SWIFT TRAINING

ADVANCED

SWIFT

- SWIFT Basics
- SWIFT Message Structure
- SWIFT Ack/Nack
- SWIFT MT Messages
- SWIFTNET Protocols
- SWIFTNET Security
- SWIFTNET GUI
- SWIFT Topology Structures
- SWIFT Partners
- SWIFT Systems
- SWIFT Authentication & Security
- SWIFT Reference Directories
- SWIFT & ISO 20022
- SWIFT Cost

What is SWIFT?

Society for Worldwide Interbank Financial Telecommunication

SWIFT provides a network that enables financial institutions worldwide to send and receive information about financial transaction in a secured, standardized and reliable environment. It is a cooperative society formed under Belgian law.

SWIFT first went live in 1977 and since then it has been the most widely used network by all major banks and financial institutions and now it links 11,000 financial institutions in more than 200 countries.

SWIFT does not facilitate in making the payment, but only provides a secured network to exchange messages related to the payment transaction. The payment messages sent through SWIFT will be settled through the Correspondent relationship maintained between the banks exchanging the messages.

SWIFT closely works with many international organisations which defines the message formats and standards. SWIFT is also a Registration Authority (RA) for ISO standards like ISO 9362, ISO 10383, ISO 13616, ISO 15022, ISO 20022

Who uses SWIFT?

SWIFT is not just restricted to the banks and financial institutions. SWIFT network is also used by Corporates.

Financial institutions using SWIFT network are

- ✓ Trading institutions,
- ✓ Money brokers,
- ✓ securities dealers,
- ✓ Investment Management institutions,
- ✓ Clearing system and depositories,
- ✓ Recognised exchanges,
- ✓ Trust and fiduciary service companies,
- ✓ Subsidiary providers of custody and nominees,
- ✓ Treasury counterparties,
- ✓ Treasury Service providers

Business Identifier Codes (BIC)

- BIC stands for Business Identifier Code (previously called as Bank Identifier Code), used to identify the business parties.
- It is defined by ISO 9362:2014.
- The standard specifies the element and structure of a universal identifier for financial and non-financial institutions to facilitate an automated processing of information.
- SWIFT as a RA (Registration Authority), issues the BIC to its participants. This uniquely identifies the party.
- The BIC is an 8 character code, defined as 'business party identifier', consisting of the business party prefix (4 alphanumeric), the country code as defined in ISO 3166-1 (2 alphabetic), and the business party suffix (2 alphanumeric).
- The branch identifier is a 3 character optional element that can supplement the 8 character BIC, used to identify specific locations, departments, services or units of the same business party.

Business Identifier Codes (BIC)

Standard Revision 2014 :

- ISO 9362 BIC standard has been revised in 2014, to be implemented before Nov 2018
- During a transition period starting in January 2015 and ending in November 2018, the existing conventions will continue to be respected.
- This allows users of the BIC to investigate potential impact and opportunities as well as to take the appropriate measures to update the back-office systems where applicable and at their own pace during this period.
- In the previous version, when an organization that is not connected to SWIFT is activated on the SWIFT network, its existing non-connected BIC (with a “1” in the eight position) is deleted and a new BIC is created with a different character in the 8th position of the BIC.
- Another consequence of the previous convention is that SWIFT users have been relying on the eight position of the BIC to identify whether they could communicate through SWIFT with other organizations.
- The BIC assigned to non-financial institutions were called as Business Entity Identifier (BEI).
- Early before the standard revision 2014, BEI was a term used to denote the identifier specifically to the business entities. Post revision, they indicate the same.

Business Identifier Codes (BIC)

Changes done :

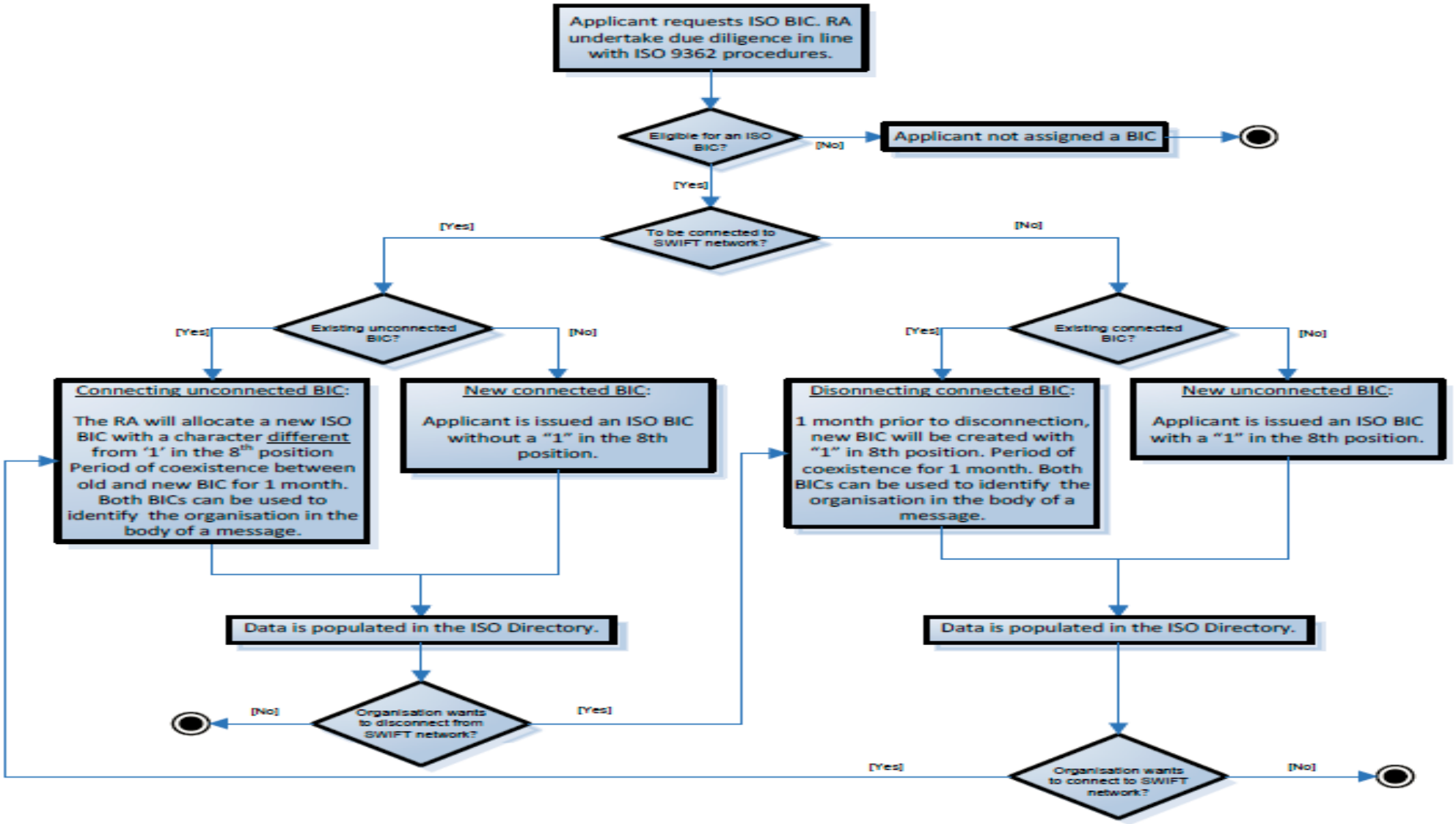
- BIC owners are responsible for the maintenance of the data related to their BICs and must keep it up-to-date and confirm the accuracy at least once a year
- The SWIFTRef BIC Plus directory contains enriched data and replaces BIC directory that will be decommissioned in November 2018
- After 18 November 2018, SWIFT will no longer issue BICs with "1" in position 8
- After 18 November 2018, a change of connectivity status will no longer systematically imply the expiry and creation of a new BIC

NOT changed:

- Existing connected and non-connected BICs are not changed
- Structure of the BIC is not changed
- There will always be connected and non-connected BICs

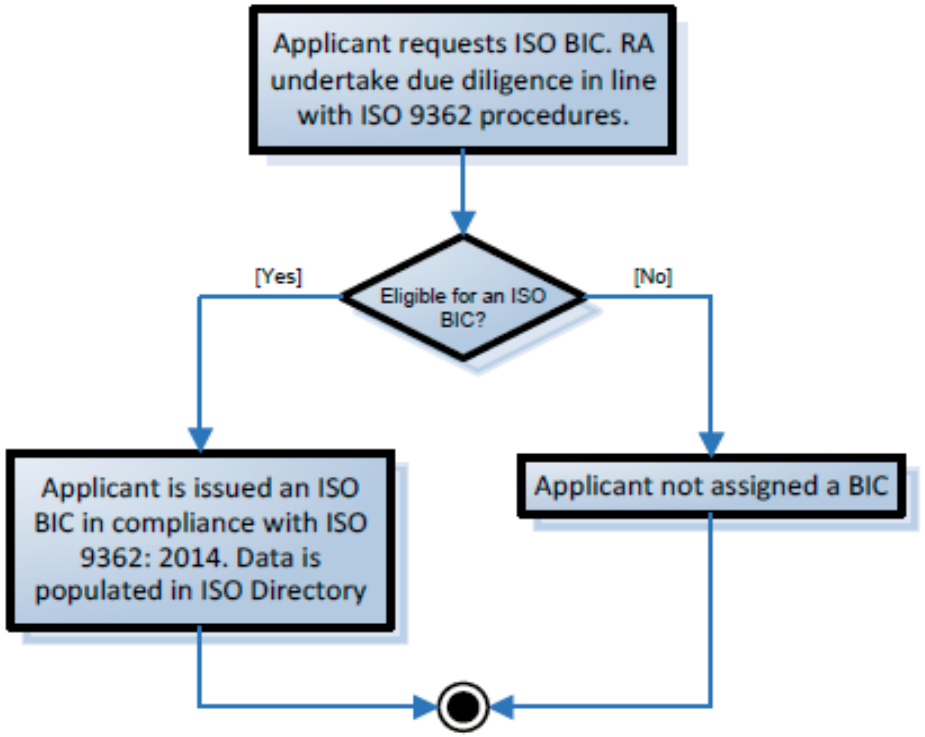
Business Identifier Codes (BIC)

Transition phase process flow for the Registration Authority

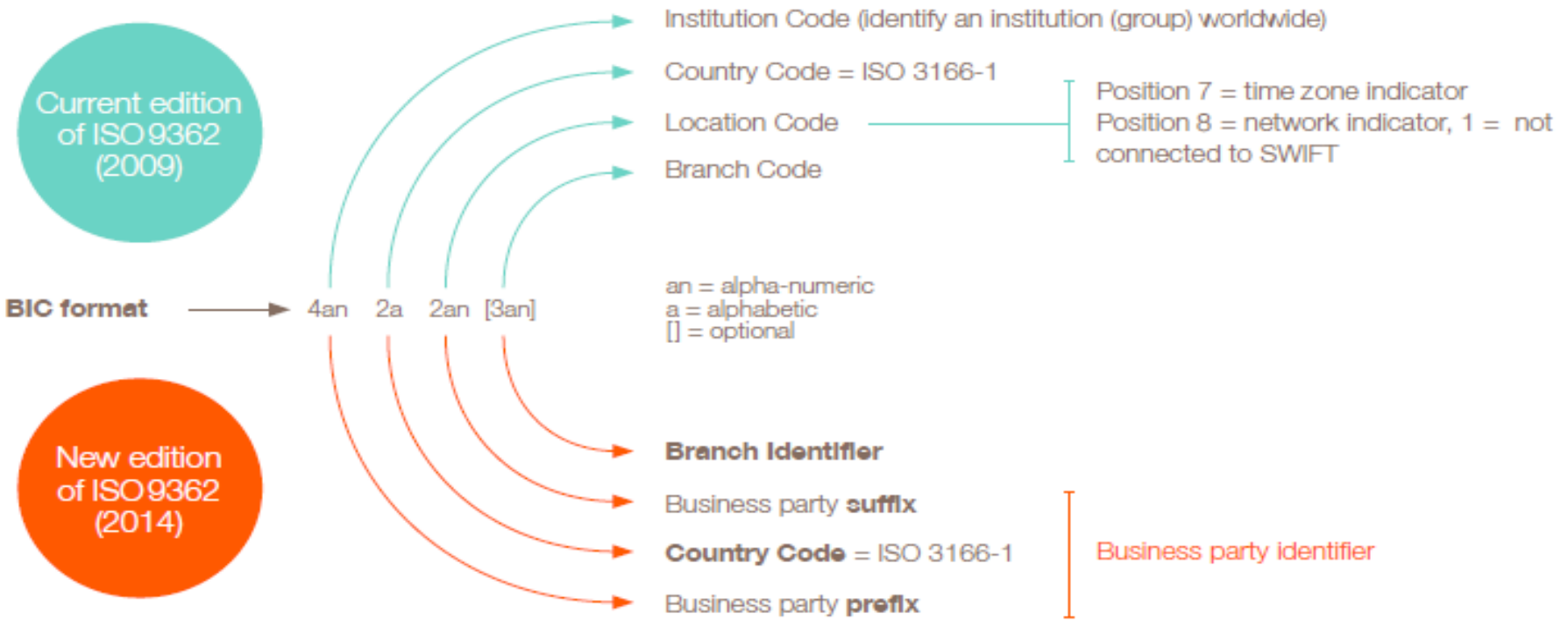


Business Identifier Codes (BIC)

After Transition, the below will be the process flow for RA



Business Identifier Codes (BIC)



SWIFT MESSAGE STRUCTURE

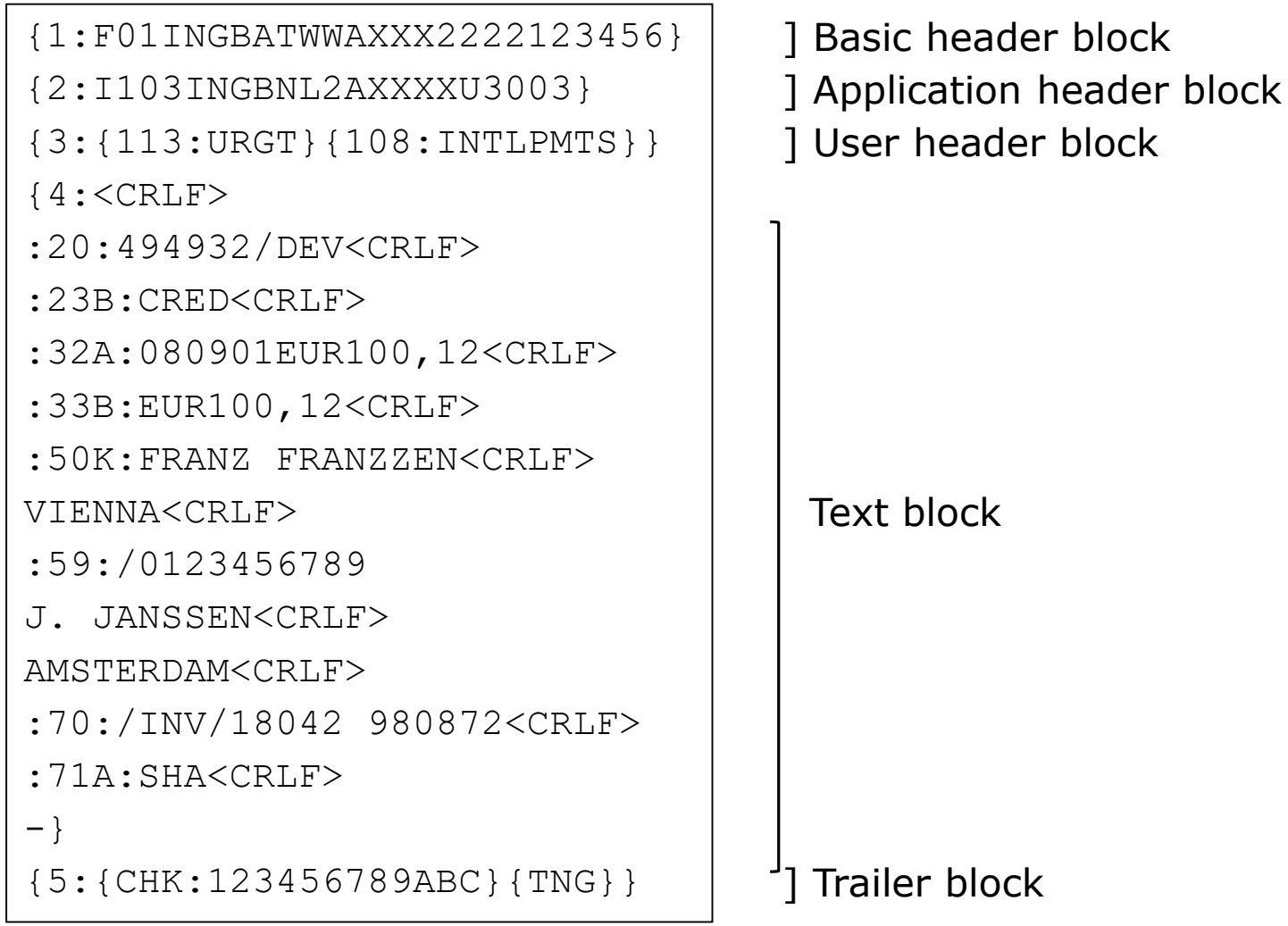
Location, Date, Author

SWIFT MESSAGE STRUCTURE

SWIFT message structure comprises of the below 5 blocks

❑ {1: Basic Header Block}	Mandatory
❑ {2: Application Header Block}	Mandatory
❑ {3: User Header Block}	Mandatory (after SSR 2018)
❑ {4: Text Block or body}	Mandatory
❑ {5: Trailer Block}	Optional

SWIFT MESSAGE STRUCTURE



SWIFT MESSAGE STRUCTURE

{1: Basic Header Block}

The S.W.I.F.T. structure is as follows:

```
{1:  F  01  BANKBEBBAXXX  2222  123456 }
  (a) (b) (c)      (d)       (e)    (f)    (g)
```


SWIFT MESSAGE STRUCTURE

{1: Basic Header Block}

- (a) {1: – Identifies that it is a "Basic Header Block"
- (b) F – Indicates the Application Id – in this case, FIN
  - [**F = FIN, A = GPA or L = GPA (logins, etc)**
- (C) 01 – Indicates the Service Id
  - 01 = FIN ; 21 = Acknowledgement (ACK) or Negative Acknowledgement (NAK)
- (d) BANKBEBBAXXX – The Logical Terminal Address – which is typically the BIC (8 characters) + Logical Terminal Code (A) + Branch Code (XXX)
- (e) 2222 – Session Number – Added by the CBT, padded with zeroes
- (f) 123456 – Sequence Number – Added by the CBT, padded with zeroes
- (g) } – Indicates the end of the Basic Header Block

SWIFT MESSAGE STRUCTURE

{2: Application Header Block}

Input to SWIFT :

The application header has a different format depending on whether it is being sent to or from SWIFT.

The Input (to S.W.I.F.T.) structure is as follows:

{2:	I	103	BANKDEFFXXXX	U	3	003}
(a)	(b)	(c)	(d)	(e)	(f)	(g) (h)

Fixed Length, continuous with no field separators from user to SWIFT.

SWIFT MESSAGE STRUCTURE

{2: Application Header Block}

- (a) {2: – Indicates the start of the Application Header block
- (b) I – Indicates it is an input to SWIFT (i.e. the Sender) ; O – Indicates Output to SWIFT.
- (c) 103 – Message type – in this case, an MT103
- (d) BANKDEFFXXXX – The recipients BIC, consisting of the BIC (8 chars)+ Recipients Logical Terminal Code (X) + Recipients Branch Code (XXX)
- (e) U – Message Priority:
  - U – Urgent
  - N – Normal
  - S – System
- (f) 3 – Delivery Monitoring
  1 = Non Delivery Warning (MT010)
  2 = Delivery Notification (MT011)
  3 = Both Valid = U1 or U3, N2 or just N
- (g) 003 – Non-delivery notification period – when a non delivery notification is generated Valid for U = 003 (15 minutes) Valid for N = 020 (100 minutes)
- (h) } – Indicated the end of the Application Header Block

SWIFT MESSAGE STRUCTURE

{2: Application Header Block}

Output from SWIFT :

The application header has a different format depending on whether it is being sent to or from SWIFT.

The Input (to S.W.I.F.T.) structure is as follows:

{2: O 103 1200970103 BANKBEBBAXXX 2222123456 970103 1201 N }

(a) (b) (c) (d) (e) (f) (g) (h) (i)

Fixed Length, continuous with no field separators from user to SWIFT.

SWIFT MESSAGE STRUCTURE

{2: Application Header Block}

- (a) Block ID - always '2:'
- (b) O = Output
- (c) Message Type
- (d) Input time and date with respect to the Sender
- (e) Senders address
- (f) Session id and sequence number
- (g) Output date and time with respect to Receiver
- (h) Message priority
- (i) } – Indicated the end of the Application Header Block

SWIFT MESSAGE STRUCTURE

{3: User Header Block}

This has the following structure:

```
{3:   {113:xxxx}   {108:abcdefgh12345678}  }
(a)    (b)              (c)
```

This is an optional block and is similar in structure to system messages.

a) Block ID - always '3:`

b) Optional banking priority code

c) Message User Reference MUR - 16 characters. This is returned in the ACK and used by applications for reconciliation with ACK

SWIFT MESSAGE STRUCTURE

{3: User Header Block}

The various validation flags that can be contained in Block 3 are as below :

119 – In case of MT202COV, this contains the value COV in case of a cover message
In case of MT103+, this field contains the code STP
In case of MT103 REMIT, field contains the code REMIT

Example - {3:{119: STP}}
{3:{119:COV}}

As per the 2018 (proposed change), this block will also contain.

111 – Service Type Identifier – Mandatory for category 1 & 2 messages.
121 – Unique End to End Transaction Reference (UETR) – Mandatory for Category 1 & 2 messages and including MT103 mandatory in MT 103 after 2018 changes.
The above are used in SWIFT-GPI CUG, to track payments based on the UETR.

SWIFT MESSAGE STRUCTURE

{4: Text Block or body}

Block 4 constitutes the body of the message which is as depicted :

{4:<CrLf>
 :20:PAYREFTB54302<CrLf>
 :32A:970103BEF1000000,<CrLf>
 :50:CUSTOMER NAME<CrLf>
 AND ADDRESS<CrLf>
 :59:/123-456-789<CrLf>
 BENEFICIARY NAME<CrLf>
 AND ADDRESS<CrLf>
-}

SWIFT MESSAGE STRUCTURE

{5: Trailer Block}

A message always ends in a trailer with the following format:

{5: {MAC:12345678} {CHK:123456789ABC}

It contains a number of fields that are denoted by keywords such as:

- MAC: Message Authentication Code calculated based on the entire contents of the message.
- CHK: Checksum calculated for all message types
- PDE: Possible Duplicate Emission added in case the user has sent the message previously
- PDM: Possible Duplicate Message added by SWIFT if in the case a message has been transmitted previously.
- DLM: Added by SWIFT if an urgent message has not been delivered within 15 minutes or a normal message within 100 minutes.
- ISO 7775, 15022, 20022 history and current standards

SWIFT ACK / NACK

Location, Date, Author

SWIFT ACK

ACK is a positive acknowledgement message received from the SWIFT network.

{1:F21DEUTDEFFAXXX1234567890}{4:{177:1508052359}{451:0}{108:123ADFJ34}}

- {1: Indicates that its the Basic Header Block
- F21 Indicates that it is an (Acknowledgement) ACK/NAK message
- DEUTDEFFXXX – Receiver BIC
- 1234 – Session ID
- 567890 – Sequence ID
- {4: – Text Block
- {177: – Date Tag
- 150805 – Local date of the submitting user on to the SWIFT network
- 2359 – Local time of the submitting user on to the SWIFT network
- } – End of Date Tag
- {451: – Accept / Reject Tag
- 0 – Accepted by the SWIFT Network
- } – End of Accept / Reject Tag
- {108: – Message User Reference (MUR)
- 123ADFJ34 – Sent reference in the original outbound message
- } – End of MUR Tag
- } – End of Acknowledgement

SWIFT NACK

NACK is the negative acknowledgement.

{1:F21DEUTDEFFAXXX1234567890}{4:{177:1508052359}{451:1}{405:T27}{108:123ADFJ34}}

- {1: Indicates that its the Basic Header Block
- F21 Indicates that it is an (Acknowledgement) ACK/NAK message
- DEUTDEFFXXX – Receiver BIC
- 1234 – Session ID
- 567890 – Sequence ID
- {4: – Text Block
- {177: – Date Tag
- 150805 – Local date of the submitting user on to the SWIFT network
- 2359 – Local time of the submitting user on to the SWIFT network
- } – End of Date Tag
- {451: – Accept / Reject Tag
- 1 – Rejected by the SWIFT Network
- } – End of Accept / Reject Tag
- {405: – Reject Reason
- T27 – FIN Error Code –
- } – End of Reject Reason
- {108: – Message User Reference (MUR)
- 123ADFJ34 – Sent reference in the original outbound message
- } – End of MUR Tag
- } – End of Acknowledgement

- In SWIFT NACK or NAK when the Accept / Reject Tag {451:1} equals 1, indicating the message has been rejected by SWIFT, it then includes a tag indicating the Reject reason {405:T27}

SWIFT MT MESSAGES

Location, Date, Author

MT MESSAGES

SWIFT MT messages are defined in categories. The category is identified by the first character of the message ID. The below are the SWIFT message categories

- MT1nn Customer Payments
- MT2nn Financial Institution Transfers
- MT3nn FX, Money Market & Derivatives
- MT4nn Collections and cash letters
- MT5nn Securities Markets
- MT6nn Precious Metals & Syndications
- MT7nn Documentary Credits & Guarantees
- MT8nn Traveller’s Cheques
- MT9nn Cash Management & Customer Status

SWIFT MT MESSAGES

SWIFT messages are identified in a consistent manner.

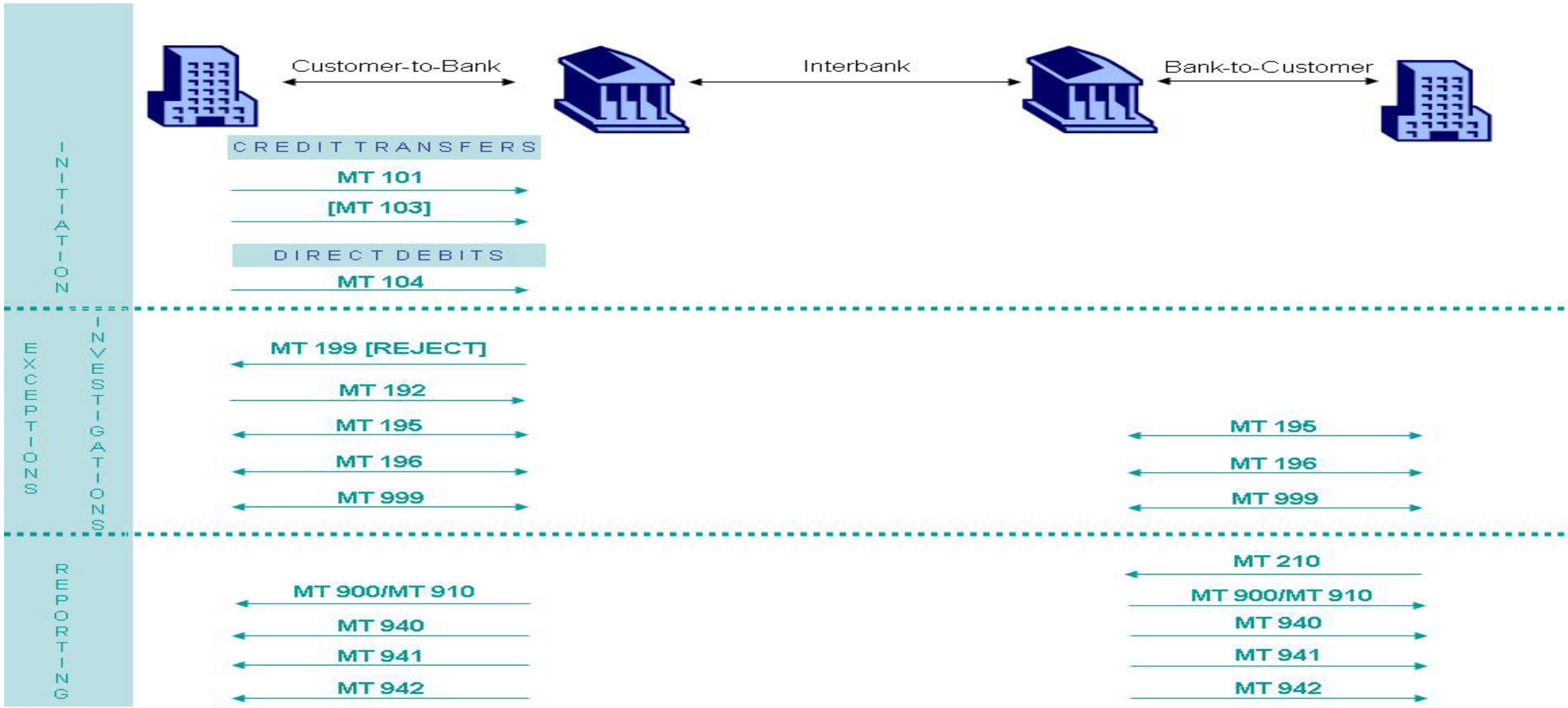
- They all start with literal “MT” which denotes message type. This is then followed by a three digit number.
- The first digit represents a category.
- A category denotes messages grouped together because they all relate to particular financial instruments or services.

The message type is composed of three digits, generally defined as Message Structure

- Category
  - Usually describes, at a general level, the underlying business function of the message. For example: Category 1 = Customer Payments and Cheques.
- Group
  - Describes the function of the message within the specified category. For example: Group 0 = Instructions (Category 1 and 2); Group 1 = Pre-advices (Category 1 and 2); Group 9 = Queries (all Categories).
- Type
  - Describes the specific function. Example: 101 = Request for Transfer.

- MT 1 & 2 series messages are used in Payments. 9 series messages are used in reports and statements.

SWIFT MT MESSAGES



SWIFT MT MESSAGES

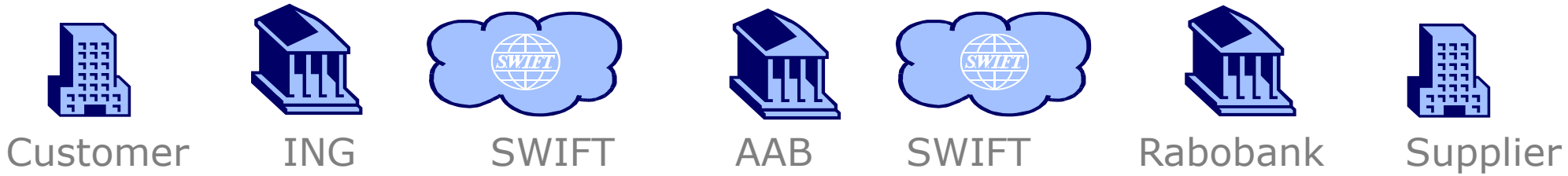
SWIFT FIN MT 1 SERIES MESSAGES

- MT101
- MT102 STP
- MT103
- MT103 REMIT
- MT103 STP
- MT104 DIRECT DEBIT AND REQUEST FOR DIRECT TRANSFER
- MT105 – EDIFACT ENVELOP
- MT107 GENERAL DIRECT DEBIT MESSAGE
- MT110 – ADVICE OF CHEQUE
- MT111 – REQUEST FOR STOP PAYMENT OF CHEQUES
- MT112 – STATUS OF A REQUEST FOR STOP PAYMENT OF CHEQUES
- MT190 – ADVICE OF CHARGES, INTEREST AND OTHER ADJUSTMENTS
- MT191 – REQUEST FOR ADVICE OF CHARGES, INTEREST AND OTHER ADJUSTMENTS
- MT192 – REQUEST FOR CANCELLATION
- MT195 – QUERIES
- MT196 – ANSWERS
- MT198 – PROPRIETARY MESSAGES
- MT199 – FREE FORMAT MESSAGES

SWIFT MT MESSAGES

SWIFT FIN MT 101

- It is a request message, instructing a bank to make funds transfer.
- This message is sent by a financial institution on behalf of a non-financial institution account owner, to an account servicing financial institution or to a forwarding financial institution for further transmission to the account servicing institution.
- Sent by a non-financial institution account owner, or a party authorised by the account owner, to an account servicing financial institution or to a forwarding financial institution for further transmission to the account servicing institution.
- It is used to move funds:
  - From the ordering customer's account serviced at the receiving financial institution (or at the account servicing institution),
  - From an account owned by the ordering customer which the instructing party has explicit authority to debit, e.g. a subsidiary account.
- It requires registration in Message User Group to send out this message.
- MT101 can be used to order the movement of funds:
  - Between ordering customer accounts.
  - In favour of a third party, either domestically or internationally.
- Customer of ING wants to transfer an EURO amount from his AAB-account to Supplier (Banking with Rabobank)
  - AAB holds an EURO account with Rabobank



- Customer sends in his request to ING
- ING sends an MT101 requesting to debit the EURO account of the Customer at AAB
- AAB sends an MT103 requesting to debit its EURO account at Rabobank and credit the account of the supplier at Rabobank

SWIFT MT MESSAGES

MT 101

Status	Tag	Field Name	Content/Options
Mandatory Sequence A General Information			
M	20	Sender's Reference	16x
O	21R	Customer Specified Reference	16x
M	28D	Message Index/Total	5n/5n
O	50a	Instructing Party	C or L
O	50a	Ordering Customer	F, G, or H
O	52a	Account Servicing Institution	A or C
O	51A	Sending Institution	[/1!a][/34x] 4!a2!a2!c[3!c]
M	30	Requested Execution Date	6!n
O	25	Authorisation	35x

SWIFT MT MESSAGES

MT 101

-----> **Mandatory Repetitive Sequence B Transaction Details**			
M	21	Transaction Reference	16x
O	21F	F/X Deal Reference	16x
----->			
O	23E	Instruction Code	4!c[/30x]
-----|			
M	32B	Currency/Transaction Amount	3!a15d
O	50a	Instructing Party	C or L
O	50a	Ordering Customer	F, G, or H
O	52a	Account Servicing Institution	A or C
O	56a	Intermediary	A, C, or D
O	57a	Account With Institution	A, C, or D
M	59a	Beneficiary	No letter option, A, or F
O	70	Remittance Information	4*35x
O	77B	Regulatory Reporting	3*35x
O	33B	Currency/Original Ordered Amount	3!a15d
M	71A	Details of Charges	3!a
O	25A	Charges Account	/34x
O	36	Exchange Rate	12d
-----| **End of Sequence B Transaction Details**			
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

SWIFT FIN MT 102

- This message is sent by or on behalf of the financial institution of the ordering customer(s) to another financial institution for payment to the beneficiary customer.
- It requests the Receiver to credit the beneficiary customer(s) directly or indirectly through a clearing mechanism or another financial institution, or to issue a cheque to the beneficiary.
- This message is used to convey multiple payment instructions between financial institutions for clean payments. Its use is subject to bilateral/multilateral agreements between Sender and Receiver.
- Amongst other things, these bilateral agreements cover the transaction amount limits, the currencies accepted and their settlement. The multiple payments checklist included below is recommended as a guide for institutions in the setup of their agreements.

The MT 102 consists of three sequences:

- Sequence A General Information is a single occurrence sequence and contains information which applies to all individual transactions described in sequence B.
- Sequence B Transaction Details is a repetitive sequence. Each occurrence is used to provide details of one individual transaction.
- Sequence C Settlement Details is a single occurrence sequence and contains information about the settlement.

