OptiView Network Analysis and Troubleshooting Training Course

Introduction

The network technicians who are currently on the job are greatly over-worked. And each time there is an upgrade in technology, they must face the same challenges of learning how to troubleshoot problems all over again.

Countries that are hoping to expand their economies will need to expand the Information Technology infrastructure sufficiently to both support and drive future growth.

Network Analysis and Troubleshooting Training of network technicians is a critical part of the success of such plans. This course focuses on the testing and troubleshooting of a computer network from Layer 1 to 7.

This course focuses on how to run the OptiView Network Analysis and Troubleshooting Course using the OptiView Network Analysis Solution (ONAS).

This Course will cover:

- Overview of the program
- SNMP and VLAN Basics
- Network Performance Analysis and Testing
- Network Statistics and Documentation
- Packet capture and Seven-layer analysis
- Device Discovery and Network Map generation
- Switch monitoring, troubleshooting and configuration
- Copper & Fiber Testing
- Hands-on learning experiences

Who Should Attend ?

This course is designed for Fluke Networks end users, training partners and Network professionals who are interested in integrating the OptiView Network Analysis and Troubleshooting Course into the Network Design , Installation and Maintenance related courses

Course Duration: 3 Days
Date: September 27 to 29, 2006
Time: 09:00-17:00
Venue:中華電信電信訓練所
北縣板橋市民族路168號
Trainer: Mr. Ted Chiou
FNET Authorized Instructor
Cisco CCSI

OptiView Network Analysis and Troubleshooting Training Course

Course Structure

A full three days course comprising of theory and practical session.
Refer to course outline for details

Certification

Participants who have successfully attended the course and attained full attendance will be presented with the “Certificate of Completion”.

Fees

NT$ 18,000.00 per person
Check should be made payable to Fluke Networks Taiwan Rep. Office

Registration

To register for the course please contact Flukenetworks Inc., Mr. Kevin Chuang or Infinet Miss. Catherine Wu or email to Fluke Networks Taiwan Rep Office: kevin.chuang@flukenetworks.com

Three-day Course Outline

OptiView Network Analysis and Troubleshooting Training Course

OptiView™ Integrated Network Analyzer/EtherScope (one day)

- **Overview of the Integrated Network Analyzer** - Cover the items shown on the front screen and the various tabs at the top of the screen
- **How Auto-Configuration works** - What are the methods of getting an IP address?
- **Security** - Setting up passwords to limit access.
- **Remote Access** - Downloading and Installing OptiView Remote
- **Cable Testing** - How extensive is the OptiView cable testing?
- **Tools/Switch Statistics** - What the graph tells you. Identifying ports with errors. Locating specific devices on a switch. WAN graphs. Adding a device to the Key Devices. Pinging and Trace Routing to a device. Pulling SNMP stats off a device. Using Trace switch Route. Using RMON to display historical information.
- **Statistics** - Viewing local utilization. Using RMON enabled devices as a source of utilization statistics. Protocol distribution. Top Host statistics. Using Host Detail to drill into a specific device and using the Back button to get you back to where you were. Using the Filter button to quickly set up a packet filter.
- **Device Discovery** - How it works. Drilling into specific devices. Producing reports. Types of problems seen in the problem tab and what to do about these problems.

Lab Exercises:

1. Connecting the OptiView to the network and using various methods for setting the IP address.

2. Testing a number of good and bad cables. Identify what is wrong with each of the cables and how this might affect the network.

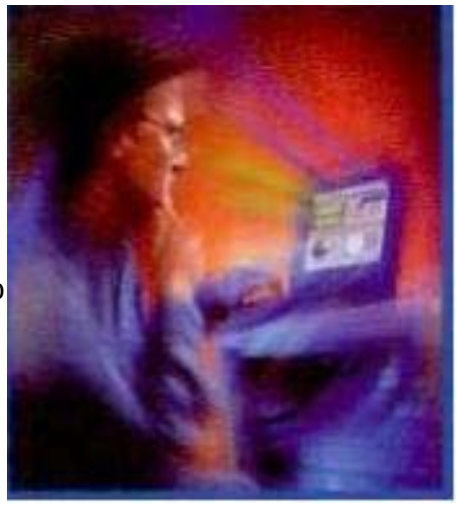
3. Use Device Discovery to determine what devices are connected to the network. Produce a report showing all of the devices.

4. Use Switch Statistics to drill into the classroom switch. Use the sort options to identify the most used ports and the ports with the most errors. Use SNMP to determine the location and contact information for the switch. Use RMON to look at the last 10 hours of traffic on the uplink port.

Three-day Course Outline

OptiView Network Analysis and Troubleshooting Training Course

OptiView™ Protocol Expert Operation (one day)



- **Installing Protocol Expert** - Discuss Taps, Capture Cards and Login information.
- **Tour of Protocol Expert** - Go over the Summary View screen . Discuss capture resources, message window. Emphasize difference between the Summary View and the Detail View. Go into Detail View. Show graphs and tables. Brief overview of Expert and Response Time windows.
- **Viewing Packets** - After packets have been captured, how do we look at them. Discuss the various panes, Summary, Detail and Hex. Searching for text.
- **Configuring Alarms** - What to watch for. How to set up an alarm.
- **Display Filters** - Using the tables to quickly create filters. Turning filters off and on. Saving and Opening filters.
- **Capture Filters** - Creating Capture Filters. Loading capture filters from Summary View.
- **Expert Analysis** - What does Expert Analysis tell us. What are some of the common problems and what can be done to fix them.

Lab Exercises:

1. Capturing Packets.

2. Searching a trace file for specific text.

3. Setting up Display Filters.

4. Setting up Capture Filters

5. Setting up Alarms.

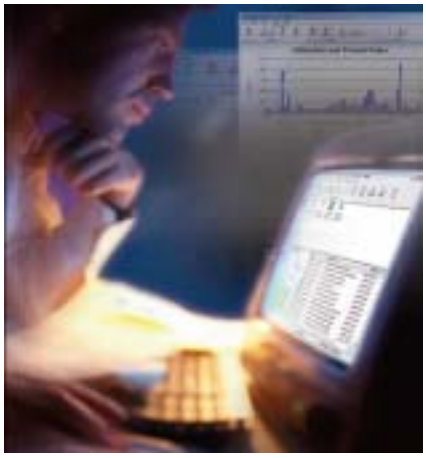
6. Using Expert Analysis to find problems.

7. Exporting Graphs and Tables

Three-day Course Outline

OptiView Network Analysis and Troubleshooting Training Course

OptiView Console 6.5 Operation (Network Inspector) (one day)



- **Overview of Console Architecture** - Agent placement and console placement.
- **Agents** - How to install. System Requirements. Repeat where they should be placed.
- **The Console** - How to install. Setting up databases. How to collect information from the Agents. Configuration options. Device summary screen. Collecting information from OptiView.
- **The Properties Screen** - Nearest Switches. Service information. SNMP information. Utilization graphs.
- **Reports** - Types of reports. Formats that can be produced. Changing the logo at the top of the report. Automatic generation of reports.
- **Network Maps** - Using Visio to generate maps of the network.

Lab Exercises:

1. Setting up an Agent and Console.
2. Collecting information from a Remote Agent.
3. Collecting information from an OptiView.
4. Locating a device in the network.
5. Producing inventory reports.
6. Mapping out the network.
7. Exporting Graphs and Tables