

GENESIS32™ V9 Enhancements

V9
August 2006



Microsoft
GOLD CERTIFIED
Partner



Visualize Your Enterprise™

100 Foxborough Blvd
Foxborough, MA 02035
508.543.8600
Fax 508.543.1503
E- mail info@iconics.com
www.iconics.com

CONTENTS

1	GENESIS32™ V9 ENHANCEMENTS	1
1.1	NEW IN VERSION 9:	1
2	ALARMWORX™32 ENHANCEMENTS	2
3	ALARMWORX™32 MULTIMEDIA V9 ENHANCEMENTS	6
4	DATABASE MANAGER V9 ENHANCEMENTS	10
5	DATA MINING V9 ENHANCEMENTS	11
6	DATA SPY V9 ENHANCEMENTS	14
7	NEW DATAWORX™32 OPC TUNNELING	15
8	DATAWORX™32 V9 ENHANCEMENTS	16
9	NEW DATAWORX™ PROFESSIONAL V9	17
10	EXPRESSION EDITOR V9 ENHANCEMENTS	18
11	GENBROKER V9 ENHANCEMENTS	19
12	GENDEMO V9 ENHANCEMENTS	20
13	GENREGISTRAR SERVER/LICENSING V9 ENHANCEMENTS	21
14	GENTRAY V9 ENHANCEMENTS	22
15	GLOBAL ALIASING V9 ENHANCEMENTS	23
16	GRAPHWORX™32 V9 ENHANCEMENTS	24
17	LANGUAGE ALIASING V9 ENHANCEMENTS	26
18	NEW MONITORWORX™ V9	27
19	PROJECTWORX™32 V9 ENHANCEMENTS	28
20	NEW RECIPE MANAGEMENT SYSTEM V9 FEATURE	29
21	NEW SCRIPTWORX™ 2006 V9	30
22	SECURITY V9 ENHANCEMENTS	31
23	NEW SNMP CONNECTIVITY V9	32
24	TRENDWORX™32 V9 ENHANCEMENTS	33
25	UNIFIED DATA BROWSER V9 ENHANCEMENTS	35
26	NEW UNIFIED DATA MANAGER V9	36
27	VCRWORX™32 V9 ENHANCEMENTS	37
28	WEBHMI™ V9 ENHANCEMENTS	38

1 GENESIS32™ V9 Enhancements

1.1 New in Version 9:

With the release of GENESIS32 V9 many new modules have been added to the GENESIS32 Suite of applications. Some of the new components are included in the GENESIS32 Standard product others are sold optionally.

- **DataWorX™32 OPC Tunneling - Optional OPC Tunneling Product**
- **DataWorX™32 Professional - Optional Full OPC Redundancy**
- **MonitorWorX™ - Standard Performance and Diagnostic Tool**
- **Recipe Management System - Standard Recipe Capability**
- **ScriptWorX™ 2006 - Standard VBA Scripting runs as NT Service**
- **SNMP Connectivity - Standard Connectivity to IT infrastructure**
- **Unified Data Manager - Standard Centralized Configuration product**

2 AlarmWorX™ 32 Enhancements

Summary

- Enhanced all of the components of AlarmWorX32 to support running under normal (restricted) user account. One exception is the one-time setup of the ODBC database connection for the Alarm Logger, which is performed by the AlarmWorX32 Logger and Logger Configurator (when the system is initially setup).

AlarmWorX32 Viewer:

- Enhanced the AlarmWorX32 Viewer's Graphical User Interface giving it a new "XP" look and feel along with 256 color desktop Icons.
- Enhanced the AlarmWorX32 Viewer adding support for Globally defined alarm filters and alarm subscriptions defined by the Unified Data Manager
- Enhanced the AlarmWorX32 Viewer adding an automation interface for applying a global filter in runtime.
- Enhanced the AlarmWorX32 Viewer to automatically name the filter when it comes from a global filter.
- Enhanced the AlarmWorX32 Viewer to add a button for remote subscriptions on the subscriptions dialog.
- Enhanced the AlarmWorX32 Viewer adding the ability to use the original row height sizing. This was implemented by adding a check box to the default property page.
- Enhanced the AlarmWorX32 viewer to automatically rename the (new) alarm filter if a new one is entered with the same name as an existing alarm filter. The renamed filter will have the original name but with a number appended to it.
- Enhanced the AlarmWorX32 viewer to display wildcard hints.
- Changed the AlarmWorX32 viewer to display more characters for filter names (avoiding the cutting off of part of the name when long names are used).
- Enhanced the AlarmWorX32 Viewer to refresh the view on a Global Alias change only in the case where the change affects the viewer. In previous versions, all Global Alias changes resulted in a refresh.
- Added an option to the AlarmWorX32 viewer to enable/disable the scroll bars.
- Added a "spacing" button to the AlarmWorX32 Viewer for spacing of columns and made this a property available via automation.
- Enhanced the tracing support in the AlarmWorX32 viewer making it more thread safe.
- Added an option to the AlarmWorX32 Viewer to disable the message box that appears when you acknowledge an alarm (the message is there to inform the user that it is checking security permissions). The checkbox for disabling the security progress bar is in the default page under base section.
- Enhanced the AlarmWorX32 Viewer to flush/refresh the messages in the viewer upon an Alarm Server failover to the backup server.
- Added an option to the AlarmWorX32 Viewer to enable or disable headers through scripting.
- Added an option to the AlarmWorX32 Viewer to enable or disable scroll bars through scripting. The methods that were added are: ShowVertScrollbar and ShowHorzScrollbar.
- Enhanced the AlarmWorX32 Viewer to disable the beep if the alarm is filtered.
- Enhanced the AlarmWorX32 Viewer to allow and support a relative path to the working directory.

- Enhanced the AlarmWorX32 Viewer Basic Filter Wizard to include "NODE".
- Enhanced the AlarmWorX32 Viewer Basic Filter Wizard to disable the text entry boxes for Severity and / or Source if the respective checkbox is not selected.
- Enhanced the AlarmWorX32 Viewer Advanced Filter Wizard to disable the text entry box if the String Compare checkbox is not selected.
- Enhanced the AlarmWorX32 Viewer dialog for "Edit Filter" entitled "Filter Option" to change the YES, NO, CANCEL descriptions to indicate that "YES" implies using the Advanced Wizard, whereas "NO" uses the "Basic" wizard.
- Revised the AlarmWorX32 Viewer to disable alarm acknowledgements when in VCR Replay mode.
- Enhanced the AlarmWorX32 Viewer to use the Unified Data Browser to browse areas.
- Enhanced the AlarmWorX32 Viewer to add support for a new automation method for global event acknowledgement – which acknowledges only events. The name of the method is RemoveAllEvents.
- Enhanced the AlarmWorX32 Viewer to add support for a new automation method for global alarm acknowledgement – which acknowledges only global alarms.
- Enhanced the AlarmWorX32 Viewer to use the Unified Data Browser to add language aliases in place of the old Language Browser.
- Enhanced the AlarmWorX32 Viewer automation method RemoveSelectedRow (INum As Long) to invoke a Viewer redraw. It should be noted that this method only deselects the row with the number that corresponds to the parameter. It doesn't actually remove the row.
- Enhanced the AlarmWorX32 Viewer to convert the alarm event categories (field) to strings
- Added support for auto-sizing the last column to the AlarmWorX32 Viewer.
- Enhanced the AlarmWorX32 Viewer to support a user-created popup menu using VBA. To do this, set the disable popup option and catch the FireOnRightMouseClicked event.
- Enhanced the AlarmWorX32 Viewer adding an automation interface for disabling the scrollbars.
- Enhanced the AlarmWorX32 Viewer's automation interface adding the method "IsAnimateMode." This new method provides the mode the Viewer is in.
- Enhanced the AlarmWorX32 Viewer to support putting the time and date of alarm into separate fields.
- Enhanced the AlarmWorX32 Viewer to support a custom command server that could allow, for example, bringing up custom dialogs and acknowledging alarms in a very specific way.
- Enhanced the AlarmWorX32 Alarm Indicator ActiveX Alarm indicator to indicate if it becomes disconnected from a Remote Alarm server.

