# $GENESIS64^{*}$

#### Next Generation in Automation Software



# A suite of 64-bit HMI/SCADA software solutions







### "The 64-bit revolution is here. Are you ready?"

With the convergence of 64-bit, multi-core, multi-processor computing; the introduction of new 64-bit Microsoft operating systems; and demand for 64-bit native applications, ICONICS introduces GENESIS64, the next generation of HMI/SCADA visualization.

The GENESIS64 suite includes several solutions that allow for connectivity from plant floor and building facilities to corporate business systems. Designed from the ground up and taking advantage of OPC-UA, .NET managed code and SharePoint<sup>®</sup> technology, it allows plant operators and IT professionals to integrate real-time manufacturing and business information into a common, Web-enabled visualization dashboard.

#### Powerful Workbench Provides Web-based Configuration

**Workbench** is the multi-functional, centralized Web-based environment for all GENESIS64 product configurations and is the core of the GENESIS64 suite. Third-party applications can easily be integrated into the ICONICS Workbench. This powerful Workbench can also act as an advanced real-time operator interface for visualization.

#### Web Configuration

All GENESIS64 and third-party applications can be configured from the unified Workbench, allowing for faster development and cost savings in building any application. Create multiple layouts which support multiple monitors.

- Thin-client Web Configuration; IE6, IE7 and IE8-compatible
- Configure Security, Graphics, Trends and Alarms

#### Real-Time Operation

View several applications with multi-monitor and multiple layout configurations. From the Workbench, users can:

- Monitor Service Health, Service Status, Diagnostics
- Remotely Start and Stop Any Application

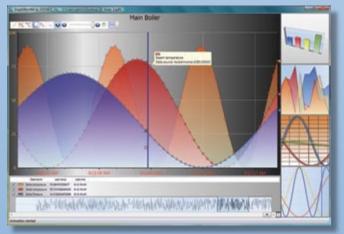
#### Integrated Project Management

The Workbench provides complete and secure project management capability for your application. The Workbench project management features include:

- Pack-and-Go Deployment
- Versioning and Change Management
- Global Search, Organize, Find and Replace
- Project Statistics and Audit Trails

Workbench Multi-Application Layout

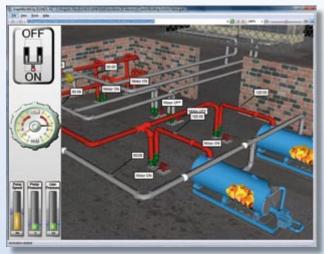
64-Bit High Availability Plant Historian Hyper Historian<sup>™</sup> is a 64-bit, high-performance, scalable, enterprise-wide data historian, reporting and analysis solution. Designed from the ground up for the most mission-critical applications demanding the highest level of availability, and using OPC-UA HDA technology, Hyper Historian is an optional product and complements the GENESIS64 suite.



Hyper Historian 3D Chart Control

This is the first plant historian to be certified for 64-bit Microsoft Windows® Server 2008 and Vista™. Combining this level of certification and tight integration with SQL Server 2003 and 2008 makes the Hyper Historian from ICONICS the best-in-class plant historian for the most demanding applications.

With data logging rates of up to 100,000 data events per second and built-in redundancy, the Hyper Historian uses a robust swinging door algorithm for extreme high speed data collection, compression and unparalleled performance.



#### Take Visualization and SCADA to New Levels

GraphWorX<sup>™</sup>64 provides the platform for visualization, taking maximum advantage of Windows Presentation Foundation (WPF) for rich 2D and 3D HMI and SCADA applications. Users can build scalable, XAML vector-based graphics that do not lose details when zoomed. GENESIS64 also takes advantage of the Vista Aero transparency look and feel, as well as Ribbons found in other integrated applications, such as Microsoft Office 2007.

Quickly browse through thousands of 2D and 3D smart symbols in the icon galleries which provide a rich preview of available actions. For instance, an operator may wish to add transparency and/or shading to several objects and, with GENESIS64, this task is done with just a few simple clicks.

