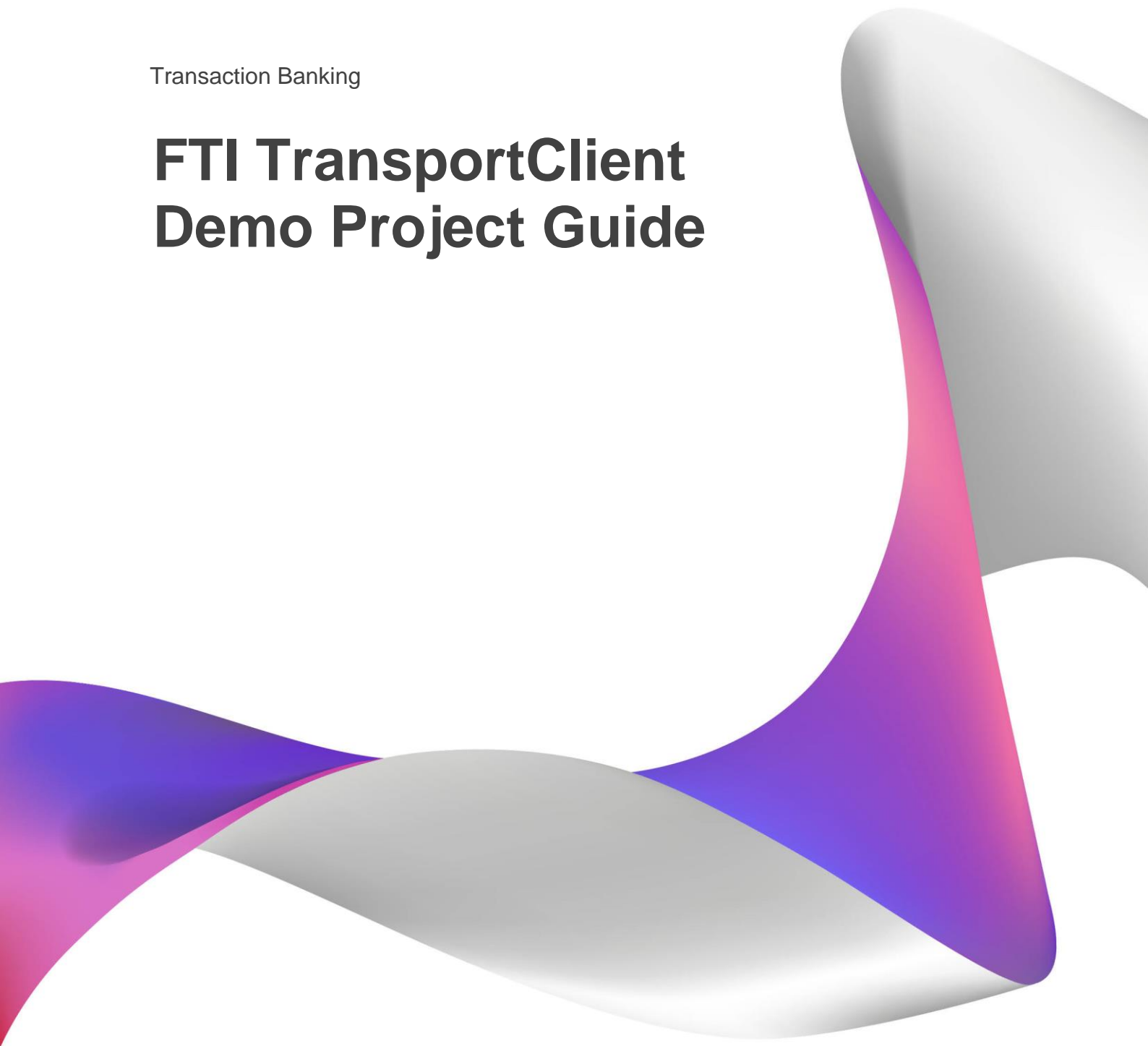


Transaction Banking

FTI TransportClient Demo Project Guide



CONTENTS

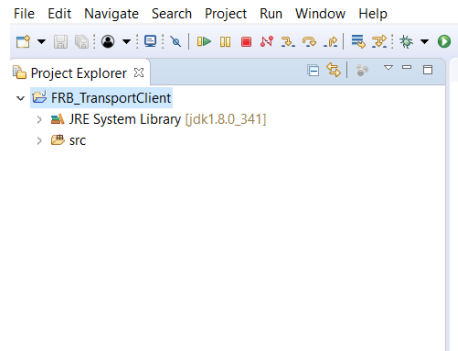
DOCUMENT SUMMARY

1	ECLIPSE JAVA PROJECT	3
2	FTI SOFTWARE PACKAGE CHANGES	7
3	DEPLOYMENT	9
4	FTI CONFIGURATION CHANGES	10
5	FTI TRANSACTION PROCESSING	12