AlarmWorX32 Container:

- Enhanced the Look and Feel of the AlarmWorX32 Container, giving it the Windows XP Look and Feel.

AlarmWorX32 Logger Configurator:

- Enhanced the AlarmWorX32 Logger Configurator adding support for the new Unified Data Manager features including Global Expressions.
- Enhanced the AlarmWorX32 Logger Configurator to support SQL Server 2005-based and SQL Express-based configuration databases.
- Enhanced the AlarmWorX32 Logger Configurator adding support for the new "Find and Replace" function.

- Added a note to the AlarmWorX32 Logger Configurator's Snapshot Tables tab to inform the user that the value has to be greater than zero for VCR replay of alarms to work.
- Enhanced the AlarmWorX32 Logger Configurator to use the Unified Data Browser to browse areas.
- Enhanced the AlarmWorX32 Logger Configurator's Graphical User Interface giving it a new "XP" look and feel along with 256 color desktop Icons and a new startup screen.

AlarmWorX Logger:

- Enhanced the AlarmWorX32 Logger to support redundant logging configurations.
- Enhanced the AlarmWorX32 Logger to support logging to SQL Server 2005 and SQL Express databases.
- Enhanced the AlarmWorX32 Logger to support logging to MySQL databases.
- Added an option to the Alarm Logger to filter out the messages generated by AlarmOLE.
- Enhanced the AlarmWorX32 Logger to support redundancy status tags using MonitorWorX and MonitorWorX Plugin as the transport layer.

AlarmWorX32 Alarm Report ActiveX Control:

- Enhanced the Alarm Report ActiveX Control adding support for custom columns in Crystal Reports. It now supports the adding, configuring and deleting expression-based columns in Crystal Reports generated by the Alarm Report ActiveX. Enhanced the Alarm Report ActiveX Control so that users with restricted access can use it. It no longer uses the H_Key_Local_Machine part of the registry.
- Enhanced the Alarm Report ActiveX Control adding support for background colors for Crystal Report headers and data sections.
- Enhanced the Alarm Report ActiveX Control adding support for a shaded grid title bar appearance with rounded corners
- Enhanced the Alarm Report ActiveX Control's automation methods making them asynchronous, thus allowing non-blocking method calls. This will provide a much faster loading of GraphWorX32 pop-ups with report controls.
- Enhanced the Alarm Report ActiveX Control adding support for clearing the current selection via script. The new method that was added is the "ClearGridSelection" method.
- Enhanced the Alarm Report ActiveX Control to allow the user to configure colors for the charts.
- Enhanced the Alarm Report ActiveX Control adding support for Language aliases in the Crystal Report headers.

AlarmWorX32 Server Configurator:

- Enhanced the AlarmWorX32 Server Configurator's Graphical User Interface giving it a new "XP" look and feel, new high-color Icons, and a new startup screen.
- Enhanced the AlarmWorX32 Server Configurator to support "Find and Replace".
- Enhanced the AlarmWorX32 Server Configurator to support SQL Server 2005-based and SQL Express-based configuration databases.

AlarmWorX32 Server:

- Enhanced the AlarmWorX32 Server to increase the number of attributes (related values) to 20. Previously a maximum of 10 attributes (related values) was supported.
- Enhanced the AlarmWorX32 Server to support the ability to add a comment to an alarm after it has been acknowledged and to support the ability to change a previously entered comment.
- Although a specific AlarmWorX32 Server enhancement wasn't made for this, it should be noted the AlarmWorX32 Server supports multiple-defined scan rates for the DA tags that it scans. Users can use the GenClient Extended Point Syntax to specify the scan rate on a per tag basis.
- Enhanced the AlarmWorX32 Server to support the ability to generate the TimeInAlarm Value, making it available as an OPC DA Tag. In some applications, this can be used to eliminate a great deal of SQL activity. Note, an OPC DA client can now browse the Alarm Server 8 newly added tags – LIM_ActiveTime, DIG_ActiveTime, ROC_ActiveTime, DEV_ActiveTime, LIM_ActiveTimeUTC, DIG_ActiveTimeUTC, ROC_ActiveTimeUTC and DEV_ActiveTimeUTC. These tags identify the VT_DATE time that the tag went into alarm. This allows users to evaluate the tag in a script that will, for example, trigger an action if the alarm exists for a certain period of time.
- Enhanced the AlarmWorX32 Server so that it no longer polls for an alarm if it is disabled.
- Enhanced the AlarmWorX32 Server to support redundancy status tags using MonitorWorX and MonitorWorX Plugin as the transport layer.
- Enhanced the AlarmWorX32 Alarm Indicator ActiveX integrating into the System Tray
- Enhanced the AlarmWorX32 Server to support persistency of the alarm states when the Alarm Server goes down or is shut down for routine updates. This is one of the features / benefits of DataWorX32 Professional Redundancy.

3 AlarmWorX™ 32 Multimedia V9 Enhancements

Summary

- Enhanced AlarmWorX32 MMX to support running under normal (restricted) user account. One exception is the Pager Agent. Configuring the Pager Agent requires Power User or higher privileges. Once the Pager agent is configured, the agent can run under a normal user account.
- Enhanced the MMX Server and all of the MMX Agents to support a new Alarm Prioritization option. When this option is enabled, newer alarms or events with higher priority will be placed ahead of any existing lower priority alarms or events in the MMX Server's and MMX Agent's output queues. When this new option is disabled, the MMX Server and MMX Agents will process and output the events in the order they occur.
- Added a new MMX Agent called the Skype Agent that supports chat sessions over the Skype chat messaging system.
- Added a new MMX Agent called the MMX Task Tray Agent that support notification of MMX events via the system task tray.

AlarmWorX32 MMX Configurator:

- Enhanced the MMX Configurator's Graphical User Interface giving it a new "XP" look and feel, new high-color Icons, and a new startup screen.
- Enhanced the MMX Configurator integrating in the new Unified Data Manager features including support for global alarm filters and global alarm subscriptions.
- Enhanced the MMX Configurator to support the sending of GenEvent messages when changes are made to the MMX Server's Configuration.
- Enhanced the MMX Configurator to support wave files with nested syntax. In the previous version, wave files were parsed once as a unique type. Now, the name of the wave file is created using data from the alarm message. For example, source names of tag1, tag2, tag3 could be associated with wave files of name tag1.wav, tag2.wav, tag3.wav. This requires that the source attribute syntax be nested inside the file syntax. In this example the add file dialogs would allow the user to select an alarm field to nest. example: {{wav: \$BASE_PATH\$MMXSounds\{{3:Source,80}}.wav}}
- Enhanced the MMX Configurator to support a cancel function – to cancel the processing of the queue of messages.
- Enhanced the MMX Configurator to support "No Action" as one of the options for the Alarm Destination of a Return / Acknowledge set.
- Enhanced the MMX Configurator to support the "General Settings" button on the Fax Agent screen as it does on most of the other agents like the pager agent.
- Enhanced the MMX Configurator to make P.A. agent part of the Telephony section. It is now in the same section as Call-in and Call-out agents.
- Enhanced the MMX Configurator to use the Unified Data Browser to browse for nodes on the network when the user is adding a node name.
- Enhanced the MMX Configurator to support sorting the journal table by time. This makes it easier to follow the flow of actions completed by the server.
- Enhanced the MMX Configurator to support two default templates for pagers. One of the default templates is for a numeric-only pager. The second default template is for alphanumeric pagers.
- Enhanced the MMX Configurator to delete the journal table entries whenever the action sets are modified. When actions sets are modified, the journal table entries are no longer appropriate and are consequently deleted.

