

Framework 17.5

Product Conformance

Certification Report

PortaOne, Inc.
PortaBilling (Maintenance Release 69)

May 2018
Version 1.0

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1 Introduction

1.1 Executive Summary

This document provides details of PortaOne's self-assessment and TM Forum's Conformance Assessment of the **PortaBilling Maintenance Release 69**, against the following Framework 17.5 component:

- Business Process Framework Version 17.5

The assessment included a review of the methodology approach to process modeling against the TM Forum's Business Process Framework Release 17.5 according to the specific processes submitted in scope for the Assessment.

For more information on PortaBilling please contact sales@portaone.com and visit <https://www.portaone.com/>

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

2 Product Functionality/Capability Overview

2.1 PortaBilling Overview

PortaBilling is a business and operation support system (B/OSS) designed for communication service providers (CSP) to manage end-to-end telecom service networks.

PortaBilling includes:

- Customer management;
- Service provisioning;
- Carrier grade converged billing platform with online charging system, mediation, rating, and flexible invoicing.

PortaBilling communicates with elements of the telecommunication network, provides its nodes with authentication and authorization, and gathers billing events such as data about services rendered to the customers. Based on this information, PortaBilling:

- provides a real-time verification of available funds and balances,
- automatically disconnects calls to prevent balance overdrafts,
- manages flexible rating of service usage,
- offers a tool to create attractive product bundles within service-agnostic product catalog,
- automatically assesses monthly recurring charges,
- detects and prevents potential fraudulent activity,
- generates and electronically delivers invoices for multiple service, and
- enforces the payment collection process.

All these processes happen in real time, so the billing data is updated as soon as a session is completed. PortaBilling acts as the nerve center of the network and represents a unified platform for multiple services allowing to charge subscribers for their voice calls, messages/SMS, data transfer, and other services like IPTV subscriptions or video-on-demand (VoD) thus effectively deploying triple-play on a single network.

PortaBilling is a core basis of PortaSwitch, an ultimate UCaaS platform that enable CSPs to utilize a variety of both advanced class 5 features for hosted IPPBX or IP Centrex services as well as the majority of functionality normally attributed to session border controllers (SBC).

2.2 PortaBilling Benefits

PortaBilling is available on SaaS basis in a public cloud. Alternatively, operator may acquire an unlimited perpetual license for on-premises installation. In case of on-premises installation the pricing does NOT depend on the number of concurrent calls, charged events or subscribers. There are absolutely no artificial limitations on the code level, and all functionality and modules are included with no exceptions. The platform comes with a customized training at customer's office and complimentary subscription to PortaCare: 24/7 technical support and maintenance with all new features updates. The license adheres to a fully open architecture standard, and all PortaBilling customers have:

- a direct access to the database and DB schema description,
- access to extensive XML API to connect with existing web portals,
- ability to develop their own customizations for the product code.

2.3 PortaBilling Components

PortaBilling consists of the following components seen in the diagram.

