



Dexia Asset Management a Satisco's customer testimonial

Optimizing trade processing thanks to
IBM WTX and *SATISCO FCT* solutions





Dexia Asset Management

Optimizing trade processing with **IBM WTX** and
SATISCO FCT V1.0 solutions

By Ludovic Dujardin

Head of IT business solutions operations



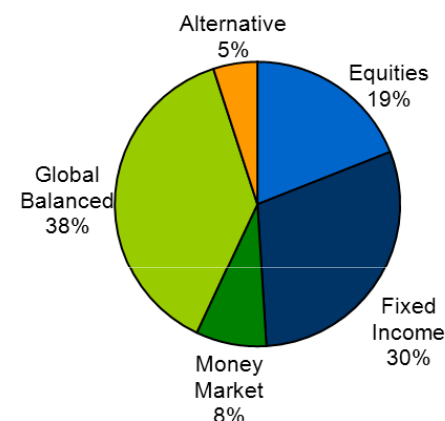
Dexia AM Identity Card

A recognized and well-diversified asset manager with a global outlook



Recognized global expertise & customized solutions

- Global strategies in Fixed Income & Equity
- Long experience in tailor-made solutions and asset allocation
- Sustainable & Responsible Investments
- Alternative Investments
- Emerging Markets
- Australian Equities
- Liability-driven Investments
- Asset-Liabilities Management
- 83% of funds with 3-4-5 stars according to Morningstar



Committed teams with solid track record

- Senior management working as a team for over 12 years
- 501 staff of which 165 Investment & Research professionals
- High responsiveness of 88 Client Relations & Solutions experts

Total AuM: EUR 73 bn
(30.06.2013)



Dexia AM Identity Card

A recognized and well-diversified asset manager with a global outlook



International Client Coverage (25 countries)

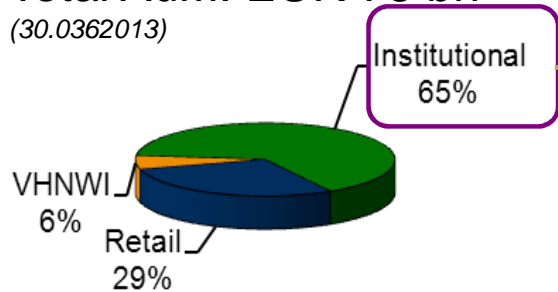


- ### PRODUCTION
- Brussels
 - Paris
 - Luxembourg
 - Australia

- ### CLIENTS
- Continental Europe
 - UK/Ireland
 - Australia (Ausbil)
 - Middle East
 - Latin America

Well-diversified Client Base with own depositary banks

Total AuM: EUR 73 bn
(30.0362013)

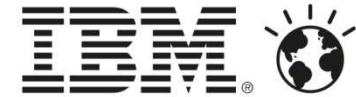


- Governments
- Social Security entities
- Pension Schemes
- Banks & other Fin. Instit.
- Insurance Companies
- Funds of Funds
- Asset managers
- Corporates

- ### 34 DEPOSITARY BANKS
- Belfius
 - RBC
 - BONY Mellon
 - Soc Gen
 - Caceis
 -



