

Huawei Tech. Co., Ltd

Digital CRM R2.1

TM Forum Framework 16.0 Certification

Business Process Framework (eTOM) Release 16.0

Self-Assessment Process Mapping Report

Level 2 Process: 1.3.6 - Customer Information Management

Version: V1R2 (Primary Review comments, second pass)

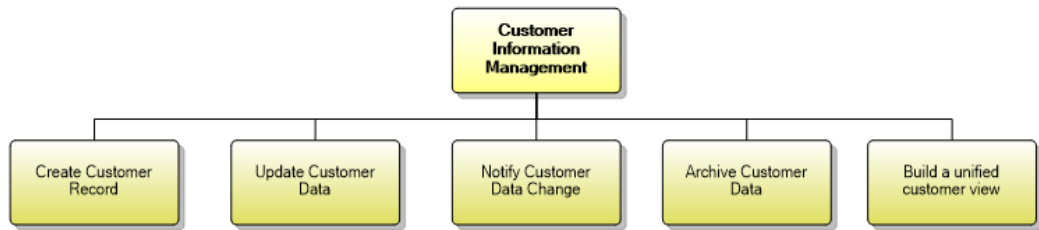
20th February 2017

Tianye (Dean)/Maxu

Table of Contents

1	Level 2: 1.3.6 CUSTOMER INFORMATION MANAGEMENT	3
1.1	Level 3: 1.3.6.1 Create Customer Record.....	4
1.2	Level 3: 1.3.6.2 Update Customer Data	6
1.3	Level 3: 1.3.6.3 Notify Customer Data Change	9
1.4	Level 3: 1.3.6.4 Archive Customer Data.....	11
1.5	Level 3: 1.3.6.5 Build a unified customer view	13

1 Level 2: 1.3.6 CUSTOMER INFORMATION MANAGEMENT



Framework Process	Level 3 Category	Process Identifier	Brief Description
Create Customer Record	(3) eTOM Process Type	1.3.6.1	Create a new customer record in the customer inventory.
Update Customer Data	(3) eTOM Process Type	1.3.6.2	Update the customer data in the customer inventory.
Notify Customer Data Change	(3) eTOM Process Type	1.3.6.3	Notify other processes that customer data has been changed
Archive Customer Data	(3) eTOM Process Type	1.3.6.4	Archive the customer data.
Build a unified customer view	(3) eTOM Process Type	1.3.6.5	Create a single customer record from the information stored in multiple systems and present a single, most updated record of the customer information.

1.1 Level 3: 1.3.6.1 Create Customer Record

LEVEL 3 PROCESS MAPPING DETAILS
1.3.6.1 Create Customer Record

Brief Description
Create a new customer record in the customer inventory.


Comment for the compliance:

AM (Please refer to the document BP.COMM Common Sub Processes. It includes the "Register customer sub-process")

The relevant process diagram in Huawei BP can be found here:

The diagram illustrates the 'Business Process Register customer' flow. It is divided into two swimlanes: 'Customer/Agent' and 'BSS/CRM'. In the 'Customer/Agent' swimlane, the process starts with 'Start of register customer', leading to a decision 'Choose login type'. From here, it branches into 'Register customer by user name and password' and 'Login via social accounts'. 'Register customer by user name and password' leads to 'Set customer basic info', then 'Select preference options', and 'Set authentication info', finally ending at 'End of register customer'. 'Login via social accounts' also leads to 'Set customer basic info'. In the 'BSS/CRM' swimlane, the process starts with 'Create customer', leading to a decision 'Include telecom main offer'. This leads to 'Perform customer checking', then 'Perform credit checking', and another decision 'End of include telecom main offer'. This decision leads to 'Promot registration', which then feeds back into 'Set authentication info' in the 'Customer/Agent' swimlane.

The diagram can also be opened here:



Register customer.png

In this process, the activities of the diagram are used to realize the "Create Customer Record" in TMF Process Framework.

