InteliSCADA

Monitoring tool for ComAp devices

SW version 2.7.0

New Features List

1 General information

This version contains support of a new product and several bug fixes.

1.1 Clarification of Notation

Note: *This type of paragraph calls the reader's attention to a notice or related theme.*

IMPORTANT: This type of paragraph highlights a procedure, adjustment etc., which can cause a damage or improper function of the equipment if not performed correctly and may not be clear at first sight.

WARNING: This type of paragraph highlights a procedure, adjustment etc., which can cause a damage or improper function of the equipment if not performed correctly and may not be clear at first sight.

Example: This type of paragraph contains information that is used to illustrate how a specific function works.

2 Changes in the version 2.7.0

> **IMPORTANT: When using version 2.1 or older, please update to version 2.5 before installing version 2.7. This ensures a smooth upgrade and a problem-free migration of your valuable data**

2.1 New features

> Support of new devices and applications

>> Support of InteliGen 1000 Marine - Applications:

- AC Gen
- AC/DC
- DC/AC
- DC/DC

>> Support of InteliMains 1010 Marine - Applications:

- AC Shore
- AC BTB
- DC Shore
- DC BTB
- DC Microgrid

>> Support of InteliSys 2000 - Applications:

- SPtM
- MINT
- SPI

>> Support of InteliNeo 530 BESS - MINT

>> Support of InteliNano AMF 5 - AMF

> Communication Loss Detection

>> The InteliSCADA application now supports Heartbeat (periodic signal indicating normal operation) for devices that support it (IG1000 Marine, IM1010 Marine)

>> The user can now set a terminal heartbeat ID in the Runtime Application -> Settings -> Settings, which is used to identify the terminal sending the heartbeat in a device

>> The indication of communication loss with a device has been enhanced by additional visual clue which is a red toast, blinking connection status icon, and also an alarm to notify the user and ensure a prompt response

> *Note: The alarm is turned on by default, but it is possible to turn off in the Add/Edit Site dialog by checking the "Audible Warnings" checkbox*

> Editor

>> Added new images to the gallery (e.g. centrifugal ventilator, new Battery/BESS icons, 2-way valves (electric, pneumatic, motor))

>> Advanced Trend and Trend - The newest value is now represented by a dot at the of the line

- » BESS Instrument
  - Has been renamed to ESS (Energy Storage System)
  - Has a new property **Type** (Battery or BESS), which serves the purpose of changing the icon of the actual instrument and loading of the corresponding data points according to the type of the device

    Note: All BESS instruments used with INeo 5500 and 6000 were migrated to the ESS with Type set to BESS(out left). ***Be sure to check the INeo 5500 and 6000 templates and their corresponding user screens to ensure everything is correct. If necessary, change the ESS type to BESS (out right).***

  - » Line and Busbar Instruments - Have new properties **Line Style** and **Line Cap** which serve the purpose of changing how the lines are rendered
  - » Rectangle - Has a new property **Line Style**
  - » Text and Markdown Text Instruments - The user can edit the text inside by double clicking the body of the instrument in canvas
  - » The color picker's preset colors were updated to align with ComAp standard color scheme
- Added support for setting of Timer setpoints
- Technical Changes
  - » Any open connections for the active site are now closed when leaving the site (Previously, there was a delay before closing the connections)
  - » Installer optimizations - Improved startup time and logs
  - » Windows 11 supported

2.2 Repairs

- Fixed an issue where screen was not saved during the data points import
- Fixed an issue where connection was kept when valid access code has been changed to an invalid one
- Fixed an issue where the calendar icon was too dark when editing the **Date** setpoint
- Fixed an issue where deviator's base value was not changed after changing the device
- Fixed an issue where data points did not react to language change after specific bulk change actions
- Fixed an issue where animations were not synchronized
- Fixed an issue where application mode could not be switched when the Setpoints window was closed in an inopportune moment
- Fixed an issue where bars created within Deviator failed to be removed alongside the deletion of their associated device
- Fixed an issue where it was not possible to add bars to copied Deviator
- Advanced Trend:
  - » Fixed an issue where data appeared sparse
  - » Fixed an issue where first value to show was defined by the Sample Period (now it is shown immediately)
  - » Fixed an issue where one disconnected device caused the whole instrument to stop showing other trend lines
  - » Fixed issues where manipulating a Trend Source did not correctly reflect in the Trend Series
  - » Removed the link property because it overlapped with any other clickable elements of the instrument

