



PcVue

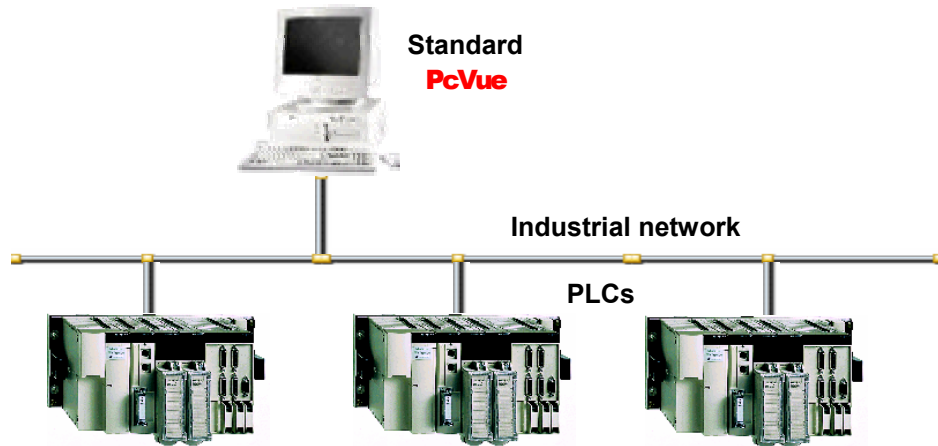
Architectures

PcVue was designed to support multi-station architectures for networking. It has responded to a growing demand from users to increase their installations' capacities for supervision and control. The concepts of client/server architecture and inter-station transport service are native to **PcVue**.

They are available in the Microsoft Windows 2000 and XP environments.

www.arcinfo.com

Single Station

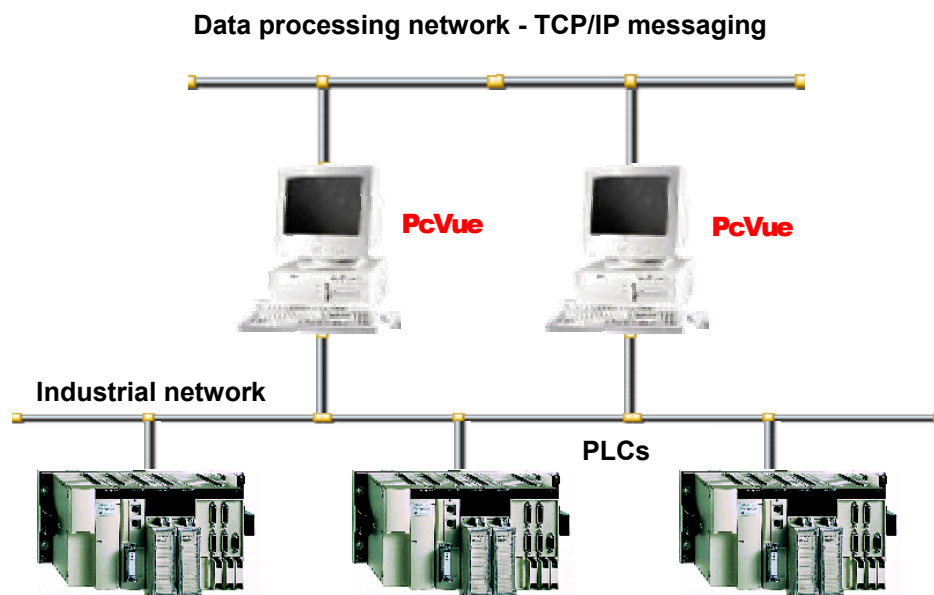


In a traditional single-user configuration, the Supervisor manages all of the source data devices as well as executing user requests. **PcVue** can support a database of some tens of thousands of variables on a single station.

Its data acquisition employs various native protocols that are delivered with **PcVue**, plus OPC Servers and - for LonWorks networks - LNS.

In situations where events must be time-stamped at source, **PcVue** supports communications protocols to capture time-stamped data to millisecond accuracy. When acquired come from several devices, the data can be collated before being displayed or recorded.

