tmforum

Product Conformance Certification Report

Information Framework (SID) v21.0

for

SALESFORCE

EPC / Loyalty Management Data Model Rel. W22

January 31st, 2022

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1   Introduction

1.1   Executive Summary

This document provides details of Salesforce self-assessment and TM Forum's Conformance Assessment of Salesforce products - **Enterprise Product Catalog (EPC) and Loyalty Management Data Model Release Winter 22,** against the following Frameworx 21.0 components:

- Information Framework (SID) version 21.0

The assessment included a review of:

- Conformance to the Information Framework Release 21.0 Domains/Aggregate Business Entities according to the specific ABEs submitted in scope for the Assessment.

    For more information on the Salesforce Enterprise Product Catalog (EPC) and Loyalty Management Data Model Release Winter 22 please contact Anne Meier (anne.meier@salesforce.com)

    For any additional information on this Frameworx Conformance Certification Report, please contact TM Forum at: conformance@tmforum.org.

1.2   About Salesforce

Salesforce is the #1 CRM, bringing companies and customers together in the digital age. With the Customer 360, Salesforce's platform and engagement apps, Salesforce helps break down the technology silos between departments to give companies a complete view of their customer everywhere a customer might interact with their brand. Specifically for communications service providers, Salesforce built Communications Cloud, which inherits all the power of the Salesforce platform as well as industry-specific innovation that's built in alignment with TM Forum industry standards. With Salesforce, operators can transform their customer and employee experiences by accelerating digital channel adoption, reducing product launch cycles, and streamline order capture, fulfillment and delivery. For information, please visit salesforce.com/communicationscloud

2 Product Functionality/Capability Overview

2.1 Product Overview - Salesforce Enterprise Product Catalog (EPC) Release Winter 22

Built on the world's #1 CRM, Enterprise Product Catalog for Communications Cloud enables communications service providers to expedite the launch of new offers, services, and products through a unified catalog. Salesforce Enterprise Product Catalog enables Communications Service Providers to simplify product management and fulfillment across consumers, business customers, and wholesale operations to create streamlined selling and in-life subscription management that improves relevancy, customer engagement, and ARPU.

Release Notes from Winter 22 Release for Communications Cloud Products can be accessed from Salesforce Industries Communications, Media and Energy Winter 22 Release webpage.

2.1.1 Benefits of Salesforce Enterprise Product Catalog (EPC)

Salesforce EPC provides the core components necessary to centralize, configure, integrate, and maintain the product and service portfolio across the enterprise. Salesforce EPC, as a centralized catalog, contains all of the commercial and technical elements you use to define reusable product and service building blocks and resulting offers. Using Salesforce EPC, Communications Service Providers have been able to reap the following benefits:

- **Launch New Offers Faster**: Expedite the launch of offers, products, and services by easily reusing
  existing specifications.
- **Increase Product Lifecycle Agility**: Adapt to every market shift with a unified, intuitive experience
  that makes it simple for product managers to revise and maintain
  existing offers.
- **Coordinate Across Business Functions**: Quickly launch different types of promotions with terms and conditions
  that can combine with marketing campaigns.
- **Unify Your Product Catalog**: Utilize a shared and connected catalog to define products in one place
  and have it automatically represented across Communications Cloud's CPQ, Contract Lifecycle Management, Order Management, and Digital Commerce solutions.
- **Align Industry Standards**: Enterprise Product Catalog's close alignment with TM Forum standards

makes integrating with BSS and OSS elements easier, and reduces deployment time and cost.

- **Track Every Catalog Change**: Improve traceability of catalog changes by user with an embedded
audit trail.
- **Reduce Total Cost of Ownership:** Leverage a cloud-based solution that evolves with your business
and requires less customization and internal resource investment.

2.1.2   Product Capabilities and Architecture

Salesforce EPC provides CSPs with an industry-leading, catalog-driven platform that revolutionizes the CPQ and order management space through the following features:

- Using a metadata-driven approach to accommodate the incarnations of a product as it travels from twinkle in the eyes of customer to physical implementation customer's hands.
- Integrating with CSP's end-to-end ecosystem (BSS/OSS) using a product-service-resource (PSR) model to drive sales, configure-price-quote (Salesforce CPQ) and Salesforce Order-Management capabilities.
- Using an evolutionary approach to transform both front office and back-office systems into a shared catalog-driven architecture.

