# How to debug LAN connectivity using PuTTY

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*Solution:* PuTTY is an open source terminal emulator that supports various network protocols.

It can also be used to communicate easily with LAN enabled instruments.

In this application note, we are going to describe how to use PuTTY for Windows and establish communications with any Rigol instrument that has open socket capability.

Once you have established connection, you can send and receive instrument specific commands.

Starting in 2014, all Rigol instrumentation with LAN capability can communicate via raw TCPIP connections using Port 5555.

> **NOTE:** The Rigol DM3068 does not support communications on Port 5555 and will not work with PuTTY.

1. Download the PuTTY Executable from the internet. Here is a link:
   *http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html*

2. The PuTTY download may simply be the executable file only. You can save the executable file to a folder on the computer and create a shortcut to the desktop.

3. Connect a working Ethernet cable to the LAN connector on the instrument.

**NOTE:** The green LED on the connector should light. The Yellow LED may flash.
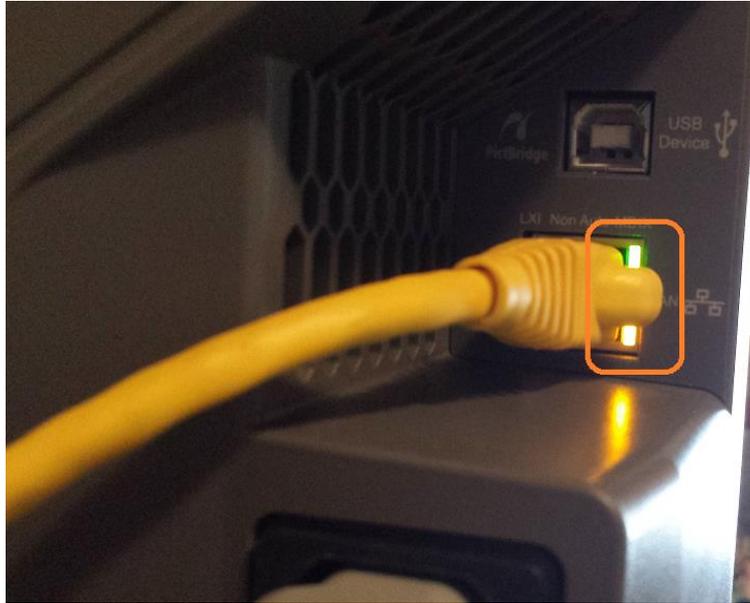


4. Verify the IP address of the instrument. This is generally located in the Utility or System menu under IO Settings.

   See the User's Manual for the LAN network information specific to the instrument that you have connected.

5. Run PuTTY. On some versions of Windows, you may need to have full administrative rights and you may also need to "Run as administrator".
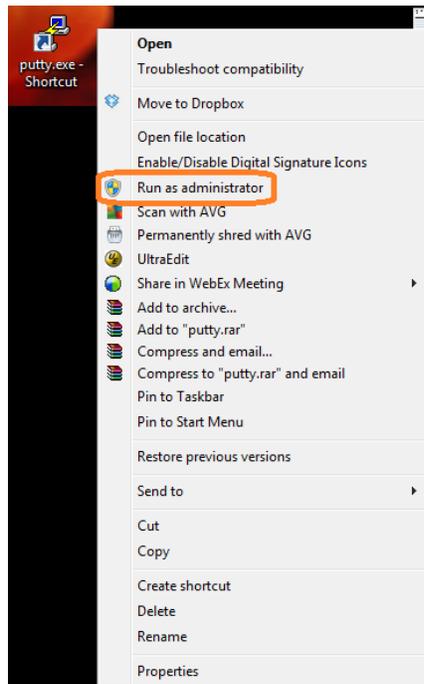


