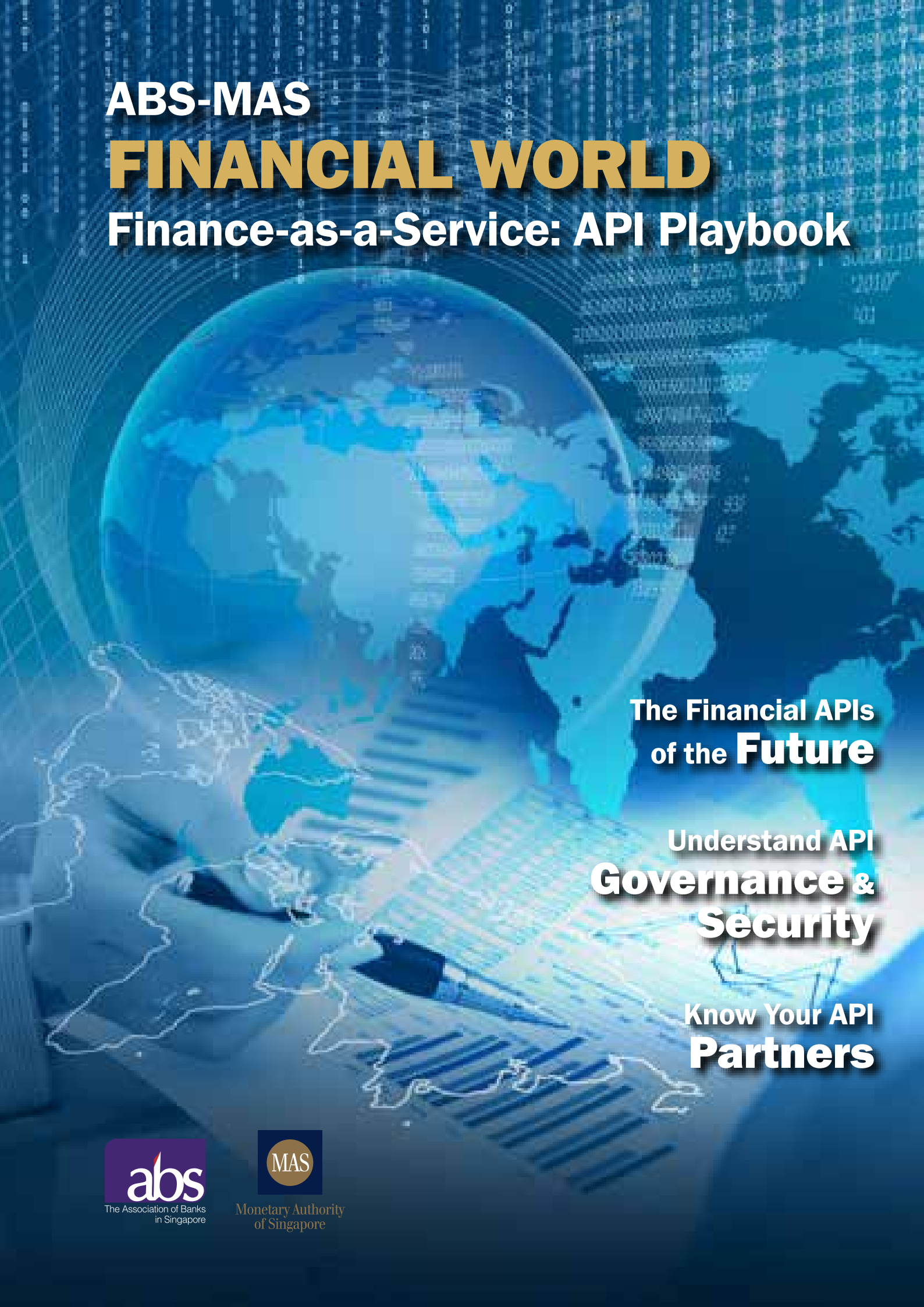

ABS-MAS FINANCIAL WORLD

Finance-as-a-Service: API Playbook

The Financial APIs of the **Future**

Understand API **Governance & Security**

Know Your API **Partners**

abs
The Association of Banks in Singapore

MAS
Monetary Authority of Singapore

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Foreword

Digital technology is fast changing the way in which enhanced and new financial services are delivered to customers by leveraging external parties' applications, software and solutions. Data exchange through Application Programming Interfaces (APIs) has become increasingly popular as it facilitates industry wide innovation and increases business agility. This API-oriented approach towards technology architecture has generated a lot of attention. Banks and Financial institutions are adapting quickly to rapid changes in consumer and business expectations.

The Association of Banks in Singapore is pleased to present the "Finance-as-a-Service: API Playbook". This Playbook will serve as a comprehensive guide in identifying and developing the APIs in your organisation. The requisite data and information standards supporting these APIs are also defined. This Playbook has also been developed as a reference guide for industry adoption in the wider ASEAN region who are embarking on similar API programs.

I would like to take this opportunity to acknowledge the contributions of the ABS Taskforce and the team from Deloitte in the production of this Playbook.

We hope that you would find this Playbook a useful tool in planning and implementing technology transformation in your business.

Ong-Ang Ai Boon, Mrs
Director, The Association of Banks in Singapore

MAS encourages financial institutions to adopt APIs as a key foundation layer for innovation. In recent years, financial institutions have begun to leverage APIs as core assets, enabling them to communicate with other FinTech firms to tap on new technology, extend their revenue streams and offer innovative services.

The ABS' guidelines, developed in close collaboration with the industry and MAS, set out an industry infrastructure for the financial services industry and cross-sectoral stakeholders. I commend ABS' effort in identifying key API candidates as well as data and information security standards for financial institutions to consider adopting.

Sopnendu Mohanty
Chief FinTech Officer, Monetary Authority of Singapore

Context

Introduction to APIs

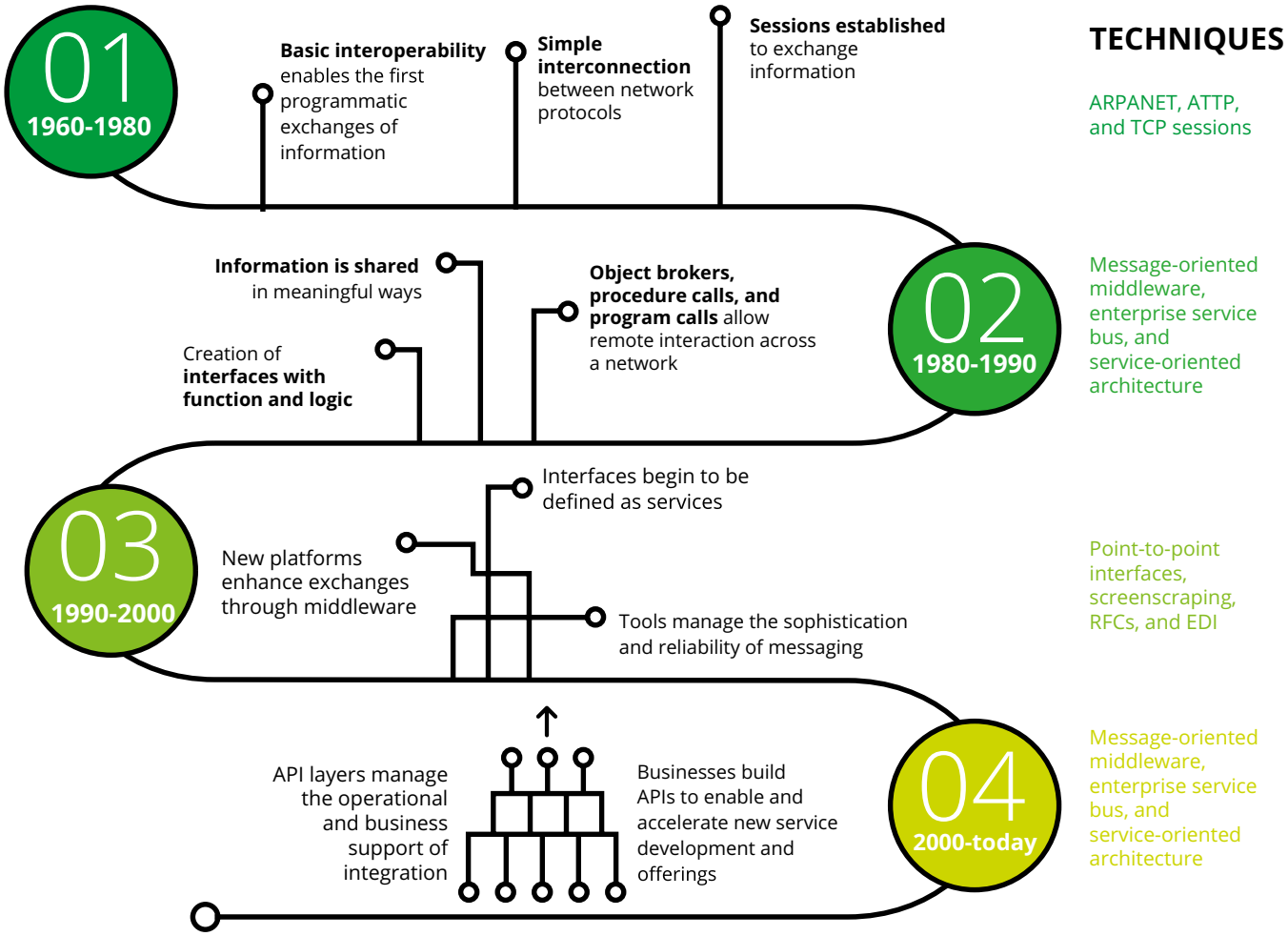
APIs are sets of protocols that define how one application interacts with another, usually to facilitate an information exchange.

The growth in Financial Institutions (FIs) exposing data within their legacy systems via APIs is driven by the need to deliver more customer oriented functionality and a faster time-to-market. APIs expedite the realisation of an interconnected and interdependent ecosystem that promotes (intra and cross-sector) partnerships, stimulates co-operation and increases information/resource sharing between organisations.

APIs enable various software applications to communicate and interact with each other and exchange data directly, without the need for human intervention. For any given software or application, an API specifies the following:

- A mechanism for connecting to the software or application.
- The data and functionality that is made available for this software.
- Rules and standards that need to be followed by other applications to interact with the application's data and functionality.

APIs have evolved over the years. There are more than 12,000 APIs which provide a fantastic opportunity for Financial Services firms to explore ways to further develop the next generation of technology play.



To manage the cost of building and delivering solutions, service providers need to consider the development of clear standards that help in articulating this across not just the entire technology organisation but also the business. This is so that it is easier to develop various ecosystems not just with small but also large corporates.

Exhibit 01: The evolution of APIs

Transformational Rewards of Migration from a 'Traditional Economy' to an 'API Economy'

Success factors for an API economy

In an interconnected world, APIs are not viewed as a technical tool, but as a potential enabler of a collaborative and cooperative ecosystem. To ensure maturity of these objectives a multitude of factors driving an API economy need to materialise.

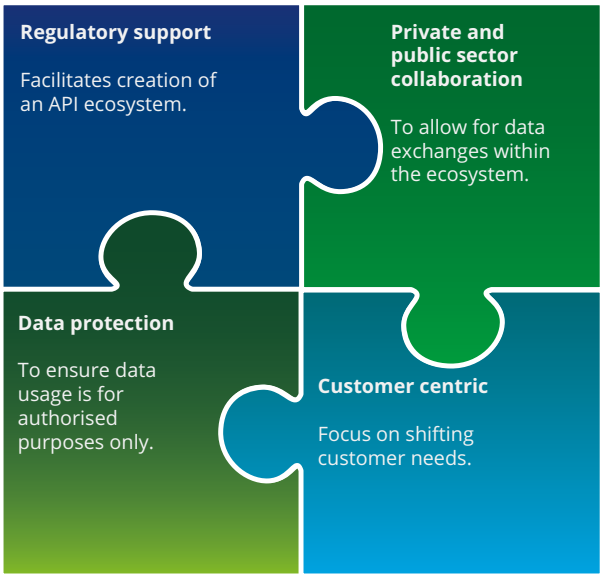


Exhibit 02: Key success factors for an API economy

Advantages of an API economy

The creation of an API economy generates a multitude of advantages for the stakeholders across FSI and cross sectors. Whilst there exist potential advantages for the industry and its customers, also existing is an opportunity to create a sustainable macro environment that promotes cooperation and collaboration between stakeholders.

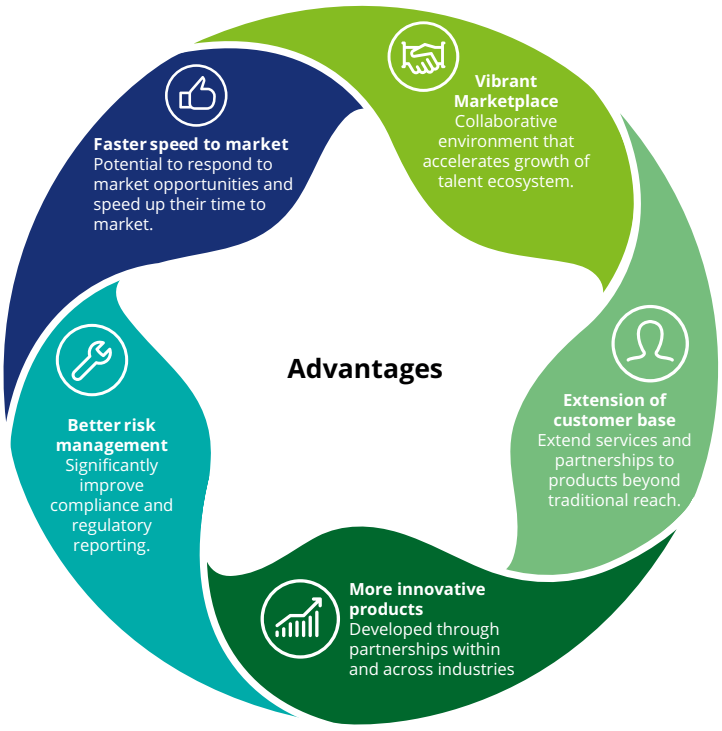


Exhibit 03: Advantages of an API economy

Key challenges in an API economy

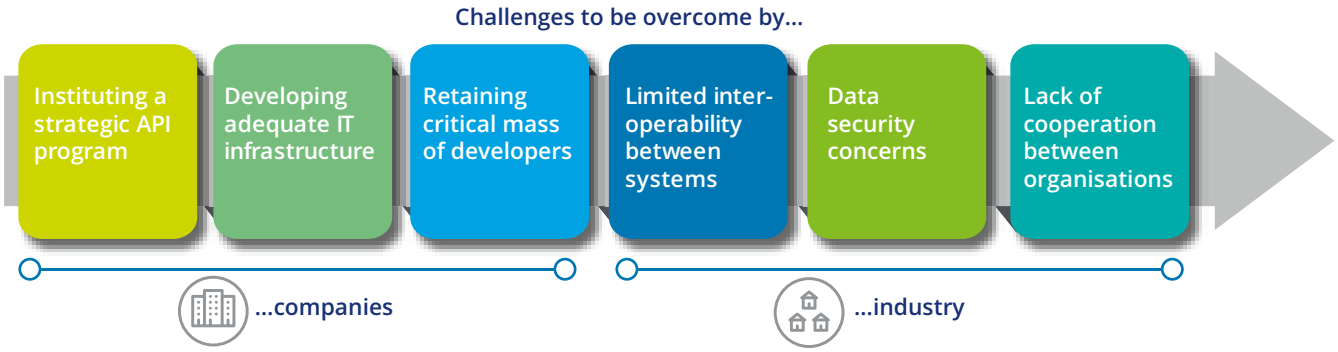


Exhibit 04: Key challenges to overcome in an API economy

(I) Challenges facing companies

- **Instituting a strategic API program** – While most organisations see business value in APIs, not all have 'invested' in APIs. The deterrent often is the management buy in of the concept and their willingness to make an investment in API programs. The deterrence often is due to a lack of technical know-how, ability to ascertain monetary benefits and focus on other strategic prioritisations.

  Organisations will need to have a 'strategic API program' to educate the key stakeholders (Board, shareholders, CEO) on the potential benefits of these strategies. They will need to nominate senior management as 'sponsors' and 'champions' of API programs, who can then effectively ensure the communication and implementation of the program across the business.

- **Developing adequate IT infrastructure** – Organisations will need to have an appropriate infrastructure to facilitate API development. FIs with legacy systems often struggle to quickly integrate innovative technology into their business. 'Long lead times' further add to these integration delays.

  These FIs that rely extensively on mainframe technology can deploy innovative means such as using middleware to integrate with API front-end technology. While mainframes have proven to be robust and scalable, and can meet demands for high data throughput, effective API integration allows for the creation of innovative solutions.

  Also, FIs have found that API workgroups can release APIs in independent clusters that support their individual business processes, enabling them to produce APIs in 2-3 month cycles. For example, sales APIs can be developed by one team to address their business priorities, and account enquiry APIs developed by a separate team. This effectively removes integration and UAT lead times from the API development cycle.

  For companies that adopt outsourced technology, some have found it more effective to engage FinTechs or external vendors to implement an API technology layer.

- **Retaining a critical mass of developers** – An increased uptake of APIs, will potentially lead to a higher demand for business and/or technology resources. Organisations need to reassess their future resource requirements and invest in upskilling staff with existing business and/or technology domain knowledge. This could be concurrent with their recruitment efforts to identify and hire developers with adequate skills. They could also work with local higher learning institutions and other training providers to design and leverage appropriate courses and curriculums to prepare the workforce.

  Existing employees already possess the essential experience and domain knowledge of business processes that are crucial to API design. FIs have found it useful to form working groups or 'SWAT' teams of existing employees across disciplines and functions (business and IT). FIs have also found that training on API creation tools, and exposure to API programs in other organisations and countries can equip staff with the ability to prototype APIs – these teams are then empowered to create APIs to automate their most frequently used and resource-intensive business processes. Further, organisations can reward staff and create transparency on these achievements through training, leader boards and high-profile roles for teams.

(II) Challenges facing the industry

- **Interoperability** – Data standards adopted by various stakeholders vary. The industry should work towards establishing common standards, which once adopted, will improve interoperability.

- **Data security** – As a growing number of consumers and businesses use third party applications to access personal and critical data, security of the data must be addressed. It is important to have stringent information security, cyber security and other data related policies/guidelines.

- **Cooperation between organisations** – The "API economy" is based on an information sharing model. Organisations should work towards retaining their competitive edge, while sharing relevant information.

Key takeaways:

1. Collaboration between the regulator, industry and across sectors is essential
2. An effective ecosystem that fosters cooperation and collaboration has to be established
3. Will lead to operational efficiencies, reduced risk, speed to market and customer satisfaction
4. Needs to overcome key business challenges including management mindset, appropriate IT infrastructure and access to appropriate talent
5. Need to address industry wide challenges including interoperability between systems, data security concerns and low cooperation between FIs

Approach

API Implementation and Usage Guidelines

This playbook presents high level guidelines for API design and usage aimed at stakeholders intending to use the APIs, including Providers, Consumers, FinTechs and the developer community. This section outlines best practices that may be used during the design and usage of the selected APIs.

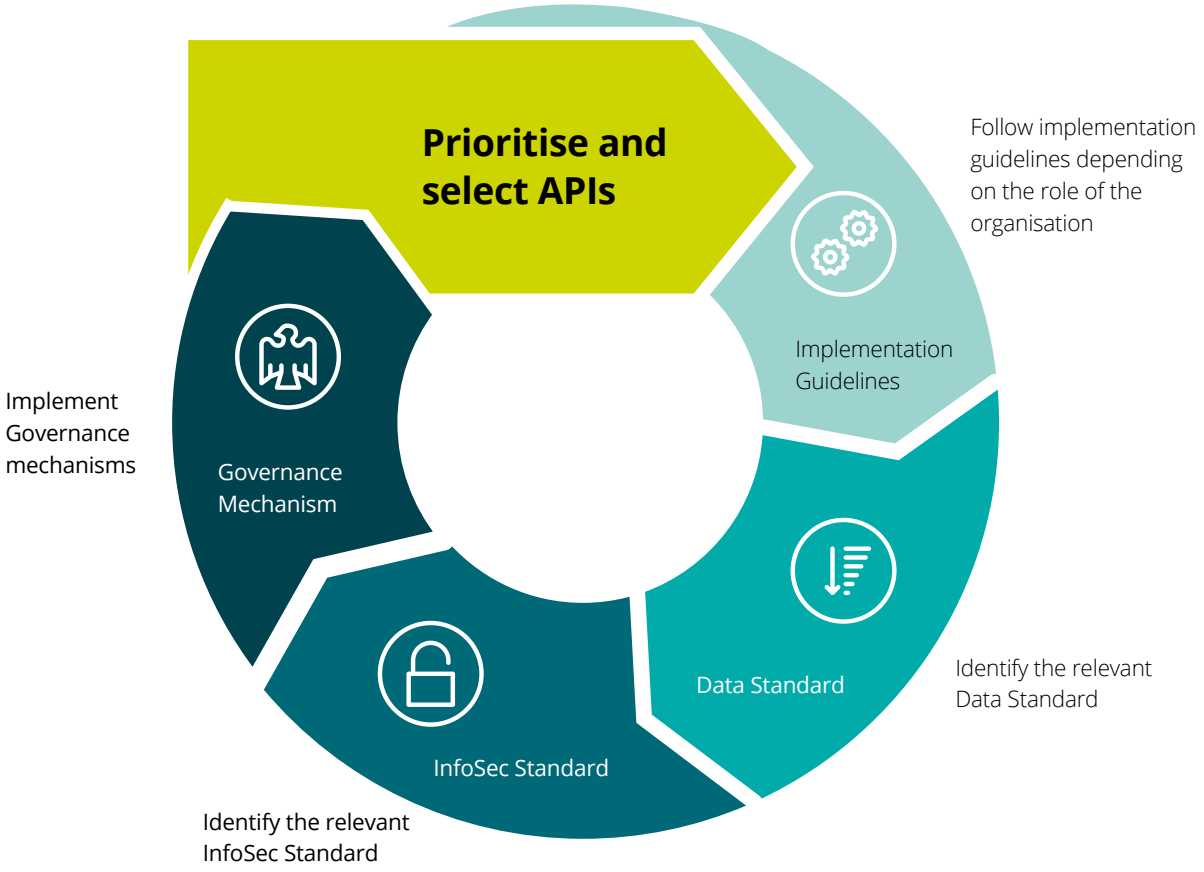


Exhibit 05: Guiding next steps for the key stakeholders intending to implement the APIs

API Selection and Categorisation

Over 5600 processes were evaluated using an established framework and industry parameters to create the recommended list of 411 API candidates (reflective of over 700 business processes). For ease of understanding and use, the API candidates have been further categorised by entities/business types they represent and by provider. These APIs have also been categorised on the basis of importance for phased implementation, thus providing a comprehensive assessment and coverage to the financial services industry and cross sectors.

