

FAST WEB CLIENT MODULE METHOD API

1. Web Service URL

In order to invoke the following methods, you have to obtain WSDL for your client application. The URL of the Web service is made of **Context Path + endpoint**.

In our case it's

<https://localhost:8443/FASTWebService/NBCInterface?wsdl>

2. Fund Transfer

2.1.Fund Transfer Full Automation

makeFullFundTransfer

```
public String makeFullFundTransfer (String cm_user_name, String cm_password, String iso_message, String import_file_name)
```

Description: For sending fund transfer in a full automation process. Fund transfer is to be made by complying with ISO message standard Pain001.001.05. Fund transfer date will follow the current date of system.

Parameters:

- cm_user_name : user name of each client who makes fund transfer (Required, Not empty String, Ex: abc_inp)
- cm_password : password of each client who makes fund transfer (Required, Not empty string, Ex: xxxxxxxxx)
- iso_message : ISO Message type pain.001.001.05 (Required, Not empty string, Ex: see sample of ISO Message pain.001.001.05 at the end of document.)
- import_file_name : name of XML file which store batch fund transactions (Required, Ex: batchtr001 or " ")

Returns:

String message : **ISO Message pain.002.001.06** (see sample of ISO Message pain.002.001.06 at the end of document.)

2.2.Fund Transfer Half Automation

makeHalfFundTransfer

```
public String makeHalfFundTransfer(String cm_user_name, String cm_password, String iso_message, String import_file_name)
```

Description: For sending fund transfer in a half automation process. Fund transfer is to be made by complying with ISO message standard Pain001.001.05. Fund transfer date will follow the current date of system.

Parameters:

- cm_user_name : user name of each client who makes fund transfer (Required, Not empty String, Ex: abc_inp)
- cm_password : password of each client who makes fund transfer (Required, Not empty string, Ex: xxxxxxxxx)
- iso_message : ISO Message type pain.001.001.05 (Required, Not empty string, Ex: see sample of ISO Message pain.001.001.05 at the end of document.)
- import_file_name : name of XML file which store batch fund transactions (Required, Ex: batchtr001 or " ")

Returns:

String message : **ISO Message pain.002.001.06** (see sample of ISO Message pain.001.001.05 at the end of document.)

3. Get Transaction and Status

3.1.Get Incoming Transaction

getIncomingTransaction

```
public String getIncomingTransaction(String cm_user_name, String cm_password, String payee_participant_code)
```

Description: Incoming transaction method fetch all receiving transaction from FAST Client Module. Incoming transaction is received in format of Pain001.001.05. Receiving message is individual transaction based which mean one message contain only one transaction. All incoming messages which are not yet acknowledged are included in the message. Transaction date will only take the current date of the system only.

Parameters:

- cm_user_name : user name of each client who makes fund transfer

(Required, Not empty String, Ex: abc_inp)

- cm_password : password of each client who makes fund transfer (Required, Not empty string, Ex: xxxxxxxxxx)
- payee_participant_code: bank code of client who receive fund transfer (Required, Not empty string, Ex: ABCDKHPPXXXX)

Returns:

String message : **ISO Message pain.001.001.05**(see sample of ISO Message pain.001.001.05 at the end of document.)

The message status indicates the state of message.

Status Name	Status Code	Status Description
Acknowledged By FI	ACSC	Transaction is acknowledged by the receiving party to confirm fund has been credited to receiving customer.
Settled	STTL	After FAST settlement session, transaction is settled successfully at FAST system which means balance Debit from sending Bank and Credit to receiving bank.
Received	RCVD	Transaction is received from sending bank.
Refunded By Receiver	RCFI	Transaction is refunded by receiver.

3.2.Get Outgoing Transaction

getOutgoingTransaction

```
public String getOutgoingTransaction(String cm_user_name, String cm_password, String payer_participant_code)
```

Description: Outgoing transaction method gets all transaction the bank sending out to the counter parties. Outgoing transaction is sent in format of Pain001.001.05. After requesting to Web Service Client Module will response in a list of fund transfers in the current date of the system only. The message will show detail of transaction including message status.

