

Framework 17.0

Solution Conformance Certification

Company Name: TIBCO

Solution Name: Fulfillment Orchestration
Suite

Report Version: 1.0

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1 Introduction

1.1 Executive Summary

This document provides details concerning the conformance certification of **Tibco's Fulfillment Orchestration Suite** against the following TM Forum Framework standards:

- Business Process Framework Version 17.0
- Information Framework 17.0

The assessment included a review of the methodology approach to process and information modeling against TM Forum Framework Release 17.0 according to the specific processes submitted in scope for the Assessment.

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

2 Functionality/Capability Overview

2.1 TIBCO - Fulfillment Orchestration Suite – Solution Overview

TIBCO Fulfillment Orchestration™ Suite provides a comprehensive set of products for accelerating the concept-to-cash cycle for multi-play communications service providers (CSPs) and media and entertainment distribution companies. It is the only solution that allows the flexible definition fulfillment process components along with offer creation in your master catalog, leading to efficient and accurate fulfillment of orders.

Fulfillment Orchestration™ enables CSPs and media companies to define new product and service offerings—along with associated fulfillment rules and processes—and automate delivery from order capture to network service activation. It consists of pre-integrated and modular products compliant with the TMF Business Process Framework (eTOM).

- TIBCO® Fulfillment Catalog, an enterprise master catalog that defines and manages the lifecycles of technical service products and commercial offers
- TIBCO® Fulfillment Order Management, an end-to-end product and service order management system that automates orchestration of delivery processes for customer orders using intelligent real-time rules
- TIBCO® Fulfillment Provisioning, a provisioning system that automates the orchestration of activation tasks using underlying network services
- TIBCO® Fulfillment Subscriber Inventory, a master repository that manages subscriber identities and entitlements, and integrates it into the rest of the suite to provide subscriber data.

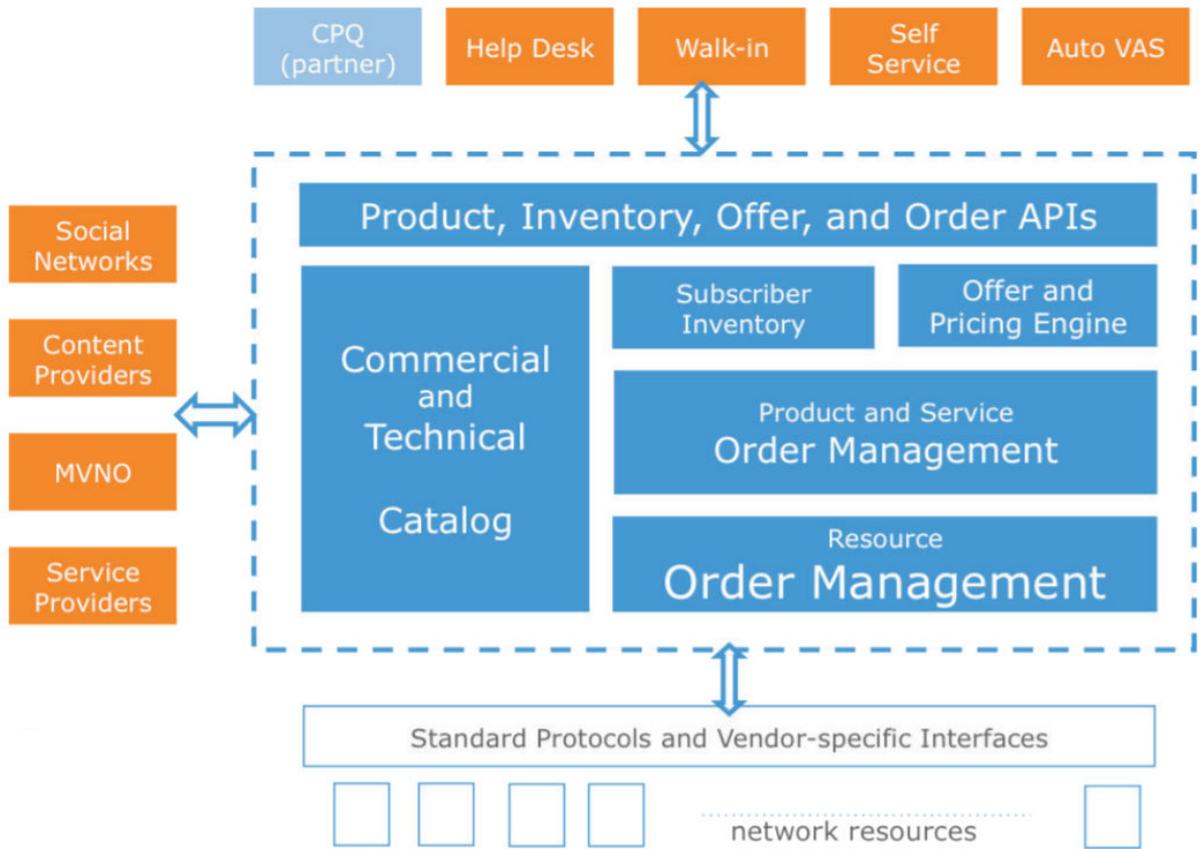


Figure 1 – TIBCO Fulfillment Orchestration Suite

3 - Business Process Framework Process Scope

The following figure represents the scope of the assessment based on the Business Process Framework (eTOM) v.17.0. The Level-2 processes highlighted in red, and all their Level-3 constituents were submitted for conformance certification.