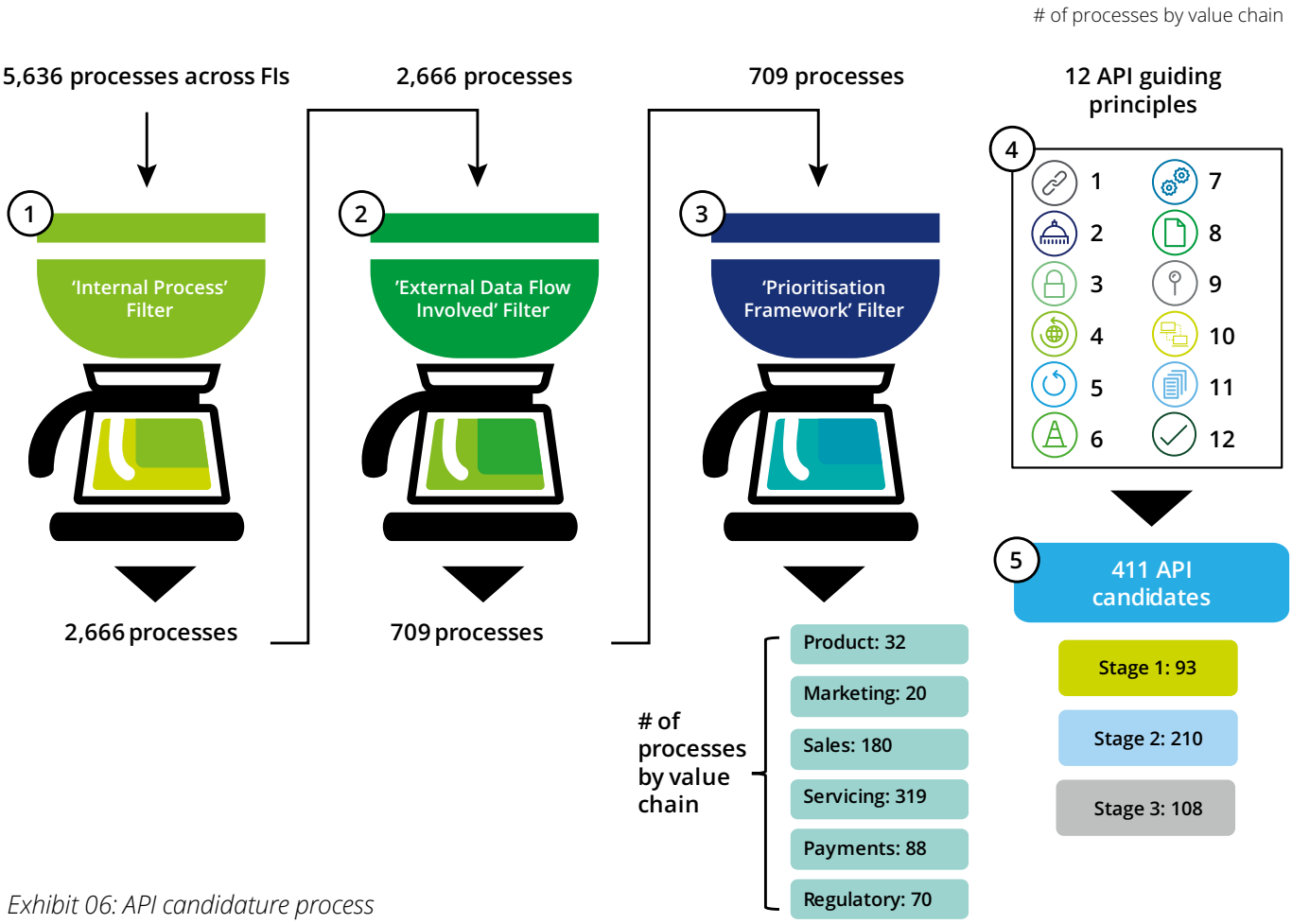
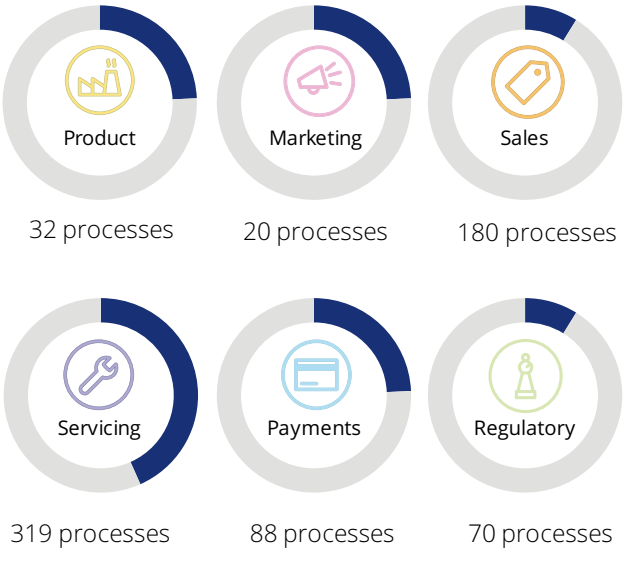


Exhibit 06: API candidature process

709 processes were shortlisted across the value chain for API candidature



These processes were used to identify 411 APIs within the value chain

Exhibit 07: API candidature process

Under the segmentation based on asset class, the regulator and the banks emerged as the largest provider groups for the APIs. The emphasis on regulatory reporting to, and information dissemination, from the regulator were the primary factors for the large number of APIs identified under the 'provider' category for the regulator. For banks, the breadth of their operations and large number of business processes were instrumental in identifying them as the second largest 'provider' of APIs in the industry.

ABS-MAS Financial World API Periodic Table

ABS-MAS Financial World API Periodic Table

Bank

Insurer

AMC

Government Agencies and Other Entities

Product

Sales

Servicing

Marketing

Reporting

Payments

Retrieve savings account details

Retrieve current account product details

Retrieve fixed deposit details

Retrieve credit card details

Retrieve debit card details

Retrieve forex card details

Retrieve unit trust product details

Retrieve CPF & SRS product details

Retrieve FX & cash mgt. product details

Retrieve structured product details

Retrieve home loan product details

Retrieve personal loan details

Retrieve car loan details

Retrieve education loan details

Retrieve secured financing pdt. details

Retrieve current account details

Retrieve currency account details

Retrieve RMB settlement pdt. details

Retrieve escrow product details

Retrieve corporate credit card details

Retrieve working cap finance details

Retrieve comm. & prop. fin. details

Retrieve vehicle finance details

Retrieve mach. & equip. fin. details

Retrieve payables mgt. pdt. details

Retrieve receivables mgt. pdt. details

Retrieve liquidity mgt. pdt. details

Retrieve import financing pdt. details

Retrieve export financing pdt. details

Retrieve bank note product details

Retrieve futures trading pdt. details

Retrieve SG Govt. securities trading pdt. details

Retrieve deposit product details

Retrieve FX trading product details

Retrieve precious metals pdt. details

Retrieve currency swaps pdt. details

Retrieve structured investment pdt. details

Retrieve equity linked notes pdt. details

Retrieve unit trust linked invest. pdt. details

Retrieve life insurance details

Retrieve health insurance details

Retrieve disability insurance details

Retrieve medical protection details

Retrieve critical illness details

Retrieve employee benefits details

Retrieve car insurance details

Retrieve travel insurance details

Retrieve property insurance details

Retrieve general insurance stats

Retrieve quants product details

Retrieve derivatives product details

Retrieve fixed income pdt. details

Retrieve equity product details

Retrieve investment insurance details

Retrieve savings-linked insurance pdt. details

Generate quote for debit card

Generate quote for forex card

Generate quote for corporate cards

Generate quote for comm. & prop. financing

Generate quote for precious metals pdts

Generate quote for savings account

Generate quote for unit trust pdt.

Generate quote for CPF & SRS products

Generate quote for working cap financing

Generate quote for vehicle financing

Generate quote for checking account

Generate quote for FX & cash mgt. products

Generate quote for structured products

Generate quote mach. & equip. financing

Generate quote payables mgt. pdts.

Generate quote for fixed deposit

Generate quote for home loan

Generate quote for personal loan

Generate quote for receivables mgt. pdts.

Generate quote for liquidity mgt. pdts.

Generate quote for credit card

Generate quote for car loan

Generate quote for education loan

Generate quote for import financing

Generate quote for export financing

Generate quote for secured finance pdts

Generate quote for current account

Generate quote for currency account

Generate quote for bank note products

Generate quote for futures trading pdts

Generate quote for RMB settlement account

Generate quote for escrow services

Generate quote for fixed/term deposit products

Generate quote for SG Govt. securities trading

Generate quote for FX trading products

Generate quote for disability insurance

Generate quote for currency swaps pdts

Generate quote for structured deposit pdts

Generate quote for equity linked notes

Generate quote for unit trust linked invest. pdt.

Retrieve Pcard transaction details

Provide documents for trade processing

Provide details for trade processing

Generate quote for medical protection

Generate quote for health insurance

Generate quote for life insurance

Receive invoice data for trade processing

Receive invoice documents for trade processing

Receive confirmation for trade processing

Generate quote for investment insurance

Generate quote critical illness insurance

Generate quote for employee benefits

Generate quote for vehicle insurance products

Generate quote for travel insurance

Generate quote for property insurance

Generate quote for savings insurance

Transmit maid & FW information to MOM

Transmit motor claim data to e-claim agent

Generate quote for equity products

Generate quote for fixed income pdts

Generate quote for derivatives

Generate quote for quant products

Retrieve property price index

Retrieve NCD data from e-claim systems

e-KYC authentication for organisation

Retrieve education & employment info for individuals

Retrieve income & CPF info for organisation

Validate education & employment info for individuals

Validate vehicle data for customers

Retrieve loan application confirmation

Transmit vehicle details to LTA

Retrieve personal info for individuals

Retrieve family info for individuals

Retrieve vehicle info for customers

Validate family info for individuals

Retrieve customer health records

Remit forex to CLS

e-KYC authentication for individuals

Retrieve contact info for individuals

Retrieve personal info for organisation

Validate address for individuals

Execute trade

Retrieve credit reports

Unified Payment Interface - Unique Identifier

Unified Payment Interface - Account Details

Submit to FATCA and report to IRAS

Report under SGX-ST rule 4.6.9

Report FATCA customer a/c balance & income

Post unclaimed proceed figures to LIA

Post quarterly premium figures to GIA

Post Motor claims details to GIA

Post foreign worker bond policy details to MOM

NAV correction

NAV reporting

Enable AMCs to report ML customers

Enable Insurers to report ML customers

Lead generation with Govt. agency channel partners - Individuals

Enable Banks to report ML customers

Fraud detection for AMCs

Enable motor insurers to report fraudulent customers

Fraud detection for Insurance

Fraud detection for Banks

OA/SRS deduction advice

Lead generation with Govt. agency channel partners - Family

Lead generation from channel partners

Lead generation from channel partners

Lead generation from channel partners

Process customer request for change of nominee

Receive 'XOL Adjustment' from Reinsurer

OA/SRS Payment Advice

Process customer name change requests

Unified Payment Interface - Account Details

Retrieve insurance and tax outstanding for organisations

Submit policy and claim data

Process change of mode of communication

Process customer change of contact requests

Receive 'XOL Statement' from Reinsurer

Customer service feedback for AMCs

Distributor/ Agent complaints against AMC

Customer complaints against AMC

Process customer requests for trade

Process partial withdrawal requests

Process investment strategy change requests

Process customer change of address requests

Process fund switch requests

Retrieve fund mgt. style details

Retrieve asset management fees

Retrieve maturity data of investments

Retrieve NAV

Retrieve fund value

Death notification of cases where CPF investment scheme account is closed

Customer service feedback for Insurers

Process change in term requests

Process change in policy rider details

Process 'free-look' cancellation requests

Customer complaints against Insurer

Process top-up customer requests

Process policy maturity date queries

Retrieve premium due date

Retrieve policy term details

Process change in premium amount requests

Distributor/ Agent complaints against insurers

Process fund value queries

Process insurance premium queries

Distributor/ Agent complaints against bank

Customer service feedback for Banks

Process change in sum assured requests

Retrieve income & CPF info for individuals

Validate personal info for individuals

Validate contact info for individuals

Validate income & CPF info for individuals

Process fixed deposit creation request

Process credit card cancellation request

Redeem credit card points

Validate personal info for organisation

Validate contact info for organisation

Validate income & CPF info for organisation

Process fund transfer request

Process credit limit increase request

Customer complaints against banks

Retrieve loan EMI details

Retrieve loan EMI due date

Process loan foreclosure request

Retrieve customer account details

Retrieve customer account balance

Retrieve credit limit details

Retrieve credit card payment due date

Retrieve index and market details

Retrieve forex rates

Retrieve trade confirmation

Transmit fraud agent details to GIA

Retrieve subscription details for SGS bonds

ABS-MAS Financial World API Periodic Table

Validate reporting of new equity products
Validate reporting of new fixed income products
Validate reporting of new derivatives
Validate reporting of new quant products
Validate reporting of new savings accounts
Validate reporting of new current accounts
Validate reporting of new fixed deposit accounts
Validate reporting of new credit card products
Validate reporting of new debit card products
Validate reporting of new forex card products
Validate reporting of new unit trust products
Validate reporting of new SRS & CPF products
Validate reporting of new FX & cash mgt. products
Validate reporting of new structured products
Validate reporting of new home loans
Validate reporting of new personal loans
Validate reporting of new car loans
Validate reporting of new education loans
Validate reporting of new secured financing products
Validate reporting of new currency accounts
Validate reporting of new RMB settlement account
Validate reporting of new escrow services
Validate reporting of new corporate cards
Validate reporting of new working capital financing
Validate reporting of new comm. & prop. financing
Validate reporting of new vehicle financing
Validate reporting of new mach. & equip. financing
Validate reporting of new payables mgt. products

Regulator

Pre-reporting validation
Regulatory reporting
Product (de) registration
Complaints
Information dissemination

Retrieve money laundering activities for customers
Retrieve interest rate information
Disburse statistical information
Serial Number tracking of Central Bank Notes
Retrieve fraudulent activities for specific customers
Report discontinued products for Banks
Report new investment insurance pdt
Report discontinued products for AMCs
Register agent complaints against Banks
Report discontinued products for Insurers
Report vehicle insurance products
Report employee benefits products
Report new savings insurance pdt.
Report new property insurance pdt.
Register agent complaints against Insurers
Report new travel insurance products
Report new equity linked products
Report new life insurance products
Report new critical illness products
Report medical claims insurance products
Register agent complaints against AMC
Report new deposit products
Report new Gov. securities trading pdt.
Report new FX trading products
Report new health insurance products
Report new disability insurance pdt
Register customer complaints against Insurers
Report new futures trading products
Report new liquidity mgt. products
Report new import financing products
Report new precious metals products
Report new currency swaps
Register customer complaints against Banks
Report new receivables mgt. products
Report escrow service products
Report corporate credit card products
Report new export financing products
Report new bank note products
Register customer complaints against AMC
Report new payables mgt. products
Report new vehicle financing
Report comm. and prop. financing
Report corporate working capital financing products
Report new education loans

Validate reporting of new receivables products
Validate reporting of new liquidity mgt. products
Validate reporting of new import financing products
Validate reporting of new export financing products
Validate reporting of discontinued products by Insurers
Validate reporting of discontinued products by AMCs
Validation for exceptional insurance regulatory returns
Regulatory reporting for Banks
Exceptional regulatory reporting for Insurers
Submit credit facilities details
Submit quarterly Balanced Scorecard report
Notify change of particulars for representative
Report Form 1 annually
Report Form 9 annually
Report Form 18 annually
Report Form 2 quarterly
Report Form 23 quarterly
Report new mach. & equip. financing
Report new RMB settlement account
Report new currency account
Report new secured financing
Report new structured products
Validate reporting of new bank notes
Validate reporting of new futures trading products
Validate reporting of new Govt. securities trading pdt
Validate reporting of new FX trading products
Validate reporting of discontinued products by Banks
Validation for banking regulatory returns
Validation for exceptional AMC regulatory returns
Regulatory reporting for Insurers
Submission of regulatory reporting against guidelines for AMCs
Submit annual RBC forms 1,2,3 & 4
Submit regulatory updates
Submit statement of assets & liabilities
Report Form 2 annually
Report Form 13 annually
Report Form 19 annually
Report Form 3 quarterly
Report Form 7 quarterly
Report Form 24 quarterly
Report new car loans
Report new personal loans
Report new home loans
Report new forex cards
Validate reporting of new precious metals products
Validate reporting of new currency swap rates
Validate reporting of new deposit products
Validate reporting of new equity linked products
Validate reporting of new investment insurance pdt
Validation for insurance regulatory returns
Validation of regulatory reporting against guidelines for Banks
Regulatory reporting for AMCs
Submission of regulatory reporting against guidelines for Insurance
Notify matters adversely affecting financial position
Notify on appointment of new representative
Submit statement of financial resources
Report Form 3 annually
Report Form 14 annually
Report Form 21 annually
Report Form 4 quarterly
Report Form 114 quarterly
Report Form 25 quarterly
Report FX & cash management investment products
Report new CPF & SRS products
Report new unit trust products
Report new current accounts
Validate reporting of new life insurance products
Validate reporting of new health insurance products
Validate reporting of new disability insurance products
Validation for regulatory reporting of medical claims insurance products
Validate reporting of new critical illness insurance pdt
Validation for AMC regulatory returns
Validation of regulatory reporting against guidelines for Insurance
Exceptional regulatory reporting for AMCs
Submission of regulatory reporting against guidelines for Banks
Notify on cessation of representative
Submit details of account holders of capital market license
Report Form 4 annually
Report Form 16 annually
Report Form 22 annually
Report Form 8 quarterly
Report asset & liability exposure annually & quarterly for Insurers
Report title of assets annually
Report Form 26 quarterly
Report new debit cards
Report new credit cards
Report new fixed deposits
Report new savings accounts
Validate reporting of new employee benefits insurance pdt
Validation for regulatory reporting of vehicle insurance products
Validate reporting of new travel insurance products
Validate reporting of new property insurance products
Validate reporting of insurance-linked savings pdt.
Validate exception report compliance for Banks
Validation of regulatory reporting against guidelines for AMCs
Exceptional regulatory reporting for banks
Regulatory reporting of suspicious activity reports
Regulatory reporting on financial data
Notify appointment of Directors, change of CEO etc.
Notify on addition of activities of representative
Submit Form X (RBC ratio)
Report Form 8 annually
Report Form 17 annually
Report Form 1 quarterly
Report Form 21 quarterly
Report loan to Foreign Residents monthly
Report new equity products
Report new fixed income products
Report new derivatives
Report new quant products

An assessment of APIs based on the key criteria of: Regulatory reporting, Customer experience and Financial impact were influential in identifying the value chain activities such as regulatory, sales and services, which are key opportunities for enabling APIs in the Financial Services industry.

The following considerations were then applied which culminated in distinct APIs for validation and submission functions:

- **Validation:** APIs apply business and validation rules to ensure that data is complete, consistent and accurate. Responses from these API will highlight data elements that have errors. FIs would typically use these APIs to validate data and formats prior to submission, thus eliminating redundant data exchanges and the manual intervention required to get clean data.

- **Submission:** Regulatory APIs will have functionality to use the data, load them into various repositories and apply the necessary business intelligence. As such interface and functionality requirements differ from validation APIs.

How to Interpret these APIs

The APIs have been selected based on their potential to positively transform the ecosystem. They are to be interpreted along with each organisation's specific business and policy considerations.

In the public sector, there are additional considerations when deciding on the implementation of procedures for data exchange. Also, further investigation may be necessary to establish the specific providers of government-related information as data may be stored across various agencies.

Key takeaways:

1. Over 5600 processes were assessed.
2. 709 processes were shortlisted across the value chain for API candidature.
3. 411 API candidates were identified.
4. The selected APIs were categorised per the value chain they represented to demonstrate their potential impact on operational efficiencies.

Implementation guidelines for Provider, Consumer, FinTechs and developer community

Provider, Consumer, FinTechs and developer community are the roles an organisation may assume for the implementation of APIs. The below exhibit briefly describes each of these roles.

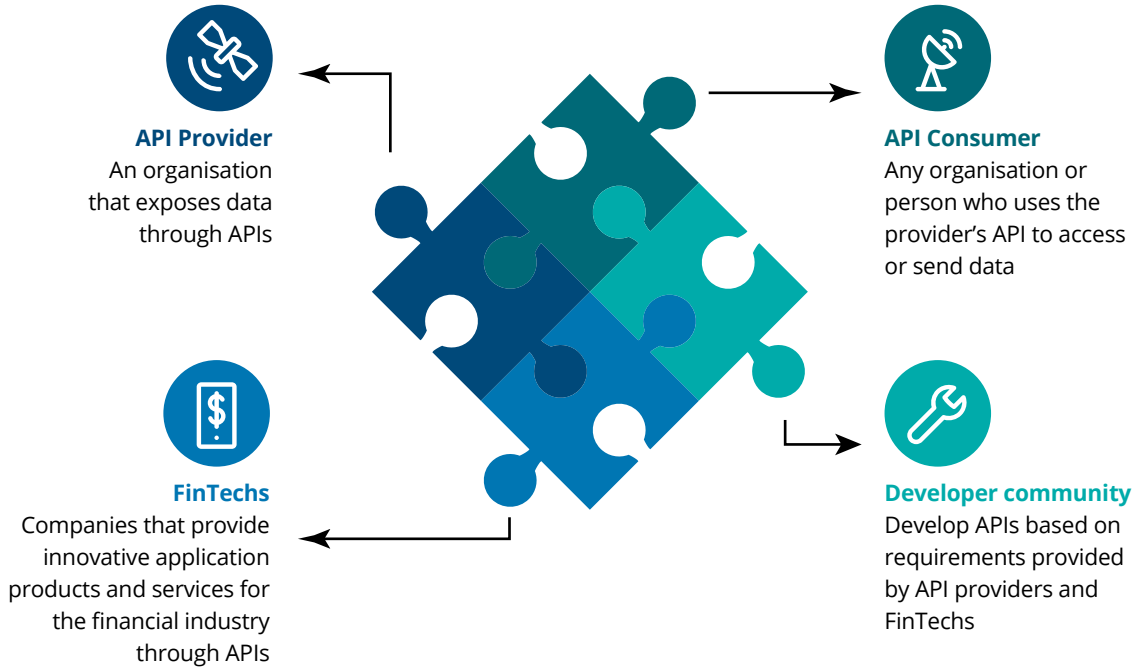


Exhibit 09: Key stakeholders intending to use APIs

Provider

The provider exposes information using an API. The organisation playing the role of a provider will typically follow these steps to implement APIs.

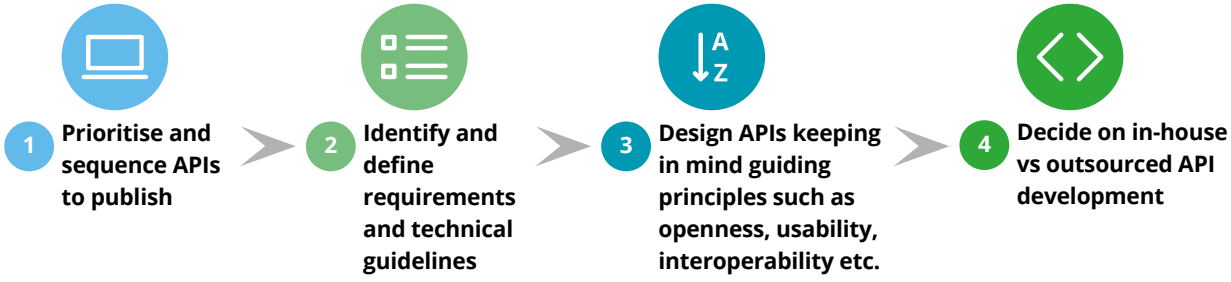


Exhibit 10: Guiding next steps for Provider

- **What APIs to publish and when?**

  As a first step, the provider should identify and sequence the APIs for publishing. The drivers for the APIs should be considered and internal infrastructure required to develop these APIs assessed. Some of the key considerations include:

  a. Assess cost and benefits of publishing APIs.
  b. Alignment with Business and IT strategy.
  c. Current IT maturity to support the design and development.
  d. Degree of digitisation in the business.
  e. Undertake business impact analysis.
  f. Identify and segment core APIs for publishing.