SWIFT MT MESSAGES

MT 102

Status	Tag	Field Name	Content/Options
Mandatory Sequence A General Information			
M	20	File Reference	16x
M	23	Bank Operation Code	16x
O	51A	Sending Institution	[/1!a][/34x] 4!a2!a2!c[3!c]
O	50a	Ordering Customer	A, F, or K
O	52a	Ordering Institution	A, B, or C
O	26T	Transaction Type Code	3!c
O	77B	Regulatory Reporting	3*35x
O	71A	Details of Charges	3!a
O	36	Exchange Rate	12d
End of Sequence A General Information			

SWIFT MT MESSAGES

MT 102

-----> Mandatory Repetitive Sequence B Transaction Details			
M	21	Transaction Reference	16x
M	32B	Transaction Amount	3!a15d
O	50a	Ordering Customer	A, F, or K
O	52a	Ordering Institution	A, B, or C
O	57a	Account With Institution	A or C
M	59a	Beneficiary Customer	No letter option, A, or F
O	70	Remittance Information	4*35x
O	26T	Transaction Type Code	3!c
O	77B	Regulatory Reporting	3*35x
O	33B	Currency/Instructed Amount	3!a15d
O	71A	Details of Charges	3!a
----->			
O	71F	Sender's Charges	3!a15d
-----|			
O	71G	Receiver's Charges	3!a15d
O	36	Exchange Rate	12d
-----| End of Sequence B Transaction Details			

SWIFT MT MESSAGES

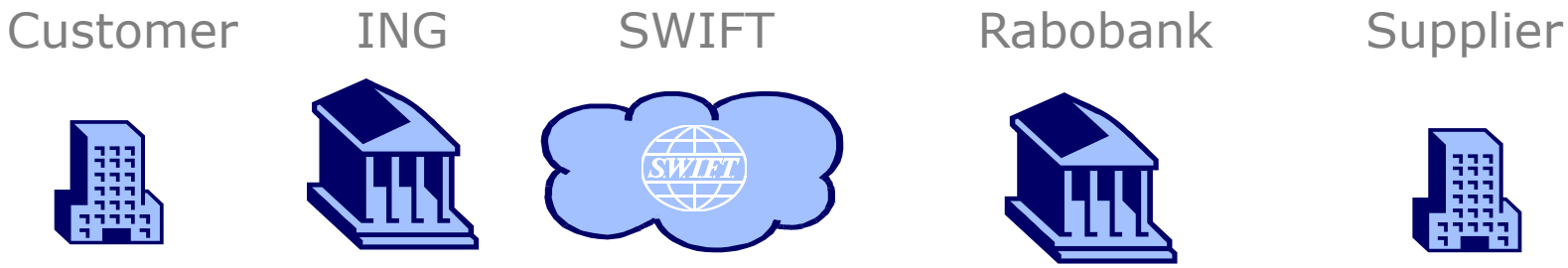
MT 102

Mandatory Sequence C Settlement Details			
M	32A	Value Date, Currency Code, Amount	6!n3!a15d
O	19	Sum of Amounts	17d
O	71G	Sum of Receiver's Charges	3!a15d
----->			
O	13C	Time Indication	/8c/4!n1!x4!n
-----|			
O	53a	Sender's Correspondent	A or C
O	54A	Receiver's Correspondent	[/1!a][/34x] 4!a2!a2!c[3!c]
O	72	Sender to Receiver Information	6*35x
End of Sequence C Settlement Details			
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

SWIFT FIN MT 103

- This message type is sent by or on behalf of the Financial Institution of the Ordering Customer, directly or through correspondent, to the Financial Institution of the Beneficiary Customer.
- It is used to convey a funds transfer instruction in which the Ordering Customer or the Beneficiary Customer, or both, are Non-Financial Institutions from the perspective of the Sender.
- For the purpose of Straight Through Processing (STP) the MT103+ is available; same structure as the normal MT103 but use of specific tags is limited or even not allowed.
- Example when there is a Direct Account Relationship between first and last Financial Institution.
  - Customer (banking with ING) wants to transfer 5.032,19 EURO to their Supplier (Banking with Rabobank)
  - ING holds an EURO account with Rabobank (Direct Account Relationship)



  - ING sends an MT103 requesting to debit its EURO account at Rabobank and credit the account of the supplier at Rabobank

SWIFT MT MESSAGES

SWIFT FIN MT 103

MT 103

Citibank Bombay

Receiver - CB NY
Sender - CB Bom
100 02

20:Ref No

32A:Date/Curr/Amt

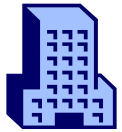
50: Remitter

59:Beneficiary

70:Paymt Details

71A:Charges

Citibank New York



Customer

(Remitter)

Beneficiary

SWIFT MT MESSAGES

SWIFT FIN MT 103

MT 103 Single Customer Credit Transfer

Status	Tag	Field Name	Content/Options
M	20	Sender's Reference	16x
----->			
O	13C	Time Indication	/8c/4!n1!x4!n
-----|			
M	23B	Bank Operation Code	4!c
----->			
O	23E	Instruction Code	4!c[/30x]
-----|			
O	26T	Transaction Type Code	3!c
M	32A	Value Date/Currency/Interbank Settled Amount	6!n3!a15d
O	33B	Currency/Instructed Amount	3!a15d
O	36	Exchange Rate	12d
M	50a	Ordering Customer	A, F, or K
O	51A	Sending Institution	[/1!a][/34x] 4!a2!a2!c[3!c]
O	52a	Ordering Institution	A or D
O	53a	Sender's Correspondent	A, B, or D
O	54a	Receiver's Correspondent	A, B, or D
O	55a	Third Reimbursement Institution	A, B, or D
O	56a	Intermediary Institution	A, C, or D
O	57a	Account With Institution	A, B, C, or D
M	59a	Beneficiary Customer	No letter option, A, or F
O	70	Remittance Information	4*35x
M	71A	Details of Charges	3!a

SWIFT MT MESSAGES

SWIFT FIN MT 103

----->			
O	71F	Sender's Charges	3!a15d
----|			
O	71G	Receiver's Charges	3!a15d
O	72	Sender to Receiver Information	6*35x
O	77B	Regulatory Reporting	3*35x
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

- **SWIFT FIN MT103+**

- The MT 103 STP is a general use message, that is, no registration in a Message User Group is necessary to send and receive this message.
- It allows the exchange of single customer credit transfers using a restricted set of fields and format options of the core MT 103 to make it straight through processable.
- The MT 103 STP is a compatible subset of the core MT 103 that is documented separately.
- The differences with the core MT 103 are:
  - appropriate MT 103 STP format validation is triggered by the code STP in the validation flag field 119 ({3:{119: STP}}) of the user header of the message (block 3)
  - fields 52, 54, 55, 56 and 57 may only be used with letter option A
  - field 53 may only be used with letter options A and B
  - field 51A is not used in MT 103 STP. This message may only be used on the FIN SWIFT network since it requires special validation
  - field 23E may only contain codes CORT, INTC, SDVA and REPA
  - if field 53a is used with option B, Party Identifier must be used
  - subfield 1 (Account) of field 59a is always mandatory
  - field 72, code INS must be followed by a valid financial institution BIC
  - field 72, codes REJT/RETN must not be used
  - field 72 must not include ERI information

SWIFT MT MESSAGES

SWIFT FIN MT 103+

MT 103 STP Single Customer Credit Transfer

Status	Tag	Field Name	Content/Options
M	20	Sender's Reference	16x
----->			
O	13C	Time Indication	/8c/4!n1!x4!n
-----|			
M	23B	Bank Operation Code	4!c
----->			
O	23E	Instruction Code	4!c[/30x]
-----|			
O	26T	Transaction Type Code	3!c
M	32A	Value Date/Currency/Interbank Settled Amount	6!n3!a15d
O	33B	Currency/Instructed Amount	3!a15d
O	36	Exchange Rate	12d
M	50a	Ordering Customer	A, F, or K
O	52A	Ordering Institution	[/1!a][/34x] 4!a2!a2!c[3!c]
O	53a	Sender's Correspondent	A or B
O	54A	Receiver's Correspondent	[/1!a][/34x] 4!a2!a2!c[3!c]
O	55A	Third Reimbursement Institution	[/1!a][/34x] 4!a2!a2!c[3!c]
O	56A	Intermediary Institution	[/1!a][/34x] 4!a2!a2!c[3!c]
O	57A	Account With Institution	[/1!a][/34x] 4!a2!a2!c[3!c]
M	59a	Beneficiary Customer	No letter option, A, or F
O	70	Remittance Information	4*35x
M	71A	Details of Charges	3!a
---->			

SWIFT MT MESSAGES

SWIFT FIN MT 103+

O	71F	Sender's Charges	3!a15d
----|			
O	71G	Receiver's Charges	3!a15d
O	72	Sender to Receiver Information	6*35x
O	77B	Regulatory Reporting	3*35x
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

DIFFERENCE BETWEEN MT101 & MT103

MT101	MT103
Initiating message from Customer to the Bank servicing its account: Request	Message between Banks: Funds Transfer on behalf of the Customer
Previous to sending no settlement has been done	Sending bank already made a booking in its ledger

SWIFT MT MESSAGES

SWIFT MT110

- This multiple message is sent by a drawer bank, or a bank acting on behalf of the drawer bank to the bank on which a/several cheque(s) has been drawn (the drawee bank).
- It is used to advise the drawee bank, or confirm to an enquiring bank, the details concerning the cheque(s) referred to in the message.
- The repetitive sequence must not be present more than ten times
- The currency code in the amount field 32a must be the same for all occurrences of this field in the message

MT 110 Advice of Cheque(s)

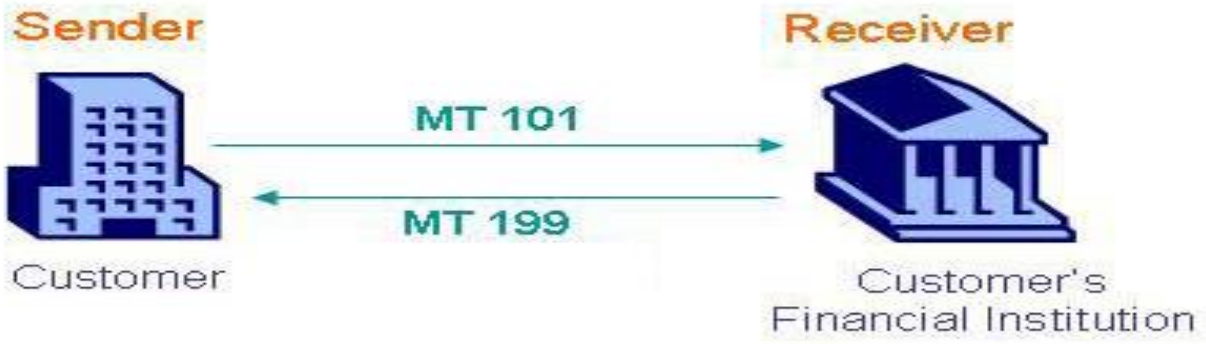
Status	Tag	Field Name	Content/Options
M	20	Sender's Reference	16x
O	53a	Sender's Correspondent	A, B, or D
O	54a	Receiver's Correspondent	A, B, or D
O	72	Sender to Receiver Information	6*35x
----->			
M	21	Cheque Number	16x
M	30	Date of Issue	6!n
M	32a	Amount	A or B
O	50a	Payer	A, F, or K
O	52a	Drawer Bank	A, B, or D
M	59a	Payee	No letter option or F
-----|			
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

SWIFT MT 199

- This message type is normally used by financial institutions to send information for which another message type is not applicable.

- It can be used as a status message to report reasons for a transaction instruction not beingexecuted or as a message to reject a transaction.



SWIFT MT MESSAGES

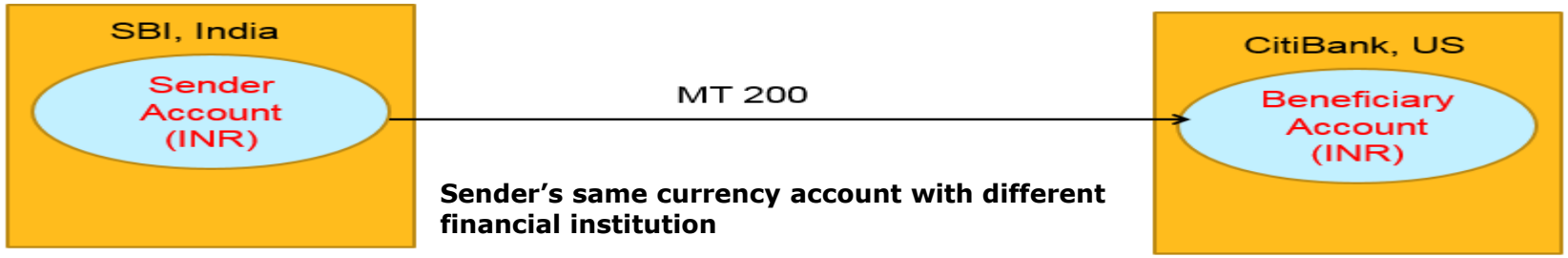
- **SWIFT FIN MT 2 SERIES MESSAGES**

- MT200 – Financial Institution Transfer for its own Account
- MT201 – Multiple Financial Institution Transfer for its own Account
- MT202 – General Financial Institution Transfer
- MT202COV – General Financial Institution Transfer – Cover payment
- MT203 – Multiple General Financial Institution Transfer
- MT204 – Financial Markets Direct Debit Message
- MT205 – Financial Institution Transfer Execution
- MT205COV – Financial Institution Transfer Execution under Cover payment
- MT210 – Notice to receive
- MT290 – Advice of Charges, Interest and Other Adjustments
- MT291 – Request for payment of charges, interest and other adjustments
- MT292 – Request for Cancellation
- MT295 – Queries
- MT296 – Answers
- MT298 – Proprietary Messages
- MT299 – Free Format Messages

SWIFT MT MESSAGES

SWIFT FIN MT 200 MESSAGE

- This message type is sent by an account owner to one of its account servicing institutions.
- The Sender has another account in same currency with other financial institutions which will be the beneficiary account.
- MT200 is used to request the movement of funds from main sender account to the beneficiary account.
- All parties identified in the message must be financial institutions



- The beneficiary of this transfer is always the Sender.
- The beneficiary and the sender account are in different countries but in same currency.

SWIFT MT MESSAGES

SWIFT MT200

MT 200 Financial Institution Transfer for its Own Account

Status	Tag	Field Name	Content/Options
M	20	Transaction Reference Number	16x
M	32A	Value Date, Currency Code, Amount	6!n3!a15d
O	53B	Sender's Correspondent	[/1!a][/34x] [35x]
O	56a	Intermediary	A or D
M	57a	Account With Institution	A, B, or D
O	72	Sender to Receiver Information	6*35x
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

SWIFT FIN MT 201 MESSAGE

- This multiple message type is sent by an account owner to one of its account servicing institutions.
- The Sender has more than one account in same currency with other financial institutions which are the beneficiary accounts.
- MT201 is used to request the movement of funds from main sender account to the several beneficiary accounts which belongs to the sender.
- The beneficiary of each transfer is always the Sender.
- The beneficiary and the sender account are in different countries but in same currency.
- With MT 201 the sender can request transfer of funds to more than one account in one go.

SWIFT MT MESSAGES

SWIFT MT201

MT 201 Multiple Financial Institution Transfer for its Own Account

Status	Tag	Field Name	Content/Options
M	19	Sum of Amounts	17d
M	30	Value Date	6!n
O	53B	Sender's Correspondent	[/1!a][/34x] [35x]
O	72	Sender to Receiver Information	6*35x
----->			
M	20	Transaction Reference Number	16x
M	32B	Currency Code, Amount	3!a15d
O	56a	Intermediary	A or D
M	57a	Account With Institution	A, B, or D
O	72	Sender to Receiver Information	6*35x
-----|			
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

SWIFT MT 202 MESSAGE

- This message is sent by or on behalf of the ordering institution directly, or through correspondent(s), to the financial institution of the beneficiary institution. All parties identified in the message must be financial institutions.
- It is used to order the movement of funds to the beneficiary institution.
- This message may also be sent to a financial institution servicing multiple accounts for the Sender to transfer funds between these accounts. In addition it can be sent to a financial institution to debit an account of the Sender serviced by the Receiver and to credit an account, owned by the Sender at an institution specified in field 57a.
- This message must not be used to order the movement of funds related to an underlying customer credit transfer that was sent with the cover method. For these payments the MT 202 COV or MT 205 COV must be used.
- If field 56a is present, then field 57a must also be present
- All parties to the transaction must be financial institutions.
- The transfer of funds between the ordering institution and the beneficiary institution is always related to another transaction. Field 21 must refer to this transaction.
- If the Sender wishes to instruct the Receiver to debit its account serviced by the Receiver and to credit one of its several accounts at an institution specified in field 57a, field 58A must contain the number of the account to be credited and the name of the Sender.
- If the Sender wishes to instruct the Receiver that funds are to be moved between two accounts owned by the Sender and serviced by the Receiver, field 53B must specify the number of the account to be debited and field 58A the number of the account to be credited and the name of the Sender.

SWIFT MT MESSAGES

SWIFT MT202

MT 202 General Financial Institution Transfer

Status	Tag	Field Name	Content/Options
M	20	Transaction Reference Number	16x
M	21	Related Reference	16x
----->			
O	13C	Time Indication	/8c/4!n1!x4!n
-----|			
M	32A	Value Date, Currency Code, Amount	6!n3!a15d
O	52a	Ordering Institution	A or D
O	53a	Sender's Correspondent	A, B, or D
O	54a	Receiver's Correspondent	A, B, or D
O	56a	Intermediary	A or D
O	57a	Account With Institution	A, B, or D
M	58a	Beneficiary Institution	A or D
O	72	Sender to Receiver Information	6*35x
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

SWIFT FIN MT 202COV MESSAGE

- MT 202 COV must only be used to order the movement of funds related to an underlying customer credit transfer that was sent with the cover method.
- In MT 202 COV the user header of the message (block 3) is mandatory.
- Block 3 must contain the code COV in the validation flag field 119 ({3:{119:COVP}}).
- This message is sent by or on behalf of the ordering institution directly, or through correspondent(s), to the financial institution of the beneficiary institution.
- The message contains a mandatory sequence to include information on an underlying customer credit transfer and has a maximum message length of 10,000 characters.
- The MT 202 COV must not be used for any other interbank transfer. For these transfers the MT 202 must be used.
- Sequence A General Information is a single occurrence sequence and contains information on the financial institution transfer between the ordering institution and beneficiary institution.
- Sequence B Underlying Customer Credit Transfer Details is a single occurrence sequence and is used to provide details on an individual underlying customer credit transfer.

SWIFT MT MESSAGES

SWIFT FIN MT 202COV MESSAGE

MT 202 COV General Financial Institution Transfer

Status	Tag	Field Name	Content/Options
Mandatory Sequence A General Information			
M	20	Transaction Reference Number	16x
M	21	Related Reference	16x
----->			
O	13C	Time Indication	/8c/4!n1!x4!n
-----|			
M	32A	Value Date, Currency Code, Amount	6!n3!a15d
O	52a	Ordering Institution	A or D
O	53a	Sender's Correspondent	A, B, or D
O	54a	Receiver's Correspondent	A, B, or D
O	56a	Intermediary	A or D
O	57a	Account With Institution	A, B, or D
M	58a	Beneficiary Institution	A or D
O	72	Sender to Receiver Information	6*35x
End of Sequence A General Information			

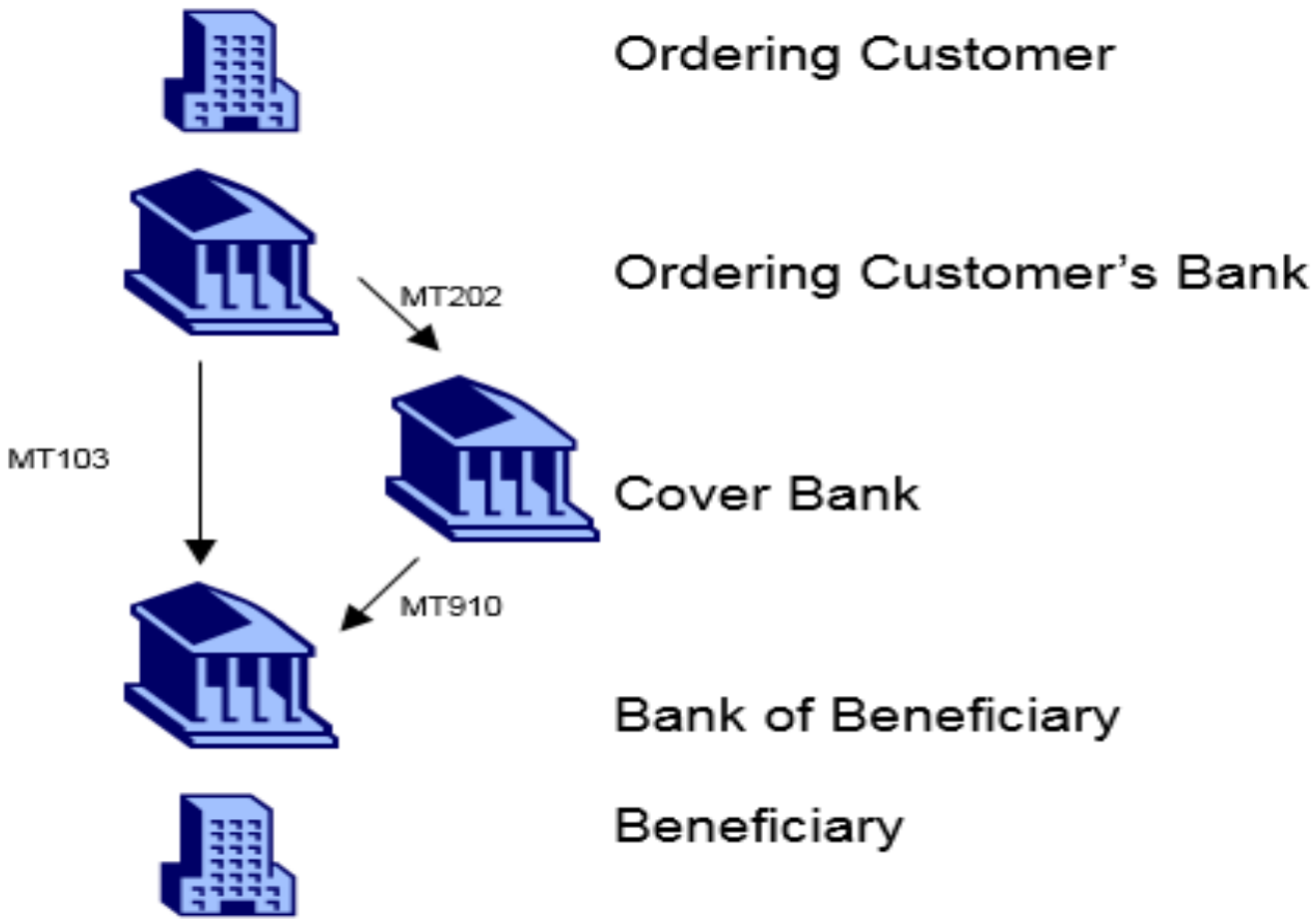
SWIFT MT MESSAGES

SWIFT FIN MT 202COV MESSAGE

Mandatory Sequence B Underlying Customer Credit Transfer Details			
M	50a	Ordering Customer	A, F, or K
O	52a	Ordering Institution	A or D
O	56a	Intermediary Institution	A, C, or D
O	57a	Account With Institution	A, B, C, or D
M	59a	Beneficiary Customer	No letter option, A, or F
O	70	Remittance Information	4*35x
O	72	Sender to Receiver Information	6*35x
O	33B	Currency/Instructed Amount	3!a15d
End of Sequence B Underlying Customer Credit Transfer Details			
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

SWIFT FIN MT 202COV – COVER PAYMENT METHOD



SWIFT MT MESSAGES

SWIFT FIN MT 202COV MESSAGE

Explanation	Format
Sender	AAAABEBB
Message type	202
Receiver	CCCCUS33
Validation flag	:119:COV
Message Text: *General Information*	
Transaction reference number	:20:090525/124COV
Related reference (1)	:21:090525/123COV
Value date/currency code/amount	:32A:090527USD10500,00
Account with Institution	:57A:DDDDUS33
Beneficiary institution	:58A:BBBBGB22
Underlying Customer Credit Transfer Details	
Ordering customer	:50F:/123564982101 1/MR. BIG 2/HIGH STREET 3 3/BE/BRUSSELS
Beneficiary customer	:59:/987654321 MR. SMALL LOW STREET 15 LONDON GB
Remittance information	:70:/INV/1234
Currency/Instructed Amount	:33B:USD10500,00
End of message text/trailer	

SWIFT MT MESSAGES

- **SWIFT FIN MT 203 MESSAGE**

- It is used to order the movement of funds to each beneficiary institution.
- This multiple message is sent by or on behalf of the ordering institution directly, or through correspondent(s), to the financial institution(s) of several beneficiary institution(s). The message contains several transactions. All parties identified in the message must be financial institutions.
- It is used to order the movement of funds to each beneficiary institution.
- This message may also contain order(s) for the movement of the Sender's own funds in favour of itself. This is the case when the Receiver services multiple accounts for the Sender and the funds are to be transferred between these accounts. In addition, it can be sent to a financial institution to debit an account of the Sender serviced by the Receiver and to credit an account owned by the Sender at an institution specified in field 57a
- The MT 203 consists of two types of sequences:
  - The first sequence provides details of the transaction between the Sender and Receiver, that is, the value date and total amount to be transferred, as well as any other information about this transaction, as necessary.
  - The second sequence must appear at least twice and, in order to expedite processing, not more than ten times. It provides details of each transaction between the Receiver and a financial institution to which the funds will be transferred. Each sequence includes a TRN, the reference of the related transaction, the amount and currency code to be transferred, the identification of the beneficiary institution and any other institution(s) through which the funds will pass and any other information about the transaction, as necessary.

SWIFT MT MESSAGES

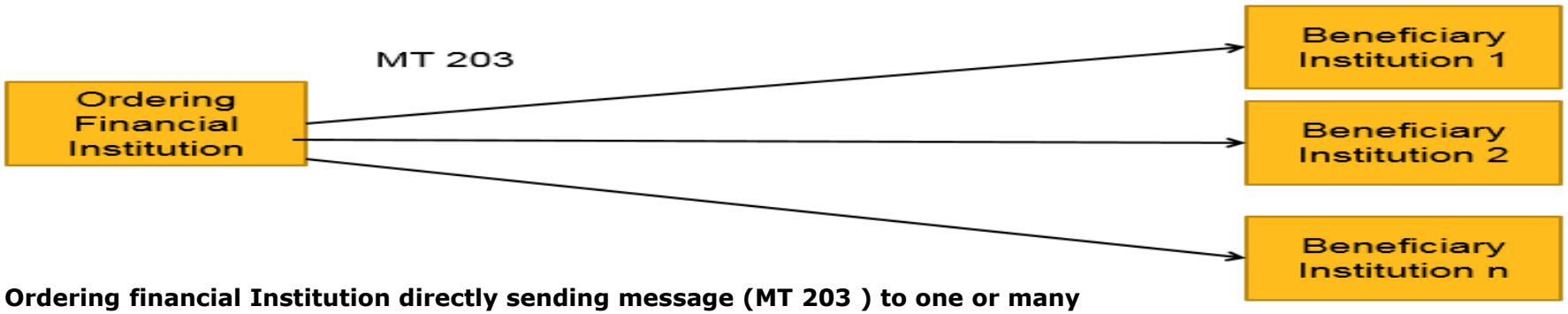
- **SWIFT FIN MT 203 MESSAGE**

- The amount in field 19 must equal the sum of the amounts in all occurrences of field 32B
- The currency code in the amount field 32B must be the same for all occurrences of this field in the message
- The repetitive sequence must appear at least twice, but not more than ten times
- If field 56a is present in a transaction, then field 57a must also be present

SWIFT MT MESSAGES

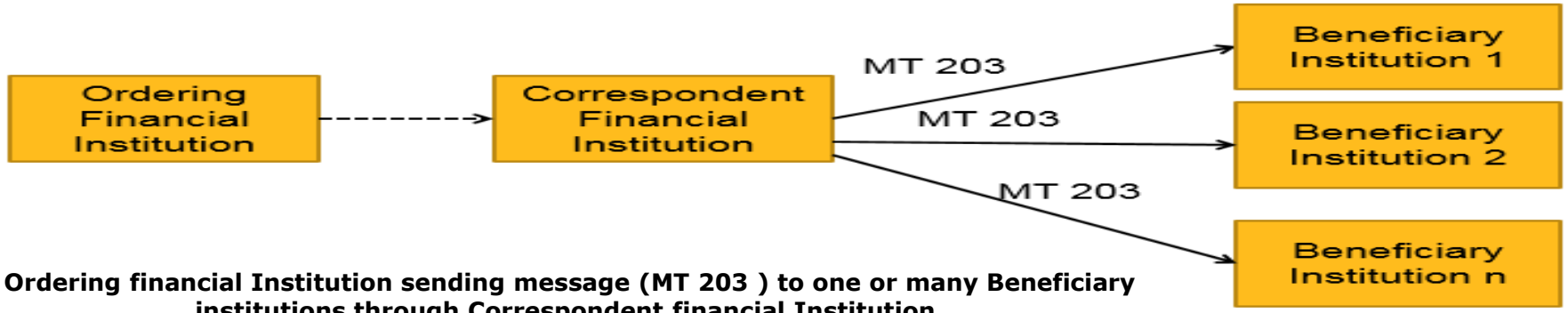
- **SWIFT FIN MT 203 MESSAGE**

- The multiple message MT203 is sent in following ways –
  - By ordering institution directly to beneficiary institutions.



Ordering financial Institution directly sending message (MT 203) to one or many Beneficiary institutions.

- Correspondent financial institution sends on behalf of ordering institution directly to beneficiary institutions.

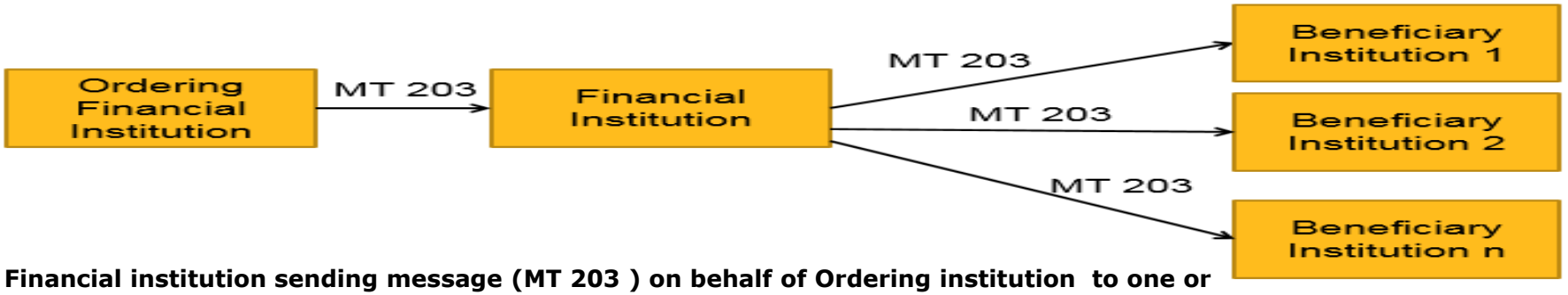


Ordering financial Institution sending message (MT 203) to one or many Beneficiary institutions through Correspondent financial Institution.

SWIFT MT MESSAGES

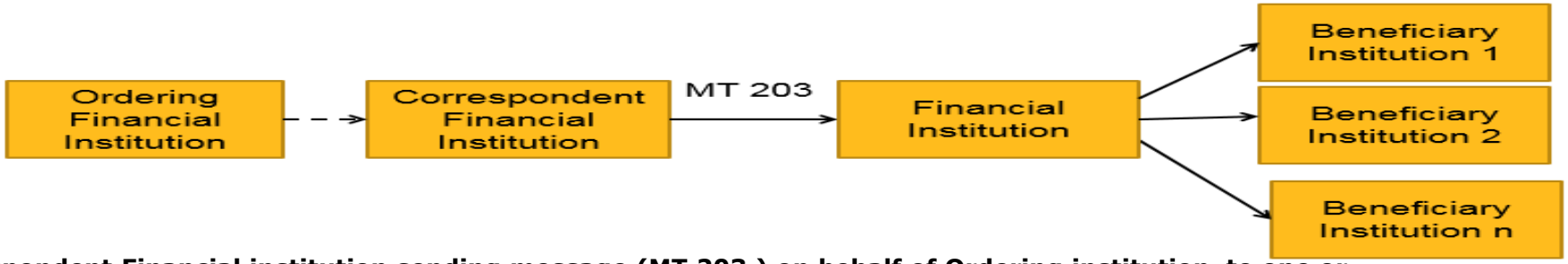
SWIFT FIN MT 203 MESSAGE

- By ordering institution directly to financial institution of beneficiary institutions.



Financial institution sending message (MT 203) on behalf of Ordering institution to one or many Beneficiary institutions directly.

- Correspondent financial institution sends on behalf of ordering institution to Financial institution of beneficiary institutions.



Correspondent Financial institution sending message (MT 203) on behalf of Ordering institution to one or many Beneficiary institutions through financial institution.

- All parties to the transactions must be financial institutions.
- This message may also contain order(s) for the movement of the Sender's own funds in favour of itself.

SWIFT MT MESSAGES

SWIFT FIN MT 203 MESSAGE

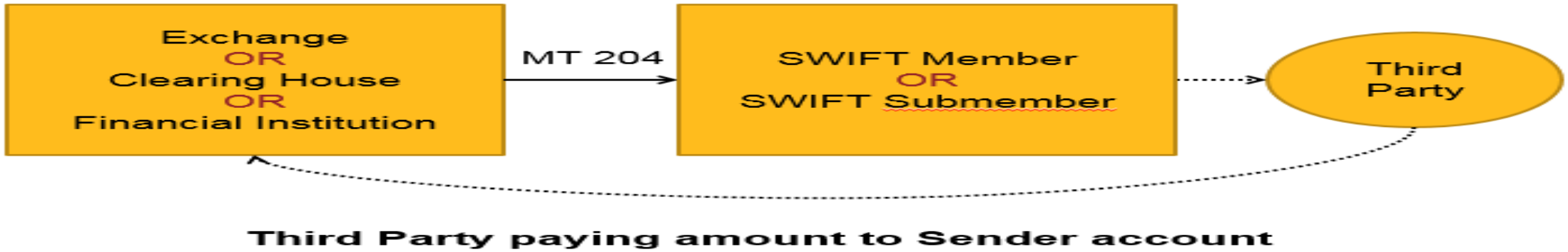
MT 203 Multiple General Financial Institution Transfer

Status	Tag	Field Name	Content/Options
M	19	Sum of Amounts	17d
M	30	Value Date	6!n
O	52a	Ordering Institution	A or D
O	53a	Sender's Correspondent	A, B, or D
O	54a	Receiver's Correspondent	A, B, or D
O	72	Sender to Receiver Information	6*35x
----->			
M	20	Transaction Reference Number	16x
M	21	Related Reference	16x
M	32B	Currency Code, Amount	3!a15d
O	56a	Intermediary	A or D
O	57a	Account With Institution	A, B, or D
M	58a	Beneficiary Institution	A or D
O	72	Sender to Receiver Information	6*35x
-----|			
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

SWIFT FIN MT 204 MESSAGE

- This message is sent by an exchange or clearing house, or another financial institution to a SWIFT member or sub-member.
- MT204 instructs the receiving member of the message to debit the account(s) of a third party specified in the message.
- The debited amount has to be credited in favour of the Sender of the message.
- This message requires the implementation of special procedures, its use is governed by relationship agreements between counterparties.
- The interested customers need to formally request SWIFT to be activated within the FIN sub-application in order to be able to send or receive this message.
- The MT 204 consists of two types of sequences:
  - Sequence A Common Elements - Reimbursement Details, is a single occurrence sequence and contains default information which is valid for all individual transactions described in sequence B and the total amount to be reimbursed.
  - Sequence B Transaction Details, is a repetitive sequence. Each occurrence gives the details concerning one debit.



