



## SWIFT Compatible Applications

# Alliance Access Integration – Automated File Transfer

## Technical Qualification Test 2021

This document lists the tests for application providers that integrate their middleware or back-office application with Alliance Access using Automated File Transfer (AFT) Adaptor.

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# 1 Preface

## 1.1 Purpose

This document describes the test scenarios to qualify software integrating with SWIFT Alliance Access using AFT.

The purpose of the AFT qualification is to validate the generation, transmission and reconciliation of files transferred from the partner application to Alliance Access.

## 1.2 Audience

The target audience for this document is both vendors considering the certification of a product, and SWIFT Users that look after an overview of the SWIFT Compatible Application contents. This document guide the application providers that integrate their middleware or back-office application with Alliance Access using AFT. The audience should be familiar with SWIFT world from both a technical and a business perspective.

## 1.3 SWIFT Compatible Application Programme

The SWIFT Compatible Application programme covers the entire financial application chain, from Trade, Treasury and Payment, to Corporate and Securities segments.

Each SWIFT Compatible Application defines a set of criteria, which are reviewed every year to ensure that the software remains aligned with the financial market evolution and with customer needs.

These criteria are designed to reflect the capability of a financial application to provide message processing automation in a SWIFT context, and to support straight through processing (STP) in order to increase customer value, limit customisation needs and cost, and reduce time to market.

## 1.4 Related Documents

- [Alliance Access 7.4 release overview](#)
- [Alliance Access - System Management Guide](#)
- [sam\\_aaccess\\_headers](#)

## 2 Introduction

Alliance Access provides different integration adapters for back-office applications and middleware products. One of the most common integration adapters to Alliance Access is the Automated File Transfer (AFT).

AFT is using the standard mechanism of Message Partner definition available in Alliance Access, including routing rules and profile definition. Routing rules must also be defined to integrate each Message Partner inside the Alliance Access routing scheme. AFT functionality is aligned with the way all other Message Partner works in Alliance Access.

### 2.1 SWIFT Compatible Application Validation

Support of AFT is one of the qualification criteria for granting the SWIFT Compatible Application label to a financial application.

The Partners who deployed the SWIFT Alliance connectivity to SWIFT ITB can perform these tests independently. Test environment configuration is described in [section 3](#).

## 3 Alliance Access configuration

This set-up is applicable for Partners that deployed an ITB environment and connect to Alliance Access **from their premises**.

### 3.1 Alliance Access

To prepare for the tests, the Alliance Access system must be installed and configured at Partner premises.

Alliance Access must be upgraded to release 7.4 or higher version. It is necessary to get acquainted with the [Alliance Access - System Management Guide](#) and [alliance 7.4 release overview](#) to further configure the interface for test purpose. The Application Interface module of Alliance Access provides all the functions necessary to manage Message Partner profiles. Using Application Interface application, the Partner needs to set up the connection profiles that are used by Alliance Access to connect with external message partners. The Application Interface allows exchanging messages with external back-office systems or "Message Partners".

### 3.2 Message Partner configuration

The AFT communication session is set up and controlled with a dedicated Message Partner configuration in Alliance Access. Using the procedure described in the Alliance Access System Management Guide – File Transfer Connection Method, create a Message Partner for the file transfer.

- Specify the connection method as File Transfer
- Specify the direction of message transfer (from Message Partner and To Message Partner)
- Configure the other parameters

The partner must ensure that the Alliance Access server must be running and the Message Partner is enabled. The vendor application must have access to the input directory configured in the "From" Message Partner and provide access for Alliance Access to transfer messages in the output directory configured in the "To" Message Partner.

Please refer to System Management Guide – Alliance Access for additional information for configuring and managing Message Partner Profiles. A screenshot of sample Message Partner is provided in [section 7](#).

### 3.3 Exchanging messages using Message Partner

- AFT supports both MT and MX messages. MT test messages can be exchanged using RJE format and XML v2 format, while MX test messages can only be sent in XMLv2 format.
- The application provider will prepare a batch file containing application generated MT or MX messages and copy it in the input directory for Alliance Access to process.
- The messages being sent must be the message types supported by the partner application.
- The file name used for automatic input must not contain any space or any other special character.
- The successfully processed test messages will be stored by Alliance Access in the \_SI\_to\_SWIFT Queue [MT test messages] or \_SI\_to\_SWIFTNet (MX test messages) Queue.
- SWIFT Network returns Notification messages for technical reconciliation and response messages, since the test messages were used for "self transfers", meaning, the sender and receiver BIC are the same.
- The application must download the Network notifications and messages sent in "Output from SWIFT" direction.

## 4 AFT Test Preparation

AFT supports the exchange of messages in the following data formats:

- **RJE Format (MT messages only)**

Currently, RJE (Remote Job Entry) and XML v2 formats are supported for the exchange of test messages. The RJE format is only applicable for MT messages, while XML v2 format is applicable for both MT and MX messages.

In RJE formatted messages, all fields in Block 4 (Message Text Block) have a Carriage Return and Line Feed (CrLf) at the beginning of every field. For fields containing multiple lines, CrLf must be present at the end of every line. RJE format allows multiple messages sent in a batch file. The messages are separated with "\$" as delimiter and there must be no message separator at the end of the last message in the batch file. For more details about the RJE format, please refer to Alliance Access – System Management guide.