Dexia AM Middle Offices



LOCATIONS

- Brussels
- Paris
- Luxembourg

Middle Office is the link between portfolio managers and depositary banks

CONTROL FUNCTIONS

- Trade Matching Confirmation
- Settlement
- Reco Cash
- Reco Position

TRADE PROCESSING

RECONCILIATION



Dexia AM: start situation

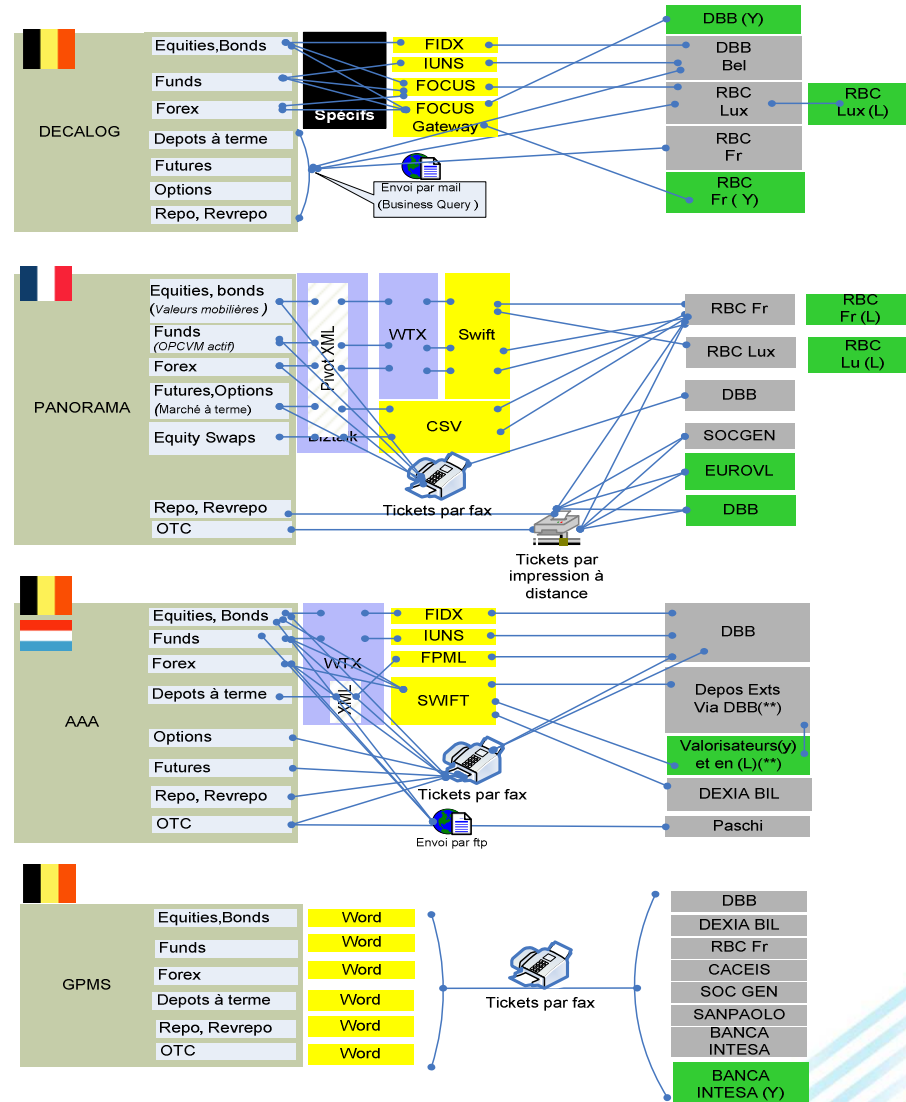
Merging's and acquisitions brings technical complexity

DIFFERENT PORTFOLIO MANAGEMENT SYSTEMS

- DECALOG: Classic SRI Funds
- PANORAMA : Alternative Funds
- Triple'A: private and institutional portfolio's
- GPMS: insurances portfolios

MANY THIRDPARTY COMMUNICATION CHANNELS

- COBOL like proprietary interfaces
- SWIFT-like internal interfaces
- SWIFT-standard interfaces
- CSV-flat files interfaces
- FpML/XML standard interfaces
- FAX/PDF workflows



Légende





SWOT Middle Office

STRENGTH

- SWIFT Knowledge
- WTX Knowledge
- Settlement Instruction Knowledge

WEAKNESS

- MATCHING = Manually & decentralized
- Bad monitoring
- Different trade processes per TP
- High maintenance
- No replaceable users

OPPORTUNITIES

- Larger support of SWIFT by third parties
- Reorganization Middle Office

THREATS

- Increasing number of depositary banks, brokers,...
- Destaffing
- New legal rules