SWIFT MT MESSAGES

SWIFT FIN MT 204 MESSAGE

MT 204 Financial Markets Direct Debit Message

Status	Tag	Field Name	Content/Options	No.
Mandatory Sequence A Common Elements - Reimbursement Details				
M	20	Transaction Reference Number	16x	1
M	19	Sum of Amounts	17d	2
M	30	Value Date	6!n	3
O	57a	Account With Institution	A, B, or D	4
O	58a	Beneficiary Institution	A or D	5
O	72	Sender to Receiver Information	6*35x	6
End of Sequence A Common Elements - Reimbursement Details				
-----> Mandatory Repetitive Sequence B Transaction Details				
M	20	Transaction Reference Number	16x	7
O	21	Related Reference	16x	8
M	32B	Transaction Amount	3!a15d	9
M	53a	Debit Institution	A, B, or D	10
O	72	Sender to Receiver Information	6*35x	11
-----| End of Sequence B Transaction Details				
M = Mandatory, O = Optional - Network Validated Rules may apply				

SWIFT MT MESSAGES

SWIFT FIN MT 205 MESSAGE

- This message is sent by the Receiver of a category 2 message that is, MT 200, 201, 202, 203 or 205, or equivalent (for example ISO 20022 Financial Institution Credit Transfer), directly, or through correspondent(s), to the financial institution of the beneficiary institution. All parties identified in the message must be financial institutions.
- It is used to further transmit a funds transfer instruction where Sender and Receiver are located in the same country.
- If the funds transfer instruction is related to an underlying customer credit transfer that was sent with the cover method, then the MT 205 must not be used.
- In the 205 message, If field 56a is present, then field 57a must also be present

SWIFT MT MESSAGES

SWIFT FIN MT 205 MESSAGE

MT 205 Financial Institution Transfer Execution

Status	Tag	Field Name	Content/Options
M	20	Transaction Reference Number	16x
M	21	Related Reference	16x
----->			
O	13C	Time Indication	/8c/4!n1!x4!n
-----|			
M	32A	Value Date, Currency Code, Amount	6!n3!a15d
M	52a	Ordering Institution	A or D
O	53a	Sender's Correspondent	A, B, or D
O	56a	Intermediary	A or D
O	57a	Account With Institution	A, B, or D
M	58a	Beneficiary Institution	A or D
O	72	Sender to Receiver Information	6*35x
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

SWIFT FIN MT 205COV MESSAGE

- The MT 205 COV is a General Use message which doesn't need registration in a Message User Group to send and receive this message.
- The message contains a mandatory sequence to include information on an underlying customer credit transfer and has a maximum message length of 10,000 characters.
- MT205 COV is only used to further transmit a funds transfer instruction related to an underlying customer credit transfer that was sent with the cover method.
- In MT 205 COV the user header of the message (block 3) is mandatory.
  - Block 3 must contain the code COV in the validation flag field 119 ({3:{119:COV}}).
- MT 205 COV is sent by the Receiver of an MT 202 COV, MT 205 COV or other equivalent message (for example ISO 20022 Financial Institution Credit Transfer)
- It can be sent directly or through correspondent(s), to the financial institution of the beneficiary institution.
  - Sequence A General Information is a single occurrence sequence and contains information on the financial institution transfer between the ordering institution and beneficiary institution.
  - Sequence B Underlying Customer Credit Transfer Details is a single occurrence sequence and is used to provide details on an individual underlying customer credit transfer that was sent with the cover method.

SWIFT MT MESSAGES

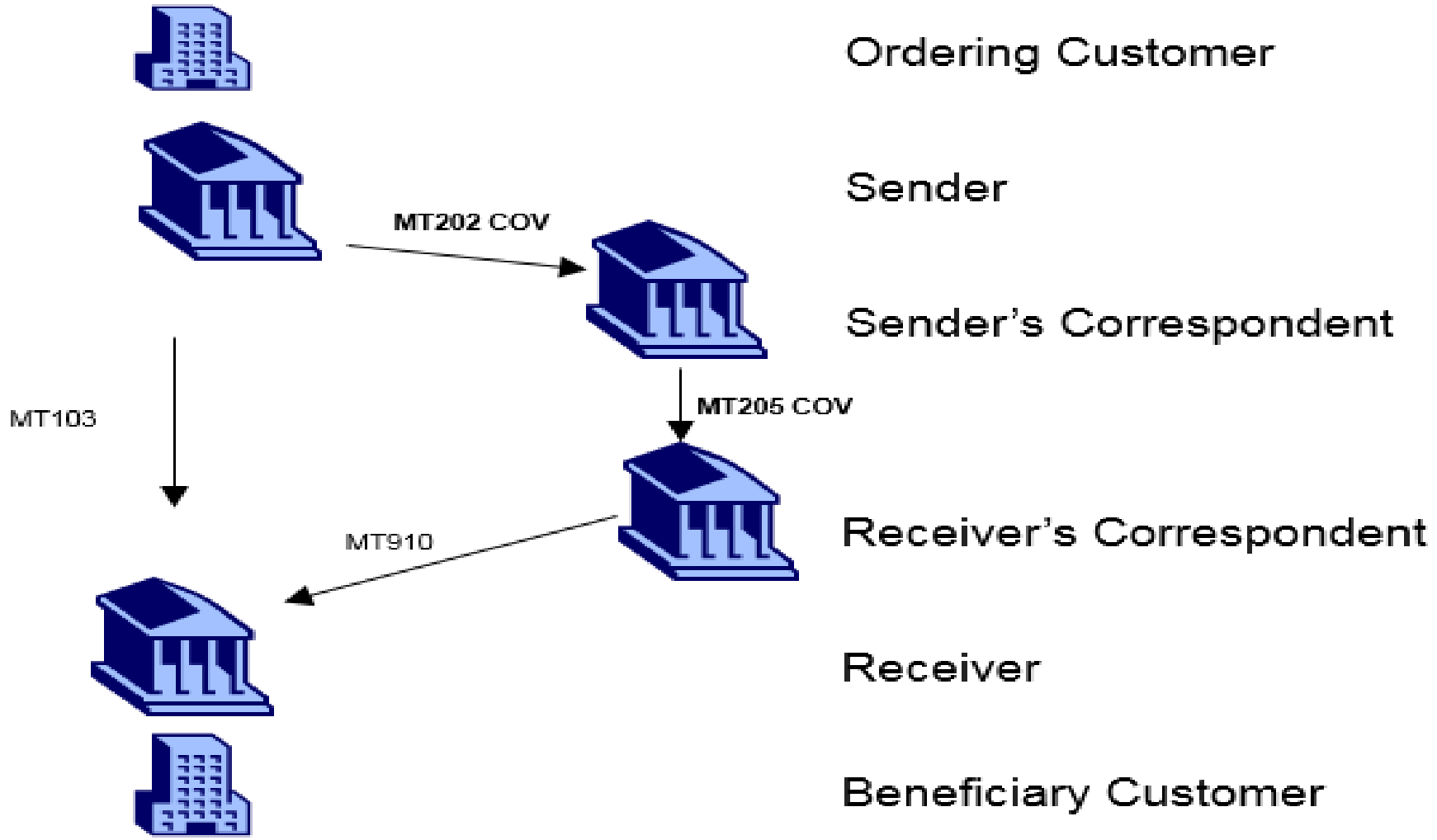
SWIFT FIN MT 205COV MESSAGE

MT 205 COV Financial Institution Transfer Execution

Status	Tag	Field Name	Content/Options
Mandatory Sequence A General Information			
M	20	Transaction Reference Number	16x
M	21	Related Reference	16x
----->			
O	13C	Time Indication	/8c/4!n1!x4!n
-----|			
M	32A	Value Date, Currency Code, Amount	6!n3!a15d
M	52a	Ordering Institution	A or D
O	53a	Sender's Correspondent	A, B, or D
O	56a	Intermediary	A or D
O	57a	Account With Institution	A, B, or D
M	58a	Beneficiary Institution	A or D
O	72	Sender to Receiver Information	6*35x
End of Sequence A General Information			
Mandatory Sequence B Underlying Customer Credit Transfer Details			
M	50a	Ordering Customer	A, F, or K
O	52a	Ordering Institution	A or D
O	56a	Intermediary Institution	A, C, or D
O	57a	Account With Institution	A, B, C, or D
M	59a	Beneficiary Customer	No letter option, A, or F
O	70	Remittance Information	4*35x
O	72	Sender to Receiver Information	6*35x
O	33B	Currency/Instructed Amount	3!a15d
End of Sequence B Underlying Customer Credit Transfer Details			
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

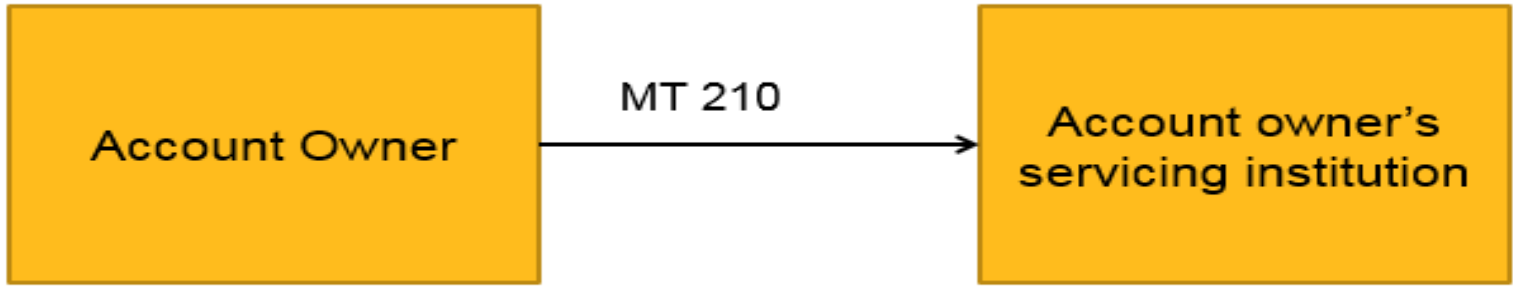
SWIFT FIN MT 205COV MESSAGE



SWIFT MT MESSAGES

SWIFT FIN MT 210 MESSAGE

- This message type is sent by an account owner to one of its account servicing institutions.
- It is an advance notice to the account servicing institution that it will receive funds to be credited to the Sender's account.



SWIFT MT MESSAGES

SWIFT FIN MT 210 MESSAGE

MT 210 Notice to Receive

Status	Tag	Field Name	Content/Options
M	20	Transaction Reference Number	16x
O	25	Account Identification	35x
M	30	Value Date	6!n
---->			
M	21	Related Reference	16x
M	32B	Currency Code, Amount	3!a15d
O	50a	Ordering Customer	No letter option, C, or F
O	52a	Ordering Institution	A or D
O	56a	Intermediary	A or D
-----|			
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

SWIFT MT 9 SERIES MESSAGES

- MT900 – Confirmation of Debit
- MT910 – Confirmation of Credit
- MT920 – Request message
- MT935 – Rate change advice
- MT940 – Customer Statement Message
- MT942 – Interim Transaction Report
- MT950 – Statement Message
- MT970 – Netting Statement
- MT971 – Netting Balance Report
- MT972 – Netting interim statement
- MT973 – Netting request message
- MT985 – Status Enquiry
- MT986 – Status Report
- MT990 – Advice of charges, interest and other adjustments
- MT991 – Request for payment of charges, interest and other expenses
- MT992 – Request for cancellation
- MT995 - Queries
- MT996 – Answers
- MT998 - Proprietary Message
- MT999 – Free format message

SWIFT MT MESSAGES

SWIFT MT 900 MESSAGE

- This message type is sent by an account servicing institution to an account owner.
- This message sent by an account servicing institution to a party authorized by the account owner to receive the information.
- Sent by a concentrating financial institution to an account owner or a party authorized by the account owner to receive the information entry.
- It is used to notify the account owner of an entry which has been debited to its account. The entry will be further confirmed by statement

MT 900 Confirmation of Debit

Status	Tag	Field Name	Content/Options
M	20	Transaction Reference Number	16x
M	21	Related Reference	16x
M	25a	Account Identification	No letter option or P
O	13D	Date/Time Indication	6!n4!n1!x4!n
M	32A	Value Date, Currency Code, Amount	6!n3!a15d
O	52a	Ordering Institution	A or D
O	72	Sender to Receiver Information	6*35x
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

SWIFT MT 900 MESSAGE

Examples of MT900

- Plant Oil sent an MT 101 to its USD bank, AAAAUS33 requesting to make a number of payments from its account 12345-67891.

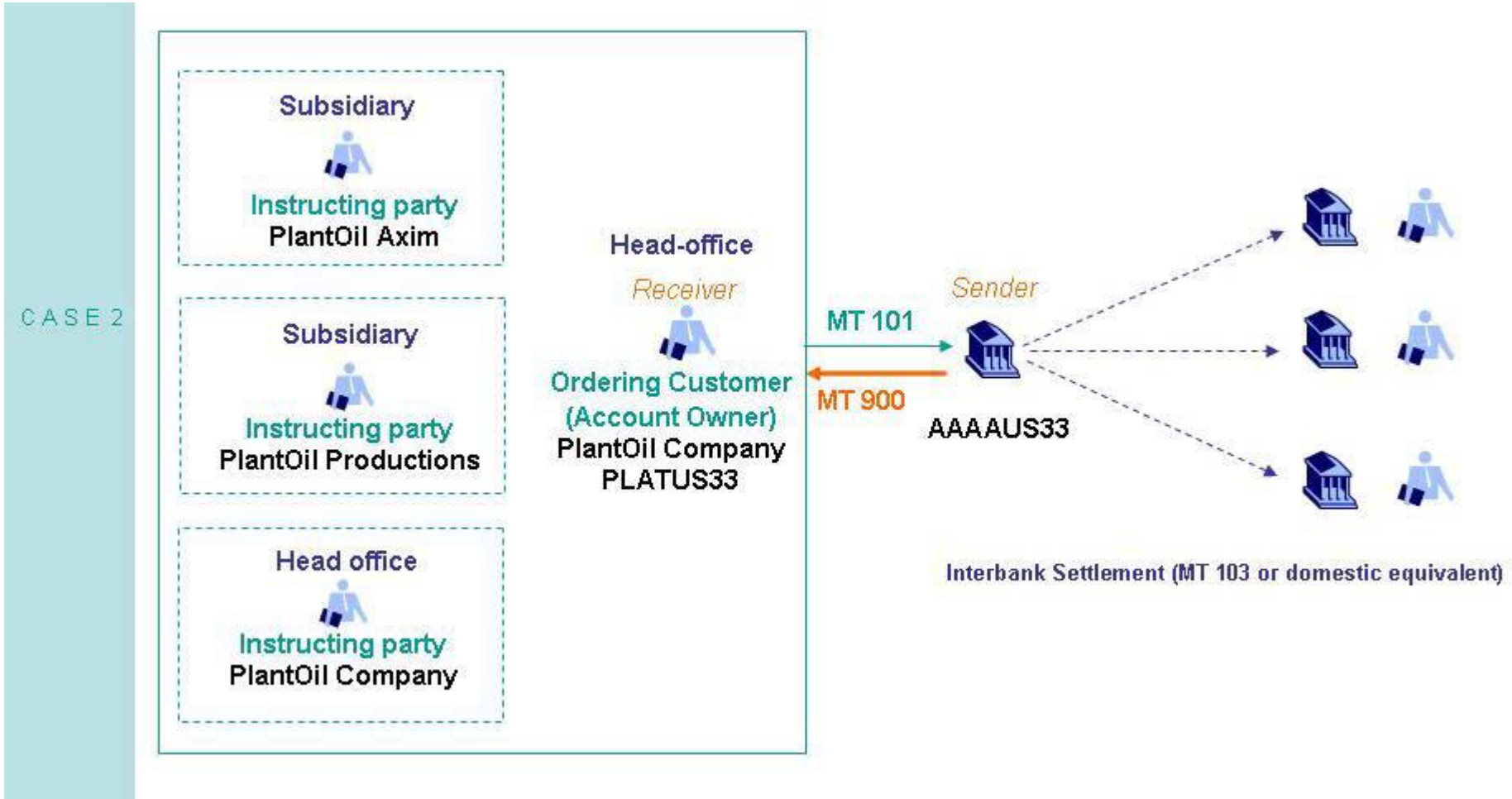
Payment details:

- On behalf of Plant Oil Axim, for 118,982.05 USD to Wung Lu Manufacturing at BBBBCNBJ (account number 60648929889) in Beijing, CN.
- On behalf of Plant Oil Productions, for 50,000 USD, to Tristan Recording Studios at CCCCGB2L (account 0010499) in London, GB.
- On behalf of Plant Oil Company, for 377,250 USD, to River Paper Company at DDDDUS33 (account number 26351-38947) in San Francisco, CA.
- Plant Oil indicated in the MT 101 it would like to see 1 batched entry on its account for the different transactions.
- AAAAUS33 Bank debits the account of Plant Oil and initiates a credit transfer (in its books or by forwarding an MT102/103 or local credit transfer message).
- AAAUS33 Bank can send an MT 900 to Plant Oil to notify that the payment has been debited from its account. AAAAUS33 will confirm this entry in the MT 940 statement message.

SWIFT MT MESSAGES

SWIFT MT 900 MESSAGE

Examples of MT900



SWIFT MT MESSAGES

SWIFT MT 900 MESSAGE

Explanation	Format
Header	
Sender	AAAAUS33
Message Type	900
Receiver	PLATUS33
Message text	
Transaction Reference Number	:20:C11126A1378
Related Reference*	:21:PLTOL101-56
Account Identification	:25:1234567891
Value Date, Currency Code, Amount	:32A:060929USD546232,05

SWIFT MT MESSAGES

SWIFT MT 910 MESSAGE

- This message sent by an account servicing institution to an account owner .
- It is sent by an account servicing institution to a party authorized by the account owner to receive the information
- MT940 sent by a concentrating financial institution to an account owner or a party authorized by the account owner to receive the information
- It is used to notify the account owner of an entry which has been credited to its account. The entry will be further confirmed by statement
- It is sent by an account servicing institution (reporting institution) to a Financial Institution (concentrating institution) which has been authorized by the account owner to receive it.
- This message type is not normally sent if statements for the account are frequently transmitted.
- This message type does not normally result in any bookings. It is a confirmation to the Receiver (account owner) of a credit to its account.
- Where a correspondent bank has received a cover payment and sends a confirmation of credit (MT 910) to the Beneficiary Bank, the reference from field 21 of the inward payment message must be passed on unchanged in field 21 of the MT 910 message

SWIFT MT MESSAGES

SWIFT MT 910 MESSAGE

MT 910 Confirmation of Credit

Status	Tag	Field Name	Content/Options
M	20	Transaction Reference Number	16x
M	21	Related Reference	16x
M	25a	Account Identification	No letter option or P
O	13D	Date/Time Indication	6!n4!n1!x4!n
M	32A	Value Date, Currency Code, Amount	6!n3!a15d
O	50a	Ordering Customer	A, F, or K
O	52a	Ordering Institution	A or D
O	56a	Intermediary	A or D
O	72	Sender to Receiver Information	6*35x
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

SWIFT MT 940 MESSAGE

- Transmission of this message requires a bilateral agreement between correspondents.
- This message type is used to transmit detailed information about all entries debited or credited to a customer account, serviced by a financial institution.

This message type is:

- sent by an account servicing institution (reporting institution) to a financial institution (concentrating institution), which has been authorised by the account owner to receive it.
- sent by an account servicing institution (reporting institution) to a financial institution account owner.
- sent by an account servicing institution to a non-financial institution account owner or party authorised by the account owner to receive the information.
- sent by a concentrating institution to a non-financial institution account owner or party authorised by the account owner to receive the information.
- It is used to transmit detailed information about all entries booked to the account. Statements block (MT940), next to transaction information, contains opening balance, closing balance and statement number. Only MT940 data should be used for ERP automated book entry.

SWIFT MT MESSAGES

SWIFT MT 940 MESSAGE

MT 940 Customer Statement Message

Status	Tag	Field Name	Content/Options
M	20	Transaction Reference Number	16x
O	21	Related Reference	16x
M	25a	Account Identification	No letter option or P
M	28C	Statement Number/Sequence Number	5n[/5n]
M	60a	Opening Balance	F or M
----->			
O	61	Statement Line	6!n[4!n]2a[1!a]15d1!a3!c16x[//16x] [34x]
O	86	Information to Account Owner	6*65x
-----|			
M	62a	Closing Balance (Booked Funds)	F or M
O	64	Closing Available Balance (Available Funds)	1!a6!n3!a15d
----->			
O	65	Forward Available Balance	1!a6!n3!a15d
-----|			
O	86	Information to Account Owner	6*65x
M = Mandatory, O = Optional - Network Validated Rules may apply			

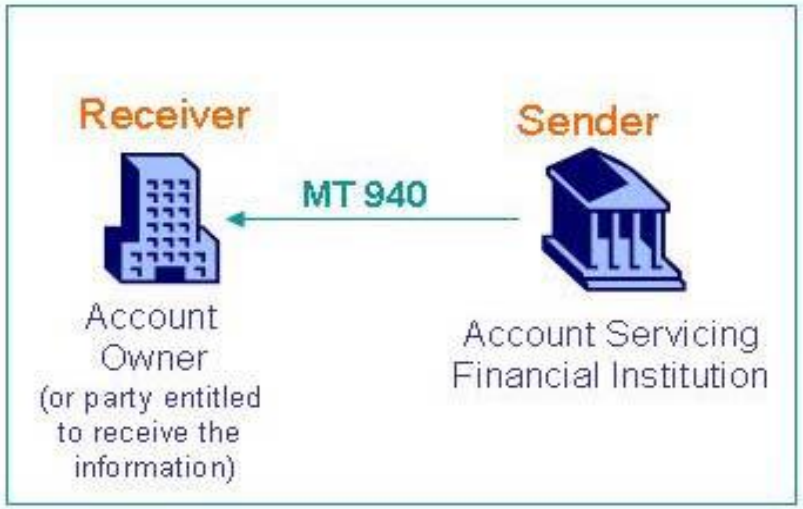
SWIFT MT MESSAGES

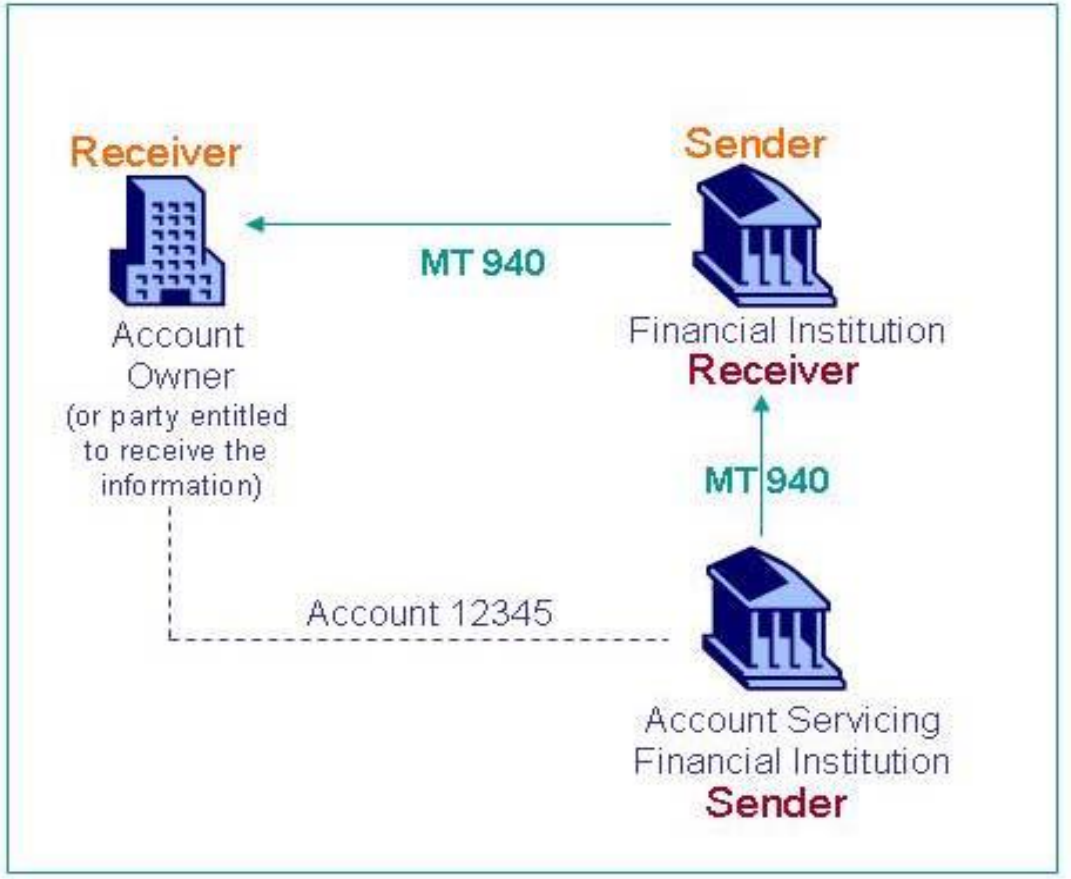
SWIFT MT 940 MESSAGE

Sender		**ABNANL2A**
Message Type		**940**
Receiver		**INGBNL2A**
Message Text		
M	**Transaction Reference Number**	**:20:123456**
O	**Related Reference**	**:21:**
M	**Account Identification**	**:25:0123456789**
M	**Statement Number/Sequence Number**	**:28C:123/1**
M	**Opening Balance**	**:60F:C080902EUR395212311,71**
O	**Transactions**	**:61:080903C50000000,NTRFNONREF**
		ORDER BK OF BANK X
O	**2nd Transaction**	**:61:080905C5700000,NFEX036960**
		:86:DIVIDEND LOCAL CORP
M	**Closing Book Balance**	**:62F:C080903EUR445212311,71**
O	**Closing Available Balance**	**:64:C080903EUR445212311,71**
O	**Forward Available Balance**	**:65:C080905EUR450912311,71**

SWIFT MT MESSAGES

SWIFT MT 940 MESSAGE





SWIFT MT MESSAGES

SWIFT MT 942 MESSAGE

- This message type is:
  - sent by an account servicing institution (reporting institution) to a financial institution (concentrating institution) which has been authorised by the account owner to receive it.
  - sent by an account servicing institution (reporting institution) to a financial institution account owner.
  - sent by an account servicing institution to a non-financial institution account owner or party authorised by the account owner to receive the information.
  - sent by a concentrating institution to a non-financial institution account owner or party authorised by the account owner to receive the information.
- It is used to transmit detailed and/or summary information about entries debited or credited to the account since:
  - the last statement or balance report, or
  - the last interim transaction report (sent in the period since the last statement or balance report)
- MT942 blocks are for intraday information purposes only and main task of these is fast informing of customer about movements on accounts. If there is movement on account MT942 block is appended immediately to STA file.
- Transmission of this message requires a bilateral agreement between correspondents.

SWIFT MT MESSAGES

SWIFT MT 942 MESSAGE

MT 942 Interim Transaction Report

Status	Tag	Field Name	Content/Options
M	20	Transaction Reference Number	16x
O	21	Related Reference	16x
M	25a	Account Identification	No letter option or P
M	28C	Statement Number/Sequence Number	5n[/5n]
M	34F	Debit/(Debit and Credit) Floor Limit Indicator	3!a[1!a]15d
O	34F	Credit Floor Limit Indicator	3!a[1!a]15d
M	13D	Date/Time Indication	6!n4!n1!x4!n
----->			
O	61	Statement Line	6!n[4!n]2a[1!a]15d1!a3!c16x[//16x] [34x]
O	86	Information to Account Owner	6*65x
-----|			
O	90D	Number and Sum of Entries	5n3!a15d
O	90C	Number and Sum of Entries	5n3!a15d
O	86	Information to Account Owner	6*65x
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

SWIFT MT 942 MESSAGE

Sender		ABNANL2A
Message Type		942
Receiver		INGBNL2A
Message Text		
M	Transaction Reference Number	:20:345678
O	Related Reference (MT 920)	:21:5678
M	Account Identification	:25:0123456789
M	Entry Number/Page Number	:28C:124/1
M	Debit Floor Limit	:34F:EURD120000,
C	Credit Floor Limit	:34F:EURC55000,
M	Date/Time Indication	:13D:0206261200+300
O	Transactions	:61:080902D120000,NCOLABCD
		:61:080902C55000,NFEX99485
O	Number and Sum of Debits	:90D:1EUR120000,
O	Number and Sum of Credits	:90C:1EUR55000,

SWIFT MT MESSAGES

SWIFT MT 950 MESSAGE

- This message type is sent by an account servicing institution to an account owner.
- It is used to transmit detailed information about all entries (whether or not caused by SWIFT messages) booked to the account of a Financial Institution.
- This statement is used by the receiving Financial Institution for reconciliation.
- As the MT950 Statement message does not allow to transport the additional information that typically needs to be reported on the entries of customer statements, the MT940 is recommended to be used in all situations as statement message towards corporate customers

MT 950 Statement Message

Status	Tag	Field Name	Content/Options
M	20	Transaction Reference Number	16x
M	25	Account Identification	35x
M	28C	Statement Number/Sequence Number	5n[/5n]
M	60a	Opening Balance	F or M
----->			
O	61	Statement Line	6!n[4!n]2a[1!a]15d1!a3!c16x[//16x] [34x]
-----|			
M	62a	Closing Balance (Booked Funds)	F or M
O	64	Closing Available Balance (Available Funds)	1!a6!n3!a15d
M = Mandatory, O = Optional - Network Validated Rules may apply			

SWIFT MT MESSAGES

SWIFT MT 950 MESSAGE

Sender		ABNANL2A
Message Type		950
Receiver		INGBNL2A
Message Text		
M	Transaction Reference Number	:20:123456
M	Account Identification	:25:0123456789
M	Statement Number	:28C:102
M	Opening Balance	:60F:C080902EUR3723495,
O	Transactions	:61:080903D1,2FCHG494935
O	2nd Transaction	:61:080903D30,2NCHK78911 FAVOUR K. DESMID
M	Closing Balance	:62F:C080903EUR3723463,6
O	Closing Available Balance	:64:C080903EUR3759863,2

SWIFTNET PROTOCOLS

Location, Date, Author

SWIFTNET Protocols

SWIFTNET provides various systems, Protocols and integration software by which the financial and non-financial institutions can connect to SWIFT.

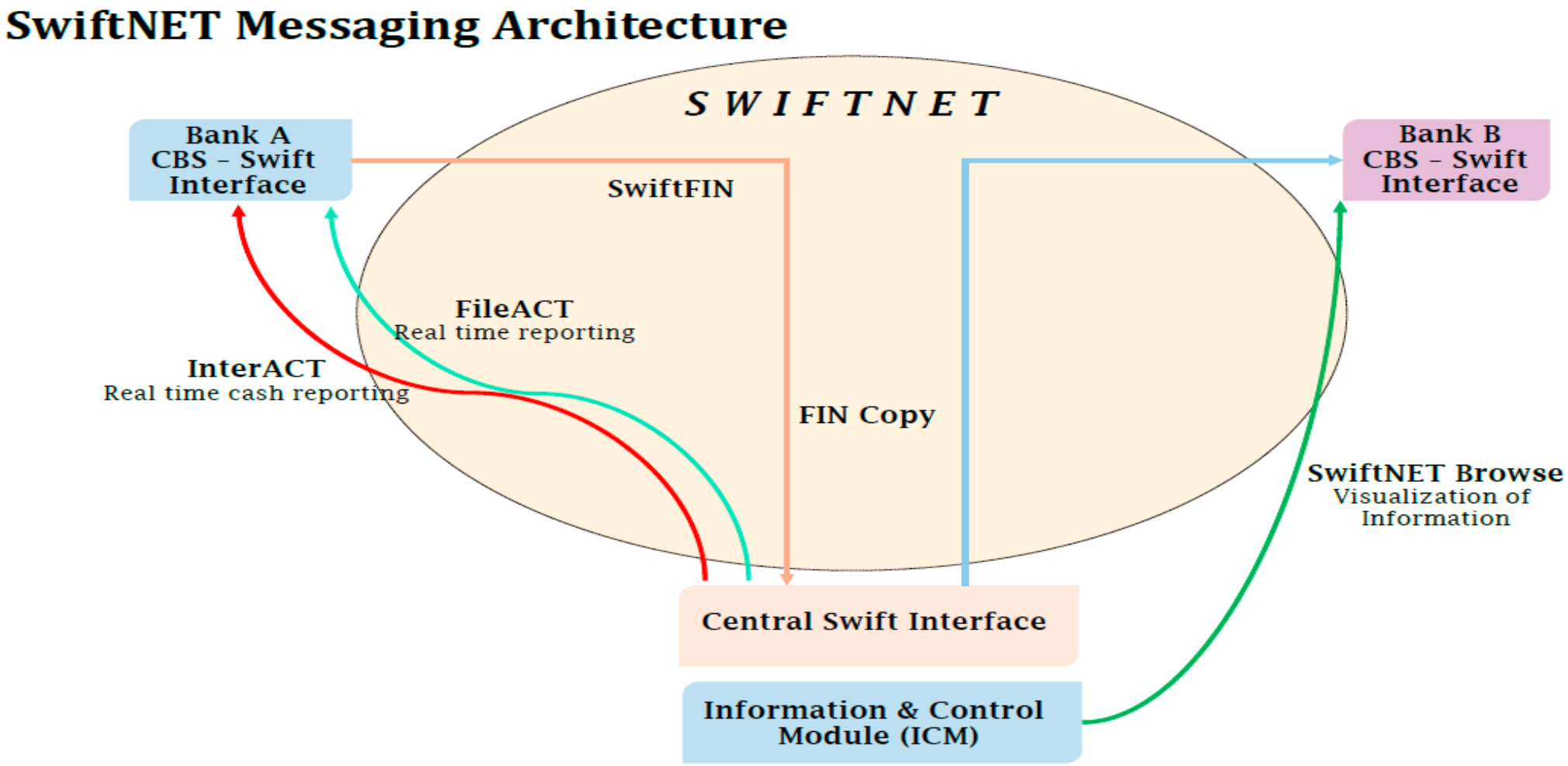
The various protocols are :

- SWIFT FIN
- SWIFT InterAct
- SWIFT FileAct
- SWIFT WebAccess

SWIFTNet can run on different type of platforms such as;

- Intel – Windows 2000
- IBM – AIX (Unix)
- SUN Solaris

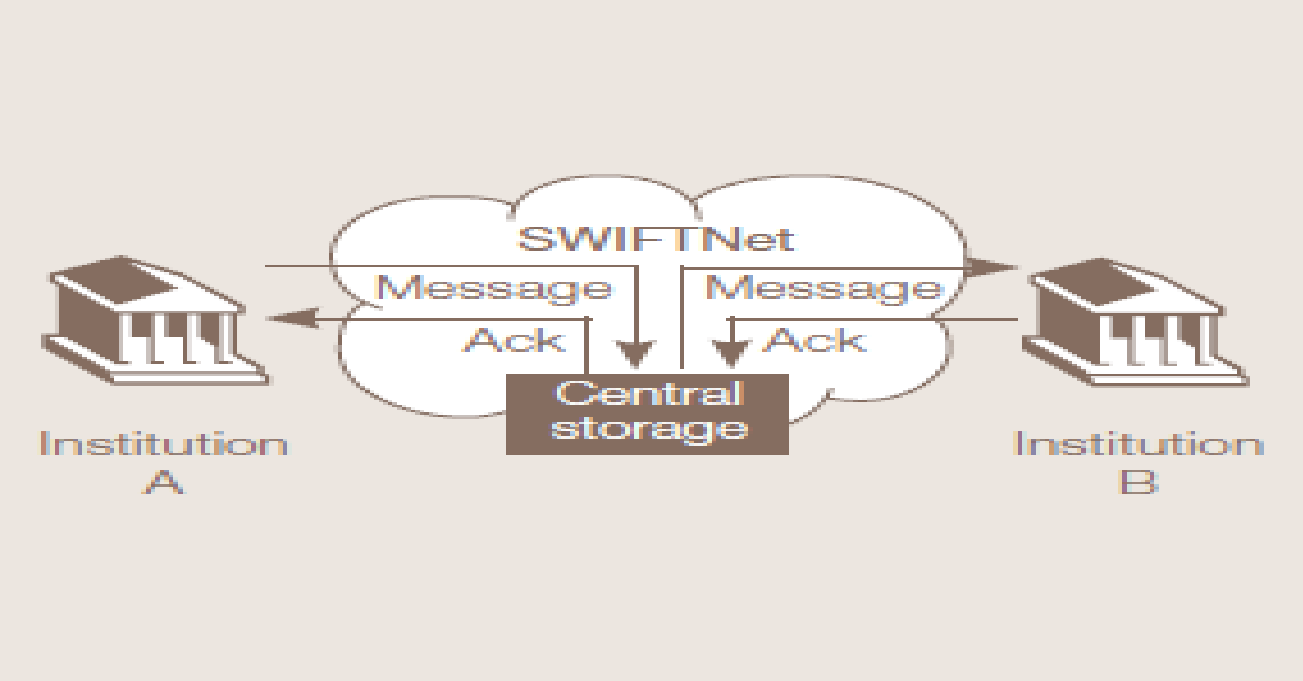
SWIFTNET Protocols



1. SWIFT FIN

- FIN is SWIFT’s core service for exchanging MT format financial messages.
- FIN connects wide range of business areas and are widely used and accepted by the financial community - financial institutions, corporate and market infrastructures.
- FIN works in store-and-forward mode and offers extensive value-added functionality, such as message copy, broadcasts, and online retrieval of previously-exchanged messages.
- FIN is a secure, reliable and resilient, access-controlled, structured messaging service.
- SWIFT also provides a few value-added processing softwares, which provides features like message validation against SWIFT Standards, delivery monitoring, and prioritisation, on top of central message storage and retrieval.
- FIN enables financial institutions to exchange individual structured (MT and ISO 15022 message formats) financial messages securely and reliably. FIN is used by over 10,800 financial institutions and their corporate customers worldwide to exchange over 22.3+ million messages per day across a wide range of business areas within the banking and securities industries
- FIN supports more than 240 message types (MT) categorised into nine market segments according to their business usage (see MT Messages).
- FIN messages are made of data blocks for addressing and control (blocks 1 to 3), the MT business payload (block 4), and the system trailer (block 5)
- FIN is based on a distributed processing architecture with full, built-in redundancy to ensure maximum availability.
- In order to meet long term technology needs, SWIFT keeps renewing the FIN application and the underlying technology platform.