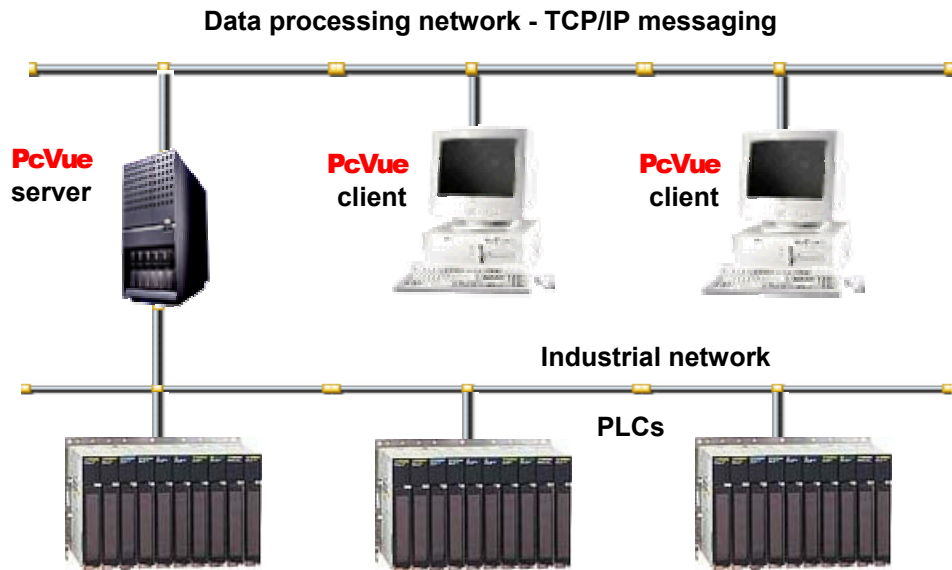
Multiple Stations in Parallel



This is the simplest way to provide a redundant set-up. Several standardized **PcVue** stations make up an association to ensure supervision and process control. Identical applications are run in parallel on the stations.

The users' actions and alarm acknowledgements are broadcast across the local area network by the TCP/IP transport service to all stations of the association.

Client-Server

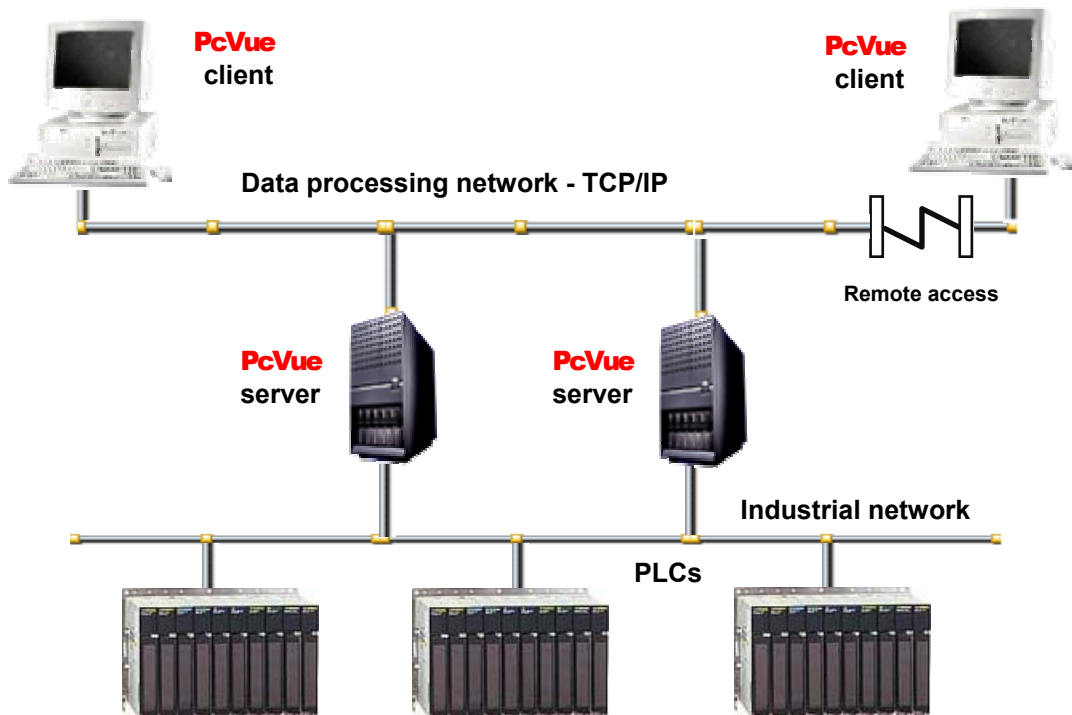


The Client-Server architecture is a solution for applications that require several user stations but only one connection to the industrial network.

