20727	Accessing TCPCFGDLL
20728	No IP RAS Adapter
20729	SLIP Requires IP
20730	Projection Not Complete
20731	Protocol Not Configured
20732	PPP Not Converging

- 20733 PPP CP Rejected
- 20734 PPP LCP Terminated
- 20735 PPP Required Address Rejected
- 20736 PPP NCP Terminated
- 20737 PPP Loopback Detected
- 20738 PPP No Address Assigned
- 20739 Cannot Use Logon Credentials
- 20740 TAPI Configuration
- 20741 No Local Encryption
- 20742 No Remote Encryption
- 20743 Remote Requires Encryption
- 20744 IPXCP Net Number Conflict
- 20745 Invalid SMM
- 20746 SMM Uninitialized
- 20747 No MAC For Port
- 20748 SMM Timeout
- 20749 Bad Phone Number
- 20750 Wrong Module

See Also
Connect Method
CreateEntry Method
Disconnect Method
Done Event
EditEntry Method
GetEntry Method
Refresh Method

See Also Action Property Done Event LastError Property See Also Action Property AsyncError Event Done Event LastError Property See Also
Action Property
Connect Method
Domain Property
EntryCount Property
EntryList Property
EntryName Property
PhoneNumber Property
Refresh Method

See Also
Action Property
Connect Method
Domain Property
EntryCount Property
EntryList Property
EntryName Property
PhoneNumber Property
Refresh Method

See Also
Action Property
Connect Method
ConnectStateString Property
Done Event

See Also
Action Property
Connect Method
ConnectState Property
Done Event

See Also
Action Property
EditEntry Method
EntryCount Property
EntryList Property
EntryName Property
LastError Property
PhoneBook Property

See Also Action Property Connect Method LastError Property See Also
Action Property
CallbackNumber Property
Connect Method
EntryCount Property
EntryList Property
EntryName Property
PhoneNumber Property
Refresh Method

See Also
AsyncError Event
ConnectState Property
ConnectStateString Property
LastError Property
LastErrorString Property
Progress Event

See Also
Action Property
CreateEntry Method
EntryCount Property
EntryList Property
EntryName Property
LastError Property
PhoneBook Property

See Also EntryName Property

See Also
Action Property
EntryList Property
Refresh Method

See Also
Action Property
EntryCount Property
EntryName Property
Refresh Method

See Also
Action Property
Connect Method
EntryCount Property
EntryList Property
PhoneNumber Property
Refresh Method

See Also
Action Property
CreateEntry Method
EditEntry Method

See Also Action Property Connect Method Disconnect Method See Also <u>Action Property</u> <u>AsyncError Event</u> <u>Done Event</u> <u>LastErrorString Property</u>

See Also LastError Property

See Also LogonPassword Property

See Also LogonName Property

See Also
Action Property
Connect Method
CreateEntry Method
Disconnect Method
EditEntry Method
GetEntry Method

See Also
Action Property
CallbackNumber Property
Connect Method
Domain Property
EntryCount Property
EntryList Property
EntryName Property
PhoneNumber Property
Refresh Method

See Also
Action Property
Connect Method
ConnectState Property
ConnectStateString Property
Done Event

See Also <u>Action Property</u> <u>EntryCount Property</u> <u>EntryList Property</u> <u>EntryName Property</u> <u>LastError Property</u> <u>PhoneBook Property</u>

AboutBox Method

Error Codes Frequently Asked Questions

Description

displays the About Box for the control.

Syntax

object. AboutBox

The syntax of the **AboutBox** method has these parts:

Part Description

object Required. A RAS control.

Remarks

This method displays the About Box for this control to display copyright information.

VBX Note: This method (and its <u>Action property</u> equivalent) is not available in the VBX version of this control.

Action Property

See Also Error Codes

Frequently Asked Questions

Description

Causes control to initiate a command / method.

Syntax

object.Action [= integer]

The syntax of the **Action** property has these parts:

<u>Part</u> <u>Description</u>

object A RAS control.

integer An integer that specifies the action to perform.

