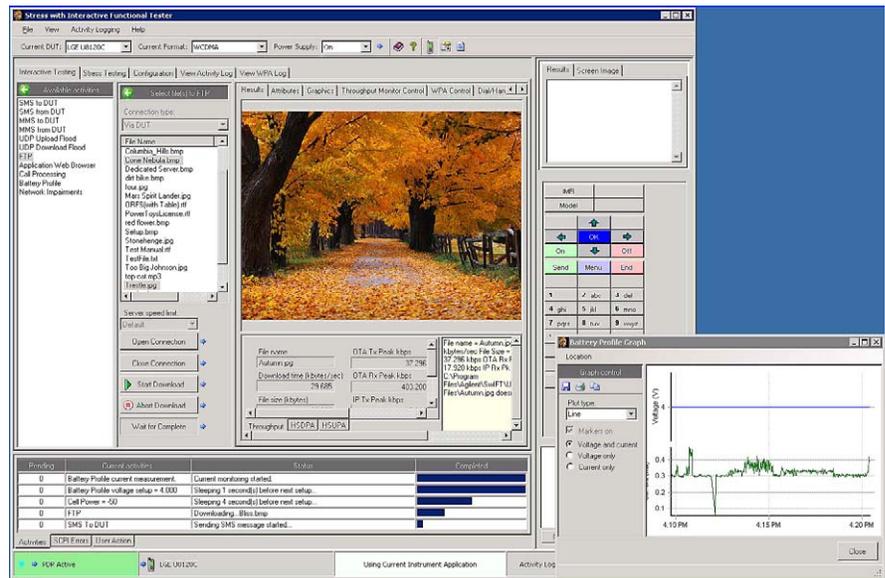


Agilent N5970A Interactive Functional Test Software: Installation and Getting Started

Application Note



The N5970A Interactive Functional Test Software along with the 8960 Series 10 (E5515C) wireless communications test set provides a complete solution for performing real-world functional tests on cellular mobile devices. The N5970A software facilitates real-world testing because it is designed to allow simultaneous testing of the various activities that are available in a device. This solution includes a simplified means of setting up the various server applications (FTP, HTTP, SMS, etc.) that enable you to perform and test these activities.

To get started using the N5970A software and to ensure that it works properly, there are certain system requirements that must be met and some setting that must be configured. This guide lists these requirements as well as provides step-by-step instructions on installing and configuring Agilent's N5970A software so you can get started using it as quickly as possible.

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Interactive Functional Test System Requirements

Server PC system requirements

- An IBM (or compatible) PC with at least:
 - 1.8 GHz Pentium® dual-core processor or later
 - Microsoft® Windows® XP Professional (SP2) or higher
 - 2 GB RAM minimum
 - 1 GB of available hard disk space
 - 10x CD-ROM drive
 - LAN port

Application workstation system requirements

- An IBM (or compatible) PC with at least:
 - 1.8 GHz Pentium® dual-core processor or later
 - Microsoft® Windows® XP Professional (SP2) or higher
 - 2 GB RAM minimum
 - 1 GB of available hard disk space
 - 10x CD-ROM drive
 - LAN port (a second LAN port is required for remote operation of the Interactive Functional Test software). Note: USB to LAN adapters are not currently supported by the Interactive Functional Test software
 - Microsoft Internet Explorer version 6.0 or later
 - An installed, configured, and tested Agilent Technologies or National Instruments IEEE 488.2 GPIB interface
 - The latest version of VISA (Virtual Instrument Software Architecture) from the manufacturer of your GPIB card
 - A USB 1.1 or later port (The hardware security key that is shipped with the software is connected to this port)

Other hardware and software requirements

- A Linksys BEFSR81 8-port cable/DSL router
- LAN cables (number varies depending on which LAN topology you choose)
- N5970A Interactive Functional Test Software installation CD-ROM
- N5970X Interactive Functional Test Software server install CD-ROM
- An Agilent 8960 Series 10 wireless communications test set with one of the following lab applications:
 - E6701F revision F.00.27
 - E6701U revision U.00.22
 - E6703E revision E.00.23
 - E6703U revision U.00.20
 - E6785E revision E.00.25
 - E6785U revision U.00.23

Installing the N597X Server Software (on the server PC)

This section assumes that you have acquired all the items listed in the [Interactive Functional Test System Requirements](#) section.

1. Close any applications currently running.
2. Insert the N597X Interactive Functional Test Software Server Install CD-ROM into the CD-ROM drive. **Note:** The server software must be installed on the C: drive. It should automatically run the installation program. If it does not start automatically, navigate to the CD-ROM and double-click N597X_Server_setup.exe. Follow the step-by-step instructions during the software installation.

