

# Agilent IFT Scripts for TD-LTE Terminal NS-IOT (N5978A-1FP)



# **Installation Guide**



**Agilent Technologies** 

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Edition

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#### Where to Find the Latest Information

Documentation is updated periodically. For the latest information about the Agilent Technologies N5978A-1FP IFT product, consult the following website: <u>www.agilent.com/find/N5978A</u>.

For the latest information about the Agilent Technologies E6621A PXT product, including operation and application information and product and accessory information, see the following website: <a href="http://www.agilent.com/find/pxt">www.agilent.com/find/pxt</a>.

#### Is Your Product Software Up-to-Date?

Periodically, Agilent releases software updates to incorporate product enhancements, and fix known defects.

All N5978A software revisions are available from <u>www.agilent.com/find/softwaremanager</u>, and require a valid N5978AS Software and Technical Support Contract (STSC).

NOTE	In general, all Agilent E6621A PXT software products are available for download from
	www.agilent.com/find/softwaremanager.

IMPORTANT	To obtain the most current software for the products listed, you must also have:
	<ul> <li>Agilent Software and Technical Support Contract (STSC) for the Agilent E6621A</li> </ul>
	Agilent Software and Technical Support Contract (STSC) for the Agilent N5978A

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# **1** Introduction

Welcome to the *Agilent N5978A-1FP IFT Scripts for TD-LTE Terminal NS-IOT Installation Guide.* The purpose of this guide is to provide you with installation and licensing instructions for the Agilent N5978A-1FP.

In this book, you'll find:

**Overview of System Configuration and Components** 

**Installation** 

**Licensing** 

Error! Reference source not found.

Setting up the System

Service and Support

# **2** Overview of System Configuration and Components

This section provides an overview of the components required to install and use the Agilent N5978A-1FP software.

## Wireless test set and PC requirements

Refer to the N5978A-1FP release notes located here: www.agilent.com/find/N5978A.

# IFT TD-LTE terminal NS-IOT test configuration



Figure 2-1. IFT TD-LTE terminal NS-IOT test system

## **3** Installation

# File locations

## **Location of User Data**

For Server PC:

Windows 7: C:\Program Files (x86)\Agilent\N597X\

Windows XP: C:\Program Files \Agilent\N597X\

For Client PC:

Windows XP: C:\Users\Public\Documents\Agilent\N5972A\TestData\N5978A

NOTE	Since the above directory paths are different, this document will reference these "User Data" locations like this: <0S Public Agilent>.
	Rename the six User Data files separately as ULThroughput1.dat, ULThroughput2.datULThroughput6.dat.

## Hardware and Software Configuration

All hardware and software applications required for this product are available for download from these locations shown below. For "Instrument Software Requirements", see Table 4-1 on page <u>10.</u>

System Component	Software Model and License	Description	Version or later	Download Location
Client PC N5978A-1FP IFT automation scripts for TD-LTE terminal NS-IOT test plans (1FP = software license)		1.0	www.agilent.com/find/N5978A	
	N5972A	IFT software	1.2	www.agilent.com/find/N5972A
	N6061A Protocol Logging	LTE protocol logging and analysis	6.4.1.0	www.agilent.com/find/softwaremanager
	N6062A (LTE Message Editor)	LTE message editor	6.4.1.0	
	E6584A (WPA)	Wireless protocol advisor (software)	A.10.01	www.agilent.com/find/E6584A
	Agilent IO	Instrument control	16.0	www.agilent.com/find/iosuite

Table 3-1: Hardware and software application requirements

	Libraries	(software)		
	MS Office Excel	Spreadsheet software	2007	www.microsoft.com
Server PC	N597X	PC server (software)	9.0	8960 Series 10 Software Downloads
	E6966A-1FP	IMS-SIP server emulator	3.1	www.agilent.com/find/E6966A
	E6966A-2FP	IMS-SIP client emulator	3.0	