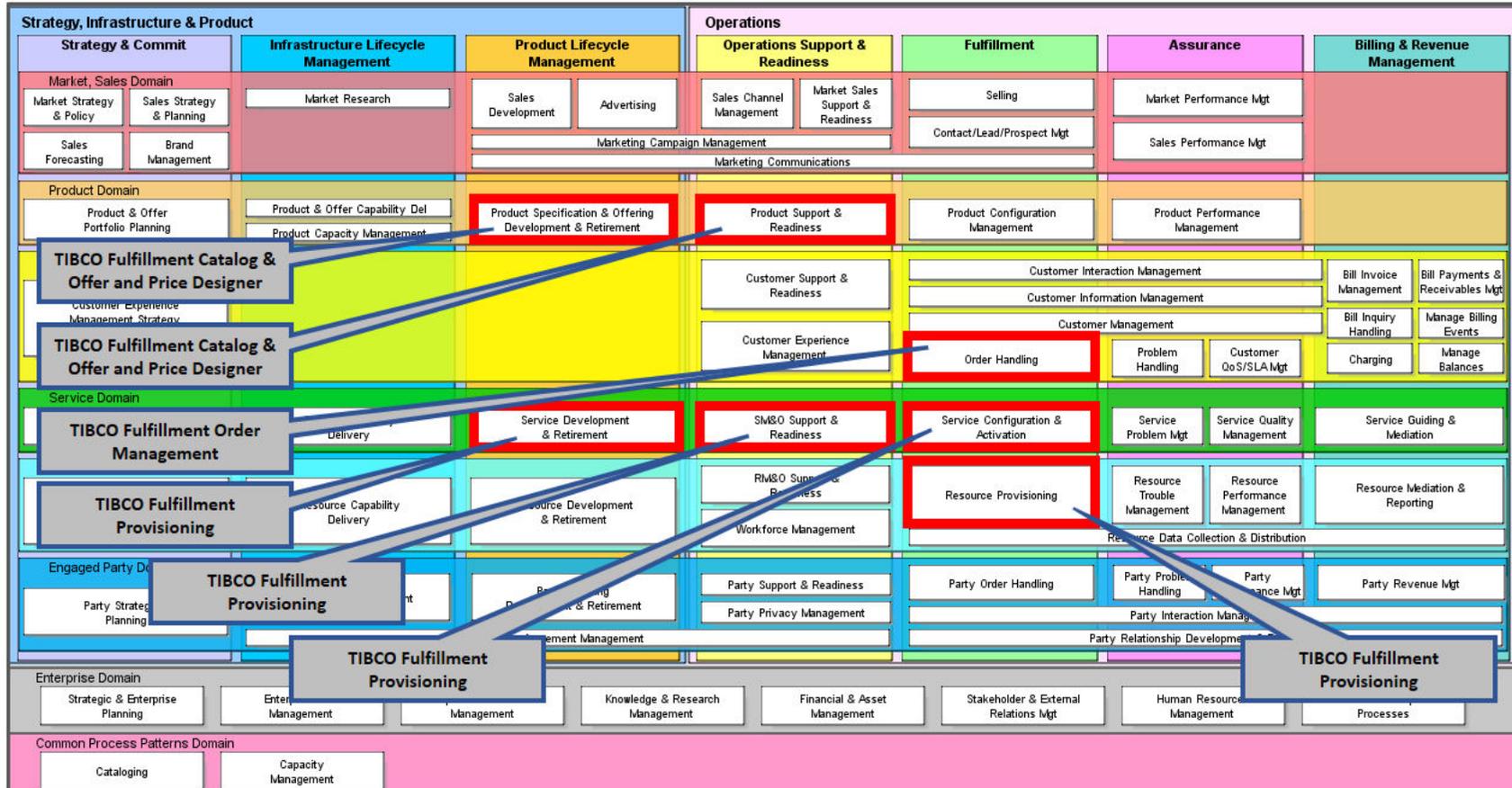


Figure 2- Level 2 process coverage for TIBCO Fulfillment Orchestration Suite

4 Business Process Framework Assessment Overview

4.1 Mapping Technique Employed

Business Process Framework Level 4 descriptions are analyzed by looking for implied tasks. (This is similar to how process decomposition can use Semantic Analysis). Each Business Process Framework process is supported by descriptive text. In many cases, each process is aligned and mapped to appropriate company documentation references solution, methodology or modeling material.

Note that when a Level 3 process has not been decomposed to Level 4 processes, the implied tasks for the given Level 3 process are analyzed.

The Business Process Framework Level 4 descriptions (or Level 3 if appropriate) are analyzed by looking for implied tasks. Color coded text as highlighted below is used as part of the process mapping whereby highlighted text indicates the level of support for a Level 4 process implied task:

- **GREEN** is used to highlight key words or key statements that are fully supported
- **YELLOW** is used to highlight key words/key statements that are partially supported
- **GREY** is used to highlight key words/key statements that are not supported
- No highlighting is used for words/statements that are irrelevant, just for reference or needed to complete the sentence.

Manual and Automated Support

It is important to determine whether the implied task is supported by manual steps, automated steps, or a combination of both. In this document, “A”, “M”, or “AM” is used for each task to indicate that the step or steps is/are automated (A), manual (M), or both (AM).

TM Forum Note 1: When process mappings are presented against Level 4 processes, the mappings are provided against the text in the “Mandatory” field for the process. In the event of the Mandatory field not being used, the process mappings are in that case provided against the Level 4 Brief/Extended descriptions.

TM Forum Note 2: Note that if a Level 3 process has not been decomposed to Level 4 processes in the Business Process Framework, in such cases the process mapping support is provided against the Level 4 process descriptions (Brief & Extended).

The following diagram identifies the number of Level 3 processes that were submitted for assessment, for each Level 2 process that was submitted in scope for the Assessment.

