Frameworx 14.5
Product Conformance
Certification Report

Celfocus
OM+ Order Management System
V5.0

November 2015
Version 1.0

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1 Introduction

1.1 Executive Summary

This document provides details of Celfocus' self-assessment and TM Forum's Conformance Assessment of the **Celfocus OM+ Order Management product**, against the following Frameworx 14.5 components:

- Business Process Framework Version 14.5

The assessment included a review of:

- The methodology approach to process modeling against the TM Forum's Business Process Framework Release 14.5 according to the specific processes submitted in scope for the Assessment.

Note that Conformance to the Information Framework (SID) Aggregate Business Entities (ABEs) was not covered in this Assessment.

2 Product Functionality/Capability Overview

2.1 Celfocus OM+ Order Management product Overview

CELFOCUS designed and developed a complete, flexible, reusable and scalable Order Management solution in order to support and expedite Sales and Fulfilment Orders in a centralized manner, which is of the utmost importance when facing the eminent multichannel order entry proliferation.

Figure 2-1 OM+ Logo

The key challenges and main objectives in the OM+ design were the following:

- **Order Capture** - One Reality: Capture commercial orders from all channels
- **Order Validation** - Consistency: Validate order requests against centralized business rules. Flexibility to introduce new products and services seamlessly
- **Order Fulfilment** - Every order is different: Generate the right workflow to provision the customer order, with the right sequence at the right time
- **Support & Error handling** - Satisfaction: Provide visibility and tracking of order progress, as well as means of action to suppress technical issues.

OM+ is a master orchestrator that maps, sequences and fulfils any commercial request. It has the ability to map business oriented complex processes, break them into specific technical processes that are thereafter ready for automation and system synchronization. In this sense, OM+ provides a seamless division between business and technical layers and it is also able to differentiate system requests not only by product, but also by any parameter available in that request.

OM+ architecture positioning and principles makes it possible for a company to launch new commercial products with no impact on the business flow, since the process distribution adjusts dynamically to pre-existing flows. OM+ helps companies optimize their product lifecycle with an order management solution that learns companies' business processes, monitors their progress and assures a better time-to-market response.

The main features of OM+ include, but are not limited to, the below topics:

- **Reusability of product fulfilment flows**

  OM+ flows are configured based on a tree-level approach using XPATH as matching conditions. The configuration concept is not product based but process or operation based. This means that the same configured flow can be reused for a set of different products with dynamic and scalable processes, which means launching a new product can be as easy as configuring the offer and reusing the existing fulfilment processes.

- **Asynchronous order fulfilment**

  Allows front-end systems to capture information and delegate the responsibility to OM+ to fulfil the requests against back-end systems. It contains features such as automatic retries and order manipulation, which provides a higher confidence that the operation will complete successfully.

- **Full order progress visibility**

  It is possible to track order progress up to the exact task being executed. This enables accurate process status monitoring, time spent executing each step, the ones that are still pending to be executed and a set of other important details. This information is also accessible through APIs, which can be used by the front-end systems to expose it to the end user. A real-time view of a customer request's current status is extremely important as it provides immediate feedback and helps expedite any issues that may occur.

- **Multiple order handling for the same customer**

  Having the customer requesting an operation while the previous is still on-going should not stop business from taking action on that particular customer. OM+ handles queuing of requests, guaranteeing they are executed in the correct order and as fast as possible – combining sequencing and parallel execution of the fulfilment tasks.

- **Future-dated orders**

  Not all requests require immediate action, some may have to be triggered in the future and for that OM+ ensures they are kept in a queue and fulfilled when their time comes.

- **Handling complex orders**

  Customer requests can be as simple as a single mobile activation but can also be as complex as a combination of multiple requests, from bundle activation to modifications, including the capability to support multiple contracts, all combined in a single order. OM+ has the ability to decompose all those requests and instantiate fulfilment processes in a correct and

efficient manner. It enhances the customer experience in the Front-End allowing simplification of the process and ensuring all requests are properly addressed in the back-end systems.

- **Product mapping**

  Applications typically have different ways of representing their product offers, usually featuring a commercial catalogue in the front-end systems and a technical representation in the back-end. OM+ is the component where the Product Mapping features reside, translating requests coming from the front-end into a representation understandable by back-end(s).

- **Order manipulation and support**

  It may happen that an order is not fulfilled correctly due to backend unavailability, incorrect data provided during capture or any other reason – order manipulation from a (technical) support perspective is mandatory. OM+ addresses that need by providing the ability to change order information during fulfilment and thus making sure the request will complete successfully

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 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).*

3.2 Business Process Framework Level 2 Process Scope

The following figure represent the Business Process Framework Level 2 processes (high-lighted in green) that were presented in scope for the assessment and that were assessed and support the corresponding Business Process Framework processes according to the results in Chapter 6 Frameworx Conformance Result.

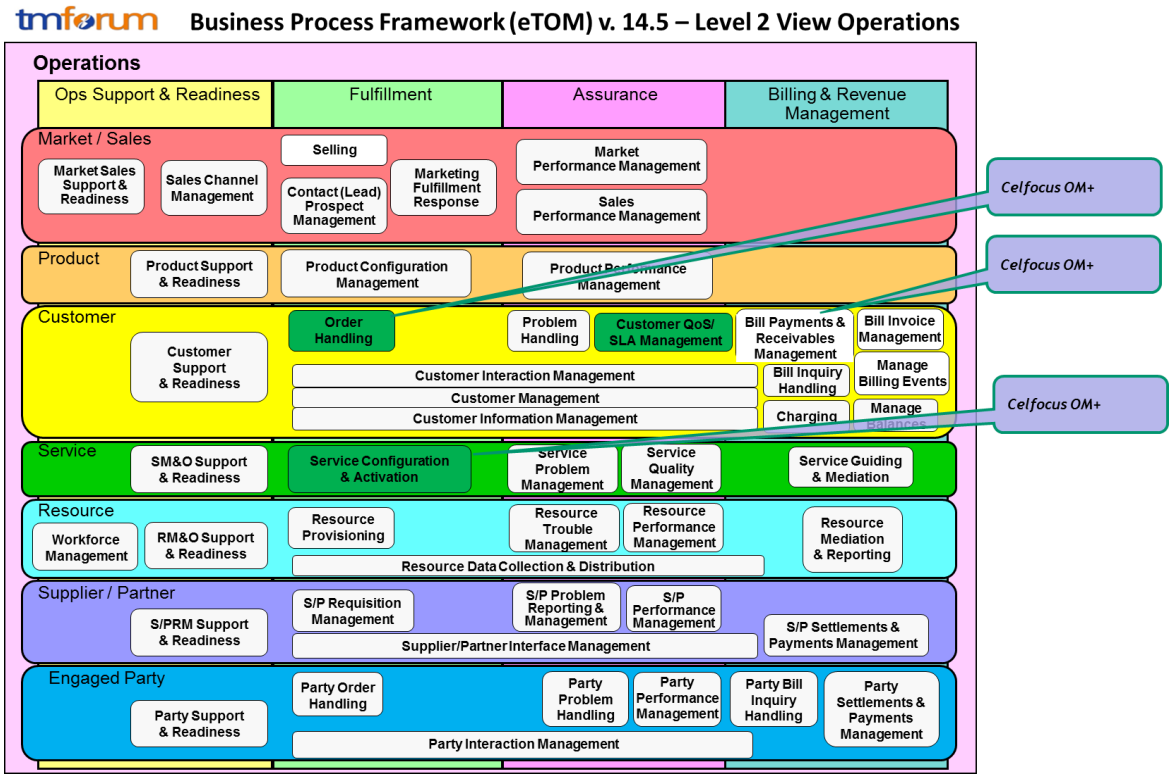


Figure 3-1 Level 2 process coverage for Celfocus OM+ Assessment

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.

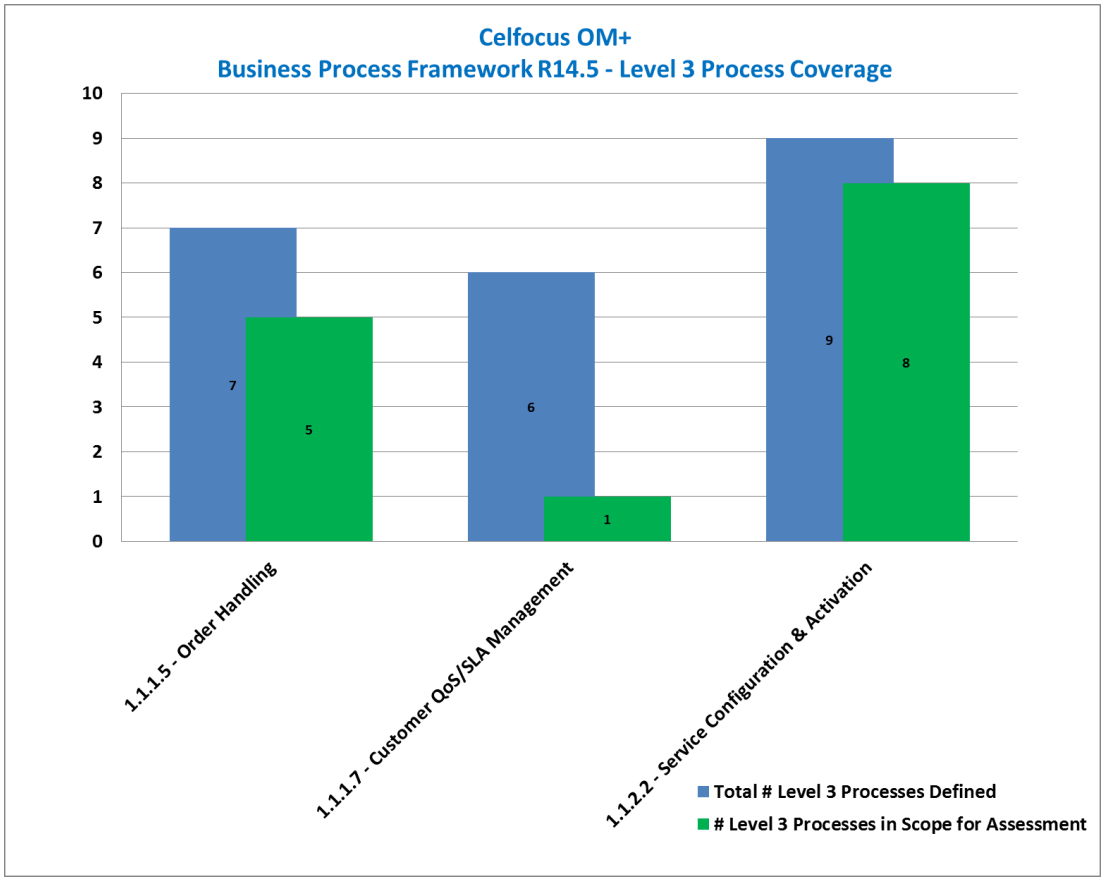


Figure 3-2 Level 3 process coverage for Celfocus OM+ Assessment

3.3 Product Scope

The diagram in
Figure 3-3 represents Celfocus' OM+ Order Management product with mappings to the Business Process Framework Level 2 processes that were submitted in scope for the Conformance Certification assessment.

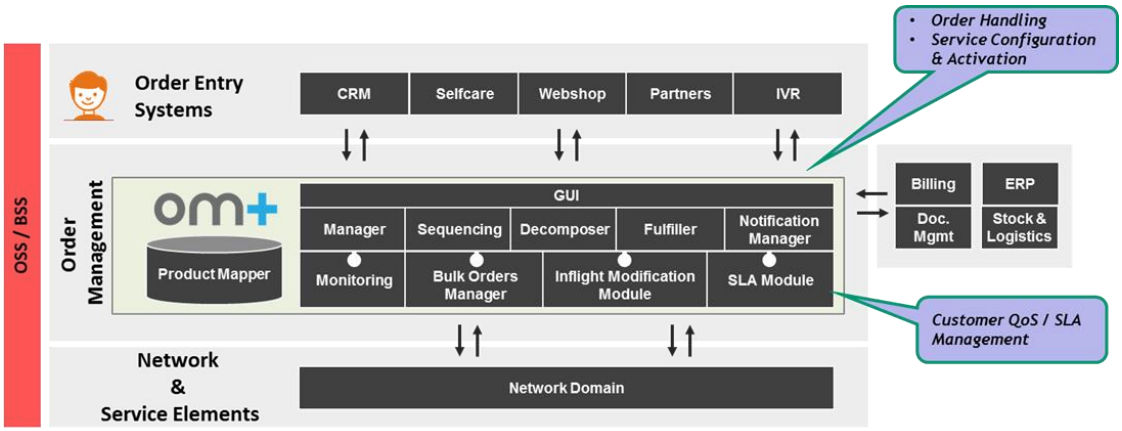


Figure 3-3 Celfocus OM+ product mapped to eTOM L2 Processes in scope

4 Business Process Framework – Process Mapping Descriptions

This section provides the Process Mapping output from Celfocus' self-assessment which was reviewed by TM Forum Subject Matter Experts alongside supporting documentation for Celfocus' OM+ product.

4.1 L2: Order Handling (1.1.1.5)

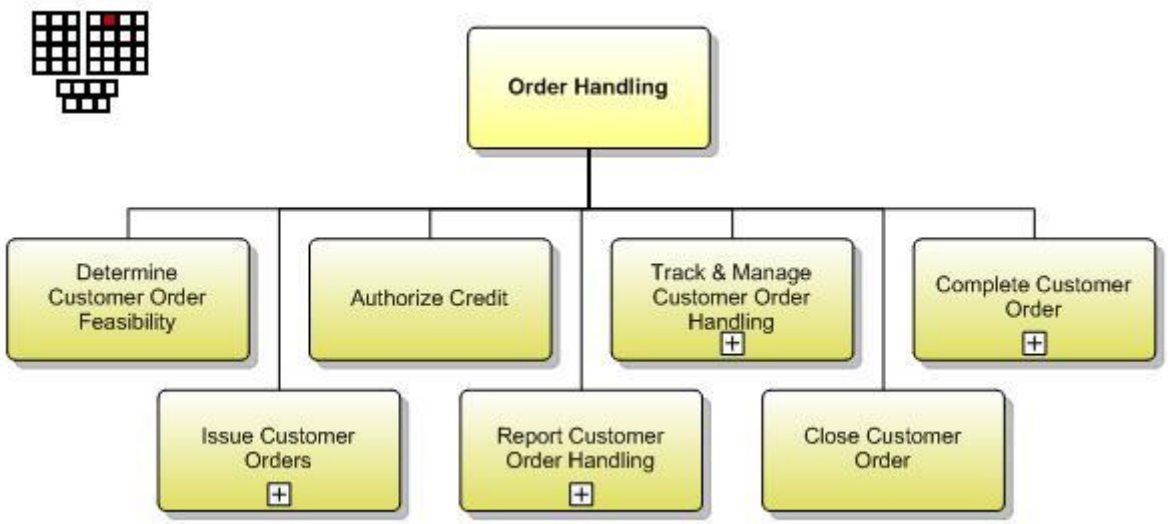


Figure 4-1 Order Handling decomposition into level 3 processes

Process Identifier: 1.1.1.5
Process Context
This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

Brief Description
Responsible for accepting and issuing orders.

Extended Description
Order Handling processes are responsible for accepting and issuing orders. They deal with pre-order feasibility determination, credit authorization, order issuance, order status and tracking, customer update on order activities and customer notification on order completion. Responsibilities of the Order Handling processes include, but are not limited to:
· Issuing new customer orders, modifying open customer orders or canceling open customer orders;
· Verifying whether specific non-standard offerings sought by customers are feasible and supportable;
· Checking the credit worthiness of customers as part of the customer order process;
· Testing the completed offering to ensure it is working correctly;
· Updating of the Customer Inventory Database to reflect that the specific product offering has been allocated, modified or cancelled;
· Assigning and tracking customer provisioning activities;

· Managing customer provisioning jeopardy conditions; and
· Reporting progress on customer orders to customer and other processes.

Explanatory
Reserved for future use.

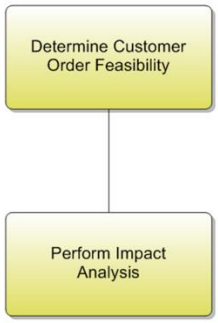
Mandatory
Reserved for future use.

Optional
Reserved for future use.

Interactions

Reserved for future use.

4.1.1 L3: Determine Customer Order Feasibility (1.1.1.5.1)



Process Identifier: 1.1.1.5.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

Brief Description

Check the availability and/or the feasibility of providing and supporting standard and customized product offerings where specified to a customer.

Extended Description

The purpose of the Determine Customer Order Feasibility process is to check the availability and/or the feasibility of providing and supporting standard and customized product offerings where specified as part of the standard product offering process flow, to a customer.

These processes invoke requests to SM&O provisioning processes to determine the availability and supportability of product offerings to a customer.

These processes are also responsible for determining whether the offering can be supported by other CRM processes.

4.1.1.1 *L4: Perform Impact Analysis (1.1.1.5.1.1) – Mapping Details*

Process Identifier: 1.1.1.5.1.1

Process Context
This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Perform Impact Analysis (1.1.1.5.1.1)
Description Analyses the customer order for further impact particularly dealing with RFCs (request for change) **Extended Description** Not used for this process element **Explanatory** This process is used to determine the impact on feasibility of customer orders. After determination on feasibility of customer orders, impact analysis will detect the need of change. It determines the impact on customer solution service components. **Mandatory** Analyses the customer order for further impact particularly deals with RFCs (request for change) **AM** As part of the Determine Customer Order feasibility process, OM+ provides configurable, optional steps within the following stages: 1- Order Validation Stage, 2- Order Decomposition and 3- Order Fulfilment. **1- Order Validation Stage** Order Validation is the stage that guarantees that an order is valid, from a commercial point of view. This step should be seen as a quality assurance step. The order validation stage is organized in two distinct order types: single order and bulk orders processing • Single order processing refers to the product offering/services to be provisioned under a specific context, for example, customer accounts, which hold customer assets, customer MSISDN or other entities and can act as a key for the customer representation. • Bulk Orders processing refers to the product offering/services to be provisioned under more than one context, this functionality can handle orders from multiple contexts (i.e. Accounts, MSISDN, etc) aggregating them in a single bulk order.

Validate Order feature:

- The validate order feature enables a configuration of an API endpoint, which integrates with an external system that will be responsible for performing a feasibility check on the product offering / services that are part of the customer order. This entity will then respond, allowing the order creation to continue assuming that the order is valid from a commercial perspective.

- The validate order feature can also contribute to other CRM processes by triggering the evaluation of other CRM processes in the Order Entry channels. It could be the identification of any other open order for the same context (i.e. account, MSISDN), or if there was any change associated with the customer assets which invalidates the purpose of the new order being submitted.

The validate order feature can be configured in the Administration menu available on the master system configuration section:

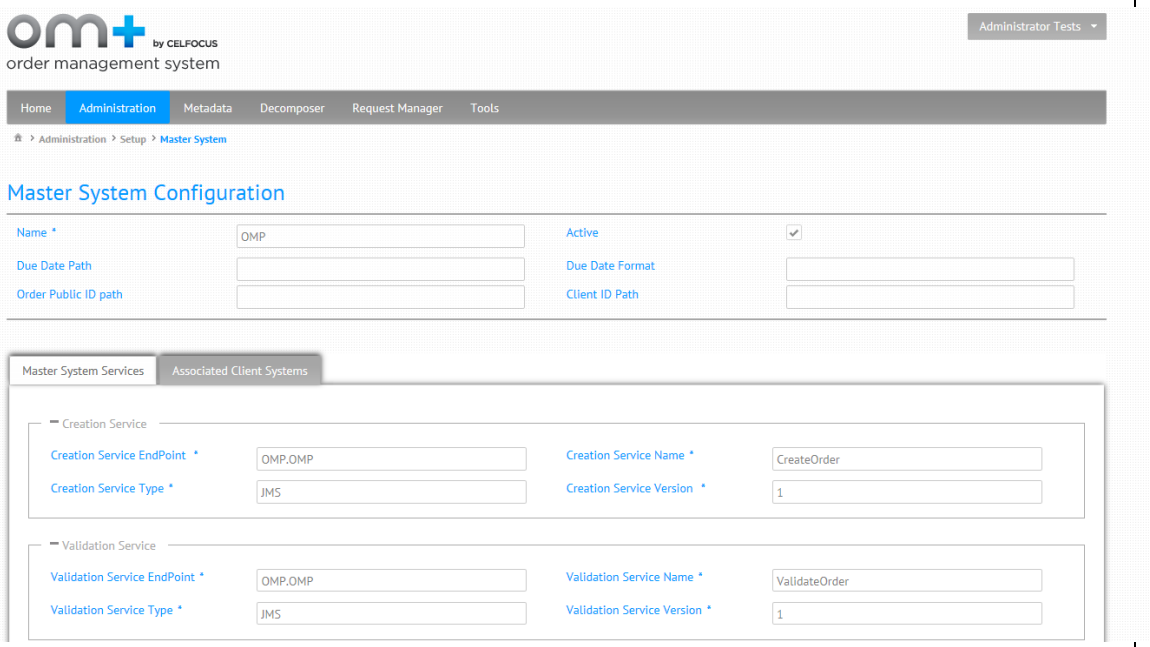


Figure 4-2 OM+ Mapping: Validate order API configuration

Approval services:

- The approval services are only available when processing Bulk Orders, in order to provide an additional feasibility check, the Bulk component can specify an approval service which will enable the Bulk order validation before its submission.

The approval services can either be an automated logic which validates the Bulk Order or it can be a manual approval. It could be the case where the approval service creates an activity in the Order Entry channel, therefore, an element from the finance department can pick the requested activity from the work queue and validate the integrity of the Bulk Order.