Remarks

Setting this property makes the RAS control perform an action. The action depends on the value set. RAS accepts the following:

<u>Constant</u>	<u>Value</u>	Description
RasActionNone	0	No action
RasActionConnect	1	Connect server (<u>Connect</u>)
RasActionGetEntry	2	Get phone book entry (<u>GetEntry</u>). Only available in the ActiveX / OCX version.
RasActionDisconnect	3	Disconnect from server (<u>Disconnect</u>)
RasActionRefresh	4	Refresh phone book list (<u>Refresh</u>)
RasActionCreateEntry	5	Create entry in phone book (<u>CreateEntry</u>) Only available in the ActiveX / OCX version.
RasActionEditEntry	6	Edit entry in phone book (<u>EditEntry</u>) Only available in the ActiveX / OCX version.

This property is present in VBX and OCX versions of this control. It is in the OCX version to maintain property compatibility. OCX users can use this property or the method equivalents to perform actions.

VBX Note: Methods are not available in the VBX version of this control. Methods are only in the ActiveX / OCX version. When using the VBX, you must use the <u>Action property</u> instead of the equivalent method.

Data Type

Integer

AsyncError Event

See Also Error Codes

Frequently Asked Questions

Description

Fired when an error occurs during asynchronous operations

Syntax

Sub object_AsyncError([index As Integer,] errornumber As Integer, errormessage As String)

The syntax of the **AsyncError** event has these parts:

<u>Part</u>	Description
object	A RAS control.
index	An integer that identifies a control if it's in a control array.
errornumber	An integer that holds the current error number.
errormessage	A string expression that holds text describing the current error.

Remarks

If an error occurs during the execution of asynchronous commands (only possible when <u>Blocking</u> is set to False) the program is notified by firing the AsyncError event.

Blocking Property

See Also Error Codes

Frequently Asked Questions

Description

Determines if any methods or actions are blocking.

Syntax

object.Blocking [= boolean]

The syntax of the **Blocking** property has these parts:

Part Description

object A RAS control.

boolean A boolean flag that determines if the control waits until a command is finished, or, returns control immediately and then fires an event when done.

Remarks

If this property is set to True, any commands using either the <u>Action property</u> or any of the methods will not return to your code until the command completes. In other words, the command will be handled synchronously.

If this property is false, any commands are handled asynchronously. They return to you immediately. You are notified of completion with the <u>Done event</u>. When the userinterface requires that the user be able to cancel file transfers, it is recommended that Blocking be set to False so that your program can respond quickly to user actions.

Important Note: The Blocking property must not be changed while a connection is established. You should only change the Blocking property when the control is not connected to a server. Changing the Blocking property while connected could cause some strange behavior in the control.

Data Type

Integer (boolean)

CallbackNumber Property

See Also Error Codes Frequently Asked Questions

Description

Determines the number that the server will call back during the connection process.

Syntax

object.CallbackNumber [= string]

The syntax of the **CallbackNumber** property has these parts:

Part Description

object A RAS control.

string A string expression that specifies a phone number.

Remarks

This property specifies a callback phone number (if one is needed). If this property is empty, callback is not used. Callbacks are only made if both the server and the local RAS sub-system are setup to do so.

Data Type

String

ConnectStateString Property

See Also Error Codes Frequently Asked Questions

Description

Holds the human readable string that corresponds to the value in the <u>ConnectState</u> <u>property</u>.

Syntax

object. ConnectStateString

The syntax of the **ConnectStateString** property has these parts:

<u>Part</u> <u>Description</u>

object A RAS control.

Remarks

This property contains the human readable string that holds the current state of the connection process (dialing). It contains a string which describes the value of ConnectState.

This property is read-only and only available at run-time. This property only holds a meaningful value while RAS connects to a server.

Data Type

Connect Method

See Also Error Codes

Frequently Asked Questions

Description

This method makes the RAS sub-system connect to the specified Internet server.