- Enhanced the MMX Configurator adding a phone configuration Graphical User Interface. It includes the new configuration for line support, and a new advanced dialog.
- Enhanced the MMX Configurator changing the MMX Action set view to a tree structure.
- Enhanced the MMX Configurator's pager configuration template to allow only a single line configuration for TAP.
- Enhanced the MMX Configurator's monitor view to display the Iteration field.
- Enhanced the MMX Configurator to support the launching of the customer user configuration.
- Enhanced the MMX Configurator to include a migration utility for converting a version 8 MMX Configuration database to a version 9 compatible database.

AlarmWorX32 MMX Server:

- Enhanced the MMX Server to support language aliases and to use the translated text for notify alarms in emails, marquee windows, and text to speech.
- Enhanced the MMX Server adding support for Receipt Confirmation.
- Enhanced the MMX Server to support a cancel function – to cancel the processing of the queue of messages.
- Enhanced the MMX Server adding support for selecting the .wav file to play from a field in the alarm message. This was done by adding the ability to replace text in the .wav file script with AE field data. For example, {{MMXSounds\test.wav}} can now be {{MMXSounds\{{3:Source,80}}.wav}}. where {{3:Source,80}} resolves to the AE source name.
- Improved the MMX Server's handling of alarms that are active for a long time. In the previous version of MMX Server, alarms that are active for a long time could get replayed after an archive. The new version of MMX Server addresses this issue.
- Enhanced the MMX Server to support TraceWorX32.
- Enhanced the MMX Server adding support for triggering action sets off of an Acknowledge message state. Enabling this feature will cause an acknowledge message to be treated as an alarm for triggering the action sets.
- Enhanced the MMX Server adding the option to ignore the stop action condition, providing a means to force the action set through a list of actions regardless of the state of the alarm.
- Enhanced the MMX Server to report the agent destination in the ActorID.

AlarmWorX32 MMX Marquee Agent:

- Enhanced the MMX Marquee Agent to support an Ethernet-based hardware marquee.
- Enhanced the MMX Marquee Agent updating the method in which messages are sent to the Ethernet hardware marquee – to send the header, body, and footer within one TCP/IP “send” message.
- Enhanced the MMX Marquee Agent to support multiple Marquee displays. Each Marquee Item can now correspond to a specific Marquee device, each possibly having it's own IP address, Protocol and other attributes.
- Enhanced the MMX Marquee Agent, expanding the support for the “trailing character” so that it can be a string (just like the Header). The syntax allows the intermixing of ASCII codes with regular text.
- Enhanced the MMX Marquee Agent to support easy modification of the default configurations. The hardware marquee stores its configuration information in the database. The software marquee allows individual text support and formatting through the marquee template and html code.

- Enhanced the MMX Marquee Agent to support a separate JPG-based background for the Virtual Marquee to facilitate easier "OEMing" of the product.
- Enhanced the MMX Marquee Agent adding support for an auto un-pause function – to un-pause it after a while if someone leaves it paused. Otherwise it could build up a large queue of items and consume a lot of memory.

AlarmWorX32 MMX Mail Agent:

- Enhanced the MMX Mail Agent to support its own SMTP Server, removing the reliance on MAPI compliant mail applications. Note, the included SMTP Server supports outgoing mail only.
- Added a Graphical User Interface for configuring the MMX Mail Agent. A new application named Emailcfg.exe is provided.
- Enhanced the MMX Mail Agent making the storage for Acknowledge IDs configurable (i.e. allowing the user to specify the length of time before a flush).
- Enhanced the MMX Mail Agent making the reading of all email and marking it read a configurable option. In the previous version, this was required.

AlarmWorX32 MMX Phone Agent:

- Upgraded the MMX Phone Agent to use Version 5.1 of the Microsoft Speech API (SAPI v5.1). This addresses some timing issues that were present in the SAPI V4.0a and makes it possible to more accurately determine the end of wave file play.
- Enhanced the MMX Phone Agent to add an option that turns off the ability for incoming calls to override outgoing calls.
- Enhanced the MMX Phone Agent adding support to indefinitely remember the last browsed tag for OPC HDA, OPC DA, and short form. Previously, the last browsed tag was only remembered if it was on the previous menu.
- Enhanced the MMX Phone Agent adding the ability to alarm if there is no dial tone.
- Enhanced the MMX Phone Agent making the OPC Read/Write timeouts user-configurable. The Read Timeout is in milliseconds. The Write timeout is a loop count.
- Enhanced the MMX Pager Agent to support reporting of error returns to GenEvent.
- Enhanced the MMX Pager Agent adding event reporting for hardware failures.
- Enhanced the MMX Pager and Configurator to support sending pages with back slashes between characters.

AlarmWorX32 MMX FAX Agent:

- Enhanced the MMX FAX Agent integrating in the new Microsoft FAX support, replacing FaxMan.
- Enhanced the MMX FAX Agent adding the ability to create cover pages.
- Enhanced the MMX FAX Agent adding the ability to turn on the alarm banner at the top of the Fax.

AlarmWorX32 MMX Sound Agent:

- Updated the MMX Sound Agent to use version 5.1 of the Microsoft Speech API (SAPI v5.1).

AlarmWorX32 MMX Installation:

- Enhanced the MMX Installation program and the MMX agents themselves to support the optional installation of stand-alone MMX Agents. (That is, installation of MMX Agents on a remote, non-MMX Server, machine.
- Enhanced the MMX Agents adding support for Localization DLLs. Note, this feature is not supported by the MMX Pager Agent due to the use of the Derdack paging software.
- Enhanced the MMX Agents to support TraceWorX32.
- Enhanced the MMX System adding support for user defined / custom Agents. If you are interested in creating your own custom agent, please contact your ICONICS representative for more information.

