Administration Server · Badging Workstation · Guard Workstation · Wireless Workstation

LAN/WAN · TCP/IP · Access Point · LAN I/F · LAN I/F · XBOX · Global · RS 485

Value-Class Access Control

HIRSCH Velocity FOR WINDOWS 2000 ™

Velocity is management software for access control and security operations. A broad range of security management features are bundled into an easy to use and easy to install offering to create the benchmark Value Class access control system. Velocity is chartered to use state of the art technologies including client/server architectures, Windows 2000 operating systems, and Microsoft's SQL Server databases. Velocity fully utilizes Hirsch's newest generation of DIGI*TRAC™ controllers in a distributed processing architecture for the simplest or most mission critical access control applications.

Features
- Optimized for Windows® 2000
- MS SQL Server Database
  - Runtime version included
- Multi-Monitor Support
- Controller Communications
  - TCP/IP
  - Serial Port
  - Wireless Ethernet (802.11b)
- Globalization via XBox™
- Dynamic Status Viewer
- Animated Graphics
  - Icons For Status, Alarm & Control
  - Imported Map Backdrops
- Photo Capture, Photo Badging and Photo Call-Up
- User Configurable GUI
  - Floating, Docked or Child Windows
- Integral Browser & AVI Tutorials
- Log-on Authentication via OS
- International Language Options
- Offline Database Creation
- Flash Downloads of Firmware to Controllers
- Online Diagnostics
- Wormhole Programming

Description
Velocity is built on Microsoft® Windows 2000 operating systems. Windows 2000 Professional is used for the Single User Version and Client Workstations. Windows 2000 Server is used for the Server. Velocity also uses Microsoft's SQL Server database, and includes an enhanced runtime version for low cost and easy installation. The database, communications and necessary services all start automatically on boot up. Velocity can reside on a local area network (LAN) or a wide area network (WAN).

The following modules make up the User Interface:
- Administration (Explorer format)
- Velocity Configuration
- DIGI*TRAC Configuration
- Interfaces Configuration
- Alarm Viewer
- Badge & Graphics Designer
- Browser
- Customization Manager
- Enrollment Manager
- Event Viewer
- Graphics
- Report Manager
- Status Viewer
- SQL Manager
- Task Scheduler
- Diagnostics

The Graphical User Interface (GUI) is user configurable to the Operator and returns at log-on to the arrangement left at log-off. Modules and components may be docked to top, bottom, left or right, or floated to another monitor in a multiple monitor configuration, or follow traditional child conventions for minimize/maximize/restore.
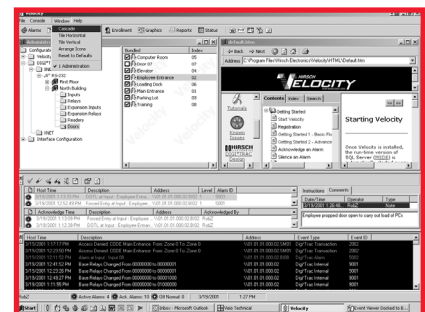
Operator Management

Velocity uses Windows 2000 Operator Authentication. The User Name & Password used to log onto the operating system also assigns operator privileges within the Velocity application. User defined Rights and Permissions restrict access to critical components and functions. Rights determine whether the operator may even view a Configuration Tab, Report or Graphic. Permissions restrict Operator access to functions, such as the ability to clear alarms, forgive passback, reset credential counts, etc.

SQL Database

Velocity maintains all access control, photo badging, field hardware parameters, screen presentation attributes and operator privilege data in a single SQL Server database. Hirsch enhanced MS SQL Server – MSDE – with the Velocity SQL Manager utility for back-up, restore and other database management functions. Velocity also provides Scheduled Archiving and database backups.

Enrollment Manager

The Enrollment Manager consists of three panes: All Personnel, Personal Information, and Credentials. The All Personnel Pane is a spreadsheet-like view of the primary User Defined Fields. Filters and search criteria are available to locate a Person by any field, such as "Last Name," "State" or "Company." Throughout Velocity, clicking on a column header will sort by that column for "on the fly" arrangements.

The Credential Pane displays Function, Status, Expires On, Last Access Time, Last Door, Tag Status, Alert Status and the Hot Stamp Reference Number.

