Do you need ...
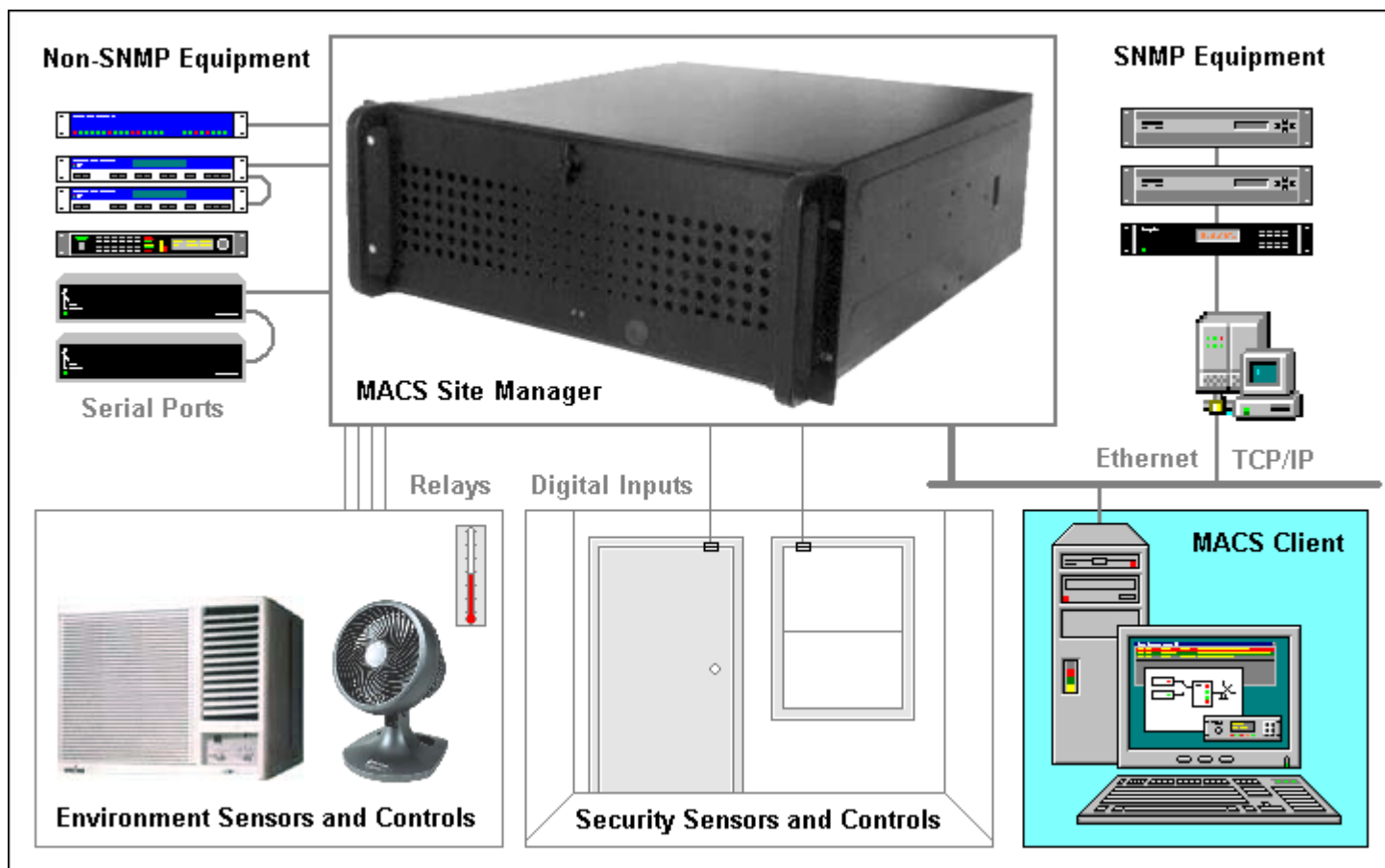
to monitor geographically distant sites?
to monitor your network from a central location?
remote access to your sites?

