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Global PAYplus Version 4.6.2

Actions on Payments

Service-Oriented Architecture

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Version Control

Version	Date	Summary of Changes
1.0		Document Created
2.0	Aug 2015	Document restructured on new template.
3.0	Nov 2015	Rebranded on new template.

Table of Contents

1   Introduction

Note: This SOA Guide has not yet been certified for GPP V4.6; therefore, there may be inaccuracies in this document that may require amendments in the future. For more information, please contact your D+H Project Manager.

1.1   Overview

GPP is a robust payment engine whose workflow emulates the business flow of the bank or other financial institution. Configurable reference data profiles control the sequence of workflow steps and the actions performed in each step.

GPP processes and manages payments. As part of the message processing flow, the payment is always associated with a message status (msg sts). When a payment reaches the end of processing, the status is Complete. Where a payment is being held for manual intervention, it would be set to Repair or any other available/relevant status.

To be able to handle payments outside of GPP, the following standalone services are used:

- QueueListService: Provides a list of payments which meet a given selection criteria and are filtered by user restrictions, for example, it will include a list of all payments that meet the combined criteria of the input, such as payments with same message status that the user has permissions to view. For more information, see GPP SOA Guide Queue List Service.

- MessageLoadService: Loads a specific payment, i.e. the third party application gets all payment details

- MessageSubmitService: Takes a manual action on a specific payment, such as Submit or Cancel

This document describes the last two services and focuses on the ability to simulate the UI ability to load and take action on payments. For more information about the QueueListService, see GPP SOA Queue List Service document.

1.2   Target Audience

This book describes GPP web services that are based on a Service-Oriented Architecture (SOA) concept which enables 3rd party applications to interact with GPP.

2   Message Load Service Description

2.1   Overview

This service enables a user to retrieve full or partial data for a single payment transaction, based on the unique payment ID (MID).

The service also enables a user to retrieve the output in a different message format. For example, the original payment message type is pain.001, and the user can request to receive the output as message type pacs.008.

2.2   Service Function

This service supports the single MessageLoadService method only.

2.3   Input

The table below describes the required input parameters.

The L column lists the level for each parameter, which is the element level in the file. The + indicators in Tag Name column are accordance to the level number.

Parameter	Tag Name	L	Format	Comment
Header	Header	0		Request header
D+H Header	+FndtHeader	1		Service Header
Credentials	++Credentials	2	{1..1}	Credentials
User ID	+++UserID	3	String {1..1}	A valid GPP user (see List of System Users). User name is case sensitive. Use the exact user name. The user must have the following credentials: User exists, and active (status = AC) and not logged in (LOGGED_IN <> 2)
User Entitlement code	+++Role	3	String {1..1}	A valid GPP entitlement profile (see List of System Entitlements). Credentials check: The entitlement exists and assigned to the login user. Also where applicable the relevant access permission is granted.
Body	Body	0	{1..1}	Service Body
Request details	+PerformMessage LoadRequest	1	{1..1}	Request details
Audit user	++UserID	2	String {0..1}	Audit user only. This input is not being validated. Where applicable, this would be used as the audit user
Unique Inputs				
MID	++P_MID	2	String (length 16) {1..1}	Message ID

Parameter	Tag Name	L	Format	Comment
Output request				Payments are stored in D+H message structure in the database. Where not specified, the output would be D+H message (as-is). The following options (one of 2) are allowed. And one of them must be present.in the input.
Ad-hock structured	++fndtMsgSubset	2	{0..1} or	An ad-hoc defined structure that is defined by this element. Allows retrieving specific information about a payment.
Presets	++ParseOutputMode	2	{0..1}	A preset of allowed outputs. FULL, ORIG_PERSISTENT_DATA, PERSISTENT_DATA. (See section Presets for Further Details)
	origPmntConversionType			Defines the original XML message structure. Possible values: AS IS (the output would be exactly what is stored in GPP database), or xml type from Xml Type.
	pmntConversionType			Defines the outgoing XML message structure. If empty, the output will be the same as set in the database (i.e. AS-IS). If not empty, can get a value from Xml Type. Requesting a specific output format (the service converts the input format).

2.3.1   Output Request

The service output may provide one of the following structures:

2.3.1.1   Ad-hock Structure

This structure enables retrieving partial data available for a single payment, based on the payment unique ID (MID). The input shall include the specific logical fields requested by the user.

(See Example 1: Ad-hock Structure - Load Specific Payment Fields.)

2.3.1.2   Presets

This structure enables retrieving data available for a single payment, based on the payment unique ID (MID). The returned output fields will be determined by the input's output mode.

This table shows the allowed Output Modes for Presets:

Output Mode	Support Type	Output Provided
FULL	Fully supported	ALL MINF Relational columns All Monitor Fields All User Defined Fields Updated Xml pmnt Section Original Message

Output Mode	Support Type	Output Provided
		Msg Extension
ORIG_PERSISTENT_DATA	Fully supported	Original Message
		Msg Extension (if provided)
PERSISTENT_DATA	Fully supported	ALL MINF Relational columns
		All Monitor Fields
		All User Defined Fields
		Updated Xml pmnt Section

This table is an extract from system tables: XML_DOCUMENT_TYPES for the different DOCUMENT_ID. It shows the Applicable XML Types that can be used as a preset for each.

Xml Type	Support Type	Content
ACMT_023	As-is	
ACMT_024	As-is	
CAMT_052	As-is	
CAMT_054	As-is	
EXTN	As-is	
FNDT_MSG	As-is	
MOP_OUT	As-is	
N90	As-is	
N91	As-is	
N92	As-is	
N95	As-is	
N96	As-is	
N98	As-is	
N99	As-is	
Pacs_002	As-is	
Pacs_004	As-is	
Pacs_008	As-is	Also PACS_00801 is version 001 support is required.
Pacs_009	As-is	
Pain_001	As-is	
Pain_002	As-is	
SWIFT_103	As-is	
SWIFT_190	As-is	
SWIFT_191	As-is	
SWIFT_192	As-is	
SWIFT_195	As-is	
SWIFT_196	As-is	
SWIFT_199	As-is	
SWIFT_202	As-is	
SWIFT_202COV	As-is	

Xml Type	Support Type	Content
SWIFT_210	As-is	
SWIFT_290	As-is	
SWIFT_291	As-is	
SWIFT_292	As-is	
SWIFT_295	As-is	
SWIFT_296	As-is	
SWIFT_299	As-is	
SWIFT_400	As-is	
SWIFT_401	As-is	
SWIFT_402	As-is	
SWIFT_900	As-is	
SWIFT_910	As-is	

2.3.2 Processing

1. A query is constructed and a single payment is fetched.

2. The payment may be converted as requested in the output request.

3. When no message is found, the relevant error is returned.

Note: This service can be used for both payments and templates.

2.4 Output

The output depends on the input parameters. That is, either a response that is taking an extract of the message (see Example 1: Ad-hock Structure - Load Specific Payment Fields) or a full message with the ability to convert the original/outgoing XML to any message type.

2.5 Errors

This table shows the relevant Error Messages:

Code	Description
77782	Message was not found for MID [MID not found in MINF]

See also Errors.

2.6 Examples

2.6.1 Example 1: Ad-hock Structure - Load Specific Payment Fields

Invoke the service with an existing MID (10801N3428AO0448) request for specific attributes (logical fields) from MINF (Message information table in the DB).

2.6.1.1 Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"
xmlns:q0="http://fundtech.com/SCL/MessageLoadService"
```

```
xmlns:q1="http://fundtech.com/SCL/CommonTypes" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <soapenv:Header>
  <q1:credentials>
     <q1:UserID>SERVICES</q1:UserID>
     <q1:Role>ADMIN</q1:Role>
  </q1:credentials>
  </soapenv:Header>
    <soapenv:Body>
    <q0:PerformMessageLoadRequest>
    <q1:credentials>
       <q1:UserID>audit3</q1:UserID>
    </q1:credentials>

  <q1:P_MID>10801N3428AO0448</q1:P_MID>
  <q0:fndtMsgSubset>
    <q1:document id="X_FNDT_MSG_EXT">
        <q1:field id="X_EXTN_PRS_PERIST_INF">
                        <q1:field id="P_MSG_STS"/>
                <q1:field id="P_BASE_AMT"/>
                <q1:field id="P_BASE_CCY"/>
                <q1:field id="P_DEPARTMENT"/>
                <q1:field id="P_MSG_CLASS"/>
                <q1:field id="P_MSG_TYPE"/>
                <q1:field id="P_OFFICE"/>
                <q1:field id="P_PROC_DT"/>
                <q1:field id="P_TIME_STAMP"/>
        </q1:field>
        <q1:field id="X_EXTN_CREDIT_SIDE">
                        <q1:field id="P_CDT_ACCT_CCY"/>
                        <q1:field id="P_CDT_ACCT_NB"/>
                        <q1:field id="P_CDT_AMT"/>
                        <q1:field id="P_CDT_CUST_CD"/>
                        <q1:field id="P_CDT_MOP"/>
        </q1:field>
        <q1:field id="X_EXTN_DEBIT_SIDE">
                        <q1:field id="P_DBT_ACCT_NB"/>
                        <q1:field id="P_DBT_AMT"/>
                        <q1:field id="P_DBT_CUST_CD"/>
                        <q1:field id="P_DBT_MOP"/>
                        <q1:field id="P_DBT_RATE_USAGE_NM"/>
        </q1:field>
    </q1:document>
  </q0:fndtMsgSubset>
</q0:PerformMessageLoadRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

2.6.1.2   Response

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
    <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
      <FndtMsg xmlns="http://fundtech.com/SCL/CommonTypes">
        <Msg>
          <Pmnt/>
          <Extn>
            <ProcessingPersistentInfo>
                <P_MSG_STS>WAIT_CONFIRMATION</P_MSG_STS>
                <P_BASE_AMT>636.36</P_BASE_AMT>
                <P_BASE_CCY>USD</P_BASE_CCY>
                <P_DEPARTMENT>PSV</P_DEPARTMENT>
                <P_MSG_CLASS>PAY</P_MSG_CLASS>
                <P_MSG_TYPE>Pain_001</P_MSG_TYPE>
                <P_OFFICE>US1</P_OFFICE>
                <P_PROC_DT>2010-04-20</P_PROC_DT>
                <P_TIME_STAMP>2010-08-02 00:03:16.956</P_TIME_STAMP>
                <CreditSide>
```