Another use case for this functionality, given the dimension of assets under modification inside a bulk run would be a back office user compiling the bulk based on a set of criteria and a business user would review and approve the submitted bulk run

The Bulk approval services can be configured in the Request Manager menu, within the associated Bulk template configuration:

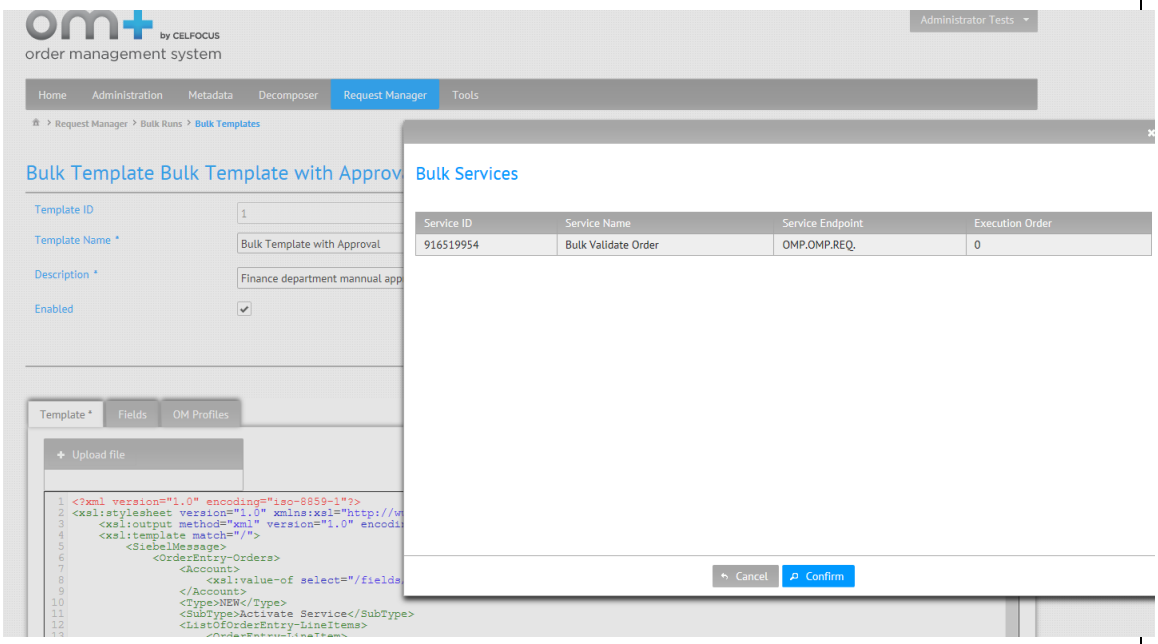


Figure 4-3 OM+ Mapping: Configuration of the Bulk approval service

2- Order Decomposition Stage

It is through Order decomposition that commercial orders are transformed into smaller and granular fulfilment requests.

The Decomposer is the OM+ component responsible for introspecting a customer order that has been placed in the OM+ platform. It performs several evaluations based on pre-configured conditions whose goal is to generate and assign the order a fulfilment plan.

The decomposer generates the fulfilment plan, which represents the 'to-do list' of activities that must be executed for a specific business scenario.

During the order decomposition stage, the Decomposer component enables additional steps which can invoke several requests to the SM&O provisioning processes to determine the stock availability at the 'Stock Management' system, or resource availability checking.

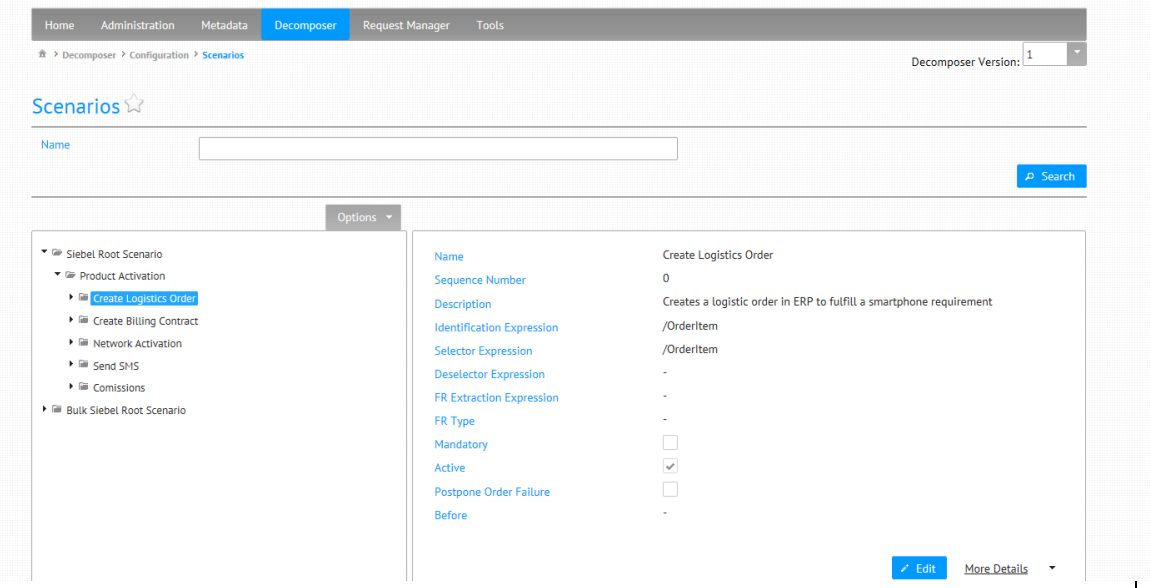


Figure 4-4 OM+ Mapping: Defining Fulfilment Request decomposition rules

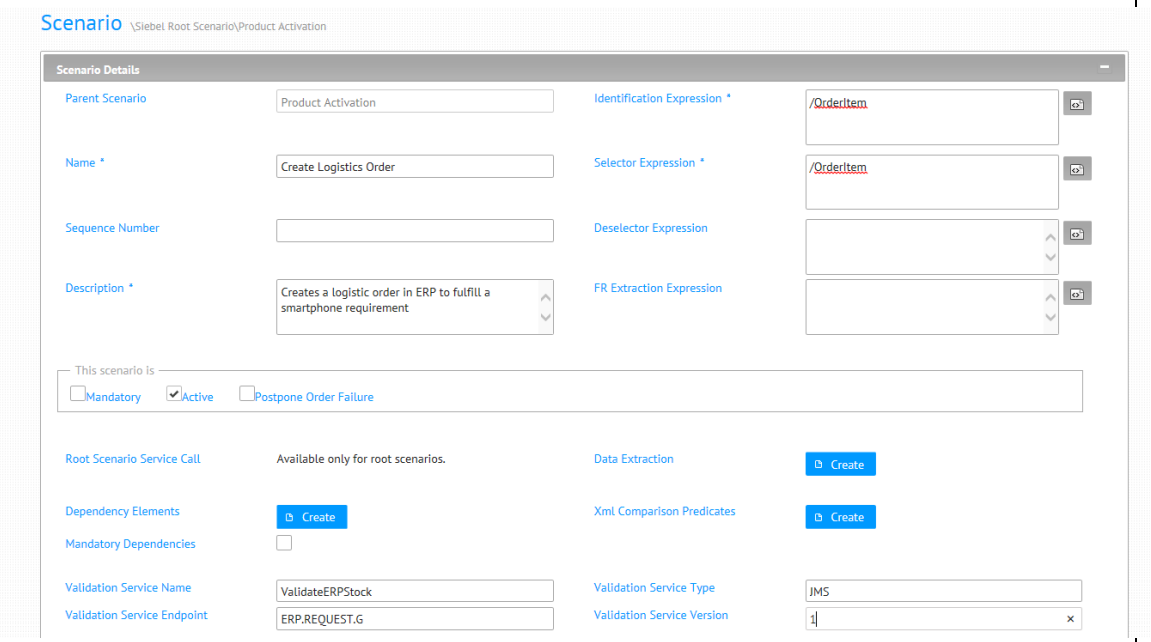


Figure 4-5 OM+ Mapping: Defining a decomposition validation service

Decompose for Validation:

OM+ also provides a step for orders to be decomposed but not processed, returning the generated fulfilment plan for a specific business scenario.

Order entry systems can then use this information to implement intermediary validations based on the specific context returned by OM+.

3- Order Fulfilment Stage

OM+ also provides a step allowing future dated orders to be evaluated on the due date, this step is important since the customer asset information could have been changed since order submission.

The validate future order feature enables an API endpoint configuration, which can integrate with an external system will be responsible for validating the changes occurred in the asset between the order submission until the order due date time interval.

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], Order Orchestration, Order Fulfiller

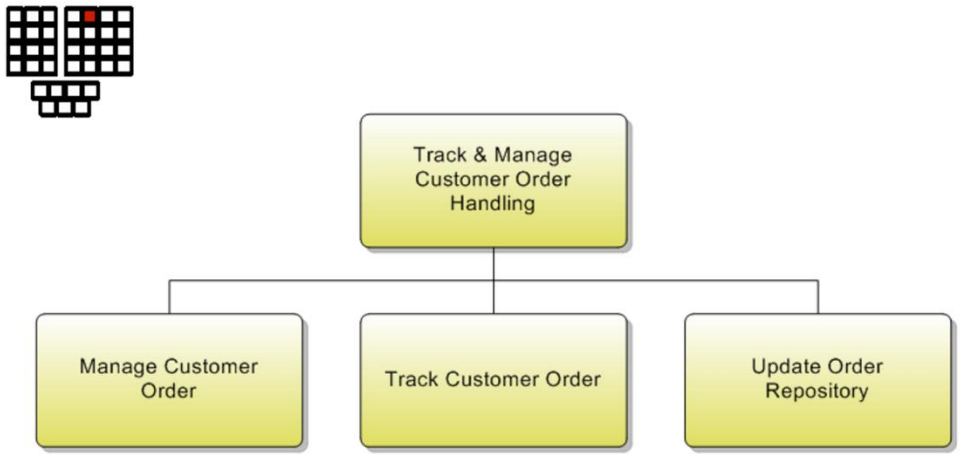
[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Components

[OM+_CONCEPTS], Order Orchestration, Order Decomposition

[OM+_CONCEPTS], Bulk Orders, Bulk Runs, Bulk Runs Management

4.1.2 L3: Authorize Credit (1.1.1.5.2) – *Not Assessed*

4.1.3 L3: Track & Manage Customer Order Handling (1.1.1.5.4)



Process Identifier: 1.1.1.5.4

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (“instantiated”) with other similar process elements for application within a specific organization or domain.

Brief Description

Ensure customer provisioning activities are assigned, managed and tracked efficiently to meet the agreed committed availability date.

Extended Description

The objective of the Track & Manage Customer Order Handling processes is to ensure customer provisioning activities are assigned, managed and tracked efficiently to meet the agreed committed availability date. Responsibilities of these processes include, but are not limited to:

- Scheduling, assigning and coordinating customer provisioning related activities;
- Generating the respective service order creation request(s) to Issue Service Orders based on specific customer orders;
- Escalating status of customer orders in accordance with local policy;
- Undertaking necessary tracking of the execution process;
- Adding additional information to an existing customer order;
- Modifying information in an existing customer order;
- Modifying the customer order status;

- Cancelling a customer order when the initiating sales request is cancelled;
- Monitoring the jeopardy status of customer orders, and escalating customer orders as necessary
- Indicating completion of a customer order by modifying the customer order status.

Note that some specific product components may be delivered directly by suppliers/partners. In these cases the Track & Manage Customer Order Handling process is responsible for initiating requests, through S/P Requisition Management for the delivery by the supplier/partner of the specific product components.

4.1.3.1 *L4: Manage Customer Order (1.1.1.5.4.1) – Mapping Details*

Process Identifier: 1.1.1.5.4.1

Process Context
This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Manage Customer Order (1.1.1.5.4.1)
Description Schedule, assign and coordinate customer provisioning related activities. **A** OM+ schedules orders based on the requested *'Due Date'* attribute sent during the order creation request. OM+ allows the submission of normal orders, which will be fulfilled immediately or scheduled for a future date, which will be fulfilled only when the due date of the order is reached. The assignment and coordination of the activities involved in a customer order flow are managed through the following components: **Decomposer** The Decomposer component evaluates the received customer order and based on a set of pre-configured rules, it will decompose the order into more granular requests called Fulfillment Requests. All those fulfilment requests are part of a fulfilment plan which also defines the correct sequencing of actions. This is the component that understands what needs to be done, which tasks are to be assigned for a specific business scenario. It generates the fulfilment plan for specific business scenarios. The decomposer generates the fulfilment plan with the associated inter-order precedencies, which represents the sequence of actions between fulfilment requests of the same order.

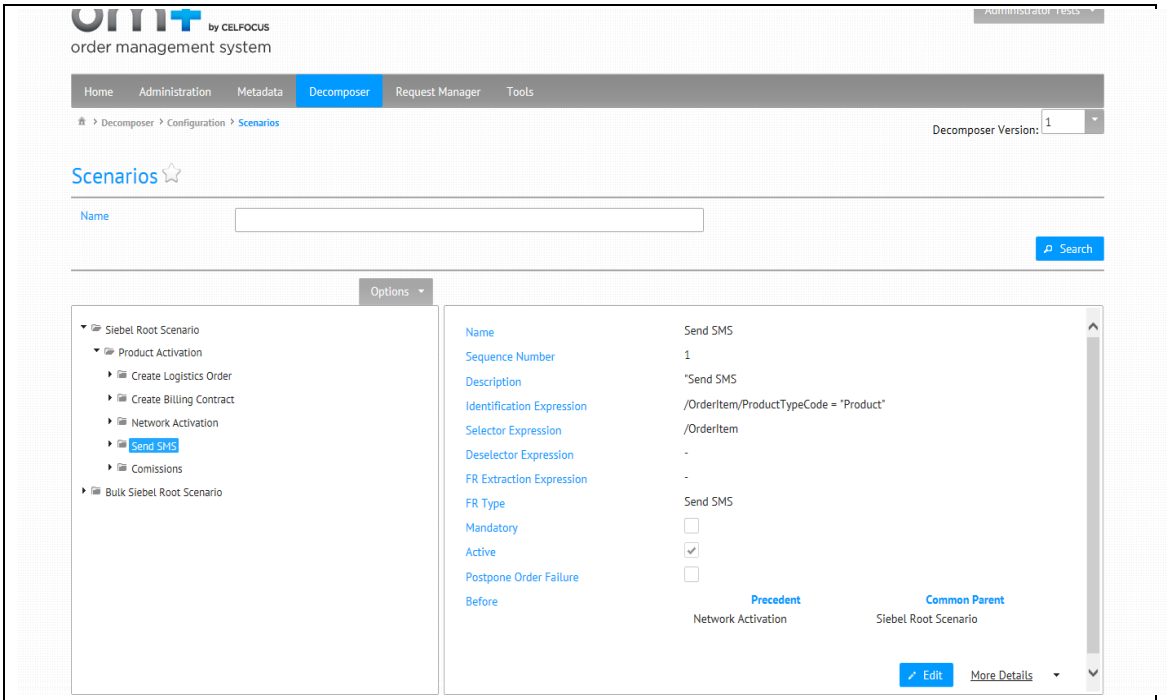


Figure 4-6 OM+ Mapping: Decomposer precedencies configuration

Sequencer

Sequencer is the component that coordinates all the activities that are part of the generated fulfilment plan. It coordinates the activities based on the configured dependencies / precedencies, ensuring a coherent and correct execution of the tasks.

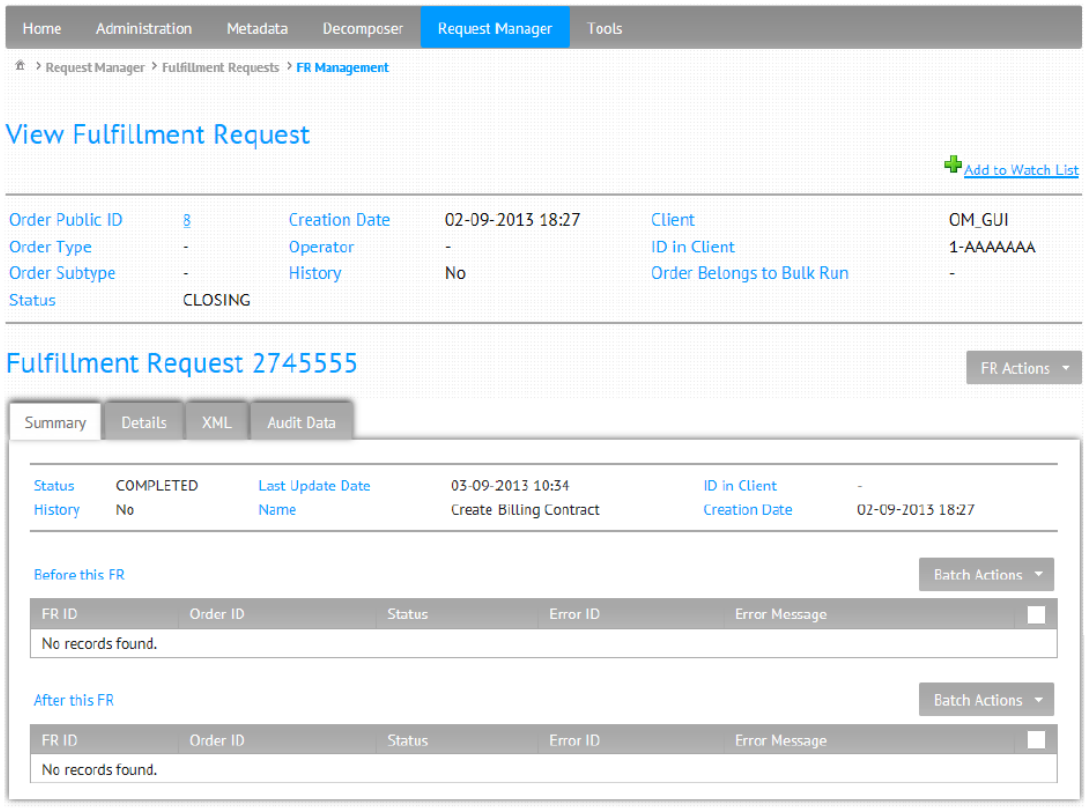


Figure 4-7 OM+ Mapping: Decomposer precedencies run-time evaluation

Fulfiller

Fulfiller is the component that executes the Fulfilment Requests, providing mechanisms for its execution control.

Generate the respective service order creation request(s) to Issue Service Orders based on specific customer orders. **A**

A customer order is captured at the order entry stage. Once the order is submitted to the OM+ platform, the decomposer component evaluates the customer order by executing a set of rules to identify the necessary list of tasks for a specific scenario (i.e. GSM activation).

The customer order is then divided in various sub-order components which represent a more granular type of requests called fulfilment requests. The generated fulfilment plan contains requests for different domains such as Stock and Logistics, Billing and Invoicing, Document Management, Commissions, Fraud Management and Network Provisioning.

The customer order contains information regarding the products/service offering, containing the respective CFS and RFS product specifications for a specific business scenario.

The OM+ customer order management layer can issue Service Orders to the Provisioning/SM&O layer based on the RFS products' identification, which must be provisioned by the Service Order Management layer.

Escalate status of customer orders in accordance with local policy. **A**

OM+ SLA Manager allows the configuration of metrics associated with orders or fulfilment requests. The metrics are defined according to business requirements also entitled local policies.

This component actively evaluates the pre-defined conditions and once the threshold is reached, it triggers an event. This event is configured as a JMS endpoint which informs other parties on the SLA violation.

Add additional information to an existing customer order.
Modify information in an existing customer order. **AM**

OM+ provides support to modify in-flight orders. This feature allows users to modify an order that was previously submitted.

Upon receiving a modification order, OM+ In-Flight modification component will evaluate the status of the current order fulfilment requests and generate the fulfilment plan of the new order.
Based on the outcome a new order will be generated, where additional fulfilment requests can be added. Previously completed fulfilment requests can be compensated, cancelled or maintained.

The main purpose of this functionality is modifying in progress order, avoiding order cancellation and doing the modified order from scratch.

Cancel a customer order when the initiating sales request is cancelled. **A**

OM+ platform provides cancellation support for running orders. The Manager component has a public API that allows client systems to cancel an identified order, sending the reference order public id as input.

The cancellation request can be triggered when the order is in its normal FULFILL mode, before the cancellation is accepted there are some validations that need to be executed such as:

- Order cancellation validation is triggered when the cancellation request arrives, the validation checks the order status and if the PONR (“Point of no return”) was already reached, the PONR marks the moment where it isn't possible to roll back order actions.

- The validations also check order status and the correspondent Fulfilment Requests status, depending on the status of the FRs and its defined compensation/cancellation services the order may or may not be cancelled.

OM+ allows an order to be cancelled when no action was performed at the underlying BSS/OSS domains. It also supports orders that need to be compensated, when some actions were already performed in those domains.
This functionality is supported through the OM+ GUI Request Management menu and the Manager public API.

If some specific product components are delivered directly by suppliers/partners, initiate requests, through S/P Requisition Management, for the delivery by the supplier/partner of the specific product components. **A**

The integration with suppliers/partner platforms are managed in the Fulfilment Requests implementation, during Fulfilment Requests execution it's possible to request the delivery of specific product components.

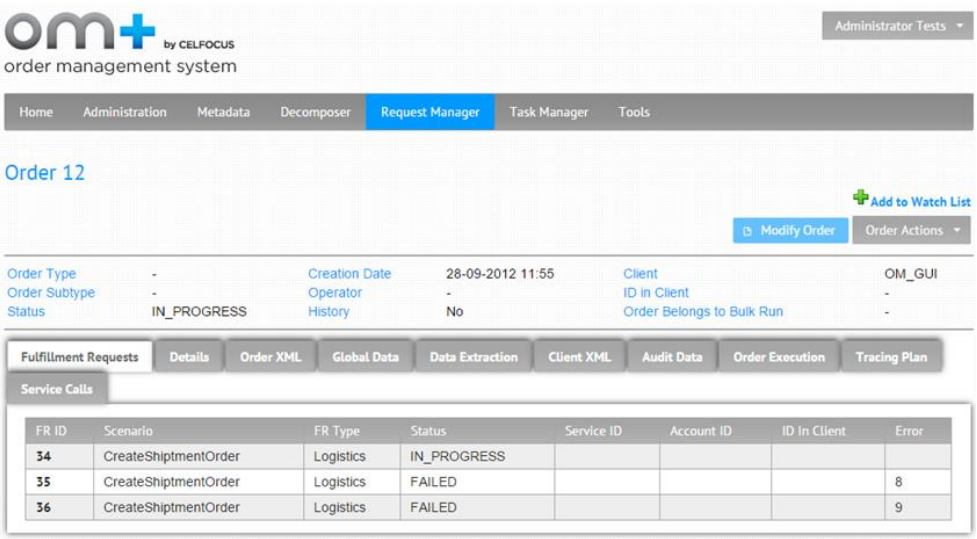


Figure 4-8 OM+ Mapping: Example of a Logistics Order integrating with Suppliers/Partners

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], Order Orchestration, Order Fulfilment

[OM+_CONCEPTS], Order Orchestration, Order Decomposition

[OM+_CONCEPTS], Order Orchestration, Order Sequencing

[OM+_CONCEPTS], SLA Management

[OM+_CONCEPTS], Managing Changes

Extended Description

Not used for this process element **Explanatory** Reserved for future use. **Mandatory** Reserved for future use.

