

# Frameworkx

## Release Notes for Release 12

RN303

Version 0.12



*May, 2012*

## Notice

No recipient of this document shall in any way interpret this document as representing a position or agreement of TM Forum or its members. This document is a draft working document of TM Forum and is provided solely for comments and evaluation. It is not a Forum Approved Document and is solely circulated for the purposes of assisting TM Forum in the preparation of a final document in furtherance of the aims and mission of TM Forum.

Although it is a copyrighted document of TM Forum:

- Members of TM Forum are only granted the limited copyright waiver to distribute this document within their companies and may not make paper or electronic copies for distribution outside of their companies.
- Non-members of the TM Forum are not permitted to make copies (paper or electronic) of this draft document other than for their internal use for the sole purpose of making comments thereon directly to TM Forum.
- If this document forms part of a supply of information in support of an Industry Group Liaison relationship, the document may only be used as part of the work identified in the Liaison and may not be used or further distributed for any other purposes

Any use of this document by the recipient, other than as set forth specifically herein, is at its own risk, and under no circumstances will TM Forum be liable for direct or indirect damages or any costs or losses resulting from the use of this document by the recipient.

This document is governed, and all recipients shall be bound, by all of the terms and conditions of the Intellectual Property Rights Policy of the TM Forum

(<http://www.tmforum.org/Bylaws/1094/home.html>) and may involve a claim of patent rights by one or more TM Forum members or by non-members of TM Forum.

Direct inquiries to the TM Forum office:

240 Headquarters Plaza,  
East Tower – 10<sup>th</sup> Floor,  
Morristown, NJ 07960 USA  
Tel No. +1 973 944 5100  
Fax No. +1 973 944 5110  
TM Forum Web Page: [www.tmforum.org](http://www.tmforum.org)



## Table of Contents

<b>Notice.....</b>	<b>2</b>
<b>Table of Contents .....</b>	<b>3</b>
<b>1. Introduction .....</b>	<b>4</b>
<b>2. Overview of Frameworkx.....</b>	<b>5</b>
2.1. TM Forum Frameworkx .....	5
2.2. Key Features in this Release .....	5
2.3. Business Benefits.....	8
<b>3. Release Definition.....</b>	<b>9</b>
3.1. Release Components .....	9
<b>4. Observations and Comments.....</b>	<b>11</b>
<b>5. Known Issues .....</b>	<b>12</b>
<b>6. Administrative Appendix .....</b>	<b>13</b>
6.1. Document History .....	13
6.1.1. Version History .....	13
6.1.2. Release History.....	13



## 1. Introduction

This document provides the overview content of Frameworkx release 12 and will identify the changes introduced in this current release.

For details on packaging and accessing the documents please refer to the respective Component Frameworks Read Me First notes or Release Notes.

This is considered the most robust release of Frameworkx ever. It includes substantial updates to the core Frameworkx as well as extensive lists of management and implementation guides and documents that enable the implementation of cloud and other new services. These updates ensure Frameworkx incorporates the latest technologies, services and business models that service providers, suppliers and value chain partners will be undertaking.

Frameworkx is created by TM Forum membership. Priorities are set by members and implementation is done by member led project groups who work collaboratively to create the updates to the best practices and standards in the release. TM Forum provides the legal and technical enablers and staff support to members in their collaborative efforts.

## 2. Overview of Frameworkx

### 2.1. TM Forum Frameworkx

---

Frameworkx enables users to analyze their business operations against industry processes, applications and information standards. It also provides a framework to support the procurement, development and implementation of a comprehensive operations environment. The Frameworkx suite of standards may be used as an integrated system end-to-end or as components to solve particular problems. They can be applied throughout organizations by operations staff, software developers and system integrators.

For more information please go to the [TM Forum Frameworkx web page](#).

### 2.2. Key Features in this Release

---

Release 12 is a full release of the Frameworkx Suite and includes key features both in the core frameworks as well as in supporting best practices and guides that enable implementation of Frameworkx-based solutions.

