



Vista Control Systems®

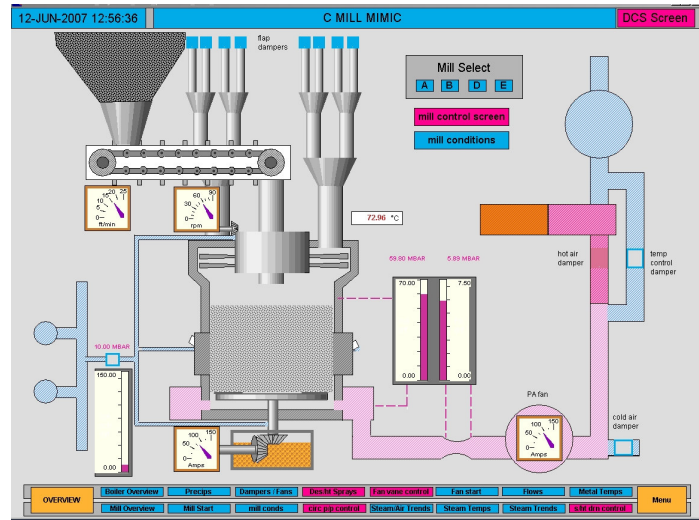
Vsystem Description

Vista Control System's Vsystem runs on and is the same product on eight computer platforms, including Windows® NT/2000/XP/Vista, Linux, Solaris, Tru-64 UNIX, OpenVMS (VAX, Alpha and Itanium), and Concurrent's PowerMaxOS and RedHawk. Vsystem is based on an open software architecture. The following points are just highlights of Vsystem:

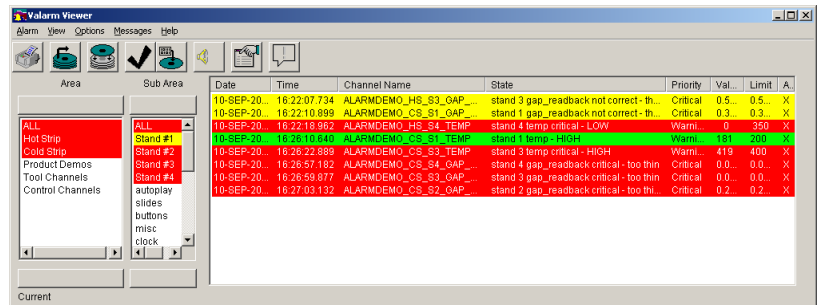
Vista Control Systems's Vsystem components include:

Vaccess® A networked, user-extendable, real-time database/data-bus and library of access routines. Its unique, event-driven architecture results in superior performance, speed, scalability, manageability, and security. Vaccess is similar in structure to an electronic crate—like a VME crate—into which a variety of independent modules plug. A Java server, ODBC and OPC are available.

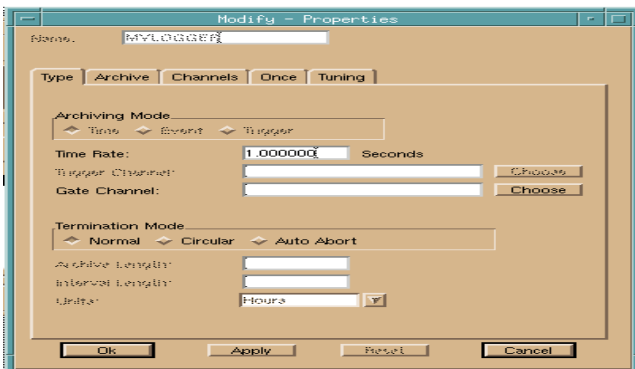
Vdraw® A graphical user interface. Our graphics tool kit, Vdraw, enables our users to quickly create simple or sophisticated data acquisition and control screens. Vdraw includes many high-performance interactive objects, like strip charts, meters, text, and bars and graphs for connecting to Vaccess with just a few clicks. Vdraw can manage many windows simultaneously in a mixture of drawing and live modes. The user interface is based on native graphics (X Windows and Motif or Microsoft Windows), with a web version now available. There is extensive external control of Vdraw screens.



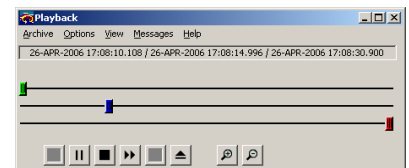
Valarm™ An interactive alarm tool. While alarm checking is done in Vaccess, Valarm monitors channels (similar to points or tags) in your system, logging, printing, and signaling warnings and alarms. The kit also includes an historical alarm viewer.



Vlogger™ A data-recording tool. Vlogger records data to disk from your Vsystem database: at specific time intervals, when channel values change, or when activated by a trigger event. All three types of loggers can be gated. Circular logs can be defined so that data are kept for only a defined time or disk space. With Vlogger you can log data at better-than-millisecond rates and log any field of any channel. Users can access (read from) logs while they are being written to, and data can be time stamped either at the source or by Vlogger. You can run multiple loggers at different rates, each with its own selection of data to log. Data are stored in compressed binary files and easily converted to ASCII format. Tools are provided to merge, extract, and copy data and log files. Data in log files can be accessed using Vlog/SQL, Vlog/Table, ODBC, JDBC and graphically viewed with Vtrend.