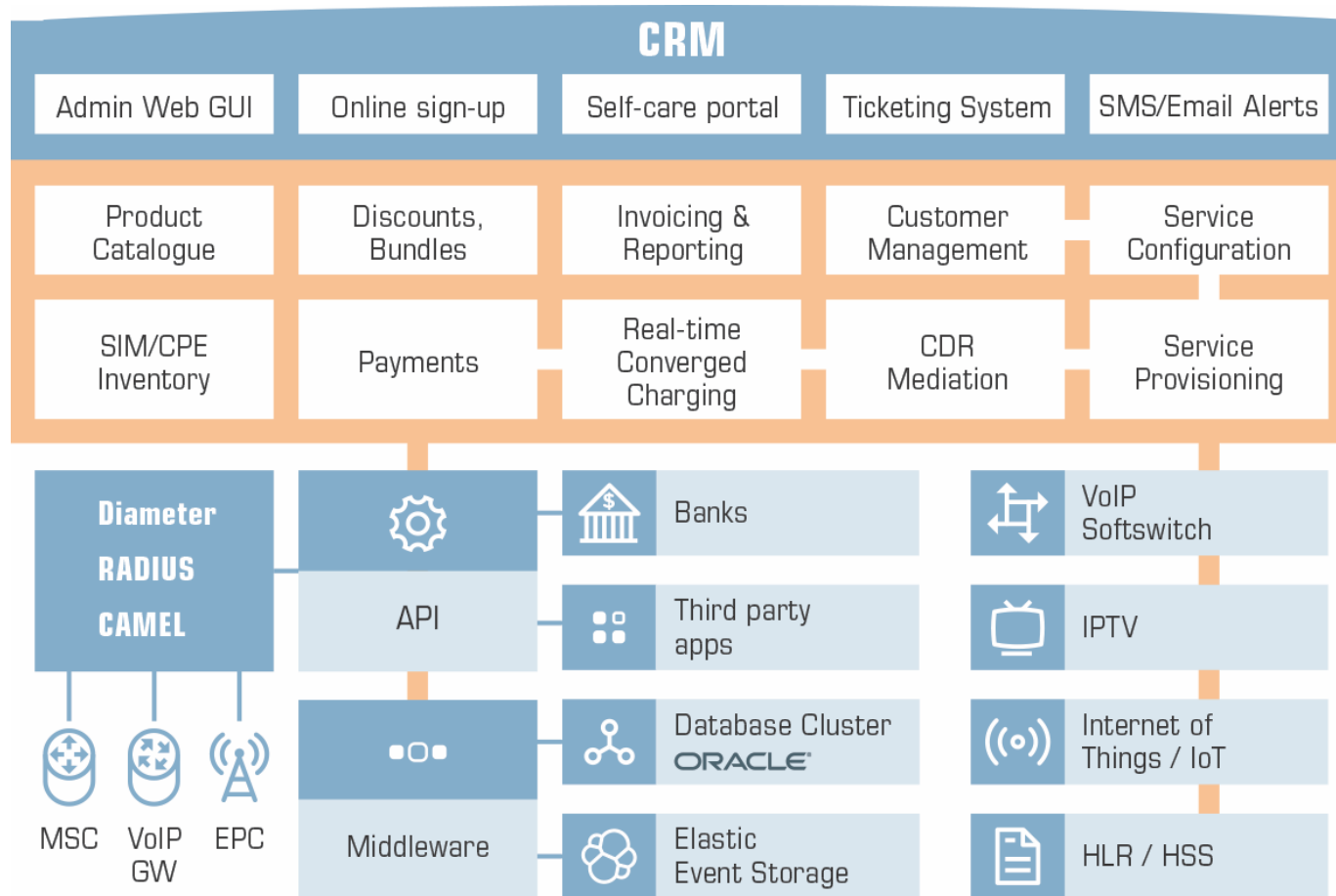


Figure 2-1 PortaBilling - Overview

2.4 Business Process Framework Level 2 Process Scope

The following figures represent the Business Process Framework Level 2 processes (high-lighted in blue) that were presented in scope for the assessment and that were assessed and support the corresponding Business Process Framework processes according to the scope of the conformance certification.