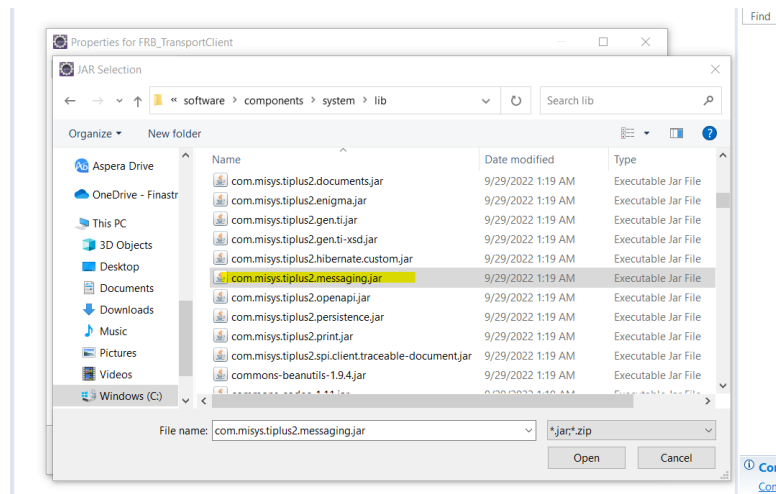
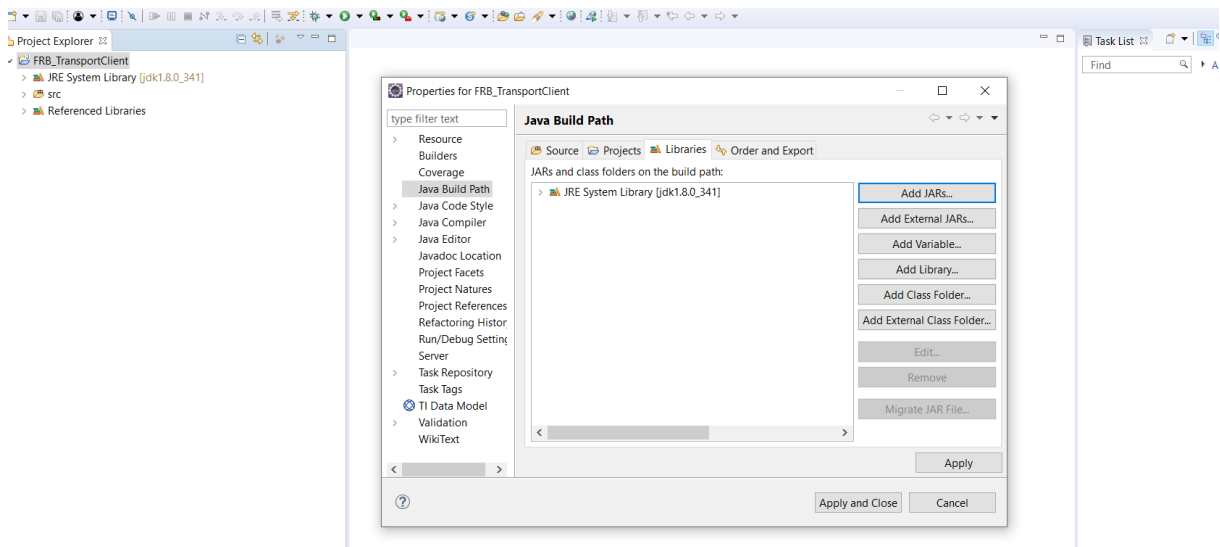


