# Version 8 *Product Bulletin*

**Includes VCRWorX, New OPC XML, OPC DA 3.0 and Data Mining Technology**

## Summary

This new version of GENESIS32™ incorporates industry's first HMI data-mining capability and supports the newest OPC Foundation specifications, including OPC Data Access (DA) 3.0 and OPC XML 1.0. GENESIS32 Version 8 integrates several new capabilities and products, such as **VCRWorX™32** and **DataWorX™32.** VCRWorX gives customers a powerful tool for replaying archived alarm and trend history into their HMI/SCADA visualization systems. DataWorX32 provides patented OPC data bridging, tunneling and aggregation capabilities. GENESIS32 Version 8's new **open data-mining technology** allows automation and IT professionals to integrate real-time manufacturing and business information into a common, Web-enabled visualization dashboard.

## Main Features & Benefits

- ✓ New open data-mining technology connects to Microsoft SQL Server, Oracle, Microsoft Access, ODBC, OLEDB, SAP®, and virtually any other database
- ✓ OPC Data Access (DA) 3.0 and OPC XML 1.0 compliance
- ✓ New VCRWorX32 replays archived historical data into HMI visualization screens
- ✓ New WebHMI supports OPC XML and OPC DA 3 language switching communications
- ✓ New TrendWorX™32 historical trend viewer for fast information analysis
- ✓ Expanded to two CDs. All options components are located on CD 2
- ✓ Hundreds of other new enhancements and features

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## New Generation of Visualization Software

GENESIS32 Version 8 represents a new generation of visualization, HMI and SCADA modular automation software designed for Microsoft's latest operating systems including Windows NT, 2000, Windows XP and Windows Server 2003.

GENESIS32 Version 8 represents over 20 man-years of development with over 500 new major features. GENESIS32 is based on 32-bit technology, taking advantage of key operating systems features of Windows NT technology. ICONICS is a Gold Certified Partner and has Gold Certification on its products, thus insuring compliance with the latest Microsoft technology.

GENESIS32 fully supports Windows NT, Windows 2000, Windows XP, Windows XP SP2, and Windows Server 2003 Symmetric multiprocessor and Hyper Threading systems.

## Compliance With the Latest OPC Specifications

ICONICS products are based on the industry standard OPC-TO-THE-CORE Technology. GENESIS32 Version 8 now supports OPC Data Access 3.0 and OPC XML 1.0 connectivity. The following OPC specifications are supported by GENESIS32 Version 8.

- OPC Data Access 3.0
- OPC Alarm and Events 1.10
- OPC XML Historical Data Access 1.20
- OPC XML Data Access 1.0

## Powerful Data-mining Technology

New Data-mining Technology that integrates Database Connectivity. Now GENESIS32 software components can have database connectivity and access similar to OPC connectivity. Included is a database connection wizard and database object browser for data-mining server configuration. This powerful data-mining technology provides reads and writes between many types of databases and spreadsheets including:

- Microsoft Access
- Microsoft SQL
- Oracle 8.x and 9.x
- MSDE
- Microsoft Excel
- ODBC and OLEDB databases

New Data Mining ActiveX Control provides the ability to view whole tables, rows, or columns from any open database. It is now easy to connect to databases through ADO, OLEDB, ODBC, Access, JET, TEXT, or CSV.



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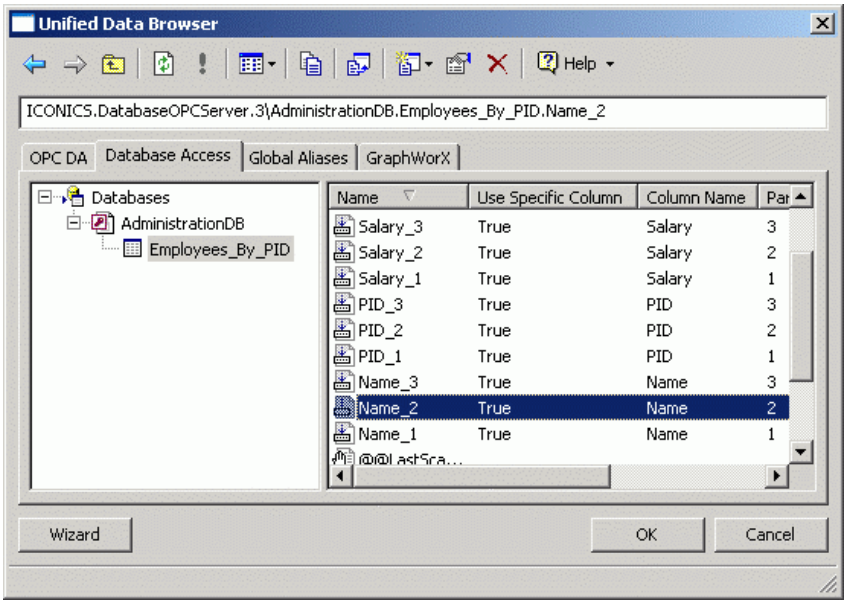
## New Unified Data Browser

