



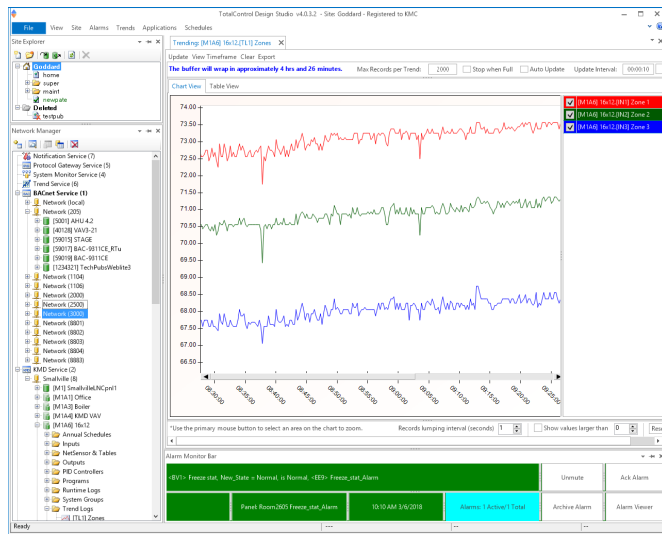
TotalControl Building Services

Building Automation Software

DESCRIPTION

TotalControl Building Services collect, store, and route data between a building automation network and an Internet or intranet accessible web site. Built on XML and the Microsoft® .NET Framework, these programs are one part of a powerful suite of software tools from KMC Controls. TotalControl Building Services include the following components:

- Alarm management service
- Trend logging service
- Internet browser accessibility modules
- Transfer values between controllers on dissimilar protocols with Protocol Gateway
- An SQL database for centralized data storage
- A Protocol Driver Service (PDS) that links TotalControl Building Services to a specific building automation protocol



TotalControl Design Studio

Site setup with Design Studio

All TotalControl Building Services are set up with Design Studio, an Advanced Operator Workstation for configuring a building automation system. Once a site is set up with Design Studio, day-to-day tasks are performed from browser pages.

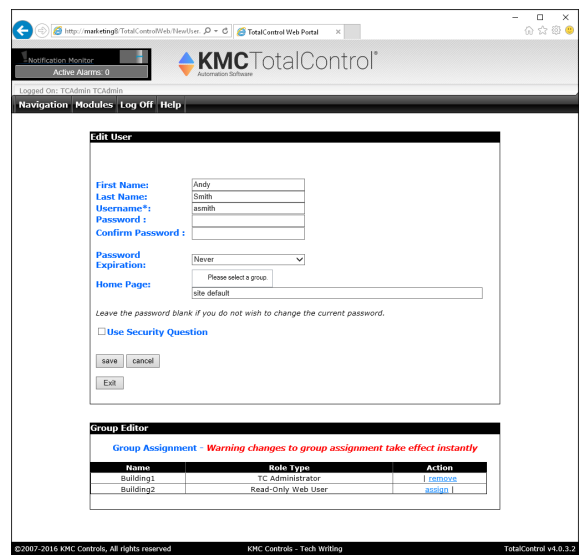
With TotalControl Design Studio you can:

- Build operator graphic pages and then publish them for Internet browser access
- View or change controller operation
- Manage alarms and notifications
- Set up and view historical trend data
- Set schedules
- Edit Control Basic programs



Internet browser site access

Once a TotalControl site is configured and the graphic pages are constructed with Design Studio, operators manage the site with an Internet browser. Design Studio is not required for daily operation.



Add or delete users with the web administration module

SQL server included

TotalControl Building Services stores data in a Structured Query Language (SQL) database. Microsoft SQL Server Express, a lightweight version of the Microsoft SQL Server family, is included with Building Services. KMC Controls recommends upgrading to Microsoft SQL Server Workgroup, Standard or Enterprise edition on sites with more than 300 controllers.