Mission



1 tool per function

Objective



1 process internally

Users can be replaceable on different subjects



1 standard communication

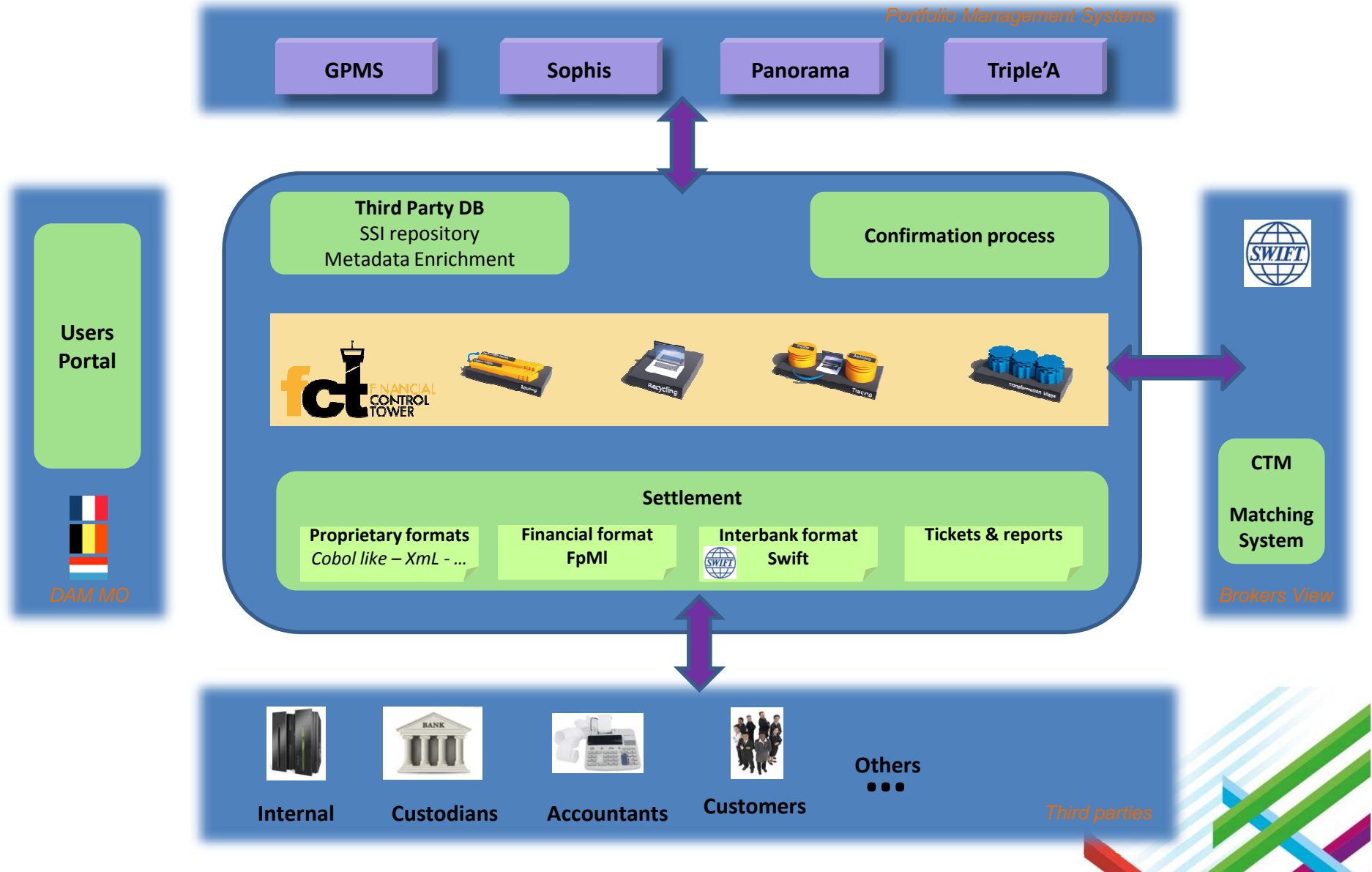
Easier implementation of new clients



Dexia AM present interfaces implementations



Target solution: 1 tool with 1 standard (communication) process



Dexia AM present interfaces implementations

Satisco FCT V1.0: WTX Transformation Maps



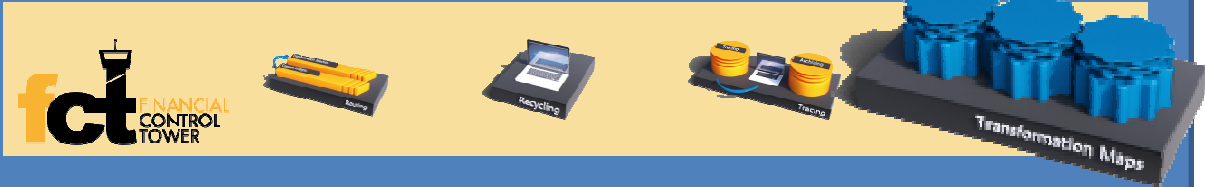
Portfolio Management Systems



Users Portal

Third Party DB
SSI repository
Metadata Enrichment

Confirmation process



Settlement

Proprietary formats
Cobol like – Xml - ...