The following diagram shows how Salesforce Enterprise Product Catalog fits in a CSP's BSS/OSS environment
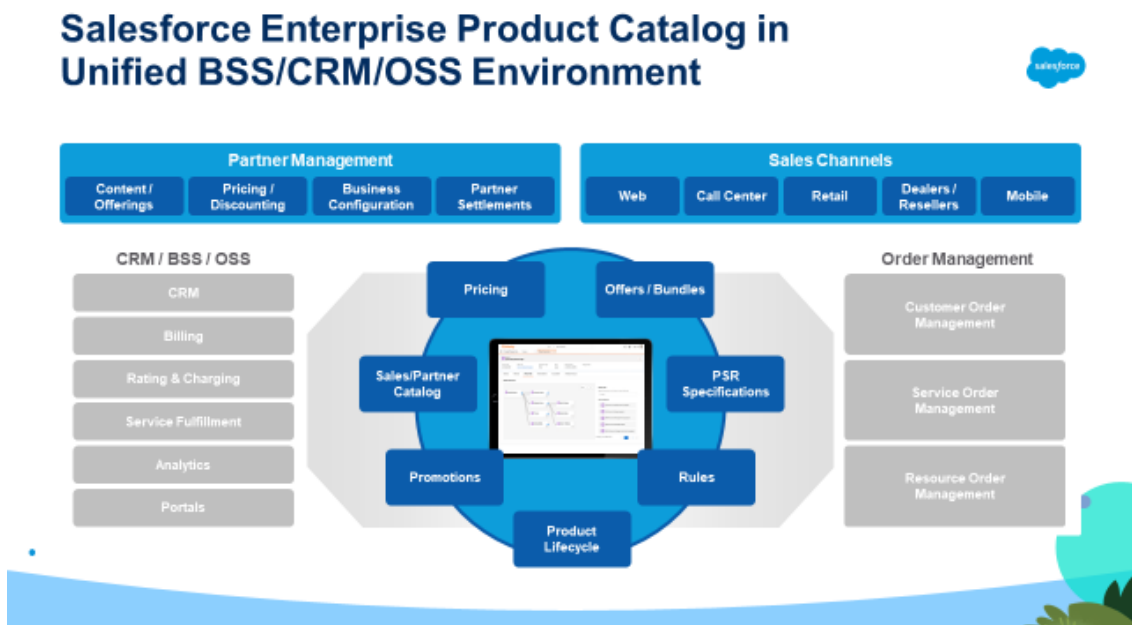
Figure 1: Salesforce Enterprise Product Catalog

Salesforce Enterprise Product Catalog enables CSPs to synchronize the product management process and corresponding data into a single, automated, error-resilient stream through reuse, shared resources and common tools:

- Through an enterprise scope, enables the definition of a single product catalog on one place, with multiple subscribers and systems that consume the product catalog.
- Enables the creation of products once, making them available for reuse across the enterprise by different systems.
- Gives you a unified UI with common tools, enabling your teams to collaboratively and rapidly create, manage, and deliver product offers to the market.
- Once implemented, eliminates data silos and includes both commercial and technical entities in a single model.
- Allows you to import products from other systems. For example, if you want to move from a development to a production environment, you can use DataPacks and document the import process.
- EPC can be leveraged by different types of users, such as product administrators, product managers, system administrators, and developers.

2.2 Product Overview - Salesforce Loyalty Management Release Winter 22

Salesforce Loyalty Management is an end-to-end loyalty platform that empowers businesses to create personalized, connected experiences that grow relationships and increase Customer Lifetime Value. Loyalty Management enables businesses to make the shift from product-centricity to customer-centricity, helping them better engage their partner channels and corporate customers with incentives that improve partner performance and help drive their bottom line. Built on the trusted Salesforce platform, Loyalty Management gives businesses in any industry the flexibility to configure their program to fit their business needs. It also provides partner-centric loyalty programs for B2B market segment. Salesforce Loyalty Management empowers enterprises to make the shift from product-centric to customer-centric, helping them to engage better with their partner channels and corporate customers with incentives that improve partner performance and help drive your bottom line.

Salesforce Loyalty Management enables Communications Service Providers to configure Advanced Loyalty Accrual & Redemption definitions, embed engagement journeys for automation, accrual and redemption - all in a common governance and extensibility platform with a unified catalog built from Commercial and Technical Product catalogs.

2.2.1 Benefits of Salesforce Loyalty Management

Salesforce Loyalty Management provides a flexible, end-to-end platform that can generate a single source of truth to empower CSPs to deliver an integrated loyalty experience. Using Salesforce Loyalty Management, CSPs can accelerate time to value for themselves and the customer, while reaping the following benefits:

1. **Configure Programs to Fit Your Needs:** Whether you are creating a B2B or B2C program, Loyalty Management gives you complete flexibility in designing programs for the Communication & Media industry.

2. **Built on the Trusted Salesforce Platform:** Rest assured that your loyalty platform would be able to scale with your business as your needs change over time.