System Component	Software Model and License	Description	Version or later	Download Location
PXT (LTE)	E6621A	PXT wireless communication test set (hardware and software)	N/A	www.agilent.com/find/softwaremanager
	N6050A-8FP	LTE TDD base station emulation software (8FP = software license)	6.3	
	N6052A-1FP	LTE enhanced BSE and IP data test (1FP = software license)	6.3	
	EPC Restart Server <sup>2</sup>	Evolved packet core restart server (software)	N/A	< <u>OS Public</u> <u>Agilent</u> >\ N5972A\TestData\N5978A\Do cs\EPCRestartServer
N6705B (DC power analyzer)	N6705B	DC power analyzer	1.0.0.2	www.agilent.com/find/N6705B
CXA	N9000A	Signal analyzer		
SR5500		Radio channel simulator	1.7	
USIM		Universal subscriber identification module (SIM)	N/A	Contact Agilent
Router		Router x1		
GPIB cards		GPIB card x2		
GPIB serial cables		GPIB serial cable x2		

#### Table footnotes:

1. An active E6621A software and technical support contract (STSC) are required to access the software manager website (displayed above), together with the login credentials registered by you or your company for activation. See the section on licensing in the *Agilent PXT Wireless Communications Test Set Getting Started Guide* for instructions to activate your STSC.

- 2. EPC Restart Server can be installed as follows:
  - a. Copy files from IFT Client PC EPC Restart Server directory to PXT desktop
  - b. Create a shortcut to the EPC Restart Server.exe in C:\Documents and Settings\All Users\Start\Programs\Startup
  - c. Reboot or manually start the EPC Restart Server.exe program

## Back-up previous IFT files

 IMPORTANT
 If an IFT Server or IFT Client PCs are already setup for use with other products, it is advisable to back up any files you wish to keep, before proceeding. See "Location of User

 Data" section above to locate the files you need to back-up.

## IFT server PC

#### Install

- 1. N597X ≥ version A.09.00
- 2. E6966A-1FP IMS-SIP server ≥ version 3.1
- 3. E6966A-2FP IMS-SIP client ≥ version 3.0

After running the N597X\_Setup.exe installation program, you can follow the normal installation process to install N597X. But, there are several issues for you to note during the process.

 Select Install free 60-day trial for evaluation purposes when Now SMS 2006 window appears.



2) Specify main password for hMailServer.

🔂 Setup - hMailServer 📃 🗆 🔀
hMailServer Security Specify main password
The installation program will now create a hMailServer user with administration rights. Please enter a password below. You will need this password to be able to manage your hMailServer installation, so please remember it.
Password:
••••
Confirm password:
hMalberver

### 3) Select *Cancel* when *hMailServer Administrator* window appears.

👤 hMailServer Admir	🖳 hMailServer Administrator - Connect			
Connect				
Host name	User name		Add	
localhost	Administrator			
			Edit	
			Delete	
🔲 Automatically conne	ct on start-up			
		Connect	Cancel	
		Connocc	Cancor	

4) During the installation, an **UDP Error** window will appear,

👰 Interactive Function Te	st UDP Server			
File Help				
Client DUT Addresses	TX Ports	RX Ports	TCP Port	
192.168.1.12	44011	44012	44013	
UDP Error				×
System.Net.Socket: at System.Net.So at System.Net.So at System.Net.So at Agilent.ModelN	s.SocketExceptio ckets.Socket.Dof ckets.Socket.Bind ckets.TcpListenet 5970A.UDPServe	n (0x80004005): T Bind(EndPoint endF d(EndPoint localEP) r.Start(Int32 backl rrs.WaitForPackets OK	The requested add PointSnapshot, Soo ) log) s()	ress is not valid in its context :ketAddress socketAddress)

Please follow the steps below to solve the UDP Error issue:

Open the file N597X Topologies.txt from this location on the IFT Server C:\Program Files\Agilent\N597X\AppFiles

🐌 N597X Topologies.txt - Notepad 📃	
File Edit Format View Help	
<pre>!N5972A Interactive Functional Test Software topologies configuration !This file is used by the Client application, the LAN Topology Wizard, 1 !Workstation Name,Workstation MAC,Topology Style,Test System Index,Route</pre>	the er
default1,000000000001,PrivateSharedWiredServerNoInternet,1,192.168.1.10, default2,000000000002,PrivateSharedWiredServerNoInternet,2,192.168.1.10	1: 0,1
default3,000000000000,PrivateSharedwiredServerNoInternet,3,192.168.1.10 default4,000000000004,PrivateSharedwiredServerNoInternet,4,192.168.1.10	), J ), J
	), J 🗸

- ▶ Use "!" to disable the default 2, default 3, default 4, and default 5.
- Update the original configuration parameters of "Router IP, DUT IP, Test Set IP, Test Set IP Data" with the new value on the right of the arrow. See Table 3-2 for reference.

