

INTRODUCTION TO KALKITECH OFFERINGS

Kalkitech is a technology based company providing products, services and solutions in the integrated domains of Control, Communications and Computing for energy industry. We enable the industry to achieve seamless connection of their field, automation and enterprise systems on standards based protocols & interfaces and optimize their operational systems at the field, automation, advanced control, monitoring and enterprise level.

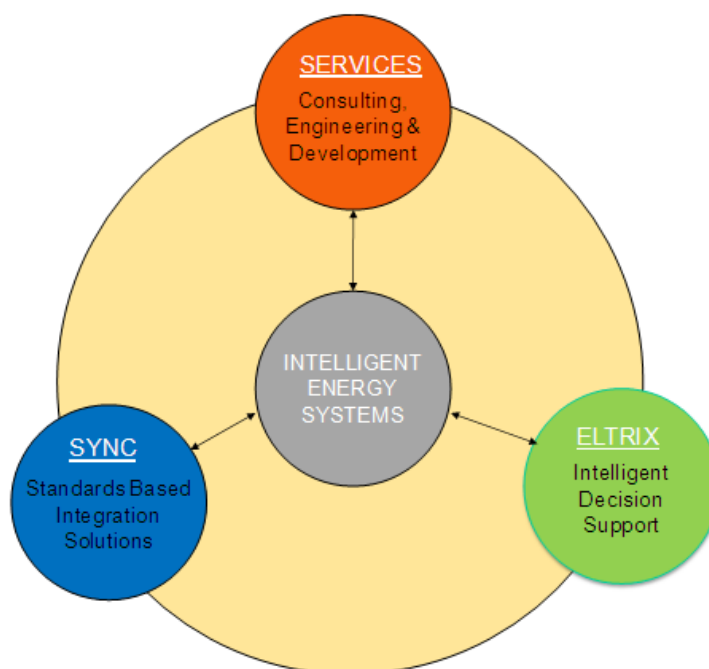


Figure 1: Kalkitech Offerings

KALKITECH SYNC

Kalkitech SYNC consists of a suite of products that provide field-to-enterprise communication enablers for the energy sector, based on Kalkitech's policy of promoting open standards and standards based solutions. SYNC enables seamless and secure communication aiding interoperability in Power Generation, Transmission and Distribution. SYNC solutions have been widely used across the globe in T&D Automation, Substation monitoring and control, Metering / AMI etc. for nearly a decade and are positioned to facilitate the Smart Grid of the future.

Apart from field level protocol converters & gateways, we also do have data center level data acquisition systems as AMR/AMI/AMM systems, Phasor data concentrators, etc as well as other enterprise level connectivity solutions. Kalkitech also possesses configuration and engineering tools like SCL Manager that helps in substation automation without even being experts in IEC61850. Kalkitech's simulation and testing tool, DLMS Explorer, a windows DLMS Client Test Tool & OPC Data access V3.0 Server interface, encapsulates a full-fledged DLMS/COSEM Client driver, with multi-channel and multi-device capabilities. We also provide clients with ANSI C Source Code Libraries that enable product developers and integrators to easily support power system and smart grid protocols to their products and applications seamlessly. Kalkitech licenses DLMS COSEM and ANSI C Metering protocols directly, as well as IEC 61850, IEC 60870-5-10X and DNP3 Protocol Libraries through partners.

The figure below depicts all communication solutions under the SYNC product hierarchy.

