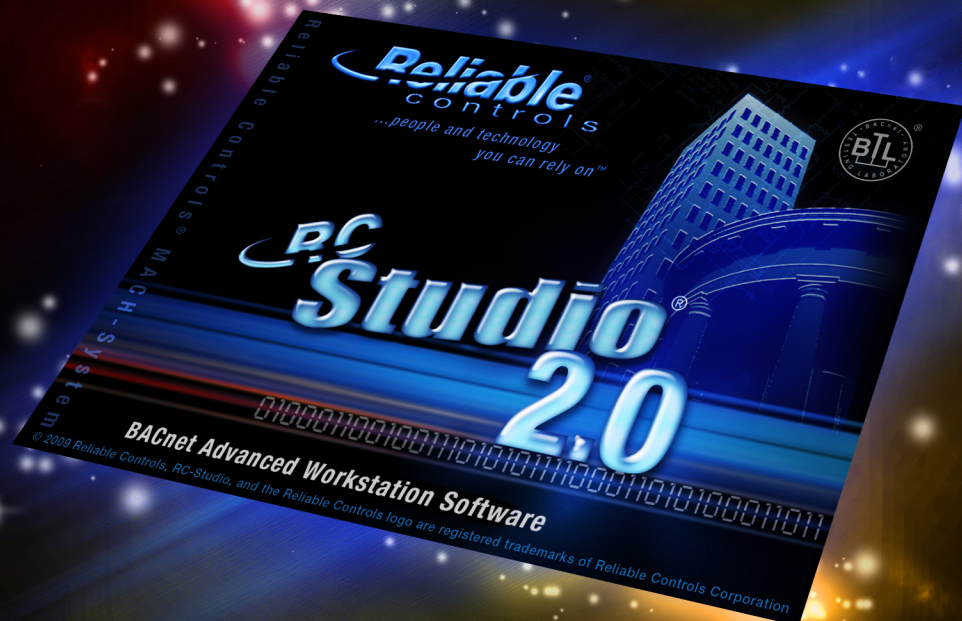




Powerful creative freedom

Recognized as the ultimate all-in-one
BACnet Advanced Workstation (B-AWS),
RC-Studio® 2.0 from Reliable Controls®
provides outstanding functionality, value,
and ease of programming.



Better by design

TECH SPECS

Recommended Workstation Requirements

- Intel P4, 2.4 GHz PC
- 3 GB hard disk space
- CD-ROM drive
- 1 GB RAM
- SVGA monitor
- (greater than 1024 x 768 resolution)
- EIA-232 com port
- (for direct communication)
- Network Interface Card (NIC) for Ethernet communications
- Modern 32- or 64-bit Microsoft operating system
- (Windows XP, 7, 8 or Windows Server 2003, 2008 R2, 2012)

FEATURES

Freedom to Program

- Automatic BACnet discovery
- Drag and drop BACnet objects
- Full priority array control
- Intuitive database worksheets
- Cut and paste program code

Full-Featured Programmability

- Inputs, Outputs, Variables
- Schedule, Calendar
- Runtime Logs, Trend Logs
- Control-BASIC Editor for program coding
- System Group Editor for annotation and linking professional-looking graphics
- Alarm programming with priorities

Simulator

- Program an entire system offline using the simulator
- Programs can be written completely offline without the need of controller hardware

Graphic Support

- Supports BMP, GIF, TIFF, JPG, EMF, PNG, SWF, and DIB
- Flash animation graphics
- Supports VGA/SVGA/ULTRAVGA resolutions
- Hyperlink support to URLs

Network Management

- Alarm monitoring and annunciation to screen, email, and printer
- Wildcard searching and report generating
- Automated network backup