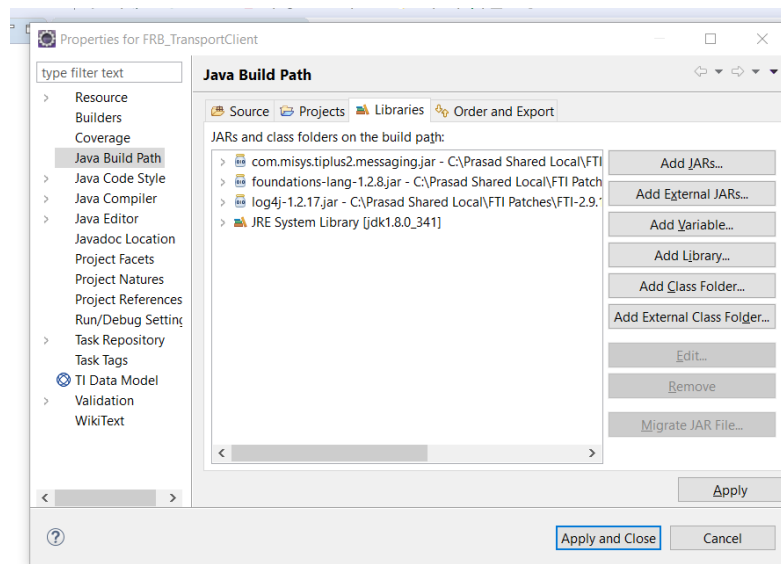
1 ECLIPSE JAVA PROJECT

1. Create new java project in Eclipse (Java/J2EE editor)

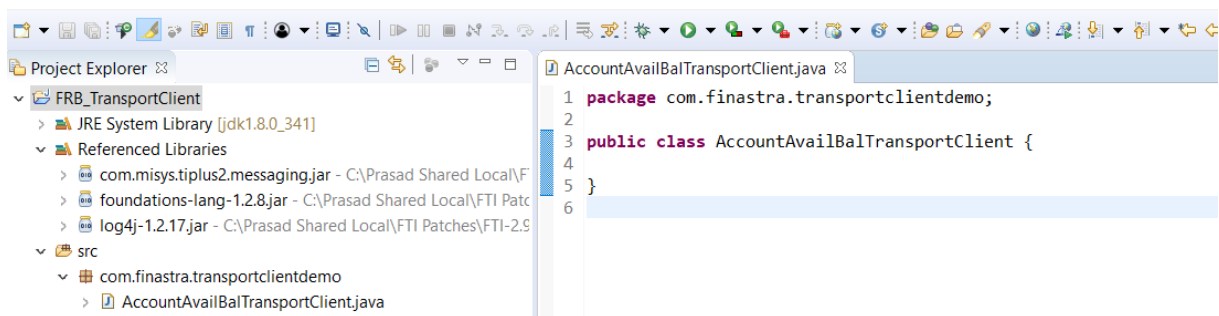


2. Add below external jar library references using Java Build Path option
com.misys.tiplus2.messaging.jar
foundations-lang-1.2.8.jar
log4j-1.2.17.jar

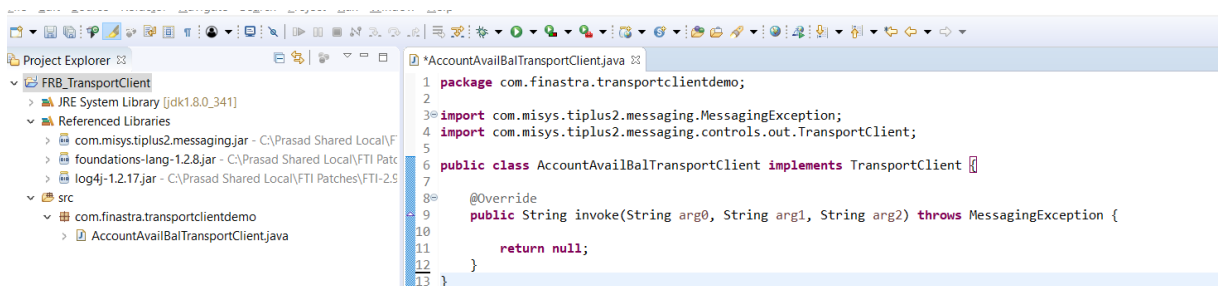




3. Create new java class



4. Implement the interface TransportClient and add override invoke method



5. Create java code to capture the Account.AvailBal Request XML and prepare a sample response message to send back to FTI.