NowSMS

The NowSMS server will now be installed. It must be installed in the default installation directory. Do NOT change the installation directory during the install. Once the next screen is selected, these instructions will no longer be available so it would be advisable to copy or print them for future reference. The NowSMS server requires an activation code which you will need to load. When the wizard starts the NowSMS installation, respond in the method below to the questions so you can install the activation code. It is important that you respond to these questions in a timely manner. If you are delayed in responding to these questions, you will be prompted to start the Apache Server installation. Please complete the NowSMS installation before continuing with the Apache Server installation. You may have to move the Apache Server installation window to access the NowSMS windows.

1. If prompted that "xx days remain in your NowSMS2006 trial period", push OK.
2. If prompted to "Select Installation Option", press "Install with a purchased serial number", or if prompted "Do you have a new activation code to install, or wish to request an activation code?", push OK.
3. Click Yes, when asked "Do you already have this activation code?"
4. Select "Load from File" when asked to "Enter NowSMS Activation Code".
5. When the open dialog box appears, navigate to the install CD and select the file called "NowSMS-Serial-Number-89600050.txt".
6. Click Open.

Apache

The Apache Server will now be installed and configured. If your security software prompts you that it has blocked the Apache HTTP Server, please Unblock the Apache HTTP Server.

Filezilla

The Filezilla server will now be installed. When the Connect to Server information appears, check the "Always connect to this server" check box and then select OK.

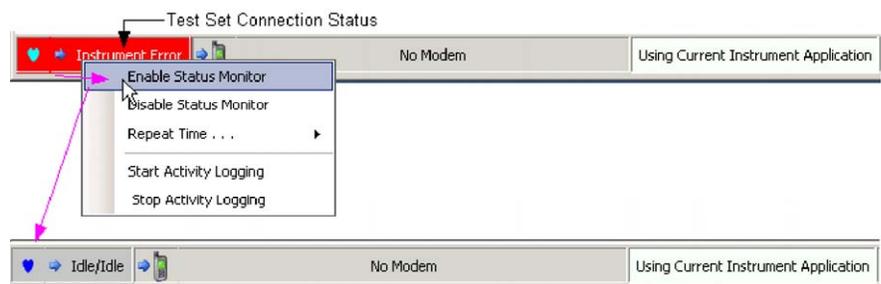
Starting the N597X Application Servers

The applications servers installed on this CD are started automatically once they have been installed. Ensure that the following:

- Apache is running as a service
- FileZilla is running as a service
- UDPServer is running
- NowSMS is running as a service

Getting Started with the N5970A Interactive Functional Test Software (continued)

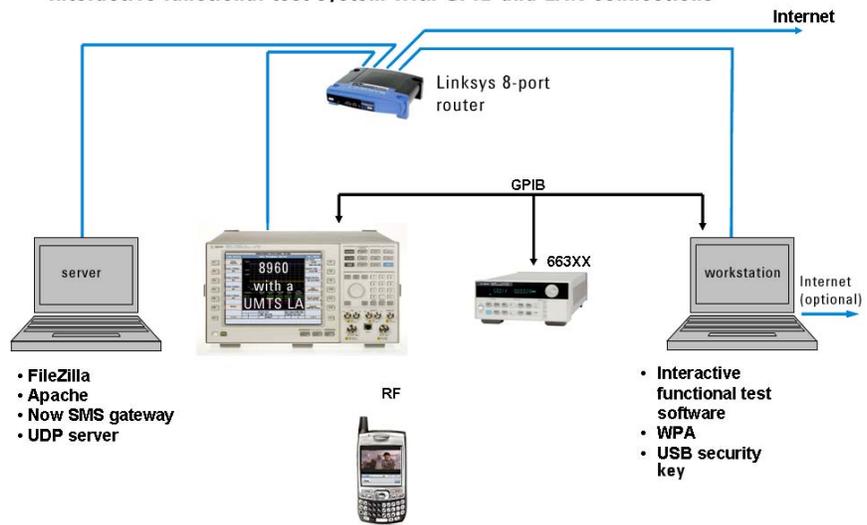
2. If you want your workstation to access the internet, configure your LAN interface device and your LAN settings to provide access to your company intranet and internet. Verify that the workstation can access the internet. (For more information, refer to the Proxy Server Settings topic in the N5970A Help File, which can be accessed within the N5970A application or at www.agilent.com/find/N5970A.) Note, at this point it is assumed that the router is not being used, and that, if an internet connection through the workstation is desired, the workstation is connected directly to your company internet.
3. Ensure that a hardware security key is inserted into a USB port on the workstation.
4. Start the N5970A Interactive Functional Test Software. (Ignore any error messages that are displayed the first time you start the Interactive Functional Test Software.)
5. Select the **Configuration** tab.
6. In the list of Available configurations, select **Instrument Control**.
7. In the Instrument Control screen, select the proper GPIB interface and GPIB address for Test set 1 (and the power supply, if applicable). Click the ***IDN?** button to test if you have set up the GPIB settings correctly. The ***IDN?** results are displayed in the ***IDN? results** field. Note, if you do not want the Interactive Functional Test Software to check the test set for the correct lab application and prefer to use the lab application that is currently installed, check the **Use Current LA** box.
8. Right-click the test set connection Status Monitor located at the bottom left corner of the screen. The first time the Interactive Functional Test Software is started, this field will display an error message with a red background. In the right-click menu select "Enable Status Monitor".



