M2M,Telemetry and Customer Intelligence Data Using

MIStudio

"An open standards, platform and device independent productivity solution"

Remote Access

- PLCs/RTUs located at remote sites
- Access Through Modem Links, Internet Connections (Modems, DSL, Cellular, GSM/GPRS)
- Improved Technologies, New Problems
- Security!
- The promise of M2M becomes a reality in MIStudio.

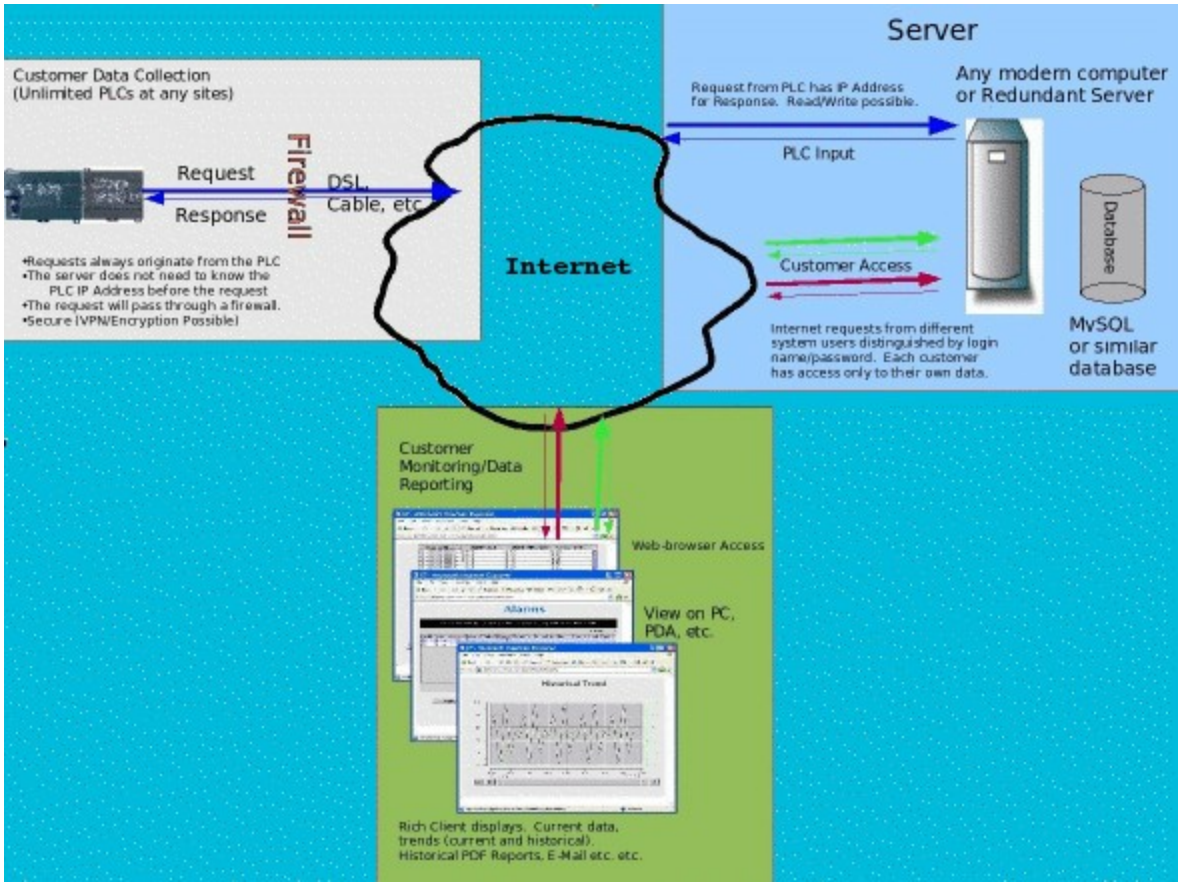
Secure Access

- Not “Security By Obscurity” **REAL** security
  - No Phone Number
  - No Open Internet Ports
  - Connections only FROM the PLC
- No Way in for Disgruntled Employees
- No Response to Port Scanners – Zero Day Exploit
  - Tools to Scan for Open Access Ports On Remote PLCs **are in use TODAY**
- Encryption

Internet Links

- Higher Security
- Require More Intelligence at the PLC but connection can be shared amongst PLCs/other devices.
- Can “piggyback” on existing DSL, Cable, etc. links
- Cost-Effective Commercial Wireless Options
- Relatively Low Cost
- Low Maintenance. Network is Maintained by Provider