4 Database Manager V9 Enhancements

Summary

- The Database Manager was upgraded to the new Teratrax V4.5 Database Manager. The new features include:
- Added support for SQL Server 2005 and SQL Server Express
- Added an intellisense SQL editor with Syntax Highlighting, Code Completion & Parameter Hinting
- Added Table Lists that show disk space allocation and number of rows for each table
- Added database object text searching name filtering
- Added support for exporting table and query results to CSV, HTML, and XML files
- Improved the performance of the database navigation
- Added the ability to shrink database files and truncate log files
- Added support for right-click compiling for stored procedures and triggers
- Added one-stop management for ALL triggers and constraints with on-the-fly enabling/disabling
- Added the ability to navigate multiple recordsets easier with the Recordsets pane
- Added support to create and manage SQL files and templates
- Added customize-able menus and toolbars for fast access to your most visited features

5 Data Mining V9 Enhancements

Summary

Data Mining ActiveX Control:

- Enhanced the Data Mining ActiveX Control adding support for Smart Aliases. This feature allows the user to define a set of rules for a specific column, allowing the visualization of the cells in that particular column to change, based on the rules. Each rule is defined using a script-like expression and has an associated action.
- Enhanced the Data Mining ActiveX Control adding the ability to compare the current column with another column defined to be from another database / table. This uses the new smart alias feature.
- Enhanced the Data Mining ActiveX Control adding support for record sorting by double clicking on the column header or through an automation method. In addition, a menuitem was added to un-do the sort.
- Enhanced the Data Mining ActiveX Control to allow double-click auto-sizing of columns and rows, similar to MS Excel.
- Enhanced the Data Mining ActiveX Control to automatically auto-fit columns and rows after rendering the grid's data. This feature is turned OFF by default. It can be enabled by setting `AutoFitColumns = True` in the VBA Properties window.
- Enhanced the Data Mining ActiveX Control to support user-configurable cell alignment on a per column basis. Column alignment can be set by creating an alias for the column.
- Enhanced the Data Mining ActiveX Control to add the ability to change the color of certain rows based on the value of a cell.
- Enhanced the Data Mining ActiveX Control to give the user the capability to change the appearance of the Database grid control (Font, point size, boldness, etc.).
- Enhanced the Data Mining ActiveX Control adding the ability to prevent users from changing column dimensions in runtime. The `DisableResize` property will disallow users from resizing columns and rows.
- Enhanced the Data Mining ActiveX Control adding support for Language Aliasing. This feature allows a Language Alias tag to be placed inside a column alias.
- Enhanced the Data Mining ActiveX Control adding support for Global Aliasing.
- Enhanced the Data Mining ActiveX Control to add support for executing stored procedures that return a 2-dimensional array.
- Enhanced the Data Mining ActiveX Control adding a Query Wizard to the ADO Connection. The wizard is able to generate a simple query (using it in basic mode) and a very sophisticated query (using it in advance mode).
- Enhanced the Data Mining ActiveX Control adding support for an automation function to scroll up and down the grid content.
- Enhanced the Data Mining ActiveX Control to support selection of multiple tags when deleting and to give the user the ability to select multiple tags for deletion from the list of tags in data mining properties.
- Enhanced the Data Mining ActiveX Control to support selection of multiple non-contiguous rows. In addition, the VBA Property "AutoSelectRow" can limit your selections to whole rows or whole columns, if enabled.
- Enhanced the Data Mining ActiveX Control adding an automation property to disable the ability for users to select multiple rows of data. The `DisableMultiSelect` property will disallow the user from selecting multiple rows, columns, or cells.

- Enhanced the Data Mining ActiveX Control's Automation Interface to support the capability to de-select all selected rows by a VB or VBA command.
- Enhanced the Data Mining ActiveX Control's Automation Interface to support a function to retrieve the coordinates of the current selected cell. The new functions are GetSelectedRowIndex() and GetSelectedColIndex().
- Enhanced the Data Mining ActiveX Control's Automation Interface to support functions to count the rows and columns. The new functions are GetColumnsNumber() and GetRowsNumber().
- Enhanced the Data Mining ActiveX Control improving its performance by removing some unnecessary cursory operations
- Enhanced the Data Mining ActiveX Control to display a message box when some of the parameters are changed to warn the user that the data items will not longer work. This was Implemented at the DataSource level (Database Table or SQL Command/Stored procedure) and at the data item (tag) level.
- Enhanced the Data Mining ActiveX Control to give the capability to print all data retrieved by the Grid's query in the same way as they are shown in the grid itself (applying the column aliases, filters, etc.).
- Enhanced the Data Mining ActiveX Control to give the capability to export in CSV Format all the data retrieved by the Grid's query in the same way as they are shown in the grid itself (applying the column aliases, filters, etc.).
- Improved the user-friendliness of the Data Mining ActiveX Control regarding the case when the user tries to delete a point even though no tag was selected. Previously, nothing would happen. A message box has been added saying to "select a point".
- Improved the user-friendliness of the Data Mining ActiveX Control regarding the case when the user tries to change a tag even though no tag was selected. A message box has been added saying to "select a point".
- Enhanced the Data Mining ActiveX Control to display an error message box if the user tries to add the same tag again. In the previous version, it did not display a message, even though it did not accept the tag.

Data Mining OPC Server:

- Enhanced the Data Mining OPC Server and the configuration tools to support running the server under normal (restricted) user account.
- Enhanced the Data Mining OPC Server adding Generic OLE DB support. This provides support for Oracle 10 and other OLE DB based databases.
- Enhanced the Data Mining OPC Server adding support for connecting to an SAP system, in particular, the SAP BAPI functions. Note, this uses the Software4You BAPI Connector software which may be purchased separately.
- Enhanced the Data Mining OPC Server to report key runtime statistics to MonitorWorX. The key statistics include the display of database connections, data sources, and average time per query.
- Enhanced the Data Mining OPC Server to support the capability of displaying an empty database field with good OPC quality.

Data Mining OPC Server Configurator:

- Enhanced the Data Mining OPC Server Configurator's Graphical User Interface giving it a new "XP" look and feel, new high-color Icons, and a new startup screen.
- Enhanced the Data Mining OPC Server Configurator to support the ability to view the SQL Command.
- Enhanced the Data Mining OPC Server Configurator adding a Test Query button. This was added at the Datasource level (in case it is a Table or SQL), and at the DataTag (data item) level.
- Enhanced the Data Mining OPC Server Configurator to keep the parameters synch between the DataSource and DataTag (DataItem) levels. Also, when the user manually adds/edits/removes any parameter(s) at the datasource level, the configurator now informs the user (via a MessageBox) about the possible existence of invalid parameters at the DataTag level. Additionally, other mechanisms were implemented in the Configurator and in the Data Mining OPC Server to help keep them in synch with possible changes to stored procedures inside the database.
- Improved the intuitiveness of the Data Mining OPC Server Configurator's user interface, especially for the configuration of Stored Procedures. Moved the "Browse" button closer to the "Edit" and "Get Params" objects and renamed the button to "Browse Proc". Also, removed the static text "StoredProcedure:".
- Improved the user-friendliness of the Data Mining OPC Server Configurator's handling of Stored Procedures, especially when a new "Database Record Definition" is added. A "Parameter Name" column was added on the Data Item Dialog View, replacing an Index Number, eliminating the need for users to go back and forth between several screens to get the appropriate information.
- Revised the Data Mining OPC Server Configurator to not show System Tables when browsing for Tables from the database – to prevent them from being selected by mistake.
- Enhanced the Data Mining OPC Server Configurator to add parameters automatically when you add a data item to a stored procedure. They are initialized to VT_EMPTY Data Type with "<not initialized>" appearing in the Value field.
- Enhanced the Data Mining OPC Server Configurator to add a "Restart Connection" button on the data connection level for checking / updating Stored Procedure queries. When pressed, the Data Mining OPC Server (runtime) will reconnect to the database connection again, possibly updating its queries.
- Enhanced the Data Mining OPC Server Configurator to disable the Add/Edit buttons if there are no parameters under Data Source.
- Enhanced the Data Mining OPC Server Configurator to wrap each parameter within a query with quotation marks to improve the ease of use of working with parameters.
- Enhanced the Data Mining OPC Server Configurator's wizard to help the user with creating the type of tags they want, based on their needs. It now provides Dynamics Tags by default and an "Advanced Button" is provided for adding Static Tags.
- Enhanced the Unified Data Browser wizard for the Data Mining OPC Server adding some of the capabilities supported by the Data Mining configurator dialogs. In particular, the wizard now supports:
 - Ability to Move Up / Move Down parameters in List Controls
 - An edit button to change parameter value in List Control
 - Ability to update state of buttons over List Controls
- Enhanced the Data Mining ActiveX Control adding the 'EMPTY' string (that is displayed for empty cells in DB Grid) to the string table so it can be made internationalize-able (translate-able).
- Enhanced the Data Mining OPC Server so that can be run as a Service.
- Enhanced the Data Mining OPC Server, Configurator, and Unified Data Browser to add support for relative paths.

