

# **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 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:

- · An alarm management service
- · A Trend logging service
- · Internet browser accessibility modules
- A Protocol Gateway to transfer values between controllers on dissimilar protocols
- A 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, a BACnet Advanced Operator Workstation (B-AWS). Once a site is set up with Design Studio, day-to-day tasks are performed from browser pages.

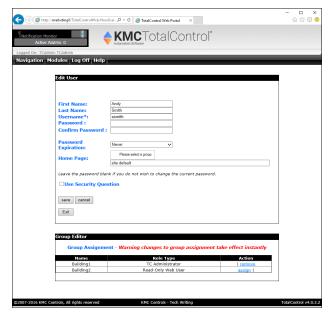
With TotalControl Design Studio you can:

- 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.

# **← KMC**TotalControl®

#### 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 HTML5-compliant Internet browser. Design Studio is not required for daily operation.



Add or delete users with the web administration module

# **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
- If using Flash, Adobe Flash Player version 11 or later
- Monitor resolution 1280 x 1024 pixels (1024 x 768 minimum)

# **Supported protocols**

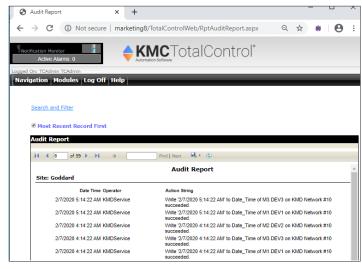
The TotalControl Building Services components support the following building automation systems.

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

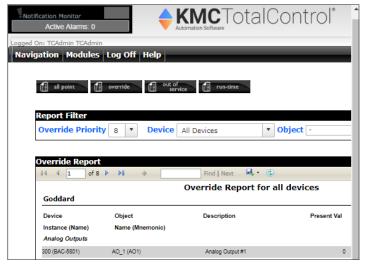
#### View reports

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 and stop times and calculates run times.
- The Override report lists all equipment in a manual override state
- The Out-of-Service report lists non-functioning objects and points.
- Save and export reports in Microsoft Excel®, Microsoft Word®, or Adobe Acrobat® formats.



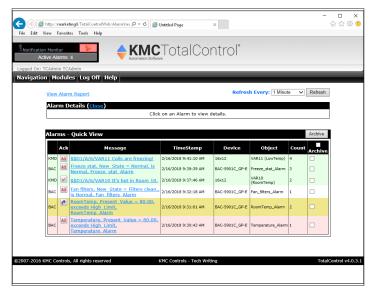
**Web Portal Audit Report** 



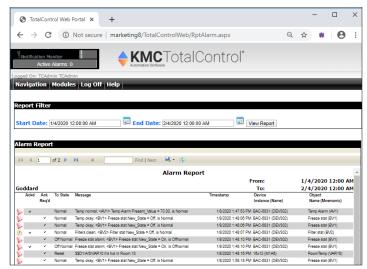
**Web Portal Override Report** 

#### **Manage Alarms**

Use the TotalControl Web Portal to view and acknowledge alarms



**Web Portal Alarm Viewer module** 



**Web Portal Alarm 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 display in a browser window as a continuously playing slide show.

# **Protocol Gateway**

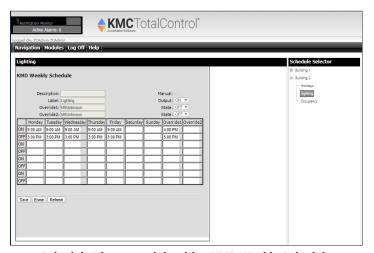
The Protocol Gateway service shares the values of setpoints, temperatures, occupancy status and other critical information among controllers regardless of protocol. The service continuously monitors data in one or more controllers and then transfers that data to other controllers regardless of their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

## **Scheduling**

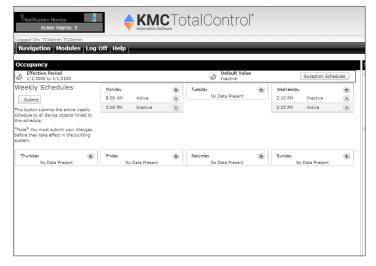
Control the schedule for holidays, maintenance, and special days.



**Schedule Manager module** 



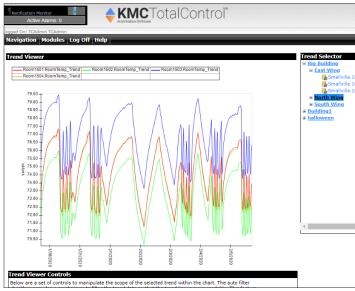
Schedule Viewer module with a KMD Weekly Schedule



Schedule Viewer module with a BACnet Weekly Schedule

#### View historical trend data

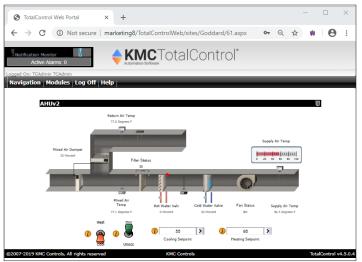
Use the Trend Viewer to monitor system performance over time. Choose which trend data to view, select the period to display, apply an averaging filter, and save the results as a CSV file.



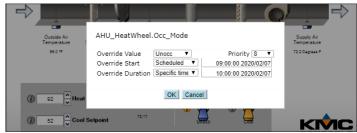
View and save performance data with the Trend Viewer module.

# **Custom graphic pages**

Use graphic pages connected to the network through TotalControl Building Services for routine and day-to-day operations.



View custom web pages served from the TotalControl Web Portal.



Manage operations from TotalControl Web Portal pages.

#### **Computer system requirements**

TotalControl Building Services run 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
- · Windows Server 2016

TotalControl Building Services run on 32-bit or 64-bit 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.

For the complete list of computer requirements, refer to the document *Installing TotalControl* available on our web site.

#### **SQL** server included

TotalControl Building Services store data in a Structured Query Language (SQL) database. Microsoft SQL Server 2014 Express, a limited 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.

A TotalControl site requires one of the following versions of Microsoft SQL Server.

- Microsoft SOL Server 2008
- · Microsoft SQL Server 2014
- · Microsoft SQL Server 2016
- · Microsoft SOL Server 2017

#### **BTL Advanced Operator Workstation**

TotalControl TC-BAC and TC-BACUNL, when used with TotalControl Design Studio, is a BACnet Testing Laboratories-listed Advanced Operator Workstation (B-AWS).



#### ORDERING INFORMATION

A job site name is required to place an order. All software is distributed through our web site at **www.kmccontrols.com**. A user name and password is required to download software.

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 (License added to 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 (License added to TC-KMD)	TC-KMDUNL
Building Services - OPC Data Acquisition Client (License only for a new or existing site)	TC-OPC
Building Services - Protocol Gateway Service (License only for a new or existing site)	TC-GATE
Additional Web Seat for TC-BAC or TC-KMD	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 area.