Transacq Overview

Introduction

The purpose of this document is to provide a high-level explanation of the problem that Transacq solves and how Transacq works. This is not a complete step-by-step guide for setting up Transacq and its environment. Please see the Transacq Quick Start Guide on the Exacq website for more detailed instructions.

What Transacq is Used For

The problem that Transacq solves is the difficulty or inability to route serial data to a specific destination, such as an exacqVision server. If data is being transmitted over an IP network through a managed network switch, Transacq can be used to solve the problem of getting serial data to an exacqVision server.

How Transacq Works

The following three components are part of the solution for getting serial data to an exacqVision server:

- a managed network switch
- Winpcap (or libpcap for Linux)
- Transacq

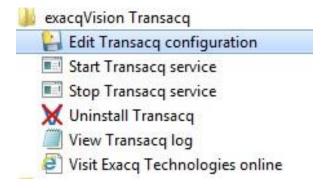
The following steps illustrate how these components work together:

- 1. The managed network switch is used to set up port mirroring of one or more ports on the switch. Port mirroring physically routes the data from one or more ports on the switch to a designated single port on the switch.
- 2. Winpcap (or libpcap) allows a computer to receive those packets on the network interface that is connected to the mirrored port on the switch.
- 3. Transacq forwards the packets it receives from the mirrored port to exacqVision through a TCP socket. The computer running Transacq must be multi-homed or have at least two network interfaces:
 - One network interface is connected to the mirrored port of the network switch. This interface becomes a "receive only" interface, as packets will never be transmitted from this interface to the mirrored port.
 - The other interface is connected to the switch with a valid IP address, and it is capable of sending and receiving data.

Transacq can run on an exacqVision server if the server has two network interfaces. If your exacqVision server has one network interface, a separate, dedicated computer with two network interfaces is required for running Transacq.

Start Menu Shortcuts

After installing Transacq, several useful Start menu shortcuts are created. You can launch the configuration editor by clicking **Edit Transacq configuration**.





Network

SniffAdapterAddress. This is the IP address of the network interface connected to the mirrored port on the switch. It is important that this IP resides on a different subnet from the regular network. This ensures that the operating system routes traffic correctly.

For example, with a subnet mask of 255.255.255.0, the network portion of the IP address 192.168.37.x would reside on a different subnet than an IP address of 192.168.1.x (see example in illustration). Also be sure to set the network interface to this IP address in the Windows or Linux operating sytem.

NVR

Address. This is the IP address of the exacqVision NVR that Transacq will log in to for determining licensing requirements, and to which Transacq will forward captured data from the mirrored port.

Password. This is the password for the account on the exacqVision NVR.

User. This is the username for the account on the exacqVision NVR.

NOTE: It is a good idea to create unique account credentials specific for Transacq to use on the exacqVision system.

Port. This is the exacqVision communications port (22609, by default).

exacqVision Transacq Configuration Editor File Edit View Help exacqVision server port number (defaults to 22609) Option Value ▼ eDVR **▼** Network SniffAdapterAddress 192.168.37.20 ▼ NVR 192.168.1.10 Address Password admin256 User admin 22609 Port ▼ Terminal SrcAddress 192.168.1.30 NvrPort 7000 DstPort SrcPort Save **F**yit Reset All

Terminal

SrcAddress. This is the filter for the IP address of the network node sending data.

DstAddress. This is the filter for the IP address of the network node receiving data.

NvrPort. This is the port for which data will be sent to the exacqVision system IP address configured under NVR.

DstPort. This is the filter for the port at the data destination node.

SrcPort. This is the filter for port at the data source node.

After editing configuration data, save, stop, and restart the Transacq service using the Start menu shortcuts.

For more detailed information on setup and configuration, see the Transacq Quick Start Guide at https://exacq.com/auto/specsheet/uploads/Transacq%20Quick%20Start.pdf?ts=1411760195.