Parameters

- cm_user_name : user name of each client who makes fund transfer (Required, Not empty String, Ex: abc_inp)
- cm_password : password of each client who makes fund transfer (Required, Not empty string, Ex: xxxxxxxxxx)
- payer_participant_code : bank code of client who send fund transfer (Required, Not empty string, Ex: ABCDKHPPXXXX)

Returns:

String message : **ISO Message pain.001.001.05** (see sample of ISO Message pain.001.001.05 at the end of document.)

getOutgoingTransactionByPmtInflId

```
public String getOutgoingTransactionByPmtInflId(String cm_user_name, String cm_password, String payer_participant_code, String instruction_ref)
```

Description: Outgoing transaction by payment info id method gets selected outgoing transaction from participant bank sending out to the counter parties that has instruction ref as provided. Outgoing transaction by payment info id is sent in format of Pain001.001.05. The message will show detail of transaction including message status.

Parameters

- cm_user_name : user name of each client who makes fund transfer (Required, Not empty String, Ex: abc_inp)
- cm_password : password of each client who makes fund transfer (Required, Not empty string, Ex: xxxxxxxxx)
- payer_participant_code : bank code of client who send fund transfer (Required, Not empty string, Ex: ABCDKHPPXXX)
- instruction_ref : specific outgoing transaction's instruction ref (Required, Not empty string, Ex: CABC1242)

Returns:

String message : **ISO Message pain.001.001.05** (see sample of ISO Message pain.001.001.05 at the end of document.)

The message status indicates the state of message

Status Name	Status Code	Status Description
Pending	PDNG	Transaction is made by Operator but not yet checked
Canceled By Checker	CNCL	Transaction is made by Operator but canceled by Checker.
Checked and Closed	CHCL	Transaction is made by Operator and Checked by Checker. The batch is closed and submitted to Authorizer.
Rejected	RJCT	Transaction is closed by Checker but rejected by Authorizer.
Received At ACH	ACSP	Transaction is made successfully and well received at FAST System.
Failed At ACH	FACH	Transaction is made but fail to deliver at FAST System due to <ul style="list-style-type: none">- Wrong encryption key- Wrong ISO Schema- Wrong Signature- Wrong Content such as Participant Code
Authorized and Sent	SENT	Transaction is made successfully but not yet received at FAST System.
Acknowledged By FI	ACSC	Transaction is acknowledged by the receiving party to confirm fund has been credited to receiving customer.
Settled	STTL	After FAST settlement session, transaction is settled successfully at FAST system which means balance Debit from sending Bank and Credit to receiving bank.
Cannot Settled	STLF	After FAST settlement session, transaction cannot be settled due to insufficient balance or other reason. Transaction will be used to settle in the next session.
Received At FI	RCFI	Transaction is well received at receiving bank but no acknowledgement to transaction yet.
Failed At FI	FLFI	Transaction is delivered to receiving bank but fail due to <ul style="list-style-type: none">- Wrong encryption key- Wrong ISO Schema- Wrong Signature
Refunded and Settled	RFST	Transaction is refunded and is settled successfully.
Acknowledged and Settled	ACST	Transaction is acknowledge by receiving bank and is settled successfully.

4. Responding Message to Incoming Transaction

4.1. Acknowledgement

makeAcknowledgment

public String makeAcknowledgment (String cm_user_name, String cm_password, String message)

Description: After incoming transaction is received, receiving bank can submit acknowledgement message using ISO Pain002.001.06 to confirm the transaction is credited to customer.

Parameters

- `cm_user_name` : user name of each client who makes fund transfer (Required, Not empty String, Ex: abc_inp)
- `cm_password` : password of each client who makes fund transfer (Required, Not empty string, Ex: xxxxxxxxx)
- `content_message` : ISO Message pain.002.001.06 (see sample of ISO Message pain.001.001.05 at the end of document.)

Returns:

String message

4.2. RefundTransaction

makeReverseTransaction

```
public String makeReverseTransaction (String cm_user_name, String cm_password, String pain007_message)
```

Description: Refund message is a payment transaction sending back to the sending bank. This message has to be sent back due to any faulty in customer account number or per request of the initiating bank. The message complies with ISO Standard Pain007.001.05. Transaction follows the current date of the system. Sending refund transaction means initiating a new payment back to the sending bank.

