

# TALON View Workstation



Figure 1. TALON View Main Menu.

## Description

The TALON® View software transforms a personal computer into a powerful and economical TALON View workstation.

A TALON View workstation provides an easy-to-use interface to manage and control a building with a true multi-tasking operating environment that gives the workstation the ability to efficiently perform many tasks simultaneously. The TALON software, combined with the multi-tasking environment of Windows Server 2003/2008 or Windows XP/Vista, provides ease-of-use, power, connectivity, and manageability.

With the TALON View workstation the user can:

- Graphically monitor and control the facility environment.
- Schedule and modify mechanical equipment operations.
- Run reports on various system conditions.
- Collect and view trend information.
- Expand the workstation capabilities whenever needed with an expandable feature set.
- Connect other TALON workstations together, with centralized system management, using standard networking features.

## Purpose

The TALON View software provides the latest in user interface design. The user interface is designed to simplify the tasks an operator commonly performs.

## Navigation

The TALON View workstation provides the most advanced graphical interface in the industry. Operators can quickly and easily access any application on the workstation. Additionally, users can share information among applications by simply “dragging and dropping”. This increases an operator’s productivity by eliminating the need to copy data from one application and paste to another.

## Expandability

Expandability is available through the use of options purchased separately for the system.

## Flexibility

TALON View workstations support BACnet®/IP and BACnet over Ethernet Networks.

Each TALON View workstation can manage up to 64 logical Automation Level Networks (ALN). Each ALN can be defined with up to 100 nodes. The overall performance limit is 1000 field panel nodes per TALON View workstation.

## Networking

Linking to other TALON View workstations over a TCP/IP Ethernet Network provides seamless operation of the TALON Automation System from any TALON View workstation location. The system can be centrally administered for greater efficiency over a Management Level Network (MLN).

## Open System Environment

The TALON View Application can communicate with both TALON and third-party BACnet devices and systems, enabling functionality such as: monitor and command BACnet objects, establish BACnet schedules and calendars, back up databases in BACnet devices, receive and acknowledge BACnet alarms, trend BACnet objects, and establish and read BACnet trend logs.

## Applications

### Operator Access and Privilege

Universal Access and Privilege™ allows the system administrator to assign different capabilities to each operator for each application. For example, an operator may need to edit a scheduled event, but does not need the ability to edit graphics. Each application has an assignable View, Edit, and Command privilege. Assigned privileges will follow the operator system-wide to any terminal (workstation or operator interface at the field panel). The system administrator has the ability to “custom-fit” privileges to the various levels of operator expertise or need.

- User accounts are based on existing Windows User Accounts. This allows the system to leverage Windows integrated security while eliminating the need for users to maintain another set of logins.
- Universal Access and Privilege are system wide.
- Privilege for each application is based on View, Edit, and Command capabilities that can be assigned to any individual operator.
- Access can also be assigned to objects (for example, points).

### Alarm Management

TALON View Alarm Management utilizes BACnet Event Enrollment objects to allow the user to monitor the value of any property of any BACnet object. The Event Enrollment allows the user to determine multiple alarm/event conditions and manage notification recipients for a device that otherwise cannot create an alarm/event message on its own, such as a BACnet TEC. The Event Enrollment, in combination with the notification class, is able to notify the user immediately or after a preset time delay in the event of the following

conditions: change of state, command failure, floating range limit, and out of range.

TALON View Alarm Management allows operators to troubleshoot an alarm quickly without disturbing the current task. In addition, the Alarm Management function allows operators to view and troubleshoot only the alarms that are relevant to their jobs or locations. Alarm Management features include:

- Alarm Summary with a current list of alarms and status
- Alarm priority with six priority levels that can be assigned different color codes for at-a-glance viewing
- Audible alarms with selectable .wav file support
- Alarm acknowledgment which includes operator identification
- Ability to view recent alarm history
- Attach a memo to the alarm record
- Customizable alarm messages for each alarm to provide specific instructions to the operator

### Trending

TALON View™ provides trending capabilities that allow an operator to easily monitor and store a record of point values trended by time or change of value (COV). Trending is especially useful in monitoring critical points or other points of interest such as discharge air temperatures or relative humidity.