ErgoTech Solution



IP Address/Firewall Friendly

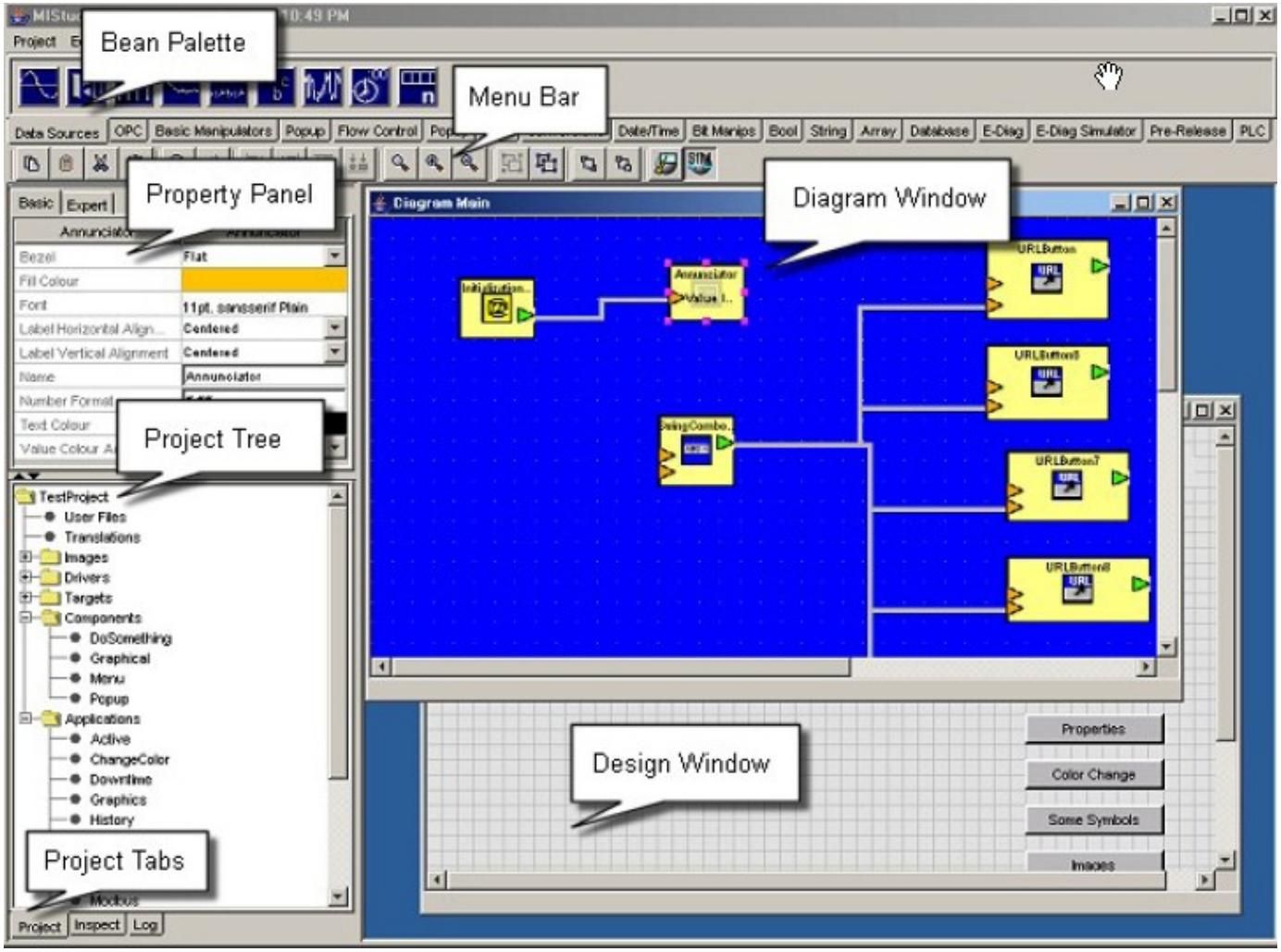
- Always Communicate from the PLC to the Server
- Only the Server needs a fixed IP Address
- Redundant Servers/Database Possible
- Server can be at Customer Site, Vendor Site or ISP.
- Dedicated Server Not Required (smaller applications). Virtual server at ISP can be used.
- No Physical Access Required at Server. A dedicated server can be co-located at highly reliable ISP site (larger applications).

