

DataWorX32™

V9.1 Product Bulletin

April 2008



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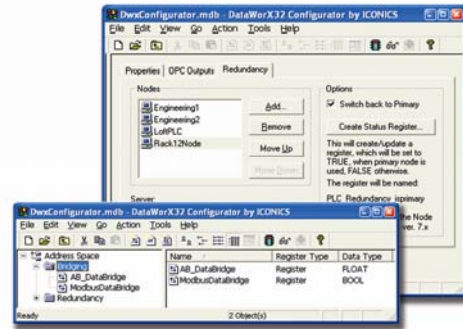
DataWorX V9.1 Product Bulletin

DataWorX32™

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DataWorX32 is a 32-bit, multithreaded, OPC-compliant client and server application providing multiple-functionality. 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 DataWorX32 will switch between a primary PC (node) and a backup PC on the network. Should the primary PC become disabled, DataWorX32 can automatically switch to the backup PC.



Features	Benefits
New OPC Tunneling	Secure, Transparent Tunneling of OPC data between any networked endpoints
New OPC Redundancy	DataWorX™32 can be used with any OPC server, adding real-time OPC data management and redundancy to any OPC application
OPC Data Bridging	Bridge and connect any OPC DA server to any OPC DA server
Patented OPC Data Aggregation	Lowers network traffic by aggregating and optimizing server requests by clients
Compliant With OPC DA 1.0 - 3.0	Designed to provide the highest level of compliancy for OPC DA 1.0, OPC DA 2.0 and OPC DA 3.0 servers
Easy to Configure	Zero client-side changes to implement a redundancy strategy
Real-time Redundancy Status	Monitoring status tag references and manual control switching to and from secondary servers
Runs As an NT Service	Can run as an NT service behind the scenes for automatic OPC data bridging and aggregation
Client & Server Side Redundancy	Seamless client transfer between redundant pairs with synchronized data management
Alarm, Trend, & SQL Data Logging	Periodic time synchronization between primary and secondary servers for real-time OPC alarm and trend data
Guard Against Single Point of Failure	Easy-to-configure, 32-bit multithreaded software, eliminating the single point of failure
3 Different Product Selections	Select the right solution that fits: DataWorX Professional, Standard or Lite



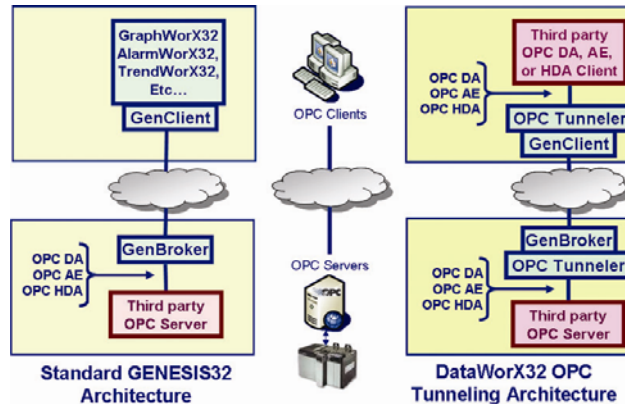
New DataWorX32 V9 Adds OPC Tunneling and Redundancy

DataWorX32 V9 contains many significant new product capabilities and enhancements, including:

- New full featured redundancy with support for OPC Data, OPC Alarms and OPC HDA Historian
- New OPC Tunneling supports any third-party OPC server to OPC client communications
- New MonitorWorX shows performance and provides centralized diagnostic utility
- Integration with new Unified Data Manager
- OPC groups and user-selectable Data Bridging and Patented Data Aggregation
- New alarm and data historian Store and Forward technology

New DataWorX32 OPC Tunneling – for OPC DA, AE, & HDA

A new OPC Tunneling features a standard part of DataWorX32 V9. This connects any remote OPC server to a client in a robust and secure manner allowing for OPC server real-time data to be redirected to more than one location. The easy to use graphical configuration interface allows for a centralized place to manage all remote connections.



