Data Sheet

IQ®VISION Supervisor

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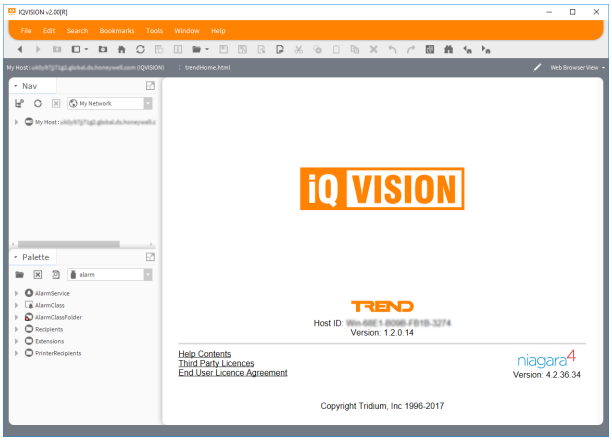

Description

IQVISION is a building monitoring and management solution built upon the powerful Niagara 4 platform. It is capable of integrating Trend controllers, third party devices and internet protocols into a centralised software platform that is designed to manage buildings at an enterprise level.

IQVISION serves real-time graphical information to standard web-browser clients and also provides server-level functions such as: centralized data logging, archiving, alarming, trending, master scheduling, system-wide database management, and integration with enterprise software applications – all of which can be used for highlighting and investigating energy use within buildings.

In addition, IQVISION provides a comprehensive, graphical engineering toolset for application development. HMTL5 support enables the customisation of user interfaces that are viewable on diverse web-enabled computers, tablets and phones.

The embedded System Migration Tool greatly reduces set up time by allowing existing system data to be imported from the IQSET engineering tool and 963 supervisor. The tool also allows 963 schematics to be imported and converted into IQVSION's HTML5 format.

Third party device integration using open standard protocols such as BACnet, Modbus, MBUS and KNX is also supported.

Features

- Enhanced Trend IP Network Driver with full multi-site capability and Trend system model compatible with IQ1, IQ2, IQ3, IQ4 and IQLs - see Compatibility for details.
- HTML5 compliant web framework for full smart device compatibility.
- System Migration Tool for migrating device data and schematics from existing 963 and IQSET projects.
- Supports an unlimited number of users over the Internet / Intranet with a standard web browser, depending on the host PC resources.
- Optional enterprise-level data archival using SQL.
- "Audit Trail" of database changes, database storage and backup, global time functions, calendar, central scheduling, control, and energy management routines.
- Sophisticated alarm processing and routing, including e-mail alarm acknowledging.
- Access to alarms, logs, graphics, schedules, and configuration data with a standard web browser.
- Password protection and security using standard authentication and encryption techniques with optional security supported via an external LDAP connection.
- HTML-based help system that includes comprehensive on-line system documentation.
- Provides online/offline use of the Niagara Framework Workbench graphical configuration tool and a comprehensive Java Object Library
- Optional direct Ethernet based driver support for BACnet IP, EIB/KNX IP, Lon IP, Modbus IP master and slave, MBUS IP, SNMP and OPC client; additional point blocks for each driver may be purchased - see page 3.
- Provides the ability to configure TONN8s.

FUNCTIONALITY

SCHEMATICS

IQVISION provides the user with colour graphics pages, which display live information from the system and enable parameters to be adjusted.

The pages can be engineered to suit the individual system requirements

ALARM HANDLING

IQVISION enables alarms from the systems to which it is connected to be displayed in an alarm console which displays alarms in a list and enables the user to acknowledge them.

The optional alarm portal provides similar functionality on a remote PC.

Note: The IQVISION station must be running.

OCCUPATION TIMES

IQVISION enables the occupation times of Trend devices to which it is connected to be adjusted form a central location.

SECURITY

IQVISION has a comprehensive security system that enables access to be controlled to prevent unauthorised access.

DATA MIGRATION

IQVISION includes a Migration Tool that can be used to import system data from 963 and IQ®SET.

Imported data can include device configurations and/or schematics.

COMPATIBILITY

TREND SYSTEM

Trend System: IQVISION provides connectivity to a Trend system via any Ethernet-enabled device with an available virtual CNC (vCNC).

Controllers: IQVISION supports all IQ controllers with the exception of IQecoVav v1. IQ1 & 2 series controllers must be updated to the latest firmware available.

TONN: Data from TONNs can be added to IQVISION. IQVISION provides the engineering tool for TONN8s.

3RD PARTY SYSTEMS

Direct Ethernet based driver support for BACnet IP, EIB/KNX IP, Lon IP, Modbus IP master and slave, MBUS IP, SNMP and OPC client.

INSTALLATION

IQVISION is available as a download from the Trend Approved Partners site (PNet): http://partners.trendcontrols.com.

A username and password is required to access the site.

Once downloaded to your PC/laptop a step-by-step installation program will guide you through the installation process.