#	Steps
1.	<p>Register customer by user name and password</p> <p>Create customer</p> <p>Create customer and directly fill in username and password to register customer.</p>

Here is the screen shot:

The screenshot shows a web form for customer registration, organized into several sections:

- CERTIFICATE INFO:** Includes fields for Certificate Type, Certificate Number, and Service Number, with a red 'Check' button below.
- BASIC INFO:** Contains fields for Last Name, Middle Name, and First Name. It also has radio buttons for Gender (Male, Female, Unknown/Ex) and Title (Mr, Mrs, Ms), and a dropdown for Nationality. A Birthplace field is also present.
- ATTACHMENT LIST:** Features an 'Upload' button.
- CONTACT INFO:** A table with columns: Contact Type, First Name, Middle Name, Last Name, Title, Contact Method, and Operation. It shows 'No Data'.
- ADDRESS INFO:** A table with columns: Region, Detailed Address, Postal Code, Address Type, Contact Fax, and Operation. It also shows 'No Data'.
- USER INFO:** Includes fields for Password (with a 'Read' button), Confirm Password, and Birth Language. A Hidden Language dropdown is also visible.

At the bottom right, there are 'SUBMIT' and 'BACK' buttons.

Extended Description

The purpose of this process is to create a new customer record in the customer inventory. This process follows the processes in Establish Customer Relationship that make sure that a single record is created for each customer, and it persists the customer data in the customer inventory.

Comment for the compliance:

AM

Please refer to the previous response to Brief Description

Explanatory

Not used for this process element.

Mandatory

Not used for this process element.

Optional

Not used for this process element.

Interactions

Not used for this process element.

Here is the screen shot of "Customer Information Change"

MY WORKBENCH | CUSTOMER 360-DEGREE VIEW | CUSTOMER INFO CHANGE

CERTIFICATE INFO

Certificate Type: Passport	Certificate Number: 2016121417304766	Read
Effective Time:	Expiration Time:	
Address on Certificate:	Issuing Authority:	
Issuing State:		


BASIC INFO

MORE

Customer Code: 31000013119	Default Account: 31000013112
Last Name: 624034	Middle Name:
First Name: 345486	Title: <input checked="" type="radio"/> Mr <input type="radio"/> Ms
Nationality:	Birthplace: 2016121417304766

FILE LIST

Upload

 NO Result!

CONTACT INFO

New

i No Data

ADDRESS INFO

New

Region	Detailed Address	Postal Code
Jiangsu Province-NanJing City-Jiangning	yfvrnGckvU	2372200055
Address Type	Contact First	
Office Address	No	

Details Modify Delete Copy

Extended Description

The purpose of this process is to update the customer data in the customer inventory. This can happen as a result of direct notification from the customer, as a result of information gathered as part of other processes (such as selling and order handling) or as a result of back office processes (such as customer data cleansing) .

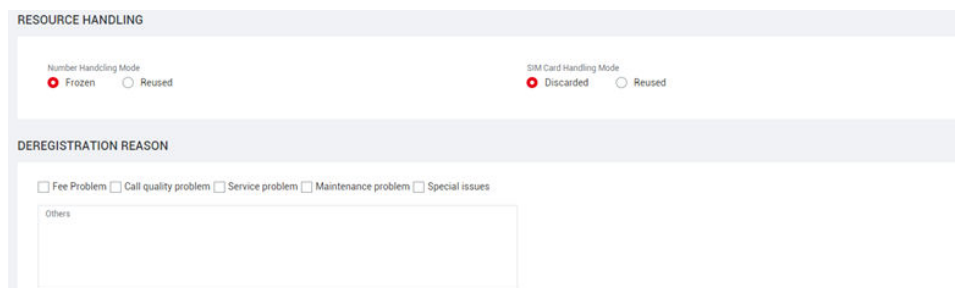
Comment for the compliance:

AM

Please refer to the previous response to Brief Description for the screenshots and process diagrams.

