

ICONICS - TrendWorX32

AT Automation México Integradores Certificados de ICONICS



Líneas Directas

+52 (55) 4334 - 9242

+52 (55) 6584 - 9782

Para obtener ayuda en determinar el producto que mejor se adecue a su proyecto, por favor póngase en contacto con nosotros a:

ventas@atautomation.com.mx

Microsoft
Partner

2017 Partner of the Year Winner
Application Development Award



Designed for Use in Many Industries

For more than 30 years, ICONICS has developed leading-edge software tools for manufacturing, industrial, and building automation. ICONICS has shipped over 350,000 products that are installed in applications spanning the globe in various industries:



Automotive



Building Automation



Food & Beverage



Government & Military



Manufacturing



Oil & Gas



Materials & Mining



Pharmaceutical



Sustainability



Transportation



Utilities & Energy



Water & Wastewater

ICONICS Cross-product Features

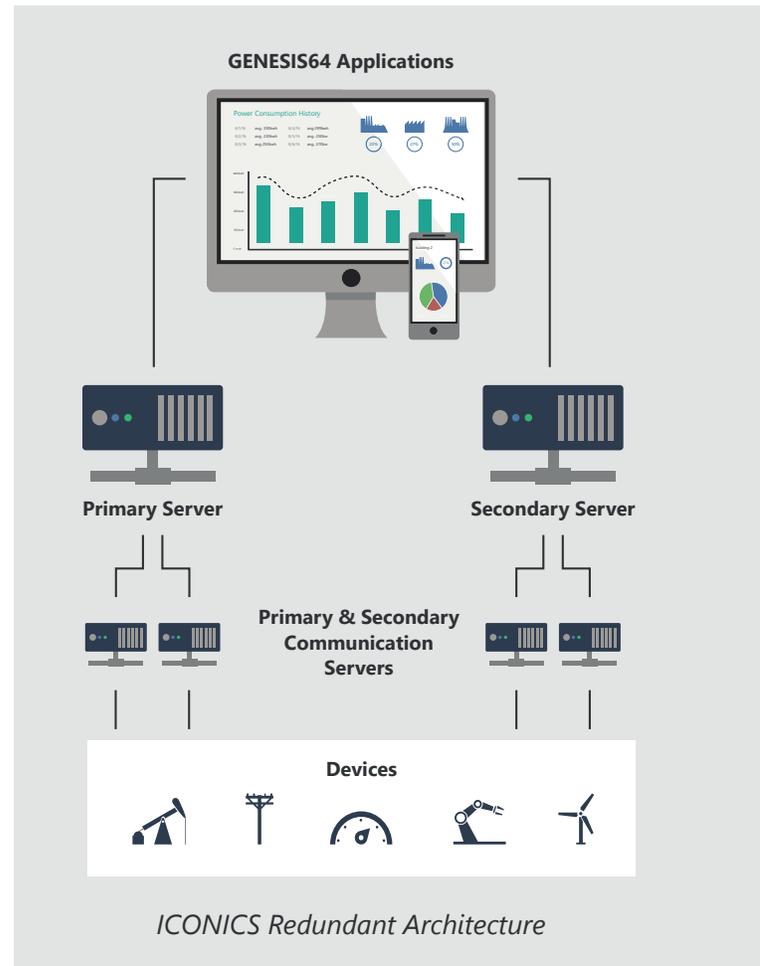


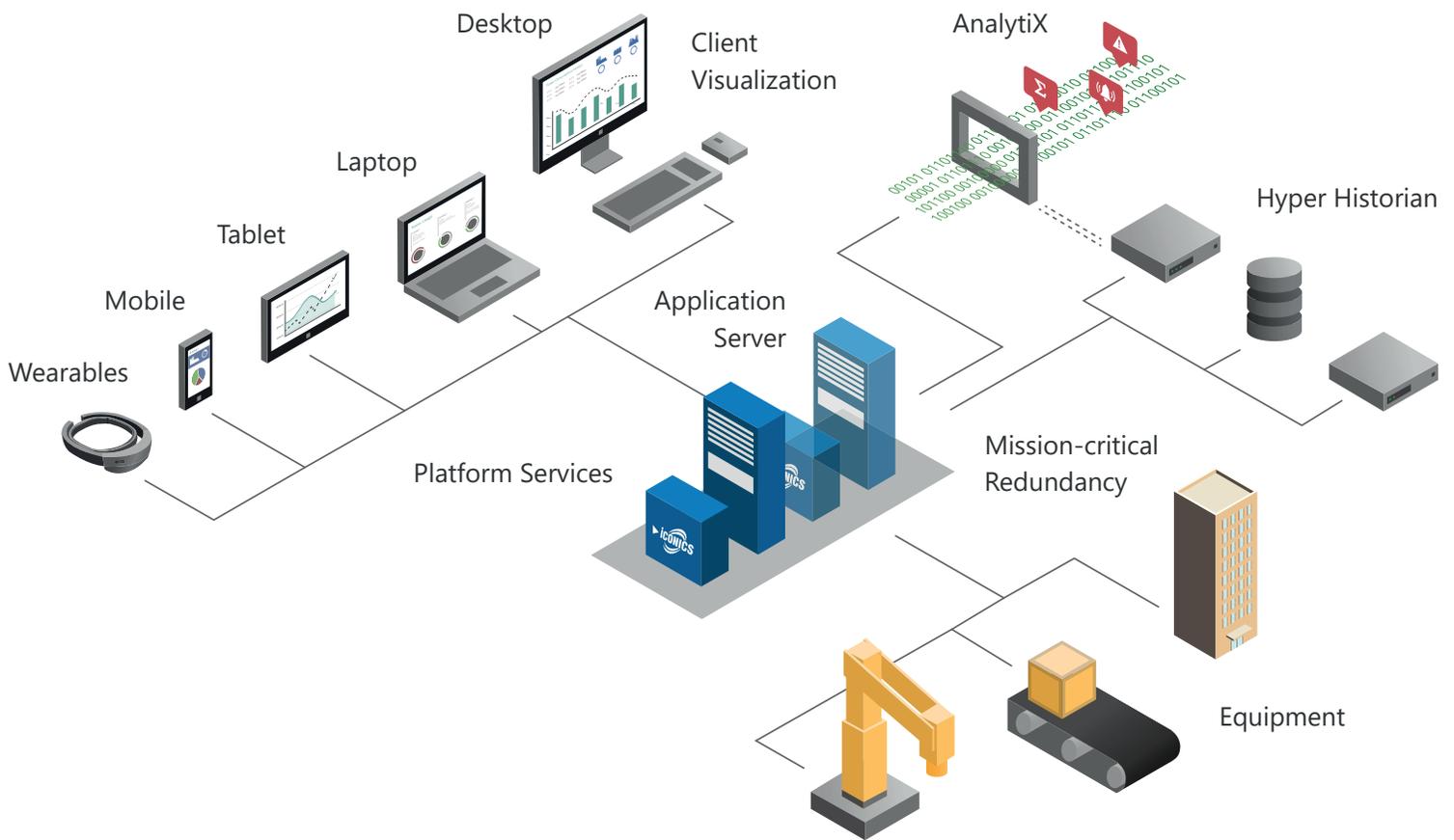
Advanced Visualization on Any Device

Bring the visualization of ICONICS to any device. Migrate desktop displays created in GENESIS64 from desktop to any mobile client. MobileHMI™ is a powerful app that provides a consistent user experience on any mobile device for GENESIS64 dashboards. WebHMI™ brings the capabilities of GENESIS64 applications to any HTML5 or WPF compliant web browser. Generate executive self-service dashboards utilizing preconfigured symbols from any mobile device with KPIWorX™. GENESIS64's responsive UI flawlessly transitions between clients to provide a consistent user experience.

Mission-critical Redundancy

ICONICS ensures the safety of any critical data by offering high availability redundancy for communication reliability. Redundant collectors and loggers serve as a backup in case of a system failure. With automatic fault detection and store-and-forward technology, GENESIS64 users can be assured that mission-critical real-time data, historical data, and alarm information are always available. ICONICS redundancy solutions are simple to configure, install, and deploy. ICONICS software redundancy covers all major aspects of data redundancy such as data access, historical data, alarms, and security.





ICONICS System Architecture

Powerful Centralized Configuration

ICONICS displays can be created using two powerful configuration tools. The Workbench is the multi-functional, centralized desktop or web-based environment for all back-end configurations making development more efficient and minimizing design time for any application. Offered in WPF, users can configure and manage their entire GENESIS64 application from anywhere.

