

BACstage Operator Workstation from KMC Controls is a basic software tool with which you can program KMC BACnet controllers for a building automation system.

- ◆ Worksheet style entry and drop-down list boxes makes programming quick and easy.
- ◆ Password protected
- ◆ Quickly create graphical user interfaces with easy to use drag and drop group displays.

Easy Programming

- ◆ Required for full access to features in KMC BACnet controllers starting with firmware releases 1.7.
- ◆ Configure KMC Controls BACnet devices with MAC addresses, device instance numbers and baud rate.
- ◆ Configure objects in third-party controllers.
- ◆ Configure standard BACnet objects in controllers.
- ◆ Identify inputs, outputs, and other functions with easy to remember names and descriptions.
- ◆ Assign standard device types for both analog and digital objects.
- ◆ Full control over built-in PID control loop routines.
- ◆ Write, compile and send building automation programs with the BACnet Control Basic editor
- ◆ Automatically synchronize system time to computer time.
- ◆ Save configuration files to disk.
- ◆ Prepare configuration files off-line with the simulator mode.

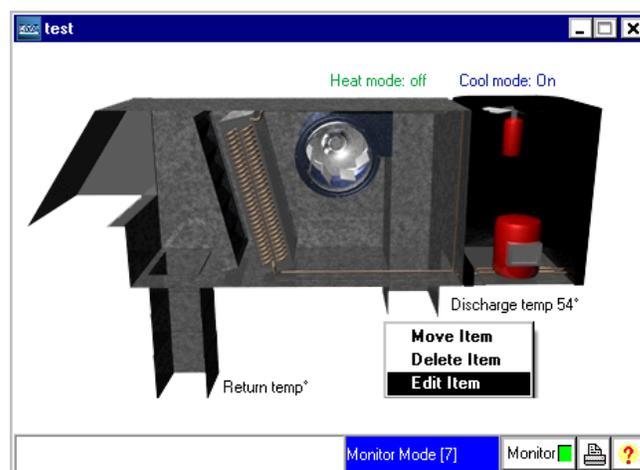


Still ... Made in the U.S.A.

Custom group displays

Design and construct operator friendly graphic interfaces with BACstage group displays. Use the extensive KMC Controls graphic libraries to build custom graphics for chillers, boilers, roof top units, air handlers and more.

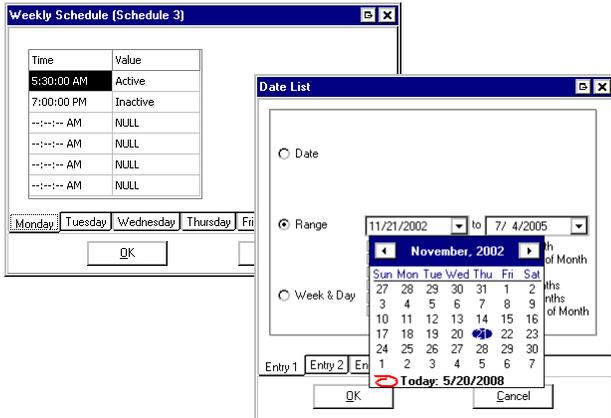
- ◆ Add motion to displays with animation files
- ◆ Easily drag-and-drop links to other group displays or object properties on the display.
- ◆ Add links from site or floor plans to critical equipment or control points.
- ◆ Use graphics from any program that generates bmp, jpg, gif, wmf or emf file types.



