

The Industrial Interface Company (NZ) Ltd, is pleased to offer you...

Proficise

Issue Three - August 2008

Welcome to the August 2008 issue of our HTML based newsletter – Proficise. It's been a long time between issues, so in this issue we have a few items to catch up on.

In this edition, we cover:

- [IIC Product Update – What we can do for you](#)
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- [Product Update: Proficy HMI/SCADA – iFIX v4.5](#)
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As always, if there is anything that you would like covered in a future issue of Proficise, please let us know as we are always open to suggestions (proficise@iic.co.nz).

IIC Product Update - What we can do for you:

The following matrix lists the current products that we support & supply and their current version numbers for each of the products on offer.

Product	Version	Description
Proficy HMI/SCADA - iFIX	v4.5	Offers a robust SCADA engine, rich set of connectivity options, open architecture and highly scalable and distributed networking model.
Kepware	v4.280.435.0	A world leader in communication software for automation and offers a unique experience in both OPC and embedded device communications
Specter	v7.08.00	Real-time Alarm Notification Software that works

<u>Instruments - Win911</u>		with your existing control software or SCADA system to monitor operations and notify personnel of problem conditions
<u>Proficy Change Management</u>	v5.8	Disaster Recovery in a box. Assists in monitoring and controlling changes to your software and data assets to protect against device failure or operator error
<u>Proficy Historian</u>	v3.1	Provides a robust and effective plant data repository to collect, archive and distribute large volumes of real-time, plant floor information quickly and easily
<u>Proficy Real-Time Information Portal</u>	v3.0	Provides a web-based solution that integrates all of your on-line and process-based systems with plant-wide connectivity, analysis and web-based visualisation components
<u>Proficy Batch Execution</u>	v5.1	Experience the power of ISA S88 device independent recipes combined with the ease of use that allows you to harness that power through a simple spreadsheet style recipe editor
<u>Proficy Plant Applications</u>	v4.4	Efficiently manage and achieve peak performance with a unified, easy to configure "plant model" that automatically generates intelligent KPI's and monitors performance
<u>Proficy Workflow</u>	v1.0	Industrial Business Process Management digitises and streamlines your production – from your work instructions and SOPs to corrective action and HACCP monitoring
<u>Proficy SOA</u>	v1.0	This Industrial SOA (Service-Oriented Architecture) software provides the real-time platform to achieve a centralised production configuration and management environment
<u>Proficy Tracker</u>	v7.5	A comprehensive tracking and order execution management system, Proficy Tracker accepts data from many types of sensors, readers, and ERP systems making it simple to implement and operate.
<u>Proficy Maintenance Gateway</u>	v1.0	Closes the loop between the plant floor and maintenance systems by using real-time production data, events and information to drive maintenance
<u>Proficy Shop Floor SPC</u>	v5.5	Complete Shop Floor Quality Data Collection & Analysis Solution

We are continually on the look out for new software products that can further enhance our offerings to you. You will find additional information on [Kepware](#) (one of our recent additions) later in this issue.

IIC Website - Competition

The [IIC website](#) has recently undergone a major transformation and to mark the occasion we have decided to run a little competition. [Register](#) yourself this month on our website (click on Users Corner to access the login page) and go in to the draw to win a [Logitech Harmony 525 Universal Remote Control](#). Just like GE Fanuc allows you take control of all of your business automation needs, the Logitech Harmony Remote allows you to take control of your 2nd place of work, the lounge - One trigger finger is all you need.

- **One-Touch Control:** Choose the activity you want to do, not the component you want to turn on.
- **Up to 15 Components:** Control video, audio, gaming—even lights and appliances.
- **Customisable Buttons:** Put your most frequent activities at your fingertips.
- **Learning Port:** Add favorite functions from an old remote just by pointing it at your Harmony.

This competition/offer is only open to NZ residents; entries close 14/09/2008 and are strictly only one entry per person. The winner will be announced in our next edition of Proficise.

Product Update: Proficy HMI/SCADA – iFIX v4.5

GE Fanuc are continually developing & enhancing the iFIX HMI/SCADA solution, the current v4.5 release contains many enhancements over the earlier v4.0 release, these include:

- **Higher Precision Math:**
The iFIX Process Database now offers higher precision math capability. Calculations are now performed with up to 15 digits of precision.
- **OPC Discovery Agent:**
The OPC Discovery and Auto-Assembly Component is a tool that you use to extract tag information from PLC programming software files or OPC servers and then add the tags automatically to your Driver and Database. Using this tool saves you valuable time and effort, because you no longer need to manually create the individual tags.

