



Salesforce Communications Industry Framework

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EXECUTIVE SUMMARY

Integrated business support systems (BSS) in industries such as telecommunications tend to be extremely complex, antiquated, and an impediment to innovation. Enterprises looking to increase agility in their business processes and innovations are deploying Salesforce, as the leading customer relationship management (CRM) platform. Salesforce, in addition to serving as the agile, interface to business support systems, offers customers a vast partner ecosystem, delivering many pre-built integration components and business applications. Salesforce recognizes that applying modern, standardized, and cloud-based design principles to industry-specific business processes would significantly simplify BSS architectures and integrations, thereby accelerating innovations and business agility. To that end, Salesforce intends to introduce a common integration approach for partners and customers to standardize information sharing, business process management, and integrations with not only the Salesforce platform, but also with any application in an integrated Salesforce ecosystem. Salesforce intends to deliver in the short term a technical specification for a common information model that partners and customers may use in planning their integrations approaches. Salesforce will leverage the TM Forum Framework in defining the common architecture model. Framework is a comprehensive set of standards and best practices for the communications and media industries, addressing a shared data model, business operations, business processes, and integrations. The release of the technical specifications for a common information model will be followed by an integration governance model that Salesforce will support and manage in the long term to ensure that collaboration between Salesforce, partners, and customers channel contributions into the evolution of the common integration model.

COMMUNICATIONS INDUSTRY CHALLENGES

Communications and media enterprises are burdened with extremely complex BSS deployments. The rapid evolution of technology, competitive pressures, adoption of smart devices, and the rise in data usage have compelled these enterprises to extend existing on-premise architectures through expensive and complex integrations. Rigid and silo'd BSS stacks are quite commonly used in the communications and media industries to deliver a variety of services. The fragmented nature of the BSS infrastructure is a key reason why most service providers do not have a single view of their customers. A single customer, subscribing to different services, mobile and broadband, for example, are often treated as two different customers by the service provider. The same customer furthermore is guided to separate sales and customer care channels. The result is not only poor customer experience, and thus increased risk of churn, but also the loss opportunity in maximizing the revenue opportunities with the customer.

Salesforce is typically deployed as a single interface to many integrated business support systems in to deliver a seamless customer experience. Some ISVs leverage pre-existing integration components; others will develop ground-up integrations. Regardless of how efficient the individual integrations may be, the final deployment includes a variety of data models and disparate integration spokes that are difficult for customers to maintain and evolve. The complexity grows exponentially when considering that many enterprises, as is the case in the communications industry for example, have multiple applications in the same business domain. Tier-1 and tier-2 communication service providers, for example, have deployed multiple product catalogs, CPQ, billing and even multiple financial management applications as a result of industry consolidation or acquisitions. An application such as billing for example, is not just deployed as separate instances within a given communications service provider environment, but actually deployed in silos as separate applications provided by different ISVs. The implication here is that the integration complexity in the non-standard model approaches a certain level of unmanageability when dealing with multiple Salesforce-billing, Salesforce-CPQ, or Salesforce-inventory integration packages data models.

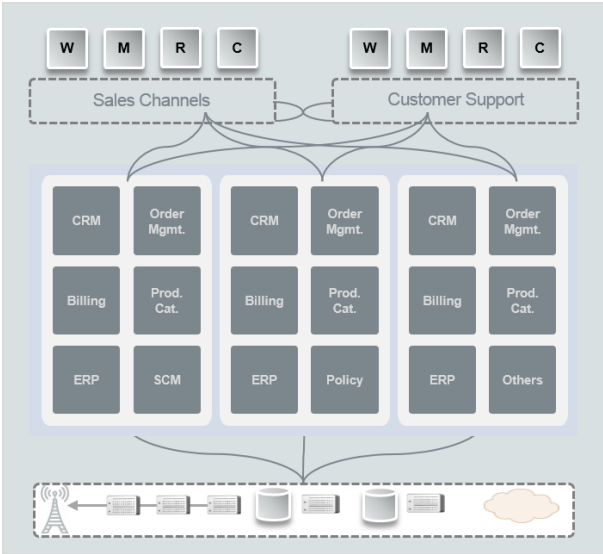


Figure 1. Common business and operations support ecosystem deployment within a communications enterprise

Salesforce has the largest partners ecosystem among enterprise software vendors. Salesforce partners provide a large array of pre-built integration components. These, however, do not follow a common set of standards beyond the Salesforce APIs and there is currently no governance model to guide the alignment of all integration approaches and data models. Partners use the Salesforce APIs and toolkits in developing their integration with the Salesforce platform, but the use of any standards and data models are specific to each individual partner. Industry-specific customizations of the various productized integration components complicate matters even more when handling upgrades, data migration, and implementing new innovations.

