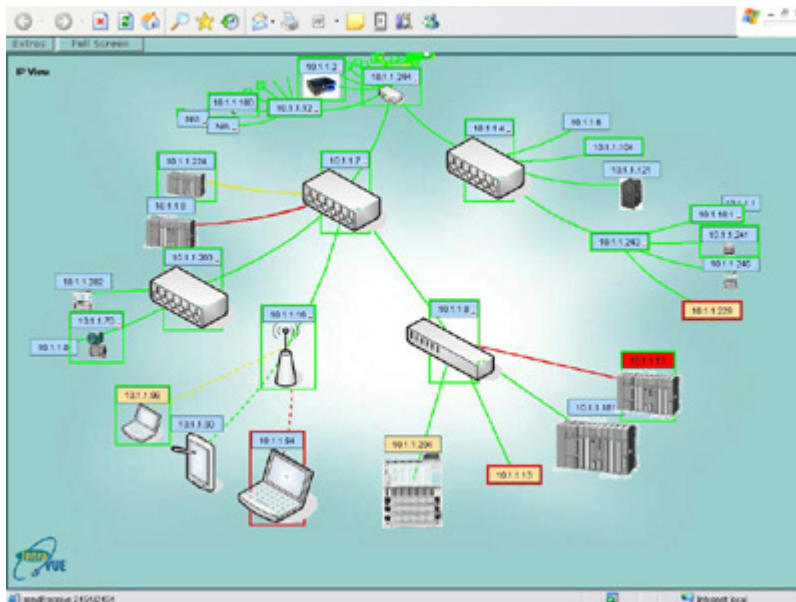


IntraVue - Monitoring and maintenance of industrial IP devices

Associated with **PcVue**, you profit from an integrated offer enabling you to ensure the control of your Ethernet network infrastructure. Rather than simple network monitoring software, **IntraVue** is a product able to provide a visibility, a diagnosis and a maintenance of all IP devices used on your industrial Ethernet networks.



IntraVue has been developed to help control staff quickly and easily resolve typical problems with interconnected industrial IP devices:

- Intermittent communication loss caused by vibrations, ground faults, or EMI interference,
- Device lock-ups from power failures or high temperature,
- Duplicated IP or MAC addresses,
- Connecting failure (cable crushed, cut, burned or simply disconnected),
- Identify the source of bandwidth problems.

The **PcVue+IntraVue** solution enables you to cross the technological threshold represented by the increasing presence of Ethernet in industrial applications. All networking data (alarms, SNMP etc.) are available in **PcVue** in a transparent, native manner. That provides a solution that is both well integrated for the end-users and powerful for systems integrators.

[Why use IntraVue?](#)

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Why use IntraVue?



Download IntraVue presentation in:

English (845 Ko)

French (847 Ko)



[IntraVue, White Paper](#)
(PDF : 928 Ko)

New communication standard: Ethernet

Ethernet is becoming the communication standard for industry. A healthy increase is forecast for the number of industrial devices connected to Ethernet networks, with some sources speaking of a threefold multiplication in coming years.

Many end-users have already installed thousands of industrial Ethernet devices and most equipment manufacturers are developing next-generation equipment communicating over Ethernet.

Any automation vendors are replacing traditional fieldbus communications with Ethernet versions such as EtherNet/IP, PROFINet, ModbusTCP and Foundation Fieldbus HSE.

Development toward all-IP

As the communication environment evolves toward a single standard, a large number of diverse devices will be connected on a single network.