- **Requirements generation for API development?**
  After selecting and sequencing the APIs, providers should identify and define requirements and guidelines. These can be split across four broad areas:

  a. Functional Requirements – Define what the APIs are expected to do

  i. Enlist different actors who are expected to use the API (using a context diagram for example).
  ii. Define use cases.
  iii. For each use case, develop a set of scenarios, outlining how the imagined system would be used.
  iv. Create design behaviours using either robustness diagrams, sequence diagrams or activity diagrams based on the scenarios to determine the messages that need to be passed.
  v. From the messages, identify what parameters are needed for each message to be successfully communicated.
  vi. Assess recommended data standards and information security standards for each API (outlined in this document) to determine the functional impact.
  vii. Identify possible errors and exception conditions.
  viii. Define process for error and exception handling.

  b. Non Functional Requirements – Define criteria to measure how well the APIs perform their expected functionality

  i. Response time – Expected time to receive response, on receipt of request.
  ii. Availability – Expected uptime for the API.
  iii. Performance throughput – Expected number of transactions for a specified period of time.
  iv. Invocation Quota – Number of times an API can be called for a unique transaction.
  v. Correctness – Ability of the API to execute the specification without errors.
  vi. Performance – Time and resources consumed by the API to execute the requested task.
  vii. Reliability – Ease with which the API performs its required functions under stated conditions over a specified period of time.
  viii. Robustness – Ease with which the API copes with errors during execution.
  ix. Scalability – Ease with which the API handles growing amounts of work in an error free manner.
  x. Security – Degree to which the API protects against threats.

  c. Technical guidelines – Define different technical guidelines to ensure that the APIs can function as required

  i. Assess and align security specifications (recommended in this document) with the current requirements.
  ii. From the messages, deduce underlying data architecture including exact data elements, data formats, data syntax, etc., by looking at what parameters are needed for each message to be successfully communicated.
  iii. Based on the architectural requirements of the API, it is recommended where possible to use existing data formats currently available in the industry.
  iv. Assess and align data standards (recommended in the document) with the current requirements.

  d. Obtain approvals on the comprehensiveness of the defined requirements

- **How to design an API?**

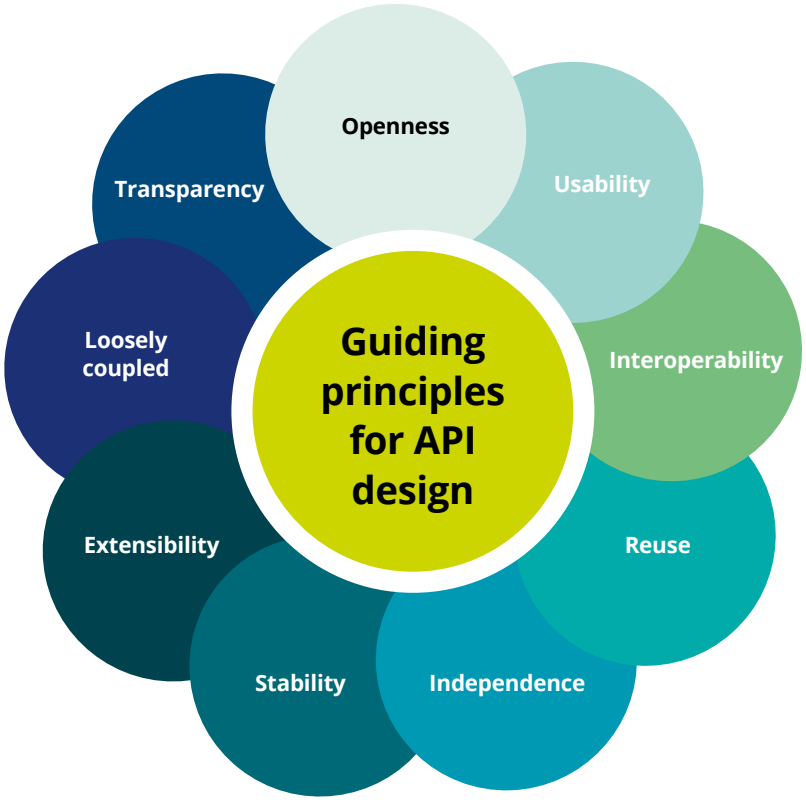


Exhibit 11: Guiding principles for API design

To deliver innovation and flexibility, the following principles should be considered in the design of the APIs

a. **Openness** – ensure all interested parties can access the API.

b. **Usability** – ensure high quality user experience for consumers.

c. **Interoperability** – enable exchange of data across organisations without any dependencies on underlying technologies.

d. **Reuse** – leverage existing standards and taxonomies to avoid duplication of efforts.

e. **Independence** – avoid dependency on any vendors or technologies to provide options in delivery models and implementation technologies.

f. **Extensibility** – establish flexibility to extend APIs to new stakeholders and business channels.

g. **Stability** – ensure consistency and transparency of changes through communications and governance.

h. **Transparency** – provide clarity on environments and standards supported.

i. **Loosely coupled** – provide flexibility and minimise impact of changes to operations of other APIs.

- **How to build?**
  The recommended development guidelines have been detailed in the later sections. In cases where the provider choses to develop APIs in-house, it is recommended that the internal IT team refers to the guidelines outlined in this document. If an external vendor is engaged, practices adopted for API development should be agreed upon mutually.

- **What and where to publish APIs?**
  a. Discoverability
  API discovery describes the tools needed to create and engage with an audience. There are currently two mechanisms used for discoverability:

  i. **Manual discovery** – API developer portals either independent or part of API management platforms are created which contain publications on APIs and allow developers to browse, experiment and enroll for the APIs.

  ii. **Automated discovery** – This nascent technique helps consumers discover APIs without manual intervention. For providers to enable machine discovery of their APIs they could publish information about an API on the web (API Owners) and have processes which index this information (and hence the APIs) using hypermedia protocols. This will allow machines to automatically discover, interpret and engage with APIs without developer intervention.

  b. Contract details – The definition of an API's contract details will depend on its method of design, if REST or SOAP was the design principle. Providers should consider using RESTful API Modelling Language (RAML) for REST based APIs and Web Service Definition Language (WSDL) for SOAP based APIs which describes data standards, formats, SLAs and interface specifications for the APIs.

  - **RESTful API Modelling Language (RAML)**
    RAML is language for the definition of RESTful APIs. It is both human and machine readable. It improves API specifications by providing formats that act as mutual contracts between providers and consumers. RAML uses the concept of resource types and traits, minimises repetition, and promotes consistency within and across APIs. RAML facilitates the provision of user documentation documentation and source code stubs for client server implementations.

  - **Web Service Definition Language (WSDL)**
    WSDL is mainly used in combination with SOAP and XML. It describes services as a collection of network endpoints. Definitions of network endpoints and messages are separated from their usage, hence allowing reuse of these definitions.

Consumer

An API consumer is someone who uses the provider's Application Programming Interface (API) to access or send data. An organisation playing the role of an API consumer will typically follow the following steps.

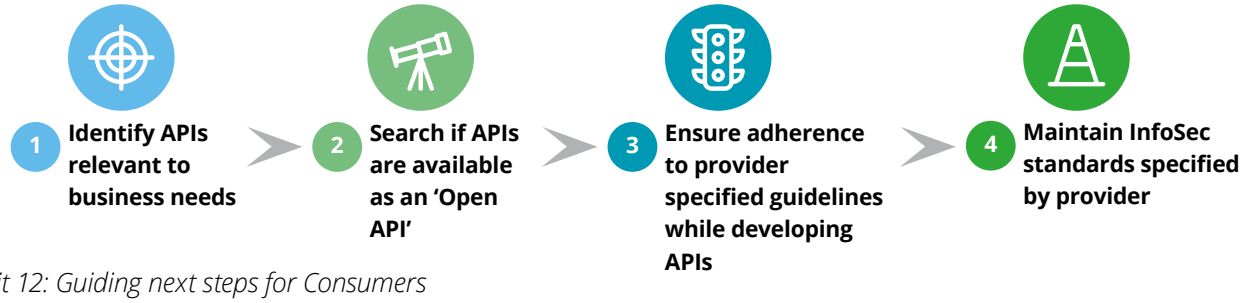


Exhibit 12: Guiding next steps for Consumers

- The consumer should determine the potential ability of the API to meet their business requirement.
- As the next step, the consumer should search if the API is available as an Open API. There are currently two mechanisms to accomplish the search:
  a. Manual discovery – Providers publish APIs on (API) management platforms; these platforms have a search functionality to identify the relevant API as per the consumer's need.
  b. Automated discovery – Providers publish APIs on a public platform using hypermedia based protocols which enable machines to automatically discover, interpret and engage with APIs without developer intervention. Consumers need to ensure that their software is compatible with automated API discovery.
- Study the contract details and other guidelines published by the provider.
- During the development, ensure adherence to the contract which includes data formats, standards, specifications etc.
- Develop the API invoking program in accordance with the non-functional requirements as specified by the provider, e.g. the program should adhere to the specified invocation quota.
- Maintain the information security based on the guidelines specified by the provider.

FinTechs

FinTechs are the pioneers of innovative technology disruption in the industry. These disruptions are a result of the technologies they have introduced in the financial services industry. While creating the products, FinTechs may identify the need of using APIs for standardised information flow across the financial services industry. They would use the following steps:

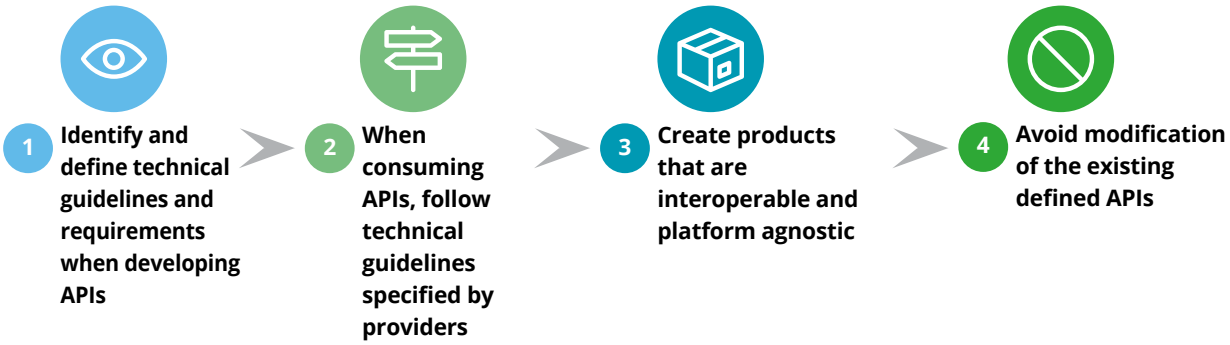


Exhibit 13: Guiding next steps for FinTechs

By virtue, FinTechs are also 'consumers' of the APIs published by the providers. While consuming these APIs, FinTechs should ensure they adhere to the guidelines specified in this document.

Playbook considerations

The standardisation of data exchange, Information Security (InfoSec) and governance mechanisms provides operational clarity. The standardisation principles should be used to build products and offerings with industry wide application, thus eliminating the need to customise for each incumbent client/partner. FinTechs should consider the following when planning to use the recommended API guidelines:

- The recommended data exchange and InfoSec standards should be adhered to in enabling seamless integration. Deviation from these standards could potentially impact profitability and efficiency as they would not be able to leverage the benefits of an API economy.

- Singapore-based FIs are required to comply with local regulatory policies and guidelines. FinTechs developing and implementing API products and services for FIs should also adhere to the relevant policies and guidelines so as not to compromise the level of service and trust offered to FI's customers.

Regulatory considerations for partner API operating models

As FIs and FinTechs collaborate through 'partner' APIs to implement innovative products and services for customers and the marketplace, it is important to be reminded of the need to comply with the relevant regulatory expectations for the secure delivery of such services.

Broadly, two operating models could be considered:

- Model 1 where the FI **owns** the customer experience provided by authorised third-parties (e.g. FinTechs, strategic service providers) consuming the partner APIs provided by the FI. In this case, the FI has entered into an outsourcing arrangement where regulatory expectations such as the TRMG[1] and Outsourcing Guidelines[2] would be applicable.

[1] http://www.mas.gov.sg/Regulations-and-Financial-Stability/Regulatory-and-Supervisory-Framework/Risk-Management/Technology-Risk.aspx

[2] http://www.mas.gov.sg/Regulations-and-Financial-Stability/Regulatory-and-Supervisory-Framework/Risk-Management/Operational-Risk.aspx

https://abs.org.sg/docs/library/abs_outsource_guidelines.pdf

- Model 2 where the FI **does not own** the customer experience provided by the third-parties consuming the 'partner' APIs provided by the FI. A good example here would be where the customer may use an account aggregator service provider to retrieve his account details through 'partner' APIs provided by his FIs. This may not be considered an outsourcing arrangement.

- However, FIs and FinTechs are still encouraged to adopt the following baseline risk management principles to safeguard the interest of the consumer and the integrity of the financial system:

  – Know-your-API consuming partners: As far as possible, FIs should have a well-defined vetting process to govern third party API access and the onboarding of partners. This helps the FI ensure that only qualified organisations have authorised and controlled access to designated API services. Vetting criteria should be risk appropriate while not being onerous and may include the nature of the business, organisation's security policy, industry reputation and track record amongst others.

  – Customer Data Protection: Protecting confidentiality and security of customer data is vital for the stability and reputation of any financial services institution and should not be compromised. As such, FIs and FinTechs are advised to comply with the Personal Data Protection Act (PDPA) and to apply best-practice safeguards for the security and protection of sensitive customer data during transit, processing and storage. These measures are further detailed in the InfoSec guidelines of the Playbook as well as in Appendix E & F of the TRMG.

Developer Community

The Developer community will receive requirements from providers and FinTechs to develop APIs which fits their business need. Based on these requirements, the Developer community uses design models and development methodologies to design the APIs:

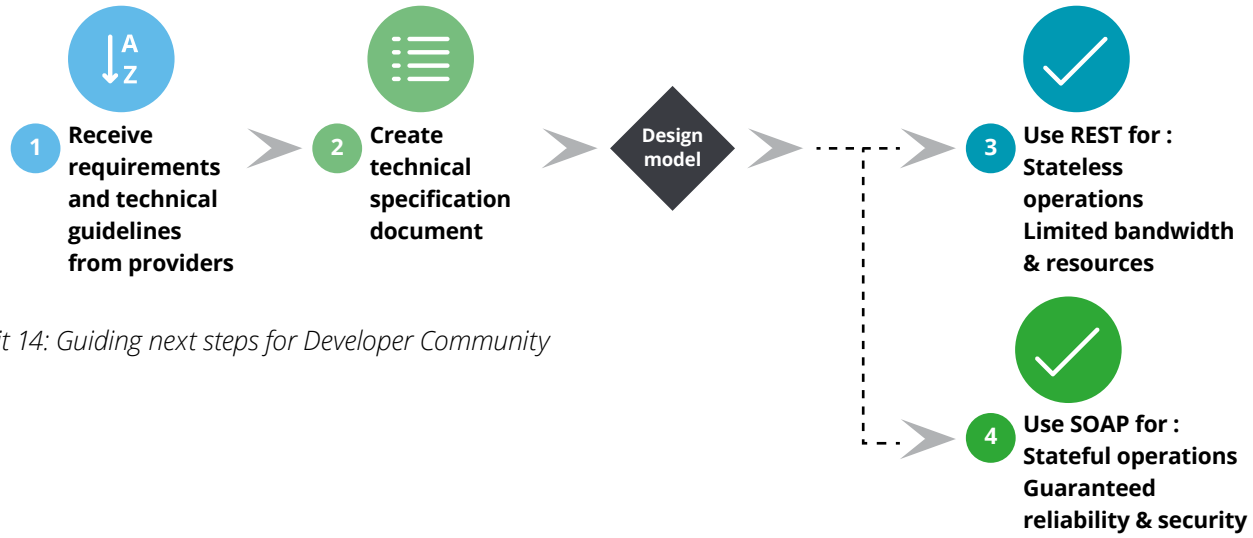


Exhibit 14: Guiding next steps for Developer Community

There are several design models available for web services, but the two most commonly used are: Simple Object Access Protocol (SOAP) and Representational State Transfer (REST).

	Representational State Transfer (REST)	Simple Object Access Protocol (SOAP)
What	• REST is an approach to communications that is often used in the development of Web services. • The REST style emphasises that interactions between clients and services are enhanced by having a limited number of operations. • It offers flexibility by assigning resources their own unique Universal Resource Identifiers (URIs). • It is often used in mobile applications, social networking Web sites and automated business processes.	• SOAP is a messaging protocol that allows programs running on disparate operating systems (such as Windows and Linux) to communicate using Hypertext Transfer Protocol (HTTP) and Extensible Markup Language (XML). • It is designed to support expansion, such as WS-Addressing, WS-Policy, WS-Security, WS-Federation, WS-Reliable Messaging, etc. • SOAP has features like in-built error handling. • There is another specification defined for using SOAP called Simple Mail Transfer Protocol (SMTP).
When	• **Limited bandwidth and resources:** If the return structure is not in a specific developer defined format and any browser can be used because it uses the standard GET, PUT, POST, and DELETE verbs. • **Totally stateless operations:** If there is a need for stateless operations like CRUD (Create, Read, Update, and Delete) or the information can be cached. • **Server to server interaction**	• **Guaranteed level of reliability and security:** If the application needs this, SOAP provides features like WS-Reliable Messaging. • **Stateful operations:** If the application needs contextual information and conversational state management. • **Direct support:** Is needed for generating a client from server-side-generated metadata.

Exhibit 15: Commonly used API design model - REST and SOAP

Aligning with the above design models are other guidelines for design and implementation of APIs in an organisation:

- Plan and map out the data flow of API calls in order to maximise the effectiveness of API interactions.
- Ensure consideration of the future state when designing the API solution.
- Plan for peaks in traffic to the website or system and identify the impact on the system once its functional limit has been reached.
- Find the logical atomic operations which deliver a result that is easily understood and useful for your audience.
- Identify the most common and complete workflows that should be supported, and how these workflows be completed in the fewest number of API calls.
- Make sure the APIs are not over tailored to the top use cases. They should allow enough flexibility to cover uncommon use cases.
- Architect the API program for agility.

- Ensure the API is designed to be simple across several levels including: Data formats, methods structure, data model and authentication. Reference standards of API Authentication have been provided in this document. Simplicity is contextual and hence the granularity of API methods must be balanced.

- Balance the simplicity of the API with flexibility as otherwise it may become very rigid and serve only specific use cases. Analyse the operations to identify the subset that are most feasible and valuable. Expose atomic operations and then design a second layer of meta operations that combine several atomic operations to serve use cases.

HATEOAS (Hypermedia as the Engine of Application State) can improve flexibility by allowing runtime changes in the API and clients.

- Use nouns as resource names instead of verbs in URLs

- Keep shorter URLs with a maximum of three nodes per URL

- Support field projects on resources by allowing clients to reduce the number of fields that come back in the response

- Use industry standards like ISO 8601 for representation of date and time wherever required

- Consider Cache-ability

- Consider using a linking strategy by using methods like HAL, JSON-LD, SIREN or Collection+JSON

- Perform any stress tests in the production support environment instead of the production environment

- **Versioning:** Change control (versioning), needs to be managed effectively. Versioning should be explicit; an altered API is recommended to be released with a new version. The versioning process includes:

  a. Using release numbers for all major and minor releases
  b. Providing backwards compatibility for all API changes
  c. Providing backwards compatibility for all minor releases on a mandatory basis
  d. Supporting of additive changes for minor releases.
  e. Assuring support for developers for major API versions, for a specified period
  f. Escalating of security implementations when vulnerabilities come to light

Applying data standards in API requests and responses and following W3C standards wherever possible.

Reference data standards have been provided later in this document.

- **XML and JSON**
  In the case of a SOAP based API, XML is the data format to be used as SOAP uses XML only. For RESTful APIs, JSON is favoured, unless the costs of offering both JSON and XML are staggering. Otherwise, both JSON and XML can be offered to consumers. Consumers can switch between the two by changing an extension from '.xml' to '.json'. In addition, for supporting AJAX-style user interfaces, a wrapped response is very helpful.

- **Extensibility and Readability:** XML is ideal for highly structured information and is more extensible. Documents require extensibility to manage images, charts, graphs, and other elements of formatting. The ability to extend the attributes of the data stored in XML files allows it to be more flexible than JSON.

  JSON is limited to only storing classical data like text and numbers. However in classical data scenarios, extensibility is not needed and JSON can be used for simplicity as JSON is easily readable.

- **Sharing of documents:** XML is recommended over JSON for the sharing of documents because it allows you to include data types like images, charts, and graphs. Additionally, XML offers options for transferring the structure, or format, of the data along with the actual data.

- **Sharing Traditional Data:** JSON is recommended for sharing data because the data is stored in arrays and records while XML stores data in trees. This makes it very easy to import data from a JSON file into Perl, Ruby, JavaScript, Python, etc. In the case of XML, the data needs to be transformed before it can be imported.

- **Adoption:** An API design is not successful if developers/consumers/FinTechs consumers do not engage with the API and eventually adopt it. Adoption is an essential part of the developer experience. The provider needs to ensure that:

  a. The functionality of the API is clear.
  b. The API management portal provides easy and simple signup process.
  c. Detailed documentation is easily accessible.
  d. Providing free access (wherever applicable).

To measure the adoption of the APIs, two KPIs can be used:

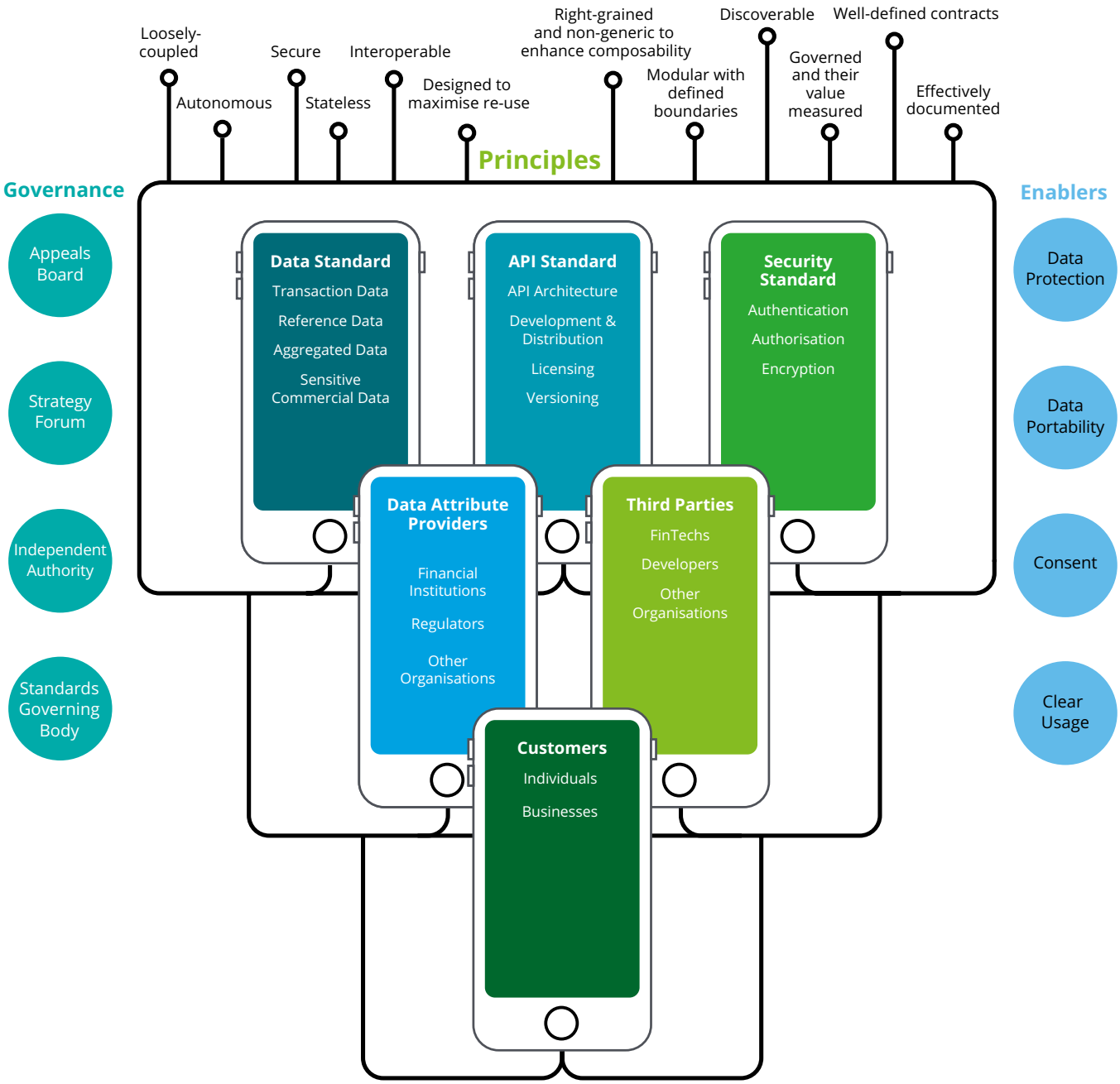
Time to First Hello World (TTFHW) – Cover as many aspects of developer engagement process as possible whilst defining the start and end of TTFHW metric. Further, optimising it to be as quick and convenient as possible while being able to go though the process faster also builds confidence in developers.

