

# **RMB/Win Extender**

## ***“A Rocky Mountain Basic for Windows TCP/ActiveX Extension”***

### Frequently Asked Questions



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**FAQ 1 : -Error 7 with RmbWin Extender CSUBs**

*There may be essentially two reasons to get such an error :*

- First one may come from the .csb file used. There are two files named Rmbwext.csb (usable with HT/HP Basic for Windows Rev 8.x) and Rmbwext63.csb (usable with HT/HP Basic for Windows Rev 6.3 to Rev 7.x). If you are not loading the correct release you may get either ERROR 7 (if a call of Rmbwext63.csb from Rev 8.x) or ERROR 2009 'Wrong Revision' (if a call of Rmbwext.csb from Rev 6.3 to 7.x).*
- Second one may come from the location of RmbWext.dll file. This DLL file must be found by the .csb. Any valid path known by HT/HP Basic for Windows may be used, there are two usual locations either the application directory (used by Evaluation product) or the Windows\System directory. If HT/HP Basic for Windows is unable to locate RmbWext.dll file you will get ERROR 7 on first call of any RmbWin Extender CSUB.*

**FAQ 2 : -What means asynchronous message communications?**

*It means communication is provided through complete messages managed by an independent communication layer, and that recipient application is much simpler to write.*

*TCP/IP layer works really fine, but is byte oriented, so even if the sender application is giving it separate complete messages, they may be broken and sent as multiple IP packets.*

*What's more two messages can be concatenated and transmitted as one IP packet.*

*So most communicating applications are obliged to implement a message layer. The sender adds control bytes, and the receiver strips them. The receiver waits until all the data bytes of one message are received before it can use the message. And it must be careful to keep the next bytes that are the beginning of the following message.*

*Scheme is asynchronous because the recipient application is not obliged to wait in the receive API call until there is a message. It can do other work during that time. Synchronous communication is simpler for the communication layer, but it's much more difficult for the application layer. Imagine your reaction if when you looked for a message in your mailbox, you were stuck there until the next message was delivered.*

*Any communication failure, if any, is signalled by TCP layer to the sender and/or the receiver. Even if multiple message are sent before the receiving application can (or want) to read the first one, there is no data loss but a delivery by First In First Out scheme. This kind of communication is secured by itself and particularly fitted for Test and Measurement applications where the data integrity is of first importance.*

**FAQ 3 : -Does RMB/Win Extender enable direct communication between two RMB/Win tasks?**

*Not in this evaluation release. Enabling this tool to deal from one RMB/Win application to another one (without using an intermediate application) will mean to have a Client functionality aside the Server one on RMB/Win side. It's something we have done already in some of our own applications, but it was somewhat more difficult to use. We choosed to offer a simpler tool without too many options.*

*Note also that tools are provided by RMB/Win Rev 8.x to enable direct exchange between RMB/Win applications running on the same machine.*

**FAQ 4 : -More than one client**

*Not in this evaluation release. We prefer to offer simpler tool.*

*Connecting to more than one client at the same time may be useful if Server is able to deal with all connected Clients at the same time. That can be difficult and tricky programming. Anyway the server is not really doing two things at the same time.*

*So it's often simpler and safer if the client connects only when it has something to ask to the server, and release the communication link as soon as the work is done.*

*When you are using files, you try to open them only when they are needed, in order to protect yourself against a fit of "Windows' Blue Screen", it's the same thing with communication links. Don't forget that the communication link can be released at any time for multiple causes, by example network congestion. So your application must be able to reconnect automatically.*

*Note also that RmbWin Extender can be used from multiple application at the same time (on different port) even if each one is enable to connect at only one client at a time, there may be as many couples client-server running at the same time as system can support.*

**FAQ 5 : -I don't have any Network, can I use RMB/Win Extender?**

*No need of any Network hardware equipment, but only standard TCP/IP software layer provided with the OS. Hardware network and physical connection is only needed when running on separate workstations.*

**FAQ 6 : -Is RMB/Win Extender available for RMB/UX?**

*Not at this time, even if no any technical reason. It may be done if enough request for such a tool!*

**FAQ 7 : -LAN without TCP/IP protocol**

*You can use multiple level 2 protocols on the same physical network at the same time. So if the TCP/IP layer is available from your network adapter, there is no problem. But you must add the necessary protocol stacks in "Control Panel\Network".*

**FAQ 8 : -Can RMB/Win Extender Client be used with other operating system than MS/Windows?**

*This release only offers an ActiveX component for MS/Windows. We do have a project for a JavaBean component usable on any system running Java, it may be released if enough request.*

**FAQ 9 : -Reverse functionality (ActiveX as Server and RMBWin as Client)**

*No in the actual release. There is no technical problem, but we prefer to deliver a simple and tested product. Next release will probably offer that functionality.*

**FAQ 10 : -Windows 2000**

*RmbWin Extender was tested and is fully compliant with any MS/Windows 32 bits system.*

**FAQ 11 : -On the web with RMB/Win Extender**

*If you know the IP address of the server side, you can establish a link through any WAN interconnection. But you may be aware that most workstations connected to the internet have dynamic IP assignation and don't provide access from the internet (but only to the internet). However with static IP assignation and allowed incoming call to server it works.*

**FAQ 12 : -Client side application launched before the RMB/Win**

*You can launch the server with a simple batch file. Your application must wait some time before trying to connect, and it's a good idea to retry later if there is a negative answer. An easy way to be sure that the two applications use the same port number is to use the same configuration file for both.*

**FAQ 13 : -How can I know a message is available from my RMB/Win application.**

*The application gets all status information by calling `TcpGetstate` : connection state and number of incoming message queued in the reception FIFO.  
If this call can't be made from a looping part, you can use the `ON CYCLE` interrupt.  
Direct usage of an interrupt (through `ON SIGNAL`) on received message will be available in next release, but only for use with latest RMB/Win Release (8.x).*

**FAQ 14 : -Is RMB/Win Extender available for DOS or MS/Windows 3.x?**

*There is no plan to have a product running on 16 bits OS.*

**FAQ 15 : -Two different RmbWin Extender server-client at the same time on the same machine**

*Yes, you must use different port number for each, but there is no restriction to do such a system with two or even more server-client running at the same time.  
It may be a good idea to use a different directory for each server application, doing so enable the logging in trace file to be separate for each server side.*