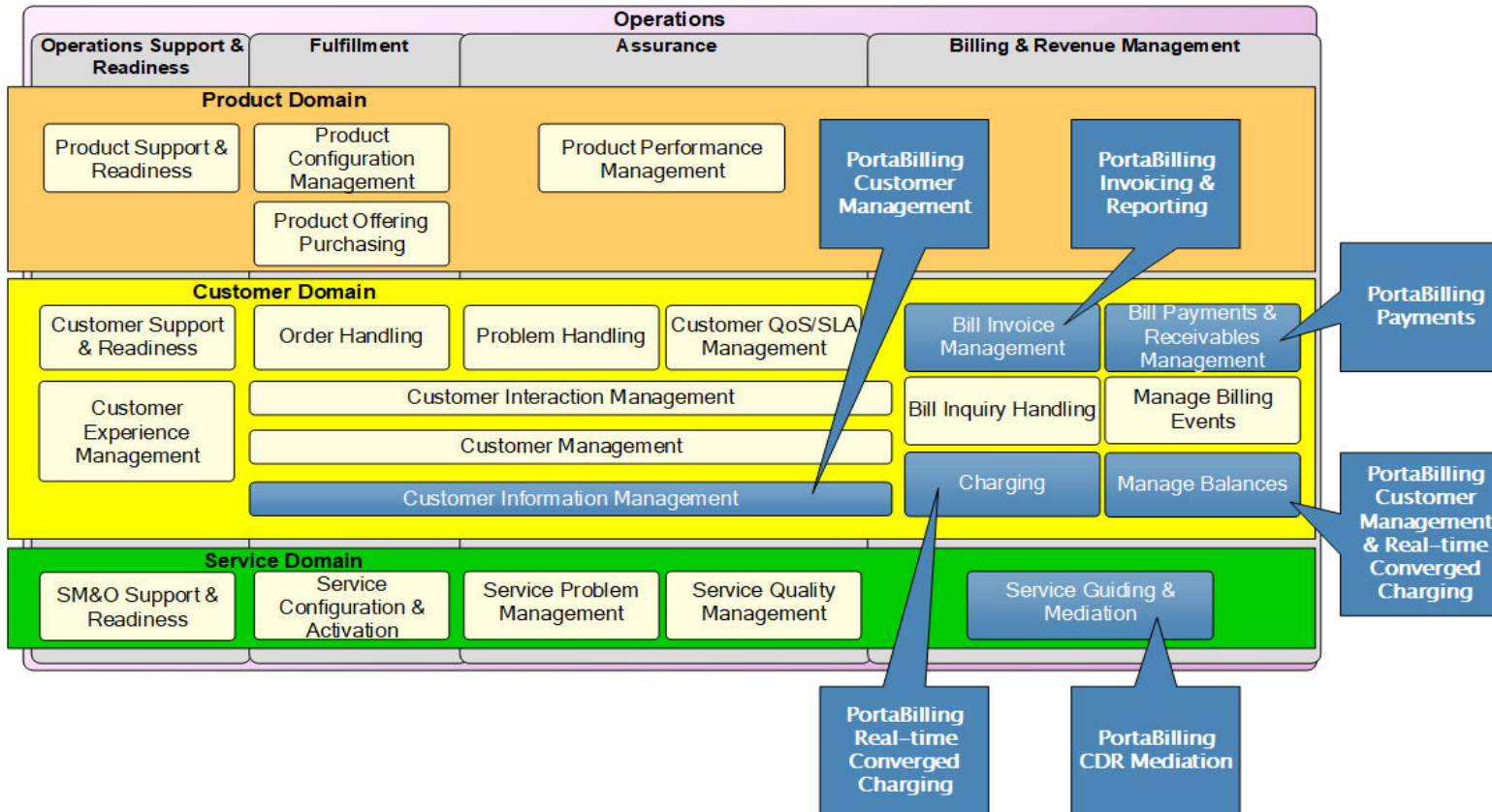


Figure 2-2 Level 2 process coverage for PortaBilling Assessment

3 Business Process Framework Assessment Overview

3.1 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 defined in the eTOM specification, the process mappings are in that case provided against the Level 4 Extended description. If an Extended description is not defined, then the mapping is provided against the Brief description.

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 3 process descriptions using the Mandatory/Extended/Brief description as per the guidelines explained for Level 4 based mappings in the previous note.

