

# AN-X Technical Note

Using AN-X Products With Windows 7



## Introduction

This application note applies to both Windows 7 (all versions) and Windows server 2008 and discusses the following topics:

1. Using the AnxInit.exe utility with Windows 7
2. Updating AN-X firmware to support Windows 7

The following procedures assume that you have already installed the AN-X software from the CD provided with your AN-X product.

## Running The AnxInit.exe Utility

The AnxInit.exe utility requires low level access to the Windows networking software and therefore must always be run as an administrator.

### *Procedure*

1. Locate the AnxInit icon under the AN-X entry in your main start menu
2. Right click on the AnxInit icon and choose “Run As Administrator”

## AN-X Firmware Support For Windows 7

Version 3.6 (or above) of the AN-X software distribution CD contains all the AN-X firmware updates that support Windows 7/Windows Server 2008. A complete list of the contents and AN-X firmware revisions contained in the AN-X software distribution CD version 3.6 are available at:

<http://www.qtsusa.com/Downloads/Files/AN-X/ReadMe.html>

### *Firmware Upgrade Procedure*

Updating the AN-X firmware to support Windows 7 is a two step procedure:

1. Update the AN-X configuration kernel (zImage.cfg.v3.2.2.qtf)
2. Upgrade the AN-X firmware associated with your AN-X product

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The firmware upgrade procedure will clear the current AN-X runtime configuration and therefore the user should assure that configuration files have been saved prior to performing a firmware upgrade process.

Any AN-X product User's Manual contains the step by step procedures required to upgrade the configuration kernel and firmware images. For configuration kernel upgrading refer to the **Update AN-X Flash** section and the **Update Firmware** section will provide steps to update the AN-X product firmware.

## Technical Information

The TCP/IP networking protocol stack for Windows 7/Windows 2008 server contains several performance enhancements. The standard TCP window scaling feature employs a new auto-tuning algorithm that has been shown to be incompatible with several networking products (routers, wifi access points, etc.) including the AN-X line of products. It should be noted that the standard TCP protocol's window scaling feature is designed to improve throughput performance for streaming application layer protocols (FTP, video, audio, etc.). Industrial automation applications (OPC, Ethernet/IP, etc.), on local area networks (LAN), show little to no performance improvements from this TCP protocol feature.

The updated AN-X firmware that supports Windows 7/Windows 2008 server disables the TCP window scaling function for any network connections made to the AN-X product. This fix does not affect the operation of the Windows 7 network connections to other devices.

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