In addition to the person's name (Salutation, First, Middle, Last, Suffix), Photo and Signature, there are 36 User Defined Fields. The user can define the labels and whether a field can support standard text entry, an enforced list of entries, or a list of entries with the ability to enter text.
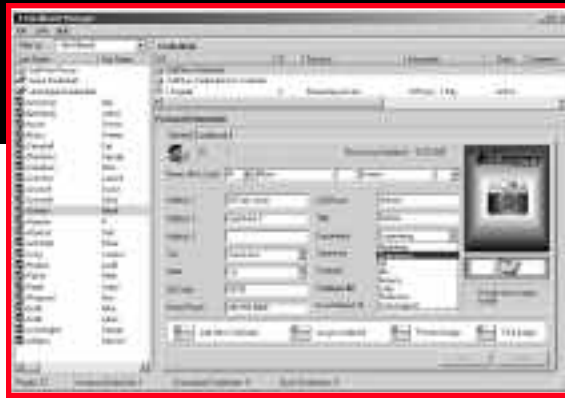
User defined fields may be used for address, phone number, hair color, medical information, training statistics, emergency contact, company, etc.

The ability to select a "Credential Template" reduces keystrokes, errors and time when adding credentials. Multiple credentials may be assigned to a person and each may be a different technology such as: ScramblePad®, ScrambleProx® Proximity, Magnetic Stripe, Wiegand, Bar Code, Biometric, or Smart Card.

The Credential Template offers the following parameters:
- Badge Template
- Activation & Expiration Dates
- Card, Code, Dual, Code+Card, Code+Dual, Card+Dual, All
- Function (Access, Relay, Alarm, Password, Special) with associated Door Group or Control Function
- Limits (including global) for Day, Use, and Absentee - with Auto-Delete Option
- Two Person Rule with A, B, and Executive Designations
- Threat Authority Level
- User Tagging & Alerts
- Duress Operation
- Special Needs Time Extension
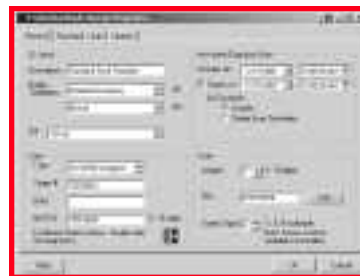
A Door Group is a global list of authorized readers with associated Time Zones. Control Functions for Relay and Alarm also provide for time based control functions such as Trigger, Force On,

Lock Down, Mask, Start Exit Timer – even a Special Function to set the Threat Level in designated controllers. Control functions can be used for security measures or for control of elevators, HVAC, lighting, etc.

The Enrollment Manager allows the operator to capture a photo (or signature) from a file, a TWAIN device (e.g., a scanner) or a video camera for use with a printed badge. The photo can be used with Photo Call-Up on one or more doors to display who is going through the door.

Alarm Monitoring

Velocity presents alarms on both the Alarm Viewer and Graphics. From either, an operator can acknowledge an alarm and enter notes for accountability and a permanent record. The user may define the alarm priority (99 levels), as well as text and/or audio (WAV) instructions by Alarm Type.

Operator's Rights and Permissions determine alarm viewing and response privileges. These and the personalized User Interface will follow the Operator to any of the Client Workstations in a Velocity system.

The Alarm Viewer has dedicated panes for new and Acknowledged Alarms with columns for Description, Acknowledged Time, Workstation Acknowledged From and Who Acknowledged. An icon indicates the current alarm/normal status of the alarm regardless of acknowledgement status.

The presence and quantity of Active and Acknowledged Alarms are shown in the status bar at the bottom of the main window. The Alarm Viewer may be configured to pop up on a new alarm or launched by double clicking the counters.

Status Viewer

The Status Viewer provides dynamic information for all or any group of points. Status, alarm, masking and other data are available for every point in the system without configuration.
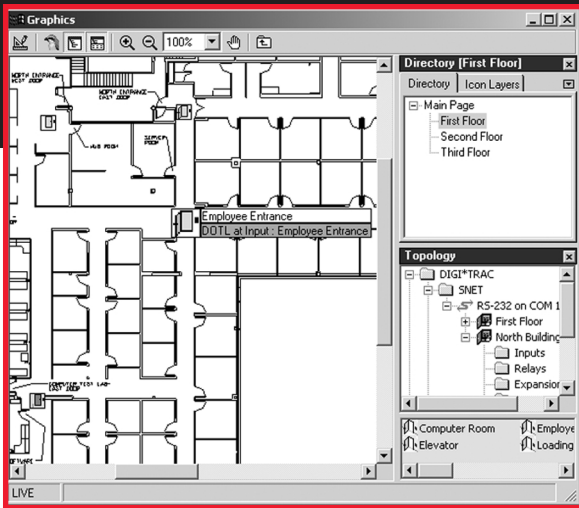
Graphics