4.1.3.2 *L4: Track Customer Order (1.1.1.5.4.2) – Mapping Details*

Process Identifier: 1.1.1.5.4.2

Process Context
This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Track Customer Order (1.1.1.5.4.2)
Description Undertake necessary tracking of the execution process. Modify the customer order status. Monitor the jeopardy status of customer orders, escalating customer orders as necessary. **A** The OM+ platform controls the customer order execution from its reception to its closure, through multiple steps. The OM+ platform provides execution process tracking, through a concrete order / fulfilment requests lifecycle status model, this model represents the possible transitions of those entities during the entire execution process. During the Order processing, there are different OM+ components that update the corresponding order status providing full visibility and tracking of the order state and the associated tasks (fulfilment requests). Orders can be monitored and tracked in two different ways: ○ Manager's public APIs provide rich information regarding the order status and it's associated Fulfilment Requests, auditing information, allowing the order tracking to be as seamless as possible. ○ OM+ GUI is a rich web-based interface that provides monitoring and support capabilities, allowing every order to be tracked from an end to end perspective

OM+ also provides order status notifications during order execution which enables other parties to subscribe to the order notifications enabling order tracking from an end to end perspective.

[OM+_PRODUCT GUIDE], Manager Component, Manager Services

[OM+_PRODUCT GUIDE], Request Management Menu, Order Management

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Order Journey (OM+)

[OM+_CONCEPTS], Order Lifecycle

[OM+_CONCEPTS], Order Lifecycle, Order Tracking

Extended Description
Not used for this process element

Explanatory
Reserved for future use.

Candidate Mandatory
Undertake necessary tracking of the execution process. Modify the customer order status. Monitor the jeopardy status of customer orders,

4.1.3.3 *L4: Update Order Repository (1.1.1.5.4.3) – Mapping Details*

Process Identifier: 1.1.1.5.4.3

Process Context
This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Update Order Repository (1.1.1.5.4.1)
Description To be added **Extended Description** Not used for this process element **Explanatory** Update repository at each level in order handling. The state of order will be changed at each level according to work flow: - All those issued customer order which are not preauthorized are set in 'pending' state - Validate order will passed to 'acknowledged' state (if invalid, order gets 'rejected') - Feasible order (completing the impact analysis) will be 'committed' in case order is not 'cancelled' (leads to cancelled state) (if infeasible , order gets 'rejected') - As the order progress for completion will set to 'completed' (in case not cancelled) - The 3 terminal states: completed, cancelled and rejected will finally leads to 'closed customer order' **Mandatory** Create, update and delete order information and update order state into order inventory/ repository. **A** The order is placed in the OM+ platform and a record of the order is created in the database reflecting its initial stage. During the order processing, the order status will be modified as it progresses from its initial stage until the last stage. When the order reaches its final stages the order repository tables are updated accordingly and all transactional data will be moved from the online to the history tables. [OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing [OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Order Journey (OM+) [OM+_CONCEPTS], Order Lifecycle

[OM+_CONCEPTS], Order Lifecycle, Order Tracking [OM+_PRODUCT GUIDE], Manager Component

4.1.4 L3: Complete Customer Order (1.1.1.5.5)

Process Identifier: 1.1.1.5.5

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

Brief Description

Manage customer information and interactions after customer contracts or associated service orders have been finalized and during the order completion phase.

Extended Description

The purpose of the Complete Customer Order processes is to manage customer information and interactions after customer contracts or associated service orders have been finalized and during the order completion phase. The customer may participate in commissioning or end-to-end testing and then satisfactory delivery. The customer is trained in the functionality and benefits of the solution. These processes are responsible for ensuring that any customer information required by other CRM processes is updated as part of the customer order completion.

4.1.4.1 *L3: Complete Customer Order (1.1.1.5.5) – Mapping Details*

NOTE: If no decomposition to Level 4 processes, provide a note here to explain this and that mappings are provided against the Level 3 process descriptions and implied tasks.

LEVEL 3 PROCESS MAPPING DETAILS Complete Customer Order (1.1.1.5.5)
Description Manage customer information and interactions after customer contracts or associated service orders have been finalized and during the order completion phase. **A** **Extended Description** The purpose of the Complete Customer Order processes is to manage customer information and interactions after customer contracts or associated service orders have been finalized and during the order completion phase. A OM+ platform can introduce a set of Fulfilment Requests as part of the order decomposition plan, they can be added to the plan as the last activities and be executed immediately before the order completion phase. These fulfilment requests can be grouped into two categories, Manage Customer Interactions and Manage Customer Information, which could be responsible for managing either customer interactions or customer information while the order is being processed. **Manage Customer Interactions:** Configuration can be added to the Fulfilment Requests to create an activity or event in the Order Entry system for CSR follow-up. This activity will contain the customer's required context and can be created under a specific context (i.e. account, MSISDN). CSR's activities can be for example calling the customer to confirm service provisioning, afterwards the CSR can close the activity and a response will be sent back to the OM+ which will complete the Fulfilment Request and consequently proceed to the order completion phase. For automated interactions, customized logic can be implemented in the Fulfilment Requests to trigger SMS/EMAIL based on static templates. Dynamic text can be added to the template by replacing specific placeholders, providing a more direct and contextualized communication. **Manage Customer Information:** Configuration can be added in the Fulfilment Requests to trigger requests to the Commissions domain, informing which sales agent performed the order selling process, based on the information held in the order, update order information in the order entry channel.

[OM+_CONCEPTS], Order Orchestration, Order Fulfiler

[OM+_CONCEPTS], Order Lifecycle

[OM+_CONCEPTS], Order Lifecycle, Order Tracking, Notifications

[OM+_PRODUCT GUIDE], Fulfiller Component

The customer may participate in commissioning or end-to-end testing and then satisfactory delivery. The customer is trained on the solution's functionality and benefits.

These processes are responsible for ensuring that any customer information required by other CRM processes is updated as part of the customer order completion. A

Configuration can be added in the Fulfilment Requests to update the order entry channel with order information; this information is retrieved during order execution due to the interaction with other systems. It can be used by other CRM processes, as part of the customer order completion or during any other order stage.

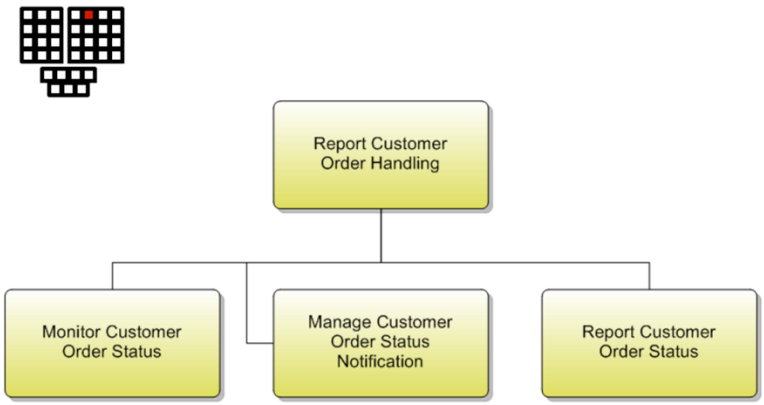
[OM+_PRODUCT GUIDE], Fulfiller Component

Explanatory
Reserved for future use.

Mandatory
Reserved for future use.

4.1.5 L3: Issue Customer Orders (1.1.1.5.6) – *Not Assessed*

4.1.6 L3: Report Customer Order Handling (1.1.1.5.7)



Process Identifier: 1.1.1.5.7

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

Brief Description
Monitor the status of customer orders, provide notifications of any changes and provide management reports.

Extended Description
The objective of the Report Customer Order Handling processes is to monitor the status of customer orders, provide notifications of any changes and provide management reports. These processes are responsible for continuously monitoring the status of customer orders and managing notifications to processes and other parties registered to receive notifications of any status changes. Notification lists are managed and maintained by the Support Order Handling processes. These processes record, analyze and assess the customer order status changes to provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Order Handling process. These specialized summaries could be specific reports required by specific customers.

4.1.6.1 *L4: Monitor Customer Order Status (1.1.1.5.7.1) – Mapping Details*

Process Identifier: 1.1.1.5.7.1

Process Context
This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Monitor Customer Order Status (1.1.1.5.7.1)
Description Continuously monitor the status of customer orders. **AM** The OM+ platform controls the customer order execution from its reception to its closure through multiple steps which includes, but not limited to: • Customer order reception • Fulfilment plan • Fulfilment Requests sequencing through the precedencies / dependencies management • Fulfilment Requests instantiation • Order Closure OM+ provides an automated transition mechanism for the Order and its corresponding activities (Fulfilment Requests) which reflects the order / fulfilment requests status in the order repository during the various steps of the Order processing. The Order and Fulfilment Request lifecycle model is leveraged through the OM+ GUI component, a rich web-based component that allows the monitoring of OM+ entities. In the OM+ GUI it's possible to follow-up on orders and have access to all the relevant information that constitutes the product offering / service requests. An order's audit data which provides tracking capabilities, the complete view of the Fulfilment Requests and their associated status, etc.

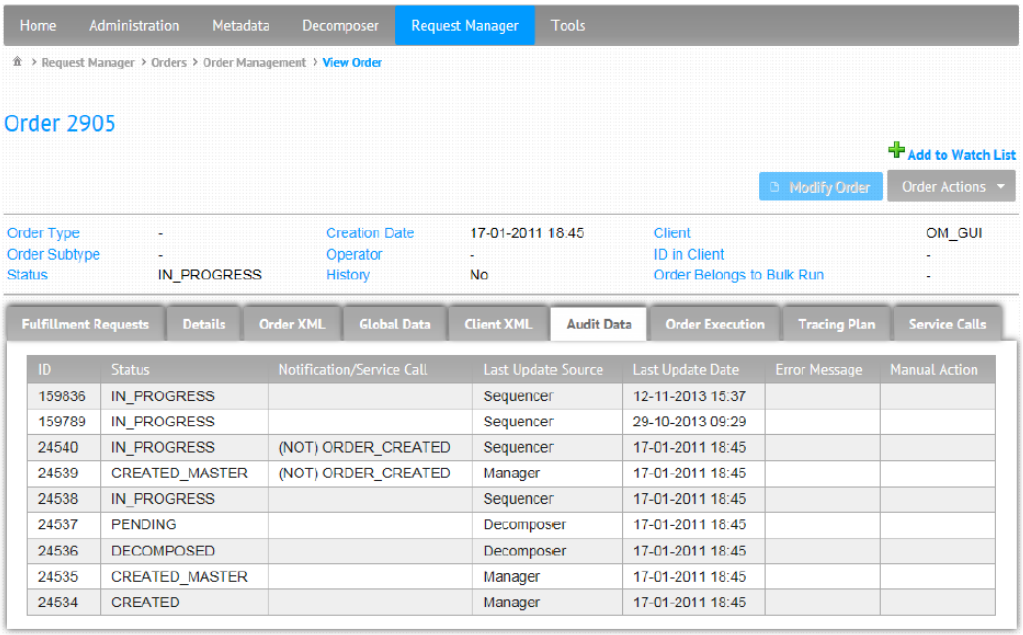


Figure 4-9 OM+ Mapping: Order Audit Data tab

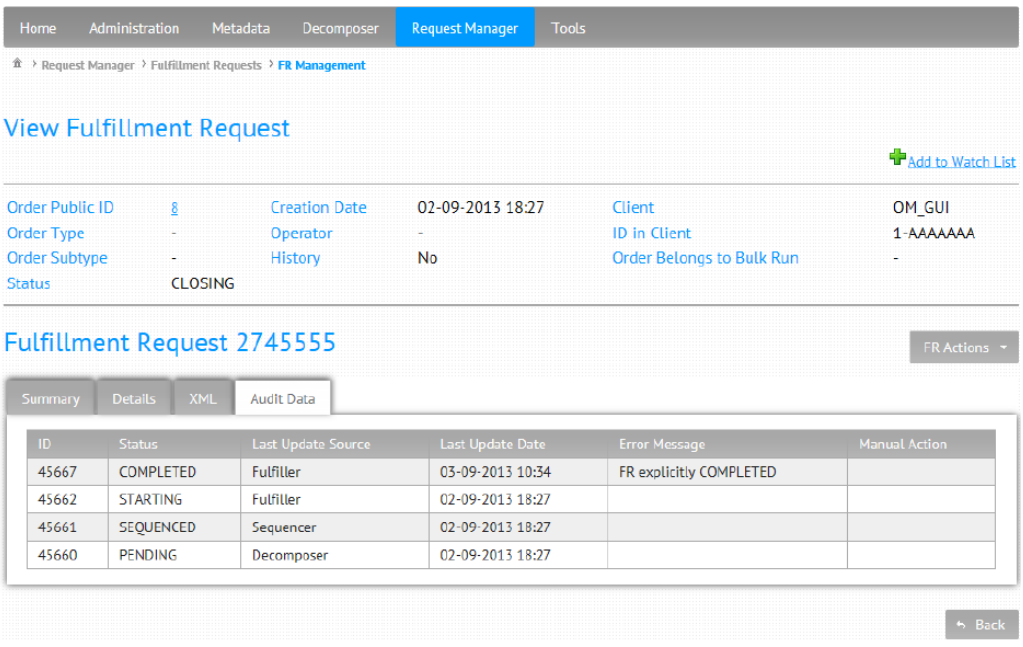


Figure 4-10 OM+ Mapping: Fulfilment Request Audit Data tab

The OM+ GUI audits the order execution in a graphical way, the operator can analyse the tasks that were executed during the order's lifecycle and its associated inter-order precedencies.

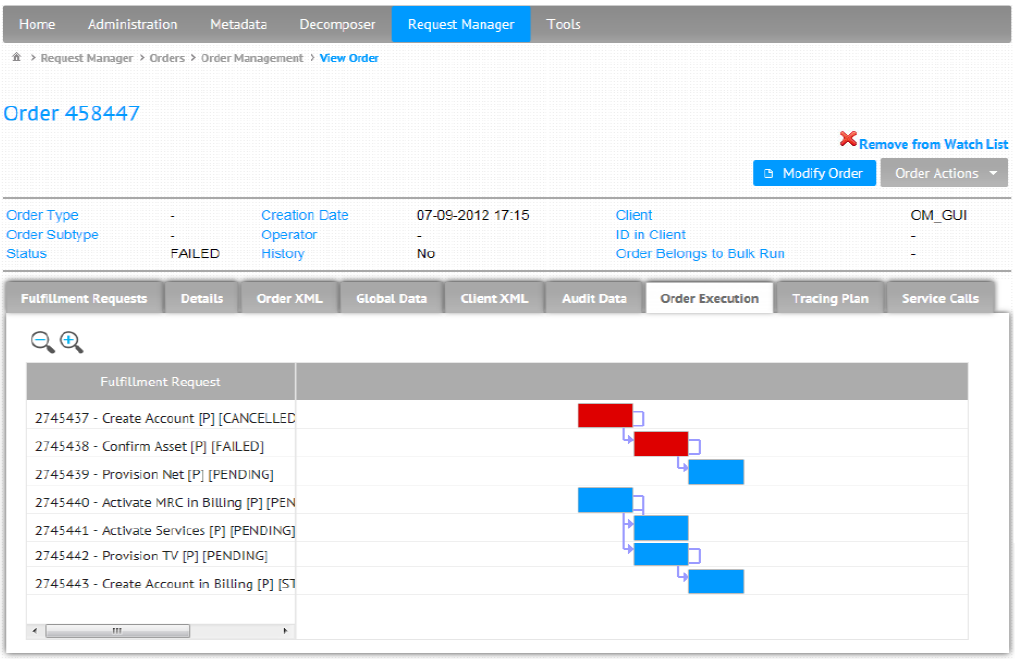


Figure 4-11 OM+ Mapping: Order Execution gant chart

[OM+_PRODUCT GUIDE], Request Management Menu, Order Management

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Order Journey (OM+)

[OM+_CONCEPTS], Order Lifecycle

[OM+_CONCEPTS], Order Lifecycle, Order Tracking

Extended Description
Not used for this process element

Explanatory
Reserved for future use.

Mandatory
Reserved for future use.

4.1.6.2 *L4: Manage Customer Order Status Notification (1.1.1.5.7.2) – Mapping Details*

Process Identifier: 1.1.1.5.7.2

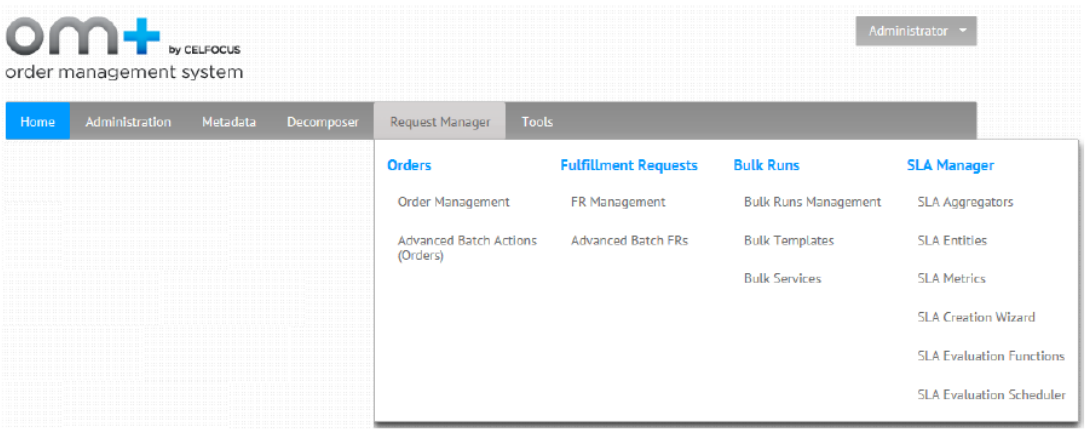
Process Context
This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Manage Customer Order Status Notification (1.1.1.5.7.2)
Description Manage notifications to processes and other parties registered to receive notifications of any status changes. **A** The OM+ platform provides a notifications component that manages universal notifications and service calls triggered during order processing. The notifications component integrates with JMS and publishes all its notifications to a JMS queue/topic, clients can register to receive all order status change notifications. **Universal Notifications** Notifications are sent right after or right before the moment the transitions occur, such notifications are sent as *fire and forget* events, meaning that the process continues and does not wait for a response. **Service Calls** Service Calls are delivery guaranteed messages to a specific system and only upon successful reception of a response will OM+ progress to the next state from its state model. These communications are extremely important to guarantee that the Order Entry channel, that submitted the request, is kept in sync with the OM+ order, offering it some level of control on how OM+ will progress. In case of failure to receive a successful response, the Service Calls can be submitted again [OM+_CONCEPTS], Order Lifecycle, Order Tracking, Notifications **Extended Description** Not used for this process element **Explanatory** Reserved for future use. **Mandatory** Reserved for future use.

4.1.6.3 *L4: Report Customer Order Status (1.1.1.5.7.3) – Mapping Details*

Process Identifier: 1.1.1.5.7.3

Process Context
This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Report Customer Order Status (1.1.1.5.7.3)
Description Record, analyse and assess the customer order status changes to provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Order Handling process, including specific reports required by specific customers. **A** OM+ records the customer orders and persists them in the database from the initial order management processing stages until they reach final stages, where they're considered complete from a fulfilment perspective. All customer order modifications and order state transitions are persisted in the database following the OM+ orders lifecycle state model. The OM+ graphical user interface allows you to retrieve information regarding the order execution at any time; this can be retrieved under the Request Management menu displayed as a Gant chart or normal order view.      Figure 4-12 OM+ Mapping: OM+ GUI Request Manager menu

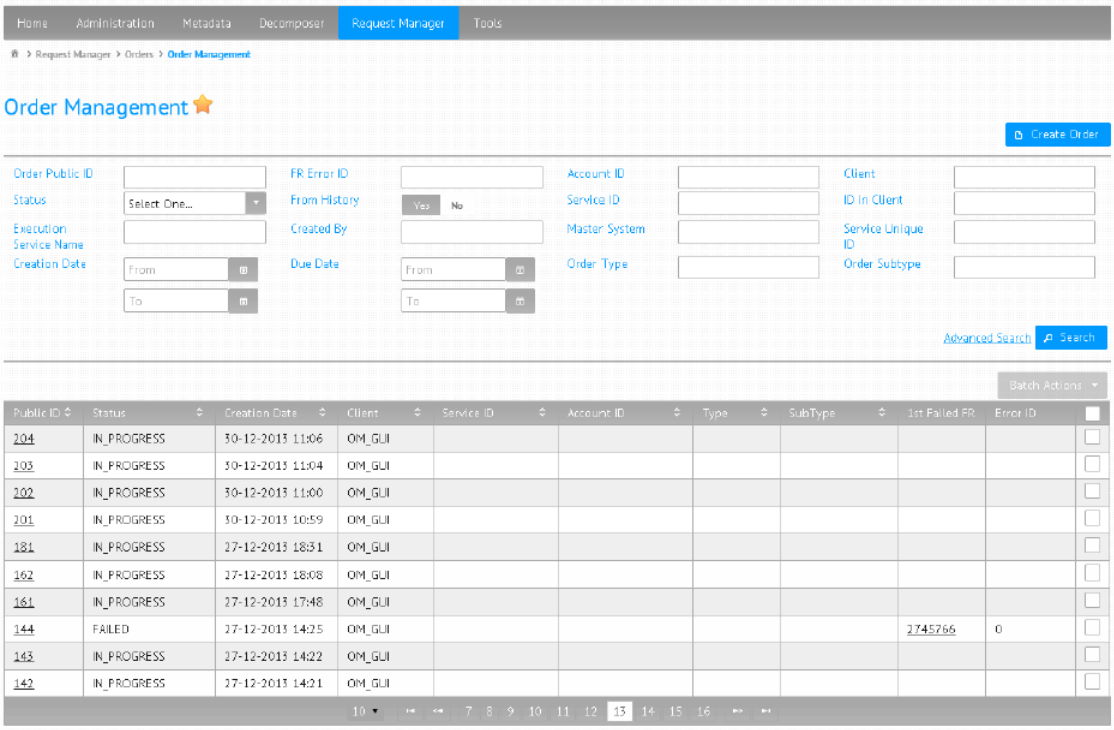


Figure 4-13 OM+ Mapping: OM+ GUI Request Manager list of order menu

The OM+ platform provides dashboard capabilities to monitor generic order performance and effectiveness, the dashboard already contains a set of pre-set metrics which can be selected during widget wizard creation.

