

Solution Conformance Certification Report

Information Framework
v23.0

for

COMVIVA
Integrated BSS v12.0.0

January, 2024

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1 Introduction

1.1 Executive Summary

This document provides details of Comviva’s self-assessment and TM Forum’s Conformance Assessment of Comviva data model deployed in their **Integrated BSS v.12.0.0** solution, against the following TM Forum ODA core frameworks:

- Information Framework (SID) version 23.0

The assessment included a review of:

- Conformance to the Information Framework (SID), according to the specific ABEs submitted in scope for the Assessment.

For more information on Comviva’s Integrated BSS solution, please contact:

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vivek.verma@comviva.com

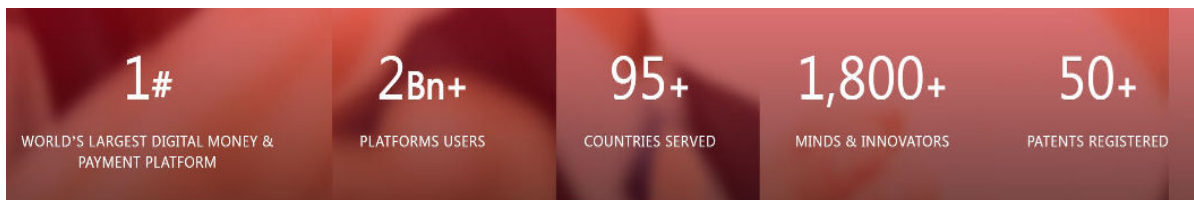
For any additional information on this SID Conformance Certification Report, please contact TM Forum at: conformance@tmforum.org.

1.2 About Comviva

Comviva is the global leader of mobility solutions catering to the business of tomorrows.

The company is a subsidiary of Tech Mahindra and is part of the \$21 billion Mahindra Group. Its extensive portfolio of solutions spans digital financial services, customer value management, Digital lifestyle solutions & messaging and broadband solutions. It enables service providers to enhance customer experience, rationalize costs and accelerate revenue growth. Comviva’s solutions are deployed by over 130 mobile service providers and financial institutions in over 95 countries and enrich the lives of over two billion people to deliver a better future.

Comviva caters to over two billion platform users globally. Comviva’s technology products enable its customers to increase revenue, operate profitably and make a difference. With a global network of customers, partners, employees, and thought leaders, Comviva helps the world run better and improves people’s lives.



2 Product Functionality/Capability Overview

2.1 Product Overview – Comviva Integrated BSS

Integrated BSS, a new digital future for CSPs, is a comprehensive, modular, secured, and future-ready solution that can enable CSPs to accelerate innovation, increase agility, rationalize costs, drive the digitization of adjacent industries, and create sustainable impact. This new platform for growth and progress can provide the agility and flexibility CSPs need to stay ahead of the competition. With cloud-based BSS, CSPs can provide a more customized customer experience, leading to higher customer satisfaction and loyalty, which can ultimately help CSPs increase revenue.

2.1.1 Benefits of Comviva's Integrated BSS

- **Quick 5G deployment**
- **Digitalize your customer experience**
- **Launch new business models rapidly and transform your business**
- **Optimize the system as you need**
- **Price new offers in minutes**
- **Enable high performance with an optimized architecture**
- **Agile DevOps for zero service downtime**