6 Data Spy V9 Enhancements

Summary

- Enhanced the DataSpy's Graphical User Interface giving it a new "XP" look and feel, new high-color Icons, and a new startup screen.
- Enhanced DataSpy to remove its writing to the registry. It can now be run by users with restricted rights.

7 NEW DataWorX™ 32 OPC Tunneling

Summary

New DataWorX32 OPC Tunneling Technology

1. Available feature in all three editions of DataWorX32 V9
 - a. DataWorX32 Lite Edition
 - b. DataWorX32 Standard Edition
 - c. DataWorX32 Professional Edition
2. Bridges any OPC Server to any OPC client
3. Supports tunneling of:
 - a. OPC Data Access (DA) v3.0
 - b. OPC Alarm and Events (AE) v1.1
 - c. OPC Historical Data Access (HDA) v1.2
4. Alternative to conventional MS DCOM communications
5. Provides secure connections by passing user's credentials (domain name, username, and password) to the server side for authentication.
6. Auto-discovery of remote OPC DA, AE, and HDA Servers
7. Supports OPC Browser interfaces over LANs, WANs, and the
8. IT-friendly communications through firewalls and Network Address Translators (NAT)
9. Supports TCP/IP and SOAP/XML communications protocols

Internet

8 DataWorX™32 V9 Enhancements

Summary

- Enhanced DataWorX32 to add support for Tunneling of OPC communications. Please see the section below on the new DataWorX32 OPC Tunneling feature.
- Enhanced DataWorX32 adding support for redundancy including:
 - Redundant AlarmWorX32 AE Servers
 - Redundant AlarmWorX32 Loggers
 - Redundant TrendWorX32 Loggers
 - Redundant TrendWorX32 HDA Servers
- Please see the section below on new DataWorX32 Professional V9.
- Enhanced DataWorX32 to support running under normal (restricted) user account. One exception is the one-time setup of OPC Tunnels, which is performed only when the system is initially setup.
- Enhanced the DataWorX32 Configurator's Graphical User Interface giving it a new "XP" look and feel, new high-color Icons, and a new startup screen.
- Enhanced DataWorX32 increasing the size of the OPC Outputs box, making it possible to see the entire tag in the OPC Outputs box of a register.
- Enhanced DataWorX32 adding a user-configurable option to ignore security. This option may be useful for WebHMI client users that want to remotely write to DataWorX32 points without having to logon to DataWorX32.
- Enhanced DataWorX32 adding support for SQL Server 2005-based and SQL Express-based Configuration databases.
- Enhanced the DataWorX32 configurator adding support for "Find and Replace".
- Enhanced DataWorX32 to only read/reinitialize the tags that have changed when the "UpDate RunTime" button in the DataWorX32 Configurator is clicked to change a DWX configuration. Previously, DataWorX32 read the value of all configured tags in the configuration not only of those that were changed/added. On large systems, it was found that this could cause all tags get bad quality until their value is read.

9 NEW DataWorX™ Professional V9

Summary

New DataWorX32 Professional V9 - Full Redundancy

- Fully support for Redundant OPC DA Servers
- Fully support for Redundant AlarmWorX32 OPC A/E Servers
- Fully support for Redundant TrendWorX32 OPC HDA Servers
- Adds support for Redundant AlarmWorX32 Alarm Loggers
- New support for Redundant TrendWorX32 Trend Loggers
- New Store and Forward Technology
 - AlarmWorX32 Logger Store and Forward
 - TrendWorX32 Logger Store and Forward
- New MonitorWorX User Interface with Diagnostics
- New Simple Redundancy configuration (Node Pairs)

10 Expression Editor V9 Enhancements

Summary

- Enhanced the Expression Editor adding menu items for several new functions.
 - 1) Added `asciitochar` (converts a sequence of single byte ascii code into a string up to four chars long)
 - 2) Added `asciitowchar` (converts a sequence of double byte unicode code into a string up to two chars long)
 - 3) Added `chartoascii` (dual of `asciitochar`)
 - 4) Added `wchartoascii` (dual of `asciitowchar`)
 - 5) Added `tonumberbase` (parse a string and interpret it as a number in a certain base.)
 - 6) Added `round` (rounds a number to the closest integer)
 - 7) Added `roundto` (rounds a number to a certain number of decimal digits)

11 GenBroker V9 Enhancements

Summary

- Enhanced the GenClient / GenBroker communications infrastructure to support new "Plug-in" technology. This new technology enables applications to easily "plug-in" to the GenBroker communications and allows them to expose OPC DA like process points quite easily and efficiently. Several GENESIS32 V9 products use the new "plug-in" technology including the Unified Data Manager, ScripWorX 2006, DataWorX32 Redundancy, and the SNMP Connector.
- Enhanced GenBroker and the GenBroker Configurator to support running under a normal (restricted) user account.
- Enhanced the GenBroker Configurator's Graphical User Interface giving it a new "XP" look and feel, new high-color Icons, and a new startup screen.
- Enhanced the GenBroker TCP/IP support code to implement a DNS cache which keeps the IP addresses of all node names used by GenClient and their clients. The cache resolves potential issues with local node IP lookup during initialization. This lookup could take a long time on Windows NT and Windows CE systems.
- Enhanced the GenBroker Configurator to allow the user to configure a list of node names that will be guaranteed access to a WebHMI license.
- Improved GenClient's detection of OPC Server failures. The detection of server failures is now much faster.
- Enhanced the GenClient / GenBroker communications to support a 1-second Node-pair Watchdog timeout to improve the configurable switchover time from Standby to Active for redundant GENESIS32 applications.
- Improve the user-friendliness of the GenClient/GenBroker communications error reporting by using the MonitorWorX system tray bubbles.
- Enhanced GenClient to support several new features in AlarmWorX32 MMX V9.
- Enhanced the GenBroker TCP/IP support code to add checking for dynamic changes in the IP address list in the DNS Cache.
- Removed GenBroker's dependency on GenRegistrar, making it possible to create a standalone GenBroker installation without GenRegistrar. Additionally, GenBroker no longer depends on GenRegistrar when it is running as an NT Service.
- Enhanced the GenClient / GenBroker communications adding a new security related feature. The new feature is based on the currently proposed OPC UA standard. When the GenBroker security option is enabled, GenBroker automatically sends the user's credentials to the server side when communications to a remote server is initiated. The server side will check the credentials, authenticating the user, and will only start up the OPC server at the server side if the user has access rights to the OPC Server. The system can be configured to send a default set of credentials to the server, or can be configured to prompt the user to enter the credentials when a new connection is being established. Caching of the user's credentials is supported on the client side so that the user does not need to continually enter them.
- Enhanced the GenBroker TCP/IP support code adding DNS resolution caching for redundancy through multi-homed DNS entries. Since Internet Explorer caches this information and moves down the list of IP addresses as failures or latency occur, this provides an effective way to make WebHMI "redundant" with just a few DNS configuration changes.
- Enhanced GenBroker communications to propagate OEM information similar to how it is done with the GBX file. This feature is implemented to support the OEM-ability of WebHMI.
- Enhanced GenClient adding a timeout property for browsing to IcoWebClient.