3. **Manage Your Programs from Beginning to End:** Loyalty Management UI makes it easy to set up programs, tiers, currencies, and benefits with no code.

4. **Get to Market Quickly:** Launch your program faster than a custom build with Salesforce Loyalty Management's underlying infrastructure and a Communication's template, reducing your time to value.

5. **Future-Proof Your Loyalty Program:** With the flexibility of the Salesforce Platform, you can test, learn and iterate to stay ahead of changing consumer demands.

6. **Ensure You're Generating Value for Your Business:** Drive program success by tracking ROI for your program and promotions through real-time and predictive analytics.

7. **Create a Connected Program with an Integration-Ready Platform:** Leverage out-of-the-box integrations to the Salesforce ecosystem and integration-ready APIs to connect Loyalty Management to your tech stack.

8. **Increase Program Stickiness:** Infuse loyalty across the entire customer experience, making customers feel understood and valued across marketing emails, service calls, and frontline staff interactions.

9. **Diversify Benefits, Promotions, and Rewards:** Use Benefits Management to trigger benefits outside of Loyalty Management and leverage your partner network to create a wide range of earn and redemption options.

10. **Unify Customer Data for a 360-Degree Member View:** Get a holistic view of your relationship with your customers through integrations that combine loyalty member data with other customer data.

11. **Deliver Personalization at Scale:** Better target your members with more personalized loyalty engagements that deliver value for members and your business.

12. **Activate Your Members Across the Business:** Leverage Loyalty Management data across your business to better inform operations across sales, service, marketing and front- line staff.

2.2.2   Product Capabilities and Architecture

Salesforce Loyalty Management provides multiple options to an enterprise to establish a Loyalty Program.

- **Rewards**: Defined and track member behaviors, leveraging rules management to rapidly deploy rules for accrual and redemption
- **Benefits:** these are assigned either based on a tier or member's behavior and are added incentives that can be triggered within Loyalty Management (point multiplier for top tier members) or in another system (priority boarding for top tier travelers)
- **Dynamic Promotions:** With Promotions Management, you can create time-based promotions and deliver them to segments either created right in Loyalty
- **Vouchers:** can be discounts and product or service experiences to reward members for eligible behaviors or to surprise and delight. Track redemptions and query vouchers from 3rd party systemsManagement, or by leveraging dynamic segments created in C360A or your CDP
- **Loyalty Analytics:** View rich, actionable insights across program, member and partner through integrated dashboards with access to Tableau CRM for Loyalty Management. Track performance and overall health of the program. CSPs can

optimize program performance with Liability Forecast, improve promotion targeting by transaction locations and map predictions to Salesforce objects.

Salesforce Loyalty Management helps enterprises reimagine their customer loyalty program with a configurable program setup for experiential rewards, benefits and promotions. The Industry templates help enterprises onboard cross-industry program partners that ultimately delivers connected Experiences for the customer in an Integrated Ecosystem. The core solution capabilities and their delivered business values are further explained below:

- **Program Setup & Configuration -** Streamline program management with an intuitive UI, defining tiers, qualifying and non-qualifying currencies and activating a benefits framework. Leverage out-of-the-box processes to manage your program including points' expiry, tier calculations and more. The delivered business values are:
    - o Get to market quickly with and underlying infrastructure, rather than building from the ground up
    - o Manage your program easily and efficiently with clicks, not code through a user-friendly UI

- **Experiential Rewards, Benefits & Promotions -** Configure rewards, benefits, promotions or vouchers based on a member's tier or member behavior. These can be in the form of discounts, bonus points, free products, and most importantly, experiential rewards like exclusive access to an event. The delivered business values are :
    - o Create more engaging programs that go beyond traditional earn & burn and offer members more personalized, experiential incentives
    - o Make your program stickier with multiple options for engaging customers

- **Partner Management -** Onboard cross-industry program partners and manage partner agreement terms including product eligibility for member rewards and redemptions. The delivered business values are :
    - o Make your program stickier with multiple options for engaging customers
    - o Easily manage program partners, and products and services that are eligible on a single platform

- **Connected Experiences with Integrated Ecosystem -** Loyalty Management comes equipped with native Salesforce integrations, but can also integrate to existing business systems through APIs. The delivered business values are :
    - o Fast time to value with native Salesforce integrations
    - o Unified member experience through integrations to other business systems

- **Industry Templates -** templates provide industry-specific reference implementations based on scenarios relevant to that industry, equipped with further configurations based on the industry needs. CSPs can drive subscriber loyalty with personalized and experiential promotions and experience these benefits:

o Faster time to market and time to value with pre-built configurations
o Helps customers visualize various loyalty scenarios they can address in their industry