- **XML version 2 (MX and MT messages, and files for FileAct service)**

A XML v2 message consists of an Alliance Access Header, an optional Application Header and a Message details block. In case MT messages are exchanged using XML v2 format, then the Message Block must be encrypted using Base 64.

For more information about these formats, see the [Alliance Access System Management Guide](#) – Message Formats Used in AI". A sample of the [RJE](#) and [XML v2](#) message format is provided in **Annexure**. Please refer to sam\_aaccess\_headers.pdf document for messages samples exchanged with Alliance Access, in scope of the SWIFT solution.

For SWIFT Certification, at least one of the following file formats will be tested:

- RJE for MT message
- XML v2 format for MT or MX messages

### 4.1 Reconciliation of Delivery Notification

When the messages are sent to Alliance Access, the application can optionally request for a delivery notification. This will result in Alliance Access receiving a message about the message delivery, which can be reconciled with the original message.

***The Partner must demonstrate the capability of their application to process the Delivery Notification Message and to reconcile it with the original message.***

A sample Delivery Notification message is provided in [section 7.5](#)

### 4.2 Transmission Notification

A transmission notification is a message representing the result of transmission to SWIFT network. SWIFT performs full syntax and semantic checks before it returns an acknowledgement ([ACK](#)). Other checks, such as validity of the sender and the receiver, are also performed. These checks can cause a message to be rejected and a negative acknowledgement ([NAK](#)) is returned in response.

The vendor must demonstrate their application capability to process the Transmission Notification Message and reconcile with the original message.

A sample Transmission Notification message is provided in [section 7.4](#).

## 5 SWIFT Compatible AFT testing

To be qualified as AFT compliant, Partners need to send MT and/or MX messages (depending on the label category), and act upon received MT/MX messages including ACK / NAK and delivery notifications.

1. The partner application vendor prepares the number of MT / MX test messages generated by the application as required for the SWIFT Compatible at stake. When these messages are placed on the input directory, the “From” session is initiated automatically and the test messages are processed by Alliance Access.
2. Partners having their own ITB environment must use their PIC in the sender and receiver fields of the message.
3. If the partner application supports only MT messages, the test messages can be sent in either RJE format or in XML v2 format. If the business application supports SWIFT Solutions, then the only format Alliance access can read is XML v2 format.
4. For individual label requirements, the vendor application must exchange application supported SWIFT Messages. Vendor should refer to label specific technical validation guide for the in-scope SWIFT MT and/or MX Messages.
5. The partner application must include delivery notification instructions while generating the test messages. The back office application must receive the delivery notification information and reconcile with the original message sent to Alliance Access.
6. The acknowledgement of transmission is sent through transmission notification message. The partner application must capture the ACK and NAK received back from SWIFT and reconciled in the application. Evidences of reconciliation mechanism (screen dump, event log, dataset extract,) will be handled back to SWIFT Qualification service provider.

### 5.1 Test Evidence

The Partner should extract the following evidences covering the testing period and send them via email to the Validation Service provider for Technical Validation of AFT connectivity test.

#### Partners with own ITB connectivity

- Alliance Access Event Journal report
- Message File report
- Message Partner Configuration details
- Samples of ASCII (MT) and XMLv2 files (MT and MX)
- Screenshots / Log File / Dataset extract / Reports generated from the Partner application evidencing the test execution through Partner application and the reconciliation mechanism against delivery notification and transmission notification for ACK and NAK.

## 6 Annexure

### 6.1 Sample Message Partner Configuration

Direction: From Message Partner (to Alliance Access) Format: RJE

**Message Partner Details - MPA01FTMTIN**

**Configuration** **Monitoring** **Help**

Name	MPA01FTMTIN
Description	A01
Status	Disabled
Partner Id	17
Allowed Direction	From Message Partner
Connection Method	File Transfer
File Transfer	
Data Format	RJE
Session Initiation	Automatic
Parameter File	Not Required
Profile Name	R7.4_MsgPartner
Local Authentication	

**Message Partner Details - MPA01FTMTIN**

**Configuration** **Monitoring**

Data Format	RJE
Session Initiation	Automatic
Parameter File	Not Required
Profile Name	R7.4_MsgPartner
Local Authentication	
Reception	
Input Filename Pattern	D:\BRANCHES2\A01\22_4056152532_N
FileAct Payload Timeout (seconds)	0
Validation level	No Validation
Message modification	Allowed
Unit to be assigned	None
Emission expiry	Days
Batch File Validation	Continue on Rejection
Build unique file transfer reference	<input type="checkbox"/>
Routing	Dispose
message in	Ready To Send

## Direction: To Message Partner (From Alliance Access) Format: RJE

**Message Partner Details - MPA01FTMTOUT**

**Configuration**   **Monitoring**

Name	MPA01FTMTOUT
Description	A01
Status	Disabled
Partner Id	18
Allowed Direction	To Message Partner
Connection Method	File Transfer
File Transfer	
Data Format	RJE
Session Initiation	Manual
Parameter File	Not Required
File On	Server
Profile Name	R7.4_MsgPartner
<input type="checkbox"/> Local Authentication	
Emission	