Financial format
FpMI

Interbank format
Swift

Tickets & reports



CTM
Matching System

DAM MO

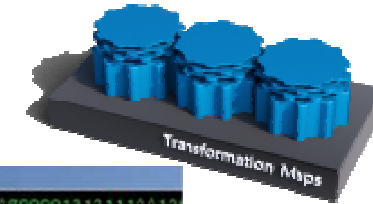
Brokers View





WTX Transformer Maps

Native file



ax0210svc1a.dbb.dexwired.net - PuTTY

```
2^15/05/2013 15:56:53^NULL^ext_operation^NULL^0^NULL^ax0210^/map_location/tmtb006_502.aix^2^0^0x0006000092e8bf93^300001312111^12^
LL^NULL^NULL^EUR^1^380.00^NULL^NULL^10/05/2013^777-777777-77_EUR^NULL^NULL^NULL^NULL^NULL^NULL^NULL^NULL^0^NULL^NULL^NU
NULL^NULL^NULL^NULL^NULL^NULL^NULL^NULL^EUR^ADJUSTMENT ON ERROR^30.00^EUR^FEES BANK^NULL^EUR^FEES BROKER^0.00^EUR^FEES
ES_PM/RV^0.00^EUR^TAXES_OTHERS^0.00^EUR^TAXES_ETRANGER^0.00^EUR^TAXES_ESD^NULL^NULL^NULL^NULL^0^0^S00001312111^AAA^UBS_LN^AAA^N
NULL^1^0^NULL^NULL^NULL^NULL^NULL^NULL^NULL^NULL^ARSI4861^S0CGENF^NULL^NULL^NULL^NULL^NULL^NULL^NULL^NULL^NULL^NULL
LL^1^EUR^1^350.00^380.70^NULL^10/05/2013^NULL^70^0^0^0^NULL^EUR^380.70^BETEST^1^25^14^25^NULL^0^NULL^Test_EP_Trading^
LL^0^0^0^0^NULL^NULL^
```

mapped & transformed by WTX

Enter the rule for this output.

```
1 = code code_t datatype:NewValues/Validation_Record
```

Map

- header
 - a_action_e_enum_t datatype (0:1)
 - a_creation_d datatype (0:1)
 - filer1 code_t datatype (0:1)
 - a_entry_sqname_c_sysname_t datatype (0:1)
 - a_execution_d datatype (0:1)
 - filer2 code_t datatype
 - a_function_sqname_c_sysname_t datatype (0:1)
 - a_hostname_c_sysname_t datatype (0:1)
 - a_map_storage_c_note_t datatype (0:1)
 - a_module_e_enum_t datatype (0:1)
 - a_nature_o_enum_t datatype (0:1)
 - filer3 code_t datatype (0:1)
 - code code_t datatype
 - a_status_e_enum_t datatype (0:1)
 - filer4 code_t datatype
 - filer5 code_t datatype
 - CodeSubd code_t datatype
 - a_update_status_c_name_t datatype (0:1)
 - a_user_c_code_t datatype (0:1)
- NewValues
 - acc2_currency code_t datatype (0:1)
 - acc2_exch_rate exchange_t datatype (0:1)
 - acc2_net_amount_m amount_t datatype (0:1)
 - acc3_currency code_t datatype (0:1)
 - acc3_exch_rate exchange_t datatype (0:1)
 - acc3_net_amount_m amount_t datatype (0:1)
 - acc_currency code_t datatype (0:1)
 - acc_exch_rate exchange_t datatype (0:1)

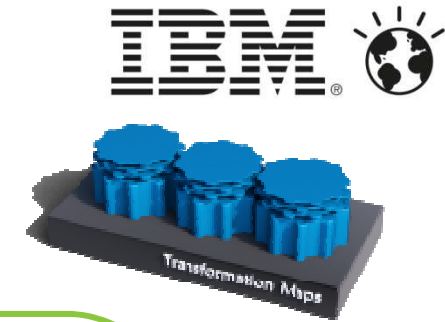
Record

```
XML version="1.0" encoding="UTF-8" ?
<ExecuteOrders xmlns="http://BANK.AAA.XMS.Schemas">
  <Header>
    <MessageType>20100</MessageType>
    <Source>BRM</Source>
    <Target>TRADEBASE</Target>
    <SourceID>AAA120010000036</SourceID>
    <TargetID/>
    <MessageID>201200101200343660005000</MessageID>
  </Header>
  <ExecuteOrder>
    <OrderIdentification>
      <System application="CRYS" type="OMS">
        <OrderID>100001</OrderID>
      </System>
    </OrderIdentification>
    <Security name="FRANCE O.A.T.I/L">
      <SecurityIdentification type="ISIN" id="FR0010135525"/>
      <SecurityIdentification type="INTERNAL" id="BF0010135525"/>
      <SecurityIdentification type="BL00" id="FRTR1.6-07/25/15"/>
      <Exchange type="TELEURS" name="EUROHEX PARIS" id="00025">
        <PrimSecondMarket>SEOE</PrimSecondMarket>
        <CotationCurrency/>
      </Exchange>
      <Exchange type="HIC" name="EUROHEX PARIS" id="XPAR">
        <PrimSecondMarket>SEOE</PrimSecondMarket>
        <CotationCurrency/>
      </Exchange>
      <SecurityType id="BF1070" type="AAA">GOVT</SecurityType>
    </Security>
    <ExecutionPrice type="M" currency="EUR">108.115</ExecutionPrice>
    <ExecutionPriceBond>
      <CleanPrice>100.115</CleanPrice>
      <InflationFactor>1.1762586</InflationFactor>
      <GrossPrice>127.17119839</GrossPrice>
    </ExecutionPriceBond>
    <TradeDate>2012-08-10</TradeDate>
    <SettlementDate>2012-08-15</SettlementDate>
    <BrokerInformation>
      <SalesBrokerTrading>
        <ID type="PMS"/>
      </SalesBrokerTrading>
      <ClearingBroker>
        <ID type="PMS">NULL</ID>
      </ClearingBroker>
    </BrokerInformation>
    <ExecutedQuantity type="M"/>
    <Side>BUY</Side>
    <Instruction type="70"/>
    <OrderComments type="DealToFront"/>
  </ExecuteOrder>
</ExecuteOrders>
```

in XML, Swift or other formats...