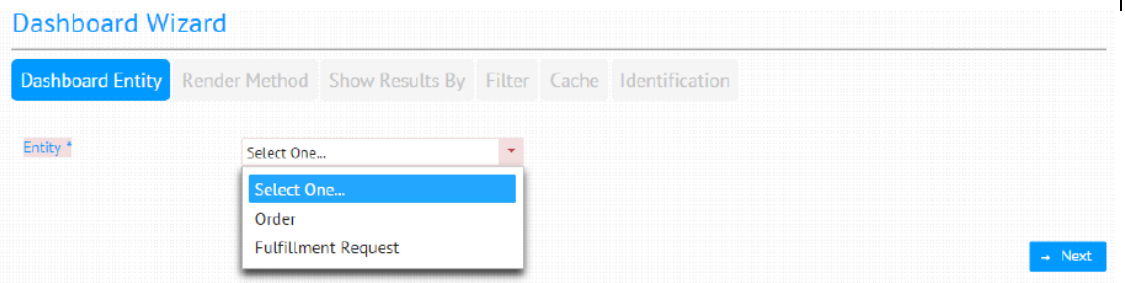


Figure 4-14 OM+ Mapping: Dashboard wizard entities

The dashboard entities can either be associated to the order or the fulfilment requests, and can be instantiated through different types of graphs.

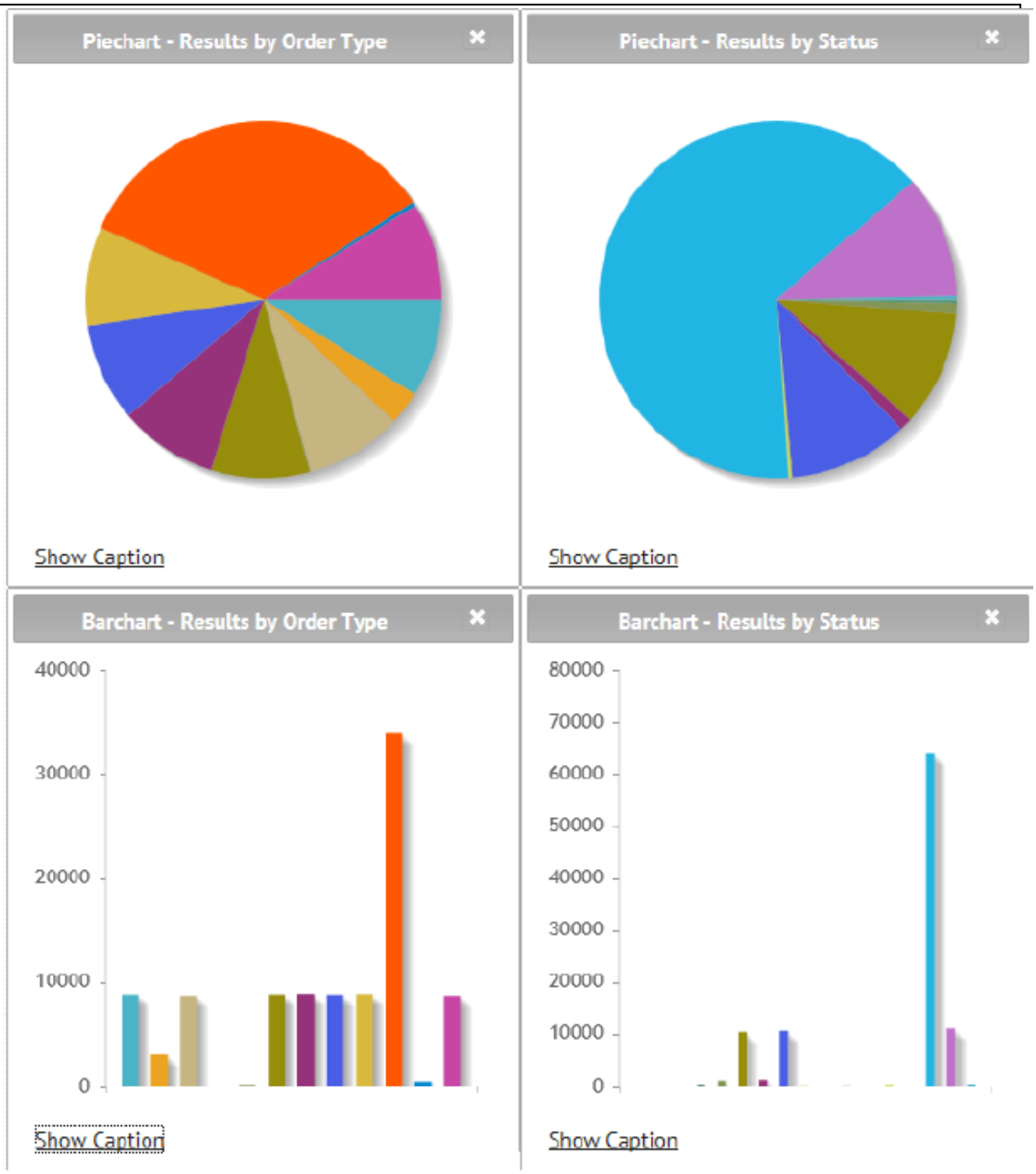


Figure 4-15 OM+ Mapping: Dashboard result representation in pie chart and bars

The dashboard has an extended capability which provides the flexibility when adding extra custom reports. These reports, once configured, will be available on the OM+ GUI dashboard together with the pre-default ones. It is also possible to produce specific reports associated to the user profile on OM+ GUI, which are added to their authentication profile.

This feature allows you to produce dynamic reports based on the pre-configured database queries that can fetch information from the Orders, Fulfilment Requests or any other relevant OM+ entities.

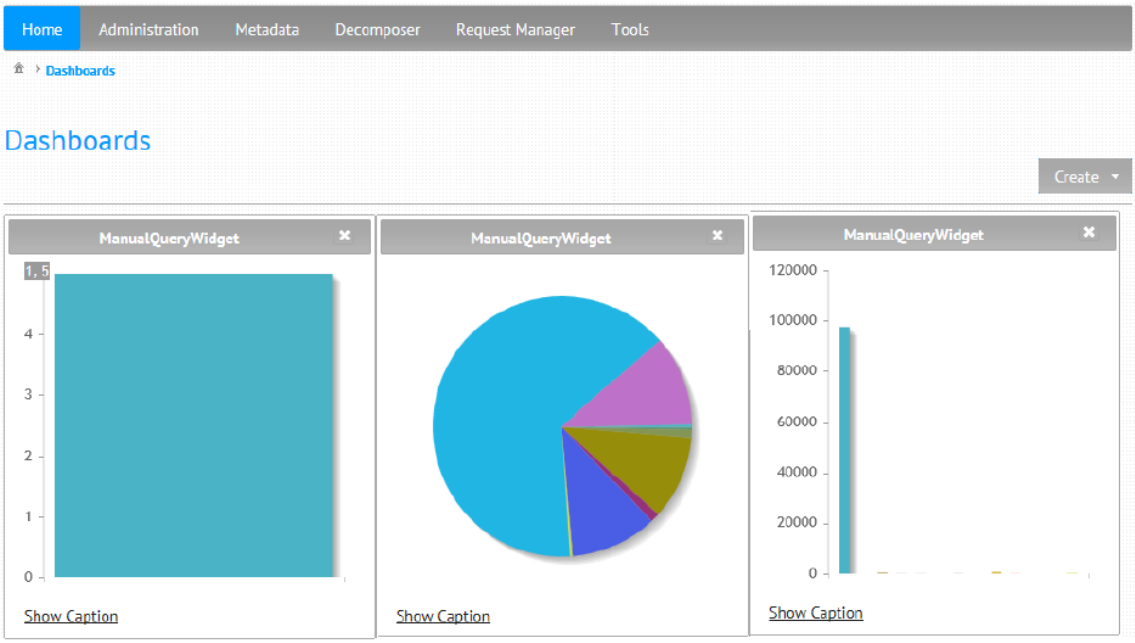


Figure 4-16 OM+ Mapping: Dashboard manual query result

The OM+ dashboards can also be retrieved through an iOS application called Omistics, optimized for IPad or IPad mini.

Omistics is a read-only application and all dashboards and widgets must be previously configured through the OM+ GUI.
The Omistics contains a login screen, a screen with the list of dashboards, (tables, pie chart and bar chart) and the option of sharing dashboards.

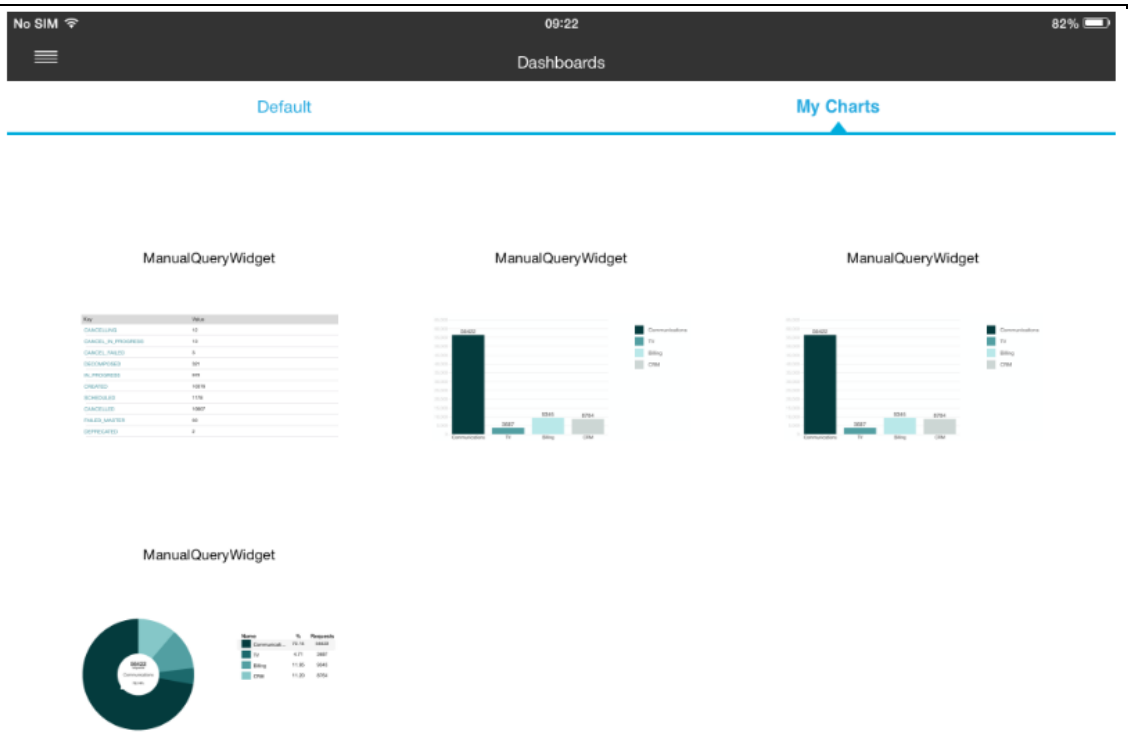


Figure 4-17 OM+ Mapping: Omistics dashboards in IPad

[OM+_PRODUCT_GUIDE], Home Menu

[OM+_PRODUCT_GUIDE], Request Manager Menu

[OM+_PRODUCT_GUIDE], Omistics – OM+ Mobile Dashboards

Extended Description
Not used for this process element

Explanatory
Reserved for future use.

Mandatory
Reserved for future use.

4.1.7 L3: Close Customer Order (1.1.1.5.8)

Process Identifier: 1.1.1.5.8

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

Brief Description

Close a customer order when the customer provisioning activities have been completed. Monitor the status of all open customer orders, and recognize that a customer order is ready to be closed when the status is changed to completed.

Extended Description

The objective of the Close Customer Order processes is to close a customer order when the customer provisioning activities have been completed. These processes monitor the status of all open customer orders, and recognize that a customer order is ready to be closed when the status is changed to completed.

4.1.7.1 *L3: Close Customer Order (1.1.1.5.8) – Mapping Details*

NOTE: If no decomposition to Level 4 processes, provide a note here to explain this and that mappings are provided against the Level 3 process descriptions and implied tasks.

LEVEL 3 PROCESS MAPPING DETAILS Close Customer Order (1.1.1.5.8)
Description Close a customer order when the customer provisioning activities have been completed. Monitor the status of all open customer orders, and recognize that a customer order is ready to be closed when the status is changed to completed. **A** **Extended Description** The objective of the Close Customer Order processes is to close a customer order when the customer provisioning activities have been completed. These processes monitor the status of all open customer orders, and recognize that a customer order is ready to be closed when the status is changed to completed. A The OM+ Sequencer component manages order orchestration, guaranteeing that the right activities are triggered in the right sequence. Its responsibility encompasses identifying the next activities to be triggered, evaluating when the order reached its final status and all the provisioning activities completed successfully. During the order's final status, OM+ triggers the order closure service call which closes the Order in the order entry system. The Order execution is considered completed / closed when all the Fulfilment Requests have been completed successfully, this is guaranteed by the Sequencer component which manages the orchestration during order fulfillment. OM+ manages the service order closure through the following: • Full awareness of all provisioning related activities in the service order, and final status management • Providing final status notifications to other parties, informing them of relevant order closure events • Final status updated in the order repository. Transactional data that supports the order fulfillment is deleted from online tables and moved to history tables, providing tracking & visibility. [OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing [OM+_CONCEPTS], Order Orchestration, Order Sequencing [OM+_CONCEPTS], Order Lifecycle

[OM+_CONCEPTS], Order Lifecycle, Order Tracking, Notifications

Explanatory
Reserved for future use.

Mandatory
Reserved for future use.

4.1.8 Supporting Evidence References (Works Cited)

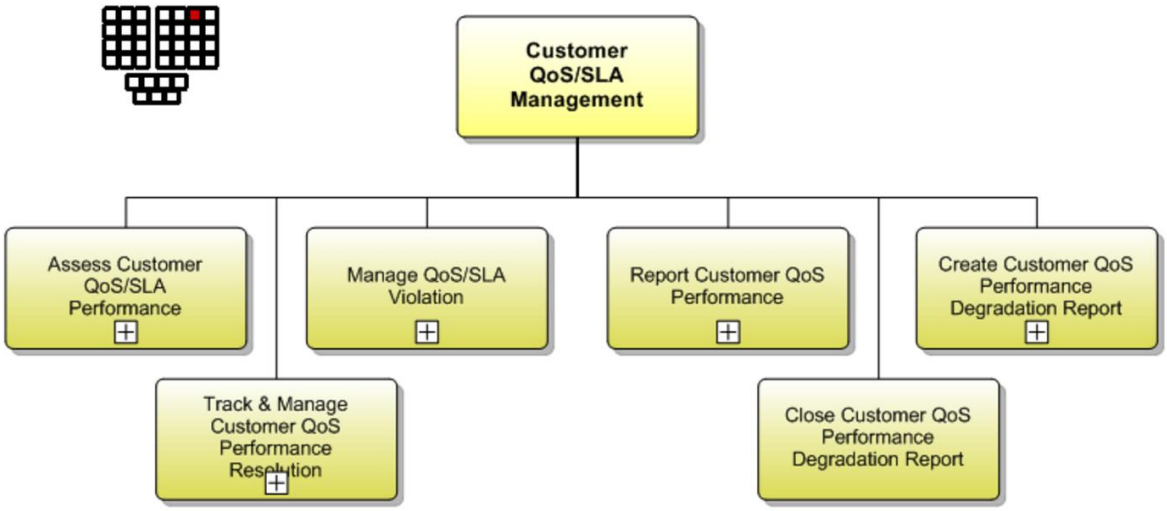
[OM+_CONCEPTS] OM+ Concepts
[OM+ _PRODUCT GUIDE] OM+ Product Guide

4.1.9 Detailed Conformance Results

Table 4-1 Order Handling (1.1.1.5) – Detailed Conformance Results

CelFocus OM+ Frameworx 14.5 Business Process Framework Conformance Scores	
Operations: Level 1: 1.1.1 - Customer Relationship Management **Level 2: 1.1.1.5 - Order Handling**	**Conformance Scores**
1.1.1.5.1 - Determine Customer Order Feasibility	**5.0**
1.1.1.5.1.1 - Perform Impact Analysis	100%
1.1.1.5.2 - Authorize Credit	*Not in Scope*
1.1.1.5.4 - Track & Manage Customer Order Handling	**5.0**
1.1.1.5.4.1 - Manage Customer Order	100%
1.1.1.5.4.2 - Track Customer Order	100%
1.1.1.5.4.3 - Update Order Repository	100%
1.1.1.5.5 - Complete Customer Order	**5.0**
1.1.1.5.6 - Issue Customer Orders	*Not in Scope*
1.1.1.5.7 - Report Customer Order Handling	**5.0**
1.1.1.5.7.1 - Monitor Customer Order Status	100%
1.1.1.5.7.2 - Manage Customer Order Status Notification	100%
1.1.1.5.7.3 - Report Customer Order Status	100%
1.1.1.5.8 - Close Customer Order	**5.0**

4.2 L2: Customer QoS/SLA Management (1.1.1.7)



Process Identifier: 1.1.1.7

Description

Monitoring, managing and reporting of delivered vs. contractual Quality of Service (QoS), as defined in the enterprise's service descriptions, customer contracts or product catalogue.

Extended Description

Customer QoS/SLA Management processes encompass monitoring, managing and reporting of delivered vs. contractual Quality of Service (QoS), as defined in the enterprise's Service Descriptions, customer contracts or the catalogue of product offerings. They are also concerned with the performance of the enterprise and its products in relation to its Service Level Agreements (SLA) for specific product instances, and other service-related documents. They include operational parameters such as resource performance and availability, but also encompass performance across all of a product's contractual or regulatory parameters, e.g., % Completion on Time for Order Requests, time to repair commitments, customer contact performance. Failure to meet a contracted SLA may lead to billing adjustments, which are handled by Billing and Collections Management.

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

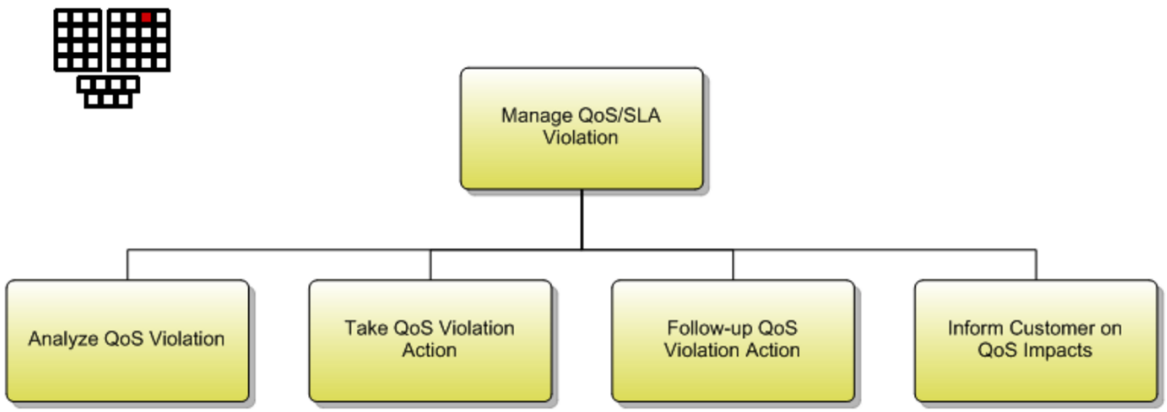
Reserved for future use.

Interactions

Reserved for future use.

4.2.1 L3: Assess Customer QoS/SLA Performance (1.1.1.7.1) – *Not Assessed*

4.2.2 L3: Manage QoS/SLA Violation (1.1.1.7.2)



Process Identifier: 1.1.1.7.2

Description

Ensure that the customer and the relevant internal processes are informed of service quality degradations and violations and that action is undertaken to resolve the degradation or violation

Extended Description

The purpose of the Manage QoS/SLA Violation processes is to ensure that the customer and the relevant internal processes are informed of service quality degradations and violations and that action is undertaken to resolve the degradation or violation. They analyze all the information related to a QoS/SLA degradation or violation and take the appropriate actions when a soft threshold is crossed or the agreed QoS is violated. They follow up the actions to ensure that the

customer is satisfied with the resolution of the problem. They ensure that the customer is informed of any planned maintenance or other scheduled events likely to impact delivery of the customer's service.

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.2.2.1 *L4: Analyze QoS Violation (1.1.1.7.2.1) – Mapping Details*

Process Identifier: 1.1.1.7.2.1

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Analyze QoS Violation (1.1.1.7.2.1)
Description Analyze all the information related to a QoS/SLA degradation or violation. **AM** The SLA manager is the OM+ component responsible for actively monitoring order management entities. Its indicators contribute for the analysis of the QoS/SLA degradation. It

analyzes information regarding OM+ entities such as Orders and their respective Fulfilment Requests. Other entities can also be included and used in the analysis process.

The QoS measurements are either applied on a per customer basis, against a group of customer type (consumer / residential) or against an entire service. (e.g. Consumer mobile activation orders in progress for more than 24 hours)

SLA Manager associates metrics to different OM+ entities such as orders and fulfilment requests, or other relevant infrastructure elements, allowing the specification of thresholds that will be used in the degradation/violation comparison metrics. It measures the current level of service being offered, and provides the ability to compare current QoS with the pre-agreed level of service promised and alerts for any jeopardizes found.

[OM+_CONCEPTS] SLA Management

[OM+ _PRODUCT GUIDE] SLA Manager Component

Extended Description

Not used for this process element

Explanatory

Not used for this process element

Mandatory

Analyze all the information related to a QoS/SLA degradation or violation

4.2.2.2 *L4: Take QoS Violation (1.1.1.7.2.2) – Mapping Details*

Process Identifier: 1.1.1.7.2.2

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS

Take QoS Violation (1.1.1.7.2.2)

Description

Take the appropriate actions when a soft threshold is crossed or the agreed QoS is violated. Ensure that action is undertaken to resolve the degradation or violation **AM**

The SLA Manager actively monitors OM+ entities, resources and its indicators that make up the basis for the QoS assessment. It associates metrics to different OM+ resources, allowing you to define specific thresholds that will be used in the degradation/violation comparison metrics. Based on the information retrieved from the monitoring phase, SLA Manager compares the information fetched from the component and the QoS degradation thresholds previously configured.

The SLA manager component triggers SLA degradation events via JMS, allowing one or more client system to subscribe them. Those events can represent the QoS degradation/violation which surpassed the defined threshold and contain information regarding the elements in scope of the analysis.

Functional and Operations teams can take actions based on the triggered events.

