

A331

Advant Controller 400 Configuration and Operation

Course goal

Learn to configure and operate Advant Controller 400 Series with Local and remote S800 I/O and write control programs in the ABB MasterPiece language

Learning objectives

Upon completion of this course the participants will be able to:

- Program Advant Controller 400 using Advant Station 100 Series Engineering Stations. (Also applicable to the on-line builder option for the Advant 500 Operator Station.)
- Use equipment in normal operation

Participant profile

System, process, and application engineers. Instrumentation, electrical, and service engineers.

Prerequisites

- Basic knowledge of logic diagrams
- Basic knowledge of how processes are controlled
- Basic knowledge of MS Windows

Topics

- Advant OCS philosophy and products
- Block selection (PC-elements)
- AMPL programming methods
- How to define, dimension, and populate a database
- On-line Builder software (PC programming, dumping, loading, and parameter adjustment).
- Introduction to AdvaBuild Function Chart Builder (FCB)

Course type and methods

This is an instructor led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is hands-on lab activities.

Duration

The duration is 5 days.



| Course Outline | | | | |
|--|---|---|---|---|
| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
| Course information • Training equipment presentation • Signal flow, hardware software • Advant Station 100 Engineering Station • Database handling | PC program structure Monitoring and testing of application programs Operation of the process controller and PC programs Design of PC program, online | On-line documentation Back-up and transfer of application Application with sequence | Sequence programs in an operator station DAT communication between PC programs Data set communication between controllers AC400 series and S800 I/O database configuration | Program handling Object control using functional units |

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T320

System 800xA for Advant Master Configuration

Course goal

The goal of this course is to learn the installation, configuration and maintenance of the Extended Automation System 800xA for Advant or Master Controllers.

Learning objectives

Upon completion of this course the participants will be able to:

- Plan an appropriate architecture for a system 800xA with Advant Master
- Install the AC450 Connect software
- Navigate in the system and create new objects / aspects
- Configure and maintain the communication between 800xA and Advant controllers
- Configure and modify graphic displays, faceplates and graphic elements
- Manage and configure alarm and events
- Configure historical data collection and trends
- Configure time synchronization
- Create and customize a workplace
- Configure user accounts and describe how access rights work
- Save and restore data.

Participant profile

This training is targeted to system and application engineers, commissioning and maintenance personnel, service engineers and system integrators.

Topics

- System 800xA architecture for Advant Master
- AC450 Connect installation
- Plant Explorer introduction
- Controller communication and Database integration
- Graphic Displays
- Faceplates
- Alarm and Events
- Historical data collection
- Trends
- Time synchronization
- Workplace configuration
- Security
- Backup and restore

Prerequisites

Students should have attended the AC 400 configuration course A331 (course AC 400 for AC 100) or have knowledge and experience associated with the content of these courses.

Course type and methods

This is an instructor led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is hands-on lab activities.

Duration

The duration is 5 days.



| Course Outline | | | | |
|---|------------------------------|----------------------------|-------------------------|----------------------------|
| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
| Course information | Graphic displays | Alarm and Events | Time synchronization | AC450 Connect installation |
| System 800xA architecture for Advant Master | Master Faceplates for Advant | Historical data collection | Workplace configuration | Optional topics: NLS, BDM |
| Plant Explorer introduction | | Trends | Security | |
| Controller communication | | Backup and Restore | | |



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