TransportClientService.jar Jar file is generated at project workspace location.

7. Sample java code




AccountAvailBalTrans
portClient.java

2 FTI SOFTWARE PACKAGE CHANGES





1. Copy the TransportClientService.jar file at /software/components/modules/local/lib location.

C > DATA (D:) > FTI Patches > FTI-2.9.3.5 > software > components > modules > local > lib

Name	Date modified	Type	Size
 TransportClientService.jar	7/10/2023 11:24 AM	Executable Jar File	3 KB

2. Create a new spring configuration file called extfrb-bridge.spring.xml in the /software/components/conf/zone/path/conf/messaging folder.

PC > DATA (D:) > FTI Patches > FTI-2.9.3.5 > software > components > system > conf > zone > path > conf > messaging

Name	Date modified	Type	Size
 extfrb-bridge.spring.xml	7/10/2023 12:32 PM	XML File	1 KB
 incoming-backing-beans.spring.xml	9/29/2022 1:19 AM	XML File	54 KB
 messaging.context.spring.xml	9/29/2022 1:19 AM	XML File	14 KB
 messaging.event.notifications.context.spring.xml	9/29/2022 1:19 AM	XML File	1 KB






```
<!-- Messaging beans for service: Account, operation: AvailBal -->
<bean id='AccountAvailBalTransportClient' scope='prototype'
class='com.finastra.transportclientdemo.AccountAvailBalTransportClient'/>
```



extfrb-bridge.spring.xml

3. Update the build-tiplus2.xml file in /local module

PC > DATA (D:) > FTI Patches > FTI-2.9.3.5 > software > components > modules > local

Name	Date modified	Type	Size
 conf	9/29/2022 1:19 AM	File folder	
 lib	7/10/2023 11:34 AM	File folder	
 web	9/29/2022 1:19 AM	File folder	
 build-global.xml	9/29/2022 1:19 AM	XML File	3 KB
 build-tiplus2.xml	7/10/2023 1:09 PM	XML File	4 KB

```
<springbridge file="${tiplus2.folder}/conf/path/conf/messaging-
bridge.spring.xml">
<import resource="classpath:conf/messaging/extfrb-bridge.spring.xml"/>
<alias alias="EXTFRB.Account.AvailBal.transport.client" name=
"AccountAvailBalTransportClient"/>
</springbridge>
```

```
<!--springbridge file="${tiplus2.folder}/conf/path/conf/some.bridge.spring.xml">
  <import resource="classpath:config.file"/>
  <alias alias="bean.to.override" name="new,bean"/>
</springbridge-->

<springbridge file="${tiplus2.folder}/conf/path/conf/messaging-bridge.spring.xml">
  <import resource="classpath:conf/messaging/extfrb-bridge.spring.xml"/>
  <alias alias="EXTFRB.Account.AvailBal.transport.client" name="AccountAvailBalTransportClient"/>
</springbridge>

</target>
</project>
```


3 DEPLOYMENT

1. Build the zone application

```
[echo] user.home=C:\Users\W29624
[echo] user.language=en
[echo] user.name=W29624
[echo] user.script=
[echo] user.timezone=Asia/Calcutta
[echo] user.variant=
[echo] xml-configure-catalog.jar=library-xml-configure-catalog-3.4.16.jar
[echo] xml-sax-loader.jar=library-xml-sax-loader-3.4.16.jar

ejb.path:

package:
[echo] Packaging platform-services-ejb EJB jar for JBE7

update.with.classpath:
[jar] Updating jar: D:\FTI Patches\FTI-2.9.3.5\software\applications\assembly\tiplus2-zone1\EAR\platform-services-ejb.jar

update.without.classpath:

tiplus2.war:

war.bind:
[echo] tiplus2-zone1 bindings for JBE7

war.manifest:
[echo] tiplus2-zone1: MANIFEST

package:
[echo] tiplus2-zone1: WAR packaging
[echo] tiplus2.folder : D:\FTI Patches\FTI-2.9.3.5\software\applications\..\applications\assembly\tiplus2-zone1
[echo] war.name : tiplus2-zone1
[war] Building war: D:\FTI Patches\FTI-2.9.3.5\software\applications\assembly\tiplus2-zone1\tiplus2-zone1.war
[echo] .war file D:\FTI Patches\FTI-2.9.3.5\software\applications\..\applications\assembly\tiplus2-zone1\tiplus2-zone1.war created

tiplus2-api.war:

tiplus2.zip:
[echo] Packaging zips...
[subant] No sub-builds to iterate on

tiplus2.ear:
[echo] tiplus2-zone1: packaging EAR
[ear] Building ear: D:\FTI Patches\FTI-2.9.3.5\software\applications\deploy\tiplus2-zone1.ear

shared-libraries:

package-split:

package-remote:
[propan] Excuted

package-sdxx:

BUILD SUCCESSFUL
Total time: 52 seconds
D:\FTI Patches\FTI-2.9.3.5\software>
```