- **Block Alarm and Alarm Summary Enhancements:**
iFIX v4.5 Process Database Blocks now deliver an Alarm Occurrence Counter, counting the number of alarm transitions between acknowledgements. Operators can now be aware of the complex lifecycle of an alarm, prior to acknowledging the last instance.
- **Auto Alarm Manager now supports TCP/IP:**
The Auto Alarm Manager (AAM) enables a SCADA node to connect to a remote Client node through either a dial-up or WAN connection, and then transfer Alarm Messages. Alarms can automatically be acknowledged upon a successful transfer.
- **Improved iFIX picture management:**
iFIX now supports the ability to use multiple instances of the same picture file, each with its own unique set of tags (through the use of Tag Groups).
- **Enhanced Functionality for Multi-Monitor Environments:**
iFIX 4.5 delivers several features to make using multiple monitors easier, eg, the Workspace will now automatically span multiple monitors when entering run mode
- **Enhanced Click Event Wizard:**
The new Multiple Command VBA Script Wizard enables you to create a sequence of commands, using one or more Command Experts, which automatically generate the required VBA code for you.
- **Integrated Change Control:**
Tighter integration with Proficy Change Management provides a complete SCADA disaster recovery & audit trail solution.
- **Remote Systems Management:**
iFIX 4.5 now supports the remote system management capabilities of Microsoft SMS (Systems Management Server). You can now remotely stop iFIX, install SIM's and restart iFIX, automatically through the use of Microsoft SMS.
- **Microsoft Windows Vista enabled**

Other Enhancements to improve the iFIX engineering experience, include:

- In-line Text editing
- VisiconX now has Read and Write functionality
- VisiconX updates: VisiconX grid now supports millisecond time display; a typical use includes retrieving and displaying Millisecond time stamped Alarms from the Proficy Historian
- Right Click functionality for access to Tag Status and Quick Trends is now under iFIX Security control

iFIX v4.5 has been available for some time now and there are product updates (SIM's – Software Improvement Modules) that can be applied if your system is

having issues. SIM's can be downloaded from the [GE Fanuc Support Site](#), or alternatively please contact us.

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Product Update: Proficy Real-Time Information Portal v3.0

Proficy Real-Time Information Portal provides a web-based solution that integrates all of your on-line and process-based systems with plant-wide connectivity, analysis and web-based visualisation components. v3.0 of Portal was released last month, key enhancements in this release include:

- Display enhancements including:
 - * Dials for graphical display
 - * Visibility of all X and Y axis titles for all Pens
 - * New [HEAT MAP](#) chart
 - * Time Component improvements
 - * New Threshold Table options – applied at Cell level
 - * Inclusion of Check Box and Radio Buttons
 - * Multiple Selection has been enabled for List Boxes
 - * Hyperlinks can be added to Cells within Grids
- Security Enhancements offering more Role and User options
- [SOA Enabled](#)

Proficy Portal is one of the easiest web-based reporting packages to use and includes a feature rich environment including copying grid or chart data and pasting it into Excel, or exported as a CSV file. Portal displays & objects can include data from multiple data-sources, reports can be scheduled to print or be attached to emails and display development supports Drag and Drop for ease of use.

Did you know that you could combine Proficy Portal with Proficy Historian and your existing Relational Database to create reports for Quality, Downtime, OEE, Production, Power Monitoring, Raw Product Usage, Staff and Shift Reports, Production statuses and more ?

To help you leverage the power of this easy-to-use web-based Reporting solution, Proficy Portal Starter Kit's are available. Each Starter kit contains: One External Relational Database Connector (ADO, SQL, Oracle, or IBM), Unlimited connections to; iFIX, OPC, Proficy Historian, Proficy Alarms and the extremely

flexible Portal Statement Builder to develop queries (Query building knowledge is not required).

To arrange a demonstration, or product evaluation of Portal v3.0, please contact us.

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OEE (Overall Equipment Effectiveness) - What can GE Fanuc offer ?

OEE is a topic we get asked about regularly. In simple terms, OEE reduces complex production problems into simple, intuitive presentations of the information. It helps you systematically improve your process with easy-to-obtain measurements.

Currently there are two extendable solutions from GE, which can help you tackle OEE/Machine Downtime problems.

a) Proficy Real-Time Information Portal, Proficy HMI/SCADA - iFIX, Proficy Historian and a Relational Database (RDB).

This is more of a Downtime Monitoring solution than an OEE solution. Utilising a series of calculations stored within the Historian and statements created by the Portal Statement Builder, a Downtime Monitoring solution can be developed. It is easy to use and understand, with displays and data available across a range of client applications.

Components of the Solution:

Proficy iFIX: Operator Data Entry, Equipment Operation Indicators, Downtime displays

Proficy Historian: Process and Batch Data, Device Runtimes, Data Calculations, Process Alarms.

RDB: Quality data, Reason and Lookup Tables, Customer/Orders data

Proficy Real-Time Information Portal: The Management window, Aggregates data from all sources with customised views

b) Proficy Plant Applications – Efficiency Module.

This solution is a specialised 'off the shelf' OEE package that future proofs your OEE requirements. The Plant Applications - Efficiency Module is one of the modules found within GE Fanuc's Plant Application suite. Users create a virtual plant model (for either a process, or site-wide) via Wizards, which lists the plant devices and production variables. Units used are defined, shifts/staff outlined,

tests required, secondary alarms, time-based and production event-based variables and integration of the site data repository.