[OM+_CONCEPTS] SLA Management

[OM+ _PRODUCT GUIDE] SLA Manager Component

Extended Description

Not used for this process element

Mandatory

Take the appropriate actions when a soft threshold is crossed or the agreed QoS is violated. Ensure that action is undertaken to resolve the degradation or violation

Optional

Not used for this process element

4.2.2.3 *L4: Follow-up QoS Violation (1.1.1.7.2.3) – Mapping Details*

Process Identifier: 1.1.1.7.2.3

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Follow-up QoS Violation (1.1.1.7.2.3)
Description Follow up the actions to ensure that the customer is satisfied with the resolution of the problem **Extended Description** Not used for this process element **Mandatory** Follow up the actions to ensure that the customer is satisfied with the resolution of the problem **Optional** Not used for this process element

4.2.2.4 *L4: Inform Customer on QoS Impacts (1.1.1.7.2.4) – Mapping Details*

Process Identifier: 1.1.1.7.2.4

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Inform Customer on QoS impacts (1.1.1.7.2.4)
Description Ensure that the customer and the relevant internal processes are informed of service quality degradations and violations. **AM** The SLA Manager can generate events whenever the pre-configured metrics thresholds are surpassed. Those events can be subscribed by internal processes or other party applications and take action based on the metrics surpassed; manual processes can eventually sustain the relationship with other internal processes providing the necessary process inputs. Customized logic can be implemented in the SOA layer to generate content based e-mail/sms in order to inform the customer on particular service quality degradations or violations. [OM+_CONCEPTS] SLA Management [OM+ _PRODUCT GUIDE] SLA Manager Component Ensure that the customer is informed of any planned maintenance or other scheduled events likely to impact delivery of the customer's service. **Extended Description** Not used for this process element **Explanatory** Not used for this process element **Mandatory**

Ensure that the customer and the relevant internal processes are informed of service quality degradations and violations. Ensure that the customer is informed of any planned maintenance or other scheduled events likely to impact delivery of the customer's service.

Optional

Not used for this process element

4.2.3 L3: Report Customer QoS Performance (1.1.1.7.3) – *Not Assessed*

4.2.4 L3: Create Customer QoS Performance Degradation Report (1.1.1.7.4) – *Not Assessed*

4.2.5 L3: Track & Manage Customer QoS Performance Resolution (1.1.1.7.5) – *Not Assessed*

4.2.6 L3: Close Customer QoS Performance Degradation Report (1.1.1.7.6) – *Not Assessed*

4.2.7 Supporting Evidence References (Works Cited)

[OM+_CONCEPTS]	OM+ Concepts
[OM+ _PRODUCT GUIDE]	OM+ Product Guide

4.2.8 Detailed Conformance Results

Table 4-2 Customer QoS/SLA Management (1.1.1.7) – Detailed Conformance Results

CelFocus OM+ Frameworx 14.5 Business Process Framework Conformance Scores	
Operations: Level 1: 1.1.1 - Customer Relationship Management **Level 2: 1.1.1.7 - Customer QoS/SLA Management**	**Conformance Scores**
1.1.1.7.1 - Assess Customer QoS/SLA Performance	*Not in Scope*
1.1.1.7.2 - Manage QoS/SLA Violation	**4.25**
1.1.1.7.2.1 - Analyze QoS Violation	100%
1.1.1.7.2.2 - Take QoS Violation Action	100%
1.1.1.7.2.3 - Follow-up QoS Violation Action	0
1.1.1.7.2.4 - Inform Customer on QoS Impacts	50%
1.1.1.7.3 - Report Customer QoS Performance	*Not in Scope*
1.1.1.7.4 - Create Customer QoS Performance Degradation Report	*Not in Scope*
1.1.1.7.5 - Track & Manage Customer QoS Performance Resolution	*Not in Scope*
1.1.1.7.6 - Close Customer QoS Performance Degradation Report	*Not in Scope*

4.3 L2: Service Configuration & Activation (1.1.2.2)

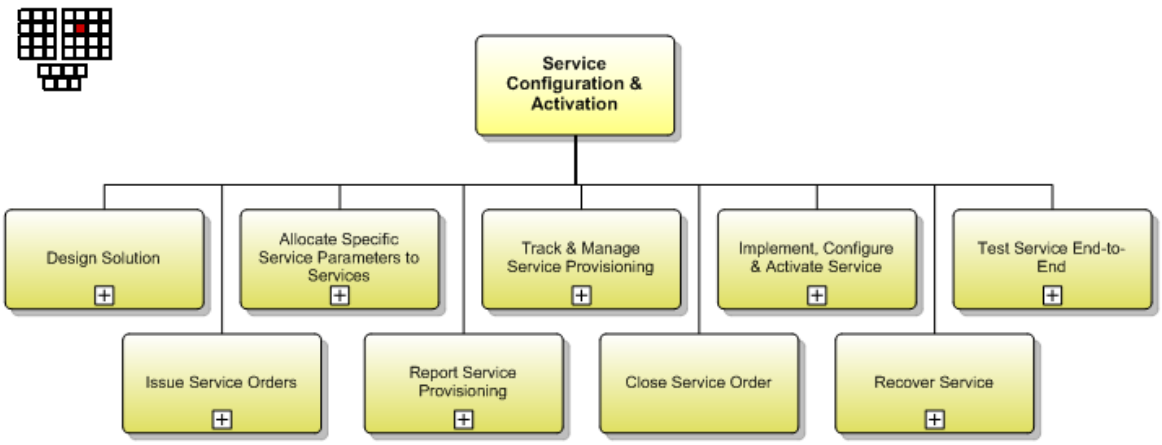


Figure 4-18 Service Configuration & Activation decomposition into level 3 processes

Process Identifier: 1.1.2.2

Description

Allocation, implementation, configuration, activation and testing of specific services to meet customer requirements.

Extended Description

Service Configuration & Activation processes encompass allocation, implementation, configuration, activation and testing of specific services to meet customer requirements, or in response to requests from other processes to alleviate specific service capacity shortfalls, availability concerns or failure conditions. Where included in the service provider offering, these processes extend to cover customer premises equipment. Responsibilities of the Service Configuration & Activation processes include, but are not limited to: • Verifying whether specific service designs sought by customers are feasible as part of pre-order feasibility checks; • Allocating the appropriate specific service parameters to support service orders or requests from other processes; • Reserving specific service parameters (if required by the business rules) for a given period of time until the initiating customer order is confirmed, or until the reservation period expires (if applicable); • Implementing, configuring and activating specific services, as appropriate; • Testing the specific services to ensure the service is working correctly; • Recovery of specific services; • Updating of the Service Inventory Database to reflect that the specific service has been allocated, modified or recovered; • Assigning and tracking service provisioning activities; • Managing service provisioning jeopardy conditions • Reporting progress on service orders to other processes.

Explanatory

Reserved for future use.

Mandatory

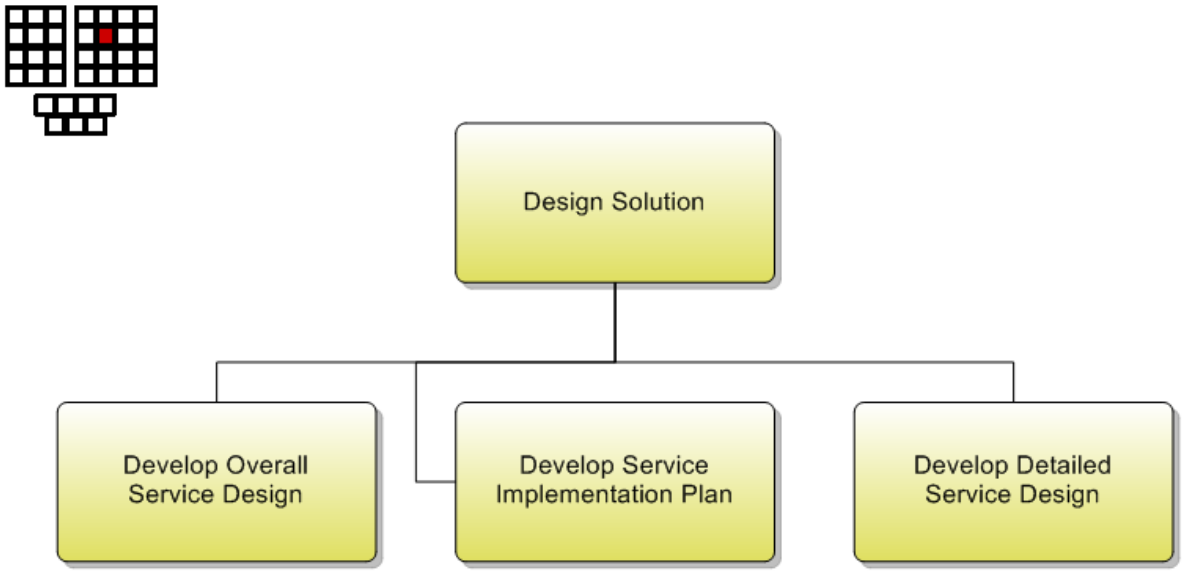
Reserved for future use.

Optional

Reserved for future use.

Interactions

4.3.1 L3: Design Solution (1.1.2.2.1)



Process Identifier: 1.1.2.2.1

Brief Description

Develop an end-end specific service design which complies with a particular customer's requirement

Extended Description

The purpose of the Design Solution processes is to develop an end-end specific service design which complies with a particular customer's requirement. These processes are invoked when a customer order requires special or unusual end-end service arrangements, which are not able to be satisfied using standard service arrangements. These processes may be invoked as part of a service feasibility assessment, or as a result of a confirmed customer order. The responsibilities of these processes include, but are not limited to:

•Developing an overall service solution design for a particular customer, including customer premises equipment, operational methods, resource assignments and pre-order feasibility;

•Developing an implementation plan considering training and operational support measures and needs, such as the proper parameter information for the Service Quality Management process;

•Consideration of current and future service and underlying resources infrastructure, as well as expected solution results, budget, duration and risks;

•Consideration of the time schedule according with customer requirements;

•Ensure service and provisioning efficiency; •Undertaking a business assessment, ensuring an appropriate time-to-revenue as a result of the service and underlying resource investment

•Developing a detailed design identifying the relevant service orders to be issued to the Implement, Configure & Activate Service process and the Allocate Specific Service Parameters to Services processes. A specific service design may require inclusion of some or all of the above aspects depending on whether the service design is being undertaken as part of a feasibility assessment, or is being developed as a result of a committed customer order. These processes invoke requests to RM&O provisioning processes to determine the availability of suitable specific resources, or to suppliers /partners though the S/PRM process in the event that the service design requires either the inclusion of outsourced or partner provided specific services.

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

4.3.1.1 *L4: Develop Overall Service Design (1.1.2.2.1.1) – Mapping Details*

Process Identifier: 1.1.2.2.1.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain

LEVEL 4 PROCESS MAPPING DETAILS Develop Overall Service Design (1.1.2.2.1.1)
Explanatory *Not used for this process element* ***Mandatory*** *Develop an overall service solution design for a particular customer, including customer premises equipment, operational methods, resource assignments and pre-order feasibility; AM* In OM+ the service solution is designed using two OM+ components; Product Mapper and Decomposer, through the OM+ GUI which is a rich web-based platform. The Product Mapper is the component used to configure the CFS and RFS specifications. It will then allow for any particular product to be configured and linked to other products, creating what is called a complex product mapping. Using this configuration, the designer is able to link the CFS and RFS specifications, allowing information to be used within the generated Service Orders. At this point, the configuration handled in the product mapper will contain every detail of the RFS specification (Technical Product) based on product information and associated attributes.

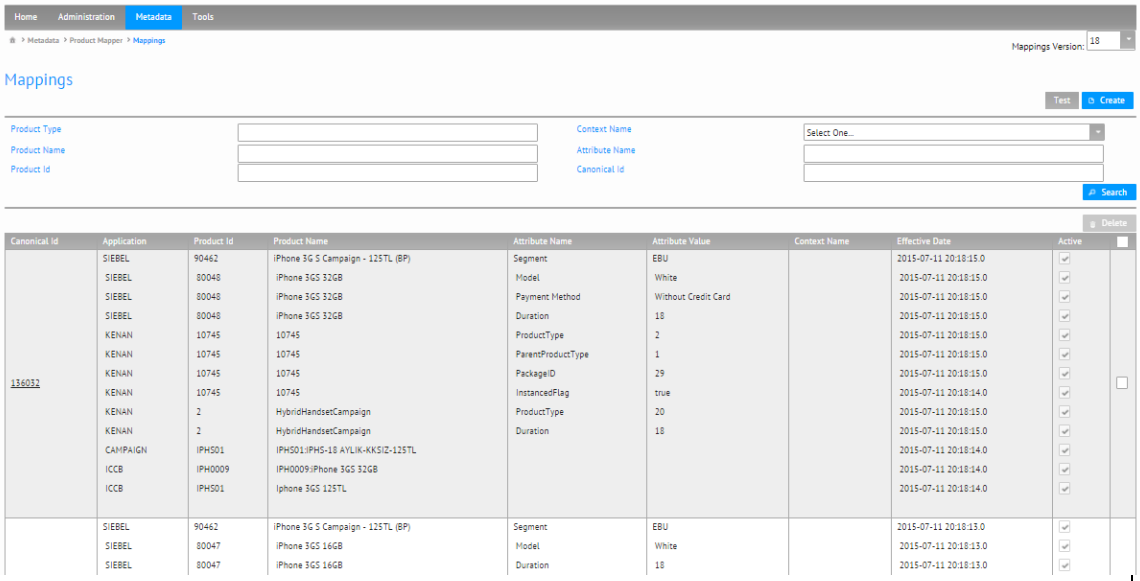


Figure 4-19 OM+ Mapping: Example of a complex product mapping relationship between CFS and RFS product specifications

Decomposer is the component responsible for evaluating the rules and generating fulfilment plans. It generates the fulfilment plan based on the information provided in the order.

The designer can model the decomposition tree based on the RFS products configured, establishing a set of actions to each of the RFS products.

In the decomposition tree the set of actions that are necessary for the implementation plan are defined. Fulfilment Requests may also be added to manage the interaction with the field service engineers' platform regarding the scheduling to the customer premises, or other relevant implementation, configuration and active service processes. Interactions with field service engineers can provide important outputs to be used during the order execution process.

Pre-order feasibility is reached using the validation services triggered during decomposition. It can evaluate the feasibility of pre-defined services and act upon the result by instantiating or not the required service.

OM+ does not have a Resource Management System, although it will integrate during fulfillment in order to reach the desired result.

The services/resources are assigned using fulfillment requests (action on the fulfilment plan) which *will request the resource management system to perform the required operations.*

[OM+_CONCEPTS], Order Orchestration, Order Fulfiler

[OM+_CONCEPTS], Product Mapper

[OM+_CONCEPTS], Order Orchestration, Order Decomposition

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], , Order Management Overview, Celfocus OM+, Components

Optional

Not used for this process element

Interactions

4.3.1.2 *L4: Develop Service Implementation Plan (1.1.2.2.1.2) – Mapping Details*

Process Identifier: 1.1.2.2.1.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain

LEVEL 4 PROCESS MAPPING DETAILS Develop Service Implementation Plan (1.1.2.2.1.2)
Explanatory Consideration of current and future service and underlying resources infrastructure, as well as expected solution results, budget, duration and risks; · Consideration of the time schedule according with customer requirements; · Ensure service and provisioning efficiency; Undertaking a business assessment, ensuring an appropriate time-to-revenue as a result of the service and underlying resource investment; **Mandatory** Develop an implementation plan considering training and operational support measures and needs, such as the proper parameter information for the Service Quality Management process; AM

The implementation plan is created as part of the decomposition tree allowing you to structure and define the detailed fulfilment plan, through the OM+ GUI, a rich web-based platform.

The designer can also configure attributes on the Product Mapper products, as part of the RFS specification, to guarantee that all the required information is available during fulfillment, including attributes which map the required Quality of Service (QoS) parameters.

Those parameters can be used to inform the network elements during order fulfilment, such as policy and charging rules function (PCRF) which are responsible for guaranteeing the QoS levels.

[OM+_CONCEPTS], Order Orchestration, Order Fulfiller

[OM+_CONCEPTS], Product Mapper

[OM+_CONCEPTS], Order Orchestration, Order Decomposition

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Components

Optional

Not used for this process element

Interactions

Not required for process mapping

4.3.1.3 *L4: Develop Detailed Service Design (1.1.2.2.1.3) – Mapping Details*

Process Identifier: 1.1.2.2.1.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain

LEVEL 4 PROCESS MAPPING DETAILS Develop Detailed Service Design (1.1.2.2.1.3)
Explanatory *Not used for this process element* ***Mandatory*** *Develop a detailed design identifying the relevant service orders to be issued to the Implement, Configure & Activate Service process and the Allocate Specific Service Parameters to Services processes. AM* *The design used to identify the relevant service orders is done through the Decomposer and Product Mapper components.* *These components can be configured and parameterized using the OM+ GUI, a rich web-based platform, acts as a transversal solution to all OM+ components.* *In the Decomposer, the designer defines identification scenarios which will be used during evaluation to generate the necessary fulfilment plan.* *The identification scenarios are designed based on the RFS specification (technical products) and/or other relevant information available in the order.* *The information related with the requested services is translated using the Product Mapper component. The designer defines the mapping relationships between the CFS and RFS specifications.*

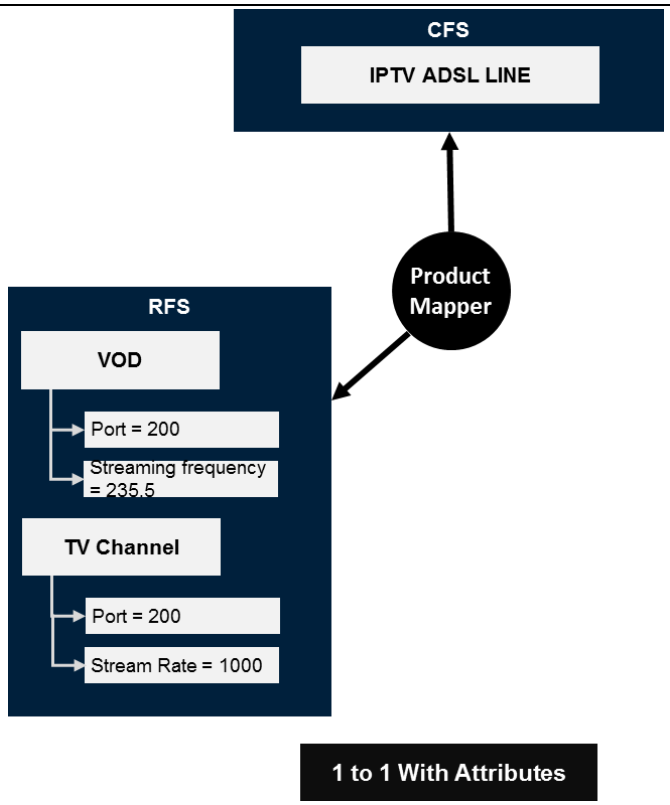


Figure 4-20 OM+ Mapping: Linkage between the CFS into RFS using the Product Mapper 1:1 relationship with attributes

In this component, a set of specific technical parameters can be included which will then be used during technical fulfillment. Although, these parameters can be configured they are only related with product specification.

[OM+_CONCEPTS], Order Orchestration, Order Fulfiller

[OM+_CONCEPTS], Product Mapper

[OM+_CONCEPTS], Order Orchestration, Order Decomposition

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], , Order Management Overview, Celfocus OM+, Components

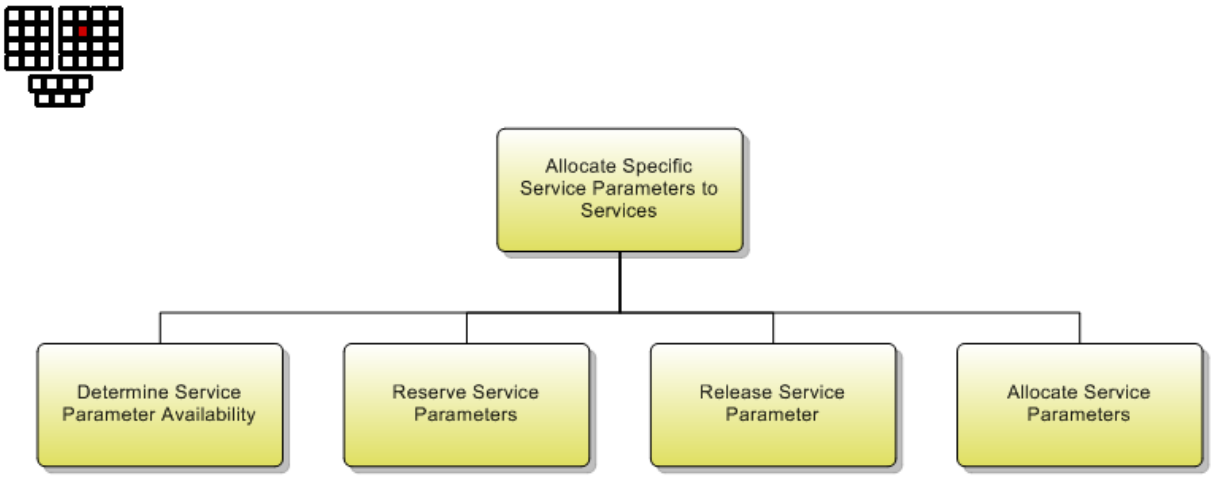
Optional

Not used for this process element

Interactions

Not used for this process element

4.3.2 L3: Allocate Specific Parameters to Services (1.1.2.2.2)



Process Identifier: 1.1.2.2.2

Description

Issue service identifiers for new services.

Extended Description

The purpose of the Allocate Specific Service Parameters to Services processes is to issue service identifiers for new services. Where the Allocate Specific Service Parameters to Services processes are requested by a pre-feasibility service order, or by the Design Services processes, these processes determine whether the requested service parameters are available. Depending on business rules, and on any specific levels of commitment contained in the initiating service order or service design request, these processes may reserve specific service parameters linked to the initiating service order or service design request for a period of time, and releasing them when the time period has expired. These processes are responsible for creating a response to the initiating processes with respect to the feasibility assessment. Where the Allocate Specific Service Parameters to Services processes are requested by a service order issued in response to a confirmed customer order, these processes are responsible for allocating the specific service parameters required to satisfy the initiating service order. Any previously reserved specific service parameters are marked as allocated.