The server is a data source (producer) that communicates with the devices and broadcasts data to the client (or consumer) stations. Communication among native TCP/IP **PcVue** stations works asynchronously and transmits meaningful information with the packets.

The server station can be a user station or a network interface processor. It does all of the routine processing for the application..

Multiple Clients and Servers

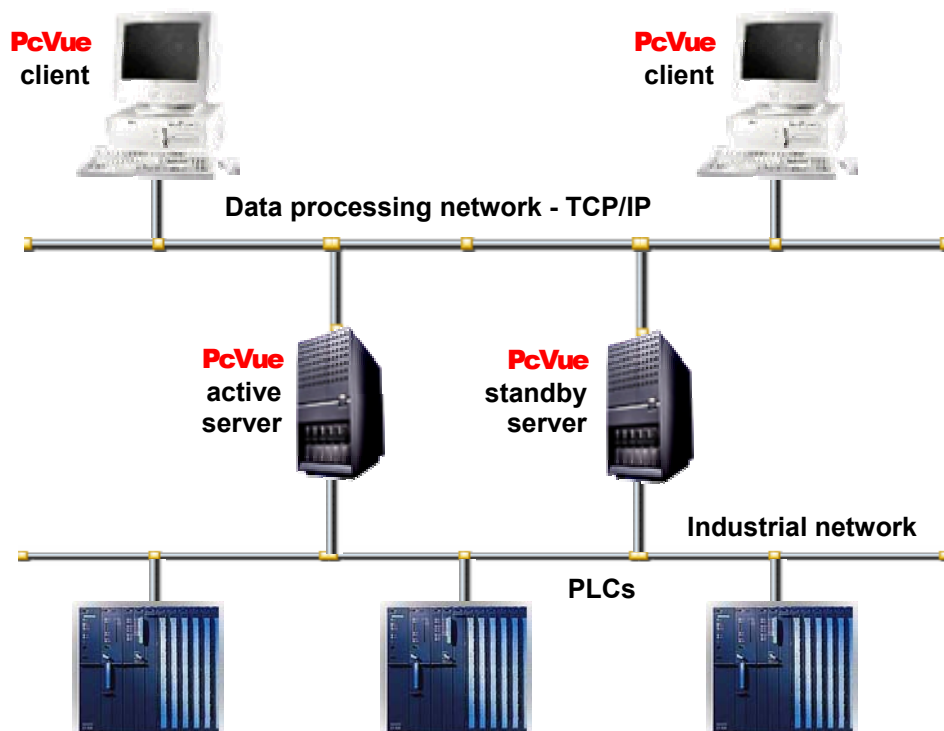


In this configuration, two or more servers working in parallel are dedicated to communicating with different devices, each managing distinct data access requirements for the application.

Each **PcVue** client is registered with each of the servers and can subscribe to any of the application variables.

A client can connect via a remote access service to a server located in another geographical place. Connection by private telephone line, public telephony or even satellite link is possible.

Single Active Server



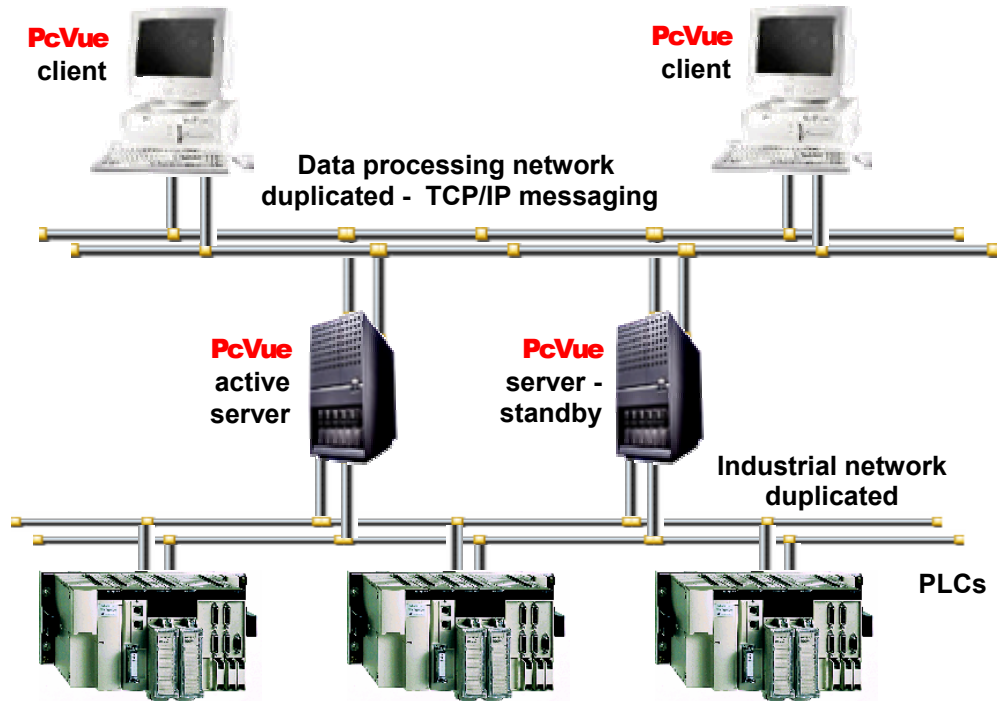
Each communication server can be duplicated for data security and availability. Each group of redundant servers forms an association (cluster). The set of associations sustains redundant acquisition from several populations of devices.