**Message Partner Details - MPA01FTMTOUT**

**Configuration**   **Monitoring**

<input type="checkbox"/> Local Authentication																	
Emission																	
Exit Points	<table border="1"> <tr><td>Available</td><td></td></tr> <tr><td>EPA05MQMTNOUT</td><td>&gt;&gt;</td></tr> <tr><td>FileActAcks</td><td>&gt;</td></tr> <tr><td>FileActReceived</td><td>&lt;</td></tr> <tr><td>FileActReject</td><td>&lt;&lt;</td></tr> <tr><td>MXToBeInvestigated</td><td></td></tr> <tr><td>ToBeInvestigated</td><td></td></tr> </table> <table border="1"> <tr><td>Selected</td><td>EPA01FTMTOUT</td></tr> </table>	Available		EPA05MQMTNOUT	>>	FileActAcks	>	FileActReceived	<	FileActReject	<<	MXToBeInvestigated		ToBeInvestigated		Selected	EPA01FTMTOUT
Available																	
EPA05MQMTNOUT	>>																
FileActAcks	>																
FileActReceived	<																
FileActReject	<<																
MXToBeInvestigated																	
ToBeInvestigated																	
Selected	EPA01FTMTOUT																
Output Filename Pattern	D:\BRANCHES2\A01123_4056152532_M																
Always transfer MAC/PAC	<input checked="" type="checkbox"/>																
Transfer UETR	<input checked="" type="checkbox"/>																
Transfer PKI Signature	<input type="checkbox"/>																
Routing Code Transmitted	<input type="checkbox"/>																
Transfer Original Message with Notification	Always																
Maximum number of messages per session																	
Increment Sequence Number across Sessions	<input type="checkbox"/>																

Direction: From Message Partner (to Alliance Access) Format: XML v2

**Message Partner Details - MPA01FTMXIN**

**Configuration Monitoring**

Name	MPA01FTMXIN
Description	A01
Status	Disabled
Partner Id	19
Allowed Direction	From Message Partner
Connection Method	File Transfer
<b>File Transfer</b>	
Data Format	XML Version 2 Original
Use Binary Prefix	<input checked="" type="checkbox"/>
Session Initiation	Automatic
Parameter File	Not Required
Profile Name	R7.4_MsgPartner
<input type="checkbox"/> Local Authentication	
<b>Reception</b>	

**Close** Refresh Export Print Enable Previous Next

**Message Partner Details - MPA01FTMXIN**

**Configuration Monitoring**

Data Format	XML Version 2 Original
Use Binary Prefix	<input checked="" type="checkbox"/>
Session Initiation	Automatic
Parameter File	Not Required
Profile Name	R7.4_MsgPartner
<input type="checkbox"/> Local Authentication	
<b>Reception</b>	
Input Filename Pattern	D:\BRANCHES2\A01\24_4056152532_N
Input Attachment Path	
FileAct Payload Timeout (seconds)	0
Generate Report File	No
Validation level	No Validation
Message modification	Allowed
Unit to be assigned	None
Emission expiry	Days

## Direction: From Message Partner (to Alliance Access) Format: XML v2 for FileAct

**Message Partner Details - MPA08FTMXIN**

**Configuration** **Monitoring**

Name	MPA08FTMXIN
Description	A08
Status	Disabled
Partner Id	118
Allowed Direction	From Message Partner
Connection Method	File Transfer

**File Transfer**

Data Format	XML Version 2 Original
Use Binary Prefix	<input checked="" type="checkbox"/>
Session Initiation	Automatic
Parameter File	Not Required
Profile Name	R7.4_MsgPartner

Local Authentication

**Reception**

**Close** **Refresh** **Export** **Print** **Enable** **Previous** **Next**

**Message Partner Details - MPA08FTMXIN**

**Configuration** **Monitoring**

Data Format	XML Version 2 Original
Use Binary Prefix	<input checked="" type="checkbox"/>
Session Initiation	Automatic
Parameter File	Not Required
Profile Name	R7.4_MsgPartner

Local Authentication

**Reception**

Input Filename Pattern	D:\BRANCHES2\A08\109_3040538744_	
Input Attachment Path	D:\BRANCHES2\A08\109_3040538744_	
FileAct Payload Timeout (seconds)	0	
Generate Report File	No	
Validation level	No Validation	
Message modification	Allowed	
Unit to be assigned	None	
Emission expiry		Days
Batch File Validation	Continue on Rejection	

**Close** **Refresh** **Export** **Print** **Enable** **Previous** **Next**

## Direction: To Message Partner (to Alliance Access) Format: XML v2 for FileAct

**Message Partner Details - MPA08FTMXOUT**

**Configuration**   **Monitoring**   **Help**

Name	MPA08FTMXOUT
Description	A08
Status	Disabled
Partner Id	119
Allowed Direction	To Message Partner
Connection Method	File Transfer
<b>File Transfer</b>	
Data Format	XML Version 2 Revision 2
Use Binary Prefix	<input checked="" type="checkbox"/>
Session Initiation	Automatic
Parameter File	Not Required
Profile Name	R7.4_MsgPartner
<input type="checkbox"/> Local Authentication	
<b>Emission</b>	