1. SWIFT FIN



- FIN works in store-and-forward mode, which makes it easy to exchange messages with a large number of correspondents, many of whom may not be online at the time of transmission.
- Store-and-forward removes the uncertainty and inconvenience of worrying about whether or not the correspondents are online at the time the message is sent. The message is delivered as soon as the recipient is ready to receive it. FIN provides an ideal way to send individual instructions, confirmations and reports to large numbers of correspondents, regardless of their geographical locations or time zones.

1. SWIFT FIN

STANDARD FIN FEATURES

SWIFTNet PKI security

- FIN offers authentication and integrity control based on the SWIFTNet PKI infrastructure.

Closed user group control

- Each FIN message is controlled for compliance with the predefined message exchange and closed user group rules that determines which users can send what type of messages to which other users. Non¬compliant messages are not delivered.

Message validation

- FIN supports central message validation of a wide range of SWIFT MT standards, which are used across a broad range of business areas within the financial industry.

Non-repudiation

- In case of dispute, SWIFT is able to confirm that a message exchange did take place as claimed.

Relationship Management

- Users car control the FIN traffic they receive from others using SWIFT’s Relationship Management Application (RMA)

1. SWIFT FIN

OPTIONAL FIN FEATURES

User-selectable priority

Messages can be flagged as 'urgent' to allow for appropriate processing by the correspondents.

Delivery notification

This provides confirmation that the correspondent received your message.

Non-delivery warning

This informs that a message remains undelivered after a certain period of time.

Online retrievals

Users can retrieve SWIFTNet FIN messages they have exchanged in the previous 124 days.

User broadcasts

Users can send broadcasts to all other FIN users, or to a group of users.

FIN Copy

Selected FIN messages can be fully or partially copied to a copy destination (T-Copy). In addition, the delivery to the intended destination can be made conditional on approval by the copy destination (Y-copy). This feature is frequently used in the context of high-value payments clearing systems.

FINInform

Some or all FIN messages sent or received by an institution's subsidiary or branch can also be fully or partially duplicated to copy destination(s) for centralised processing including optional approval (Y-Copy) or monitoring of activities, outsourcing or regulatory reporting (T-Copy).

2. SWIFT INTERACT

- InterAct caters to the interactive real-time and store-and-forward exchange of messages between applications.
- InterAct is widely used in many SWIFT solutions, Payments, settlement instructions, FX Confirmations, Exceptions and Investigations, Collateral Management and Reports.
- It is also used for market initiatives such as TARGET2, SEPA, or TARGET2-Securities.
- InterAct supports XML format and other structured formats (FIX, FpML) wrapped into an XML envelope.
- InterAct Central Services provide enhanced validation services over MX messages, which are XML messages designed with the ISO 20022 methodology
- InterAct provides the security, availability and reliability the business demands.
- SWIFTNet offers increased flexibility in the way of working: in addition to store-and-forward messaging, it also supports real-time messaging, and real-time query-and-response.
- InterAct is the service to use in the business areas for which the use of the new XML-based MX standards is more advantageous.
- Both FIN and InterAct enable the exchange of messages on a message-per-message basis, and support the exchange of messages using proprietary formats in the context of market infrastructures.

2. SWIFT INTERACT

Store-and-forward messaging - InterAct's store-and-forward capability is designed for messages destined for a large number of correspondents, many of whom may not be online at the time of transmission. It removes the uncertainty and inconvenience of worrying about whether or not the correspondents are online at the time the message is sent. The message is delivered as soon as the recipient is ready to receive it. As a result, SWIFTNet InterAct provides an ideal way to send individual instructions, confirmations and reports to large numbers of correspondents, even in different time zones.

Real – Time messaging - Real-time messaging offers an alternative to store-and–forward to correspondents who are online at the time of transmission, such as market infrastructures or large correspondents expecting to receive an instruction or confirmation and that do not need store-and-forward added-value features.

Real – Time Queries and Response - Real-time query and response This is an interactive service typically used in the context of workstation-based online enquiry or reporting systems. It is often used in conjunction with Browse.

2. SWIFT INTERACT

STANDARD INTERACT FEATURES :

SWIFTNet PKI security

InterAct is secured with SWIFTNet PKI and offers message authentication, encryption and integrity control.

Closed user group control

Each InterAct message is controlled for compliance with predefined closed user group rules that determine which users can send messages to which other users. Non-compliant messages are not delivered.

Message validation

InterAct supports central message validation of XML-based SWIFT standards.

Advanced delivery control(store-and-forward mode)

Interact offers a number of messaging features to control traffic delivery.

2. SWIFT INTERACT

OPTIONAL INTERACT FEATURES :

User-selectable priority

Messages can be flagged as ‘urgent’ to allow for appropriate processing by the correspondents

Delivery notification (store-and-forward mode)

This provides confirmation that the correspondent received the message.

Non-repudiation of emission and reception

In case of dispute, this allows SWIFT to confirm that the message exchange did take place as claimed.

InterAct copy

For selected messages, SWIFT can copy messages to a copy destination (T-Copy). In addition, the delivery to identified destination can be made conditional to an approval by the copy destination (Y-Copy). This feature is typically used in the context of payment clearing systems.

3. SWIFT FILEACT

- FileAct enables secure and reliable transfer of files and is typically used to exchange batches of structured financial messages and large reports.
- FileAct supports tailored solutions for market infrastructure communities, closed user groups and financial institutions. It is particularly suitable for bulk payments, securities value-added information and reporting, and for other purposes, such as central-bank reporting and intra-institution reporting.
- FileAct enables the transfer of files in a secure and reliable manner. It is most efficient when used to transfer large batches of messages, such as bulk payment files, very large reports, or operational data.
- Whether it is for bulk payments processing, transmission of cheque images, securities value-added information and reporting, or other business areas such as central-bank reporting or corporate-to-bank instructions and reporting, most financial institutions require the ability to exchange files in a secure, reliable and cost-effective manner. FileAct allows all of the above.
- The benefits are significant and extend far beyond the realms of traditional file transfer solutions.

3. SWIFT FILEACT

FileAct offers different working modes to meet specific needs

Store-and-forward file transfer

- FileAct's store-and-forward capability removes the uncertainty and inconvenience of worrying about whether or not the correspondents are online at the time the file is transmitted. The file is delivered as soon as the recipient is ready to receive it. As a result, it provides an ideal way to send files to large numbers of correspondents, some of which may be in different time zones.

Real-time file transfer

- Real-time file transfer allows an institution to send files to correspondents who are online at the time of transmission. It is an efficient and cost-effective way to exchange files with market infrastructures or large institutions.

Real-time file download

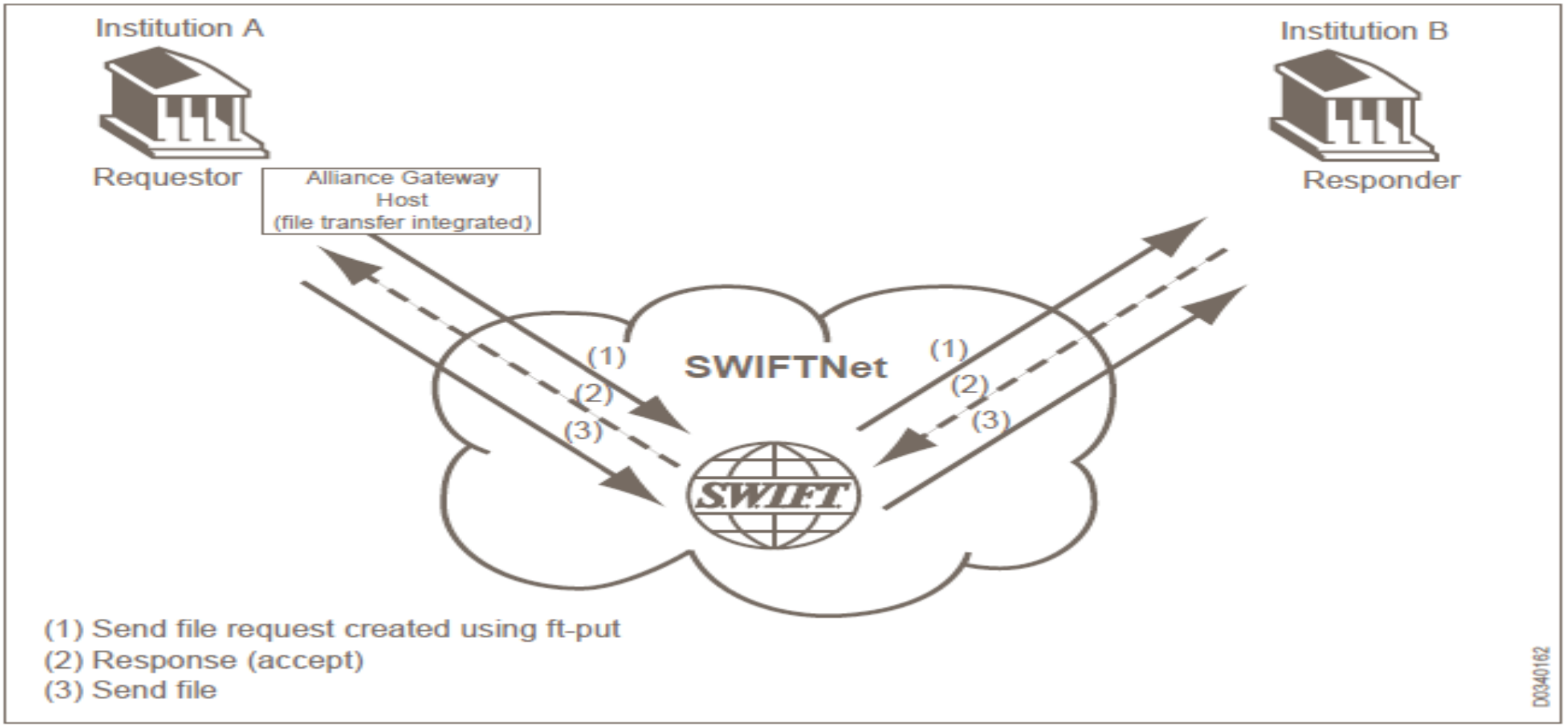
- This is an interactive service typically used to download files from the system of a correspondent. It is often used to download files in the context of workstation-based systems.

FileAct Copy

- For selected files, SWIFT can copy the file (or just the file header) to a copy destination (T-Copy). In addition, the file delivery to the intended destination can be made conditional to an approval by the copy destination (Y-copy). This feature is typically used in the context of payments clearing systems.

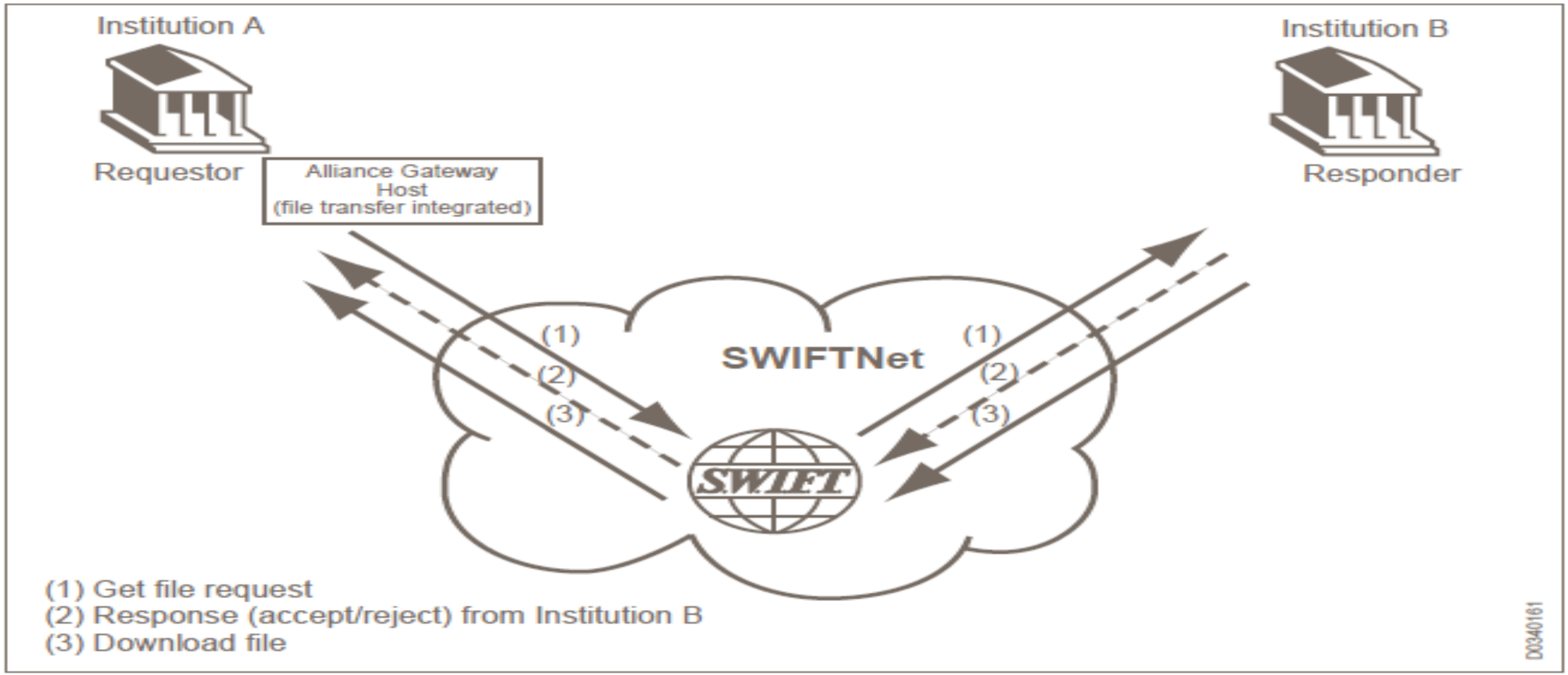
3. SWIFT FILEACT

Real Time File Transfer



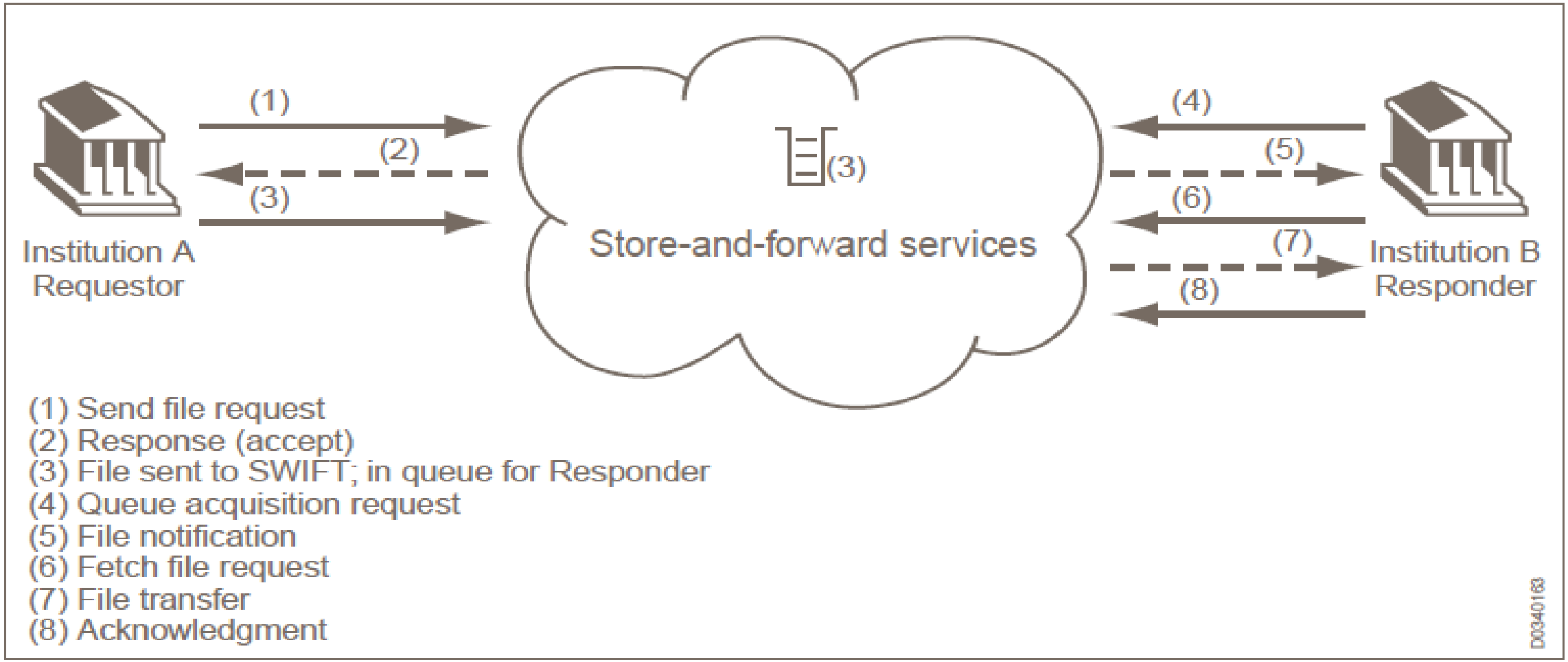
3. SWIFT FILEACT

Real Time File Download



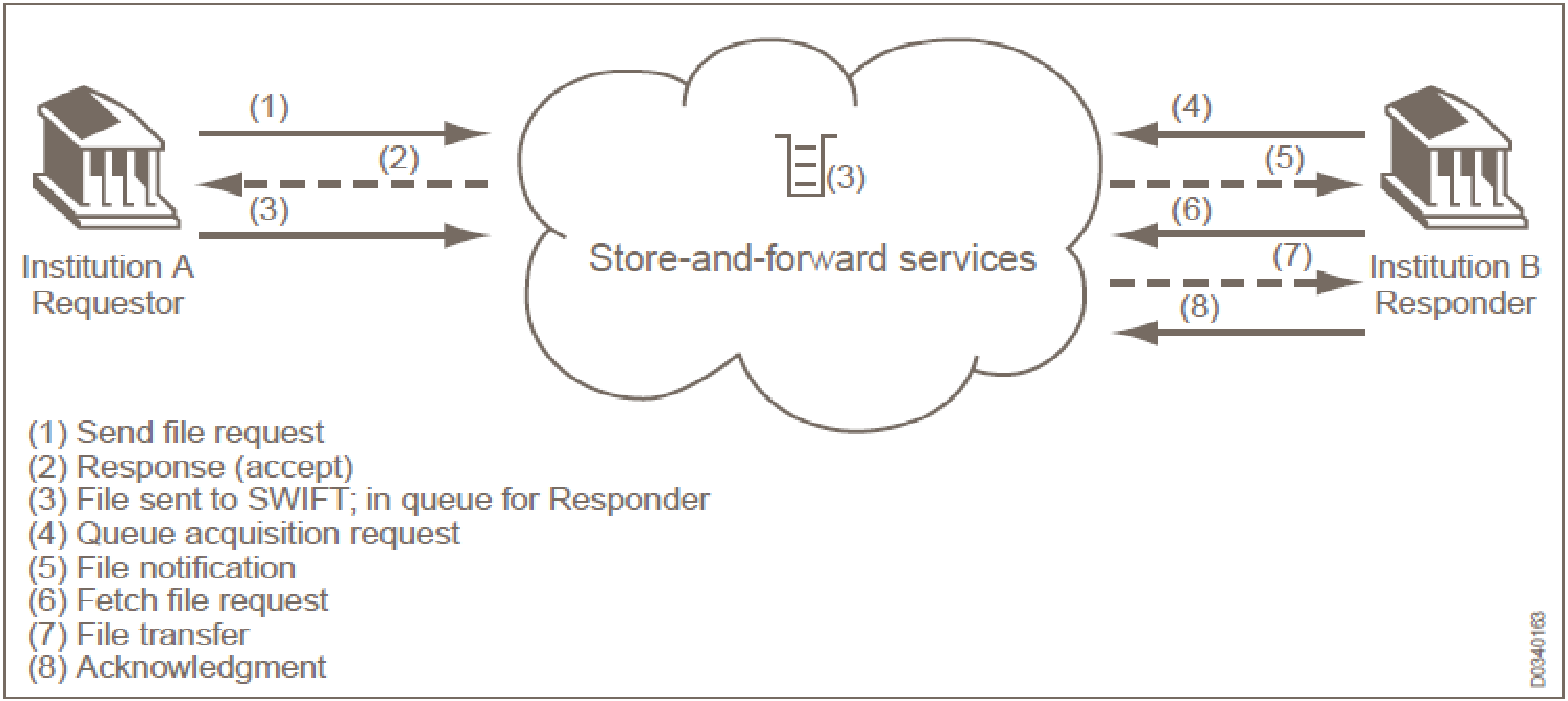
3. SWIFT FILEACT

Store-and-forward File Transfer



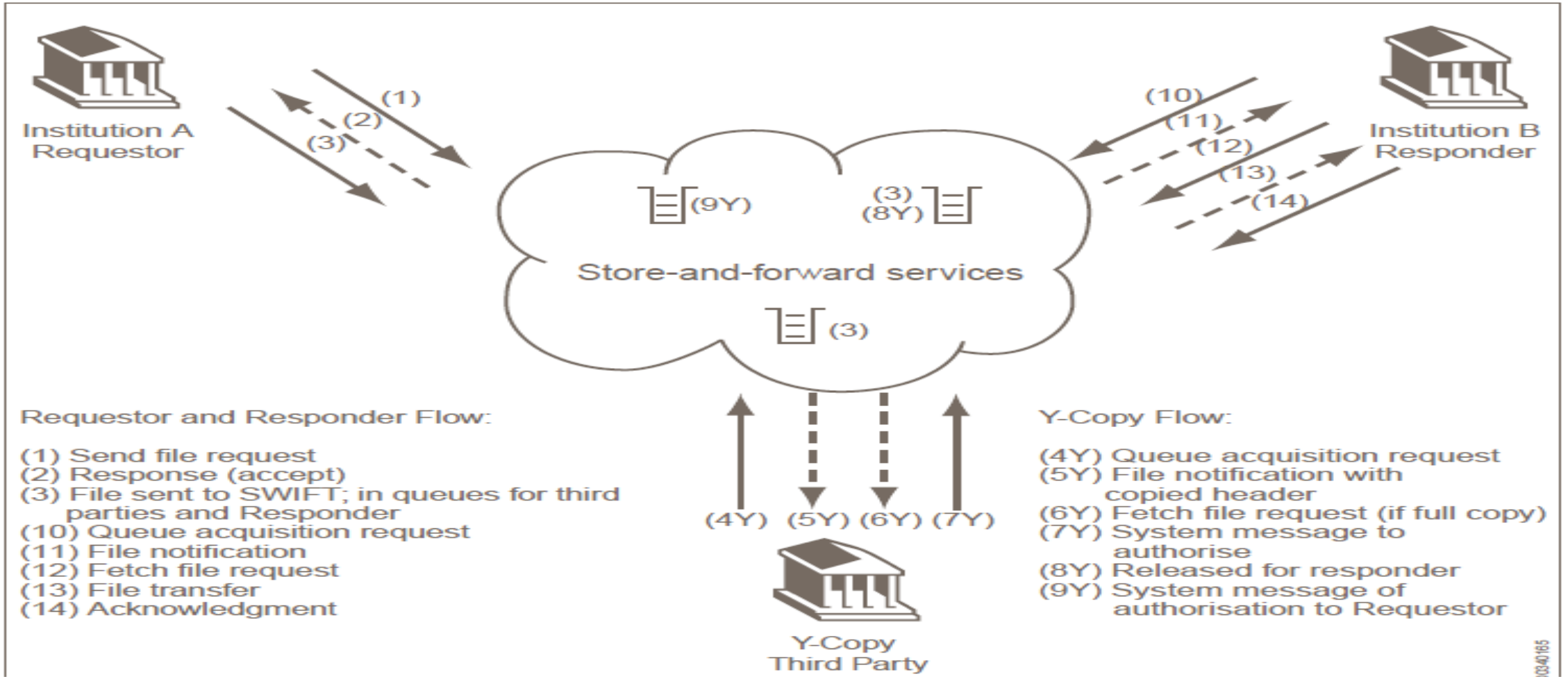
3. SWIFT FILEACT

Store-and-forward File Transfer with T-Copy



3. SWIFT FILEACT

Store-and-forward File Transfer with Y-Copy



3. SWIFT FILEACT

FILEACT FEATURES

Files supported

- Any character set
- Any content structure
- File size up to 250 Mbytes

File transfer security

- Based on SWIFTNet PKI (managed certificates)
- Closed user group control
- Encryption
- Authentication control
- Integrity control
- Non-repudiation of emission and reception (optional)

Transfer reliability

- Automatic handling of intermittent communication failures
- Monitoring of transfer progress and status
- Delivery notification provides explicit confirmation of delivery by receiver (optional)
- Throughput management and traffic prioritisation

Enhanced header

- Dedicated optional header block to specify key business summary information (for example, number of payments or total amount)
- Allows file handling (such as routing) without having to open the file

4. SWIFT WEBACCESS

SWIFTNet users can browse securely on financial web sites available on SWIFTNet using standard Internet technologies and protocols such as HTTP-S and HTML. This is enabled by Browse, complemented with InterAct and FileAct for business and security sensitive exchanges.

Browser enables users to browse on financial online portals made available by financial institutions and market infrastructures on SWIFTNet. It combines the user friendliness of web technology with the security features offered by SWIFTNet.

Browser-based : Access to a Browse service is via a standard Internet browser (such as Microsoft Internet Explorer) and Browse interface software. There is no need to install any software or hardware from the provider of the online portal.

Browsing security : Browse exchanges are secured by the combined use of the Secure Socket Layer protocol and SWIFT's secure IP network.

InterAct and FileAct security : Sensitive business or security data exchanges such as payment orders, confirmations, account balances, user IDs and passwords are exchanged through InterAct or SWIFTNet FileAct. Such exchanges benefit directly from all the features of these services, including their high security and reliability. Their use is made invisible to the person browsing.

Closed user group control : Browse exchanges are only permitted within defined closed user groups.

4. SWIFT WEBACCESS

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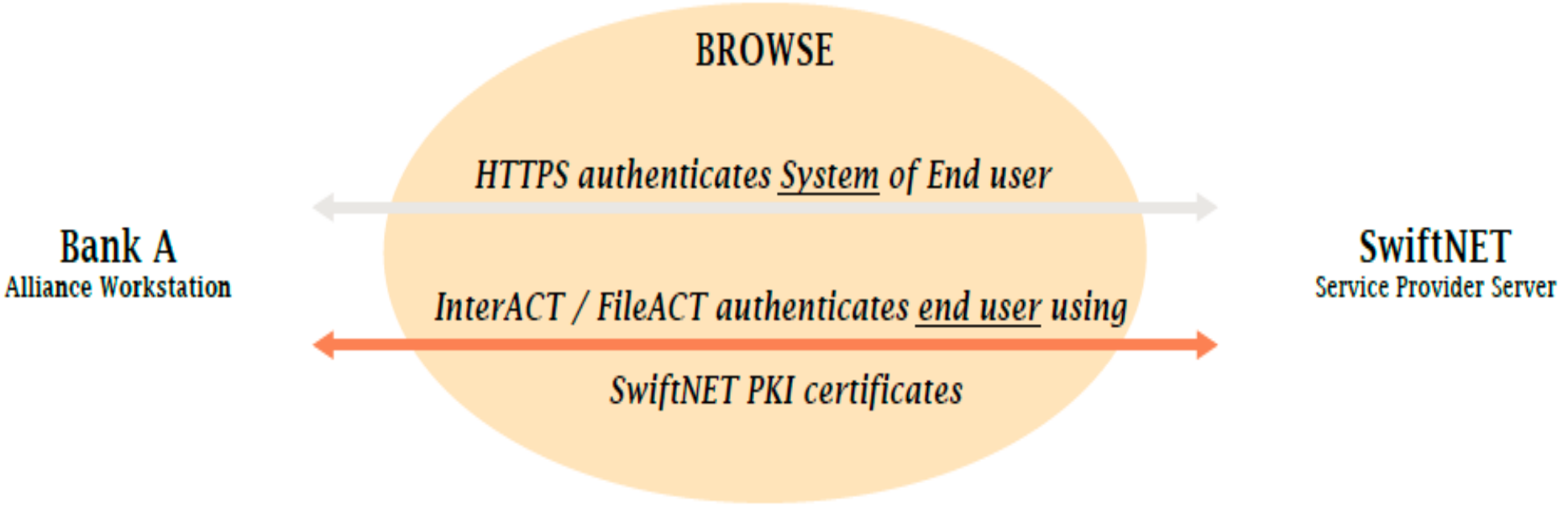
SWIFT WEBACCESS provides a secure channel to web applications

- **A highly secure, screen-based channel over SWIFT**
  - With cyber-threats an ever-present risk, the internet may not deliver the security and reliability demanded for mission-critical applications. On the other hand, proprietary channels require dedicated infrastructure and setup costs for each channel added.
  - SWIFT WebAccess is the secure and reliable channel to access web applications over SWIFT.
  - It offers valuable benefits to both users and service providers.
- **Benefits for users:**
  - Access to critical applications is safeguarded with SWIFT's security and reliability
  - A single window to access multiple services – no need to set up and manage a new dedicated channel
  - It's easy to adopt new services using existing connectivity, infrastructure, tools and processes.
- **Benefits for service providers:**
  - Offers customers a secure and reliable channel to access your services
  - Increases customer reach by facilitating adoption by SWIFT customers worldwide
  - User authentication service is centrally managed by SWIFT
  - Straightforward integration into your web applications, using open standards.

4. SWIFT WEBACCESS



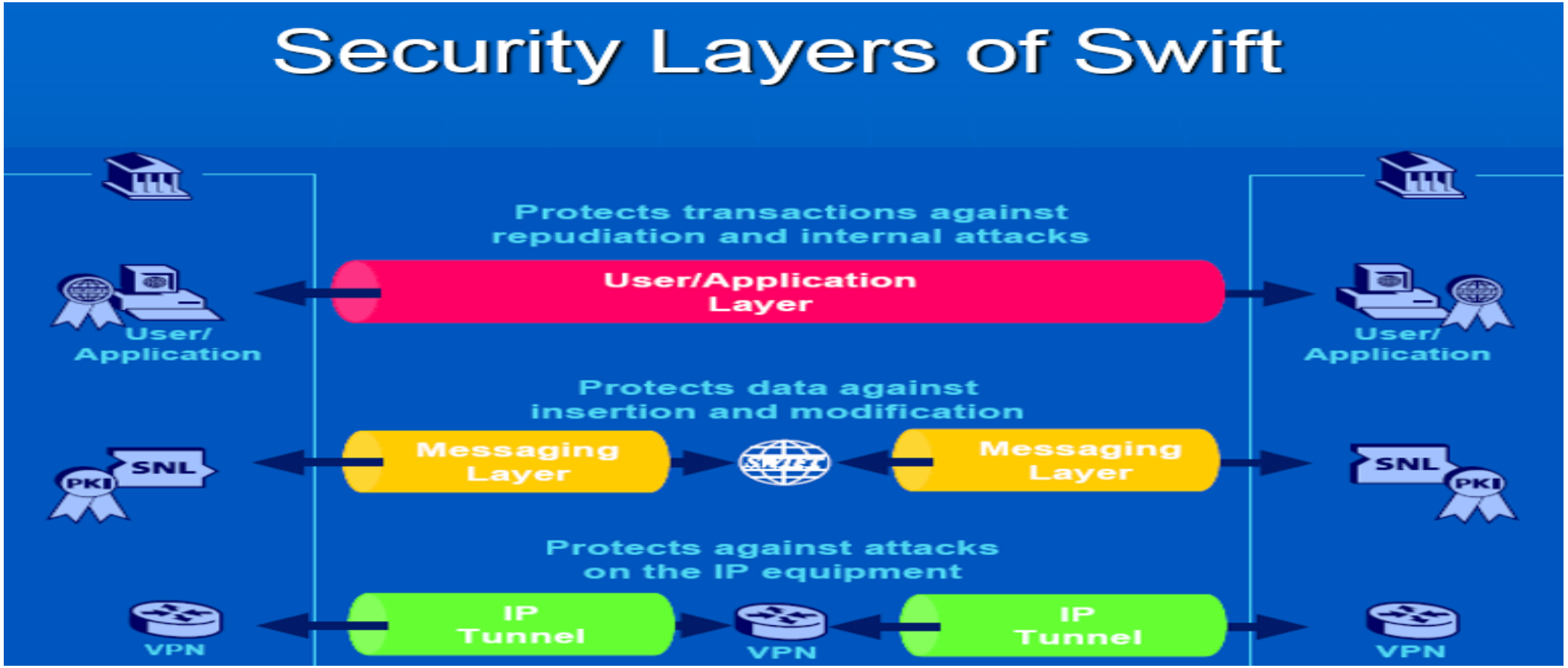
SWIFTNET SECURITY

Location, Date, Author

SWIFTNET SECURITY

SWIFTNET comprises of the below layers :

- ✓ Application layer
- ✓ Messaging layer (SNL)
- ✓ Network layer



SWIFTNET SECURITY

Application layer

The application layer provides transaction level capabilities, secured by a Public Key Infrastructure (PKI). It protects against fraud, with SNL providing Application Programming Interfaces (APIs) that enable applications to encrypt and sign individual transactions.

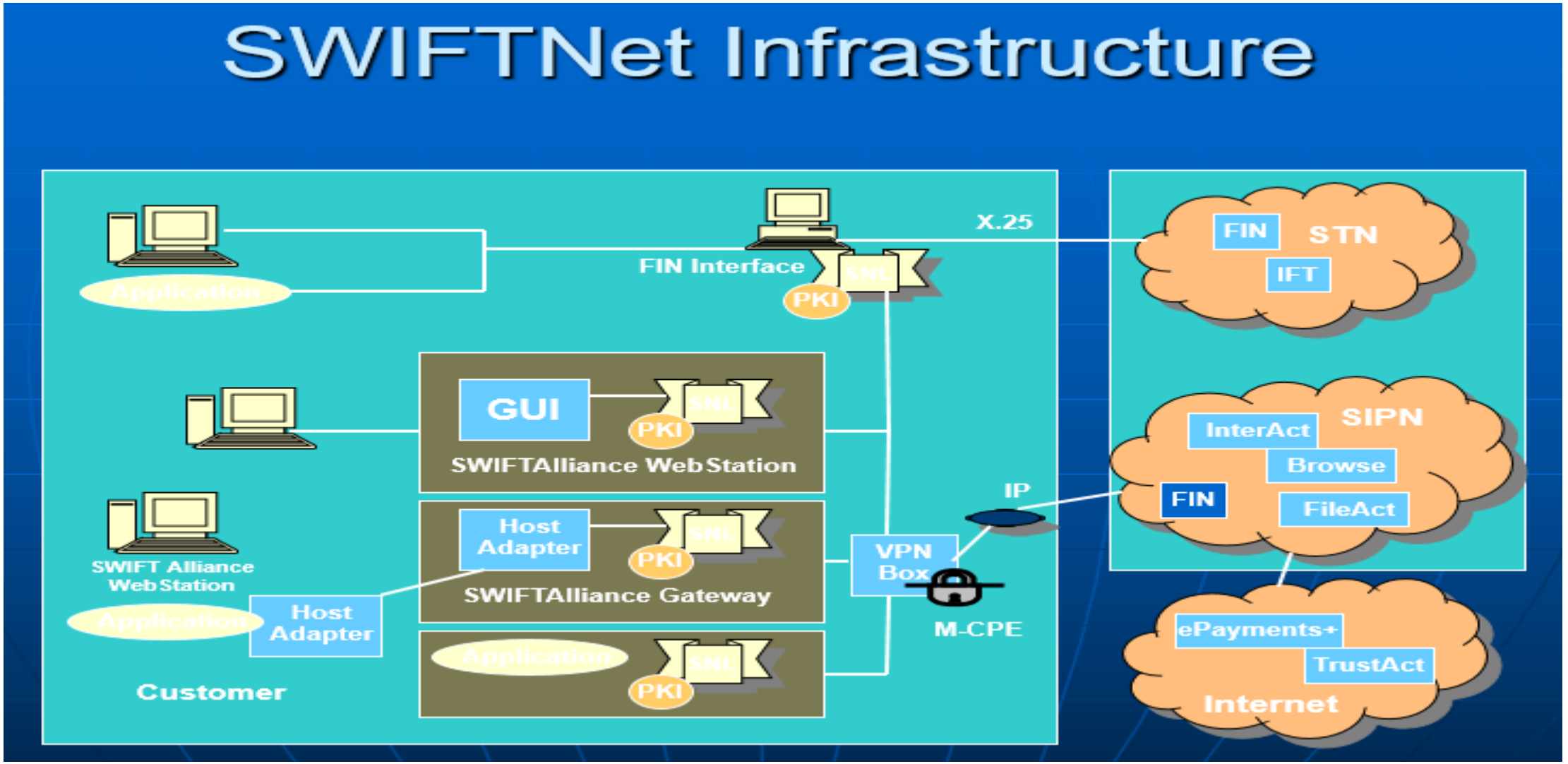
Messaging Layer (SNL)

SWIFTNet Link provides data security between SWIFTNet Link nodes. This security is complementary to and completely independent of the Secure IP Network security. SNL is a mandatory software to access SWIFT's services on the SIPN network. It embeds SWIFTNet PKI.