Scheduling

Schedule special holidays, maintenance schedules and special days

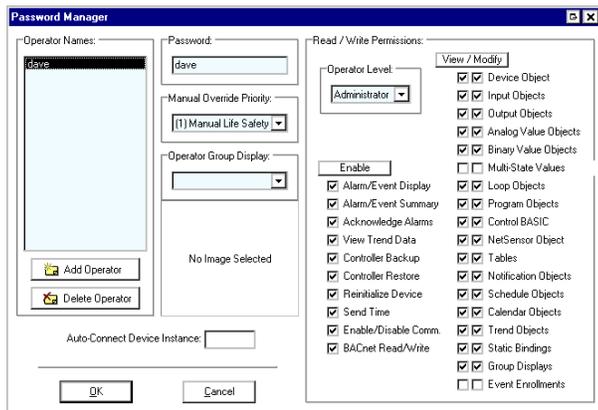
- ◆ Program BACnet schedule objects in individual controllers for recurring daily activities.
- ◆ Create special days such as holidays in the controller's calendar objects that override the weekly schedules.



Security

BACstage security locks out tampering and still permits authorized operators to make system changes.

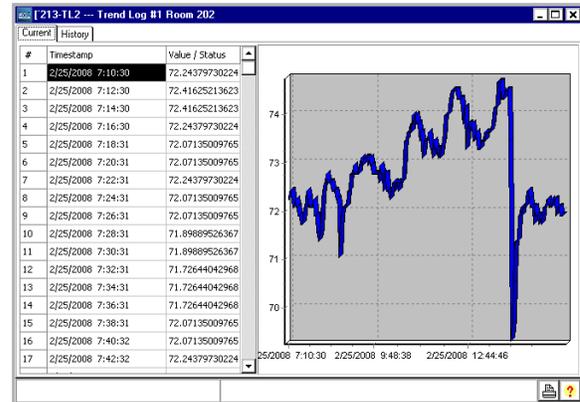
- ◆ By-name, password protection prevents unauthorized access
- ◆ Logs operator sign-in, sign-out and other significant operator action.
- ◆ Choose from four preset levels or create a custom level for each operator



Data logging

Use BACstage to retrieve and display temperature, humidity or any performance data stored in each controller.

- ◆ Verify actual system performance
- ◆ Capture equipment duty cycle
- ◆ View trend objects from any controller
- ◆ Display data as graphs or text.
- ◆ Retrieve and save logs for analysis in programs such as Microsoft® Excel.



Connectivity

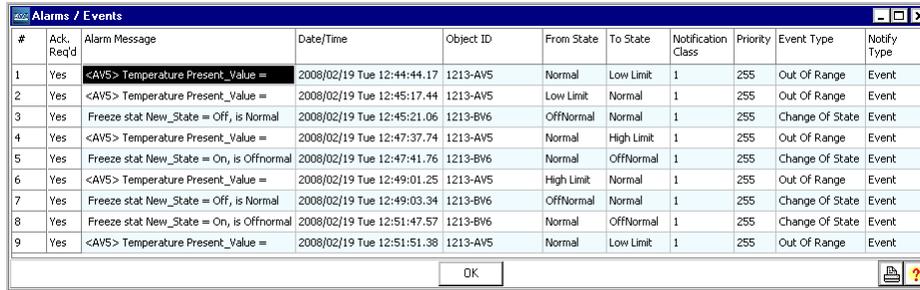
Supports the following internetwork connection methods:

- ◆ MS/TP
- ◆ Ethernet 8802-3
- ◆ Ethernet IP
- ◆ Register as foreign device to a BBMD (BACnet broadcast management device)
- ◆ PTP including modem

Manage alarms

Setting up alarms and events with BACstage keeps you informed of critical operating conditions.

- ◆ Program, view and acknowledge alarms.
- ◆ Manage recipient lists in notification class objects.
- ◆ View an alarm summary for each device.
- ◆ Custom alarm messages.
- ◆ Audible notification of incoming alarms.



