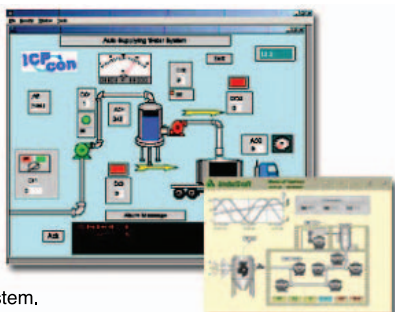


Software *SCADA Solution*

Introduction

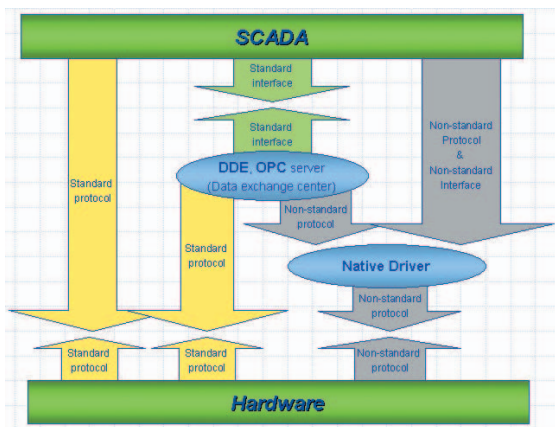
SCADA stands for **S**upervisor **C**ontrol **A**nd **D**ata **A**cquisition. It is a production automation and control system based on PCs. It is widely used in many fields: e.g. power generation, water system, oil industry, chemistry, automobile industry. Different fields need different functions, but they all have below features:

- * Graphical interface
- * Process simulation
- * Real time and historic trend logging
- * Alarm system
- * Data acquisition and recording
- * Data analysis
- * Report generation



Using SCADA software, users can easily integrate many different hardware devices to build a huge system.

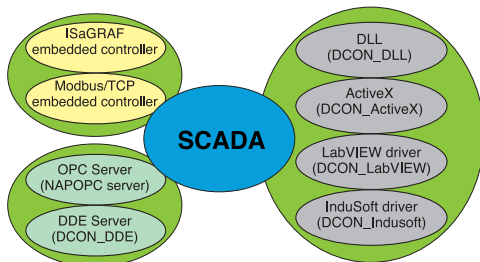
SCADA software accesses to hardware devices



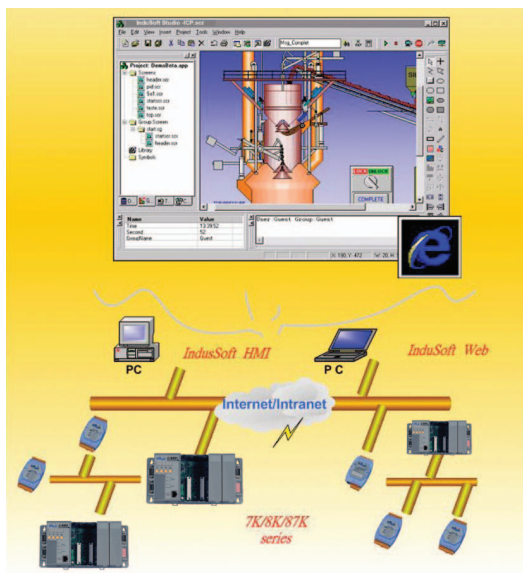
Famous SCADA software

Citect, ICONICS, iFix, InduSoft, Intouch, Entivity Studio, Entivity Live, Entivity VLC, Trace Mode, Wizcon, Wonderware, ... etc.

Resources from ICPDAS



Software *InduSoft Solution*



InduSoft Web Studio

Main Functions:

- Multi-Function HMI with Graphics, Alarms, Trending, Recipes and Reports.
- Allow to save the HMI in HTML format and export them to Internet Browsers.
- Include more than 150 different protocols for different devices.
- Support Microsoft.NET, OPC(Client & Server), DDE(Client & Server), ODBC, XML, SOAP and ActiveX.
- TCP/IP Client and TCP/IP Server modules to exchange tag values and configure redundancy systems.
- Automatic e-mail support (SMTP).
- Intuitive script language.

Supported:

- I-7000 series.
- I-8000 series.
- I-87K series.