PcVue's optimized Client-Server architecture authorizes a single active server at a time within an association. In an association, the servers that are in standby are clients of the active server and do not communicate with the devices.

If the active server should fail, one of the standby servers starts communication with the devices and becomes the active server. The switch-over is transparent to the client stations. This solution offers the advantage of minimizing communication loading with the devices.

Each **PcVue** client station can be connected to several server associations. This caters for high throughput applications, some tens of stations and over 100,000 variables.

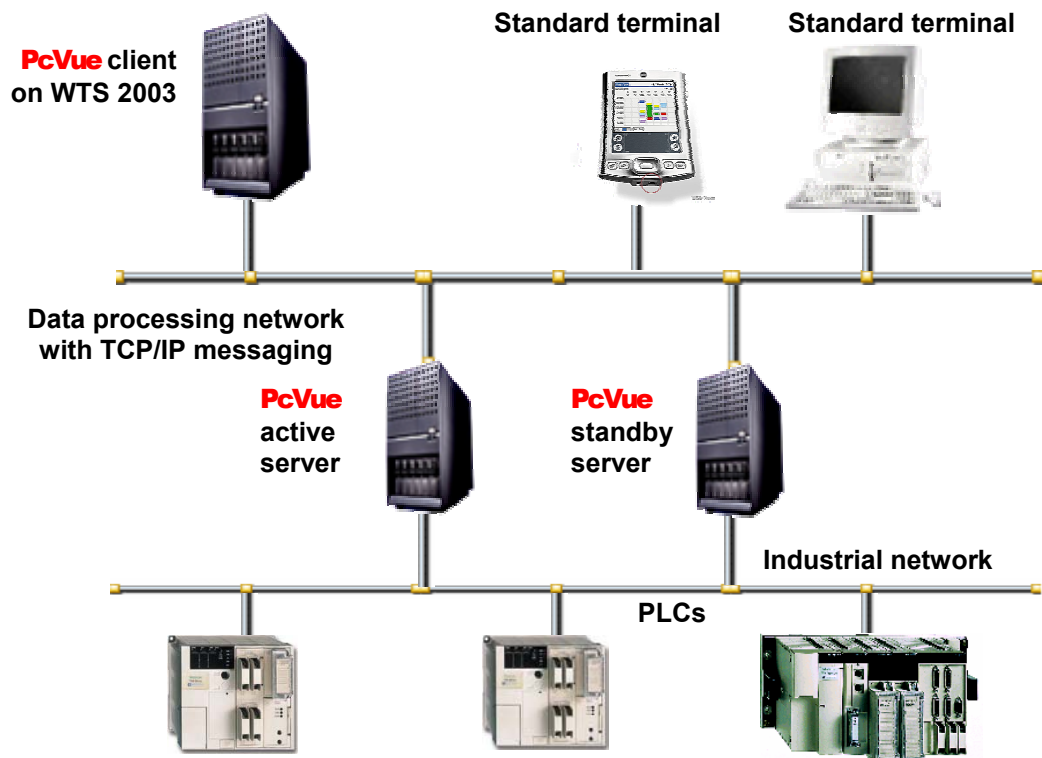
Secure Client-Server Setup



To improve overall availability of the installation, the local area network (LAN) for data processing and/or the industrial network can be duplicated. There are then two independent paths between any client station and the data sources. Each **PcVue** client station maintains two connections with each server station and will attempt to switch between servers only when both of these connections are inoperable.

