

# Certified WinCC OA Consultant Workshop

#### Course code

ETM-WinCCOACON

#### Description

This three-day instructor-led workshop provides experienced trainees with the knowledge and skills necessary to set up complex and large WinCC OA projects. This will include best practices for creating data structures, graphical references and system architecture of large, distributed and redundant systems. Also debugging and failure analysis will be covered. Further subjects (like WinCC OA Add-On's or special functions) can be arranged previously with the trainer.

## **Prerequisites**

Participating trainees are required to have deeper knowledge of WinCC OA CTRL programming, PLC and network knowledge. Trainees must have previously attended the "Certified WinCC OA Basic Training" (ETM-WinCCOABAS) and "Certified WinCC OA Engineer Workshop" (ETM-WinCCOAENG). Trainees should bring a suitable laptop. A training copy of the WinCC OA software will be provided for the duration of the course if needed. A minimum specification for this PC is detailed in the note below.

### **Training objectives**

On completion of this course the trainee will be able to extend WinCC OA projects with further functionalities (advanced scripting). The best practices of designing data structures and graphical references may be also based on an existing customer project.

### Content

- Best practices for designing data structures and graphical references
- Architectural design based on a distinct customer project
- Advanced scripting (multi-user / multi-threaded)
- Performance of complex SQL queries in systems with big data volume (dpQuery, dpQuerySplit, dpQueryConnectSingle, etc.)
- Time correction mechanism inside event manager
- Up to two additional WinCC OA modules may be chosen by the participants. Available modules: Plant model, Security concepts (MxProxy), Reporting with SOAP interface (BIRT), Video\_OA, Remote UIs (Ultralight Client UX, Web Client, Mobile UIs Android and IOS), WinCC OA Operator, Recipes, Scheduler, Redundancy, Distributed Systems, DRS (Disaster Recovery System), Communication Centre, Driver (S7 and others), RDB (Oracle archiving), CTRL-ADO interface, APM (Advanced Playback Manager), API, Mass configuration / Multilanguage, Object Design, AMS (Advanced Maintenance Suite)



Please note: WinCC OA only supports 64bit-operating systems! Hardware and software, except for WinCC OA, are not provided and must be brought by the participant. The minimum hardware and software requirements are as follows:

Processor
Intel Core i3 / i5 / i7 with 2.2 GHz or similar

• RAM 4 GB

HDD 5GB free disk space

Graphic 1280 x 1024

Input
Keyboard, mouse and USB-port (required)

Operating system
Windows 10 CB Version 20H2, LTSC Version 2019, Windows Server 2019,

RedHat Enterprise Linux 8 64bit, Oracle® Linux 8.3, SIMATIC Industrial OS 2.2,

Docker-Version 20.10.3 with Debian 10 Buster

Optional
VMware Cluster (HA) ESXi 6.7 Update 3\*

(supported by all operating systems which are mentioned above)

Optional software Microsoft Excel 2016, Excel 365 1912

(Only 32bit Excel versions can be used for the WinCC OA Excel-report.)

# **Duration**

3 days non-residential

 $<sup>^*\</sup>dots$  The use of a virtualization is optional and not required for the installation of WinCC OA!