Time to First Profitable App (TTFPA) – Profitability depends on the organisation's API and business strategy and needs to be defined accordingly. It analyses aspects related to API operations.

Key takeaways:

1. Adherence to API Guiding Principles will enable flexibility in the business environment and help achieve the stated objectives and envisaged benefits of the API economy
2. Providers should consider functional, non-functional and technical requirements to make for simple and easy adoption policies with an aim to improve the developer and consumer experience
3. Consumers should adhere to the contract details and other usage guidelines published by the providers
4. FinTech firms when creating innovative products should consider providing and consuming the published APIs to enable consistency and standardisation
5. Developer community should ensure technology independence to keep the environment flexible and interoperable with a focus on increasing adoption

Standards Governing APIs



Standardisation of APIs

In today's world most business entities have created APIs for consumption both internally and with partners. These APIs have been created based on customised data models and customised technology/platform requirements; in fact there is a significant duplication in terms of APIs built for similar functionality. The development of these 'closed' API ecosystems while deemed necessary, have led to increased development and maintenance cost.

This is where a standardisation of APIs can provide significant benefits. Providing standardised APIs for common functionality such as payments or submission of reports (to regulator) will significantly reduce duplication of functionality and reduce technical cost by promoting reuse.

To standardise an API, the following sub-components must be consistent:

- **API design guidelines** – these would cover a broad range of design considerations which would help in arriving at a uniform API design language across the industry and will enable developers to create APIs which are easy to consume and well documented. These are covered in detail in an earlier section of this document.

- **Data standards** – these would define the semantics and syntax of the data (messages) being transmitted over the APIs. This will provide a common language of communication across the industry.

- **Information security standards** – are defined to secure the information being transmitted through the APIs and would ensure the privacy of customer data.

The standards should be generic in nature and be compatible with different technological solutions.

To increase usability of the APIs, it is imperative to have a standardised environment. Usability will also be driven by having consistency, integrity, accuracy and all-encompassing omnipresence and interoperability of both the data being shared and the platforms which grant access. This will ensure increased and sustained involvement by the vendors, which will in turn influence the participation of third parties and data attribute providers.[3]

Benefits of Standardisation

The benefits of standardised APIs across the financial industry are manifold. The most important of them is an environment in which FinTechs (and other similar providers) can create innovative solutions to benefit the end customer in a competitive environment such as Singapore. Additional benefits which can be driven from standardisation are:

- **New business channels** – A standardised API will make it easier for an institution's partners to consume the services towards the sales and service processes across all channels/partner touch points. Further, standardisation will make it easier to create new partnerships including FinTechs and other e-commerce providers and drive adoption of digital channels.

- **Innovative new products** – Standardisation will promote the creation of innovative products. This will be by exploiting the providers' unique capability or through partnerships with third parties such as FinTechs. Additionally, the capabilities of different providers can be merged to form new product lines and bundle existing products.

- **Improved brand visibility** – Having standard APIs exposed to the partners, will enable distribution of the entity's product/offerings through these partners. This will further enhance the business's brand visibility across the market.

[3] https://www.scribd.com/document_downloads/298569302?extension=pdf&from=embed&source=embed

- **Enhanced customer experience** – Standard APIs could potentially improve end user experience through timely, efficient, accurate and contextually relevant data for customer reference and decision making e.g. a 360 degree view of the customer's financial status.

- **Simplifying integration** – APIs could enable the integration of systems across the financial landscape with additional benefits of lowering the associated financial costs and promoting interoperability.

- **Cost efficiencies** – Standardisation could reduce development cost and time to market for new applications and/or services. It will also ensure functionalities are available to any developer independent of platform.

- **Promotes reuse and simplicity** – Standardised APIs promote the reuse of existing applications and services through the simplification of interfaces. APIs will expose existing information assets independent of their underlying access mechanisms/technologies.

- **Grow customer base** – Standardised APIs within the financial services industry and across sectors will allow institutions to set up partnerships (inter and intra-industry) that could potentially expose their products/offerings to customers who could not be accessed otherwise.

- **Future proof the business** – Embracing standardisation in an API economy enables institutions to be prepared for and take advantage of the next disruption.

Data Standards

A standard helps define a frame of reference that two parties can use for data exchange. Data standards describes what information should look like when multiple parties (two or more) wish to share any information, helping the receiving party to utilise the information instantly.

For structured data, a data standard describes the structure. It defines entity names, definitions, data element names, formatting rules, implementation guidelines and procedures.

Particularly, in the financial services environment of Singapore where multiple organisations having their own data definition peculiarities are involved in the exchange of data, there is a need for information exchange to be standardised.

Key takeaways:

1. Helps create new innovative products, improves brand visibility and enables new business models
2. Improves customer experience due to a uniform and engaging experience, consistency in quality of service and enables a 360 degree view of their financial investments
3. Reduces costs of operations due to reuse of services and provides interoperability in the business environment
4. Enables digitisation and agility in business processes through simplifying integration
5. Future proofs the businesses, i.e. – such APIs are easy to manage with changing business and technical environments

Introducing data standards for APIs will help Singapore's financial services industry to:

a. Improve data quality.
b. Enable reuse of data elements and metadata, thereby improving reliability and reducing cost.
c. Ensure consistency in code set by providing for maintenance and management of permissible code sets.
d. Improve efficiency of mapping by providing a common translation set of data elements.

The data standards for the study have been identified using different criteria:

- Type of data exchange.
- Industry involved.
- Region specific.

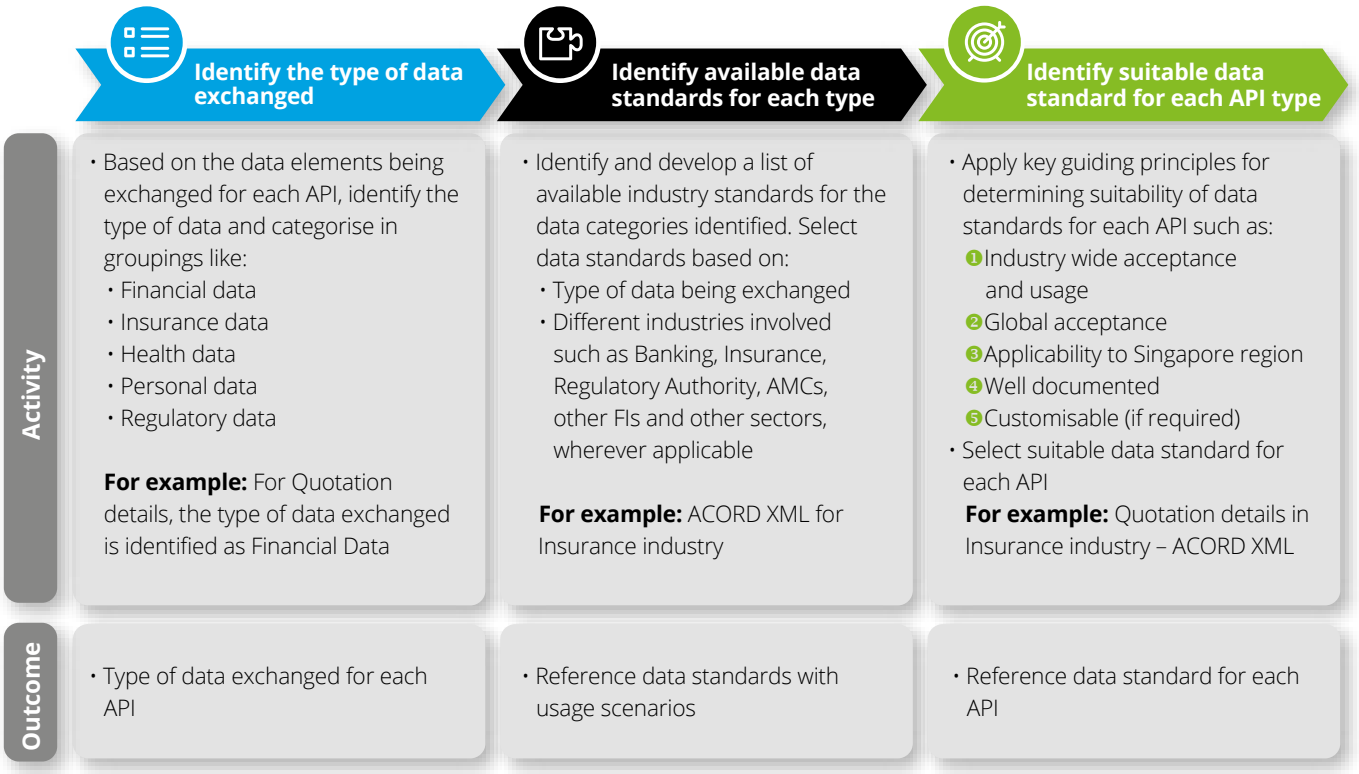


Exhibit 16: Identifying and selecting the applicable Data standards

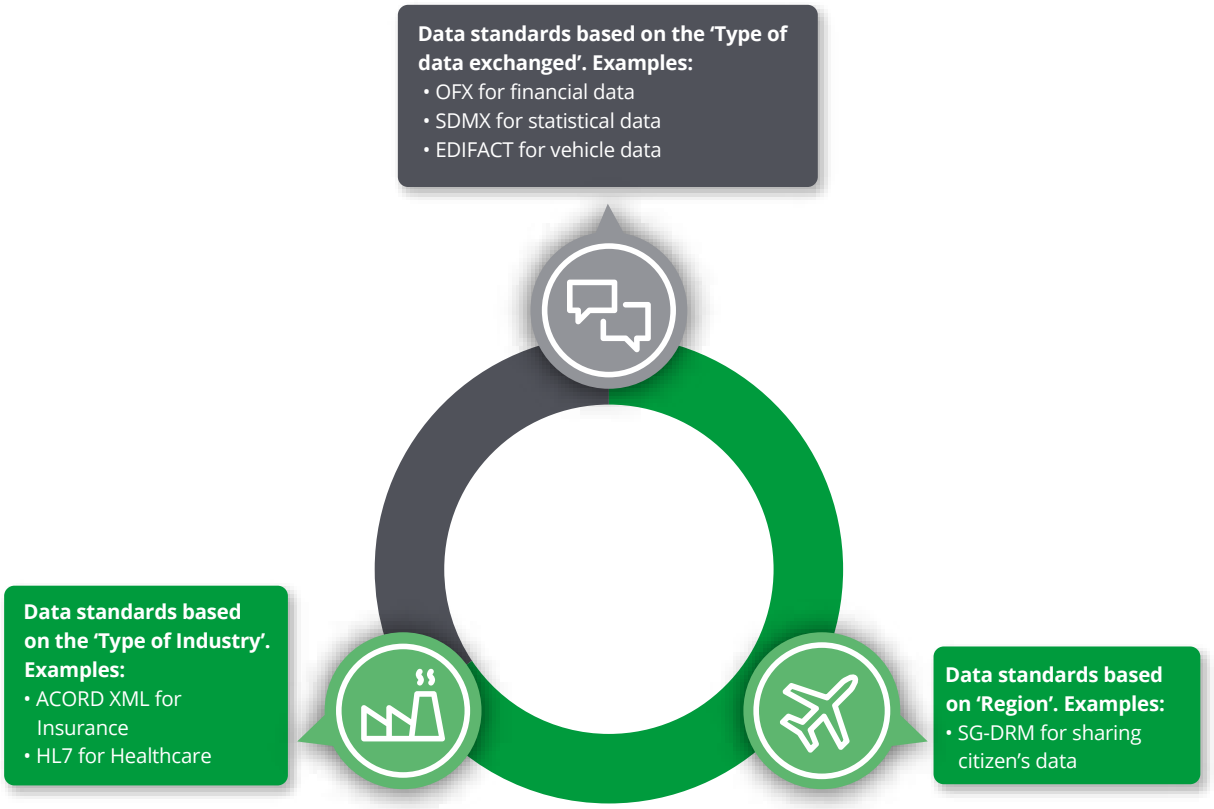


Exhibit 17: Illustrative data standards by type of data exchanged, industry and region

Following are the different data standards that have been identified for the selected API candidates:

- **eXtensible Business Reporting Language (XBRL)**
  XBRL is the open international standard for digital business reporting based on XML. XBRL allows the creation of reusable, authoritative definitions, called taxonomies that capture the meaning contained in:
  a. all of the reporting terms (used in a business report)
  b. the relationships between all of the terms

  Taxonomies are developed by those who require information to be reported like regulators, government agencies and other relevant groups.

Different scenarios where XBRL [4] can be used:
XBRL can be applied to a wide range of business and financial data. Among other things, it can handle:

a. Company's internal and external financial and business reporting
b. Business reporting and exchange of information between all types of regulators, including tax and financial authorities, central banks, and governments
c. Filing of loan reports and applications
d. Credit risk reports and assessments
e. Authoritative accounting literature, i.e. accounting documents provided by authoritative bodies

[4] https://www.aicpa.org/InterestAreas/FRC/AccountingFinancialReporting/XBRL/Pages/BenefitsandPotentialUsesofXBRL.aspx

- **Open Financial Exchange (OFX)[5]**
  Open Financial Exchange is a reference data standard used for exchanging financial data, and performing transactions between financial institutions and underlying applications.

  OFX can be used for financial activities including:
  a. Banking transactions
  b. Bill presentment
  c. Stock, bond and mutual fund investments
  d. Downloading bank images, tax data and loan and amotisation scheduled

ACORD XML

a. ACORD for P&C Insurance and Surety (ACORD P&C XML)[6]

ACORD for P&C Insurance and Surety is a standard used for real time requirements in propery and casualty transactions. It contains business messages that support B2B, B2C, different geographies, lines of business and internal systems.

ACORD P&C XML can be used for exchanging commercial schedules, claims, underwriting etc. across retail and commercial P&C lines of business.

b. ACORD Life & Annuity Standard

ACORD L&A standards provide a well defined vocabulary for exchanging data between channel partners and insurers and also within the insurance organisation using a formally defined specification.

ACORD XML for L&A can be used for products that have pricing, coverage, risk of mortality and morbidity across different product types like life insurance, annuities, long term care, health and disability and also other products including their investment related components.

ACORD XML can also be used by all producers and consumers of insurance data including agents, distributors, regulators and also third party service providers across various business processes where insurance data needs to be exchanged.

c. ACORD XML for Global Reinsurance and Large Commercial (GRLC) [6]

ACORD GRLC is created by members comprising of insurers, reinsurers, intermediaries, clients and technology service providers.

It can be used where reinsurance and complex insurance business is underwritten.

- **Financial products Markup Language (FpML)[7]**
  FpML is a standard based on XML and used for data exchange for electronic dealing and processing of derivatives instruments like interest rate derivatives, inflation swaps, dividend derivatives and other structured products. It also provides a framework for regulatory reporting.

- **Electronic Data Interchange For Administration, Commerce and Transport (EDIFACT)**
  EDIFACT, also referred to as ISO 9735, comprises a set of internationally agreed standards and directories for electronic interchange of structured data. It can be used for exchange of customer vehicle details electronically between insurers and relevant government agencies in Singapore.

- **Financial Information eXchange (FIX)[8]**
  FIX is the standard used for pre-trade and trade messaging across Financial Markets globally. It describes trade-related messages, and used for automated trading of securities, derivative, and other financial instruments.

  It can be used for pre trade activities like market data exchange, quotation details etc. across different trade types like cross orders, basket orders etc. and for post trade activities like collateral management, registration instruction etc.

[5] http://www.ofx.net/

[6] https://www.acord.org/Pages/default.aspx

[7] http://www.fpml.org/

[8] http://www.fixtradingcommunity.org/pg/main/who-uses-fix/fix-versio

- **Market Data Definition Language (MDDL)[9]**
  MDDL enables the exchange of information necessary to account, analyse, and trade financial instruments. It defines an XML-based interchange format and common dictionary on the fields which can describe Financial instruments, Corporate events that impact value and trade ability and Market-related, economic and industrial indicators.

  It can be used to exchange pricing of stocks, bonds, commodities from exchanges, macroeconomic statistics from public and private sector.

- **Security Assertion Markup Language (SAML)[10] 2.0**
  SAML is an open-standard XML based data format for the exchange of authentication and authorisation data between parties, i.e. between an identity provider and a service provider.

  Different scenarios where SAML can be used:
  - Single Sign On.
  - Authorisation service.
  - Back office transaction.

- **SWIFT and ISO 20022**
  SWIFT Standards, under contract to ISO[11], also acts as Registration Authority for ISO 20022 scoped for financial industry processes.

  ISO 20022, the Universal financial industry message scheme is a international standard that defines the ISO platform for the development of financial message standards. Its allows users and developers to represent financial business processes and financial transactions in a formal and syntax-independent notation.

  It can be used as a methodology for creating financial messaging standards and it also defines common industry terms and message definitions for business areas including payments, cards and securities.

- **Statistical Data and Metadata eXchange (SDMX)[12]**
  SDMX was created to standardise and mechanise the processes for the exchange of statistical and metadata among international organisations across the globe and their member countries.

  SDMX provides guidelines regarding the application of coordinated statistical concepts to data sets, and also provides rules on how these data sets should be represented.

  Different parts of SDMX are used for collection cases like push and pull reporting format, file downloads and extractions, transformation and loading of data.

- **Health Level 7 (HL7)[13]**
  HL7 was created to have international standards defined for the transfer of medical, clinical and administrative data shared between the systems used by healthcare providers across the globe. These standards lay emphasis on Layer 7 (the application layer) in the OSI model. HL7 and its members provide standards for the exchange, integration, sharing, and retrieval of electronically saved health information across healthcare providers.

  HL7 can be used by government bodies to share clinical data across multiple consumers including financial services companies for underwriting, claims processing and fraud detection.

[9] http://xml.coverpages.org/mddl.html

[10] https://wiki.oasis-open.org/security/FrontPage

[11] https://www.swift.com/standards/about-iso-20022#topic-tabs-menu

[12] https://sdmx.org/

[13] http://www.hl7.org/implement/standards/index.cfm?ref=nav

- **HR-XML**[14]
  To solve their HR related integration needs, HR professionals and technologists developed the HR Open Standards. These standards create standard definitions and makes data integration easier across the entire global HR Community.

  HR-XML can be used for all HR functions like assessments, employee benefits, onboarding, screening, time management etc.

Information Security

Why is API security more important than ever before?

The dawn of APIs has brought about newer modes of interaction over the HTTP protocol. Given the novelty of these modes traditional modes of security such as SOA gateways, IPS/IDS and web application scanners do not adequately deal with these.

Using JSON in HTTP may become a new pathway for malicious/untrusted data to be shared and affect the backend services or consumer's browser. Traditional security mechanisms can also be breached when inputs are passed directly in the URL path.

Another consideration is a surge in usage levels or malicious users can adversely affect API SLA and in some instances cause a Denial of Service attack which may lead to financial losses.

Payment services are crucial to the smooth operation of economic and social activities[15] and recently electronic payments have been subjected to ever increasing security risks.

This risk to payment services is compounded by the growing technical complexity of electronic payments, increasing adoption of electronic payments and other emerging innovative payment services. Safe and secure payment services constitute a vital condition for a well-functioning payments market. Users of such payment services should therefore be adequately protected against such risks.

Key takeaways:

1. Data Standards enable consistency and reuse of data elements and metadata and thereby improve reliability and reduce costs
2. The type of data elements being exchanged like financial data, statistical data, etc. should be considered for identification of available reference data standards for an API
3. Another factor that influences the identification of reference data standards is the industry sectors involved like Insurance, Banks, AMCs, Healthcare, etc.
4. To determine the suitability of data standards for each API, guidelines should be considered like industry wide acceptance, global usage, and availability of required documentation

[14] http://www.hropenstandards.org/

[15] http://ec.europa.eu/finance/payments/framework/index_en.htm

The security of the APIs is fundamental for ensuring the protection of users and the development of a safe environment for digital economy. Additionally, the security measures deployed should be in proportion to the amount of risk involved in the transactions and should ensure a uniform customer experience across the varying service providers as illustrated in the figure below.