Certification

- BTL Listed (B-AWS)*

*Certification applies to Software Version 2.0
Update 1.76 or greater

ORDERING

RC-ST2-1

- Single user license

RC-ST2-5

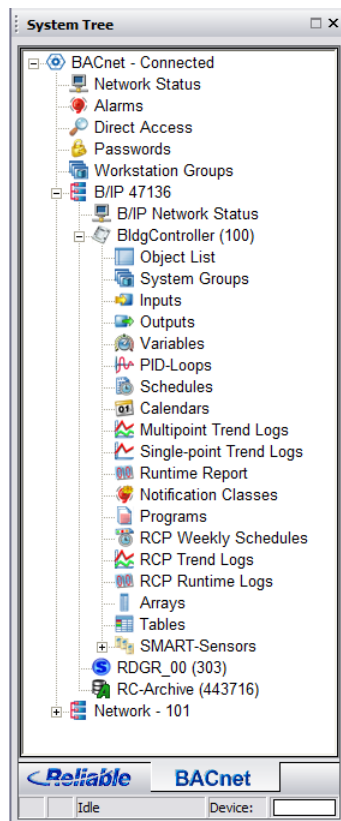
- Five user license

RC-ST2-A

- Additional user license

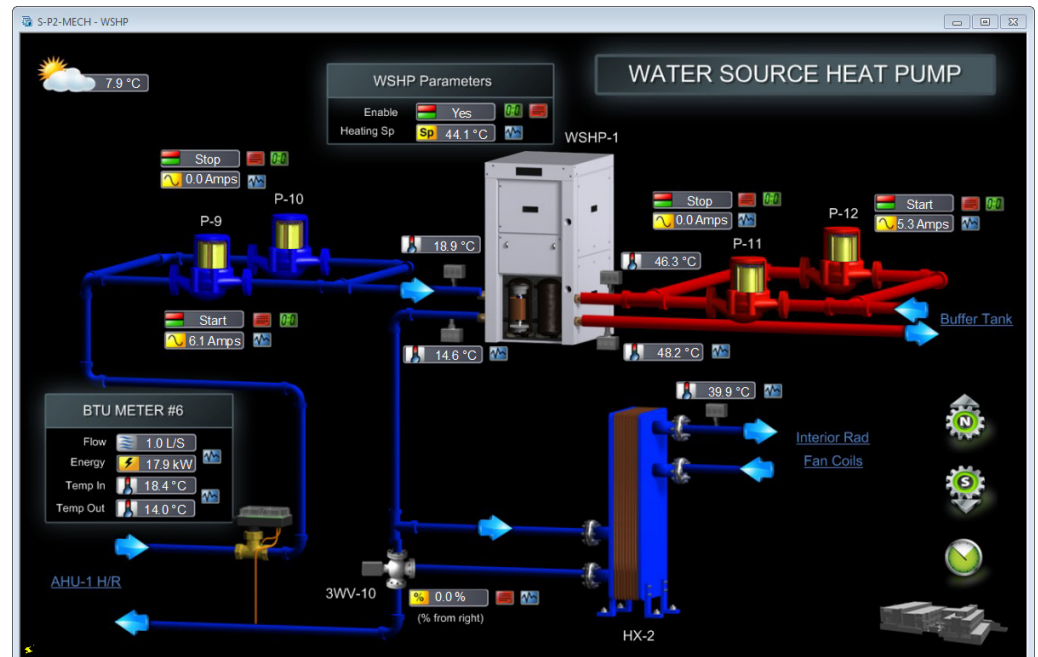
RC-ST2-M

- RC-Studio 2.0 Software Manual

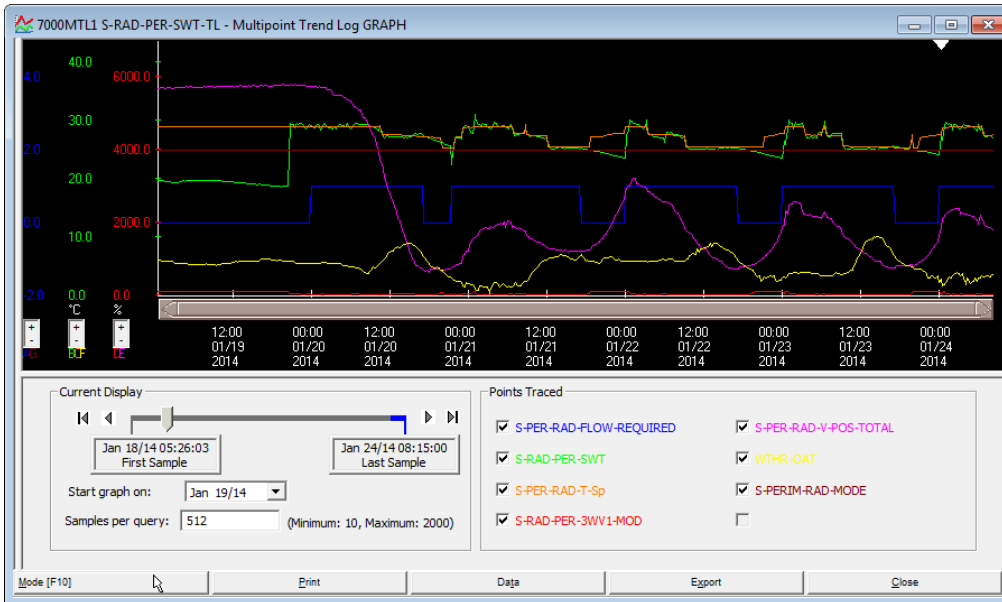


System Tree

SCREEN CAPTURES



System Group graphic drawn using GrafXSet 2.0 Image Library



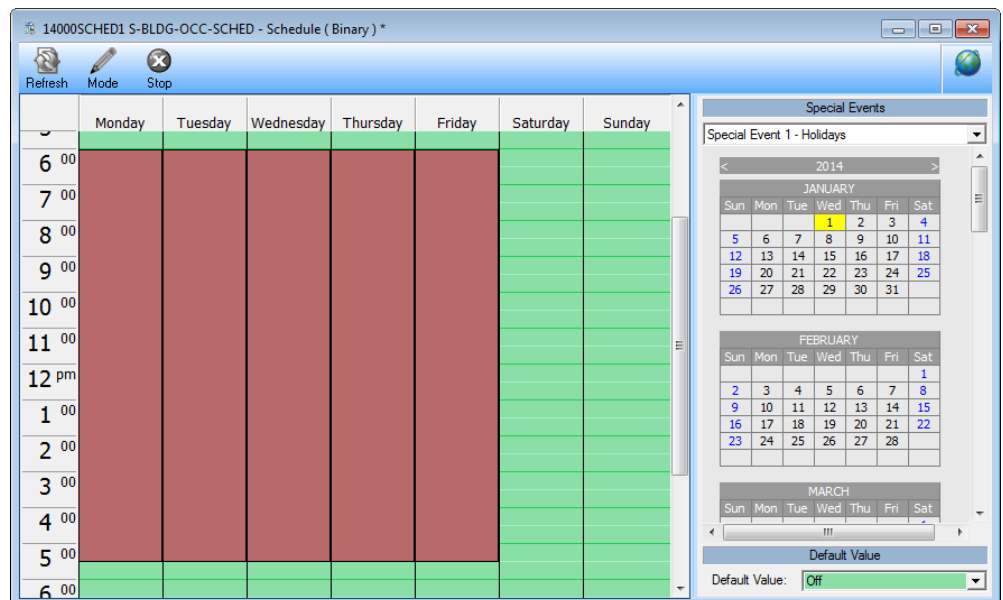
Trend Log

Object Name	Value	Unit	Object
PH1 PERIM RAD	Operational		227001DEV227001
Fault code	0.00		227001A0
Warning code	0.00		227001A1
Time to bearing service	24.00		227001A2
Capacity	0.00	%	227001A3
Head	0.00		227001A4
Flow	0.00	CMH	227001A5
Relative performance	0.00	%	227001A6
Speed	0.00		227001A7
Frequency	0.00		227001A8
Actual setpoint	3.84	%	227001A9
Motor current	0.00	Amps	227001A10
DC link voltage	290.00	Volts	227001A11
Motor voltage	0.00	Volts	227001A12
Power	0.00	Watts	227001A13
Remote low	0.00	CMH	227001A14
Inlet pressure	0.00		227001A15
Remote pressure	0.00		227001A16
Level	0.00		227001A17
Power electronic temperature	30.00	°C	227001A18
Motor temperature	0.00	°C	227001A19
Remote temperature	0.00	°C	227001A20
Fluid temperature	0.00	°C	227001A22
Auxiliary sensor input	0.00	%	227001A25
Runtime	2954.00	Hours	227001A27
Total online	12234.00	Hours	227001A28
Torque	0.00		227001A29
Energy consumption	882.00	kWh	227001A30
Number of starts	172.00		227001A31