DataWorX32 OPC Tunneler Architecture

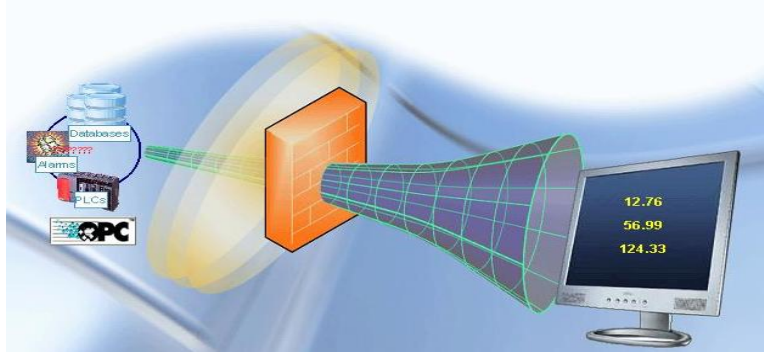
The underlying technology behind OPC Tunneling is the patented ICONICS GenBroker™ communication, which provides high-performance and robust communication, replacing Microsoft DCOM. DataWorX32 OPC Tunneling is completely OPC-compliant and is IT firewall-friendly, supporting communications over LANs, WANs and the Internet with built-in security.

It is simple to install and deploy DataWorX32 OPC Tunneling technology to virtually any OPC application where requiring remote and secure OPC communications is a requirement.



DataWorX32 V9 OPC Tunneling fully supports open OPC industry standards such as:

- OPC Data Access (DA 3.0)
- OPC Alarm and Events (AE 1.1)
- OPC Historical Data Access (HDA 1.2)



Other significant features of DataWorX32 OPC Tunneling include:

- Auto-discovery of remote OPC DA, AE and HDA servers
- Extremely simple to set up and configure
- Supports OPC browser interfaces over LANs, WANs and the Internet
- Provides a robust, secure alternative to standard Microsoft DCOM communications
- Integrated secure communications
- IT-friendly communications through firewalls and Network Address Translators (NAT)
- Supports TCP/IP and XML communication protocols

Advantages of ICONICS Gen Client – Gen Broker communication infrastructure

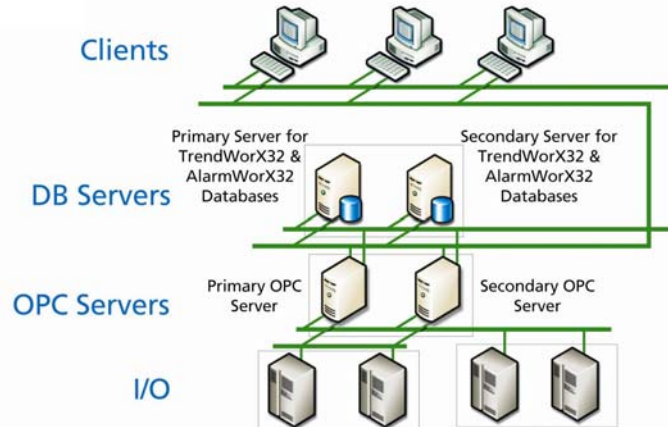
- Robust security
- Provide connection health status
- Adds a layer of redundancy

DataWorX32 OPC Redundancy

Offered in the DataWorX32 Professional Edition is the new DataWorX32 full-featured redundancy provides high availability similar to features found in large Distributed Control Systems. DataWorX32 Redundancy is the only product to support the three most important OPC standards, increasing the reliability and availability of OPC data by allowing multiple OPC servers to be configured into redundant pairs. These redundant OPC server pairs seamlessly appear as a single OPC server to any OPC client application. This feature can be added to an existing OPC server/client application, without any reconfiguration of those applications, keeping your processes going without any downtime.



Taking maximum advantage of the popularity of the OPC Data Access, OPC Alarm and Events and OPC Historical Data Access standards, a DataWorX32-enabled system uses multiple connections to a device or system to increase the reliability of data collection. By using built-in, patented aggregation, redundant data paths transparently map and appear as if a single OPC server connection. DataWorX32 can be seamlessly integrated into any existing OPC application without any changes to the client and without loss of data.



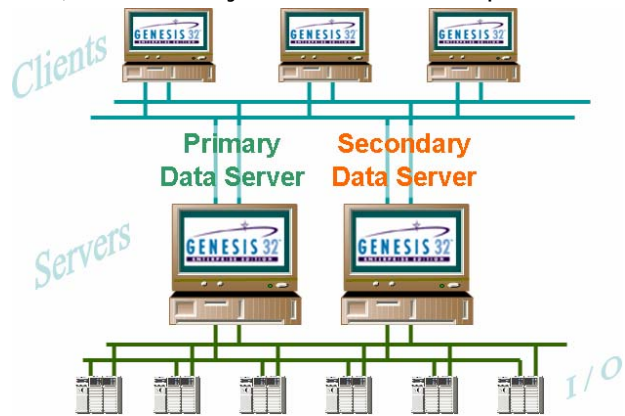
DataWorX32 V9 Redundancy key features include:

- Seamless and transparent addition to OPC applications
- Extremely easy to set up; no programming or application changes required
- On failure of a primary OPC server, DataWorX32 automatically switches to the secondary server
- Supports multiple OPC Data Access (DA) server pairs; supports 1.0 through 3.0 specifications
- Supports multiple OPC Alarm and Event (AE) server pairs
- Supports multiple OPC Historical Data Access (HDA) server pairs
- Add redundant data collection to any OPC Data Access application
- Automatic as well as manual fallback capability when primary server becomes available
- Built-in MonitorWorX32 support with system tray diagnostics
- Configure OPC tags for visualization of key redundant monitor items
- Built-in audit trail and diagnostics with event logging, tracking every redundant event to disk
- Drop-in design makes implementing redundancy a snap
- Available fail-over modes: hot, warm, and cold
- Configurable server polling intervals
- Integrate with multimedia alarming product to provide e-mail, SMS, and Instant Messenger notifications



OPC Data Redundancy

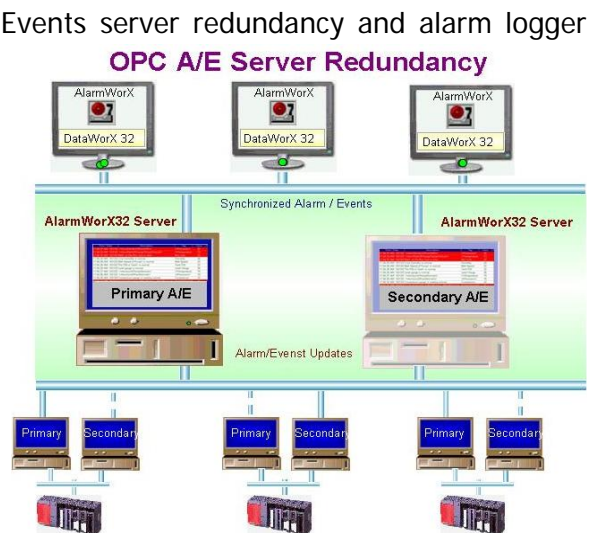
DataWorX32 V9 supports OPC DA (Data Access) Redundancy. DataWorX32 is a powerful data-optimization tool, as well as an easy-to-configure redundancy solution for any OPC-based application. The patented OPC data-aggregation technology found in DataWorX32 will lower network traffic by aggregating server-to-client requests, leading to a reduction in CPU load and an increase in performance. DataWorX32 is a component of the GENESIS32 product family, and it serves as a project-level data system for GENESIS32 applications.



OPC AE Alarm Redundancy

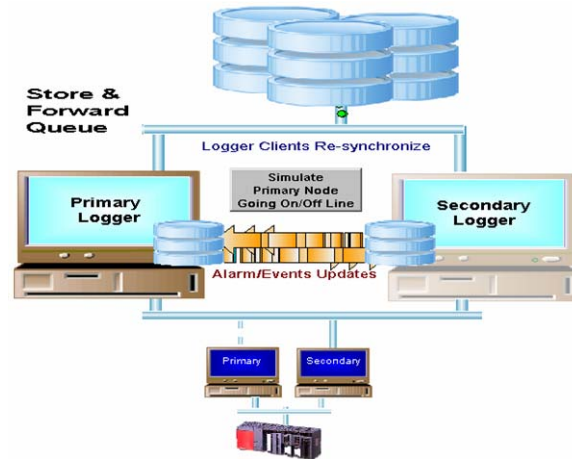
DataWorX32 V9 supports OPC Alarm and Events server redundancy and alarm logger redundancy. Providing both real-time OPC Alarm Server redundancy as well as synchronization of alarm historical log files was a design goal.

Alarm acknowledgements are automatically synchronized, guaranteeing that all operator actions are accounted for when switching from primary to secondary alarm servers and vice versa. Integrated Store and Forward technology provides the core capability when synchronizing alarm history between primary and secondary alarm log files.



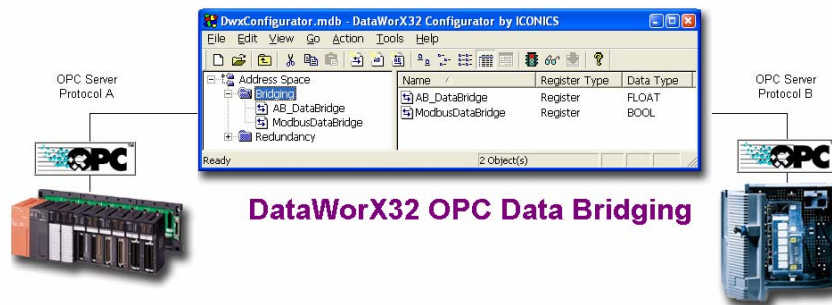
OPC HDA Redundancy

DataWorX32 V9 supports OPC Historical Data Access (OPC HDA) redundancy, providing several configurations for guaranteeing synchronization of critical historical time-stamped data. Integrated Store and Forward technology provides the core capability when synchronizing historical data between primary and secondary log files. DataWorX32 supports Microsoft SQL 2000 and SQL 2005 data stores for highly available trend historian redundancy.

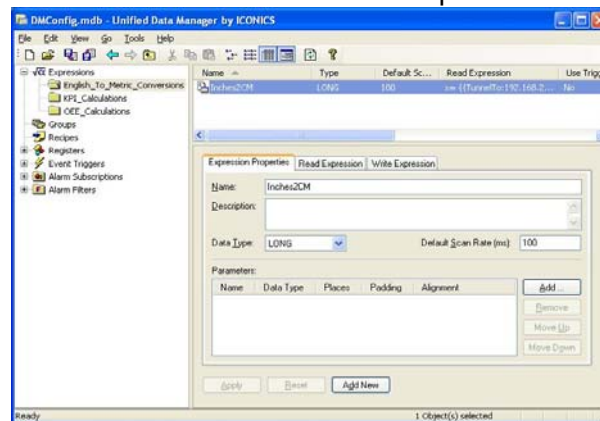


DataWorX32 OPC Universal Data Bridging

DataWorX32 provides simple and reliable means for connecting real-time OPC DA data between OPC servers and applications using OPC.



DataWorX32 supports the use of OPC groups and registers, which are used to form collections of OPC items that will be moved between OPC servers at a specified rate. Using multiple groups, DataWorX32 allows you to control how fast data are transferred from one OPC server to another. By using DataWorX32 groups with different update rates, you can tailor your data transfers to fit the needs of the application. While one item may need to be sent at high speed, other items in the application may need slower update rates. The benefit is reduced network traffic and increased overall communications reliability.