Standard Telephone (POTS) Modems

- Secure Telephone access using Internet technologies
- Low Maintenance links through local ISPs
- Easy Modem Line Sharing

MIStudio - Integrated Development Environment

- A graphical tool used to design, create, and deploy HMI, SCADA and Manufacturing Intelligence applications.



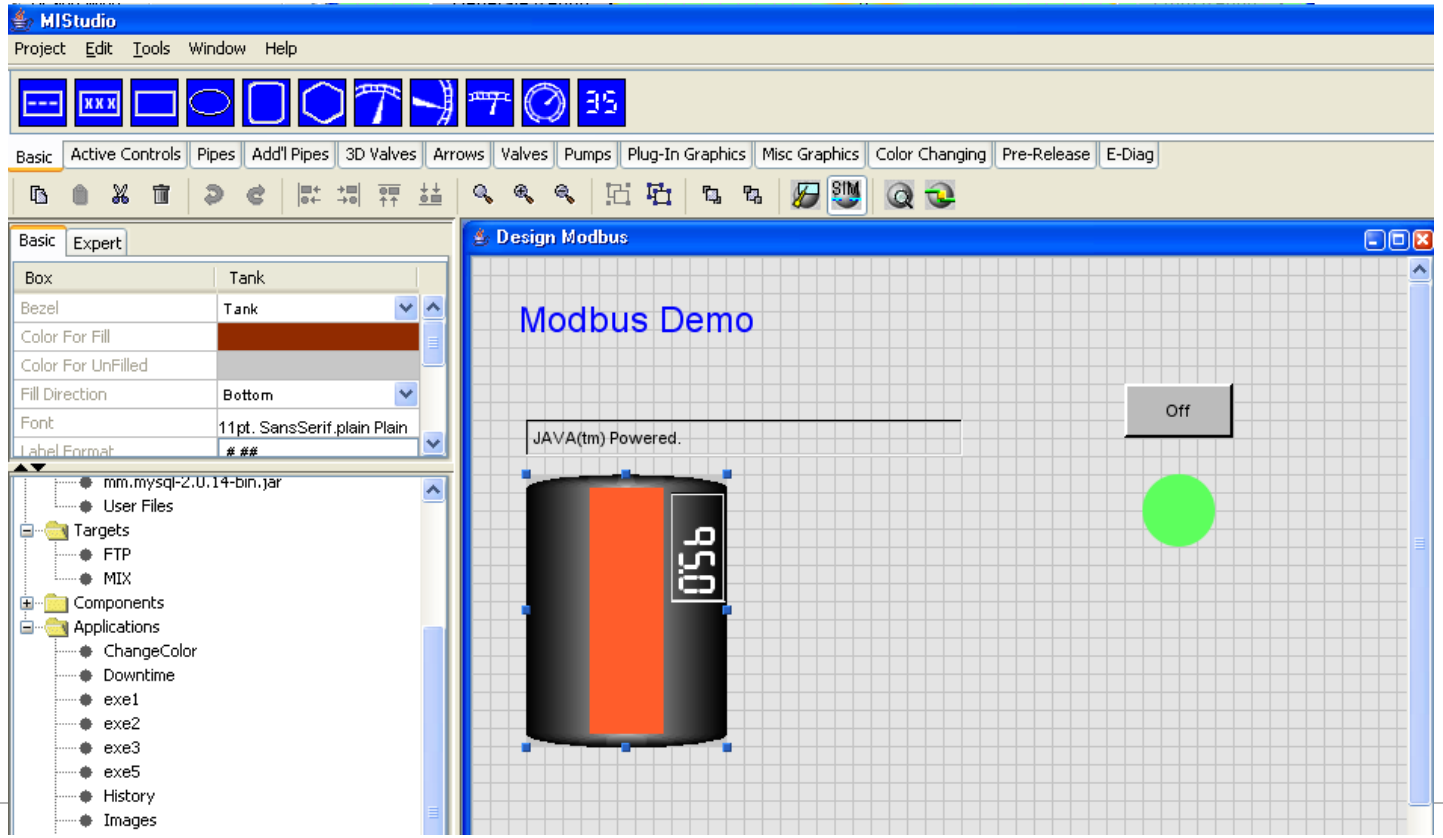
MIStudio – Product Overview

- 1. Integrated Design Environment, IDE, Software Toolkit
  - Easy to Use/Drag and Drop
  - Create Real-Time, Web-enabled Manufacturing Intelligence application.
- 2. Component Library - Virtual Instrumentation Beans - VIB
  - 300 + Visual and Logic Components
    - Direct Database Integration with any database (eg MySQL, Oracle, InSQL, SQLServer, etc. etc.)
  - Alarming with e-mail and sound notification (send e-mail to phones).
- 3. Deployment
  - HMI is a browser. “Kiosk Mode” viewer for operator stations.
  - Execution engine embeddable on a variety of hardware platforms (Java JVM enabled)