3 Changes in the version 2.6.0

IMPORTANT: When using version 2.1 or older, please update to version 2.5 before installing version 2.6. This ensures a smooth upgrade and a problem-free migration of your valuable data

3.1 New features

- Access Lock
  - Unlock Request - Prepared for upcoming devices
  - Lock Owner ID - Prepared for upcoming devices
  - Audible Warning - An acoustic signal notifies users when the administrator unlocks a device locked by the current user
- Instruments
  - Multi Alarm List
    - Alarms are sorted by urgency and time (previously only by time). They are grouped by protection level in following order: Level2 (Shutdown), Level3 (Sensor Fail), Level1 (Warning), NoLevel (Others), ECU
    - Alarm Confirmation
      - There is no longer a limit on the number of alarms that can be confirmed
      - Only the unconfirmed alarms are displayed in the modal confirmation window
  - Shore Connector - Prepared for upcoming devices
- Setpoints - The editable text or numeric value is now preselected for user convenience
- Sites
  - Automatic Log Out - Added option to disable and configure an automatic user session termination based on user inactivity
- Performance and stability improvements
- InteliNeo Templates - PVCB Breaker visibility now also reflects the new "PVCB not installed" option

3.2 Repairs

- Fixed an issue where user would log out after refreshing a site
- Fixed an issue where wrong log in attempts would result in log in action being stuck without any result
- Fixed an issue where History incompatibility on devices with older firmware would cause an inability to connect to the device.
- Fixed an issue where the Fault/Horn Reset buttons would incorrectly indicate as unlocked, although the user's access rights were insufficient, and couldn't operate them.
- Fixed an issue where long image names in the "Image Gallery" would cause graphical issues
- Fixed an issue where the connection state for devices would get incorrectly evaluated.
- Fixed a potential security risk
- Server and database error messages were revised to more accurately describe the problem

4 Changes in the version 2.5.1

4.1 Repairs

> Missing device in Alarm List caused a migration fail and a data version mismatch after installing InteliSCADA 2.5.0

5 Changes in the version 2.5.0

5.1 New features

- Support of new devices and applications
  - Support of InteliMains 1010SC - MC, BTB
  - Support of InteliGen 1000SC - MINT
- Editor
  - Bulk change
    - If you select more instruments of the same type, it is possible to make bulk changes to all of their specific properties
    - Valid for all instruments
  - Clone Auto-screen
    - Editing clone of Auto-screen and setting it as *home screen* is possible.

      Note: *Data Points need to be imported from all the devices on the site for templates to work correctly on the cloned auto-screen*

  - In Screen Properties is option to hide Auto-screen
  - Image Gallery
    - Image Gallery - added new images (US breakers, animated pumps, propeller, cooler)
    - Shore connector - replaced image
  - Search function is added to the Data Point Selection dialog
  - Screens order - drag and drop can be used to move up or down
- Instruments
  - Converter / Inverter - prepared for upcoming controller
  - "Indicate Invalid Data as Error" - a new instrument property allows to show or hide invalid data indication
  - Alarm List and Multi Alarm List - new Horn Reset and Fault Reset properties are now a part of both of them
- Advanced Trend
  - Multiple trend series in one graph are supported
  - It is possible to add a new trend source using "+" in the Advanced Trend properties (in the *Add Trend Series* window)
  - Show Time Range checkbox to show or hide the Time range option in Runtime
  - Extended retention from 1 to 24 months. To keep the optimal performance a longer sampling period is needed for longer retention
  - Advanced Trend - It is now possible to change font size for specific parts of the instrument:
    - Legend
    - Header
    - Axes

- Others
  - New label in site list Runtime/Designer "Last Used" at site indicating the last visited site
  - Button "Last Used Screen" in the toolbar Runtime/Designer used for navigating to the last visited screen
  - Site list order - (Runtime, Designer) - the last added site is ranked first
  - Preview restriction frequency - 15 minutes interval increased to 60 minutes
  - Default templates for Auto-screen - small adjustments (color, position)
  - Uninstall old MongoDB during InteliSCADA installation - old version of the database and backups are deleted to save space on disk
  - InteliSCADA doesn't try to reconnect to controller when invalid credentials are entered

