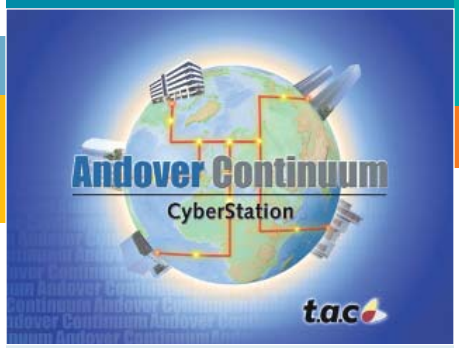


# Continuum™

## CyberStation™/BACnet Operator Workstation

- Native BACnet Operator Workstation (B-OWS), per ASHRAE BACnet Standard
- Consolidate Multiple Systems and Vendors Under One Interoperable System
- Supports 18 BACnet Object Types including Trends, Schedule, Calendar, and Loops
- Functions as BBMD—BACnet Broadcast Management Device
- Performs BACnet Backups and Restore Service for BACnet Devices
- BACnet Autodiscovery Reduces Setup Time
- Manage HVAC, Security, Card Access, Lighting, and Power Systems from a Single Workstation
- Web-Based Interface for Easy Access Anywhere
- Crisp Dynamic Graphic Displays for Quick Troubleshooting
- Fully Compatible with all Andover Continuum Controllers
- Add Digital Video Surveillance to Any Graphic Display

The Andover Continuum™ CyberStation Operator Workstation software includes native BACnet functionality, expanding the reach of CyberStation to the Continuum bCX1 System Controller/BACnet Router, all Continuum MS/TP BACnet controller family members, and other third-party BACnet controllers. As a BACnet Operator Workstation (B-OWS), CyberStation™ offers full alarm monitoring, displays and controls all BACnet-compatible devices on your networks, through a powerful and dynamic graphical interface.

Take control of your entire facility through a single workstation platform. Along with BACnet, CyberStation also supports full, simultaneous compatibility to all Continuum controllers, including HVAC controllers, security/card access controllers, lighting controllers, as well as all third-party systems. CyberStation also integrates seamlessly with digital video recorders from Integral Technologies, allowing live video feeds from any camera to be placed within a BACnet graphical environment.

CyberStation is built upon a solid foundation, designed and implemented in strict accordance with ASHRAE BACnet standard to facilitate effortless interoperability with third-party BACnet systems. CyberStation runs on the Microsoft Windows 2000/XP platform, and employs either a Microsoft MSDE or SQL database. Configurations range from a single PC to multiple workstations with a central file server.

### INCREASED ACCESSIBILITY WITH WEB.CLIENT

With the optional web.Client™ package, your BACnet system can be accessed anywhere on your network through a standard browser interface. View graphic displays, modify setpoints, change schedules, view reports, respond to alarms, and manage your building without being pinned down to a dedicated workstation. web.Client functionality can be added to even the smallest existing system with ease, using the same graphic displays, user profiles, and system database as the standard CyberStation.

### BEYOND BACnet WITH SUPPORT FOR MULTIPLE PROTOCOLS

Chances are your building is multi-lingual — a chiller that talks BACnet, a lighting controller that may talk LONWorks, a power monitor that speaks Modbus, an older fire alarm system with its own unique protocol. Let Continuum be your translator. Our Continuum system allows interoperability between all types of devices simultaneously, providing a strong, common platform to manage your facility proactively.

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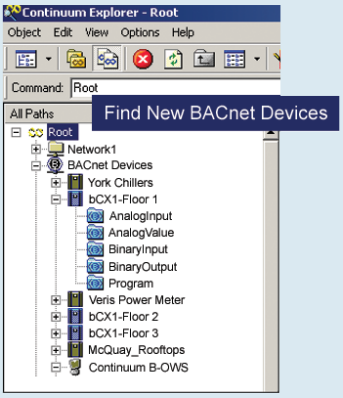
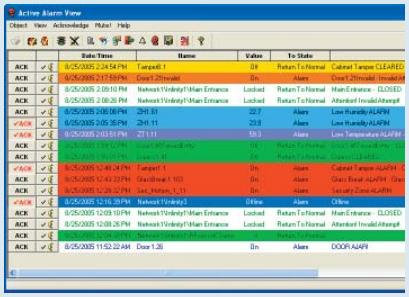
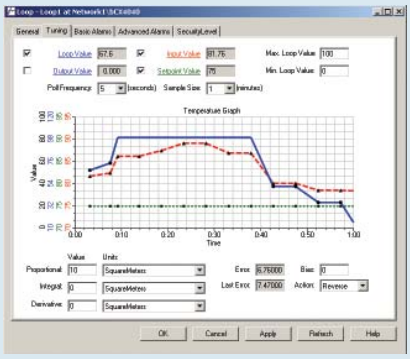
# CyberStation™/BACnet Operator Workstation





## TIME-SAVING CONFIGURATION TOOLS

CyberStation will auto-discover all the BACnet Devices on the BACnet network along with their objects and properties. This makes BACnet integration a breeze! Gone is the need to individually map points into the database. Let CyberStation do the work for you will a simple click of the "Find BACnet Devices" and "Save to Database" buttons.