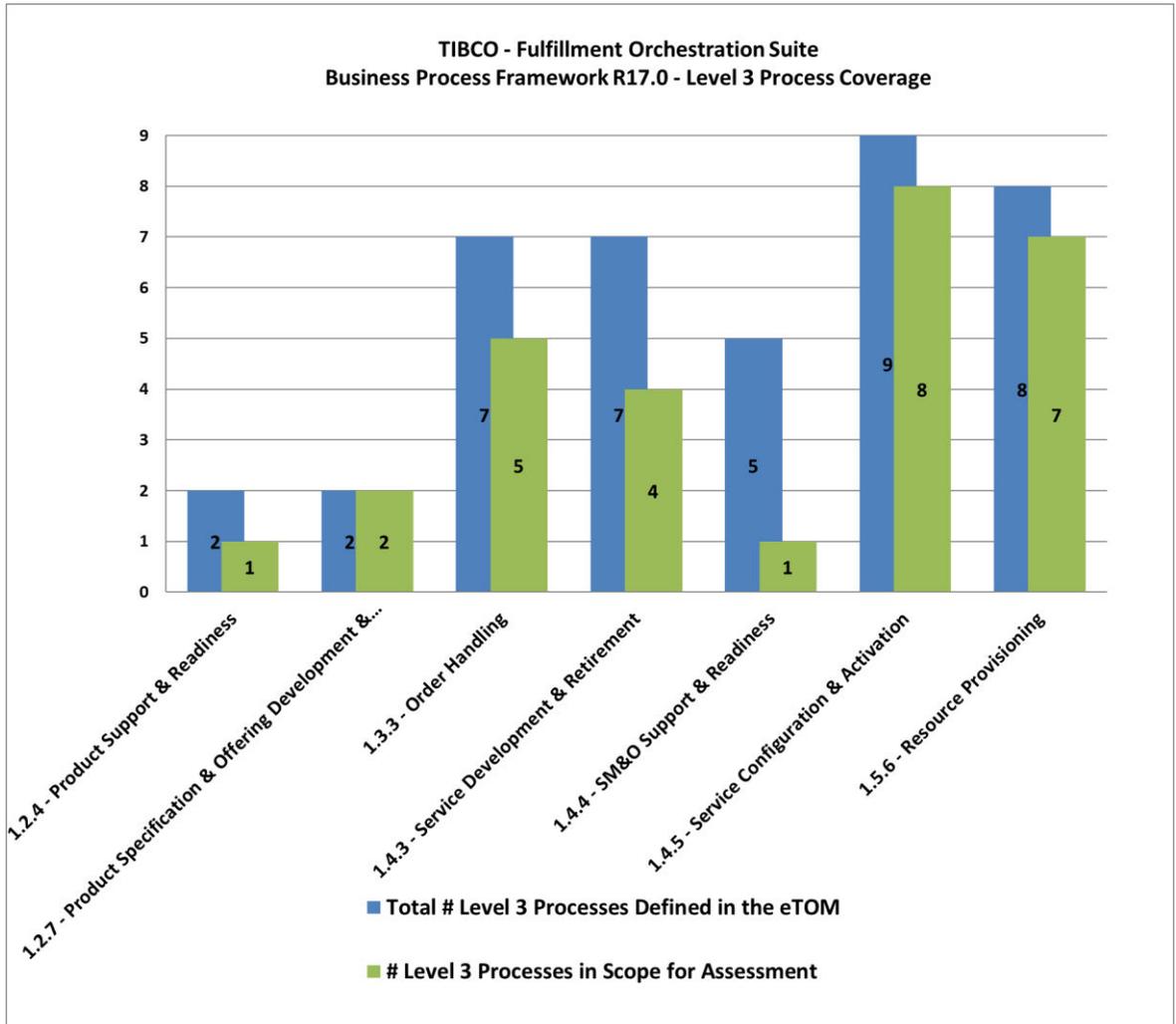


Figure 3 - Level 3 process coverage for TIBCO – Fulfillment Orchestration Suite

5 Business Process Framework – Process Mapping Descriptions

This Section provides a summary of the mappings that TIBCO provided in the form of self-assessment.

The self-assessment was reviewed by TM Forum Subject Matter Experts alongside supporting documentation provided by the designated TIBCO mapping team.

5.1 Level 2: 1.2.4 - Product Support & Readiness

5.1.1 Mapping Details & Supporting Evidence

The documented mapping information for all Level 3/Level 4 processes in scope for the “1.2.4 - Product Support & Readiness” business processes are available from the following link:

https://www.tmforum.org/wp-content/uploads/2017/09/Tibco-FOSuite-R_eTOM_Certification_PRODUCT_R17_0_VFRF.pdf

Mappings and supporting evidence was presented for the following **L3/L4** processes:

1.2.4.2 - Manage Product Offering Inventory

- 1.2.4.2.1 - Identify Relevant Product Offering Inventory Information
- 1.2.4.2.2 - Maintain Product Offering Inventory facilities
- 1.2.4.2.3 - Manage Product Offering Inventory Capture
- 1.2.4.2.4 - Control Product Offering Inventory Access
- 1.2.4.2.5 - Ensure Product Offering Inventory Data Quality
- 1.2.4.2.6 - Track Product Offering Inventory Usage
- 1.2.4.2.7 - Identify Product Offering Inventory Shortcomings

5.2 Level 2: 1.2.7 - Product Specification & Offering Development & Retirement

5.2.1 Mapping Details & Supporting Evidence

The documented mapping information for all Level 3/Level 4 processes in scope for the “1.2.7 - Product Specification & Offering Development & Retirement” business processes are available from the following link:

https://www.tmforum.org/wp-content/uploads/2017/09/Tibco-FOSuite-R_eTOM_Certification_PRODUCT_R17_0_VFRF.pdf

Mappings and supporting evidence was presented for the following **L3/L4** processes:

1.2.7.1 - Product Specification Development & Retirement

- 1.2.7.1.1 - Gather & Analyze New Product Specification Ideas
- 1.2.7.1.2 - Develop New Product Specification Business Proposal
- 1.2.7.1.3 - Develop Detailed Product Specification
- 1.2.7.1.4 - Manage Product Specification Development
- 1.2.7.1.5 - Remove Product Specification

1.2.7.2 - Product Offering Development & Retirement

- 1.2.7.2.1 - Product Offering Lifecycle Management
 - 1.2.7.2.2 - Product Offering Pricing
 - 1.2.7.2.3 - Product Offering Cataloging
 - 1.2.7.2.4 - Product Offering Agreement Management
 - 1.2.7.2.6 - Product Offering Promotion Development
- 1.4.6.7 - Survey & Analyze

5.3 Level 2: 1.3.3 - Order Handling

5.3.1 Mapping Details & Supporting Evidence

The documented mapping information for all Level 3/Level 4 processes in scope for the “1.3.3 - Order Handling” business processes are available from the following link:

https://www.tmforum.org/wp-content/uploads/2017/09/Tibco-FOSuite-R_eTOM_Certification_CUSTOMER_R17_0_VFRF.pdf

Mappings and supporting evidence was presented for the following **L3/L4** processes:

1.3.3.1 - Determine Customer Order Feasibility

1.3.3.1.1 - Perform Impact Analysis

1.3.3.3 - Track & Manage Customer Order Handling

1.3.3.3.1 - Manage Customer Order

1.3.3.3.2 - Track Customer Order

1.3.3.3.3 - Update Order Repository

1.3.3.4 - Complete Customer Order

1.3.3.6 - Report Customer Order Handling

1.3.3.6.1 - Monitor Customer Order Status

1.3.3.6.2 - Manage Customer Order Status Notification

1.3.3.6.3 - Report Customer Order Status

1.3.3.7 - Close Customer Order

5.4 Level 2: 1.4.3 – Service Development & Retirement

5.4.1 Mapping Details & Supporting Evidence

The documented mapping information for all Level 3/Level 4 processes in scope for the “1.4.3 – Service Development & Retirement” business processes are available from the following link:

https://www.tmforum.org/wp-content/uploads/2017/09/Tibco-FOSuite-R_eTOM_Certification_SERVICE_R17_0_VFRF.pdf

Mappings and supporting evidence was presented for the following **L3/L4** processes:

1.4.3.4 - Develop Detailed Service Specifications

1.4.3.4.1 - Develop Detailed Service Technical Specifications

1.4.3.4.2 - Develop Detailed Service Support Specifications

1.4.3.4.3 - Develop Detailed Service Operational Specifications

1.4.3.4.4 - Develop Detailed Service Customer Manuals

1.4.3.5 - Manage Service Development

1.4.3.5.1 - Identify Required Processes & Procedures for Services

1.4.3.5.2 - Develop Required Processes & Procedures for Services

1.4.3.5.3 - Develop Service & Operational Agreements for Services

1.4.3.5.4 - Gain Service & Operational Agreements Approval for Services

1.4.3.5.5 - Produce Supporting Documentation & Training Packages for Services

1.4.3.6 - Manage Service Deployment

1.4.3.6.1 - Manage Service Process & Procedure Implementation

1.4.3.6.2 - Manage Service Operational Staff Training

1.4.3.6.3 - Develop Service Party Operational Support

1.4.3.6.4 - Manage Service Acceptance Testing

1.4.3.7 - Manage Service Exit

5.5 Level 2: 1.4.4 – Service Management & Operations Support & Readiness

5.5.1 Mapping Details & Supporting Evidence

The documented mapping information for all Level 3/Level 4 processes in scope for the “1.4.4 – Service Management & Operations Support & Readiness” business processes are available from the following link:

https://www.tmforum.org/wp-content/uploads/2017/09/Tibco-FOSuite-R_eTOM_Certification_SERVICE_R17_0_VFRF.pdf

Mappings and supporting evidence was presented for the following **L3/L4** processes:

1.4.4.1 - Manage Service Inventory

- 1.4.4.1.1 - Manage Service Inventory Database and Processes
- 1.4.4.1.2 - Perform Service Inventory Audit Tests
- 1.4.4.1.3 - Track and Monitor Service Inventory Capabilities
- 1.4.4.1.4 - Identify Service Inventory Issues and Provide Reports and Warnings