**Message Partner Details - MPA08FTMXOUT**

**Configuration**   **Monitoring**   **Help**

<b>Exit Points</b>	<b>Available</b> EPA05MQMTNOUT FileActAcks FileActReceived FileActReject MXToBeInvestigated ToBeInvestigated	<input type="button" value="&gt;&gt;"/> <input type="button" value="&gt;"/> <input type="button" value="&lt;"/> <input type="button" value="&lt;&lt;"/>	<b>Selected</b> EPA08FTMXOUT
Output Filename Pattern	D:\BRANCHES2\A08\110_3040538744_		
Output File Extension	out		
Output Attachment Path	D:\BRANCHES2\A08\110_3040538744_		
Output Attachment Extension			
Always transfer MAC/PAC	<input checked="" type="checkbox"/>		
Message Emission Format	Complete Text		
Transfer Original Message with Notification	Always		
Maximum number of messages per session			
Original Message Format	Complete Text		
Increment Sequence Number across Sessions	<input type="checkbox"/>		
<b>Run Output Session Triggers</b>			
Number of messages	1		

## 6.2 Input MT Message sample in RJE format

```
{1:F01SPXAINJJAXXX0001000455}{2:I569SPXAINJJXXXXN2}{3:{108:20-569-SR-P001}}{4:  
:001/LAST  
:20C::SEME//20-569-ACK-P026  
:23G:CANC  
:98C::PREP//20140202100000  
:22F::STBA//EOSP  
:22H::REPR//PROV  
:16R:COLLPRTY  
:95Q::CLPA//PARTY NAME CLT  
:97A::SAFE//123456  
:16S:COLLPRTY  
:16R:LINK  
:20C::PREV//569001  
:16S:LINK  
:16S:GENL  
:16R:SUMM  
:19A::COVA//USD10000000,  
:19A::TEXA//USD9000000,  
:19A::MARG//USD270000,  
:19A::TCOR//USD11000000,  
:92A::MARG//3,0  
:25D::GCST//DEFI  
:98A::VALN//20140202  
:16S:SUMM  
:16R:SUME  
:22F::COLA//OPTN  
:19A::COVA//USD10000000,  
:19A::TEXA//USD9000000,  
:19A::TCOR//USD11000000,  
:92A::MARG//3,0  
:25D::GETS//DEFI  
:16R:SUMC  
:13B::ELIG//1234PROF145  
:95P::PTYB//SWHQBEBB  
:19A::COVA//USD10000000,  
:19A::TEXA//USD9000000,  
:19A::TCOR//USD11000000,  
:19A::MARG//USD270000,  
:92A::MARG//3,0  
:25D::GCOS//FLAT  
:16R:TRANSDET  
:20C::CLTR//CLN00102AB235  
:98A::TERM//20210202  
:98A::EXRQ//20210202  
:19A::COVA//USD10000000,  
:19A::TEXA//USD9000000,  
:19A::TRA//USD9000000,  
:19A::TCOR//USD11000000,  
:22F::MICO//A013  
:92A::MARG//5,1  
:16R:VALDET  
:17B::COLL//Y  
:17B::SECU//Y  
:98A::SETT//20210202  
:19A::MVPF//USD10000000,  
:19A::LICO//USD9000000,  
:19A::MVF//USD9000000,  
:92B::EXCH//USD/GBP/2,0  
:92A::VAFC//2,  
:22F::MICO//A013  
:16R:SECDET  
:35B:ISIN US0000123456  
:36B::SECV//UNIT/10000,  
:95L::ALTE//LEGALENTIDENTIFIER45  
:95P::ACOW//SWHQBEBB  
:97B::SAFE//DVPA/234-87-65767
```

```
:25D::SETT//PEND
:11A::DENO//USD
:90A::MRKT//PRCT/2,0
:94B::RATS//VEND
:70C::RATS//AAA+
:16S:SECDET
:16S:VALDET
:16S:TRANSDET
:16S:SUMC
:16S:SUME
-}
```

### 6.3 Input MT Message sample in XML v2 format

```
_001000_____<?xml version="1.0" encoding="UTF-8"?>
<DataPDU xmlns="urn:swift:saa:xsd:saa.2.0">
  <Header>
    <Message>
      <SenderReference>MT101-b64-test2-feb10</SenderReference>
      <MessageIdentifier>fin.101</MessageIdentifier>
      <Format>MT</Format>
      <Sender>
        <BIC12>SPXAINJJAA05</BIC12>
      </Sender>
      <Receiver>
        <BIC12>SPXAINJJXXXX</BIC12>
      </Receiver>
      <InterfaceInfo>
        <UserReference>101-ACK-N-XXX-01</UserReference>
      </InterfaceInfo>
      <NetworkInfo>
        <Service>swift.fin!p</Service>
      </NetworkInfo>
      <SecurityInfo>
        <SWIFTNetSecurityInfo/>
      </SecurityInfo>
    </Message>
  </Header>

  <Body>DQo6MjA6MTAzLUFDSy1OLVhYWC0wMw0KOjlzQjpDUkVEDQo6MzJBOjExMDIxMIVTRDE
  wMDAsMDANCjozM0I6VVNEMTAwMCwwMA0KOjUwQTovMTIzNDU2DQpTV0hRQkVCQg0KOjU3Q
  TpTV0hRQkVCQg0KOjU5QTpTV0hRQkVCQg0KOjcxQTpTSEENCi19</Body>
</DataPDU>
```