2. Deploy the zone application into application server and start the zone

FINASTRA

FUSION TRADE INNOVATION

User administration

Deployment administration

Zone administration

Application monitor

Restricted passwords

Change password

Who am I ?

Global application parameters

Logout

Login information

Zone list

Fusion Trade Innovation Global Application

▼ Login information

Last login10/07/2023 12:51:52 AM (America/Los_Angeles)

Last unsuccessful login26/06/2023 1:28:45 AM - 0 attempt(s)

▼ Zone list

Zone ID	Description	Zone status	Global status
ZONE1	TIZONE 1	RELEASED 28/07/2020 9:49:45 AM	ONLINE

Refresh

Start...

4 FTI CONFIGURATION CHANGES

1. Create External System Definition in System Tailoring and assign Account balance service to it.

External System Definition - New

▼ External System Definition

ID Description

▼ Service assignments

Assigned

☒ Account balance

Available

☐ Accounts

☐ Attachment DMS

☐ Base rate

☐ Customer settlements

☐ Customer

☐ Facilities

☐ Fees and Billing

☐ Financing

☐ FX options

☐ FX dealer rate request

☐ FX spot rate

☐ FX deals

☐ Generated documents DMS

☐ General ledger

☐ General messages

☐ Interest rate

☐ Limits

☐ Standing settlements

☐ SWIFT

☐ Watch list checking

External System Definition maintenance

▼ External System Definition - filters

ID Description

ID	Description
BOCBS	Back Office Core Banking system
<input checked="" type="checkbox"/> EXTFRB	FRB External System

2. Assign the Account balance service to the branch in Branch options/Service mappings menu in System Tailoring.

Maintain branch service maps

▼ Branch service maps

Branch Full name

▼ Branch services assigned to this branch

Service

Service	External system
<input checked="" type="checkbox"/> Account balance	<input checked="" type="checkbox"/> EXTFRB
<input type="checkbox"/> Accounts	<input type="checkbox"/> Internal
<input type="checkbox"/> Attachment DMS	<input type="checkbox"/> Internal
<input type="checkbox"/> Base rate	<input type="checkbox"/> Internal
<input type="checkbox"/> Customer	<input type="checkbox"/> Internal
<input type="checkbox"/> General ledger	<input type="checkbox"/> Internal
<input type="checkbox"/> Generated documents DMS	<input type="checkbox"/> Internal
<input type="checkbox"/> Standing settlements	<input type="checkbox"/> Internal

3. Set the 'AccountBalanceCheckType' service option to 'AvailBal service'

Branch service map maintenance

▼ Branch service map - filters

Branch: %
 Service: <---> Description: % External system: %
 Refresh

Branch

- MBWW Misys Bank - Worldwide
 - Account balance - EXTRB
 - Accounts - Internal
 - Attachment DMS - Internal
 - Base rate - Internal
 - Customer - Internal
 - Generated documents DMS - Internal
 - General ledger - Internal
 - Standing settlements - Internal

Assign services... Collapse/Expand Collapse all Expand all
 Branch options... Service options... View...