The new Unified Data Browser in GENESIS32 Version 8 allows common and unified data browsing for OPC Data Access, OPC Alarm/Events, and OPC Historical Data Access tags. In addition to supporting OPC data sources, the new Unified Data Browser now allows support for global aliases and database data browsing. The graphical user interface has been updated with a Windows XP look and feel as well as local and language aliasing, and the multi-threading allows for better performance than in previous browsers.




## VCRWorX32 - New Modular for Historical Playback

VCRWorX32 is a powerful tool in GENESIS32 that enables the replay and reanimation of graphical, historical and alarm data. Features of VCRWorX32 replay include:

- Replay of OPC data
- Reanimation of graphics
- Re-plotting of trends
- See what the operator saw through replay of graphical displays
- VCRWorX32 Control Panel with customizable skins/layouts
- Change the replay speed
- Specify time and date ranges for data replay
- Search for key events, tags, and expressions

The VCRWorX32 Control Panel is the interactive user interface that enables the historical data replay time and date settings. This control floats on top of your GraphWorX32 screen and works just like your VCR or DVD controls used to playback your favorite movies. From this intuitive control operators can



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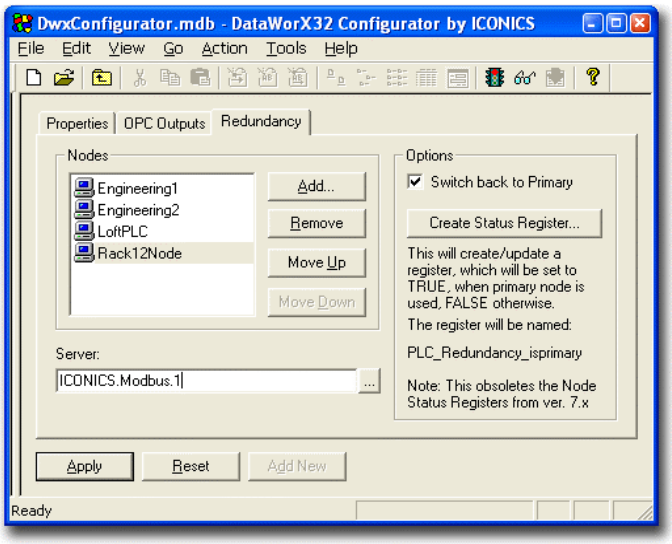
specify time and date ranges for replay, fast forward and rewind, change the replay speed, and search for key events, tags, or expressions. The appearance of the VCRWorX32 Control Panel is fully customizable with the ability to select a different skin and complete customization of the layout. The VCRWorX32 Control Panel can be launched from the GraphWorX32, AlarmWorX32, and TrendWorX32 containers during runtime mode with one click from the Tools menu.

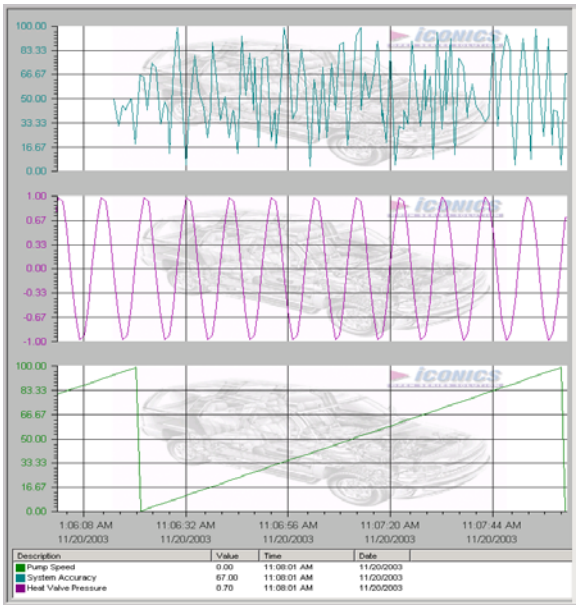
## DataWorX32 - *"OPC Data Bridging, OPC Aggregation, OPC Redundancy"*