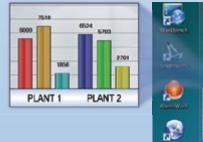
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#### **3D** Visualization



#### **Unsurpassed Visualization using Windows Presentation Foundation (WPF)**

GENESIS64 also takes advantage of state-of-the-art graphic hardware acceleration through DirectX10, powered by Microsoft Windows Server 2008 and Vista. GraphWorX64, integrated with Windows Presentation Foundation, provides users with a compelling 2D and 3D view of their operations in real-time with live data. Imagine the ability to view how equipment is running, in real-time, from any angle. *It's a whole new powerful approach to visualization*.



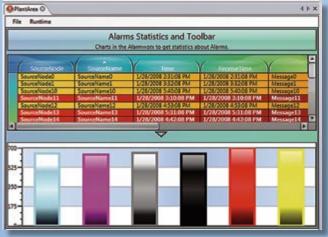


#### Innovative, Real-Time KPI Gadgets for Automation

ICONICS has created a series of automation-centric Microsoft Gadgets, designed to run in the Windows Vista Sidebar. GENESIS64 uses Microsoft Gadget, Sidebar and Sideshow technology designed to provide at-a-glance information, useful search abilities and valuable Key Performance Indicators (KPIs). Automation specialists can quickly see how a plant or facility is performing and navigate to custom graphics, reports, trends and alarms for detailed information.

#### **Object-oriented Distributed Alarm Management**

AlarmWorX<sup>™</sup>64 is a powerful distributed enterprise-wide alarm and events management system for the largest, most demanding applications. Available as part of GENESIS64, or as a stand-alone product, AlarmWorX64 offers the tools you need to deliver real-time and historical alarm information. AlarmWorX64 includes AlarmWorX64 OPC Server, AlarmWorX64 OPC Logger and a new 3D Alarm Viewer .NET Control. AlarmWorX64 is totally compatible with the OPC A/E, and OPC-UA/AE industry standards. AlarmWorX64 is ready to meet the most demanding alarm management applications.

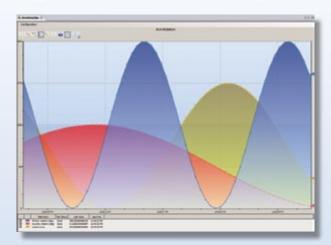


AlarmWorX64 Statistics

### "ICONICS gives you a 360° view of your entire enterprise"

Real-time and Historical 3D Charts and Analysis

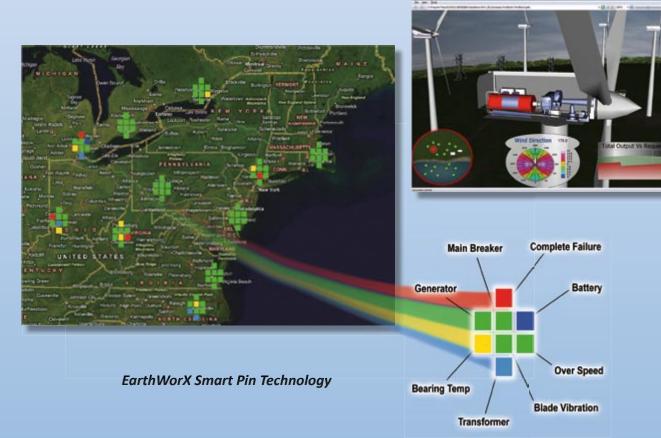
**TrendWorX™64** is a plant-wide data collection, logging, charting, reporting and analysis solution. Included in the standard GENESIS64 suite of applications, it is designed to log data to any OLEDB database (e.g. Microsoft SQL Server, Oracle, MySQL and others). TrendWorX64 offers the tools you need to trend and chart real-time and historical data from any relational database. TrendWorX64 is an OPC HDA-compliant application and provides open connectivity to any OPC/ OPC-UA data source, making it ideal for most OPC logging applications. This means it can easily plug and play with not only ICONICS servers and trend components, but with other third-party trending solutions, as well.



TrendWorX64 Real-time & Historical Trend

#### Quickly View Assets with the Most Advanced Geo-SCADA Capabilities

EarthWorX<sup>™</sup>, GENESIS64's new geographical information SCADA technology, provides real-time visualization to widely dispersed assets such as water plants, building facilities, postal centers, factories, oil fields and many others. ICONICS' unique SmartPin<sup>™</sup> technology allows for an intuitive drill-down capability to quickly view alarm conditions and status for any location around the world. Within seconds, assets can be identified and located through GENESIS64's integration with Microsoft's Virtual Earth<sup>™</sup>.