Advantages of WTX Transformer Maps



- Short time to market
- Connection between internal applications or with external business partners (b2b)
- Treats high volume/Scalable
- Swift Package
 - Easy implementation of standard messages
 - Easy maintenance with yearly release
- Easy implementation of Tailor-made exceptions



Dexia AM present interfaces implementations

Satisco FCT V1.0: Routing



Portfolio Management Systems

GPMS

Sophis

Panorama

Triple'A

Users Portal

Third Party DB
SSI repository
Metadata Enrichment

Confirmation process



CTM
Matching System

Settlement

Proprietary formats
Cobol like – Xml - ...

Financial format
FpMI

Interbank format
Swift

Tickets & reports

Brokers View

DAM MO



Internal



Custodians



Accountants



Customers



Others

Third parties





FCT Routing



- Set up routing via XML parameters
- Select transformation process
- Setup Input & Output channels:
 - Queues
 - Folders
 - Database
 - ...
- Select archiving location



Dexia AM present interfaces implementations

Satisco FCT V1.0: Recycling



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FCT Recycling of messages



PRD-FISE_TMROALL_TRACING - SESAME MONITORING TOOL

File Home Create External Data Database Tools

PROJECT	SESAME	CINPUT	QMN MQPRD205-QN VM45.QL.STPT_DES_ACK_IN.0001-REFRESH 300-MBS 16384 -event 7e201
SUBPROJECT	TB		
SEQUENCE	30000		
ENVIRONMENT	PRD	IO	
UNIQUEID	201306141247367670030000_7e201		
EXECORDER	10	SELECTFILE	tmro001_501_choose.xml
MAP	tmsw320_502.aix	LOGFILE	../log/Mer_tmsw320_502_201306141247367670030000_7e201.log
FAILED	NO	UTILMAP	
MSGTYPE	MT320	UTILSTATUS	0
REFERENCE	23449034/695070	UTOPTIONS	
BICFROM	GRIFRPPA	UTILID	
BICTO	DXAMBEBB	ARCHIVEFILE	../../../../NAS/archive/swift/MT320/20130614/tmsw320_502_Arc_20130614124736767003 0000_7e201.txt
INFO1	23449034/695070		
INFO2			
CDESC	MT320		
STATUS	0	ARCHIVEEXEC	0
DATETIMEBEFORE	20130614/12:47:36:7810	EXECNEXT	
DATETIMEAFTER	20130614/12:47:36:8000		
TXERRMSG			
USERERRMSG			
OPTIONS	-T -wM -AEW=../log/Mer_tmsw320_502_201306141247367670030000_7e201.log		

Navigation Pane

View Archive View Log File Recycle PRD Send to SESAME - UAT Send to SESAME - TST Switch to DataSheet view

Record: 8 of 1336 Filtered Search

Form View Num Lock Filtered



Dexia AM present interfaces implementations

Satisco FCT V1.0: Tracing



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FCT Tracing: transmits tracing and log files to business application



Amadeus Web Interface - Dujardin Ludovic [v] - Windows Internet Explorer provided by DTS

http://damwebapps.internal.dexia-am.com/Operations/Amadeus/v1/pai

Asset Management
DEXIA AMADEUS - SWIFTS

Start Date : 02/05/2013 End Date : 07/05/2013 Search

Swift	Target	Source	Message	Message Type	Status	Date	Internal Me
	S00003187956	DXFSBEBB		MT304	TACK	05/07/13 10:53:54	25000
	S00003187956	DXFSBEBB			TACK	05/07/13 10:53:54	25000
	S00003187956	GKCCBEBB		MT300	TACK	05/07/13 10:53:22	22270
	S00003187956	GKCCBEBB			TACK	05/07/13 10:53:22	22270

