Efficiencies in system integration and testing
Substation automation tools
Comprehensive and intuitive tools for substation automation
Ease of use

ABB substation automation tools is a suite of software solutions that enables simple and intuitive configuration, integration, testing and management of your multi-vendor, IEC 61850-based substation automation systems.

As today’s power networks grow in complexity, it has becoming significantly more difficult to design, implement and maintain your power systems. It is our aim at ABB to support the development and growth of your substation automation systems in a simple and intuitive way. Our solution is a suite of easy-to-handle software tools that facilitate efficiencies throughout the lifecycle of your systems.

The core of these products contain deep integration with the IEC 61850 standard - allowing engineers and integrators to define and configure substation automation systems in an intuitive and meaningful way. Re-using of engineered data between the tools is the base to achieve synergy benefits.

With over a thousand deployed substation automation systems worldwide, this tool suite reflects ABB’s long-term IEC 61850 expertise. ABB’s UCA International certified in-house System Verification Center continuously ensures that all our tools meet the challenging system performance and integration requirements of any system integrator.
Simplifying substation automation system engineering IET600

Integrated Engineering Tool IET600 provides a simple, flexible and consistent approach to substation automation system engineering. It enables engineers to design and configure the system-wide IEC 61850 communication dataflow between IEDs by featuring powerful graphical interfaces to design the substation topology and the physical communication infrastructure. The complete system is documented in an IEC 61850 standard-compliant and reusable SCD file, allowing an efficient and consistent multi-vendor system integration.

IET600’s combination of powerful engineering editors and built-in IEC 61850 intelligence allows engineers to easily and effectively integrate protection and control IEDs into a multi-vendor SA system. IET600 performs consistency checks, which reduces the amount of errors not only during the initial system engineering, but also subsequently during the integration, testing and commissioning phase.

Combined with the configuration of alarm and event signals for ABB’s MicroSCADA platform, IET600 ensures data consistency throughout the lifecycle of the substation automation system. The intuitive user interface allows engineers to effectively navigate through large amounts of data, to find exactly what they need.
PCM600 provides versatile functionalities for the entire life cycle of Relion® protection and control IED applications. This easy-to-handle tool helps you manage your protection and control equipment all the way from application and communication configuration to IED maintenance and service.

PCM600 interacts with IEDs over the fast and reliable TCP/IP protocol via a corporate LAN or WAN, or alternatively directly through the communication port at the front of the IED. It is able to read and write all configuration and setting data of an IED with a single command.

PCM600’s unique graphical application configuration concept enables configuration and monitoring of the complete IED application from input to output. The online monitoring allows an easy and fast testing of all protection and control functions.

The IEC 61850 standard-compliant PCM600 allows a seamless integration of Relion IEDs into any IEC 61850 system. PCM600 and Relion IED series are the perfect solution for any protection and control application.
Simplifying IEC 61850 diagnosis and application testing ITT600

Integrated Testing Tool ITT600 SA Explorer is designed for easy diagnosis and troubleshooting of IEC 61850 compliant substation automation systems and applications. Featuring convenient navigation, comprehensive presentation of application data and support for consistency checks, both on and off-line.

ITT600 facilitates the easy exploration of the IEC 61850 configuration in any protection and control IED, the visualization of GOOSE messages and the communication simulation of an IED. ITT600’s versatile functionality eliminates the need for multiple testing tools and helps engineers to isolate the root cause of system communication problems. This allows efficient diagnosis and troubleshooting of substation automation applications and therefore significantly reduces testing and commissioning time.

ITT600 SA Explorer makes IEC 61850 systems easy to use. By translating the complex terminology of communication protocols into the standardized IEC 61850 language, it makes the essential information available to all users, allowing anybody to use the same tool.