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Advanced Switching and Routing in Industrial Networks with SCALANCE (IC-ASWIROS)

Краткое описание

Today, Operational Technology (OT) is responsible to control and monitor industrial processes and equipment. In this regard, OT networks play a key role in industries such as manufacturing, power engineering, water management and others. It is important that these networks are not only efficient and reliable, but also secure, as vulnerabilities in OT networks can have serious impacts on production and operations.

Availability is a critical factor in OT networks. Loss of availability can cause production downtime and loss of productivity. To ensure availability, it is essential to have appropriate network design, network health monitoring and the ability to respond quickly to unforeseen problems and failures. At the same time, security is one of the most important features of OT networks. Ensuring security includes network protection, segmentation and the monitoring of different events.

Technology improvements are enabling new applications and businesses models where everything is connected - devices, machines, and applications. A deeper knowledge of networking technologies allows organizations to take advantage of them to scale and secure their network infrastructure.

To capitalize on these opportunities, today' s networking professionals need a broader range of skills and deeper focus in strategic technology areas.

Цели

The course Advanced Switching & Routing in Industrial Networks with SCALANCE gives you exactly the knowledge that is required for planning, configuring and operating network solutions in industrial environments. The training has been designed in a way to develop skills in the complicated landscape of OT networks technologies. The course covers core technologies and advanced features available on the SCALANCE product line in an industrial or industry-related environment. It includes ample time for hands-on practice, diagnosis and troubleshooting.

Целевая группа

- Plant Engineers
- Control Engineers
- System Engineers
- Commission Engineers
- Application Engineers
- Service and Maintenance Personnel
- Project Engineers
- OT and IT Network Engineers
- Technical Sales Personnel
- CIOs

Network Planners and Administrators

Содержание

- Open Shortest Path First v2 (OSPF) — multi area implementation
- Fundamental network services (NTP, SYSLOG, TFTP)
- Sticky MAC
- Protocol Independent Multicast (PIM)
- 802.1x & Radius
- Policy-based routing and Sink route
- Network Concept
- Multiple Spanning Tree Protocol (MSTP)
- Quality of Service (QoS)
- QinQ (L2 tunnels)
- Privat VLAN (PVLAN)

Требования к участнику

Knowledge in accordance with the course "Switching and Routing in Industrial Networks": Participants must be very familiar with topologies, transmission methods, addressing and transport of data in industrial networks, and ideally possess practical experience in the field of industrial networks.
If the course "Switching and Routing in Industrial Networks" was taken more than 1 year ago, you should refresh your knowledge by reading the relevant documentation from that course.

Примечания

Included in the course price: Free access to the digital learning platform SITRAIN access — starting one week before the start of the course until two weeks after the end of the course.
With the Learning Membership, you can deepen or repeat the content of this Learning Event as well as continue your education on other interesting topics.

Certification (Siemens CPIN-LEVEL)

After the training course, you have the opportunity to become certified as "Siemens Certified Expert for Industrial Networks — Routing and Switching ". The certification examination takes place at the end of this training. As an option, the exam can be taken later.

Тип

Очный тренинг

Продолжительность

4 Дн.

Язык

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