Application:

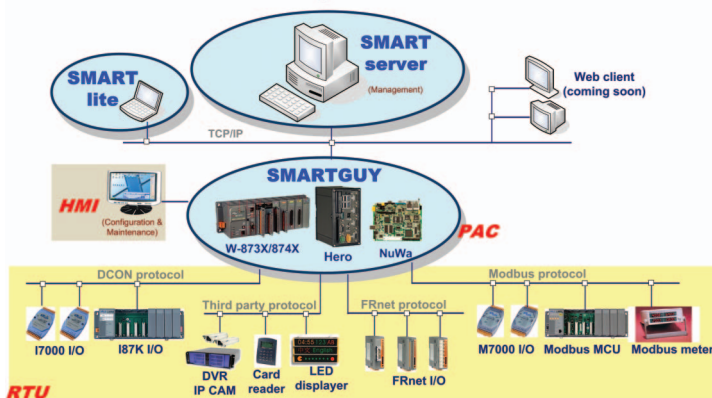
- Environment and facility monitoring.
- Industrial automation.
- Building automation.
- Remote Data Acquisition.

OS supported:

- Windows NT/2000/XP for development.
- Windows NT/2000/XP or Windows CE(v2.12,v3.x and v4.0) and Windows CE.NET operating system for runtime.

Note: Visit "<http://www.indusoft.com/>" for more information.

SMART System Frame



Introduction & Features

- SMART SYSTEM, the distributed control network system, is special designed to construct, integrate and manage SMARTGUY(s) and appliances.
- Include SMART-server, SMARTGUY(with SMART-lite) & SMART appliances.
- SMART-server is the back-end control center software, managing the distributed and independent SMARTGUY to form a distributed control network.
- Data central stored, distributed controlled, and shared to whole system.
- ODBC kernel database make easy to integrate with MIS/ERP.
- Provide authentication management ensure authority, privacy and security.
- Build-in Report Generation output variety reports for advanced analysis.
- Event pre-scheduled & interlock compose/assign events and schedules easily.
- SMARTGUY is the HMI software bass on WinCE embedded in PAC series of ICP DAS.
- Offer "Pre-Configured Templates", function easy set, and programming free!
- Variety of complex calculation capability - PID, Fuzzy, WWE...
- Plenty protocols: Modbus, DCON, FRnet, CAN, RS-485, third party devices etc.
- Support PACscript, a BASIC-like script for special demand.
- SMART-lite remote configure/access SMARTGUY(s) over TCP/IP.
- Build-in HMI interface offer rich fieldwork operation and maintenance.

Support

- ICP DAS I-7K / I-8K / I-87K series IO modules/units
- ICP DAS M-7K series IO modules, Modbus MCU, Modbus meter
- ICP DAS FRnet series IO modules
- ICP DAS CAN bus series IO units
- Third party devices: DVR, IP CAM, card reader, LED displayer...

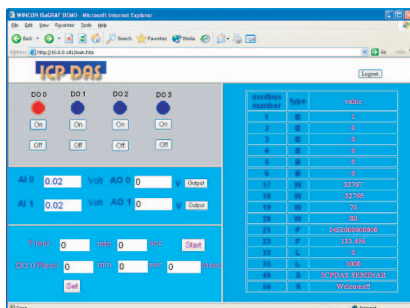
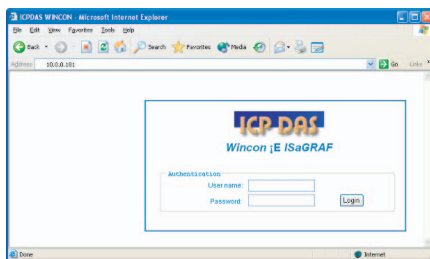
Application

- Building & factory automation system
- Security & surveillance automation system
- Light, air-condition, elevator facility automation & energy auditing system
- Broadcast & emergency interlock control system
- Public information inquiry & subscription system

Note: visit "<http://www.icpdas.com/products/Software/SMART/SMART.htm>" for more information.

