

# ICONICS - Hyper Historian

AT Automation México Integradores Certificados de ICONICS



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

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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**



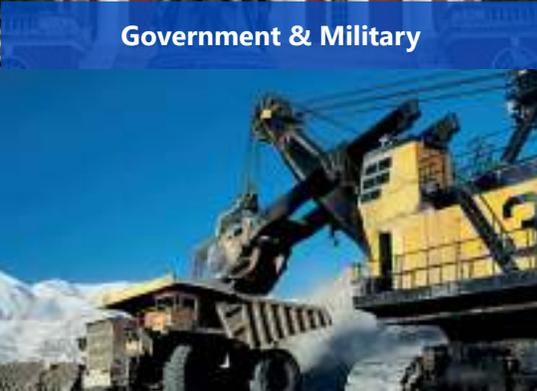
**Government & Military**



**Manufacturing**



**Oil & Gas**



**Materials & Mining**



**Pharmaceutical**



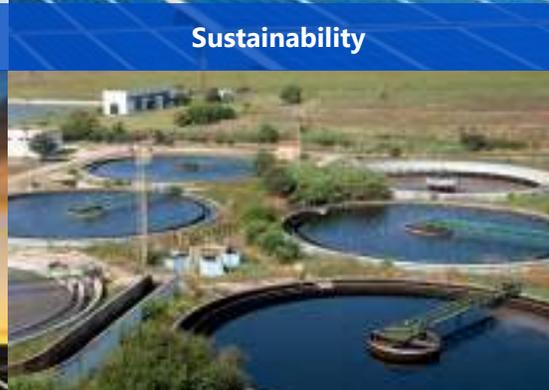
**Sustainability**



**Transportation**



**Utilities & Energy**



**Water & Wastewater**

# ICONICS Cross-product Features

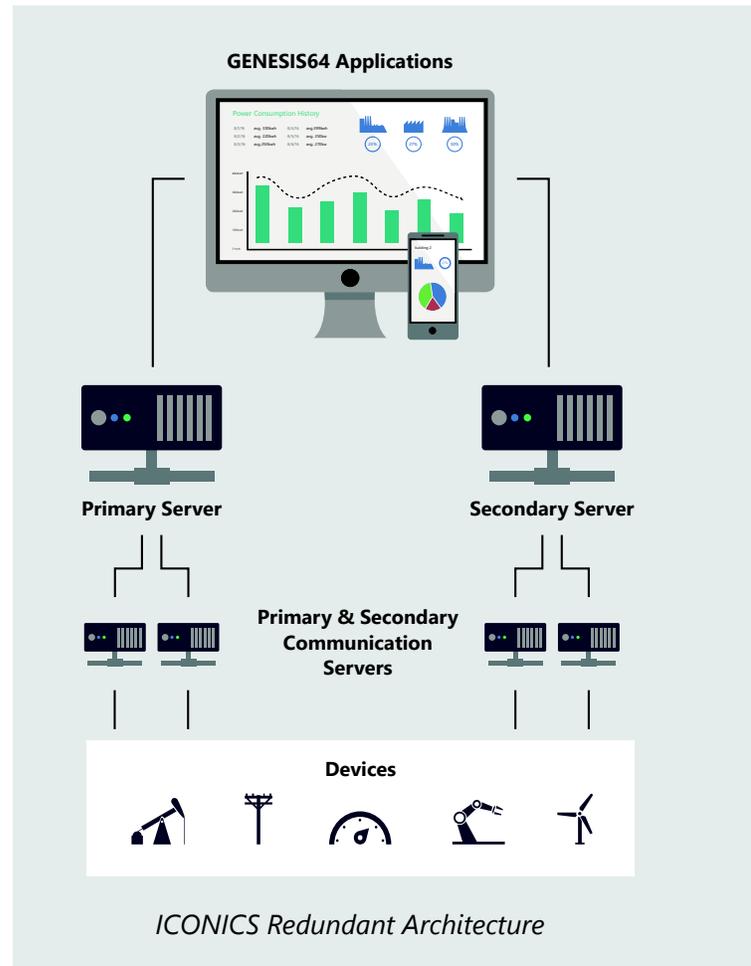


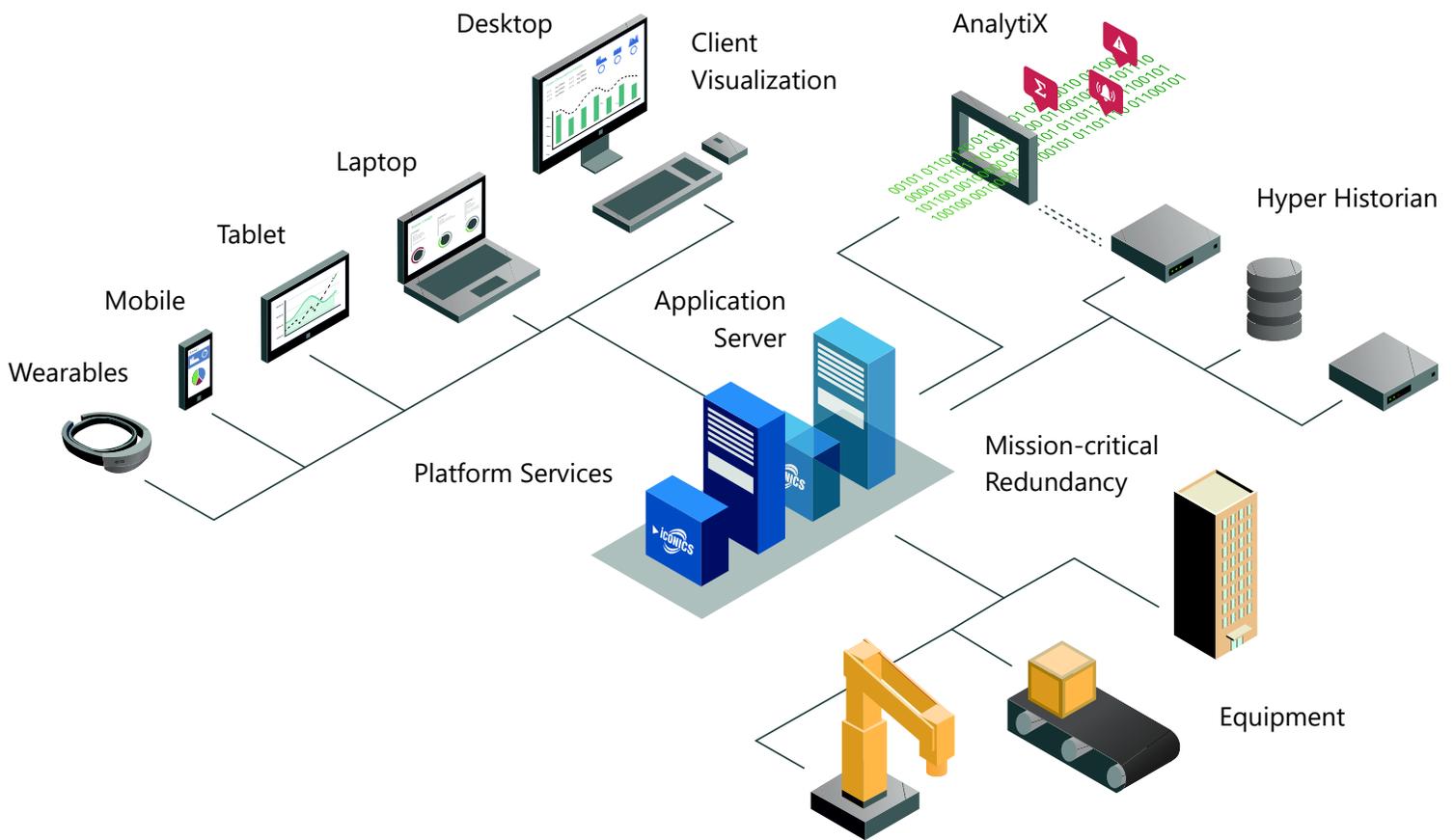
## Advanced Visualization on Any Device

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

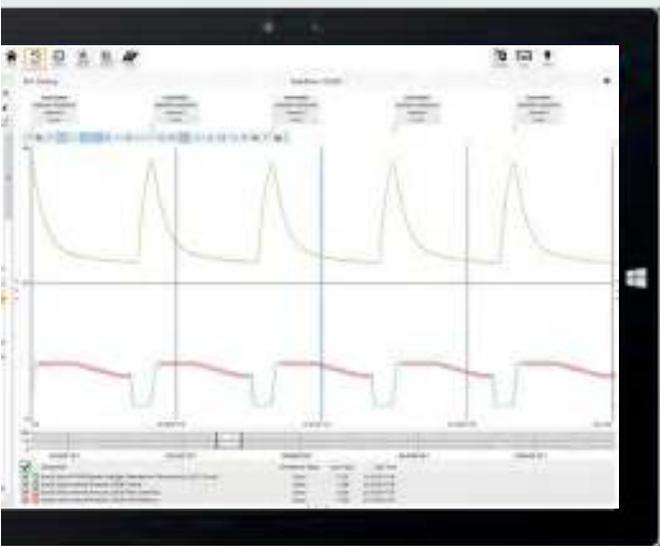
GENESIS64 supports industry standard communications such as OPC, OPC UA, Modbus, BACnet, web services, and databases. As the first 64-bit Advanced Workstation (B-AWS), GENESIS64 is certified by the BACnet Testing Laboratories, ensuring maximum integration with BACnet protocols such as BACnet objects, 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.

# Hyper Historian™

ICONICS' Hyper Historian™ is an advanced 64-bit high-speed, reliable, and robust historian. Designed for the most mission-critical applications, Hyper Historian delivers unparalleled performance with very efficient use of resources. Hyper Historian leverages the latest Microsoft platforms and includes integration with SQL Server. This technology makes Hyper Historian the most efficient, real-time plant historian for any Microsoft operating system. Combining a high