ABB 800xA Simulator
Improve safety and productivity through simulation

Overview
ABB 800xA Simulator combines 800xA automation system software with simulator functionality to allow operator training and control system testing in a realistic, yet offline environment. It can be deployed on premises or in the cloud to decrease computing and storage requirements.

Operators and decision makers can use ABB 800xA Simulator to see how equipment will behave under all realistically anticipated conditions and scenarios – without affecting the actual equipment. All equipment and integrated systems are fully modeled in a simulation environment to test and verify processes and functionality.

ABB 800xA Simulator can also be used for DCS configuration checkout, virtual commissioning, verification of modifications and validation of optimization changes.

ABB 800xA Simulator is ideal for operator training on process and system control. It helps operators learn how to manage new processes, mitigate safety risk, avoid unplanned shutdowns and abbreviate startup times following plant outages.

Benefits
- Improves operator training and education by simulating an environment that is nearly identical to actual plant engineering and operations
- Reduces shutdown time with ability to test proposed operational changes prior to implementation
- Reduces commissioning time at startup with training and testing of new processes, designs and configurations
- Reduces maintenance costs by identifying issues on the simulator instead of in the plant
- Enhances safety by allowing users to gain familiarity and build process and operational competencies before deploying to offshore locations
- Increases computing and storage space savings and cost efficiencies with the option to run on a cloud-based platform
- Provides users access to the system anywhere and at any time with the ability to run in the cloud
- Enhances system security in cloud-based deployments
ABB 800xA Simulator creates a nearly identical replication of your plant control environment in a separate system for operator training and testing and verification of process updates.

**Features**
- 800xA Simulator Link makes interfacing with external model vendors easy by providing common synchronization of all the components
- Three different solution versions give customers price flexibility and scalability: Basic, Premium and Professional
- Simulated Speed allows customers to run the simulation faster or slower than real time
- Record and Replay of Operator Actions captures activity and allows users to watch the recording for review during training sessions
- Step Execution allows customers to set a specific time step and then let the simulation run for just as long as that step in time
- Control Applications and Alarms saves control applications and the alarm list as part of an IC
- Event Logs and Basic History saves event logs and basic history as part of an IC
- Simulated Critical Action Panel emulates hardwired matrix panels on touch screen
- Can run on a cloud-based platform to help save space, reduce costs, keep software up to date and provide users greater access

**Why choose ABB**
- Our extensive control system knowledge allows us to help customers:
  - Enable complete comprehensive testing before the heavy-duty work begins
  - Ensure more sophisticated professional training and practical experience
  - Manage costs of operations, energy consumption, green practices and process efficiencies
- We offer the most complete solution in the industry – supporting 800xA with AC800M and many legacy systems
- We have a global footprint with an installed base in 10 industries and 20 countries
- We offer a life cycle approach that supports product upgrades and provides access to product support services

**Services and support**
ABB supports customers throughout the complete plant life cycle. Our services include:
- Software agreements for updates and upgrades
- Service agreements for remote monitoring, maintenance and consulting
- Service desk support for tech issues
- Course for how to install and maintain software