Agilent Technologies

N4010A Signal Studio
Upgrade Process

1 Introduction

1.1   Description

This document outlines the N4010A Signal Studio upgrade process for use with the Agilent N4010A Wireless Connectivity Test Set options 102/103/104/204.

1.2   Minimum PC System Requirements

- Minimum 200MHz Pentium® or equivalent
- 50 Mbytes available on hard drive
- 128 Mbytes RAM
- TCP/IP LAN or GPIB connection to test set

1.3   Software Requirements

- Microsoft® Windows 2000 or XP operating system
- Microsoft® Windows NT 4.0 (service pack 4 or later)
- Microsoft® Internet Explorer (4.01 service pack 2 or later)

The following is not necessary for installation, only for communication with instrument:

- TCP/IP LAN or GPIB connection to test set
- Version M.01.01.04 or later of the Agilent I/O libraries preferred, or National Instruments Visa.

2   N4010A Signal Studio Upgrade Process

2.1   Connection Setup

- There is no need to connect the N4010A to the PC for installation of the N4010A Signal Studio
- For downloading of calculated waveforms connect the PC to the N4010A via TCP/IP LAN or GPIB.

2.2   Installation of the N4010A Signal Studio Software

- Click on the "dot11g_N4010A.exe" to begin installation
- Click Next > to continue
- Click > Yes to agree with the licensing agreement
- Click Next > to continue
- To install to a location other than the default, click Browse... and select the destination directory
- Click Next > to continue
- Click Next > to accept the default Program Manager group for the Signal Studio Icon
- Click Next > to begin installation
- Select Yes or No to adding a shortcut icon to the desktop
- Click Finish to complete installation

2.3   Using the N4010A WLAN Test Driver Software

- Once installed you can start the N4010A Signal Studio for 802.11 WLAN Application from the desktop icon, or from the start menu.
- The N4010A Signal Studio software enables creation of a waveform in a Windows-based environment. Calculating a baseband I/Q waveform file based on the user-defined 802.11 frame. The software also provides basic configuration menus for signal generator parameters, including frequency and amplitude. The parameter settings, along with the waveform files, are passed to the test set over the TCP/IP LAN or GPIB interface.
- To use the N4010A Signal Studio to download a waveform file, two N4010A options are required, Option 204, Signal Studio License, and Option 104, Fully Flexible ARB.
- Option 104 switches off encryption in the N4010A test set and allows you to download waveform files directly using the N4010A Signal Studio software, or using the N4010A WLAN Test Driver after creating the waveform with other tools such as MATLAB. Once downloaded to the N4010A the waveform file can subsequently be uploaded and used in any option 102/103 equipped test set. The uploaded files are encrypted in a format suitable for downloading to an N4010A test set without an option 104 using the N4010A WLAN Test Driver.