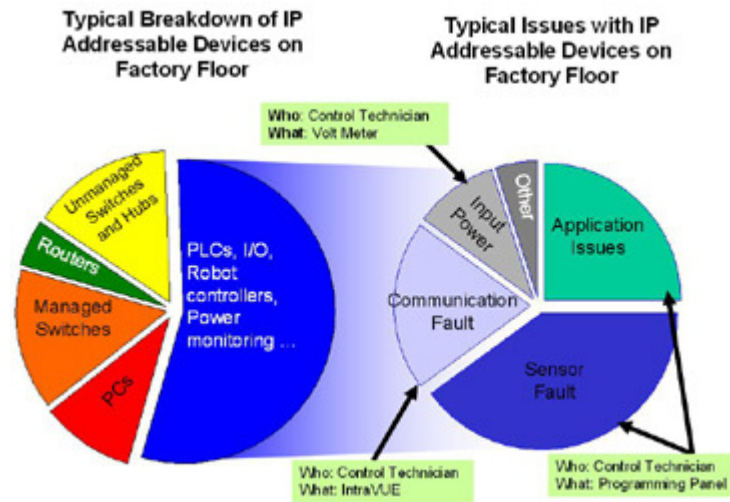
According to the initial feedback from control staff using Ethernet communication on the plant floor, it is of primary importance to have a vendor-independent tool that enables real-time supervision of all network exchanges. When deployment of additional IP equipment is planned, it is also vital to comprehend the full details of the network.

IntraVue enables you to answer the following questions:

- Do you have a tool, usable by everyone, to enable you diagnose and maintain your networking application?
- Could you easily detect common faults on an industrial Ethernet network?
- Do you have a graphical view of the network interconnections among your industrial IP devices?
- Do you have a tool that enables you to document and test your network application?
" Could you quickly detect a duplicate IP address?
- Are you able to identify whether a failure is due to a configuration problem (VLAN), a connection fault (ground, vibrations), a communication issue (disconnection, accidental reset) or an application fault (in exchanges between a PLC and a SCADA station)?

New problematic: Support of IP devices

The issues arising on the plant floor are quite different to those of an office environment. These differences create the need for specialized functions that are not addressed by traditional IT tools.



Communication faults commonly found in industrial applications

- Cable faults such as burned or crushed cables,
- Intermittent connection problems created by vibrations, RF interference or faulty grounding,
- Duplicate IP and MAC addresses,
- Accidental movement of cables or devices,
- Unknown devices connecting to the industrial network,
- Faulty devices (resetting or malfunctioning).

When you encounter any of these problems, you will also experience:

- Production downtime,
- Extended start-up time,
- Losses of data.

The ability to reduce or eliminate losses will be greatly improved if control staff can promptly identify and respond to these common plant floor problems.

Main benefits of IntraVue

'Auto-aware' software

One of the main benefits of **IntraVue** is its ability automatically to detect and map the topology and population of IP devices on a network. **IntraVue** is parameterized software that requires no specific development. Running 24x7, it monitors all network data and provides a real time display of network activity.

Quick setup

IntraVue offers a quick Wizard to simplify the configuration of the network areas to be monitored.

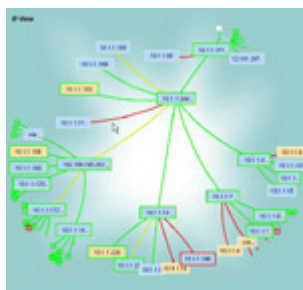


Automatic discovery

Once the configuration is done, **IntraVue** intercepts the network exchanges so as to detect IP devices. It thus displays the whole population of IP devices answering to a PING.

Automatic mapping

The second stage carried out by **IntraVue** consists in accurately representing ports to ports connections between detected industrial IP devices. Thus, you are able to know which device is connected on such port of such switch.