2.1.2 Product Capabilities and Architecture

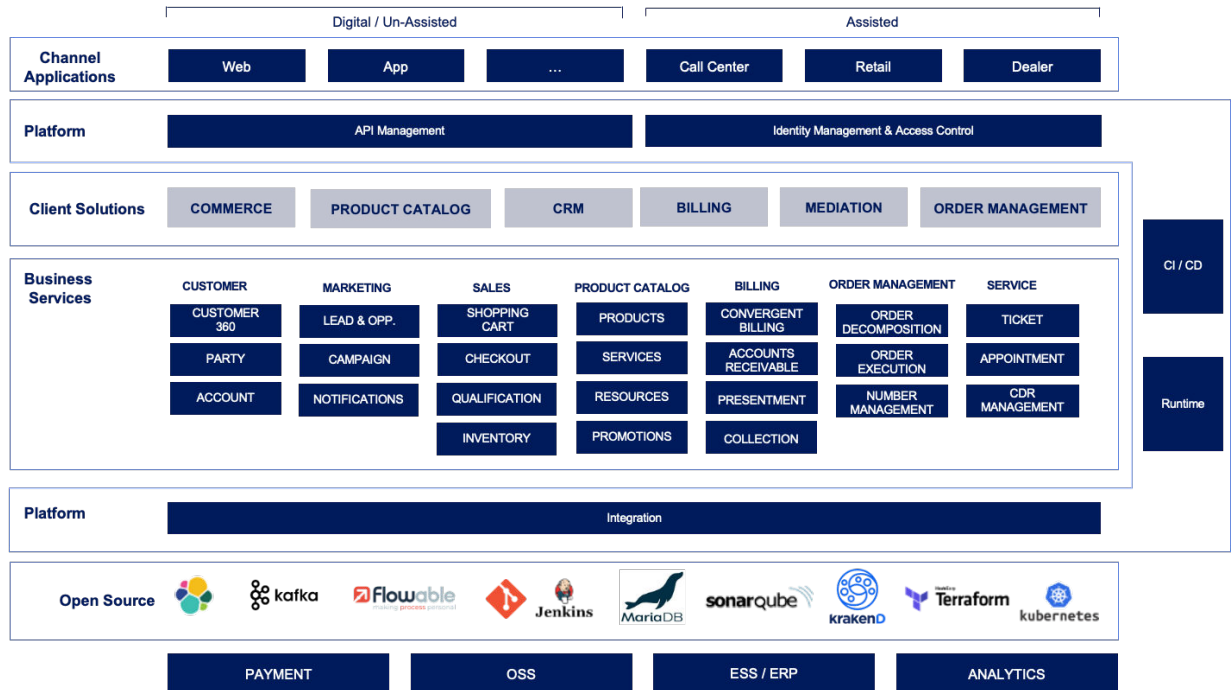


Figure 1: Comviva's Integrated BSS v12.0.0

- Enterprise-level lead & opportunity management system
- Sophisticated enterprise CPQ (Configure, Price & Quote) system
- Enterprise & B2B customer life cycle maintenance
- Support N-Level of hierarchy to support enterprise B2B customers
- Account level payment feature to support B2B enterprise customers
- Intuitive design to solve 85 % of customer inquiries and issues on First Time Resolution (FTRs) by case management
- User-friendly self-guided UI
- Stable, scalable, and proven system

2.2 Product Scope

The table in figure below represents Comviva Integrated BSS solution with mappings to the Information Framework ABEs that were submitted in scope for the Conformance Certification assessment.