Trended point data, by time and COV, can be collected automatically at the TALON workstation from the field panel or third-party BACnet device and is available at any workstation on the network. Trend reports are easy to set-up and an easy-to-use Trending Wizard guides the operator through the simple configuration of trending strategies. Users do not need to understand the details of the building system to report on trended information.

### Scheduler

Scheduling is easy to use and understand, allowing users to create schedules that reflect specific building activities.

Schedule configurations include weekly schedules with normal days and exception days, and exception schedules for holidays and special events. This flexibility allows for optimal configuration based on planned facility usage. A single command may be sent to a group of BACnet objects using the scheduler application.

### Creating and Editing Graphics

Graphics are easy to create and modify with Micrografx Designer®, a powerful graphics package that runs on Microsoft Windows.

Designer contains basic drawing features including freehand lines, boxes, circles, arcs, ellipses, and more.

Text is displayed in a variety of scalable fonts, sizes and colors. With Designer's wide array of color palettes, the operator can choose the standard colors, or customize colors.

Designer supports library features that allow the operator to select HVAC symbols from a template window and place them in a new graphic. The operator can also import existing drawings from an equivalent Micrografx drawing package, or even AutoCAD® drawings.

TALON View comes with an extensive library of HVAC and automation symbols including fans, valves, motors, chillers, standard ductwork diagrams, and laboratory symbols.

## Information and Reporting Capabilities

The information and reporting capabilities of the TALON View software are greatly expanded to provide users not just information, but insight into their buildings. Simplified report set up is standard. The user does not have to be concerned with the complexities of the building control system when information is needed. The TALON software package includes over 40 defined report templates. These system reports are designed to give the user specific information on BACnet device and network diagnostics, alarms, points, schedules, systems profiles, and trend data.

## BACnet Browser

TALON View software is equipped with the BACnet Browser for fast and efficient BACnet network troubleshooting and device status assessment. This application provides a valuable network view of all devices able to respond to BACnet messages and allows the user to view status, test functionality, and receive immediate feedback on command response.

## Operator Interface

### Electronic Documentation:

A robust library of electronic documents is available with every revision including current Release Notes, Online help, and printable User and Training Guides. These documents detail step-by-step procedures for using each application to its fullest capacity and allow quick navigation of the system.

### Dynamic Graphics:

- Point information displays and dynamically updates on the TALON View graphic.

- Graphics can be linked in a logical structure that makes the most sense for the facility, allowing the operator to navigate from building floor plans to associated air handling units in seconds.
- Graphics can be accessed directly by name or point association from other system screens such as the alarm screen or trend plot.
- Animated graphics allow you to define the visual movement of the control based on the point's value.
- Point values can be viewed and commanded from each graphic.
- Analog bars can be used to monitor and control analog values such as set points or static air pressure. High and low limits are also displayed on the scale.
- Graphics can be created and customized to suit any operator's need.
- Graphics can be linked to related applications or documents.

### Commanding and Monitoring the System:

- Points can be commanded by the click of a mouse button.
- Dynamic point display provides easy viewing and commanding.

### System Configuration and Maintenance:

The TALON View Backup Utility provides the following capabilities:

- Back up and restore databases
- Schedule recurring backups
- Delete unwanted backups to free disk space

System Profile is the TALON View application that gives you graphical, system-wide control for defining, configuring, and maintaining your entire building control network.

### Custom Definable Buttons:

You can create up to 10 custom buttons that launch applications from the TALON View Main Menu. Depending on your access level, you can create custom buttons that launch/open local or network programs, files, folders, or Internet/Intranet addresses. For example, you can add buttons for third-party programs such as closed-circuit TV (CCTV) systems.

## Advanced Options

Increase your system utilization by adding one or more of the following options to the TALON View workstation:

**Dynamic Plotter:**

Dynamically plot the values up to 15 points simultaneously to troubleshoot and tune the system.

**Report Scheduling:**

Reports can be scheduled on a regular basis or even years in advance and run as often as required.

**Program Editor:**

Create and modify customized control programs using Powers Process Control Language (PPCL).

**System Activity Log:**

Capture and report on individual operator activity to identify system utilization and training needs. Capture system events (scheduled event execution, alarms, etc.) for future reference and analysis.

**TALON GO:**

Provides Web option with Internet and intranet access to system graphics, commanding and monitoring, alarms, and schedules.

