Dear Reader,

We are pleased to announce the release of System Data Manager SDM600 1.1 Feature Pack 1 (FP1).

Modern utilities run a pair of vital networks - one delivering services to customers, the other monitoring and managing the first one. SDM600 monitors that second network; tracking protection relay software versions, collating disturbance reports, and helping to secure the network against attack.

Introduction
This new version, SDM600 1.1 Feature Pack 1 (FP1), is an add-on to SDM600 1.1. The Feature Pack release concept means incremental add-on releases and upgrades of SDM600 software between the main releases.

This document describes the new features, modifications and corrections made for SDM600 1.1 FP1. Note: SDM600 1.1 FP1 includes also previously released service packs for SDM600 1.1 (SP1 and SP2).

New Features

- Hot-Standby
  Two SDM600 1.1 FP1 systems can be paired to a Hot-Standby (HSB) configuration to provide higher availability. Disturbance recorder data, cyber security events, version information and user accounts are automatically synchronized between the two SDM600 in HSB mode.

- Digital certificate management
  New configuration user interface allows the end user to create digital certificates signed by SDM600 for any device and purpose. The root certificate and key length used by SDM600 to sign all subsequent certificates can be changed and replaced.

- Central user account management (CAM) configuration
  The CAM configuration has been extended with replication groups for ABB IEDs supporting this functionality. The CAM configurations for several IEDs can be easily exported into one common package. This configuration package can then be loaded to the IEDs using PCM600 2.7. The user management configuration has been extended to support private roles based on IEC 62351-8.
Improvements

- The SDM600 dashboard has been optimized to show more events on the screen.
- Security events created by SDM600 itself are shown independent of license options.
- Integration of SDM600 as a child system is now independent of license options.
- IED description is taken from SCD file
- Export / Import of cyber security mapping rules is working properly.
- Security event ID (number) is shown in security mapping target selection.
- Device information can be edited manually in the “Device Settings” configuration.
- Upgraded ABB Wavewin to version H.5

Technical requirements and supported products
SDM600 is a generic application that supports a wide range of IEDs and other devices for its provided functionality. However, it cannot be ensured that the full functionality can be supported for all IEDs. The supported protocols and functionality is described in the product factsheet.

Supported Operating Systems:

<table>
<thead>
<tr>
<th>Operating system</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Windows 7 Professional, Ultimate, Enterprise 32-bit or 64-bit</td>
<td>SP1</td>
</tr>
<tr>
<td>Microsoft Windows 8.1 Pro 32-bit or 64-bit</td>
<td>8.1</td>
</tr>
<tr>
<td>Microsoft Windows Server 2008</td>
<td>R2</td>
</tr>
<tr>
<td>Microsoft Windows Server 2012</td>
<td>R2</td>
</tr>
</tbody>
</table>
Limitations

- SDM600 stores its data in a Microsoft SQL Server 2012 Express. This variant of SQL Server has a limitation of 10GB per database (dedicated databases for DR and security events are used). In case more than 10 GB of storage is required, the SQL Server needs to be upgraded to another edition (e.g. Standard). This requires a product key purchased from a local Microsoft distributor.
- SDM600 1.1 FP1 release supports only 1 IP network for IEC 62351-8 based IEDs.
- Disturbance Recorder files with same names and file dates are not uploaded, even if the files are different (rollover of file name at the same day).
- When re-establishing Hot-Standby from a Hot-Hot situation, one of the systems need to be rebooted in case a user was logged-in in both hot systems.
- It might happen that not all SDM600 services can be started after installation. It has been observed that sometimes the World “Wide Web Publishing Service” needs to be started manually, even though it is configured to start automatically.

Ordering and delivery information

The SDM600 software can be ordered from Substation Automation Products, Vaasa, Finland. More information will be provided by the responsible sales manager (see link) or your local ABB sales representative.

All existing licenses will remain valid for SDM600 FP1. In case a present system shall include the new Hot Standby Feature, a new license is required.

Documentation

Following documentation is updated and available for download:

- SDM600 installation guide
- SDM600 cyber security deployment guide
- SDM600 user manual
- SDM600 release notes
Installation
SDM600 is a web based client / server system. SDM600 will be installed on a computer that can communicate with the supervised IEDs or devices. The user interface of SDM600 is web-based and can be used from any supported web browser. The installation is described in the SDM600 installation guide. SDM600 requires a license key to function during start-up and runtime.

When installing a new SDM600 1.1 FP1 system it is not required to install SDM600 1.1 beforehand. Upgrading to SDM600 1.1 FP1 is performed by installing FP1 on an existing SDM600 1.1 system (including SP1 or SP2). Before upgrading an existing system to FP1, it is best practice and highly recommended to create a SDM600 backup first. A computer restart is requested after the installation has been completed. It is advisable to perform the restart to ensure system stability.

All exiting data will be automatically migrated, however due to new hashing algorithms used for certificate generation, all previously generated digital certificates (including CAM configurations) need to be re-created and re-loaded to the respective devices.

All existing Parent-Child relationships need to be re-established. Delete all Child systems on the parent (no data will be lost, since everything is stored also in the child systems).

First upgrade the Parent SDM600 to FP1, then update all Child systems to FP1 and finally reconnect the child systems to the Parent SDM600.

Yours faithfully,

Michael Obrist,
Product Manager, SDM600
Substation Automation Products