5.6 Level 2: 1.4.5 – Service Configuration & Activation

5.6.1 Mapping Details & Supporting Evidence

The documented mapping information for all Level 3/Level 4 processes in scope for the “1.4.5 – Service Configuration & Activation” business processes are available from the following link:

https://www.tmforum.org/wp-content/uploads/2017/09/Tibco-FOSuite-R_eTOM_Certification_SERVICE_R17_0_VFRF.pdf

Mappings and supporting evidence was presented for the following **L3/L4** processes:

1.4.5.1 - Design Solution

- 1.4.5.1.1 - Develop Overall Service Design
- 1.4.5.1.2 - Develop Service Implementation Plan
- 1.4.5.1.3 - Develop Detailed Service Design

1.4.5.2 - Allocate Specific Service Parameters to Services

- 1.4.5.2.1 - Determine Service Parameter Availability
- 1.4.5.2.2 - Reserve Service Parameters
- 1.4.5.2.3 - Release Service Parameter
- 1.4.5.2.4 - Allocate Service Parameters

1.4.5.3 - Track & Manage Service Provisioning

- 1.4.5.3.1 - Assign Service Provisioning Activity
- 1.4.5.3.2 - Track Service Provisioning Activity
- 1.4.5.3.3 - Manage Service Provisioning Activity

1.4.5.4 - Implement, Configure & Activate Service

- 1.4.5.4.1 - Configure Service
- 1.4.5.4.2 - Implement Service
- 1.4.5.4.3 - Activate Service

1.4.5.6 - Issue Service Orders

- 1.4.5.6.1 - Assess Service Request
- 1.4.5.6.2 - Create Service Orders
- 1.4.5.6.3 - Mark Service Order for Special Handling

1.4.5.7 - Report Service Provisioning

- 1.4.5.7.1 - Monitor Service Order Status
- 1.4.5.7.2 - Distribute Service Order Notification
- 1.4.5.7.3 - Distribute Service Provisioning Reports

1.4.5.8 - Close Service Order

1.4.5.9 - Recover Service

- 1.4.5.9.1 - Develop Service Recovery Plan
- 1.4.5.9.2 - Provide Service Recovery Proposal Notification
- 1.4.5.9.3 - Request Service Recovery Authorization
- 1.4.5.9.4 - Commence Service Recovery
- 1.4.5.9.5 - Complete Service Recovery

5.7 Level 2: 1.5.6 – Resource Provisioning

5.7.1 Mapping Details & Supporting Evidence

The documented mapping information for all Level 3/Level 4 processes in scope for the “1.5.6 – Resource Provisioning” business processes are available from the following link:

https://www.tmforum.org/wp-content/uploads/2017/09/Tibco-FOSuite-R_eTOM_Certification_RESOURCE_R17_0_VFRF.pdf

Mappings and supporting evidence was presented for the following **L3/L4** processes:

1.5.6.1 - Allocate & Install Resource

- 1.5.6.1.1 - Determine Resource Availability
- 1.5.6.1.2 - Reserve Resource
- 1.5.6.1.3 - Release Resource
- 1.5.6.1.4 - Allocate Resource
- 1.5.6.1.5 - Install and Commission Resource

1.5.6.2 - Configure & Activate Resource

- 1.5.6.2.1 - Configure Resource
- 1.5.6.2.2 - Implement Resource
- 1.5.6.2.3 - Activate Resource

1.5.6.4 - Track & Manage Resource Provisioning

- 1.5.6.4.1 - Coordinate Resource Provisioning Activity
- 1.5.6.4.2 - Track Resource Provisioning Activity
- 1.5.6.4.3 - Manage Resource Provisioning Activity
- 1.5.6.4.4 - Update Resource Repository

1.5.6.5 - Report Resource Provisioning

- 1.5.6.5.1 - Monitor Resource Order Status
- 1.5.6.5.2 - Distribute Resource Order Notification
- 1.5.6.5.3 - Distribute Resource Provisioning Reports

1.5.6.6 - Close Resource Order

1.5.6.7 - Issue Resource Orders

- 1.5.6.7.1 - Assess Resource Request
- 1.5.6.7.2 - Create Resource Orders
- 1.5.6.7.3 - Mark Resource Order for Special Handling

1.5.6.8 - Recover Resource

- 1.5.6.8.1 - Develop Resource Recovery Plan
- 1.5.6.8.2 - Provide Resource Recovery Proposal Notification
- 1.5.6.8.3 - Request Resource Recovery Authorization
- 1.5.6.8.4 - Commence Resource Recovery
- 1.5.6.8.5 - Complete Resource Recovery
- 1.5.6.8.6 - Recover Specific Resource

6 Framework Conformance Result

This Section details the Scores awarded to reflect Conformance of the TIBCO Fulfillment Orchestration Suite solution to the Business Process Framework components of Framework 17.0.

6.1 Business Process Framework – Scoring Guidelines

Business Process Framework - Conformance Certification Methodology		
Process Level	Conformance Score	Qualifier
Level 1 Process	Not applicable	Conformance Assessment shall not be carried out at this process level.
Level 2 Process	Not applicable	A conformance level is not awarded to Level 2 processes in Framework Certification. The Certification Report shall highlight the coverage within a Level 2 process submitted in scope for an Assessment, in terms of number of Level 3 processes submitted for assessment out of the total number defined in the Business Process Framework for the Level 2 process.
Level 3 Process	Conformance Score is awarded between 3.1 & 5.0	The Conformance Score is awarded for each Level 3 process submitted in scope for the Assessment. The Conformance Score awarded can be a value between 3.1* & 5 depending on the level of coverage & conformance to the Level 3 process based on the alignment to the level 3 Implied Tasks as decomposed in the Level 4 process definitions. If a Level 3 process has not been decomposed to Level 4 processes, the Level score is awarded according to alignment to the Level 3 defined Implied Tasks.
Level 4 Process	Level of conformance is calculated as input to parent Level 3 Process Score	Levels of conformance are calculated for Level 4 processes according to alignment to the individual implied tasks. Level 4 scores are summed and averaged to given an overall score for the parent Level 3 process.
* In earlier Conformance Assessments, scores were awarded to Level 1 & Level 2 processes using values 1 through to 3. For this reason, the Level 3 scores start from > 3.		
Additional Notes		
Note 1 - Level 1 processes shall be presented to define the assessment scope only. i.e. they shall not be assessed as self-contained processes since the level of detail is not considered sufficient. A conformance level shall not be awarded for Level 1 processes.		
Note 2 - Level 2 processes shall be presented to define the assessment scope only. i.e. they shall not be assessed as self-contained processes since the level of detail is not considered sufficient. A conformance level shall not be awarded for Level 2 processes. However, the Certification Report shall provide good indication of the coverage of the Level 2 process in terms of number of contained Level 3 processes submitted in scope for the Assessment.		
Note 3 - The Conformance Assessment shall be carried out at process level 3 (if there are no level 4 process elements defined for a specific level 3 in scope) or at level 4 (if there are level 4 process elements defined for a specific level 3 in scope). For each Level 3 process (when there are no level 4 processes available), conformance shall be deduced according to the documented support for the process implied tasks. For each Level 4 process (when available), conformance shall be deduced according to the documented support for the process implied tasks, as decomposed and described in the Level 4 process descriptions. The score awarded for a Level 3 process, is deduced according to the support mapped to the Level 4 processes/Implied Tasks.		
Note 4 - In evaluating conformance to the standards, manual intervention shall not impact the conformance score granted. However, any level of manual support shall be noted in the Conformance Report and Detailed Results Report. This note specifically applies to Product & Solution Assessments.		
Note 5 - Processes that are supported via manual implementation only, are not considered in scope for the Assessment. This note specifically applies to Product & Solution Assessments.		

