

## Tech Note 200401\_01

**Date:** April 1, 2020  
**Product:** Aperio Platform  
**Subject:** Essentials Software Release 3.5.7 and Firmware Release 3.5.0  
**Note:** To download these releases visit our website at <http://brtint.com/downloads.html>

Essentials: 3.5.7 Release:  
Bugfixes:

- Fixes a performance issue when loading large files with more than 1K Channels.

Essentials: 3.5.0 Release:  
Features:

- Station button status: The status of the station indicators is now visible on the station graphics themselves when connected to a system. Requirements are a control module running firmware greater than 3.1.7 and CTS V2.
- The Help files have been revised to match the GUI updates of the release with new images and naming conventions.
- The Tools menu now provides an item to contact Blue Ridge Tech Support. It will automatically compose an email to Blue Ridge Tech Support and simultaneously create and place on the Desktop a .zip file comprised of BRTE.log files and the current system file. The email provides guidance for where to find the .zip file and how to attach it.
- AKA Name: Essentials now uses a standard naming convention with an immutable label for all Input and Output types. Standardization makes it easier for parties to converse about a given IO item. Furthermore, Essentials now has a second field "AKA Name" for those customers who would like an additional identifier in addition to the fixed name. Customers upgrading systems who have made no modifications from the previous default IO names will be migrated to this new scheme when upgrading. Those who have made modifications will have those custom names preserved in the new AKA Name field.
- BACnet Tab: There is a new third tab in the left navigation panel that displays an up-to-date read-only sorted summary of the totality of the exposed BACnet points for a given system.
- BACnet points: Essentials now exposes several BACnet points by default at the Channel and Zone levels.  
Specifically:
  - Channel:
    - AV: Channel Level Pct
    - BV: Channel Status
  - Zone:
    - BV: Zone Run Command
- Do Not Contact preference for a Control Module: Essentials gains a toggle-able button to the left of a Control Module in the physical tree that determines whether Essentials will attempt to communicate with it when a communication channel is open. This is useful when the Control Module in a system is not yet physically present or is purposefully turned off. To toggle connectivity for an entire MSTP subnet, a right-click context menu on the Physical tree at the router level is available.

- Essentials now re-opens the last open file at startup.
- The GUI for Channels has been reworked to better apportion screen real estate. The order of the sub-panels is now (from top to bottom) Inputs, Outputs, and Sequence Logic.
- On both the Logical and Physical Trees, many elements have been resized to allow better visibility of labels and more economical use of onscreen real estate.
- There is a new type of channel, Shade Control, available when using a TS02 module.
- When viewing I/O Modules:
  - 1) All sub-panels are expanded by default.
  - 2) The module's firmware version is displayed in addition to Serial ID.
  - 3) I/O Modules may now select from the entire legal address range [1-32] regardless of the total quantity allowed by its Control Module. As before, no address duplicates are allowed. The no-duplicates rule is enforced by the dropdown list. Overall quantity limits are enforced the same as before.
- When viewing Control Modules:
  - 1) The detail panel now displays the Serial ID for those Control Modules that shipped with a set ID.
  - 2) All sub-panels (General Settings, BACnet Settings, CANbus Diagnostics) are expanded by default.
  - 3) In the control module model type combo box, the "Show legacy" check-box setting is per-control module and unselected by default. Previously it had been a system-wide persisted-across-runs-of-Essentials setting.
  - 4) In BACnet Settings, the max masters default has changed to 127 to avoid potentially segmented MSTP nets. Further performance tuning is the responsibility of the operator.

### Firmware Release 3.5.0:

#### Features:

- Support for a new IO Module, TS02, with a new type of output, the TRI-STATE-OUTPUT (TSO).
- Support for a new type of Channel: The Shade Control Channel. It uses TSOs as outputs and Raise/Lower Station columns as inputs. It reacts exclusively to the RL input events.
- The former Channel has now been retitled 'Lighting Control Channel' for clarity.
- Shade Control Channels estimate of the Shade's position based on cycle time. This is displayed in Essentials.
- Send Settings is much faster, more robust.
- Control modules re-read their own address every 45 seconds. If rotaries have been changed since last read, the module updates its MAC address, BACnet device ObjID, & name string.
- Support for Control Module Serial IDs with pre-pended born-on date-stamp.
- Ability to display the commanded-to state (i.e. indicator value) of all station buttons in Essentials.
- Stations now display their FW version and SerialID in Essentials owing to firmware improvements.

#### Bugfixes:

- Default MSTP max masters now defaults to the maximum max masters value of 127. This ensures that without further configuration the control module will find any other legal master on the MSTP segment. The tradeoff is that the token ring network might have some additional lag time due to its obligation to poll-for-master through the entire (often empty) address range. Operator intervention is required for performance tuning.
- Raise & Lower buttons now work when an RL Station's On/Off button had been locked out while ON in a given occupancy mode or due to a maintained input as lock
- USB connections can be re-established after Control Module is rebooted without needing to disconnect and re-connect one end of the cable.