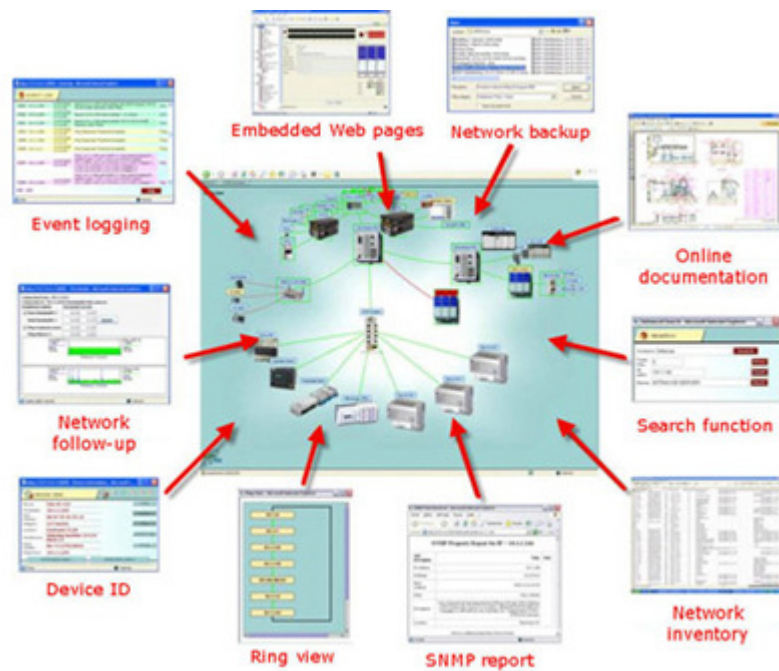


Real time tracking

In real time, **IntraVue** monitors all IP devices connected to the Ethernet network. Topology and device moves, connections, disconnections, bandwidths exceeded etc. are represented with color-coding in the graphical interface.

Graphical user interface

IntraVue's user interface is the key feature of this solution. The software is astonishingly easy to set up and use. Hundreds of IP devices can be displayed at once within a single comprehensive graphic. You can access any of the functions with a single click.



Vendor-independent Solution

IntraVue is the only independent monitoring software specifically developed to monitor industrial network installations. An industrial network is characterized by a distributed architecture but also by the diversity of the devices connected on the same network.

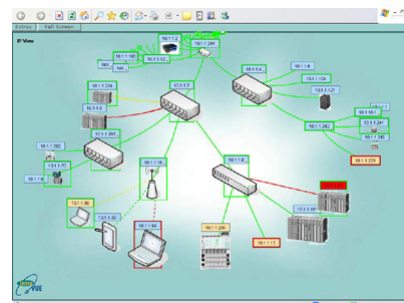
IntraVue enables monitoring of a wide range of devices by type and brand. The sole requirement is that a device has an IP address so that **IntraVue** can detect and monitor it. This affords a solution for network architectures made up of dissimilar systems.

Integration with PcVue

ARC Informatique has decided to integrate the **IntraVue** software within its own monitoring software, **PcVue**. The objectives of these two software packages are common: ease of use and providing functions suited to industrial requirements.

The solution of **PcVue** plus **IntraVue** is the only product on the market that offers a complete integrated solution for process and network monitoring within a single SCADA application. The **PcVue** application receives network alarms and SNMP data generated by **IntraVue**. This makes it possible for local users immediately to detect any incident that could affect the application.

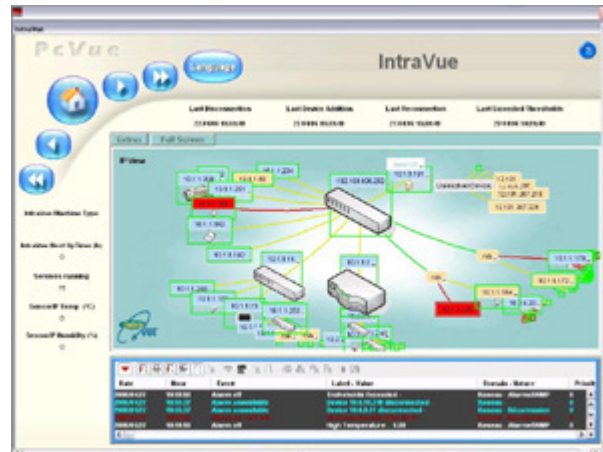
When an alarm occurs, the contextual



modes for navigating within the user interface allow the user to move automatically to a detailed view that presents all the characteristics of the device that triggered the fault.

Information available within **PcVue**:

- Network alarms,
- Status of network connections,
- Status of IP devices,
- Specific SNMP data.



Benefits from integration of IntraVue with PcVue:

- Gathering of process and network monitoring,
- Unique database,
- Real time, dynamic and powerful network view,
- Significant reduction of the development period for network monitoring,
- Visibility of the connections among process devices,
- Increase in the availability ratio of the control and monitoring system,
- Modbus and OPC communications,
- Innovative and distinctive solution.