Parameter	Value		
Workstation Name	default1		
Workstation MAC	0000000001		
Topology Style	PrivateSharedWiredServerNoInternet		
Test System Index	1		
Router IP	$192.168.1.10 \to \underline{192.168.1.1}$		
Workstation IP	192.168.1.11		
DUT IP	192.168.1.12 → <u>192.168.1.51</u>		

#### Table 3-2: Configuration parameters

Test Set IP	192.168.1.13 → <u>192.168.1.60</u>
Test Set IP Data	$192.168.1.14 \rightarrow \underline{192.168.1.63}$
Bridge IP	192.168.1.19
Server IP	192.168.2.230
Server Bridge IP	192.168.1.239
MMS From DUT TCP Port	43594
MMS From DUT TO Address	1011
UDP TX Port	44011
UDP RX Port	44012
UDP TCP Port	44013

5) Be sure to select **Always connect** on FileZilla after completing the installation.

6)	Find a file with the size larger than 2 GB and rename it as <b>throughput.dat</b> . Then copy 6 files to				
	the directory C:\Program Files\Agilent\N597X\FIPFiles on the Server PC and rename the six				
	User Data files separately as DLThroughput1.dat, DLThroughput2.datDLThroughput6.dat				
	If you are going to upgrade N597X, uninstall the old version you've installed first:				
IMPORTANT	1. Open the Control Panel from the Start Menu and select <i>Add/Remove Programs</i> .				
	<ol><li>Locate Agilent N597X Server, NowSMS/MMS Gateway, Filezilla Server,</li></ol>				
	hMailServer 4.4.3-B285, Apache HTTP Server 2.0.59 from the Add/Remove				
	Programs window and select Remove, to uninstall Agilent N597X Server, NowSMS,				
	Filezillam hMailServer, and Apache separately.				

## IFT Client PC\*

#### Install

- 1. OS Windows XP system
- 2. MS Office Excel  $\geq$  version 2007
- 3. WPA  $\geq$  version A.10.01
- 4. Agilent IO Libraries  $\geq$  version 16.0
- 5. N5972A  $\geq$  version 1.2.1\*
- 6. N5978A-1FP  $\geq$  version 1.0.0.0
- 7. N5978AS STSCs
- 8. N6061A ≥version 6.4.1.0
- 9. N6062A ≥version 6.4.1.0.
- 10. Create big files for throughput test:

Find a file with the size larger than 1 GB and copy six files to the path"

C:\Users\Public\Documents\Agilent\N5972A\TestData\N5978A\Result\"

Rename the files separately as ULThroughput1.dat, ULThroughput2.dat, ULThroughput3.dat, ULThroughput4.dat, ULThroughput5.dat, and ULThroughput6.dat

11. Copy state folder to "My Documents/sa/state folder" of MXA/CXA12. Shut down firewall and antivirus. Turn down the User Account Control Settings when using windows7 OS.

🚱 User Account Control Settings		
Choose when to be User Account Control he	e notified about changes to your computer	your computer.
Always notify	Account Control settings	
	Never notify me when:	
	<ul> <li>Programs try to install software or make changes to my computer</li> <li>I make changes to Windows settings</li> </ul>	
  Never notify	Not recommended. Choose this only if you need to use programs that are not certified for Windows 7 because they do not support User Account Control.	
	🛞 ОК	Cancel

- Add a persistent route by the Command prompt of windows. Type "ROUTE –P ADD 192.168.1.60 MASK 255.255.255.255 192.168.1.11" and then press "enter". You can check the route by pressing command "ROUTE PRINT".
- \* When installing the N5972A on Client PCs using a Windows 7 (64 bit) operating system, verify that Microsoft .NET Framework 3.5.1 feature is turned ON. For instructions to ensure this is set correctly, refer to Error! Reference source not found. on page Error! Bookmark not defined.

NOTE	During this installation, when you are instructed to select a LAN connection, choose
	"LAN" and <b>NOT</b> "WLAN".