```
                        <P_CDT_ACCT_CCY>AUD</P_CDT_ACCT_CCY>
                        <P_CDT_ACCT_NB>50006789</P_CDT_ACCT_NB>
                        <P_CDT_AMT>700</P_CDT_AMT>
                        <P_CDT_CUST_CD>USD1SACITIUS33XXX</P_CDT_CUST_CD>
                        <P_CDT_MOP>CRSCCY</P_CDT_MOP>
                    </CreditSide>
                    <DebitSide>
                        <P_DBT_ACCT_NB>8552502</P_DBT_ACCT_NB>
                        <P_DBT_AMT>700</P_DBT_AMT>
                        <P_DBT_CUST_CD>US1SACOMPUS33XXX</P_DBT_CUST_CD>
                        <P_DBT_MOP>BOOK</P_DBT_MOP>
                        <P_DBT_RATE_USAGE_NM>US1^STANDARD</P_DBT_RATE_USAGE_NM>
                    </DebitSide>
                </ProcessingPersistentInfo>
                <QaInfo>
                    <D_ELAPSED_TIME_MS>[MessageLoad]:5.684</D_ELAPSED_TIME_MS>
                    <QATest2/>
                </QaInfo>
            </Extn>
        </Msg>
        <ResponseDetails>
            <returnCode>0</returnCode>
            <description/>
        </ResponseDetails>
    </FndtMsg>
  </soap:Body>
</soap:Envelope>
```

2.6.2   Example 2: Presets with Output Mode FULL + Convert to SWIFT 103

Invoke the service with an existing MID (1042984940CK0208) request for FULL (one of the use presets) and convert the original payment format (Message type pain.001) into message type SWIFT 103 xml format.

2.6.2.1   Request

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:mes="http://fundtech.com/SCL/MessageLoadService"
xmlns:com="http://fundtech.com/SCL/CommonTypes">
   <soap:Header>
<com:FndtHeader>
 <com:credentials>
     <com:UserID>MASTERUSER</com:UserID>
     <com:Role>ADMIN</com:Role>
   </com:credentials>
 </com:FndtHeader>
   </soap:Header>
   <soap:Body>
   <mes:PerformMessageLoadRequest>
   <com:P_MID>1042984940CK0208</com:P_MID>
   <com:credentials>
    <com:UserID>audit3</com:UserID>
   </com:credentials>
   <mes:outputMode
origPmntConversionType="Pain_001"pmntConversionType="SWIFT_103">FULL</mes:outputMode>
  </mes:PerformMessageLoadRequest>
   </soap:Body>
</soap:Envelope>
```

2.6.2.2   Response

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
   <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
      <ns1:FndtMsg xmlns="http://fundtech.com/SCL/CommonTypes">
```

```xml
<Header>
    <P_MID>1042984940CK0208</P_MID>
</Header>
<Msg>
    <Pmnt>
        <swif:SWIFT MT="103" xmlns:swif="urn:fundtech/scl/SWIFT">
            <swif:Header>
                <swif:Create_Date_Time xmlns="urn:fundtech/scl/SWIFT">2008-06-25T06:19:06</swif:Create_Date_Time>
                <swif:Msg_ID xmlns="urn:fundtech/scl/SWIFT">CTv422-001</swif:Msg_ID>
            </swif:Header>
            <swif:Data xmlns="urn:fundtech/scl/SWIFT">
                <F32A>
                    <Date>2010-05-02</Date>
                    <Currency>USD</Currency>
                    <Amount>755.00</Amount>
                </F32A>
                <F20>
                    <Sender_s_Reference>CTv41-52</Sender_s_Reference>
                </F20>
                <F33B>
                    <Currency>USD</Currency>
                    <Amount>755.00</Amount>
                </F33B>
                <F21>
                    <Related_Reference>CTv422-8/2008-06-25</Related_Reference>
                </F21>
                <F71A>
                    <Code>CRED</Code>
                </F71A>
                <F52a>
                    <Identifier_Code>BOFAUS31XXX</Identifier_Code>
                </F52a>
                <F50a>
                    <Account>22222222</Account>
                    <F50F>
                        <Id>
                            <PartyName>THE US COMPANY</PartyName>
                        </Id>
                    </F50F>
                </F50a>
                <F57a>
                    <Identifier_Code>CITIUS33XXX</Identifier_Code>
                </F57a>
                <Cdrt_F58a_F59a>
                    <Account>3333421212</Account>
                </Cdrt_F58a_F59a>
            </swif:Data>
        </swif:SWIFT>
    </Pmnt>
    <Extn>
        <AuditTrail>
            <M_AUDIT_TRAIL>
                <F_AUDIT_ERROR_CODE>40171</F_AUDIT_ERROR_CODE>
                <F_AUDIT_TIME_STAMP>2010-04-29 18:59:54.367</F_AUDIT_TIME_STAMP>
                <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
                <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
                <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
            </M_AUDIT_TRAIL>
            <M_AUDIT_TRAIL>
                <F_AUDIT_ERROR_CODE>40171</F_AUDIT_ERROR_CODE>
                <F_AUDIT_TIME_STAMP>2010-04-29 18:59:54.366</F_AUDIT_TIME_STAMP>
                <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
                <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
                <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
            </M_AUDIT_TRAIL>
            <M_AUDIT_TRAIL>
                <F_AUDIT_ERROR_CODE>40171</F_AUDIT_ERROR_CODE>
```

```
                    <F_AUDIT_TIME_STAMP>2010-04-29 18:59:54.365</F_AUDIT_TIME_STAMP>
                    <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                    <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
                    <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
                    <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                </M_AUDIT_TRAIL>
                <M_AUDIT_TRAIL>
                    <F_AUDIT_ERROR_CODE>40171</F_AUDIT_ERROR_CODE>
                    <F_AUDIT_TIME_STAMP>2010-04-29 18:59:54.364</F_AUDIT_TIME_STAMP>
                    <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                    <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
                    <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
                    <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                </M_AUDIT_TRAIL>
                <M_AUDIT_TRAIL>
                    <F_AUDIT_ERROR_CODE>40171</F_AUDIT_ERROR_CODE>
                    <F_AUDIT_TIME_STAMP>2010-04-29 18:59:54.363</F_AUDIT_TIME_STAMP>
                    <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                    <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
                    <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
                    <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                </M_AUDIT_TRAIL>
                <M_AUDIT_TRAIL>
                    <F_AUDIT_ERROR_CODE>40171</F_AUDIT_ERROR_CODE>
                    <F_AUDIT_TIME_STAMP>2010-04-29 18:59:54.362</F_AUDIT_TIME_STAMP>
                    <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                    <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
                    <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
                    <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                </M_AUDIT_TRAIL>
                <M_AUDIT_TRAIL>
                    <F_AUDIT_ERROR_CODE>40035</F_AUDIT_ERROR_CODE>
                    <F_AUDIT_TIME_STAMP>2010-04-29 18:59:54.361</F_AUDIT_TIME_STAMP>
                    <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                    <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
                    <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
                    <F_AUDIT_ERROR_PARAMS>@@2010-03-
03@@STRING@@@@,@@PROCESSING@@STRING@@@@,@@SLA-PROCS@@STRING@@</F_AUDIT_ERROR_PARAMS>
                    <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                </M_AUDIT_TRAIL>
                <M_AUDIT_TRAIL>
                    <F_AUDIT_ERROR_CODE>1001</F_AUDIT_ERROR_CODE>
                    <F_AUDIT_TIME_STAMP>2010-04-29 18:59:54.360</F_AUDIT_TIME_STAMP>
                    <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                    <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
                    <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
<F_AUDIT_ERROR_PARAMS>@@PEND_APPROV@@STRING@@@@,@@SCHEDULE@@STRING@@</F_AUDIT_ERROR_PARAMS>
                    <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                </M_AUDIT_TRAIL>
                <M_AUDIT_TRAIL>
                    <F_AUDIT_ERROR_CODE>40090</F_AUDIT_ERROR_CODE>
                    <F_AUDIT_USER_NAME>ADMIN2</F_AUDIT_USER_NAME>
                    <F_AUDIT_TIME_STAMP>2010-04-29 08:49:40.472</F_AUDIT_TIME_STAMP>
                    <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                    <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
                    <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
                    <F_AUDIT_ERROR_PARAMS>@@Submit@@STRING@@</F_AUDIT_ERROR_PARAMS>
                    <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                </M_AUDIT_TRAIL>
                <M_AUDIT_TRAIL>
                    <F_AUDIT_ERROR_CODE>40171</F_AUDIT_ERROR_CODE>
                    <F_AUDIT_USER_NAME>ADMIN2</F_AUDIT_USER_NAME>
                    <F_AUDIT_TIME_STAMP>2010-04-29 08:49:40.471</F_AUDIT_TIME_STAMP>
                    <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                    <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
                    <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
                    <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                </M_AUDIT_TRAIL>
                <M_AUDIT_TRAIL>
```

```xml
            <F_AUDIT_ERROR_CODE>40171</F_AUDIT_ERROR_CODE>
            <F_AUDIT_USER_NAME>ADMIN2</F_AUDIT_USER_NAME>
            <F_AUDIT_TIME_STAMP>2010-04-29 08:49:40.470</F_AUDIT_TIME_STAMP>
            <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
            <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
            <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
            <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
        </M_AUDIT_TRAIL>
        <M_AUDIT_TRAIL>
            <F_AUDIT_ERROR_CODE>40171</F_AUDIT_ERROR_CODE>
            <F_AUDIT_USER_NAME>ADMIN2</F_AUDIT_USER_NAME>
            <F_AUDIT_TIME_STAMP>2010-04-29 08:49:40.469</F_AUDIT_TIME_STAMP>
            <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
            <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
            <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
            <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
        </M_AUDIT_TRAIL>
        <M_AUDIT_TRAIL>
            <F_AUDIT_ERROR_CODE>1001</F_AUDIT_ERROR_CODE>
            <F_AUDIT_USER_NAME>ADMIN2</F_AUDIT_USER_NAME>
            <F_AUDIT_TIME_STAMP>2010-04-29 08:49:40.468</F_AUDIT_TIME_STAMP>
            <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
            <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
            <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
<F_AUDIT_ERROR_PARAMS>@@(RECEIVED)@@STRING@@@@,@@PEND_APPROV@@STRING@@</F_AUDIT_ERROR_PARAMS>
            <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
        </M_AUDIT_TRAIL>
    </AuditTrail>
    <MsgNotes>
        <M_MSG_NOTES_GRID>
            <F_MSG_NOTES_USER_ID>USER1</F_MSG_NOTES_USER_ID>
            <F_MSG_NOTES_TEXT>LINE 1 TEXT</F_MSG_NOTES_TEXT>
            <F_MSG_NOTES_TIMESTAMP>2010-04-29 08:49:42.025</F_MSG_NOTES_TIMESTAMP>
            <F_MSG_NOTES_CREATE_DATE>2010-04-29 08:49:42
(EST)</F_MSG_NOTES_CREATE_DATE>
            <F_MSG_NOTES_EXTERNAL_NOTE_IND>true</F_MSG_NOTES_EXTERNAL_NOTE_IND>
<F_MSG_NOTES_ATTACHED_FILE_LINK>//NoteFile1.txt</F_MSG_NOTES_ATTACHED_FILE_LINK>
            <F_MSG_NOTES_REC_STATUS>AC</F_MSG_NOTES_REC_STATUS>
        </M_MSG_NOTES_GRID>
    </MsgNotes>
    <ProcessingPersistentInfo>
        <CreditSide>
            <P_CDT_ACCT_CCY>USD</P_CDT_ACCT_CCY>
            <P_CDT_ACCT_NB>33334567812</P_CDT_ACCT_NB>
            <P_CDT_ACCT_OFFICE>US1</P_CDT_ACCT_OFFICE>
            <P_CDT_AMT>755</P_CDT_AMT>
            <P_CDT_CROSS_CONV>false</P_CDT_CROSS_CONV>
            <P_CDT_CUST_CD>USD1SACITIUS33XXX</P_CDT_CUST_CD>
            <P_CDT_MOP>BOOK</P_CDT_MOP>
            <P_CDT_RATE_USAGE_NM>US1^STANDARD</P_CDT_RATE_USAGE_NM>
            <P_CDT_TX_CD>CRBOFA</P_CDT_TX_CD>
            <P_CDT_VD>2010-05-02</P_CDT_VD>
        </CreditSide>
        <DebitSide>
            <P_DBT_ACCT_CCY>USD</P_DBT_ACCT_CCY>
            <P_DBT_ACCT_NB>22222222</P_DBT_ACCT_NB>
            <P_DBT_ACCT_OFFICE>US1</P_DBT_ACCT_OFFICE>
            <P_DBT_AMT>755</P_DBT_AMT>
            <P_DBT_CROSS_CONV>false</P_DBT_CROSS_CONV>
            <P_DBT_CUST_CD>US1SACOMPUS33XXX</P_DBT_CUST_CD>
            <P_DBT_MOP>BOOK</P_DBT_MOP>
            <P_DBT_RATE_USAGE_NM>US1^STANDARD</P_DBT_RATE_USAGE_NM>
            <P_DBT_TX_CD>DRBOFA</P_DBT_TX_CD>
            <P_DBT_VD>2010-05-02</P_DBT_VD>
        </DebitSide>
        <P_BASE_AMT>755</P_BASE_AMT>
        <P_BASE_CCY>USD</P_BASE_CCY>
        <P_BASE_RATE_USAGE_NM>US1^BASE</P_BASE_RATE_USAGE_NM>
```