Done Trusted sites 100%



FCT Tracing: transmits tracing and log files to IT



PRD-FISE_TMROALL_TRACING - SESAME MONITORING TOOL

UNIQUEID	EXEORCORDE	MAP	FAILED	MSGTYPE	REFERENCE	BICFROM	BICTO
201306171456075230030000_107e01	10	tmsw320_502.aix	NO	MT320	FC62621595001001	EBABEBBD	DXAMBEBB
201306171320061960030000_f9401	10	tmsw320_502.aix	NO	MT320	23466471/775130	GRIFRPPC	DXAMBEBB
201306171258034760030000_f7001	10	tmsw320_502.aix	NO	MT320	7493285-v1	REGBEBBA	DXAMBEBB
201306171257054220030000_f6a01	10	tmsw320_502.aix	NO	MT320	7493269-v1	REGBEBBA	DXAMBEBB
201306171255353820030000_f6201	10	tmsw320_502.aix	NO	MT320	06997PEC6239232A	OGEFRPPD	DXAMBEBB
201306141309077290030000_80c01	10	tmsw320_502.aix	NO	MT320	7486766-v1	REGBEBBA	DXAMBEBB
201306141308076650030000_80601	10	tmsw320_502.aix	NO	MT320	7486725-v1	REGBEBBA	DXAMBEBB
201306141247367670030000_7e201	10	tmsw320_502.aix	NO	MT320	23449034/695070	GRIFRPPA	DXAMBEBB
201306141244366280030000_7d801	10	tmsw320_502.aix	NO	MT320	ARB1214036701	KCCBEBBA	DXAMBEBB
201306141240384770030000_7d601	10	tmsw320_502.aix	NO	MT320	06997PEC6236888A	OGEFRPPD	DXAMBEBB
201306141210350800030000_79e01	10	tmsw320_502.aix	NO	MT320	0374302N662736AA	REDBEBBD	DXAMBEBB
201306141156043890030000_76401	10	tmsw320_502.aix	NO	MT320	ARB1214033401	KCCBEBBA	DXAMBEBB
201306131300505470030000_c4e01	10	tmsw320_502.aix	NO	MT320	FC62597872001001	EBABEBBB	DXAMBEBB
201306131300205260030000_c4a01	10	tmsw320_502.aix	NO	MT320	ARB1213888401	KCCBEBBA	DXAMBEBB
201306121136155400030000_9fc01	10	tmsw320_502.aix	NO	MT320	7475934-v1	REGBEBBC	DXAMBEBB
201306121134454620030000_9f201	10	tmsw320_502.aix	NO	MT320	7475930-v1	REGBEBBD	DXAMBEBB
201306121105396670030000_92001	10	tmsw320_502.aix	NO	MT320	ARB1213721301	KCCBEBBA	DXAMBEBB
201306111403092140030000_96601	10	tmsw320_502.aix	NO	MT320	23388670/424219	GRIFRPPC	DXAMBEBB
201306111308050110030000_87801	10	tmsw320_502.aix	NO	MT320	FC62574883001001	EBABEBBA	DXAMBEBB
201306111250363360030000_84c01	10	tmsw320_502.aix	NO	MT320	06997PEC6230339A	OGEFRPPF	DXAMBEBB
201306101306195970030000_76401	10	tmsw320_502.aix	NO	MT320	06997PEC6227974A	OGEFRPPD	DXAMBEBB
201306101253170860030000_72001	10	tmsw320_502.aix	NO	MT320	23368843/336800	GRIFRPPB	DXAMBEBB
201306101231060870030000_69201	10	tmsw320_502.aix	NO	MT320	7467384-v1	REGBEBBA	DXAMBEBB
201306101231060870030000_69001	10	tmsw320_502.aix	NO	MT320	7467398-v1	REGBEBBC	DXAMBEBB
201306101224357700030000_68001	10	tmsw320_502.aix	NO	MT320	ARB1213443801	KCCBEBBA	DXAMBEBB
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201306071343347040030000_74201	10	tmsw320_502.aix	NO	MT320	ARB1213291401	KCCBEBBA	DXAMBEBB
201306071313035730030000_71e01	10	tmsw320_502.aix	NO	MT320	FC62550910001001	EBABEBBA	DXAMBEBB
201306071311335180030000_71801	10	tmsw320_502.aix	NO	MT320	06997PEC6225750A	OGEFRPPF	DXAMBEBB
201306071309013470030000_70c01	10	tmsw320_502.aix	NO	MT320	23349932/253593	GRIFRPPA	DXAMBEBB
201306061445072060030000_61201	10	tmsw320_502.aix	NO	MT320	ARR1213145001	KCCFRPRA	DXAMFRFR

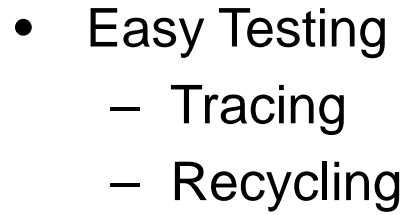

Record: 8 of 1336 Filtered Search



Advantages of FCT V1.0 solution



- Easy Set up
 - Routing
 - Management meta data



- Easy Testing
 - Tracing
 - Recycling



- Easy support
 - Alerting
 - Errors handling
 - Tracing



With FCT: Ready for the future



- Scalable
 - Can treat high volumes
- Flexible
 - Tailormade exceptions
- Easy Setup of new thirdparties
 - Routing
 - Testing (Recycling & tracing)



