# **EDUCATION SERVICES**



## APRISA SR ADVANCED OPERATION AND MAINTENANCE

TRN-APRISA-SR-ADV

## **Course Specifics**

Duration: 2 days

Class capacity: 10 students

Materials provided: Student Handbook (e-Book)

## **Course Description**

The Aprisa SR Two-day training course provides a basic overview of the Aprisa SR product and its application.

Our training courses will teach you how to install, configure, and commission Aprisa radio systems.

The course covers network applications, hardware architecture, software management and troubleshooting.

The training also provides the advantage of an in-depth understanding of the interfacing capability, ultimately allowing you to achieve operational efficiencies

This program is based on 60% hands-on lab work and 40% content slides. However, adequate backup material is provided in the training manuals for those who want to do more.

AVIAT expert trainers conduct courses in a mentoring environment backed by their deep technology expertise and experience in implementing microwave wireless and IP/MPLS networks.

The course is conducted at Aviat Training locations or can be arranged at customer sites.

#### **Target Audience**

This course is intended for Level-2 support groups, engineers, and technicians with advanced knowledge of the technology.

#### **Pre-requisites**

While the Aprisa SR program starts with covering some basics of RF, networking, and NMS, strongly recommends the following expertise as pre-requisites:

- Working knowledge of the OSI network model, TCP/IP protocol suite, working of routers, bridges, Layer-2 and Layer-3 QoS, and packet processing.
- Working knowledge of SCADA

## **Objectives**

Participants who have completed the course will have the knowledge and skills to carry out:

- Basic Aprisa configuration, performance monitoring, and fault diagnostics.
- System architecture and building blocks at the MAC, PHY, and RF levels and the
  performance attributes in applications for the Oil and Gas industry, video surveillance,
  backhauling, and BWA deployments.

## **EDUCATION SERVICES**



#### **Course Outline**

#### **Aprisa SR Family Overview**

- Introduction.
  - What is SCADA?
  - Where does SR+/SR fit into a SCADA network?
- · Product Overview.
  - Functional Overview
  - Hardware Overview
  - Network Overview
  - Management Overview
  - Security Overview
- Real World Use and case studies
  - Application scenarios Gas
  - Application scenarios Electricity
  - Application scenarios Water

#### **Aprisa SR Family Overview**

- Radio Architecture
  - Block diagram
  - Processor and Interfaces
- Protocols
  - Communication Architecture Stack
  - Channel access (Physical Link layer / MAC layer)
- Key functionality
  - Protected station
  - Terminal server functionality
  - ACM functionality
  - Security
  - Compression
  - QoS & Filtering
  - SNMP
- Implementing a Network
  - Network planning and topology
  - Site Planning and Path Planning
  - Antenna and Feeder Selection

#### Installation

- What is in the box
- Basic Configuration
  - Management Overview Supervisor web tool
- Interface connections
  - Radio interfaces
  - Protection switch remote control connections
- Preparation
  - Bench Testing
- Site Installation
  - Installing the Radio
  - Protected station installation

### Commissioning

- Preparation
  - Before you start
  - In-Service commissioning
- Process
  - Base and Repeater Station
  - Remote Station
  - Antenna Alignment Test Mode
  - Serial Traffic Interface
  - Ethernet Traffic Interface
  - SCADA Communications

## Maintenance

- Radio software upgrade
- Maintenance and spares
- Configuration
  - Supervisor Advanced Configuration
  - Engineering Level Configuration (CLI)
  - Diagnostics
- Practical Exercises
  - Radio management with Supervisor
  - Hardware maintenance and upgrades
  - · Alarms and troubleshooting

## **Required Equipment for Training Sessions at Customer Sites**

## CLASSROOM SET UP

Sufficient in size to handle all participants, instructor, desks, chairs, and classroom equipment. The room must have enough 110 AC (220) AC power and air conditioning to operate equipment, all students' client PCs, and the server or radio as required.

Hands-on participation of the trainees is subject to hardware availability in on-site sessions.

# **EDUCATION SERVICES**



# **Pricing & Scheduling**

Please contact your Aviat local sales team for a quote or email <a href="mailto:aviatcareeducate@aviatnet.com">aviatcareeducate@aviatnet.com</a> and request pricing for the following items:

TRN-APRISA-SR-ADV-A	APRISA SR/SR+: Advanced Operation and Maintenance- ILT- 2 Days- Aviat Training Center- Open Enrollment- per Student
TRN-APRISA-SR-ADV-B	APRISA SR/SR+: Advanced Operation and Maintenance- ILT- 2 Days- Aviat Training Center- 10 Students Max
TRN-APRISA-SR-ADV-C	APRISA SR/SR+: Advanced Operation and Maintenance- ILT- 2 Days- Customer Location- 10 Students Max
TRN-APRISA-SR-ADV-D	APRISA SR/SR+: Advanced Operation and Maintenance- ILT- 2 Days- Customer Location US Only- with Equipment- 10 Students Max
TRN-APRISA-SR-ADV-VILT-A	APRISA SR/SR+: Advanced Operation and Maintenance- ILT- 2 Days- Open Enrollment- per Student
TRN-APRISA-SR-ADV-VILT-B	APRISA SR/SR+: Advanced Operation and Maintenance- ILT- 2 Days- 10 Students Max