The wide array of available integration packages, approaches, and delivery strategies has caused some level of customer confusion in the marketplace. This is particularly evident within Salesforce industries. Customers are burdened with making purchasing decisions with focus on interoperability between Salesforce ISV partners. This erodes a key value proposition of the Salesforce partnership model, which is that customers may rely upon Salesforce and its partner ecosystem for seamless interoperability and robust integrations.

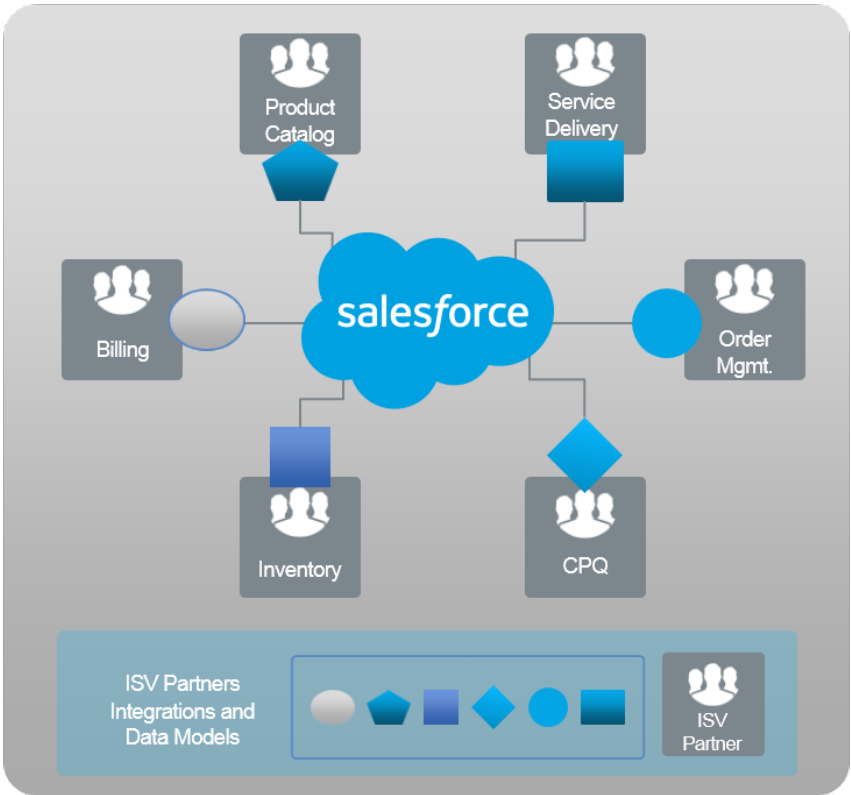


Figure 2. Typical integration between Salesforce and partner applications

SOLUTION: DESIGNING BSS FOR THE CLOUD

A Salesforce communications industry framework approach is required to standardize integrations

with the Salesforce platform. The Salesforce communications industry framework includes support for different integration approaches (e.g., subscribe-publish, one-way push model, or event-triggered), best practices, and a shared data model, which would serve as the foundation of the architecture. Salesforce will develop and evolve the Salesforce communications industry framework governance model, which Salesforce would support and maintain on on-going basis. This approach would enable ISV partners to focus on their core competencies and innovations rather than on infrastructure. The standards-based approach would also enable new ISV partners – particularly those who may not yet have a pre-existing Salesforce managed package, for example – to join a deployment ecosystem much more readily.

Salesforce intends to leverage existing and widely aligned to standards frameworks in developing the Salesforce communications industry framework. The standardization of the Salesforce communications industry framework will commence with alignment to the TM Forum Framework, a standards framework covering business processes, operations, a shared information model, and integration best practices. Other standards frameworks will be considered and may be adopted when appropriate. Salesforce delivers the communications industry framework in of level-1 technical specifications for canonical data model and integration architecture. Salesforce had sought input from partners as well as customers to ensure the technical specifications are not only comprehensive, but also meet specific business requirements for all parties. Collaboration with partners and customers on the Salesforce communications industry framework will be incorporated into the Salesforce product management process.