```xml
                    <P_BA_CD>US1</P_BA_CD>
                    <P_CHARGES_PAID>false</P_CHARGES_PAID>
                    <P_DEPARTMENT>PSV</P_DEPARTMENT>
                    <P_DISPLAY_MSG_TYPE>PAIN001</P_DISPLAY_MSG_TYPE>
                    <P_FC_INFO_IND>0</P_FC_INFO_IND>
                    <P_IS_HISTORY>0</P_IS_HISTORY>
                    <P_MSG_CLASS>PAY</P_MSG_CLASS>
                    <P_MSG_STS>COMPLETE</P_MSG_STS>
                    <P_MSG_TYPE>Pain_001</P_MSG_TYPE>
                    <P_NON_ACC>false</P_NON_ACC>
                    <P_OFFICE>US1</P_OFFICE>
                    <P_ORG_INITG_PTY_CUST_CD>US1SACOMPUS33XXX</P_ORG_INITG_PTY_CUST_CD>
                    <P_ORIG_MSG_TYPE>Pain_001</P_ORIG_MSG_TYPE>
                    <P_PAYMENT_TP>FEDWIRE</P_PAYMENT_TP>
                    <P_PRIORITY>900</P_PRIORITY>
                    <P_PROC_DT>2010-05-02</P_PROC_DT>
                    <P_PRODUCT_CD>HVP</P_PRODUCT_CD>
                    <P_RVS_SELL>false</P_RVS_SELL>
                    <P_TIME_STAMP>2010-05-02 14:54:01.528</P_TIME_STAMP>
                    <P_USER_MSG_TYPE>false</P_USER_MSG_TYPE>
                </ProcessingPersistentInfo>
                <CutoffInfo>
                    <P_CLEARING_CUTOFF_NM>SLA-CLEAR</P_CLEARING_CUTOFF_NM>
                    <P_CLEARING_CUTOFF_STS>B</P_CLEARING_CUTOFF_STS>
                    <P_CLEARING_CUTOFF_TM>2010-05-02T15:30:00</P_CLEARING_CUTOFF_TM>
                    <P_PROC_CUTOFF_NM>SLA-PROCS</P_PROC_CUTOFF_NM>
                    <P_PROC_CUTOFF_STS>B</P_PROC_CUTOFF_STS>
                    <P_PROC_CUTOFF_TM>2010-05-02T18:00:00</P_PROC_CUTOFF_TM>
                    <P_TREASURY_CUTOFF_NM>SLA-TRSURY</P_TREASURY_CUTOFF_NM>
                    <P_TREASURY_CUTOFF_STS>B</P_TREASURY_CUTOFF_STS>
                    <P_TREASURY_CUTOFF_TM>2010-05-02T18:00:00</P_TREASURY_CUTOFF_TM>
                </CutoffInfo>
                <UserDefinedFields xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:q1="http://fundtech.com/SCL/CommonTypes"
xmlns:q0="http://fundtech.com/SCL/MessageSubmitService">
                    <q1:System>
                        <q1:PMT_CTGORY>1234</q1:PMT_CTGORY>
                    </q1:System>
                </UserDefinedFields>
                <ProcessingTransientInfo>
                    <D_DIRECT_RECEIVER_INDEX>X</D_DIRECT_RECEIVER_INDEX>
                </ProcessingTransientInfo>
                <Monitors>
                    <UserMonitors>
                        <MU_COMPLIANCE_FORCE_STS>X</MU_COMPLIANCE_FORCE_STS>
                        <MU_FORCE_STANDARD_VD>X</MU_FORCE_STANDARD_VD>
                        <MU_HANDLE_71G_GAP>X</MU_HANDLE_71G_GAP>
                        <MU_MISSED_CUTOFF>X</MU_MISSED_CUTOFF>
                        <MU_NSF_FORCE_STS>X</MU_NSF_FORCE_STS>
                        <MU_PI_FORCE_STS>X</MU_PI_FORCE_STS>
                        <MU_REQ_FOR_CHARGES_FORCE_STS>X</MU_REQ_FOR_CHARGES_FORCE_STS>
                        <MU_SPECIAL_INST_STS>X</MU_SPECIAL_INST_STS>
                        <MU_STOP_FLAGS_OVERRIDE_STS>X</MU_STOP_FLAGS_OVERRIDE_STS>
                    </UserMonitors>
                    <ServiceMonitors>
                        <MF_CANCEL_MATCH_STS>X</MF_CANCEL_MATCH_STS>
                        <MF_CANCEL_REQUEST_VALID_STS>X</MF_CANCEL_REQUEST_VALID_STS>
                        <MF_CDT_STOP_FLAGS_STS>N</MF_CDT_STOP_FLAGS_STS>
                        <MF_COMPLIANCE_VALIDATION_STS>B</MF_COMPLIANCE_VALIDATION_STS>
                        <MF_DBT_STOP_FLAGS_STS>N</MF_DBT_STOP_FLAGS_STS>
                        <MF_DIRECT_COVER_GENERATED>X</MF_DIRECT_COVER_GENERATED>
                        <MF_FEE_PROC_STS>P</MF_FEE_PROC_STS>
                        <MF_GENERATED_ANSWER_MESSAGE>X</MF_GENERATED_ANSWER_MESSAGE>
                        <MF_GENERATED_CANCEL_REQUEST>X</MF_GENERATED_CANCEL_REQUEST>
                        <MF_GENERATE_REQ_CHARGES>X</MF_GENERATE_REQ_CHARGES>
                        <MF_INITIAL_CREATE>X</MF_INITIAL_CREATE>
                        <MF_MOP_SELECTION_STS>S</MF_MOP_SELECTION_STS>
                        <MF_N_MESSAGES_MATCH_STS>X</MF_N_MESSAGES_MATCH_STS>
                        <MF_OUT_REQ_FOR_CHRG_MATCH_STS>X</MF_OUT_REQ_FOR_CHRG_MATCH_STS>
                        <MF_PISN_MATCH_STS>X</MF_PISN_MATCH_STS>
```

```
                        <MF_PISN_PROCESS_STS>X</MF_PISN_PROCESS_STS>
                        <MF_POSTING_STS>P</MF_POSTING_STS>
                        <MF_REQ_FOR_CHARGES_MATCH_STS>X</MF_REQ_FOR_CHARGES_MATCH_STS>
                        <MF_REQ_FOR_CHARGES_VALID_STS>X</MF_REQ_FOR_CHARGES_VALID_STS>
                        <MF_SPECIAL_INST_STS>X</MF_SPECIAL_INST_STS>
                        <MF_TIME_HOLD>H</MF_TIME_HOLD>
                    </ServiceMonitors>
                </Monitors>
                <ReferenceData>
                    <M_DBT_CUST_PROFILE>
                        <F_DBT_CUST_BASE_NO>102030</F_DBT_CUST_BASE_NO>
                        <F_DBT_CUST_COUNTRYCODE>US</F_DBT_CUST_COUNTRYCODE>
                        <F_DBT_CUST_CUST_CODE>US1SACOMPUS33XXX</F_DBT_CUST_CUST_CODE>
                        <F_DBT_CUST_CUST_NAME>THE US COMPANY</F_DBT_CUST_CUST_NAME>
                        <F_DBT_CUST_CUST_TYPE>CU</F_DBT_CUST_CUST_TYPE>
                        <F_DBT_CUST_DEPARTMENT>PSV</F_DBT_CUST_DEPARTMENT>
                    </M_DBT_CUST_PROFILE>
                    <M_CDT_CUST_PROFILE>
                        <F_CDT_CUST_ABA>7878712</F_CDT_CUST_ABA>
                        <F_CDT_CUST_ADDRESS1>111, WALL STREET</F_CDT_CUST_ADDRESS1>
                        <F_CDT_CUST_ADDRESS2>TEST2 ADDRESSS</F_CDT_CUST_ADDRESS2>
                        <F_CDT_CUST_ALIAS>8585</F_CDT_CUST_ALIAS>
                        <F_CDT_CUST_CITY>NEW YORK</F_CDT_CUST_CITY>
                        <F_CDT_CUST_COUNTRYCODE>IE</F_CDT_CUST_COUNTRYCODE>
                        <F_CDT_CUST_CUST_NAME>CITIBANK N.A.</F_CDT_CUST_CUST_NAME>
                        <F_CDT_CUST_SWIFT_ID>CITIUS33XXX</F_CDT_CUST_SWIFT_ID>
                        <F_CDT_CUST_ZIP>10043</F_CDT_CUST_ZIP>
                    </M_CDT_CUST_PROFILE>
                    <M_STTLM_CCY_PROFILE>
                        <F_INSTR_CCY_DRAFT>false</F_INSTR_CCY_DRAFT>
                        <F_INSTR_CCY_EURO>IN</F_INSTR_CCY_EURO>
                    </M_STTLM_CCY_PROFILE>
                    <M_DBT_MOP_PROFILE>
                        <F_MOP_ALLOW_NAC_MSG>false</F_MOP_ALLOW_NAC_MSG>
                        <F_MOP_CHK_DRAFT_CURRENCY>false</F_MOP_CHK_DRAFT_CURRENCY>
                        <F_MOP_CURRENCY></F_MOP_CURRENCY>
                        <F_MOP_MOPDOWN>false</F_MOP_MOPDOWN>
                        <F_MOP_NCC_TYPE></F_MOP_NCC_TYPE>
                        <F_MOP_NM>BOOK</F_MOP_NM>
                        <F_MOP_SENDOUTMSG>false</F_MOP_SENDOUTMSG>
                        <F_MOP_SEND_REC_IDCODE>SA</F_MOP_SEND_REC_IDCODE>
                        <F_MOP_SETTLEMENT_ACC>1</F_MOP_SETTLEMENT_ACC>
                        <F_MOP_SETT_ACC_EXISTS>false</F_MOP_SETT_ACC_EXISTS>
                        <F_MOP_SPLIT_OVER_MAX>false</F_MOP_SPLIT_OVER_MAX>
                    </M_DBT_MOP_PROFILE>
                    <M_CDT_MOP_PROFILE>
                        <F_CDT_MOP_ALLOW_NAC_MSG>false</F_CDT_MOP_ALLOW_NAC_MSG>
                        <F_CDT_MOP_CCY></F_CDT_MOP_CCY>
                        <F_CDT_MOP_CHK_DRAFT_CCY>false</F_CDT_MOP_CHK_DRAFT_CCY>
                        <F_CDT_MOP_DOWN>false</F_CDT_MOP_DOWN>
                        <F_CDT_MOP_NCC_TP></F_CDT_MOP_NCC_TP>
                        <F_CDT_MOP_NM>BOOK</F_CDT_MOP_NM>
                        <F_CDT_MOP_SENDOUTMSG>false</F_CDT_MOP_SENDOUTMSG>
                        <F_CDT_MOP_SEND_REC_IDCODE>SA</F_CDT_MOP_SEND_REC_IDCODE>
                        <F_CDT_MOP_SETTLEMENT_ACC>1</F_CDT_MOP_SETTLEMENT_ACC>
                        <F_CDT_MOP_SETT_ACC_EXISTS>false</F_CDT_MOP_SETT_ACC_EXISTS>
                        <F_CDT_MOP_SPLIT_OVER_MAX>false</F_CDT_MOP_SPLIT_OVER_MAX>
                    </M_CDT_MOP_PROFILE>
                </ReferenceData>
                <XMLPersistentInfo>
                    <D_FIRST_IN_CDT_CHAIN_BIC>CITIUS33XXX</D_FIRST_IN_CDT_CHAIN_BIC>
                </XMLPersistentInfo>
                <QaInfo>
                    <D_ELAPSED_TIME_MS>[MessageLoad]:558.9982</D_ELAPSED_TIME_MS>
                    <QATest2/>
                </QaInfo>
            </Extn>
        </Msg>
        <OrigMsg>
            <Pmnt>
```