Syntax

object.Connect

The syntax of the **Connect** method has these parts:

<u>Part</u> <u>Description</u>

object Required. A RAS control.

Remarks

This method causes the RAS subsystem to dial the specified server (specified by <u>PhoneBook</u> and <u>EntryName</u> or by <u>PhoneNumber</u>).

The simplest way to dial is to set the <u>PhoneBook</u> and <u>EntryName</u> properties. Then, use the <u>GetEntry method</u> (to ensure that all of the properties are filled with their appropriate values). **Note:** It is very important to use the <u>GetEntry method</u> (or its <u>Action property</u> equivalent) -- this will ensure that the other properties, such as <u>LogonName</u> and <u>LogonPassword</u>, are set properly from the phone book.

Or, you can set the <u>PhoneNumber</u>, <u>LogonName</u> and <u>LogonPassword</u> properties. Then execute the <u>Connect method</u>. This, however, is not the recommended method. It is far better to have a phone book entry and use it to dial.

While this method executes, your program will receive the <u>Progress event</u>. In this event, your program can access the <u>ConnectState</u> and <u>ConnectStateString</u> properties to follow the progress of the dialing / connection. The connection process is not complete until the <u>ConnectState</u> property reaches either connected (8192) or disconnected (8193).

If the <u>Blocking property</u> is True, you can cancel a connection attempt by using the <u>Disconnect method</u> (or its <u>Action</u> equivalent).

Windows 95 Note: all phone book entries are kept in the registry. So, the <u>PhoneBook</u> <u>property</u> is ignored.

VBX Note: Methods are not available in the VBX version of this control. Methods are only in the ActiveX / OCX version. When using the VBX, you must use the <u>Action property</u> instead of the equivalent method.

ConnectState Property

See Also Error Codes Frequently Asked Questions

Description

Holds the status of dialing / connecting.

Syntax

object.ConnectState

The syntax of the **ConnectState** property has these parts:

Part Description

object A RAS control.

Remarks

This property contains the current state of dialing (using the <u>Connect method</u> or <u>Action</u> <u>property</u>). You should not rely on these values to come in any particular order during a connection.

<u>Value</u> <u>Description</u>

- 0 Open Port
- 1 Port Opened
- 2 Connect Device
- 3 Device Connected
- 4 All Devices Connected
- 5 Authenticate
- 6 Authenticate Notify
- 7 Authenticate Retry
- 8 Authenticate Callback
- 9 Authenticate Change Password
- 10 Authenticate Project
- 11 Authenticate Link Speed
- 12 Authenticate Ack
- 13 ReAuthenticate
- 14 Authenticated
- 15 Prepare for Callback
- 16 Wait for Modem Reset
- 17 Wait for Callback
- 18 Projected
- 19 Start Authentication
- 20 Callback Complete
- 21 Logon Network
- 4096 Interactive
- 4097 Retry Authentication
- 4098 Callback Set By Caller
- 4099 Password Expired
- 8192 Connected
- 8193 Disconnected. In this case, the ConnectStateString property may contain the reason for not connecting. The string may be one of the following: Disconnected Line Busy

Disconnected - Voice Answer Disconnected - No Answer Disconnected - No Carrier Disconnected - No Dialtone Disconnected

This property is read-only and only available at run-time. This property only holds a meaningful value while RAS connects to a server.

Data Type

Integer

CreateEntry Method Error Codes

See Also

Frequently Asked Questions

Description

Displays dialog box which allows user to create a phone book entry.

Syntax

object. CreateEntry

The syntax of the **CreateEntry** method has these parts:

Part Description

object Required. A RAS control.

Remarks

The CreateEntry method (or its <u>Action property</u> equivalent) displays a dialog box which allows the user to create a new phone book entry. The entry ends up in the phone book specified by the PhoneBook property.

After this you should execute the <u>Refresh method</u> (or <u>Action</u>) to get the list of entries in the current phone book.

Windows 95 Note: all phone book entries are kept in the registry. So, the <u>PhoneBook</u> property is ignored.