5.2 Repairs

- The selected language was not saved after display restart
- Newly added Trend sources were not displayed in Advanced Trend unless refreshed
- Access lock indication in Toolbar - locked by me (red indication) had lower priority than locked by someone else (blue indication), newly reversed
- Synchroscope did not save configured data points when changing connection between the same device (Ethernet - AirGate)
- InteliMains 210 G2 - changing the Time and Date setpoints was not displayed in history.
- Access limited indication for instruments - if the user doesn't have sufficient access rights (e.g. to edit setpoint or run commands)
- InteliNeo 5500, 6000 Auto-screen templates - Bargraph scale limits changed
- Analog Meter needle and warning limit color sections were not displayed after an invalid value
- InteliMains 1010 displayed erroneous ECU alarms on the default template
- Data Points Selection - sometimes, it was not possible to close dropdown menu for binary data points (e.g. Binary Inputs)
- Bar Graph / Deviator - horizontal scrollbar was displayed in Instrument Properties
- In a special case the "NoUnreadHistoryRecords" message was displayed for IS-GSC

6 Changes in the version 2.4.0

6.1 New features

- Support of new devices and applications
  - InteliMains 210 G2 – MCB, MGCB, BTB applications
  - InteliMains 510 – MCB, MGCB, BTB applications
  - InteliNeo 5500 – MPtM, MINT applications
  - InteliNeo 6000 – MPtM, MINT applications
- Devices
  - Access lock – You can lock a device so only the user that locked it can control it (Only for devices that support it)
  - Device form – AirGate form improvements
    - Providing a 9-digit AirGate ID changes the AirGate server
    - AirGate key stays secure – behaves like a password
- Editor
  - Image Gallery
    - New images added (I/O, vertical breaker, AC/AC)
    - Tags renamed
  - Instrument properties – Upon inputting an incorrect number (over the maximum or under the minimum value), it will change the value to its respective maximum or minimum
  - It is possible to add instrument to canvas with double-click
  - Minimum screen height changed to 480px
  - Toolbar Height and Font-size is editable by clicking on the "SCADA Toolbar Area"
- Instruments
  - Deviator – New instrument
  - Bar Graph
    - Supports up to 32 bars
    - UI Changes – Bars management
  - Control Button – You can add a custom image to it
  - Data point selection
    - It is possible to use "Multiselect" while selecting data points. For more information regarding the topic, refer to the Global Guide (Only available for Bar Graph and Deviator)
- Technical Changes
  - History – optimization

6.2 Repairs

- Analog Meter and Synchroscope had graphical issues present while being under each other and the visibility function is used
- Busbar/Wire Junction – error state indication did not work

> Paste was available on the auto-screen

> Some modal windows that should've been scrollable, were not

> Sometimes it was not possible to change the application mode and then any other setpoint

> Synchroscope animation caused freezing and slow recovery when screen turned off due to power saving

> The "MongoDB Disconnected" notification was not shown correctly

> Time in History window was shown with regard to Local Time Zone which caused issues

7 Changes in the version 2.3.0

7.1 New features

- Licenses
  - 2 new Display license types
    - Display Pro (2 devices, 64 trends sources, 10 trends/screen, InteliGateway, synchroscope)
    - Display Pro+ (4 devices, 128 trends sources, 10 trends/screen, InteliGateway, synchroscope)

    Note: Added in license overview, license check, limitation and activation

  - Display license changed from "Display" to "Display Lite"
  - Trend sources limits changed
    - Pro: increased from 32 to 128
    - Pro+: increased from 32 to 256
- Runtime and Preview
  - Login to devices in Runtime, new dialog for logging in as another user and back as a default user

    Note: Autologout - when a non-default user is inactive for 10 minutes, the default user is logged in again instead

  - Toolbar - responsive (button description disappears on small screens to reduce space)
- Instruments
  - Synchroscope - **available only for InteliSCADA Display license types**
  - Instrument visibility based on a bit for each instrument
  - Text instrument - padding property
  - Trend instruments - the default left margin was increased
  - Instrument - context menu is available
  - BESS and PV instruments - ready for upcoming controllers
- Editor
  - Toolbar - buttons reduction (Edit group, Zoom group)
  - Canvas - context menu is available
  - Grid - custom density
  - Image Gallery
    - Delete image
    - Images added (Marine, flow arrows)
- Support of new devices and applications
  - InteliGen 500 G2 - SPtM, MINT applications
- Others
  - Device language selection - if a device does not know the selected language, the default one is used. The menu contains all languages available on devices of the given site.
  - Forgotten password reset - connection details of all devices will be removed, screens will be kept

- » Zoom
  - In canvas using mouse wheel + Ctrl key
  - Key shortcuts (Ctrl + 0 for 100%, Ctrl + 1 for Fit to Screen)
- » "Hidden Screen" property - defines if the screen is available in the Screens overview in Runtime
- » Login to devices using UID and pin, for devices that support it (e.g. InteliGen 1000)
- » Fullscreen – Accessible from the settings menu or by pressing the F11 shortcut
- » Runtime and Designer icons – different colors for easier identification