```xml
<Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03">
    <CstmrCdtTrfInitn>
        <GrpHdr>
            <MsgId>CTv422-001</MsgId>
            <CreDtTm>2008-06-25T06:19:06</CreDtTm>
            <InitgPty>
                <Nm>THE US COMPANY</Nm>
                <Id>
                    <OrgId>
                        <Othr>
                            <Id>US1SACOMPUS33XXX</Id>
                        </Othr>
                    </OrgId>
                </Id>
            </InitgPty>
        </GrpHdr>
        <PmtInf>
            <ReqdExctnDt>2009-05-04</ReqdExctnDt>
            <Dbtr>
                <Nm>THE US COMPANY</Nm>
                <Id>
                    <OrgId>
                        <Othr>
                            <Id>US1SACOMPUS33XXX</Id>
                        </Othr>
                    </OrgId>
                </Id>
            </Dbtr>
            <DbtrAcct>
                <Id>
                    <Othr>
                        <Id>22222222</Id>
                    </Othr>
                </Id>
                <Ccy>USD</Ccy>
            </DbtrAcct>
            <DbtrAgt>
                <FinInstnId>
                    <BIC>BOFAUS31XXX</BIC>
                </FinInstnId>
            </DbtrAgt>
            <ChrgBr>SHAR</ChrgBr>
            <CdtTrfTxInf>
                <PmtId>
                    <InstrId>CTv41-52</InstrId>
                    <EndToEndId>CTv422-8/2008-06-25</EndToEndId>
                </PmtId>
                <Amt>
                    <InstdAmt Ccy="USD">755</InstdAmt>
                </Amt>
                <ChrgBr>CRED</ChrgBr>
                <CdtrAgt>
                    <FinInstnId>
                        <BIC>CITIUS33XXX</BIC>
                    </FinInstnId>
                </CdtrAgt>
                <CdtrAcct>
                    <Id>
                        <Othr>
                            <Id>3333421212</Id>
                        </Othr>
                    </Id>
                </CdtrAcct>
            </CdtTrfTxInf>
        </PmtInf>
    </CstmrCdtTrfInitn>
</Document>
</Pmnt>
<Extn xmlns:q1="http://fundtech.com/SCL/CommonTypes">
    <q1:ProcessingPersistentInfo>
```

```
                    <q1:P_OFFICE>US1</q1:P_OFFICE>
                    <q1:P_DEPARTMENT>PSV</q1:P_DEPARTMENT>
                    <q1:DebitSide>
                        <q1:P_DBT_ACCT_NB>22222222</q1:P_DBT_ACCT_NB>
                        <q1:P_DBT_ACCT_CCY>USD</q1:P_DBT_ACCT_CCY>
                        <q1:P_DBT_ACCT_OFFICE>US1</q1:P_DBT_ACCT_OFFICE>
                    </q1:DebitSide>
                </q1:ProcessingPersistentInfo>
                <q1:OperationalSection>
                    <q1:D_BUTTON_ID>Submit</q1:D_BUTTON_ID>
                </q1:OperationalSection>
                <q1:UserDefinedFields>
                    <q1:System>
                        <q1:PMT_CTGORY>1234</q1:PMT_CTGORY>
                    </q1:System>
                    <q1:Office/>
                    <q1:Customer/>
                </q1:UserDefinedFields>
                <q1:MsgNotes>
                    <q1:M_MSG_NOTES_GRID>
                        <q1:F_MSG_NOTES_EXTERNAL_NOTE_IND>1</q1:F_MSG_NOTES_EXTERNAL_NOTE_IND>
<q1:F_MSG_NOTES_ATTACHED_FILE_LINK>//NoteFile1.txt</q1:F_MSG_NOTES_ATTACHED_FILE_LINK>
                        <q1:F_MSG_NOTES_TEXT>LINE 1 TEXT</q1:F_MSG_NOTES_TEXT>
                        <q1:F_MSG_NOTES_USER_ID>USER1</q1:F_MSG_NOTES_USER_ID>
                        <q1:F_MSG_NOTES_CREATE_DATE>2010-01-
26T18:42:42.914+02:00</q1:F_MSG_NOTES_CREATE_DATE>
                        <q1:F_MSG_NOTES_REC_STATUS>AC</q1:F_MSG_NOTES_REC_STATUS>
                    </q1:M_MSG_NOTES_GRID>
                </q1:MsgNotes>
            </Extn>
        </OrigMsg>
        <ResponseDetails>
            <returnCode>0</returnCode>
            <description/>
        </ResponseDetails>
    </ns1:FndtMsg>
  </soap:Body>
</soap:Envelope>
```

2.6.3   Example 3: Non-existing MID

Invoke service with a non-existing MID (10729B4917DE3425) - service returns a fail response.

2.6.3.1   Request

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:mes="http://fundtech.com/SCL/MessageLoadService"
xmlns:com="http://fundtech.com/SCL/CommonTypes">
   <soap:Header>
<com:FndtHeader>
 <com:credentials>
     <com:UserID>MASTERUSER</com:UserID>
     <com:Role>ADMIN</com:Role>
   </com:credentials>
 </com:FndtHeader>
   </soap:Header>
   <soap:Body>
   <mes:PerformMessageLoadRequest>
   <com:P_MID>10729B4917DE3425</com:P_MID>
   <com:credentials>
    <com:UserID>audit3</com:UserID>
   </com:credentials>
   <mes:outputMode origPmntConversionType="Pain_001"
pmntConversionType="Pain_001">FULL</mes:outputMode>
  </mes:PerformMessageLoadRequest>
   </soap:Body>
</soap:Envelope>
```

2.6.3.2   Response

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
    <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
       <ns1:FndtMsg xmlns="http://fundtech.com/SCL/CommonTypes">
          <Msg>
             <Extn>
                <QaInfo/>
             </Extn>
          </Msg>
          <ResponseDetails>
             <returnCode>28560</returnCode>
             <description>Message was not found for MID |1</description>
             <errorsList>
                <error>
                   <code>28560</code>
                   <description>Message was not found for MID 10729B4917DE3425</description>
                </error>
             </errorsList>
          </ResponseDetails>
       </ns1:FndtMsg>
    </soap:Body>
</soap:Envelope>
```

2.6.4   Example 4: Presets with Output Mode ORIG_PERSISTENT_DATA

Invoke the service with an existing MID (1042984940CK0208) request for
ORIG_PERSISTENT_DATA (one of the use presets). No format conversion is required.

2.6.4.1   Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"
xmlns:q0="http://fundtech.com/SCL/MessageLoadService"
xmlns:q1="http://fundtech.com/SCL/CommonTypes" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Header>
  <q1:credentials>
       <q1:UserID>YUVBOFA</q1:UserID>
       <q1:Role>ADMIN</q1:Role>
    </q1:credentials>
  </soapenv:Header>
  <soapenv:Body>
    <q0:PerformMessageLoadRequest>
      <q1:credentials>
       <q1:UserID>audit3</q1:UserID>
      </q1:credentials>

             <q1:P_MID>1042984940CK0208</q1:P_MID>
             <q0:outputMode origPmntConversionType="Pain_001"
pmntConversionType="">ORIG_PERSISTENT_DATA</q0:outputMode>
       </q0:PerformMessageLoadRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

2.6.4.2   Response

```
  <soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
    <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
       <FndtMsg xmlns="http://fundtech.com/SCL/CommonTypes">
          <Header>
             <P_MID>1042984940CK0208</P_MID>
          </Header>
```

```
<Msg>
    <Pmnt/>
    <Extn>
        <ProcessingPersistentInfo>
            <P_TIME_STAMP>2010-05-02 14:54:01.528</P_TIME_STAMP>
        </ProcessingPersistentInfo>
        <QaInfo>
            <D_ELAPSED_TIME_MS>[MessageLoad]:13.054</D_ELAPSED_TIME_MS>
            <QATest2/>
        </QaInfo>
    </Extn>
</Msg>
<OrigMsg>
    <Pmnt>
        <Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03">
            <CstmrCdtTrfInitn>
                <GrpHdr>
                    <MsgId>CTv422-001</MsgId>
                    <CreDtTm>2008-06-25T06:19:06</CreDtTm>
                    <InitgPty>
                        <Nm>THE US COMPANY</Nm>
                        <Id>
                            <OrgId>
                                <Othr>
                                    <Id>US1SACOMPUS33XXX</Id>
                                </Othr>
                            </OrgId>
                        </Id>
                    </InitgPty>
                </GrpHdr>
                <PmtInf>
                    <PmtMtd>TRF</PmtMtd>
                    <ReqdExctnDt>2009-05-04</ReqdExctnDt>
                    <Dbtr>
                        <Nm>THE US COMPANY</Nm>
                        <Id>
                            <OrgId>
                                <Othr>
                                    <Id>US1SACOMPUS33XXX</Id>
                                </Othr>
                            </OrgId>
                        </Id>
                    </Dbtr>
                    <DbtrAcct>
                        <Id>
                            <Othr>
                                <Id>22222222</Id>
                            </Othr>
                        </Id>
                        <Ccy>USD</Ccy>
                    </DbtrAcct>
                    <DbtrAgt>
                        <FinInstnId>
                            <BIC>BOFAUS31XXX</BIC>
                        </FinInstnId>
                    </DbtrAgt>
                    <ChrgBr>SHAR</ChrgBr>
                    <CdtTrfTxInf>
                        <PmtId>
                            <InstrId>CTv41-52</InstrId>
                            <EndToEndId>CTv422-8/2008-06-25</EndToEndId>
                        </PmtId>
                        <Amt>
                            <InstdAmt Ccy="USD">755</InstdAmt>
                        </Amt>
                        <ChrgBr>CRED</ChrgBr>
                        <CdtrAgt>
                            <FinInstnId>
                                <BIC>CITIUS33XXX</BIC>
                            </FinInstnId>
```

