Introduction

- OpenControl V 1.0 was released in September 2009 as National ICT R&D funded project.
- OpenControl is a high end Supervisory Control and Data Acquisition (SCADA) Software for monitoring and control of industrial processes.
- OpenControl is a crucial tool for Process Control & Industrial Automation that provides Human Machine Interface (HMI).
- OpenControl software provides real-time and dynamic information in standard graphical form for mission critical industrial applications.
- OpenControl software connects and communicates with Programmable Logic Controls (PLCs), Field Instruments and Sensors.
Introduction

OpenControl
SCADA System

PLC, Controllers, I/O Boards

Sensors, Field Devices, Instruments
OpenControl

- General Public License (GPL) Product
- Development using:
  - Java
  - MySQL
- OPC Compliant
- Client/Server Architecture
- Linux Supported
- Lines of code: 80,000+
- Modules: 8
- Development time: 1.5 years
- Team size: 25+
Why Open Source?

- There were no professionally developed Real-time HMI components available
- The open source HMI software were mostly developed by the individuals
- No success stories & strong clientele
- Core architecture of existing deployed software is not scalable
- No any industrial automation standards & compliance
- Security & safety standards of industry were not followed
Our Solution

OpenControl can manage:

- **Industrial Processes:**
  - Manufacturing, Production, Fabrication, Mixing, Blending & Refining, Filling, Recipes, etc.

- **Infrastructure Processes:**
  - Water/Wastewater Treatment, Pumping Stations, Oil and Gas Pipelines, Electrical Power Transmission and Distribution, Civil Defense Systems, Traffic Lights, Telecommunication System etc.

- **Facility based Processes:**
  - Multi-storey Buildings, Airports, Ships, Hospitals, Cool Rooms, Clean Rooms etc.
Opportunity Identification

- Industrial Automation Software is multi Billion Dollar Industry worldwide
  (source ARC Advisory Group)

**Market Size: Figures are in $ Billion**

- Infrastructure (4.3%)
- Transportation (4.7%)
- Manufacturing (8.7%)
- Water & Wastewater (5.4%)
- Oil & Gas (9.3%)
- Electric Power (5.5%)

**Top Players:**
- General Electric
- WonderWare
- Siemens
- Iconics
- Rockwell

- North America, Europe, Middle East & North Africa dominate the existing market as active customers
- China Railways – One of the largest SCADA project worth $512 Billion. The China Ministry of Railways company expects a 6-year return on investment
OpenControl

Industry simulation with the help of different shapes, symbols, widgets and dynamics

- Dials & Meters
- Knobs
- Toggles & Switches
- Sliders & Joysticks
- Buttons & Indicators
- Process Control Equipment
- Process Control Gauges & Indicators
- Tanks, Columns & Heat Exchangers
- Motors, Pumps & Fans
- Valves
- Pipes & Lines
- Special/Misc Widgets
Open Graph – Control Widgets

Toggles and Switches

Sliders and Joysticks
Open Graph – Process Control Symbols

Includes the standard process control symbols with embedded dynamic behavior.

Motors, Pumps and Fans

Tanks, Columns and Heat Exchangers
Open Trend & Alarm
Strengths & Opportunities

Strengths
- Relevant Experience of >10 years
- Software Developed & Released
- Reference sites are made
- Cost Effective Solution for global market
- Competitors don’t have Linux based version
- Prepared Marketing & Training Material
- Appointment of Local Partners
- Localization & Regional Training Programs
- Understanding of industrial needs for further development
- Formation of Center of Excellence for Industrial Automation at NUST

Opportunities
- SCADA market size is enormously growing
- Competitors have expensive products to license, implement, get trained, get support and maintain
- Global expansion & partnerships
Business Model & Go to Market Plan

Phase – I
Pakistan

Q1-Q2 2010
- Preparation of detailed plan targeting domestic industry
- Conduct of Training and Seminars with specialized industrial focus
- Participation to local and international events
- Identification of International Distributors for Phase-II

Phase - II
Singapore, Taiwan, China, Malaysia

Q3-Q4 2010
- Appointment of International Distributors
- Training of International Distributors
- Accomplishment of Regional Technical Requirements
- Training of System Integrators for providing vertical market solutions
- Participation to Intl events
- Identification of Intl Distributors for Phase-III

Phase - III
World Wide International Panetration

Q1-Q4 2011
- Appointment of International Distributors
  - Distribution will be divided into 6 Regions
    - America
    - Europe
    - Middle East & Africa
    - Asia Pacific
    - Central Asia
    - Australia / New Zealand
- Training of International Distributors
- Accomplishment of Regional Technical Requirements
- Training of System Integrators for providing vertical market solutions
- Participation to International events
- Establishment of 24x7 Technical Support & Call Center
Financial Analysis
Existing Team

- Organizational Experience: >10 years of Industrial Automation

  Board of Directors

  Dr Hafeez Ur Rehman
  Research & Engineers

  Dr Habib Ur Rehman
  Marketing & Intl Sales

  Mohammad Asad
  Admin and Operations

  Muhammad Muzzamil
  Technical Solutions

- Board of Advisors
  - HRH Prince Engr Amr Al Faysal; BoD Faysal Bank Limited
  - Brig (R) Dr Mukhtar Hussain; Company Sr. IT Manager, FFC
  - Engr Dr Hossny Aziz; Senior Planning Consultant
  - Engr Abdul Rehman; Engineering Consultant
  - Aslam Mehmood; Industrialist
  - Akhtar Hussain; Financial Analyst
Future Plans

Formation of ‘Process Control & Automation Center’ to perform the following actions:

- Act as ‘Centralized Resource Center’ and ‘National Forum’
- Establishment of Centers of Excellence at Universities for SCADA/OpenControl training
- Induction of OpenControl as lab tool for the Universities
- Training of Teachers / Lab Staff regarding
  - Field Instruments
  - Sensors
  - Controls
  - OpenControl
  - Telemetry
  - Safety Standards
- Liaison with Industry for Research/Commercial Projects
Want more information?

visit

www.buraq.com/opencontrol