Parameters

- `cm_user_name` : user name of each client who makes fund transfer (Required, Not empty String, Ex: abc_inp)
- `cm_password` : password of each client who makes fund transfer (Required, Not empty string, Ex: xxxxxxxxx)
- `content_message`: ISO Message pain.007.001.05 (see sample of ISO Message pain.001.001.05 at the end of document.)

Returns:

String message : **ISO Message pain.002.001.06** (see sample of ISO Message pain.001.001.05 at the end of document.)

5. Inquiry View

5.1. Account Inquiry

getAccountInquiry

public String getAccountInquiry (String cm_user_name, String cm_password, String participant_code)

Description: Account Inquiry method provides status of the bank account including information such as available balance in settlement account and current account, net position, and next settlement session.

Parameters

- cm_user_name : user name of each client who makes fund transfer (Required, Not empty String, Ex: abc_inp)
- cm_password : password of each client who makes fund transfer (Required, Not empty string, Ex: xxxxxxxxx)
- participant_code : bank code of client who do account inquiry (Required, Not empty string, Ex: ABCDKHPPXXXX)

Returns:

String message : **Custom Message** (see sample of Custom Message for Account Inquiry at the end of document.)

6. Response

6.1. makeHalfFundTransferResponse

6.2. makeFullFundTransferResponse

6.3. makeReverseTransactionResponse

6.4. makeAcknowledgmentResponse

6.5. getOutgoingTransactionResponse

6.6. getIncomingTransactionResponse

6.7. getAccountInquiryResponse

Sample of ISO Message Pain001.001.05 for Fund Transfer

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
```

```
<Document xsi:schemaLocation="xsd/pain.001.001.05.xsd"
xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.05"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <CstmrCdtTrfInitn>
    <GrpHdr>
      <MsgId>831</MsgId>
      <CreDtTm>2015-09-10T11:02:44.000+07:00</CreDtTm>
      <NbOfTxes>1</NbOfTxes>
      <CtrlSum>5000</CtrlSum>
      <InitgPty>
        <Nm>ABCD Bank Ltd HQ-010</Nm>
      </InitgPty>
    </GrpHdr>
    <PmtInf>
      <PmtInfId>ABCDKHPPXXXX/MNOPKHPPXXXX/AAAA0031</PmtInfId>
      <PmtMtd>TRF</PmtMtd>
      <BtchBookg>false</BtchBookg>
      <ReqdExctnDt>2015-09-10+07:00</ReqdExctnDt>
      <Dbtr>
        <Nm>Test10092015</Nm>
      </Dbtr>
      <DbtrAcct>
        <Id>
          <Othr>
            <Id>0150</Id>
          </Othr>
        </Id>
        <Ccy>KHR</Ccy>
      </DbtrAcct>
      <DbtrAgt>
        <FinInstnId>
          <BICFI>ABCDXXXX</BICFI>
        </FinInstnId>
      </DbtrAgt>
      <CdtTrfTxInf>
        <PmtId>
          <InstrId>ABCDKHPPXXXX/AAAA0031</InstrId>
          <EndToEndId>0150-000886653481/AAAA0031</EndToEndId>
        </PmtId>
        <Amt>
          <InstdAmt Ccy="KHR">5000</InstdAmt>
        </Amt>
        <ChrgBr>CRED</ChrgBr>
        <CdtrAgt>
          <FinInstnId>
            <BICFI>MNOPXXXX</BICFI>
          </FinInstnId>
        </CdtrAgt>
        <Cdtr>
          <Nm>Yarttak</Nm>
        </Cdtr>
        <CdtrAcct>
          <Id>
            <Othr>
              <Id>000886653481</Id>
            </Othr>
          </Id>
        </CdtrAcct>
      </CdtTrfTxInf>
    </PmtInf>
  </CstmrCdtTrfInitn>
</Document>
```



```

        </CdtrAcct>
        <Purp>
            <Cd>GDDS</Cd>
        </Purp>
        <RmtInf>
            <Ustrd>TRANSFER/AAAA0031</Ustrd>
            <Strd>
                <RfrdDocInf>
                    <Tp>
                        <CdOrPrtry>
                            <Cd>CINV</Cd>
                        </CdOrPrtry>
                    </Tp>
                    <Nb>987-AC</Nb>
                    <RltdDt>2015-09-10+07:00</RltdDt>
                </RfrdDocInf>
            </Strd>
        </RmtInf>
    </CdtTrfTxInf>
</PmtInf>
</CstmrCdtTrfInitn>
</Document>

```

Sample of ISO Message pain.002.001.06