Use Micus Alarm and Control System (MACS) Site Manager
the reliable and cost effective solution to your needs
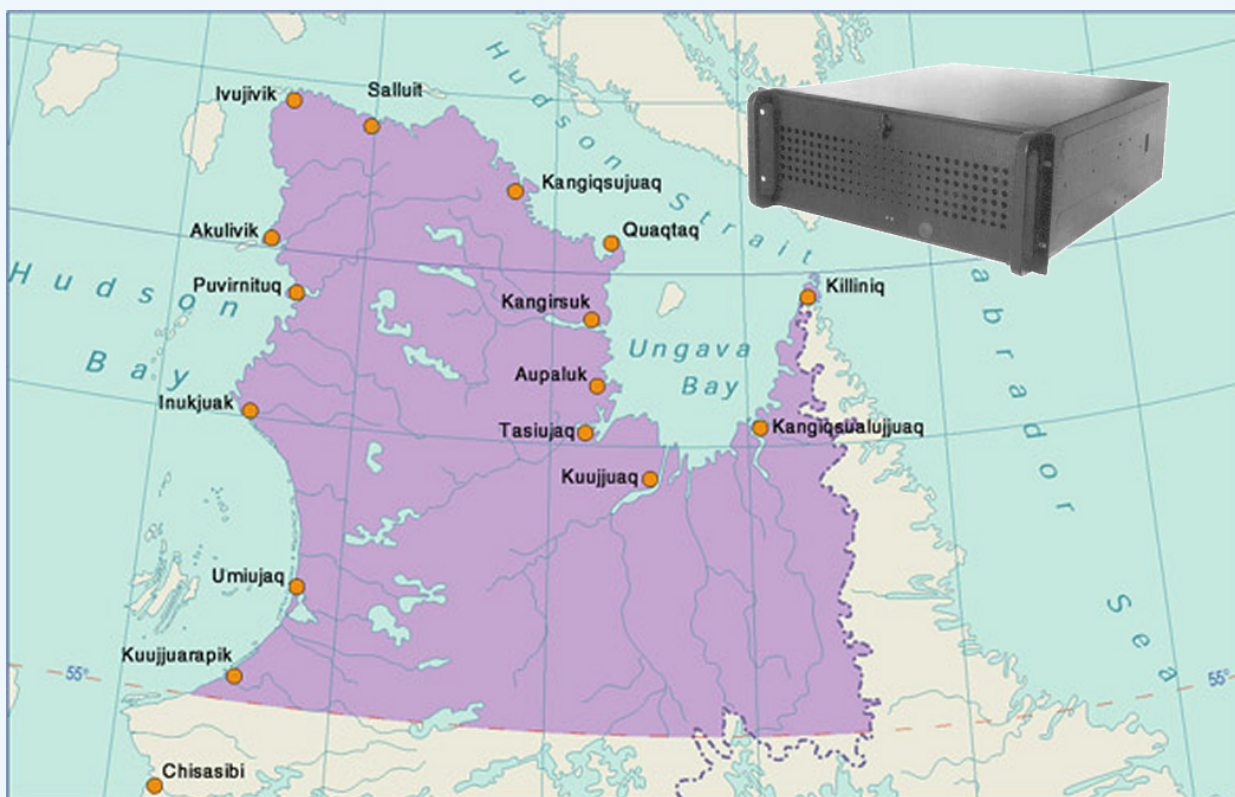
· **Manages all of your SNMP equipment**
· **Supports non-SNMP equipment and proprietary protocols**
· **Monitors digital inputs from your equipment and environment sensors**
· **Operates output relays that control your equipment and environment**
· **Pages personnel responsible for equipment that needs attention**
· **Allows you to create your own graphical images**
· **Supports network and dial up remote access**

Non-SNMP Equipment

MACS Site Manager

Serial Ports

Relays Digital Inputs

Environment Sensors and Controls

Security Sensors and Controls

SNMP Equipment

Ethernet TCP/IP

MACS Client

The Problem

As a service provider, you probably have a number of unmanned remote sites, such as satellite downlinks and cable head ends. In these sites, you may have a variety of equiment from different vendors. You may also have a number of sensors to monitor site security and environment.

To provide a reliable service to your customers, you need to know the exact operational status of all of your equipment at all times. You also need to monitor the environment and the security of your sites.

In case of equiment failure, power outage, or intrusion into your site, you need reliable and immediate notification.

If your sites are unattended overnight or over the weekend, you need automatically sent pager messages to report mission critical equipment failures.

To monitor your sites, you will probably need a combination of text messages and graphical images, such as regional maps, site diagrams, schematics and equipment front panels. You may want to include on-line documentation to guide your technicians through the repairs and maintenance tasks.

You may decide to go even further and fully automate tracking of the equipment repair process, and integrate it with the alarm monitoring.

The Solution

MACS Site Manager offers a fully integrated and automated yet cost-effective solution to all of your alarm monitoring and equipment control needs. The product is based on our standard MACS software[1] that runs on a robust rack mounted computer, under the industry standard Windows XP operating system.

---

[1] *Micus Alarm And Control System (MACS)* is a computer based system which configures, controls and monitors various pieces of equipment, and collects and processes alarms generated by the equipment. For more information on MACS itself, please refer to the related marketing material.

MACS Site Manager Key Features:

- Available as 1U or 4U rack mounted unit.

- Built-in SNMP manager monitors and controls all SNMP equipment installed in your remote site.

- Built-in SNMP agent sends SNMP traps and allows other SNMP managers to communicate with the site.

- 8 digital inputs, expandable to 64 digital inputs, monitor external dry contacts and environment sensors.

- 8 output relays, expandable to 64 relays, control external switches.

- Two, eight or more serial ports can be used to monitor equipment attached to MACS Site Manager via serial lines.

- Simple, friendly and intuitive *Graphical User Interface (GUI)* can be used locally, on the Site Manager itself, or remotely, from geographically distant locations.

- Monitor screens, implemented as graphical images, can be added to the system by the end-user.

- The user interface always shows up to 100 of the most recent events in a scrollable window.