Graphics supports imported backdrops including bitmaps (bmp), metafiles (wmf and emf) and images (jpg and gif). These formats are typically available as exports from AutoCAD, Visio and other drawing packages. It is easy to locate a desired icon using the key plan image in the Birdseye Viewer. Icons for status and control, embedded onto the backdrop, may represent Ports, XBoxes, Controllers, Doors, Readers, Inputs, Outputs, and Cameras. Using the Topology pane, icons are dragged and dropped onto discrete layers in a Graphic. Using the Directory pane, other graphics are added in a branching fashion or linked to "hot spots."

Operator Control

An operator can issue commands from the Graphics window or the Administration window by right clicking an object and selecting from a pop-up menu. Commands include:

- Momentary Access, Unlock or Relock
- Trigger
- Mask, Unmask, or Momentary Mask
- Force On, Force On Release
- Force Off, Force Off Release
- Lock Open, Lock Open Release
- Lock Down, Lock Down Release
- View Cameras

Event Viewer

Velocity provides real-time and historical event monitoring from the Event Viewer. The Event Viewer has columns for the Host Date and Time, the Description of the Event, and the system address of the source of the event. The Controller Date and Time can be added for circumstances where the controller is in a different time zone than the Host (server).

The Event Viewer supports the preceding 100 events when launched, although this value is user adjustable. Custom Event Filters may be created with criteria for Port, XBox, Controller, Point, and Event. Hundreds of pre-defined events include:

- Operator % Logged onto Workstation %
- Credential % Was Added by %
- Master Time Zone % was Changed by %
- Operator % Printed Badge %
- Input % Secure
- Forced Entry at Input %
- User % Under Duress at %
- DENIED: Use Count Exceeded
- Operator % Unlocked Door % From Workstation %
- Time Zone % Input % Masked
- % indicates Velocity will insert the specific operator name, point name, etc.

Report Manager

Velocity has 60 standard reports under the following groups:

- Customization Reports
- DIGI*TRAC Configuration
- History Logs
- Person Information
- Velocity Configuration

By default, Velocity has a wide-open criteria and ascending sort order by most significant field. Custom criteria and sort parameters may also be selected to create virtual custom reports. Custom reports may be created using Crystal Reports™.

Once generated, a report may be previewed, printed, or saved in a variety of file formats (CSV, rpt, XLS, rtf, HTML, text, etc.).

The Administration Window

The Administration Window presents the software (Velocity Configuration) and the hardware (DIGI*TRAC Configuration) in an expandable/collapsible Explorer-type display. Control and Edit functions are available by right clicking an item and selecting from a pop-up menu. Each tier in the system – Server/Workstation, Port

Type, Port, XBox (if present), Controller, Devices (Inputs, Relays, Readers, Doors, etc.) – has tabbed property sheets available for setup and configuration. The Add New Controller dialog provides for a quick setup of the DIGI*TRAC controllers by populating the database with default parameters and allocating the full complement of Readers, Inputs, Outputs and Doors. Alternatively, the setups may be uploaded from an existing controller. The "Add New" feature is used throughout Velocity to go directly to another program element and back. These "Wormholes" make it easy to add a new Time Zone, Door Group, etc., without having to "back out" of the current dialog.

Velocity uses Distributed Processing so that all control functions are controller resident.

CCTV Integration

Velocity interfaces with CCTV matrix switchers and camera systems. The Camera Viewer is launched from a camera in the Administration Window or a Graphic icon. The Viewer provides for Pan, Tilt, Zoom, Iris, Focus and AutoPan control from a mouse or keyboard. Command options include the ability to set or select a preset, to start or end a camera tour, or to switch to a different camera for display on the viewer. A small, medium or large image may be displayed.

The Grab feature will capture a still image (jpg), named with the time, date and camera number for future retrieval.

CCTV Triggers/Actions allow selection of a device (eg., a door), and associated event (eg., Access Denied, Unescorted Visitor) to trigger a resulting Action (e.g., Invoke camera Preset # 3).

