

# **Network Time Machine Training Class**

#### **Purpose:**

The purpose of this class is to help users install, configure, and operate their Fluke Networks' Network Time Machine. In addition to the use of the Network Time Machine, this class will introduce users to the operation and configuration of the Fluke Networks' ClearSight Analyzer embedded in the Network Time Machine.

#### Who should attend:

Network engineers and technicians who are tasked with network troubleshooting and protocol analysis.

# Course Agenda

## Day 1

#### Installation of Network Time Machine -

During this part of the engagement, we will ensure the Network Time Machine has been physically installed in the appropriate location at the customer site. This includes connecting the Network Time Machine to the correct management port and assigning an IP address. The Network Time Machine will also be connected to the desired monitoring points within the network.

#### **Network Time Machine Classroom Training**

- Introduction to the Network Time Machine
- Use of Taps and Span ports with the Network Time Machine
- Installing and configuring the Agent Manager and the Agent Viewer
- Initial Configuration of the Network Time Machine
- Creating Capture Filters
- Using Triggers to Start and Stop Captures and Lock Records
- Drilling down into a specific time frame
- Using the Records to extract packets
- Creating Display Filters
- Atlas
- Sending Packets to Atlas
- Drilling down to specific Servers and Time Frames
- Bottleneck Analysis
- SIP and RTP Analysis
- HTTP Analysis
- TCP Analysis
- Showing the Trace File in ClearSight

## Day 2

# Using the ClearSight Analyzer to perform Application -centric Analysis

The second day of training focuses on the use of the ClearSight Analyzer to take those packets capture using the Network Time Machine and isolate those conversations and packets related to a specific problem.

- Overview of the ClearSight Analyzer
- Using the Summary View do drill down into problems
- Ladder Diagrams and Conversation Statistics
- Using Issues and Problems to perform root cause analysis
- Analysis and Playback of MultiMedia data streams
- Reassembly of Data Flows
- Using Combined Flows
- Creating Display Filters
- Using the Decode View to drill into packets
- Producing Reports

# Day 3 (optional)

# Advanced Protocol Analysis Using the ClearSight Analyzer

This optional day is designed to provide the students with the skills necessary to use the ClearSight Analyzer to troubleshoot problems specific to commonly used protocols.

- Domain Name Service (DNS)
- Internet Protocol (IP)
- Transmission Control Protocol (TCP)
- Hypertext Transfer Protocol (HTTP)
- Voice over IP (VoIP)
- Mail Protocols (SMTP and POP3)
- File Transfer Protocol (FTP)





## **Ordering Information**

| Model          | Description   |
|----------------|---|
| CSN/CSN-PROF-2 | On-site two-day training for the Network Time Machine |
| CSN/CSN-PROF   | On-site advance protocol analysis training (one day)  |

#### Note:

1. Domestic travel and lodging for the instructor is included. 2. Customer to arrange training facility for the training. 3. Class size is limited to 8 people.

#### About Instructor: Mike Pennacchi and Network Protocol Specialists, LLC

Mike Pennacchi has been in the business of troubleshooting networks and helping others to resolve their problems for over 15 years. During this time, he has been an instructor at Interop since 1997, helped restore the networks at the Pentagon after the 9/11 terrorist attacks, and trained thousands of people in the area of protocol analysis and troubleshooting.

In 2002, Mike founded Network Protocol Specialists, LLC, a Seattle based company focused on providing the best in network analysis and training services. All of the analysts at Network Protocol Specialists, LLC are both accomplished trainers and skilled network troubleshooters. Bringing the experience gained in the field back into the classroom helps students become proficient in isolating and resolving network and application related problems. Network Protocol Specialists, LLC has been providing training and analysis services for many years on behalf of Fluke Networks in North America. The combination of training services from Network Protocol Specialists, LLC with Fluke Networks' world class line of network analysis equipment has resulted in customers getting to the root cause of problems faster.