# 4 Licensing

When you purchase the N5978A-1FP license, you receive a "License Entitlement Certificate". Follow the instructions on this certificate to redeem your license keys for these products.

NOTE	N5978A-1FP is licensed using a soft-key installed on the Client PC. You do not need a license for the N5972A as this is automatically licensed by the presence of a valid N5979A license.
	presence of a valid N5978A license.

# **5** Setting up the System

#### Table 5-1: Instrument software application requirements

Cell	Product	Description	Version
E6621A PXT (LTE)	N6050A-8FP	LTE-TDD base station emulation	
	N6052A-1FP	LTE enhanced BSE and IP data test	
СХА	N9000A	Signal analyzer	
SR5500		Radio channel simulator	1.7
N6705B	N6705B	DC power Analyzer	1.0.0.2

## Setup procedure

<b>NOTE</b> When discussing E6621A PXT key paths within tables or text, instrument front-panel keys are represented in <b>bold;</b> softkeys appear in <b>bold, italics</b> .
---

- 1. Connect all components as shown in Figure 2-1, ensuring all wireless test sets are loaded with the appropriate software described in Table 4-1.
- 2. Ensure all components are set to the IP/GPIB addresses shown in Table 4-2.
- 3. Set the PXT to TCP/IP for remote control by selecting **Config >** *Network Setup* > *Remote Ctrl Setup* > *TCP/IP* > *Apply*.

Component		IP	Subnet Mask	Gateway	<b>GPIB</b> Address
IFT Client PC	192.1	68.1.11	255.255.255.0	192.168.1.1	
IFT Server PC	192.168.2.230		255.255.255.0	192.168.1.1	
PXT <sup>1</sup> (LTE)	192.168.1.60		255.255.255.0	192.168.1.1	9
PXT <sup>2</sup> (LTE)	192.168.1.63		255.255.255.0	192.168.1.1	10
CXA <sup>2</sup>	192.168.1.64		255.255.255.0	192.168.1.1	Interface : 0
					Address : 18
SR5500	192.168.1.7		255.255.255.0	192.168.1.1	
N6705B <sup>2</sup>					Interface : 0
					Address : 5
Router	WLAN IP	192.168.2.1	255.255.255.0	192.168.2.1	

#### Table 5-2: Component IP/GPIB addresses

	LAN IP	192.168.1.1		192.168.1.1	
E-EPC-E	See " <b>Setting</b> these settings	the E-EPC-E IP A 3.	<b>ddresses</b> " on page <u>15</u>	to configure	
UE	See " <b>Setting</b>	<b>Up the UEs</b> " on p	age <u>15</u> to configure th	ese settings.	

#### **Table footnotes:**

- 1. The actual setting is "IP" and is part of the *TCP/IP Setup* menu. Please select **Config >** *Network Setup* > *IP Setup* to access this menu. Make your changes and then select *OK*.
- 2. Set the N6705B and CXA to GPIB Card to 0 via the GPIB cable.
  - 4. Copy the E6621A PXT scenario files

from this location on the IFT Client PC:

- <OS Public Agilent>\N5972A\TestData\N5978A\Docs\Senariofiles
- to this location on the PXT (LTE):
  - D:\Program Files\Agilent\E6621A\LTE-Scenario
- 5. Set alternate source voltage in N6705B Battery Profile
- 6. Launch N5978A on the IFT Client PC.
- 7. Set the power supply voltage:

N5972A Interactive Functional Test Software							
File View Activity Logging Help							
Current DUT: N5978A 🗾 Cell Forma	ats: 🕶 LTE LTE 🤣 🦹 🤰 🎼 🔛						
Interactive Testing Stress Testing Configuration	Interactive Testing   Stress Testing Configuration   View Activity Log   View WPA Log   View N6061A Log						
Available configurations           DUT Configuration           DUT Configuration           Connections Integrity           LAN Topologies           Robot Calibration           Remote LAN Control           Instrument Control           Email Configuration	Current DUT Name: N5978A  Interface type: AT Command Interfaces Keypad type: Normal Add New Delete Formats supported For	Power supply     DUT control design       Voltage:     5.00       Max voltage limit:     1       5.0     1       Min voltage limit:     5.0       5.0     1					
	DUT Specific Settings	Max current limit (A): 3.0 DUT					

8. N5978A IP setting via LAN Topologies->Default LAN Settings-> Topologies Settings:

.