VBX Note: This method (and its Action property equivalent) is not available in the VBX version of this control.

Disconnect Method Error Codes

<u>See Also</u>

Frequently Asked Questions

Description

Makes RAS control disconnect from the Internet server.

Syntax

object. Disconnect

The syntax of the **Disconnect** method has these parts:

<u>Part</u> **Description**

object Required. A RAS control.

Remarks

This method disconnects the computer from the Internet server. If there is no connection, this method does nothing.

This action executes immediately. Even when <u>Blocking</u> is False, this method does not fire the Done event.

VBX Note: Methods are not available in the VBX version of this control. Methods are only in the ActiveX / OCX version. When using the VBX, you must use the Action property instead of the equivalent method.

Domain Property

See Also Error Codes

Frequently Asked Questions

Description

Specifies domain where authentication should occur.

Syntax

object.Domain [= string]

The syntax of the **Domain** property has these parts:

Part Description

object A RAS control.

string A string expression that specifies a domain name.

Remarks

This property determines the domain where user authentication should occur. If this property is blank, the Internet server's domain is used to authenticate. Normally this property should be blank.

Data Type

Done Event See Also

Error Codes

Frequently Asked Questions

Description

This event procedure is fired when the control completes an action or method.

Syntax

Sub object_Done([index As Integer])

The syntax of the **Done** event has these parts:

Part Description

object A RAS control.

index An integer that identifies a control if it's in a control array.

Remarks

Fired when a method has finished executing without error. If an error occurs during execution of any method and <u>Blocking</u> is True, then an error is thrown by the control and must be handled by **On Error**.

When <u>Blocking</u> is False, an error may be thrown during execution of a method as it is when <u>Blocking</u> is True. However, errors which occur during background execution of methods when <u>Blocking</u> is False will result in firing of the <u>AsyncError event</u>.

EditEntry Method

See Also Error Codes

Frequently Asked Questions

Description

Displays dialog box where the user can edit a phone book entry.

Syntax

object. EditEntry

The syntax of the **EditEntry** method has these parts:

Part Description

object Required. A RAS control.

Remarks

The EditEntry method (or its <u>Action property</u> equivalent) displays a dialog box which allows the user to edit an existing phone book entry. The entry ends up in the phone book specified by the <u>PhoneBook property</u>.

Windows 95 Note: all phone book entries are kept in the registry. So, the <u>PhoneBook</u> <u>property</u> is ignored.

VBX Note: This method (and its <u>Action property</u> equivalent) is not available in the VBX version of this control.

EntryConnected Property

See Also Error Codes Frequently Asked Questions

Description

Returns whether or not the RAS entry (specified by EntryName) is connected.

Syntax

object. EntryConnected

The syntax of the **EntryConnected** property has these parts:

Part Description

object A RAS control.

Remarks

This property returns a boolean which is set to True if the RAS entry named by the <u>EntryName property</u> is connected at the time the property is checked. <u>Refresh</u> is not required to update this property and the connection status is checked each time the the EntryConnected property is examined.

Data Type

Integer (boolean)

EntryCount Property

<u>See Also</u>

Error Codes

Frequently Asked Questions

Description

Returns the number of items in the <u>EntryList</u> property array.

Syntax

object. EntryCount

The syntax of the **EntryCount** property has these parts:

Part Description

object A RAS control.

Remarks

This property returns the number of phone book entries in the <u>EntryList</u> property array. This property is filled when the control first loads and when the <u>Refresh method</u> is executed. This property is read-only at run-time only.

Data Type

Integer

EntryList Property

See Also Error Codes

Frequently Asked Questions

Description

Holds the list of entries from a phone book.

Syntax

object.EntryList [= index]

The syntax of the **EntryList** property has these parts:

<u>Part</u> <u>Description</u>

object A RAS control.

index An integer that indentifies an entry in the property array.

Remarks

This property returns the names of phone book entries found in the phone book specified by the <u>PhoneBook property</u>. The names in this list are used to fill the <u>EntryName property</u> when connecting to a server (via the Connect method) or editing an entry.