### 6.4 ACK Message with Original Message

```
{1:F21SPXAINJJAXXX0062122997}{4:{177:1107130720}{451:0}{108:20-540-SR-
P001}}{1:F01SPXAINJJAXXX0062122997}{2:I540SPXAINJJXXXXN2}{3:{108:20-540-SR-P001}}{4:
:16R:GENL
:20C::SEME//20-540-SR-2021
:23G:NEWM
:16R:LINK
:20C::POOL//REFERENCE
:36B::TURN//FAMT/1000000,
:16S:LINK
:16S:GENL
:16R:TRADDET
:98A::SETT//20210120
:35B:ISIN US0000123456
ABCD
:16R:FIA
```

:94B::PLIS/XNYS/EXCH/NEWYORK STOCC EXCHANGE  
:22F::MICO//A012  
:98A::MATU//20210120  
:16S:FIA  
:22F::RPOR//DEFR  
:16S:TRADDET  
:16R:FIAC  
:36B::SETT//FAMT/100000,  
:97A::SAFE//123456  
:16S:FIAC  
:16R:SETDET  
:22F::STCO//NPAR  
:22F::SETR//TURN  
:16R:SETPRTY  
:95P::BUYR//SWHQBEBB  
:16S:SETPRTY  
:16R:SETPRTY  
:95P::SELL//SWHQBEBB  
:97A::SAFE//123456  
:16S:SETPRTY  
:16R:SETPRTY  
:95P::DEAG//SWHQBEBB  
:16S:SETPRTY  
:16R:SETPRTY  
:95C::PSET//US  
:16S:SETPRTY  
:16S:SETDET  
-}{5:{MAC:00000000}{CHK:D37613267275}}

## 6.5 Delivery Notification Message

{1:F21SPXAINJJAXXX0062040262}{4:{177:1107131151}{451:0}}{1:F01SPXAINJJAXXX0062040262}  
{2:O0110621110713DYLXXXXHXXX0004188011107130721S}{4:{175:0720}{106:110713SPXAINJ  
JAXXX0062122997}{108:20-540-SR-  
P001}{175:0720}{107:110713SPXAINJJAXXX0062040261}}{5:{CHK:70D184C5EACD}{SYS:}}{S:{CO  
P:P}}

## 6.6 Output MT Message sample in RJE format

{1:F21SPXAINJJAXXX0062040261}{4:{177:1107131150}{451:0}}{1:F01SPXAINJJAXXX0062040261}  
{2:O5400720110713SPXAINJJAXXX00621229971107130720N}{3:{108:20-540-SR-P001}}{4:  
:16R:GENL  
:20C::SEME//20-540-SR-2021  
:23G:NEWM  
:16R:LINK  
:20C::POOL//REFERENCE  
:36B::TURN//FAMT/1000000,  
:16S:LINK  
:16S:GENL  
:16R:TRADDET  
:98A::SETT//20210120  
:35B:ISIN US0000123456  
ABCD  
:16R:FIA  
:94B::PLIS/XNYS/EXCH/NEWYORK STOCC EXCHANGE  
:22F::MICO//A012  
:98A::MATU//20210120

:16S:FIA  
:22F::RPOR//DEFR  
:16S:TRADDET  
:16R:FIAC  
:36B::SETT//FAMT/100000,  
:97A::SAFE//123456  
:16S:FIAC  
:16R:SETDET  
:22F::STCO//NPAR  
:22F::SETR//TURN  
:16R:SETPRTY  
:95P::BUYR//SWHQBEBB  
:16S:SETPRTY  
:16R:SETPRTY  
:95P::SELL//SWHQBEBB  
:97A::SAFE//123456  
:16S:SETPRTY  
:16R:SETPRTY  
:95P::DEAG//SWHQBEBB  
:16S:SETPRTY  
:16R:SETPRTY  
:95C::PSET//US  
:16S:SETPRTY  
:16S:SETDET  
-}{5:{MAC:00000000}{CHK:D37613267275}}{S:{SAC:}{COP:P}}

## 6.7 NAK Message with Original Message

{1:F21SPXAINJJAA050011096785}{4:{177:1102101209}{451:1}{405:E46005}{108:20-101-NAK-01}}{1:F01SPXAINJJAA050011096785}{2:I101SPXAINJJXA05N}{3:{108:20-101-NAK-01}}{4:  
:20:10-101-NAK-01  
:13C:/RNCTIME/1240+0100  
:23B:CRTS  
:23E:TELI/Additional Information  
:23E:TELI  
:32A:091120USD15000,00  
:33B:USD15100,00  
:50K:/12345678  
ORDERING CUSTOMER NAME  
:52A:SWHQBEBB  
:53D:/C/23456789  
SENDERS CORRESPONDENT  
HONG KONG BRANCH  
HONG KONG  
:54B:/C/987654321  
HONG KONG BRANCH  
:56A:/C/654321  
SWHQBEBB  
:57D:/654321  
ACCOUNT WITH INSTITUTION  
:59:BENEFICIARY CUSTOMER NAME  
HONG KONG  
HONG KONG  
:70:/INV/070717, 12345, INVOICE  
NUMBERS 24578, 54789,  
354789, 545884, 578822  
987664, 3211458, 56412636  
:71A:BEN  
:71F:USD100,00  
:72:/ACC/INSTRUCTIONS ARE FOR  
//ACCOUNT WITH INSTITUTION