Figure 4 - TM Forum Business Process Framework: Conformance Scoring Rules

6.2 Business Process Framework – Conformance Result Summary

The graph in this Section provides an overview of the conformance levels granted to the Level 3 Processes presented in scope for TIBCO Fulfillment Orchestration Suite solution conformance assessment. Each Level 3 process was measured using a Business Process Framework (eTOM) conformance score according to the level of Conformance – Full Conformance or Partial Conformance as described in Section 6.1 Business Process Framework – Scoring

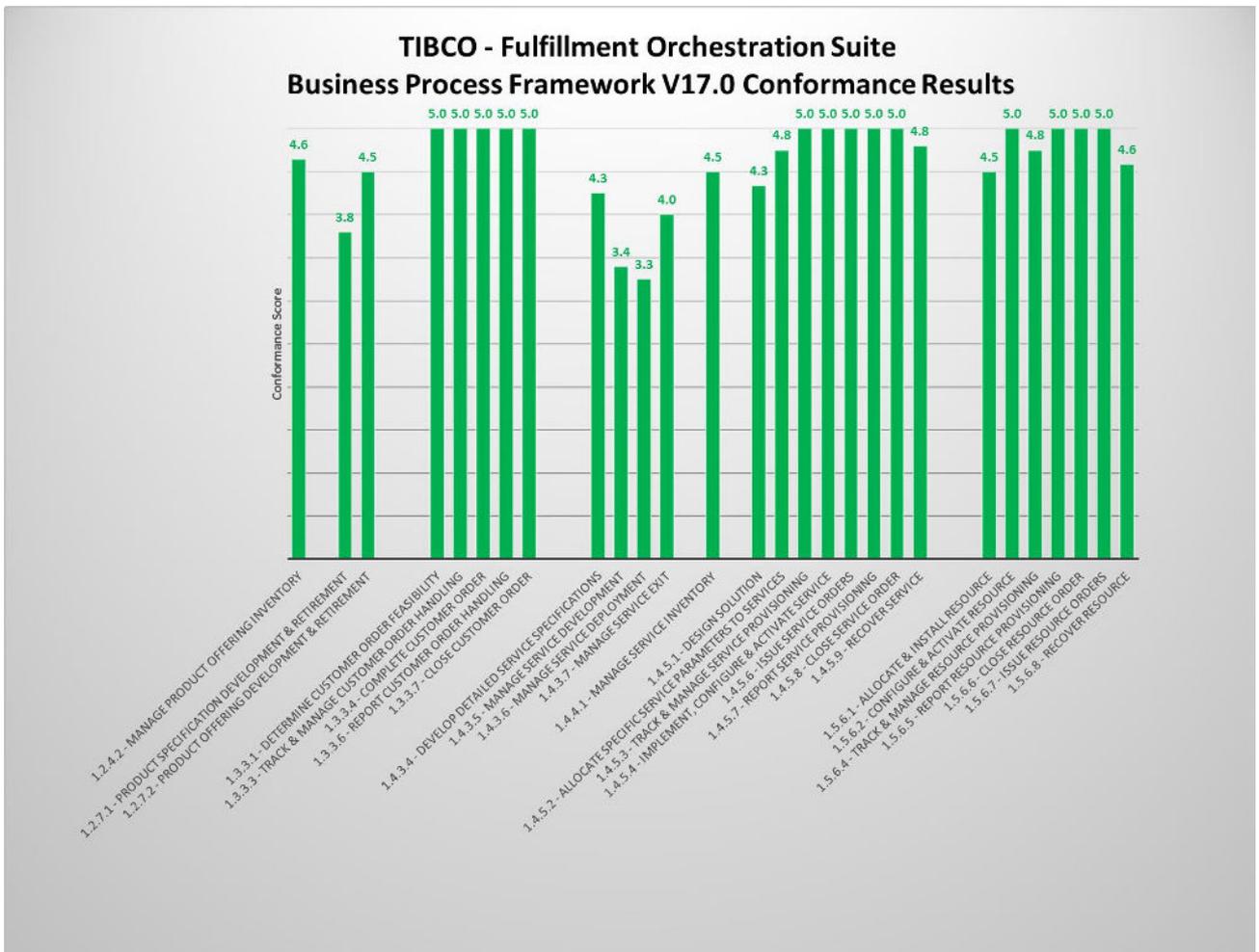


Figure 5 - Conformance Results (eTOM) Product, Customer, Service & Resource Domains

6.3 Business Process Framework – Detailed Conformance Results Product Domain

TM Forum Framework 17.0 Assessment Scoping Document - Business Process Framework (eTOM) Level 4 process elements			
Member:		TIBCO	
Solution:		Fulfillment Orchestration Suite	
Assessment Type:		Solution Assessment	
Number of L3 Processes in Scope:		28	
Number of L4 Processes in Scope:		89	
Level 2	Level 3	Level 4	
		Level 4 Process Elements included in the certification scope	Overall Scores Achieved in the certification
1.2 - Product Domain			
1.2.4 - Product Support & Readiness			
	1.2.4.2 - Manage Product Offering Inventory	L3	4.6
	1.2.4.2.1 - Identify Relevant Product Offering Inventory	L4	100%
	1.2.4.2.2 - Maintain Product Offering Inventory facilities	L4	100%
	1.2.4.2.3 - Manage Product Offering Inventory Capture	L4	100%
	1.2.4.2.4 - Control Product Offering Inventory Access	L4	100%
	1.2.4.2.5 - Ensure Product Offering Inventory Data Quality	L4	50%
	1.2.4.2.6 - Track Product Offering Inventory Usage	L4	25%
	1.2.4.2.7 - Identify Product Offering Inventory Shortcomings	L4	100%
1.2.7 - Product Specification & Offering Development & Retirement			
	1.2.7.1 - Product Specification Development & Retirement	L3	3.8
	1.2.7.1.1 - Gather & Analyze New Product Specification Ideas	L4	50%
	1.2.7.1.2 - Develop New Product Specification Business Proposal	L4	0%
	1.2.7.1.3 - Develop Detailed Product Specification	L4	50%
	1.2.7.1.4 - Manage Product Specification Development	L4	0%
	1.2.7.1.5 - Remove Product Specification	L4	100%
	1.2.7.2 - Product Offering Development & Retirement	L3	4.5
	1.2.7.2.1 - Product Offering Lifecycle Management	L4	100%
	1.2.7.2.2 - Product Offering Pricing	L4	100%
	1.2.7.2.3 - Product Offering Cataloging	L4	75%
	1.2.7.2.4 - Product Offering Agreement Management	L4	100%
	1.2.7.2.6 - Product Offering Promotion Development	L4	0%