Front-end user interfaces and dashboards are configured using the GraphWorX64 visualization module. Design HMI and SCADA displays leveraging 2D and 3D graphics, preconfigured symbols, dynamic properties, animation, and flexible aliasing.

Universal Connectivity

GENESIS64 supports industry standard communications such as OPC, OPC UA, Modbus, BACnet, web services, and databases. As the first 64-bit Advanced Workstation (B-AWS), GENESIS64 is certified by the BACnet Testing Laboratories, ensuring maximum integration with BACnet protocols such as BACnet objects, trends, and alarms. GENESIS64 is certified for OPC UA compliance by the OPC Foundation. Simple device discovery on the network makes integration seamless and efficient.



Analysis

Having the ability to provide real-time analysis of your plant operations is vital. GENESIS32 can present real-time and historical information in a wide variety of trend plots. Alarms management can take place anywhere, anytime with instant acknowledgment.

TrendWorX32, a distributed enterprise-wide data collection, logging, charting, reporting and analysis system, has the distinction of being the first OPC-compliant trending product to be not only an OPC Data Access client application, but also an OPC Historical Data Access (HDA) server. That means it can easily plug-n-play not only with ICONICS servers and trend components, but with other 3rd-Party hardware interface drivers and trending software as well.

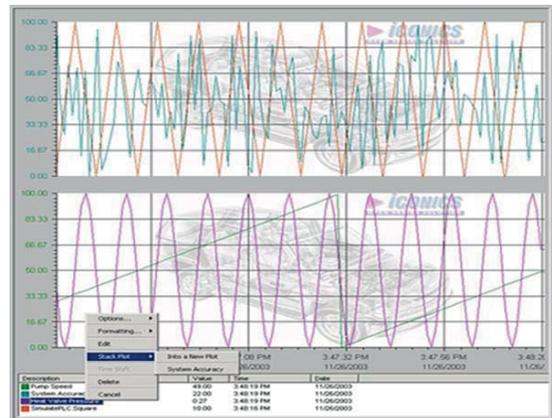
For replay analysis, GENESIS32 has a powerful feature called **VCRWorX** that can step, frame by frame, through a replay of your process to see what happened and when. VCRWorX32 enables historical data replay within your real-time graphic screens. The media-like control floats on top of a GraphWorX32 screen and works just like a VCR or DVD player. Users can specify time and date ranges for replay, fast forward or rewind, as well as change the replay speed, and search for key events, tags, or expressions.

Trending – TrendWorX™32

TrendWorX32 Overview

TrendWorX™32 is a powerful collection of real-time trending, historical data logging, reporting, and analysis tools that seamlessly integrates with enterprise-wide information systems. Based on the OPC Historical Data Access specification for creating Plug and Play historical data servers and clients, TrendWorX32 offers an open solution to applications requiring scalable and distributed real-time performance.

The powerful Microsoft based ADO/OLEDB data-logging provider is at the core of TrendWorX32. OPC HDA provides the standard COM and OLE interface for ICONICS Trend ActiveX Viewer Control to display real-time and historical data, separately or simultaneously.



Several trend display types are supported, including time plots, XY plots, logarithmic plots, bar plots, the popular strip chart recorder, and even circular charts! Acquire thousands of data points and organize them into groups for very fast and efficient replay of historical and real-time information. You can use the built in Visual Basic Application to create reports, calculations, and data analysis.

TrendWorX32 integrates with Microsoft Access, Microsoft SQL Server and Oracle using ADO and OLEDB database technologies. In addition, TrendWorX32 supports MSDE 7.0 and MSDE 2000.

New TrendWorX32 Logger V9.4 Features

Added Store and Forward capability - ensures data logging integrity even when the database server or the communications to it fails.

Added support for data logging at fixed intervals. The logging intervals are user-configurable on a per group basis.