compression, advanced algorithm, and designed to leverage 64-bit hardware and software architectures, Hyper Historian can access more CPU power and memory than traditional 32-bit based historians, providing the highest performance possible on all standard PC-based platforms.

## Hyper Historian Key Features

- Integrate performance calculations
- Archive data from unattended operations
- Replay real-time and historical data
- Customize trends and charts
- Store and forward critical data
- Trace diagnostic data with event logs
- Leverage rapid collection for enterprise-wide storage



## Charts, Data Analysis, and Reporting

Choose from a multitude of chart and trend styles to best represent and accentuate real-time and historical data. Use configuration options to customize trends to make data analysis concise and intuitive. Drag and drop data sources during runtime and view multiple trends simultaneously. Enter operator comments as well as manage lab data and audit trails.

Hyper Historian includes an industry standard SQL Query Engine for reporting and bulk data editing, enabling tight integration with any SQL compatible database such as Microsoft SQL Server, Oracle, and any open database.

## Data Merging

Hyper Historian includes a module for automatic or manual insertion of data, empowering users to import historical or log data from databases, other historians, or intermittently connected field devices and equipment. This also provides for greatly increased reliability in capturing all data, even when network disruptions occur.

## Performance Calculations

Customize calculations that can be triggered periodically or on any event, using flexible date/time, mathematical, string, and historical data retrieval functions within the expression editor.

## Hyper-to-Hyper

Merge data collected by distributed servers, while maintaining full system interconnectivity for metrics and analytics. Hyper-to-hyper connectivity can also automatically detect changes in the source data and propagate those to the central Hyper Historian server, maintaining a unified historical database.

## Remote Collectors

Architected as a distributed, multi-collector product, Hyper Historian remote collectors allow for historical data collection from dispersed locations. Remote collectors ascribe by ICONICS' universal connectivity capability including OPC-UA, BACnet, and SNMP protocols.



## Hot, Warm, and Cold Big Data Solutions

Hyper Historian is designed for all scenarios of data access and storage with the flexibility to handle "hot", "warm", and "cold" data. Hot data is information that needs to be accessed regularly, such as real-time KPIs or analytics, critical to daily decisions and procedures. Warm data balances between long-term storage and ease of access but is not constantly being changed or required for daily operations. This includes information such as weekly statistics, monthly reports, or quarterly analytics. Cold data includes archived data, high volumes of raw information for long-term analysis, and data required for audits. Each type of data requires specific handling with various accessibility and storage needs. Hyper Historian includes features to help users prioritize access of hot data while maintaining the integrity of secured, cold data.

