Andover Continuum

SNMP Alarming
for Andover Continuum™

- Receive critical alarms as SNMP TRAPs

- SNMP alarms sent directly from controller — no host PC or gateway required

- Use existing network management software — less operator training required

- Network operators can monitor alarms without additional field hardware

- Alarms from both the facility and the network are consolidated in a single view

- Increases network reliability and uptime because alarms instantly reach the right person

- Adds redundancy to alarm notification, eliminating a single point of failure

- Compatible with industry-standard SNMPv1 and SNMPv2c protocols

TAC's SNMP Alarming for Andover Continuum provides industry-standard SNMP management embedded in Andover Continuum CX network controllers. This optional feature enables popular Network Management Systems (NMS) to receive facility alarms directly from CX controllers. SNMP joins other standard protocols supported by the CX, such as TCP/IP and HTTP, adding value and flexibility to network management operations.

All newer versions of CX firmware include basic SNMP support, which permits the NMS to discover and map CX controllers in NMS graphical views. Basic SNMP is plug-and-play! No installation or configuration is required. The SNMP Alarming option extends this core functionality with powerful and flexible TRAP alarms.

INSTANT ALARM FORWARDING
With SNMP Alarming, CX controllers can now send notices of facility problems instantly to corporate Network Operations Centers in the form of SNMP TRAPs, where operators are alerted to incidents such as high temperature, invalid site access, or loss of power. CX alarms still go to Andover Continuum graphical workstations, such as CyberStation™ and web.Client™, but now have added flexibility and comprehensive coverage to notify network managers.

EASY NMS INTEGRATION
Deliver higher network reliability, availability and uptime through software integration. SNMP Alarming is compatible with leading network management systems:

- HP OpenView
- CA Unicenter
- IBM/Tivoli Netview
- CiscoWorks
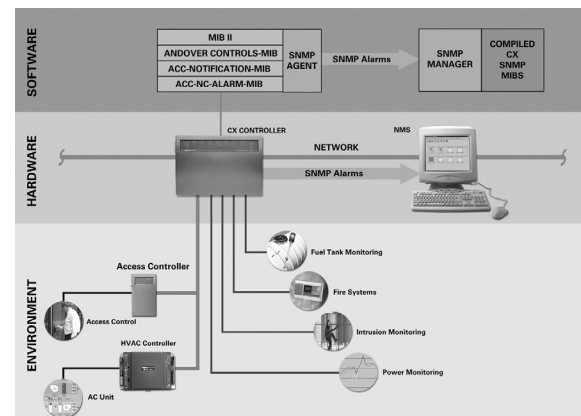
SNMP Alarming Architecture

t.a.c®

NO DEDICATED HARDWARE OR HOST PC REQUIRED

Many other control systems rely on a single PC to proxy SNMP events on behalf of one or more controllers. In those cases, if the PC is down, all SNMP identification and alarm routing stops. With Andover Continuum, SNMP Alarming runs independently as a software agent in the CX controller firmware. The CX controller puts alarm data into the agent's Management Information Base (MIB), where it is then forwarded to network management systems as an SNMP TRAP. This provides the dual advantages of being more cost effective as well as eliminating a single point of failure.

GRAPHICAL VIEWS FOR MANAGING CX CONTROLLERS

Facility alarms flash icons on the map of the NMS to alert operators of trouble. Monitor and manage CX controllers using your familiar NMS screens to set alarm filtering criteria, manage alarm destinations, and view controller online/offline status.

NUISANCE ALARM FILTERING

SNMP Alarming gives you the flexibility to define which facility alarms to forward via SNMP. Filter nuisance alarms at the source CX controller, and send to network personnel only the alarms you choose.

ALARM CORRELATION AND INTEGRATION

Alarms from network switches and routers can be correlated with heat, humidity, or other facility alarms, enabling early problem identification. Receiving alarms via SNMP also means that other integrated NMS software packages can act on them, such as automatic trouble ticketing and daily report generation.