The following solution diagram shows a high-level overview of Salesforce Loyalty Management and its role in an enterprise.
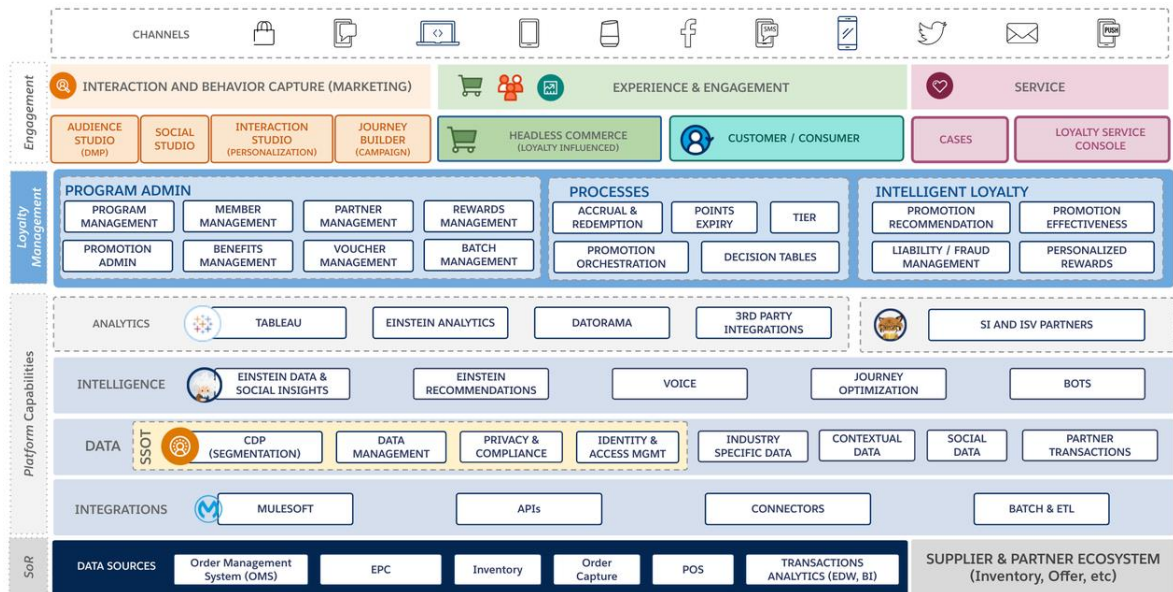

Figure 2: Loyalty Solution Capabilities

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2.3   Supported Installation Models: Salesforce Enterprise Product Catalog (EPC) and Loyalty Management Release Winter 22

Salesforce EPC and Loyalty Management Winter '22 Release, as in all Salesforce products and applications, are available in Salesforce's release notes.

Hyperforce, Salesforce's next-generation infrastructure architecture, is designed to deliver Salesforce services for the all-digital, work-from-anywhere world. Hyperforce scales Salesforce to new geographies on top of public cloud infrastructure to support the growth and success of an enterprise's global customer base. For more information on how to future proof your digital investments with Hyperforce, please refer to the Hyperforce datasheet.

2.4   Product Scope

The table in figure below represents Salesforce EPC / Loyalty Management Data Model Rel.W22 Platform product with mappings to the Information Framework ABEs that were submitted in scope for the Conformance Certification assessment.

Salesforce SID Certification Scope = 18 ABEs				
Level 1 ABEs	*Level 2 ABEs*	*Level 3 ABEs*		*Scope for certification*
Product Domain				
Loyalty ABE	Loyalty Program ABE			X
Loyalty ABE	Loyalty Program Specification ABE			X
Product ABE				X
Product ABE	Network Product ABE			X
Product ABE	Product Price ABE			X
Product Configuration ABE				X
Product Offering ABE				X
Product Offering ABE	Pricing Logic Algorithm ABE			X
Product Offering ABE	Pricing Logic Algorithm ABE	PLA Spec ABE		X
Product Offering ABE	Product Catalog ABE			X
Product Offering ABE	Product Offering Price ABE			X
Product Offering ABE	Product Offering Price Rule ABE			X
Product Offering ABE	Product Placement ABE			X
Product Order ABE				X
Product Party Roles ABE				X
Product Specification ABE				X
Product Specification ABE	Goods and Shipping Product Spec ABE			X
Common Domain				
Catalog ABE				X

Figure 3 Salesforce EPC / Loyalty Management Data Model Rel.W22 mapped to SID ABEs in scope

2.5   Information Framework (SID) Certification Scope

The following figure represents the Information Framework (SID) ABEs that were presented in scope for conformance certification.