Supported protocols

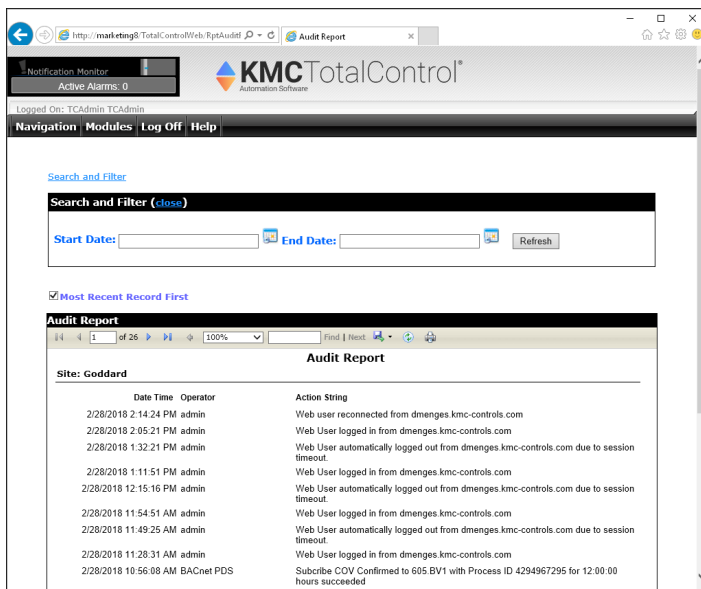
The TotalControl Building Services components support the following building automation systems.

- BACnet-IP, 8802.3, Foreign Device, BBMD
- KMDigital-Tier 1, Tier 2 connected to Tier 1 controllers, Tier 2 direct serial connection
- OPC as an OPC data acquisition client

View reports

Use TotalControl reports for site commissioning and recording system operations.

- An All Points report includes key objects and points in the connected system
- The Audit report is a journal of changes performed by operators
- A Run-time report captures equipment start time, stop time, and calculates the equipment run time
- The Override report lists all equipment in a manual override state
- The Out of Service report lists non-functioning objects and points
- Save reports in Microsoft Excel®, Microsoft Word®, or Adobe Acrobat® formats



Web Portal Audit Report

Run kiosk slide show displays

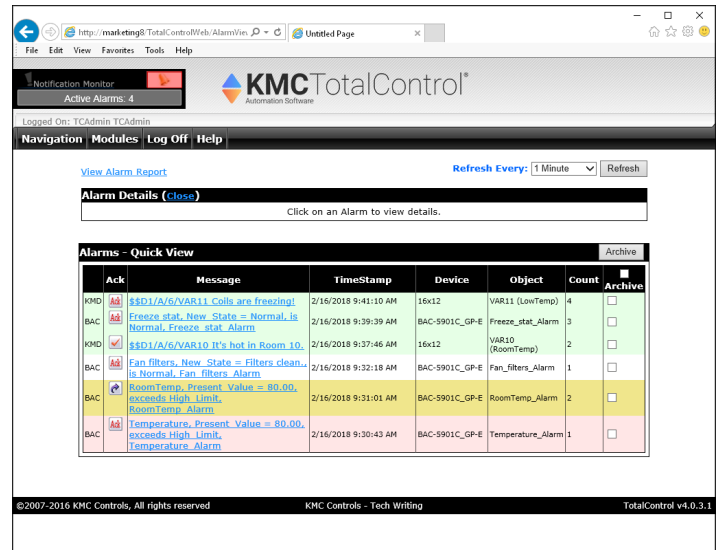
A kiosk is a specially designated computer that automatically displays only selected graphic pages from the Web Portal. Pages that have been selected for the kiosk are displayed in a browser window as a continuously running slide show.