**Terminal Services:**

Anywhere access using Microsoft standard Terminal Services. Terminal Service provides access to all TALON View applications based on user privileges. Terminal Services provides TALON system access from any laptop or personal computer with access to the TALON system network.

**T-Mote Remote Notification:**

Send alarm information to remote users via e-mail, page, and text message, allowing user to monitor critical conditions from any location.

**OPC Server:**

OPC Server provides OPC Data Access support for points in the TALON View database, sourced from TALON View or third-party BACnet points.

# BACnet Protocol Implementation Conformance Statement

## Products

Product	Model Number	Protocol Revision	Software Version	Firmware Version
TALON View Workstation	571-020-310T-USB	135-2004	3.10	N/A

**Date Tested:** TALON View 3.10 has contingently passed BTL Operator Workstation Testing. Final certification is pending and expected in summer 2009. The latest information on BTL listings can be found at [www.bacnetassociation.org/btl](http://www.bacnetassociation.org/btl)

## Vendor Information

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## Product Description

The TALON® View workstation provides a powerful and comprehensive interface to manage and control a facility within a user-friendly operating environment. The TALON View workstation, combined with the multi-tasking environment of Windows® 2008/2003/Vista/XP, provides ease-of-use, power, connectivity, and manageability. The TALON View workstation provides an integration platform to work with other BACnet enabled systems and devices using either the BACnet Ethernet or BACnet/IP protocol.

## BACnet Standardized Device Profile

Supported	Device Profile
•	BACnet Operator Workstation (B-OWS)
	BACnet Building Controller (B-BC)
	BACnet Advanced Application Controller (B-AAC)
	BACnet Application Specific Controller (B-ASC)
	BACnet Smart Actuator (B-SA)
	BACnet Smart Sensor (B-SS)

## Supported BACnet Interoperability Building Blocks (BIBBs)

BIBB	Name	Initiate	Execute
DS-RP-A	Data Sharing-ReadProperty-A	•	
DS-RP-B	Data Sharing-ReadProperty-B		•
DS-RPM-A	Data Sharing-ReadPropertyMultiple-A	•	
DS-RPM-B	Data Sharing-ReadPropertyMultiple-B		•
DS-WP-A	Data Sharing-WriteProperty-A	•	

<b>BIBB</b>	<b>Name</b>	<b>Initiate</b>	<b>Execute</b>
DS-WP-B	Data Sharing-WriteProperty-B		•
DS-WPM-A	Data Sharing-WritePropertyMultiple-A	•	
DS-COV-A	Data Sharing-COV-A	•	
<b>Scheduling</b>			
SCHED-A	Scheduling-A	•	
<b>Alarm and Event Management</b>			
AE-N-A	Alarm and Event-Notification-A	•	
AE-ACK-A	Alarm and Event-ACK-A	•	
AE-ASUM-A	Alarm and Event-Alarm Summary-A	•	
AE-ESUM-A	Alarm and Event-Enrolment Summary-A	•	
AE-INFO-A	Alarm and Event-Information-A	•	
<b>Trending</b>			
T-VMT-A	Trending-Viewing and Modifying Trends-A	•	
T-ATR-A	Trending-Automated Trend Retrieval-A	•	
<b>Network Management</b>			
NM-CE-A	Network Management-Connection Establishment-A	•	
<b>Device Management</b>			
DM-DDB-A	Device Management-Dynamic Device Binding-A	•	
DM-DDB-B	Device Management-Dynamic Device Binding-B		•
DM-DOB-A	Device Management-Dynamic Object Binding-A	•	
DM-DOB-B	Device Management-Dynamic Object Binding-B		•
DM-DCC-A	Device Management-DeviceCommunicationControl-A	•	
DM-PT-A	Device Management-Private Transfer-A	•	
DM-PT-B	Device Management-Private Transfer-B		•
DM-TM-B	Device Management-Text Message-B		•
DM-TS-A	Device Management-TimeSynchronization-A	•	
DM-UTC-A	Device Management-UTCTimeSynchronization-A	•	
DM-RD-A	Device Management-ReinitializeDevice-A	•	
DM-BR-A	Device Management-Backup and Restore-A	•	
DM-LM-A	Device Management-List Manipulation-A	•	
DM-LM-B	Device Management-List Manipulation-B		•
DM-OCD-A	Device Management-Object Creation and Deletion-A	•	

