



SUNGARD ALIGNE ADVANCED INTEGRATION FRAMEWORK

Integrated energy
transaction solutions.
Data | Understanding |
Action

Advanced Integration Framework

Integrating applications and information for energy business intelligence

In the constantly changing energy industry, participants encounter new challenges almost daily. To meet those challenges requires an ability to make fast, informed reactions needed to stay profitable or to anticipate changes that can help optimize the use of resources and maximize profit.

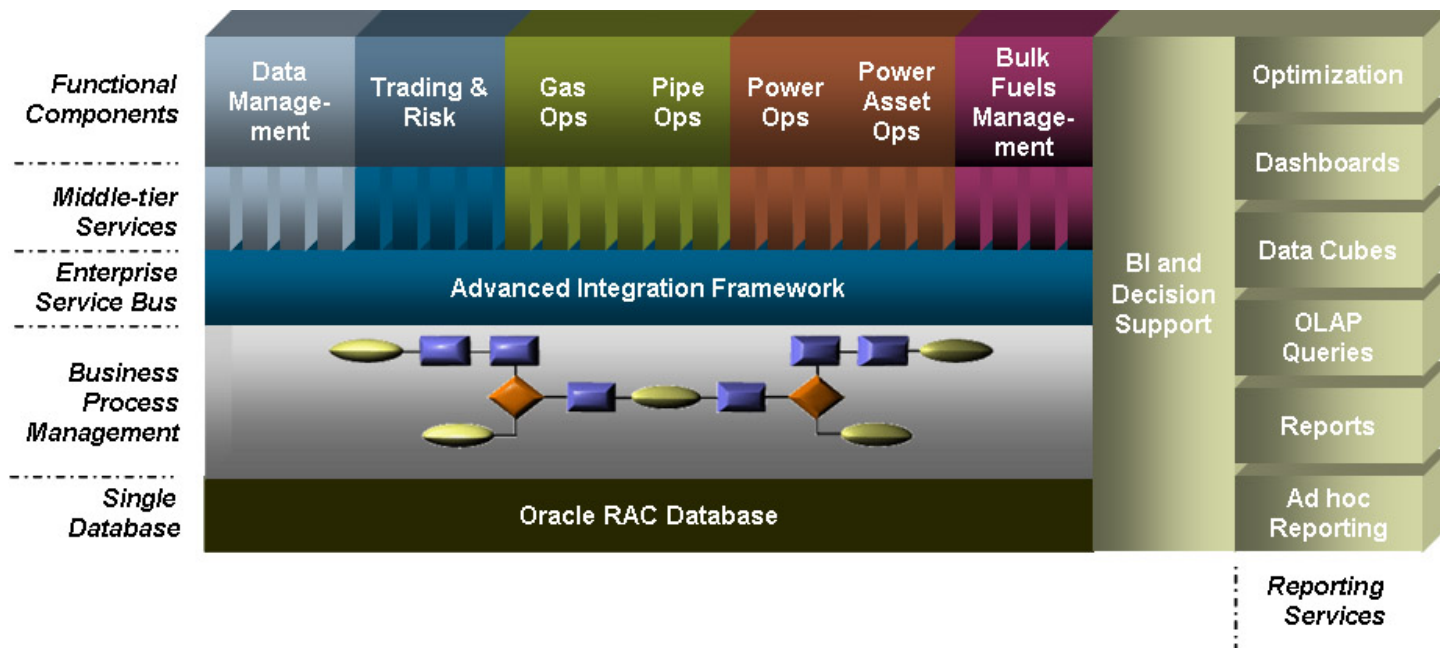
Achieving this requires good market intelligence stemming from the aggregation of information from a variety of sources across an ecosystem of energy suppliers and consumers. From pre-trade analysis through deal transaction management, clearing and settlement, scheduling inventory, logistics, and billing, success depends on the sharing of information between and across processes.

Different groups are responsible for these processes and the systems to support them are also different. Bringing together the resulting islands of information for an overall business view can mean considerable resource spent on integration, data consolidation, and reconciliation.

Integration and Modularity for Flexibility

The advanced integration framework from SunGard enables a fully-integrated solution to help streamline your processes for trading, risk management, scheduling, accounting, and reporting. The framework allows modular applications to work together to provide a customized solution to meet the unique needs of your company. This modular approach provides the flexibility you need to manage your business processes now and expand when necessary.

As the diagram below shows, the advanced integration framework is comprised of 4 major components: an Enterprise Service Bus (ESB), a common data model for energy, shared services, and a reference data database. Additionally, the framework provides the environment for a domain data mart and "adapters" for integrating applications on the framework.



Built using open standards, the framework provides standard interfaces to enable customers to easily integrate other systems to it, whether purchased from a third party or built internally.

Advanced Integration Framework Components

Enterprise Service Bus

The ESB provides message transportation and shared services which include:

- Data transformation services to convert data from one source format and values to or from the common definition
- Message logging that may be monitored by framework provided monitoring tools or another monitoring tool already in use may be used to look at the messages
- Monitoring of the messages with alerts (such as an e-mail)
- Java™ Messaging Service (JMS)
- Orchestration of business process definitions and process logic
- Encryption services
- Administrative services with a console for configuration and settings of the framework itself

Common Data Model for Energy

Much of the time needed to integrate systems is in the definition and documentation of the data the systems must exchange. SunGard's advanced integration framework provides a common data definition for energy transactions used to integrate SunGard's energy solutions. External systems can also use SunGard's common data model for energy to exchange data. Reducing time spent on integration means more time for real business needs. SunGard's common data model for energy supports reusable interfaces for introducing new applications into the overall systems environment. Adapters between the common data model and the applications also help users to maintain and upgrade integration components without disturbing all the other touching systems.

Reference Data Database

Having a single source of information about common business aspects can ensure that common data does not differ from one set of applications to another. Shared through the advanced integration framework, the reference data database contains non-transactional energy data elements that are common to many systems, such as Counterparties, Contracts, and Delivery Locations. SunGard point solutions will begin to store and use the data in the reference database.

Advanced Integration Framework: Meeting the Integration Challenge

Change in the energy industry is one constant and adapting to change an ongoing challenge. It takes ready access to an aggregate view of the business's information to move quickly and make effective decisions. The advanced integration framework provides a foundation for integrating the business processes and information needed to meet these energy industry challenges.

Energy Framework: Meeting the Integration Challenge

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ABOUT SUNGARD ENERGY SOLUTIONS

SunGard's energy solutions help energy companies, industrials and financial services, to efficiently compete in global energy markets by streamlining and integrating the trading, risk management and operations of physical commodities and their associated financial instruments. These solutions provide front to back-office support for capturing deals, delivering market data for valuation, clearing and reconciliation of transactions, invoicing and accounting for transactions, analysis and management of risk, and physical transmission or delivery of commodities. SunGard Energy Solutions also support the logistics and inventory of fuels used in producing power and industrial products.

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