    Embedded Linux, PLC module, Windows PC or Enterprise Server

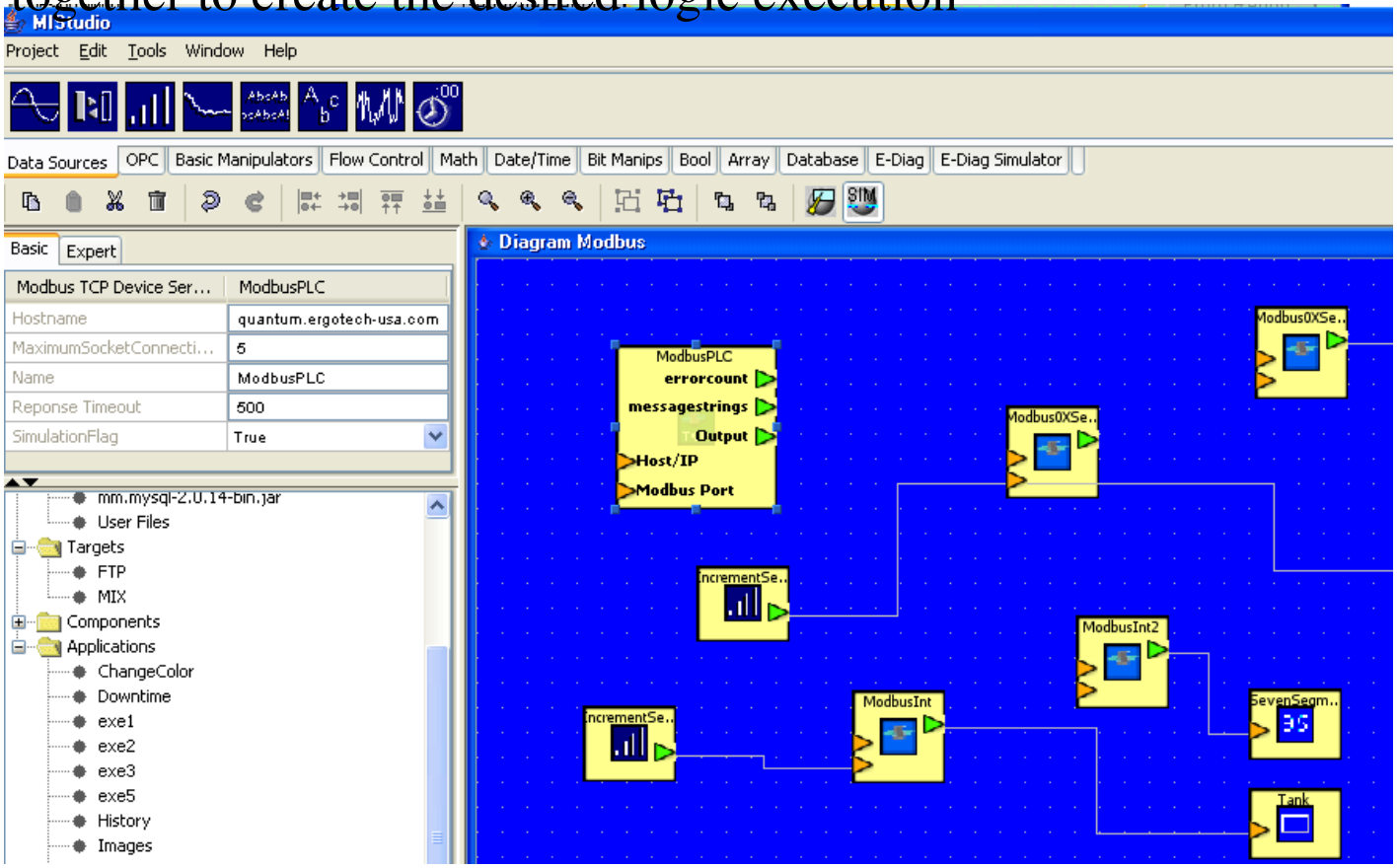
MI Studio IDE - Design (Graphic) Window

- The graphics created on this window are viewed in any web browser (Applet).