//TO EXECUTE  
:77B:/ORDERRES/US//ADDITIONAL INFO  
//CONTINUATION OF ADDITIONAL INFO  
-}{5:{MAC:00000000}{CHK:F815F08BA4D7}}

## 6.8 Input message in XML V2 for FileAct

\_001154\_\_\_\_\_<?xml version="1.0" encoding="UTF-8" standalone="no" ?>  
<Saa:DataPDU xmlns:Saa="urn:swift:saa:xsd:saa.2.0" xmlns:Sw="urn:swift:snl:ns.Sw"  
xmlns:SwGbl="urn:swift:snl:ns.SwGbl" xmlns:SwInt="urn:swift:snl:ns.SwInt"  
xmlns:SwSec="urn:swift:snl:ns.SwSec">  
    <Saa:Revision>2.0.7</Saa:Revision>  
    <Saa:Header>  
        <Saa:Message>  
            <Saa:SenderReference>AFT\_FA\_test1</Saa:SenderReference>  
            <Saa:MessageIdentifier>camt.007.002.02</Saa:MessageIdentifier>  
            <Saa:Format>File</Saa:Format>  
            <Saa:Sender>  
                <Saa:DN>o=spxainjj,o=swift</Saa:DN>  
                <Saa:FullName>  
                    <Saa:X1>SPXAINJJXXX</Saa:X1>  
                </Saa:FullName>  
            </Saa:Sender>  
            <Saa:Receiver>  
                <Saa:DN>o=spxainjj,o=swift</Saa:DN>  
                <Saa:FullName>  
                    <Saa:X1>SPXAINJJXXX</Saa:X1>  
                </Saa:FullName>  
            </Saa:Receiver>  
            <Saa:InterfaceInfo>  
                <Saa:UserReference>AFT\_FA\_test1</Saa:UserReference>  
            </Saa:InterfaceInfo>  
            <Saa:NetworkInfo>  
                <Saa:Service>swift.generic.fast!x</Saa:Service>  
            </Saa:NetworkInfo>  
            </Saa:Message>  
        </Saa:Header>  
        <Saa:Body>AFT\_FA.JPG</Saa:Body>  
    </Saa:DataPDU>

## 6.9 Ack message in XML V2 for FileAct

```
_002098_<?xml version="1.0" encoding="UTF-8" ?>
<Saa:DataPDU xmlns:Saa="urn:swift:saa:xsd:saa.2.0" xmlns:Sw="urn:swift:snl:ns.Sw"
  xmlns:SwInt="urn:swift:snl:ns.SwInt" xmlns:SwGbl="urn:swift:snl:ns.SwGbl"
  xmlns:SwSec="urn:swift:snl:ns.SwSec">
  <Saa:Revision>2.0.7</Saa:Revision>
  <Saa:Header>
    <Saa:TransmissionReport>
      <Saa:SenderReference>AFT_FA_test1</Saa:SenderReference>
      <Saa:ReconciliationInfo>SNL02013D11330601714009891C</Saa:ReconciliationInfo>
      <Saa:NetworkDeliveryStatus>NetworkAcked</Saa:NetworkDeliveryStatus>
      <Saa:OriginalInstanceAddressee>
        <Saa:X1>SPXAINJJXXX</Saa:X1>
      </Saa:OriginalInstanceAddressee>
      <Saa:ReportingApplication>SWIFTNetInterface</Saa:ReportingApplication>
      <Saa:NetworkInfo>
        <Saa:Priority>Normal</Saa:Priority>
        <Saa:IsPossibleDuplicate>false</Saa:IsPossibleDuplicate>
        <Saa:Service>swift.generic.fast!x</Saa:Service>
        <Saa:Network>SWIFTNet</Saa:Network>
        <Saa:SessionNr>000083</Saa:SessionNr>
        <Saa:SeqNr>00000004</Saa:SeqNr>
        <Saa:SWIFTNetNetworkInfo>
          <Saa:RequestType>camt.007.002.02</Saa:RequestType>
          <Saa:SNLRef>SNL02016-2021-01-01T12:08:36.8976.000007Z</Saa:SNLRef>
          <Saa:Reference>5d8c33e0-5ae4-4509-b6dc-813a2eafa1ef</Saa:Reference>
          <Saa:SnFInputTime>0140:2021-01-01T12:10:10</Saa:SnFInputTime>
          <Saa:TransferRef>SNL02013D11330601714009891C</Saa:TransferRef>
          <Saa:FileStartTime>20210101173833</Saa:FileStartTime>
          <Saa:FileEndTime>20210101173858</Saa:FileEndTime>
        </Saa:SWIFTNetNetworkInfo>
      </Saa:NetworkInfo>
      <Saa:Interventions>
        <Saa:Intervention>
          <Saa:IntvCategory>TransmissionReport</Saa:IntvCategory>
          <Saa:CreationTime>20210101173833</Saa:CreationTime>
          <Saa:OperatorOrigin>SYSTEM</Saa:OperatorOrigin>
        <Saa:Contents>
```

```
<AckNack>
<PseudoAckNack>{1:F21SPXAINJJAXXX000083000000004}{4:{177:1201011738}{451:0}{311:ACK}{108:AFT_FA_test1}}</PseudoAckNack>
</AckNack>
</Saa:Contents>
</Saa:Intervention>
</Saa:Interventions>
<Saa:IsRelatedInstanceOriginal>true</Saa:IsRelatedInstanceOriginal>
<Saa:MessageCreator>ApplicationInterface</Saa:MessageCreator>
<Saa:IsMessageModified>false</Saa:IsMessageModified>
<Saa:MessageFields>NoOriginal</Saa:MessageFields>
</Saa:TransmissionReport>
</Saa:Header>
</Saa:DataPDU>
```