This property is filled when the control first loads and when the <u>Refresh method</u> is executed. This property is read-only at run-time only.

Data Type

EntryName Property

<u>See Also</u>

Error Codes

Frequently Asked Questions

Description

Specifies an entry in a phone book.

Syntax

object.EntryName [= string]

The syntax of the **EntryName** property has these parts:

Part Description

object A RAS control.

string A string expression that specifies a RAS phone book entry name.

Remarks

This property holds the name of the current phone book entry loaded (or of the phone book entry to load with the <u>GetEntry method</u> or <u>Action property</u>).

Data Type

GetEntry Method

See Also Error Codes

Frequently Asked Questions

Description

Loads properties with data from a phone book entry.

Syntax

object. GetEntry

The syntax of the **GetEntry** method has these parts:

Part Description

object Required. A RAS control.

Remarks

This method loads an entry (<u>EntryName</u>) from a phone book (specified by the <u>PhoneBook</u> <u>property</u>). Before using this property, you must set the <u>EntryName</u> and <u>PhoneBook</u> <u>properties</u>.

If the entry is found, the <u>LogonName</u>, <u>LogonPassword</u>, <u>CallbackNumber</u> and <u>Domain</u> properties are filled from the phone book.

General Note: This method does not load the <u>PhoneNumber property</u>. This is due to the fact that the RAS sub-system does not return the value to the RAS Control. You do not need this property to connect to an server. In fact, since you have the <u>EntryName</u>, you can connect to a server using just that (along with the <u>LogonName</u> and <u>LogonPassword</u> properties.

Windows 95 Note: all phone book entries are kept in the registry. So, the <u>PhoneBook</u> <u>property</u> is ignored.

VBX Note: This method (and its <u>Action property</u> equivalent) is not available in the VBX version of this control.

Handle Property

See Also Error Codes

Frequently Asked Questions

Description

Returns the connection handle (if connected to a server).

Syntax

object. Handle

The syntax of the **Handle** property has these parts:

Part Description

object A RAS control.

Remarks

After the control has connected to a server, this property holds the connection handle. This handle is typically for information uses only

This property is read-only and only available at run-time.

Data Type

Integer (long)

LastError Property

See Also Error Codes

Frequently Asked Questions

Description

Holds the last error number reported.

Syntax

object. LastError

The syntax of the **LastError** property has these parts:

Part Description

object A RAS control.

Remarks

This property contains the result of the last method executed. It is zero if the last method completed without error. Otherwise, it contains an error code.

This property is read-only and only available at run-time.

Data Type

Integer

LastErrorString Property

See Also Error Codes Frequently Asked Questions

Description

Holds a description of the last error number reported.

Syntax

object. LastErrorString

The syntax of the **LastErrorString** property has these parts:

Part Description

object A RAS control.

Remarks

This property contains the result of the last method executed. It is zero if the last method completed without error. Otherwise, it contains an error code.

This property is read-only and only available at run-time.

Data Type

LogonName Property

See Also Error Codes Frequently Asked Questions

Description

Name to use when connecting to the server.

Syntax

object. LogonName

The syntax of the **LogonName** property has these parts:

Part Description

object A RAS control.

Remarks

RAS servers require a username and password. This property is sent to the server when it asks for a name.

Data Type

LogonPassword Property

See Also Error Codes Frequently Asked Questions

Description

Password to use when connecting to the server.

Syntax

object. LogonPassword

The syntax of the **LogonPassword** property has these parts:

Part Description

object A RAS control.

Remarks

RAS servers require a username and password. This property is sent to the server when it asks for a password.

Data Type

PhoneBook Property Error Codes

See Also

Frequently Asked Questions

Description

Specifies the phone book file to use when dialing.

Syntax

object. PhoneBook [= filename]

The syntax of the **PhoneBook** property has these parts:

Part Description

object A RAS control.

filename A string expression that specifies the filename of a RAS phone book.

Remarks

This property determines the phone book to use when dialing or creating/editing phone book entries. This property should contain the full path and filename of the phone book file.