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

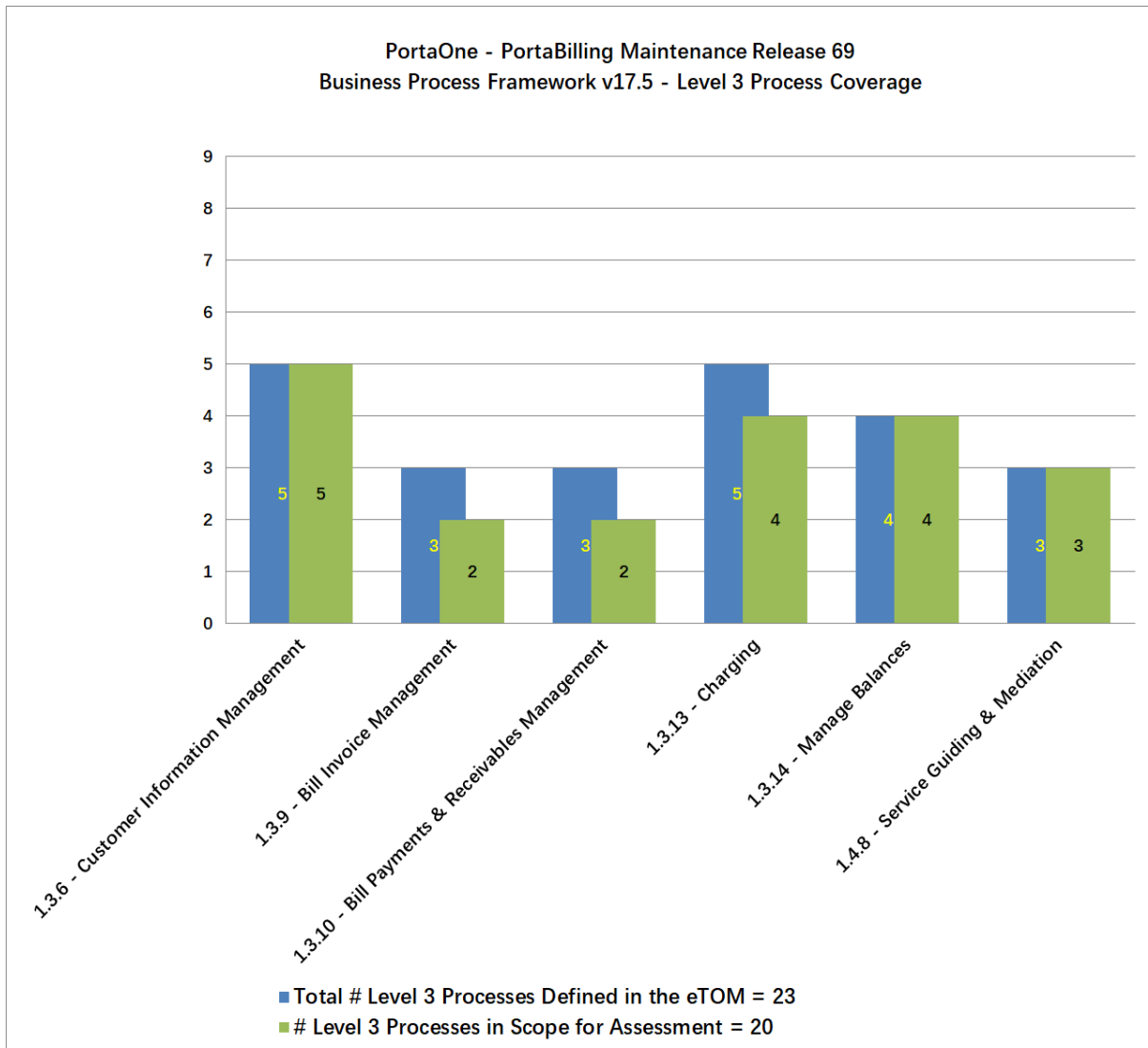


Figure 3-1 Level 3 process coverage

Table 3-1 Business Process Framework Assessment Scope

TM Forum Framework 17.5 Assessment Scoping Document - Business Process Framework (eTOM)			
Member:		PortaOne, Inc.	
Product:		PortaBilling (Maintenance 69)	
Assessment Type		Product	
Number of L3 Processes in Scope:		20	
Level 1	Level 2	Level 3	Certification Scope for Level-3 Process Elements <i>Double click on cell for every L3 process to be included in scope</i>
1.3 - Customer Domain			
1.3.6 - Customer Information Management			
		1.3.6.1 - Create Customer Record	X
		1.3.6.2 - Update Customer Data	X
		1.3.6.3 - Notify Customer Data Change	X
		1.3.6.4 - Archive Customer Data	X
		1.3.6.5 - Build a unified customer view	X
1.3.9 - Bill Invoice Management			
		1.3.9.1 - Apply Pricing, Discounting, Adjustments & Rebates	X
		1.3.9.2 - Create Customer Bill Invoice	X
		1.3.9.3 - Produce & Distribute Bill	X
1.3.10 - Bill Payments & Receivables Management			
		1.3.10.1 - Manage Customer Billing	X
		1.3.10.2 - Manage Customer Payments	X
		1.3.10.3 - Manage Customer Debt Collection	X
1.3.13 - Charging			
		1.3.13.1 - Perform Rating	X
		1.3.13.2 - Apply Rate Level Discounts	X
		1.3.13.3 - Aggregate Items For Charging	X
		1.3.13.4 - Manage Customer Charging Hierarchy	X
		1.3.13.5 - Provide Advice of Charge/Rate	X
1.3.14 - Manage Balances			
		1.3.14.1 - Manage Balance Containers	X
		1.3.14.2 - Manage Balance Policies	X
		1.3.14.3 - Balance Operations Management	X
		1.3.14.4 - Authorize Transaction Based on Balance	X
1.4 - Service Domain			
1.4.8 - Service Guiding & Mediation			
		1.4.8.1 - Mediate Service Usage Records	X
		1.4.8.2 - Report Service Usage Records	X
		1.4.8.3 - Guide Resource Usage Records	X

4 Business Process Framework – Scoring Guidelines

This section provides the Process Mapping output from PortaOne’s self-assessment which was reviewed by TM Forum Subject Matter Experts alongside supporting documentation for PortaBilling Maintenance Release 69.