```
                              </CdtrAgt>
                              <CdtrAcct>
                                  <Id>
                                      <Othr>
                                          <Id>3333421212</Id>
                                      </Othr>
                                  </Id>
                              </CdtrAcct>
                          </CdtTrfTxInf>
                      </PmtInf>
                  </CstmrCdtTrfInitn>
              </Document>
          </Pmnt>
          <Extn xmlns:q1="http://fundtech.com/SCL/CommonTypes">
              <q1:ProcessingPersistentInfo>
                  <q1:P_OFFICE>US1</q1:P_OFFICE>
                  <q1:P_DEPARTMENT>PSV</q1:P_DEPARTMENT>
                  <q1:DebitSide>
                      <q1:P_DBT_ACCT_NB>22222222</q1:P_DBT_ACCT_NB>
                      <q1:P_DBT_ACCT_CCY>USD</q1:P_DBT_ACCT_CCY>
                      <q1:P_DBT_ACCT_OFFICE>US1</q1:P_DBT_ACCT_OFFICE>
                  </q1:DebitSide>
              </q1:ProcessingPersistentInfo>
              <q1:OperationalSection>
                  <q1:D_BUTTON_ID>Submit</q1:D_BUTTON_ID>
              </q1:OperationalSection>
              <q1:UserDefinedFields>
                  <q1:System>
                      <q1:PMT_CTGORY>1234</q1:PMT_CTGORY>
                  </q1:System>
                  <q1:Office/>
                  <q1:Customer/>
              </q1:UserDefinedFields>
              <q1:MsgNotes>
                  <q1:M_MSG_NOTES_GRID>
                      <q1:F_MSG_NOTES_EXTERNAL_NOTE_IND>1</q1:F_MSG_NOTES_EXTERNAL_NOTE_IND>
<q1:F_MSG_NOTES_ATTACHED_FILE_LINK>//NoteFile1.txt</q1:F_MSG_NOTES_ATTACHED_FILE_LINK>
                      <q1:F_MSG_NOTES_TEXT>LINE 1 TEXT</q1:F_MSG_NOTES_TEXT>
                      <q1:F_MSG_NOTES_USER_ID>USER1</q1:F_MSG_NOTES_USER_ID>
                      <q1:F_MSG_NOTES_CREATE_DATE>2010-01-
26T18:42:42.914+02:00</q1:F_MSG_NOTES_CREATE_DATE>
                      <q1:F_MSG_NOTES_REC_STATUS>AC</q1:F_MSG_NOTES_REC_STATUS>
                  </q1:M_MSG_NOTES_GRID>
              </q1:MsgNotes>
          </Extn>
      </OrigMsg>
      <ResponseDetails>
          <returnCode>0</returnCode>
          <description/>
      </ResponseDetails>
    </FndtMsg>
  </soap:Body>
</soap:Envelope>
```

3   Message Submit Service Description

3.1   Overview

This service creates a new message in GPP or amends an existing one. The service includes some action button validations (i.e., the action button is allowed for the message status) and some payment attributes validations (for example, mandatory attributes are set correctly), as well as user authorization to perform the action.

The service can accept a batch (i.e. multiple payments) or a single payment action.

3.2   Service Functions

This service only supports a single method: MessageSubmitService.

This table lists the possible action buttons available for use in the service:

Button ID	Description
Submit	Performs validations and processes the payment when a new message is manually created.
Reject	Prompts a rejection (PACS 002) for a payment
CancelTemplate	Cancels/deletes a templates
Approve	Releases the payment/template into the processing flow from the Pending Approval status queue
CreatePaymentFromTemplate	Receives the template ID Receives the template ID and changed fields, and generates individual/multiple payments (in this case, the payment information is derived from the template and from the quick fill fields).
	Step 1 – Get the list of templates that belong to the selected template set (by user). For this step use the GetQueueListService with the operator In Template Set.
	Step 2 – Generate individual/multiple payments by sending the template ID and the fields that the user entered (such as value date and amount).
Send to Repair	Sends the payment to Repair status
Save	Saves payment without performing validation (set payment status to Timed Hold)
AcceptDupex	Confirms the payment is not a duplicate for payments that are waiting in possible duplicate queue
Cancel Request	Initiates the cancellation process. That is, changing message status to Pending cancellation request from which a user can either RefuseCancel or Cancel the payment.
RefuseCancel	Refuse to cancel a payment (for a cancellation request). Payment returns to its previous status
Cancel	Sends payment to Cancel status queue
Validate	Returns all errors without saving the payment
FinalApprove	Perform final approval step for pending approval messages

Note: An additional capability is to store user notes for every action that will be associated with the message. These notes are defined as internal or external notes. Each note may contain a link to a reference file. Some notes can be accessed and edited.

3.3   Input

- A subset of D+H standard message

- These Input Parameters must be part of the input request:

Mandatory extension fields for MessageSubmitService input.

Parameter	Tag Name	L	Format	Comment
Extension	Extn	0	{1..1}	D+H Extension
Persistent Information	+ProcessingPersistentInfo	1	{1..1}	
Office	++P_OFFICE	2	String {0..1}	A 3 letter code from BANKS table in the DB
Department	++P_DEPARTMENT	2	String {0..1}	The relevant Office Department code
Operational instructions	+OperationalSection	1	{1..1}	
Action name	++D_BUTTON_ID	2	String {1..1}	The action name is a valid button ID taken from MESSAGEBUTTONS table (See Action Buttons)

3.3.1   Service Input Table Legend

The table explains the symbols used in the Service Input tables.

Symbol	Description
L	Element level in the file
++++	Shows the element indentation

3.4   Processing

Input validations that include:

1. Action button exists (MESSAGEBUTTONS.BUTTONID) AND.

2. Message button is allowed for the message status (P_MSG_STS).

    a. Assess Message fields sets selection system rule to identify the relevant button screen set (see list of Screen SetScreen Set).

These are the Screen Sets for the Different Message Statuses:

Condition	Screen set
[P_MSG_STS] = APPROVE_CANCEL	WSI_STTN_APPR_CNCL
[P_MSG_STS] = COMPLETE AND [P_IS_HISTORY] = 2	WSI_STTN_CMPLT_TMP
[P_MSG_STS] = DUPEX	WSI_STTN_DUPX
[P_MSG_STS] = NAK	WSI_STTN_NAK
[P_MSG_STS] = PEND_APPROV	WSI_STTN_PND_APPR
[P_MSG_STS] = (RECEIVED)	WSI_STTN_RCVD

Condition	Screen set
[P_MSG_STS] = REPAIR	WSI_STTN_RPR
[P_IS_HISTORY] = 2 AND [P_MSG_STS] = REPAIR	WSI_STTN_RPR_TMPLT
[P_MSG_STS] = SCHEDULE	WSI_STTN_SCHED
[P_MSG_STS] = VERIFY	WSI_STTN_VRFY

With screen set defined, assess the available action buttons for the screen and make sure the provided button ID is allowed for this screen set:

Screen Set	Message Status	Button ID
WSI_STTN_CMPLT_TMP	Complete templates	Submit
WSI_STTN_CMPLT_TMP	Complete templates	CreatePaymentFromTemplate
WSI_STTN_APPR_CNCL	Approve cancel	Approve
WSI_STTN_APPR_CNCL	Approve cancel	RefuseCancel
WSI_STTN_APPR_CNCL	Approve cancel	Reject
WSI_STTN_PND_APPR	Pending approval	Approve
WSI_STTN_PND_APPR	Pending approval	Cancel
WSI_STTN_PND_APPR	Pending approval	CancelTemplate
WSI_STTN_PND_APPR	Pending approval	FinalApprove
WSI_STTN_PND_APPR	Pending approval	Reject
WSI_STTN_PND_APPR	Pending approval	Submit
WSI_STTN_RPR_TMPLT	Repair template	CancelTemplate
WSI_STTN_DUPX	Possible duplicate	AcceptDupex
WSI_STTN_CMPLT_TMP	Complete templates	CancelTemplate
WSI_STTN_CMPLT_TMP	Complete templates	Reject
WSI_STTN_CMPLT_TMP	Complete templates	Send to Repair
WSI_STTN_DUPX	Possible duplicate	Cancel
WSI_STTN_DUPX	Possible duplicate	Reject
WSI_STTN_DUPX	Possible duplicate	Submit
WSI_STTN_DUPX	Possible duplicate	Validate
WSI_STTN_RCVD	Received	Save
WSI_STTN_RCVD	Received	Submit
WSI_STTN_RCVD	Received	Validate
WSI_STTN_RPR	Repair	Cancel
WSI_STTN_RPR	Repair	Save
WSI_STTN_RPR	Repair	Validate
WSI_STTN_RPR	Repair	Submit
WSI_STTN_SCHED	Schedule	Cancel
WSI_STTN_NAK	NAK	Send to Repair
WSI_STTN_NAK	NAK	Cancel

3.5   Output

- Successful creation of a new message in GPP repository (MINF table)

- A D+H message format is returned, along with a message ID that was associated with the message

This table is an extract from D+H message showing the important additional derived information that is returned together with the response.

Parameter	Tag Name	Format	Comment
Message ID	P_MID	String {1..1}	Message unique ID in GPP
Message status	P_MSG_STS	String {1..1}	The queue where the payment is. This would be MSG_STATUS from STATUSES system table
Time stamp	P_TIME_STAMP	Date time {1..1}	Server time representing the last time the message was modified
Payment/Template indicator	P_IS_HISTORY	[0,2]{1..1}	Valid Values: 0 - Active Partition 1 - Historical Partition 2 - Templates Partition

3.6   Errors

Code	Description	Notes
40037	Party cannot be found. Invalid account number: [invalid account number].	
40039	Unable to identify 1st in credit chain	
40040	Unable to identify 1st in debit chain	
40041	Failed to derive account number	
40078	Sender ([Original Sender BIC]) has no debit authorization on account number ([Debit account number]) (BIC = [Debit party BIC])	Debit authorization check has been failed
40083	Party cannot be found. Invalid ABA: [Invalid ABA].	
40079	Initiating party [Name of the party] has no debit authorization on account number [Debit account number]	Debit authorization check has been failed
40102	Payment status does not allow cancellation	Error message which will be issued when cancellation request cannot be processed because the original payment status does not allow cancellation
40161	Payment future value date (|1) is greater than the MOP max extension (|2)	
60019	Dbtr is empty	
60020	Dbtr BIC is invalid	
60021	Dbtr Agent ID is invalid	
60022	Dbtr Agent BIC is invalid	
60023	Instg Rmbrsmnt Agent is empty	

Code	Description	Notes
60024	Instg Rmbrsmnt Agent BIC is invalid	
60025	Instd Rmbrsmnt Agent is empty	
60026	Instd Rmbrsmnt Agent BIC is invalid	
60027	Thrd Rmbrsmnt Agent is empty	
60028	Thrd Rmbrsmnt Agent BIC is invalid	
60029	Intrmy Agent1 should be empty	
60030	Intrmy Agent1 is empty	
60031	Intrmy Agent1 BIC is invalid	
60032	Cdtr Agent is empty	
60033	Cdtr Agent BIC is invalid	
60034	Cdtr is empty	
60084	The action ButtonID used in the submit action is not allowed for a message with status Current message status	
60035	Cdtr BIC is invalid	
40199	Cancel action is not permitted on a Template pending Future changes	
40200	No action is permitted on a Template pending Future changes	

See also Generic Errors.

3.7   Examples

3.7.1   Example 1: Manual Creation of a Payment

3.7.1.1   Request

Provide payment details and action button (D_BUTTON_ID) as submit.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
 xmlns:q0="http://fundtech.com/SCL/MessageSubmitService"
 xmlns:q1="http://fundtech.com/SCL/CommonTypes"
 xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
 <soapenv:Header>
  <q1:FndtHeader>
   <q1:credentials>
    <q1:UserID>SERVICES</q1:UserID>
    <q1:Role>ADMIN</q1:Role>
   </q1:credentials>
  </q1:FndtHeader>
 </soapenv:Header>
 <soapenv:Body>
  <q0:MessageSubmitRequest>
   <q0:MsgBatch>
    <q1:FndtHeader>
     <q1:credentials>
      <q1:UserID>audit3</q1:UserID>
     </q1:credentials>
    </q1:FndtHeader>
```

```
<q1:FndtPmntTxInf>
 <q1:FndtMsg>
  <q1:Msg>
   <q1:Pmnt>
    <Document
     xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03"
          xmlns:n1="http://www.w3.org/2001/XMLSchema-instance">
     <CstmrCdtTrfInitn>
      <GrpHdr>
       <MsgId>CTv422-002</MsgId>
       <CreDtTm>2008-06-25T06:19:06</CreDtTm>
       <BtchBookg>false</BtchBookg>
       <NbOfTxs>1</NbOfTxs>
       <CtrlSum>700</CtrlSum>
       <Grpg>GRPD</Grpg>
       <InitgPty>
        <Nm>THE US COMPANY</Nm>
        <Id>
         <OrgId>
          <Othr>
           <Id>US1SACOMPUS33XXX</Id>
          </Othr>
         </OrgId>
        </Id>
       </InitgPty>
      </GrpHdr>
      <PmtInf>
       <PmtMtd>TRF</PmtMtd>
       <ReqdExctnDt>2009-05-04</ReqdExctnDt>
       <Dbtr>
        <Nm>THE US COMPANY</Nm>
        <Id>
         <OrgId>
          <Othr>
           <Id>US1SACOMPUS33XXX</Id>
          </Othr>
         </OrgId>
        </Id>
       </Dbtr>
       <DbtrAcct>
        <Id>
         <Othr>
          <Id>8552502</Id>
         </Othr>
        </Id>
        <Ccy>EUR</Ccy>
       </DbtrAcct>
       <DbtrAgt>
        <FinInstnId>
         <BIC>BOFAUS31XXX</BIC>
        </FinInstnId>
       </DbtrAgt>
       <CdtTrfTxInf>
        <PmtId>
         <InstrId>AD_27</InstrId>
         <EndToEndId>Csa40E-27</EndToEndId>
        </PmtId>
        <Amt>
         <InstdAmt Ccy="USD">731</InstdAmt>
        </Amt>
        <ChrgBr>CRED</ChrgBr>
        <CdtrAgt>
         <FinInstnId>
          <BIC>CITIUS33XXX</BIC>
         </FinInstnId>
        </CdtrAgt>
        <CdtrAcct>
         <Id>
          <Othr>
           <Id>3333421212</Id>
```

```
                  </Othr>
                 </Id>
                </CdtrAcct>
                <CtgyPurp>
                 <Cd>GDDS</Cd>
                </CtgyPurp>
                <RmtInf>
                 <Strd>
                  <RfrdDocInf>
                   <Tp>
                    <CdOrPrtry>
                     <Cd>CINV</Cd>
                    </CdOrPrtry>
                   </Tp>
                   <RfrdDocNb>ABC-13679</RfrdDocNb>
                  </RfrdDocInf>
                  <RfrdDocRltdDt>2009-05-04</RfrdDocRltdDt>
                 </Strd>
                </RmtInf>
               </CdtTrfTxInf>
              </PmtInf>
             </CstmrCdtTrfInitn>
            </Document>
           </q1:Pmnt>
           <q1:Extn>
            <q1:ProcessingPersistentInfo>
             <q1:P_OFFICE>US1</q1:P_OFFICE>
             <q1:P_DEPARTMENT>PSV</q1:P_DEPARTMENT>
            </q1:ProcessingPersistentInfo>
            <q1:OperationalSection>
             <q1:D_BUTTON_ID>Submit</q1:D_BUTTON_ID>
            </q1:OperationalSection>
           </q1:Extn>
          </q1:Msg>
         </q1:FndtMsg>
        </q1:FndtPmntTxInf>
       </q0:MsgBatch>
      </q0:MessageSubmitRequest>
     </soapenv:Body>
    </soapenv:Envelope>
```