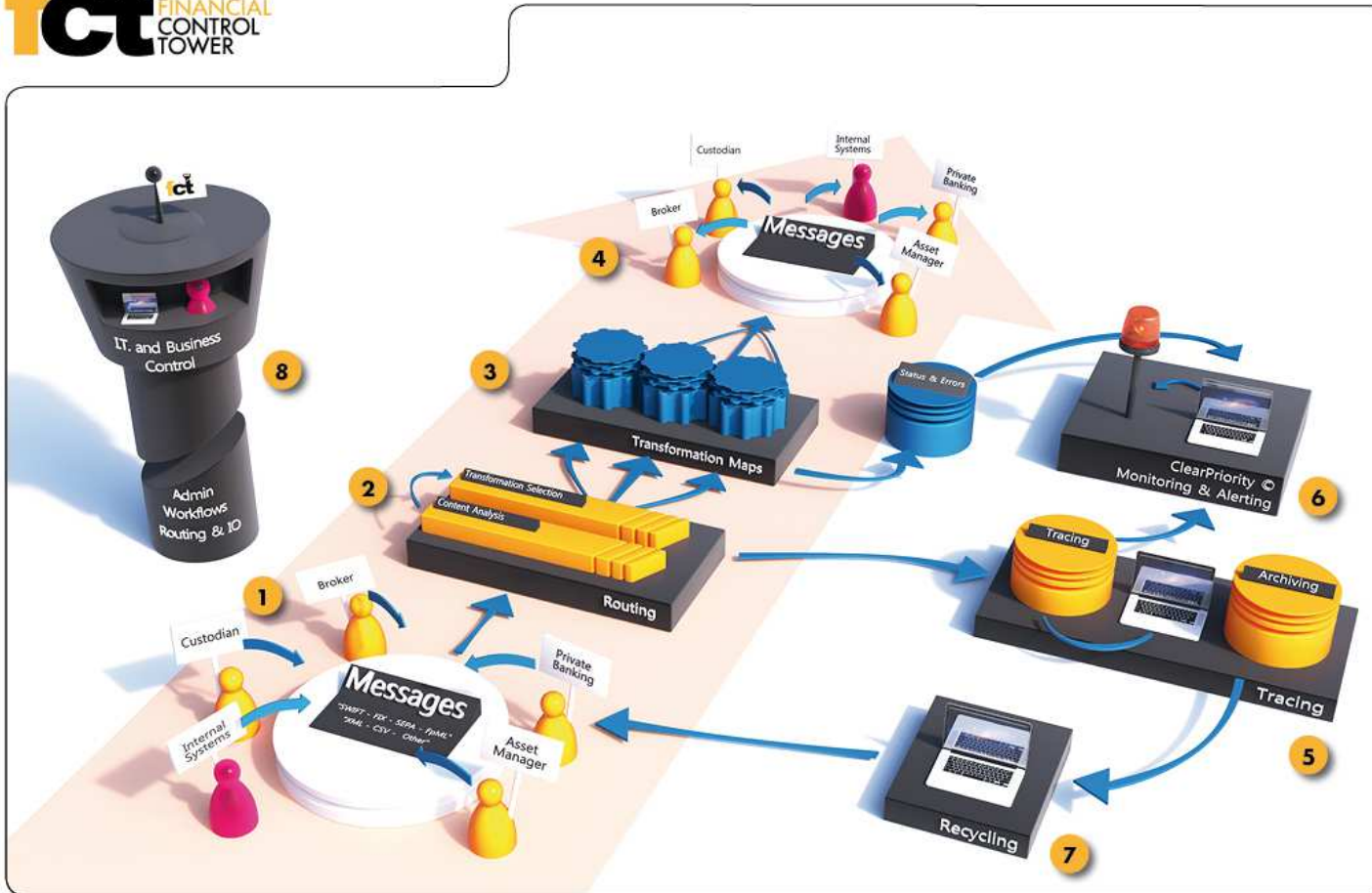


Financial Control Tower V2.0

By Alain Kunnen

Managing Director







- Dynamic Routing
- Powerful transformation engine
- Automatic tracing
- Archiving
- Recycling





- **IBM WTX existing packs**
- **SWIFT**: Society for Worldwide Interbank Financial Telecommunication
- **FIX**: Financial Information eXchange ("FIX")
- **SEPA**: Single Euro Payments Area (SEPA)
- **FpML®**: Financial products Markup Language