SID Information Framework v21.0 – Salesforce EPC / Loyalty Management Data Model Rel. W22– Conformance Footprint
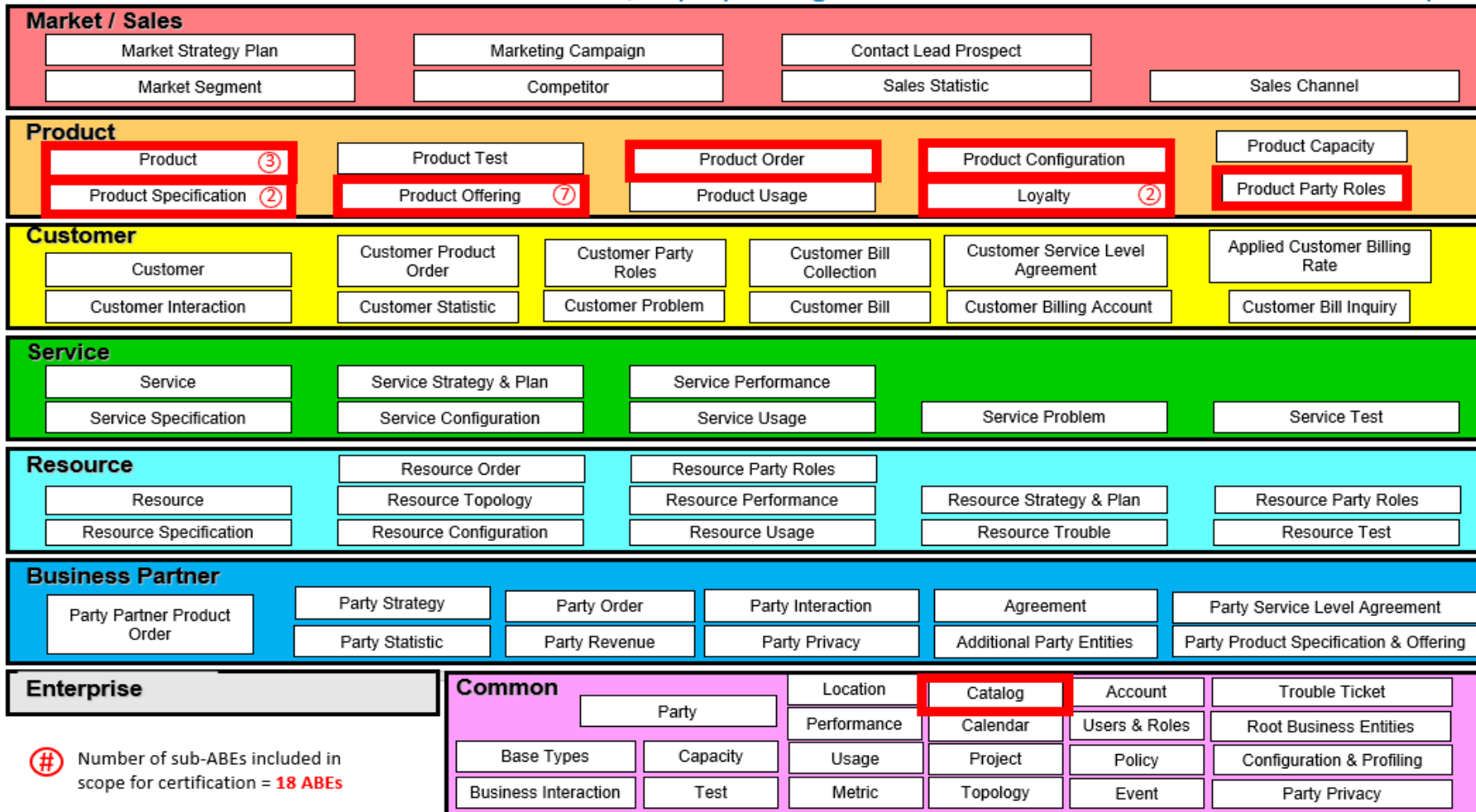
Market / Sales

Market Strategy Plan	Marketing Campaign	Contact Lead Prospect	
Market Segment	Competitor	Sales Statistic	Sales Channel

Product

Product ③	Product Test	Product Order	Product Configuration	Product Capacity
Product Specification ②	Product Offering ⑦	Product Usage	Loyalty ②	Product Party Roles

Customer

Customer	Customer Product Order	Customer Party Roles	Customer Bill Collection	Customer Service Level Agreement	Applied Customer Billing Rate
Customer Interaction	Customer Statistic	Customer Problem	Customer Bill	Customer Billing Account	Customer Bill Inquiry

Service

Service	Service Strategy & Plan	Service Performance		
Service Specification	Service Configuration	Service Usage	Service Problem	Service Test

Resource

	Resource Order	Resource Party Roles		
Resource	Resource Topology	Resource Performance	Resource Strategy & Plan	Resource Party Roles
Resource Specification	Resource Configuration	Resource Usage	Resource Trouble	Resource Test