Summary of major new features:

**Management & Implementation Guides:**

- Quick Start Pack for Fulfillment
- Customer Experience Management Introduction
- Asset Management Guide Updates
- Revenue Assurance Solution Suite Extensions
- Business Metrics Updates

**Cloud and New Services:**

- Quick Start Pack: Cloud Assurance
- Cloud Service Level Agreement Management Guidebook
- Monetizing Cloud White Paper
- Cloud Business Models document
- External Compute Infrastructure as a Service Operational Requirements
- Software Enabled Services interface suite including WSDL

**Enterprise Architecture:**

- Metamodel for the entire Frameworkx
- Governance Platform Architecture white paper
- 300 mappings across Framework's

**In the Integration Framework:**

- Enterprise Security Interface Audit logs
- Exchanging Information between Policy Domains
- DSL/GPON Provisioning Specs
- Basic Resource Inventory
- Enabling Deployment and Adoption of Harmonized Interfaces
- Interface Development Tooling for the auto-generation of TIP interfaces
- Interface Deployment Scenarios
- Business Services Technical Report

**Application Framework:**

- Billing, Bill Calculation and Data Mediation
- Customer & Network Care
- Sales and Marketing
- Inventory Management
- Business Analytics
- Supplier Partner Domain
- Enterprise Domain

**Information Framework:**

- Federated Information Model Enablers
- Customer/Subscriber/ Subscription Enhancements
- Workforce Management Enhancements
- Alarms and Alarm controls
- Performance Management Collection
- Disputes/Customer Disputes
- Resource Capacity Demand Model
- Database Design Guidelines

**Business Process Framework:**

- Fulfillment and Billing Level 4 processes and flows
- Security Management Level 3 Processes
- Workforce Management Processes
- Fraud Management Level 2 and 3 processes
- Spectrum Management use cases
- Process Flow Guidelines

Further explanation of some of the highlights of the release:

- Extensive updates across the entire Frameworkx suite to ensure that Frameworkx is relevant for the newest technologies, services and business models that service providers, their suppliers and value chain partners will be undertaking.
- 800 new processes added to the Business Process Framework
- 300 new mappings across the component Frameworks driving cohesion and alignment between Frameworks
- New billing, charging, policy management and fraud management additions to the Business Process Framework.
- A new metamodel to describe how the Frameworks interrelate with each other. Focus is split between identifying common design constructs across all frameworks and on providing a view of how the TM Forum repositories are



structured. The former is necessary for the future evolution of Framework and the latter to enable data management and machine readable transfer of the frameworks between modeling tools. This document and model resolves the majority of both issues and provides a solid basis for any architect wishing to develop solutions across the enterprise.

- Software Enabled Services interface suite including new WSDL generated automatically from the latest version of TM Forum's Interface Development Tooling, a Service Orientated Architecture Tigerstripe-based open source tooling designed to auto-generate standardized interfaces.
- A new addendum to the Service Level Agreement document for Cloud. These guidelines provide the information that you need to validate that your SLA meets Enterprise Grade standards. This handbook is based on the IaaS requirements from the TM Forum Enterprise Cloud Leadership Council and guides service providers on the expectations from their enterprise customers on SLAs.
- New security use cases and processes for the 3 most common network security breaches, Denial of Service Attacks, Penetration Attacks and Application Misuse. These user stories were mapped to the Business Process Framework to create new security processes in 5 areas that serve as a blueprint for organizations to use in establishing their security practices for network defense.
- New Quick Start Pack for Fulfillment provides guidelines for streamlining fulfillment processes for product and service delivery, including interaction with value chain partners. A common language is provided for working with partners on the delivery of services, as well as complete end to end process flows with their BPMN equivalent formats, along with required metrics to ensure effective monitoring and management of the processes.
- Introduction to Customer Experience is a new document which provides business focused recommendations for service providers on how to develop a roadmap for customer experience management transformation including guidance on how to monitor and measure success.
- The Model Federation Enablers in Framework 12 are designed to allow the Information Framework (SID) to model any kind of resource, including those where the detail of the resource is defined by someone else (a company, another standards body, etc). Utilizing this enablement of federated models in conjunction with the Interface Development Tooling could facilitate the generation of interface capability using any combination of federated models.
- Business Services Technical Report: provides for important advancements in the development of the Integration Framework and in particular, plug and play interfaces. This rapidly maturing concept will enable model driven interfaces to be generated from existing TM Forum standards for Process, Application and Information, allowing TM Forum standards certified software developers to ultimately deliver solutions with markedly reduced integration costs to other systems within the CSP environment and throughout the Digital Services value chain. The report documents the state of agreement in this critical area and allows members to join in this exciting development and position themselves for the future. This report is based on solid, existing, proven concepts and identifies the many industry advances that will be combined to deliver this benefit.