Added support for user-configurable OPC DA refreshes

Separated the Logger and HDA Server functions. Allows the Trend Logger configuration to be changed without disturbing the TrendWorX32 HDA Replay

Added support for data logging to MySQL databases

Added support for data logging to Microsoft SQL Server databases

Added support for MonitorWorX - reporting key runtime information

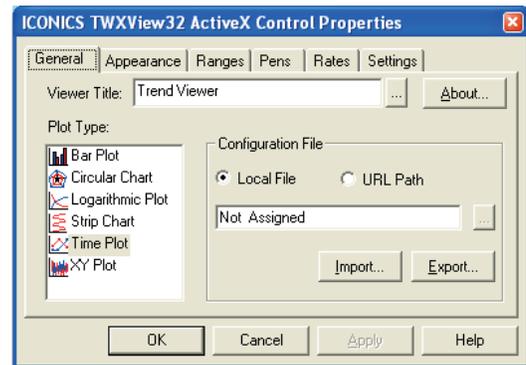
New TrendWorX32 Configurator V9.4 Features

Updated GUI with Windows XP Look and Feel

New TrendWorX32 Report V9.4 Features

Updated GUI with Windows XP Look and Feel

Added support for MonitorWorX - reporting key runtime information



Real-time Trending

TrendWorX Real Time Trend Configuration uses the OLE Automation interface of the TrendWorX32 Viewer ActiveX within a VBA-enabled application, such as GraphWorX32. Pens can be added "on the fly" by reading the pen configuration from a Microsoft Access database (.mdb) file and utilizing the OLE Automation properties of the TrendWorX32 ActiveX through VBA scripts.

Historical Trending

TrendWorX32 Reporting is compliant with the latest OPC HDA specification 1.2. Although TrendWorX32 Reporting is not a direct OPC HDA client or server, it creates reports with data outputs as specified by the OPC HDA specification. Version 7.x introduced an enhanced data-retrieval system, which utilizes an updated approach to creating historical reports:

Data filter selection other than Raw will result in data time stamped at the beginning of each subinterval.

When retrieving data using data filters other than Raw, subintervals for which there are no data because of no data-logging activity will be marked as "empty" slots at the corresponding time with a zero value. You can check the returned qualities for further processing.

The TrendWorX32 OLE DB Provider supports a minimal set of "trend SQL" keywords that can be used to formulate "trend" queries in order to retrieve historical data.

If any or both of the start and end dates are not specified, the TrendWorX32 OLE DB Provider will perform an exhaustive database search to retrieve all samples in the database, or those samples starting from the start date or ending prior to the end date. Because this can be an extremely time-consuming operation, it is suggested that you use the "MaxRows" property of the provider to establish a limit to the total number of retrieved samples.

GENESIS32 trending has enhanced language aliasing support, including automatic value scaling. You need to configure the ICONICS Language Server, as well as configure language aliases in the TrendWorX32 Configurator. Once all language aliases are configured, you can use the LCID property of the TrendWorX32 OLE DB Provider connection to set the desired language settings.

Trend Reporting

Trend reporting within TrendWorX32 has been updated with a new GUI featuring a Windows XP look and feel plus additional support for MonitorWorX, reporting key runtime information.

TrendWorX32 Reporting includes the following key features:

- Microsoft Excel reporting password support/performance tuning
- Enhanced data retrieval support
- Updated Microsoft Excel date handling
- Microsoft Excel FDA password support. TrendWorX32 Reporting supports creating Microsoft Excel reports where a random password will be created to lock the worksheet if desired. The password is not stored anywhere, therefore providing added security for FDA reports. This support is on a per-report basis.
- Report tag reordering/time span enabled for periodic reports
- TraceWorX32 debug tracing support
- Enhanced expression support
- Daylight savings time support

There are, however, some things to consider. These functions are used by default (no user enabling is required). In order to convert each time stamp, users are advised to check Windows for the PC Time Zone Settings and to see if automatic daylight savings is enabled. Also, obtain the times/dates from Windows for switching over. These dates do not change (e.g. "the first Sunday of April"). Depending on previous information, the functions properly adjust the conversion times to compensate for daylight savings time.

TrendWorX32 also includes the following features:

- Data-retrieval filters
- Scheduling and load-balancing support
- Microsoft Excel integration and template support
- HTML and e-mail support for Microsoft Excel-based reporting
- Unicode version support
- Report integration to historical database, operator comments, and batch information
- Multiple database support
- Easy-to-use report configuration wizard
- Microsoft SQL 2000 support
- Tag column description support