Protocol Gateway

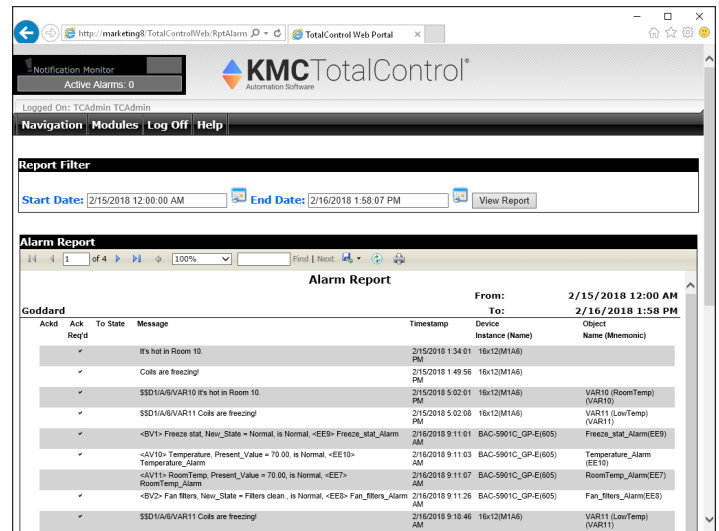
The Protocol Gateway service shares the values of setpoints, temperatures, occupancy status and other critical information among controllers regardless of protocol. The service continuously monitors data in one or more controllers and then transfers that data to other controllers regardless of their protocol. The transfer takes place at intervals that can be set to be as frequent as every few seconds or as long as once a month. A license is required for each computer on which the gateway service is operating

Alarm management

Use the TotalControl Web Portal to view and acknowledge alarms.



Web Portal Alarm Viewer module



Web Portal Alarm Report

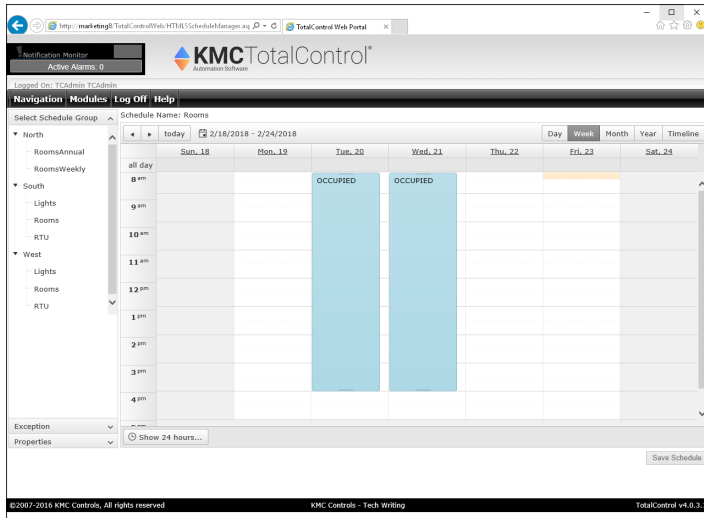
BTL Advanced Operator Workstation

TotalControl TC-BAC and TC-BACUNL, when used with TotalControl Design Studio, is a BACnet Testing Laboratory listed Advanced Operator Workstation.



Scheduling

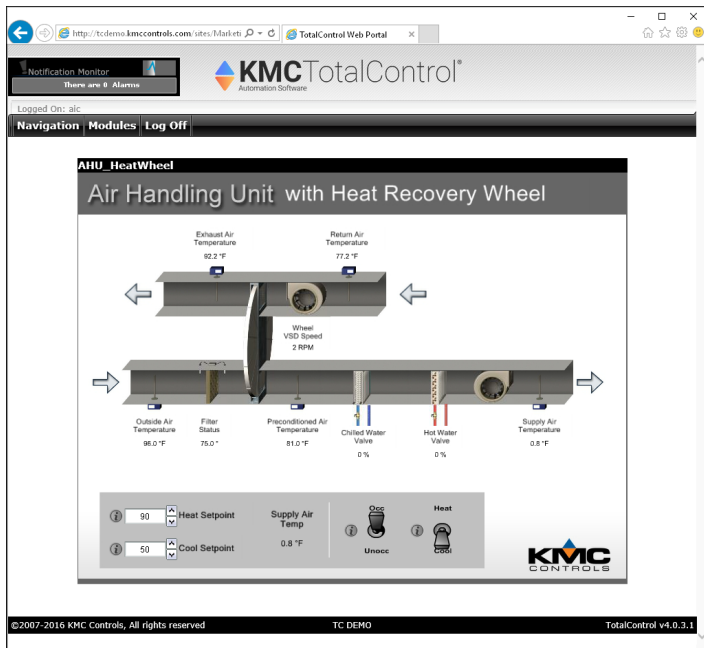
Control the schedule for holidays, maintenance, and special days.