Note: A full list of all changes is identified within the release notes for each of the respective component Frameworks and the associated documentation.

Please refer to each component Framework release document for a full list of all documentation included within the component Framework for this release of Frameworkx.

## 2.3. Business Benefits

Frameworkx 12 provides three major business benefits to the user:

1. Capture, protect and maximize revenue in complex value chains
2. Enable rapid deployment of advanced services
3. Reduce IT and operational cost and risk

The table below maps features from Frameworkx 12 in support of each of these business benefits:

Capture, protect and maximize revenue in complex value chains	Enable rapid deployment of advanced services	Reduce IT and operational cost and risk
<ul style="list-style-type: none"> <li>• New significant billing, charging, policy management and fraud management additions to core Frameworks</li> <li>• Definitions for security management processes to counter 3 of the most common network security breaches</li> <li>• New features and enhancements in Revenue Assurance and Asset Management guides</li> <li>• Definition of business agreements for cloud SLAs and capture of cloud monetization industry intelligence</li> </ul>	<ul style="list-style-type: none"> <li>• Focused enrichment of Frameworkx core components for services, products and value chain enablement</li> <li>• Blueprint for streamlining fulfillment processes across enterprises based on key Business Process Framework</li> <li>• Cloud SLA Handbook for defining service level agreements between customers and suppliers in the cloud value chain elements</li> <li>• New Policy Management Interface capabilities including the exchange of information between policy domains, enabling more secure, efficient, flexible, and resilient networks in an extended value chain</li> <li>• Business Process Framework additions for fulfillment that are linked to ITIL processes</li> <li>• New information definitions to streamline multi-enterprise product management, increase security, improve workforce management, and manage network capacity</li> <li>• New Application definitions focused on product and service delivery</li> </ul>	<ul style="list-style-type: none"> <li>• 800 new process definitions in the Business Process Framework spanning the service lifecycle including ITIL best practices</li> <li>• 300 new cross Framework mappings to streamline multi-enterprise product management, increase security, improve workforce management, manage network capacity</li> <li>• New Frameworkx Quick Start Packs for speeding up Fulfillment and Cloud Assurance implementations</li> <li>• Enhancements to standardized interfaces for enterprise security, Policy Exchange, and Inventory</li> <li>• New SOA Infrastructure blueprint</li> </ul>



### 3. Release Definition

#### 3.1. Release Components

The following table outlines the release notes for the components of this Frameworkx 12 release. These release notes provide a convenient next step and a list of all documents that are associated with each component. Please note that not all documents have release notes. Release notes are typically provided for document suites and not individual or standalone documents.

