

KNXnet/IP: Von der Theorie zur praktischen Anwendung und Visualisierung (BC-IPBWV)

Short Description

The KNXnet/IP application course provides you with the necessary knowledge to successfully integrate a KNX system into an IP network and the Internet. Many practical exercises with our current KNXnet/IP devices deepen the theory.

Objectives

The KNXnet/IP application course provides you with the necessary knowledge to successfully integrate a KNX system into an IP network and the Internet. Many practical exercises with current KNXnet/IP devices also deepen the theory. The highlight of the training is the system visualisation with the IP Control Center N152. After the course, you will be able to understand the basic structure of IP networks, to set up IP network topologies correctly in relation to KNX and to put them into operation. You will also learn how to use IP addressing in the network and how to use the functions and options of various KNXnet/IP devices correctly. With this newly acquired know-how, you will increase your understanding of KNXnet/IP applications and be able to contribute new ideas and impulses, which will lead to greater success in your work.

Target Group

- Planners and installers of KNX systems
- service personnel
- project managers
- project team members

Content

- Internet: History, Development, Structure
- Building the IP Network:
 - Network Devices Switch, Router
 - Addressing: MAC, Unicast, Multicast
 - Services: IGMP / Routing
 - LAN / WLAN / WAN / DynDNS Setup
- KNXnet/IP Introduction
 - Tunneling, Routing, Device Management
 - KNXnet/IP devices at a glance
- Application examples for coupling KNX / IP
 - Networking of remote real estate
 - Remote diagnostics and maintenance
 - Setting Up Port Forwarding
 - VPN
- Siemens IP Interface N148/22 with application examples and configuration
- Siemens IP Router N146/22 with application examples and configuration
- Diagnostics with Wireshark
- HTML5 - Web visualization with Siemens IP Control Center N152:
 - Application areas for remote visualization via KNXnet/IP
 - Features of the KNXnet/IP web server Siemens N152 (IPCC)
 - Getting to know the sample project
 - Page and container navigation
 - Creating a Navigation Structure
 - Creating process items via the ETS project (objects and group address structure)
 - Creating the OPC export file
 - Setting up access paths via IP for graphical processing (VPN / port forwarding / DynDns)
 - Opening the editor and importing the ETS-OPC file
 - Creating pages and navigation
 - Edit pages: Background images, dynamic element library, own symbols
 - Virtual Objects
 - Additional functions: Logic, time, scenes, mathematical calculations, alarm messages and much more.

Prerequisites

Mandatory: Participation in the KNX basic course (BC-KNXBK) and practical experience with ETS version 4 and higher and KNX projects.

Note

Good knowledge of ETS5 is desirable. This course is evaluated as a partial module for the qualification "Siemens KNX Building System Specialist".

Type

Face-to-face training

Duration

2 days

Language

de