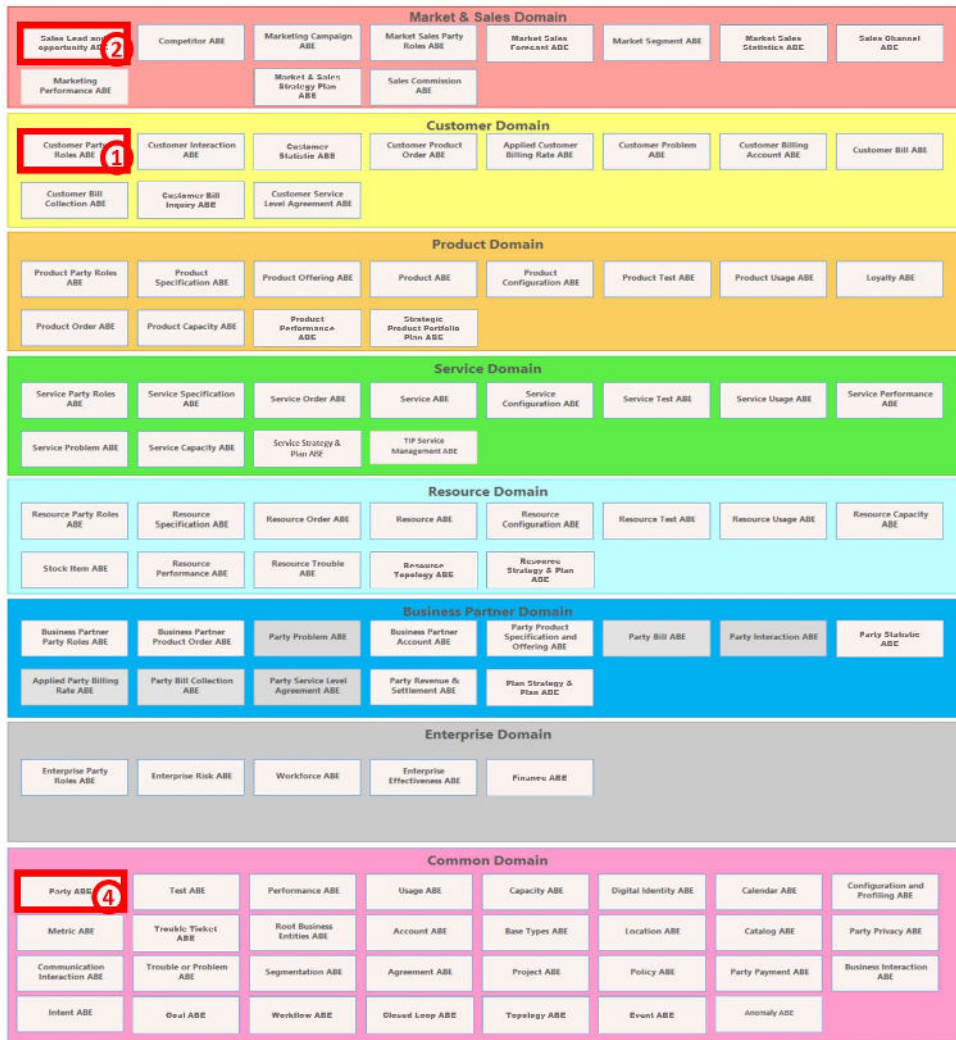
TM Forum - Assessment Scoping Document - Information Framework (SID) v23.0	
Member:	Comviva
Product:	Integrated BSS v.12.0.0
Assessment Type:	Solution
ABEs in Scope:	7
Level 1 ABEs	Level 2 ABEs
Market_Sales Domain	
Sales Lead and Opportunity ABE	Sales Lead ABE
Sales Lead and Opportunity ABE	Sales Opportunity ABE
Customer Domain	
Customer Party Roles ABE	
Common Domain	
Party ABE	Contact Medium ABE
Party ABE	Identification ABE
Party ABE	Party Demographic ABE
Party ABE	Party Organization ABE

Figure 2 SID ABEs in scope of Comviva Integrated BSS Certification

2.3 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 – v23.0 – Level-1 ABEs View



 Number of ABEs or sub-ABEs submitted for conformance certification

Figure 3 – SID ABEs coverage for Comviva’s Integrated BSS 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 Framework Conformance Result

This Section details the Scores awarded to reflect Conformance of Comviva Integrated BSS solution to the Information Framework components release 23.0.

3.2.1 Information Framework – Scoring Rules

Starting on the 1st of January 2018, one single method has been retained instead of the two previous 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 **Adoption** scoring method.

3.2.2 Information Framework Adoption Conformance Scoring Methodology

Information Framework Adoption scores are granted based on the detailed scoring guidelines outlined in Table 2 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 2 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]
<p>NOTES:</p> <p>1. The score values for each SID component are added together to get the overall Adoption Conformance score.</p> <p>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.</p> <p>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 Conformance) & Adoption Conformance score = 5.2 (Medium Conformance).</p>						

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 Comviva’s Integrated BSS solution.