12 GenDemo V9 Enhancements

Summary

- Created new V9 GENESIS32 GenDemo
- Created new V9 BizViz GenDemo
- Completely updated the Industry Examples
- Added over 10 new Success Stories and Examples
- Created new GenDemo examples for the following capabilities:
 - DataWorX™32 OPC Tunneling
 - DataWorX™32 Professional - OPC Redundancy
 - MonitorWorX™
 - Recipe Management System
 - ScriptWorX™ 2006
 - SNMP Connectivity
 - Unified Data Manager

13 GenRegistrar Server/Licensing V9 Enhancements

Summary

- Enhanced the License Monitor to support running under a normal (restricted) user account.
- Enhanced GENESIS32 Licensing, adding support for temporary (time-limited) Hard-key licenses.
- Enhanced the ICONICS Hardware Key utility to support command line options to automatically enable the hardware key (on the parallel port or the USB port) or to re-enable the software key.
- Enhanced the GENESIS32 Licensing to provide better support for custom registrations - for OEMs that are handling their own registration process. With version 9, there is now an option to bypass entry of Product Registration numbers and instead use a serial number.
- Enhanced the AutoGenRegistrar automation interface adding methods for reporting nodes connected to the License Server and their application usage.
- Enhanced the License Monitor to make the descriptions of the components OEM-able.
- Enhanced the GENESIS32 Licensing to support the allocation of WebHMI licenses based on Node Name. With this feature, the user can use the GenBroker Configurator to specify a list of Node Names that will be guaranteed availability of a WebHMI license.
- Enhanced the GENESIS32 Licensing Hardkey View to show the number of days for time-limited licenses.
- Enhanced the HWKUpdate.exe field utility adding the capability to completely program the hardkey in the field.

14 GenTray V9 Enhancements

Summary

- Enhanced GenTray to support running under normal (restricted) user account. All GenTray functions are available for restricted users with the exception of setting up services – which requires Power User Privileges.
- Enhanced GenTray to include a new startup (splash) screen.
- Enhanced GenTray to add support for ScriptWorX 2006.
- Enhanced GenTray to use the default value of one second for delaying the startup of all applications.

15 Global Aliasing V9 Enhancements

Summary

- Enhanced the Global Aliasing Configurator adding support for “Find and Replace”.
- Enhanced the Global Aliasing Configurator’s Graphical User Interface giving it a new “XP” look and feel, new high-color Icons, and a new startup screen.

16 GraphWorX™32 V9 Enhancements

Summary

- Enhanced GraphWorX32's Graphical User Interface giving it a new "XP" Look and Feel along with high-color Icons and a new startup splash screen.
- Enhanced all of the components of GraphWorX32 to support running under normal (restricted) user account.
- Enhanced GraphWorX32 adding support for Globally defined Expressions, Groups, Recipes, and ValueSets defined by the Unified Data Manager.
- Enhanced GraphWorX32 to integrate it with MonitorWorX.
- Enhanced GraphWorX32 adding several new Pick Actions and Smart Symbols for support of the new Recipe Grid and Recipe Tree Control.
- Enhanced the GraphWorX32 Search and Replace function to include the search of Aliases
- Enhanced GraphWorX32 to increase the object count to be greater than 65,000.
- Enhanced GraphWorX32 to allow the user to preserve specified information in the display after applying a template. When applying a template to a display, a dialog is now provided that allows the user to select which parts of the template to apply and which to preserve.
- The choices include:
 - VBA modules
 - VBA references
 - VB scripts / Jscripts
 - display properties
- Enhanced GraphWorX32 to support the ability to create and save templates without VBA.
- Enhanced GraphWorX32 adding support for customized information in the ToolTips. The GraphWorX32 configuration mode supports a dialog that allows the configuration of alternative tooltips based on a tag and its value.
- Enhanced GraphWorX32 adding support for a Runtime Menu Pick Action, which supports calling menu items – making every menu action available during runtime also available as a Pick Action.
- Added a VBA Event to GraphWorX32 to be triggered when the display gets the focus. The method is WindowChanged.
- Enhanced GraphWorX32's Automation Interface adding a new function to distinguish between symbols and layers or templates. The details of the new method are:


```
GWXSMBOLTYPE GetSymbolType();
With GWXSMBOLTYPE being one of these values:
NormalSymbol = 0
MasterTemplateSymbol = 1
LayerGroupingSymbol = 2
LayerSymbol = 3
```
- Enhanced GraphWorX32 to optionally support a Language Alias in the tag value.
- Enhanced the GraphWorX32 Toggling Toolbar function to show/hide only the currently visible toolbars whereas in the past, it toggled all toolbars, not just the visible ones.
- Enhanced GraphWorX32 to support turning tooltips on/off for individual dynamics and statics
- Enhanced GraphWorX32 to support an option to turn off auto-naming of pick action buttons.

Summary

- Enhanced the GraphWorX32 Viewer's zoom function adding mouse support (using alt + mouse-wheel).
- Revised the way GraphWorX32 handles Hex, Octal, and Binary values. They are now treated as unsigned numbers.
- Enhanced the Symbol Library's Graphical User Interface giving it a new "XP" Look and Feel.
- Enhanced the Keypad's Graphical User Interface giving it a new "XP" Look and Feel.
- Enhanced GraphWorX32 to support faster export of local aliases. The capability to perform multi-selection of aliases in the aliases dialog was added.
- Enhanced GraphWorX32 to allow the user to decide which "Thisdisplay" module (VBA code) is to be discarded when applying a template.
- Enhanced GraphWorX32 to show a 'progress bar' when updating a template to many files.
- Enhanced GraphWorX32 to support an option to suppress the Security message box. This applies to restricted users where they try to do something which they are not allowed to do, if they select yes, it will optionally hide the messages for all instances of GraphWorX32. This was implemented using Registry key: HKLM\Software\ICONICS\Hwx32\Compatibility Properties
 - SuppressSecurityMessageBox = 1
 - SuppressSecurityLogin = 1
- Enhanced GraphWorX32 to optionally preserve the startup themes when templates are applied to a display.
- Enhanced GraphWorX32 adding two new automation functions for setting gas themes when loading a popup window or an embedded window via code.

17 Language Aliasing V9 Enhancements

Summary

- Enhanced the Language Aliasing Configurator adding support for “Find and Replace”.
- Enhanced all of the components of the Language Aliasing subsystem to support running under normal (restricted) user account.
- Enhanced the Language Aliasing Configurator Graphical User Interface giving it a new “XP” look and feel, new high-color Icons, and a new startup screen.

18 NEW MonitorWorX™ V9

Summary

- New MonitorWorX V9 - Provides centralized system monitoring and diagnostics
 1. Centralized Diagnostics area
 2. Product "Monitor View" tool for products such as ScriptWorX 2006 and others
 3. GenTray Replacement
 4. Start and stop applications and services
 5. Provides application runtime and version information
 6. Provides duplicate License Detection
 7. Redundancy monitor
 8. Works with DataWorX32 Professional
 9. Provides notification of failed servers and redundancy statistics
 10. Tells you when connected OPC Servers become available
 11. System tray provides visual balloons interface
 12. Visualize all connections
 - a. OPC
 - b. License
 - c. Runtime
 13. Provides software installation information including versions of all GENESIS32 components
 14. Provides meaningful messages in the system tray bubbles when issues occur with the GenBroker communications.
 15. Monitors the status of connected OPC Servers (including 3rd party servers) and generates GenEvents based on status changes and can optionally send the events to the NT Event Log.