Table 6-1 Business Process Framework: Detailed Conformance Results – Product Domain

6.4 Business Process Framework – Detailed Conformance Results Customer Domain

TM Forum Framework 17.0 Assessment Scoping Document - Business Process Framework (eTOM) Level 4 process elements			
Member:		TIBCO	
Solution:		Fulfillment Orchestration Suite	
Assessment Type		Solution Assessment	
Number of L3 Processes in Scope:		28	
Number of L4 Processes in Scope:		89	
Level 2	Level 3	Level 4	
		Level 4 Process Elements included in the certification scope	Overall Scores Achieved in the certification
1.3 - Customer Domain			
1.3.3 - Order Handling			
	1.3.3.1 - Determine Customer Order Feasibility		L3 5
		1.3.3.1.1 - Perform Impact Analysis	L4 100%
	1.3.3.3 - Track & Manage Customer Order Handling		L3 5
		1.3.3.3.1 - Manage Customer Order	L4 100%
		1.3.3.3.2 - Track Customer Order	L4 100%
		1.3.3.3.3 - Update Order Repository	L4 100%
	1.3.3.4 - Complete Customer Order		L3 5

	1.3.3.6 - Report Customer Order Handling		L3 5
		1.3.3.6.1 - Monitor Customer Order Status	L4 100%
		1.3.3.6.2 - Manage Customer Order Status Notification	L4 100%
		1.3.3.6.3 - Report Customer Order Status	L4 100%
	1.3.3.7 - Close Customer Order		L3 5

Table 6-2 Business Process Framework: Detailed Conformance Results – Customer Domain

6.5 Business Process Framework – Detailed Conformance Results Service Domain (Part 1)

Member:		TIBCO		Level 4 Process Elements included in the certification scope	Overall Scores Achieved in the certification
Solution:		Fulfillment Orchestration Suite			
Assessment Type		Solution Assessment			
Number of L3 Processes in Scope:		28			
Number of L4 Processes in Scope:		89			
Level 2	Level 3	Level 4			
1.4 - Service Domain					
1.4.3 - Service Development & Retirement					
1.4.3.4 - Develop Detailed Service Specifications				L3	4.3
1.4.3.4.1 - Develop Detailed Service Technical Specifications				L4	100%
1.4.3.4.2 - Develop Detailed Service Support Specifications				L4	100%
1.4.3.4.3 - Develop Detailed Service Operational Specifications				L4	50%
1.4.3.4.4 - Develop Detailed Service Customer Manuals				L4	0%
1.4.3.5 - Manage Service Development				L3	3.4
1.4.3.5.1 - Identify Required Processes & Procedures for Services				L4	50%
1.4.3.5.2 - Develop Required Processes & Procedures for Services				L4	50%
1.4.3.5.3 - Develop Service & Operational Agreements for Services				L4	0%
1.4.3.5.4 - Gain Service & Operational Agreements Approval for Services				L4	0%
1.4.3.5.5 - Produce Supporting Documentation & Training Packages for Services				L4	0%
1.4.3.6 - Manage Service Deployment				L3	3.3
1.4.3.6.1 - Manage Service Process & Procedure Implementation				L4	0%
1.4.3.6.2 - Manage Service Operational Staff Training				L4	0%
1.4.3.6.3 - Develop Service Party Operational Support				L4	0%
1.4.3.6.4 - Manage Service Acceptance Testing				L4	50%
1.4.3.7 - Manage Service Exit				L3	4.0
1.4.4 - SM&O Support & Readiness					
1.4.4.1 - Manage Service Inventory				L3	4.5
1.4.4.1.1 - Manage Service Inventory Database and Processes				L4	75%
1.4.4.1.2 - Perform Service Inventory Audit Tests				L4	75%
1.4.4.1.3 - Track and Monitor Service Inventory Capabilities				L4	75%
1.4.4.1.4 - Identify Service Inventory Issues and Provide Reports and Warnings				L4	75%

Table 6-3 Business Process Framework: Detailed Conformance Results – Service Domain (Part 1)

6.6 Business Process Framework – Detailed Conformance Results Service Domain (Part 2)

Member:		TIBCO		Level 4 Process Elements included in the certification scope	Overall Scores Achieved in the certification
Solution:		Fulfillment Orchestration Suite			
Assessment Type		Solution Assessment			
Number of L3 Processes in Scope:		28			
Number of L4 Processes in Scope:		89			
Level 2	Level 3	Level 4			
1.4 - Service Domain					
1.4.5 - Service Configuration & Activation					
	1.4.5.1 - Design Solution			L3	4.3
		1.4.5.1.1 - Develop Overall Service Design		L4	100%
		1.4.5.1.2 - Develop Service Implementation Plan		L4	0%
		1.4.5.1.3 - Develop Detailed Service Design		L4	100%
	1.4.5.2 - Allocate Specific Service Parameters to Services			L3	4.8
		1.4.5.2.1 - Determine Service Parameter Availability		L4	100%
		1.4.5.2.2 - Reserve Service Parameters		L4	75%
		1.4.5.2.3 - Release Service Parameter		L4	75%
		1.4.5.2.4 - Allocate Service Parameters		L4	100%
	1.4.5.3 - Track & Manage Service Provisioning			L3	5.0
		1.4.5.3.1 - Assign Service Provisioning Activity		L4	100%
		1.4.5.3.2 - Track Service Provisioning Activity		L4	100%
		1.4.5.3.3 - Manage Service Provisioning Activity		L4	100%
	1.4.5.4 - Implement, Configure & Activate Service			L3	5.0
		1.4.5.4.1 - Configure Service		L4	100%
		1.4.5.4.2 - Implement Service		L4	100%
		1.4.5.4.3 - Activate Service		L4	100%
	1.4.5.6 - Issue Service Orders			L3	5.0
		1.4.5.6.1 - Assess Service Request		L4	100%
		1.4.5.6.2 - Create Service Orders		L4	100%
		1.4.5.6.3 - Mark Service Order for Special Handling		L4	100%
	1.4.5.7 - Report Service Provisioning			L3	5.0
		1.4.5.7.1 - Monitor Service Order Status		L4	100%
		1.4.5.7.2 - Distribute Service Order Notification		L4	100%
		1.4.5.7.3 - Distribute Service Provisioning Reports		L4	100%
	1.4.5.8 - Close Service Order			L3	5.0
	1.4.5.9 - Recover Service			L3	4.8
		1.4.5.9.1 - Develop Service Recovery Plan		L4	50%
		1.4.5.9.2 - Provide Service Recovery Proposal Notification		L4	100%
		1.4.5.9.3 - Request Service Recovery Authorization		L4	100%
		1.4.5.9.4 - Commence Service Recovery		L4	100%
		1.4.5.9.5 - Complete Service Recovery		L4	100%