Network Layer

IP Packet Authentication and Integrity is used for authentication between the M-CPE and the POP
IP Packet Confidentiality is ensured with link encrypters
Router Authorisation is used by implementing IP packet filters on all Secure IP Network routers. Attacks within or outside the network is countered and external origined messages are filtered

SWIFTNET INFRASTRUCTURE



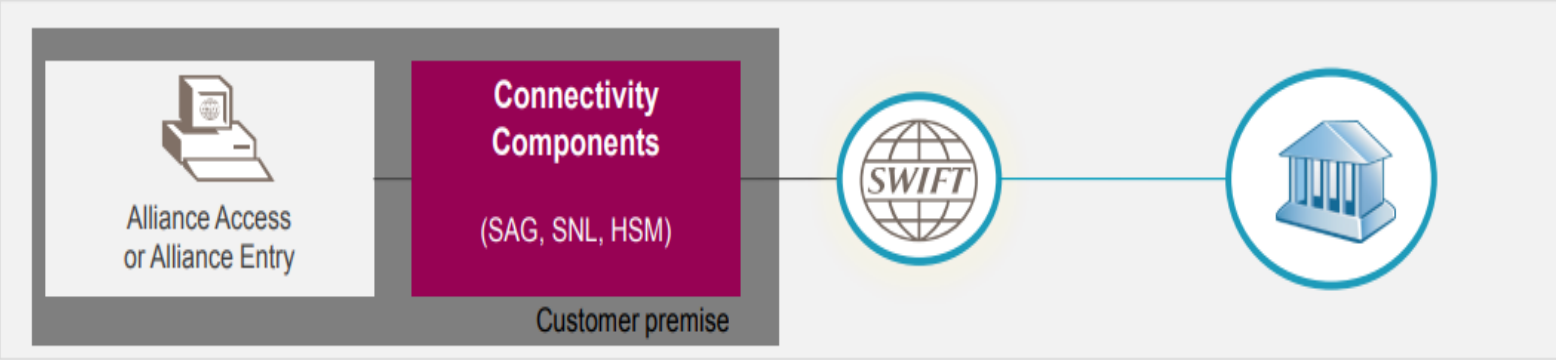
SWIFT CONNECTIVITY

- In order to use SWIFT's messaging services, customers need to connect to the SWIFT Environment.
- There are several ways of connecting to the SWIFT Environment: directly via permanent leased lines, the internet, or SWIFT's cloud service (Lite2); or indirectly via their appointed partners.
- Messages sent by the customers are authenticated using specialized security and identification technology.
- Encryption is added as the messages leave the customer environment and enter the SWIFT Environment.
- Messages remain in the protected SWIFT Environment, subject to all SWIFT's confidentiality and integrity commitments, throughout the transmission process – whilst they are transmitted to the SWIFT operating centres where they are processed until they are safely delivered to the receiver.
- In addition to the different connectivity options and the range of gateway products, SWIFT also provides a range of interfaces, providing seamless links between users' internal systems and the SWIFT Environment.
- All the interface products manage the SWIFT protocols needed to access the SWIFT Environment; our range of interfaces supports different services and functionalities, addressing distinct customer needs.
- All SWIFT messaging services can be combined with a range of standard and optional features. Users can increase efficiencies and tailor their SWIFTNet package to their messaging needs by making use of these additional tools.

SWIFT CONNECTIVITY

Connectivity Options

Traditional setup



ARG setup

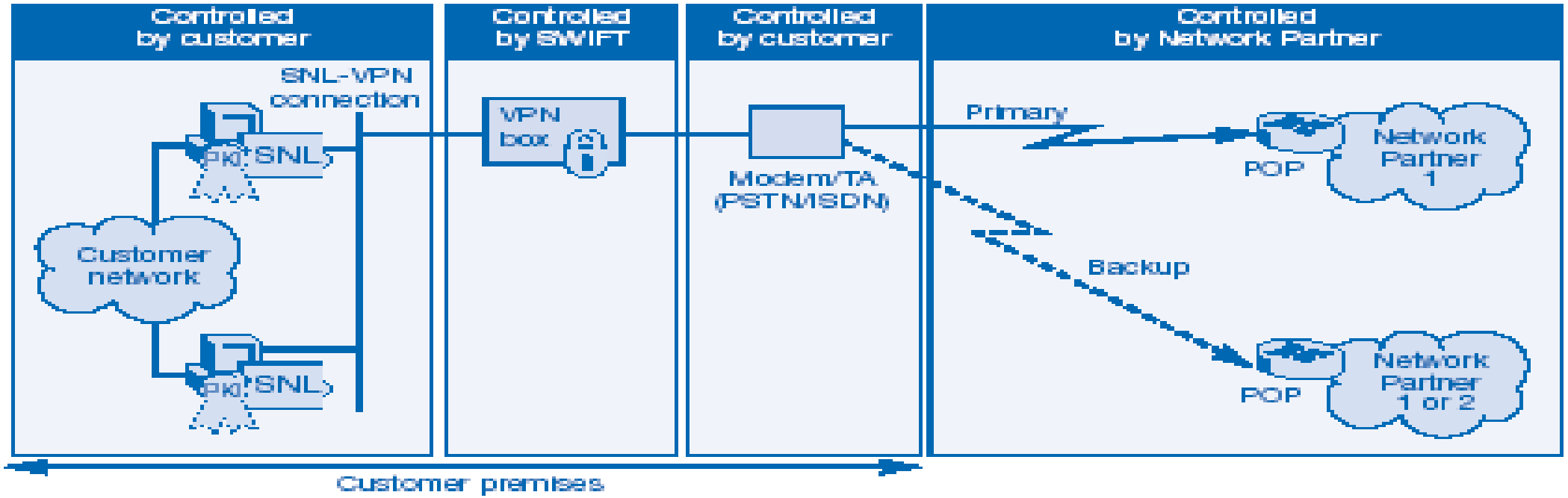
Advantages:

1. Light foot print – hosted gateway solution
2. Best in Class – security, reliability and support
3. Cost effective - Save money by letting SWIFT host Technical components
4. Integrated service offering
5. **Full-featured -** All SWIFT message types, SWIFTNet flows and Browse services

SWIFTNET CONNECTION TYPES

Dialup Connection –

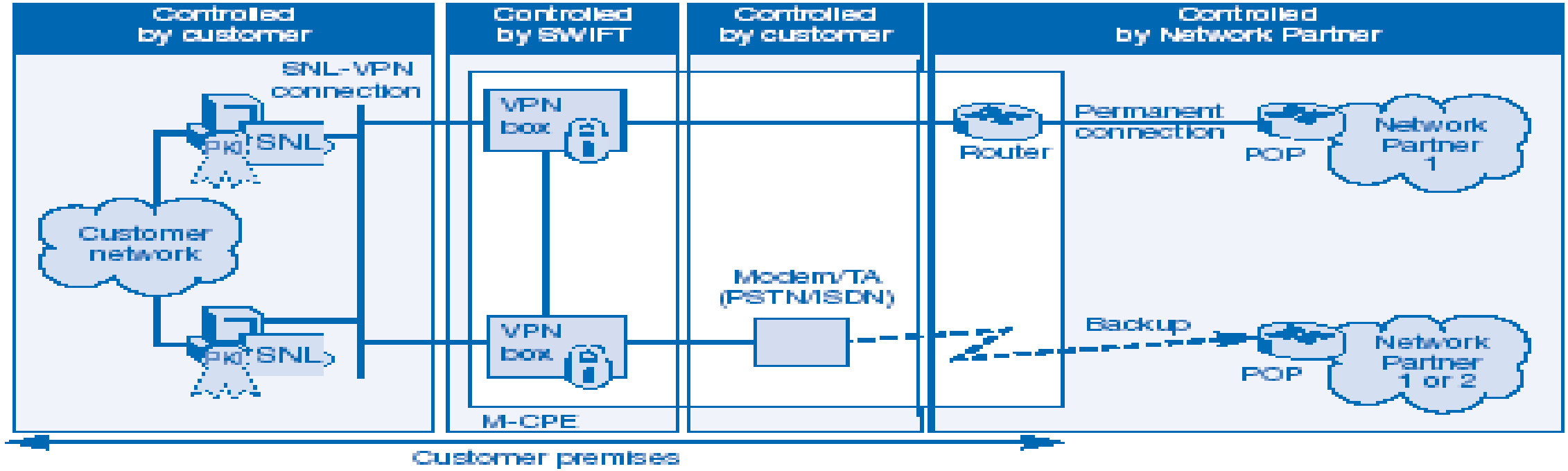
The WebStation or SNL uses a single VPN box with dial access via one or more network partners. PSTN is the default technology



SWIFTNET CONNECTION TYPES

Dial-I Connection

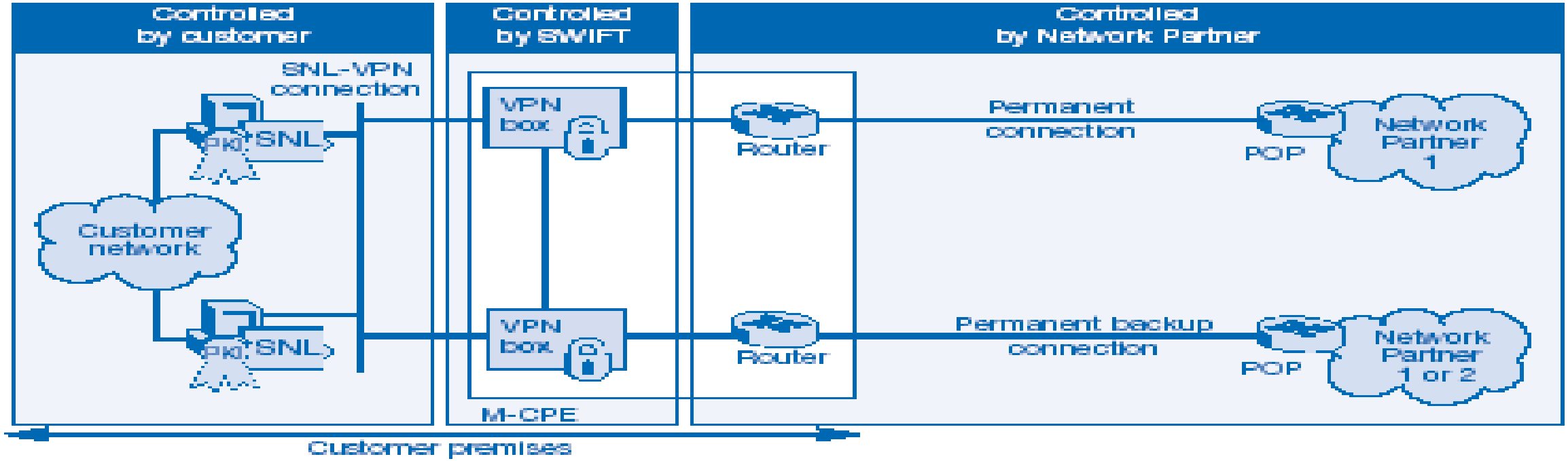
Two VPN boxes in active/standby mode. The active box is connected to a router with a leased line connection; the standby VPN box offers ISDN/PSTN access to the same or a different network partner.



SWIFTNET CONNECTION TYPES

Dual-P Connection

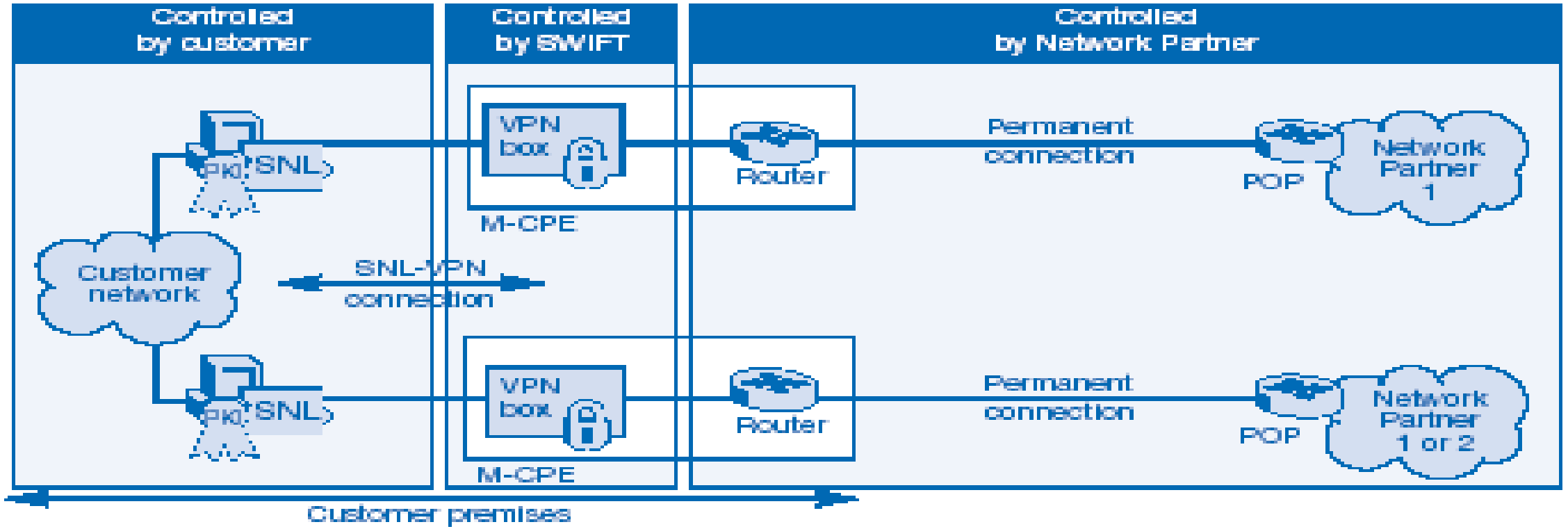
Two VPN boxes in active/standby mode. Each is connected to a dedicated router with a leased line connection to either the same or a different network partner.



SWIFTNET CONNECTION TYPES

Multi-Line Connection

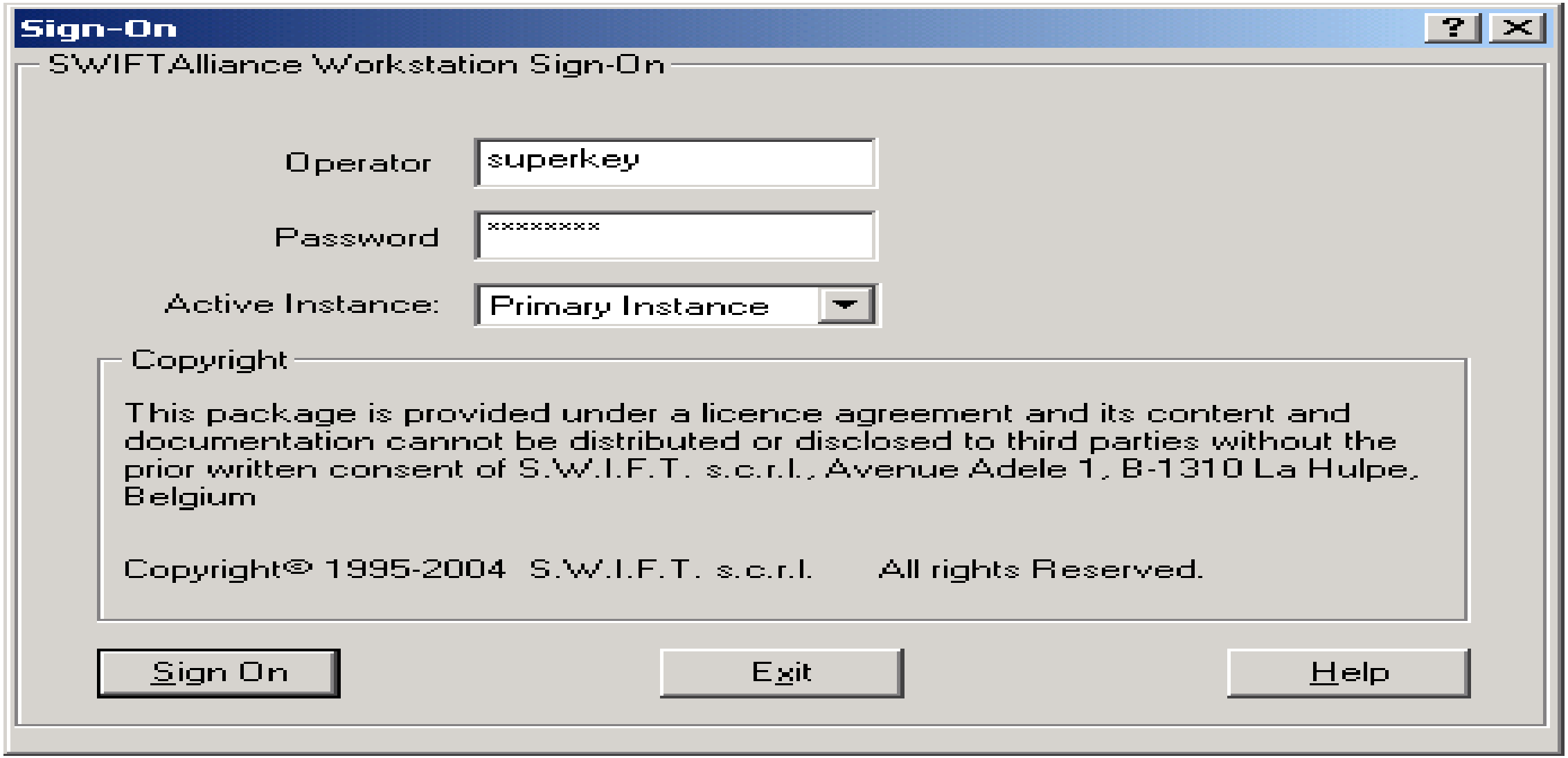
Two independent leased lines. It uses mechanisms at the level of SWIFTNet Link and/or SWIFTAlliance Gateway to handle all resilience aspects. It is a cost effective, fully resilient connectivity solution.



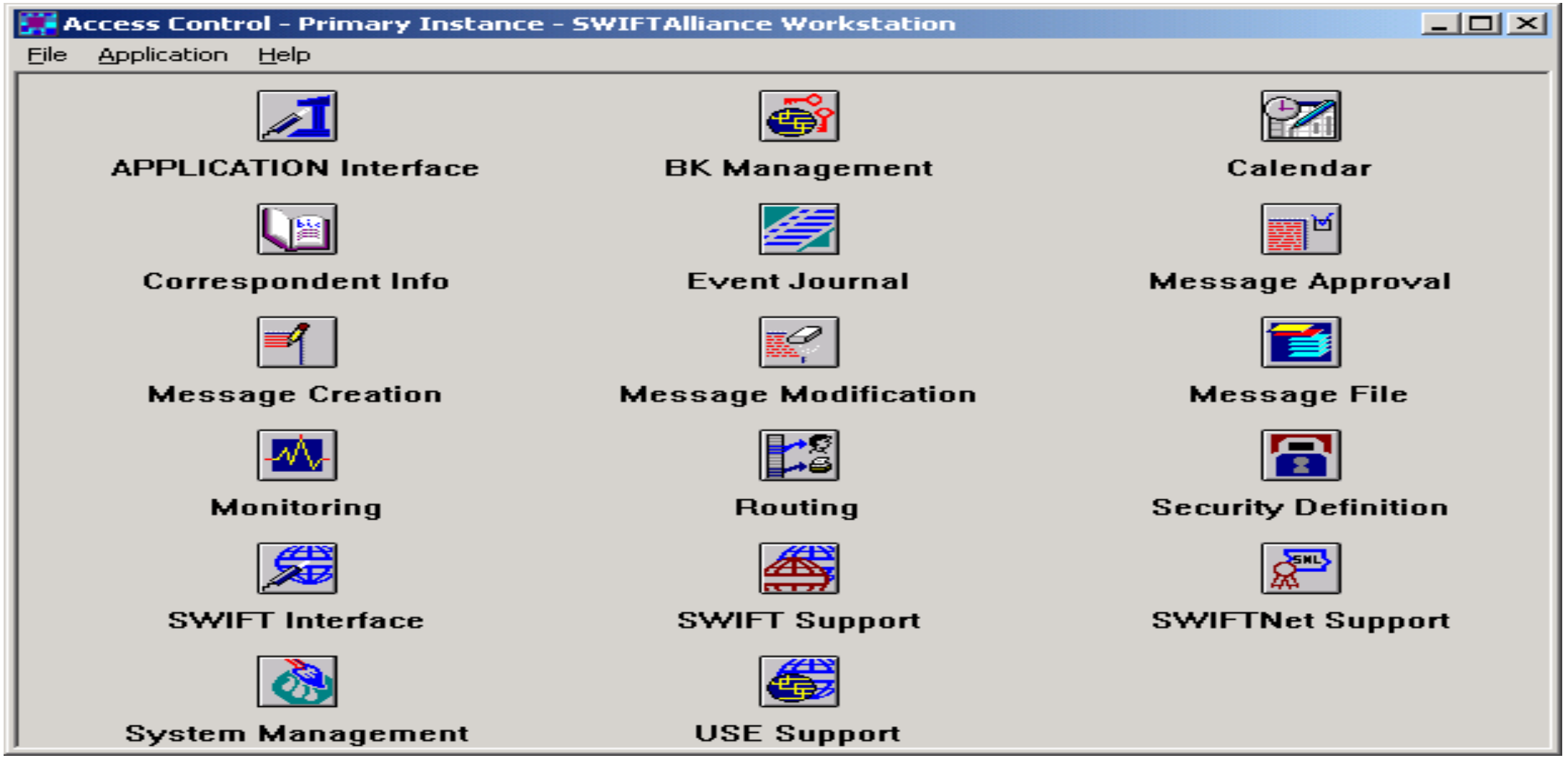
SWIFTNET GUI

Location, Date, Author

SWIFTNET UI



SWIFTNET UI



SWIFTNET UI

The various applications which can be access from the primary access control are:

Event Journal :

Event journal has its own event journal application, with powerful facilities for searching and viewing the events that have been recorded. Every event that occurs in an Alliance system is recorded in an Event Journal. To resolve a problem or find out more about an incident that has taken place on the system, then you can go to event journal. Event provide right information quickly and easily.

Fixed events : This type of event (usually a security-related event) is preset in Alliance Access and is always recorded in the Event Journal. This ensures that the auditing facilities and security
of the system does not fall below a minimum level.

Non-fixed events: You can use the System Management application to specify whether a no fixed event is recorded in the Event Journal.

Message Creation Application :

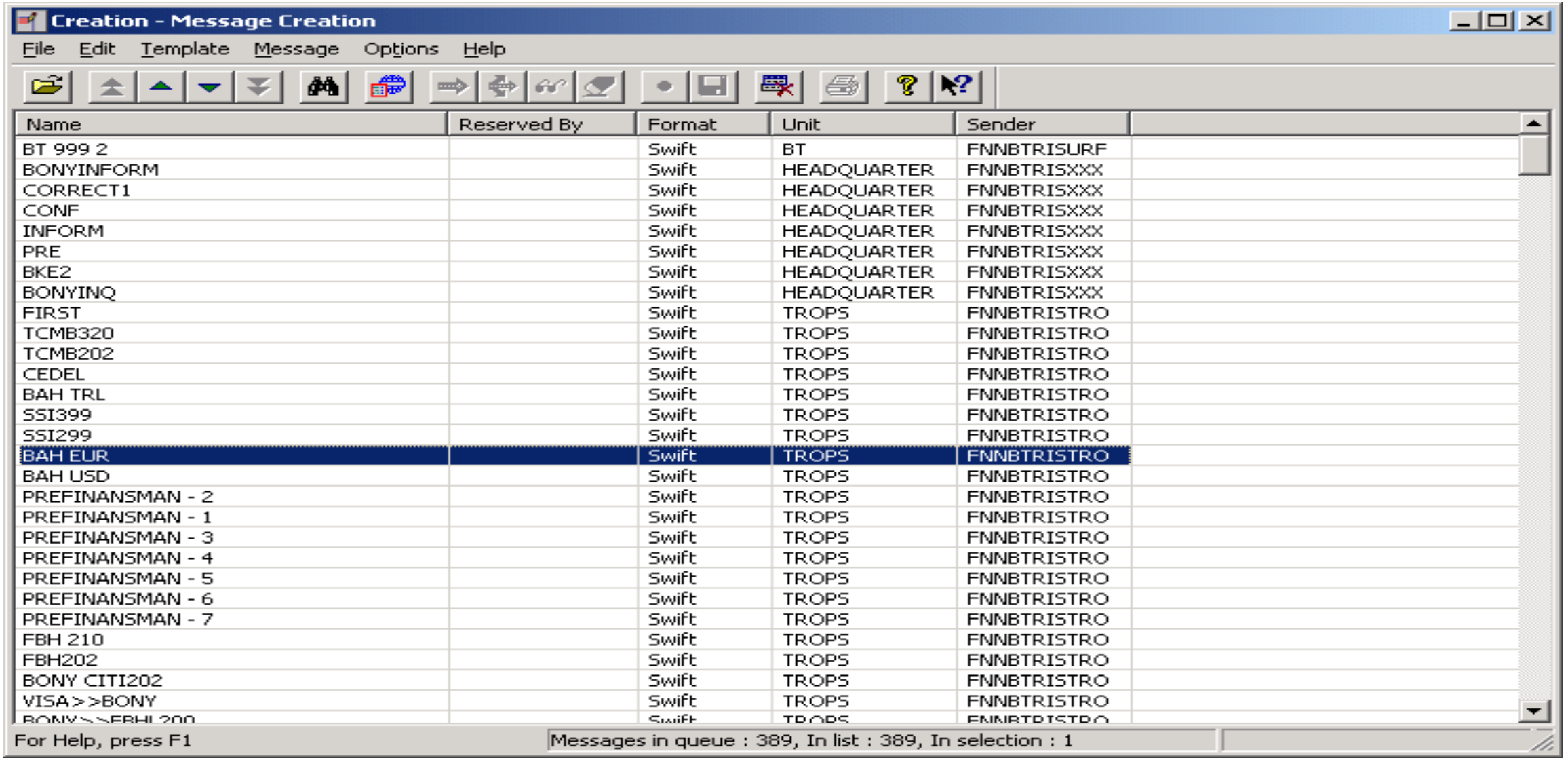
Message Creation application is used to create financial messages for secure transmission to correspondents all over the world using the SWIFT, fax and telex networks. It is also used to create system messages to communicate with the SWIFT organization and its user community about network issues. The Message Creation application provides all the functions necessary to create messages.

Create a completely new message, or can open an existing template and base the message on it.

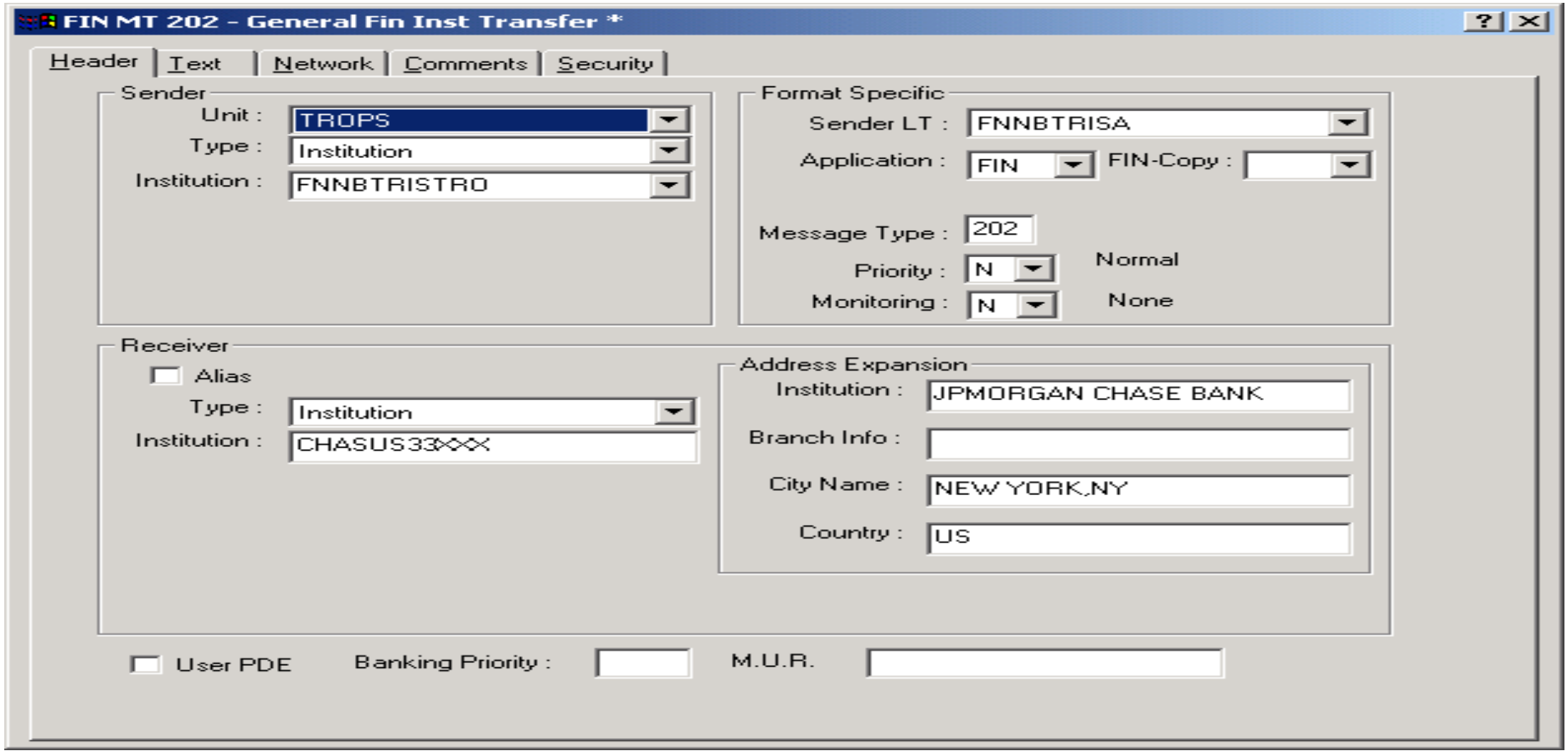
Depending on the operator profile, can:

- Open a template and base a new message on it
- Create a SWIFT message by entering all its details in full
- Create a telex message in full
- Create a template, or modify or remove an existing template.

SWIFTNET UI



SWIFTNET UI



SWIFTNET UI

Message Verification:

Message verification is used to verify the messages.

In order to act as message verifier , the verifier should have all the possible access granted to him. The Security officers define the operators to act as message verifiers by means of Security Definition application. As a verifier, select messages from the Verification queue and display them.
Messages always appear for verification in prompted mode.
Verifiable fields appear blank. As a verifier, complete the blank fields.
The data is entered by verifier is compared with the data entered by the message creator as the verifier quits each field.
If there are any differences then the field is identified in a different colour.
In this way the difference in message is caught by virtue of colour difference and the message is verified.
Once the message is verified it can be routed or disposed to next queue as per following three cases –

1.If all the fields in message are verified properly then route it to Message Authorisation queue (_MP_authorisation).
2.If the verifier has permission to bypass authorisation for a message then he can also route the verifed message directly to input network queue.
3.If the field in the message fails verification then the verifier can move it to Text modification queue.

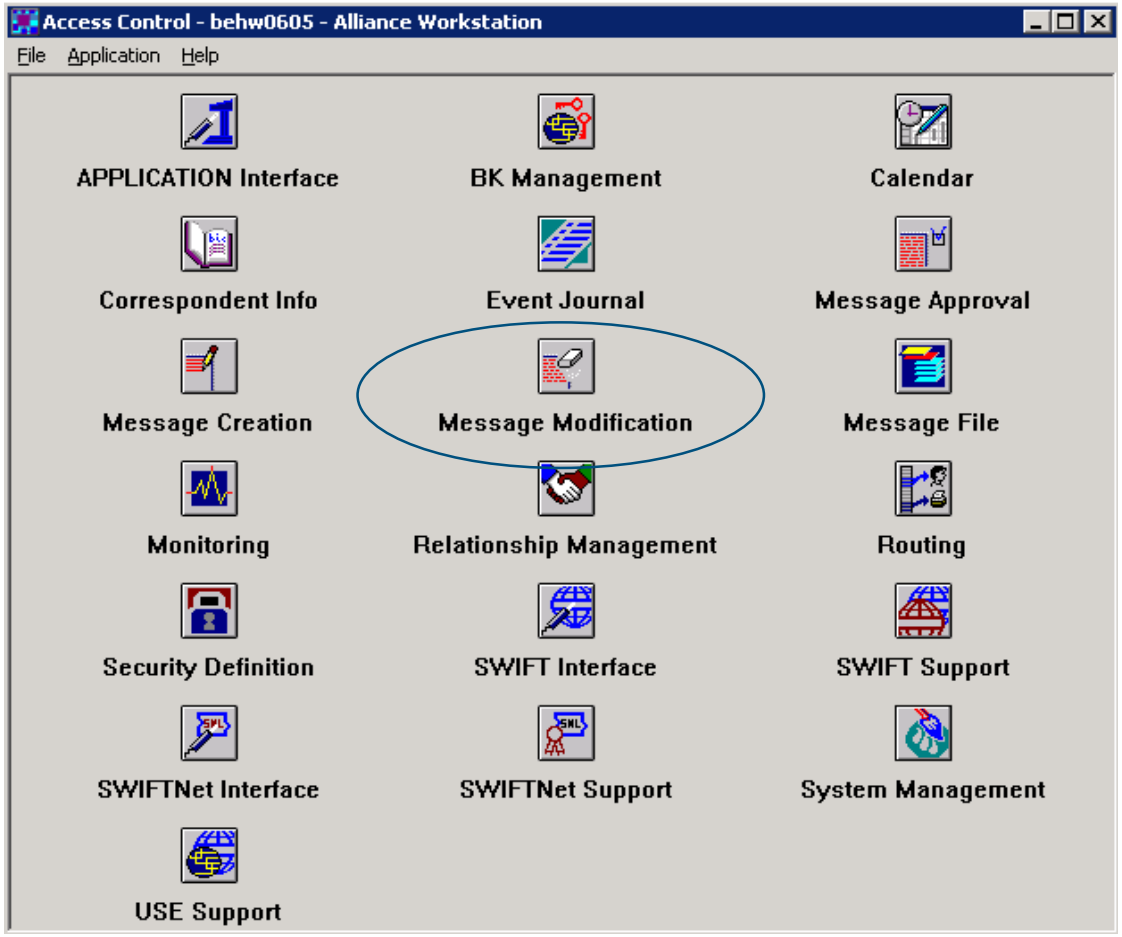
SWIFTNET UI

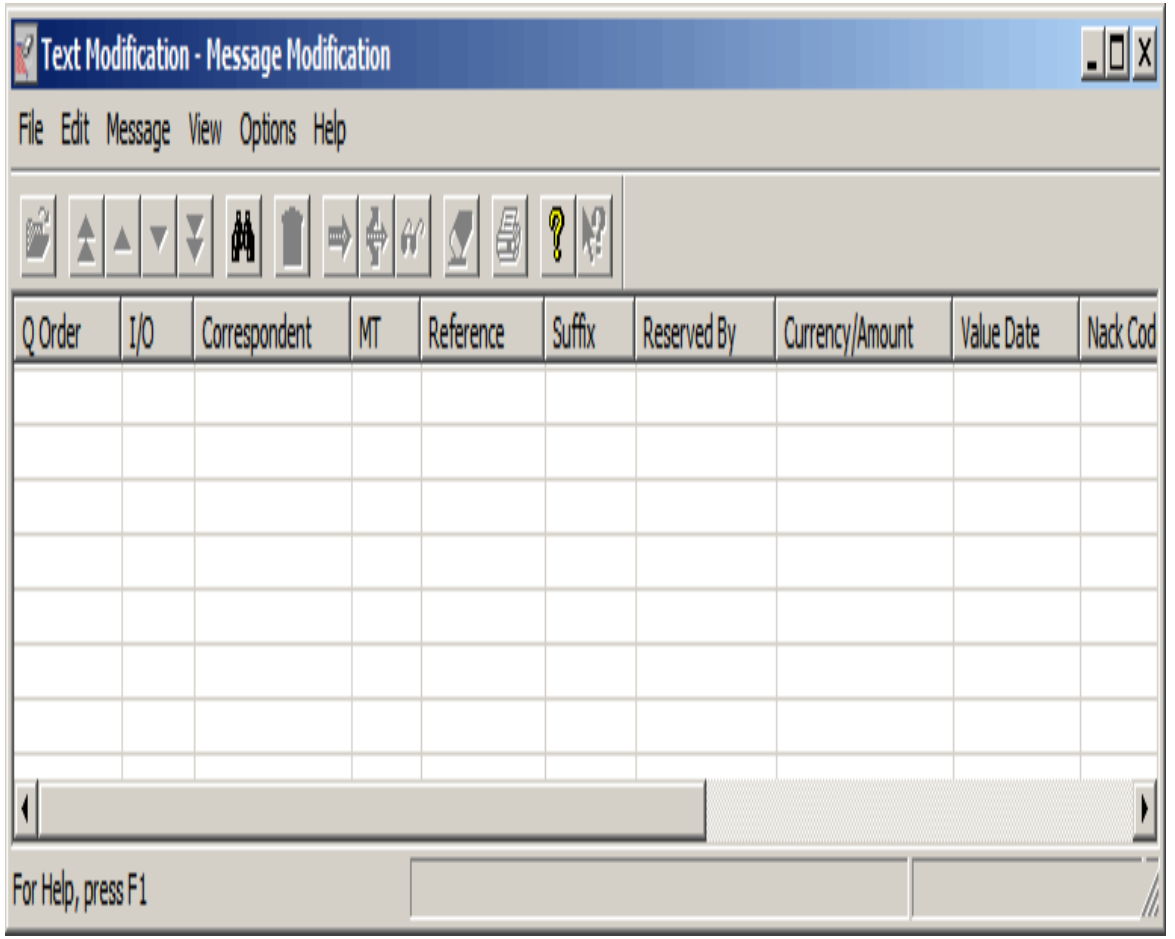
USED FOR VERIFYING MESSAGES

SWIFTNET UI

Message Modification:

The Message Modification application is used to modify SWIFT messages to correct problems.
The Message Modification window lists the messages that are currently held in a selected modification queue.





