SCADAvantage™
Version 5.6.0
Product Update
SCADAvantage™
Version 5.6.0
Product Update
NOTICE

This document contains information about one or more ABB products and may include a description of or a reference to one or more standards that may be generally relevant to the ABB products. The presence of any such description of a standard or reference to a standard is not a representation that all of the ABB products referenced in this document support all of the features of the described or referenced standard. In order to determine the specific features supported by a particular ABB product, the reader should consult the product specifications for the particular ABB product.

ABB may have one or more patents or pending patent applications protecting the intellectual property in the ABB products described in this document.

The information in this document is subject to change without notice and should not be construed as a commitment by ABB. ABB assumes no responsibility for any errors that may appear in this document.

In no event shall ABB be liable for direct, indirect, special, incidental or consequential damages of any nature or kind arising from the use of this document, nor shall ABB be liable for incidental or consequential damages arising from use of any software or hardware described in this document.

This document and parts thereof must not be reproduced or copied without written permission from ABB, and the contents thereof must not be imparted to a third party nor used for any unauthorized purpose.

This product is designed to be connected to and to communicate information and data via a network interface. It is the reader’s sole responsibility to provide and continuously ensure a secure connection between the product and the reader’s network or any other network (as the case may be). The reader shall establish and maintain any appropriate measures (such as but not limited to the installation of firewalls, application of authentication measures, encryption of data, installation of anti-virus programs, etc.) to protect the product, the network, its system and the interface against any kind of security breaches, unauthorized access, interference, intrusion, leakage and/or theft of data or information.

ABB is not liable for damages and/or losses related to such security breaches, any unauthorized access, interference, intrusion, leakage and/or theft of data or information.

The software or hardware described in this document is furnished under a license and may be used, copied, or disclosed only in accordance with the terms of such license.

TRADEMARKS

All rights to copyrights, registered trademarks, and trademarks reside with their respective owners.

Copyright © 2017 by ABB. All Rights Reserved.

Release: January 2017
Document number: 3CCA003325
SCADAvantage 5.6.0

SCADAvantage 5.6.0 is now released for sale. SCADAvantage is the Oil and Gas Business Unit Upstream and Midstream SCADA software package to enable safe control and optimized operations for Onshore and Offshore Upstream assets, Gathering networks, Transmission Pipelines, Product Distribution Pipelines and Local Gas Distribution networks.

Products Concerned

SCADAvantage™ HMI 5.6.0
SCADAvantage™ Host 5.6.0
SCADAvantage™ Enterprise 5.6.0

Release Description

SCADAvantage™ 5.6.0 contains the following new features, updates and supported technology.

With this version, there are three (3) new editions available as bundled packages; SCADAvantage™ HMI, SCADAvantage™ Host and SCADAvantage™ Enterprise.

**SCADAvantage™ HMI**, contains the following bundled features
- SCADAvantage Primary Server
- SCADAvantage Primary Tags - 1000
- SCADAvantage Reporting System
- One Real-time Protocol

**SCADAvantage™ Host**, contains the following bundled features
- SCADAvantage Primary Server
- SCADAvantage Primary Tags - 10000
- SCADAvantage Reporting System
- One Real-time Protocol

**SCADAvantage™ Enterprise**, contains the following bundled features
- SCADAvantage Primary Server
- SCADAvantage Redundant Server
- Disaster Recovery Services
- SCADAvantage Primary Tags - 10000
- SCADAvantage Redundant Tags - 10000
- SCADAvantage Reporting System
- One Real-time Protocol

Both SCADAvantage™ Host and SCADAvantage™ Enterprise can be expanded as the pricing catalog and pricing guidelines.

New Functionality

1. Cyber Security hardening of all SCADAvantage editions which includes;
• All authentication with the real-time database is now encrypted. All communication is obfuscated

• A new security audit log tracks all security related actions within the real-time database including changes to security and user account settings, success, failed and rejected connection and login attempts, SQL DDL and failed SQL statements

• The new Global Security Settings provides an easy way to view and enforce overall security within the real-time database

• The new IP Whitelisting allows easy discovery, then enforcement of which network devices or computers are allowed to connect to the real-time database.