WinCon Web HMI

HMI running on Internet



Local or Internet



WinCon-8000



I-7000



I-7000



I-87K

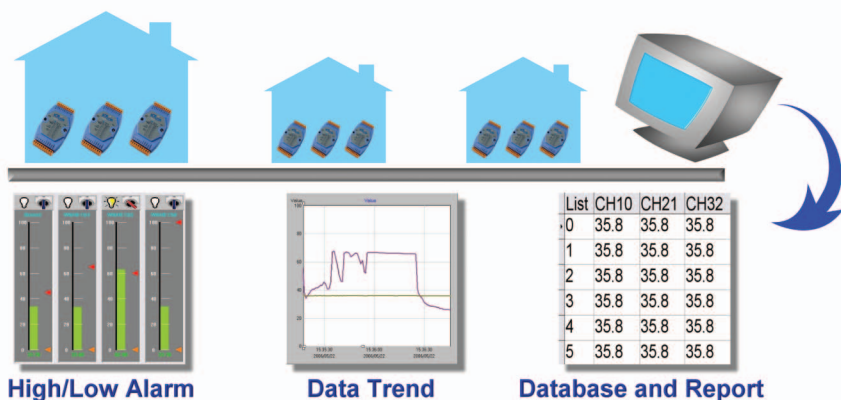
Main Features

- **No extra HMI software need.** WinCon Web HMI is build by user's own HTML editor. For example, Notepad or FrontPage, or ...
- Allow user to save his own web pages in the WinCon controller (HTML format) .
- Other PCs can use Internet Explorer to browse I/O & control data in the WinCon controller.
- Support three levels "User ID" & "Password" security.
- The web pages of the WinCon Web HMI can exchange data with the ISaGRAF program (Hardware should be W-8037/8337/8737 or W-8036/8336/8736)
- The web pages of the WinCon Web HMI can exchange data with the "Modbus Server" (Hardware: Other WinCon controllers with "Modbus Server" enabled)

Supported Controllers & Demo

- Wincon-8x31/8x41 (EVC++ program example available)
- W-8x37/8x47 & W-8x36/8x46 (ISaGRAF program example available)
- More at http://www.icpdas.com/products/Software/Web_HMI/Web_HMI.htm
- Live demo at <http://61.218.42.10> (Username - "level2", password - "level2")

Software *EZ Data Logger*



EZ Data Logger is a small data logger software. It can be applied to small remote I/O system. With its user-friendly interface, users can quickly and easily build a data logger software without any programming skill.

Main Features

- Flexible module configuration
Each module and I/O point can have different description and color
- Real time data trend (with zoom in and zoom out)
Each trend line can store more than 86400 records.
- Access Database supported
The database can be exported to excel file or pure text file
- Reporter
Can print the trend line or data from the database
- High/Low alarm with audio warning
- Programming skill needless
All operations are done by click mouse and enter value.

Supported

- I-7000 series

Application

- Environment and facility monitoring
- Remote Data Acquisition

OS Supported

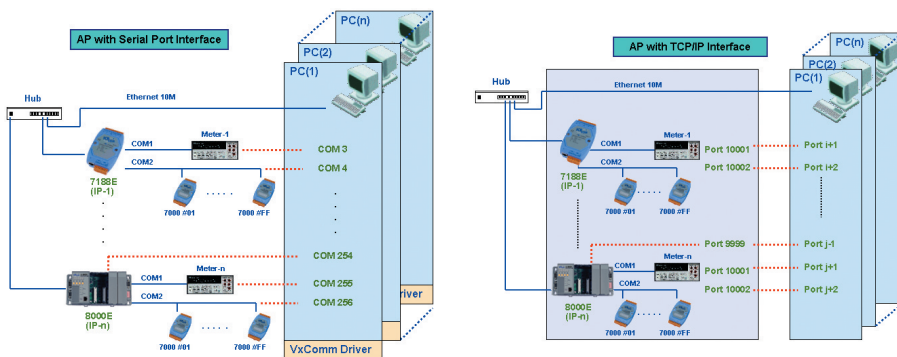
- Windows 98/2000/XP

Note: visit http://ftp.icpdas.com.tw/pub/cd/8000cd/napdos/driver/ez_data_logger/ for more information.

Software VxComm Technique & Xserver

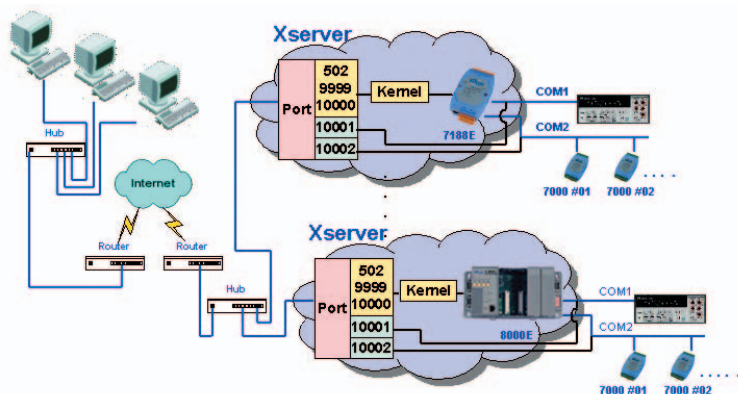
What is VxComm technique?

