

COURSE NAME BT 500 BACtalk System Networking Lab

FORMAT Instructor-led training in a lab-intensive, realistic environment

DURATION One Week (24 hours over four days)

SCHEDULE Tue-Thu 8:30am to 5:00pm with one hour for lunch and two 15-minute breaks
Fri 8:30am to 11:30am (written examination)

ASSESSMENT A series of lab exercises allow students to self-assess their comprehension of the material covered in the pre-requisite courses, NT-e100 and BT-e500; followed by a comprehensive, written examination on the last day of the course.

AUDIENCE

This course is targeted to building automation and control system field technicians, application/field engineers, and programmers who work with Alerton's BACtalk control system.

OVERVIEW

The BACtalk System Networking course, BT-500-Lab, is the third course in Alerton's networking technologies curriculum. The BT-500-Lab is an instructor-led lab intensive training course wherein students configure and implement the BACtalk product using BACnet/Ethernet and BACnet/IP protocols.

The course is designed to give Alerton dealers the knowledge and skills necessary to design, implement, and troubleshoot a BACtalk Control System on a customer's enterprise network or on a network installed and managed by the dealer.

OBJECTIVES

After completion of this course, students should be able to:

- Identify the network interface cards (NICs) available in a computer
- Document the network addressing & configuration of available NICs within a computer
- Identify the quantity of BACnet network types available with the BACnet/Ethernet protocol
- Identify the BACtalk devices that function as BACnet routers
- Upgrade a customer's Envision for BACtalk system to Compass
- Merge multiple BACtalk projects into a single BACtalk project
- Configure a system that has Compass server & client workstations
- Identify the quantity of BACnet network types available with the BACnet/IP protocol
- Configure the BACtalk system to communicate using the BACnet/IP protocol
- Identify the BACtalk devices that can act as a BACnet Broadcast Management Device (BBMD) on a BACnet/IP network

Alerton Reserves the right to revise or update this training course syllabus without prior notice.

- Configure a BACtalk BBMD for multiple subnets
- Identify the BACtalk devices that can act as a Public BBMD (support an IP Router running a Network Address Translation program) on a BACnet/IP network
- Configure a BACtalk Public BBMD and a BACtalk Private BBMD for multiple subnets
- Understand when to implement both BACnet/IP and BACnet/Ethernet protocols on the same subnet
- Understand when to configure a Compass workstation to either “Use Local IP Address” or “Register with BBMD as Foreign Device”
- Understand when and where to use Wireshark captures as well as how to analyze the BACnet information contained in the packets
- Troubleshoot network communication issues having to do with BACnet/IP and TCP/IP

PREREQUISITES

- A working knowledge of computers and current Microsoft operating systems
- Successful completion of the NT-e100 course or CompTIA Network+ certification
- Successful completion of the BT-e500 course
- Successful completion of the BT-230 Lab course or ACE certification