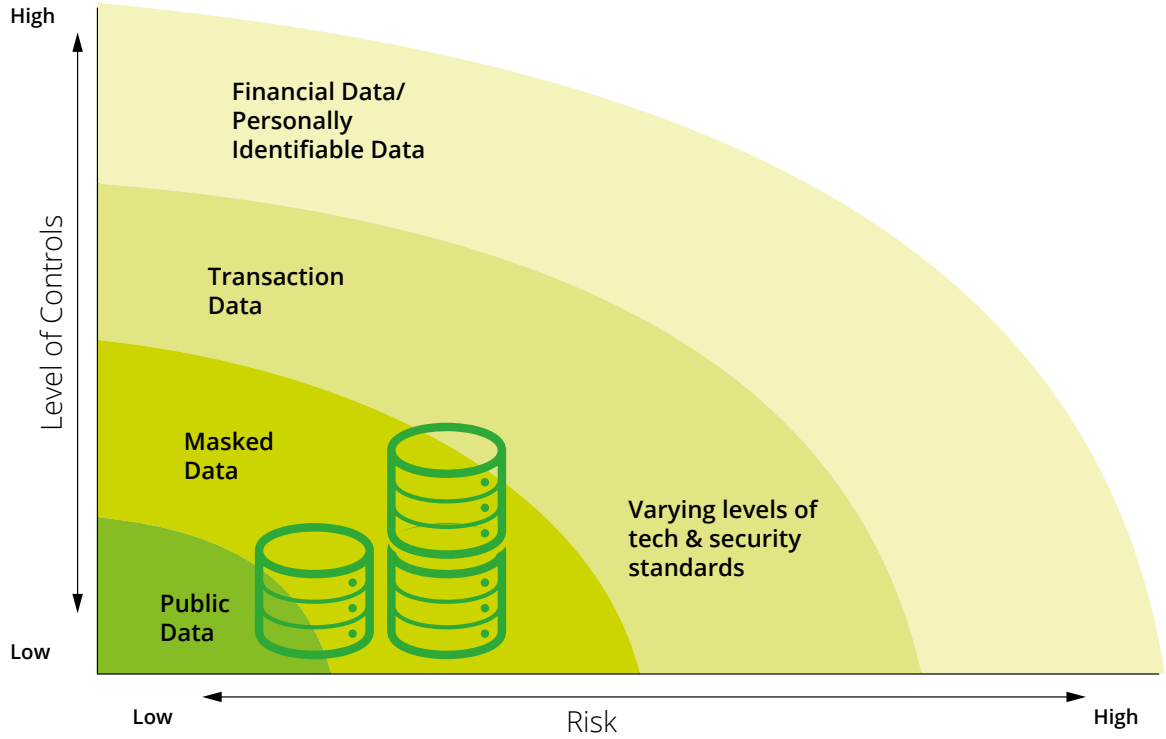
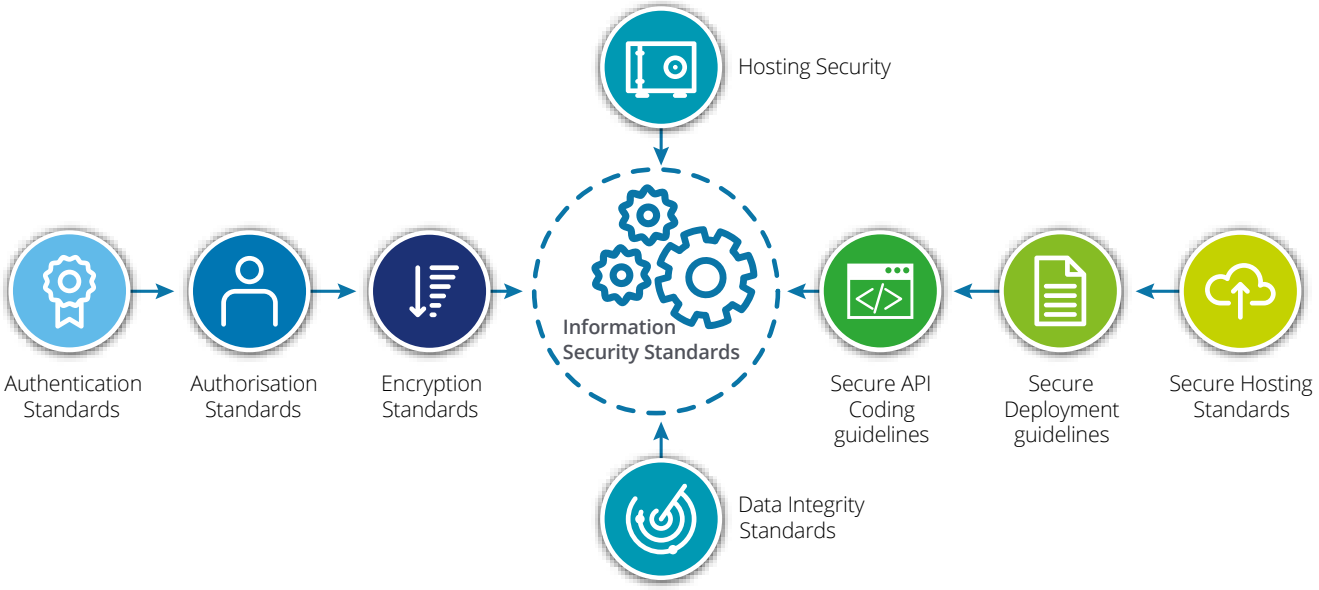


Exhibit 18: Levels of control based on type of data

Information Security Standards

The various information security standards and guidelines for designing and developing secure APIs can be classified under:



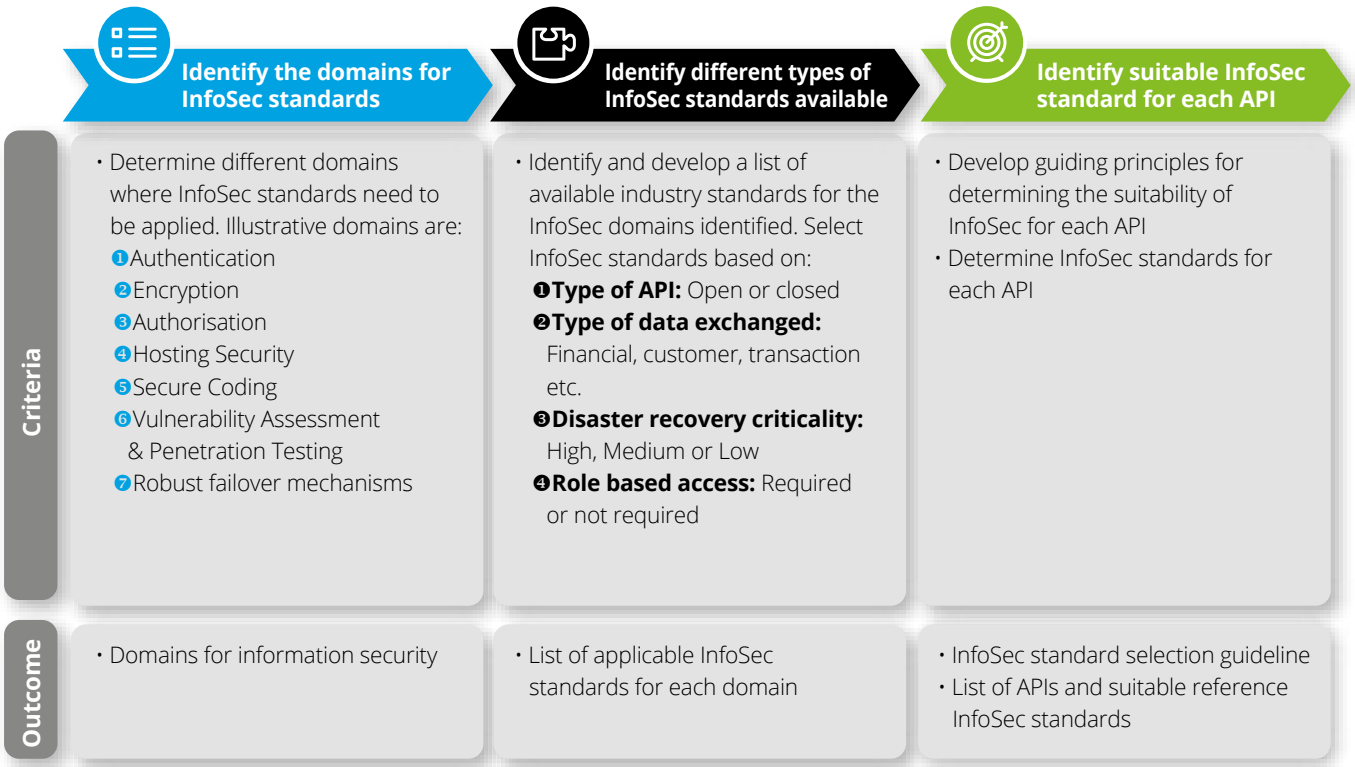


Exhibit 19: Identifying and selecting Information Security standards

Reference InfoSec domains and applicable standards are listed below:

Authentication Standards

OAuth 2.0

- OAuth 2.0 provides authorisation workflows for diverse applications such as web applications, desktop applications, mobile phones and home automation devices while providing a simple platform for developers to harness.

- In an OAuth based authorisation a consumer requests access to resources under the control of a resource owner. For accessing these resources the consumer is provided a different set of credentials.

- This can be used for accessing the APIs from multiple devices including mobile apps, desktops etc.

- This can be modified to include any national UID (SingPass/CorpPass) as the access token against which an individual or an organisation can be authenticated.

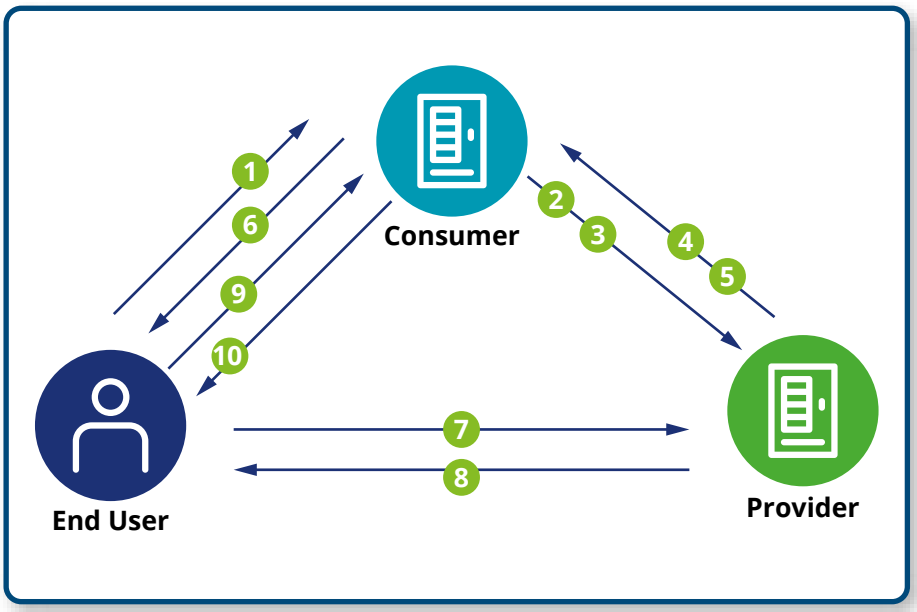
OpenID Connect

- OpenID Connect is an interoperable authentication protocol based on the OAuth 2.0 family of specifications. It uses straightforward REST/JSON message flows with a design goal of simplifying things and works over the existing HTTP standard.

- OpenID Connect enables developers to create an authentication mechanism across websites and applications without creating a separate username/password file combination of their own.

- OpenID has the capability to manage multiple types of clients including browser based JavaScript and native mobile applications. Apps designed using OpenID are able to utilise sign-in workflows and receive confirmable assertions about the identity of the user. (Identity, Authentication + OAuth 2.0 = OpenID Connect).

- This can be used for accessing the APIs from multiple devices including mobile apps, desktops etc. in a manner similar to how Google/Facebook single sign on works across other websites. This can be modified to include the UID as the access token against which an individual or an organisation can be authenticated.



Consumer:
The entity looking to verify the identity of the end user

Provider:
The entity that registers the OpenID URL and can verify the end user's identity

End User:
The entity that is looking to verify its identity

Steps involved in an OpenID authentication illutrative scenario:

1. User provides the URL to access the OpenId
2. Consumer discovers the provider of the API
3. Consumer starts the association with the provider
4. The Provider creates the key and association handle
5. Provider sends the created key and association
6. End user is then redirected to Provider with a request for authentication
7. End user will now place the authentication request
8. Provider checks the validity of the request, authenticates end user and redirects the end user to the consumer with sign assertion
9. End User presents the signed assertion
10. Consumer will now validate the assertion and create a session

Exhibit 20: Illustrative scenario for OpenID Connect authentication standard[16]

[16] https://softwaresecured.com/federated-identities-openid-vs-saml-vs-oauth/

Security Assertion Markup Language (SAML 2.0)

- Security Assertion Markup Language (SAML) is an identity federation standard. It can be utilised by businesses, government agencies, non-profit organisations and service providers to enable a single sign on (SSO) facility.
- This is an XML based standard for authentication.
- SAML being an older standard was not adjusted to provide SSO services for native mobile applications or for applications which consume services through API calls from multiple third-party providers. This hinders the usage of SAML to a certain extent.
- This method of authorisation can be used where the authentication is required to be provisioned by the provider of the API.

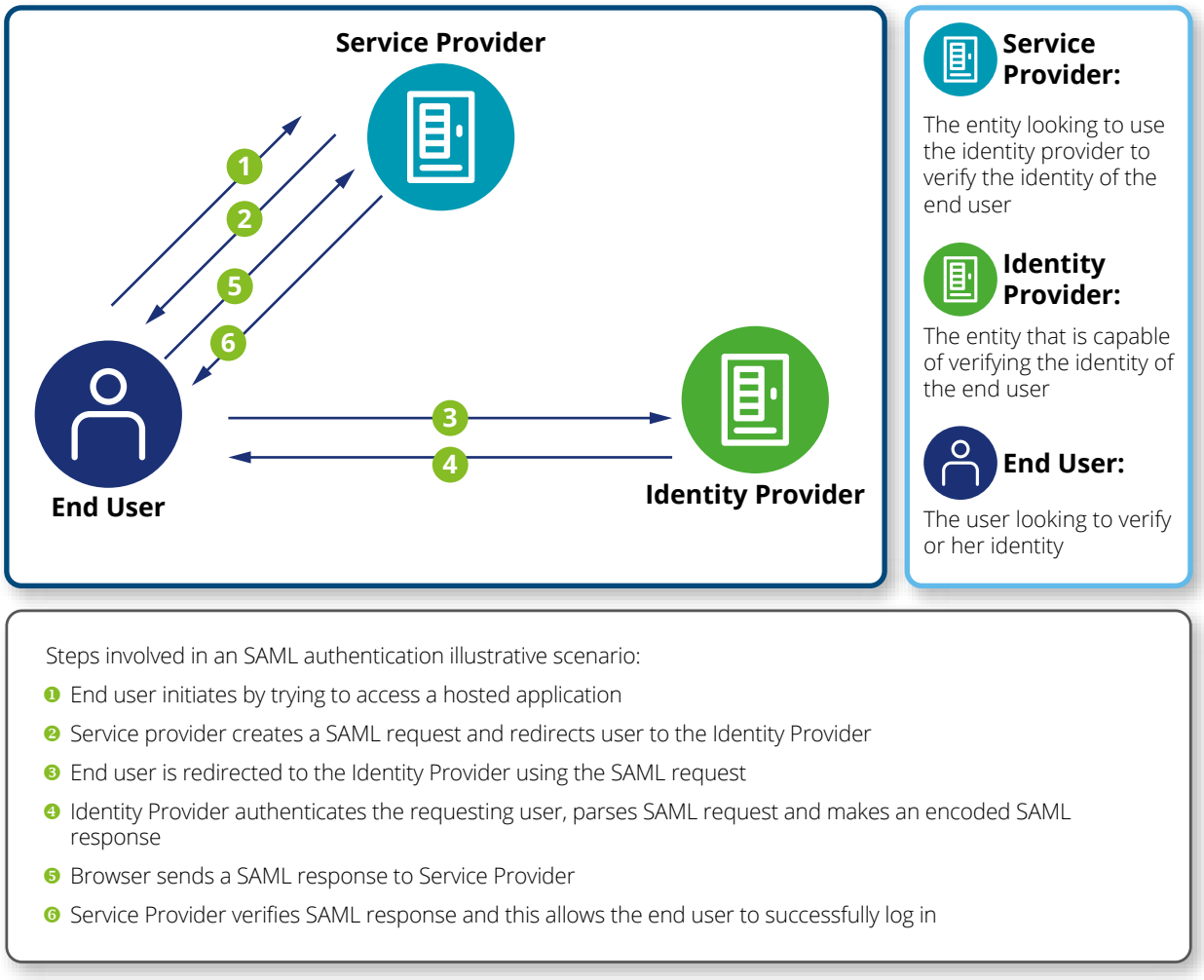


Exhibit 21: Illustrative scenario for SAML 2.0 authentication standard[16]

[16] https://softwaresecured.com/federated-identities-openid-vs-saml-vs-oauth/

Two Factor Authentication (2FA)

- 2FA is a form of Identity and Access Management (IAM) and is implemented using an IAM solution which provides for 2 or more factors to authenticate the user.

- The simplest form of 2FA is a chip based debit/ credit card, where on swiping the card (performing a transaction) the user is prompted to enter a PIN, only when the PIN which is known to the user is entered the transaction is completed.

Why use 2FA

- To commit any type of fraud, the malicious user needs to find an entry point. Utilising someone's login credentials is one such way. 2FA while not 'unbreakable' makes it increasingly difficult for the malicious user to gain access to the systems/data as two different credentials are needed for gaining access.

- Provides a great customer experience while ensuring security through a lightweight registration process which reduces the discomfort sensed by users during a typical registration process.

- Further, utilising a Single Sign On (SSO) solution in conjunction with the IAM will enable users to access all portals, apps, sites and services with a single login.

Typical Challenges while using 2FA

2FA while more secure is not unbreakable. Usually, institutions adopting 2FA for the first time will face challenges in its implementation. Some of these are enlisted below:

- Acquiring the physical token (hardware tokens or key fobs) is time consuming and users may have to wait to gain access to sensitive data which they own.

- If 2FA is not implemented correctly, i.e. there are loopholes in the 2FA, the entire implementation is rendered useless.

- Vulnerabilities due to dependency on third party authentication providers. A breach in the security of the physical or soft tokens provided by third parties could render personal data.

- Reluctance of end user to adopt an additional method of authentication.

- However, the benefits of utilising a 2FA mechanism far outweigh the challenges/risks associated with the implementation and most of the risks can be mitigated with proper planning, communication, implementation and management of the 2FA mechanism.

What the FinTechs can do

Two-factor authentication is common place in Singapore for accessing many online services. Customers of Singapore banks are authenticated through OTP (One-Time Pin) received via SMS or generated via the hardware token. Users accessing government e-services are authenticated via the SingPass-2FA service which is based on SMS-OTP model.

Thus, FinTechs can implement similar 2FA solutions using UID as the identity provider (first authentication), followed with either a soft token or SMS/email based second factor for authentication. The same can be illustrated as below:

1. The user initiates a high-risk transaction (e.g. funds transfer) via the 3rd-party client application (App).
2. The App invokes the FI's funds transfer API to authorise the transaction.
3. The user is then redirected to the 2FA pop-up box to provide the relevant credentials for authorisation.
4. The App then requests for the Access Token with the Authorisation Code provided.
5. The User is now authorised to complete the funds transfer transaction with the Access Token provided.

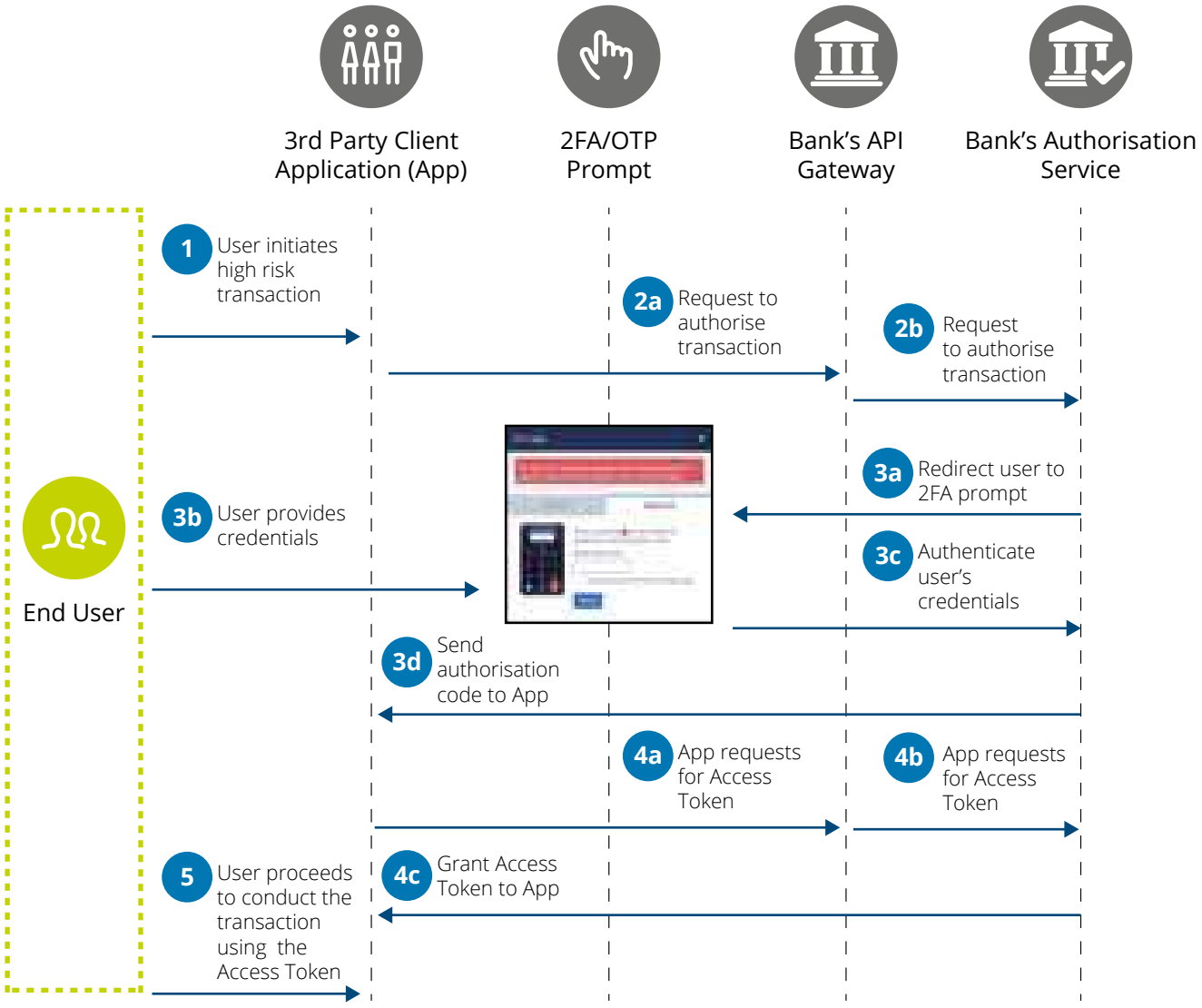
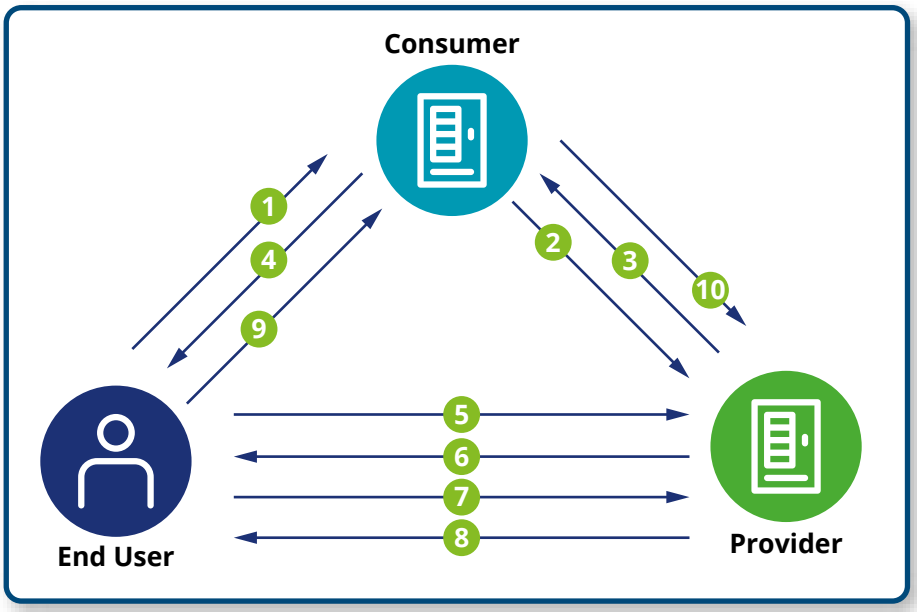


Exhibit 22: 2FA Process

Authorisation Standards

OAuth 2.0

The OAuth standard can also provide Authorisation related information in addition to the authentication of the individual.



Consumer:

The client which is the entity that is looking to consume the resource after getting authorisation from the client

Provider:

The resource server which is the entity hosting the resource

End User:

The entity that owns the resource in question

Steps involved in an OAuth authorisation illustrative scenario:

1. The end user logs and wants to access/send information using his/her social account
2. Consumer sends a request to the provider for generating the "Request Token" and Secret Key
3. "Request Token" and Secret Key is created and sent by the provider
4. Consumer asks end user for authorisation and will pass a link that contains the "Request Token"
5. The end user clicks on the said link (which contains the "Request Token") and an API call passes the secret key
6. Provider asks the user if the consumer is allowed to access their database
7. The end user confirms this and authorises the consumer to access their data
8. Provider creates an "Access Token" and an "Access Token Secret Key" and forward the end user back to the consumer
9. User is redirected to the consumer along with the "Access Token" and "Access Token Secret Key" generated by the provider
10. Consumer asks for the user's information and includes the "Access Token" along with the "Access Token Secret Key"

Exhibit 23: Illustrative scenario for OAuth 2.0 Authorisation standard[16]

[16] https://softwaresecured.com/federated-identities-openid-vs-saml-vs-oauth/

ISO 10181-3 Access Control Framework

Four roles for components participating in an access requests are defined by the framework:
1. Initiators.
2. Targets.
3. Access Control Enforcement Functions (AEFs).
4. Access Control Decision Functions (ADFs).

A typical access request scenario is as follows:

a. An initiator submits and access request. An access request states the operation to be performed on the target resource.

b. The objective of the AEF is to mediate on such requests.

c. AEFs submit decision requests to ADFs. A decision request inquires if access should be granted or denied.

d. ADFs are responsible for granting or denying access.

Encryption Standards

Transport Layer Security (TLS) v 1.2

TLS was designed with the goal of providing privacy and ensuring data integrity between two communicating applications. This has two layers:

The first layer uses TLS Record Protocol to encapsulate other higher level protocols.

The second layer uses the TLS Handshake Protocol which allows the server and client to authenticate each other. The protocol allows negotiation and agreement of a cryptographic algorithm and keys prior to transmission or receipt of any data.