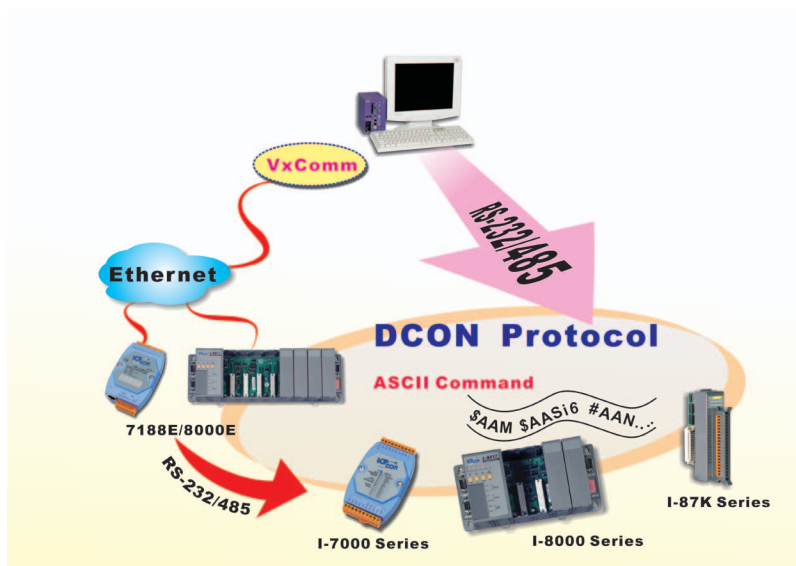
VxComm is a technique that stands for "Virtual Communication Port". It provides two software interfaces to access remote COM ports of the 7188E/8000E via the Ethernet, one is serial port interface, and the other is the TCP/IP interface. For the serial port interface, we provide a VxComm driver for Windows OS. It is used to create virtual COM ports to map to the COM ports and I/O module of the 7188E/8000E. After creating virtual COM ports, you can easily upgrade serial devices to with Ethernet communication ability, and the original software only need to link to a virtual COM port. It doesn't need any source code modification.



What is Xserver?

Xserver is a programmable TCP/IP server template (in C language) for the 7188E/8000E based on the VxComm technique. It has an open and flexible programming architecture. With the help of the Xserver, you can easily develop a powerful PAC system with the TCP/IP and serial communication ability.





What is DCON protocol?

DCON protocol is a request/reply communication protocol for the I-7000/8000/87K series. It defines a simple ASCII format protocol, like \$AAN, \$AASi6, #AAN, ... ,etc. The hardware interface to access the I-7000/8000/87K series can be divided to:

- * RS-232: I-8000 MCU with 8K232.exe firmware
- * RS-485: I-7000/87K and I-8000 MCU with 8K485.exe firmware
- * Ethernet: I-8000 MCU with 8KE10.exe firmware

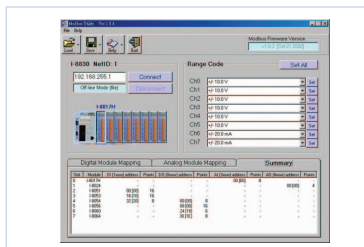
Even the I-7000/87K series is not equipped with any Ethernet interface, by using the I-7188E/8000E and the VxComm technique, you can still access the I-7000/87K series via the Ethernet.

Note 1: The I-8000 and I-87K series I/O modules can be plugged in the I-8000 MCU together.

Note 2: When the I-87K series I/O module is plugged in the I-8000 MCU, it uses the same commands as the I-8000 series I/O does.

Note 3: The I-87K series I/O module uses different command when it is plugged in the I-8000 MCU and the 87K expansion unit.