  Note: If the application icons were pinned (e.g. on the Windows taskbar), they need to be unpinned and re-pinned to display the new icons correctly

- Technical Changes
  - » Install package
    - Backup of sites from MongoDB
    - Uninstallation option removes all InteliSCADA data newly from MongoDB, optional backup of sites and logs

      Note: When updating from InteliSCADA 2.2.0.50 to 2.3.0, there is no need to check the installation of the MongoDB Community Server 5.0.8.0 component (if it has not been uninstalled)

  - » Data reading optimization for Display licenses
  - » Advanced Trend - optimization
  - » InteliSCADA service and MongoDB service recovery settings
  - » Export all - MongoDB logs were included
  - » About window - OS Image Version was added for Display Licenses

7.2 Repairs

- Data Row - it is possible to edit a setpoint even if the Editable checkbox was unchecked
- Busbar/Line - Shift + resize sometimes does not work
- If there are any not configured BINs on BIN input/output, the configured ones don't display values, but general errors
- Paste
  - » If no instrument is selected, 3 dots get stuck on the Paste icon
  - » Instrument pasted from another site redirects to the original link
  - » It seems to not work when the clipboard does not contain an instrument definition - a message is displayed now
- Logo
  - » Wrong logo in the upper left corner
  - » Missing icon for InteliSCADA in 'Programs and features'
- After restarting the InteliSCADA service (in special cases), the loading of the screen does not finish correctly

8 Changes in the version 2.2.0

8.1 New features

- Install package
  - License agreement update
  - MongoDB installation
  - Data migration from LiteDB to MongoDB
  - Backup of sites from MongoDB
- Licenses
  - InteliSCADA Display license support – new type of license for InteliVision 10Touch
    - Activation
    - Limitation (1 device, 150 data points/screen, 10 000 data points/site, 16 trends sources)
    - License Details overview
    - Data points/screen indication in Editor
  - License Check site attribute and over limit indications in Designer
- InteliSCADA Display – available only in InteliSCADA Display Runtime for InteliVision 10Touch
  - Opening the 1st site (or site list) after restarting the display
  - Devices tab in Runtime
  - Faster refresh data period
  - Sign out and Switch user menu items in Runtime (for system users)
- Runtime and Preview
  - List of screens in the Runtime toolbar
  - Import site in Runtime
  - Change password in Runtime
- Designer
  - Trends Sources panel to define the storage of data point values
  - new Advanced Trend instrument - linked to a Trend Source, which ensures data persistence
  - Text, Markdown Text instruments – Hide Scrollbars property
  - Scale property design change
- Support of new devices and applications
  - InteliGen 1000
    - SPtM, MINT applications
  - InteliMains 1010
    - MCB, MGCB, BTB applications
  - InteliATS 50, InteliATS 70
    - Mains-to-Mains, Mains-to-Generator applications
  - InteliGen4 200
    - SPtM, MINT applications

- » InteliGateways 100, 101, 300, 301
- › Others
  - » Sites ordering
  - » Remember password option in the Unlock dialog
  - » Action Confirmation site attribute and popup dialog
  - » About window – new information (Application, Database, Data version), License info only for Runtime
- › Technical changes
  - » LiteDB replaced by MongoDB
    - • refactoring, version check, DB issues notification, etc.
  - » Devices of the archive type are not encrypted

8.2 Repairs

- › Control Button - missing commands User button 1-5 for Inteli Lite 4 and InteliGen4 200
- › Link in the manual opened in InteliSCADA – not possible to go back to InteliSCADA
- › Device with invalid login data - error in disconnected status indication
- › Lost connection to the InteliSCADA server when refreshing a page or switching tabs in browser
- › Massive outage for 32 devices causes some devices not to connect again
- › Export history fails in some cases (null value or object reference is not set)
- › Multihistory consumes excessive amount of RAM if multiple controllers repeatedly reconnect
- › Incorrect Timer value format

9 Changes in the version 2.1.2

9.1 New features

- Support of InteliSys NTC BaseBox – Combi application

10 Changes in the version 2.1.1

10.1 New features

> Single bit data point support for InteliFieldbus Gateway and InteliGateway

10.2 Repairs

> InteliFieldbus Gateway and InteliGateway connection issue if any alarm list values are configured in the communication module.

> Editable Data Row – incorrect indication when access rights are insufficient.

> User relogging sometimes doesn't work correctly when switching sites using the same device(s) with different access levels.