### Standard Object Types Supported

<b>Object Type</b>	<b>Creatable</b>	<b>Deletable</b>
Analog Input		
Analog Output		
Analog Value		

Object Type	Creatable	Deletable
Binary Input		
Binary Output		
Binary Value		
Calendar	•	•
Command	•	•
Device		
Event Enrolment	•	•
File		
Multi-State Input		
Multi-State Output		
Multi-State Value		
Notification Class	•	•
Schedule	•	•
Trend Log		

### Data Link Layer Options

•	BACnet IP, (Annex J)
•	BACnet IP, (Annex J), Foreign Device
•	ISO 8802-3, Ethernet (Clause 7)
	ANSI/ATA 878.1, 2.5 Mb ARCNET (Clause 8)
	ANSI/ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s) _____
	MS/TP master (Clause 9), baud rate(s): _____
	MS/TP slave (Clause 9), baud rate(s): _____
	Point-To-Point, EIA 232 (Clause 10), baud rate(s): _____
	Point-To-Point, modem, (Clause 10), baud rate(s): _____
	LonTalk, (Clause 11), medium: _____
	Other: _____

### Segmentation Capability

Can transmit segmented messages	Yes	Window Size: 16 (Configurable)
Can receive segmented messages	Yes	Window Size: 16 (Configurable)

## Device Address Binding

Is Static Device Binding supported?	Yes
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## Networking Options

	Router, Clause 6
	Annex H.3, BACnet Tunneling Router over UDP/IP
•	BACnet/IP Broadcast Management Device (BBMD)
Yes	Does the BBMD support registrations by Foreign Devices?

## Character Sets

•	ANSI X3.4
	ISO 10646 (UCS-2)
	IBM/Microsoft DBCS
	ISO 10646 (ICS-4)
•	ISO 8859-1
	JIS C 6226

## Specifications

Operating System Environment	Windows Server 2008, Windows Server 2003, Windows XP Professional, Windows Vista Business or Enterprise
Object Oriented Database	Objectivity®
Graphics Package	Micrografx Designer®
TALON Database Server on Management Level Network	Any dual-core processor or better (Intel® Pentium® D/AMD Athlon™ 64 X2 or better) 2 GB RAM 7200 RPM hard drive or better USB port DVD-Rom Drive
TALON Database Client	Any Single-core processor or better (Intel® Pentium® D/AMD Athlon™ 64 X2 or better) 1 GB RAM 7200 RPM hard drive or better USB port DVD-ROM Drive

### NOTES on Specifications:

- Windows Server 2003 or Windows Server 2008 Enterprise Edition is required if you intend to install the TALON software on a Windows cluster.
- Additional RAM and available disk space is recommended for systems with a large database (points, program, trend, schedules, animation, etc.). The performance of your computer may be affected by the size and amount of animated graphic controls on a graphic. In addition, the performance and efficiency of the InsightDBCSServer is highly dependent on the current running hardware. In general, upgrading to the recommended hardware will improve the responsiveness of your TALON software. Contact your local Siemens Building Technologies, Inc. representative for further sizing recommendations.



## Ordering Information

Description	Product Number
TALON Base Software Package (includes one user license and one Sentinel)	571-020-3P10T-USB
TALON Base Single User License – adds one user license	571-021-3P10T

Increase your system utilization by adding one or more of the following options to the Base Package:

TALON VIEW 3.9.1 TO 3.10 Server Update Kit	571-022-3P10T
TALON VIEW 3.9.1 TO 3.10 Client License Update	571-023-3P10T
Terminal Services Option	571-105T
Report Scheduling Option	571-110T
System Activity Option	571-120T
Dynamic Plotter Option	571-130T
Program Editor Option	571-150T
Remote Notification Option	571-181T
Text to Speech Option for use with Remote Notification Option	571-186T
TALON GO for TALON View Base Kit (Required for all TALON GO installations)	571-305T
TALON GO for TALON View 2 Users License	571-317T
TALON GO for TALON View Unlimited Users License (includes base kit)	571-319T
OPC Server Option – 1000 Point Capacity	571-162T
OPC Server Option – 5000 Point Capacity	571-163T

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