- All reported events are saved in the event log files created on a daily basis. Commands are available to view, search, copy, print, and archive the event log.

- Paging module automatically calls all personnel responsible for the equipment. Each alarm, depending on whether it is related to the equipment, power, building environment, or security can be directed to different personnel.

- Optional modules can be easily added to support non-SNMP equipment.

- Optional *MACS Trouble Ticketing System (TTS)* can be installed on the same hardware platform.

- Multi-user support allows operators on the network to access MACS Site Manager independently and simultaneously both locally and from the remote locations.

- Site monitors can be accessed over the LAN, WAN, dial-up and ISDN networking, using the TCP/IP protocol.

- MACS Site Manager can be used as a router for the on-site local area network.
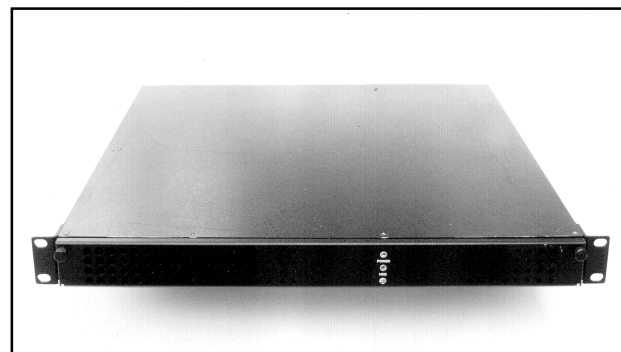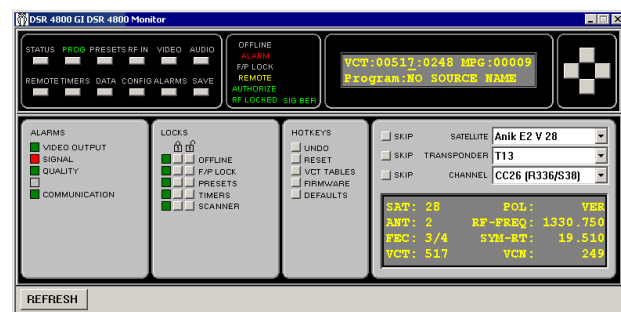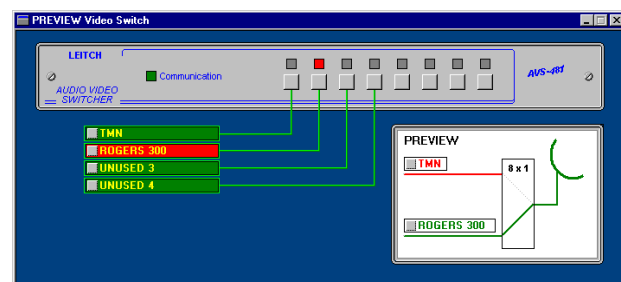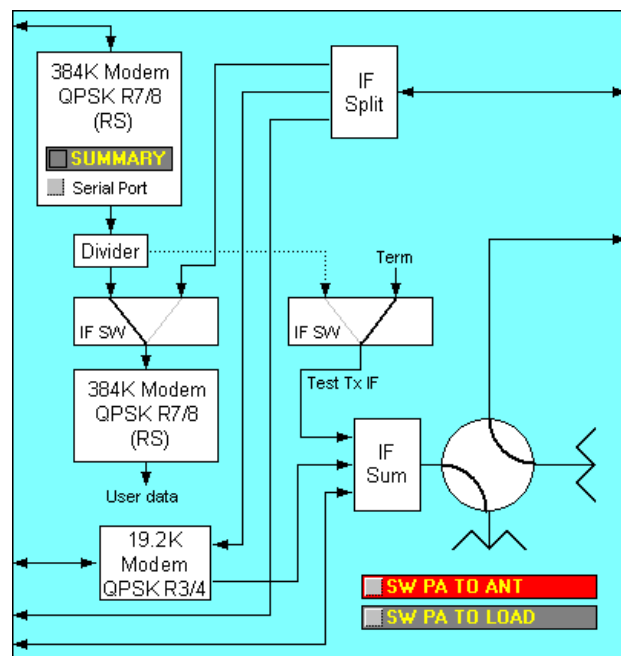
MACS Site Manager in a 1U rack mounted chassis

MACS site managers are capable of sending their event reports to any number of remote locations, via a TCP/IP network. At the same time, MACS site managers listen to the service requests from the TCP/IP network. Thus, MACS site managers can be configured into a hierarchical structure of regional servers and master servers.

The user interface clients for the MACS site managers are computer programs that can run on the site manager itself, or on any Windows workstation on the TCP/IP LAN or WAN network. Clients can use a variety of possible connections to communicate with the site managers: LAN connections, RAS connections via modems or ISDN, and WAN connections.

Add-on MACS Site Manager features include:

- Automatic redundancy switching and script language programming module.
- E-mail and fax module.
- Trouble ticketing module.
- Modules for a variety of equipment supported by MACS software.
- Additional serial ports.
- Additional digital inputs and relays .