19 ProjectWorX™32 V9 Enhancements

Summary

- Enhanced ProjectWorX32 adding support for ScriptWorX 2006. Note, it will appear as a new application in the tree. Its .vba files are not maintained the same way they are for ScriptWorX32. Instead, they are treated as dependencies that are packed and delivered on pack (for a cleaner solution).
- Enhanced ProjectWorX32 adding support for the new SNMP Configurator.
- Enhanced ProjectWorX32 adding support for the new Unified Data Manager Configurator.
- Enhanced ProjectWorX32 to remember last browsed directory when adding application files. Previously, when you added an application file to a project, you had to re-browse to the folder you are grabbing files from. The file browser now remembers the last folder browsed to instead of defaulting to the project root directory.
- Improved the tab order on ProjectWorX32's GenTray tree application properties.
- Enhanced ProjectWorX32 adding the ability to launch and make a project active with one command. This was implemented as a command-line interface (when supplying a .pwx file):
/a = activate after unpack
/s = do the whole process silently (without prompts, msgboxes along the way)
- Improved the ProjectWorX32 support for Global Aliasing (it uses the new Global Aliasing support released as part of V8 SP1).
- Enhanced ProjectWorX32 adding a new startup (splash) screen.

20 New Recipe Management System V9 Feature

Summary

New Recipe Management System: Components:

- **Unified Data Manager**
- **Tree Explorer ActiveX**
- **Recipe ActiveX**
- **OPCConnectivity**
- **Recipe Server**
- **Recipe Pick Actions and Smart Symbols**

Unified Data Manager Recipe Configuration Features:

- Create and edit recipes (products)
 - Create folders for recipes
 - Create and edit recipe items (product variations)
 - Specify the amount of each ingredient needed
 - Import/export recipe configurations from/to XML and CSV files
-
- New Recipe Grid ActiveX Control
 - New Recipe Support in the UDM
 - New GrpahWorX32 Pick Actions
(Save, Save As, Restore, Download, Delete)
 - New Recipe Tree Control

21 NEW ScriptWorX™ 2006 V9

Summary

- **New ScriptWorX 2006 V9**

1. Runs as an NT Service
2. Based on a new threading model with predictable multi-threading
3. Able to share components by scripts in the same thread
4. Able to share VBA variables by scripts in the same thread
5. OnTimer Event per Thread (Scripts can execute on millisecond basis within the thread)
6. OnValueChange Event per Thread (Scripts execute when global variable is modified)
7. Scripts are queued in designated thread queue
8. Ability to synchronized thread using Global Variables and other native sync objects
9. Improved robustness with watchdogs and auto-recovery
 - Provides detecting and auto-restarting dead threads
 - Cooperation from script is required (keep alive)
10. Ability to send values (variables) as OPC data tags
11. Ability to send thread status as OPC data tags, including the following status items:
 - Queue Length
 - Number of executions
 - Watchdog remaining time
 - And more
12. Trigger information exposed to scripts
13. Integrated with new MonitorWorX, ability to monitor:
 - Application status
 - Thread details and thread console
 - Global variable information
14. Integrated with new Unified Data Manager
 - Scripts are triggered by Universal Triggers
15. Built-in OPC Read and Write functions
16. Configuration stored in standard database
17. Integrated VBA Environment
 - Write/edit scripts
 - Debugging
18. Triggers are created globally in UDM and can be shared with ReportWorX and BridgeWorX.
19. Integrated easy support for reading and writing OPC values - 1 line of code is sufficient to read or write OPC data
20. Configurator is similar to other configurations, based on the same Configuration Library Toolkit
21. Configuration supports on-line changes (no need to stop runtime before modifications)

22 Security V9 Enhancements

Summary

- Enhanced the Security Configurator's user interface, giving it a new XP Look and Feel.
- Enhanced the Security Login Application's user interface, giving it a new XP Look and Feel.
- Enhanced the Security Configurator so that the GENESIS32 security configuration can be synchronized with a user-specified Active Director Group. This was implemented by making a GUI change that allows a user to specify an Active Directory Group. Users from that group only are added. The collection of all groups that those users belong to are also added.
- Enhanced the Security Configurator to auto fill-in the NT Domain for each user during synchronizing or uploading users. Previously, the user had to fill in the NT Domain field for every user after taking their accounts from the domain.
- Enhanced the Login Application, Login ActiveX, and SecAutoUtil to use the Windows crypto API and 128 bit encryption to enhance their security.
- Enhanced the Security Configurator's user friendliness, adding text to the dialog explaining the Point Security applies only to Writing (not viewing).

23 NEW SNMP Connectivity V9

Summary

- **New SNMP Connectivity V9**

1. Provides the ability to communicate to any SNMP Compliant Managed Device
2. Fully integrated into GENESIS32 V9 (more than an OPC Server)
3. Includes support for:
 - a. Auto Discovery of SNMP Compliant devices on the network
 - b. Auto-detection of Device Types with recognizable icons
 - c. Browsing for available objects within each managed device (OIDs)
 - d. Human Readable names for the objects (OIDs)
 - e. Importing of MIB files
 - f. Reception and handling of SNMP Traps
 - g. GenEvent event messages based on SNMP Traps
4. Ability to use SNMP data as data tags
5. Full-featured configurator including support for Find and Replace

- **New GENESIS32 SNMP Agent V9**

1. Exposes system monitoring and diagnostic information to SNMP
2. Provides Product monitoring for products such as ScriptWorX 2006 and others
3. Provides application runtime and version information
4. Provides Redundancy monitoring
 - a. Works with DataWorX32 Professional
 - b. Provides notification of failed servers and redundancy statistics
5. Tells you when connected OPC Servers become available
6. Provides software installation information including the versions of all of the Installed GENESIS32 components

24 TrendWorX™ 32 V9 Enhancements

Summary

- Enhanced all of the components of TrendWorX32 to support running under normal (restricted) user account. One exception is the one-time setup of the ODBC database connection for the Trend Logger, which is performed by the TrendWorX32 Logger and TrendWorX32 Configurator (when the system is initially setup).

