Your IED Smarter Than You Think
Not just another Source Code Library - But a complete IEC 61850 solution.

IEC 61850 Program for Performance Critical Applications

GAS (GOOSE Accelerator System) is a high performance UNIX/Linux program that lets you instantly host the IEC 61850 GOOSE and MMS communications protocols along with a super-fast event based Logic Engine that will accelerate performance of your logic, achieving respond times well below the levels set by the standards.

What can I do with GAS

- Develop new IEC 61850 Products
- Provide IEC 61850 to Existing Product Portfolio
- Develop custom Test Applications & Programs

What Apps Run GAS?

- HMI's, Gateways and Data Concentrators
- Controllers providing: System Tripping, Blocking, Interlocking, Auto-Reclosing...

How Do You Benefit from GAS?

1. Performance
   10x Faster than what you expect

2. Time To Market
   Instant Integration. Ready For Use.

3. Cost Savings
   Resource & Hour Reductions.

Your Starting Point is a Working Solution

4. Risk Free
   No System Development Needed.

5. Simple to Use
   Easy to follow XML Interfaces.

6. Working Examples
   No Unknowns. Follow the Samples.

GAS Features

- GOOSE Publisher
- GOOSE Subscriber
- IEC 61850 MMS Client
- IEC 61850 MMS Server*
- Real-Time Database
- Advanced Ethernet scanning module (GEP)
- Event Driven Logic Engine
- Built in Function Modules
- External (Custom) Program Module slots
- Data Presentation Module
- PTP Time Synch Support
- PRP & HSR Redundancy (with IRBx)

GAS Logic Engine

GAS Logic Engine is based on internal registers to which all Input & Output variables, built in and custom functions are mapped. By default, GAS offers 1024 registers, this number is easily extendable to fit your needs.

Any change in the register (event) will be detected, causing corresponding registers to be updated. The update will reflect as a new function call, an update of GOOSE dataset values, or a publishing of a new GOOSE message.

- Arithmetic: ADD, SUB, DIV, MUL, MOD
- Numeric: ABS, SQRT, LN, LOG, EXT, EXPT
- Bitwise: AND, OR, XOR, NOT...
- Bit shift: SHL, SHR, ROL, ROR
- Triggers: F_TRIG, R_TRIG
- Timers: TON, TOF, custom timers
- Comparison: EQ, GE, GT, LE, LT, NE
- Write your own functions or Integrate existing ones

GAS Package

- IEC 61850 Source Code Library (ANSI C)
- GAS Framework
- MS Visual Studio 2012 Sample Project (Client implementation / C# source code)

HW/OS Platforms

- Linux/Unix, Android
- RTOS/Embedded
- Intel, Arm

GEP - Get Ethernet Packet

Superior Ethernet Scanning Library

GEP is our own library designed to manage raw Ethernet packets captured on Linux network interfaces. GEP provides a generic UNIX file socket descriptor to user applications, giving user full control of the execution flow. GEP allows user to be notified by Kernel in an asynchronous (non-blocking) way.

As a result, user program is always in control of its execution - an approach that is more suitable for time critical operations