Change master schedules.

Graphic pages

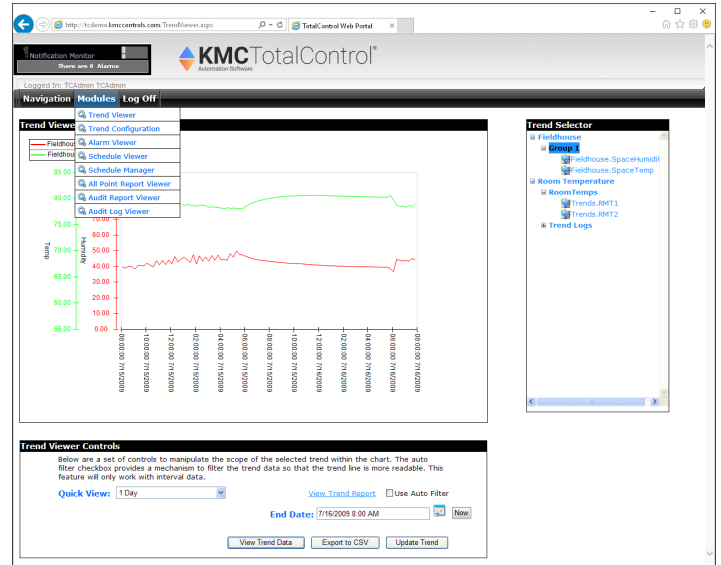
Routine and day to day operations for a site are performed from graphic pages connected to the network through TotalControl Building Services.



View custom web pages served from the TotalControl Web Portal.

View historical trend data

Use the Trend Viewer to monitor system performance with the Trend Viewer. With the viewer you can choose which trend data to view, the period to display, and to apply an averaging filter.



View historical and performance data with the Trend Viewer module.

Computer system requirements

TotalControl Building Services runs only on the following operating systems:

- Windows 7 Professional
- Windows 7 Ultimate
- Windows 8 and 8.1 Professional
- Windows 10 Professional
- Windows Server 2008 R2
- Windows Server 2012 R2

TotalControl Building Services will run on 32-bit or 64-bit computers or versions of Windows. TotalControl Building Services can be installed on hot-swappable or replicated servers as long as the servers meet the operating system requirements of TotalControl.

The complete list of computer requirements are listed in the document *Installing TotalControl* available on our web site.

Browser requirements

Browser pages set up with Design Studio are accessible through an intranet or over the Internet with an HTML5 browser that meets the following requirements.

- Microsoft Internet Explorer 11 or later for best viewing
- Adobe Flash Player version 11 or later
- Monitor size is 1280 x 1024 pixels (1024 x 768 minimum)

ORDERING INFORMATION

A job site name is required to place an order. All software is distributed through our web site at partners.kmccontrols.com.

| DESCRIPTION | MODEL |
|--|---------------|
| TotalControl AWS for BACnet, 50 controllers, 1 web seat, HW-KEY included. | TC-BAC |
| TotalControl AWS for BACnet, unlimited controllers and web seats (Requires TC-BAC) | TC-BACUNL |
| TotalControl OWS for KMDigital, 50 controllers, 1 web seat, HW-KEY included. | TC-KMD |
| TotalControl OWS for KMDigital, unlimited controllers and web seats (Requires TC-KMD) | TC-KMDUNL |
| TotalControl OWS for KMDigital; upgrade from 50 KMD controllers and 1 web seat to unlimited controllers and web seats. | TC-KMDUNL-UPG |
| Building Services - OPC Data Acquisition Client (Requires HW-KEY) | TC-OPC |
| Building Services - Protocol Gateway Service (Requires HW-KEY) | TC-GATE |
| Additional Web Seat for TotalControl OWS | TC-WEB1ADD |
| License to activate one remote computer as a kiosk | TC-KIOSK |
| KMC Controls Hardware License Key | HW-KEY |

SUPPORT

Additional resources for installation, configuration, application, operation, programming, upgrading, and much more are available on the web at www.kmccontrols.com. To see all available files, log-in to the KMC Partners site.