

PORT FORWARDING WITH THE ELITEPRO XC/SP WITH ETHERNET

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NOTE: Although the text below references the ELITEpro XC, this application will work with both the ELITEpro SP (with Ethernet port) and the ELITEpro XC.

Overview

Port forwarding¹ is a name given to the combined technique of:

1. Translating the address and/or port number of a packet to a new destination
2. Possibly accepting such packet(s) in a packet filter (firewall)
3. Forwarding the packet according to the routing table.

Port forwarding allows remote computers (for example, computers on the Internet) to connect to a specific computer or service within a private local area network (LAN). In the case of the ELITEpro XC with Ethernet, port forwarding allows remote connection between the ELITEpro XC and a computer on another network through the firewall via ELOG software.

For instance, if the ELITEpro XC is on the local area network at a remote project site, but you wish to download data off the meter from the office, you can remotely access the ELITEpro XC from any computer with an internet connection through ELOG.

Requirements

Prior to beginning, confirm the following information:

1. Know the external IP address of the router on the network with the ELITEpro XC. This address is usually assigned by the ISP and is typically static. However, it may be dynamic, changing the address every other day. This can be easily found by someone inside the network by visiting www.whatismyip.com.
2. Confirm that the router can be configured for port forwarding. Verify this with your router's documentation or by visiting the manufacturer's website.
3. Know the ELITEpro XC meter's IP address.

Note: The ELITEpro XC itself does not need to be configured for Port Forwarding. All the configuration takes place on the router.

Each router manufacturer uses slightly different software. Check your router's documentation for specific directions on how to port forward with your router's software. Regardless of what software is on your router, you'll be required to enter the same general information²:

1. A text field where you can type the name of the application or service (in this case, it's helpful to reference "ELITEpro XC" or the EXC's serial number).
2. Incoming port the router should watch for.
3. The protocol to watch for: TCP or UDP. Choose "both" if you're unsure.
4. The IP address that is the destination for this port's request (i.e., the EXC's IP address).
5. Which port the request should be targeted to on the destination IP. The default is 3001.

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1. Information courtesy of Wikipedia: http://en.wikipedia.org/wiki/Port_forwarding
 2. Information courtesy of How-To Geek: <http://www.howtoqeeek.com/66214/how-to-forward-ports-on-your-router/>

Instructions

Here are the steps to connecting your networked ELITEpro XC from a different network:

1. Obtain an internal IP address that is routable to an external IP address. If you are unsure of which IP address to use, check with your IT department.
2. The external IP address gets forwarded to the internal IP address. For instance, the external IP address 212.45.67.89 may be forwarded to internal IP address 192.168.1.50.
3. Determine which port should be used to connect to the ELITEpro XC. The default port is 3001. Check with your IT department if you are unsure.
4. On the remote PC, from ELOG, go through the menu: Logger > Communication > Network Connect.
5. Enter the external IP address for the network you wish to connect to in the Network IP Address box.
6. Enter the Port Number for the logger you wish to connect to.
7. Click OK.
8. You should now be connected to the remote ELITEpro XC.