This customer information modification (updating) can be used for both the front end staff and back office maintenance team.

For the “customer data cleansing”, the back office team can use the deregistration function to deactivate the customer data so it will not be used in any operation scenario. The screenshot is as follows:



The screenshot shows a form with two main sections. The first section, 'RESOURCE HANDLING', contains two radio button groups. The first group is 'Number Handling Mode' with 'Frozen' selected (indicated by a red dot) and 'Reused' unselected. The second group is 'SIM Card Handling Mode' with 'Discarded' selected (indicated by a red dot) and 'Reused' unselected. The second section, 'DEREGISTRATION REASON', contains a row of checkboxes for 'Fee Problem', 'Call quality problem', 'Service problem', 'Maintenance problem', and 'Special issues', all of which are unselected. Below this row is a text input field labeled 'Others'.

Explanatory

Not used for this process element.

Mandatory

Not used for this process element.

Optional

Not used for this process element.

Interactions

Not used for this process element.

1.3 Level 3: 1.3.6.3 Notify Customer Data Change

LEVEL 3 PROCESS MAPPING DETAILS 1.3.6.3 Notify Customer Data Change

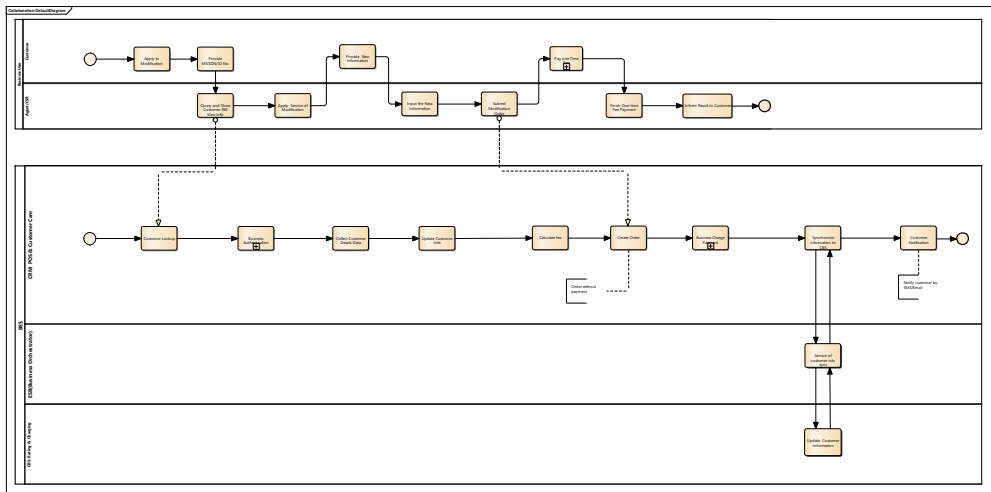
Brief Description

Notify other processes that customer data has been changed

Comment for the compliance:

AM (Please refer to the document BP.CC.CUSTMGT.01 “Modify Customer”)

The relevant process diagram in Huawei BP can be found here:



In this process, the activities of the diagram are used to realize the “Inform Customer Data Change” in TMF Process Framework.

9	Inform Result to Customer	CSR confirms the updating/modification to customer.
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Extended Description

The purpose of this process is notify other processes that customer data has been changed. Other processes (mostly long-lived processes) might need to know about such changes in order to adapt to such changes. In addition some processes which gather the data for centralized systems (such as Data Warehouse or Master Data Management) should be notified about such changes.

