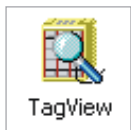


Discovery and Auto-Configuration Tool

I/O Discovery and HMI/SCADA Configuration is Fast & Easy!

GE Fanuc HMI/SCADA solutions, through the use of discovery and automated configuration, offer more value and easier setup on third party hardware than HMI/SCADA solutions from the vendors themselves. The Proficy™ HMI/SCADA Discovery and Auto-Assembly Component (DAC) is specially designed to identify field data and automatically configure both drivers and SCADA databases to use the information.



The Tool

Installed as part of GE Fanuc HMI/SCADA – iFIX® 4.0 (and CIMPLICITY® in the future), the Discovery and Auto-Assembly

Component (DAC) delivers an easy to use interface for discovering Tags from field-based devices like PLCs. Then it allows you to configure HMI/SCADA Drivers to acquire data from those tags, and configure HMI/SCADA databases to use the data (for alarming, logging, etc.)

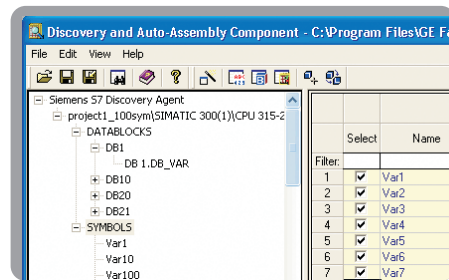
The DAC tool consists of three components. First, Discovery Agents are specially developed for various data sources. Second, Driver Configurators offer the ability to configure a Driver to acquire data from the field. Third, a Database Configurator will configure the HMI/SCADA database to use the data from the driver.

Device Discovery

Discovery Agents are specially designed to discover tags from a specific source. Sources include PLC programs, PLCs directly, and OPC servers.

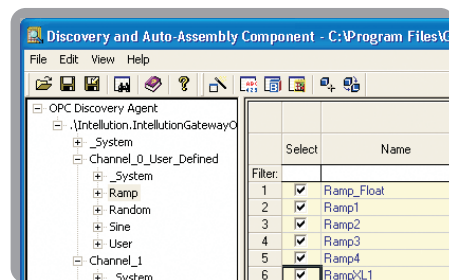
The DAC Version 2.0 Discovery Agents offer support for:

- Siemens Step 7 Program Files – This Agent will scan through a Siemens Step 7 Program file (reading a PROJECT.S7P file) and will highlight Tags in the project.



Siemens Step 7 Program File TAG Discovery

- OPC Server Sources – The OPC Discovery Agent will enable you to Browse Local or Remote OPC Data servers for Tags (as long as the server offers browse capability)



OPC Server (IGS Driver) Discovery

- Allen-Bradley PLCs – When used with the GE Fanuc IGS Driver for Allen-Bradley PLCs, the OPC Browser will browse Tags that have been automatically discovered by the IGS Driver. The IGS Driver will discover Tags from a Control Logix PLC. In addition, the OPC Discovery has also been validated with the Rockwell Software RSLinx Driver.

HMI/SCADA Driver Setup

The first phase in automated configuration manages the configuration of a driver to acquire data from the field device.

- The Discovery Tool for Siemens will configure one of two Siemens Drivers, the GE Fanuc S17 Driver and the InCoSol S7A Driver.
- The GE Fanuc S17 Driver requires the Siemens SIMATIC NET interface software for communications to Siemens PLCs.
- The InCoSol S7A Driver is a non-SIMATIC NET Driver available from www.incosol.de.
- The Discovery Tool for OPC will automatically configure the OPC Client Driver of iFIX. The Client Driver communicates with local or remote OPC Servers, representing the resulting data in the iFIX Native (NIO) format for further use.

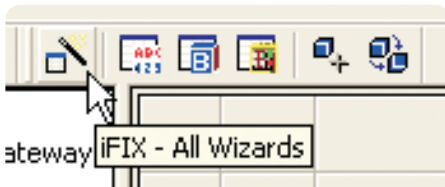


HMI/SCADA Database Setup

All Discovery Tools can automatically create iFIX Database Blocks. Block Types, Scan Rates, and Descriptors can be selected for each Tag to be generated. Block Tag Names are automatically set based on the Discovered name, and can contain pre and post alpha-numeric characters. Users can choose to Phase database block processing in order to control CPU utilization. Users can also include text in the descriptor of a block. This is beneficial as a search item for future block programming. You can use the DAC tool to initially create function blocks, then use the database manager to search descriptors for those new blocks to perform additional editing.