Playback A tool that replays previously recorded data. Playback exploits the architecture of Vsystem. You can play back a log file into Vaccess to determine problems, train operators, or perform useful analyses of "what if" scenarios. Playback can also be used to play prerecorded scenarios.



Vtrend™ A history and trending tool for viewing logged data graphically.

Vtrend gives you the tools needed to export the data that you are viewing to a spreadsheet, report writer, or other program. Vtrend can be used for live trending, and Vtrend can be totally controlled from Vaccess. There is no limit to the number of “pens.”

Vscript™ A high-level scripting language that interfaces transparently with Vaccess.

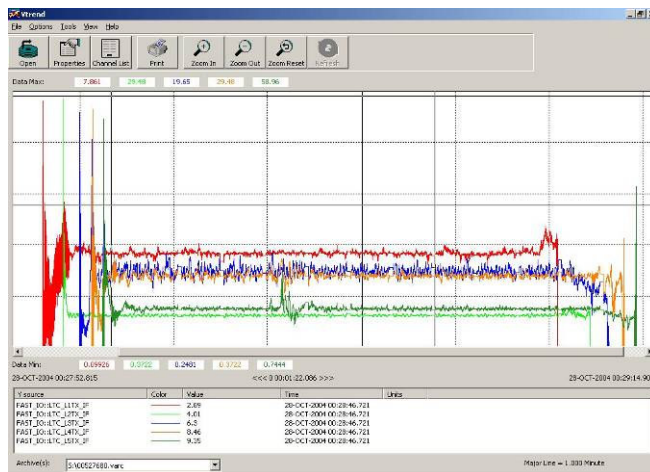
Vscript enables you to connect to any Vscript server on the network, monitor running scripts, or start and debug new scripts remotely. Vscript supports most language capabilities and adds time support and Vaccess support.

Vscan™ An active connection between Vaccess and I/O hardware, allowing for easy customization.

Vczar™ An active agent that acts as the Vsystem Network Task Manager.

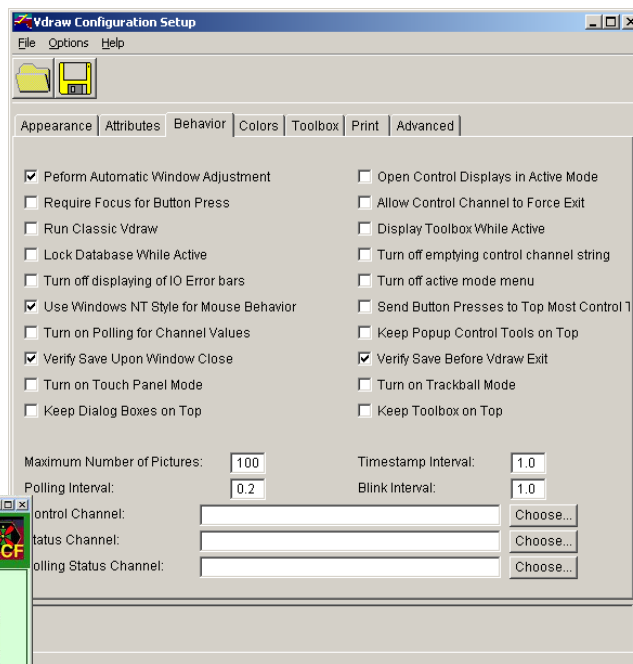
Vczar allows applications and users to perform database control and computer process control in the Vsystem network environment.

Setup Many of the above components have a graphical editing tool to simplify the selection of their many options.



I/O Connections and Openness

We publish the interfaces to Vista control System’s Vsystem so that our customers have a choice in developing or extending their system. Presently, we have a Modbus, Allen Bradley and Siemens S7 scanner that will talk over Ethernet, serial lines, and radio links. In addition there is available a GE MkVI GSM scanner. We have an RTP scanner, a Sixnet scanner and a complete Kingfisher RTU scanner (including integrated video support—video frames are data along with the rest), and an OPC Scanner for NT/2000/XP, along with some interfaces to other I/O. If the I/O has an OPC server available or an API to talk to it, then it is a simple matter to either make the OPC connection or join the two APIs (one for the I/O system and the other for the Vaccess API) with a thread of code.



Reports

Vlog/SQL and Vreport provides text-based reports while the JDBC interface provides Java reporting tools access to data for more complex formats of reports and graphics. Vopc client and ODBC provide a connection to other third-party reporting tools.

Simulation and Training

By implementing a computer model of an application and installing it with Vsystem in place of the I/O

connection, one has a real-time training system for operator training. This system will have the same look and feel and response as the actual application.