## 6.10 OUT message in XML V2 for FileAct

```
_004279_____<?xml version="1.0" encoding="UTF-8" ?>
<Saa:DataPDU xmlns:Saa="urn:swift:saa:xsd:saa.2.0" xmlns:Sw="urn:swift:snl:ns.Sw"
  xmlns:SwInt="urn:swift:snl:ns.SwInt" xmlns:SwGbl="urn:swift:snl:ns.SwGbl"
  xmlns:SwSec="urn:swift:snl:ns.SwSec">
  <Saa:Revision>2.0.7</Saa:Revision>
  <Saa:Header>
    <Saa:Message>
      <Saa:SenderReference>OSPXAINJJXXX007AFT_FA_test1$120101</Saa:SenderReference>
      <Saa:MessageIdentifier>camt.007.002.02</Saa:MessageIdentifier>
      <Saa:Format>File</Saa:Format>
      <Saa:SubFormat>Output</Saa:SubFormat>
      <Saa:Sender>
        <Saa:DN>o=spxainjj,o=swift</Saa:DN>
        <Saa:FullName>
          <Saa:X1>SPXAINJJXXX</Saa:X1>
        </Saa:FullName>
      </Saa:Sender>
      <Saa:Receiver>
        <Saa:DN>o=spxainjj,o=swift</Saa:DN>
        <Saa:FullName>
          <Saa:X1>SPXAINJJXXX</Saa:X1>
        </Saa:FullName>
      </Saa:Receiver>
    </Saa:Message>
  </Saa:Header>
</Saa:DataPDU>
```

```
</Saa:Receiver>
<Saa:InterfaceInfo>
<Saa:UserReference>AFT_FA_test1</Saa:UserReference>
<Saa:MessageCreator>SWIFTNetInterface</Saa:MessageCreator>
<Saa:MessageContext>Original</Saa:MessageContext>
<Saa:MessageNature>Financial</Saa:MessageNature>
</Saa:InterfaceInfo>
<Saa:NetworkInfo>
<Saa:Priority>Normal</Saa:Priority>
<Saa:IsPossibleDuplicate>false</Saa:IsPossibleDuplicate>
<Saa:Service>swift.generic.fast!x</Saa:Service>
<Saa:Network>SWIFTNet</Saa:Network>
<Saa:SessionNr>006100</Saa:SessionNr>
<Saa:SeqNr>000000116</Saa:SeqNr>
<Saa:SWIFTNetNetworkInfo>
<Saa:RequestType>camt.007.002.02</Saa:RequestType>
<Saa:SNLRef>SNL02021-2021-01-01T12:08:36.8976.000007Z</Saa:SNLRef>
<Saa:Reference>5d8c33e0-5ae4-4509-b6dc-813a2eafa1ef</Saa:Reference>
<Saa:SnFQueueName>spxainjj_file!x</Saa:SnFQueueName>
<Saa:SnFInputTime>0140:2021-01-01T12:10:10</Saa:SnFInputTime>
<Saa:SnFDeliveryTime>2021-01-01T12:10:10Z</Saa:SnFDeliveryTime>
<Saa:TransferRef>SNL02013D11330601738010042C</Saa:TransferRef>
<Saa:StoredTransferRef>SNL02013D11330601714009891S</Saa:StoredTransferRef>
<Saa:FileStartTime>20210101173858</Saa:FileStartTime>
<Saa:FileEndTime>20210101173926</Saa:FileEndTime>
</Saa:SWIFTNetNetworkInfo>
</Saa:NetworkInfo>
<Saa:SecurityInfo>
<Saa:SWIFTNetSecurityInfo>
<Saa:SignerDN>cn=fin1spxainjj,o=spxainjj,o=swift</Saa:SignerDN>
<Saa:NRTType>SvcOpt</Saa:NRTType>
<Saa:SignatureResult>Success</Saa:SignatureResult>
<Saa:SignatureValue>
    <SwInt:RequestPayload type="swift.fileact.secsecuredata">
<Sw:FileRequestHeader>
<SwInt:Requestor>o=spxainjj,o=swift</SwInt:Requestor>
<SwInt:Responder>o=spxainjj,o=swift</SwInt:Responder>
<SwInt:Service>swift.generic.fast!x</SwInt:Service>
```

```
<SwInt:RequestType>camt.007.002.02</SwInt:RequestType>
<SwInt:Priority>Normal</SwInt:Priority>
<SwInt:RequestRef>AFT_FA_test1</SwInt:RequestRef>
</Sw:FileRequestHeader>
<Sw:TransferRef>SNL02013D11330601714009891</Sw:TransferRef>
<Sw:Digest>
<Sw:DigestAlgorithm>SHA-1</Sw:DigestAlgorithm>
<Sw:DigestValue>5iSXh3GDOdNT4cUGaOFeMhO6/og=</Sw:DigestValue>
</Sw:Digest>
</SwInt:RequestPayload>
<SwSec:Crypto>
<SwSec:CryptoInternal>

<SwSec:CipherKey>UEVNRkBQcm9jLVR5cGU6IDQsTUIDLU9OTFkNCkNvbnRlbnQtRG9tYWluOiBS
Rkm4MjINCKVudHJ1c3RGaWxILVZlcnPb246IDluMA0KT3JpZ2luYXRvc1ETjogY249ZmluMXNweG
FpbmpqLG89c3B4YWluamosbz1zd2lmdA0KT3JpZy1TTjogMTMwNzEzNjk2Mw0KTUIDLUluZm86IFNI
QTI1NiwgUINBLA0KIFpqbmZHMWJLR3RIS25Ycnl6RHBaQ0dySCtNc0pXbDNvWjNjVHRxWWdZUUIj
WXEwMvp5YmY2ZGhPSW8xSE1SSkcNCiBON3JicW10ckdYU01idFBGajJjZytLU2FrUFNxNytjUjhvV
2J0SW00WjBrTGx5UVkwM2FNMVVpbHBwNEdJd3hUDQogamF4RmtTNWZvT0R4KzJczNJcGE3Q
VBkL2tsTy9pcTNDSGYzeFNFdEp4REZLNGJ4WHNuRXFNT0tiVG12VzJOZw0KIDd5bnlyN3R2Wk0w
azBsTzQ5aUzrUVILUk1wTGVyS3FaYzZtYktMDDBRENiMDU5TDVYV0I4VFwREhlazJOaFkNCiB
WaDNTeXF1NFR4UFU5bVNjcpaRGdhYS9BaTVMS2F6QzM0aEpjRmplYjlPVm9leE9BM25EWEkxQ
yt5OGIVVWhpYDQogalZVZFp3a2tpc2NhWWcrYnhaaHV2dz09DQo=</SwSec:CipherKey>

<SwSec:CryptoProtocol>4.0:3.0</SwSec:CryptoProtocol>
</SwSec:CryptoInternal>
<SwSec:CryptoInfo>
<SwSec:MemberRef>RequestPayload</SwSec:MemberRef>
<SwSec:SignDN>cn=fin1spxainjj,o=spxainjj,o=swift</SwSec:SignDN>
</SwSec:CryptoInfo>
</SwSec:Crypto>
</Saa:SignatureValue>
<Saa:FileDigestAlgorithm>SHA-1</Saa:FileDigestAlgorithm>
<Saa:FileDigestValue>5iSXh3GDOdNT4cUGaOFeMhO6/og=</Saa:FileDigestValue>
</Saa:SWIFTNetSecurityInfo>
</Saa:SecurityInfo>
<Saa:FileLogicalName>AFT_FA.JPG</Saa:FileLogicalName>
</Saa:Message>
</Saa:Header>
<Saa:Body>AFT_FA.JPG.SNL02013D11330601738010042C.ath</Saa:Body>
</Saa:DataPDU>
```