DataWorX32 is a 32-bit, multithreaded, OPC-compliant client and server application providing multiple functionality and designed to run as an NT service. DataWorX32 is a component of the GENESIS32 product family, and it serves as a project-level data system for GENESIS32 applications. Acting as a bridge between various OPC servers, DataWorX32 provides different OPC data channels. Once multiple I/O channels are established between PCs, DataWorX32 will switch between a primary PC (node) and a backup PC on the network. Should the primary PC be disabled, DataWorX32 will automatically default to the backup PC and vice versa. Another feature of DataWorX32 is the use of global variables that are accessible from multiple clients.

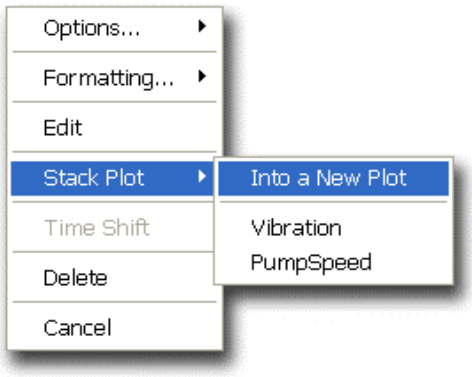



## New TrendWorX32 Features

The award-winning TrendWorX32 component of GENESIS32 keeps getting better. Version 8 users can now take advantage of stackable plots, allowing for quick trending comparisons and analysis. Operators can drag and drop pens among different trend plots for optimal viewing. Tick marks, chart titles and labels are now completely configurable. Also new in Version 8 is the ability to have a background image for plots, adding another visualization and identity to plots. OEMS can even embedded their logo into the background of plots.



**Simply right-click on a pen during runtime and use the new Stack Plot menu to tell the viewer to plot the pen in another sub-window.**



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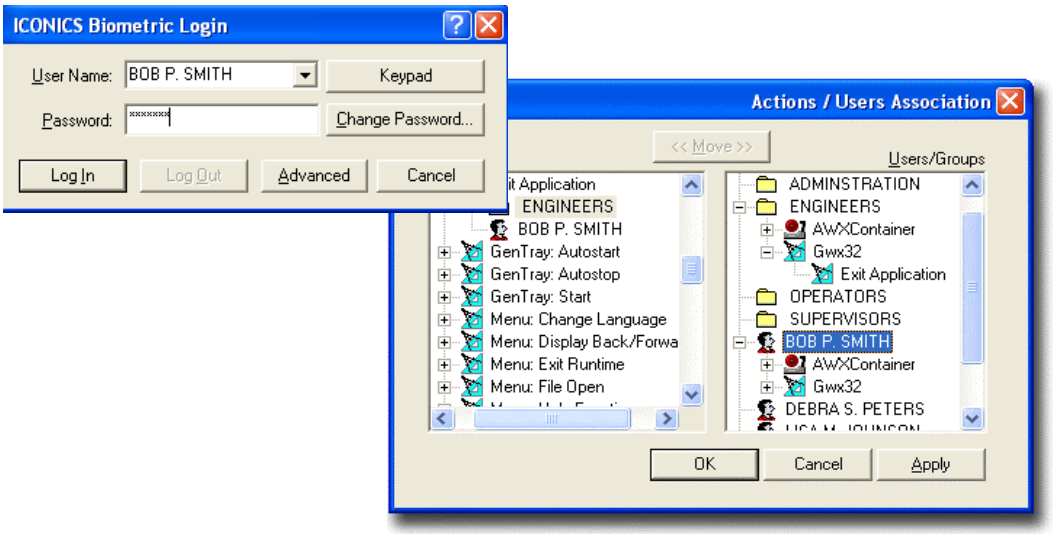
## New Biometrics & Identity Assurance Management

The ICONICS Security Server now supports biometric identity assurance with the added support for Saflink's Identity Assurance Management software. The integration of biometrics authentication with the ICONICS HMI/SCADA Automation Suite provides maximum security for user identification, making GENESIS32 a more robust and secure HMI/SCADA system for regulated applications. Saflink's Identity Assurance authentication has been deeply integrated with the ICONICS Security Server architecture. This new level of integration provides ICONICS users with the option to use Biometrics for operator authentication. Identity assurance is critical to meeting current and future business security requirements and more government regulations, such as FDA, that are designed to protect public health, safety and privacy.