• The new Workstation list allows easy discovery, then enforcement of which workstations can connect

• Separate process accounts are now used by each SCADAvantage system process, are configured separately from user accounts and can be disabled when not used

• All SCADAvantage applications are digitally signed to enable application whitelisting

• A new tool for configuring user permission to issue commands to Disaster Recovery system

2. Baseline Security Analyzer application to checks the security settings of the real-time database and flags various issues.

3. SCADAvantage Cyber Security Guide, includes best practices for hardening of the Microsoft Operating System and physical communication layer associated with SCADAvantage software

4. Simplified architecture with the Gas Metering (EFM and Real-time) application integrated into the Real-time Relational Database

5. Archiving support for Gas Metering with the Integrated Gas Metering application

6. Database connectivity with Web Services (OData) for both Real-time, Historical and Application data

7. Graphic User Interface display element - Quality Indicators. Including support for Quality Indicator Icons, Quality Indicator Groups and Quality Indicator Sets

8. Historical Playback allows operator HMI's to capture screen images and store them on a SCADAvantage server.

9. Support for Twilio SMS Web Service as a Call out/in method

Updated Features

1. Performance and security enhancement to the Excel Add-in

2. OPC UA support via Advosol Converter Servers

3. Performance improvements to gas metering history processing

4. Performance improvements of the HMI components, CBReportList, CBReportListInstance, CBCommSummary and CBImage

5. Functionality enhancements to the HMI component CBAlarmSummary to allow customizing the column heading appearance (visible, name, order and width) for each of the supported views, additional filtering options and ability to customize the right click menu items using code-behind

6. Updated Installation and Upgrade Guide

7. Various bug fixes, refer to the release notes for details
Supported Technology

- Microsoft Windows 10 Enterprise LTSB Update 1 (Version 1511 or 1607) – 64-bit only
- Microsoft Windows Server 2012 R2 and 2016
- Microsoft Visual Studio 2015 with Update 3
- Microsoft SQL Server 2014 SP2 and 2016 Standard Edition – 64-bit only
- Microsoft Office 2016 - 32-bit and 64-bit
- Microsoft Internet Explorer 11

Version Notes:

1. Visual Basic HMI's are not supported in version 5.6. Visual Basic was replaced with Visual Studio .Net. HMI migration must be done before upgrading to version 5.6.
2. Multiple HMI's sharing login credentials is not supported in version 5.6 due to Cybersecurity hardening.
3. Multiple HMI's using variables to share information is not support in version 5.6 due to Cybersecurity hardening.
4. The I/O List Export feature has been removed from this version. The I/O List Export add-in is a customer specific solution. It requires a specific set of BOT variables, components and templates which are not shipped with the product. The source code is provided under %svhome%/Media\SampleCode\SVIOList for those customers who wish to continue using this functionality and/or improve/customize the original implementation.
5. The HMI component CBPipeSegment HMI has been removed from this version.
6. Deploying HMI's using CAM has been removed from this version due to Cybersecurity hardening. A simple alternative is a self-updating script that copies newer files from a network share to each HMI client. An example script autoUpdateHMI.ps1 is provided and located in the %svhome%/custom/bin folder. Modify variables to indicate your HMI application name and network share for deployment to automate the process of updating HMI applications on client desktops.

Reference Documents

SCADAvantage 5.6.0 Release Notes – 3CCA003324
SCADAvantage 2017 Pricing Catalog
SCADAvantage 2017 Pricing Guide

How to Order

Contact Product Management and TechSalesSupport at SCADAvantage.info@abb.com or your local ABB representative for ordering and technical sales support.

SCADAvantage license pricing is available in the SCADAvantage Pricing Catalog. Refer to the SCADAvantage Pricing Guide to determine the licenses for your system and functionality.