Once the plant model is completed many predefined reports are automatically generated and further custom reports can be developed. ActiveX components allow the data to be shared within iFIX for operator interaction. The system can be extended at anytime to include any of the other Plant Application Modules; the most commonly used being Proficy Plant Application - Production Management for ERP and Shop Order integration and the Proficy Plant Application - Quality Module for production consistency.

Components of the Solution:

Proficy iFIX: Operator Data Entry, Equipment Operation Indicators, Downtime displays

Proficy Historian: Process and Batch Data, Device Runtimes, Data Calculations, Process Alarms

Proficy Plant Applications - Efficiency Client: Data Entry and Data Reports

Proficy Plant Applications - Universal Web Client: Management consoles

If you need a Machine Downtime or OEE solution, talk to us. GE Fanuc solutions to your Downtime/OEE needs can be deployed from as little as \$15,000.00.

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Product Update: Proficy Change Management v5.8

Proficy Change Management (PCM) assists in monitoring and controlling changes to your software and data assets to protect against device failure or human error. PCM v5.8 is the first of two steps towards a new thin Client/Server architecture. The v5.8 release has a strong Client focus which incorporates the migration of the existing vendor modules to the new platform, and improved ease of use within the PCM client.

Key enhancements include:

- New Thin Client: Is easier to deploy and supports Drag and Drop functionality for faster set-up and development.
- Device Modules currently available include: RSLogix 5, RSLogix 500, RSLogix 5000, Siemens Step 7, Proworx32 and CimplicityME.
- Device displays include User details along with the Project status (Checked-out, and by)

- New Scheduler Client Execution Forms: A new Scheduler Client interface allows Users to group events logically based on location, line, type, execution time, or device.
- PCM v5.8 supports existing Thick and the new Thin (Web) Clients

The Proficy Change Management Starter Kit provides the tools (single concurrent user of PCM & distributed scheduler) a company needs to create their own cost-effective Automated PLC Backup system.

You can [download](#) further information on Proficy Change Management from our website.

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Kepware

A new addition to the IIC Product range - Kepware. One of the worlds leading developers of communication software for OPC servers and embedded device communications.

Kepware solutions include:

- **KepServerEX** – A highly flexible OPC suite that can provide OPC data access to 100's of different PLC types.
- **Industrial SNMP (iSNMP) Suite** - iSNMP Suite seamlessly integrates monitoring and analysing of Managed and Unmanaged Ethernet network devices into the leading HMI, SCADA, Historian, or MES software packages.
- **LinkMaster** - Is an OPC and DDE server allowing it to act as a bridge between legacy DDE systems and new OPC enabled applications.
- **RedundancyMaster** - Increases the reliability and availability of OPC data by configuring OPC Servers into redundant pairs that seamlessly appear as a single OPC Server to any OPC Client application.

You can [download](#) further information on Kepware's products from our website.

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Barry's Tech Tip - I/O Drivers

One of the common phone calls that we get is about systems either not starting with the correct I/O Server configurations or systems starting but no data

showing in the system. Nine times out of ten, these problems could be avoided if correct procedures are followed when handling I/O driver configurations.

Firstly, when installing v7.x I/O Servers on SCADA Servers, always select to install the SERVER components and not just the CLIENT components. The CLIENT component of a v7.x I/O Server is the management interface for that particular I/O Server only, it is not a Client used to obtain data through.

Once you have correctly installed your v7.x I/O Server, open it's power tool and then go to options - setup.

- a) Click the 'Default Path' tab.
- b) Change the 'Default configuration file name' to nodename.drv (replace 'nodename' with your actual 'physical' nodename and the .DRV with the three letter name of your installed driver i.e .mb1 or .mbe or .abr, etc).
- c) Change the 'Default path for configuration file' to your PDB folder (Don't forget the backslash at the end of the path), it will be either: C:\Dynamics\PDB\ or C:\Program Files\GE Fanuc\Proficise iFIX\PDB\ or a custom location you have defined from within your SCU.
- d) Click OK.
- e) From the File Menu, choose Save As. (It should prompt you to save your loaded driver configuration into the PDB folder.)
- f) Click Save.
- g) Close the Power Tool

Failing to define a default configuration file for the I/O Server, will most likely lead to an 'Untitled' configuration file each time you open the I/O servers powertool.

Another thing that can trip up users is failing to rename their driver configuration files, when changing thier iFIX SCADA nodenames. Every iFIX I/O Driver requires its own Driver Image Table (DIT) file. The DIT can be recognised by its unique name that is a combination of the Local Nodename and the 3 letter acronym of the driver name. This DIT file needs to reside in the PDB folder configured in the launching SCU file. To avoid issues with DIT files, always ensure that prior to any node name changes - export (save as CSV) your driver configurations. You can then change the node name, re-open the driver power tool, import the configuration (from CSV), change the default starting file (as detailed above, using your new nodename) and then start your iFIX system.

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