Table 6-4 Business Process Framework: Detailed Conformance Results – Service Domain (Part 2)

6.7 Business Process Framework – Detailed Conformance Results

Resource Domain

TM Forum Framework 17.0 Assessment Scoping Document - Business Process Framework (eTOM) Level 4 process elements			
Member:		TIBCO	
Solution:		Fulfillment Orchestration Suite	
Assessment Type:		Solution Assessment	
Number of L3 Processes in Scope:		28	
Number of L4 Processes in Scope:		89	
Level 2	Level 3	Level 4	
		Level 4 Process Elements included in the certification scope	Overall Scores Achieved in the certification
1.5 - Resource Domain			
1.5.6 - Resource Provisioning			
	1.5.6.1 - Allocate & Install Resource	L3	4.5
	1.5.6.1.1 - Determine Resource Availability	L4	75%
	1.5.6.1.2 - Reserve Resource	L4	75%
	1.5.6.1.3 - Release Resource	L4	75%
	1.5.6.1.4 - Allocate Resource	L4	75%
	1.5.6.1.5 - Install and Commission Resource	L4	75%
	1.5.6.2 - Configure & Activate Resource	L3	5.0
	1.5.6.2.1 - Configure Resource	L4	100%
	1.5.6.2.2 - Implement Resource	L4	100%
	1.5.6.2.3 - Activate Resource	L4	100%
	1.5.6.4 - Track & Manage Resource Provisioning	L3	4.8
	1.5.6.4.1 - Coordinate Resource Provisioning Activity	L4	100%
	1.5.6.4.2 - Track Resource Provisioning Activity	L4	100%
	1.5.6.4.3 - Manage Resource Provisioning Activity	L4	50%
	1.5.6.4.4 - Update Resource Repository	L4	100%
	1.5.6.5 - Report Resource Provisioning	L3	5.0
	1.5.6.5.1 - Monitor Resource Order Status	L4	100%
	1.5.6.5.2 - Distribute Resource Order Notification	L4	100%
	1.5.6.5.3 - Distribute Resource Provisioning Reports	L4	100%
	1.5.6.6 - Close Resource Order	L3	5
	1.5.6.7 - Issue Resource Orders	L3	5
	1.5.6.7.1 - Assess Resource Request	L4	100%
	1.5.6.7.2 - Create Resource Orders	L4	100%
	1.5.6.7.3 - Mark Resource Order for Special Handling	L4	100%
	1.5.6.8 - Recover Resource	L3	4.6
	1.5.6.8.1 - Develop Resource Recovery Plan	L4	25%
	1.5.6.8.2 - Provide Resource Recovery Proposal Notification	L4	100%
	1.5.6.8.3 - Request Resource Recovery Authorization	L4	100%
	1.5.6.8.4 - Commence Resource Recovery	L4	100%
	1.5.6.8.5 - Complete Resource Recovery	L4	50%
	1.5.6.8.6 - Recover Specific Resource	L4	100%

Table 6-5 Business Process Framework: Detailed Conformance Results – Resource Domain

7 Information Framework Assessment Overview

7.1 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.

7.2 Information Framework Assessment - ABE Scope

The diagram below illustrates the Information Framework Level 1 ABEs (as highlighted in red), the boxes that have a number within a red circle indicate the number of lower level ABEs included within the Level-1 ABE, which were presented in scope for the Assessment. The full scope for the assessment, including lower level ABEs, is provided in Table 7-1 below.

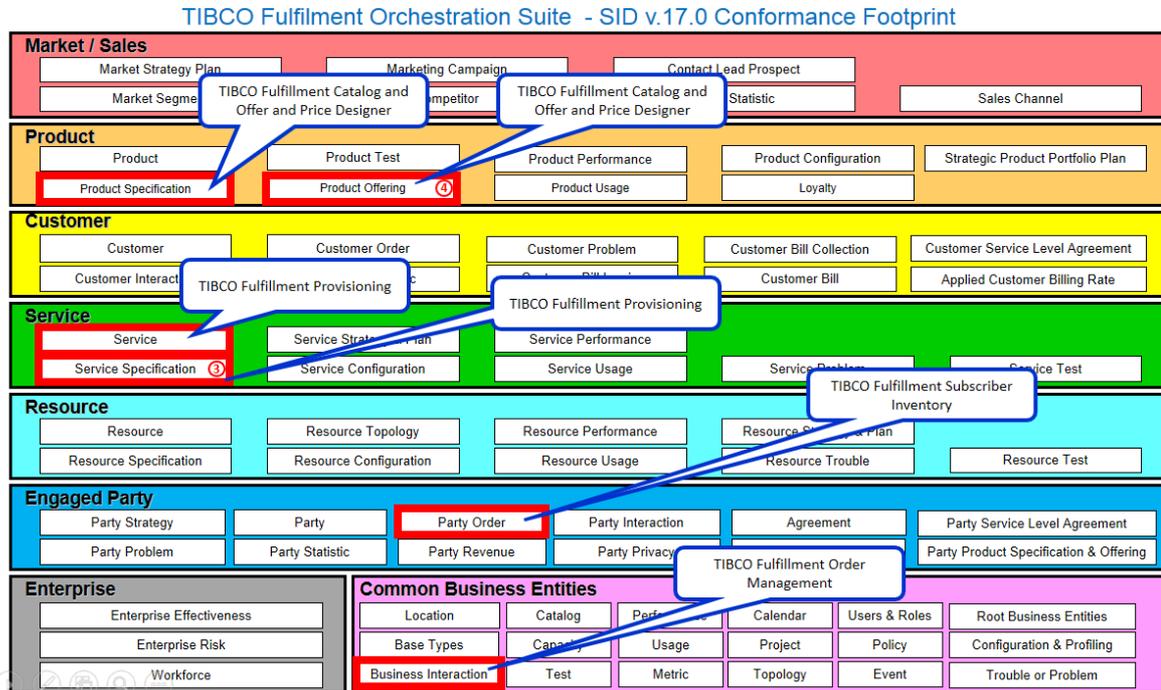


Figure 7-1 Tibco FoS-R SID Mapping

Table 7-1 Information Framework Assessment Scope

TM Forum Framework Conformance Assessment Scope - Information Framework (SID)				
Information Framework (SID) Scope				
Member:	TIBCO			
Product:	Tibco Fulfillment Orchestration Suite R			
Assessment Type:	Product Assessment			
Framework Version:	17			
ABEs in Scope:	11			
Level 1 ABEs	Level 2 ABEs	Level 3 ABEs	Level 4 ABEs	In Scope
Common Business Entities Domain				
Business Interaction				X
Product Domain				
Product Specification				X
Product Offering				X
Product Offering	Product Offering Price			X
Product Offering	Product Offering Price Rule			X
Product Offering	Product Catalog			X
Service Domain				
Service	Service Order			X
Service Specification				X
Service Specification	Customer Facing Service Spec			X
Service Specification	Resource Facing Service Spec			X
Engaged Party Domain				
Party Order				X

8 Information Framework Conformance Result

This Section details the Scores awarded to reflect Conformance of the Tibco solution to the Information Framework components of Framework 17.0.

