

Fondamenti di Security e Routing (SIE-SECROU)

Short Description

In Industry 4.0 systems, interfacing with the IT level of companies is essential, both for control and maintenance purposes, and for the transfer of information related to Big Data. It is therefore necessary to have an excellent knowledge of the mechanisms to guarantee the non-interruption of the service even in the event of a failure (network redundancy) and of the possibilities of exchanging information between networks belonging to different classes (routing), with particular regard to secure transmission of some data. The course will provide you with the fundamental theoretical and practical knowledge on Switched Network solutions for connecting real-time - capable systems, for their design, configuration and operation. You will be shown typical solutions for structured industrial environments through routing and their connection to corporate networks.

Objectives

After taking the course you will be able to:

- Identify the most suitable network topology for your plant
- Increase the reliability of your network by implementing redundancy protocols
- Configure a VLAN
- Implement routing

Target Group

Systems engineers
Plant managers
Programmers
Commissioning personnel
Engineering personnel

Content

- Differences between Ethernet and Industrial Ethernet networks
- Typical topologies of Industrial Ethernet networks
- Redundancy concepts (MRP, HRP, Standby Redundancy Protocol)
- Notes on RSTP, Passive Listening, HSR, PRP
- Applications with VLANs
- Addressing, data exchange and protocols with IPv4
- Static Routing
- Router Redundancy (VRRP)
- Dynamic Routing (RIP, OSPF)
- Diagnosis and troubleshooting on Industrial Ethernet networks

Prerequisites

SIE-ETHBA course or equivalent basic knowledge.
Basic knowledge of the operating principles of switches and routers.

Note

This course delivery data will be decided together with you: please get in touch to digitalindustryacademy.rc-it@siemens.com, tell us your needs and we'll be glad to find a tailored solution for you!

[Submit Training Request](#)

Type

Online-Training

Duration

4 hours

Language

it

Fee

760 EUR
Price for semi individual session up to 2 participants

1400 EUR
Price for session up to 5 participants