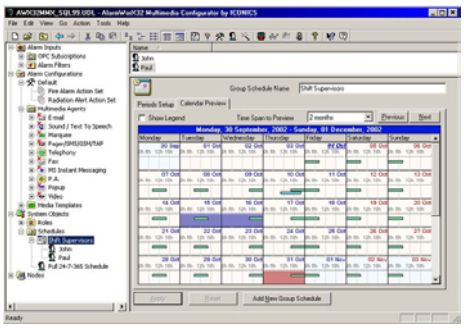



## Introducing AlarmWorX32 Multimedia Lite

In addition to several key features, AlarmWorX32 Multimedia will now be offered in two different configurations: Standard edition and a Lite version.

**AlarmWorX32 Multimedia Standard Edition –** Multimedia package that connects to any OPC Alarm and Events server. Comes with complete multimedia agents including Paging, SMS, E-mail, Fax, Popup, Marquee, Video, Messenger, Phone, and Sound.

**AlarmWorX32 Multimedia Lite –** All the power of AlarmWorX32 Multimedia Standard but with a limited set of agents. AlarmWorX32 Multimedia Lite comes with the following agents: Paging, SMS, E-mail, Popup and Marquee. In addition to the new Lite version**,** AlarmWorX32 Multimedia V8 also offers the following:



- Send multiple page requests via the same connection
- Paging algorithm enhanced for faster performance
- E-mail Agent now supports acknowledgements
- Pitch, volume and playback support for Sound Agent
- Plug-in card configuration added to Fax Agent
- Phone Agent now supports real-time alarm processing



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## New WebHMI features

This optional component to GENESIS32 adds Web technology to any GENESIS32 application and delivers Web-based graphics in real-time to remote Web browsers. GENESIS32 WebHMI is firewall friendly, requires no installation on the remote clients and supports DHCP, DNS, Name Address Translation, and Windows Domains. WebHMI V8 offers the following new features.

- New Web-based language switching
- New Web-based VCRWorX32 playback capabilities
- New login and security ActiveX control
- New FTP upload for WebHMI publishing

## New GENESIS32 Vertical Markets Applications

Several new vertical industry applications have been added to the GENDEMO application. Select from one of the 48 real-life applications. Vertical markets include Building Control, Water & Wastewater, Food & Drug, Machine Builders, Oil & Gas, Automotive, Transportation, and more. In addition to the new vertical industry applications, GENESIS32 has a few added features to the Carousel application for running GraphWorX in a demo slide show mode. The following new key features have been added to the Carousel.

- Runtime selectable display lists
- Interface to indicate current display and timing
- User definable display list and flip time

***GENESIS32 Version 8 has several hundred new features and enhancements, only a subset are covered in this product brief. For a complete list of all new features, please refer to the readme file located on the GENESIS32 main CD***.

## Cost Savings and Productivity

The market is demanding solutions that provide a real-time visualization connection to databases such as Microsoft SQL Server®, MSDE, Oracle®, and Microsoft Access, as well as the integration of real-time manufacturing and business visualization. ICONICS' newest HMI/SCADA visualization product incorporates several unique capabilities that address this market demand, such as VCR-like replay functions, which allow users to view history through their HMI systems.

ICONICS has been providing award-winning, industrial automation and business visualization software for over 18 years, and has successfully deployed more than 130,000 solutions wide. For more information, please contact ICONICS at (508) 543-8600 or info@iconics.com, or visit the ICONICS Web site at www.iconics.com.



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## Operating Systems Supported

GENESIS32 fully supports all the Microsoft Windows 32 bit operating systems including:

- Windows NT
- Windows XP
- Windows XP SP2
- Windows 2000 Server
- Windows 2000 Workstation
- Windows Server 2003

## System Requirements

GENESIS32 requires the following hardware and software components: System requirements may vary based on application size and system performance requirements and loading factors.

Minimum Hardware and Operating System Requirements:

- 600 MHz or higher processor.
- 256 MB RAM or more if running with OPC servers.
- At least 600 MB of available hard disk space.
- CD ROM Drive
- A SVGA monitor (256 colors) or better.
- Windows NT 4.0, Windows 2000, Windows XP Professional, or Windows Server 2003.
- A mouse or other compatible pointing device.

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