Business Partner

Party Partner Product Order	Party Strategy	Party Order	Party Interaction	Agreement	Party Service Level Agreement
	Party Statistic	Party Revenue	Party Privacy	Additional Party Entities	Party Product Specification & Offering

Enterprise

Ⓡ Number of sub-ABEs included in scope for certification = **18 ABEs**

Common

Party		Location	Catalog	Account	Trouble Ticket
		Performance	Calendar	Users & Roles	Root Business Entities
Base Types	Capacity	Usage	Project	Policy	Configuration & Profiling
Business Interaction	Test	Metric	Topology	Event	Party Privacy

Figure 4 – SID ABEs coverage for Salesforce EPC / Loyalty Management Data Model Rel.W22 Conformance Assessment

3   Information Framework Assessment Overview

3.1   Mapping Technique Employed

The certification scope defines the list of Information Framework (SID) ABEs (Aggregate Business Entities) for which mapping support is reviewed during the assessment. For each of the ABEs defined in scope for the assessment, the organization undergoing the assessment must map their information model to the core entities and dependent entities and the required and optional attributes for each entity, as defined in the SID model, according to what is supported for the product/solution under assessment.

For a view of the ABEs that were submitted in scope for conformance certification, please refer to scope in previous page.

3.2   Information Frameworx Conformance Result

This Section details the Scores awarded to reflect Conformance of Salesforce EPC / Loyalty Management Data Model Rel.W22 to the Information Framework components release 21.0.

3.2.1   Information Framework – Scoring Rules

Between 2013 (Frameworx 14.0) and the end of 2017, TM Forum applied a combined scoring method based on two different categories of conformance scoring:

1. Information Framework Maturity
2. Information Framework Adoption

Starting on the 1st of January 2018, only one method has been retained instead of these two scoring methods (Maturity + Adoption). The use of two different methods made interpretation and understanding difficult and ambiguous for many of our members, on the ground of such experience, the TM Forum decided to keep only the "Adoption" scoring method and discard the "Maturity" scoring method.

Adoption scoring ensures a good balance between qualitative and quantitative criteria on SID conformance criteria. The adoption scoring method consists of a range of scores from 1 to 10 which makes it intuitive and fair, it is also based on weighted criteria e.g. core element, dependent, required, optional, etc.

This section provides further details about the **<u>Adoption</u>** scoring method.

3.2.2 Information Framework Adoption Conformance Scoring Methodology

As of Frameworx 14.0 based Conformance Assessments, to recognize the overall adoption of the Information Framework SID Information model, the Information Framework Adoption Scoring system was introduced to complement the Maturity Levels that have been used since the launch of the Frameworx Conformance Program.

Information Framework Adoption scores are granted based on the detailed scoring guidelines outlined in Table 1 below.

Adoption conformance is based on an accumulative scoring system - i.e. scores are awarded for each element of an ABE to give an overall total Adoption score for the ABE – with elements in this context defined by core & dependent entities and required and optional attributes for both category of entity.

The scores for each element are calibrated according to relative weightings, according to the significance of each element e.g. core entity having higher weighting than dependent entities and required attributes having higher weighting than optional attributes. The relative weightings for each ABE 'element' are indicated in Table 1 - TM Forum Information Framework Adoption Conformance - Scoring Rules Table 1 below.

Table 1 - TM Forum Information Framework Adoption Conformance - Scoring Rules

Information Framework Adoption Conformance Scoring Guidelines	
SID Component	**Weighted Scoring Calculation**
Lowest Level ABE	Equivalent – 1 score point
Core Entity	Equivalent – 2 score points
Core Entity Required Attribute	% equivalent * 2 [Must support min 50% of Required Attributes]
Dependent Entity	% equivalent * 1.5
Dependent Entities – Required Attributes	% equivalent * 1.5
Core Entity – Optional Attributes	% equivalent * 1.2
Dependent Entity – Optional Attributes	% equivalent * 0.8

Adoption Conformance Score Graduation						
Non Conformance [Score = 1 to 3]	Very Low Conformance [3.0 < Score <= 4.0]	Low Conformance [4.0 < Score <= 5.0]	Medium Conformance [5.0 < Score <= 6.0]	High Conformance [6.0 < Score <= 8.0]	Very High Conformance [8.0 < Score < 10.0]	Full Conformance [Score = 10.0]

NOTES:
1. The score values for each SID component are added together to get the overall Adoption Conformance score.
2. If 50% of of the required attributes of Core entities are not supported, scores for following components are not applied as Adoption Conformance requires conformance to 50% of the required attributes of Core entities.
3. Adoption Score versus Maturity Level: Using the scoring category to recognise SID adoption, an assessed ABE for which there is equivalence to 2/3 required core attributes and 8/10 dependent entities would be awarded Maturity Level Score = 2.5 (Very Low Confomance) & Adoption Conformance score = 5.2 (Medium Conformance).