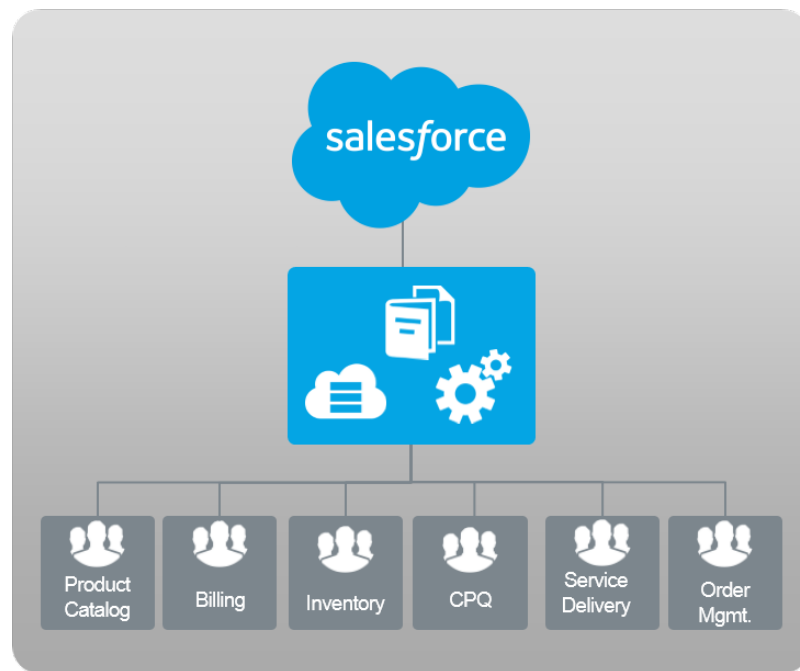


Figure 3. A conceptual integrated ecosystem based on Salesforce communications industry framework

The deliverables for the Salesforce communications industry framework includes specifications for governance model, including participation and contribution from customers, partners and standards bodies. The industries integration governance model includes review of and recommendations on integration approaches, technical services, data model evolution, toolkits, API support, and best practices. The intention is for all data in the Salesforce domain to be shared with partner applications

using a common set of definitions. The Salesforce communications industry framework will provide a number of business-oriented services such as data validation, transformation, and support for multiple integration as well as migration approaches.

TM FORUM FRAMEWORX

The TM Forum Framework is a suite of best practices and standards designed to enable a service-oriented, highly automated and efficient approach to business operations. Key features of Framework are:

Business Process Framework: also referred to as the Enhanced Telecommunications Operational Map (eTOM), it is a business process architecture that identifies and organizes the functions that an enterprise performs on an on-going basis. It serves as a blueprint of processes that the business performs to achieve its goals and objectives. The eTOM establishes a common language to describe the functions and processes of the business in a consistent way.