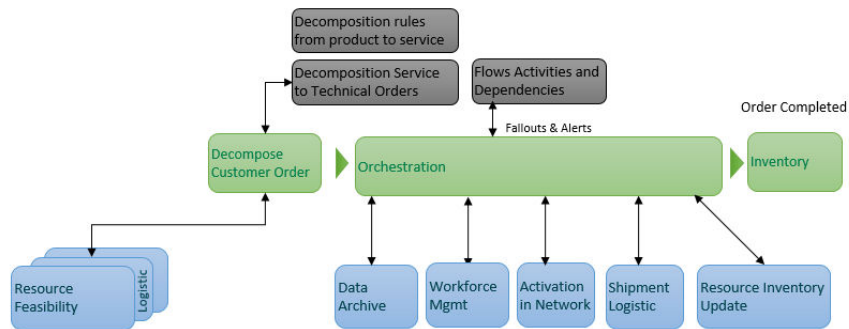
Comment for the compliance:

AM

Please refer to the previous response to Brief Description for the screenshots and process diagrams.

The software systems are notified mainly by the order decomposition and orchestration.

The order will synchronize the change of customer data to a group of relevant downstream systems, including workforce management, network element, resource inventory, etc. The diagram as the below illustrates this process.



Explanatory

Not used for this process element.

Mandatory

Not used for this process element.

Optional

Not used for this process element.

Interactions

Not used for this process element.

1.4 Level 3: 1.3.6.4 Archive Customer Data

LEVEL 3 PROCESS MAPPING DETAILS

1.3.6.4 Archive Customer Data

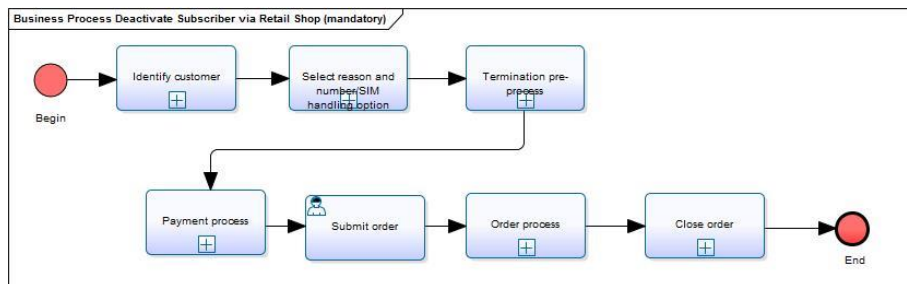
Brief Description

Archive the customer data.

Comment for the compliance:

AM (Please refer to the document BP.CC.SUBMGT.08 Deactivate Subscriber. It includes the process of "Deactivate Subscriber (mandatory and immediately)")

The relevant process diagram in Huawei BP can be found here:



Extended Description

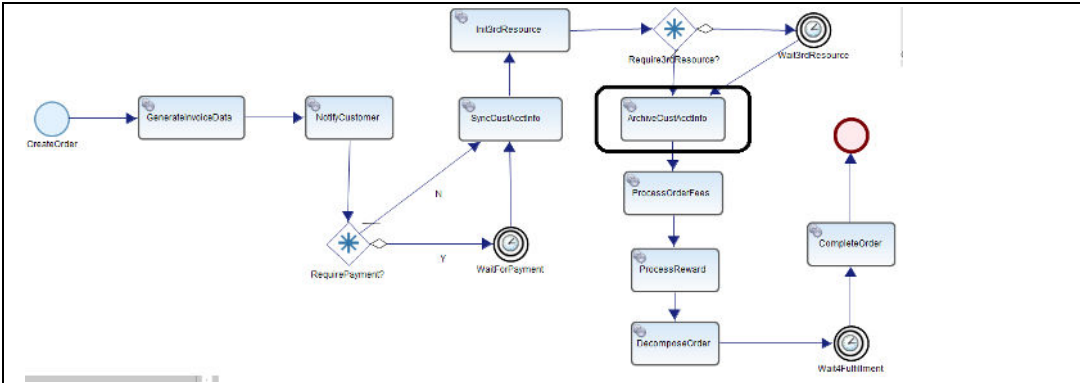
The purpose of this process is to archive and clean up customer data when it is no longer needed as part of the customer inventory. The information is archived according to the CSP policies and the local regulations. In most cases customer information is not deleted unless this is specifically required by the customer.

Comment for the compliance:

AM

Please refer to the previous response to Brief Description for the screenshots and process diagrams.