```

<?xml version="1.0" encoding="UTF-8"?>
<Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.002.001.06"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <CstmrPmtStsRpt>
        <GrpHdr>
            <MsgId>REPANZBKHPPXXXX000000001</MsgId>
            <CreDtTm>2012-06-29T15:49:00</CreDtTm>
            <InitgPty>
                <Nm>Yarttak</Nm>
                <PstlAdr>
                    <StrtNm>Virginia Lane</StrtNm>
                    <BldgNb>36</BldgNb>
                    <PstCd>NJ 07311</PstCd>
                    <TwnNm>JerseyCity</TwnNm>
                    <Ctry>US</Ctry>
                </PstlAdr>
            </InitgPty>
            <CdtrAgt>
                <FinInstnId>
                    <BICFI>CABCKHPP</BICFI>
                </FinInstnId>
            </CdtrAgt>
        </GrpHdr>
        <OrgnlGrpInfAndSts>
            <OrgnlMsgId>CRTANZBKHPPXXXX000000001</OrgnlMsgId>
            <OrgnlMsgNmId>pain.001.001.05</OrgnlMsgNmId>
            <OrgnlCreDtTm>2012-06-28T14:25:00</OrgnlCreDtTm>
        </OrgnlGrpInfAndSts>
        <OrgnlPmtInfAndSts>

```

```

    <OrgnlPmtInfId>CABCKHPPXXXX/ANZBKHPPXXXX/AAAA0056</OrgnlPmtInfId>
    <TxInfAndSts>
      <OrgnlEndToEndId>123456789012-
000000009008/AAAA0056</OrgnlEndToEndId>
      <TxSts>ACSC</TxSts>
      <OrgnlTxRef>
        <Amt>
          <InstdAmt Ccy="USD">1025</InstdAmt>
        </Amt>
        <Dbtr>
          <Nm>Jones</Nm>
          <PstlAdr>
            <StrtNm>HudsonStreet</StrtNm>
            <BldgNb>19</BldgNb>
            <PstCd>NJ 07302</PstCd>
            <TwnNm>JerseyCity</TwnNm>
            <Ctry>US</Ctry>
          </PstlAdr>
        </Dbtr>
        <Cdtr>
          <Nm>Virgay</Nm>
          <PstlAdr>
            <StrtNm>Virginia Lane</StrtNm>
            <BldgNb>36</BldgNb>
            <PstCd>NJ 07311</PstCd>
            <TwnNm>JerseyCity</TwnNm>
            <Ctry>US</Ctry>
          </PstlAdr>
        </Cdtr>
      </OrgnlTxRef>
    </TxInfAndSts>
  </OrgnlPmtInfAndSts>
</CstmrPmtStsRpt>
</Document>

```

Sample of ISO Message pain.007.001.05

```

<?xml version="1.0" encoding="UTF-8"?>
<Document xmlns="urn:iso:std:iso:2002:tech:xsd:pain.007.001.05"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <CstmrPmtRvsl>
    <GrpHdr>
      <MsgId>REFABCDKHPPXXXX000000001</MsgId>
      <CreDtTm>2012-06-17T15:38:00</CreDtTm>
      <NbOfTx>1</NbOfTx>
      <InitgPty>
        <Nm>Ritcom</Nm>
        <PstlAdr>
          <StrtNm>SchuemanStrasse</StrtNm>
          <BldgNb>18</BldgNb>
          <PstCd>60017</PstCd>
          <TwnNm>FrankfurtamMain</TwnNm>
          <Ctry>DE</Ctry>
        </PstlAdr>
      </InitgPty>
      <DbtrAgt>

```