Software *Utility and Development Tool Kit*



Modbus Utility

Main Functions:

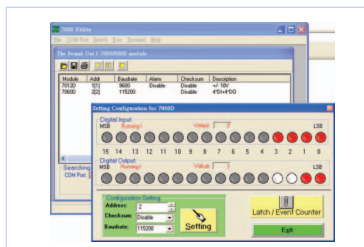
- On-line configuration via Ethernet
- On-line help
- Automatically generate register mapping tables
- Configuration export/import

Controllers supported:

- I-8430 -MTCP, I-8431 -MTCP
- I-8830 -MTCP, I-8831 -MTCP
- I-7188E -MTCP

OS supported:

Windows 98/NT/2000/XP



DCON Utility

Main functions:

- Configuring modules
- Baudrate
- Address
- Checksum
- Power-on value
- Safe value
- ... etc.

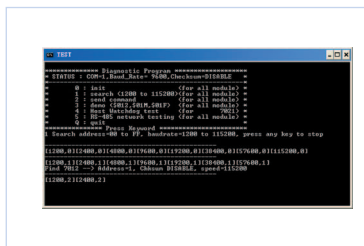
Testing I/O action

Module supported:

- I-7000/8000/87K series (with DCON protocol)

OS supported:

Windows 98/NT/2000/XP



DCON Utility (DOS)

Main functions:

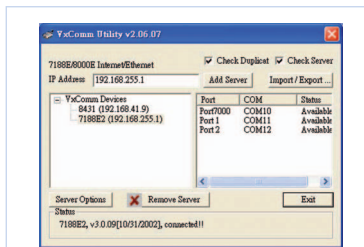
- Diagnostic (Source code included)
- Learning
- Performance test

Module supported:

- I-7000/8000/87K series (with DCON protocol)

OS supported:

DOS



VxComm Utility

Main functions:

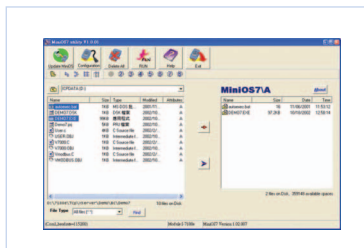
- Creating Virtual COM ports on PC

Controllers supported:

- 7188E/8000E with VxComm technique

OS supported:

Windows 95/98/NT/2000/XP/2003



MiniOS7 Utility

Main functions:

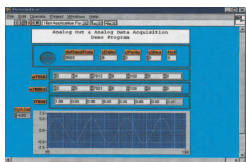
- Download files
- Update MiniOS7
- Configures COM port settings
- Configures network settings

Controllers supported

- Support all PAC with MimiOS7 (7188, 7188X, 7188E, 8000, i-View 100..., etc)

OS supported

Windows 95/98/NT/2000/XP



DCON_LabVIEW

Bundled driver for LabVIEW

Module supported:

I-7000/8000/87K series (with DCON protocol)

OS supported:

Windows 98/NT/2000/XP



DCON_InduSoft

Bundled driver for InduSoft

Module supported:

I-7000/8000/87K series (with DCON protocol)

OS supported:

Windows 98/NT/2000/XP/CE



DCON_DLL

DLL library

Module supported:

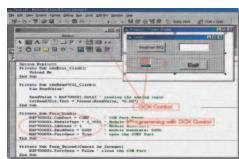
I-7000/8000/87K series (with DCON protocol)

Demo supported:

VB/VC/BCB/Delphi (Source code included)

OS supported:

Windows 98/NT/2000/XP



DCON_ActiveX

ActiveX (OCX) component

Module supported:

I-7000/8000/87K series (with DCON protocol)

Demo supported:

VB/VC/BCB/Delphi (Source code included)

OS supported:

Windows 98/NT/2000/XP



DCON_Linux

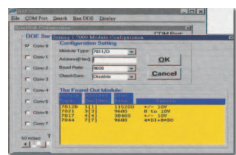
Libraries for Linux platform

Module supported:

I-7000/8000/87K series (with DCON protocol)

OS supported:

Linux



DCON_DDE

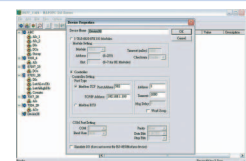
DDE server

Module supported:

I-7000/8000/87K series (with DCON protocol)

OS supported:

Windows 98/NT/2000/XP



NAPOPC Server

OPC server

Module/Controller supported:

I-7000/8000/87K series (with DCON protocol)

Modbus PAC

ISaGRAF PAC

OS supported:

Windows 98/NT/2000/XP