User setpoint	0.00	%	227001A56
Minimum of feedback sensor	0.00		227001A85
Minimum of feedback sensor	0.00		227001A88
Set setpoint	0.00	%	227001A00

Device Object List

```
7000PRG27 S-2P-MECH - S-BOILER-BOOST-PRG *
10 REM *** Backup system to inject heat when WSHP and ASHP cannot, RLS, Oct 10, 2012
20 REM *** Last modified Jan 18, 2013, RLS
30 REM *** When the buffer tank needs heat, the priority is WSHP, then ASHP, then Boiler, in that order
40 REM *** There are 3 valves involved with heat injection
50 REM *** No heat injection from boilers:                2WV2 = 0%   3WV4 = 100%   3WV6 = 100%
60 REM *** Heat injection to TV HX-1, but not to buffer tank:  2WV2 = 0%   3WV4 = 0%   3WV6 = 0%
70 REM *** Heat injection to TV HX-1 and also heat buffer tank: 2WV2 = 100% 3WV4 = 0%   3WV6 = 100%
80 REM *** Heat injection must be disabled during the cooling and shoulder seasons
81 A = SWITCH( A, WTHR-OAT, 5, 3 )
90 IF A AND ( {6000}S-HVAC-MODE-NORTH = 2 OR {6000}S-HVAC-MODE-SOUTH = 2 ) THEN GOTO 100 ELSE GOTO 160
100 REM *** The following code will automatically inject heat if the buffer tank temperature falls below setpoint
110 {7000}S-BOILER-INJ-Sp = S-BUFFER-TK-HTG-Sp - 8
120 S-BUFF-3WV4-MOD = S-BOILER-TV-INJ--PID
130 S-BUFF-2WV2-MOD = 100 - S-BOILER-TV-INJ--PID
140 S-BUFF-3WV6-MOD = 100
150 GOTO 190
160 REM *** Building not in heating mode
170 S-BUFF-3WV4-MOD = 100
180 S-BUFF-2WV2-MOD = 0
190 S-BUFF-3WV6-MOD = 100
200 END
```

Program Code



Schedule