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 4-1 - TM Forum Business Process Framework: Conformance Scoring Rules

4.1 Business Process Framework – Conformance Result Summary

This Section provides a graphical view of the conformance levels granted to the Level 3 Processes presented in scope for PortaOne’s PortaBilling Maintenance Release 69 conformance assessment. Each Level 3 process was measured using a Business Process Framework (eTOM) conformance score according to the level of Conformance – Full Conformance (Score = 5) or Partial Conformance (Score below 5).

4.1.1 Customer Domain

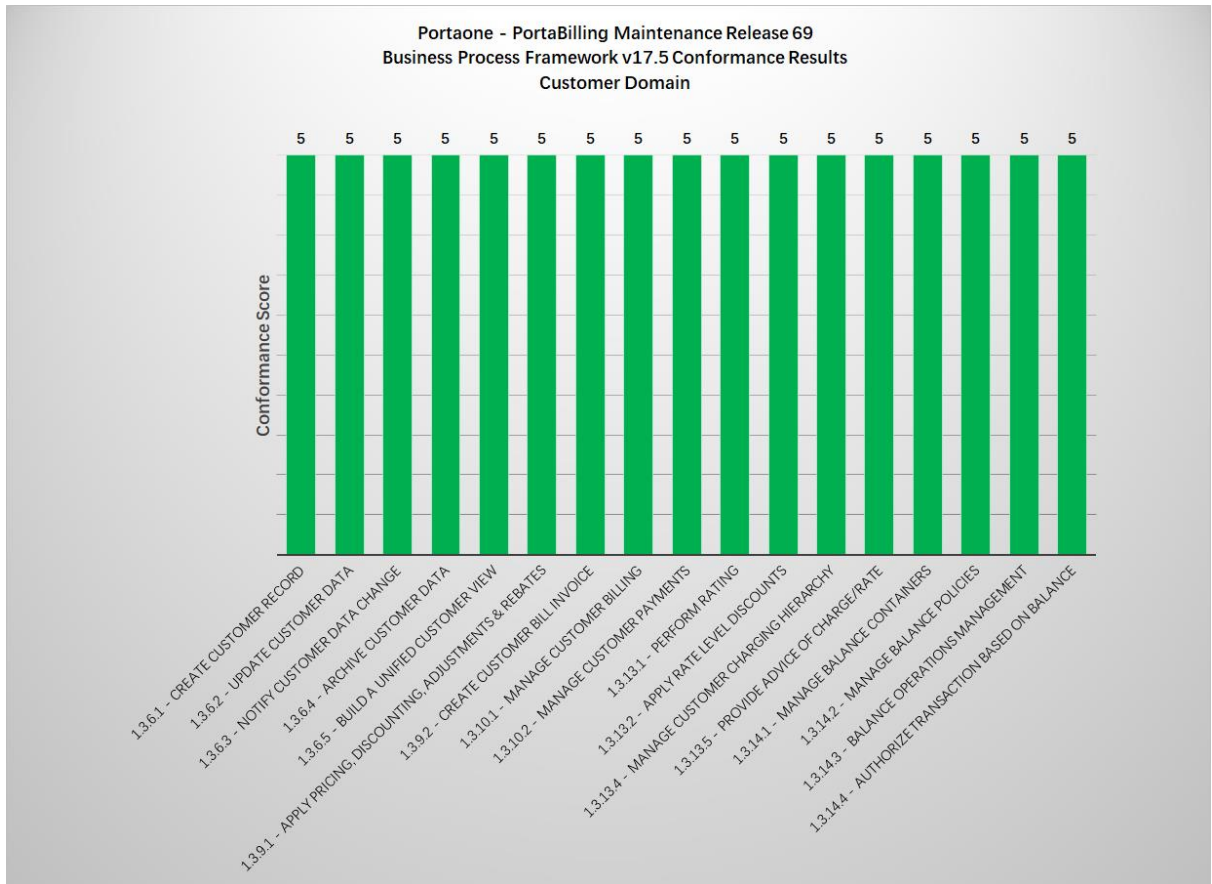


Figure 4-2 - Business Process Framework: Scores for Customer Domain

4.1.2 Service Domain

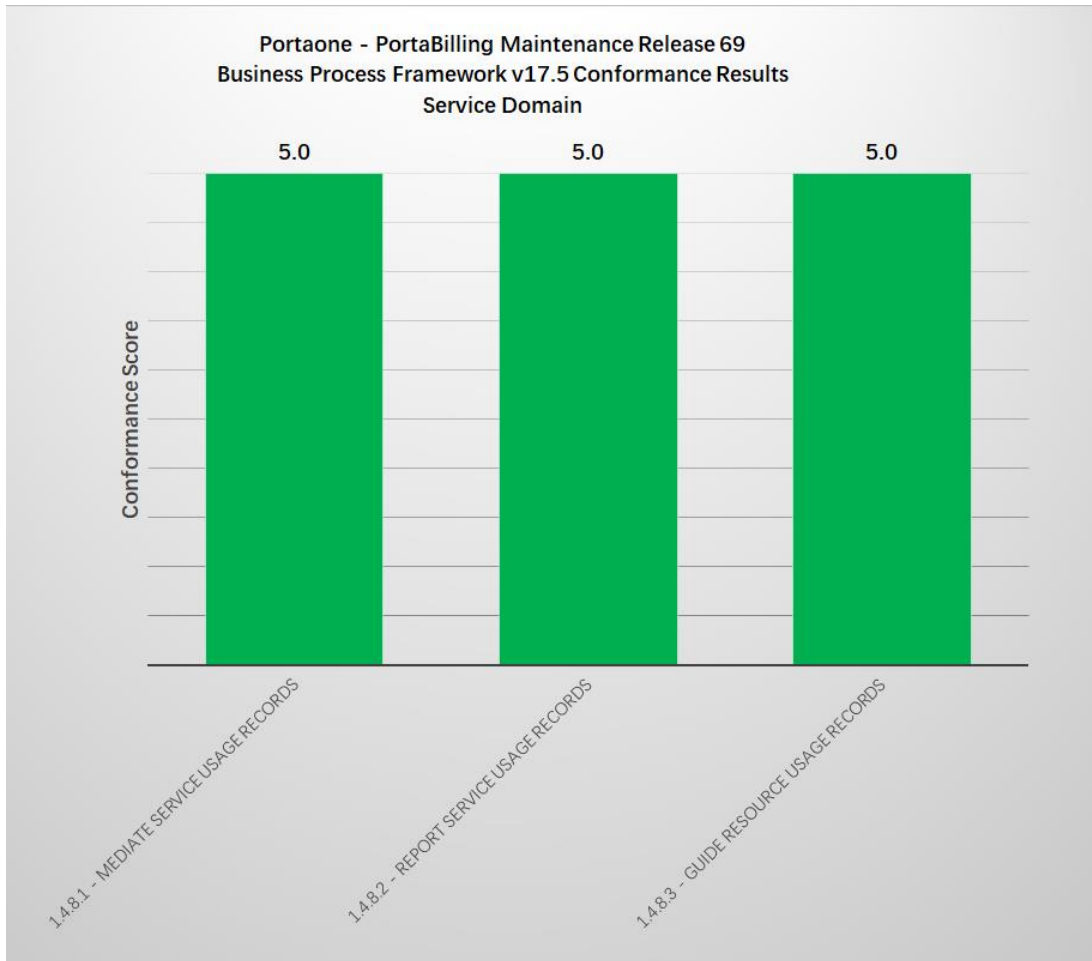


Figure 4-3 - Business Process Framework: Scores for Service Domain

4.2 Customer Domain

4.2.1 Mapping Details & Supporting Evidence

The documented mapping information for all Level 3/Level 4 processes in scope for the Customer domain is available from the following link:

https://www.tmforum.org/wp-content/uploads/2014/10/PortaBilling_Maintenance_Rel_69_Customer_Domain_v1_0.pdf