File     View     Activity Logging     Help       Current DUT:     N5978A     Cell Formats: - LTE LTE     Image: Provide the second secon			
Current DUT: N5978A 🗸 Cell Formats: - LTE LTE 🔗 💡 👔 🖾 🗎 🚧	View Activity Logging Help	(d) T	Topology Settings
Interactive Testing       Configuration       Vew Activity Log       Vew WPA Log       Vew N0051A Log         IVI Configuration       Configuration       Default LAN Settings       Image: Configuration       Concretion in Regifty         LAN Topologies       Default LAN Settings       Image: Configuration       Concretion in Regifty       Concretion in Regifty         LAN Topologies       Private LAN Network IP Address       Image: Configuration       Concretion in Regifty         LAN Topologies       Private LAN Network IP Address       Image: Configuration       Concretion in Regifty         LAN Topologies       Default LAN Settings       Image: Configuration       Concretion in Regifty         LAN Topologies       Default LAN Settings       Image: Configuration       Concretion in Regifty         LAN Topologies       Default LAN Settings       Image: Configuration       Concretion in Regifty         LAN Topologies       Default LAN Settings       Image: Configuration       Concretion in Regifty         LAN Topologies       Default Configuration       Default Configuration       Image: Configuration       Concretion in Regifty         LAN Topologies       Default Configuration       Default Configuration       Image: Configuration       Image: Configuration       Test Set IP Address:         Ig2:       168:       1       1 <td>t DUT: NS978A Cell Formats:  ve Testing Stress Testing Configuration Ve Available configurations onfiguration Lons Integrity poologies Calibration LAN Control antifogration</td> <td>Idd         V N6051A Log         Image: Default LAN Settings         Image: Default LAN Settings         Private LAN Network IP Address         192.168.11.0         Default Router IP Address         192.168.1.1         Note: The Router LAN must default to DHCP.         Default Wreless Bridge IP Address         192.168.1.25         Note: The Router LAN must default to DHCP.         Default Wreless Bridge IP Address         192.168.1.25         Note: The Bridge IP Address         192.168.1.25         Note: The Bridge IP Address         Topology Settings         Only experience users should change the Topologies Settings.         OK       Cancel         Apply</td> <td>Iopology Settings         LAN Topology settings         LAN Topology:         Private Shared Wired ServerNoIntermet         Test System index:         1      </td>	t DUT: NS978A Cell Formats:  ve Testing Stress Testing Configuration Ve Available configurations onfiguration Lons Integrity poologies Calibration LAN Control antifogration	Idd         V N6051A Log         Image: Default LAN Settings         Image: Default LAN Settings         Private LAN Network IP Address         192.168.11.0         Default Router IP Address         192.168.1.1         Note: The Router LAN must default to DHCP.         Default Wreless Bridge IP Address         192.168.1.25         Note: The Router LAN must default to DHCP.         Default Wreless Bridge IP Address         192.168.1.25         Note: The Bridge IP Address         192.168.1.25         Note: The Bridge IP Address         Topology Settings         Only experience users should change the Topologies Settings.         OK       Cancel         Apply	Iopology Settings         LAN Topology settings         LAN Topology:         Private Shared Wired ServerNoIntermet         Test System index:         1

9. Select the Stress Testing tab in the main IFT application.



10. Display the N5978A Scripting Tool by double-clicking the icon outlined in red below.

File	View	Activity Logging	Help	
Currer	nt DUT:	N5978A	💌 Cell Formats: 👻 LTE 🧔 😵 👔 🔝 🕍	

11. "Run" the test script to ensure that everything is configured correctly (on the IFT Client PC).

CAUTION	Any change you make to the scripts <b>WILL</b> violate conformance to the
	Compliance Test Plan. Before making any changes to a script, you should
	make a copy of the original script so that it can be recovered.
	If you make any changes to a script, the original script <b>MUST</b> be recovered to
	restore conformance to the Compliance Test Plan.

# Setting the E-EPC-E IP Addresses

NOTE	You will need to plug in a USB mouse and keyboard to the PXT in order to
	setup the E-EPC-E (Embedded-Evolved Packet Core-Entity) IP addresses.
	You can also use Windows virtual keyboard on PXT:
	Start/Programs/Accessories/Accessibility/On-Screen Keyboard.