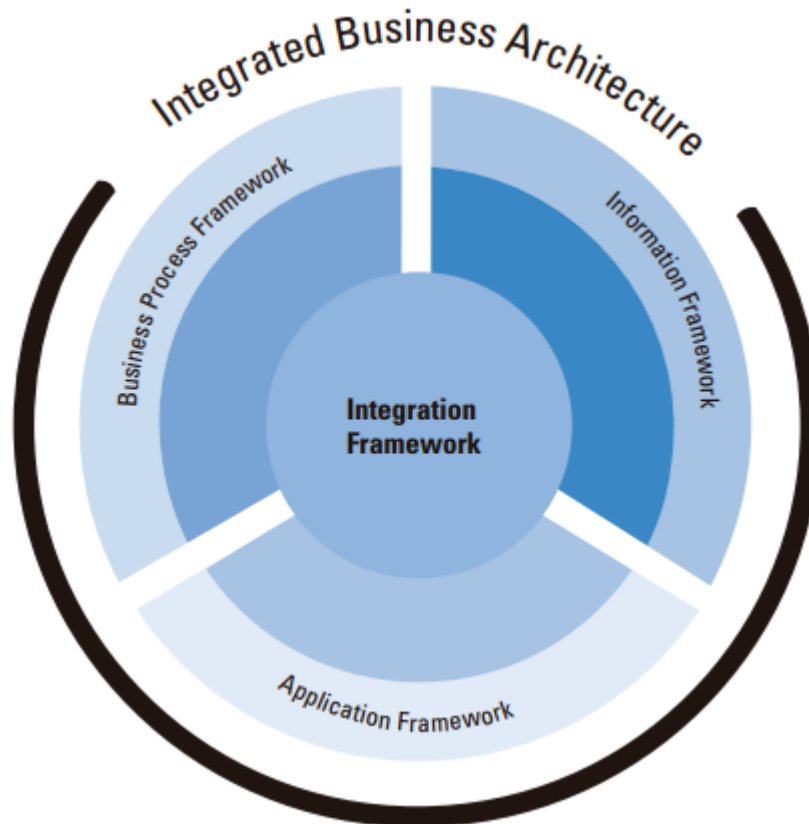


Figure 4. TM Forum Framework

Application Framework: also referred to as the Telecommunications Applications Map (TAM), it defines the applications that represent collections of closely related business functions and information comprising application services and functions. It enables enterprises to deploy modular yet seamlessly integrated sets of applications.

Integration Framework: formerly known as the Technology Neutral Architecture (TNA), it defines how to use Framework to design, architect and implement an enterprise. It provides direction on how operational processes can be automated by utilizing standardized information definitions from the Information Framework to define standardized, reusable Service Oriented Architecture (SOA)-based Business Services. The Integration Framework also provides an automated means to create standardized interfaces and use these interfaces to integrate applications within the enterprise and with partners.

Information Framework: also referred to as the Shared Informational and Data model (SID), it provides a common information architecture and nomenclature. It does so in the form of a comprehensive model of information/data definitions, relationships, and patterns that describe the information assets enterprises manage. The SID describes information from a business perspective. The model is therefore independent of both technology and implementation. This feature allows SID to serve as an information blueprint that can be used across businesses and is specifically intended to be extensible, specialized, and evolved into specific implementations that meet specific industry requirements. The organization and content of SID are based on comprehensive modeling of both business information (data) and business processes across many enterprises and thus, is well suited as basis for a superset cross-industry canonical data modeling.

SALESFORCE COMMUNICATIONS INDUSTRY FRAMEWORK DELIVERABLES

Salesforce has published technical specifications in multiple phases for partner application integrations. The first deliverable was level-1 technical specification focusing on key features of a common data model, aligned with the TM Forum Framework Shared Information Data model. The level-1 specification proposes a common data model and appropriate extensions by partners to their Salesforce managed package to support the Order-to-Cash-to-Care business process for the communications industry. Specifically, the level-1 technical specification defines extensions to the Account, Product, and Order business objects. Subsequent levels of the technical specifications include implementation details as well as further extensions to ensure key communications front-office business processes are supported toward delivering customer experience excellence. Proposal drafts of all technical specifications has been reviewed and validated with partners before publication. Salesforce anticipates that through a collaborative process before and throughout the publication of the technical specification for Salesforce communications industry framework, partners and customers are enabled to plan current and future integrations around a common and standards-based model.

Salesforce has introduced an integration governance model. Collaboration with ISV partners and customers have been a key component of the Salesforce communications industry framework

governance model. Partners and customers will have opportunities to influence the direction of the Salesforce communications industry framework. Salesforce will adopt a cadence of engagements with customers and partners to ensure alignment in supporting industry-specific business requirements.

CONCLUSION

Salesforce is widely deployed across many industries integrated with a variety of partner systems to ensure the end-to-end fulfillment of many business processes designed to deliver products and services to customers. Salesforce has significantly increased the value of its partner ecosystems to customers by introducing a Salesforce communications industry framework. Partners and customers will be able to leverage the Salesforce communications industry framework to standardize and simplify not only integrations with the Salesforce platform, but indeed their entire approach to enterprise business support systems integrations and deployments. Salesforce has released a series of technical specifications covering topics from a common data model to business-process-specific implementation patterns. Salesforce has also introduced and will continue supporting in an on-going basis a governance model for the Salesforce communications industry framework. The governance model will include collaboration approaches, fostering exchange of ideas and innovations between Salesforce, partners, and customers. The deliverables are a series technical specification, including input from ISV partners and customers, for a common data model supporting the Order-to-Cash-to-care business processes as well as implementation details and integration patterns.

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