This is a basic level of security which rides on the TCP protocol and HTTPS. All RESTful APIs by default are created to use this as an encryption mechanism.

RSA Public/Private Key Encryption

The Rivest-Shamir-Adleman (RSA) algorithm is one of the most popular and highly secure public-key based encryption methods. The algorithm utilises the fact that factoring very large (100-200 digit) numbers is not efficiently possible.

The algorithm uses an encryption key (e, n) and follows the below steps:

- The message is represented as an integer number between 0 and (n-1).
- Large messages may be broken into a large number of blocks.
- Each block is then represented by a number in the same range and is encrypted by raising it to the eth power modulo n to obtain the ciphertext C.
- To decrypt this ciphertext C is raised to another power – d modulo n.
- The key used for encryption is public.
- The decryption key (d, n) is kept private by the user.

AES 128/192/256-bit Encryption

- The Advanced Encryption Standard (AES) was originally referred to as Rijndael specifies a method for encrypting electronic data.
- AES comes in three varieties each having a block size of 128 bits but three different type of key lengths 128, 192 and 256 bits.
- The US government and other entities across the globe use AES.

Secure File Transfer Protocol (SFTP)

The Secure File Transfer Protocol (SFTP) is also known as the SSH File Transfer Protocol. It is a network protocol that allows access to files, transfer and management of files over a reliable data stream.

It has multiple applications including secure file transfer over the Transport Layer Security (TLS) or transferring management information in VPN applications.

There is no provision for authentication and security within the SFTP itself. However, it depends on the underlying protocols for this.

Data Integrity Standards

JSON Web Token (JWT)

- JSON Web Token (JWT) provides a lightweight and autonomous mechanism for secure transfer of information between parties as a JSON object. The information is digitally signed which makes it verifiable and trust worthy.

- JWTs can be signed using a secret (with the HMAC algorithm) or a public/private key pair using RSA.

- JWTs can be digitally signed which ensures that the senders are indeed who they claim to be.

WS-Security

WS-Security states a protocol for enforcing integrity and confidentiality on messages. It also provides for communication using various security token formats such as SAML, Kerberos and X.509.

Its primary objective is the usage of XML Signature and Encryption to provide end-to-end security. WS-Security describes three main mechanisms:

- How SOAP messages should be signed to assure integrity. Signing messages also ensures non-repudiation.
- How SOAP messages should be encrypted to ensure confidentiality.
- How security tokens should be attached to determine the sender's identity.

The specification provides for a variety of signature formats, encryption algorithms and multiple trust domains, and is open to various security token models, such as:

1. X.509 certificates;
2. Kerberos tickets;
3. User ID/Password credentials;
4. SAML Assertions; and
5. Custom-defined tokens.

Keyed-Hash Message Authentication Code (HMAC)

- A keyed-Hash Message Authentication Code (HMAC) involves uses a cryptographic hash function in combination with a secret cryptographic key to encode the message.

- The HMAC relies on the strength of the cryptographic strength of the hash function, the size of the hash output and the size and quality of the key used.

- HMAC is more secure than a standard MAC owing to the fact that the key and message are hashed separately.

Secure Hosting Standards

ISO27001

- The ISO 27000 family of standards aid organisations in securing their information assets. Deploying these standards helps organisations manage the security of assets including financial information, intellectual property, etc.

- ISO/IEC 27001: 2013 was published on 25th September 2013 for information security.

- Organisations which meet the requirements specified by this standard may be certified compliant by independent and accredited certification bodies on completion of a formal compliance audit.

This standard can be used to secure the information assets being exchanged on the APIs and stored in the hosting environment.

ISO22301

- The ISO 22301: 2012 standard states the requirements for planning, establishing, implementing, operating, monitoring, reviewing, maintain and continually improving a documented management system to protect against, reduce the likelihood of occurrence, prepare for, respond to, and recover from disruptive incidents when they arise.

- ISO22301:2012 specifies generic requirements which are applicable to all organisations depending on the organisation's operating environment and complexity.

This standard can be used to ensure the continuity of the business in the event of a disruption.

The Payment Card Industry Data Security Standard (PCI DSS)

- The Payment Card Industry Data Security Standard (PCI DSS) is a proprietary information security standard for organisations that handle branded credit cards from the major card schemes including Visa, MasterCard, American Express, Discover, and JCB.

- This was created to reduce the credit card fraud and ensuring security of cardholder information by increasing controls around cardholder data.

Key takeaways:

1. Securing APIs is of paramount importance due to the business criticality of the transaction infrastructure and the technical complexity involved with the same
2. For high risk transactions including financial and personally identifiable data exchanges, stronger information security controls are required
3. It is an imperative to implement security controls at all layers and hence identify guidelines for securing applications, hosting infrastructure, transport of data, coding and deployment
4. Ensuring the security and integrity of data being exchanged during a transaction is critical to the success and increased adoption of the API economy
5. Level of security standards for each API depends on business criticality of data being exchanged, permissible access levels including role based access and availability requirements across the identified information security domains

Governance

The Need for API Governance

Governance ensures consistency and cohesiveness for API interfaces, further enabling developers to leverage from their past experience of using APIs from a provider and accelerating development capability. The following elaborates the need for API governance and management:

- For any transaction or interaction in the organisation, APIs are required at various levels and need to be standardised on both ends (provider and consumer). This requires consistency in the performance of all the APIs. Any failure on one end will lead to the failure of transaction.
- Ensuring efficiency of the APIs is also a factor under consideration for API governance and management.
- Another major concern that creates necessity for governance and maintenance of APIs is security, including unregistered usage of APIs, data security and backend systems and service access.
- At the corresponding ends of an API (providers and consumers), the API providers need to meet the demands of the consumers, and the consumers need to ensure the integration of APIs and alignment with terms and conditions of the provider.
- Dealing with varying protocols and design patterns such as SOAP, REST, JMS, etc., along with dealing with APIs developed by multiple developers, vendors and individuals.

Defining API Governance

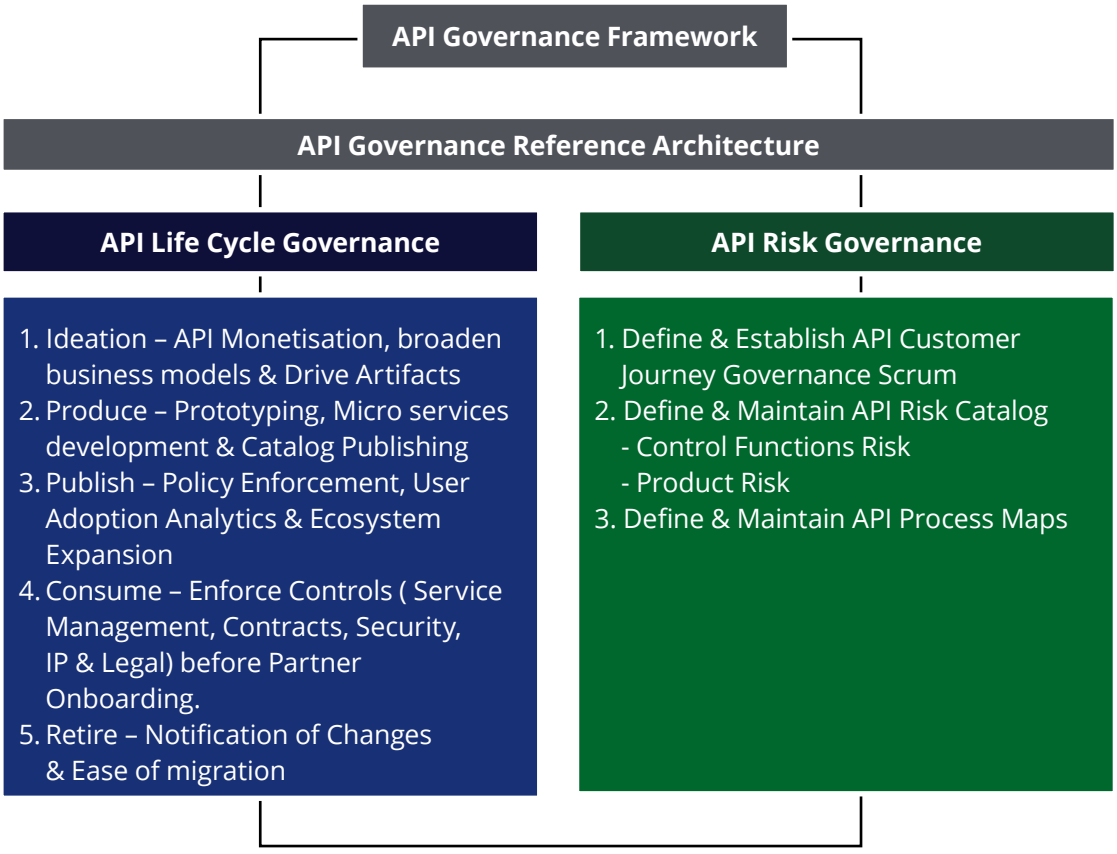


Exhibit 24: API Governance Framework

API Life Cycle Governance

There are five phases of implementing the API Life Cycle Governance.

- Ideation – API Monetisation, broaden business models & Drive Artifacts.
- Produce – Prototyping, Micro services development & Catalog Publishing.
- Publish – Policy Enforcement, User Adoption Analytics & Ecosystem Expansion.
- Consume – Enforce Controls (Service Management, Contracts, Security, IP & Legal) before Partner Onboarding.
- Retire – Notification of Changes & Ease of migration.

Governance includes the following components:

- API Portal - this can be used to govern the framework, design, lifecycle, documentation and publishing of the API.
- API Billing - this deals with billing in case of Open and external APIs.
- API Gateway – this handles the guidelines and governing required for runtime activities like routing, multi-tenancy and security (authentication and Authorisation).
- API Service Manager - for managing any change, deployment or modification in API configuration or policies, etc.
- API Cashback – for dealing with cashbacks when service/APIs cannot meet the required expectations.
- API Monitor - to handle the runtime issues encountered in the performance and quality of the API.

The three main pillars of an effective API Risk Governance framework reference architecture are:

API Governance Framework

There are the four phases of implementing the API Governance Framework.

1. **Plan Phase:** Establish the Governance Needed.
2. **Define Phase:** Design the Governance Approach.
3. **Enable Phase:** Put the Governance Model into Action.
4. **Measure Phase:** Monitor and manage the governance process.

Plan Phase: Establish the Governance Needed

In the planning phase of building a governance framework, the provider should focus on understanding the overall scope of the governance needs and identify areas for improved governance. This phase includes key activities such as:

- Developing an API Governance strategy and approach.
- Conducting an assessment of existing governance committees, objectives and rosters to determine overlap of priorities and membership.
- Explicitly determining the level of Enterprise Data, API, and other IT capabilities.
- Developing an API Governance work plan.
- Developing an API Governance stakeholder engagement and communication plan.

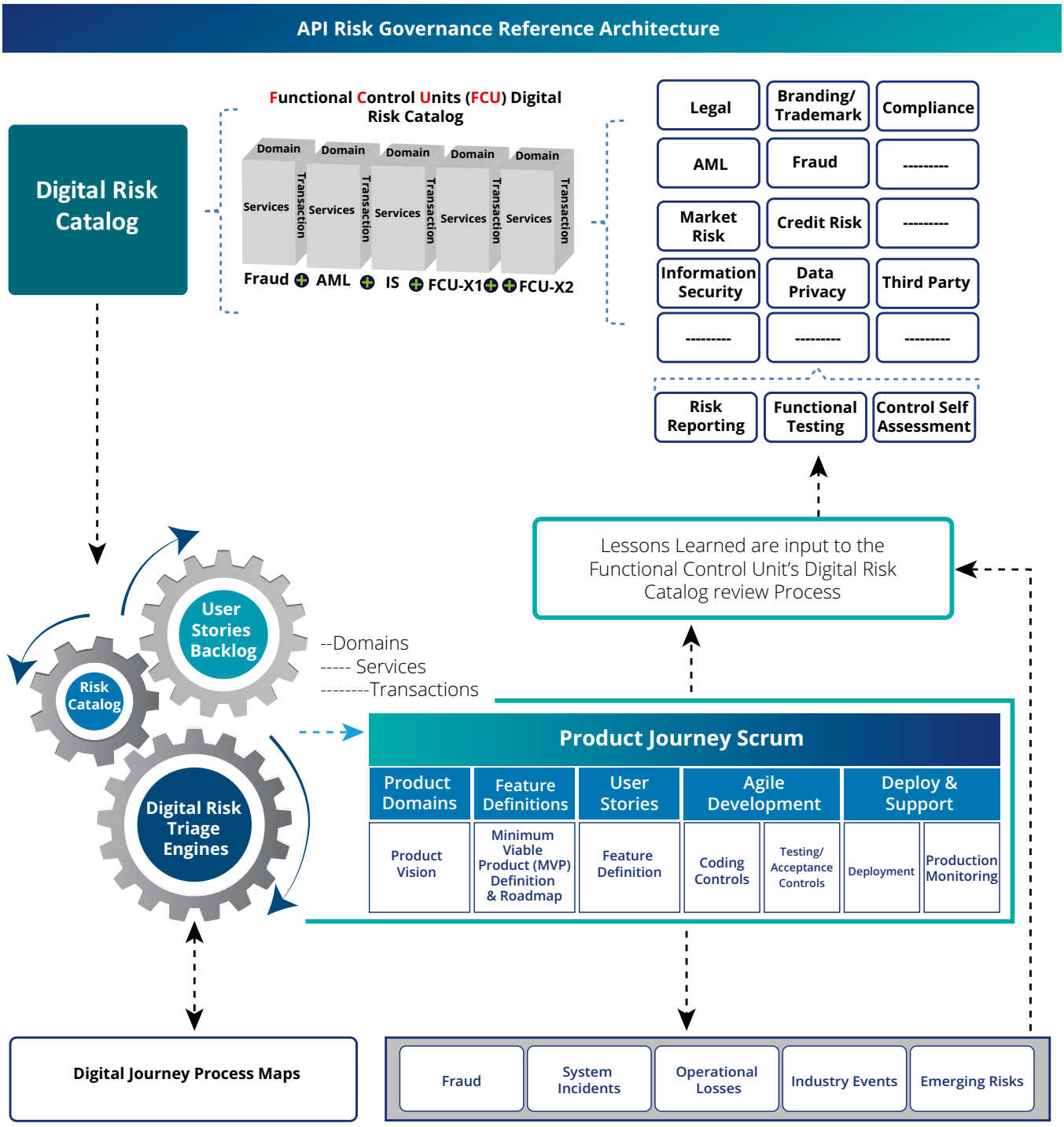


Exhibit 25: API Governance Reference Architecture

Define Phase: Design the Governance Approach

For the Define phase, the provider will use the analysis from the plan phase to develop the future state governance structure, processes, policies, and standards. This phase includes the following key activities:

- Establishing or refining a Governance Centre of Excellence (COE).
- Designing the API Governance structure.
- Developing API Program Governance committee charters.
- Creating API Governance leadership decision model and decision-making process.
- Define API Governance standards and processes
- Developing change and transition plans.
- Agreeing on policies for reuse across lines of business.

Enable Phase: Put the Governance Model into Action

In this phase, planning tools, along with the new structure and processes are put into action. Key activities during this time will include:

- Deploying new API Governance structure.
- Activating enhanced API Governance policies, procedures and standards.
- Communicating API Governance key messages.
- Implementing the new API Governance training and education plan.

Measure Phase: Monitor and manage the governance process

Governance arrangements and mechanisms that were identified in the Define phase and deployed in the Enable phase are monitored. Key activities in this phase include:

- Initiating metrics to track and monitor API Governance effectiveness.
- Monitoring compliance with API Governance policies and standards.
- Analysing IT effectiveness metrics

API Risk Governance

The three main pillars of an effective API Risk Governance framework reference architecture are:

1. **Define & Establish API Customer Journey Governance Scrum:**
   Define and establish an API Customer Journey Governance Scrum to provide oversight over:

   - Product Domains – Product Vision / Ideation.
   - Feature Definitions – MVP Definition & Roadmap.
   - User Stories – Product Feature definition based on prioritisation.
   - Agile Development – Coding Controls, Testing / Acceptance Controls.
   - Deploy & Support – API Deployment and Production Monitoring.

2. Define & Maintain API Risk Catalogs:

The API Risk Catalogs serve as both inputs to and outputs from an effective API Customer Journey Governance Scrum framework:

- Functional Risk – Functional Control Units should define and maintain Functional Risk Catalogs based on Domains, Services and Transactions classification for their respective Functional areas.
- Consolidated API Product Risk – The Governance Scrum should consolidate the respective Control Functions' Risk Catalogs to give a single view of risk relevant to the API based on the classification of Domains, Services and Transactions.

3. Define & Maintain API Process Maps:

Below are two expected outputs from an effective API Customer Journey Governance Scrum framework:

- Process Control Mapping – Mapping of API Customer Journey Business, Operational & Technology Processes and Controls.
- Risk Control Matrix – Documentation of key Processes, Risks and Controls relevant to the API Customer Journey.

Key takeaways:

1. API Governance is essential to ensure the quality of services offered are maintained across the ecosystem without compromising on security and enabling technology independence
2. It is essential to define and operationalise an API Governance Framework and further monitor its compliance and effectiveness
3. API Governance is required across the life cycle to ensure they deliver business value
4. Identifying and preventing risks is another critical aspect of API Governance
5. Various tools and technologies like API Portals, Service Managers and Gateways can be used across the API lifecycle for communications, change management, billing and performance monitoring

List of Recommended APIs

1

Disburse statistical information

Description

Disburse statistical information from the regulator (such as MAS) to external entities.

Functionality

1. Disburse statistical information upon request

Provider

Regulator

Consumer

FIs, Agencies and public

Data Standards

Statistical Data and Metadata eXchange (SDMX) / regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

2

Disburse general insurance statistics

Description

Disburse general insurance related statistics from GIA for use by General Insurance companies for underwriting policies, launching new products and other such purposes. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Disburse statistical information upon request

Provider

GIA

Consumer

Insurers

Data Standards

Statistical Data and Metadata eXchange (SDMX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

3

Validation for reporting of equity products

Description

Pre-filing validation for regulatory reporting for new or updates to equity products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

4

Regulatory reporting for equity products

Description

Filing of regulatory reports for new or updates to equity products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

5

Validation for reporting of fixed income products

Description

Pre-filing validation for regulatory reporting for new or updates to fixed income products.
(n.b. API implementation subject to review of legal, policy and technical considerations by respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

6

Regulatory reporting for fixed income products

Description

Filing of regulatory reports for new or updates to fixed income products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

7

Validation for reporting of derivative products

Description

Pre-filing validation for regulatory reporting for new or updates to derivative products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

8

Regulatory reporting for deriviate products

Description

Filing of regulatory reports for new or updates to derivative products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

AMC

Data Standards

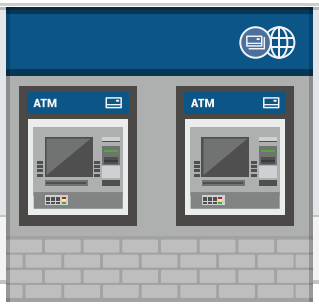
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

9

Validation for reporting of quant products

Description

Pre-filing validation for regulatory reporting for new or updates to quant products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

AMC

Data Standards

Statistical Data and Metadata eXchange (SDMX) / MAS defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

10

Regulatory reporting for quant products

Description

Filing of regulatory reports for new or updates to quant products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

11

Validation for reporting of savings accounts products

Description

Pre-filing validation for regulatory reporting for new or updates to savings accounts products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

12

Regulatory reporting for savings accounts products

Description

Filing of regulatory reports for new or updates to savings accounts products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

13

Validation for reporting of current accounts products

Description

Pre-filing validation for regulatory reporting for new or updates to current accounts products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

14

Regulatory reporting for current accounts products

Description

Filing of regulatory reports for new or updates to current accounts products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

15

Validation for reporting of fixed deposits products

Description

Pre-filing validation for regulatory reporting for new or updates to fixed deposits products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

16

Regulatory reporting for fixed deposits products

Description

Filing of regulatory reports for new or updates to fixed deposits products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

17

Validation for reporting of credit card products

Description

Pre-filing validation for regulatory reporting for new or updates to credit card products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

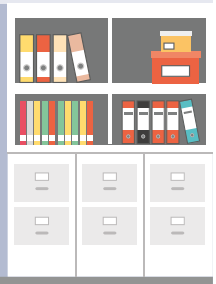
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

18

Regulatory reporting for credit card products

Description

Filing of regulatory reports for new or updates to credit card products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)



Functionality

1. Create new product record

Consumer

Banks

Data Standards

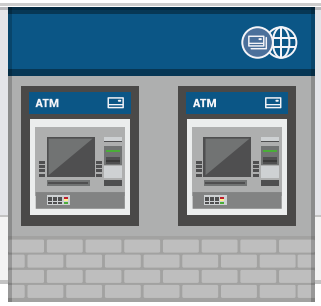
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

19

Validation for reporting of debit card products

Description

Pre-filing validation for regulatory reporting for new or updates to debit card products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

20

Regulatory reporting for debit card products

Description

Filing of regulatory reports for new or updates to debit card products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

21

Validation for reporting of forex card products

Description

Pre-filing validation for regulatory reporting for new or updates to forex card products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

22

Regulatory reporting for forex card products

Description

Filing of regulatory reports for new or updates to forex card products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

23

Validation for reporting of unit trust investment products

Description

Pre-filing validation for regulatory reporting for new or updates to unit trust investment products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Bank, AMC, Insurer and other FIs

Data Standards

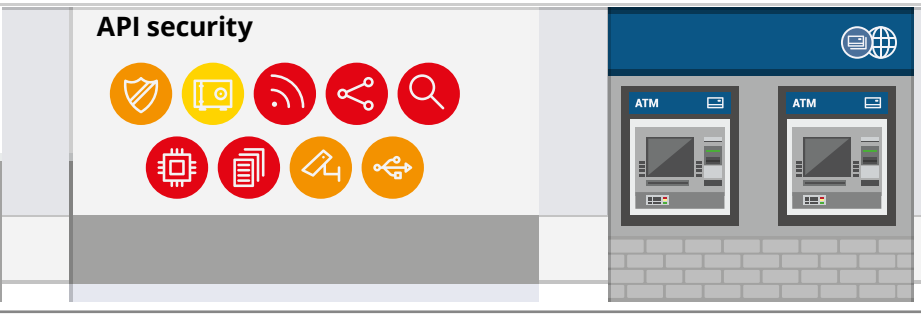
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

24

Regulatory reporting for unit trust investment products

Description

Filing of regulatory reports for new or updates to unit trust investment products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

25

Validation for reporting of CPF & SRS products

Description

Pre-filing validation for regulatory reporting for new or updates to CPF & SRS products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

26

Regulatory reporting for CPF & SRS products

Description

Filing of regulatory reports for new or updates to CPF & SRS products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

27

Validation for reporting of FX & cash management investment products

Description

Pre-filing validation for regulatory reporting for new or updates to FX & cash management investment products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.).

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

28

Regulatory reporting for FX & cash management investment products

Description

Pre-filing validation for regulatory reporting for new or updates to FX & cash management investment products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.).

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

29

Validation for reporting of structured investment products

Description

Pre-filing validation for regulatory reporting for new or updates to structured investment products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.).

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

30

Regulatory reporting for structured investment products

Description

Filing of regulatory reports for new or updates to structured investment products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

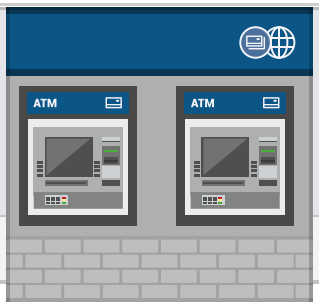
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

31

Validation for reporting of home loan products

Description

Pre-filing validation for regulatory reporting for new or updates to home loan products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)..