Version 2.0 New features

- **Dynamic Routing editor**
- **Tracing browser module**
- **Easier recycling module**
- **Monitoring and Alerting**
- **Administration module**





Version 2.0 New features

- **New business features**
 - Business processing **time control**
 - **SEPA** payments validation
 - Operations **workflows monitoring**
- **New technical features**
 - Quick access to **technical logs**
 - Automatic technical **alerts**
 - **Production updates** monitoring



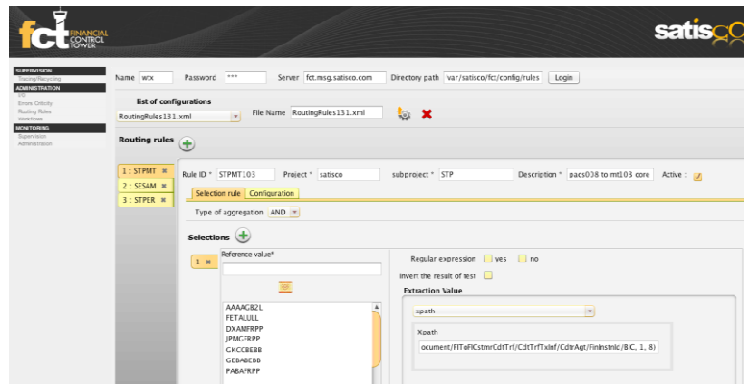


- **SEPA Reclaims control**
- **AML (Anti-Money Laundering)**
- **Tax Reclaim**
- **CLOUD**
- **xCT**

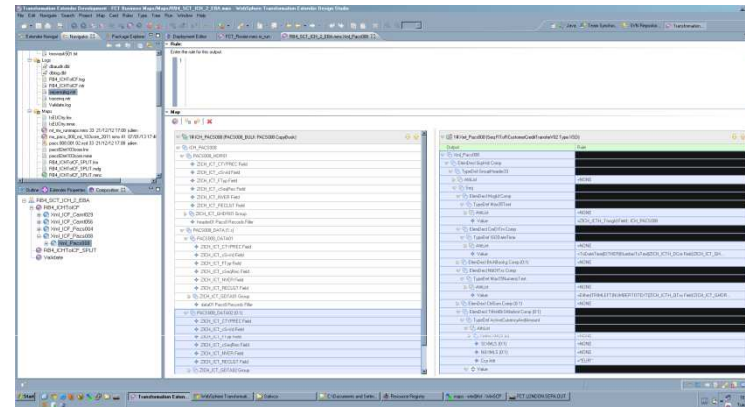




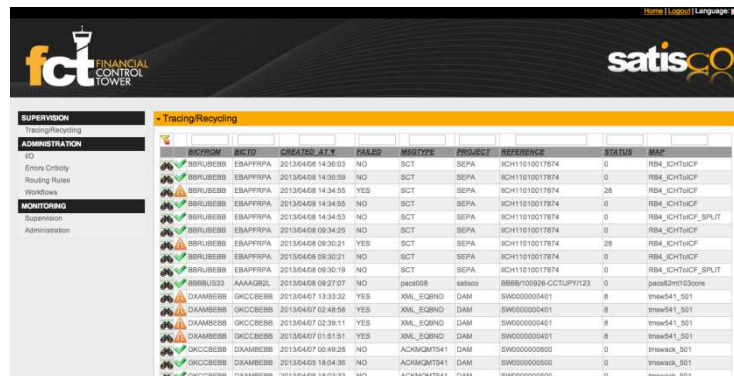
IBM Version 2.0 Screen shots



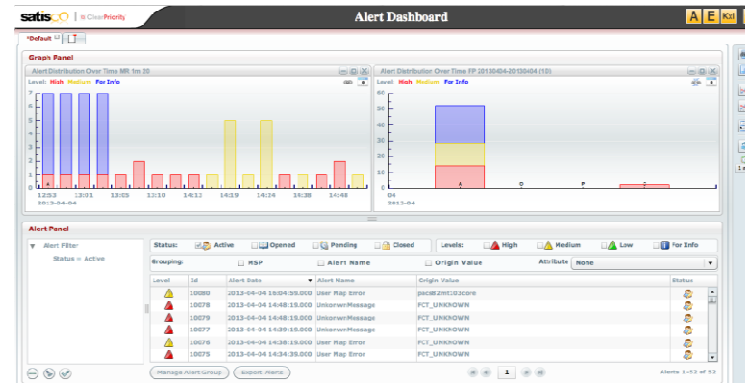
Dynamic routing definition module



IBM WebSphere Transformation eXtender



Tracing module



Monitoring & Alerting module



IBM BusinessConnect
Realize the art of the possible.



Thank You!

