



SMART ProGate Protocol Converter (Autonomic Real Time Multiprotocol Gateway)

SCADA protocols are designed to be very compact. Different devices may support different proprietary and standard protocols. With the increase in difficulty in interconnecting two devices or two networks, supporting various standard and proprietary protocols is a main concern to achieve interoperability in SCADA systems for power sector.

To overcome this concern, a gateway is required to convert from one type of protocol to other. **SMART ProGate** Protocol convertor achieves interoperability by converting standard or proprietary protocol of a device or network to a suitable standard protocol for other device or network. It includes an agent based monitoring and diagnostic tool to continuously monitor the communication port of the devices and does self healing in case of port failures.

Protocol Converter

- IEC 60870-5 101 to IEC 60870-5 104
- Proprietary Protocol (SINAUT -8FW PCM) to IEC 60870-5 101(Serial)
- Proprietary Protocol (SINAUT -8FW PCM) to IEC 60870-5 104(Ethernet)

Protocol Support

- IEC 60870-5 101
- IEC 60870-5 104
- SINAUT 8FW –PCM
- DNP3.0
- Modbus

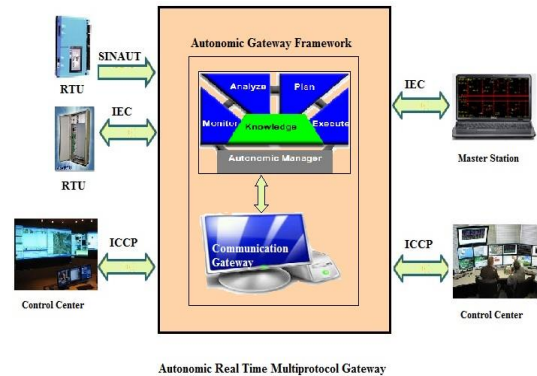


Figure. Architecture of SMART ProGate

Technical Specification

- Operating System: RHEL ver 5.5
- Database: MySQL 5.5
- Web Server: Tomcat Apache
- Conversion Latency: < 20 ms
- Communication Interface: RS232, IPv4 or IPv6.

Diagnostic Tool

- Using the C-DAC Multi Agent Framework (C-MAF) the software framework act as a diagnostic tool which will continuously monitor the communication port of the devices.

Unique Features

- Self healing from logical port failure using agent technology.

Tools & Technologies

NetBeans, C, Java, JSP and Servlet



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