After installation the software must be licensed, and configured to operate as required, as described in the IQVISION Configuration Manual (TE201382) which is also available from PNet.

ORDER CODES

The IQVISION license scheme is based around a point count. A point is a single item of information that is stored into the IQVISION database and in the case of the Trend system includes sensors, knobs, switches, digital inputs, drivers and any additional software point (not connected with any controller) that you may want to add into IQVISION.

There are three main categories of point in IQVISION - Trend points, open points and TONN points:

Trend Points

These are points from Trend controllers (IQ1, IQ2, IQ3, IQ4, IQL, IQeco). The license should be sized according to the number of the points to be monitored. Point discovery is an embedded feature available through the discovery wizard embedded in the Trend driver. Trend devices and networks are not counted for licensing purposes.

IQV-500	IQVISION starter kit including Trend native driver and 500 point database size
IQV-2500	IQVISION starter kit including Trend native driver and 2500 point database size
IQV-5000	IQVISION starter kit including Trend native driver and 5000 point database size
IQV-15000	IQVISION starter kit including Trend native driver and 15000 point database size

If additional Trend points are required to meet system requirements the following codes can be combined to reach the desired number of points:

IQV-100EXT	IQVISION additional 100 Trend database points
IQV-500EXT	IQVISION additional 500 Trend database points
IQV-2500EXT	IQVISION additional 2500 Trend database points
IQV-5000EXT	IQVISION additional 5000 Trend database points
IQV-15000EXT	IQVISION additional 15000 Trend database points

Open Points

These are points from open protocol equipped devices or subsystems that you wish to integrate into IQVISION. The IQVISION open driver licences include a selection of standard drivers (BACnet IP, EIB/KNX IP, Lon IP, Modbus IP master and slave, MBUS IP, SNMP and OPC client) that can be selected as necessary to enable head end integration.

IQV-500-OPEN	Extend base license with additional 500 Open protocols points
IQV-2500-OPEN	Extend base license with additional 2500 Open protocols points
IQV-5000-OPEN	Extend base license with additional 5000 Open protocols points
IQV-10000-OPEN	Extend base license with additional 10000 Open protocols points

Note: When reach the limit for point count is reached a license upgrade must be purchased if additional points are required.

TONN Points

These are points from Trend TONNs. The license scheme is based around the number of devices.

IQV-1-N	Add connectivity for 1 TONN
IQV-10-N	Add connectivity for 10 TONNs

Maintenance Upgrade Options

IQVISION starter kits include an 18 month maintenance and free upgrade package. This can be extended by purchasing one of the following maintenance upgrade options:

IQV-MNT1	IQVISION maintenance upgrade - additional 1 year
IQV-MNT3	IQVISION maintenance upgrade - additional 3 years
IQV-MNT5	IQVISION maintenance upgrade - additional 5 years

Extended Support Options

IQV-ALM-PORTAL	Licence for the Alarm Portal on a remote PC.
IQV-OPC	Extend the open protocol points with OPC client connectivity
IQV-DB-CSV	Extend the capability for IQVISION to interact with Microsoft Excel
IQV-DB-SQL	Extend the capability for IQVISION to communicate SQL

PLATFORM REQUIREMENTS

IQVISION will run on the following operating systems:

Windows 10 (32-bit),
Windows 10 (64-bit),
Windows 8.1 Professional/Enterprise/Ultimate (32-bit),
Windows 8.1 Professional/Enterprise/Ultimate (64-bit),
Windows 7 Professional/Enterprise/Ultimate (32-bit),
Windows 7 Professional/Enterprise/Ultimate (64-bit),
Windows Server 2012 R2 Standard/Enterprise (SP2) (64-bit)

Your PC must comply with the minimum specification for the installed operating system as specified by Microsoft.

In addition to meeting the requirements for the operating system IQVISION requires the following:

Processor	:Intel® Xeon® CPU E5-2640 x64 (or better), compatible with dual- and quad-core processors.
Memory	:1 GB minimum, 4 GB or more recommended for larger systems.
Free Hard Drive Space	:4 GB minimum, more recommended depending on archiving requirements.
Display	:Video card and monitor capable of displaying 1024 x 768 pixel resolution or greater
Network Support	:Ethernet adapter (10/100 Mb with RJ-45 connector)
Connectivity	:Full time high speed ISP connection recommended for remote site access (i.e. T1, ADSL, cable modem).

Niagara 4 supervisors may run acceptably on lower-rated platforms, or may even require more powerful platforms, depending on the application, number of data points integrated, data poll rate, number of concurrent users, performance expectations, etc.

The biggest factors for performance will be the amount of memory available to Niagara and the speed of disk drives.

If enterprise-level data archiving is required (optional), one of the following compatible database applications will need to be installed:

MS SQL Server 2012,
MS SQL Server 2014.

Please send any comments about this or any other Trend technical publication to techpubs@trendcontrols.com

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