3.2.3 Additional Notes on Information Framework Conformance Adoption scoring:

1. For each level, according to what is required, a value is calculated based on the percentage of entities/attributes supported - as appropriate. This will result in a decimal figure (rounded to one decimal place).

2. Adoption Scoring is based on the progressive scoring schema from the former "Maturity" scoring, however it provides additional flexibility in-so-far as it allows to score all attributes and entities in an assessed ABE. In the former "Maturity" scoring, when not all required attributes of the Core Entity were supported, the Maturity Level score would not progress to the next level, regardless of conformance to other "subordinate" components of the ABE (e.g. dependent entities, optional attributes). "Adoption" scoring fixes this constraint as it provides a weighting mechanism to score all elements supported, regardless of the absence of the core entity or/and required attributes.

3. A **core business entity** is an entity upon which other entities within the ABE are dependent. For example, Service in the Service ABE. A model should strive to attain as high a level of Information Framework (SID) conformance as possible. A core entity is also an entity whose absence in the ABE would make the ABE incomplete.

4. A **dependent entity** is one whose instances are dependent on an instance of a core entity. For example, a ServiceCharacteristic instance within the Service ABE is dependent upon an instance of the Service entity.

5. The score values for each SID component are added together to get the overall Adoption Conformance score.

6. If 50% of the required attributes of Core entities are not supported, scores for following categories are not applied as Adoption Conformance requires conformance to 50% of the required attributes of Core entities.

3.3 Information Framework – Conformance Result Summary

The following sections provide the summary results of the Information Framework Adoption scores granted to the ABEs presented in scope for the assessment of Salesforce EPC / Loyalty Management Data Model Rel.W22.

Each ABE was measured using the Information Framework (SID) conformance scoring guidelines as described in section 3.2.2 above.

3.4   Information Framework – Conformance Results

Salesforce - EPC Loyalty Mgt Data Model Rel. W22 - Product & Common Domain		
ABE name	**ABE Conformance Score Adoption**	**ABE Conformance Score Label**
Loyalty ABE :: Loyalty Program ABE	10.00	Full Conformance
Loyalty ABE :: Loyalty Program Specification ABE	10.00	Full Conformance
Product ABE	10.00	Full Conformance
Product ABE :: Product Price ABE	10.00	Full Conformance
Product Configuration ABE	10.00	Full Conformance
Product Offering ABE	10.00	Full Conformance
Product Offering ABE :: Pricing Logic Algorithm ABE	10.00	Full Conformance
Product Offering ABE :: Pricing Logic Algorithm ABE :: PLA Spec ABE	10.00	Full Conformance
Product Offering ABE :: Product Catalog ABE	10.00	Full Conformance
Catalog ABE	10.00	Full Conformance
Product Offering ABE :: Product Offering Price ABE	10.00	Full Conformance
Product Offering ABE :: Product Offering Price Rule ABE	10.00	Full Conformance
Product Offering ABE :: Product Placement ABE	10.00	Full Conformance
Product Order ABE	10.00	Full Conformance
Product Specification ABE	10.00	Full Conformance
Product Specification ABE :: Goods and Shipping Product Spec ABE	10.00	Full Conformance
Product Specification ABE :: Network Product Spec ABE	10.00	Full Conformance
Product Party Roles ABE	10.00	Full Conformance