#### **OPC-UA-To-The-Core Architecture**

OPC Unified Architecture (OPC-UA) is at the core of GENESIS64. OPC-UA is based on secure, robust and scalable Web services, taking advantage of Windows Communications Foundation (WCF). GENESIS64 is truly "OPC-To-The-Core™", exemplifying the next generation of standards-based communications.



# $GENESIS64^{*}$



"The Next Generation in Automation Software... Has Arrived!"

#### **Improve Your Productivity!**

The largest cost of any automation project is in engineering the application. For an average project, this can be well over 60 percent of the total expenditure. Taking advantage of 64-bit computing can greatly reduce this effort and shorten the design time, resulting in enormous savings and improving the bottom line.

As an award-winning Microsoft Gold Certified Partner, ICONICS had very early knowledge and involvement in

the development of the Microsoft Windows Server 2008 and Vista operating systems and has been certified for both. Key features of Windows Server 2008 and Windows Vista have been utilized to provide



customers with the greatest application performance, reliability and flexibility.

#### **Key Features and Benefits**

- Certified for Microsoft Windows Server 2008 & Vista
- Reduce Engineering & Development Costs
- Hardware Accelerated 3D User Experience
- Intuitive 2D and 3D XAML, WPF Visualization
- Real-time KPI Gadgets for Instant Visibility
- Universal Connectivity OPC-UA, SNMP, BACnet, Databases
- Object-oriented Distributed Alarm Management
- Web-based Development & Configuration
- Integrated Windows Vista Search & Organize
- International Language Support

#### **Ideal for Many Industries**

For over two decades, ICONICS industrial automation software solutions have met real customer needs in multiple industries, including:

- Automotive
- Building Automation
- Chemical
- Consumer Products
- Discrete Manufacturing
- Entertainment
- Food & Pharmaceutical
- Government
- Logistics
- Machine Builders & OEMs

- Oil, Gas & Petrochemical
- Pipelines
- Plastics
- Postal & Airport
- Power & Energy
- Process Industries
- Robotic Control
- Transportation
- Water & Wastewater
- Wind Energy



VISIT US AT WWW.ICONICS.COM

## WORLDWIDE OFFICES

#### **ICONICS World Headquarters**

100 Foxborough Blvd. Foxborough, MA 02035 Tel: 508 543 8600 Fax: 508 543 1503 Email: info@iconics.com

#### **ICONICS** Europe

Czech Republic

Tel: 420 377 183 420 Fax: 420 377 183 424 Email: czech@iconics.com

#### France

Tel: 33 045 019 1180 Fax: 33 045 001 0870 Email: france@iconics.com

#### Germany

Tel: 49 224 114 82233 Fax: 49 224 114 82686 Email: germany@iconics.com

#### Italy

Tel: 39 347 819 9250 Fax: 39 010 601 4091 Email: italy@iconics.com

#### Netherlands

Tel: 31 252 228 588 Fax: 31 252 226 240 Email: holland@iconics.com

#### **ICONICS** Asia

Australia Tel: 61 297 273 411 Fax: 61 297 273 422

Fax: 61 297 273 422 Email: australia@iconics.com

#### China

Tel: 86 130 684 86069 Email: china@iconics.com

#### India

Tel: 91 22 67291029 Fax: 91 22 67291001 Email: india@iconics.com

#### WHY CHOOSE ICONICS?

**ICONICS**, Inc. is a leading provider of award-winning enterprise manufacturing intelligence and automation software solutions and implementation services. **ICONICS** solutions deliver real-time visibility into all enterprise operations and systems, helping companies to be more profitable, more agile and more efficient. **ICONICS** products have delivered value within over 225,000 installations worldwide and have been chosen by more than 70% of Fortune 500 manufacturers.

Windows

Vista

#### Microsoft GOLD CERTIFIED Partner 2008 ISV/SOFTWARE SOLUTIONS PARTNER OF THE YEAR-WINNER THE VEAR-WINNER CHARTER CHARTER CHARTER CERTIFIED FOR

#### ICONICS UK

United Kingdom Tel: 44 138 427 5500 Fax: 44 138 440 1642 Email: info@iconics-uk.com

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