8.1 Information Framework – Scoring Rules

Between 2013 (Framework 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 will prevail instead of these two scoring methods (Maturity + Adoption). The use of two different methods made interpretation and understanding opaque 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 with regard to 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.

8.1.1 Information Framework Maturity Conformance Scoring Methodology

As of Framework 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 Framework Conformance Program.

Information Framework Adoption scores are granted based on the detailed scoring guidelines outlined in Table 8-1.

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 8-1.

Table 8-1 TM Forum Information Framework Adoption Conformance - Scoring Rules

Information Framework R17.0: 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>						

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.

8.2 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 Tibco Fulfillment Orchestration Suite Framework Assessment.

Each ABE was assessed using the Information Framework (SID) conformance scoring guidelines as described in previous sections.

8.2.1 Information Framework - Adoption Conformance Result Summary

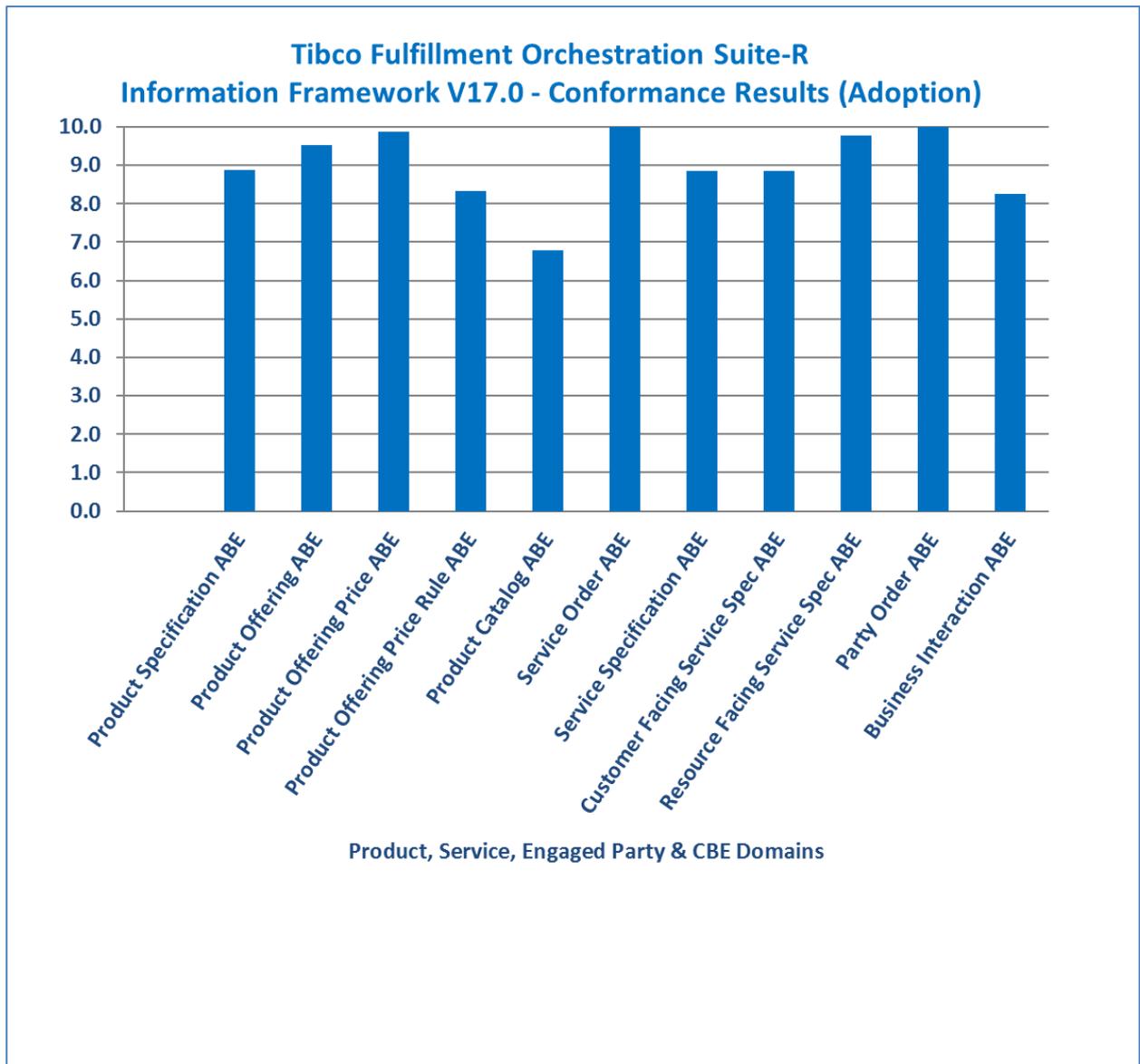


Figure 8-1 Information Framework – Adoption Conformance Results Summary

8.3 Information Framework – Detailed Conformance Result

The following table provides a more detailed breakdown of the scores awarded with some additional commentary.

Table 8-2 Information Framework: Conformance Results Summary

Tibco FoS-R - SID Assessment & Certification Scope TM Forum Information Framework (SID) v.17.0			
Domain ABE	Conformance Comments Maturity/Adoption	Maturity Score	Adoption Score
Product Domain			
Product Specification/ Product Specification	Low Conformance/Very High Conformance	3.9	8.8
Product Offering/ Product Offering	Low Conformance/Very High Conformance	3.9	9.5
Product Offering/ Product Offering Price	Non Conformance/Non Conformance	3.9	9.9
Product Offering/ Product Offering Price Rule	Low Conformance/Very High Conformance	0.0	0.0
Product Offering/ Product Catalog	Very Low Conformance/Medium Conformance	2.3	5.3
Tibco FoS-R - SID Assessment & Certification Scope TM Forum Information Framework (SID) v.17.0			
Domain ABE	Conformance Comments Maturity/Adoption	Maturity Score	Adoption Score
Service Domain			
Service/ Service Order	Full Conformance/Full Conformance	7.0	10.0
Service Specification/ Service Specification	Low Conformance/Very High Conformance	3.7	8.9
Service Specification/ Customer Facing Service Spec/ Customer Facing Service Spec	Low Conformance/Very High Conformance	3.5	8.9
Service Specification/ Resource Facing Service Spec/ Resource Facing Service Spec	Very High Conformance/Very High Conformance	6.9	9.8
Tibco FoS-R - SID Assessment & Certification Scope TM Forum Information Framework (SID) v.17.0			
Domain ABE	Conformance Comments Maturity/Adoption	Maturity Score	Adoption Score
Engaged Party Domain			
Party Order/ Party Order		5.8	7.6
Tibco FoS-R - SID Assessment & Certification Scope TM Forum Information Framework (SID) v.17.0			
Domain ABE	Conformance Comments Maturity/Adoption	Maturity Score	Adoption Score
CBE Domain			
Business Interaction/ Business Interaction ABE		3.4	8.3

Revision History

Version	Date	Authors	Comments
V1.0	09/03/2018	Alfred Anaya-Dubernard	Updated final version for Publication of Final Report