



PT. INTEGRA TEKNIK ASIA

Engineers Provider - Control and IT-embedded

Kawasan KaliMas C.3, Bekasi Timur 17113

Tel.(+62-21) 8835-3922 Fax.(+62-21) 8835-3933

Internet :

e-mail : info@integrateknik.com

www.integrateknik.com www.integrateknik.co.id

Secured Automation Projects

Some of our prestigious 2002 projects on each industry are listed as follow :

- Project Name : **Caltex Kota Batak Wells Monitoring and Control**
Industry Area : Oil Producing
System Classification : Automation / SCADA
Role : Sub-Contractor to PT. Sartika Mitra Sejati (Contractor)
Scope of Work : Turn-key System for the SCADA System
Scope of Supply :
 - InTek Hybrid OPC Server
 - . Protocol : Modbus RTU over Data Radio
 - . Template : Keltronics, Vortex, and WSW RTU
 - InTek ESPsView
 - InTek WSWsView
 - InTek TTL-to-RS232 for Keltronics K095/L095
 - MOXA TransIO A53 - RS232 to RS485 Converter
 - SCADA Master PC - Dell
 - Wonderware InTouch - MMI Software
Scope of Services :
 - Survey, Engineering and Functional Design
 - Application development at Wonderware InTouch
 - InTek Software configuration
 - Interface Testing, Staging, and FAT
 - System Start-up and Commissioning
Project Amount (about) : US\$ 50,000.-
Execution Period : January - June 2002

References : Mr. Budi Arief
budiari@ptcpi.com
PT. Caltex Pacific Indonesia
Rumbai SBU, Kota Batak Field



Plus Point / Advantage on the Supplied System

Comparing if the customer is using Wonderware InTouch Modbus DDE Server, InTek OPC Server provide a plus point in-terms of :

- Tags and Screen definition shall be made individually at Wonderware Modbus DDE Server, while with using InTek all tags automatically created once the Well (Keltronics, Vortex, and/or WSW) is defined, and the Well automatically available on the Screen. On InTek software, Well definition could be done less than one minute by standard computer operator, while at Wonderware could be 5 - 60 minutes depend on the expertise.
- All of the define points/tags at Wonderware Modbus DDE Server will be polled on real-time base, while with InTek OPC Server - the user has a flexibility to define real-time, periodic and on-demand poll. On InTek software, the polling time per Well could be below one second while with Wonderware the polling time per Well will be more than one minute (>60 times slower).



- Project Name : **PLN UPD Bali Master SCADA Replacing**
- Industry Area : Electrical Distribution
- System Classification : SCADA / Distribution Control Center
- Role : Contractor
- Scope of Work : Turn-key System for the SCADA System
- Scope of Supply :
- InTek Hybrid OPC Server
 - . Protocol : KIM-LIPI and IEC 60870-5-101 over Single Channel Data Radio
 - . Template : not required yet at the current stage (will be implemented for Protection Relays)
 - InTek Multimedia Alarm - send alarm to GSM SMS
 - InTek Report - provide daily TM value report with statistic and automatically deliver via e-mail as file attachment (XLS format)
 - Citect 5.4 MMI Software
 - repas AEG U1 RTU (for Distribution and Switching Substation)
 - Linux Firewall (limiting external access to SCADA network)
- Scope of Services :
- KIM-LIPI Protocol investigation and re-build the protocol Documentation based-on the investigation finding result
 - Develop KIM-LIPI protocol module at InTek OPC Server
 - replace KIM-LIPI Master with Citect 5.4 + InTek OPC Server by re-building all existing RTUs database and all Graphics
 - supply and install new RTUs (repas AEG U1) with IEC 60870-5-101 protocol, include Panel and Data Radio
 - Interface Testing, Staging Test, Start-up and Commissioning.
- Project Amount (about) : US\$ 75,000.- (*multi-stage*)
- Execution Period : January - October 2002 (*multi-stage*)
- References : Mr. Edwin Nugraha Putra
Edwin_upd@plnbali.co.id
PT. PLN (Persero) Unit Bisnis Bali, NTB & NTT
Unit Pengatur Distribusi Bali

Plus Point / Advantage on the Supplied System

Comparing when the customer use KIM-LIPI Master, currently PLN got the real-benefit of "open system" platform, where the have no dependency to just purchase KIM-LIPI (Micromint) RTU anymore.

Also, with the InTek OPC DataScope and Communication Statistic that include in the InTek OPC Server, currently PLN more easy to maintain their SCADA system as well to find and define whether the problem at Master SCADA computer/software, at the Radio, or at the RTU, which in the past very difficult to determine.

Now, PLN Bali Master SCADA is free to be interfaced with any Remote Devices, either it via a dedicated channel per protocol or through a same channel running multi protocol.

They plan now to connect the system to Nu-Lec Recloser, ION 7700 Power Monitor, ABB SPA series Protection Relay, and Siemens Siprotec.



- Project Name : **IBT SCADA re-tuning and ladder modification**
- Industry Area : Bulk Terminal
- System Classification : Terminal Automation
- Role : Automation Services Provider
- Scope of Work : Expertise Services
- Scope of Services : - Design Document, Program, Install, and Commission all DirectLogic Koyo PLCs, Citect Software, Drawing, etc. for Magnets B1 and B11 monitoring system
- Find, modify and fix all problems exist on their Citect :
a. Fix Loss Communication (sometimes) between Control/MMI to Bargewharf and Wharf PLC
b. Fix Gap in Graphic Trend Pages
c. Fix Slow Responding while open the new page
d. Fix Problem in General page on Outloading and Recirculation
e. Fix Animation of Tripper Display not Correctly
f. Fix a few position led status
g. Alarm or POP Up Message if Power Capacity is not Enough
h. Daily Alarm List and Plant Running Hour through e-mail
- Project Amount (about) : US\$ 8,400.-
- Execution Period : May 2002
- References : Mr. Greg Morphet
greg@ibt.co.id
PT. Indonesia Bulk Terminal
Pulau Laut, Kalimantan Selatan

Plus Point / Advantage on the Supplied System

The existing Citect MMI Software as well as DirectLogic PLCs at IBT's plant was supplied by Australian company (system integrator), and before they found Integra as the local Indonesian company that capable to perform the job, they always only rely to that system integrator - and in fact, there is several problem that exist in their Citect that even not be finished by that Australian System Integrator during their last commissioning.

Now, IBT could have an alternate system integrator that could provide faster response (because we are local company and just need about half day to reach IBT's remote plant), as well as IBT got a very competitive automation integrator services rate (as for the above services work they could get 2 - 3 times charge if they are use services from an Australian system integrator).



OUTSOURCING PROJECTS

PT. Indokomas Buana Perkasa

- Commissioning for TotalFinaELF Tunu Field PA/GA and CCTV System

PT. Sarana Alam Semesta

- Engineer support/assistance for Control System and Data Telecommunication bid preparation document

PT. Asia Karsa Indah

- Engineers support for Maintenance of Caltex Balam/Bangko Control System
- Engineers support for Maintenance Master SCADA of PLN UPB Palembang
- Engineers support for Interface of Siemens Cerberus Fire Alarm/Detection system to a Web-based system using Cerberus Cerban protocol at Caltex Warehouse
- Engineers support for Installation and Commissioning of Kodeco SCADA system