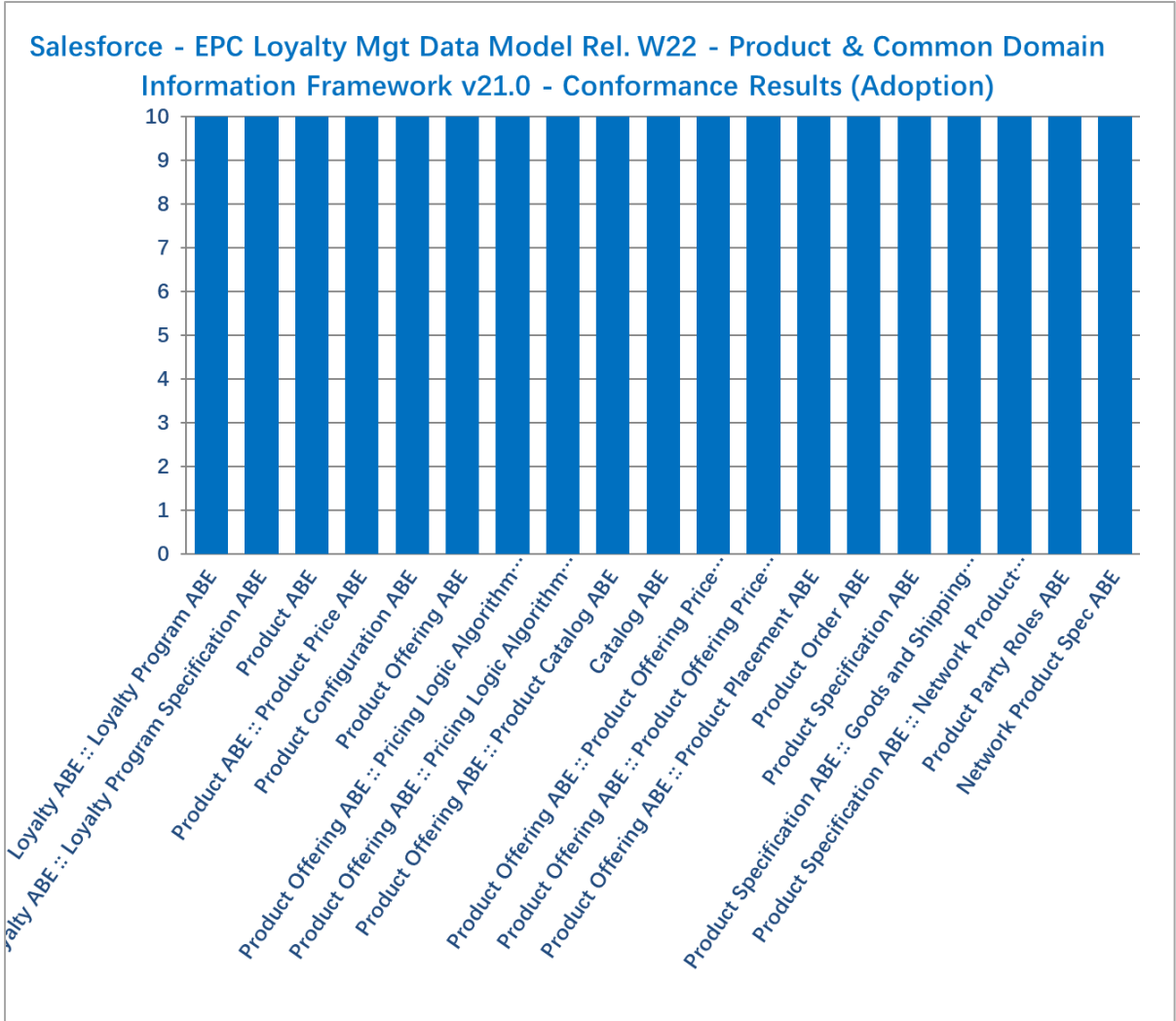**Table 2 - Information Framework: Conformance Scores**

Salesforce - EPC Loyalty Mgt Data Model Rel. W22 - Product & Common Domain Information Framework v21.0 - Conformance Results (Adoption)

Table 3 - Information Framework: Conformance Scores (chart)

3.5 Conformance Assessment Team

SALESFORCE Conformance Certification Assessment Team			
Salesforce Assessment Team			
Name	**Function**	**Role**	**Location**
Abhi Sur	Senior Director - Industry Solutions, Comms & Media	Program Manager	USA
Zoë Heimdal	Visual Strategy	Diagramming Specialist	USA
J.J. Jakubik	VP Architecture, Salesforce Industries	Exec Sponsor	USA
Linfoong Lee	Software Engineering	Principal Data Modeler	USA
David Germilla	Director, EPC Product Management	Product Manager	USA
Andre Pereira	Principal Solution Engineer	Business Data Analyst	Australia
Daisy Brahpuria	Senior Solution Architect	Business Data Analyst	Canada
Justin Yue	Senior Solution Architect	Business Data Analyst	Canada
Kshitij Shivani	Principal Solution Engineer	Business Data Analyst	Australia
Odair Civelli	Senior Manager, Technical Consulting	Business Data Analyst	Brazil
Russ Adams	Product Management Director, Loyalty Solutions	Product Manager	USA

TM Forum Assessment Team			
Name	**Department**	**Role**	**Location**
Rebecca Reeves	Marketing & Sales	TM Forum Engagement Manager Membership	UK
Alfred Anaya-Dubernard	Education & Coaching	TM Forum Primary Assessor	Netherlands
Ailis Claassen	Senior Marketing Manager	TM Forum Marketing & Publication	Ireland
Kevin J. Scaggs	Information Framework Technical Specialist - CTO & Theme Leadership Team	TM Forum SID Secondary Assessor	U.S.

Table 4 – Salesforce Conformance Certification Assessment Teams