

Maintaining WiMAX Networks

Course Outline:

Module 1: WiMAX Network Overview

At the end of this module you should be able to:

- Diagram a WiMAX network
- List the six major applications of WiMAX
- Converse in the industry-general and vendor-specific WiMAX vocabulary
- Describe the impact of RF regulation on network configuration

Module 2: Overview of WiMAX Maintenance Toolsets

At the end of this module you should be able to:

- Explain and follow each step of a Maintenance checklist
- Understand the operation of sample WiMAX network diagnostic tools and maintenance databases
- Use these tools to maintain and improve WiMAX network performance
- Understand how the tools relate to general network management systems

Module 3: Schedule Maintenance Actions

At the end of this lesson you should be able to:

- List sample steps to take with Urgent actions
- List sample actions to take Daily
- List sample actions to take Weekly
- List sample actions to take Monthly

Module 4: Optimizing WiMAX Networks

At the end of this module you should be able to:

- Explain and follow each step of a sample optimization checklist
- Use Module 2's tools to optimize the network
- Review the health of operating links
- Re-configure the network based on the tool data
- Analyze backhaul reports
- Evaluate alternate channel assignments
- Identify and address problems with noise

Course Description:

This course is designed for students who are familiar with the general configuration of a WiMAX network, and who wish to formalize their approach to maintenance and troubleshooting of WiMAX networks through use of generic approaches. While the tools used to illustrate maintenance and troubleshooting are specific to one vendor's equipment, the skills learned are transferable to any WiMAX implementation.

With the knowledge and experience they acquire, the student will be able to apply maintenance tools to maintain, optimize and troubleshoot their network, thereby improving their effectiveness and return on investment. The course features hands-on practice with maintenance tools, in hands-on labs. Students can bring a laptop to the class or must arrange to use a SpectroTech laptop to participate in the class exercises. SpectroTech will provide sample tools for network management lab exercises.

SpectroTech can teach industry-general maintenance skills, using industry-leading vendor's maintenance tools or work with your chosen vendor's equipment and tools to develop the specific maintenance labs, for network-specific skills training.

Course length: 2 Days

Module 5: Real Network Lab Exercise

At the end of this lesson you will have:

- Interpreted data collected from a sample network
- Worked with a team of students to determine problems within the network
- Reported recommendations for evaluation

Module 6: Practice Labs

At the end of this module you will have had practice executing the Maintenance and Troubleshooting procedures to diagnose four trouble cases with a WiMAX network.

Endorsed by: