



GENESIS32 Version 7.0

New Product Release Notes - Features/Enhancements

All New GENESIS32 Version 7.0

ICONICS is pleased to make the newest version of GENESIS32 available. It represents many man-years of product improvements and enhancement to the ICONICS powerful and industry leading OPC-to-the-Core products. ICONICS new “One Development Tool – Many Targets” design allows users to create applications that run on any Microsoft Operating System on Windows newest .NET Servers, Windows XP home, XP Professional, Windows 2000 and 2000 Server, Windows NT and NT Server to the Pocket PC running Windows CE.

Many major new features and improvements are a standard part of the GENESIS32 Version 7.0 product and optional products. GENESIS32 Release 7.0 is based on many Open Standards and designed from the ground up to take advantages of these standards. This guarantees applications scalability and connectivity to sensors and field devices using OPC and database using VBA, OLEDB and XML technologies.

ICONICS strictly adheres to the OPC Data Access 2.05 Standard, OPC Alarm/Events 1.03 and OPC Historical Data Access (HDA) 2.0 Specification. The latest VBA 6.3 is used in ScriptWorX32, (VBA 6.3 is what you find in the new MS Office 2000). GENESIS32 7.0 has been exclusively been compiled using MS Visual C++ for maximum optimization and performance in all windows OS's including; Windows .Net Servers, Windows XP, Windows NT, Windows 2000, Millennium, Windows 98, 98 Second Edition and Windows CE. ICONICS has made great efforts to be compliant with Microsoft's DNA for Manufacturing and .NET initiatives. Below is a summary of the new feature found in all new GENESIS32 R7.0:



MAJOR NEW FEATIURES IN VERSION 7.0:

Here is a quick listing of what's new in v7.0. Additional details are described later in this document.

1. **GENESIS32 is Windows 2000, XP and .NET Server Certified**
2. **New ProjectWorX32 – Systems Integrator Productivity tool**
3. **New TraceWorX32 – System Analysis and Diagnostics Tool**
4. **New Product Wide Global Aliasing**
5. **FDA CFR 11 Compliance Support throughout**
6. **FDA CFR 11 Security Synchronization with NT Security**
7. **FDA CFR 11 TrendWorX32 Time / Date Daylight Saving Time**
8. **New TOUCH Screen Friendly Capability in Alarms, Security and trends**
9. **New GENBroker Internet Firewall friendly - SOAP/XML Communications Technology**
10. **New MachineWorX version for simplified Operation**
11. **GraphWorX32 Dockable Symbol library**
12. **GraphWorX32 VBScript & JScript support for WEBHMI and Pocket PC Applications**
13. **GraphWorX32 Integrated VB Script and JScript Support**
14. **GraphWorX32 Touch Screen KeyPad and QUERTY keyboard support**
15. **GraphWorX32 Support for over 20 new files import formats including:**
 - **JPEG, TIFF, GIF, PNG, Animated GIF and much more**
16. **New WebHMI Database support for VBScript & Jscript**
17. **New WEBHMI with Firewall and Router Support using SOAP/XML**
18. **New WEBHMI Support for Alarm Logger Reports**
19. **WEBHMI - GraphWorX32 and ProjectWorX32 WEB Publishing Capability**
20. **New Software and Hardware Licensing**
21. **Expression support for Bit Operations and many other improvements**
22. **Thin Client – Extensive New Terminal Server and Terminal Client Support**
23. **Multimedia (MMX) Option for AlarmWorX32™ – Including new Call In Technology, Video and SMS Paging, Scheduler, Email, Video, Voice, Telephone, Marquee, Pop-Ups, FAX, Text/Speech, 2 way Pagers and much more**
24. **International Language Switching OEM Support**
25. **International Languages: German, Dutch, Italian, Spanish, French, Russian**



- 26. Product Software and Hardware Licensing Support**
- 27. Standard MSDE for low cost AlarmWorX32 Alarm Logging Option**
- 28. Standard MSDE for low cost TrendWorX32 Data Logging Option**
- 29. DataWorX32 Lite version**
- 30. New DataWorX32 Professional version**
- 31. DataWorX32 NT Service**
- 32. ScriptWorX32 NT Service**
- 33. TrendWorX32 Alarm range Limits Feature**
- 34. TrendWorX32 Global Aliasing Support for Trend reports**
- 35. Security and Licensing Redundancy using GenBroker**
- 36. AlarmWorX32 improved Operator Comments**
- 37. AlarmWorX32 Report & Analysis – HTML and Advanced reports**
- 38. New OPC Data Statistic Monitor**
- 39. New Marquee ActiveX Control**
- 40. Support New OPC 2.05 Data Access Specification & Compliance**
- 41. Support New OPC 1.03 Alarm / Event Specification & Compliance**
- 42. Support New OPC 2.0 Historical Data Access Specification & Compliance**
- 43. Intellution iFIX and Dynamics Picture Converter**
- 44. Wonderware Graphics Converter**



ALSO NEW IN VERSION v7.0:

- **Global Aliasing System (GAS) – Create reusable applications**
- **Updated Screen Manager Multi-monitor and Layout Utility**
- **GENESIS System Tray (GenTray) – Provides access to GENESIS32 Services**
- **WEBHMI Thin Client product using DCOM, OPC over TCP and OPC over SOAP/XML**
- **DataWorX32 Support for OPC over SOAP/XML Communications**
- **New Powerful MSDE Manager Utility**
- **New Internet and WEB Enabled DataSpy Utility**
- **Universal Tag Browser Stores User setting and Persistence**
- **International Language Font – Japanese, Chinese, Cyrillic, Arabic**
- **New Language Switching Import & Export capability**
- **New Redundancy for WEBHMI on Licensing and Security**
- **Numerous Security Server Enhancements**
- **Redundant Security and Licensing Server Support with GenBroker**



GENESIS32 Version 7.0

STANDARD FEATURES:

- **New ProjectWorX32™** – Manage and Deploy ICONICS Projects integrates with Source Safe
- **New TraceWorX32™** – Analyze and Diagnose system performance
- **New ScriptWorX32™** – Multithreading Periodic, Event and Alarm VBA6 based Scripting
- **Improved WEB based Licensing and Authorization**
- **DR. DCOM** - DCOM and OPC over TCP trouble shooting and diagnostics tool
- **OPC Data SPY** – OPC 2.04 Data Access and Alarm/Events diagnostics Client
- **AlarmWorX+ Conversion Utility** – Convert AlarmWorX+ apps into AlarmWorX32
- **MSDE Manager Utility** - Manage MSDE Databases
- **Symbol VBA Wizards** – Many useful VBA Wizards help configure HMI functions
- **Symbol VBScript Wizards** – Many useful Wizards help configure HMI functions
- **Symbol JScript Wizards** – Many useful Wizards help configure HMI functions
- **Symbol Library** – Symbol library with 3D professional drawn gradient symbols
- **TrendWorX32 Oracle, MSDE and MS SQL Support**
- **AlarmWorX32 MSDE and MS SQL Support**
- **New Timer, Marquee, Grid Control ActiveXs**
- **Periodic Scheduler, Event and Alarm ActiveXs**
- **Switch, Vessel and several other powerful ActiveX's**
- **Unattended Network Installation for Enterprise-wide Installation on multiple machines**



GraphWorX32 V 7.0 - Advanced OPC based HMI

What's New in Version 7.0:

- Greatly improved performance
- Speed Improvement for Pop-ups
- New Microsoft VBA 6.3 Support
- New Global Alasing
- New Integrate TraceWorX32 Function
- New Powerful Dockable Symbol Library with OLE Automation
- New Powerful Dockable Vb Script Editor
- New Connection Wizard
- New Transparent to Displays & Objects (2000 / XP only)
- New Display Thumbnail to File Open Function
- Add VB Script and Jscript support
- Create New VB and JScript Editor
- New Publish Multiple Graphics pages to WEBServer
- Process Point & Text Improvements
- New Find / Replace Dockable Tree Control
- Improve Screen Updates for Foreground & Dynamics
- WEB Publish Export to HTML Function – Stores Displays directly into WEB Servers.
- Find / Replace for State Fields
- Find / Replace for local Alias
- Add Classic and MachineWorX Configurations
- Improve Screen Updates for Zoom & Layers
- Add Keypad & QUERTY Keyboard enhancements
- New Grid Control ActiveX
- Simplified Access to Symbol Tags & Aliases
- New Expression Concatenation, Bit Operations
- New AlarmWorX32 Alert Indicator to GraphWorX32 Toolbar
- New VB Script Editor
- Add Examples for VB Script in Symbol Library
- Integrate New Database Support into GraphWorX32
- New Expression Improvements
- New WEBHMI Naming Features to Pick, Button, Tabs



- **International Language Switching**
 - Language switching based on central language database
 - Language server, Configurator selector
 - Engineering Unit conversion support
 - Switch language pick actions
- **Add JPEG and GIF File import & Export**
- **Improved Run time Zoom & Pan**
- **Several New Automation Improvements**
- **New Marquee ActiveX**
- **New text file Aliasing support to WEBHMI**
- **New Relative Path Support**
- **Add VBScript & JScript Support for Pocket PC**
- **New Global Aliasing and Language Browser**
- **Internal PBG vs BMP Compression Feature**
- **New BMP, JPEG and other format Rotation**
- **New JPEG, PNG, GIF TIF File import & Export**
- **Printing on White background feature**
- **New Save as previous version feature**
- **Global Alaising in Configuration & Runtime Dialogs**
- **GWX32View ActiveX Raise Mouse Events**
- **GWX32.EXE Raise Mouse Events**
- **OLE Automation for finding mouse under object**
- **New OLE Automation for Pick Action**
- **Digital Selector Enhancement**
- **New Digital Confirmation Feature**

VBA Smart Wizard Symbols

- **Help Wizard** – Provides detailed information on the use of the VBA Wizards
- **OPC Data Access Wizard** – Set and retrieve OPC data with this powerful wizard
- **Microsoft Excel Wizard** – Easily and quickly integrate data to and from Excel
- **Report Wizard** – create simple useful reports using this powerful VBA Wizard
- **Recipe Wizard** – Create recipes using this powerful VBA Wizard
- **Microsoft Word Wizard** – Easily and quickly integrate data into Word
- **Email & Outlook Wizard** – Send email based on VBA events
- **OPC Calculator Wizard** – Easily connect 4 function calculator to a tag on any display
- **OPC KeyPad Wizard** – Easily connect QUERTY keypad to a tag on any display
- **Runtime Aliasing Symbol Wizard** – Change aliases during display runtime
- **Analog Chart Wizard** – Create displays with Analog OPC tags in seconds
- **Digital Chart Wizard** – Create displays with discrete OPC tags in seconds



GraphWorX32 STANDARD FEATURES:

- OPC 1.0 and OPC 2.0 Data Access Compliant
- OVER 90 Animation Types Supported
- Development and Configuration for Windows CE
- Layers with Clutter / Declutter – Powerful AutoCad style display layers
- PowerPoint Style Gradient Fills
- State Fields – display human readable text representing machine states
- ActiveSync Download to Windows CE and Pocket PC's
- Pocket PC's Development Mode - Support for Compaq, Casio and HP
- ActiveX Numeric and Thumb Wheel ActiveX Controls with Gradient look and feel
- Wonderware Graphics and Database Translator
- Intellution Graphics and Database Translator
- Data type support
- Supports Netscape and IE Browsers.
- Range limit display for keypad and notepad
- Display level Keyboard and Function Keys Assignment
- Key Disable Capability for Windows NT/98/95 –Disable ctrl-alt-del and more...
- GraphWorX32 can be Started / Stopped from the GenTray
- User defined Pop up menus
- Rotate text in 90 degrees increments
- WEB based Look & Feel similar to internet Explorer
- Professionally drawn 2D and 3D Gradient Symbol libraries
- Runtime Window Properties Mode – for improved WYSIWYG configuration
- “View” Toolbar – for convenient access to zooming and layering commands
- Powerful advanced poly-line editing capabilities
- Aliasing and advanced editing features
- Password on display files and user created Custom Symbols and Symbol Wizards
- Smart ActiveX Toolbar – Add / remove any ActiveX Control to the ActiveX toolbar
- Keypad and QWERTY Keyboard support to Process Point Dynamic
- Numerous user interface enhancements to improve ease-of-use
- Customizable Toolbars - Add / Remove icons from Toolbars



Improved WEBHMI – Internet / Intranet based Visualization

WebHMI™ Version 7.0 represents the second generation WEB based HMI product which provides OPC real-time visualization, Alarm and Historical information from any ICONICS GENESIS32 OPC based product to any computer running Netscape Navigator or Microsoft's Internet Explorer Browser. Perform remote browsing over a corporate Intranet or Internet. Based on Microsoft DNA architecture, **WebHMI** uses ActiveX, OPC and GEN-Broker communications technology to provide WEB based visualization.

What's New in Version 7.0:

- **Runs on Windows XP Professional, Windows .NET Server, NT, Win2000 and Server**
- **NEW OPC over SOAP/XML Seamless Communications**
- **NEW Alarm Report WEB Capability**
- **NEW Alarm Marquee Capability**
- **NEW Firewall Friendly Capability**
- **NEW Zero install Web Capability**
- **NEW WEB based Security Login Capability**
- **Works with VPN, RAS and other secure communications**

KEY STANDARD FEATURES:

- **Standard OPC over TCP/IP or DCOM Communications**
- **OPC over TCP Seamless Communications**
- **Support for Microsoft Internet Explorer 4 or greater**
- **Support for Netscape Browser 4.5 or greater**
- **DHCP / DNS / NAT support**
- **DCOM direct Channel Communications with Configurable timeout**
- **Supports Fire Walls and Routers**
- **Improved GEN Broker Configuration Utility**
- **Built in Windows 2000 and NT Level Security**
- **Serves OPC Real Time Data over the WEB (Intranets and Internet)**
- **Delivers ActiveX Controls and HTML Pages**
- **Uploads Graphics, Trends, Alarms, etc**
- **Ideal for viewing remote HTML PLC, Controller information**



NEW ProjectWorX32 – Manage and Deploy GENESIS32 Projects

KEY STANDARD FEATURES:

- **Manage entire projects with a single Project Tool**
- **Easily deploy projects to different PCs**
- **Project Collaboration tool allows multiple users to create applications at one time**
- **Easy to use Configuration management with integrated Microsoft Source Safe**
- **Project Global Find and Replace**
- **Custom add project databases using the ProjectWorX32 Addin Toolkit**
- **Integrates GraphWorX / Symbols / Templates / VBA Wizards**
- **Integrates Trend and Alarm databases with one tool**
- **Integrate with Global Aliasing and Language Aliasing configuration tools**
- **Incremental Project Deployment with File unpack capably**
- **Project WEB publishing for WEBHMI Projects**
- **Integrated Context Sensitive Help**
- **OPC Tag cross Reference Reporting**
- **OPC Project Reporting**
- **Automatically adds Launch ICON to Startup Group**
- **Integrates Secure Desktop & Screen Manager into Project**
- **Integrates ICONICS Security**
- **ProjectWorX32 GenTray Archiving support**
- **ProjectWorX32 supports TrendWorX32 Configuration**
- **ProjectWorX32 supports AlarmWorX32 Configuration**
- **ProjectWorX32 supports Alarm Multimedia Configuration**
- **ProjectWorX32 supports Genbroker Configuration**
- **ProjectWorX32 supports ReportWorX.Net Configuration**
- **ProjectWorX32 supports MobileHMI Configuration**
- **ProjectWorX32 supports ReportWorX32**
- **ProjectWorX32 supports Global Aliasing Configuration**
- **ProjectWorX32 supports Language Switching Configuration**



NEW 21 CFR 11 Features in Version 7.0

What's New in Version 7.0:

- ICONICS Full supports the FDA 21 CFR 11 Electronic Signatures
- FDA CFR 11 Security Synchronization with NT Security
- FDA CFR 11 TrendWorX32 Time / Date Daylight Saving Time

KEY STANDARD FEATURES:

Item	GENESIS32 Module	<u>Feature</u>	FDA Relevance
1.	Security Server	Unique User Name Enforcement	Electronic Signatures are Unique
2.	Security Server	Account Disable Feature	Electronic Signatures are not re-assigned
3.	Security Server	Network and Web-Centric Security	System-wide E-Signature enforcement
4.	Security Server	User ID's can be full name of user	E-Signature Definition
5.	Security Server	Maximum Password Age option	Password Aging
6.	Security Server	Minimum Password Age option	Password Aging
7.	Security Server	Account Lockout Feature option when someone tries "hacking" into system by guessing name/password to log in	Unauthorized Access
8.	Security Server	Account Lockout Feature option – define the number of attempts required to trigger event	Unauthorized Access
9.	Security Server	Account Lockout Feature option – define optional reset timeout of the lockout	Unauthorized Access
10.	Security Server	Account Lockout Feature: such attempts are posted to the GenEvent Server	Unauthorized Access
11.	Security Server	Access to the Security Server engine is possible through OLE Automation, enabling integration with other login methods, such as a tie-in to a retinal scanner, fingerprint detector, and so on.	Biometrics



Item	GENESIS32 Module	<u>Feature</u>	FDA Relevance
12.	AlarmWorX32	Logger Component prints out the posted attempts from the GenEvent Server of failed login attempts	Unauthorized Access
13.	AlarmWorX32	Logger Component stores posted attempts from the GenEvent Server of failed login attempts to an SQL Database (or Oracle, or Access, or MSDE).	Unauthorized Access
14.	AlarmWorX32	Viewer ActiveX Component shows posted attempts from the GenEvent Server of failed login attempts	Unauthorized Access
15.	AlarmWorX32	Multimedia Component (MMX) can filter on GenEvent Server to get the failed login attempts to trigger Action Sets	Unauthorized Access
16.	AlarmWorX32	MMX notifies organizational management of failed login attempts in an immediate and urgent manner via Email	Unauthorized Access
17.	AlarmWorX32	MMX notifies organizational management of failed login attempts in an immediate and urgent manner via Pager	Unauthorized Access
18.	AlarmWorX32	MMX notifies organizational management of failed login attempts in an immediate and urgent manner via Fax	Unauthorized Access
19.	AlarmWorX32	MMX notifies organizational management of failed login attempts in an immediate and urgent manner via MS Instant Messaging	Unauthorized Access
20.	AlarmWorX32	MMX notifies organizational management of failed login attempts in an immediate and urgent manner via Sound	Unauthorized Access
21.	AlarmWorX32	MMX notifies organizational management of failed login attempts in an immediate and urgent manner via telephone	Unauthorized Access
22.	AlarmWorX32	MMX notifies organizational management of failed login attempts in an immediate and urgent manner via Marquee Displays	Unauthorized Access
23.	AlarmWorX32	MMX notifies organizational management of failed login attempts in an immediate and urgent manner via Internet Popup Windows	Unauthorized Access



Item	GENESIS32 Module	<u>Feature</u>	FDA Relevance
24.	Security Server	Auto Logout option so users are removed logged out of the system automatically after a definable period of time	Timeouts
25.	Security Server	Login Reminder pops up when the Auto Logout option has been activated for the user, reminding of pending logout and giving option to re-login.	Timeouts
26.	Security Server	Users can have specific restrictions on which OPC Data Points they can write to.	Access Control
27.	Security Server	Users can have specific restrictions on which stations they can log in from.	Access Control
28.	Security Server	Users can have specific restrictions on when they can log into the system.	Access Control
29.	Security Server	Users can have specific restrictions on files they can open up.	Access Control
30.	Security Server	Access to specific functionality in the various components that make up GENESIS32 can be restricted on a per-user or per-group basis (e.g., configuring a graphic display, acknowledging an alarm, printing a report, etc.)	Access Control
31.	Security Server	Custom parameters can be defined to further restrict operator access; details of which are limitless and accessible via OLE Automation calls (e.g., via VBA scripting, etc.)	Access Control



Item	GENESIS32 Module	<u>Feature</u>	FDA Relevance
32.	GraphWorX32	Data Entry Field Control	Audit Trails
33.	GraphWorX32	Slider Control	Audit Trails
34.	GraphWorX32	Dial Control	Audit Trails
35.	GraphWorX32	Value change (via Data Entry, Slider, Dial) reports the new value to GenEvent Server	Audit Trails
36.	GraphWorX32	Value change (via Data Entry, Slider, Dial) reports the previous value to GenEvent Server	Audit Trails
37.	GraphWorX32	Value change (via Data Entry, Slider, Dial) reports node information to GenEvent Server	Audit Trails
38.	GraphWorX32	Value change (via Data Entry, Slider, Dial) reports operator ID information to GenEvent Server	Audit Trails
39.	GraphWorX32	Value change (via Data Entry, Slider, Dial) reports date information to GenEvent Server	Audit Trails
40.	GraphWorX32	Value change (via Data Entry, Slider, Dial) reports time information to GenEvent Server	Audit Trails
41.	GraphWorX32	Value change (via Data Entry, Slider, Dial) reports tag source to GenEvent Server	Audit Trails
42.	GraphWorX32	Disable Dynamic can be tied to Buttons	Sequence Checking
43.	GraphWorX32	Disable Dynamic can be tied to Pick Actions	Sequence Checking
44.	GraphWorX32	Disable Dynamic can be tied to Radio Controls	Sequence Checking
45.	GraphWorX32	Disable Dynamic can be tied to Checkboxes	Sequence Checking
46.	GraphWorX32	Disable Dynamic can be tied to Data Entry Fields	Sequence Checking
47.	GraphWorX32	OPC Data can be tied to the Disable Dynamic	Sequence Checking
48.	GraphWorX32	Expressions can be tied to the Disable Dynamic	Sequence Checking
49.	GraphWorX32	Alarm/Event viewer can be embedded within a Graphics Display	Audit Trails
50.	GraphWorX32	A Login Menu permits users to identify themselves as the current operator	Audit Trails, Security, Access, and more...
51.	GraphWorX32	VBA Scripting is provided for additional advanced applications, helping to comply with a particular company's procedures	Audit Trails, Security, Restricted Access, and more...



52.	AlarmWorX32	Operator Tracking Events are posted in the AlarmViewer ActiveX Component	Audit Trails
53.	AlarmWorX32	AlarmViewer ActiveX Component can be configured to view Node information	Audit Trails
54.	AlarmWorX32	AlarmViewer ActiveX Component can be configured to view Operator ID information	Audit Trails
55.	AlarmWorX32	AlarmViewer ActiveX Component can be configured to view Old Value information	Audit Trails
56.	AlarmWorX32	AlarmViewer ActiveX Component can be configured to view New Value information	Audit Trails
57.	AlarmWorX32	AlarmViewer ActiveX Component can be configured to view Operator Comment information	Audit Trails
58.	AlarmWorX32	AlarmViewer ActiveX Component can be configured to view date information	Audit Trails
59.	AlarmWorX32	AlarmViewer ActiveX Component can be configured to view time information	Audit Trails
60.	AlarmWorX32	AlarmViewer ActiveX Component can be configured to view tag source information	Audit Trails
61.	AlarmWorX32	AlarmViewer ActiveX Component can have filters defined to view only audit trail information	Audit Trails
62.	AlarmWorX32	AlarmViewer ActiveX Component can be configured to pop-up a window for Operator Comments to attach to an alarm and/or event	Audit Trails
63.	AlarmWorX32	AlarmViewer ActiveX Component records the date and time of alarm Acknowledgement	Audit Trails
64.	AlarmWorX32	Historical Alarm Report ActiveX Component permits users to generate event reports	Audit Trails
65.	GenEvent Server	GenEvent Server permits user-defined comments via OLE Automation interface	Audit Trails
66.	GenEvent Server	GenEvent Server is network and web-centric, for capturing/posting events in an enterprise solution	Audit Trails
67.	AlarmWorX32	Logger Component stores Alarm and Events to an open database (i.e., MS SQL Server, Oracle, MSDE)	Retention
68.	ProjectWorX32	Upcoming product ICONICS is introducing for project management, including check-in for revision control of system components	Revision Control
69.	GraphWorX32	Displays are stored as individual documents, not all compiled into one monolithic executable.	Revision Control



NEW TraceWorX32 Utility – Analyze and Diagnose Applications

KEY STANDARD FEATURES:

- TraceWorX32 integrates with ProjectWorX32
- Set severity level of tracing for any of the key ICONICS Modules
- Detailed for Verbose Debugging and Logging
- Files stored in XML Format
- The Following applications have been Integrated with TraceWorX32
 - AlarmWorx32 MDI Container
 - AlarmWorX32 Server Configurator
 - AlarmWorX32 Logger Configurator
 - AlarmWorx32 Report ActiveX
 - AlarmWorx32 Server
 - AlarmWorx32 Viewer ActiveX
 - GraphWorx32
 - GWXview32 ActiveX
 - GWX Gauge ActiveX
 - GWX Numeric ActiveX
 - GWX Slider ActiveX
 - GWX Switch ActiveX
 - GWX Vessel ActiveX
 - Genesis32 Tool Tray
 - Global Aliasing System Client
 - Global Aliasing System Engine
 - GenBroker Server
 - ProjectWorX32
 - ProjectWorX32
 - SymbolWorx32
 - TrendWorx32 MDI Container
 - TrendWorX32 Server Configurator
 - TrendWorx32 HDAExpress SERVER
 - TrendWorx32 OLEDB Provider
 - TrendWorx32 Persistent Trending
 - TrendWorx32 Report Server
 - TrendWorx32 SQL Data Logger
 - TrendWorx32 Tool ActiveX
 - TrendWorx32 Tool ActiveX
 - TrendWorx32 Viewer ActiveX
 - Security Server



NEW AlarmWorX32 – Multimedia Product (Optional)

What's New in Version 7.0

- **New MMX Global Aliasing for Alarming**
- **New MMX Language Aliasing for Alarming**
- **New MMX Acknowledgement Receipt with Backwards compatibility**
- **New MMX Call in Telephony Support**
- **New MMX PA Agent**
- **New MMX Call In & Phone Agent Configurator**
- **New MMX Security Call In Support**

KEY STANDARD FEATURES:

Industry's Most Complete Multi Media Support:

- ✓ **Call In Telephony Agent** – Call in and receive Alarm status, Acknowledge & Change Tags
- ✓ **Call Out Telephony Agent** – Announces Alarms over standard Telephones
- ✓ **Video Agent for Security** – connects to any Video Cam or Digital Camera
- ✓ **E-mail Agent** – Send Alarms via standard E-mail
- ✓ **Page Agent** – Sends Text Alarms over standard Pagers
- ✓ **SMS and TAP Message Agent** – Sends Text messages via SMS/TAP to phones
- ✓ **Fax Agent** – Fax Alarms to dedicate phone numbers
- ✓ **Text To Speech Agent** – Converts Text Alarms to Digitized Speech
- ✓ **Sound Agent** – Plays stand Pre recorded Wav files
- ✓ **Marquee Agent** – Displays most critical alarms on Scrolling Marquees
- ✓ **Instant Messenger Agent** – Sends alarms to popular desk applications
- ✓ **Pop-Up Agent** – Launches any windows application with command line
- **Uses Industry Standards such as TAPI and MAPI**
- **Powerful Scheduler with Escalation**
- **OPC 1.0 Alarm / Events Client**
- **CCV Import and Export Utility**
- **Include over 600 pre-recorded Sounds**
- **Include over 10 Stand Fax Headers**
- **Alarm Server and Client Function**
- **AlarmWorX32 Multimedia Scheduler**
- **New Alarm Multimedia Circular Table Management**
- **Online Configuration of Alarm Multiemdia Database**
- **Alarm Server -- Persistent Alarm Limits Changes are saved to the database.**
- **International Language Switching**
- **Imports AlarmWorX+ Applications using Utility**



COMPATIBILITY OF GENESIS32 V 7.0 Products

GraphWorX32 V 7.0 supports displays created, saved or built in previous versions of GraphWorX32. However, displays created, saved or built in GraphWorX32, TrendWorX32 and AlarmWorX32 are not compatible with, and cannot be opened in older versions of these applications.

AlarmWorX32 V 7.0 supports databases created, saved or built in previous versions of AlarmWorX32. However, applications created, saved or built in AlarmWorX32 are not compatible with, and cannot be opened in older versions of these applications.

TrendWorX32 V 7.0 supports databases created, saved or built in previous versions of TrendWorX32. However, applications created, saved or built in TrendWorX32 are not compatible with, and cannot be opened in older versions of these applications.

Wonderware - Intouch to GraphWorX32 Display Converter

- Converts Intouch graphics to ICONICS GraphWorX32 6.X graphics

Intellution - Fix to GraphWorX32 Display Converter

- Converts iFIX and Fix 2.X pictures to ICONICS GraphWorX32 6.X graphics

AlarmWorX+ to AlarmWorX32 Multimedia Converter

- Converts AlarmWorX+ 5.X/6.X to AlarmWorX32 Multimedia applications
- Converts most Multimedia types to AlarmWorX32 Multimedia Agents
- Available as standard part of GENESIS 32 Release 6.1
- Runs on Windows NT, Windows 95, Windows 98, Win CE and Win 2000



AlarmWorX32 – OPC Alarm and Events System

What's New in Version 7.0

- New VBA 6.3 to AlarmWorX32 Container
- New OPC 1.03 Alarm Server Compliance
- New TraceWorX32 Support
- New Touch Screen Support for Alarm Viewer
- New Alarm Logger Printing for Chinese and Japanese
- New Expressions Support in Alarm Server
- New Alarm Reports to Alarm Logger Design
- New Alarm Server Time Delayed Alarms
- FDA CFR-11 Compliance and product Support (See FDA White paper for details)
- New AlarmWorX32 Alert Indicator
- New Global Aliasing for Alarming Viewer
- Support for Oracle 8.X in Alarm Logger
- International Language Switching
- Over 20 New OLE Automation for Alarm Viewer
- Add Operator Comments to Server database
- UDL Support for Alarm Server and Logger Configurator
- New TCP Hardware support Marquee Agent
- New AlarmWorX32 Alert Indicator
- New Language Aliasing Browser for Alarming Viewer
- New Enable/disabling of runtime Alarm Viewer Line Dialog
- New Global Aliasing for Alarming Server
- New GenEVENT DLL Trace Function
- NewOLE Automation for WEBHMI Change Host Utility

AlarmWorX32 Report ActiveX v 7.0

- New MSDE / SQL MMX Configurator as main Database
- Numerous Alarm Report Features as described below:
- Standard with WEBHMI
- ProjectWorX32 Support to save configuration databases
- NewGlobal Alaising to Alarm Report ActiveX
- Add TraceWorX32 to Alarm Report ActiveX
- New Oracle Support to Alarm Report ActiveX
- New Alarm Reports now available as part of WEBHMI



AlarmWorX32 – OPC Alarm and Events System

KEY STANDARD FEATURES:

- OPC 1.0 and OPC 2.0 Data Access Compliant
- AlarmWorX32 servers controlled by GEN System Tray
- AlarmWorX32 Logger OLEDB Distributed Configuration Utility
- AlarmWorX32 Reports Capability supports SQL and MSDE
- AlarmWorX32 Reports Capability supports Access MDB
- Support for NT Logger
- Configurable Alarm Scan time
- AlarmWorX32 Viewer Beep
- AlarmWorX32 Viewer configurable Flashing
- AlarmWorX32 Viewer ActiveX Filtering
- Selectable Time Stamp - Use time stamp from OPC Server or Alarm Server
- Alarm Time delay in Alarm Data Access Server for Alarm Startup conditions
- Many new OLE Automation methods for displaying only current alarms filter
- AlarmWorX32 Viewer indicates # times alarms have been in alarm
- Pocket AlarmWorX32 Configurations for Windows CE devices (Optional)
- Integrated Alarm bits and integrated Common database design
- Supports Alarms bits for Area, group, hihi, hi, lo, lolo and many others
- Alarm Scroll and Alarm freeze capability
- Automation Configuration Interface
- Centralized Language Support
- ActiveSync Download to Windows CE and Pocket PC's
- Alarm Logger Circular Table Management
- Support for MSDE
- Support for Local variables Category
- Publish Reports to HTML
- Pocket PC's Development Mode - Support for Compaq, Casio and HP



DataWorX32 – OPC Data Bridge, OPC Redundancy option

What's New in Version 7.0

- Runs as an NT Service
- New DataWorX32 Support for GEN Broker - OPC over TCP Communications
- New Filter Support
- Improved Redundancy with Auto Switch Over performance

KEY STANDARD FEATURES:

- OPC 1.0 and OPC 2.04 Data Access Compliant
- OPC Server to OPC Server Bridging
- OPC Tag Aggregation (performance)
- OPC Data Access 1.0 and 2.0 Compliant
- Support for NT Logger and AlarmWorX32 Logger
- Time-stamp and quality to points accessed via automation
- Primary Node Status Register
- Statistics & Performance Analyzer
- Start up as with specified file
- OPC Groups capability for registers
 - DataWorX32 Group menu:
 - New Add, Edit & Remove Group.
 - Registers, Aliases and other objects can be hierarchically organized into groups
 - Groups have new tree view in the upper left pane
 - Hierarchical structure of groups are available and viewable in the Tag Browser
- DataWorX32 View menu:
 - *Storing settings of list views*
 - *Column sorting*
 - *Functions for adjusting column widths*
 - Added 'Adjust Column Widths' - changes width of the columns for better viewing.
 - Added option to change font in the output window
- Aliasing & Expressions
- Runtime command line option
- CSV file import and Export
- Configurable Font in the output window
- Current value monitor shows quality



ScriptWorX32 – VBA 6.2 Multithreading Scripting Product

What's New in Version 7.0

- **Runs as an NT Service**
- **New Command Line Option**
- **New communications Serial Communications Component**

KEY STANDARD FEATURES:

- ScriptWorX32 powerful VBA 6.3 Scripting container
- Standard part of GENESIS32 R 6.1 – requires separate installation
- ScriptWorX32 available as Stand Alone Product
- VBA Scripts are persistent and global to all applications
- Support for NT Logger and AlarmWorX32 Logger
- Script Wizards for commonly used System Scripts
- Integrated Periodic Scheduler – trigger VBA scripts based on Time/Date
- Integrated Data / Event Driven Scripts – trigger VBA scripts based on OPC Data
- Integrated OPC Alarm Control – trigger VBA scripts on OPC alarms
- Runs Multi-threading scripts with Symmetric multi processor – SMP
- Fully supports VBA 6.0 multithreading Model
- Runs Compiled VBA 6 scripts or maximum performance
- Powerful Runtime Monitor– Watch Scripts executing and control VBA operation
- Utilizes powerful VBA6 features such as :
 - ✓ VBA IntelliSense, Data & Operator Triggered Script
 - ✓ Popular VBA Editor, Global Registration interface to any GEN32 app
 - ✓ Trigger Scripts manually, from outside applications, when entering runtime
 - ✓ Powerful integrated debugger, and more ...
- Tightly integrates with GENESIS32 R 6 applications such as GraphWorX32 etc.
- Open systems design allows integration with Third Party applications
- Supports Common Working Directory
- Integrated Expression and Calendar controls for calculation based scripts
- Integrated Time/Date Calendar controls for time driven based scripts

New ScriptWorX32 Command line options:

SYNTAX: **ScriptWorX32 -options <filename>**

- | | |
|--------------|--|
| -NoSplash | - start with no splash |
| -Runtime | - start directly to runtime |
| -Maximized | - start maximized |
| -Minimized | - start minimized |
| -Lang=LANGID | - start with given language, e.g. English is: -Lang=1033 |



New Screen Manager V 7.0

The Screen Manager provides windows screen management to applications requiring automatic launching of applications into dedicated and user defined window frames. The Screen Manager also manages the use of multiple windows across multi monitors. By using features in Windows 98 and Windows 2000 , XP up to 9 monitors can be managed simultaneously.

- Supports Windows 98 and Windows 2000, XP Multi monitor capabilities
- Supports New Integrate Errors and System messages NT Event Logger
- New OLE automation functions
- New International and Security Support
- New support for loading displays via a URL
- Progress of the display file download is shown via a "watch cursor"
- URL support can also be used in conjunction with the working directory feature
- New Screen Manager Properties dialog to manage all configuration settings
- New drag application documents to the thumbnail
- Application names can be renamed to appear within the browser under an alias name
- Added template configuration support. Users can now create templates from scratch.
- Displays a default view when no user is logged in
- Now able to associate a default view and language of operation on a user by user basis
- New Slide-Show feature allows for scrolling layouts when no one is logged in
- Tool-tips now used so that labels can be hidden during button view
- In Button View, templates and layouts are now listed in separate list boxes
- Templates are now protected from being overwritten.
- Enhanced Security for all user actions
- Screen Manager now behaves more like a windows taskbar.



NEW GENESIS32 System Tray (GenTray)

GenTray is an application that docks on the Windows System Tray and provides a method for launching and shutting down multiple applications. Auto Start and Auto Stop configurations. Any ICONICS Products which are Services or Exe's can be automatically launched..

Powerful all new Auto Start/Stop Configuration Utility

- Automatic Start / Stop and Docking on the Windows System Tray
- New OLE Automation to Start and Stop configurations
- New Command line support for execution of any application
- New configurations dialogs lets users Manually configure applications
- New Start and Stop of:
 - GENBroker & GenAgent Service
 - Secure Desktop Utility
 - TraceWorX32
 - DataWorX32
 - GraphWorX32
 - ScriptWorX32
 - Screen Manager
 - TrendWorX32 Service
 - AlarmWorX32 Alarm/Event Server
 - AlarmWorX32 Logger Server
 - AlarmWorX32 Multimedia Server
 - OPC Servers



TrendWorX32 – OPC HDA based Data Logging and Replay

What's New in Version 7.0

- **TrendWorX32 Logger Service for Windows XP, Windows ,NET Server, 2000 and NT**
- **NEW 21 CFR 11 FDA Daylight Savings feature**
- **New OPC HDA 2.0 Compliance**
- **NEW VBA 6.3 to TrendWorX32 Container**
- **NEW Global Aliasing to Trend Reports**
- **NEW OPC Tags to Alarm lines**
- **NEW OLE Automation for Totalizer**
- **NEW Language Aliasing Browser integration**
- **New TraceWorX32 support for trend Logger, viewer, reports**
- **New TrendWorX32 Simple Basic / Advanced Configuration**
- **Global Aliasing Tag Browser integration**
- **Additional OLE Automation in Reports**
- **UDL Support for Trend Configurator**
- **New Trend File replay from Archived files**
- **Create Wizard for configurators to set DNS automatically**
- **Retrieving Data for replay easier**
- **OLE Automation for TrendWorX32 Reports**
- **New OLE Automation for WEBHMI Change Host Utility**
- **Publish Reports to HTML**



TrendWorX32 – OPC HDA based Data Logging and replay

KEY STANDARD FEATURES:

- Simultaneous real-time & Historical replay
- Circular Charts and Totalizers
- TrendWorX32 SQL MSDE (Microsoft Data Engine) support (Optional)
- TrendWorX32 SQL Oracle support (Optional)
- TrendWorX32 distributed ADO Configuration
- Support for NT Logger and AlarmWorX32 Logger
- Integrated TrendWorX32 ADO Configuration
- Auto printing to TrendWorX32 Reporting
- Wildcard replacement – Replace tags from indirect sources - pseudo aliases
- COM interface to ADO Configuration
- Import & Export trend logger Configuration
- Synchronous updates
- TrendWorX32 OLE Automation for database
- Expression/Simulator Category
- TWX OLE DB Provider for historical data
- TrendWorX32 Redundancy- database merging with Access & SQL2000
- Pocket TrendWorX32 Configurations for Windows CE devices (Optional)
- Support for Local variables Category
- Operator Comments - Simultaneously trend live and historical data
- Batch & Lot Tracking – Track Data using bar codes and Batch numbers
- Send Automatic Reports via E-Mail
- New International Language Switching
- New ActiveSync Download to Windows CE and Pocket PC's
- Pocket PC's Development Mode - Support for Compaq, Casio and HP
- TrendWorX32 Additional Table Management
- TrendWorX32 Support for MSDE



- **TRENDWORX32 PRODUCT ENHANCEMENTS:**

I. TrendWorX32 Viewer New Features

1. Added Support for Circular Charts to support historical paging via OLE automation
2. Added OLE Automation method to conserve ink while printing by not using background color fill

II New TrendWorX32 Server Historian Features:

III. TrendWorX32 Reports:

IV Persistent Trending:

V. TrendWorX32 SQL Tool (TWXSQLTool):

New support for Moving Averages, Moving Max, Moving Min historical data retrieval

The implementation allows the user to specify a desired MA filter order and a processing interval. In case of more than one sample existing within the processing interval, the moving average becomes moving average of "averages" within the processing interval. In addition, the VB example has been modified as well

TWXSQLTool now supports language switching and scaling by requesting scaling Equations (if desired) using the Units field entry of the TrendWorX32 Data logger configurator on a per tag basis.

Note:

TWXSQLTool relies on the actual Logging names of the tags for retrieving data. It does NOT use the Description field of the Description field entry of the TrendWorX32 Data logger . TWXSQLTool is a basically invisible at runtime ActiveX component, so it does not require any additional support.



OPC Cool Tools:

OPC DataSPY

- Supports GENBroker Internet communications technology
- New Internet OPC over TCP/Ip Tag Browsing
- Simple to use OPC Test Client – Inspection and Diagnostics Utility
- Determine if OPC Servers meet minimum or Optional compliance
- Comes standard with GENESIS 32 Release 6.1
- Available as stand-alone OPC Test Client
- Runs on Windows NT, Windows 95, Windows 98, CE and Win 2000
- Powerful OPC 1.0 and 2.0 Data Access Test Client
- Powerful OPC 1.0 Alarm / Events Test Client
- Powerful OPC Data Access Troubleshooting Tool
- Powerful OPC Alarm / Events Troubleshooting Tool
- Ideal for testing OPC Compliance of Third Party Servers
- Determines if OPC Servers meets OPC 1. or OPC 2.0 Standards
- Numbers of OPC Servers Connected
- Provides OPC Loading and OPC Traffic analysis
- New Support for NT Logger and AlarmWorX32 Logger
- Gives recommendations on where to optimize communications

Dr. DCOM

- Available as standard part of GENESIS 32 Release 6
- Runs on Windows NT, Windows 95, Windows 98, Win CE and Win 2000
- Dr. DCOM One click Auto DCOM Configuration
- Eliminates difficult DCOM configuration issues
- Helpful DCOM Troubleshooting Wizard
- Easy-to-use three panel Explorer GUI Design
- Browse for OPC Servers using Explorer-like Tree Control
- Simply configure Data Access, Alarm/Events and HDA COM Objects (Servers)
- DCOM Configuration Details displayed in Property Panels
- Networking utility to help GENESIS 32 users with DCOM configurations
- New Support for NT Logger and AlarmWorX32 Logger
- Status window displays messages containing useful information



OPC ToolWorX 3.06 – 3rd Generation advanced OPC Toolkit

- Full Source Code Version
- Utilize Microsoft Visual C++ 6.0 Only
- Supports Windows CE: MIPS, Hitachi S3, S4, Intel, Strong Arm processors
- Create OPC Servers as NT Service
- Support SQL, Access and other Database Configuration
- Wizards creates Servers in minutes for OPC Data Access and OPC Alarms
- Integrated OPC Data Access & OPC Alarm/Events
- New Powerful Distributed Remote ADO / OLEDB Database access
- New Universal Tag Browser with Alarm/Events and HDA support
- More Powerful Rapid Develop Wizards
- Supports Packed Bits capability
- OPC 2.04 Custom Interface & OLE Automation Interface Support
- Support for latest OPC Network Browsing
- Many new runtime speed optimizations.

OPC ToolWorX 3.06 Lite – Low Cost OPC Toolkit

- Utilize Microsoft Visual C++ 6.0 Only
- Supports Windows CE: MIPS, Hitachi S3, S4, Intel, Strong Arm processors
- Create OPC Servers as NT Service
- Support SQL, Access and other Database Configuration
- Wizards creates Servers in minutes for OPC Data Access and OPC Alarms
- Integrated OPC Data Access & OPC Alarm/Events
- New Powerful Distributed Remote ADO / OLEDB Database access
- New Universal Tag Browser with Alarm/Events and HDA support
- More Powerful Rapid Develop Wizards
- Supports packed Bits capability
- OPC 2.04 Custom Interface & OLE Automation Interface Support
- Support for latest OPC Network Browsing
- Many new runtime speed optimizations.



ActiveX 7.0 ToolWorX (Optional)

- Create OPC enabled ActiveX Control rapidly using Patent Pending Technology
- Plugs into Visual C++ 6.0
- Rapidly create OPC enabled ActiveX Controls using ActiveX Wizard
- New Tag Browser Wizard for rapid code generation of Tag Browse Interface
- Quickly turn GraphWorX32 created symbols into OPC enabled ActiveX

ActiveX 7.0 ToolBox Pro (collection of optional ActiveXs)

1. Gauge and meter ActiveX – Create 3D Meters. Gauges and faceplates
2. Marquee ActiveX – Display Alarms on Scrolling Marquee
3. Switch ActiveX – Create 3D Switches for true to life look and feel
4. Super Slider ActiveX – Create 3D Slider. Buttons and manual entry fields.
5. Numeric ActiveX – Create update values and manual entry fields.
6. Vessel ActiveX – Create 3D vessels with OPC cut-a-ways
7. New Periodic Scheduler ActiveX – Trigger scripts on time based intervals
8. New Data Driven Event ActiveX – Connect scripts to any OPC tag
9. New OPC Alarm ActiveX – trigger scripts based on OPC Alarms conditions
10. Timer ActiveX – simple Time driven ActiveX
11. National Instruments ActiveX for Modbus simulation
12. National Instruments ActiveX for Direct Simulation

ActiveX 6.1 ToolBox Standard (collection of optional ActiveXs)

1. Gauge and meter ActiveX – Create 3D Meters. Gauges and faceplates
2. Switch ActiveX – Create 3D Switches for true to life look and feel
3. Super Slider ActiveX – Create 3D Slider. Buttons and manual entry fields.
4. Numeric ActiveX – Create update values and manual entry fields.

Individually available ActiveX controls

1. Gauge and meter ActiveX – Create 3D Meters. Gauges and faceplates
2. Switch ActiveX – Create 3D Switches for true to life look and feel
3. Super Slider ActiveX – Create 3D Slider. Buttons and manual entry fields.
4. Numeric ActiveX – Create update values and manual entry fields.
5. Vessel ActiveX – Create 3D vessels with OPC cut-a-ways



New and Updated OPC Servers (Optional)

All OPC Servers are fully compliant with OPC Foundation 1.0 and 2.0 Specification

<u>ICONICS OPC Servers</u>	<u>Version</u>
1. Simulator OPC Server with OPC Alarms	3.04
2. Modbus OPC Server with OPC Alarms	3.04
3. Modbus Ethernet OPC Server with OPC Alarms	3.04
4. Bristol BSI OPC with Alarms & OPC 2.0	3.04
5. Moore Procidia Modbus Ethernet	3.04
6. York International with OPC Alarms	3.04
7. DataStore OPC Server	3.04
8. Modbus OPC Server	2.11
9. AB OPC Server	2.11
10. Moore Procidia Modbus	2.11
11. Moore Procidia LIL OPC Server	2.11
12. Yokogawa Green Series	2.11
13. Yokogawa Darwin OPC Server	2.11
14. OCI OPC Server	2.11
15. DDEOPC Server	2.11
16. GEN OPC Server	2.11
17. Moeller OPC Server	2.11
18. Beckhoff OPC Server	2.10

<u>Third Party Servers</u>	<u>Company</u>
1. LONWorks OPC Server	Innovex
2. BACNET OPC Server	Innovex
3. ADAM OPC Server	ProSoft
4. Modbus+ OPC Server	Matrikon
5. Kepware over 40 servers supported	Kepware
6. Siemens MPI OPC Server	Merz