

Open Standards and Integration

Trend's unique approach to Open Standards and Integration delivers all of the benefits you would expect, as well as market leading innovations from a premier Building Management System.

The two most important benefits of open standards in building management systems are future-proofing and integration.

Future-Proofing

There are two elements needed to future-proof your building management system. Firstly you need to ensure that you will be able to extend and upgrade your system throughout the life of the building. Secondly you need to avoid being locked into a single provider.

Trend's approach

Trend's strategy for success has been to future-proof customers investments. Whenever we develop a new product, direct compatibility with the legacy system is paramount.

Future-proofing - Trend complies

Trend offers LON, BACnet and OPC within its range, which enables you to add other manufacturers

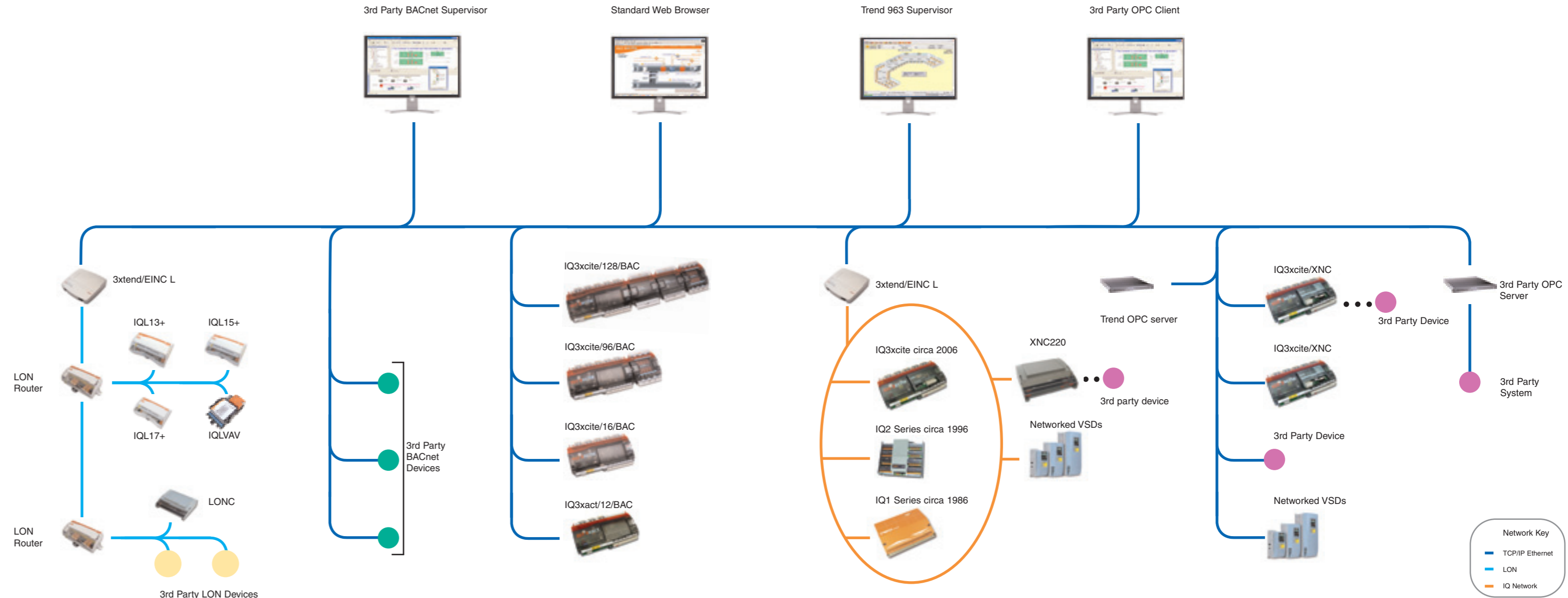
open standard equipment to the system in the future.

And there's more

If you had purchased a Trend IQ controller 20 years ago, and now wished to extend your system, you can buy our latest controller and they will communicate perfectly with each other. Furthermore if you wished to utilise another media for your network (Ethernet or LON) the old and the new systems can still communicate with each other through a self-learning router.

In fact Trend's self-learning routers have meant that as new standards and media types have developed over the years, users have been able to extend their existing Trend Building Management Systems without costly reconfiguration or replacement.

And, to ensure that you are never locked into a single provider Trend offers all of its equipment through third party suppliers. Hence wherever you are in the world you can always find a choice of approved providers to extend or maintain your Building Management System.



BACnet

Trend's IQ3xcite range includes variants with native BACnet communication capability. BACnet over IP enables the IQ3xcite to integrate seamlessly with other BACnet devices.

The BACnet capable 963 supervisor not only enables monitoring and adjustment of all of Trend's controller products (IQ1xx to IQ3xcite) but also other manufacturers BACnet devices. Importantly Trend's approach to BACnet in both the IQ3xcite and 963 supervisor maintains existing engineering and operating methods, giving customers a consistent and familiar approach.

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Enterprise Integration

Trend's IQ3xcite range resides on Ethernet and uses TCP/IP protocols. They have an in-built web server and can send emails via an SMTP server.

Simply using a standard web browser you can view and control your plant via a graphical interface. Furthermore web services will allow integration to your energy management and integrated business systems.

LON

All of Trend's IQL products are LonMark Certified and furthermore Trend's LONCs allow other LONMarked devices to be integrated into the Trend system.

The 3xtend/EINC L self-learning router, interconnects Ethernet, Trend LAN and LON networks, bringing all three media together to provide a transparent system.

Hence 3rd party LON information can be shared throughout the system.

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Integration Controllers

Trend have a range of controllers, that reside on the Trend LAN or Ethernet and can provide interfaces through RS232, RS485 and Ethernet. These devices can be visualised in two parts, one half being a standard IQ controller and the other being a protocol translator. Using TCL (Trend Custom Language) our network of integration specialists have written over 100 different interface applications, including such standards as MODBUS and MBUS.

OPC

Trend is a member of the OPC Foundation and have a fully scaleable OPC server that has been successfully applied in many different applications.

Trend manufactures a "Data Access" client in which has been included significant additional features. Firstly, time schedules are easily managed within our server and secondly, our OPC server can receive alarms without the need to continually poll the critical points.

Other Integration

Trend's custom components can allow other systems to talk directly to Trend devices whichever network they reside on. This can provide unique interfaces not available by other means.



Integration

Integration can occur at three different levels, management, control or field. It is useful to have more than one option available since different systems are more suited to being integrated at different levels. Of the three common open standards, typically OPC operates at the management level whereas BACnet and LON operate at both control and field levels.

Integration - Trend complies

Trend has BACnet, LON and OPC solutions to satisfy your integration needs, meaning that we can integrate to any system that complies with these open standards.

And there's more

Trend also has a range of integration controllers which are able to place information from 3rd party equipment directly into the controller. These controllers can interface over RS232, RS485 and now Ethernet. Hundreds of different interface applications have already been written, however

should you have a unique interface requirement then our network of integration specialists will be able to provide a solution.

Sometimes a solution is required that needs closer cooperation in order to provide the best resolution to the problem. Trend have always been very open and have developed custom components that can be incorporated into other systems allowing them to talk directly to the Trend system.

Enterprise Integration is considered to be another major route for the future of system integration at the management level. The Trend IQ3 Controllers all reside on Ethernet and use TCP/IP protocols, enabling you to use the same media as other Ethernet devices and a common browser.

The integral web servers coupled with web services will allow integration to energy management and integrated business systems so your entire organisation will benefit from the unique data stored in your BMS.

If you have a requirement for future-proofing or integration talk to Trend. We can provide you with the best solution.

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