SWIFTNET UI

Message File Application:

The Message File application is used to monitor the location and status of messages within Alliance Access. The application can be used to investigate the status and history of messages. A copy of every processed message is kept on a database. From the Message File application, can query this database with powerful search criteria to find specific messages or groups of messages.

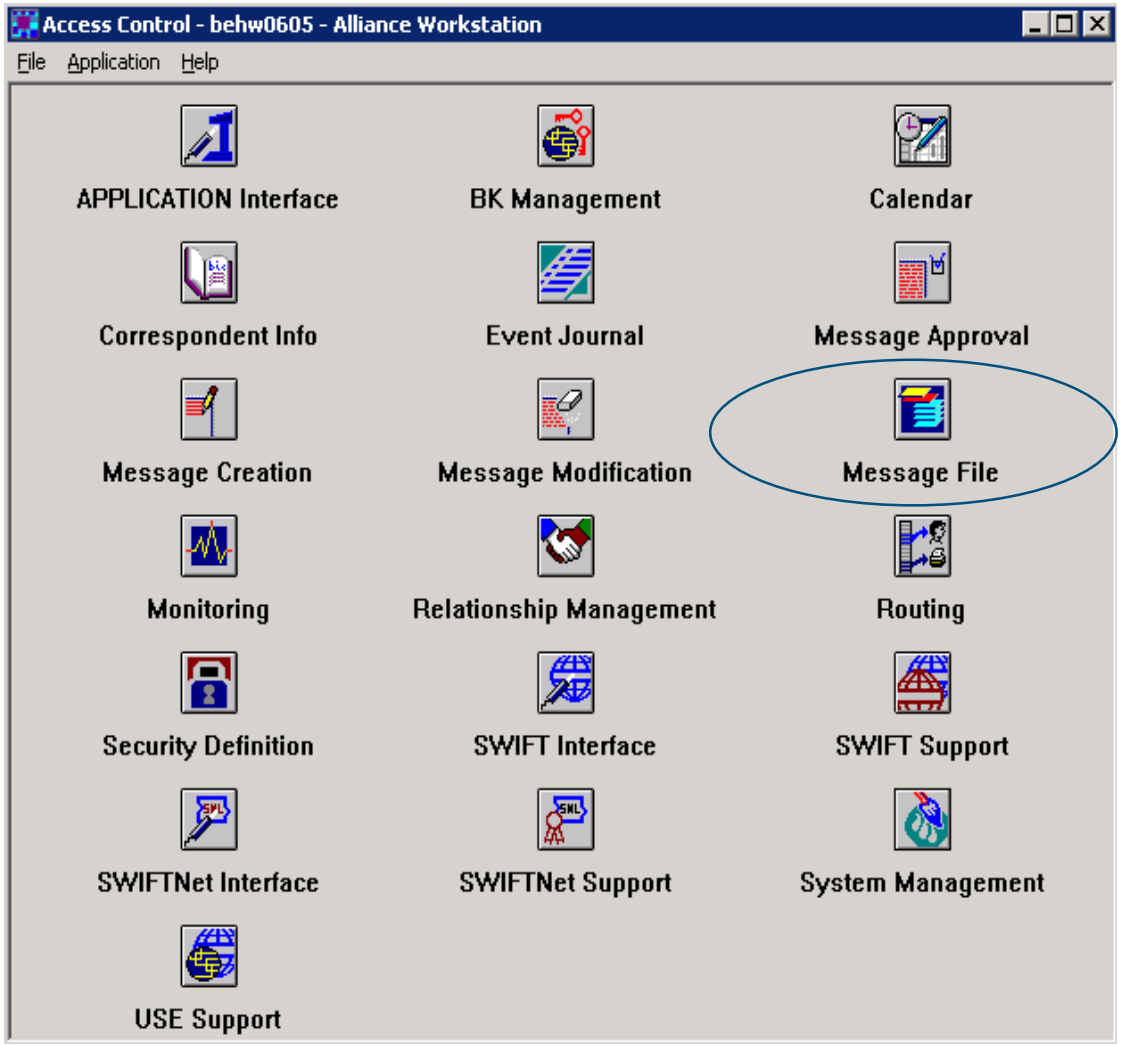
Message File application is used to:

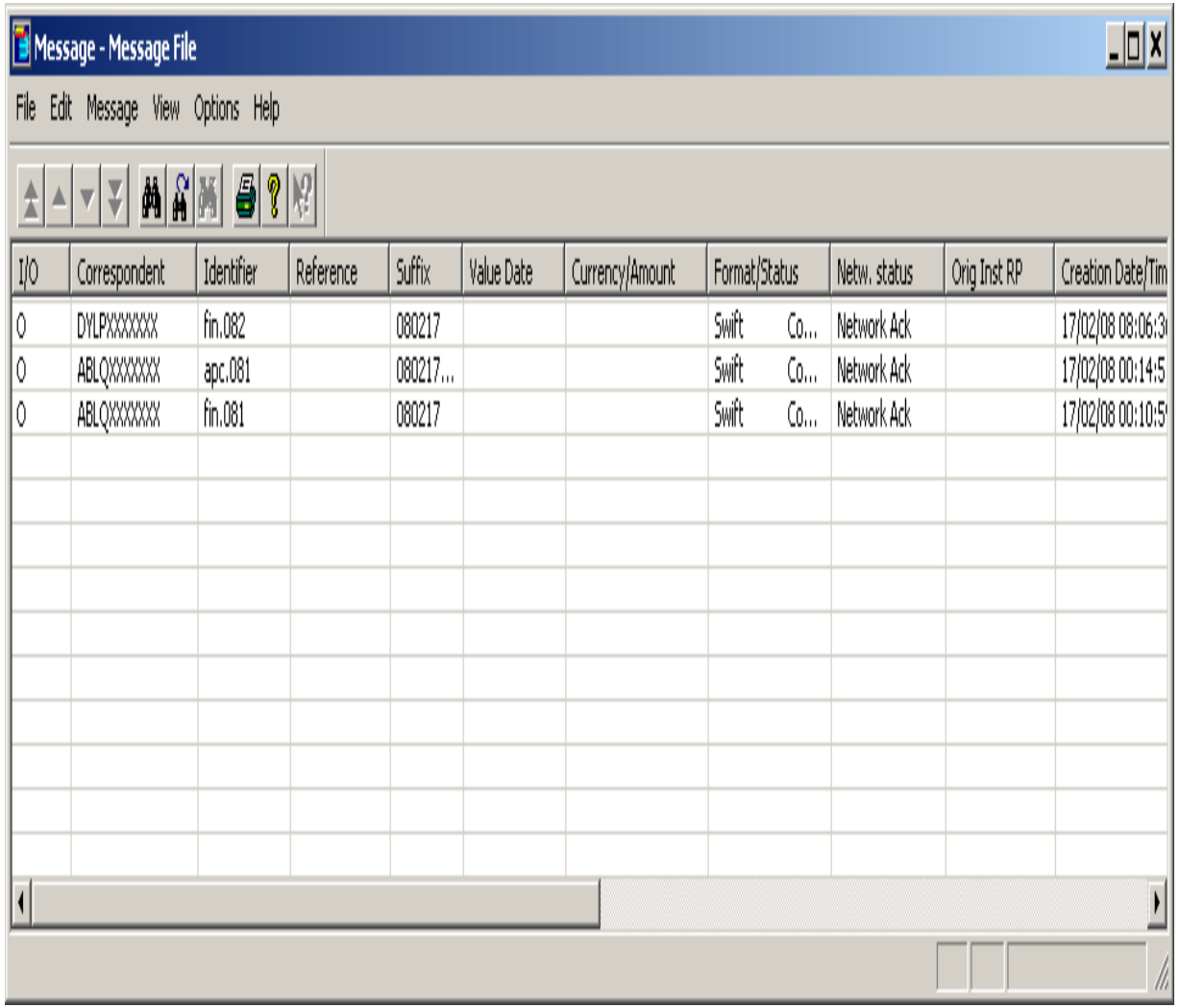
- specify the messages that need to search for
- create search templates
- list search results
- display the details of messages that match your search criteria
- change the state of a message instance by completing or reactivating it
- change the priority of a message instance
- move a message instance to a routing point or exit point
- reassign a message instance to a different unit
- check the transmission details for a message transmitted with automatic logical terminal allocation enabled.

When a message search is complete, the results appear in the **Message File window.**
In the main part of the window is a list of messages that match the search criteria

SWIFTNET UI

Message File Application :





SWIFTNET UI

Calendar Application

The Calendar application is used to manage calendar(s). Within other Alliance Access applications, operators can use the calendar to schedule automatic operations. Multiple calendars can be set up for a given year. This enables logical terminals to have their own calendar, which can be useful if the LTs are located in different countries, with different working days or public holidays.
Calendar application can be used to create additional calendars. If only one calendar is defined, then it is automatically set as the default one.
If more than one calendar is defined then select which one is to be used as the default.

Alliance Access automatically assigns the following system attributes to the days:

First working day of month. This is assigned to the first day of the month that is not a Holiday or a Weekend.

Middle working day of month. This is assigned to the 16th of the month, or the next day that is not a Holiday or a Weekend.

SWIFTNET UI

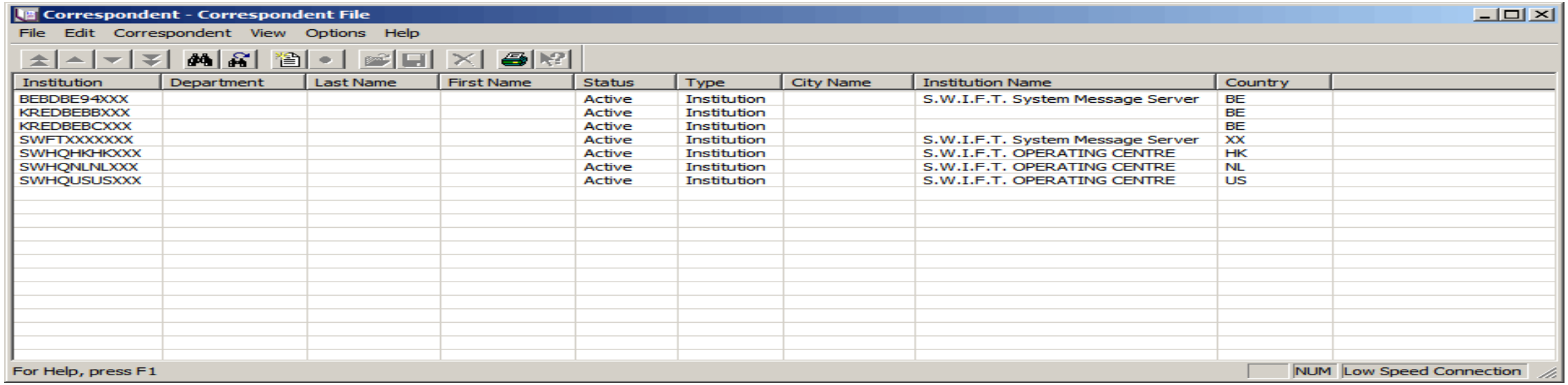
Correspondent Information File Application

The Correspondent Information File application allows to update the Correspondent Information File (CIF) manually or by importing information from a BIC (Bank Identifier Code) file, which contains details of financial institutions.

In Alliance Access, a correspondent can be an institution, department or individual which Alliance Access can communicate with through a network.

The Correspondent Information File contains detailed records for:

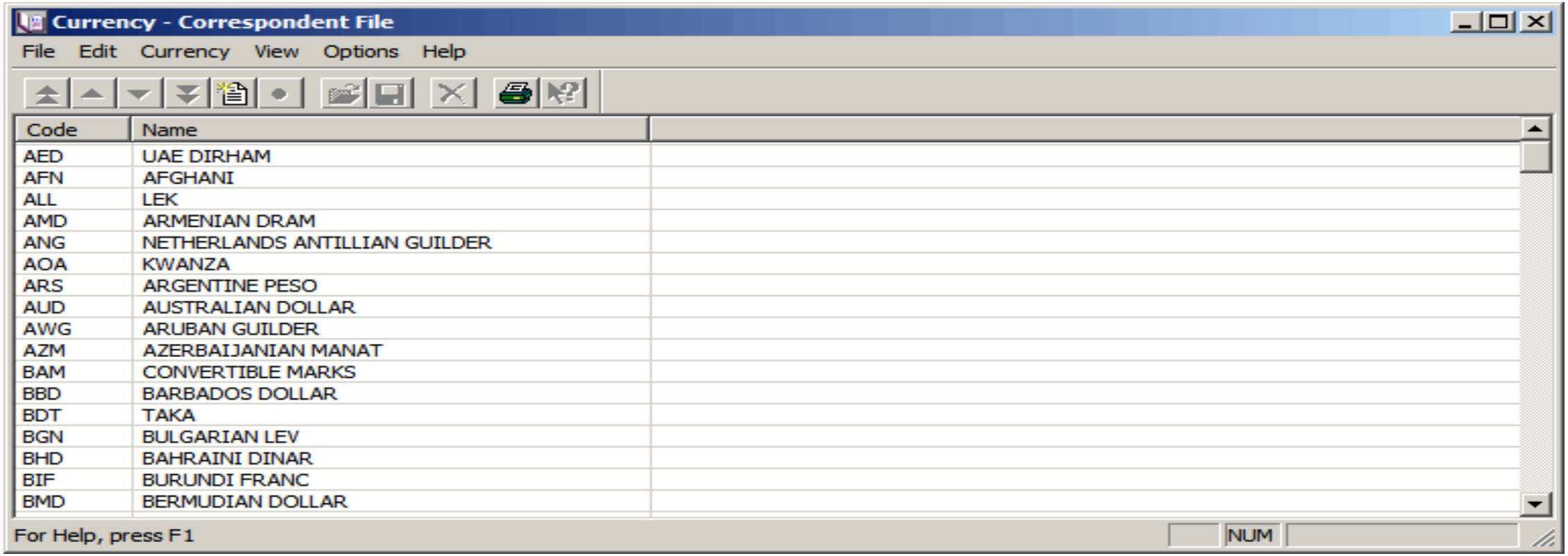
- Correspondents
- Aliases
- Currencies
- Countries



SWIFTNET UI

Currency Correspondent File

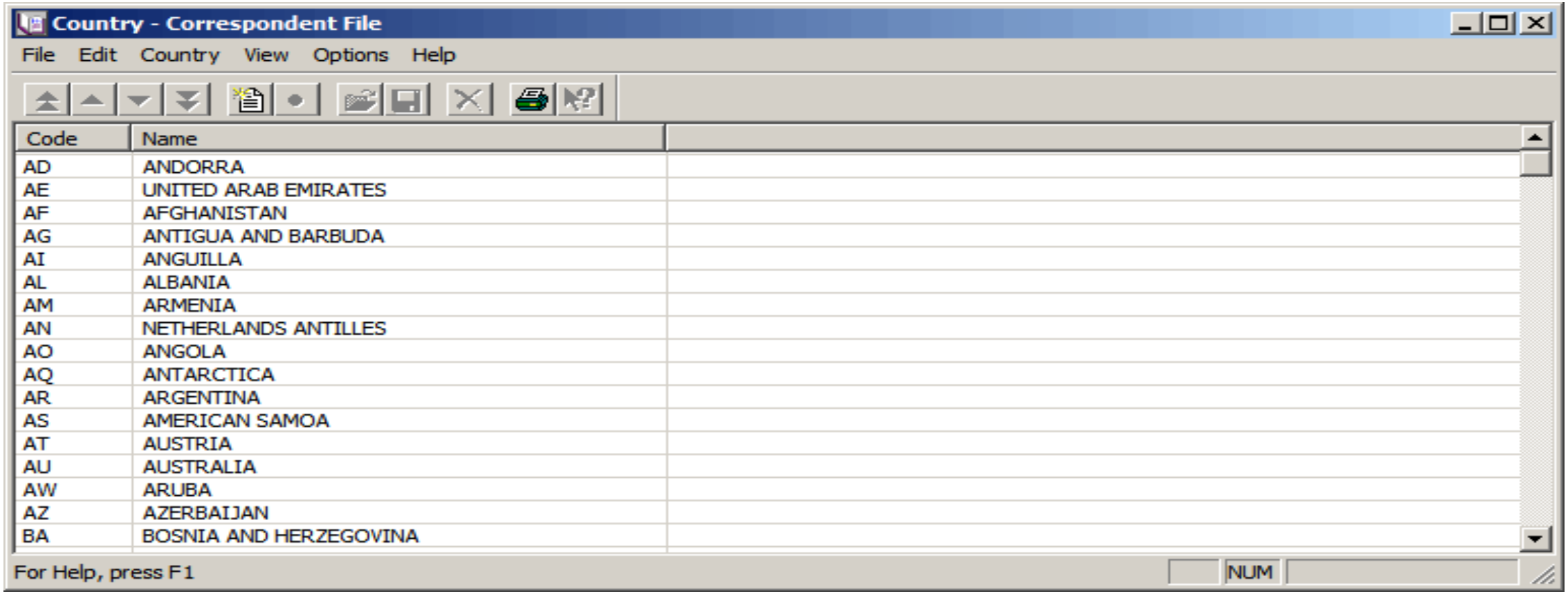
The Currency - Correspondent File window appears by selecting Currency from the View menu in the Correspondent File window.



SWIFTNET UI

Country Correspondent File

The Country - Correspondent File window appears by selecting Country from the View menu in the Correspondent File window.



SWIFTNET UI

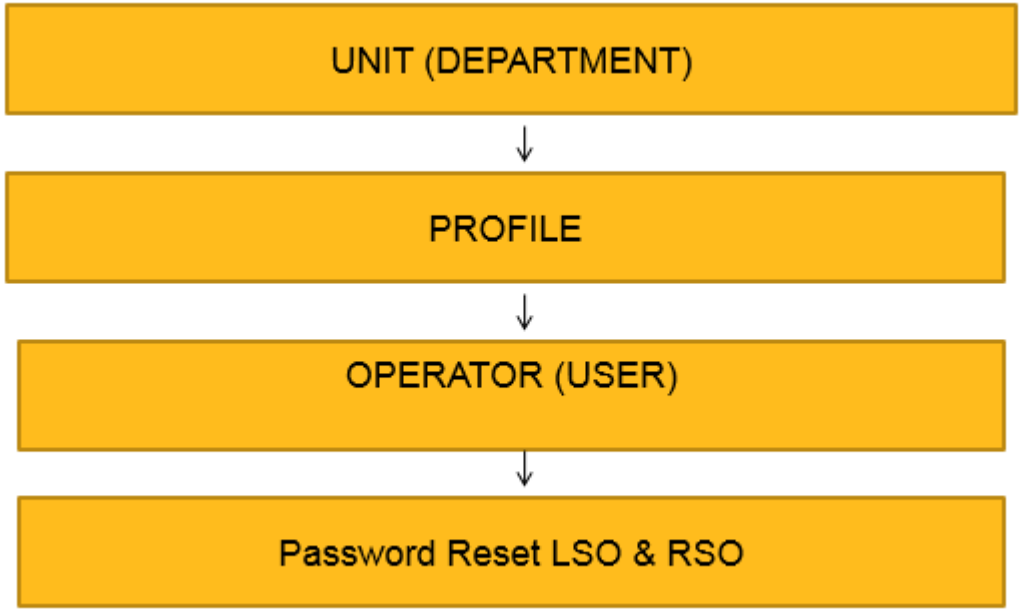
Security Definition

The Security Definition application strictly controls the use of Alliance Access. Security officers use this application to create and manage operator definitions and to modify the global security parameters that control access to the system. The Security Definition application is used to define unit, profile, user on the system and security definition is used for configure various security parameters .

SWIFTNET UI

Security Definition

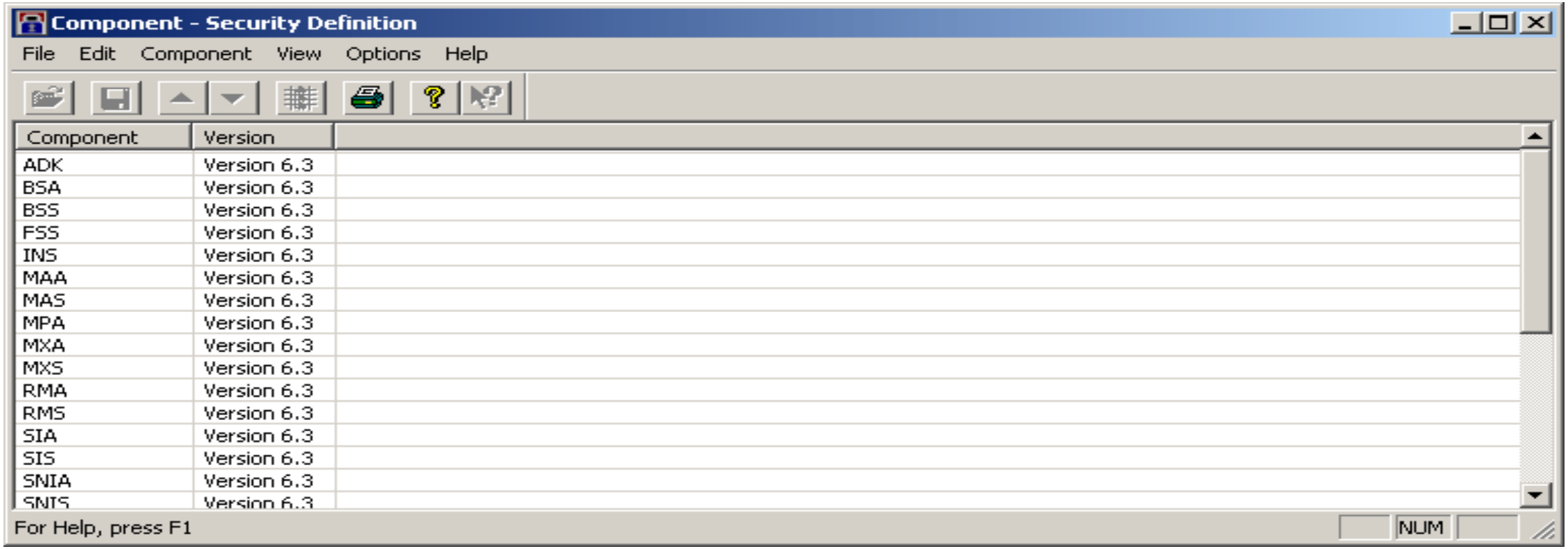
Flow of system in Security Definition



SWIFTNET UI

Security Definition

The component view of the Security Definition application lists all registered components with their version number The Component column shows the name of each component. The Version column shows the version number of the component.



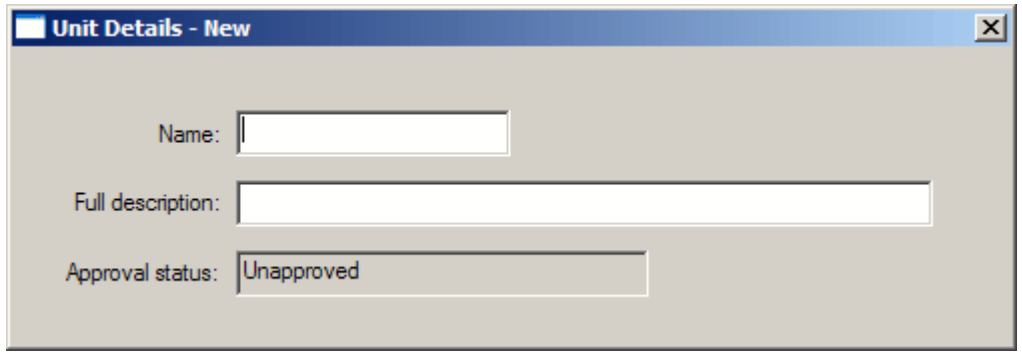
SWIFTNET UI

Security Definition

Defining Units with help of security definition

Units allow operators, working in a large institution, to be subdivided into logical working groups. This means that confidential message information such as value dates, currency, amounts, and message text are visible only to those operators with the appropriate unit membership.

Below is the window when we want to create new Unit with in SAA.



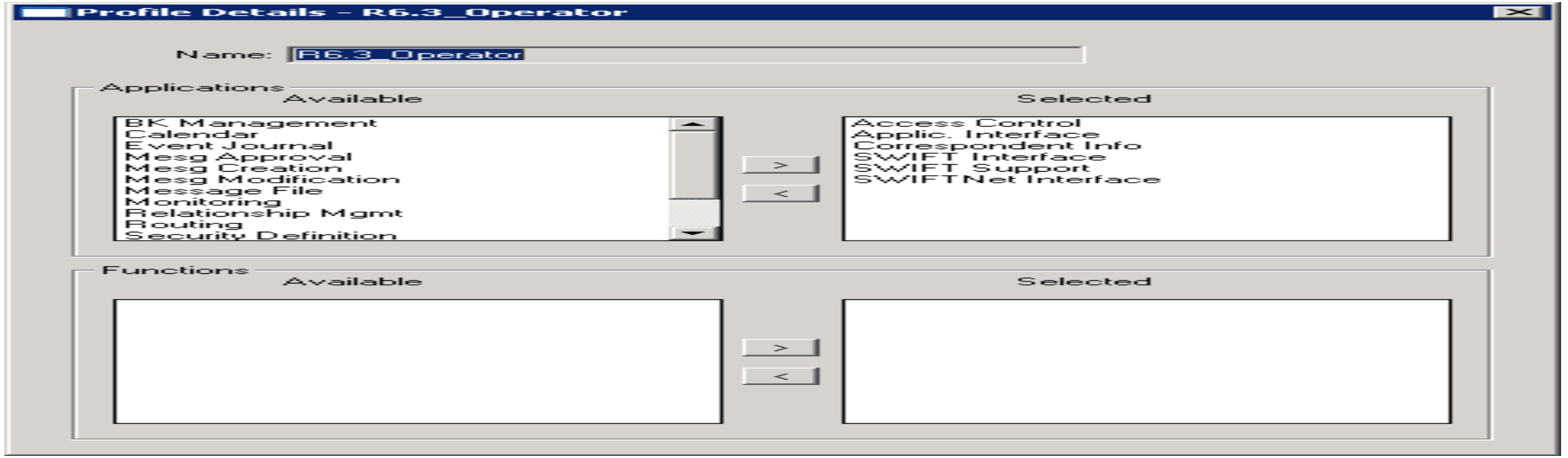
SWIFTNET UI

Defining Profile with help of security definition

Alliance Access profiles are assigned to operators to entitle them to work with the system.

- A single operator can be assigned several profiles.
- Each profile gives the operator access to one or more applications Profiles can be added, modified, and removed from the system Default profiles are supplied with Alliance Access to illustrate the recommended way of allocating entitlements.

The general functions of most applications allowed by a profile are automatically available to operators and consequently do not appear in the list of functions. For example, any operator who is given access to the Event Journal application can use the application to carry out searches in the Event Journal.



SWIFTNET UI

Defining Operator with help of security definition

- Alliance Access is installed with two predefined operators:
  - Left security officer
  - Right security officer
- The left security officer and right security officer operators are initially used to define other operators. Until a new operator is approved separately by both security officers, they cannot sign on.
- The length of the password is of four digits. 2 left and 2 right digits need to be given to operator by LSO and RSO. Once operator provided with these then he can be able to login.

SWIFT TOPOLOGY STRUCTURES

Location, Date, Author

SWIFT TOPOLOGY STRUCTURES

More than 60 high-value clearing and settlement systems rely on SWIFT for the common message standards, highly secure and resilient messaging and connectivity essential to their smooth operation. SWIFT accommodates the various messages and information exchanges required by high-value payment and clearing system

Some of the features why HVP use SWIFT are :

Transaction input : where accuracy, security and archiving are essential, such as for payments and acknowledgements. The store-and forward messaging services, FIN and InterAct, are ideal for these types of exchanges. FIN can be supplemented by FIN Copy.

Liquidity management : where speed and throughput are essential. Browse and InterAct are ideal for these types of interactive information exchanges.

Report management : where volume and flexible structure are essential. FileAct is ideal for exchanges of batches of structured financial messages and large reports.

Generic communication : where secure and efficient person-to person communication of sensitive information is essential, Mail is ideal for such exchanges of secure e-mail across SWIFTNet.

Closed User Group (CUG) : where membership, service parameters and operational guidelines need to be well managed, a CUG is an ideal environment to exchange specific information between group members.

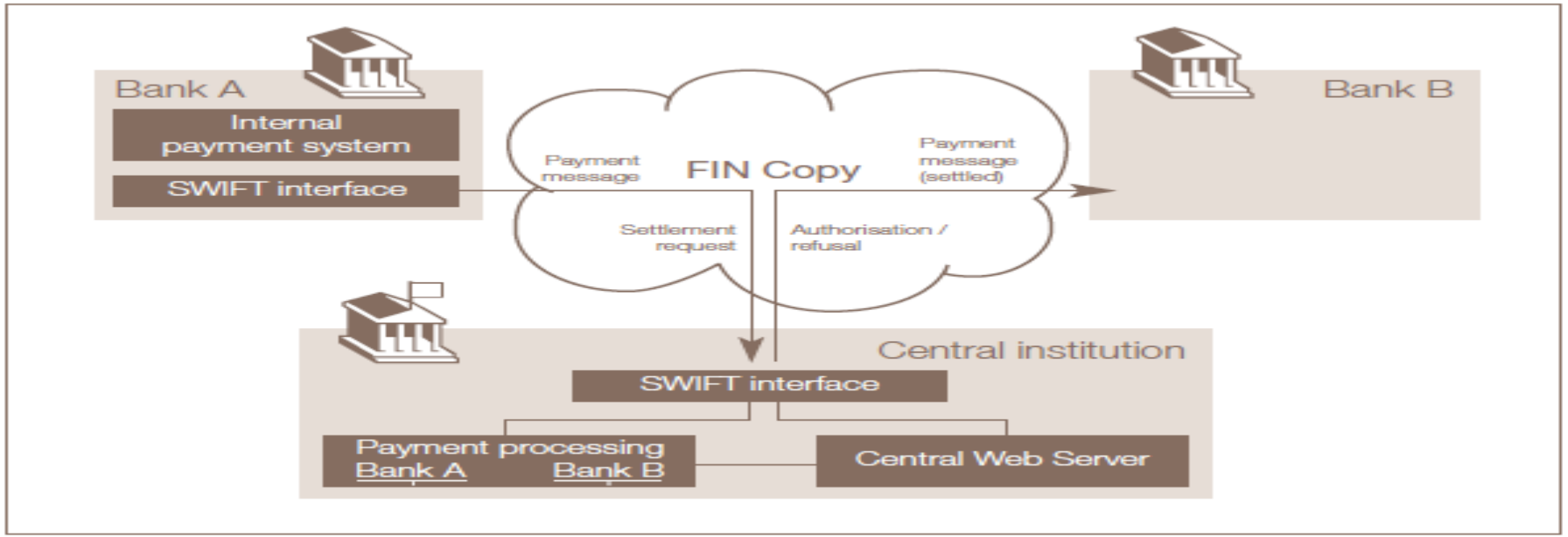
SWIFT uses various topology structures in storing and forwarding the messages as below :

1. Y Structure
2. V Structure
3. T Structure

SWIFT TOPOLOGY STRUCTURES

SWIFT is already used to provide access to mission critical services. SWIFT has gained experience in numerous industry-wide programmes, such as TARGET2 (Eurosystem), EURO1/STEP1 (Euro Banking Association), LVTS (Central Bank of Canada), and MEPS+ (Monetary Authority of Singapore).

SWIFT Y – topology Structure



SWIFT TOPOLOGY STRUCTURES

SWIFT FIN Y COPY

In the 'Y' topology using FIN Copy, Bank A sends its payment messages to the receiving Bank B. A partial or complete copy of the message is sent to the market infrastructure, which will clear and settle the payments before authorising or rejecting their delivery to the addressee.