3.7.1.2   Response

Use Case 1: Payment was successfully created. The MID is returned along with the time stamp of creation and a payment/template indicator and the message status.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
    <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
        <FndtMsgBatch xmlns="http://fundtech.com/SCL/CommonTypes">
            <FndtPmntTxInf>
                <FndtMsg>
                    <Header>
                        <P_MID>10C02A4104J00231</P_MID>
                    </Header>
                    <Msg>
                        <Pmnt/>
                        <Extn>
                            <ProcessingPersistentInfo>
                                <P_IS_HISTORY>0</P_IS_HISTORY>
                                <P_MSG_STS>PEND_APPROV</P_MSG_STS>
                                <P_TIME_STAMP>2010-12-02 10:41:06.134</P_TIME_STAMP>
                            </ProcessingPersistentInfo>
                        </Extn>
                    </Msg>
                </FndtMsg>
            </FndtPmntTxInf>
        </FndtMsgBatch>
```

```
    </soap:Body>
</soap:Envelope>
```

Use Case 2: ==Message== already exists (payment is created but moving to ==possible duplicate== queue)

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
    <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
        <FndtMsgBatch xmlns="http://fundtech.com/SCL/CommonTypes">
            <FndtPmntTxInf>
                <FndtMsg>
                    <Header>
                        <P_MID>10C02A3752KR0425</P_MID>
                    </Header>
                    <Msg>
                        <Pmnt/>
                        <Extn>
                            <MsgErrors>
                                <M_MSGERR_LINE>
                                    <F_MSGERR_CODE>6042</F_MSGERR_CODE>
                                    <F_MSGERR_TIME_STAMP>2010-12-02 10:37:53.726</F_MSGERR_TIME_STAMP>
                                    <F_MSGERR_CREATE_DATE>2010-11-30T20:17:53</F_MSGERR_CREATE_DATE>
                                    <F_MSGERR_TIME_ZONE>EST</F_MSGERR_TIME_ZONE>
                                    <F_MSGERR_FAULT></F_MSGERR_FAULT>
                                    <F_MSGERR_PARAMS/>
                                    <F_MSGERR_DISPLAY>0</F_MSGERR_DISPLAY>
                                    <F_MSGERR_FIELD_LOGICAL_ID/>
                                </M_MSGERR_LINE>
                            </MsgErrors>
                            <ProcessingPersistentInfo>
                                <P_IS_HISTORY>0</P_IS_HISTORY>
                                <P_MSG_STS>DUPEX</P_MSG_STS>
                                <P_TEMPLATE_CD>05</P_TEMPLATE_CD>
                                <P_TIME_STAMP>2010-12-02 10:37:53.775</P_TIME_STAMP>
                            </ProcessingPersistentInfo>
                        </Extn>
                    </Msg>
                </FndtMsg>
            </FndtPmntTxInf>
        </FndtMsgBatch>
    </soap:Body>
</soap:Envelope>
```

3.7.2   Example 2: Final Approve of an Existing Payment

Provide payment reference (==P_MID==), payment time stamp (==P_TIME_STAMP==) and action button (==D_BUTTON_ID==) as FinalApprove.

3.7.2.1   Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"
xmlns:q0="http://fundtech.com/SCL/MessageSubmitService"
xmlns:q1="http://fundtech.com/SCL/CommonTypes" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Header>
  <q1:FndtHeader>
   <q1:credentials>
    <q1:UserID>SERVICES</q1:UserID>
    <q1:Role>ADMIN</q1:Role>
   </q1:credentials>
  </q1:FndtHeader>
</soapenv:Header>
<soapenv:Body>
```

```
   <q0:MessageSubmitRequest>
    <q0:MsgBatch>
     <q1:FndtHeader>
      <q1:credentials>
       <q1:UserID>audit3</q1:UserID>
      </q1:credentials>
     </q1:FndtHeader>
     <q1:FndtPmntTxInf>
      <q1:FndtMsg>
       <q1:Header>
        <q1:P_MID>11313E2230DI0630</q1:P_MID>
       </q1:Header>
       <q1:Msg>
        <q1:Pmnt/>
        <q1:Extn>
         <q1:ProcessingPersistentInfo>
          <q1:P_OFFICE>US1</q1:P_OFFICE>
          <q1:P_DEPARTMENT>PSV</q1:P_DEPARTMENT>
           <q1:P_TIME_STAMP>2011-03-13 14:22:31.887</q1:P_TIME_STAMP>
         </q1:ProcessingPersistentInfo>
         <q1:OperationalSection>
          <q1:D_BUTTON_ID>FinalApprove</q1:D_BUTTON_ID>
         </q1:OperationalSection>
        </q1:Extn>
       </q1:Msg>
      </q1:FndtMsg>
     </q1:FndtPmntTxInf>
    </q0:MsgBatch>
   </q0:MessageSubmitRequest>
 </soapenv:Body>
</soapenv:Envelope>
```

3.7.2.2   Response

Use case 1: The Final Approval step was performed for a payment in pending approval status. (Final approve button is available for this status)

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
    <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
        <FndtMsgBatch xmlns="http://fundtech.com/SCL/CommonTypes">
            <FndtPmntTxInf>
                <FndtMsg>
                    <Header>
                        <P_MID>11313E2230DI0630</P_MID>
                    </Header>
                    <Msg>
                        <Pmnt/>
                        <Extn>
                            <ProcessingPersistentInfo>
                                <P_IS_HISTORY>0</P_IS_HISTORY>
                                <P_MSG_STS>COMPLETE</P_MSG_STS>
                                <P_TIME_STAMP>2011-03-13 14:23:26.432</P_TIME_STAMP>
                            </ProcessingPersistentInfo>
                        </Extn>
                    </Msg>
                </FndtMsg>
            </FndtPmntTxInf>
        </FndtMsgBatch>
    </soap:Body>
</soap:Envelope>
```