11 Changes in the version 2.1.0

11.1 New features

- Editor

  - Grid on/off + density selection

  - Snap to grid

  - Screen Background Color property

  - Background and Border Color properties for Alarmlist, Multi Alarm List

  - Text Color property for Data Row, Bar Graph, Analog Meter, Trend, Alarm List, Multi Alarm List

  - Device bulk change

    - Now, the Device property is available when multiple instruments are selected, even if an instrument without the Device property (e.g. Text) is included. Using Ctrl + A or selecting the mouse area is thus more beneficial.

    - Number of selected instruments is displayed.

- Runtime and Preview

  - Setpoints window

- Support of new devices and applications

  - InteliFieldbus Gateway – available for the Pro and Pro+ license types

  - InteliGateway – available for the Pro and Pro+ license types

  - IGS-NT – PSC application

- Technical changes

  - Backups

    - Recommendation of regular backup of all sites

    - Site backup when closing it in Designer

    - Logs backup during installation

  - Performance optimization (e.g. History loading)

  - Low disk space notification

  - Imported site size limited to 100 MB

  - Custom image size reduced to 3 MB

11.2 Repairs

- Data Points Import – History Loading Failed issue for some controller types (IGS-NT family)

- Export History

  - Last line cut

  - Not complete when history cache is still being processed

- Data points of LED type are not available for default archives of some controller types (IL3 family)

- Control Button instrument – order of available commands in the list after site import

- Incorrect Data Row label in the Editor when Editable checked

- 2 modal dialogs – the bottom one is not visually suppressed
- Values window – optimization of requests
- Connection issues
  - After multiple attempts with wrong connection details
  - Lost connection to the InteliSCADA server in a specific case

12 Changes in the version 2.0.0

12.1 New features

> Editor

>> New "Text" instrument with format properties (Font Size, Text Color, Text Alignment, Font Style)

>> Original "Text" instrument was renamed to "Markdown Text"

>> Data Row instrument – new properties Font Size, Unit Space

>> Breaker instrument – new properties Active State Color, Inactive State Color. Updated indication of Synchronizing and Init state

>> Busbar and Junction instruments – possibility to control by a LED or a binary data point. For the binary data point option there are new properties available – Invert value, Active/Inactive State Color

> **IMPORTANT: Important: Reimport of data points is needed if you want to add/edit a Busbar or a Wire Junction in a site created in the previous version of InteliSCADA.**

>> Trend instrument – new properties Header, Header Background Color, Border Color, Background Color, Legend, Left Margin, Bottom Margin, Font Size. Other small changes to save space (e.g. 1 line legend).

>> Background and Border Color properties for more instruments (Analog Meter, Bar Graph, IFrame, Image)

>> Font Size property for Mode Selector and Control Button

>> Instruments panel – sorted alphabetically

>> Image Gallery – images added (e.g. vertical variants), tags updated

>> Data Point Selection – "Invisible" groups included

>> The smallest allowed size of some instruments was decreased

> Support of new controllers and applications

>> InteliSys NTC BaseBox GeCon Marine – SPTM, MINT, SPI

>> InteliSys NTC BaseBox GeCon LandBased – SPTM, MINT, SPI

>> InteliGen NTC/NT BaseBox GeCon Marine – SPTM, MINT, SPI

>> InteliGen NTC/NT BaseBox GeCon LandBased – SPTM, MINT, SPI

> Technical improvements

>> Performance optimization – data refresh period, history loading and scrolling, Analog Meter rendering, RAM, Multi Alarm List, Editor/Preview switching,

>> Licenses – new HW ID format

>> More info in the log files – HW info, application version

12.2 Repairs

> Force Values indication

> ECU Alarm List sums in Preview

> Mode Selector, Control Button: font size in Editor vs. Preview

13 Notes

13.1 Document history

Revision number	Related sw version	Date	Author
11	2.7.0	15.3.2024	Jakub Kutka
10	2.6.0	7.12.2023	Jakub Kutka
9	2.5.1	11.10.2023	Jakub Kutka
8	2.5.0	21.8.2023	Kristýna Urbanová
7	2.4.0	20.2.2023	Jakub Kutka
6	2.3.0	2.1.2023	Dana Salingerová
5	2.2.0	13.7.2022	Dana Salingerová
4	2.1.2	28.2.2022	Dana Salingerová
3	2.1.1	13.12.2021	Dana Salingerová
2	2.1.0	10.11.2021	Dana Salingerová
1	2.0.0	18.6.2021	Dana Salingerová