On an Industrial Ethernet network, **PcVue** also manages redundancy of communication media and device-level redundancy.

Standardised Clients

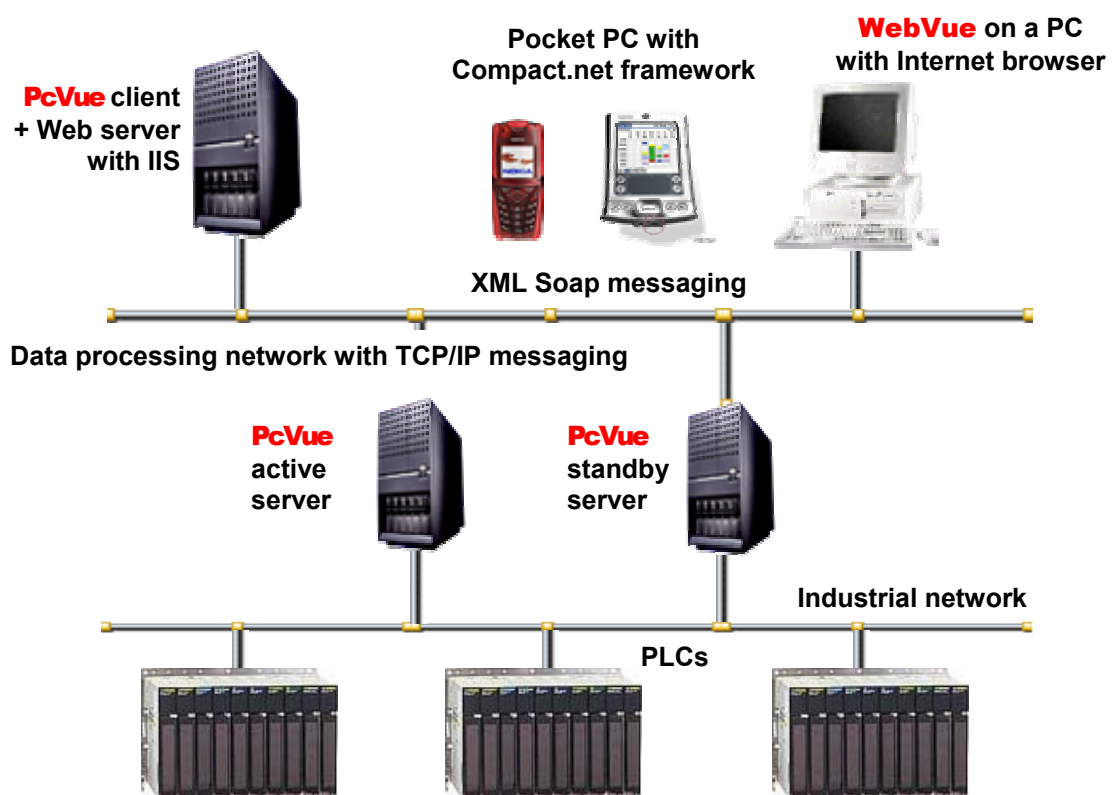


Here, a **PcVue** client is installed on a station with Windows Terminal Server (WTS) 2003. From it, you can open a session to run an instance of the **PcVue** client.

The WTS Station must be configured to support the required number of simultaneous sessions. The standardized terminals do not require any specific installation, which facilitates on-site deployment of the application. The **PcVue** server, when there is only one, can also reside on the WTS station.

A terminal running Windows 2000, XP, or CE must be set up with the 'Allow remote connection' option. There is a version of this for Pocket PC and the software for managing Remote Desktop Protocol (RDP) is available for Wyse type terminals under Linux or Unix.

Web Clients



A **PcVue** client is used as a Web server for stations running an ordinary Internet browser. It provides various public and/or private Web services via an IIS server using HTTP protocols and XML Soap. The standardized stations do not require any specific installation, which facilitates deployment of the application both on-site and remotely.

Mobile terminals can access the real-time values of variables and various alarms lists, historical data etc. on the **PcVue** client stations, through public Web services. Terminals equipped with a Web browser and Java can display mimics, historical trends, alarm lists etc. from **PcVue** private services and WebVue's Java applet.

The Web server station must be configured to support the required number of simultaneous WebVue sessions.