Use case 2: The final approval step was performed for a payment in Repair status. (Final approve button is not available for this status), the user gets error code 60084 meaning: The action FinalApprove is not allowed for a message with status REPAIR.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
    <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
        <FndtMsgBatch xmlns="http://fundtech.com/SCL/CommonTypes">
            <FndtPmntTxInf>
                <FndtMsg>
                    <Header>
                        <D_SKIP_PERSIST_ON_ERROR>true</D_SKIP_PERSIST_ON_ERROR>
                        <P_MID>11313E1430EZ0219</P_MID>
                    </Header>
                    <Msg>
                        <Pmnt/>
                        <Extn>
                            <MsgErrors>
                                <M_MSGERR_LINE>
                                    <F_MSGERR_CODE>60084</F_MSGERR_CODE>
                                    <F_MSGERR_TIME_STAMP>2011-03-13 14:15:34.242</F_MSGERR_TIME_STAMP>
                                    <F_MSGERR_SEVERITY>0</F_MSGERR_SEVERITY>
                                    <F_MSGERR_CREATE_DATE>2011-03-13T03:45:34.242-
05:00</F_MSGERR_CREATE_DATE>
                                    <F_MSGERR_TIME_ZONE>EST</F_MSGERR_TIME_ZONE>
                                    <F_MSGERR_FAULT></F_MSGERR_FAULT>
                                    <F_MSGERR_PARAMS>@@ @@STRING@@@@,@@ @@STRING@@</F_MSGERR_PARAMS>
                                    <F_MSGERR_DISPLAY>0</F_MSGERR_DISPLAY>
                                    <F_MSGERR_FIELD_LOGICAL_ID/>
                                </M_MSGERR_LINE>
                            </MsgErrors>
                            <ProcessingPersistentInfo>
                                <P_IS_HISTORY>0</P_IS_HISTORY>
                                <P_MSG_STS>REPAIR</P_MSG_STS>
                                <P_TIME_STAMP>2011-03-13 14:14:31.342</P_TIME_STAMP>
                            </ProcessingPersistentInfo>
                        </Extn>
                    </Msg>
                </FndtMsg>
            </FndtPmntTxInf>
        </FndtMsgBatch>
    </soap:Body>
</soap:Envelope>
```

3.7.3   Example 3: Cancel a Payment

Cancel processing flow to an existing payment by providing the MID and the action button cancel.

3.7.3.1   Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
 xmlns:q0="http://fundtech.com/SCL/MessageSubmitService"
 xmlns:q1="http://fundtech.com/SCL/CommonTypes"
 xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
 <soapenv:Header>
  <q1:FndtHeader>
   <q1:credentials>
    <q1:UserID>SERVICES</q1:UserID>
    <q1:Role>ADMIN</q1:Role>
   </q1:credentials>
  </q1:FndtHeader>
 </soapenv:Header>
 <soapenv:Body>
  <ns20:MessageSubmitRequest
   xmlns:ns10="http://notesservice.pubsub.ws.services.cp.bofa.com"
   xmlns:ns11="http://ws.entitlements.services.cp.bofa.com/"
   xmlns:ns12="http://www.bankofamerica.com/cpo/payments/services/approval/v002"
```

```xml
  xmlns:ns13="http://fundtech.com/SCL/CommonTypes"
  xmlns:ns14="http://fundtech.com/SCL/MopSelectionService"
  xmlns:ns15="http://fundtech.com/SCL/MessageLoadService"
  xmlns:ns16="http://fundtech.com/SCL/ProfileListService"
  xmlns:ns17="http://fundtech.com/SCL/StaticDataCommonTypes"
  xmlns:ns18="http://fundtech.com/SCL/QueueListService"
  xmlns:ns19="http://Fundtech.com/prule-metadata-dto.xsd"
  xmlns:ns2="http://payments.cpo.gcib.bofa.com/xsd/paymentorchestrator/sla/V001"
  xmlns:ns20="http://fundtech.com/SCL/MessageSubmitService"
  xmlns:ns21="http://www.bankofamerica.com/xmlschema/resource/metadata/osa/infrastructure/v001"
  xmlns:ns22="http://payments.cpo.gcib.bofa.com/xsd/paymentextn/V001"
  xmlns:ns23="http://payments.cpo.gcib.bofa.com/xsd/paymentlisttype/V001"
  xmlns:ns24="http://payments.cpo.gcib.bofa.com/xsd/paymentservice/V001"
  xmlns:ns25="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03"
  xmlns:ns26="http://payments.cpo.gcib.bofa.com/xsd/paymentutilityservice/V001"
  xmlns:ns4="http://payments.cpo.gcib.bofa.com/xsd/cpsMessageTypes/V001"
  xmlns:ns5="http://payments.cpo.gcib.bofa.com/xsd/commontypes/V001"
  xmlns:ns6="http://payments.cpo.gcib.bofa.com/xsd/fxservice/V001"
  xmlns:ns7="http://pubsubservice.message.ws.services.cp.bofa.com"
  xmlns:ns8="http://pubsubservice.ws.services.cp.bofa.com/xsd/headertypes/V001"
xmlns:ns9="http://payments.baml.com/PaymentsNotificationV001">
  <ns20:MsgBatch>
   <ns13:FndtHeader>
    <ns13:credentials>
     <ns13:UserID>muli2</ns13:UserID>
    </ns13:credentials>
   </ns13:FndtHeader>
   <ns13:FndtPmntTxInf>
    <ns13:FndtMsg>
     <ns13:Header>
      <ns13:credentials>
       <ns13:UserID>Muli 2</ns13:UserID>
      </ns13:credentials>
      <ns13:P_MID>10B29H2451640188</ns13:P_MID>
     </ns13:Header>
     <ns13:Msg>
      <ns13:Pmnt>
       <ns25:Document>
        <ns25:CstmrCdtTrfInitn>
         <ns25:GrpHdr>
          <ns25:InitgPty>
           <ns25:Id>
            <ns25:OrgId>
             <ns25:Othr>
              <ns25:Id>US1SACOMPUS33XXX</ns25:Id>
             </ns25:Othr>
            </ns25:OrgId>
           </ns25:Id>
          </ns25:InitgPty>
         </ns25:GrpHdr>
         <ns25:PmtInf>
          <ns25:ReqdExctnDt>2011-09-26</ns25:ReqdExctnDt>
         </ns25:PmtInf>
        </ns25:CstmrCdtTrfInitn>
       </ns25:Document>
      </ns13:Pmnt>
      <ns13:Extn>
       <ns13:ProcessingPersistentInfo>
        <ns13:P_OFFICE>US1</ns13:P_OFFICE>
        <ns13:P_DEPARTMENT>PSV</ns13:P_DEPARTMENT>
        <ns13:P_TIME_STAMP>2010-11-29 17:24:51.905</ns13:P_TIME_STAMP>
        <ns13:P_IS_HISTORY>0</ns13:P_IS_HISTORY>
       </ns13:ProcessingPersistentInfo>
       <ns13:OperationalSection>
        <ns13:D_BUTTON_ID>Cancel</ns13:D_BUTTON_ID>
       </ns13:OperationalSection>
      </ns13:Extn>
     </ns13:Msg>
    </ns13:FndtMsg>
   </ns13:FndtPmntTxInf>
```

```
        </ns20:MsgBatch>
      </ns20:MessageSubmitRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

3.7.3.2   Response

Message ID is cancelled.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
    <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
      <FndtMsgBatch xmlns="http://fundtech.com/SCL/CommonTypes">
        <FndtPmntTxInf>
          <FndtMsg>
            <Header>
                <D_SKIP_PERSIST_ON_ERROR>true</D_SKIP_PERSIST_ON_ERROR>
                <P_MID>10B29H2451640188</P_MID>
            </Header>
            <Msg>
                <Pmnt/>
                <Extn>
                    <MsgErrors>
                        <M_MSGERR_LINE>
                            <F_MSGERR_CODE>40227</F_MSGERR_CODE>
                            <F_MSGERR_TIME_STAMP>2010-12-02 10:51:41.613</F_MSGERR_TIME_STAMP>
                            <F_MSGERR_SEVERITY>0</F_MSGERR_SEVERITY>
                            <F_MSGERR_CREATE_DATE>2010-11-30T20:31:41</F_MSGERR_CREATE_DATE>
                            <F_MSGERR_TIME_ZONE>EST</F_MSGERR_TIME_ZONE>
                            <F_MSGERR_FAULT></F_MSGERR_FAULT>
                            <F_MSGERR_PARAMS>@@ @@STRING@@</F_MSGERR_PARAMS>
                            <F_MSGERR_DISPLAY>0</F_MSGERR_DISPLAY>
                            <F_MSGERR_FIELD_LOGICAL_ID/>
                        </M_MSGERR_LINE>
                    </MsgErrors>
                    <ProcessingPersistentInfo>
                        <P_IS_HISTORY>0</P_IS_HISTORY>
                        <P_MSG_STS>CANCELED</P_MSG_STS>
                        <P_TIME_STAMP>2010-12-01 15:52:26.772</P_TIME_STAMP>
                    </ProcessingPersistentInfo>
                </Extn>
            </Msg>
          </FndtMsg>
        </FndtPmntTxInf>
      </FndtMsgBatch>
    </soap:Body>
</soap:Envelope>
```

3.7.4   Example 4: When an Action is not Allowed for the Queue

- Message is in PEND_APPROVE and user tries to perform retract

- First step – create the message (also demonstrates the quick fill button):

3.7.4.1   Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
 xmlns:q0="http://fundtech.com/SCL/MessageSubmitService"
 xmlns:q1="http://fundtech.com/SCL/CommonTypes"
 xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
 <soapenv:Header>
```