System option - Update

▼ System option

Name: AccountBalanceCheckType
 Description: Defines the service to be used when doing available balance checking. If not set, the 'AvailBal' service is used.
 Data type: Balance check type
 Current option: AvailBal service
 OK Cancel

- Set the 'AvailableBalanceSteps' service option to IR to trigger the balance check


System option - Update

▼ System option

Name: AvailableBalanceSteps
 Description: Used to specify the steps at which the available balance service is called either at end of input (data capture) and final review (release) only or at all review steps after input. If not set the default is at all steps. IR='Input and release only', IRR='Input/Review/Release'
 Data type: String
 Value: IR
 OK Cancel

5 FTI TRANSACTION PROCESSING

1. Create new transaction in FTI

FUSION TRADE INNOVATION User: SUPERVISOR 

OK
Pend
Cancel
Submit
Attachments...
Validate
Copy
Create from template
Special instructions and notes
Release items
Master details
Subsidiary events...
Other
What can I do?

Trade Innovation

Issue - Import Letter of Credit Input - ILC/MBW/11/0002-ISS001

▼ Import Letter of Credit details

Applicant reference: AvailBal Test 1
Application date: 17/05/2011
Issue by: SWIFT
Issue date: 17/05/2011
Expiry date: 17/06/2011
Confirmation: Unconfirmed
Applicable rules: UCP LATEST VERSION

Transferable
Advise direct
Domestic expiry
Preadvice date
Expiry place
Product type

Irrevocable
Revolving
Operative

Party details

Applicant: ABC
ABC INDUSTRIES LTD
SLOUGH ESTATES
BATH ROAD
SLOUGH

Beneficiary: GREEN
Mr R. Green
116 The Gables
Eton
Berkshire

Country: GB
Beneficiary's account

Advising bank: CHASE
CHASE MANHATTAN BANK (NY)
112 AVENUE OF THE AMERICAS
NY 10006
USA

Instructions to advising bank

▼ Advise details

Instructions from applicant


Principal (if not the applicant)

Instructions to paying/accepting/negotiating bank
Advise through bank

Instructions to advising bank

Entity: LOND Zone: ZONE1 17/05/2011 02:29:40

2. Click OK and AvailBal API is triggered at Input step. Notice that a dummy warning message response is captured at the input step

FUSION TRADE INNOVATION User: SUPERVISOR 

OK
Pend
Cancel
Submit
Attachments...
Validate
Copy
Create from template
Special instructions and notes
Release items
Master details
Subsidiary events...
Other
What can I do?

Trade Innovation

Issue - Import Letter of Credit Input - ILC/MBW/11/0002-ISS001

▼ Errors and warning messages

Severity	Description	Step	Details	Overridden
Warning	General	Input	Duplicate applicant's reference	Y
Warning	General	Input	This is a dummy warning message	N

Override Override All

▼ Import Letter of Credit details

Applicant reference: AvailBal Test 1
Application date: 17/05/2011
Issue by: SWIFT
Issue date: 17/05/2011
Expiry date: 17/06/2011
Confirmation: Unconfirmed
Applicable rules: UCP LATEST VERSION

Transferable
Advise direct
Domestic expiry
Preadvice date
Expiry place
Product type