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.3.2.1 *L4: Determine Service Parameter Availability (1.1.2.2.2.1) – Mapping Details*

Process Identifier: 1.1.2.2.2.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain

LEVEL 4 PROCESS MAPPING DETAILS Determine Service Parameter Availability (1.1.2.2.2.1)
Explanatory Where the Allocate Specific Service Parameters to Services processes are requested by a pre-feasibility service order, or by the Design Services processes, **Mandatory** these processes determine whether the requested service parameters are available AM This process can be modelled as part of the service order pre-order feasibility which is considered part of the order decomposition stage. The pre-order feasibility with the objective to evaluate the service parameter availability can be reached using the validations services during decomposition time. During the decomposition stage the decomposer has access to all the service order service parameters which can be modelled within the respective validation services. The validation services can evaluate the service parameters' availability for the service order processing, by integrating with the network domain platforms to check the required parameters. OM+ does not provide a Resource Management System and does not implement the complete behaviour, but it allows you to integrate with the Resource Management System in order to serve the business process. [OM+_CONCEPTS], Order Orchestration, Order Fulfiler [OM+_CONCEPTS], Order Orchestration, Order Decomposition

Optional

Not required for process mapping

Interactions

Not required for process mapping

4.3.2.2 *L4: Reserve Service Parameters (1.1.2.2.2.2) – Mapping Details*

Process Identifier: 1.1.2.2.2.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Reserve Service Parameters (1.1.2.2.2.2)
Explanatory Depending on business rules, and on any specific levels of commitment contained in the initiating service order or service design request, **Mandatory** these processes may reserve specific service parameters linked to the initiating service order or service design request for a period of time A In OM+ this process can be modelled through the fulfilment requests which are part of the fulfiller component. During the service order execution, the relevant services and its associated parameters are present in the order structure and can be accessed by the most granular elements of the order fulfilment requests. The services and the linked service parameters can then be accessed by the fulfilment requests triggering the reservation actions on the resource management systems. OM+ also provides rollback mechanisms which can be used whenever the initiating order is to be cancelled, providing compensation services that rollback the previously reserved parameters in the resource management systems. OM+ does not provide a Resource Management System and does not implement the complete behaviour but allows you to integrate with the Resource Management System in order to serve the business process. [OM+_CONCEPTS], Order Orchestration, Order Fulfiler [OM+_CONCEPTS], Order Orchestration, Order Decomposition

Optional

Not required for process mapping

Interactions

Not required for process mapping

4.3.2.3 *L4: Release Service Parameter (1.1.2.2.2.3) – Mapping Details*

Process Identifier: 1.1.2.2.2.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Release Service Parameters (1.1.2.2.2.3)
Explanatory Not used for this process element **Mandatory** Release the reservation when the time period has expired. AM This process can be modeled as part of the following OM+ features, 1) order cancellation and 2) bulk ordering. **1) Order Cancellation** OM+ platform provides cancellation support for running orders. The Manager component has a public API that allows client systems to cancel an identified order, sending the reference order public id as input. The cancellation request can be triggered when the order respects the favourable cancellation conditions, which are imposed by the Manager component (.e.g. conditions related with the order status, the current step, and orders that have reached a no turning back point). • Order cancellation validation is triggered when the cancellation request arrives, the validation checks the order status and if the PONR ("Point of no return") was already been reached, the PONR marks the moment where it isn't possible to roll back order actions. • The validations also check the order status and the corresponding Fulfilment Requests status, depending on the FR's status and its defined compensation/cancellation services the order may or may not be cancelled.

OM+ allows an order to be cancelled when no action was performed at the underlying BSS/OSS domains. It also supports orders that need to be compensated, when some actions were already performed in those domains.

2) Bulk Ordering

The OM+ Bulk module allows for simple execution and management of bulk OM operations which are created from pre-defined templates.

This process can be modeled as part of the mentioned functionality, allowing to design and execute bulk ordering flows that support the release of service parameters. (E.g. one use-case of this functionality could be the release of service parameters for pre-activated sim cards, on a specific day).

OM+ does not provide a Resource Management System and does not implement the complete behavior but may integrate with the Resource Management System in order to serve the business process.

[OM+_CONCEPTS], Order Orchestration, Order Fulfilment

[OM+_CONCEPTS], Order Orchestration, Order Fulfilment, Order Scheduling

[OM+_CONCEPTS], Order Orchestration, Order Decomposition

[OM+_CONCEPTS] Managing Changes to Orders

[OM+_CONCEPTS] Bulk Orders

[OM+ _PRODUCT GUIDE] Manager Component, Future Dated Orders

Optional

Not required for process mapping

Interactions

Not required for process mapping

4.3.2.4 *L4: Allocate Service Parameter (1.1.2.2.2.4) – Mapping Details*

Process Identifier: 1.1.2.2.2.4

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Allocate Service Parameters (1.1.2.2.2.4)
Explanatory Where the Allocate Specific Service Parameters to Services processes are requested by a service order issued in response to a confirmed customer order, **Mandatory** This process is responsible for allocating the specific service parameters required to satisfy the initiating service order. Any previously reserved specific service parameters are marked as allocated. A In OM+ this process can me modelled through the fulfilment requests which are part of the fulfiller component. During the service order execution, the relevant services and its associated parameters are present in the order structure and can be accessed by the most granular elements of the order fulfilment requests. The services and the linked service parameters can then be accessed by the fulfilment requests triggering the f service parameters' allocation on the network domain systems. OM+ does not provide a network management system and does not implement the complete behaviour but allows integration with the network management system in order to serve the business process. In BSS/OSS architectures without a central resource management system, having this functionality spread in different systems, OM+ can provide a cross referencing feature which supports the conversion between two or more systems. The conversions use logic entities to aggregate the different values. Cross referencing allows the use of a common key to build relationships between equivalent business objects from different applications. Relationships are kept and maintained in a cross

reference repository model, which can be used during the order fulfilment by the order elements (fulfilment requests).

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], Order Orchestration, Order Fulfilment

[OM+_CONCEPTS], Order Orchestration, Order Decomposition

[OM+_CONCEPTS], Order Orchestration, Order Sequencing

[OM+_CONCEPTS], Product Mapper

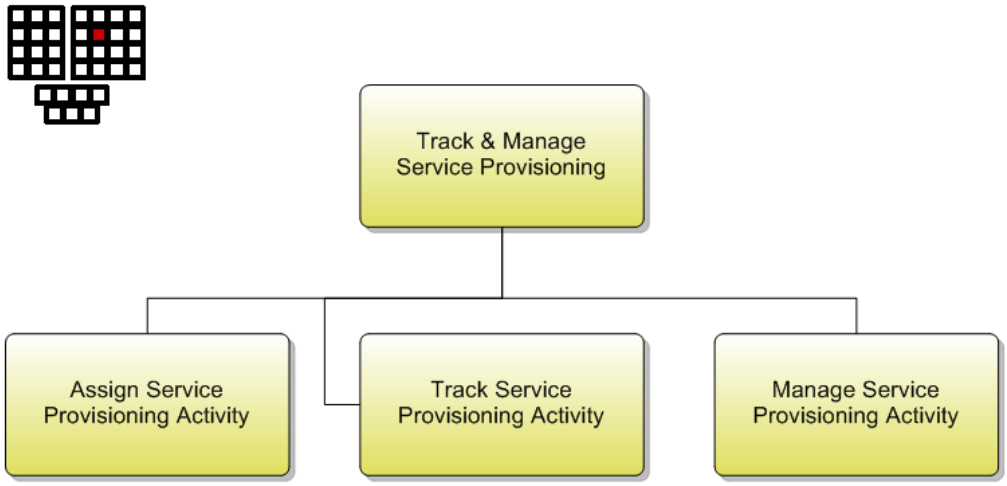
Optional

Not required for process mapping

Interactions

Not required for process mapping

4.3.3 L3: Track & Manage Service Provisioning (1.1.2.2.3)



Process Identifier: 1.1.2.2.3

Description

Ensure service provisioning activities are assigned, managed and tracked efficiently.

Extended Description

The objective of the Track & Manage Service Provisioning processes is to ensure service provisioning activities are assigned, managed and tracked efficiently. Responsibilities of these processes include, but are not limited to:

• Scheduling, assigning and coordinating service provisioning related activities;

• Generating the respective resource order creation request(s) to Issue Resource Orders based on specific service orders;

• Escalating status of service orders in accordance with local policy;

• Undertaking necessary tracking of the execution process;

• Adding additional information to an existing service order;

• Modifying information in an existing service order;•

• Modifying the service order status;

• Canceling a service order when the initiating customer order is cancelled;

• Monitoring the jeopardy status of service orders, and escalating service orders as necessary

• Indicating completion of a service order by modifying the service order status. Note that some specific service components may be delivered by suppliers/partners. In these cases the Track & Manage Service Provisioning process is responsible for initiating requests, through S/P Requisition Management for the delivery by the supplier/partner of the specific service components.

4.3.3.1 *L4: Assign Service Provisioning Activity (1.1.2.2.3.1) – Mapping Details*

Process Identifier: 1.1.2.2.3.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Assign Service Provisioning Activity (1.1.2.2.3.1)
Explanatory Not used for this process element **Mandatory** Schedule, assign and coordinate service provisioning related activities. A OM+ schedules orders based on the requested *'Due Date'* attribute sent during the order creation request. OM+ allows the submission of normal orders, which will be immediately fulfilled or scheduled for a future date, on the order's due date. The service order management instance receives a service order request and places it in queue for decomposition.

Service orders are handled as technical product orders in OM+, they represent the services/products that must be provisioned at the service domain layer.

The assignment and coordination of the activities involved in a service order flow are managed through the Decomposer and Sequencer components.

Decomposer
Decomposer component evaluates the service order, and based on the decomposition rules it will decompose the order into more granular requests called fulfilment requests.

The decomposer is the component that understands what needs to be done and which tasks are to be assigned for a specific business scenario.

The decomposition on the service order management layer is more oriented to technical flows as it represents a more granular decomposition level.

Sequencer
Sequencer is the component that coordinates all the activities that are part of the generated service order management fulfilment plan.

It coordinates the activities based on the configured dependencies / precedencies, ensuring a coherent and correct execution of the tasks.

[OM+_CONCEPTS], Order Orchestration, Order Fulfiller

[OM+_CONCEPTS], Product Mapper

[OM+_CONCEPTS], Order Orchestration, Order Decomposition

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], , Order Management Overview, Celfocus OM+, Components

Optional

Not required for process mapping

Interactions

Not required for process mapping

4.3.3.2 *L4: Track Service Provisioning Activity (1.1.2.2.3.2) – Mapping Details*

Process Identifier: 1.1.2.2.3.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Track Service Provisioning Activity (1.1.2.2.3.2)
Explanatory Not used for this process element **Mandatory** Undertake necessary tracking of the execution process. Monitor the jeopardy status of service orders, and escalating service orders as necessary. A The OM+ platform controls service order execution, from its reception to its closure through multiple steps. The OM+ platform provides tracking of the execution process through a concrete order / fulfilment requests lifecycle status model. This model represents the possible transitions of those entities during the entire execution process. During the order processing, there are different OM+ components that update the corresponding order status, contributing to a full visibility and tracking of the order state and the associated tasks (fulfilment requests) The order tracking can be achieved in two ways: o Manager public APIs that provide rich information regarding the order status and its associated units of work, auditing information o OM+ GUI is a rich web-based interface that provides monitoring and support capabilities OM+ also provides order status notifications during the order execution, which allows other parties to subscribe to order notifications enabling the order's end-to-end tracking.

Monitor the jeopardy status of service orders, and escalating service orders as necessary **AM**

The monitoring of jeopardy status associated to the service orders can be achieved through the OM+ monitoring capabilities.

OM+ provides orders search menus which can identify orders in jeopardy conditions or in other specific condition.

OM+ SLA Manager identifies service orders or fulfilment requests in specific conditions, either in jeopardy or any other condition.

The SLA Manager component enables definition of metrics that monitor pre-selected entities such as, orders and fulfilment requests. These metrics contain the periodicity, threshold and condition to be evaluated during a specific time interval.

Events are triggered when the threshold defined for the metric is achieved.

This component integrates with JMS by publishing notifications; at this point clients can register in order to receive all the SLA Manager notifications.

[OM+_CONCEPTS] Celfocus OM+, Order Management Overview, Architecture Positioning

[OM+_PRODUCT GUIDE], Manager Component, Manager Services

[OM+_CONCEPTS], How OM+ Processes an Order

[OM+_CONCEPTS], Order Lifecycle

[OM+_PRODUCT GUIDE], Request Management Menu, Order Management

Optional

Not required for process mapping

Interactions

Not required for process mapping

4.3.3.3 *L4: Manage Service Provisioning Activity (1.1.2.2.3.3) – Mapping Details*

Process Identifier: 1.1.2.2.3.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Manage Service Provisioning Activity (1.1.2.2.3.3)
Explanatory Not used for this process element **Mandatory** Generating the respective resource order creation request(s) to Issue Resource Orders based on specific service orders A The service order management decomposer evaluates the service order and applies decomposition rules, it hen breaks it in several fulfilment requests. During the execution process the fulfilment requests can issue the Resource orders based on the service order, calling the Manager specific API for the purpose. Escalating status of service orders in accordance with local policy; A OM+ SLA Manager allows the configuration of conditions associated with orders or fulfilment requests. The conditions are defined according to business requirement or local policies. This component actively evaluates the pre-defined conditions and once the threshold is reached, it triggers an event. This event is configured as a JMS endpoint, informing other parties regarding SLA violation. Undertaking necessary tracking of the execution process; A Please see requirement Track Service Provisioning Activity (1.1.2.2.3.2)

Adding additional information to an existing service order; Modifying information in an existing service order;·Modifying the service order status; AM

OM+ provides support for in-flight orders modification. This feature allows users to modify an order that was previously submitted.

Upon receiving a modification order, OM+ In-Flight modification component will evaluate the status of the current order's fulfilment requests and generate the fulfilment plan of the new order.

Based on the outcome a new order will be generated, where additional fulfilment requests can be added. Previously completed fulfilment requests can be compensated, cancelled or maintained.

The main purpose of this functionality is to modify an order still in progress, thus, avoiding order cancelation and doing the modified order from scratch.

This functionality is available through the Manager API's Modify Order. It receives the order's public reference id and the respective modification.

Canceling a service order when the initiating customer order is cancelled; A

OM+ platform provides cancellation support for running orders. The Manager component has a public API that allows client systems to cancel an identified order, sending the reference order public id as input.

The cancellation request can be triggered when the service order is in its normal FULFILL mode, before the cancellation is accepted there are some validations that need to be executed such as:

- Order cancellation validation is triggered when the cancellation request arrives, the validations check the order status and if the PONR ("Point of no return") was already reached. The PONR marks the moment where it isn't possible to roll back order actions.
- The validations also check order status and the correspondent Fulfilment Requests status, depending on the status of the FRs and its defined compensation/cancellation services the order may or may not be cancelled.

OM+ allows an order to be cancelled when no action was performed at the underlying BSS/OSS domains. It also supports orders that need to be compensated, when some actions were already performed in those domains.
This functionality is supported through the OM+ GUI Request Management menu and the Manager public API.

Indicating completion of a service order by modifying the service order status. **A**

OM+ Sequencer component manages all the service order orchestration guaranteeing that the right activities are triggered in the right sequence. It is responsible for identifying the next activities that need to be triggered, evaluating when the order has reached its final status and all the provisioning activities completed successfully.

During the order's final status, OM+ triggers the order closure service call which closes the order in the order entry system.

The Order execution is considered completed / closed when

- All the fulfilment requests have been completed successfully
- Service calls notifications are processed successfully

Thus, reflecting the order / fulfilment requests status in the order repository.

[OM+_PRODUCT GUIDE], Manager Component, Manager Services

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], Order Orchestration, Order Fulfilment

[OM+_CONCEPTS], Order Orchestration, Order Decomposition

[OM+_CONCEPTS], Order Orchestration, Order Sequencing

[OM+_CONCEPTS], SLA Management

[OM+_CONCEPTS], Managing Changes

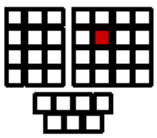
Optional

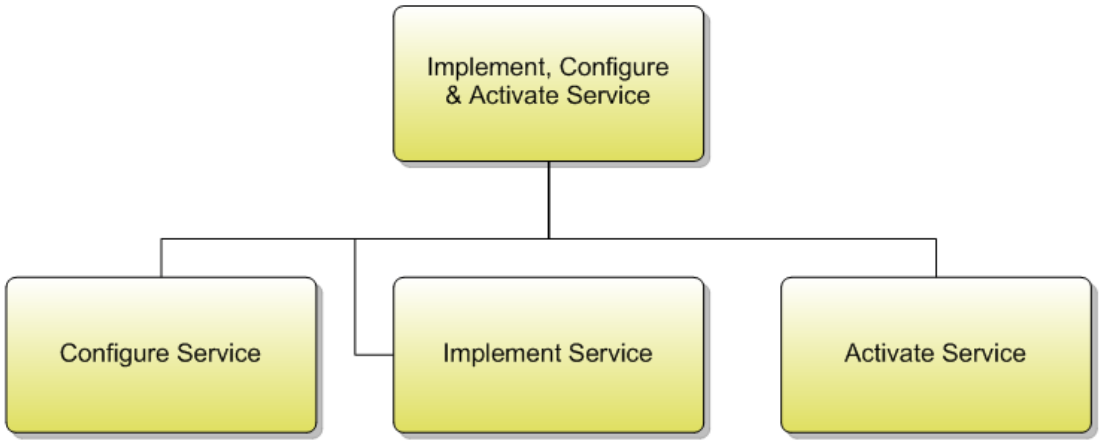
Not required for process mapping

Interactions

Not required for process mapping

4.3.4 L3: Implement, Configure & Activate Service (1.1.2.2.4)





Process Identifier: 1.1.2.2.4

Description

Implement, configure and activate the specific services allocated against an issued service order.

Extended Description

The purpose of the Implement, Configure & Activate Service processes is to implement, configure and activate the specific services allocated against an issued service order. These processes are responsible for, but not limited to:

•Assessing and planning the approach to be undertaken for implementation, configuration and activation;

•Re-using standard implementation, configuration and activation processes applicable to specific services;

•Implementing, configuring and reconfiguring specific services, including customer premises equipment if part of the service provider offering.

•Providing notifications as required if the implementation, configuration and activation activity requires a planned outage or is likely to initiate false specific service alarm event notifications

•Updating the information contained in the service inventory as to the configuration of specific services and their status. At the successful conclusion of these activities, the status of the specific services will be changed from allocated to activated, which means they are in-use.

4.3.4.1 *L4: Configure Service (1.1.2.2.4.1) – Mapping Details*

Process Identifier: 1.1.2.2.4.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Configure Service (1.1.2.2.4.1))
Explanatory Not used for this process element **Mandatory** Assess and plan the approach to be undertaken for configuration. AM The Product Mapper is the component where the CFS and RFS specifications are configured. It will then allow for any particular product to be configured and linked to other products, creating what is called a complex product mapping. Using this configuration, the designer is able to link the CFS and RFS specifications allowing the information to be used within the generated Service Orders. Decomposer is the component responsible for evaluating the rules and generating fulfilment plans. It generates the fulfilment plan based on information provided by the order. The designer can model the decomposition tree based on the RFS products configured, establishing a set of actions to each of the RFS products. In the decomposition tree a set of actions, that are necessary for the implementation plan, are defined. Re-use standard configuration and processes applicable to specific services. Configure and reconfigure specific services, including customer premises equipment if part of the service provider offering. A OM+ decomposer generates the fulfilment plan based on the designed decomposition rules. The plan is generated based on the configuration previously defined and created dynamically depending on the RFS specification received and other relevant information.

The decomposition tree can be designed using conditions which aggregate several RFS specifications, such as product type. This capability allows similar or identical processes to be reused amongst several RFS specifications.

The fulfilment plan is comprised by a set of tasks which are configured to trigger all the necessary actions towards OSS systems. This includes the network activation process, scheduling installation on customer premises, managing resources and other.

Provide notifications as required if the configuration activity requires a planned outage or is likely to initiate false specific service alarm event notifications. M

Update the information contained in the service inventory as to the configuration of specific services and their status. AM

The information update in the resource inventory is triggered by the defined actions available in the fulfilment plan.

However, the actions triggered by OM+ during fulfilment are handled by an external system to the provided solution.

These specific service actions require a resource management system which is not included in the solution but can be integrated as part of the fulfilment plan.

[OM+_CONCEPTS], Order Orchestration, Order Fulfiller

[OM+_CONCEPTS], Product Mapper

[OM+_CONCEPTS], Order Orchestration, Order Decomposition

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], , Order Management Overview, Celfocus OM+, Components

Optional

Not required for process mapping

Interactions

Not required for process mapping

4.3.4.2 *L4: Implement Service (1.1.2.2.4.2) – Mapping Details*

Process Identifier: 1.1.2.2.4.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Implement Service (1.1.2.2.4.2)
Explanatory Not used for this process element **Mandatory** Assess and plan the approach to be undertaken for implementation. Re-use standard implementation processes applicable to specific services. Implement specific services, including customer premises equipment if part of the service provider offering. **A** OM+ decomposer generates the fulfilment plan based on the designed decomposition rules. The plan is generated based on the configuration previously defined and created dynamically depending on the RFS specification received and other relevant information. The decomposition tree can be designed using conditions which aggregates several RFS specifications, such as product type. This capability allows similar or identical processes to be reused amongst several RFS specifications. The fulfilment plan is comprised by a set of tasks which are configured to trigger all the necessary actions towards OSS systems. This includes the network activation process, scheduling installation on customer premises, managing resources and other. Provide notifications as required if the implementation activity requires a planned outage or is likely to initiate false specific service alarm event notifications. M [OM+_CONCEPTS], Order Orchestration, Order Fulfiller [OM+_CONCEPTS], Product Mapper

[OM+_CONCEPTS], Order Orchestration, Order Decomposition

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], , Order Management Overview, Celfocus OM+, Components

Optional

Not required for process mapping

Interactions

Not required for process mapping

4.3.4.3 *L4: Activate Service (1.1.2.2.4.3) – Mapping Details*

Process Identifier: 1.1.2.2.4.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Activate Service (1.1.2.2.4.3)
Explanatory At the successful conclusion of this activity, the status of the specific services will be changed from allocated to activated, which means they are in-use. **Mandatory** Assess and plan the approach to be undertaken for activation. **A** Re-used standard activation processes applicable to specific services. **A** OM+ decomposer generates the fulfilment plan based on the designed decomposition rules. The plan is generated based on the configuration previously defined and created dynamically depending on the RFS specification received and other relevant information. The decomposition tree can be designed using conditions which aggregates several RFS specifications, such as a product type. This capability allows similar or identical processes to be reused amongst several RFS specifications. The fulfilment plan is comprised by a set of tasks which are configured to trigger all the necessary actions towards OSS systems. This includes the network activation process, scheduling installation on customer premises, managing resources and other. Provide notifications as required if the activation activity requires a planned outage or is likely to initiate false specific service alarm event notifications. M The services status update within the resource inventory is triggered by the defined actions available in the fulfilment plan. Although, the actions are triggered by OM+ during fulfillment, it is handled by a system external to the provided solution. These specific service actions require

a resource management system which is not included in the solution but can be integrated as part of the fulfilment plan.