The archiving customer data is one node in the order process flow. This node will change the customer data status and store the data in the pre-set destination module (or device). The access of such archived data will be controlled or limited by the mandate module so the customer data will not be active or used in the other business processes.



Explanatory

Not used for this process element.

Mandatory

Not used for this process element.

Optional

Not used for this process element.

Interactions

Not used for this process element.

1.5 Level 3: 1.3.6.5 Build a unified customer view

LEVEL 3 PROCESS MAPPING DETAILS

1.3.6.5 Build a unified customer view

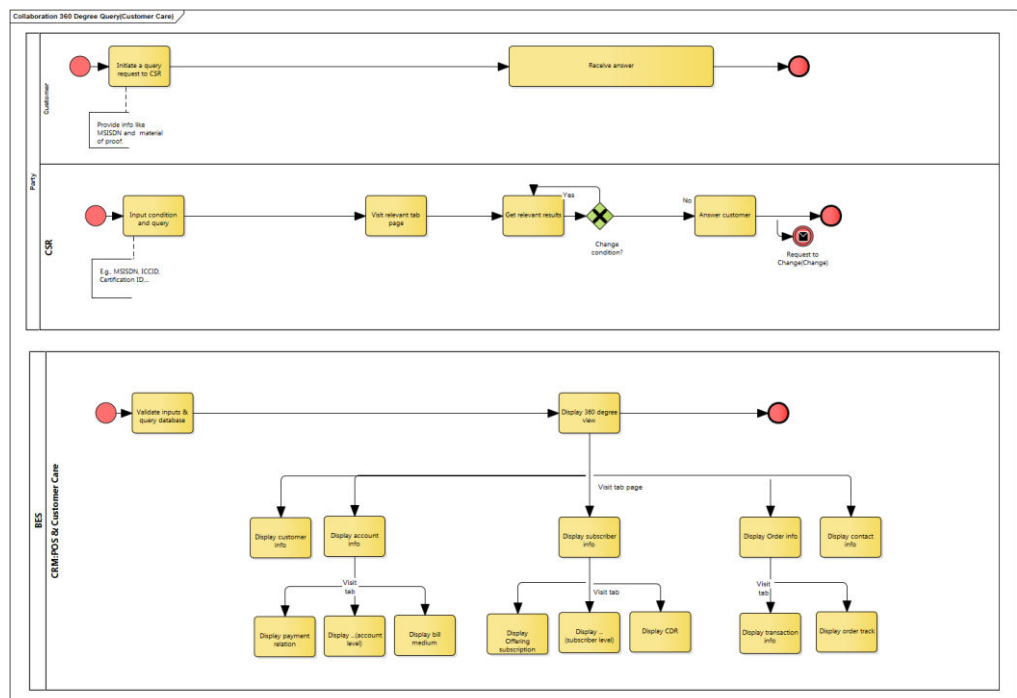
Brief Description

Create a single customer record from the information stored in multiple systems and present a single, most updated record of the customer information.

Comment for the compliance:

AM (Please refer to the document BP.CC.QUE.01 "360 Degree Query (Customer Care)")

The relevant process diagram in Huawei BP can be found here:



The diagram can also be opened here:



360 Degree
Query (Customer Care)

In this process, the activities of the diagram are used to realize the “Build a unified customer view” in TMF Process Framework.

9	Display 360 degree view: CRM displays the 360 degree view.
10	Display customer info: CRM displays the basic customer info, such as name, certification id, birthday, contact number, address, and so on.
11	Display account info: CRM displays account info such as bill cycle date, name, bank account info, email, and so on.
12	Display payment relation: CRM displays payment relation info, namely, for whose usage it has to pay.

