

Sunopsis Active Integration Platform - Unifying Integration

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Abstract:

Integrating data and applications throughout the enterprise, and presenting a unified view of these, is a complex proposition. Not only are there broad disparities in data structures and application functionality, but there are also fundamental differences in integration architectures. Some integration needs are Data Oriented, especially those involving large data volumes. Other integration projects lend themselves to an Event Oriented Architecture (EOA) or a Service Oriented Architecture (SOA), for asynchronous or synchronous integration.

Traditionally, many organizations have been addressing these diverse needs with a broad palette of tools and technologies, resulting in disjointed integration projects – with no leverage or unity between them.

The Active Integration Platform is the only integration platform that unifies data-, event- and service-based integration with a single user interface and a common business rules driven approach. The Active Integration Platform enables the enterprise to present a single view of its Information Systems, with a unified access model.

The Active Integration Platform is built around a persistent data and event database – the Active Integration Hub – which essentially captures the superset of all data and business events contained in all systems linked by the Active Integration Platform. Since the Active Integration Hub always represents a stable state of the integrated applications, it can also be viewed as an integrated representation of the Information System and accessed as such.

A best of breed data integration solution, Data Conductor can be used standalone for data driven integration needs such as ETL. When associated with the other components of the Active Integration Platform, Event Conductor and Service Conductor, Data Conductor provides the data oriented integration mechanisms for the overall integration framework. Entirely business-rules-driven, Data Conductor provides the best performance and productivity, for development and execution alike.

Through its Event Conductor module, the Active Integration Platform automatically implements Changed Data Capture (CDC) in the applications that create events. This CDC capability captures all changes to data, including insertions, deletions and updates. Data Interfaces then transform this data to the Common Format and publish these changes to the Active Integration Hub, where data is controlled and consolidated in the common database. In turn, changes to the Active Integration Hub are pushed to subscriber applications which are consumers of events, after transformation from the Common Format to the applications' native formats. All data, regardless of volume, is processed and transformed by the RDBMS engines that constitute the information system and the Active Integration Hub. Optionally, Sunopsis MQ provides for event propagation in low-reliability network environments.

Through its Service Conductor module, the Active Integration Platform provides access to data through Web Services that are automatically generated from the defined business rules. A development environment is made available to the user to customise the generated services. The Active Integration Platform provides on-demand access to data through a standardised interface. Integration through services is typically used to provide a new user interface flow, based on Web technologies, or to facilitate exchanges of information with business partners over the Internet.