[OM+_CONCEPTS], Order Orchestration, Order Fulfiler

[OM+_CONCEPTS], Product Mapper

[OM+_CONCEPTS], Order Orchestration, Order Decomposition

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Components

Optional

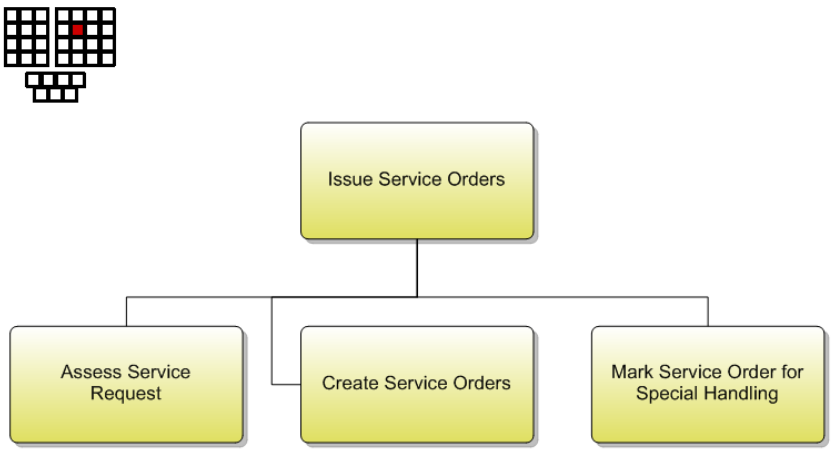
Not required for process mapping

Interactions

Not required for process mapping

4.3.5 L3: Test Service End-to-End (1.1.2.2.5) – *Not Assessed*

4.3.6 L3: Issue Service Orders (1.1.2.2.7)



Process Identifier: 1.1.2.2.7

Description

Issue correct and complete service orders

Extended Description

The purpose of the Issue Service Orders processes is to issue correct and complete service orders. The service orders may be required to satisfy pertinent customer order information received, may arise as a result of requests for service provisioning to satisfy service problem recovery activities, may arise to alleviate service performance issues, or may arise as a result of information received from suppliers/partners in relations to specific services. These processes assess the information contained in the customer order, through a service order request, relating to the purchased product offering, initiating service process or supplier/partner initiated request, to determine the associated service orders that need to be issued. The issued service order may require a service feasibility assessment or a service design to be produced, may require new provisioning activities for specific services, may require a change to a previously issued service order, or may require deletion and/or recovery of previously delivered specific services. Where, the initiating request or the purchased product offering has a standard set of associated service orders this process is responsible for issuing the service orders, and for creating a record of the relevant initiating request or customer order information and the associated service orders. Where the initiating request or the purchased product offering has special or unusual requirements, and a specific feasibility assessment and/or service design has been previously created, this

process is responsible for issuing the service orders, and for creating a record of the relevant initiating request or customer order information and the associated service orders. Where the purchased product offering has special or unusual requirements, and a specific feasibility assessment and/or specific service design has not been previously created, this process marks the issued service order as requiring special handling, and passes management for further processing to the Track & Manage Service Provisioning process. The orchestration, if required, and tracking of the service order progress is the responsibility of the Track & Manage Service Provisioning processes.

4.3.6.1 *L4: Assess Service Request (1.1.2.2.7.1) – Mapping Details*

Process Identifier: 1.1.2.2.7.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Assess Service Request (1.1.2.2.7.1)
Explanatory Not used for this process element **Mandatory** This process assesses the information contained in the customer order, through a service order request, relating to the purchased product offering, initiating service process or supplier/partner initiated request, to determine the associated service orders that need to be issue **AM** The customer order contains all the information regarding the customer, customer premises, customer product offering for a specific initiated service process or supplier/partner initiated request. It is through the decomposition that the customer order is then assessed and partitioned in more granular activities. This is achieved due to the introspection of the order information and executing several rules through the decomposition tree, originating the corresponding customer order fulfilment plan.

When the fulfilment plan is generated, the Sequencer component starts the execution of the identified fulfilment requests.

The customer order can manage complex orders, having different types of service (e.g. IPTV, LL, and BB) with different provisioning modes, which can originate multiple service orders to address such distinct provisioning requirements.

A fulfilment request, part of the customer order, will then process the order information, by working with the order context and retrieving the CFS-RFS linkage from the Product Mapper component. Relevant service orders will be identified and issued into the OM+ service order management instance.

The customer order can issue several service orders, which can be aggregated by the specific service they represent or based on an aggregator such as a bundle promotion.

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], Order Orchestration, Order Fulfilment

[OM+_CONCEPTS], Order Orchestration, Order Decomposition

[OM+_CONCEPTS], Order Orchestration, Order Sequencing

[OM+_CONCEPTS] Product Mapper

Optional

Not required for process mapping

Interactions

Not required for process mapping

4.3.6.2 *L4: Create Service Orders (1.1.2.2.7.2) – Mapping Details*

Process Identifier: 1.1.2.2.7.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Create Service Orders (1.1.2.2.7.2)
Explanatory The service orders may be required to satisfy pertinent customer order information received, may arise as a result of requests for service provisioning to satisfy service problem recovery activities, may arise to alleviate service performance issues, or may arise as a result of information received from suppliers/partners in relations to specific services. The issued service order may require a service feasibility assessment or a service design to be produced, may require new provisioning activities for specific services, may require a change to a previously issued service order, or may require deletion and/or recovery of previously delivered specific services. **Mandatory** Where, the initiating request or the purchased product offering has a standard set of associated service orders this process is responsible for issuing the service orders, and for creating a record of the relevant initiating request or customer order information and the associated service orders. Where the initiating request or the purchased product offering has special or unusual requirements, and a specific feasibility assessment and/or service design has been previously created, this process is responsible for issuing the service orders, and for creating a record of the relevant initiating request or customer order information and the associated service orders. A As referred in requirement 1.1.2.2.7.1, during the customer order fulfilment, there's the capability to identify and issue service orders based on the CFS-RFS linkage provided by the Product Mapper output and fulfilment capabilities that can act based on the result and issue the relevant service orders. A service order will be created in the OM+ service order management instance, which will be responsible for fulfilling the required RFS actions working closely with the SM&O processes.

The customer order/service order records will be created in the OM+ order repository, the linkage between the customer orders and respective service orders will be established using the data extractions functionality.

Data extractions is a functionality that allows the extraction of key words from the order structure during decomposition time and persist them in the order repository in order to provide additional information during order fulfilment.

The customer order management order will have a unique identifier which will be represented as COM Order in the SOM order.

The service order management service calls can be configured to notify the customer order management processes.

[OM+_CONCEPTS] Celfocus OM+, Order Management Overview, Architecture Positioning

Optional

Not required for process mapping

Interactions

Not required for process mapping

4.3.6.3 *L4: Mark Service Order for Special Handling (1.1.2.2.7.3) – Mapping Details*

Process Identifier: 1.1.2.2.7.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Mark Service Order for Special Handling (1.1.2.2.7.3)
Explanatory Not used for this process element **Mandatory**

Where the purchased product offering has special or unusual requirements, and a specific feasibility assessment and/or specific service design has not been previously created, this process marks the issued service order as requiring special handling, **A**

OM+ allows marking a service order for special handling, an additional step for order enrichment can be added before its issuance. This step can enrich the service order by including more data in the order structure with the objective to highlight the order requiring special handling.

Order enrichment can be performed through the integration with other systems, by identifying where the information resides to support special and unusual requirements.

Having the required information present in the order context, additional fulfilment requests can be added into the fulfilment plan with in order to fulfill unusual requirements.

[OM+_CONCEPTS] Celfocus OM+, Order Management Overview, Architecture Positioning

[OM+_CONCEPTS], Order Orchestration, Order Fulfilment

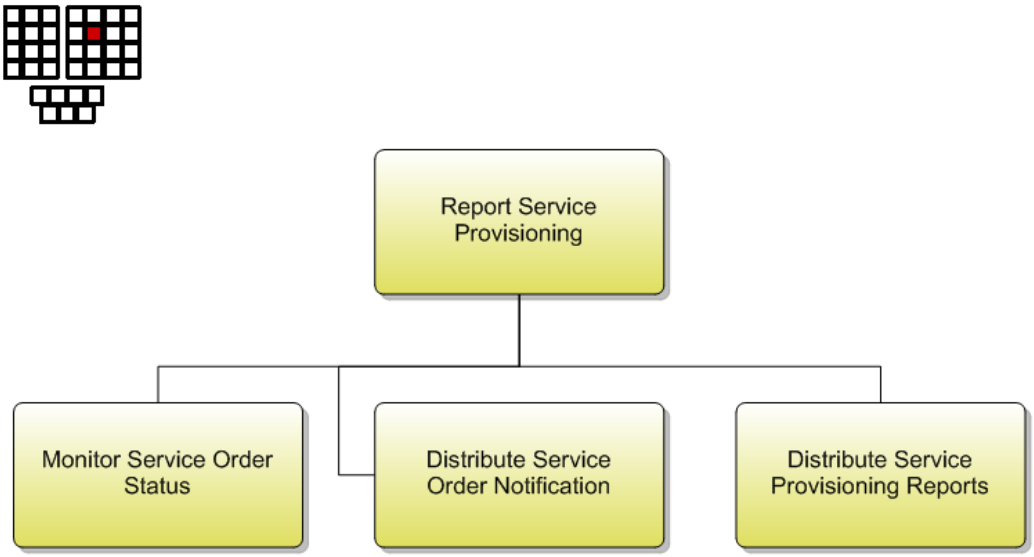
Optional

Not required for process mapping

Interactions

Not required for process mapping

4.3.7 L3: Report Service Provisioning (1.1.2.2.8)



Process Identifier: 1.1.2.2.8

Description

Monitor the status of service orders, provide notifications of any changes and provide management reports.

Extended Description

The objective of the Report Service Provisioning processes is to monitor the status of service orders, provide notifications of any changes and provide management reports. These processes are responsible for continuously monitoring the status of service orders and managing notifications to processes and other parties registered to receive notifications of any status changes. Notification lists are managed and maintained by the Enable Service Configuration & Activation processes. These processes record, analyze and assess the service order status changes to provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Service Configuration & Activation process. These specialized summaries could be specific reports required by specific audiences.

4.3.7.1 *L4: Monitor Service Order Status (1.1.2.2.8.1) – Mapping Details*

Process Identifier: 1.1.2.2.8.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Monitor Service Order Status (1.1.2.2.8.1)
Explanatory Not used for this process element **Mandatory** responsible for continuously monitoring the status of service orders; record, analyze and assess the service order status changes AM The OM+ platform controls service order execution, from its reception to its closure through multiple steps, which includes but is not limited to: ○ Service order reception ○ Fulfilment plan ○ Fulfilment requests sequencing through precedencies / dependencies management ○ Fulfilment requests instantiation ○ Service order closure The service orders orchestrate the RFS products specification that must be provisioned in the downstream provisioning layers. The link between the customer order and the service order can be seen as a sub-order that shares the same order lifecycle status and transitions, being the customer order the parent order that issued the services orders managing it at a top level hierarchy. The service orders share the same lifecycle status model, the same OM+ components work during the service order lifecycle and can change the order status lifecycle, which provides full end to end visibility on the order monitoring processes.

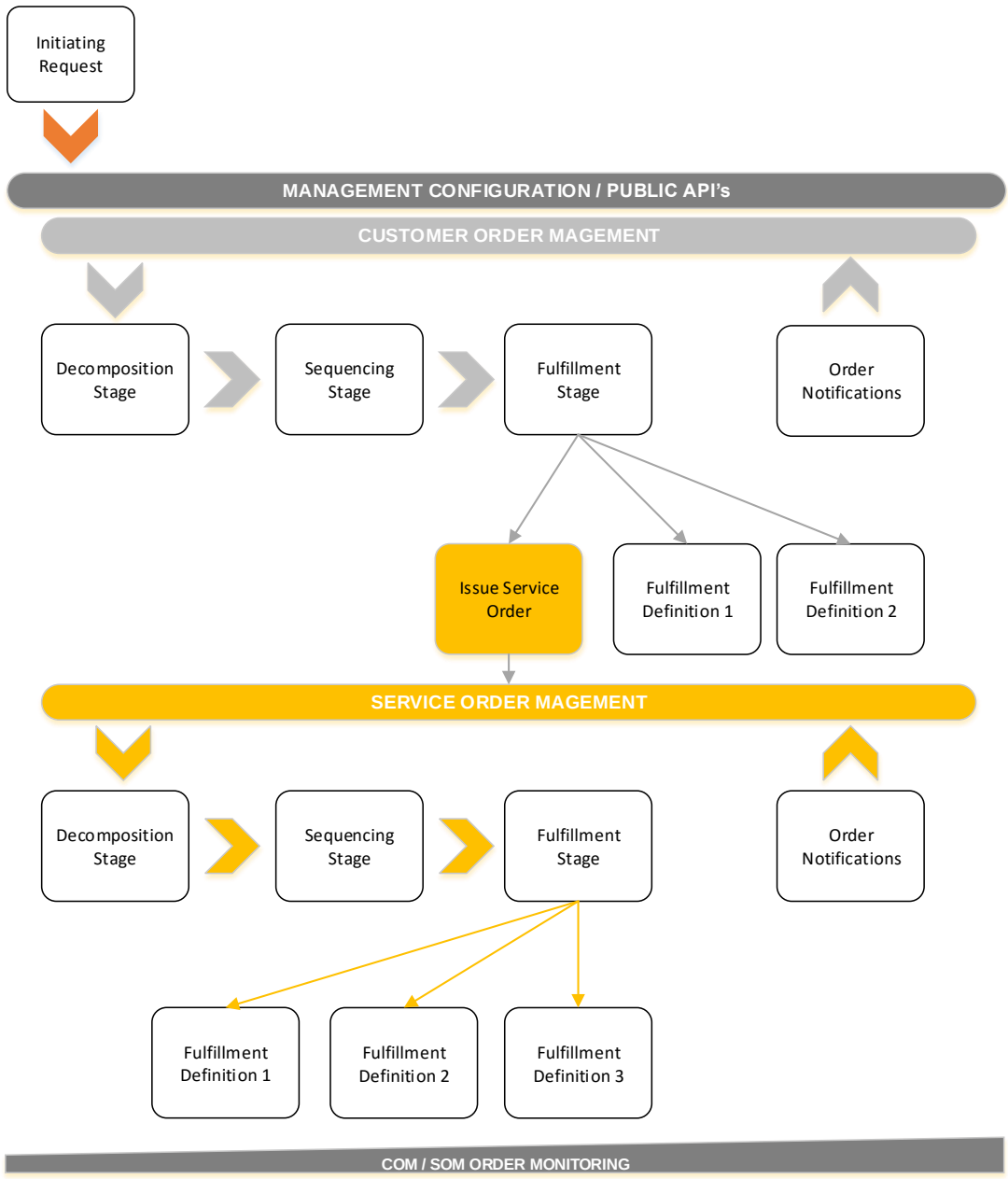


Figure 4-21 OM+ Mapping: Illustrative diagram for the customer and service order management

OM+ provides an automated transition mechanism for the order and its corresponding activities (fulfilment requests), which reflects them in the order repository during the various steps of the order processing.

Service orders trigger order notifications that allow the order status synchronization between the related customer order management orders.

The service orders monitoring can be achieved in two ways:

- Manager public API's that provide rich information regarding the service order status and its associated units of work, auditing information, allowing the order tracking to be seamless as possible.
- OM+ GUI is a rich web-based interface that provides monitoring and support capabilities, allowing every order to be monitored from an end to end perspective.

The audit capabilities provide extended monitoring capabilities to record every service order and fulfillment request's status transition. It has a concrete audit blueprint which stores timestamp, component, application and other relevant information which can be retrieved in a later stage.

[OM+_CONCEPTS], Celfocus OM+, Order Management Overview, Architecture Positioning

[OM+_CONCEPTS], Order Orchestration, Order Fulfilment

[OM+_PRODUCT GUIDE], Request Manager Menu, Order Management

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Stages of Order Processing

[OM+_CONCEPTS], Order Management Overview, Celfocus OM+, Order Journey (OM+)

Optional

Not used for this process element

Interactions

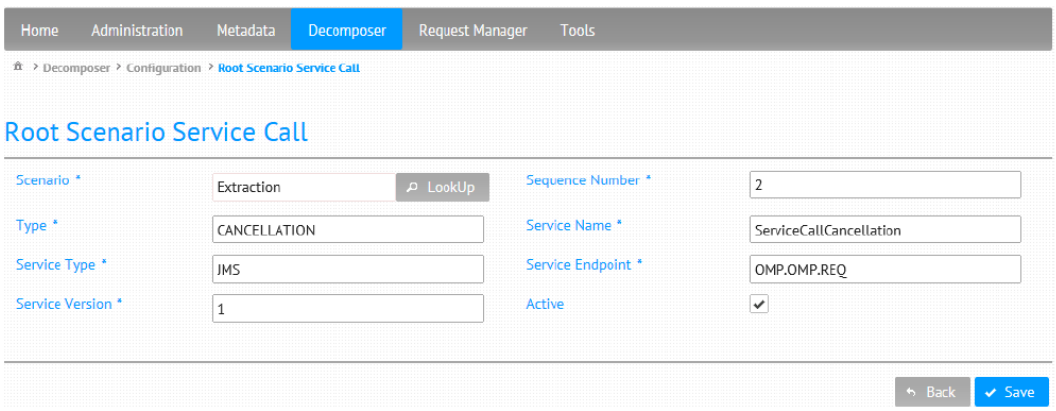
Not required for process mapping

4.3.7.2 *L4: Distribute Service Order Notification (1.1.2.2.8.2) – Mapping Details*

Process Identifier: 1.1.2.2.8.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Distribute Service Order Notification (1.1.2.2.8.2)
Explanatory Notifications are used to notify the owner of the current status of the order and also distributed to the other parties who require it. **Mandatory** Provide notifications of any changes the status of service orders. A OM+ allows the configuration of specific service calls notifications that are triggered during the service orders processing. These notifications are used to notify the customer order on the service order status transitions, within the defined order lifecycle status model. The OM+ component that manages the notifications is the Notifications Manager, by providing a set of service calls to be used during the service order processing. The service calls' notifications can be configured through the OM+ GUI in the Decomposer menu.      Figure 4-22 OM+ Mapping: Service order notifications enablement through service calls

[OM+_CONCEPTS], Order Lifecycle, Order Tracking, Notifications **Optional** Not required for process mapping **Interactions** Not required for process mapping

4.3.7.3 *L4: Distribute Service Order Provisioning Reports (1.1.2.2.8.3) – Mapping Details*

Process Identifier: 1.1.2.2.8.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Distribute Service Order Provisioning Reports (1.1.2.2.8.3)
Explanatory These specialized summaries could be specific reports required by specific audiences. **Mandatory** Provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Service Configuration & Activation process. AM OM+ records the service orders and they persist in the database since the initial stages of the order management processing until they reach final stages, where they're considered completed from a fulfillment perspective. All service order modifications and order state transitions persist in the database, and follow OM+ orders lifecycle state model. The OM+ platform provides dashboard capabilities to monitor generic order performance and effectiveness, the dashboard already contains a set of preset metrics which can be selected during widget wizard creation.

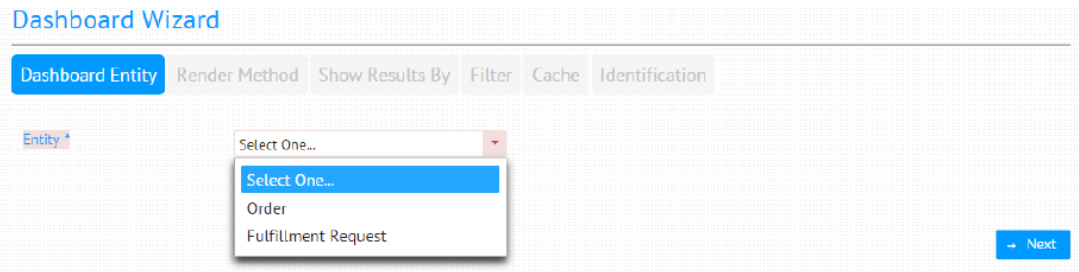


Figure 4-23 OM+ Mapping: Pre-configured dashboard wizard entities

The dashboard entities can either be associated to the service order or the associated fulfillment requests, and can be instantiated through different types of graphs.

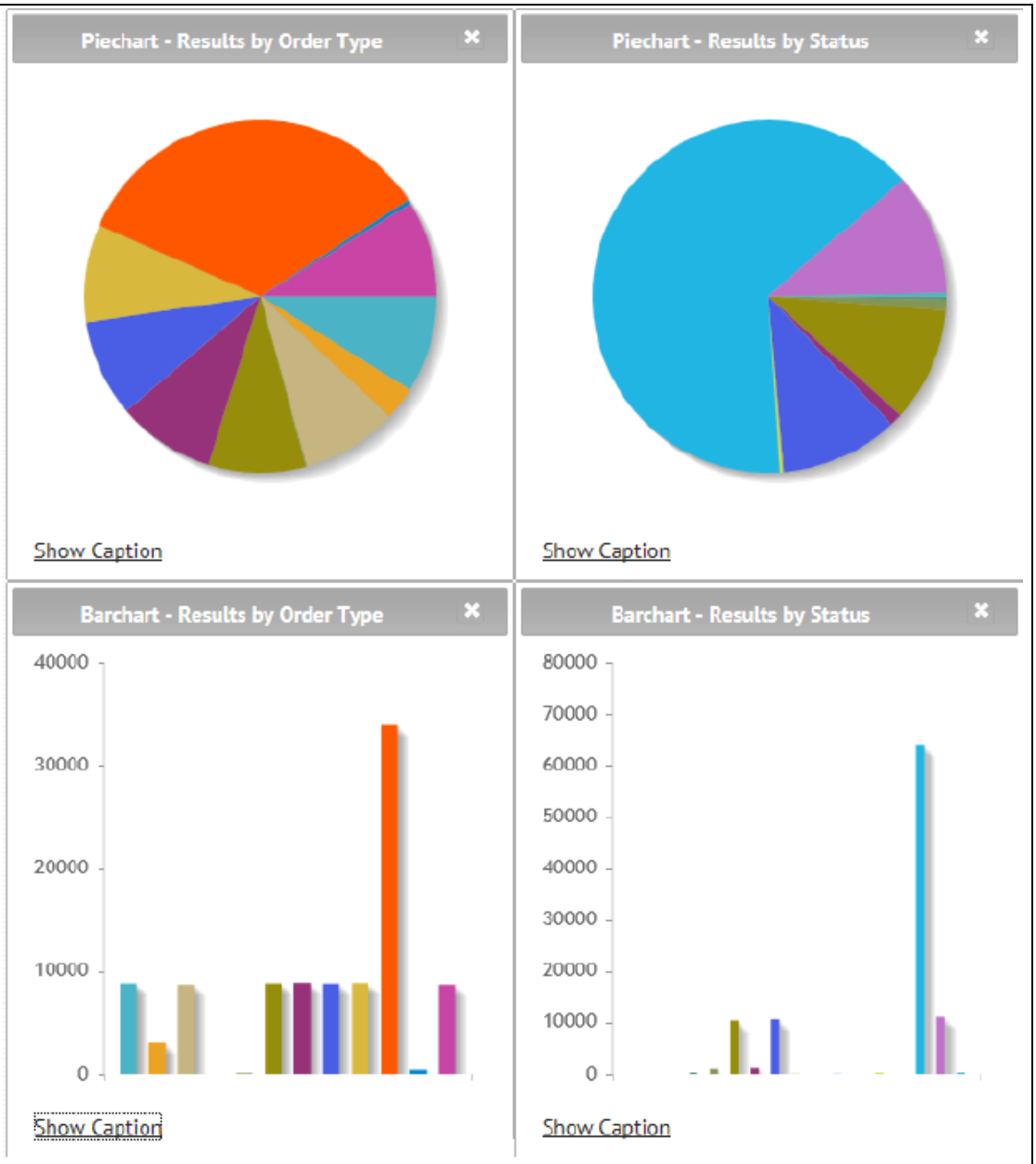


Figure 4-24 OM+ Mapping: Dashboard result representation in pie chart and bars

This feature produces dynamic reports based on the pre-configured database queries that can fetch information from orders, fulfillment requests or any other OM+ entity.