6. Under the Session Category, enter the IP address for the instrument, set the Port to 5555, and the Connection type to Raw as shown below
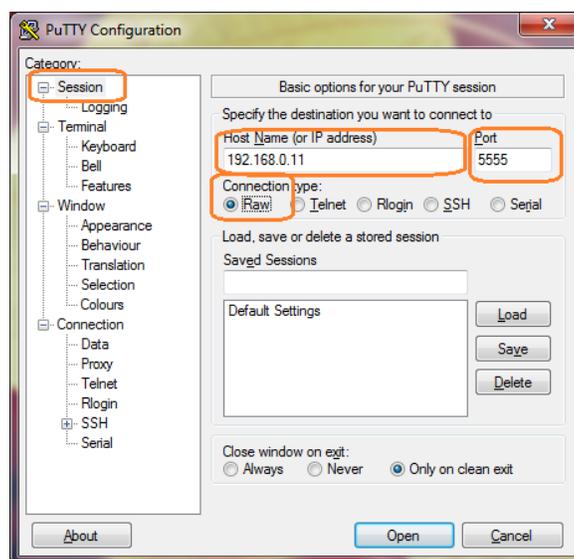
7. Now, click on the Terminal Category. Select Implicit CR in every LF. This adds a carriage return after every press of the Enter key on the keyboard.
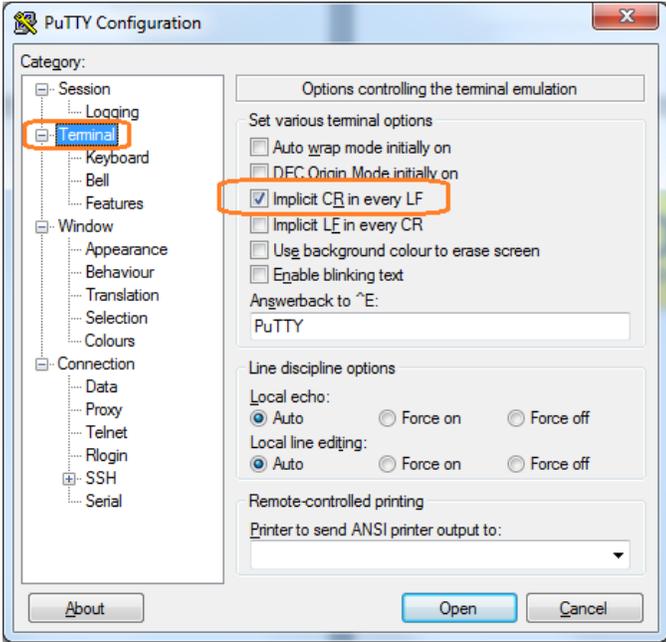


8. Press Open. This will create a window with a flashing cursor:
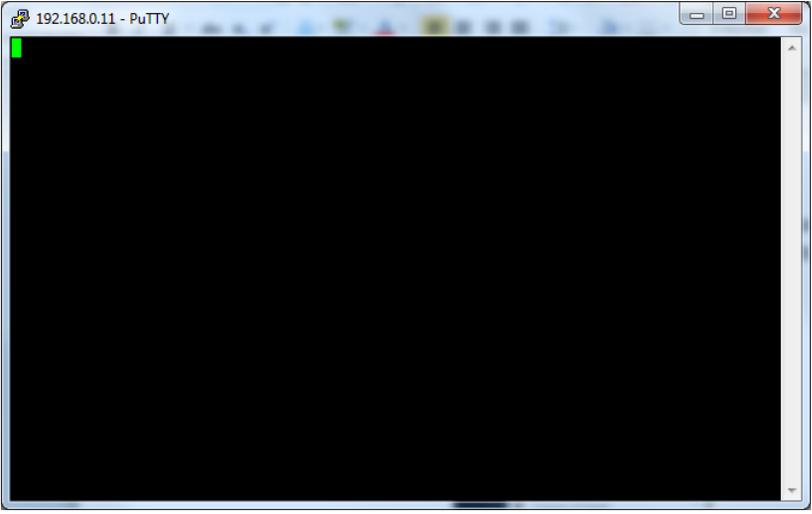
9. Type *IDN? And press the Enter key on the keyboard of the computer
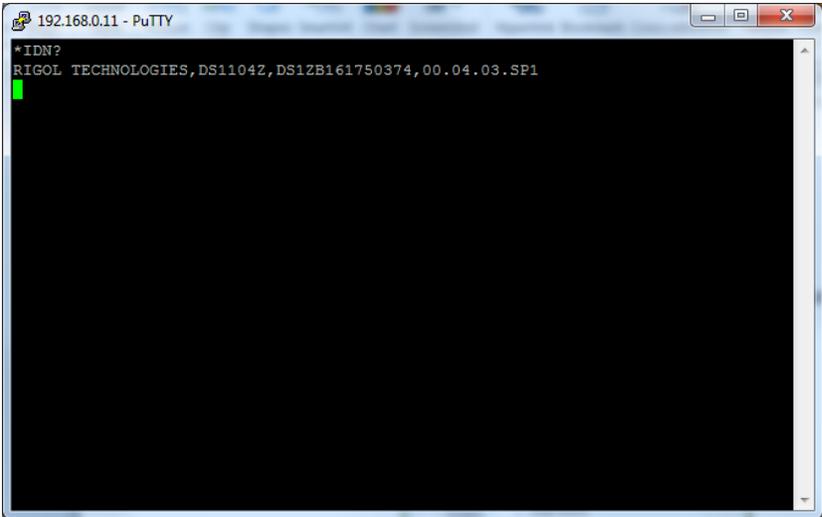


10. The instrument should respond with its identification string.

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