## DISASTER RECOVERY

BACnet has a very powerful feature called "Backup & Restore" which permits the backing up and restoring of controller memory. If a BACnet Device supports this feature CyberStation has the tools to provide this advanced management service. CyberStation not only allows you to backup a BACnet Device within it's SQL database, but also allows you to create an archive of backups on your hard drive. When it comes time to restore a controller, simply issue the restore command and select the backup file from the archive or SQL database.

## NETWORKING SUPPORT

If you have BACnet Devices spread across multiple IP networks or even the Internet, enable CyberStation's BBMD (BACnet Broadcast Management Device) and configure CyberStation to communicate to those remote devices.

## CONSOLIDATED, FLEXIBLE ALARM SYSTEM

All alarms, whether they originate from a BACnet controller or Continuum controller, are displayed in the same active alarm view, allowing for a quick yet complete assessment of each alarm condition. Take advantage of CyberStation's powerful alarm engine to define precise Alarm and Event Notifications, including which workstation the alarm type is delivered to, escalation path, alarm actions including email and pager, and acknowledgement rules. All alarms, including acknowledgement details and text, are logged in the central database. Alarm reports are easily generated based on time and date, priority, alarm type, or any other criteria.

## NO LIMITS TO YOUR GRAPHICS

CyberStation offers complete graphic freedom — a single graphic display may contain live point values from Continuum controllers (BACnet or Infinet) and third-party BACnet devices, as well as live video feeds, personnel images, and even embedded web pages! Graphics are easily created using CyberStation's powerful graphics editor, using imported bitmaps or image files if desired, and dynamic "controls" are placed on the graphic using a simple drag-and-drop technique.

## GRAPHICAL REPORTS

The graphics reporting package in CyberStation/web.Client presents data from extended trend, alarm, access event, and activity logs as well as instantaneous data in a graphical format. Choose between SVG scalable bar graphs, line graphs, and pie charts, and text formats using html and xml. Optionally, reports may be generated in Adobe Acrobat format for distribution. Regardless of format, all reports may be emailed either manually or by a schedule (using MS Scheduler included in OS.) The power of these report lies within some of the statistical reports — display the top ten alarms, the most active personnel!

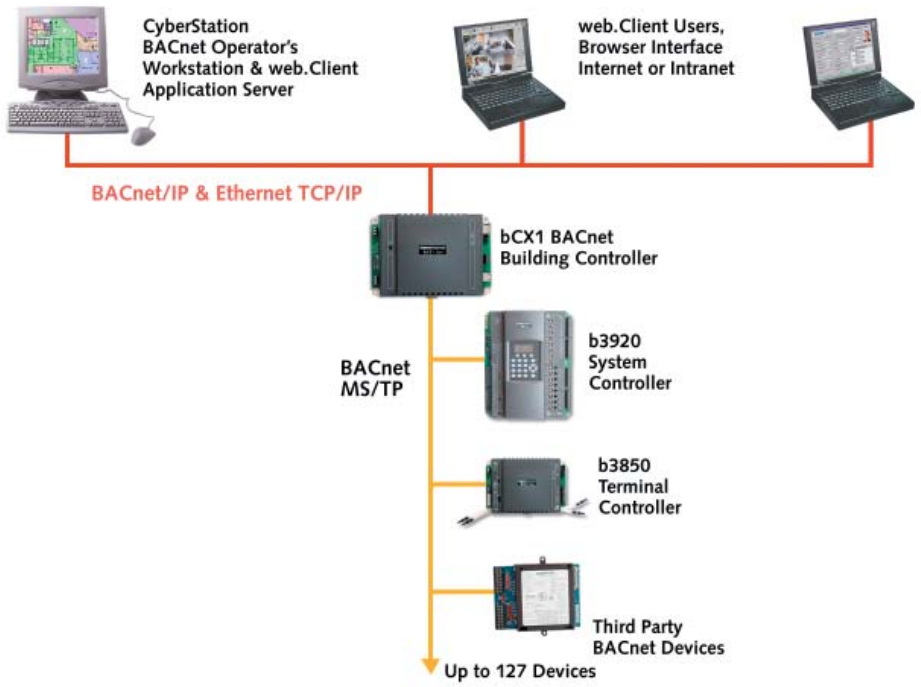
## HIGH PERFORMANCE BACnet

CyberStation has been optimized to issue BACnet commands and retrieve BACnet information at the highest speeds. Using the change of value and read property multiple services within the BACnet standard, CyberStation can display graphics, reports and other data at the optimal refresh rates.