This decision can be based on various elements defined in the central application:

- Dynamic business data, such as a user's account balance
- Multilateral pre-agreements among the user community
- Message content

High-value payment market infrastructures gain the following benefits from using FIN Y Copy:

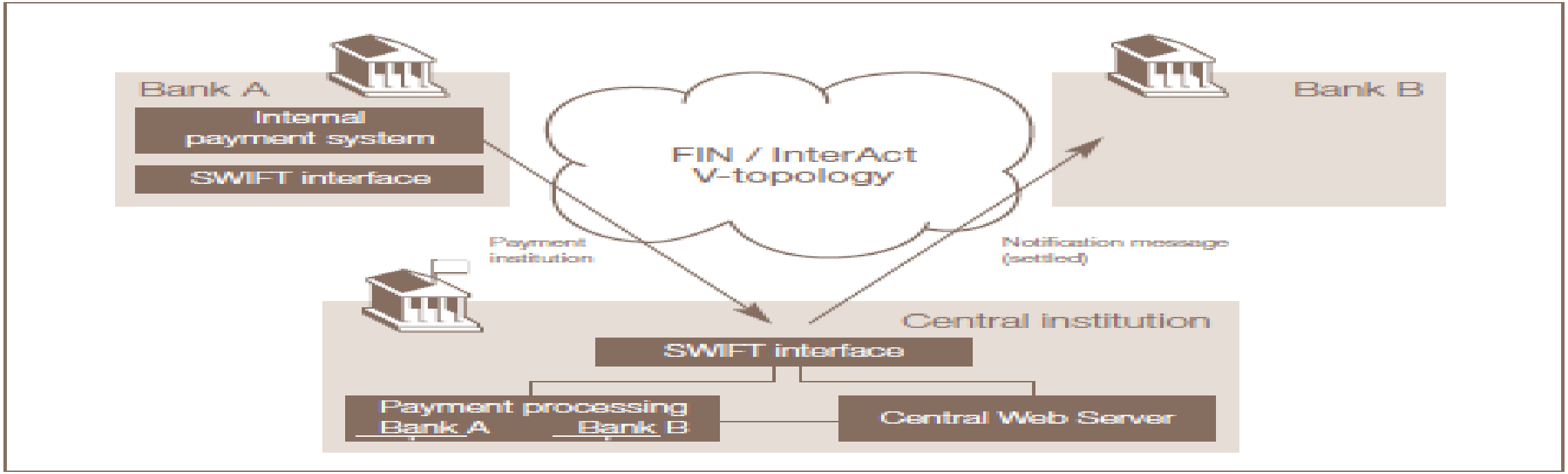
- The market infrastructure can process a shorter message in a simpler manner, where the banks work on the complete set.
- Commercial information does not need to be copied to the market infrastructure.
- There is little operational change needed for the sender or the receiver. This reduces the risk of error and related costs.

SWIFT TOPOLOGY STRUCTURES

SWIFT V – topology Structure

Another payments clearing option is the 'V' topology using FIN or InterAct messaging services. With the 'V' topology, Bank A sends its payment messages to the market infrastructure which will clear and settle them before forwarding them to Bank B. FIN supports a wide range of FIN message types (MTs), while InterAct supports the ISO 20022 messages types (MXs). Both services enable fast and secure transaction exchange between participants and their market infrastructure.

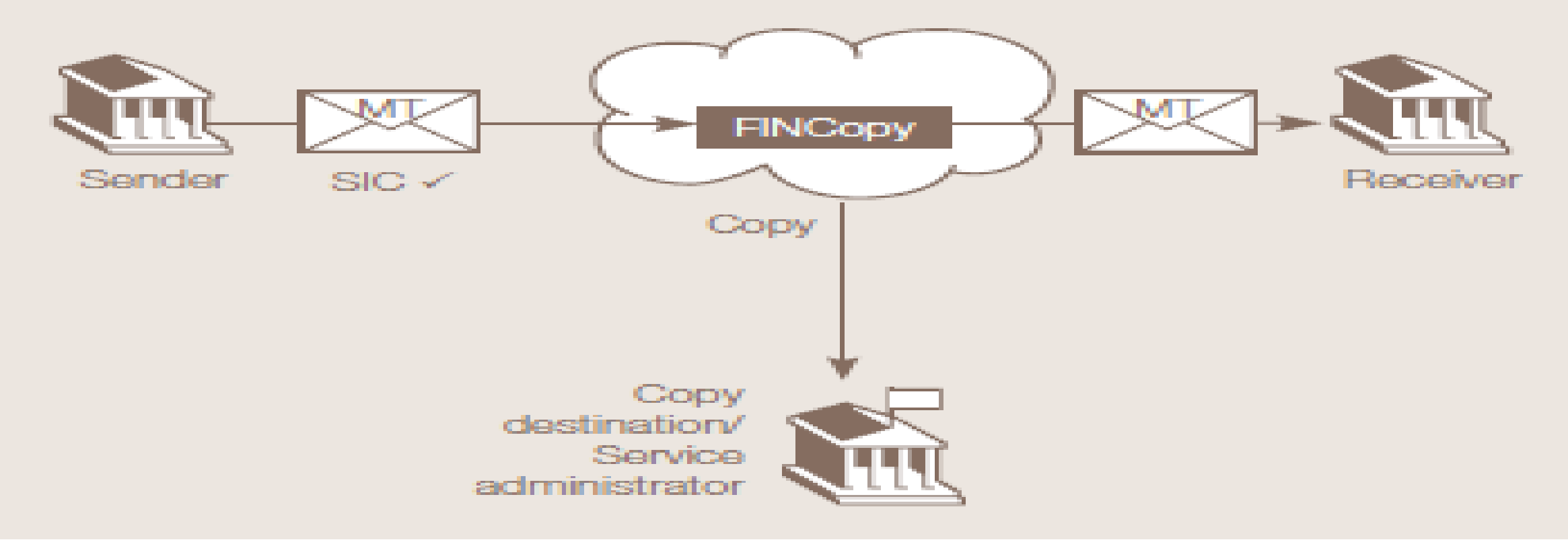
FIN and ISO 20022 messages are internationally accepted standards. Their confidentiality, integrity and authenticity are ensured by means of 1. Security of transmission, delivery and message storage; 2. Encryption of user data within the system, both in transit and in storage



SWIFT TOPOLOGY STRUCTURES

SWIFT T – topology Structure

T-Copy mode forwards copies to a copy destination while the original message is immediately forwarded to the receiver, without waiting for authorisation. This mechanism provides an ideal solution for risk, cash or collateral management, monitoring and reporting.



SWIFT PARTNERS

Location, Date, Author

SWIFT PARTNERS

SWIFT partners with various external organisations to achieve goals and expand its presence.

Solution partners

Partner Solutions seeks to help achieve SWIFT customers end-to-end automation by SWIFT-enabling third-party software products, accredited SWIFT compliant applications, providers of SWIFT-related services and providing advice on finding potential solutions.

Service partners

SWIFT Service Partners are accredited to deliver consultancy services with SWIFT Certified Experts.

Related with: SWIFT Software Implementations, SWIFTNet Connectivity Implementations, Upgrades of SWIFT software products & SWIFTNet connectivity, SWIFTNet Migration Assistance

Business partners

Over the years SWIFT has built a network of external partner companies who act in selected countries or regions on SWIFT's behalf, called SWIFT business partners.

Related with: North America: S.I.D.E. America Corp, Middle East & Gulf Region: Eastern Networks Dubai, Balkan countries: CiS d.o.o. Serbia & Montenegro. Etc.

Network partners

SWIFT has adopted a multi-vendor model for its secure IP network (SIPN). The new architecture uses state-of-the-art security and ensures highest resilience and lowest risk. The key aspect of this architecture is the co-existence of multiple IP network partners. SWIFT uses four network partners, each with a standard offering of managed IP-VPN services

Related with: AT&T , BT Infonet , Colt , Orange Business Services

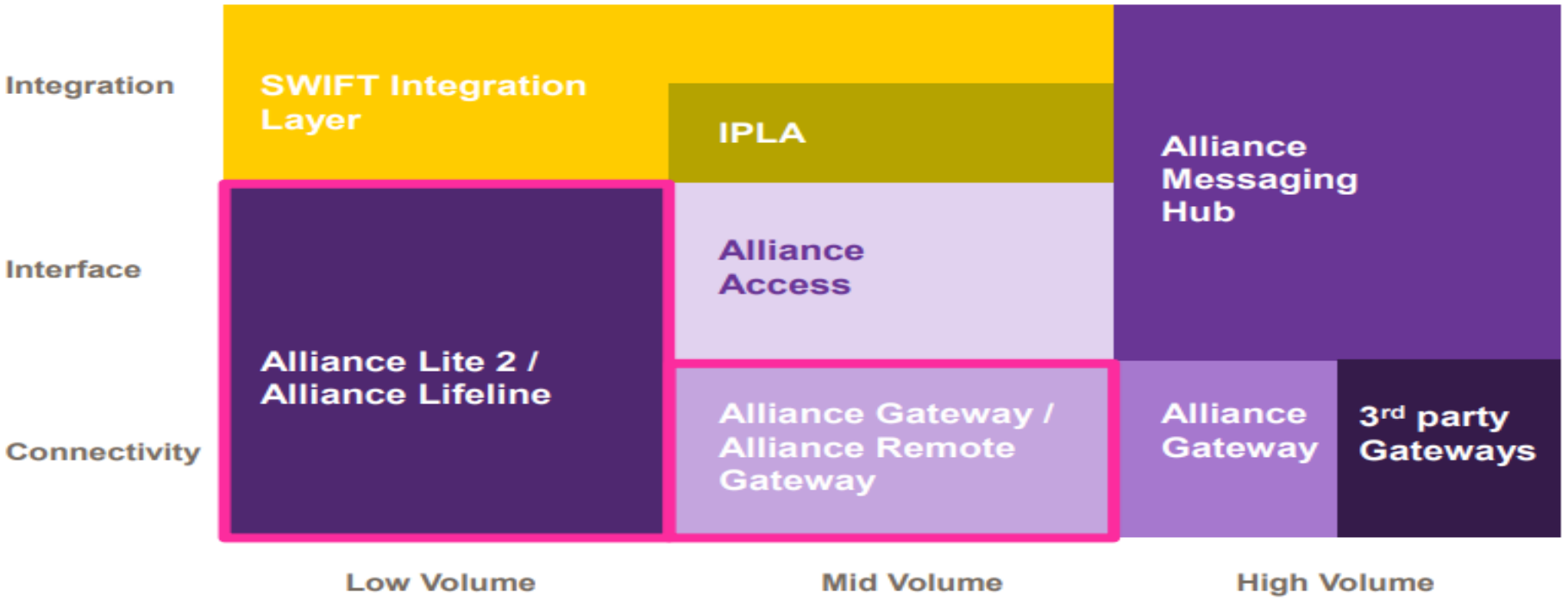
SWIFT SYSTEMS

Location, Date, Author

SWIFT Systems

SWIFT provides various systems and integration softwares by which the financial and non-financial institutions can connect to SWIFT. SWIFT provides a comprehensive range of solutions which connects the bank's back office applications to SWIFT and enables them to send and receive financial messages.

1. SWIFT Messaging Software
2. SWIFT Integration & Infrastructure



SWIFT Systems

SAA - Alliance Access (SAA) and Alliance Messaging Hub (AMH) are the main messaging software applications by SWIFT, which allow message creation for FIN messages, routing and monitoring for FIN and MX messages. The main interfaces are FTA (files transfer automated, not FTP) and MQSA, a WebSphere MQ interface.

SNL - SWIFTNet Link (SNL) software which is installed on the SWIFT customer's site and opens a connection to SWIFTNet. Other applications can only communicate with SWIFTNet through the SNL.

SAG - Alliance Gateway (SAG) software with interfaces (e.g., RAHA = Remote Access Host Adapter), allowing other software products to use the SNL to connect to SWIFTNet

SAB - Alliance WebStation (SAB) desktop interface for SWIFT Alliance Gateway with several usage options:

- administrative access to the SAG
- direct connection SWIFTNet by the SAG, to administrate SWIFT Certificates
- so-called Browse connection to SWIFTNet (also by SAG) to use additional services, for example Target2

SAW - The Alliance Workstation (SAW) is the desktop software for administration, monitoring and FIN message creation. Since Alliance Access is not yet capable of creating MX messages, Alliance Messenger (SAM) has to be used for this purpose.

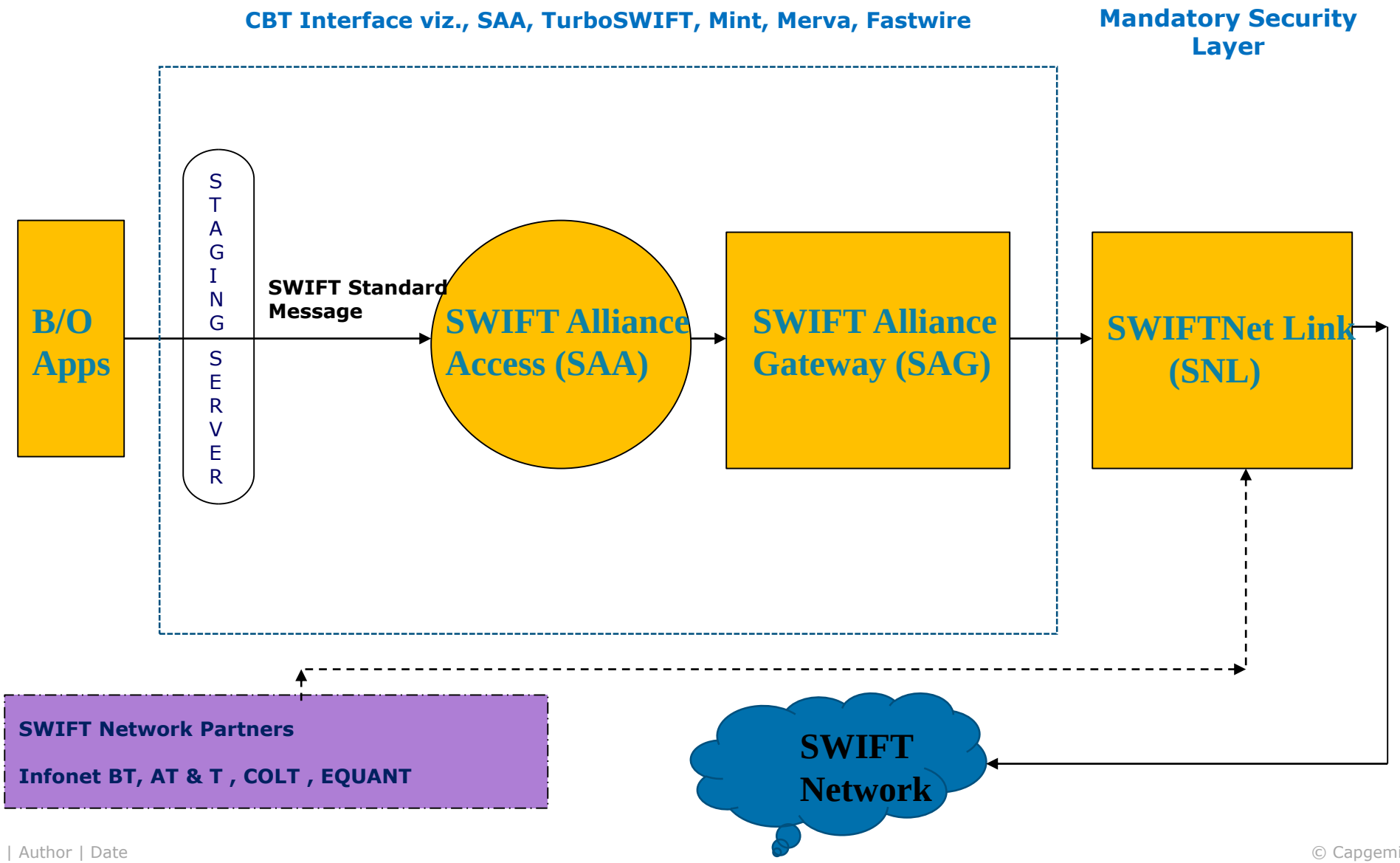
SWP - Alliance Web Platform (SWP) as new thin-client desktop interface provided as an alternative to existing Alliance WebStation, Alliance Workstation (soon) and Alliance Messenger.

ALLIANCE INTEGRATOR - Alliance Integrator built on Oracle's Java Caps which enables customer's back office applications to connect to Alliance Access or Alliance Entry.

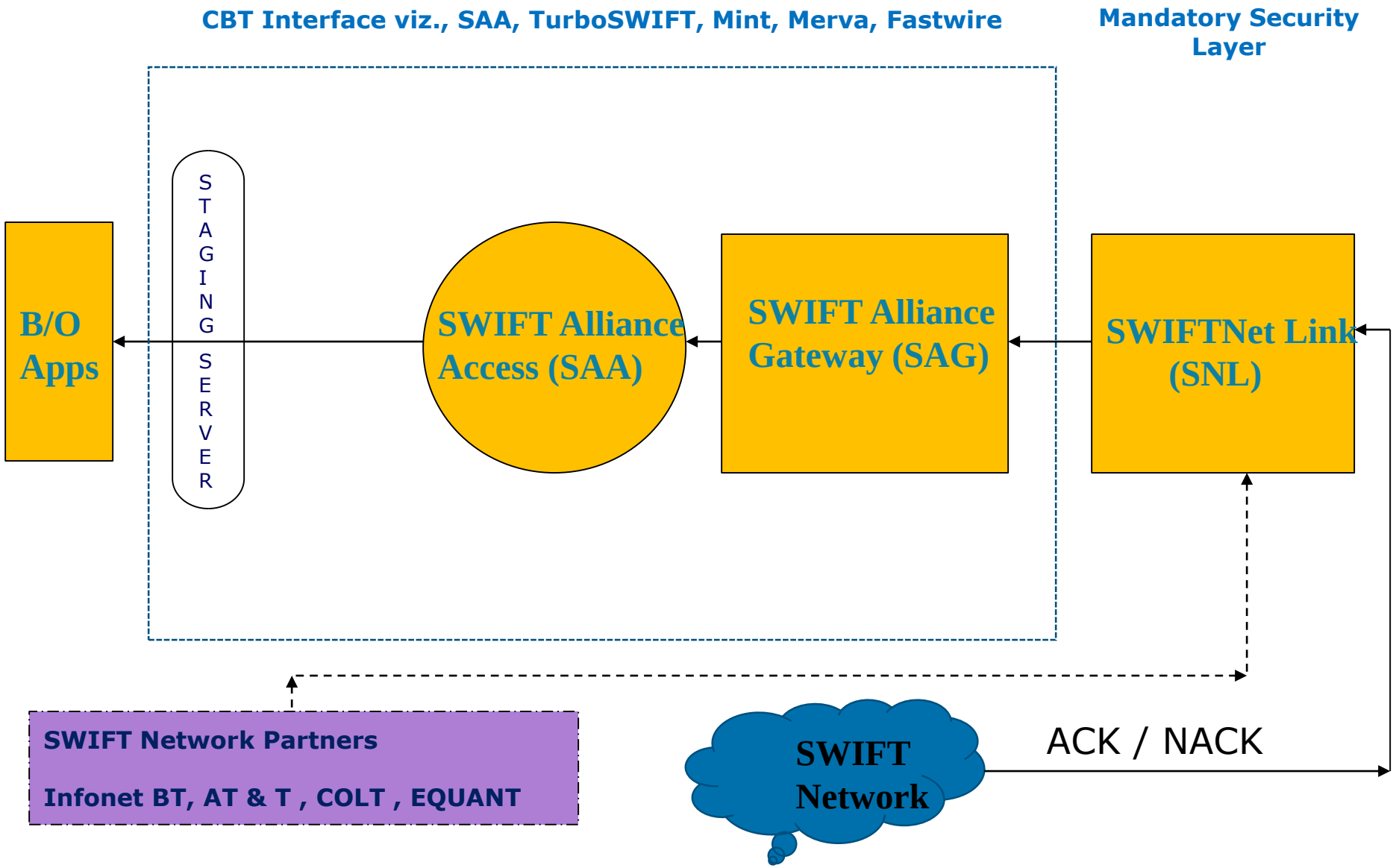
ALLIANCE LITE2 - Alliance Lite2 is a secure and reliable, cloud-based way to connect to the SWIFT network which is a Lite version of Alliance Access specifically targeting customers with low volume of traffic.

ARG – Alliance remote gateway - Alliance Remote Gateway is designed for customers with up to five BIC-8 destinations, up to 20 Concurrent users, and low-to-medium message volumes (up to Alliance Gateway band 5)

SWIFT Message Flow (Input)



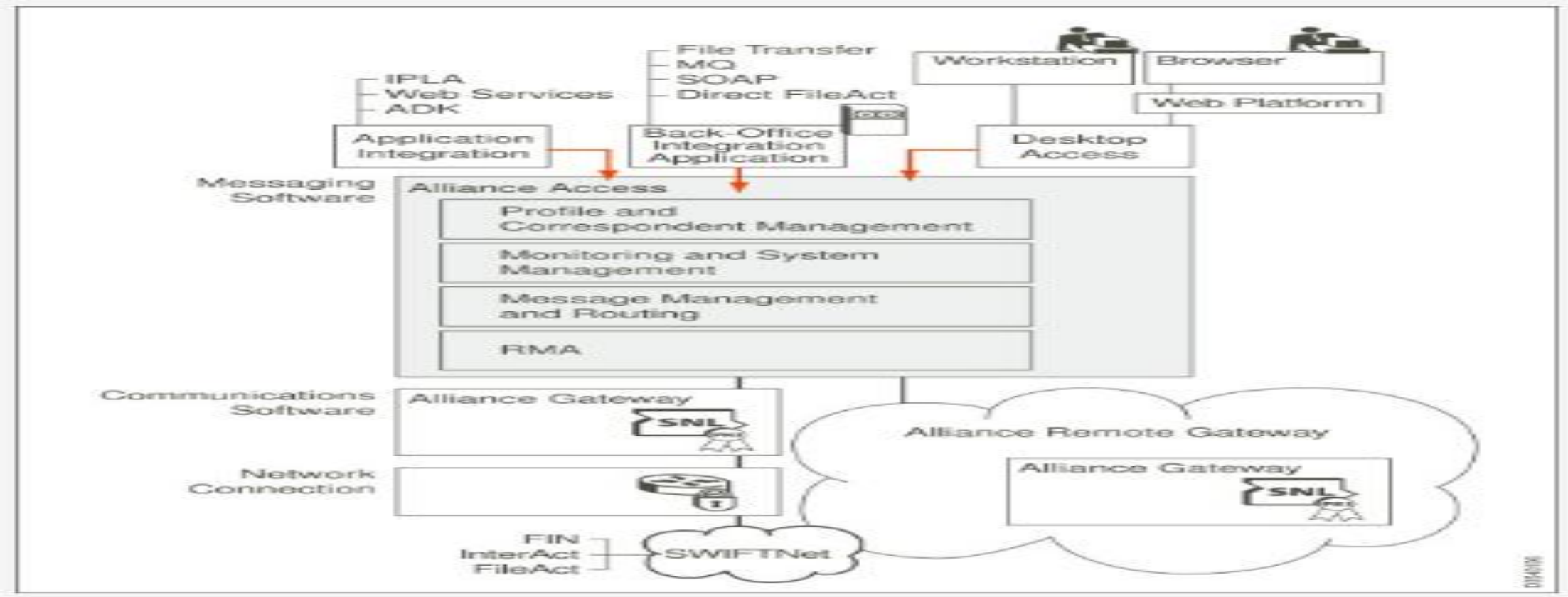
SWIFT Message Flow (Output)



SWIFT Messaging Systems

Alliance Access

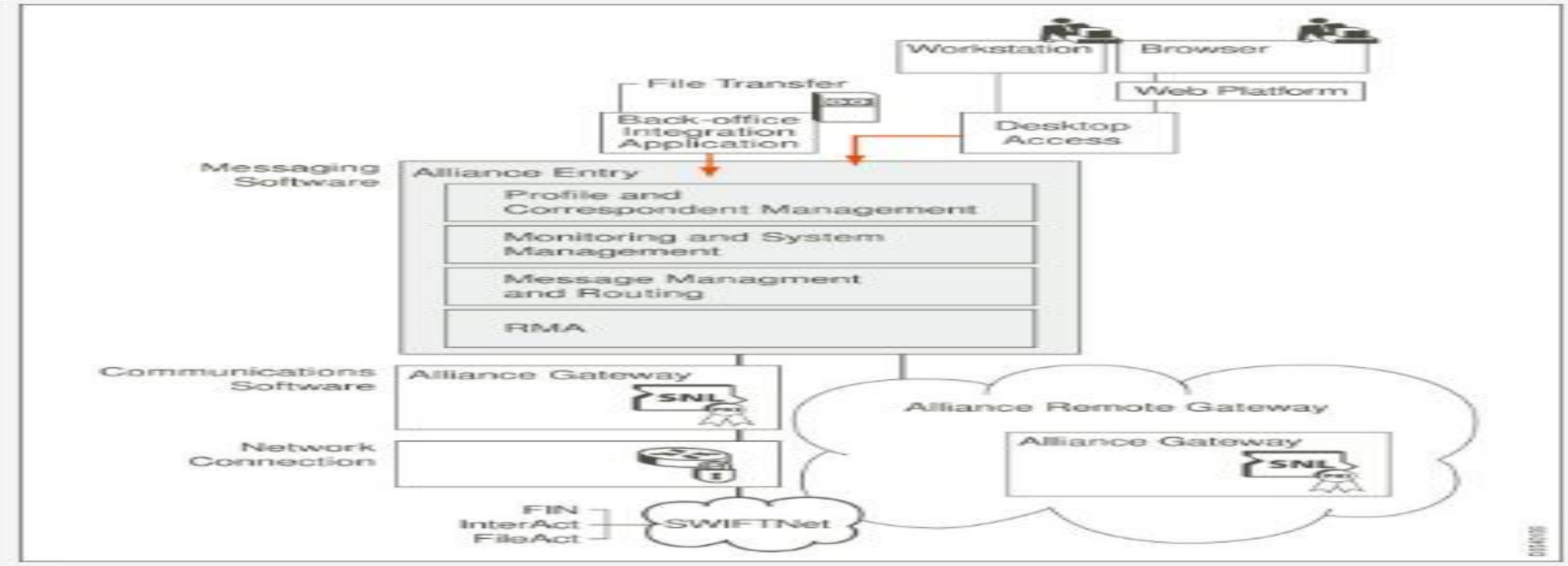
SWIFT's market leading messaging interface, allows banks and market infrastructures to connect to SWIFT. With over 2,000 installations around the world, and a track record of more than 20 years, Alliance Access offers high performance and resilience. Alliance Access is highly scalable and can meet your needs, no matter how large your messaging volumes become. The interface is supported on Windows, Linux and UNIX (AIX and SUN) and uses our browser-based Alliance Web Platform SE as its default graphical user interface framework. Alliance Access enables customers to connect to SWIFT via single or multiple destinations with maximum automation of system management tasks. The most recent mandatory release is Access 7.0. Alliance Access can be used as a single window to FIN, InterAct and FileAct messaging services



SWIFT Messaging Systems

Alliance Entry

A simplified version of Alliance Access, Alliance Entry is a lightweight messaging interface for banks and market infrastructures. Alliance Entry provides basic messaging for the transfer of information between business applications and SWIFT. Hosted and run on your premises, Alliance Entry allows you to connect to SWIFT via a single destination in order to send and receive financial messages. The interface has a condensed feature set which requires minimal system maintenance – allowing you to focus on your core business. The interface can accommodate MT and MX message standards, and mandatory release Access 7.0 also supports the exchange of files via FileAct. The interface is supported on Windows only and with the most recent mandatory Release 7.0, Alliance Entry uses our browser-based Alliance Web Platform SE as its default graphical user interface framework

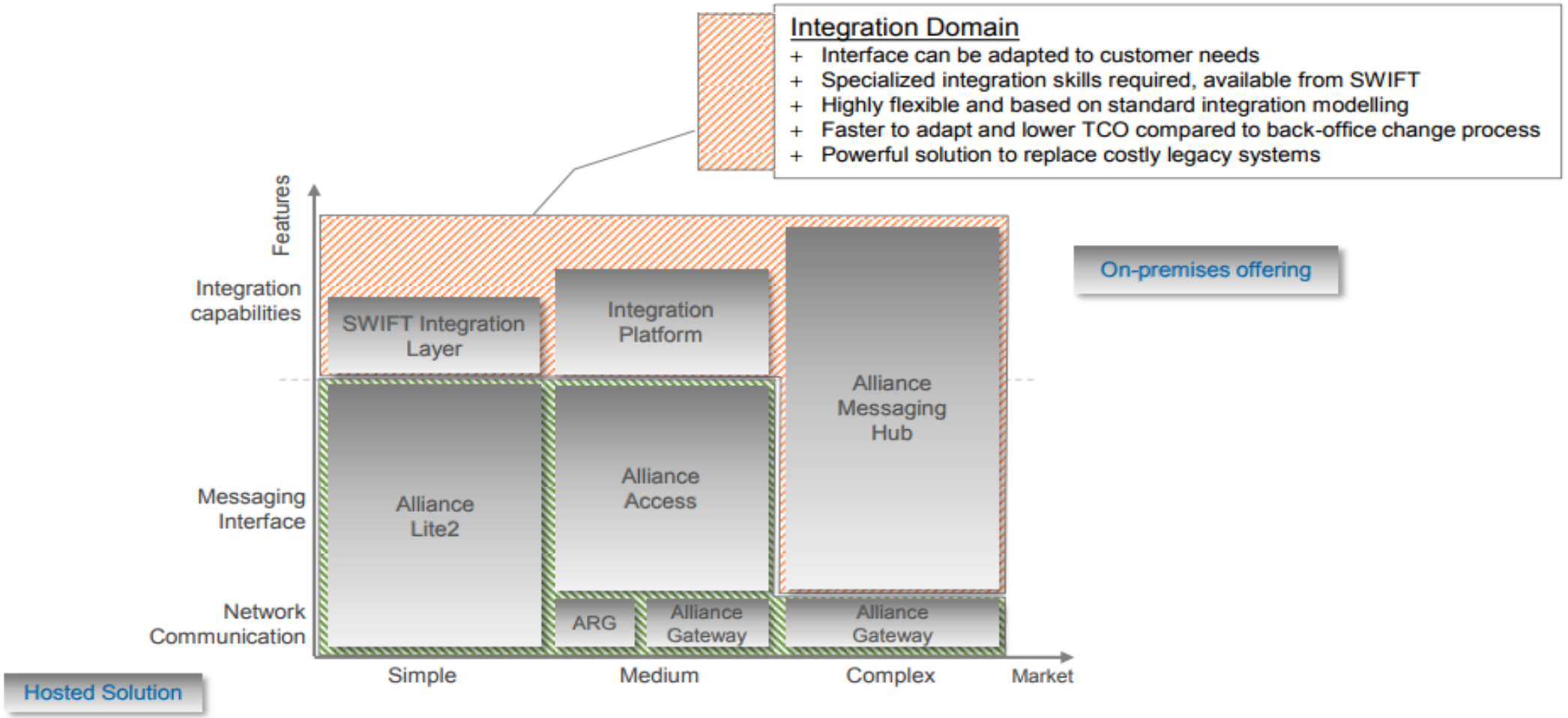


SWIFT Messaging Systems

Alliance Access	Alliance Entry
Powerful and flexible routing	Simple routing functionality
The operators can be grouped into many logical units to define the scope of the messages visibility.	All operators belong to one logical unit
These operations could be scheduled to perform automatically.	Operations "Secure Login and Select" and "Open / close Emission / Reception profiles" can be performed only in manual mode.
There are no such license limitations.	License limitation is not more than 1000 messages per day (sent and received).
Several destinations are supported with message segregation between destinations.	Only one destination is supported.
Number of concurrent operators: 640.	Number of concurrent operators: 20.
Supported platforms: Windows, RHEL, Solaris, AIX	Supported platforms: Windows only
Adapters to connect with external applications: Automated File Transfer, SOAP, MQHA.	Adapters to connect with external applications: only Automated File Transfer.
Support external plugins with Alliance Developer Toolkit from third-party developers.	Not supported external plugins from third-party developers.
Supports all functionality: • Direct FileAct • Database Recovery • SWIFT Integration Layer • Sanctions Connector	Not supported: • Direct FileAct • Database Recovery • SWIFT Integration Layer • Sanctions Connector
Support external database	External database is not supported

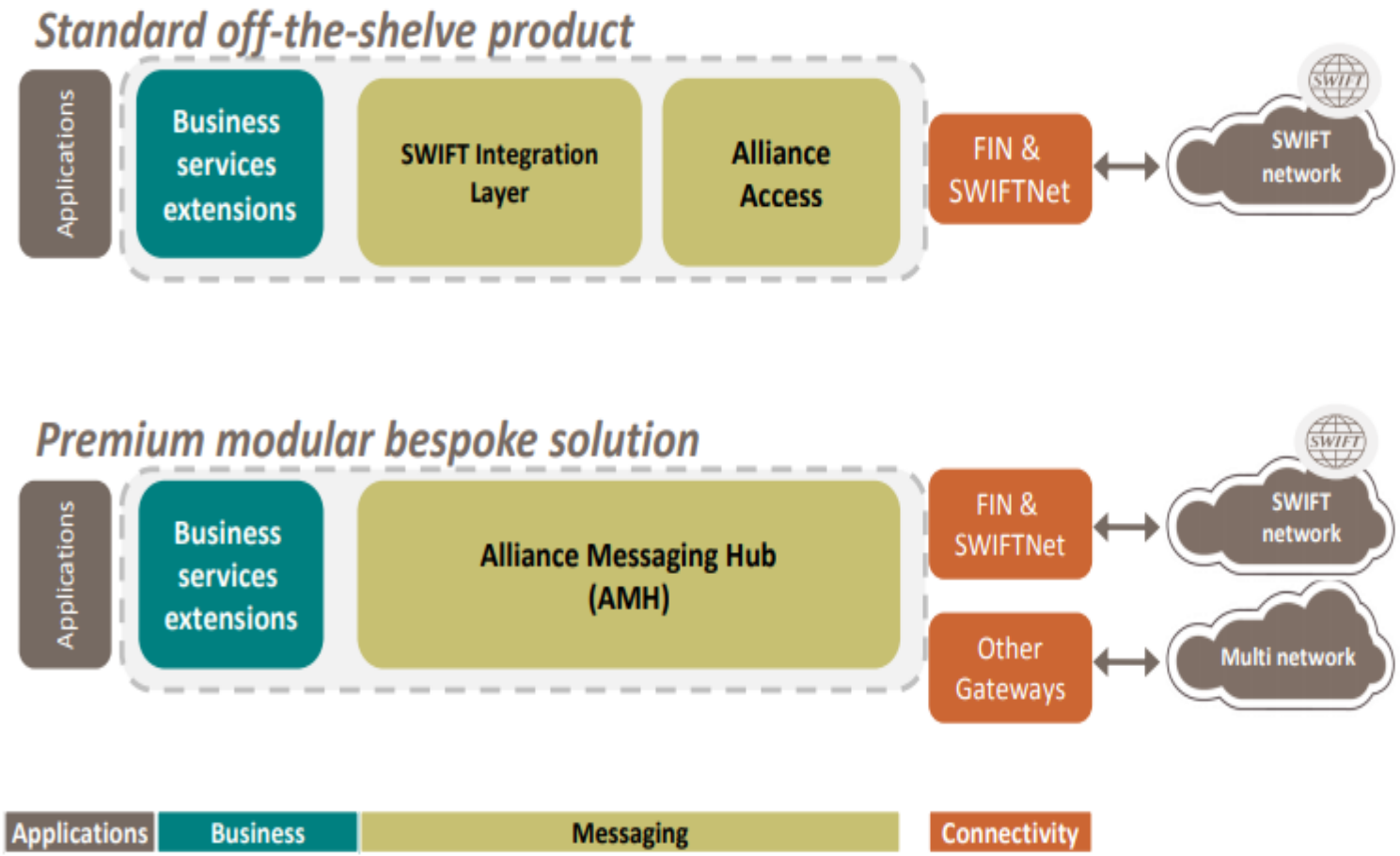
SWIFT INFRASTRUCTURE

SWIFT Infrastructure is established in the below structure



SWIFT INFRASTRUCTURE

The standard and Premier structures



Key benefits

- Out-of-the-box solution
- Adaptable and configurable
- Little implementation effort
- Integrate 3rd party applications

- Modular component architecture
- Multi-network support
- Hook with 3rd party applications
- Zero down time infrastructure

SWIFT INFRASTRUCTURE

Alliance Lifeline

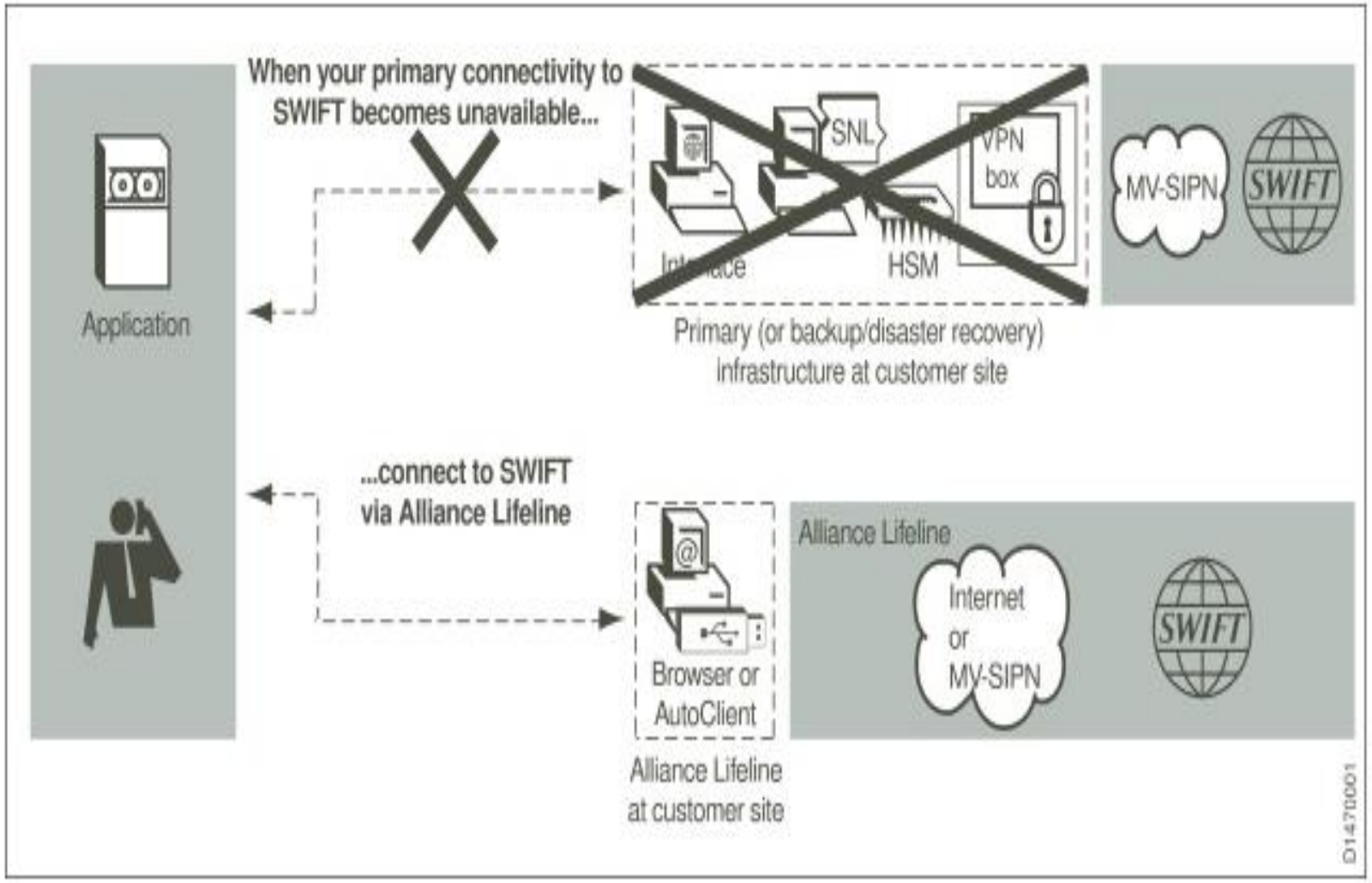
Alliance Lifeline is a cost-effective service that enables to keep on using SWIFT even if the standard connection becomes unavailable. Easy to activate, it lets one to exchange messages and use SWIFT services until the SWIFT connection becomes operational again. Alliance Lifeline is a 'cold standby' service based on Alliance Lite2 and provides an additional SWIFT connection on top of the existing back-up infrastructure.

