**Workshop goal**
You might have a need to integrate field devices in System 800xA, which are not available as object types in ABB Device Library. The students learn how to design and create field device object types that are fully integrated and can be used later on in System 800xA projects. Participants either bring their own devices to the lab, or use devices supplied by Consult IT.

**Learning objectives**
Upon completion of this workshop the participants will be able to:

- Design field device object types for different integration purpose like engineering, commissioning, maintenance and operation
- Analyze device capabilities and individual requirements to decide which integration level should be used
- Use standard System 800xA tools to create field device object types for:
  - HART
  - PROFIBUS (GSD based)
  - FOUNDATION Fieldbus (CFF based)
- Adapt and implement device capabilities like cyclic communication, acyclic communication, diagnostic and alarming into System 800xA
- Explore and add DTMs as well as Asset Monitors for commissioning and maintenance purpose
- Customize existing device faceplates, DTMs and Asset Monitors if required
- Add CMMS connectivity to self-made field device object types
- Package field device object types such that they can be easily used in projects
- Test self-made field device object types in a real-time environment

**Participant profile**
This Expert Workshop is targeted to sales support, application engineers, service & support engineers, maintenance engineers and instrumentation engineers.

**Prerequisites and recommendations**
Students should have attended the PROFIBUS/HART course T316 (T304) and the FOUNDATION Fieldbus training T317 (T303) or have knowledge and experiences associated with the content of these courses. The required knowledge can be verified with user assessment modules T710e-10 and T710e-11.

**Workshop type and methods**
This is an instructor led workshop with short presentations and demonstrations, extended exercises, hands on sessions and discussion.

**Duration**
The duration is 4½ days.