Irrevocable
Revolving
Operative

Party details

Applicant: ABC
ABC INDUSTRIES LTD
SLOUGH ESTATES
BATH ROAD
SLOUGH

Beneficiary: GREEN
Mr R. Green
116 The Gables
Eton
Berkshire

Country: GB
Beneficiary's account

Advising bank: CHASE
CHASE MANHATTAN BANK (NY)
112 AVENUE OF THE AMERICAS
NY 10006
USA

Instructions to advising bank

▼ Advise details

Entity: LOND Zone: ZONE1 17/05/2011 02:31:16

3. Verify the request XML captured in the logs which is set in the java code.

```

2023-07-10 02:31:15,518 INFO [stdout] (default task-4) 2023-07-10 02:31:15,515 INFO [default task-4]
[RequestConvId=7b53b763d89c9284X-537b780cX1893f17eb73X-7d8c|user=SUPERVISOR|server=til-server (2H1BVv13SfKGC1G7Ohiv5APr-VR180j9Ri5Yr4eg|MsgIn:296512089)]
AccountAvailBalTransportClient AccountAvailBalTransportClient Class invoked

2023-07-10 02:31:15,522 INFO [stdout] (default task-4) 2023-07-10 02:31:15,521 INFO [default task-4]
[RequestConvId=7b53b763d89c9284X-537b780cX1893f17eb73X-7d8c|user=SUPERVISOR|server=til-server (2H1BVv13SfKGC1G7Ohiv5APr-VR180j9Ri5Yr4eg|MsgIn:296512089)]
AccountAvailBalTransportClient Service = Account

2023-07-10 02:31:15,532 INFO [stdout] (default task-4) 2023-07-10 02:31:15,523 INFO [default task-4]
[RequestConvId=7b53b763d89c9284X-537b780cX1893f17eb73X-7d8c|user=SUPERVISOR|server=til-server (2H1BVv13SfKGC1G7Ohiv5APr-VR180j9Ri5Yr4eg|MsgIn:296512089)]
AccountAvailBalTransportClient Operation = AvailBal

2023-07-10 02:31:15,535 INFO [stdout] (default task-4) 2023-07-10 02:31:15,535 INFO [default task-4]
[RequestConvId=7b53b763d89c9284X-537b780cX1893f17eb73X-7d8c|user=SUPERVISOR|server=til-server (2H1BVv13SfKGC1G7Ohiv5APr-VR180j9Ri5Yr4eg|MsgIn:296512089)]
AccountAvailBalTransportClient Request XML = <?xml version="1.0" encoding="UTF-8"?><ServiceRequest xmlns="urn:control.services.tiplus2.misys.com"
xmlns:ns2="urn:messages.service.tiplus2.misys.com"
xmlns:ns3="urn:common.service.tiplus2.misys.com"><RequestHeader><Service>Account</Service><Operation>AvailBal</Operation><Credentials><Name>SUPERVISOR</Name>
</Credentials><ReplyFormat>FULL</ReplyFormat><TargetSystem>EXTFRB</TargetSystem><SourceSystem>ZONE1</SourceSystem><NoRepair>Y</NoRepair><NoOverride>Y</NoOverride><Tr
ansactionControl>NONE</TransactionControl></RequestHeader><ns2:AvailBalRequest><ns2:BackOfficeAccount>0543-123445-002</ns2:BackOfficeAccount><ns2:ExternalAccount>ext
ernal
no</ns2:ExternalAccount><ns2:PostingValueDate>2011-05-17</ns2:PostingValueDate><ns2:PostingAmount>70.00</ns2:PostingAmount><ns2:PostingCurrency>GBP</ns2:PostingCurre
ncy><ns2:DebitCredit>D</ns2:DebitCredit><ns2:Customer xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">ABC</ns2:Customer><ns2:AccountIdentifier xmlns:xs="http://www.w3.org/2001/XMLSchema-instance"
xsi:nil="true"/></ns2:AvailBalRequest></ServiceRequest>

2023-07-10 02:31:15,539 INFO [stdout] (default task-4) 2023-07-10 02:31:15,538 INFO [default task-4]
[RequestConvId=7b53b763d89c9284X-537b780cX1893f17eb73X-7d8c|user=SUPERVISOR|server=til-server (2H1BVv13SfKGC1G7Ohiv5APr-VR180j9Ri5Yr4eg|MsgIn:296512089)]
AccountAvailBalTransportClient Invoking external service call to check the balance

2023-07-10 02:31:15,560 INFO [stdout] (default task-4) 2023-07-10 02:31:15,558 INFO [default task-4]
[RequestConvId=7b53b763d89c9284X-537b780cX1893f17eb73X-7d8c|user=SUPERVISOR|server=til-server (2H1BVv13SfKGC1G7Ohiv5APr-VR180j9Ri5Yr4eg|MsgIn:296512089)]
AccountAvailBalTransportClient Returning AvailBal Response

2023-07-10 02:31:15,564 INFO [stdout] (default task-4) 2023-07-10 02:31:15,562 DEBUG [default task-4]
[RequestConvId=7b53b763d89c9284X-537b780cX1893f17eb73X-7d8c|user=SUPERVISOR|server=til-server (2H1BVv13SfKGC1G7Ohiv5APr-VR180j9Ri5Yr4eg|MsgIn:296512089)]
MessagingTimedLogger Complete (73ms):()

2023-07-10 02:31:15,655 INFO [stdout] (default task-4) 2023-07-10 02:31:15,652 DEBUG [default task-4]
[transaction-id=7b53b763d89c9284i-537b780c1893f17eb73i-7d6f|RequestConvId=7b53b763d89c9284X-537b780cX1893f17eb73X-7d8c|user=SUPERVISOR|server=til-server (2H1BVv13SfK

```