It includes a user interface, SWIFT connection, and related services. The user interface is always available, but the connection to SWIFT is not active under normal conditions. If the primary SWIFT connection becomes unavailable, SWIFT can activate the Alliance Lifeline connection. SWIFT will activate Lifeline after validating the request in line with standard security procedures. The Lifeline connection is operational within 90 minutes.

Alliance Lifeline lets us to connect to SWIFT from a PC or laptop and exchange messages and files. One can connect via internet from any location using the secure USB tokens, or by using Alliance Connect SWIFT VPN connection. SWIFT will deliver messages and files received from the counterparties during the period between when the primary connection went down and the Lifeline connection was activated. Alliance Lifeline supports basic message reconciliation. One can request to receive a report of the last messages exchanged before the outage. User can also request a copy of all messages exchanged over Lifeline during the outage.

The standard Alliance Lifeline offering requires the user to ask SWIFT to activate the connection. SWIFT also offers an optional Premium service whereby the connection is always active to send messages. This gives the users additional flexibility and further reduces activation time in case the standard connection becomes unavailable. The daily usage fee will apply for each day that the messages are sent or received. Alliance Lifeline Premium is available to all Lifeline customers.

SWIFT INFRASTRUCTURE



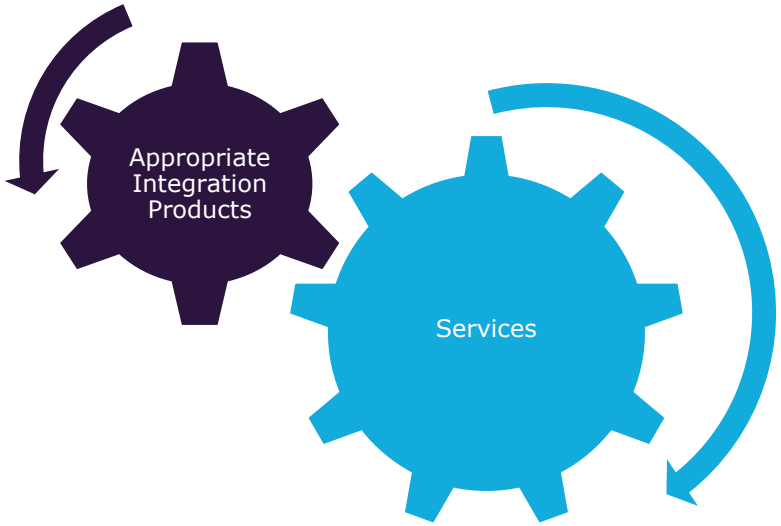
Benefits of Alliance Lifeline:

1. Exchange SWIFT messages when your standard SWIFT connection is unavailable;
2. Robust, easy-to-use SWIFT connection and messaging interface;
3. All SWIFT message and file types, standards, and Browse services;
4. Always ready, activated on demand;
5. Optional Premium Service.

SWIFT INTEGRATION

SWIFT's approach to Integration

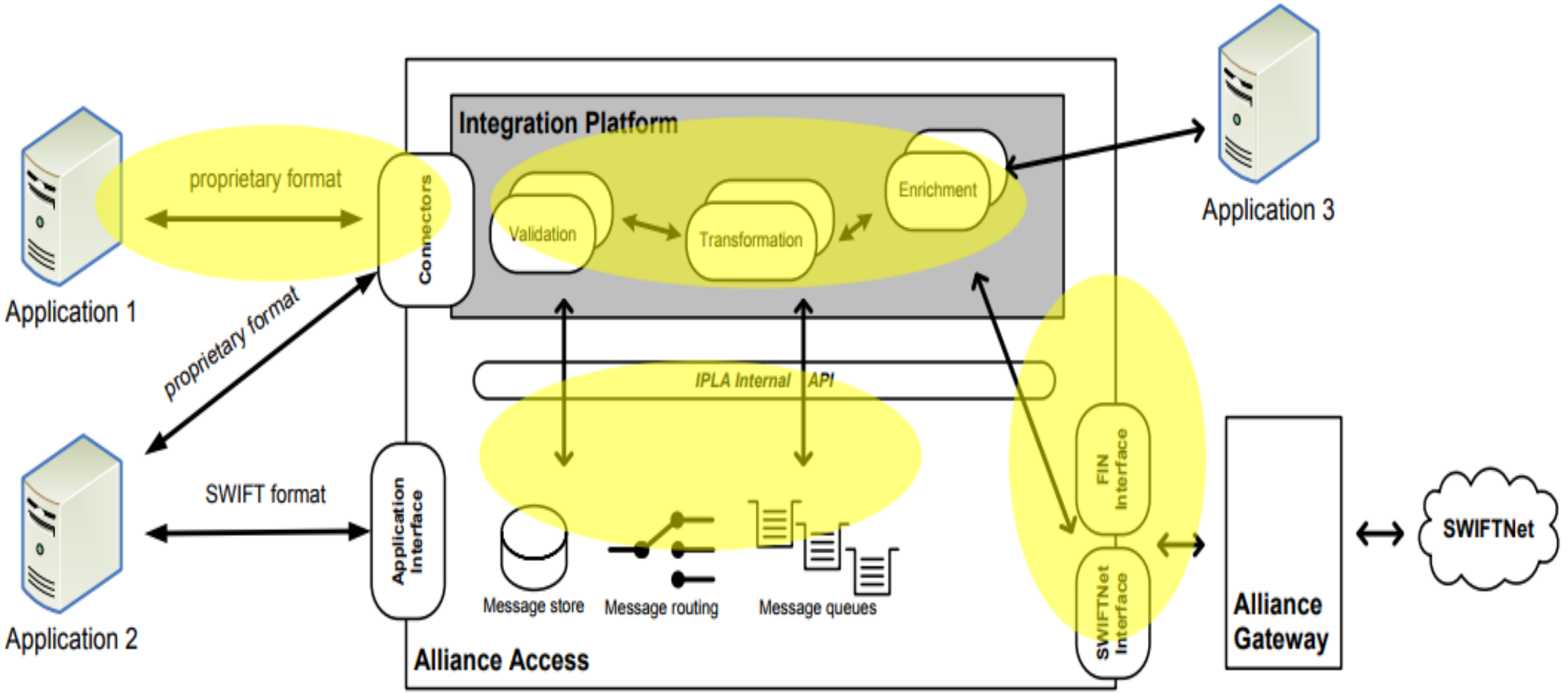
Connecting your back office to SWIFT can be very complex and requires specific expertise. Combining services and the appropriate integration product to offer a true end-to-end solution



SWIFT INTEGRATION

Alliance Integration Platform

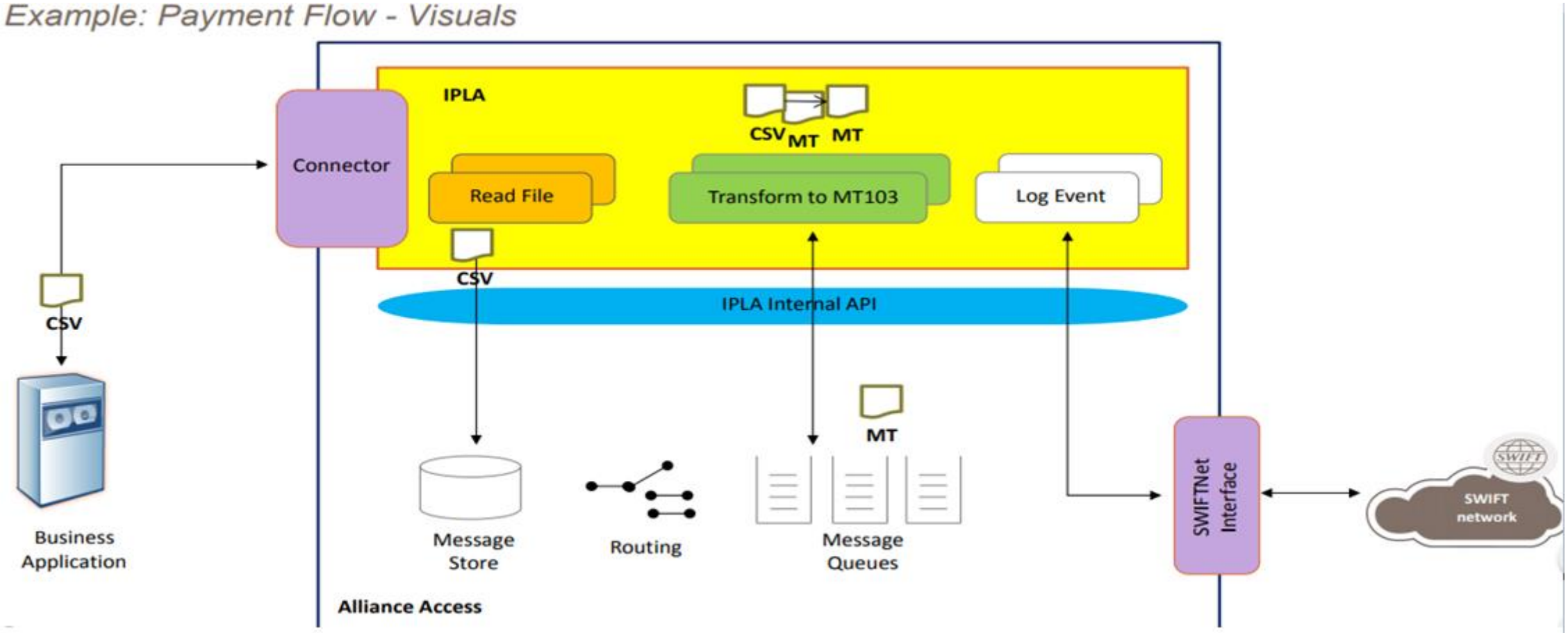
Overall Architecture



SWIFT INTEGRATION

Alliance Integration Platform

Overall Architecture - Example



SWIFT INTEGRATION LAYER

- SIL automates your back-office message flows and connects your systems to SWIFT without changing them. The solution supports specific SWIFT file formats and messaging services, enabling connectivity either on-site or in the cloud.
- SIL software is offered by SWIFT to integrate any system to SWIFT.
- Data transformation, Flexible connectivity, Combining the benefits of cloud connectivity and an on-premises solution, SIL can meet any complex integration needs and help automate the back-office flows.
- Acting as a bridge between the systems and SWIFT, SIL enables to exchange information in the proprietary format messages with Alliance Lite2 or Alliance Access for onward communication over SWIFT.
- SIL's data transformation services convert messages from non-SWIFT proprietary formats to SWIFT message formats such as MT, ISO 15022, MX and ISO 20022 – and vice versa.
- In addition to the default file-based connectivity method, additional connectivity options are provided for back-office communication, including IBM WebSphere MQ and SOAP Web Services.
- SIL supports specific SWIFT file formats, such as RJE and XMLv2, as well as messaging services including FIN, InterAct and FileAct.

SWIFT AUTHENTICATION / SECURITY

Location, Date, Author

SWIFT PKI

- Public Key Infrastructure (PKI) consists of software, encryption technologies, identity services and policies designed to ensure that digital data sent over an unsecured network, such as the internet, is both private and genuine.
- The infrastructure revolves around asymmetric public and private key pairs, which are not physical keys but alphanumeric sequences that work together. The key encryption and decryption system is based on a technique called public key cryptography, which uses algorithms. An algorithm is a set of instructions, a procedure or formula, as to how a particular process should be carried out. In this case, the process is a computation relating to how the public and private keys should be generated to ensure that the private key cannot be derived from the public key, whilst allowing them to interact.
- SWIFTNet PKI model has replaced the Bilateral Key Exchange method to verify the correspondents over the existing FIN store and forward network. A Bilateral Key allowed secure communication across the SWIFT Network. The text of a SWIFT MT and the authentication key were used to generate a Message Authentication Code or MAC. The MAC ensured the origin of a message and the authenticity of the message contents. This was normally accomplished by the exchange of various SWIFT Messages used specifically for establishing a communicating key pair. BKE keys were generated either manually inside the SWIFT software, or automatically with the use of an SCR or Secure Card Reader.
- It simplifies the management of relationships over the network as allowable message categories and message types can be specified for each correspondent.
- It is a single security model to access all SWIFTNet based services
- A certificate contains public keys, amongst other information. The private keys that complement the public keys are stored locally on the Alliance Gateway system or on an HSM device, in a SWIFTNet PKI profile.
- There is one specific SWIFTNet password associated with a given SWIFTNet PKI profile.
- A virtual SWIFTNet user uses a SWIFTNet PKI profile indirectly. Each SWIFTNet user has its own password. One or more SWIFTNet virtual profile can exist for any SWIFTNet PKI profile .
- A SWIFTNet user that uses a profile directly provides the password of the SWIFTNet PKI profile

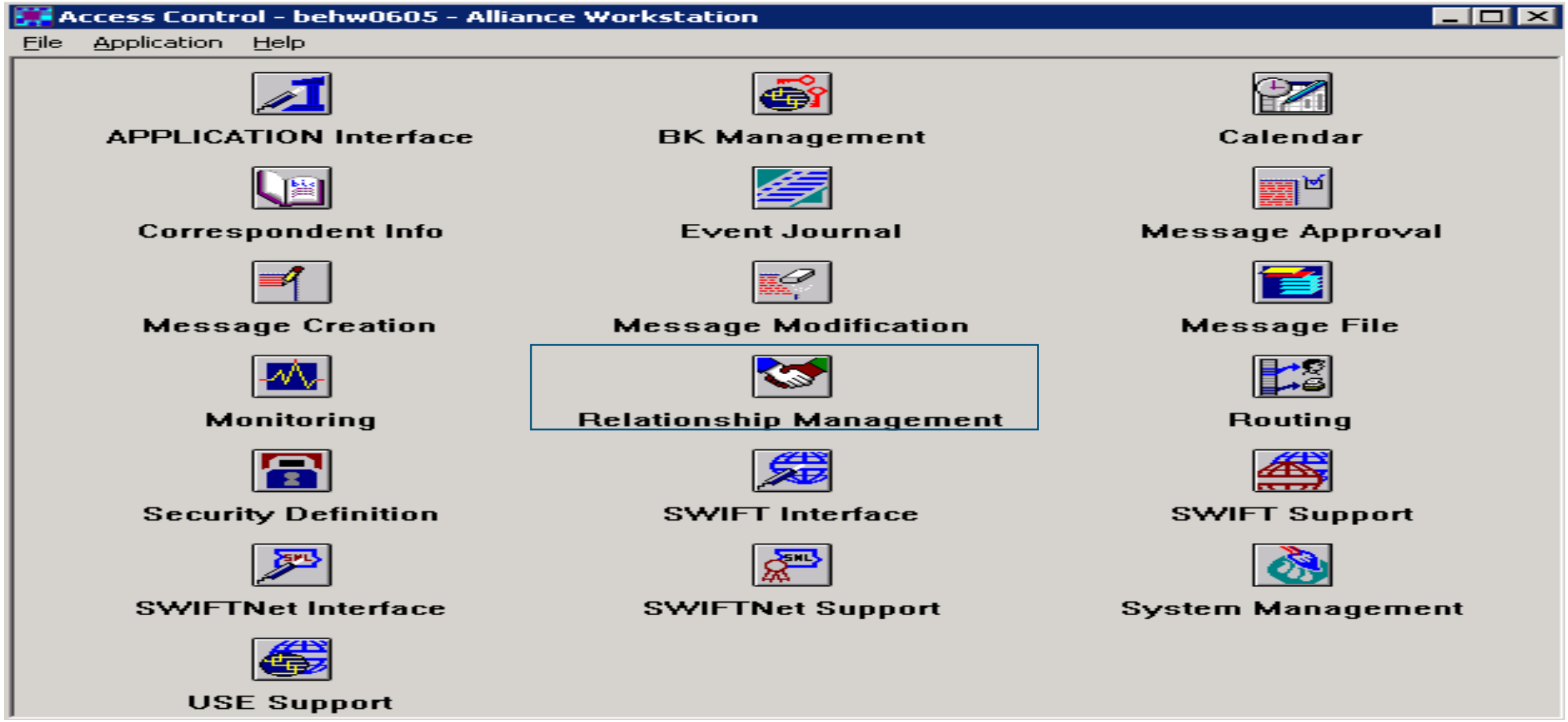
SWIFT RMA

RELATIONSHIP MANAGEMENT APPLICATION

- RMA is a service provided by SWIFT to manage business relationships between financial institutions.
- RMA operates by managing with message type can be exchanged between users of a SWIFT service.
- The concept of RMA was initially known as BKE.
- The sender checks the message type against the permission data before sending the message to the receiver
- RMA uses SWIFTNet InterAct Store and Forward service to exchange the permission data between financial institution.
- SWIFT's RMA plays an important part in supporting communication between different financial institutions. The RMA is a SWIFT-mandated filter that enables financial institutions to define which counterparties can send them FIN messages. Any unwanted traffic is blocked at the sender level, reducing the operational risks associated with handling unwanted messages and providing a first line of defence against fraud.
- RMA Plus, the more granular version of RMA, goes one step further by letting institutions specify which message type(s) they want to receive from, and send to, each of their counterparties. By giving greater control over individual relationships, RMA Plus can facilitate new business opportunities which might otherwise be avoided due to risk and regulatory concerns.
- SWIFT offers a number of products and services to help financial institutions optimise the use of RMA and RMA Plus in order to better understand, manage and mitigate operational, compliance and fraud risks.
- ***"Compliance Analytics"*** gives banks a powerful analytics tool to obtain a global overview of their RMA and RMA Plus authorisations, with statuses and trends. It helps banks identify potentially risky correspondent relationships and supports effective, targeted compliance and risk-management activities.
- ***"RMA/RMA Plus consultancy"*** provides global lists of RMA and RMA Plus authorisations and related message traffic information to support decision-making about correspondent relationships, and assistance with updating or terminating such authorisations. It is a fast, cost-effective approach to 'clean up' RMA and RMA Plus authorisations that may not have kept pace with evolving business relationships and compliance practices.

SWIFT RMA

RELATIONSHIP MANAGEMENT APPLICATION



SWIFT REFERENCE DIRECTORIES

Location, Date, Author

SWIFT REFERENCE DIRECTORIES

RELATIONSHIP REFERENCE DIRECTORIES

Every business application accessing SWIFT must have access to the below SWIFT Directories :

- ✓ BIC Directory
- ✓ Bank Directory Plus (Optional)
- ✓ IBAN Plus (Optional)
- ✓ SWIFT Ref Business Applications (Optional)

SWIFT REFERENCE DIRECTORIES

BIC DIRECTORY

The business application must provide access to the BIC Directory both for message validation and as a look-up function in the message creation and message repair stations. It is the responsibility of directory subscribers at all times to make sure that they use the latest version of the BIC Directory. As such, SWIFT expects the application to support the BIC Directory monthly update in an efficient manner without disrupting customer operations.

Retrieval functionality during message composition

The BICs contained in the BIC Directory, BIC Plus, and BIC Directory 2018 can be used in various fields of the SWIFT messages. The absence of BICs in these fields is one of the major obstacles to straight-through processing (STP) and causes manual intervention on the recipient side. SWIFT expects vendors to provide an integrated interface within their application to make it possible for users to retrieve and input correctly formatted BICs into the proper fields.

Search functionality

The user must be able to enter a number of search criteria, such as a part of the BIC, bank name, or address, to perform a search, and to get a list of results. From this result window, the user must be able to select the required BICs and copy these into the different bank identifier fields of the message (that is, the transaction).

If the search criteria return no results, then the user must be alerted that no BIC is available. If the user manually enters an invalid BIC, then the application must send an alert notifying the user that this BIC is not valid.

Available format

Flat file in XML or TXT format.

Delivery

The BIC Directory, BIC Plus, and BIC Directory 2018 are downloadable or they can also be delivered through FileAct.

The BIC Directory, BIC Plus, and BIC Directory 2018 must either be copied into the application repository system or stored in the back office for access by the vendor application through a defined interface.

SWIFT REFERENCE DIRECTORIES

BANK DIRECTORY PLUS

Bank Directory Plus contains the following information:

- All BIC11s from the BIC Directory (more than 200 countries), from connected and non-connected financial institutions and corporates active on FIN, FileAct, and/or InterAct.
- LEIs (Legal Entity Identifier) from the endorsed LOUs (Local Operating Units).
- Only LEIs that have a corresponding BIC are included.
- Name and address details for most BICs
- FIN service codes
- National clearing codes (160+ countries), including CHIPS, TARGET, and EBA data. For a limited number of countries (10+), national codes are also provided with name and address in local language (for example, China, Japan, Russia).
- Bank hierarchy information
- Country, currency, and holiday information
- Timezone information

Available formats

- Flat file in XML or TXT format

Delivery

- The Bank Directory Plus is downloadable or also delivered through FileAct on a daily or monthly basis.

SWIFT REFERENCE DIRECTORIES

IBAN PLUS

The IBAN Plus directory contains the following information:

- IBAN country formats
- IBAN country prefix
- IBAN length
- Bank code length, composition, and position within the IBAN

- Institution name and country
- Institution bank and branch codes in the formats as embedded in IBANs
- Institution BICs as issued together with the IBANs to the account holders
- Data for the SEPA countries and the non-SEPA countries that adopted the IBAN
- Updates to the file when new IBAN country formats are registered with SWIFT in its capacity as the ISO IBAN registry
- Institution bank and branch codes for which no IBANs have been issued and hence that should not be found in IBANs.
- The directory is ideal for accurate derivation of BIC from IBAN, covering 72 IBAN countries (including all SEPA countries). It is also ideal for validating IBANs. The capability to validate IBANs is important as many corporations generate IBANs for their vendors, suppliers, and clients, which in many cases are not the correct IBANs issued by the banks.

Available formats

- Flat file in XML or TXT format

Delivery

- The IBAN Plus is downloadable or also be delivered through FileAct.

SWIFT REF BUSINESS APPLICATIONS

Introduction

SWIFTRef offers a portfolio of reference data products and services. Data is maintained in a flexible relational database and accessible in a choice of formats and delivery channels matched to business needs.

Purpose

Application vendors are able to access BICs, National bank/Sort codes, IBAN data, payment routing data (including SEPA and other payment systems), Standard Settlement Instructions (SSIs), LEIs, MICs (Market Identification Codes), BRNs (Business Registration Numbers), GIINs (Global Intermediary Identification Numbers), and more. Through SWIFTRef, vendors can ensure that their applications support the most accurate and up-to-date reference and entity data for smooth payments initiation and processing

SWIFT & ISO 20022

Location, Date, Author

ISO 20022

ISO 20022 is an ISO standard for electronic data interchange between financial institutions.

ISO 20022 is a methodology, or recipe, which can be followed when creating financial messaging standards. A global and open standard, ISO 20022 is not controlled by a single interest: it can be used by anyone in the industry and implemented on any network. It has fully established processes for its maintenance, evolution and governance.

First published in 2004, ISO 20022 is widely recognised as the standard of the future. As well as being flexible enough to work with the latest technology, ISO 20022 can also adapt to new technology as it emerges.

SWIFT's role in supporting ISO 20022

1. **RA – Registration Authority** - As the Registration Authority for ISO 20022, SWIFT oversees the financial repository and safeguard the quality of the standard.
2. **Market Practice Facilitator** - A trusted harmoniser of global and local market practice for ISO 20022, SWIFT advise communities on best practice
3. **Content Contributor** - SWIFT has submitted or co-submitted more than half of all message developments to the ISO 20022 portfolio.
4. **Knowledge and expertise Provider** – The rich experience and knowledge of ISO 20022 enables SWIFT to bring invaluable support to market infrastructures and their communities

ISO 20022

ISO 20022 & PAYMENTS

In the Payments area, the below category of MX messages are used :

- ✓ PAIN – PAYMENT INITIATION
- ✓ PACS – PAYMENT CLEARINGS AND SETTLEMENT
- ✓ CAMT – CASH MANAGEMENT

ISO 20022

1. PAIN MESSAGES

PAIN - PAYMENT INITIATION MESSAGES

Message Name	Msg ID (Schema)
CustomerCreditTransferInitiationV08	pain.001.001.08
CustomerPaymentStatusReportV09	pain.002.001.09
CustomerPaymentReversalV08	pain.007.001.08
CustomerDirectDebitInitiationV07	pain.008.001.07

PAIN MANDATES

Message Name	Msg ID (Schema)
MandateInitiationRequestV05	pain.009.001.05
MandateAmendmentRequestV05	pain.010.001.05
MandateCancellationRequestV05	pain.011.001.05
MandateAcceptanceReportV05	pain.012.001.05
MandateCopyRequestV01	pain.017.001.01
MandateSuspensionRequestV01	pain.018.001.01

ISO 20022

2. PACS MESSAGES

Message Name	Msg ID (Schema)
FIToFIPaymentStatusReportV09	pacs.002.001.09
FIToFICustomerDirectDebitV07	pacs.003.001.07
PaymentReturnV08	pacs.004.001.08
FIToFIPaymentReversalV08	pacs.007.001.08
FIToFICustomerCreditTransferV07	pacs.008.001.07
FinancialInstitutionCreditTransferV07	pacs.009.001.07
FinancialInstitutionDirectDebitV02	pacs.010.001.02
FIToFIPaymentStatusRequestV02	pacs.028.001.02

ISO 20022

3. CAMT MESSAGES

CAMT – BANK TO CUSTOMER

Message Name	Msg ID (Schema)
BankToCustomerAccountReportV07	camt.052.001.07
BankToCustomerStatementV07	camt.053.001.07
BankToCustomerDebitCreditNotificationV07	camt.054.001.07
AccountReportingRequestV04	camt.060.001.04

CAMT – BANK SERVICES BILLING

Message Name	Msg ID (Schema)
BankServicesBillingStatementV02	camt.086.001.02

CAMT – NOTICE TO RECEIVE

Message Name	Msg ID (Schema)
NotificationToReceiveV05	camt.057.001.05
NotificationToReceiveCancellationAdviceV05	camt.058.001.05
NotificationToReceiveStatusReportV05	camt.059.001.05

ISO 20022

3. CAMT MESSAGES

CAMT – EXCEPTIONS AND INVESTIGATIONS

Message Name	Msg ID (Schema)
UnableToApplyV06	camt.026.001.06
ClaimNonReceiptV06	camt.027.001.06
AdditionalPaymentInformationV08	camt.028.001.08
ResolutionOfInvestigationV08	camt.029.001.08
NotificationOfCaseAssignmentV04	camt.030.001.04
RejectInvestigationV05	camt.031.001.05
CancelCaseAssignmentV03	camt.032.001.03
RequestForDuplicateV05	camt.033.001.05
DuplicateV05	camt.034.001.05
ProprietaryFormatInvestigationV04	camt.035.001.04
DebitAuthorisationResponseV04	camt.036.001.04
DebitAuthorisationRequestV06	camt.037.001.06
CaseStatusReportRequestV03	camt.038.001.03
CaseStatusReportV04	camt.039.001.04
CustomerPaymentCancellationRequestV07	camt.055.001.07
FIToFIPaymentCancellationRequestV07	camt.056.001.07
RequestToModifyPaymentV05	camt.087.001.05

COMPARISON OF ISO 20022 VS SWIFT FIELDS

ISO name	ISO tag	SWIFT name	SWIFT tag	Description
Instructing agent	InstgAgt	Sender		Sender
Instructed Agent	InstdAgt	Receiver		Receiver
Instruction Identification	PmtIdInstrId	Transaction Reference	20	Unique identification, assigned by the instructing party to unambiguously identify the instruction. Format: 16x
End to End ID	EndToEndId	Related Reference	21	The identification of a transaction to which the current transaction is related. Format: 16x
FX deal reference	FXDealRef	FX deal reference	21F	Only when the Transaction Amount (field 32B) and the Instructed Amount (field 33B) are both present and different from 0, the Ordering Customer/Instructing Party is allowed, even obliged, to provide the Exchange Rate (field 36) and the F/X Deal Reference (field 21F)
NA	NA	Customer specified reference	21R	Customer specified reference. Format: 16x

COMPARISON OF ISO 20022 VS SWIFT FIELDS

ISO name	ISO tag	SWIFT name	SWIFT tag	Description
Exchange rate	XchgRate	Exchange Rate	36	This field specifies the exchange rate used to convert the instructed amount specified in field 33B, otherwise field 36 is not allowed.
Debtor	Dbtr	Ordering Customer - Account, BIC	50A	The customer ordering the transaction Format: A – Account # & BIC/BEI
Debtor - Account, Name, Address	DbtrAcct, Dbtr Nm, Dbtr PstIAdr	Ordering customer - Account, Name, Address	50K	K – Account # & Name and Address
Debtor private Id	Dbtr Id PrvtId Under CdTrfTxlInf block:- DrvrsLicNb CstmrNb SclSctyNb AlnRegnNb PsptNb TaxIdNb IdntyCardNb MplyrIdNb OthrId	Codes:- DRLC CUST SOSE ARNU CCPT TXID NIDN EMPL	50F	Where a predefined identifier does not exist.

COMPARISON OF ISO 20022 VS SWIFT FIELDS

ISO name	ISO tag	SWIFT name	SWIFT tag	Description
Debtor Agent	DbtrAgt	Ordering Institution	52	If required, Use only Option A If "Sending Bank" has more than 1 account in same currency, message will not be a straight through, unless each account has a unique SWIFT TID.
Instructing Reimbursement Agent	InstgRmbrsmntAgt	Sender's Correspondent	53	Definition: Use only where there are multiple account relationships in the currency of the transaction, between the Sender and the Receiver and one of these accounts is to be used for reimbursement. Must contain / + 7 digit account number (no spaces).
Instructed Reimbursement Agent	InstdRmbrsmntAgt	Receiver's correspondent	54	Receiver's correspondent
Intermediary Agent	IntrmyAgt1	Intermediary Institution	56	Use only Option A The SWIFT BIC of the Head Office of the Account with Institution must be included. Leave BLANK if the "Account with the Institution" SWIFT BIC is the same or if it is the Receiving Bank (i.e. NOSCCATT).

COMPARISON OF ISO 20022 VS SWIFT FIELDS

ISO name	ISO tag	SWIFT name	SWIFT tag	Description
Creditor Agent	CdtrAgt	Account With Institution	57	A- The financial institution at which the Ordering Party requests the Use only for branches of receiver. Must contain //CC + 9 digit Canadian Sort Code (no spaces). Name and address of receiving branch plus //CC + 9 digit Canadian Sort Code. Beneficiary to be paid. Format Option: SWIFT BIC alone or SWIFT BIC plus B - Use only for branches of receiver. D - Name and address of receiving branch plus
Creditor Agent	CdtrAgt	Beneficiary Customer	59	The Party designated by the Ordering Party as the ultimate recipient of the funds. Format: (no letter) – Account # & Name and Address A – Account # & BIC/BEI

COMPARISON OF ISO 20022 VS SWIFT FIELDS

ISO name	ISO tag	SWIFT name	SWIFT tag	Description
Instruction for creditor agent Previous Instructing agent Instruction for next agent	InstrForCdtrAgt PrvsInstAgt InstrForNxtAgt	Codes: ACC INS INT REC	72	Sender to receiver information - ACC - Instruction following are for the account with institution -INS - Instructing Institution which instructed the sender to execute the transaction - INT - Instructions following are for the intermediary institution -Rec - Instructions following are for the Receiver of the message
Charge bearer(DEBT,CRED,SHAR)	ChrgBr	Details of charges (OUR,BEN,SHA)	71A	Party who bears the charges of transaction
		Senders or Receivers Charges	71F or 71G	(F) currency and amount of the transaction charges deducted by the Sender and by previous banks in the transaction chain. (G) currency and amount of the transaction charges due to the Receiver. Please use as appropriate to our arrangements with your Bank.

COMPARISON OF ISO 20022 VS SWIFT FIELDS

ISO name	ISO tag	SWIFT name	SWIFT tag	Description
Remittance information	RmtInf Ustrd PmtId EndToEndId	Codes: INV, IPI,RFB ROC	70	The Party designated by the Ordering Party as the ultimate recipient of the funds. Format: (no letter) – Account # & Name and Address A – Account # & BIC/BEI If the field 71 contains the code "/ROC/". Then reference of the ordering customer following the code, restricted to 35 characters, is copied to the EndtoEndIdentification element. Else, the instructed element <Ustrd> of the Remittance information block is used.
Service level (pre agreed or proprietary)	**CdtrfTxInfSvcLvl**	**Bank Operation code**	**23B**	**Agreement or rules under which the transaction is to be processed**
InterBank Settlement Date, Interbank Settlement Amount	IntrBkSttlmDt, TtlIntrBkSttlmAmt	InterBank Settlement Date, Interbank Settlement Amount	32A	Interbank settlement amount and currency and the value date of transaction. Format Option: 6n 3a 15 number
Original ordered amount	OrgnlOrdrdAmt	Currency/Original Ordered Amount	33B	Original ordered amount and currency Format: ccyAmount
Creditor	Cdtr	Beneficiary Institution	58A	Beneficiary Institution

SWIFT COST TO ACQUIRE

Location, Date, Author

Cost Involved

SWIFT charges its customers/members with various fees based on various heads. SWIFT charges for its

- Hardware and
- Software

The various heads on which the financial institution or corporates get charged are:

- Joining fees
- BIC registration charges
- Connectivity/Infrastructure charges
- Security establishment charges (PKI, Certificate management, Security tokens etc.,)
- SWIFT messaging Gateway / Interface charges
- SWIFT application interface charges
- Data management charges
- Back up Tapes charges
- Transaction wise charges

They are of various types :

- One time charges
- Annual recurring charges
- Monthly recurring charges

People matter, results count.

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