## 6.11 Delivery Notification message in XML V2 for FileAct

```
_004279_____<?xml version="1.0" encoding="UTF-8" ?>
<Saa:DataPDU xmlns:Saa="urn:swift:saa:xsd:saa.2.0" xmlns:Sw="urn:swift:snl:ns.Sw"
  xmlns:SwInt="urn:swift:snl:ns.SwInt" xmlns:SwGbl="urn:swift:snl:ns.SwGbl"
  xmlns:SwSec="urn:swift:snl:ns.SwSec">
  <Saa:Revision>2.0.7</Saa:Revision>
  <Saa:Header>
    <Saa:DeliveryNotification>
      <Saa:ReconciliationInfo>SNL02013D11330601714009891C</Saa:ReconciliationInfo>
      <Saa:ReceiverDeliveryStatus>RcvDelivered</Saa:ReceiverDeliveryStatus>
      <Saa:MessageIdentifier>Delivery Notification</Saa:MessageIdentifier>
      <Saa:InterfaceInfo>
        <Saa:MessageCreator>SWIFTNetInterface</Saa:MessageCreator>
        <Saa:MessageContext>Original</Saa:MessageContext>
        <Saa:MessageNature>Network</Saa:MessageNature>
      </Saa:InterfaceInfo>
      <Saa:NetworkInfo>
        <Saa:Priority>Normal</Saa:Priority>
        <Saa:IsPossibleDuplicate>false</Saa:IsPossibleDuplicate>
        <Saa:Network>SWIFTNet</Saa:Network>
        <Saa:SessionNr>006079</Saa:SessionNr>
        <Saa:SeqNr>000000557</Saa:SeqNr>
      </Saa:NetworkInfo>
      </Saa:DeliveryNotification>
    </Saa:Header>
    <Saa:Body>
      <Sw:NotifySnFRequestHandle>
        <Sw:SnFRef>SNL02013D11330601714009891C</Sw:SnFRef>
        <Sw:SnFRefType>FileAct</Sw:SnFRefType>
        <Sw:AcceptStatus>Accepted</Sw:AcceptStatus>
        <Sw:AckSwiftTime>2021-01-01T12:10:44Z</Sw:AckSwiftTime>
      </Sw:NotifySnFRequestHandle>
    </Saa:Body>
  </Saa:DataPDU>
```

\*\*\* End of Document \*\*\*