Systems With Integrity

Specifications

PC Minimum Requirements
- Pentium III, 128MB RAM, (256MB RAM for Server) 4GB hard drive, CD-ROM, sound card and speaker for AVI or WAV options, SVGA (XGA recommended) monitor.

Operating System
- Windows 2000 Professional: Velocity Single User Workstation, or Velocity Client Workstation
- Windows 2000 Server: Velocity server

Database
- Enhanced runtime version of SQL Server (MSDE), included

Communications
- LAN: Ethernet TCP/IP, Wireless Ethernet (802.11b)
  - Remote Serial Drop via LIF-U
- Serial Port: RS-232
  - XNet (for connection to XBox)
  - SNet (SCRAMBLE*NET™ encrypted protocol)
- Enrollment Station: RS-232
- Parallel Printers: Report (page), Alarm/Event (line), and Photo Badging (Magicard Turbo, Rio, or Tango)
- Video capture via VCC-WOVGA
- CCTV: RS-232 Serial Port to Matrix Switcher: Pelco 6700/6800/ 9740, Vicon 1300/1400, AD 2150, Burle TC8100 (others may be available on request)
  - Video Input: VCC-WOVGA

- USB supported for serial ports, video, Ethernet, parallel ports

DIGI*TRAC Controller Support
- CCM: Version 7.1.08 or later
- Downloadable Firmware
- 63 controllers/channel
  - NET*MUX4 required for > 16
- Credentials: 132,000
- Passback: 65 nested zones
- Models supported: VM1N, VM2N, VM8N, VM16N, VMSPN and VM64N
- Globalization for I/O, passback, and user limits via XBox. User limits include absentee limits, use count limits and day limits.

Ordering Information

Model #	Description	Comments
HMS3	Hirsch Management System 3 - Win 2000 Pro	Windows 2000 Professional & PC - 800/133MHz PIII, 256MB (100MHz) SDRAM, 20 GB hard drive, floppy drive, 20/48X CD-ROM, mouse, keyboard, color monitor (17"), speaker, 2 serial & 1 parallel & 2 USB ports, 10/100 Ethernet port internal 56K modem, PCAnywhere included. Hirsch software (ordered separately) factory installed & tested. Client Licenses not included.
HMS4	Hirsch Management System 4 - Win 2000 Server	Windows 2000 Server & PC - 800/133MHz PIII, 512MB (100MHz) SDRAM, 20 GB hard drive, floppy drive, 20/48X CD-ROM, mouse, keyboard, color monitor (17"), speaker, 2 serial & 1 parallel & 2 USB ports, 10/100 Ethernet port, internal 56K modem, PCAnywhere included. Hirsch software (ordered separately) factory installed & tested. Client Licenses not included.
DMC	Dual Monitor Card	Supports dual monitors on one Workstation. Provides two VGA ports from a single PCI slot. The PC's primary on board VGA is disabled. Includes Appian Hydrovision Software on disk. (requires second monitor, purchased separately)
VCC-WOVGA	Video Capture Card- Without VGA Port	Supports live video on Velocity. S-Video or RS-170 input and flash synch output. Does not include VGA output port. (Use for badging and CCTV video input)
LIF-U	LAN Interface - TCP/IP to RS-232/RS-485 - 1 Port	LAN Interface (serial server) with field configurable serial port for providing either an RS-232 or RS-485 serial "drop" from a TCP/IP Ethernet network. Serial port is DB25 female DCE. Includes MC1 to connect to SNIB RS-232. Includes status LEDs and 120VAC Plug-in Power Supply.
VEL	Velocity Server Software – For Server and up to 5 Remote Clients	Velocity Server and Client application software. CD Installs Single User, Server, or Client Workstation. Server supports up to five workstations included. For networks of DIGI*TRAC controllers (CCM-F Version 7.1.08 or higher required). Includes Photo Badging, Dynamic Graphics, Alarms, Events, Control, History, Programming, and Editing. Runtime version of SQL Server 7.0 (MSDE) included. Windows 2000 Professional (with Service Pack 2) or Windows 2000 Server (with Service Pack 2) is required and must be purchased separately. PC must be purchased separately. Includes CD-ROM, Quick Install Guide & NET*Adapt.

HIRSCH ELECTRONICS ™

Specifications are subject to change without notice.

Global Headquarters

1900 Carnegie Ave, Bldg. B Santa Ana, CA 92705 USA
949-250-8888 Fax 949-250-7372
www.hirschelectronics.com