| # | Ack. Req'd | Alarm Message | Date/Time | Object ID | From State | To State | Notification Class | Priority | Event Type | Notify Type |
|---|------------|--|----------------------------|-----------|------------|------------|--------------------|----------|-----------------|-------------|
| 1 | Yes | <AVS> Temperature Present_Value = | 2008/02/19 Tue 12:44:44.17 | 1213-AV5 | Normal | Low Limit | 1 | 255 | Out Of Range | Event |
| 2 | Yes | <AVS> Temperature Present_Value = | 2008/02/19 Tue 12:45:17.44 | 1213-AV5 | Low Limit | Normal | 1 | 255 | Out Of Range | Event |
| 3 | Yes | Freeze stat New_State = Off, is Normal | 2008/02/19 Tue 12:45:21.06 | 1213-BV6 | OffNormal | Normal | 1 | 255 | Change Of State | Event |
| 4 | Yes | <AVS> Temperature Present_Value = | 2008/02/19 Tue 12:47:37.74 | 1213-AV5 | Normal | High Limit | 1 | 255 | Out Of Range | Event |
| 5 | Yes | Freeze stat New_State = On, is Offnormal | 2008/02/19 Tue 12:47:41.76 | 1213-BV6 | Normal | OffNormal | 1 | 255 | Change Of State | Event |
| 6 | Yes | <AVS> Temperature Present_Value = | 2008/02/19 Tue 12:49:01.25 | 1213-AV5 | High Limit | Normal | 1 | 255 | Out Of Range | Event |
| 7 | Yes | Freeze stat New_State = Off, is Normal | 2008/02/19 Tue 12:49:03.34 | 1213-BV6 | OffNormal | Normal | 1 | 255 | Change Of State | Event |
| 8 | Yes | Freeze stat New_State = On, is Offnormal | 2008/02/19 Tue 12:51:47.57 | 1213-BV6 | Normal | OffNormal | 1 | 255 | Change Of State | Event |
| 9 | Yes | <AVS> Temperature Present_Value = | 2008/02/19 Tue 12:51:51.38 | 1213-AV5 | Normal | Low Limit | 1 | 255 | Out Of Range | Event |

Ordering information

Each copy of BACstage is licensed to end-users for use on one computer at a time. Order a hardware license key for each copy of BACstage. The hardware license key requires a dedicated USB port. See next page for computer system requirements.

| Model number | Ordering description |
|--------------|-----------------------------------|
| HW-KEY | KMC Controls Hardware License Key |
| BAC-5000 | BACstage Operator Workstation |

Computer system requirements

BACstage requires a computer that meets the following specifications.

Windows® 7

| Component | Requirements |
|------------------|--|
| Operating system | Windows 7 Professional (32-bit) or Windows 7 Ultimate (32-bit) |
| Processor speed | 2 GHz or faster |
| RAM memory | 2 GB |
| Graphics adaptor | DirectX 9 graphics processor |

Windows® Vista

| Component | Requirements |
|------------------|--|
| Operating system | Windows Vista Business (32-bit) or Windows Vista Ultimate (32-bit) |
| Processor speed | 2 GHz or faster |
| RAM memory | 3 GB |

Windows® XP Professional or Windows® 2000

| Component | Recommended | Minimum |
|------------------|---------------------|------------------------------|
| Operating system | Windows XP (32-bit) | Windows 2000 (32-bit) |
| Processor | Pentium 4 or better | Pentium III |
| Processor speed | 2 GHz or faster | 1 GHz |
| RAM memory | 2 GB or greater | 512 megabytes RAM or greater |

Computer platform requirements

| Component | Recommended | Minimum |
|---------------------------|--|--|
| Hard disk space | 160 GB | 80 GB |
| | 5 GB free | 5 GB free |
| Monitor | SVGA 1280 x 1024 | SVGA 1024 x 768 |
| Optical drive | CD/DVD-RW | CD-ROM |
| Network connection | Ethernet 100BaseT | Ethernet 10BaseT |
| MS/TP connection | Serial or USB port with KMD-5579 or third party EIA-485 converter. | Serial or USB port with KMD-5579 or third party EIA-485 converter. |
| Sound output and speakers | Required for audible alarm notification | |
| License key | USB port dedicated to hardware key | |

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