Component	Release	Release Notes
Application Framework	12 Beta	RN315
Business Process Framework	12 Beta	RN311
Frameworkx (this document)	12	RN303
Information Framework	12 Beta	RN310
Integration Framework	12 Beta	RN334
Business Metrics Solution Suite	1.0 Beta	RN332
Business Services Suite	12 Approved	RN316
Business Services Technical Report	1.0 Beta	RN329
Enterprise-Grade External Compute IaaS Requirements	1.0 Beta	RN330
Frameworkx Metamodels	1.0 Beta	RN335
Frameworkx Solution Methodology	12 Beta	RN333
Policy Information Exchange (PIE) Interfaces	1.0 Beta	TMF_PIE_RN
Remote Unit Provisioning – Support for MTOSI GPON and DSL Technologies	1.0 Beta	
Revenue Assurance	3.6 Beta	RN314
TM Forum Basic Resource Inventory	1.0 Beta	TMF_BRI_RN
TM Forum Generic Query	1.0 Beta	TMF_GQ_RN

The tables that follow provide a more complete list of the documents that are new or updated in this Frameworkx 12 release.

#### Implementing Frameworkx Features

##### Management and Implementation Guides

Quick Start Pack: Fulfillment	GB959	0.2
Quick Start Pack for Cloud: Trouble to Resolve	GB960	0.2

Cloud SLA Application Note	GB963	1.1
Customer Experience Management Introduction	Whitepaper	N/A
Asset Management Guide	GB950	1.2
Revenue Assurance Solution Suite Extensions	GB941 Series	3.6
Business Metrics Solution Suite Updates	BM1000 Series	1.0
TMF617 Software Enabled Services Management Interface Information Agreement, Release 1.1	TMF_SMI_IA	1.1

### **Market Intelligence**

Monetizing Cloud	Whitepaper	N/A
Cloud Business Models	TR174A/TR174 B	1.3/1.1
External Compute Infrastructure as a Service Operational Requirements	TR174	1.2

### **Core Frameworkx Features**

Business Process Framework 12 - 800 new processes reflected in extensive updates to documents across the Solution Suite	GB921 Series	12
Information Framework 12 - Substantial new and updated models	GB922 Series	12
Application Framework 12 - Extensive updates to main Application Framework document	GB929 Series	12
Integration Framework 12 - New documents related to integration and interfaces	Various Documents	12

### **Frameworkx Infrastructure Features**

Frameworkx Architecture: Governance Platform	GB945 Series	N/A
Frameworkx Architecture: Metamodel	TR177 Series	N/A
Enterprise Architecture Management: Mappings	TR176	1.8
Software Enabled Services Management Solution	Various Documents	N/A



## 4. Observations and Comments

This release demonstrates TM Forum's commitment to continuous development of Frameworkx as an enabler of the digital service ecosystem, striving for improvements in areas such as value chains, B2B and service fulfilment. Significant further advances will be seen in these areas in subsequent releases, also.

This release also strives to demonstrate our commitment to serving the industry in areas such as Security, Revenue Management, Infrastructure Management, Customer Experience and Big Data.

Continuing with the initiative that began with the 11.5 Frameworkx release, the release numbers of the component Frameworks are now aligned with the Frameworkx release.

Available for download at any given time is the current Frameworkx release and the previous Frameworkx release. The current Frameworkx release is 12, the previous release is 11.5.

The Integration Framework in this release has a much broader definition and is more inclusive in terms of the interfaces, documents and supporting documents that it contains. What was previously referred to as the Integration Framework release, the GB942 series of documents has been renamed the Business Services Suite.



## 5. Known Issues

None

## 6. Administrative Appendix

### 6.1. Document History

---

#### 6.1.1. Version History

Version Number	Date Modified	Modified by:	Description of changes
0.1	May 8, 2012	Joann O'Brien	Draft
0.11	May 15, 2012	Ken Lipnickey	Added material where necessary
0.12	May 17, 2012	Alicja Kaweck	Minor cosmetic corrections prior to web posting

#### 6.1.2. Release History

This section records the changes between this and the previous Official Frameworkx release

Release Number	Date Modified	Modified by:	Comments