Here is the screen shot of unified customer view:

The screenshot displays a user profile page for ID 720124162530. The left sidebar contains navigation options: Overview, Customer, User, Account, Billing, Customer Order, and Contact Log. The main content area is divided into sections: 'BASIC INFO' (with a 'CUSTOMER GOODS' tab), 'QUICK ENTRY' (with a 'Modify Customer Info' link), and 'CERTIFICATE INFO'. The 'CERTIFICATE INFO' section includes fields for Certificate Type (Passport), Certificate Number (2016121410171255), Expiration Time, Address on Certificate, Issuing Authority, and Issuing State. Below this is another 'BASIC INFO' section with a 'MORE' dropdown, containing fields for Customer Code (31000010993), Default Account, First Name (720124), Middle Name, Last Name (162530), Gender (Male), Title (Mr), Nationality, Birthdate (2016121410171255), and Birthday Type (Lunar Calendar).

The screenshot displays a user profile page for ID 720124162530, specifically for the 'INDIVIDUAL USER' tab. The left sidebar is identical to the previous screenshot. The main content area includes a search bar for 'Service Number' with a 'Search' button. Below is a table of user services:

User Type	Service Number	Payment Type	Status	Primary Offering	Main Account Code
<input type="radio"/> Individual	18835197250	Postpaid	Idle	4G fly enjoy (postpaid)	31000010086
<input checked="" type="radio"/> Individual	18835197248	Postpaid	Active	4G fly enjoy (postpaid)	31000010086

Below the table, it shows 'Total: 2' with pagination controls. The 'QUICK ENTRY' section has links for 'Modify User Info', 'Suspend/Resume', 'Unregister', 'Re-register', 'Change Password', and 'Transfer Ownership'. The 'USER INFO' section includes tabs for OFFERING, USER GROUP INFO, SERVICE NO. HISTORY, STATUS HISTORY, CALL DETAIL RECORD, and USER RESOURCE. The 'USER INFO' section displays details for the selected user: Service Number (18835197248), SM Card Number (3203233251900006091), Status (Active), Main Account Code (31000010086), Network Type (GSM), Payment Type (Postpaid), User Type (Individual), Primary Offering (4G fly enjoy (postpaid)), and Brand.

Extended Description

The purpose of this process is to create a single customer record from the information stored in multiple systems and present a single, most updated record of the customer

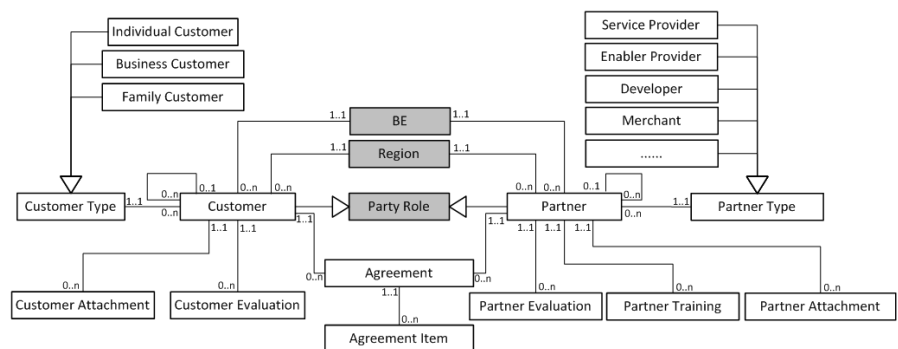
information. This process invokes business rules in order to reconcile the customer data in a single accurate record. This process may be activated immediately upon any update of customer data or may be invoked on request to retrieve the customer data. This process may replicate data from other systems or calculate the unified record on the fly without persisting any customer data.

Comment for the compliance

AM

Please refer to the previous response to Brief Description for the screenshots and process diagrams.

The uniqueness of the customer data is guaranteed (reconciled) by the cooperation of the CRM modules which all obey the principle of customer data model. The customer records can be received from different channels, but all the records with the same customer identifier shall be compared and linked. This is the business rule built inside the CRM.



Explanatory

Not used for this process element.

Mandatory

Not used for this process element.

Optional

Not used for this process element.

Interactions

Not used for this process element.