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

32

Regulatory reporting for home loan products

Description

Filing of regulatory reports for new or updates to home loan products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

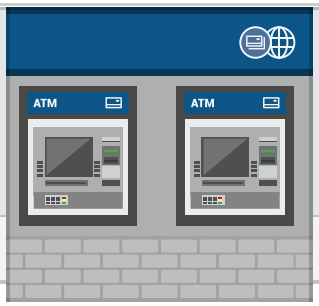
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

33

Validation for reporting of personal (unsecured) loan products

Description

Pre-filing validation for regulatory reporting for new or updates to personal (unsecured) loan products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.).

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

34

Regulatory reporting for personal (unsecured) loan products

Description

Filing of regulatory reports for new or updates to personal (unsecured) loan products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

35

Validation for reporting of vehicle loan products

Description

Pre-filing validation for regulatory reporting for new or updates to vehicle loan products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

36

Regulatory reporting for vehicle loan products

Description

Filing of regulatory reports for new or updates to vehicle loan products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

37

Validation for reporting of education loan products

Description

Pre-filing validation for regulatory reporting for new or updates to education loan products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

38

Regulatory reporting for education loan products

Description

Filing of regulatory reports for new or updates to education loan products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

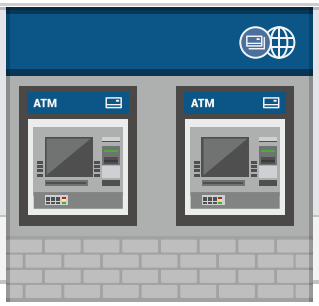
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

39

Validation for reporting of secured financing products

Description

Pre-filing validation for regulatory reporting for new or updates to secured financing products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

40

Regulatory reporting for secured financing products

Description

Filing of regulatory reports for new or updates to secured financing products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

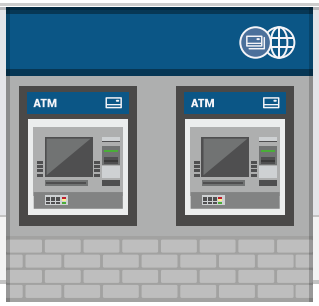
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

41

Validation for reporting of multi-currency account products

Description

Pre-filing validation for regulatory reporting for new or updates to multi-currency account products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

42

Regulatory reporting for multi-currency account products

Description

Filing of regulatory reports for new or updates to multi-currency account products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

43

Validation for reporting of RMB trade settlement account products

Description

Pre-filing validation for regulatory reporting for new or updates to RMB trade settlement account products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

44

Regulatory reporting for RMB trade settlement account products

Description

Filing of regulatory reports for new or updates to RMB trade settlement account products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

45

Validation for reporting of escrow service products

Description

Pre-filing validation for regulatory reporting for new or updates to escrow service products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

46

Regulatory reporting for escrow service products

Description

Filing of regulatory reports for new or updates to escrow service products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

47

Validation for reporting of corporate credit card products

Description

Pre-filing validation for regulatory reporting for new or updates to corporate credit card products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

48

Regulatory reporting for corporate credit card products

Description

Filing of regulatory reports for new or updates to corporate credit card products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

49

Validation for reporting of corporate working capital financing products

Description

Pre-filing validation for regulatory reporting for new or updates to corporate working capital financing products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Consumer

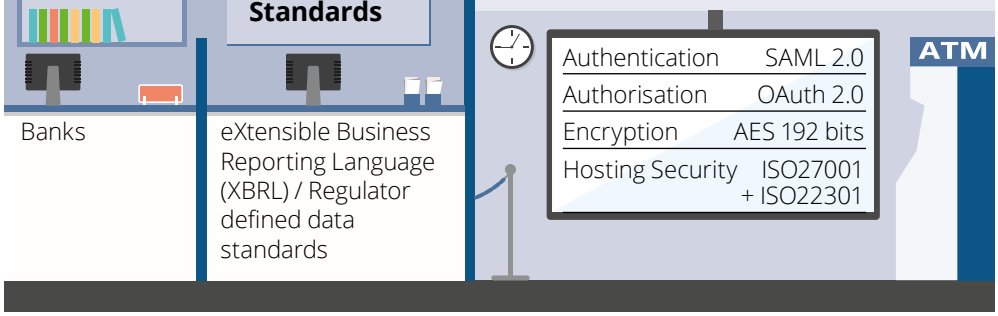
Banks

Data Standards

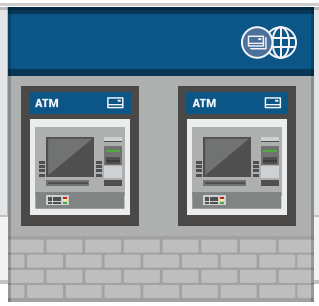
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301



API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

50

Regulatory reporting for corporate working capital financing products

Description

Filing of regulatory reports for new or updates to corporate working capital financing products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

51

Validation for reporting of commercial and property capital financing products

Description

Pre-filing validation for regulatory reporting for new or updates to commercial and property capital financing products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

52

Regulatory reporting for commercial and property capital financing products

Description

Filing of regulatory reports for new or updates to commercial and property capital financing products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

53

Validation for reporting of vehicle financing products

Description

Pre-filing validation for regulatory reporting for new or updates to vehicle financing products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

54

Regulatory reporting for vehicle financing products

Description

Filing of regulatory reports for new or updates to vehicle financing products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

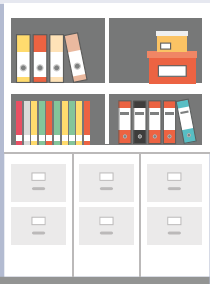
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

55

Validation for reporting of machinery and equipment financing products

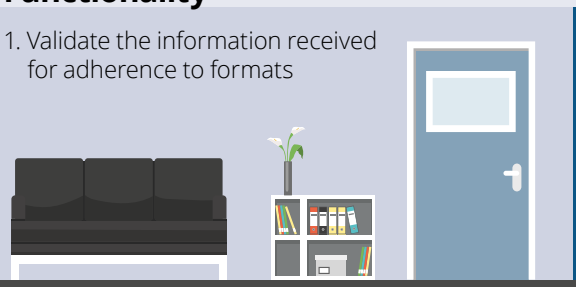
Description

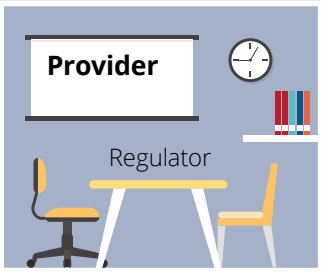
Pre-filing validation for regulatory reporting for new or updates to machinery and equipment financing products. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)



Functionality

1. Validate the information received for adherence to formats





Consumer

Banks

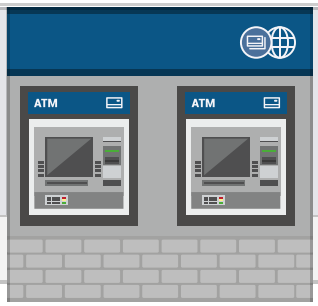
Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

56

Regulatory reporting for machinery and equipment financing products

Description

Filing of regulatory reports for new or updates to machinery and equipment financing products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defin ed data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

57

Validation for reporting of payables management products

Description

Pre-filing validation for regulatory reporting for new or updates to payable management products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Consumer

Banks

Data Standards

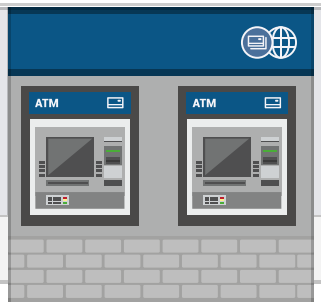
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

58

Regulatory reporting for payables management products

Description

Filing of regulatory reports for new or updates to payables management products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

59

Validation for reporting of receivables management products

Description

Pre-filing validation for regulatory reporting for new or updates to receivables management products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

60

Regulatory reporting for receivables management products

Description

Filing of regulatory reports for new or updates to receivables management products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Consumer

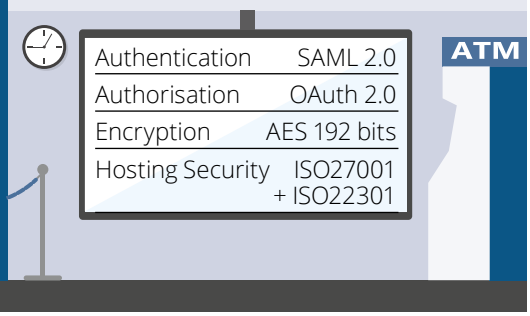
Banks

Data Standards

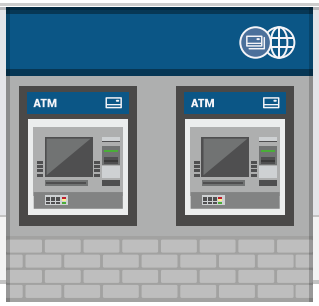
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301



API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

61

Validation for reporting of liquidity management products

Description

Pre-filing validation for regulatory reporting for new or updates to liquidity management products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

62

Regulatory reporting for liquidity management products

Description

Filing of regulatory reports for new or updates to liquidity management products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

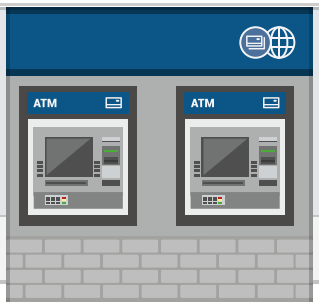
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

63

Validation for reporting of TF import services products

Description

Pre-filing validation for regulatory reporting for new or updates to TF import services (LC financing, import financing etc) products. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

64

Regulatory reporting for TF import services products

Description

Filing of regulatory reports for new or updates to TF import services (LC financing, import financing etc) products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Consumer

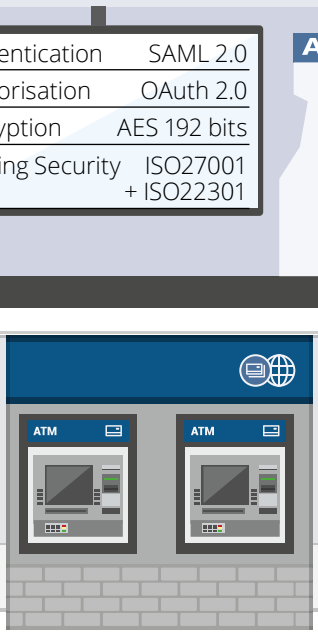
Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301



API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

65

Validation for reporting of TF export services products

Description

Pre-filing validation for regulatory reporting for new or updates to TF export services (Export LC financing etc) products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

66

Regulatory reporting for TF export services products

Description

Filing of regulatory reports for new or updates to TF export services (Export LC financing etc) products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Consumer

Banks

Data Standards

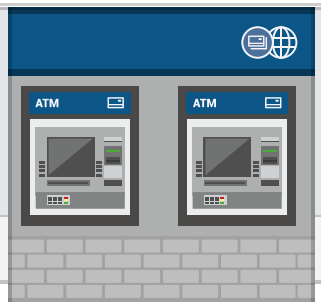
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

67

Validation for reporting of Bank notes products

Description

Pre-filing validation for regulatory reporting for new or updates to Bank notes products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Consumer

Banks

Data Standards

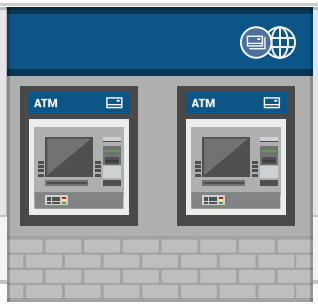
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

68

Regulatory reporting for Bank notes products

Description

Filing of regulatory reports for new or updates to Bank notes products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

69

Validation for reporting of Futures trading products

Description

Pre-filing validation for regulatory reporting for new or updates to Futures trading products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

70

Regulatory reporting for Futures trading products

Description

Filing of regulatory reports for new or updates to Futures trading products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

71

Validation for regulatory reporting of SGS products

Description

Pre-filing validation for regulatory reporting for new or updates to SGS-linked products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

72

Regulatory reporting for SGS products

Description

Filing of regulatory reports for new or updates to SGS-linked products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

73

Validation for regulatory reporting of FX trading products

Description

Pre-filing validation for regulatory reporting for new or updates to FX trading products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

74

Regulatory reporting for FX trading products

Description

Filing of regulatory reports for new or updates to FX trading products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

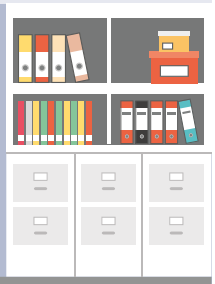
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

75

Validation for regulatory reporting of commodities/precious metals linked products

Description

Pre-filing validation for regulatory reporting for new or updates to commodities/precious metals linked products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)



Functionality

1. Validate the information received for adherence to formats

Consumer

Banks

Data Standards

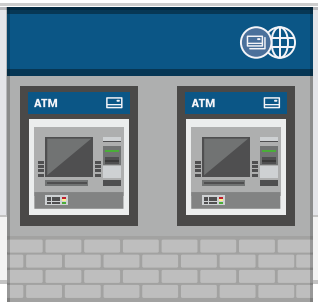
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

76

Regulatory reporting for commodities/precious metals linked products

Description

Filing of regulatory reports for new or updates to commodities/precious metals linked products. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

77

Validation for regulatory reporting of currency and interest rate swaps

Description

Pre-filing validation for regulatory reporting for new or updates to currency and interest rate swaps products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

78

Regulatory reporting for currency and interest rate swaps products

Description

Filing of regulatory reports for new or updates to currency and interest rates swaps products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

79

Validation for regulatory reporting of structured deposit products

Description

Pre-filing validation for regulatory reporting for new or updates to structured deposits products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

80

Regulatory reporting for structured deposit products

Description

Filing of regulatory reports for new or updates to structured deposits products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

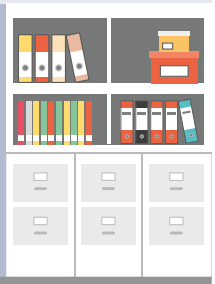
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

81

Validation for regulatory reporting of equity-linked products

Description

Pre-filing validation for regulatory reporting for new or updates to equity-linked products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)



Functionality

1. Validate the information received for adherence to formats

Consumer

Banks

Data Standards

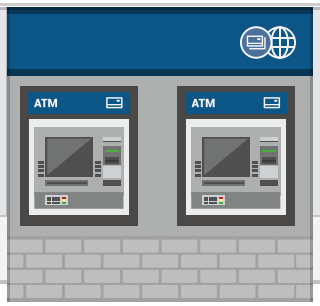
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

82

Regulatory reporting for equity-linked products

Description

Filing of regulatory reports for new or updates to equity-linked products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

83

Validation for regulatory reporting of life insurance products

Description

Pre-filing validation for regulatory reporting for new or updates to life insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

84

Regulatory reporting for life insurance products

Description

Filing of regulatory reports for new or updates to life insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

85

Validation for regulatory reporting of health insurance products

Description

Pre-filing validation for regulatory reporting for new or updates to health insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

86

Regulatory reporting for health insurance products

Description

Filing of regulatory reports for new or updates to health insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy andtechnical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

87

Validation for regulatory reporting for accident and disability insurance products

Description

Pre-filing validation for regulatory reporting for new or updates to accident and disability insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Consumer

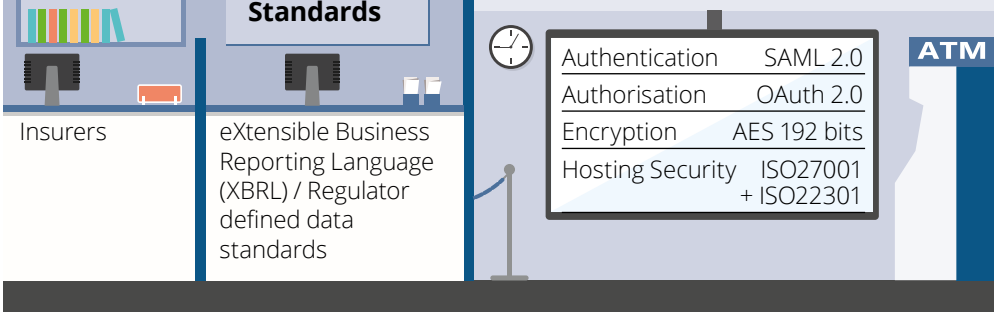
Insurers

Data Standards

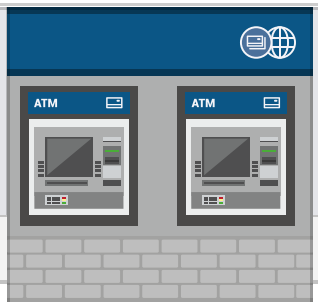
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301



API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

88

Regulatory reporting for accident & disability insurance products

Description

Filing of regulatory reports for new or updates to accident and disability insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

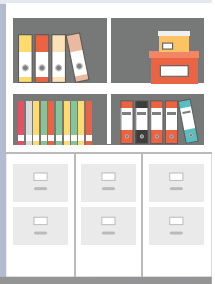
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

89

Validation for regulatory reporting of medical claims insurance products

Description

Pre-filing validation for regulatory reporting for new or updates to medical claims insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)



Functionality

1. Validate the information received for adherence to formats

Consumer

Insurers

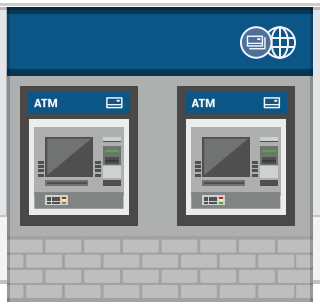
Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

90

Regulatory reporting for medical claims insurance products

Description

Filing of regulatory reports for new or updates to medical claims insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

91

Validation for regulatory reporting of critical illness insurance products

Description

Pre-filing validation for regulatory reporting for new or updates to critical illness insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Consumer

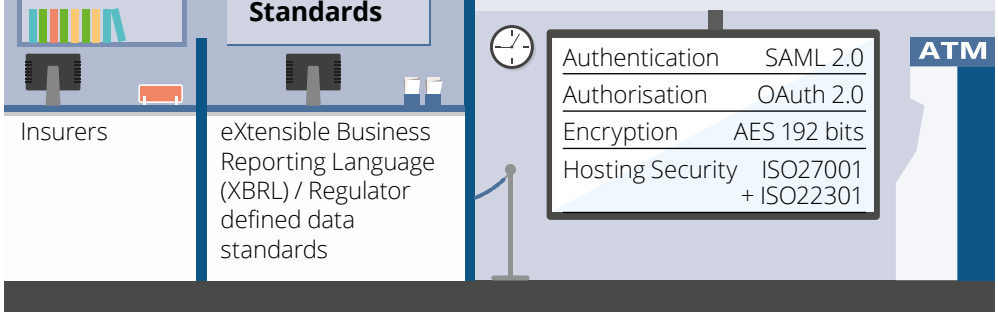
Insurers

Data Standards

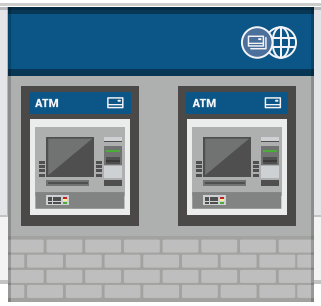
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301



API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

92

Regulatory reporting for critical illness insurance products

Description

Filing of regulatory reports for new or updates to critical illness insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

93

Validation for regulatory reporting of employee benefits and healthcare insurance products

Description

Pre-filing validation for regulatory reporting for new or updates to employee benefits and healthcare insurance products. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

94

Regulatory reporting for employee benefits & healthcare insurance products

Description

Filing of regulatory reports for new or updates to employee benefits and healthcare insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

95

Validation for regulatory reporting of vehicle insurance products

Description

Pre-filing validation for regulatory reporting for new or updates to vehicle insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Consumer

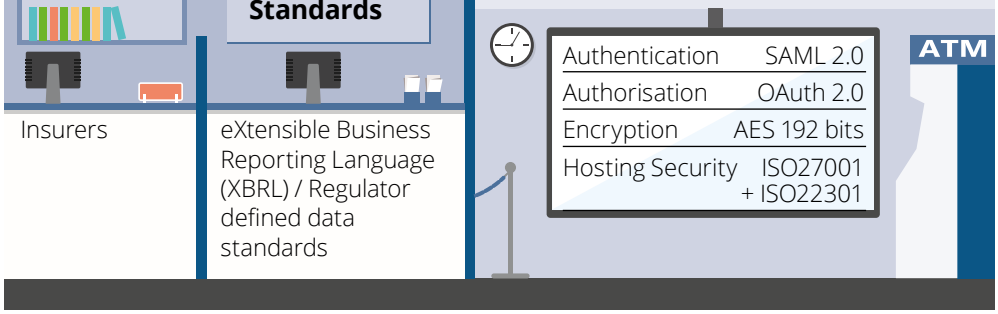
Insurers

Data Standards

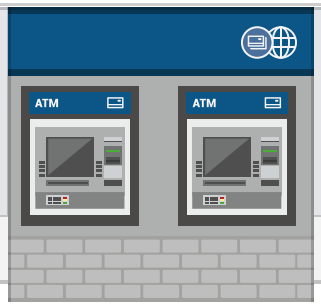
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301



API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

96

Regulatory reporting for vehicle insurance products

Description

Filing of regulatory reports for new or updates to vehicle insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

97

Validation for regulatory reporting of travel insurance products

Description

Pre-filing validation for regulatory reporting for new or updates to travel insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Consumer

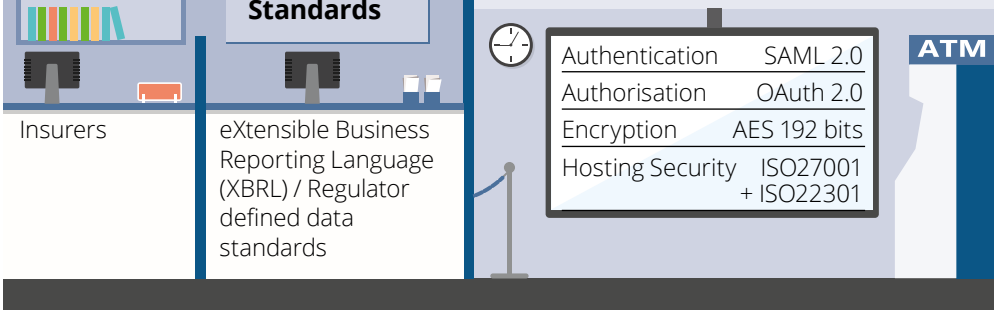
Insurers

Data Standards

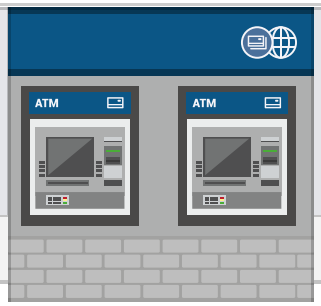
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301



API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

98

Regulatory reporting for travel insurance products

Description

Filing of regulatory reports for new or updates to travel insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

99

Validation for regulatory reporting of home/ property insurance products

Description

Pre-filing validation for regulatory reporting for new or updates to home/property insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Consumer

Insurers

Data Standards

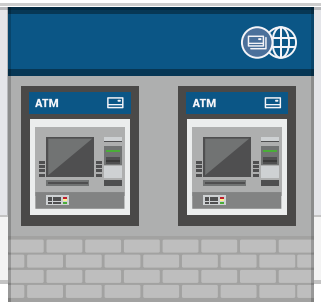
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

100

Regulatory reporting for home/property insurance products

Description

Filing of regulatory reports for new or updates to home/property insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

101

Validation for reporting of insurance-linked savings products

Description

Pre-filing validation for regulatory reporting of new or updates to insurance-linked savings products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Consumer

Insurers

Data Standards

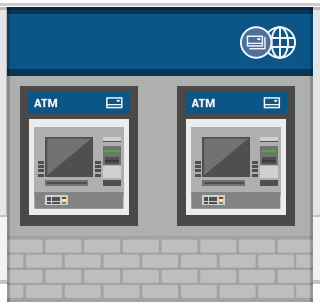
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

102

Regulatory reporting for insurance-linked savings products

Description

Filing of regulatory reports for new or updates to insurance-linked savings products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

103

Validation for reporting of investment-linked insurance products

Description

Pre-filing validation for regulatory reporting for new or updates to investment-linked insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Consumer

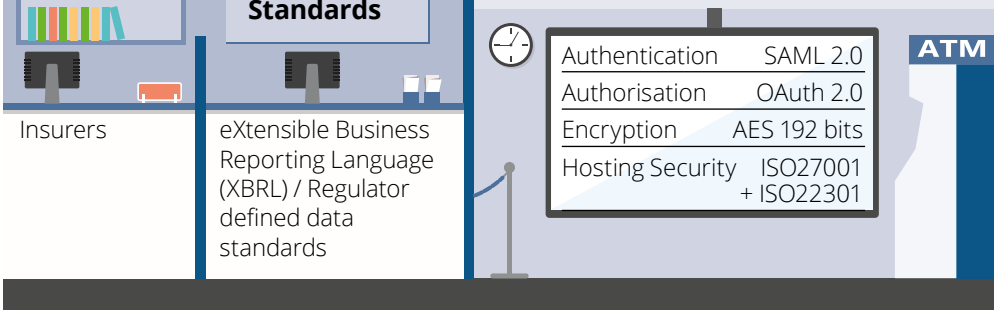
Insurers

Data Standards

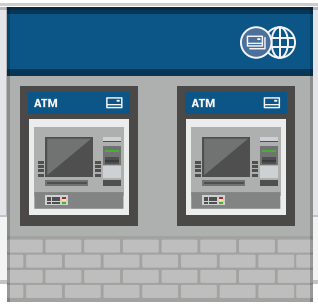
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301



API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

104

Regulatory reporting for investment-linked insurance products

Description

Filing of regulatory reports for new or updates to investment-linked insurance products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

105

Validation for regulatory reporting of discontinued asset management products

Description

Pre-filing validation for regulatory reporting of discontinued asset management products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

106

Regulatory reporting of discontinued asset management products

Description

Common API for standardised regulatory reporting of discontinued asset management products.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

107

Validation for regulatory reporting of discontinued banking products

Description

Pre-filing validation for standardised regulatory reporting of discontinued banking products
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Consumer

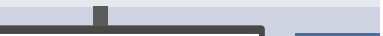
Banks

Data Standards

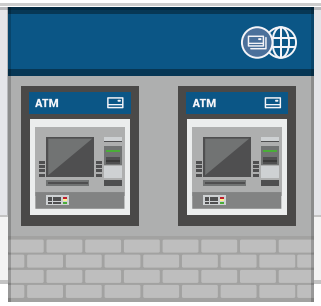
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301



API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

108

Regulatory reporting of discontinued banking products

Description

Common API for standardised regulatory reporting of discontinued banking products
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

109

Validation for regulatory reporting of discontinued insurance products

Description

Pre-filing validation for standardised regulatory reporting of discontinued insurance products
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for adherence to formats

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

110

Regulatory reporting of discontinued insurance products

Description

Common API for standardised regulatory reporting of discontinued insurance products
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new product record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

111

Retrieve equity based product details

Description

Retrieve product details of equity-based asset management product.