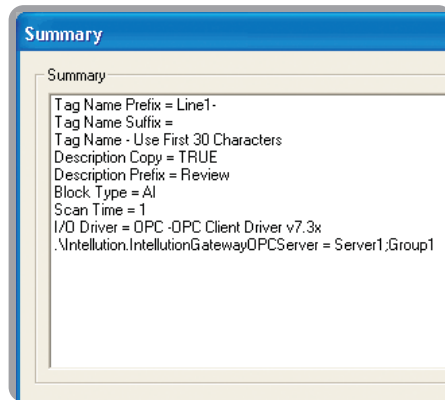
Extremely Easy to Use

After the Discovery phase, setting up a Driver or creating the Database is triggered through one icon – “Run All Wizards”. The DAC tool will prompt the user for Tag Naming criteria, Block Types, and Driver details. Then either add blocks to the iFIX Database or modify blocks already existing.



Wizards Guide Operation

Prior to actual auto-configuration, the DAC tool will summarize operations that are about to be performed.



A Summary of Operations to Perform

The tool then generates a display of the actual actions taken. The user can make changes by selecting new Tags and updating operations on an ad-hoc basis.

Select	Name	Tag Name	Type	Description	Scan Time	Driver	I/O Address
1	Ramp1	LINE1-RAMP1	AI	Review	1	OPC	Server1.Group1.Channel_0_Line_Delta
2	Ramp2	LINE1-RAMP2	AI	Review	1	OPC	Server1.Group1.Channel_0_Line_Delta
3	Ramp3	LINE1-RAMP3	AI	Review	1	OPC	Server1.Group1.Channel_0_Line_Delta
4	Ramp4	LINE1-RAMP4	AI	Review	1	OPC	Server1.Group1.Channel_0_Line_Delta
5	Ramp5.1	LINE1-RAMP5.1	AI	Review	1	OPC	Server1.Group1.Channel_0_Line_Delta
6	Ramp5.2						
7	Ramp5.3						

The Results

The final results of any action are logged within the spreadsheet. The DAC tool liberally annotates all variables that need further attention.

File#	Tag Name	Type	Description	Scan Time	Driver	I/O Address	H/W Options	Last Action Status
1	RAMP5.2	AI		1	OPC	Server1.Group1.Channel_0_Line		OK
2	LINE1-RAMP4	AI	Review	1	OPC	Server1.Group1.Channel_0_Line		Error setting value
3	RAMP5.3	AI		1	OPC	Server1.Group1.Channel_0_Line		Tag Creation Failed
4	LINE1-RAMP2	AI			OPC	Server1.Group1.Channel_0_Line		
5	LINE1-RAMP5.1	AI	Name already used in database as an alarm area		OPC	Server1.Group1.Channel_0_Line		OK
6	LINE1-RAMP3	AI	or tag		OPC	Server1.Group1.Channel_0_Line		
7	LINE1-RAMP1	AI			OPC	Server1.Group1.Channel_0_Line		
8	LINE1-RAMP_FLOAT	AI			OPC	Server1.Group1.Channel_0_Line		

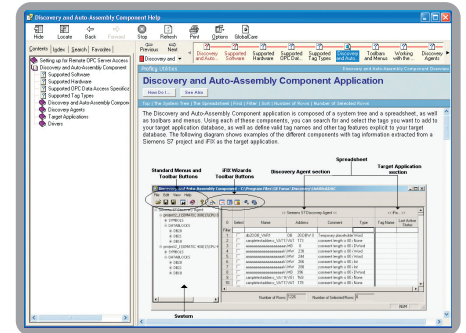
Valuable Status Information

Not Just a One Time Use Tool

The Discovery and Configuration Tool can save its information to a file, enabling the user to discover and configure tags in one session, save the results, then discover and configure additional tags in a new session. Discovered Tags are highlighted as New, changed or Missing, and DAC will highlight tags that already exist.

Extremely Well Documented

As if operation of the DAC tool wasn't easy enough, on-line help ensures that you have the answers to any questions that may arise.



For More Information

The DAC tool with Siemens Discovery is delivered in iFIX 4.0. The DAC tool with OPC Discovery is available for download on the GE Fanuc GlobalCare site. All enhancements to the DAC tool will be included in future versions of GE Fanuc HMI/SCADA products.

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Additional Resources

For more information, please visit the GE Fanuc web site at:

www.gefanuc.com