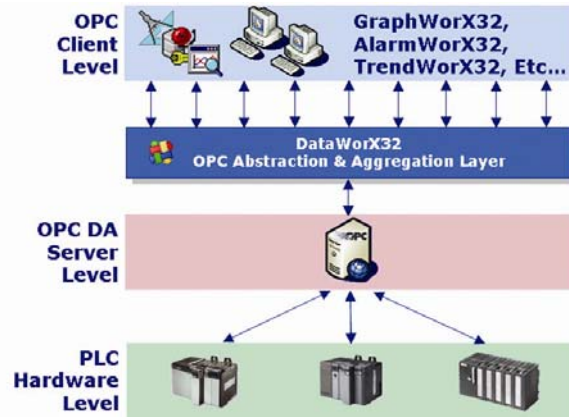


New DataWorX32 OPC Data Aggregation

DataWorX32 will now be offered in three license versions: DataWorX32 Standard Edition with Global Aliasing, OPC Bridging and OPC Tunneling, DataWorX32 Professional for redundancy mission critical applications, and DataWorX32 Lite Edition with OPC Tunneling and Aggregation.

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- Integration with new Unified Data Manager
- OPC groups and user-selectable Data Bridging and Patented Data Aggregation
- New alarm and data historian Store and Forward technology
- New scheduled data transfers
- Port-level and connection level aggregation



Architecture of OPC Data Aggregation



Data Tunneling and Redundancy Solutions

	DataWorX32 Redundancy	DataWorX32 Professional	DataWorX32 Standard	DataWorX32 Tunneler Kit	DataWorX32 Lite Version
	DATAWORX 32-R V9	DATAWORX 32-PRO V9	DATAWORX 32 V9	DATAWORX 32-TUN V9	DATAWORX 32-LITE V9
OPC Data Aggregation	Y	Y	Y	Y	Y
OPC HDA Tunneling	Y	Y	Y	Y	Y
OPC A/E Tunneling	Y	Y	Y	Y	Y
OPC DA Tunneling	Y	Y	Y	Y	Y
United Data Manager	Y	Y	Y	Y	Y
SNMP	Y	Y	Y	Y	Y
MonitorWorX	Y	Y	Y	Y	Y
Security	Y	Y	Y	Y	Y
GenBroker Networking	Y	Y	Y	Y	Y
Database OPC Server	Y	Y	Y	Y	Y
Global Aliasing	Y	Y	Y		
OPC DA Data Bridging	Y	Y	Y		
OPC DA Redundancy	Y	Y	Y		
Store & Forward Technology	Y	Y			
OPC HDA Logged Data Redundancy	Y	Requires Pair			
OPC A/E Logged Data Redundancy	Y	Requires Pair			



About ICONICS

ICONICS is a leading provider of award-winning enterprise manufacturing intelligence and automation software solutions.

ICONICS' solutions deliver real-time visibility into all enterprise operations and systems, helping companies to be more profitable, more agile, and more efficient. As a Microsoft Gold Certified Partner, ICONICS designs its solutions from the ground up to take maximum advantage of Microsoft .NET and SharePoint Portal Server technology, offering an unprecedented level of performance and ease of use.

Our award-winning GENESIS32 and new GENESIS64 automation software solutions can improve productivity, reduce integration and operating costs, and optimize your asset utilization, giving your organization a competitive edge. All ICONICS products are based on "open standards," using OPC-to-the-Core technology leveraging proven architecture and lower TCO of mainstream Microsoft platform, and connect to your existing infrastructure. We have more than 225,000 applications running worldwide serving top manufacturing companies.

ICONICS' BizViz suite of products provides real-time manufacturing intelligence from the production floor to the boardroom, turning real-time information into your competitive advantage.

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