

## APG43 Operation and Maintenance



LZU 108 7177 R1A

### Description

Do you want to know how the APG43 works? Are you required to perform Operation and Maintenance activities on the APG43 such as backups, creating new user accounts, or configuring statistical measurement programs?

This course describes the hardware and software structure of the APG43. It also explains many of the features in APG43 while describing the procedures and commands used to configure them.

The participants will gain experience in handling the APG43 by performing a series of practical exercises designed to re-enforce the theoretical components of the course. The exercises include fault handling, trouble report creation, file transfer definitions, backup procedures and more.

### Learning objectives

On completion of this course the participants will be able to:

#### 1 Describe the APG features on an overview level

- 1.1 Introduce the APG43 product and its main features
- 1.2 Compare the performance and hardware characteristics of APG43 to previous IO systems

#### 2 Describe the APG43 hardware components

- 2.1 Explain the layout of the EGEM magazine including APG43
- 2.2 Describe each board which makes up the APG43 and their functions
- 2.3 Understand the front cabling used in APG43, and be familiar with the connections
- 2.4 Be familiar with the APG43 data disk directory structure, and describe the contents

#### 3 Use different interfaces to connect to the APG43 platform

- 3.1 Connect to the APG43 using Telnet, WinFiol or Terminal Server
- 3.2 Describe the serial console port in APG43, and when it is used



#### **4 Explain the APG43 software structure**

- 4.1 Provide a basic understanding of the software architecture, and describe the major components APHW, APOS, ACS on an overview level
- 4.2 Describe some of the commonly used applications such as Microsoft Cluster Server and other 3<sup>rd</sup> Party products
- 4.3 Describe the functions of ACS and AES subsystems used in APG43
- 4.4 Perform exercises to define file transfer destinations in the AP, and generate files to observe the file transfer process.

#### **5 Describe the principles of the alarm system in APG43**

- 5.1 Explain the principles of the alarm system on the APG43
- 5.2 Describe the functions of PRC, USA and SSU

#### **6 Describe the file management system implemented in APG43**

- 6.1 Understand the main file handling functions used in FMS
- 6.2 Perform exercises to create, rename, copy and remove files in FMS
- 6.3 Explain the CP backup functions supported in APG43
- 6.4 Understand how to transfer a CP backup file into the AP to be loaded into the CP

#### **7 Describe the Man-Machine Subsystem in APG43**

- 7.1 Describe the hardware components in MCS
- 7.2 Understand how users can be defined in APG43 with different levels of access to AP and CP functions
- 7.3 Explain the alarm display function used in APG43
- 7.4 Define the data for an external alarm in APG43

#### **8 Describe the APG43 System Backup, Restore and Function Change procedures**

- 8.1 Describe the principles of the APG43 backup function, and perform a backup of the APG43
- 8.2 Explain the APG43 system restore procedure, and perform a single Node restore
- 8.3 Describe the Function change principles, and perform a soft function change in APG43

#### **9 Describe the principles of the Statistics and Traffic Measurement subsystem STS in APG43**

- 9.1 Have a basic understanding of STS concepts and their implementation in APG43
- 9.2 Explain the counters, objects and object types used in STS
- 9.3 Understand the output of files and the different formats used in STS
- 9.4 Perform and exercise to define measurement reports to produce statistical data to be output to a destination defined in APG43



**Target audience**

The target audience for this course is: System Technicians, System Engineers.

This audience is responsible for Network Maintenance, Network Operation and System administration

**Prerequisites**

The participants should be familiar with previous version of APG 40 systems.

Successful completion of the following courses:

APG43 Delta

**Duration and class size**

The length of the course is 4 days and the maximum number of participants is 8.

**Learning situation**

This course is based on theoretical and practical instructor-led lessons given in both a classroom and in a technical environment, using equipment and tools.