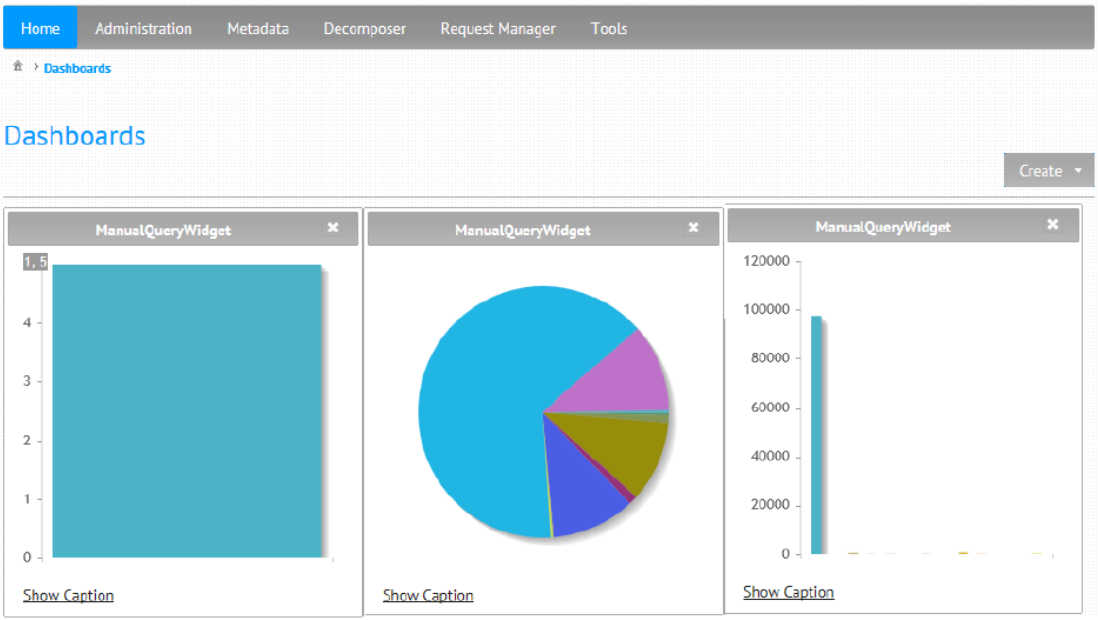


Figure 4-25 OM+ Mapping: Dashboard manual query result

The OM+ dashboards can also be retrieved through an iOS application called Omistics optimized for IPad or IPad mini.

Omistics is a read-only application, all dashboards and widgets must be previously configured through the OM+ GUI.

The Omistics contains a login screen, and, three different types of dashboards (tables, pie chart and bar chart) and the option of sharing dashboards.

All the information regarding the service orders status, transitions with associated timestamps, fulfillment requests persist in the OM+ database, allowing a 3rd party reporting system to generate specific reports.

[OM+_PRODUCT_GUIDE], Home Menu

[OM+_PRODUCT_GUIDE], Request Manager Menu

[OM+_PRODUCT_GUIDE], Omistics – OM+ Mobile Dashboards

Optional

Not required for process mapping

Interactions

Not required for process mapping

4.3.8 L3: Close Service Order (1.1.2.2.9)

Process Identifier: 1.1.2.2.9

Description

Close a service order when the service provisioning activities have been completed

Extended Description

The objective of the Close Service Order processes is to close a service order when the service provisioning activities have been completed. These processes monitor the status of all open service orders, and recognize that a service order is ready to be closed when the status is changed to completed.

4.3.8.1 *L3: Close Service Order (1.1.2.2.9) – Mapping Details*

Process Identifier: 1.1.2.2.9

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Close Service Order (1.1.2.2.9)
Description Close a service order when the service provisioning activities have been completed **Extended Description** The objective of the Close Service Order processes is to close a service order when the service provisioning activities have been completed. These processes monitor the status of all open service orders, and recognize that a service order is ready to be closed when the status is changed to completed. A OM+ Sequencer component manages all the service order orchestration guaranteeing that the right activities are triggered in the right sequence. It is responsible for identifying the next activities that need to be triggered, evaluating when the order has reached its final status and all the provisioning activities completed successfully.

During the order's final status OM+ triggers the order closure service call which closes the Order in the order entry system.

The Order execution is considered completed / closed when all the fulfilment requests have been completed successfully, this is guaranteed by the Sequencer component which manages all the orchestration during order fulfillment.

OM+ manages the service order closure through the following:

- Full awareness of all provisioning related activities in the service order, and final status management
- Providing final status notifications to other parties, informing them of relevant order closure events
- Final status updated in the order repository.

Transactional data that supports the order fulfillment is deleted from online tables and moved to history tables, providing tracking & visibility.

[OM+_CONCEPTS], Order Lifecycle

[OM+_CONCEPTS], Order Lifecycle, Order Tracking

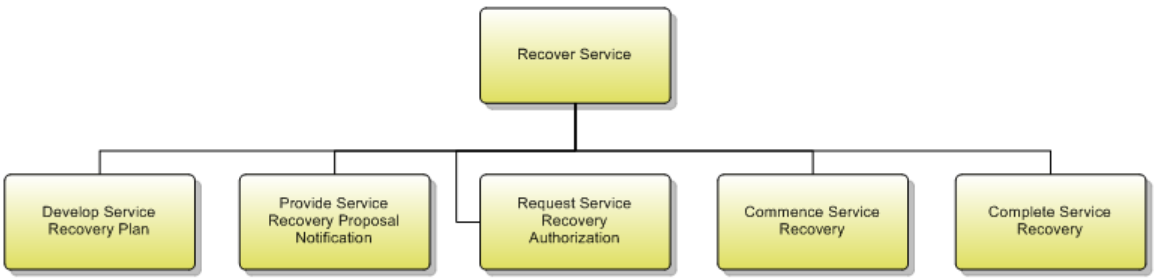
Optional

Not required for process mapping

Interactions

Not required for process mapping

4.3.9 L3: Recover Service (1.1.2.2.10)



Process Identifier: 1.1.2.2.10

Description

Recover specific services that are no longer required by customers.

Extended Description

The responsibility of the Recover Service processes is to recover specific services that are no longer required by customers. These processes follow recovery plans specified by the supplier/partner, or against recovery plans developed by the service provider. Where appropriate recovery plans are not available these processes are responsible for developing appropriate recovery plans. Where recovery of services is likely to impact other in-use specific services, this process is responsible for providing appropriate notification of the recovery proposal and ensuring authorization is received to proceed with the recovery plan. When the recovery activity is about to commence, these processes are responsible for notifying when recovery work is commencing and when it is completed. When recovered, the specific services and/or associated service specific parameters will be marked as unallocated.

4.3.9.1 *L4: Develop Service Recovery Plan (1.1.2.2.10.1) – Mapping Details*

Process Identifier: 1.1.2.2.10.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Develop Service Recovery Plan (1.1.2.2.10.1)
Explanatory Where appropriate recovery plans are not available **Mandatory** this process is responsible for developing appropriate recovery plans **A** OM+ enables the definition of cancellation and compensation modes which can implement service recovery plans. Cancellation plans can be defined in the decomposer as a recovery option. During the design time specific services can be configured to perform recovery actions whenever an order is to be cancelled. OM+ provides different types of execution modes, for the cancellation mode the order has a specific cancellation flow which executes all the rollback actions that must be performed. The cancellation mode can serve different objectives such as: • IT constraints: order fulfilment failures due to an incomplete transactions, incorrect network coverage, incorrect customer data entry • Business constraints: the user selected the wrong product offering or no longer desires to subscribe to a specific product Compensation mode is similar to the cancellation mode, although for the compensation to take place some order actions must have been completed. This capability can be leveraged through compensation services that implement service recovery to its initial state. [OM+_CONCEPTS], Managing Changes to Orders

Optional

Not required for process mapping

Interactions

Not required for process mapping

4.3.9.2 *L4: Provide Service Recovery Notification (1.1.2.2.10.2) – Mapping Details*

Process Identifier: 1.1.2.2.10.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Provide Service Recovery Notification (1.1.2.2.10.2)
Explanatory Where recovery of services is likely to impact other in-use specific services, **Mandatory** This process is responsible for providing appropriate notification of the recovery proposal **A** OM+ platform provides service call notifications for the cancellation / compensation final stages. It's possible to configure service calls notifications associated to the final stages of the cancellation / compensation modes, this feature can be configured in the Decomposer component during design time. [OM+_CONCEPTS], Order Lifecycle [OM+_CONCEPTS], Order Lifecycle, Order Tracking, Notifications **Optional** Not required for process mapping **Interactions** Not required for process mapping

4.3.9.3 *L4: Request Service Recovery Authorization (1.1.2.2.10.3) – Mapping Details*

Process Identifier: 1.1.2.2.10.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Request Service Recovery Authorization (1.1.2.2.10.3)
Explanatory Not used for this process element **Mandatory** Ensure authorization is received to proceed with the recovery plan. **AM** OM+ provides authorization mechanisms for the recovery plans, whenever a cancellation request is required for a certain order, before proceeding with the cancellation the Manager component requests an authorization request from the system that is responsible for providing such feedback. Once the authorization is received, the recovery plan starts. [OM+_CONCEPTS], Managing Changes to Orders **Optional** Not required for process mapping **Interactions** Not required for process mapping

4.3.9.4 *L4: Commence Service Recovery (1.1.2.2.10.4) – Mapping Details*

Process Identifier: 1.1.2.2.10.4

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Commence Service Recovery (**1.1.2.2.10.4**)
Explanatory When the recovery activity is about to commence, **Mandatory** This processes is responsible for notifying when recovery work is commencing. **A** The cancellation / compensation services can implement a notification once the recovery work is started, this process can be modeled at the very initial stages of the cancellation flow. [OM+_CONCEPTS], Managing Changes to Orders [OM+_CONCEPTS], Order Orchestration, Order Fulfiler **Optional** Not required for process mapping **Interactions** Not required for process mapping

4.3.9.5 *L4: Complete Service Recovery (1.1.2.2.10.5) – Mapping Details*

Process Identifier: 1.1.2.2.10.5

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (ie "instantiated") with other similar process elements for application within a specific organization or domain.

LEVEL 4 PROCESS MAPPING DETAILS Complete Service Recovery (1.1.2.2.10.5)
Mandatory When recovered, the specific services and/or associated service specific parameters will be marked as unallocated. A The sequencing of the activities regarding the cancellation / compensation modes is managed through the sequencer component. Sequencer interacts with the Fulfiller component which manages all the transactions with the identified target systems, managing the fulfilment requests status according to the target systems responses. The implementation of the fulfilment requests during the cancellation / compensation can be customized in order to provide specific service's unallocated actions. [OM+_CONCEPTS], Managing Changes to Orders [OM+_CONCEPTS], Order Orchestration, Order Fulfiller **Optional** Not required for process mapping **Interactions** Not required for process mapping

4.3.10 Supporting Evidence References (Works Cited)

[OM+_CONCEPTS]	OM+ Concepts
[OM+ _PRODUCT GUIDE]	OM+ Product Guide

4.3.11 Detailed Conformance Results

Table 4-3 Service Configuration & Activation (1.1.2.2) – Detailed Conformance Results

Celfocus OM+ Order Management V5.0 Frameworx 14.5 Business Process Framework Conformance Scores	
Operations: Level 1: 1.1.2 - Service Management & Operations **Level 2: 1.1.2.2 - Service Configuration & Activation**	**Conformance Scores**
1.1.2.2.1 - Design Solution	**4.8**
1.1.2.2.1.1 - Develop Overall Service Design	100%
1.1.2.2.1.2 - Develop Service Implementation Plan	75%
1.1.2.2.1.3 - Develop Detailed Service Design	100%
1.1.2.2.2 - Allocate Specific Service Parameters to Services	**5**
1.1.2.2.2.1 - Determine Service Parameter Availability	100%
1.1.2.2.2.2 - Reserve Service Parameters	100%
1.1.2.2.2.3 - Release Service Parameter	100%
1.1.2.2.2.4 - Allocate Service Parameters	100%
1.1.2.2.3 - Track & Manage Service Provisioning	**5**
1.1.2.2.3.1 - Assign Service Provisioning Activity	100%
1.1.2.2.3.2 - Track Service Provisioning Activity	100%
1.1.2.2.3.3 - Manage Service Provisioning Activity	100%
1.1.2.2.4 - Implement, Configure & Activate Service	**4.5**
1.1.2.2.4.1 - Configure Service	75%
1.1.2.2.4.2 - Implement Service	75%
1.1.2.2.4.3 - Activate Service	75%
1.1.2.2.5 - Test Service End-to-End	*Not in Scope*
1.1.2.2.7 - Issue Service Orders	**5**
1.1.2.2.7.1 - Assess Service Request	100%
1.1.2.2.7.2 - Create Service Orders	100%
1.1.2.2.7.3 - Mark Service Order for Special Handling	100%
1.1.2.2.8 - Report Service Provisioning	**5**
1.1.2.2.8.1 - Monitor Service Order Status	100%
1.1.2.2.8.2 - Distribute Service Order Notification	100%
1.1.2.2.8.3 - Distribute Service Provisioning Reports	100%
1.1.2.2.9 - Close Service Order	**5**
1.1.2.2.10 - Recover Service	**5**
1.1.2.2.10.1 - Develop Service Recovery Plan	100%
1.1.2.2.10.2 - Provide Service Recovery Proposal Notification	100%
1.1.2.2.10.3 - Request Service Recovery Authorization	100%
1.1.2.2.10.4 - Commence Service Recovery	100%
1.1.2.2.10.5 - Complete Service Recovery	100%

5 Information Framework Assessment Overview

5.1 Mapping Technique Employed

Not applicable for this assessment.

5.2 Information Framework Assessment - ABE Scope

Not applicable for this assessment.

5.3 Product Scope

Not applicable for this assessment.

6 Frameworx Conformance Result

This section details the Scores awarded to reflect Conformance of Celfocus' OM+ Order Management product to the Business Process Framework & Information Framework components of Frameworx 14.5.

6.1 Business Process Framework – Scoring Rules

The conformance scores granted were based on the following TM Forum scoring rules:

Frameworx 14.5 Conformance Certification (Product/Solution/Implementation)		
Business Process Framework (eTOM) - Conformance Level Descriptions (Level 3 processes)		
Process level	**Conformance Score**	**Qualifier**
Level 1	**Not applicable**	**Conformance Assessment shall not be carried out at this process level - hence Confomance Level shall not be awarded at this level.**
Level 2	**Not applicable**	**A conformance level is not awarded to Level 2 processes in Frameworx 12.0 Assessments. The Certification Report shall highlight the coverage of 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 for the Level 2 process.**
Level 3	**Score is awarded between 3.1 & 5.**	**The Conformance Score is awarded for each Level 3 processes 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.** *Any manual implementation of the process support shall be noted in the Conformance Report and Detailed Results Report.*

Figure 6-1 TM Forum Business Process Framework: Conformance Scoring Rules

Additional Notes on Business Process Framework Conformance Scoring

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.

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.

3. The Conformance Assessment shall be carried out at process level 3. For each Level 3 process, conformance shall be deduced according to the support for the process implied tasks, as decomposed and described in the underlying 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. This provides finer granularity of scoring than in Assessment prior to Frameworx 12.0 based Assessments.

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.

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.

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 the Celfocus OM+ Assessment. Each Level 3 process was measured using a Business Process Framework (eTOM) conformance score according to level of Conformance – Full Conformance or Partial Conformance as described in section 6.1 Business Process Framework – Scoring Rules.

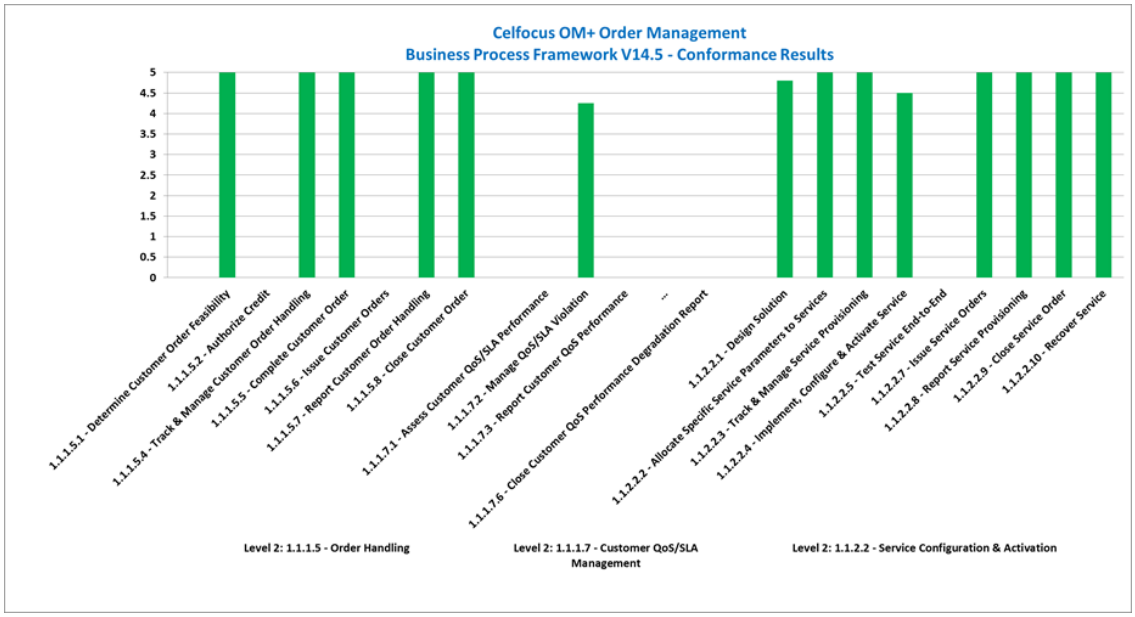


Figure 6-2 Business Process Framework: Conformance Result Summary

6.3 Business Process Framework – Detailed Conformance Results

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

Table 6-1 Business Process Framework: Detailed Conformance Results

Celfocus OM+ Order Management V5.0 Business Process Framework (eTOM) Release 14.5 Conformance		
L1 / L2 / L3 Process	**L3 Process Score [L2 Coverage]** **Level 1: 1.1.1 - Customer Relationship Management**	**Comments**
Level 2: 1.1.1.5 - Order Handling	**[5/7]**	
1.1.1.5.1 - Determine Customer Order Feasibility	**5.0**	**Fully Conformant** Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.5.2 - Authorize Credit	*Not in Scope*	
1.1.1.5.4 - Track & Manage Customer Order Handling	**5.0**	**Fully Conformant** Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.5.5 - Complete Customer Order	**5.0**	**Fully Conformant** Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.5.6 - Issue Customer Orders	*Not in Scope*	*Not in Scope*

1.1.1.5.7 - Report Customer Order Handling	**5.0**	**Fully Conformant** Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.5.8 - Close Customer Order	**5.0**	**Fully Conformant** Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
Level 2: 1.1.1.7 - Customer QoS/SLA Management	**[1/6]**	
1.1.1.7.1 - Assess Customer QoS/SLA Performance	*Not in Scope*	*Not in scope.*
1.1.1.7.2 - Manage QoS/SLA Violation	**4.3**	**Partially Conformant** Supporting evidence and documentation submitted for the assessment of this level 3 process supported alignment criteria with the standard Business Process Framework (eTOM) but with some deviations.
1.1.1.7.3 - Report Customer QoS Performance	*Not in Scope*	*Not in scope.*
1.1.1.7.4 - Create Customer QoS Performance Degradation Report	*Not in Scope*	*Not in scope.*
1.1.1.7.5 - Track & Manage Customer QoS Performance Resolution	*Not in Scope*	*Not in scope.*
1.1.1.7.6 - Close Customer QoS Performance Degradation Report	*Not in Scope*	*Not in scope.*
Level 2: 1.1.2.2 - Service Configuration & Activation	**[8/9]**	
1.1.2.2.1 - Design Solution	**4.8**	**Fully Conformant** Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).

1.1.2.2.2 - Allocate Specific Service Parameters to Services	**5.0**	**Fully Conformant** Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.2.2.3 - Track & Manage Service Provisioning	**5.0**	**Fully Conformant** Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.2.2.4 - Implement, Configure & Activate Service	**4.5**	**Fully Conformant** Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.2.2.5 - Test Service End-to-End	***Not in scope***	***Not in scope.***
1.1.2.2.7 - Issue Service Orders	**5.0**	**Fully Conformant** Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.2.2.8 - Report Service Provisioning	**5.0**	**Fully Conformant** Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.2.2.9 - Close Service Order	**5.0**	**Fully Conformant** Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).

1.1.2.2.10 - Recover Service	**5.0**	**Fully Conformant** Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).

6.4 Information Framework – Scoring Rules

Not applicable for this assessment.

6.4.1 Information Framework Maturity Conformance Scoring Methodology

Not applicable for this assessment.

6.4.2 Information Framework Adoption Conformance Scoring Methodology

Not applicable for this assessment.

6.5 Information Framework – Conformance Result Summary

Not applicable for this assessment.

6.5.1 Information Framework - Maturity Conformance Result Summary

Not applicable for this assessment.

6.5.2 Information Framework - Adoption Conformance Result Summary

Not applicable for this assessment.

6.6 Information Framework – Detailed Conformance Result

Not applicable for this assessment.