

TESTING SUBSTATION AUTOMATION SYSTEMS WITH StationScout

Greater efficiency during commissioning



The IEC 61850 station automation system (SAS) has become an essential part of substations. As a critical infrastructure feature it requires a steady stream of security patches and updates. Testing then has to be carried out in order to ensure that all of the devices and the system itself are still functioning as required.

OMICRON has developed the StationScout testing system specifically for this purpose. It dramatically simplifies and speeds up testing for automation and control technology in IEC 61850 substation automation systems. The software is easy to operate while the powerful MBX1 hardware provides a secure connection to the SAS and offers unrivaled insight into GOOSE and MMS communication. The Smart Overview Package, released in 2018, enables signals to be tracked in the SAS, and detects any

GOOSE publishing and subscribing problems. It also allows interlocks to be tested manually.

The new Commissioning package greatly simplifies the testing of a SAS. It scans the signal lists for all of the signals that are to be used in the SAS or the control center system, while also testing functionality and monitoring features. It also facilitates the documentation of all tests that were carried out and provides new overviews. Test plans that have been drawn up can be printed and reused when the test has to be repeated. Therefore, any tests that have already been carried out can be repeated quickly and easily. This saves a lot of time, especially when tests have to be performed frequently as a result of the numerous patches and updates being released.