FLEXIBLE CONFIGURATION

One screen has all the settings you need to manage the way SNMP Alarming runs on your network. Login using any PC terminal emulator, or access the CX directly from your network management station. A built-in Command Terminal enables easy access to the SNMP configuration interface.

ALARM TABLE DETAIL

The CX controller contains a table for storing SNMP alarm occurrences. Each SNMP alarm occupies one entry in the table. Alarm data can also be polled from the NMS using the GET/GET NEXT command(s).
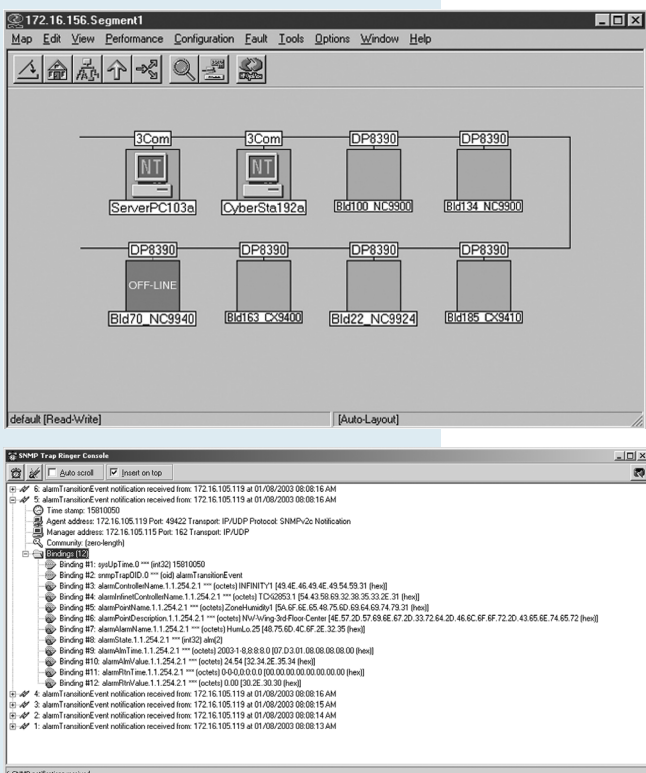
NMS Graphical Alarm Views
and Alarm Detail

ENTRY	DESCRIPTION
CX Controller Name	Building controller name (e.g., Bldg7A)
Infinet Controller	Fieldbus controller name (e.g., RooftopController)
Point Name	Name of monitored point (e.g., RoomTemp)
Point Description	Description of monitored point (32 characters)
Alarm Name	Name of the Alarm assigned (e.g., HighTemp)
State	ALM (2) = alarm, RTN (1) = return to normal
ALMTime	Time stamp when alarm condition occurred
ALMValue	Value at the time of the alarm
RTNTime	Time stamp when alarm condition returned to normal
RTNValue	Value at the time when the alarm returned to normal
IENAD	For internal use only
Alarm Link	Number identifying which Andover Continuum alarm link triggered the alarm (1-8 or zero for internal alarm)

SPECIFICATIONS
SNMP Alarming

AUTO-DISCOVERY AND MAPPING
Network management systems automatically discover and map CX controllers, providing the following system information:

- Device Name
- Description
- Location
- Contact
- Online/Offline Status
- System Uptime
- Network Error Statistics

ALARM CONFIGURATION
- Poll or TRAP for alarms
- Supports Infinet controllers "owned" by the CX controller
- Variable alarm table size – provides history when polling
- Built-in Command Terminal
- Configure SNMP alarm setup over the network using SET and GET commands

MULTIPLE ALARM DESTINATIONS
Each CX controller delivers its own alarms to as many as 12 TRAP destinations you specify. Two of these addresses are stored in non-volatile memory.

SNMP COMMANDS SUPPORTED
Send and receive configuration and alarm data from CX controllers using standard SNMP commands:

- GET
- TRAP
- GET NEXT
- SET

SNMP VERSIONS SUPPORTED
- SNMP v1
- SNMP v2c

ORDER INFORMATION
Add "– SA" to any CX network controller part number for SNMP Alarming option.

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