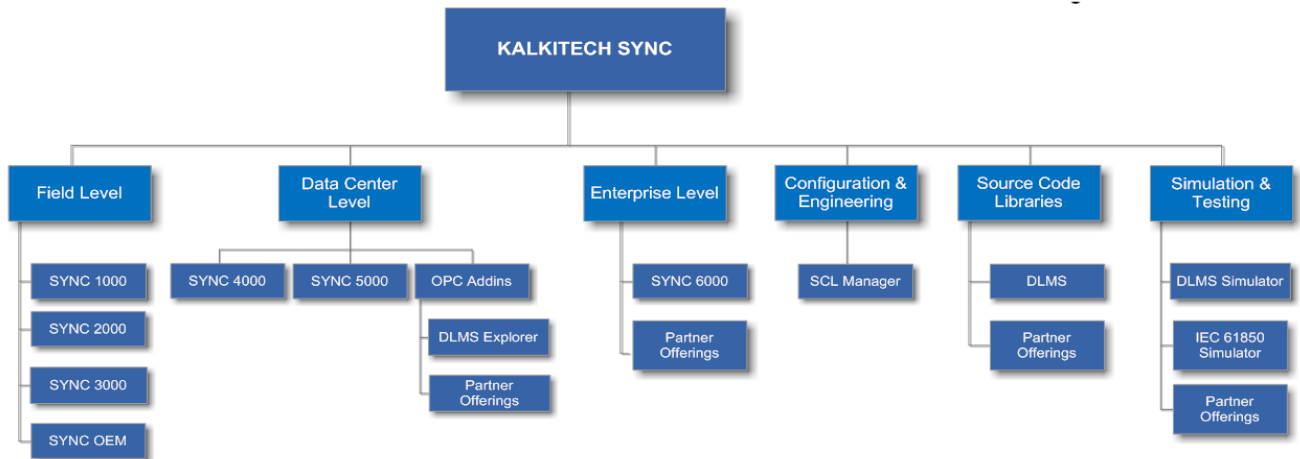


Figure 2: Kalkitech SYNC Product Hierarchy

KALKITECH ELTRIX

Kalkitech’s commitment towards supporting its customers in building an optimized grid resulted in developing a number of Energy Optimization solutions, including a mix of products and services which combine power & energy domain expertise with the optimization technology know how. Kalkitech’s Optimization solutions are built around its own products, as well as products from third parties. While combined with its communication solutions both solutions complement each other in terms of building a smart and intelligent grid.

ELTRIX Energy Optimization platform is a one of the core offerings from Kalkitech under the umbrella of offerings from its optimization vertical .ELTRIX enables overall sustenance of an energy eco system through optimal decisions within regulatory, environmental and reliability constraints. ELTRIX delivers to the need for intelligent and open decision support systems to guide the system and its stake holders across various decision scenarios so that the decision is optimal; the models are open and transformable to new scenarios, and all decisions can be well connected resulting in meeting the end goals and objectives of utility or consumer.

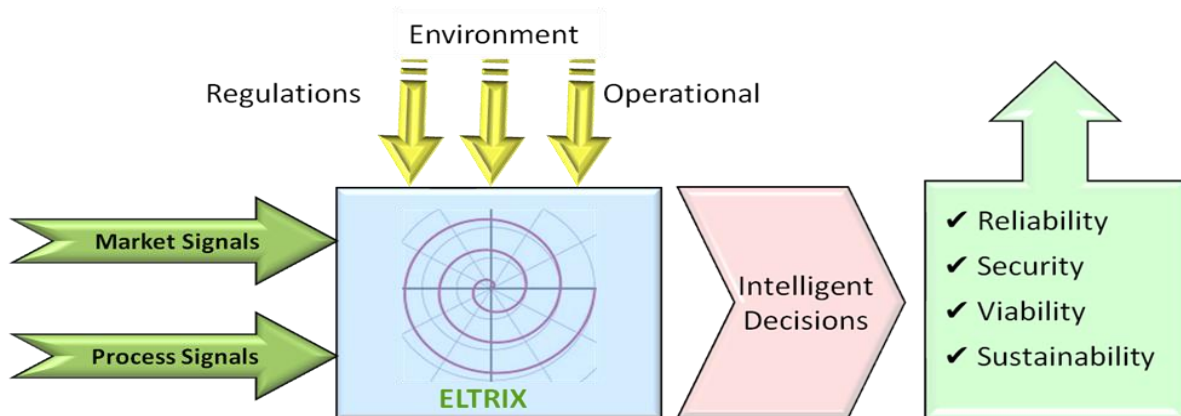


Figure 3: Kalkitech ELTRIX Overview

KALKITECH SERVICES

Kalkitech Services consists of Consulting Services, Engineering Services, Integration Services and Software Services. Kalkitech has extensive reference base and experience in working with the Energy and Utilities OEM's, System Integrators and end customers globally. Kalkitech Consulting Services are aimed at enabling OEM's and Utilities to be able to be technologically updated and adapt easily to the emerging scenario. The Consulting Services encompass a range of services that help the OEM's and Utilities to succeed in these challenging times. Kalkitech's Engineering Services is customized to meet the growing engineering services and project requirements for the Energy and Utilities Industry. Kalkitech's engineering services offering are fine-tuned towards providing OEM's, System Integrators and thereby end customers with engineering, programming and project management capabilities for their automation requirements. Integration services of Kalkitech encompass full product engineering services for customer OEMs, from providing individual product enhancements like protocol additions, platform upgrades etc to full life-cycle management including roadmap design to support. Our customers have realized value from our integration services leveraging on Kalkitech's rich domain knowledge, history of protocol implementations and involvement in standards bodies related to the Energy and Power domain. Software Service group of Kalkitech offers wide range of application development, reengineering and product development.

<u>Consulting Services</u> <ul style="list-style-type: none">● Distribution SCADA● High Voltage SCADA● Power System Studies● Protocol Consulting & Training	<u>Integration Services</u> <ul style="list-style-type: none">● HW/SW Interface Development● Protocol Implementation● Custom Integration Solutions● Driver Development
<u>Engineering Services</u> <ul style="list-style-type: none">● Substation Automation● Industrial PEMS● SCADA Engineering	<u>Software Services</u> <ul style="list-style-type: none">● Enterprise Integration Solutions● MIS Solutions● Engineering Software● Customized EMS Modules

Figure 4: Kalkitech Services Overview