```
  <q1:FndtHeader>
   <q1:credentials>
    <q1:UserID>SERVICES</q1:UserID>
    <q1:Role>ADMIN</q1:Role>
   </q1:credentials>
  </q1:FndtHeader>
 </soapenv:Header>
 <soapenv:Body>
  <q0:MessageSubmitRequest>
   <q0:MsgBatch>
    <q1:FndtHeader>
     <q1:credentials>
      <q1:UserID>audit3</q1:UserID>
     </q1:credentials>
    </q1:FndtHeader>
    <q1:FndtPmntTxInf>
     <q1:FndtMsg>
      <q1:Msg>
       <q1:Pmnt>
        <Document
          xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03"
               xmlns:n1="http://www.w3.org/2001/XMLSchema-instance">
         <CstmrCdtTrfInitn>
          <PmtInf>
           <ReqdExctnDt>2009-05-04</ReqdExctnDt>
           <CdtTrfTxInf>
            <PmtId>
             <InstrId>CTv41as</InstrId>
             <EndToEndId>AA0018</EndToEndId>
            </PmtId>
            <Amt>
             <InstdAmt Ccy="USD">905.00</InstdAmt>
            </Amt>
           </CdtTrfTxInf>
          </PmtInf>
         </CstmrCdtTrfInitn>
        </Document>
       </q1:Pmnt>
       <q1:Extn>
        <q1:ProcessingPersistentInfo>
         <q1:P_OFFICE>US1</q1:P_OFFICE>
         <q1:P_DEPARTMENT>PSV</q1:P_DEPARTMENT>
         <q1:P_TEMPLATE_CD>TEMPLATE_UPDATEaf</q1:P_TEMPLATE_CD>
         <q1:P_TEMPLATE_MID>10A04K1340292853</q1:P_TEMPLATE_MID>
        </q1:ProcessingPersistentInfo>
        <q1:OperationalSection>
         <q1:D_BUTTON_ID>CreatePaymentFromTemplate</q1:D_BUTTON_ID>
        </q1:OperationalSection>
       </q1:Extn>
      </q1:Msg>
     </q1:FndtMsg>
    </q1:FndtPmntTxInf>
   </q0:MsgBatch>
  </q0:MessageSubmitRequest>
 </soapenv:Body>
</soapenv:Envelope>
```

3.7.4.2   Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
 <soap:Body
   xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
  <FndtMsgBatch
     xmlns="http://fundtech.com/SCL/CommonTypes">
   <FndtPmntTxInf>
```

```
    <FndtMsg xmlns="http://fundtech.com/SCL/CommonTypes">
     <Header>
      <P_MID>10C23F4124960431</P_MID>
     </Header>
     <Msg>
      <Pmnt/>
      <Extn>
       <ProcessingPersistentInfo>
        <P_IS_HISTORY>0</P_IS_HISTORY>
        <P_MSG_STS>PEND_APPROV</P_MSG_STS>
        <P_TEMPLATE_CD>TEMPLATE_UPDATEaf</P_TEMPLATE_CD>
        <P_TEMPLATE_NM>TEMPLA</P_TEMPLATE_NM>
        <P_TIME_STAMP>2010-12-23 15:41:25.738</P_TIME_STAMP>
       </ProcessingPersistentInfo>
      </Extn>
     </Msg>
    </FndtMsg>
   </FndtPmntTxInf>
  </FndtMsgBatch>
 </soap:Body>
</soap:Envelope>
```

Second step – button ID is Retract.

3.7.4.3   Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
 xmlns:q0="http://fundtech.com/SCL/MessageSubmitService"
 xmlns:q1="http://fundtech.com/SCL/CommonTypes"
 xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
 <soapenv:Header>
  <q1:FndtHeader>
   <q1:credentials>
    <q1:UserID>SERVICES</q1:UserID>
    <q1:Role>ADMIN</q1:Role>
   </q1:credentials>
  </q1:FndtHeader>
 </soapenv:Header>
 <soapenv:Body>
  <q0:MessageSubmitRequest>
   <q0:MsgBatch>
   <q1:FndtHeader>
    <q1:credentials>
     <q1:UserID>audit3</q1:UserID>
    </q1:credentials>
   </q1:FndtHeader>
   <q1:FndtPmntTxInf>
    <q1:FndtMsg>
     <q1:Header>
      <q1:P_MID>10C23F4124960431</q1:P_MID>
     </q1:Header>
     <q1:Msg>
      <q1:Pmnt/>
      <q1:Extn>
       <q1:ProcessingPersistentInfo>
        <q1:P_OFFICE>US1</q1:P_OFFICE>
        <q1:P_DEPARTMENT>PSV</q1:P_DEPARTMENT>
        <q1:P_TIME_STAMP>2010-12-23 15:41:25.738</q1:P_TIME_STAMP>
       </q1:ProcessingPersistentInfo>
       <q1:OperationalSection>
        <q1:D_BUTTON_ID>Retract</q1:D_BUTTON_ID>
       </q1:OperationalSection>
      </q1:Extn>
     </q1:Msg>
    </q1:FndtMsg>
```

```
      </q1:FndtPmntTxInf>
    </q0:MsgBatch>
  </q0:MessageSubmitRequest>
 </soapenv:Body>
</soapenv:Envelope>
```

3.7.4.4   Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
 <soap:Body
   xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
  <FndtMsgBatch
     xmlns="http://fundtech.com/SCL/CommonTypes">
   <FndtPmntTxInf>
    <FndtMsg xmlns="http://fundtech.com/SCL/CommonTypes">
     <Header>
      <D_SKIP_PERSIST_ON_ERROR>true</D_SKIP_PERSIST_ON_ERROR>
      <P_MID>10C23F4124960431</P_MID>
     </Header>
     <Msg>
      <Pmnt/>
      <Extn>
       <MsgErrors>
        <M_MSGERR_LINE>
         <F_MSGERR_CODE>60084</F_MSGERR_CODE>
         <F_MSGERR_TIME_STAMP>2010-12-23 15:42:41.331</F_MSGERR_TIME_STAMP>
         <F_MSGERR_SEVERITY>0</F_MSGERR_SEVERITY>
         <F_MSGERR_CREATE_DATE>2010-12-22T01:22:41</F_MSGERR_CREATE_DATE>
         <F_MSGERR_TIME_ZONE>EST</F_MSGERR_TIME_ZONE>
         <F_MSGERR_FAULT/>
         <F_MSGERR_PARAMS>@@ @@STRING@@@@,@@ @@STRING@@</F_MSGERR_PARAMS>
         <F_MSGERR_DISPLAY>0</F_MSGERR_DISPLAY>
         <F_MSGERR_FIELD_LOGICAL_ID/>
        </M_MSGERR_LINE>
       </MsgErrors>
       <ProcessingPersistentInfo>
        <P_IS_HISTORY>0</P_IS_HISTORY>
        <P_MSG_STS>PEND_APPROV</P_MSG_STS>
        <P_TEMPLATE_CD>TEMPLATE_UPDATEaf</P_TEMPLATE_CD>
        <P_TEMPLATE_NM>TEMPLA</P_TEMPLATE_NM>
        <P_TIME_STAMP>2010-12-23 15:41:25.738</P_TIME_STAMP>
       </ProcessingPersistentInfo>
      </Extn>
     </Msg>
    </FndtMsg>
   </FndtPmntTxInf>
  </FndtMsgBatch>
 </soap:Body>
</soap:Envelope>
```

4   Errors

4.1   Generic Errors

Code	Description	Notes
28560	An error has occurred while trying to perform this action	
40087	Service [service name] failure	
40071	[Office name] is not a valid Office	Office was not found in cache
40127	Service [service name] failure, (last step: [Last step name])	
3104	Payment currency should equal to debit account or credit account currency	Error message reported when neither the Debit nor Credit account's currency is in the payment's currency. Message is routed to the Repair queue.
10002	Interface severe error during processing. Reason: [Reason for the crash]	The Alerts are generated as part of the transaction and thus are either persisted into MQ or the entire transaction is rolled back and the alert will be generated when the transaction is completed after the system is available again
40104	Rule type ID [Rule type ID] – [Rule type description] - was not found	Error message which will be issued when message processing, mandatory rule type was not found, (e.g. department, business area, payment classification etc)
60000	The data content of this field may not contain a / as its first character, nor as its last character; nor may it contain // (two consecutive slashes) anywhere within its contents.	
60001	Instr Id is empty	
60002	Instr Id length should not exceed 16 characters	
60003	Instr Id format is invalid	
60004	Instr Id is invalid, should not start or end with a slash / and should not contain two consecutive slashes //.	
60005	Sttlm date is empty	
60006	Sttlm ccy is empty	
60007	Sttlm amount is empty	
60008	Sttlm date is invalid	
60009	Year in the Sttlm date is invalid	
60010	Sttlm ccy is invalid	
60011	Sttlm amount is invalid. Number of decimal digits in amount exceeds maximum allowed for the currency	
60012	Sttlm amount is invalid, the integer part of amount should contain at least one digit	
60013	Decimal separator in Sttlm amount is incorrect, should be a single comma	

Code	Description	Notes
60014	Instd ccy/Instd amount is empty	
60015	Instd ccy is invalid	
60016	Instd amount is invalid	
60017	Instd amount is invalid, the integer part of amount should contain at least one digit	
60018	Decimal separator in Instd amount is incorrect, should be a single comma	

4.2   Static Data Related Error Codes

Code	Description	Notes
77787	Input parameter(s) [missing parameter names] missing.	An input parameter is missing.

4.3   Message Processing Related Error Codes

Code	Description	Notes
77782	Message was not found for MID [missing MID]	MID not found in MINF
3104	Payment currency should equal debit account or credit account currency	Error message reported when neither the Debit nor Credit account currency is in the payment's currency. Message is routed to the Repair queue.

Appendix A

List of System Users

GPP users are specified in the System User menu, or in DB in USERS table. For more information, see GPP Online Help.

List of System Entitlements

GPP users are associated with an appropriate entitlement. Entitlement is a profile in GPP specified in the Entitlement menu. For more information, see GPP Online Help.

Document Preservation

Message Load Service

Maintenance	Query
Any change in message attributes	Select t.* from LOGICAL_FIELDS
List of supported documents	Select DOCUMENT_ID from XML_DOCUMENT_TYPES
List of supported message output values	Select distinct XML_TYPE from LOGICAL_FIELDS_XPATH union select distinct FORMAT_TYPE from XML_FORMAT_TYPE_RELATIONS

Message Submit Service

Maintenance	Query
List of messages that are allowed for creation	MESSAGEBUTTONS.AVAILABLE_FOR_PAYMENT_CREATION <> 0
List of message buttons	Select BUTTONID, BUTTONDESCRIPTION from MESSAGEBUTTONS
Service screen sets	Select PRULES.CONDITIONS_AS_TEXT, PRULES.RULE_ACTION from OBJECT_PRULES inner join PRULES on PRULES.UID_PRULES = OBJECT_PRULES.RULE_UID where OBJECT_PRULES.RULE_TYPE_ID = 108 and RULE_UID such as %WSI%;
List of applicable action buttons per message status	Select * from MESSAGE_FIELDS_SETTING where FIELDS_GROUP_ID = SERVICES_INTERFACE

Appendix B: Glossary

This table lists the terms used in this document:

Term	Description
GPP	Global PAYplus
Logical field ID	Messages attribute description. With GPP use of logical fields that are associated to different XML paths, it is possible to define a message attribute, its type, its display name and other attributes. For example, the Sttlm amt describes the settlement amount of the outgoing payment. The logical field ID is used behind the scenes and is unique (X_STTLM_AMT)
LOGICAL_FIELDS_XPATH	Describes a different XML path location & element name for the logical field ID for different message types (like PACS008, PAIN 001). For example: X_STTLM_AMT has different XML path in PACS 008 (/IntrBkSttlmAmt tag name: IntrBkSttlmAmt). Note that the path may be a relative path. For full path, refer to the parent path ID that is specified under the logical field.
MID	Message ID –a unique identifier generated by GPP for each Created/Incoming payment
MINF	Message information table in the database. Stores all messages in the system. Primary key: P_MID
PACS	Payments Clearing and Settlement.
PAIN	Payment Initiation.
PDO	Payment Data Object (PDO)
SOA	Service-Oriented Architecture