

## Certified Allied Telesis Professional / Alliedware Plus - CAP/AW+

**Duration:** 3 day, Classroom based, Instructor led

**Language:** German

### Certification Requirements:

- Attendees will be required to pass a written or web-based exam at the completion of the course. The title of Certified Allied Telesis Professional (CAP) will be awarded to all attendees that receive a passing score on the exam

### Introduction:

- This course is aimed at experienced engineers installing and configuring the Allied Telesis core and edge switches. The objective of this 3-day course is to transfer special in-depth knowledge to those customers, who are typically selling installation and maintenance services to their customers and thus need to ensure that they have enough skilled technicians to do so. The course is designed to give the participants the theory behind configuration tasks and the opportunity to try the configurations. Special networking debugging scenarios will be explained and will be tried.

### Prerequisites:

- CAT – Certified Allied Telesis Technician exam passed
- Experience using the CLIs found in all the Allied Telesis products.

### Intended Audience:

- Professionals who are setting up complex networks based on Allied Telesis core and edge switches, and wish to use the advanced features available in these ATI products. The training is designed to provide to all participants the opportunity to make practical tests and to obtain the necessary knowledge to manage and troubleshoot these products in complex environments.

### Scheduling:

- To schedule a class or to get more information, please use our website:  
[www.alliedtelesis.co.uk](http://www.alliedtelesis.co.uk) → Service&Support → Training

or contact [Training.EU@alliedtelesis.com](mailto:Training.EU@alliedtelesis.com)

### Objectives:

- After completion of the course the course attendees will be able to:
  - Describe the differences between layer 2 and layer 3 switches
  - Understand how networks are architecturally split into the edge and the core sections
  - Identify the key criteria for deploying of high availability solutions and their implementation
  - Understand the operation and utilization of Ethernet Protection Switched Rings

- Understand the concepts and implementation of the advanced Network Access Control and Quality-of-Service concepts
- Understand and use the different configuration methods available for Allied Telesis switches, using the CLI.

### Training is relevant for the following products:

- AT-x600
- AT-x900
- AT-SBx908
- AT-SB4000

### Outline:

Introduction: This general module starts the course and provides the logistics for the students. It also includes an overview of the modules within the course.

- **Introduction:** This general module starts the course and provides the logistics for the students. It also includes an overview of the modules within the course.
- **Service and Support:** This short standard module provides contact information and also information about Net.Cover support.
- **Hardware overview:** This should be a single slide overview of where the products fit in the portfolio. The objective is only to provide an overview, and not review the product features.
- **Operations:** This module is less important than in the other courses, but should still remain a fundamental part of the course. The time reserved for this module should be less than in the other courses. It covers the supported platforms. Relative importance of the platforms:
  - AW Plus
  - 8000S/GS

Only the CLI will be used in the course, and should be described in some detail. It is important to allow enough time that students understand the concepts, but a lab session is not necessarily needed.

- Serial port and client software configuration
- User name and password concept
- Levels of access, command line structure, and function keys
- Help, command completion
- Storage architecture ( running, startup, current, flash, etc). What is booted, etc.
- Licensing

- File system and commands, external device support
  - Reboot, restart of switches
  - Basic “show” commands
  - Set, do, exec command concepts
  - Firmware upgrade
  - Configure initial IP and GUI, and TELNET (SSH)
  - IP ICMP commands
  - (Lab session)
- **Layer 2 Switching:**
- Layer 2 switching concepts
  - Configuration
  - Lab session
- **VLAN:**
- Types, terminology and uses
  - VID
  - Port based VLAN
  - Trunk VLAN
  - Private VLAN
  - (Lab session)
- **Network Access Control:**
- Access Control Lists
    - IP based
    - MAC based
  - 802.1X concept
    - RADIUS server connection
    - Port configuration
- **Quality of Service:**
- Background to QOS, and COS, etc.
  - Policy maps, class maps
  - Policers

- Lab session
  
- **Spanning Tree:**
  - Concept and description of different types
  - RSTP
  - MSTP
  - (Lab session)
  
- **Trunking/Aggregation:**
  - Terminology and static vs. LACP
  - Static aggregation configuration
  - LACP configuration
  - (Lab session)
  
- **Stacking:**
  - Concept
  - AT-x900, SB x908 configuration
  
- **Routing:**
  - Short overview IP, subnet, gateway
  - Static routing concept
  - Ports, and interface IP configuration syntax
  - RIP, OSPF, BGP Introduction
  - Lab session
  
- **VRRP:**
  - Master, and backup router concepts
  - Configuration
  - Lab session
  
- **Ethernet Protection Switched Rings:**
  - EPSR overview
  - How it works
  - Supported hardware
  - Configuration

- Lab session if hardware is available
  
- **Debugging and troubleshooting:**
  - Event logging
  - SNMP
  - Counters
  - Enabling debug
  - Interpreting information from the system
  
- **On-line certification exam**