MI Studio IDE - Diagram (Logic) Window

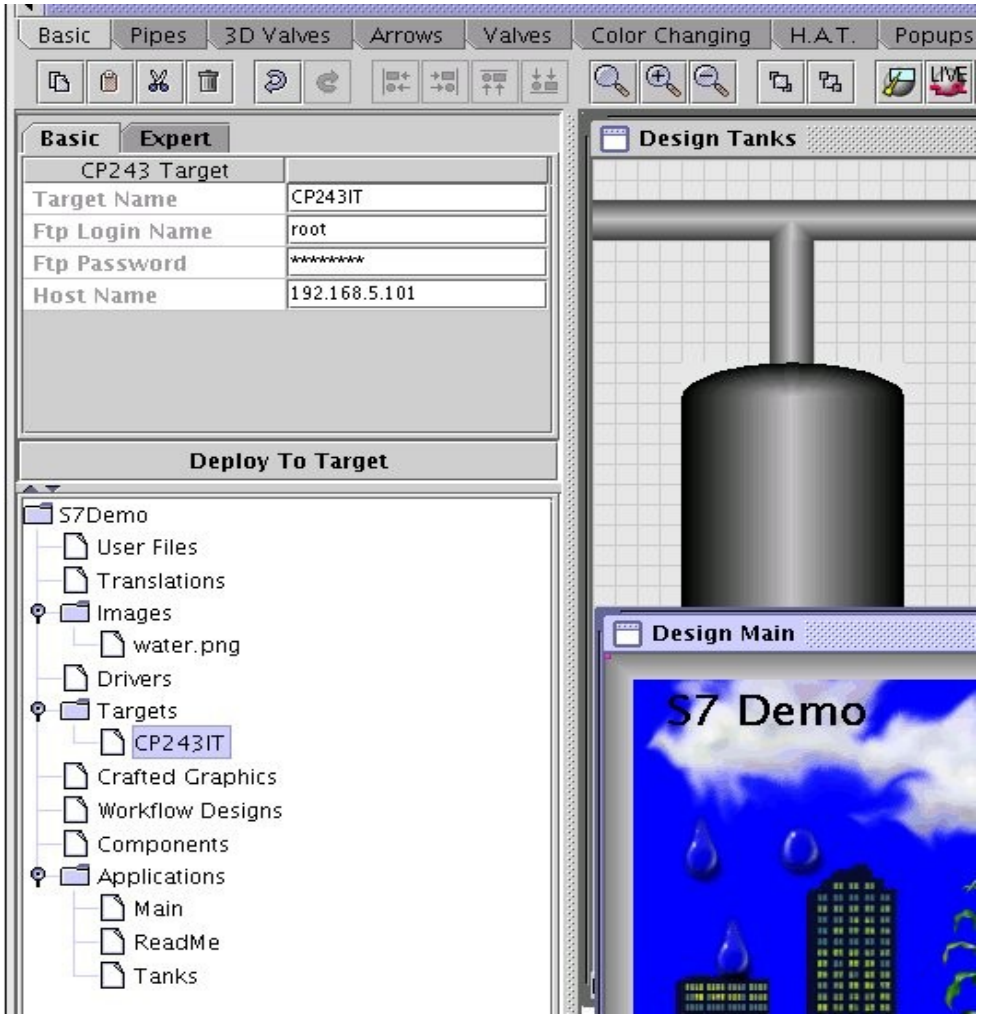
- This is where you design the 24/7 execution logic for the application or component. Java bean components are wired together to create the desired logic execution



Direct Deployment of Views to Remote Modules

- Any Web Server is a Target
- Direct Creation of Applets

  PLCs and other embedded systems.



ErgoTech and MIStudio

- Internet Ready. Not an add-on to an existing product.
- Browser Based HMI
- Secure, Java-based Network Model. Security is not an afterthought.
- No Microsoft Dependencies. No Virus Carriers.
- Support for wide range of industrial devices/PLCs
- Full Read/Write Database Support for Historian, Configuration, etc.

PLC-Server Dial Up

- Support for Asynchronous Messages
- More difficult to set up on PLC
- Scalable, but must be sized correctly
  - Single/Few Modems Direct to a PC
  - Modem Terminal Banks (Ethernet Encapsulation) – unlimited (Technology used by ISPs such as AOL for dialup)
- More Secure. But Spoofing Attacks Possible.