To access the E-EPC-E Setup menu, right click on the orange icon, in the task bar at the bottom of the Microsoft Windows' screen and select **Setting**, as shown below.



The following window is displayed:

Alternative UE IP
IPv4 Range: Start 192 . 168 . 1 . 49
End 192 . 168 . 1 . 59
IPv6 IID Range: Start 021f:29ff:fe7c:8f51
End 021f:29ff:fe7c:8f59
Non Local Prefix: 2001:: Set
OK Cancel

Use the mouse and keyboard you connected to the PXT (LTE), to insert the setting values required by the scenario file you are using.

NOTE

The settings shown above are those values set in the scenario files you loaded into Step  $\underline{4}$ .

#### **Gateway setting**

This is where all DUT uplink IP data is directed during TD-LTE terminal NS-IOT testing, regardless to which subnet the IP data is destined. When setting up a TD-LTE terminal NS-IOT procedure, this IP address is the target for all DUT IP traffic and is set to the IFT server IP address. If being used on a corporate LAN this could instead be set to the network **Default Gateway**.

#### **Alternative DUT IP**

#### **IPv4 Range:**

This is the IPv4 address range used when the DUT requests an IPv4 address when attached to the PXT<sup>1</sup> (LTE). The alternative DUT IPv4 range starts from 192.168.1.51 and ends with 192.168.1.59. Note that this should match any scenario file in use for TD-LTE terminal NS-IOT handovers.

#### **IPv6 IID Range:**

This is the Ipv6 address range used when the DUT requests an IPv6 address when attached to the PXT<sup>1</sup> (LTE). Note that this should match any scenario file in use for TD-LTE terminal NS-IOT handovers.

## **Setting up the DUTs**

To access the DUT Setup menu, first right click on the icon outlined in red in the task bar, as shown below.

File	View	Activity Logging	Help
Curren	nt DUT:	N5978A	🖸 Cell Formats: 👻 LTE 🤌 💡 🚺 😭 🔜 🚧

12. Select the **Run** tab in the left column.



When the script is run, the following message box is displayed.

		N59	978A NS-IOT Test	
	please select	DUT Name	Default	
	please add D	UT Name	Add DUT Name	
	please add A' please add A'	TCmdRepresent TCmd	Add ATCommand	
	ATCmdRepre ATCommand	esent	ATTACH  At+codcont=1 "IP" 0.0#at+coact=1	
	please select	Adapter Name	MS TCP Loopback interface	
•	Debug_script	DownLinkPXBCard	GPIBD   DownLinkPXBAddress 0  Test	t
<b>v</b>	AutoReg Atcommand AutoDial	UPLinkPXBCard	GPIBO 💌 DownLinkPXBAddress 0 💌 Test	t

Select one of the DUT names from the drop-down list or add a new DUT name.

The DUTs available from the drop-down list are defined in the Default.txt, located in the Template file. The directory is C:\N5978ATestLogs\Template.

If you select **Add DUT Name**, the new DUT defined in the **please add DUT Name** field is added to the dropdown list.

N5978A NS-IOT Test			
please select DUT Name	Default		
please add DUT Name		Add DUT Name	

If you select Add AT Command, the new parameters defined in the please add ATCmdRepresent and please add ATCmd field is added to the drop-down list.

please add ATCmdRepresent	
	 Add ATCommand
please add All Cmd	

To select or modify the existing parameters from the drop-down list defined in the **ATCmdRepresent** and **ATCommand**.

ATCmdRepresent ATCommand	ATTACH ATTACH SWITCHON SWITCHOFF DETACH AUTOPLMN MANPLMN FREQUENCE	Modify ATCommand
ATCmdRepresent ATCommand	ATTACH  +cgdcont=1,"IP",,,0,0#at+cgact=1,1 at+cgdcont=1,"IP",,,0,0#at+cgact=1,1 at+cFUN = 1 at+CFUN = 0 at+cgact=0,1 strenger, 0,2	Modify ATCommand
please select Adapter Name	at+cops=0,2 at+cops=1,2 at+scfg=fn,	•

Select one of the **Adapter Names** from the drop-down list.

please select Adapter N	Jame	MS TCP Loopback interface MS TCP Loopback interface Intel[R] 82567LM-3 Gigabit Ne	twork Cor	
	Start		Skip	