TrendWorX32 Logger:

- Enhanced the TrendWorX32 Logger to support redundancy (as part of the DataWorX32 Redundancy Option). With version 9, the user can configure a redundant "Node Pair" of TrendWorX32 Loggers. If one of the redundant pair of loggers fail, the backup logger can take over and continue the Trend Logging process. Note: This feature requires the purchase and installation of the DataWorX32 Professional Edition.
- Enhanced the TrendWorX32 Logger to support Store-and-Forward (as part of the DataWorX32 Redundancy Option). With version 9, the user can configure (temporary) storage that the TrendWorX32 Logger would use if access to the database is temporarily lost. The TrendWorX32 logger queues the trend data in temporary storage until communications to the database is restore, at which time, it forwards the trend data to the database. Note: This feature requires the purchase and installation of the DataWorX32 Professional Edition.
- Enhanced the TrendWorX32 Logger and TrendWorX32 Configurator to support Data Logging to Microsoft SQL Server 2005 and Microsoft SQL Express databases.
- Enhanced the TrendWorX32 Logger and TrendWorX32 Configurator to support Data Logging to MySQL databases.
- Enhanced the TrendWorX32 Logger and TrendWorX32 Configurator to support data logging at fixed intervals. The logging intervals are user-configurable on a per group basis.
- Enhanced the TrendWorX32 Logger so that it will continue to data log after the configurator is closed, even when running as an executable. Previously, it would continue to run only if it was configured to run as a service.
- Enhanced TrendWorX32 Logger to report its state, version information, up time, and key statistics to the MonitorWorX Centralized monitoring and diagnostic utility.
- Enhanced the TrendWorX32 Logger adding support for controlling the periodic refresh rate of the TWXSQLSvr.
- Enhanced the TrendWorX32 Logger and TrendWorX32 Configurator to support user configuration of the OPC DA refreshes. Users can configure OPC DA refreshes on the advanced property tab on a per logging group basis. If set, there will be a new sample at the configured interval, with updated timestamp, regardless if the value has changed or not.
- The TrendWorX32 Logger and TrendWorX32 HDA Server functions were separated into their own applications. One of the benefits of this splitting is that it allows the user to change the Trend Logger configuration without disturbing the TrendWorX32 Historical Trend (HDA) Replay.
- Enhanced the TrendWorX32 Logger to support running on the Microsoft Windows 64-bit operating system platforms (Windows XP 64-bit and Windows Server 2003 64-bit).
- Enhanced the TrendWorX32 Logger to support a shadow Access database configuration file so that the logger can start even if disconnected from the configuration server.
- Enhanced the TrendWorX32 Logger and TrendWorX32 HDA Server to support redundancy status tags using MonitorWorX and MonitorWorX Plugin as the transport layer.

TrendWorX32 Logger Configurator:

- Enhanced the TrendWorX32 Configurator's Graphical User Interface giving it a new "XP" look and feel along with 256 color desktop Icons, new program Icon, and a new startup screen.
- Enhanced the TrendWorX32 Configurator to support the configuration of Redundant TrendWorX32 Loggers.
- Enhanced the TrendWorX32 Logger Configurator to support Find and Replace

TrendWorX32 Persistent Trend:

- Enhanced TrendWorX32 Persistent Trend to report its state, version information, up time, and key statistics to the MonitorWorX Centralized monitoring and diagnostic utility.

TrendWorX32 Report:

- Enhanced the TrendWorX32 Report's Graphical User Interface giving it a new "XP" look and feel along with 256 color desktop Icons, new program Icon, and a new startup screen.
- Enhanced TrendWorX32 Report to report its state, version information, up time, and key statistics to the MonitorWorX Centralized monitoring and diagnostic utility.
- Enhanced the TrendWorX32 Report to address an issue where it could seem that the time-stamping is off by one day. The time-stamping is based on the OPC HDA standard. Consequently, a user configurable option was added to use the new time-stamping method.
- Enhanced the TrendWorX32 Trend Report to support redundant HDA Servers.

TrendWorX32 HDA Server:

- Enhanced the implementation of the HDA Server to address an issue where the LAST data filter gave the last value between intervals, but with beginning timestamp. Since this behavior is per the OPC HDA specification, an option was added to display the ending timestamp rather than the beginning time stamp
- The HDA Server was tested for compliance with the OPC HDA 1.2 Specification.
- Enhanced TrendWorX32 HDA32 Server to report its state, version information, up time, and key statistics to the MonitorWorX Centralized monitoring and diagnostic utility.
- Enhanced the TrendWorX32 HDA Server to support a shadow Access database configuration file so that the logger can start even if disconnected from the configuration server.

TrendWorX32 Upsize Utility:

- Enhanced the TrendWorX32 Upsize Utility's user interface, giving it a new XP Look and Feel.
- Enhanced the TrendWorX32 Persistent Trend's Graphical User Interface giving it a new "XP" look and feel along with 256 color desktop Icons, new program Icon, and a new startup screen.

25 Unified Data Browser V9 Enhancements

Summary

- Enhanced the Unified Data Browser adding a way to translate the item names.
- Enhanced the Unified Data Browser to support a way to programmatically disable the initial sorting of items with a certain folder.
- Enhanced the Unified Data Browser to support the ability for the user to minimize and maximize it.
- Enhanced the Unified Data Browser to automatically fill-in the Extended Tag Syntax character for separating array indices.

26 NEW Unified Data Manager V9

Summary

- **Provides centralized Configuration and storage for:**
 - **Global Expressions**
 - **Groups**
 - **Recipes**
 - **Value Sets**
 - **Event Triggers**
 - **Alarm Subscriptions**
 - **Alarm Filters**
- 1. New Global Expressions:
 - Expressions are available as data tags
 - Parameters are supported
 - Read Expression
 - Write Expression
 - Expressions in expressions are possible and calculated together
- 2. New Groups:
 - Available as Read/Write data tags
 - Parameters are supported
 - Group values are written synchronously to target OPC Server(s)
- 3. New Recipes:
 - Available as Read/Write data tags
 - Parameters are supported
- 4. New ValueSets:
 - Available as Read/Write data tags
 - Parameters are supported
- 5. New Centralized Event Triggers:
 - Global management of event triggers
 - Possible to access remote triggers over the network
 - Based on existing trigger functionality used in previous versions
- 6. New Global management of Alarm Subscriptions
- 7. New Global management of Alarm Filters:
 - Possible to choose between local or global subscriptions and filters
 - New full-featured configurator (Unified Data Manager Configurator) supports many advanced features including support for Find and Replace

27 VCRWorX™32 V9 Enhancements

Summary

- Enhanced VCRWorX32 adding support for a “Find Tags” feature.
- Enhanced the VCRWorX32 examples
- Enhanced the VCRWorX32 Configurator’s Graphical User Interface giving it a new “XP” look and feel along with 256 color desktop Icons, new program Icon, and a new startup screen.

28 WebHMI™ V9 Enhancements

Summary

- Added new Recipe ActiveX for Web Enabled Recipe Management
- Added new Recipe Tree Explorer
- Tested WEBHMI with new Internet Explorer 7
- Added support for Redundant WEBHMI Server capability via GenBroker DNS Switchover
- Enhanced the Web Publisher to be in compliance with the new Microsoft rules regarding ActiveX Controls, so that the ActiveX Controls will be activated appropriately.
- Enhanced the GENESIS32 Licensing to support the allocation of WebHMI licenses based on Node Name. With this feature, the user can use the GenBroker Configurator to specify a list of Node Names that will be guaranteed availability of a WebHMI license.

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 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 200,000 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.

WORLDWIDE OFFICES

World Headquarters

ICONICS, Inc.
100 Foxborough Blvd.
Foxborough, MA 02035 USA
Tel: 508-543-8600
fax: 508-543-1503
info@iconics.com

Australia

Tel: 61-2-9898-3211
fax: 61-2-9898-3411
australia@iconics.com

China

Tel: 852-281-40311
fax: 852-287-70479
china@iconics.com

Czech Republic

Tel: 420-377-183-420
fax: 420-377-183-424
czech@iconics.com

Germany

Tel: 49-5723-749869
fax: 49-5723-749879
germany@iconics.com

Italy

Tel: 39-347-8199250
fax: 39-010-6014091
italy@iconics.com

Netherlands

Tel: 31-252-228-588
fax: 31-252-226-240
holland@iconics.com

United Kingdom

Tel: 44-1384-275500
fax: 44-1384-401642
uk@iconics.com



Connect, Analyze & Visualize



Manufacturing Intelligence