```

    <FinInstnId>
      <BICFI>ABCDKHPP</BICFI>
    </FinInstnId>
  </DbtrAgt>
  <CdtrAgt>
    <FinInstnId>
      <BICFI>MNOPKHPP</BICFI>
    </FinInstnId>
  </CdtrAgt>
</GrpHdr>
<OrgnlGrpInf>
  <OrgnlMsgId>ABCDKHPPXXXX000000001</OrgnlMsgId>
  <OrgnlMsgNmId>pain.001.001.05</OrgnlMsgNmId>
  <OrgnlCreDtTm>2012-06-09T09:18:00</OrgnlCreDtTm>
</OrgnlGrpInf>
<OrgnlPmtInfAndRvsl>
  <OrgnlPmtInfId>MNOPKHPPXXXX/ABCDKHPPXXXX/AAAA0056</OrgnlPmtInfId>
  <TxInf>
    <RvslId>12345</RvslId>
    <OrgnlEndToEndId>123456789012-
000000009008/AAAA0056</OrgnlEndToEndId>
    <OrgnlInstdAmt Ccy="KHR">5000</OrgnlInstdAmt>
    <RvslInstdAmt Ccy="KHR">5000</RvslInstdAmt>
    <RvslRsnInf>
      <Orgtr>
        <Nm>Ritcom</Nm>
        <PstlAdr>
          <StrtNm>SchuemanStrasse</StrtNm>
          <BldgNb>18</BldgNb>
          <PstCd>60017</PstCd>
          <TwnNm>FrankfurtamMain</TwnNm>
          <Ctry>DE</Ctry>
        </PstlAdr>
      </Orgtr>
      <Rsn />
    </RvslRsnInf>
    <OrgnlTxRef>
      <Cd>AM05</Cd>
      <ReqdExctnDt>2015-06-25+07:00</ReqdExctnDt>
      <Dbtr>
        <Nm>Schneider</Nm>
      </Dbtr>
      <PstlAdr>
        <StrtNm>KuertmanStrasse</StrtNm>
        <BldgNb>45</BldgNb>
        <PstCd>50475</PstCd>
        <TwnNm>Koln</TwnNm>
        <Ctry>DE</Ctry>
      </PstlAdr>
      <DbtrAcct>
        <Id>
          <Othr />
        </Id>
        <Id>000000009008</Id>
      </DbtrAcct>
      <Cdtr />
    </OrgnlTxRef>

```

```
        </TxInf>
    </OrgnlPmtInfAndRvsl>
</CstmrPmtRvsl>
</Document>
```

Sample of Custom Message for Account Inquiry

```
<?xml version="1.0" encoding="UTF-8"?>
<Doc>
    <BizDate>2015-07-15</BizDate>
    <BizTime>T09:18:34.000</BizTime>
    <myBankID>10591</myBankID>
    <nextSess>2015-07-15T09:18:34.000</nextSess>
    <nextSettleKHR>0</nextSettleKHR>
    <nextSettleUSD>-25</nextSettleUSD>
    <settleKHR>6110751386</settleKHR>
    <settleUSD>26039761</settleUSD>
    <curAccKHR>
        <Brnch>
            <Nb>001</Nb>
            <Acc>001-000000001515</Acc>
            <Bal>103847382</Bal>
        </Brnch>
        <Brnch>
            <Nb>004</Nb>
            <Acc>004-000000002308</Acc>
            <Bal>1035967036</Bal>
        </Brnch>
        <Brnch>
            <Nb>006</Nb>
            <Acc>006-000000002012</Acc>
            <Bal>2765189309</Bal>
        </Brnch>
        <Brnch>
            <Nb>014</Nb>
            <Acc>014-000000002422</Acc>
            <Bal>1528554465</Bal>
        </Brnch>
    </curAccKHR>
    <totalKHR>15783511309</totalKHR>
    <curAccUSD>
        <Brnch>
            <Nb>001</Nb>
            <Acc>001-000000001415</Acc>
            <Bal>32523532432</Bal>
        </Brnch>
        <Brnch>
            <Nb>004</Nb>
            <Acc>004-000000002308</Acc>
            <Bal>1035967036</Bal>
        </Brnch>
        <Brnch>
            <Nb>006</Nb>
            <Acc>006-000000002012</Acc>
            <Bal>2765189309</Bal>
        </Brnch>
    </curAccUSD>
</Doc>
```

```
<Brnch>
  <Nb>014</Nb>
  <Acc>014-000000002422</Acc>
  <Bal>1528554465</Bal>
</Brnch>
</curAccUSD>
<totalUSD>4.012833198E7</totalUSD>
</Doc>
```