Selecting **Start** generates a default DUT-specific settings file for the DUT (if one does not already exist) at this location: C:\N5978ATestLogs\Template\ Default.txt

Table 5-3: UE-specific settings file configuration

ATCmdRepresent	ATCmd
АТТАСН	at+cgdcont=1,"IP",,,0,0#at+cgact=1,1
SWITCHON	at+CFUN = 1
SWITCHOFF	at+CFUN = 0
DETACH	at+cgact=0,1
AUTOPLMN	at+cops=0,2
MANPLMN	at+cops=1,2

FREQUENCE at+scfg=fn	
----------------------	--

## 6 Service and Support

## **Calling Agilent Technologies**

Agilent Technologies has offices around the world to provide you with complete support for your products. For help, to obtain servicing information or to order replacement parts, contact the nearest Agilent Technologies office listed on page <u>14</u>. In any correspondence or telephone conversations, you will need the product number, full serial number, software revision, and any other pertinent contract numbers.

## Software and Technical Support Contracts

If you have a Software and Technical Support Contract, there are three methods of accessing your technical support:

- Web-based support: My Support Center
- E-mail support
- Phone support

For fastest response times, we recommend using the web-based or e-mail access methods as these provide the most direct route to your technical support expert. All support cases may be viewed and tracked through the online support center (My Support Center), regardless of how you initially contacted technical support.

**NOTE** Software and Technical Support Contracts (STSC) entitle you to software updates and feature enhancements, as well as direct access to technical experts. The N5978AS STSC covers all automation scripts you have purchased for the N5978A.

## Web-based support

You can directly enter and manage your support requests online via www.agilent.com/find/mysupportcenter.

The first time you use My Support Center you will be asked to create a profile and provide proof of entitlement. Once your profile is created, you can use the online support center to enter your support request.

Each support request will be given a unique case number which you can use to track the progress of your support case. A technical expert will contact you via phone or email (whichever you have stated as your preferred option) to resolve your issue.

Note: English, Japanese, Korean, and Mandarin local language support is available.

#### **E-mail support**

You can also contact our technical support at the following e-mail addresses:

- wireless\_test\_support\_americas@agilent.com
- wireless\_test\_support\_japan@agilent.com
- wireless\_test\_support\_europe@agilent.com
- wireless\_test\_support\_asia@agilent.com
- wireless\_test\_support\_korea@agilent.com

Your support request will be routed to a technical expert who will contact you via e-mail or phone (whichever you have stated as your preferred option) to help resolve your issue.

Note: English, Japanese, Korean, and Mandarin local language support is available.

## Locations for Agilent Technologies

Online assistance: http://www.agilent.com/find/assist

If you do not have access to the Internet, one of these centers can direct you to your nearest representative:

If you have a current STSC for the E6621A, you can contact Agilent at the e-mail addresses listed in "Software and Technical Support Contracts" on page <u>20</u>.

Should the Declaration of Conformity be required, please contact an Agilent Sales Representative, or the closest Agilent Sales Office. Alternately, contact Agilent at: <u>www.agilent.com</u>.

#### Americas

Brazil	Canada	Mexico
(11) 4197 3600	(877) 894 4414	01800 5064 800
United States (800) 829 4444		
Asia Pacific		
Australia 1 800 629 485	India 1 800 112 929	Malaysia 1 800 888 848
China 800 810 0189	Japan 0120 (421) 345	Singapore 1 800 375 8100
Hong Kong 800 938 693	Korea 080 769 0800	Taiwan 0800 047 866
Other Asian Countries: www.agilent.com/find/contactus		
Europe & Middle East		
Belgium 32 (0) 2 404 93 40	lreland 1890 924 204	Spain 34 (91) 631 3300
Denmark 45 45 80 12 15	lsrael 972-3-9288-504/544	Sweden 0200-88 22 55
Finland 358 (0) 10 855 2100	ltaly 39 02 92 60 8484	Switzerland 0800 80 53 53
France 0825 010 700* *0.125 €/minute	Netherlands 31 (0) 20 547 2111	United Kingdom 44 (0) 118 927 6201
Germany		

49 (0) 7031 464 6333

Other Unlisted Countries: www.agilent.com/find/contactus

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