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

TM Forum - Assessment Scoping Document - Information Framework (SID) v23.0			
Member:	Comviva	Conformance Certification Final Scores Achieved for ABEs	
Product:	Integrated BSS v.12.0.0		
Assessment Type:	Solution		
ABEs in Scope:	7		
Level 1 ABEs	Level 2 ABEs		
Market_Sales Domain			
Sales Lead and Opportunity ABE	Sales Lead ABE	10.00	Full Conformance
Sales Lead and Opportunity ABE	Sales Opportunity ABE	7.21	High Conformance
Customer Domain			
Customer Party Roles ABE		9.89	Very High Conformance
Common Domain			
Party ABE	Contact Medium ABE	9.42	Very High Conformance
Party ABE	Identification ABE	10.00	Full Conformance
Party ABE	Party Demographic ABE	10.00	Full Conformance
Party ABE	Party Organization ABE	6.60	High Conformance

Table 2 - Information Framework: Conformance Scores Chart

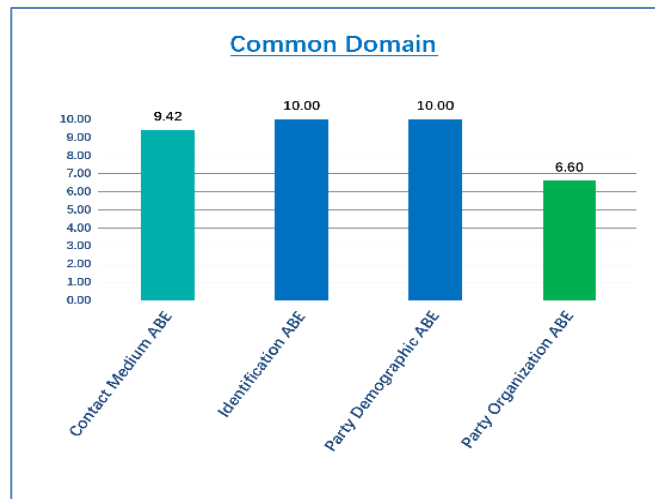
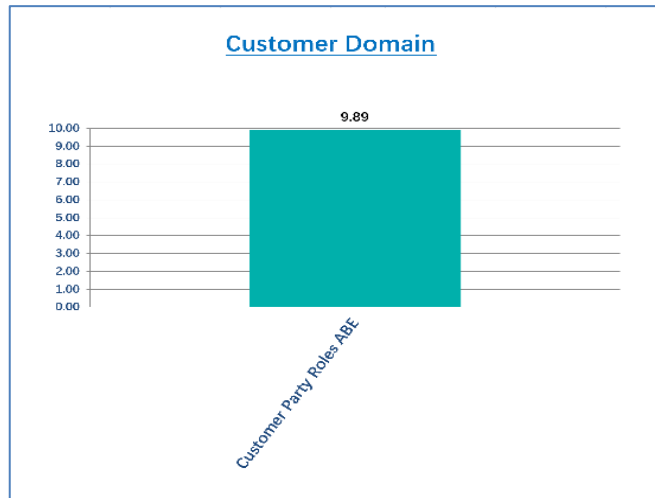
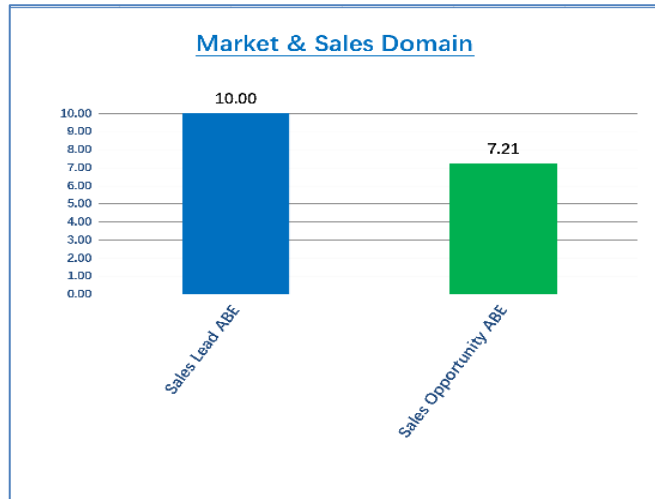


Figure 4 - Information Framework: Conformance Scores Graph