4.2.2 Detailed Conformance Scores

Table 4-1 Conformance Scores for Customer Domain

TM Forum Framework 17.5 Assessment Scoring Document - Business Process Framework (eTOM)			
	Member:	PortaOne, Inc	
	Product:	PortaBilling (Maintenance Release 69)	
	Assessment Type:	Product	
	Number of L3 Processes:	20	
	Number of L4 Processes:	17	
Level 2	Level 3	Level 4	
1.3 - Customer Domain			
1.3.6 - Customer Information Management			
	1.3.6.1 - Create Customer Record		5
	1.3.6.2 - Update Customer Data		5
	1.3.6.3 - Notify Customer Data Change		5
	1.3.6.4 - Archive Customer Data		5
	1.3.6.5 - Build a unified customer view		5
1.3.9 - Bill Invoice Management			
	1.3.9.1 - Apply Pricing, Discounting, Adjustments & Rebates		5
		1.3.9.1.1 - Obtain Billing Events	100%
		1.3.9.1.2 - Apply Pricing, Discounting, Adjustments & Rebates to Customer Account	100%
		1.3.9.1.3 - Apply Agreed Customer Bill Adjustment	100%
	1.3.9.2 - Create Customer Bill Invoice		5
		1.3.9.2.1 - Render & Format Invoice	100%
		1.3.9.2.2 - Deliver Electronic Invoice	100%
		1.3.9.2.3 - Verify Invoice Quality	100%
		1.3.9.2.4 - Manage Customer Invoice Archive	100%
1.3.10 - Bill Payments & Receivables Management			
	1.3.10.1 - Manage Customer Billing		5
	1.3.10.2 - Manage Customer Payments		5
		1.3.10.2.1 - Manage Customer Payment Plan	100%
		1.3.10.2.2 - Collect Customer Payment	100%
		1.3.10.2.3 - Reconcile Customer Payment	100%
		1.3.10.2.4 - Manage Back-End Bank Account	100%
		1.3.10.2.5 - Administer Commercial Arrangement for Third Party Supplier	100%
1.3.13 - Charging			
	1.3.13.1 - Perform Rating		5
	1.3.13.2 - Apply Rate Level Discounts		5
	1.3.13.4 - Manage Customer Charging Hierarchy		5
	1.3.13.5 - Provide Advice of Charge/Rate		5
1.3.14 - Manage Balances			
	1.3.14.1 - Manage Balance Containers		5
	1.3.14.2 - Manage Balance Policies		5
	1.3.14.3 - Balance Operations Management		5
	1.3.14.4 - Authorize Transaction Based on Balance		5
1.4 - Service Domain			
1.4.8 - Service Guiding & Mediation			
	1.4.8.1 - Mediate Service Usage Records		5
		1.4.8.1.1 - Validate Service Usage Record	100%
		1.4.8.1.2 - Normalize Service Usage Record	100%
		1.4.8.1.3 - Convert Service Usage Record	100%
		1.4.8.1.4 - Correlate Service Usage Record	100%
		1.4.8.1.5 - Remove Duplicate Service Usage Record	100%
	1.4.8.2 - Report Service Usage Records		5
	1.4.8.3 - Guide Resource Usage Records		5

4.3 Service Domain

4.3.1 Mapping Details & Supporting Evidence

The documented mapping information for all Level 3/Level 4 processes in scope for the Service domain is available from the following link:

https://www.tmforum.org/wp-content/uploads/2014/10/PortaBilling_Maintenance_Rel_69_Service_Domain_v1_0.pdf

4.3.2 Detailed Conformance Scores

Table 4-2 Conformance Scores for Service Domain

TM Forum Framework 17.5 Assessment Scoring Document - Business Process Framework (eTOM)				
	Member:	PortaOne, Inc		
	Product:	PortaBilling (Maintenance Release 69)		
	Assessment Type:	Product		
	Number of L3 Processes:	20		
	Number of L4 Processes:	17		
Level 2	Level 3	Level 4		
1.4 - Service Domain			Overall Scores Achieved in the certification	
1.4.8 - Service Guiding & Mediation				
	1.4.8.1 - Mediate Service Usage Records			5
	1.4.8.1.1 - Validate Service Usage Record			100%
	1.4.8.1.2 - Normalize Service Usage Record			100%
	1.4.8.1.3 - Convert Service Usage Record			100%
	1.4.8.1.4 - Correlate Service Usage Record			100%
	1.4.8.1.5 - Remove Duplicate Service Usage Record			100%
	1.4.8.2 - Report Service Usage Records			5
	1.4.8.3 - Guide Resource Usage Records			5