Getting Started with the N5970A Interactive Functional Test Software (continued)

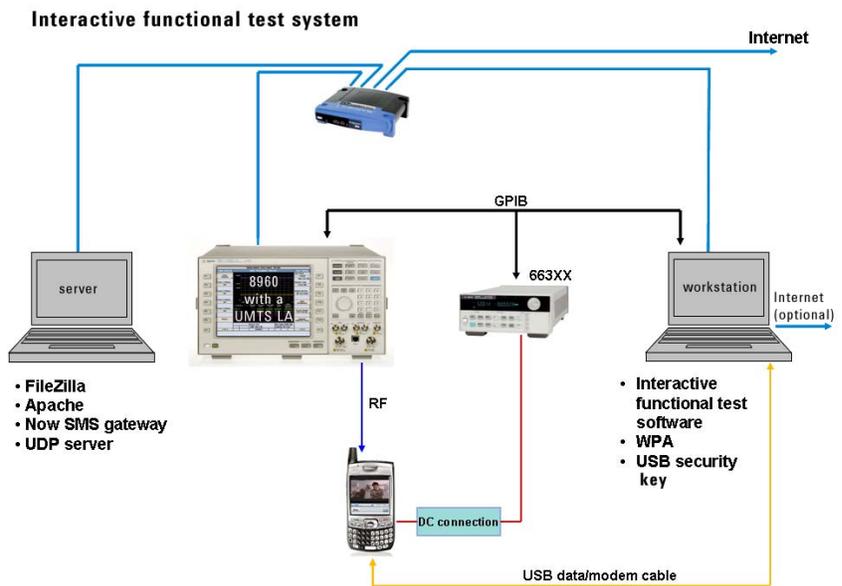
9. Wait for the test set connection Status Monitor to update and Test Set Application status to update. Once they have, right-click again on the test set connection Status Monitor and select "Disable Status Monitor". Verify that the instrument error message goes away.
10. In the Available configurations list, select **LAN Topologies**. Use the "Selected LAN topology trade-offs" information to determine the topology that best meets your needs.
11. Once you have chosen a topology (click on the link), press the **Pre-Wizard Tasks** button. Ensure that the title bar in the pre-wizard tasks matches the LAN topology you have selected.
12. The Pre-Wizards tasks must be completed before you run the wizard. It is recommended that you print them so that you can mark the tasks that you have completed.
13. Once you have completed all the Pre-Wizard tasks, press the **LAN Topology Setup Wizard** button. **Note:** There are several steps in the LAN Topology Setup Wizard (the number of steps varies depending on which topology you choose) and therefore can take over an hour to complete. You must complete the wizard before any of the settings are saved.
14. The wizard will guide you through the process of setting up the LAN Topology. **IMPORTANT:** Read and follow the directions on each step of the wizard carefully. Most setup issues are due to incorrect settings/connections done in the wizard.
15. When the wizard has been successfully completed, you will be taken to the **Connections Integrity** screen within the **Configuration** tab.

Interactive functional test system with GPIB and LAN connections



Getting Started with the N5970A Interactive Functional Test Software (continued)

16. On the **Connections Integrity** page, press each Check button to test the configuration to ensure that the wizard has configured all the settings correctly.
17. If all the **Connections Integrity** fields show OK, then you are ready to add a Device Under Test (DUT) to the Interactive Functional Test Software.
18. Once the DUT is properly configured and connected as in the figure above, you can perform any of the various interactive testing activities that are available under in the Interactive Testing tab.
19. For more information, visit www.agilent.com/find/N5970A.





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