



How to troubleshoot TCP connections to a Client

When attempting to connect to Client machines from a Control across the LAN/WAN directly using TCP, you may receive a '1704 error' that the 'Client does not respond'.

This means there is a communication issue between the two machines. You will need to diagnose whether the Client and Control can communicate with each other. We recommend performing two tests from the Control to the Client machine:

1. Ping test.
2. PowerShell Test-NetConnection.

Performing a ping test

On the Control machine, run the Command window as an administrator and enter **ping** followed by the IP address of the machine you are communicating to.

For example, **ping 10.20.0.128**

A screenshot of a Windows Command Prompt window. The title bar reads "C:\WINDOWS\system32\cmd.exe". The window content shows the following text:

```
Microsoft Windows [Version 10.0.18363.720]
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C:\Users\testing>ping 10.20.0.128

Pinging 10.20.0.128 with 32 bytes of data:
Reply from 10.20.0.128: bytes=32 time<1ms TTL=128
Reply from 10.20.0.128: bytes=32 time<1ms TTL=128
Reply from 10.20.0.128: bytes=32 time<1ms TTL=128
Reply from 10.20.0.128: bytes=32 time<1ms TTL=128

Ping statistics for 10.20.0.128:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\testing>
```

You will receive a response informing you if the packets sent from the Control machine to the Client are being received. A successful ping will show all the packets have been received.

Using PowerShell to test the Port is available

To confirm whether the port the Client is listening on is open, you can use the PowerShell Test-NetConnection command.

Open PowerShell and enter **Test-NetConnection -ComputerName** followed by the IP address of the machine and port that the Client is listening on.

For example, **Test-NetConnection -ComputerName 10.20.0.128 5405**

If a connection is successful, it will show "TCPTestSucceeded: True"