## FLEXIBLE PROGRAMMING

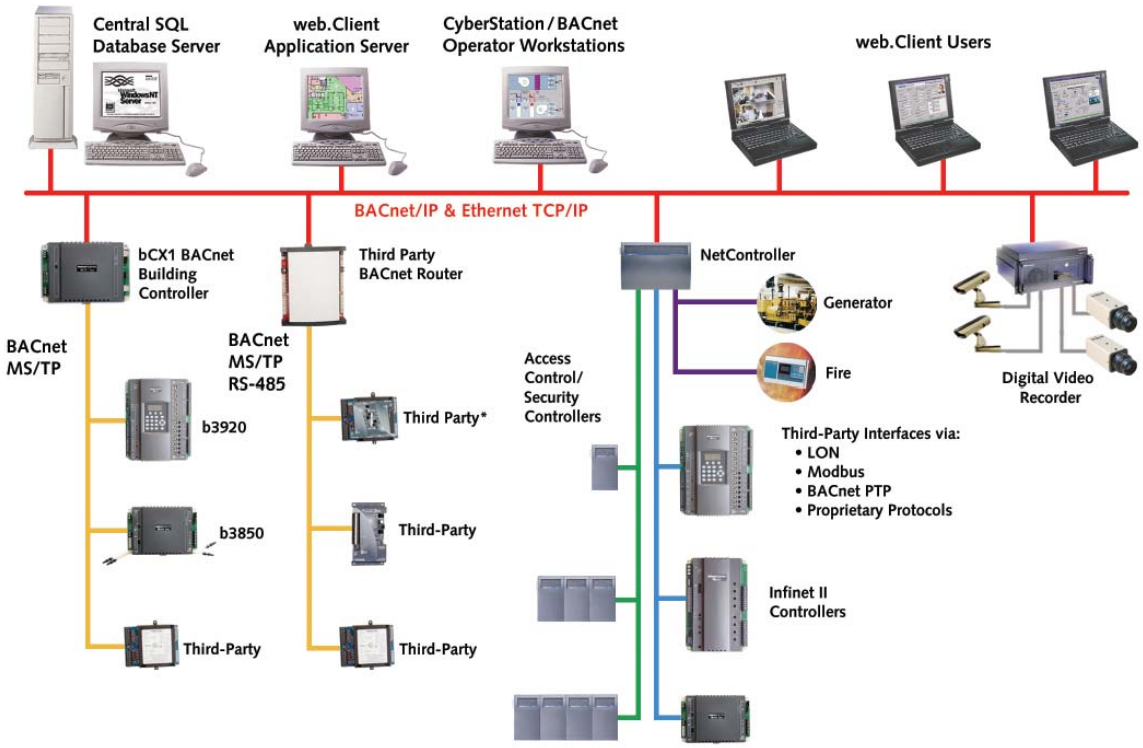
From CyberStation users can write programs for BACnet Devices using the Andover Plain English programming language. With Plain English, it is possible to take control of any writable BACnet property. For example, in the case of an emergency, Plain English can command all the smoke dampers, regardless of which BACnet vendor's product the dampers are connected.

## STANDARD BACnet ARCHITECTURE




## EXPANDED BACnet ARCHITECTURE

TAC opens your system to the world beyond BACnet. Connect to LON, Modbus, Continuum and Infinity devices, along with legacy systems that use proprietary protocols. Easily add access control, security, and digital video functions to your system, managed from the same workstation.



# SPECIFICATIONS

## CyberStation™/BACnet Operator Workstation

### CYBERSTATION

**Minimum Hardware Requirements, CyberStation Workstation and File Server**
1GHz Pentium III PC, 512 MB RAM, 40GB hard drive, CD drive, 10/100 Ethernet port, parallel or USB port

**Operating Systems, CyberStation Workstation**
Microsoft Windows 2000, Windows XP

**Operating System, File Server (for multi-user systems)**
Microsoft Windows 2000 Server or MS Windows Server 2003, with Microsoft SQL Server 2000 database software

**BACnet Device Profile**
B-OWS, BACnet Operator Workstation

### WEB.CLIENT OPTION

**Minimum Hardware, Application Server**
700 MHz Pentium III PC, 128MB RAM (plus 5MB per user), 20GB hard drive, CD drive, 10/100 Ethernet port, parallel or USB port

**Client Browser**
PC running MS Internet Explorer 6.0 or higher, Java-enabled, 20 MB minimum hard drive space. Windows NT/2000/XP, Microsoft Windows Server 2003

**Operating System, Application Server**
MS Windows 2000 Server or MS Windows Server 2003, MS Windows 2000 Professional with MS Internet Information Services (IIS) 4.0 or higher with Active Server Pages (ASP) enabled

### COMMUNICATIONS

**Network Connectivity**
Ethernet TCP/IP

**BACnet Connectivity**
BACnet/IP, per ASHRAE BACnet standard

**BACnet Device Profile**
B-OWS, BACnet Operator Workstation

**Maximum Number of Ethernet Devices, including CyberStations**
4 million

### USER ACCOUNTS

**User Security**
Continuum user accounts (encrypted). Database may be partitioned such that users have access to only certain collections of objects in the system. Examples include partitioning by site, by building, by function (HVAC or security, etc.), and by department. Minimum password length and password expiration may be enforced.

**Auto-Logoff feature**
User logoff after 0-255 minutes of inactivity (individually set per user)

**Maximum User Accounts**
4 million

### SOFTWARE SPECIFICATIONS

**Maximum Number of Points**
4 million per point type

**Maximum Number of Personnel**
4 million

**Maximum Alarm and Event Log History**
Limited only by disk space



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