Windows 95 Note: Under Windows 95 all RAS phone book entries are kept in the registry. This property is ignored under Windows 95.

Windows NT Note: The path to the default phone book can be found in the Registry. The key is HKEY LOCAL MACHINE\SOFTWARE\Microsoft\RAS\CurrentVersion. The value to read is PathName. The filename of the default phone book is RASPHONE.PBK.

Data Type

PhoneNumber Property Error Codes

See Also

Frequently Asked Questions

Description

Internet server's phone number.

Syntax

object.PhoneNumber [= string]

The syntax of the **PhoneNumber** property has these parts:

<u>Part</u> Description

object A RAS control.

A string expression that specifies a phone number. string

Remarks

This is the phone number that the RAS sub-system uses to dial the Internet server. Typically this property is filled in by the <u>GetEntry method</u> or <u>Action property</u>.

When dialing (using the <u>Connect method</u> or <u>Action property</u> equivalent), this property is ignored if the EntryName property is not empty. In that case, the RAS sub-system retrieves the phone number from the phone book entry specified by the EntryName property.

Data Type

Progress Event

See Also Error Codes

Frequently Asked Questions

Description

Fires during a connection (dialing).

Syntax

Sub object_Progress([index As Integer,] connectstate As Integer)

The syntax of the **Progress** event has these parts:

<u>Part</u>	Description
object	A RAS control.
index	An integer that identifies a control if it's in a control array.
connectstate	An integer that specifies the current state of dialing.

Remarks

This event fires while the RAS sub-system attempts to connect to an Internet server. The *connectstate* parameter is identical to the <u>ConnectState property</u>.

If you want a string to display to the user, use the <u>ConnectStateString property</u>. While the text in this property is brief, it is also accurate.

Dialing / connection is complete when the *connectstate* parameter is either 8192 (Connected) or 8193 (Disconnected). See the <u>ConnectState property</u> for more information on the values of *connectstate*.

RASAvailable Property

Error Codes Frequently Asked Questions

Description

Reports if RAS services are available.

Syntax

object. RASAvailable

The syntax of the **RASAvailable** property has these parts:

Part Description

object A RAS control.

Remarks

This property tells your program whether RAS services are available or not. If this property is True, you can use the RAS control to connect to remote servers. If this property is False, RAS services are not available.

Data Type

Integer (boolean)

Refresh Method

See Also Error Codes Free

Frequently Asked Questions

Description

Re-loads the list of phone book entries.

VBX Note: Methods are not available in the VBX version of this control. Methods are only in the ActiveX / OCX version. When using the VBX, you must use the <u>Action property</u> instead of the equivalent method.

Syntax

object. Refresh

The syntax of the **Refresh** method has these parts:

Part Description

object Required. A RAS control.

Remarks

This method makes the RAS control re-load the list of dialing entries in a phone book. You specify the phone book to scan using the <u>PhoneBook property</u>.

Once this method completes, the <u>EntryCount property</u> will hold the number of entries in the phone book. And, the EntryList property array will contain the names of the servers in the phone book.

Windows 95 Note: all phone book entries are kept in the registry. So, the <u>PhoneBook</u> <u>property</u> is ignored.

VBX Note: Methods are not available in the VBX version of this control. Methods are only in the ActiveX / OCX version. When using the VBX, you must use the <u>Action property</u> instead of the equivalent method.

Version Property

Error Codes Frequently Asked Questions

Description

Shows the version of the control.

Syntax

object.Version

The syntax of the **Version** property has these parts:

Part Description

object A RAS control.

Remarks

This property holds the current version of the control. It is read-only and available at both design-time and run-time.

Data Type

Getting Custom Controls Written

If you or your organization would like to have custom controls written, you can contact us at the following:

Mabry Software, Inc. Post Office Box 31926 Seattle, WA 98103-1926 Phone: 206-634-1443 Fax: 206-632-0272 or 206-364-3196 Internet: mabry@mabry.com

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