Functionality

1. Read/Retrieve product details

Provider

AMC

Consumer

Bank, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

112

Retrieve fixed-income based product details

Description

Retrieve product details of fixed-income based asset management product.

Functionality

1. Read/Retrieve product details

Provider

AMC

Consumer

Bank, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

113

Retrieve derivatives-based product details

Description

Retrieve product details of derivatives-based asset management product.

Functionality

1. Read/Retrieve product details

Provider

AMC

Consumer

Bank, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

114

Retrieve quants-based product details

Description

Retrieve product details of quants-based asset management product.

Functionality

1. Read/Retrieve product details

Provider

AMC

Consumer

Bank, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

115

Retrieve savings account product details

Description

Retrieve product details of savings account banking product.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

116

Retrieve current account product details

Description

Retrieve product details of current account banking product.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

117

Retrieve fixed/term deposit product details

Description

Retrieve product details of fixed/term deposit banking product.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

ATM

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

118

Retrieve credit card product details

Description

Retrieve product details of credit card banking product.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

ATM

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

119

Retrieve debit card product details

Description

Retrieve product details of debit card banking product.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

ATM

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

120

Retrieve forex card product details

Description

Retrieve product details of forex card banking product.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

ATM

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

121

Retrieve unit trust investment product details

Description

Retrieve product details of unit trust investment product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

122

Retrieve CPF- & SRS-linked investment product details

Description

Retrieve product details of CPF- & SRS-linked investment product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

123

Retrieve FX & cash management product details

Description

Retrieve product details of FX & cash management linked investment product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

124

Retrieve structured investment/deposit product details

Description

Retrieve product details of structured investment/deposit product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

125

Retrieve home loan product details

Description

Retrieve product details of home loan product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

126

Retrieve personal (unsecured) loan product details

Description

Retrieve product details of personal (unsecured) loan product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

127

Retrieve vehicle loan product details

Description

Retrieve product details of vehicle loan product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

128

Retrieve education loan product details

Description

Retrieve product details of education loan product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

129

Retrieve secured financing/loan product details

Description

Retrieve product details of secured financing product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

130

Retrieve current account product details

Description

Retrieve product details of current account product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

131

Retrieve multi-currency account product details

Description

Retrieve product details of multi-currency account product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

132

Retrieve fixed/term deposit product details

Description

Retrieve product details of fixed/term deposit investment product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

133

Retrieve RMB trade settlement account product details

Description

Retrieve product details of RMB trade settlements account product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

134

Retrieve escrow service product details

Description

Retrieve product details of escrow service product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

ATM

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

135

Retrieve corporate credit card product details

Description

Retrieve product details of corporate credit card product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

136

Retrieve working-capital financing product details

Description

Retrieve product details of working capital financing product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

137

Retrieve commercial & property financing product details

Description

Retrieve product details of commercial and property financing product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

138

Retrieve vehicle financing product details

Description

Retrieve product details of vehicle financing product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

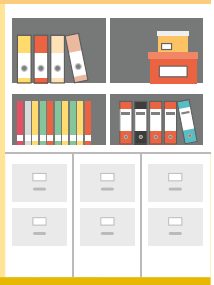
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

139

Retrieve machinery & equipment financing product details

Description

Retrieve product details of machinery and equipment financing product of the bank.



Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

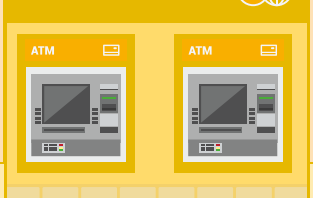
Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

140

Retrieve payables management product details

Description

Retrieve product details of payables management product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

141

Retrieve receivables management product details

Description

Retrieve product details of receivables management product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

142

Retrieve liquidity management product details

Description

Retrieve product details of liquidity management product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

143

Retrieve TF import service product details

Description

Retrieve product details of trade finance import service product (eg. Letter of Credit) of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

144

Retrieve TF export service product details

Description

Retrieve product details of trade finance export service (eg. Export LC) product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

145

Retrieve bank notes treasury management product details

Description

Retrieve product details of bank notes treasury management product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

146

Retrieve Futures-linked treasury management product details

Description

Retrieve product details of Futures-linked treasury management product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

147

Retrieve SGS-linked treasury management product details

Description

Retrieve product details of Singapore Government Securities-linked treasury management product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

148

Retrieve FX-linked treasury management product details

Description

Retrieve product details of FX-linked treasury management product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

149

Retrieve commodities/precious metals-linked treasury management product details

Description

Retrieve product details of commodities & precious metals linked treasury management product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

150

Retrieve currency- & interest rate- swaps linked treasury management product details

Description

Retrieve product details of currency/interest rate swaps based treasury management product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

151

Retrieve structured-deposit investment product details

Description

Retrieve product details of structured deposit investment product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

152

Retrieve equity-linked notes investment product details

Description

Retrieve product details of equity-linked notes investment product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

153

Retrieve unit trust linked investment product details

Description

Retrieve product details of unit trust linked investment product of the bank.

Functionality

1. Read/Retrieve product details

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

154

Retrieve life insurance product details

Description

Retrieve product details of life insurance product of the insurer.

Functionality

1. Read/Retrieve product details

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Life Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

155

Retrieve health insurance product details

Description

Retrieve product details of health insurance product of the insurer.

Functionality

1. Read/Retrieve product details

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Property and Casualty Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

156

Retrieve accident & disability insurance product details

Description

Retrieve product details of accident & disability insurance product of the insurer.

Functionality

1. Read/Retrieve product details

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Life Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

157

Retrieve medical claims insurance product details

Description

Retrieve product details of medical claims insurance product of the insurer.

Functionality

1. Read/Retrieve product details

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Property and Casualty Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

158

Retrieve critical illness insurance product details

Description

Retrieve product details of critical illness insurance product of the insurer.

Functionality

1. Read/Retrieve product details

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Life Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

159

Retrieve employee benefits & healthcare insurance product details

Description

Retrieve product details of employee benefits and healthcare insurance product of the insurer.

Functionality

1. Read/Retrieve product details

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Property and Casualty Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

160

Retrieve vehicle insurance product details

Description

Retrieve product details of vehicle insurance product of the insurer.

Functionality

1. Read/Retrieve product details

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Property and Casualty Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

161

Retrieve travel insurance product details

Description

Retrieve product details of travel insurance product of the insurer.

Functionality

1. Read/Retrieve product details

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Property and Casualty Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

162

Retrieve home/property insurance product details

Description

Retrieve product details of home/ property insurance product of the insurer.

Functionality

1. Read/Retrieve product details

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Property and Casualty Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

163

Retrieve savings-linked insurance product details

Description

Retrieve product details of savings-linked insurance product of the insurer.

Functionality

1. Read/Retrieve product details

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Life Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

164

Retrieve investment-linked insurance product details

Description

Retrieve product details of investment-linked insurance product of the insurer.

Functionality

1. Read/Retrieve product details

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Life Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

165

Lead generation with banking channel partners

Description

Facilitates exchange of contact information of prospective customers who have granted consent to release details for cross-selling of products & services.

Functionality

1. Retrieve contact information

Provider

Banks

Consumer

AMC, Insurer, Other Fis, Channel Partners

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

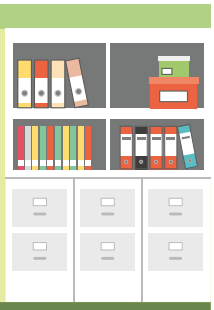
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

166

Lead generation with insurance channel partners

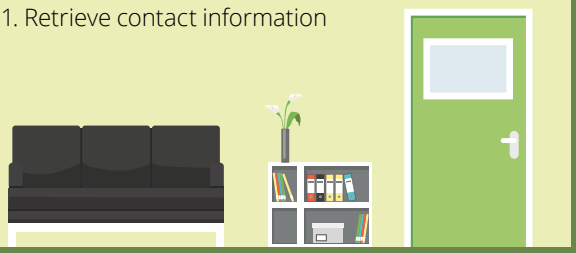
Description

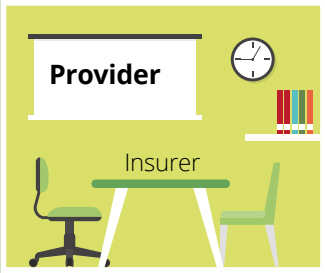
Facilitates exchange of contact information of prospective customers who have granted consent to release details for cross-selling of products & services.



Functionality

1. Retrieve contact information





Consumer

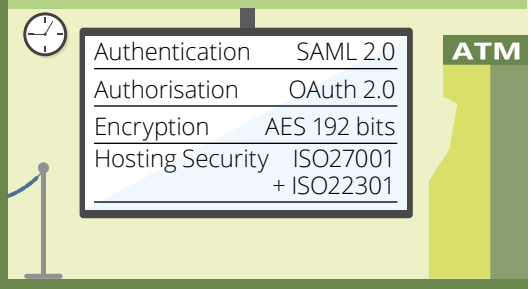
AMC, Bank, Other Fis, Channel Partners

Data Standards

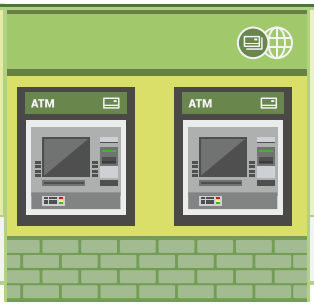
ACORD XML

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301



API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

167

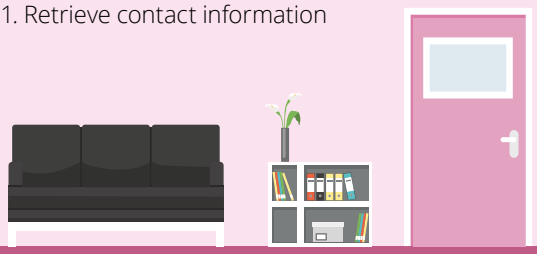
Lead generation with asset management channel partners

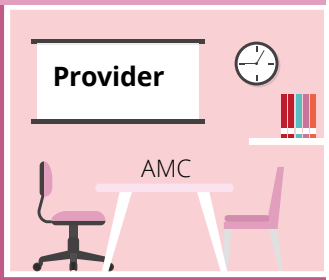
Description

Facilitates exchange of contact information of prospective customers who have granted consent to release details for cross-selling of products & services.

Functionality

1. Retrieve contact information





Consumer

Bank, Insurers, Other Fis, Channel Partners

Data Standards

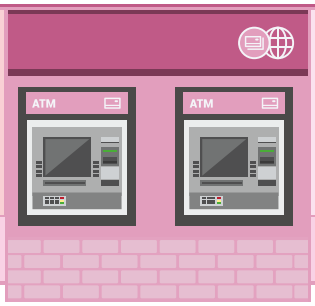
Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

168

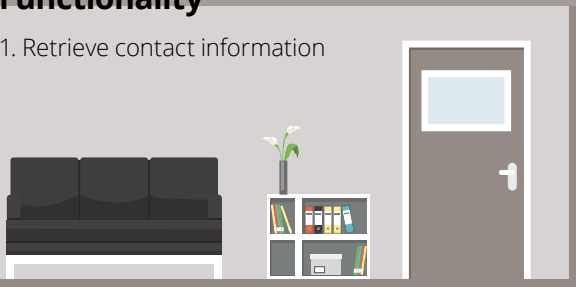
Lead generation with Govt. agency channel partners - Individuals

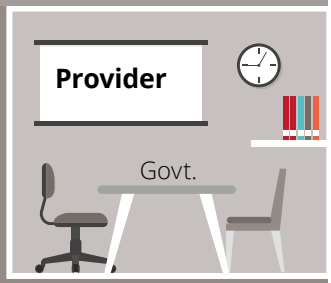
Description

Facilitates exchange of contact information of prospective customers who have granted consent to release details for cross-selling of products & services.
(n.b. API implementation subject to jurisdictional restrictions, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve contact information





Consumer

AMC, Bank, Insurer and other FIs

Data Standards

Open Financial Exchange (OFX) / Govt. Proprietary data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

169

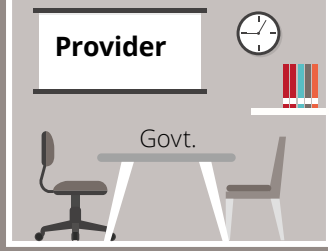
Lead generation with Govt. agency channel partners - Family

Description

Facilitates exchange of contact information of families of prospective customers who have granted consent to release related details for cross-selling of products & services.
(n.b. API implementation subject to jurisdictional restrictions, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve contact information



Consumer

AMC, Bank, Insurer and other FIs

Data Standards

Open Financial Exchange (OFX) / Govt. Proprietary data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

170

Quote generation for equity-linked products

Description

Provide quotation for equity-linked asset management product.

Functionality

1. Retrieve Quote

Provider

AMC

Consumer

Bank, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

171

Quote generation for fixed-income products

Description

Provide quotation for fixed-income asset management product.

Functionality

1. Retrieve Quote

Provider

AMC

Consumer

Bank, Insurer, Other FIs, end customer

Data Standards

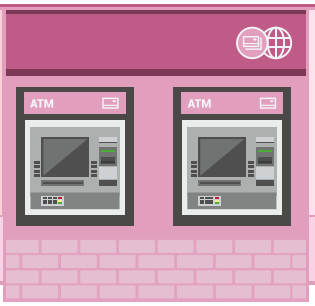
Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

172

Quote generation for derivatives-linked products

Description

Provide quotation for derivatives-linked asset management product.

Functionality

1. Retrieve Quote

Provider

AMC

Consumer

Bank, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

173

Quote generation for quants-linked products

Description

Provide quotation for quants-linked asset management product.

Functionality

1. Retrieve Quote

Provider

AMC

Consumer

Bank, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

174

Quote generation for savings account products

Description

Provide quotation for savings account product of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

175

Quote generation for checking account products

Description

Provide quotation for checking account product of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

176

Quote generation for fixed/term deposit products (retail)

Description

Provide quotation for fixed/term deposit products of the retail bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

177

Quote generation for credit card products

Description

Provide quotation for credit card product of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301 + PCIDSS

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

178

Quote generation for debit card products

Description

Provide quotation for debit card product of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301 + PCIDSS

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

179

Quote generation for forex card products

Description

Provide quotation for forex card product of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301 + PCIDSS

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

180

Quote generation for unit trust linked investment products

Description

Provide quotation for unit trust investment product of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

181

Quote generation for CPF & SRS-linked investment products

Description

Provide quotation for CPF- & SRS-linked investment product of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

182

Quote generation for FX & cash management products

Description

Provide quotation for FX & cash management product of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

183

Quote generation for structured investment/ deposit investment products

Description

Provide quotation for structured investment/deposit product of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

184

Quote generation for home loan products

Description

Provide quotation for home loan product of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

185

Quote generation for personal (unsecured) loan products

Description

Provide quotation for personal (unsecured) loan product of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

186

Quote generation for vehicle loan products

Description

Provide quotation for vehicle loan product of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

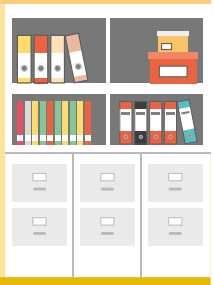
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

187

Quote generation for education loan products

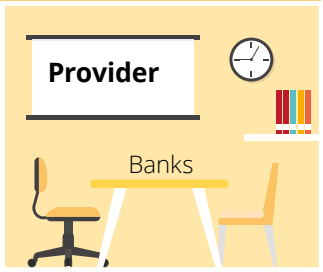
Description

Provide quotation for education loan products of the bank.



Functionality

1. Retrieve Quote



Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

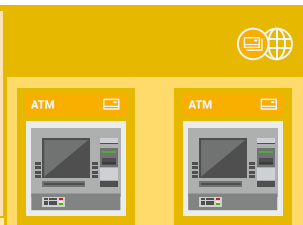
Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

188

Quote generation for secured financing products

Description

Provide quotation for secured financing products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

ATM

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

189

Quote generation for current account products

Description

Provide quotation for current account products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

190

Quote generation for currency account products

Description

Provide quotation for currency account products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

191

Quote generation for fixed/term deposit products (commercial)

Description

Provide quotation for fixed/term deposit products of the commercial bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

192

Quote generation for RMB trade settlements account products

Description

Provide quotation for RMB trade settlements products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

193

Quote generation for escrow services products

Description

Provide quotation for escrow services products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

194

Quote generation for corporate credit card products

Description

Provide quotation for corporate credit card products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

195

Quote generation for working capital financing products

Description

Provide quotation for working capital financing products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

196

Quote generation for commercial & property financing products

Description

Provide quotation for commercial and property financing products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

197

Quote generation for vehicle financing products

Description

Provide quotation for vehicle financing products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

198

Quote generation for machinery & equipment financing products

Description

Provide quotation for machinery and equipment financing products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

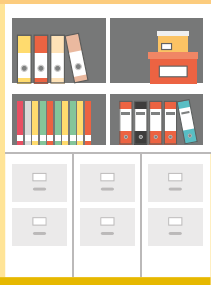
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

199

Quote generation for payables management products

Description

Provide quotation for payables management products of the bank.



Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

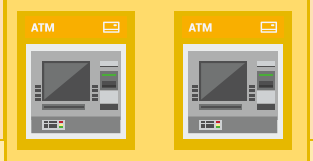
Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

200

Quote generation for receivables management products

Description

Provide quotation for receivables management products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

201

Quote generation for liquidity management products

Description

Provide quotation for liquidity management products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

202

Quote generation for TF import services products

Description

Provide quotation for trade finance import services products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

ATM

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

203

Quote generation for TF export services products

Description

Provide quotation for trade finance export services products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

204

Quote generation for bank notes linked treasury management products

Description

Provide quotation for bank note based treasury management products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

205

Quote generation for Futures-linked treasury management products

Description

Provide quotation for Futures-linked treasury management products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

206

Quote generation for SGS-bank linked treasury management products

Description

Provide quotation for Singapore Government Securities linked treasury management products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

207

Quote generation for FX-linked treasury management products

Description

Provide quotation for FX-linked treasury management products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

208

Quote generation for commodities/precious metals linked treasury management products

Description

Provide quotation for commodities/ precious metals linked treasury management products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

209

Quote generation for currency- & interest rate swaps linked treasury management products

Description

Provide quotation for currency- & interest rate swaps linked treasury management products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

210

Quote generation for structured deposits investment products

Description

Provide quotation for structured deposits investment products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

211

Quote generation for equity linked notes investment products

Description

Provide quotation for equity-linked notes investment products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

212

Quote generation for unit trust linked investment products

Description

Provide quotation for unit trust investment products of the bank.

Functionality

1. Retrieve Quote

Provider

Banks

Consumer

AMC, Insurer, Other FIs, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

213

Quote generation for life insurance products

Description

Provide quotation for life insurance products of the insurer.

Functionality

1. Retrieve Quote

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Life Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

214

Quote generation for health insurance products

Description

Provide quotation for healthcare insurance products of the insurer.

Functionality

1. Retrieve Quote

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Property and Casualty Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

215

Quote generation for accident and disability insurance products

Description

Provide quotation for accident and disability insurance products of the insurer.

Functionality

1. Retrieve Quote

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Life Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

216

Quote generation for medical claims insurance products

Description

Provide quotation for medical claims insurance products of the insurer.

Functionality

1. Retrieve Quote

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Property and Casualty Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

217

Quote generation for critical illness insurance products

Description

Provide quotation for critical illness insurance products of the insurer.

Functionality

1. Retrieve Quote

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Life Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

218

Quote generation for employee benefits and healthcare insurance products

Description

Provide quotation for employee benefits and healthcare insurance products of the insurer.

Functionality

1. Retrieve Quote

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Property and Casualty Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

219

Quote generation for vehicle insurance products

Description

Provide quotation for vehicle insurance products of the insurer.

Functionality

1. Retrieve Quote

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Property and Casualty Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

220

Quote generation for travel insurance products

Description

Provide quotation for travel insurance products of the insurer.

Functionality

1. Retrieve Quote

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Property and Casualty Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

221

Quote generation for home/property insurance products

Description

Provide quotation for home/property insurance products of the insurer.

Functionality

1. Retrieve Quote

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Property and Casualty Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

222

Quote generation for savings-linked insurance products

Description

Provide quotation for savings-linked insurance products of the insurer.

Functionality

1. Retrieve Quote

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

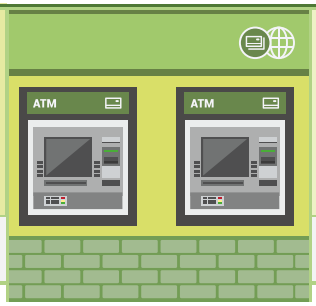
ACORD XML for Life Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

223

Quote generation for investment-linked insurance products

Description

Provide quotation for investment-linked insurance products of the insurer.

Functionality

1. Retrieve Quote

Provider

Insurer

Consumer

AMC, Bank, Other FIs, end customer

Data Standards

ACORD XML for Life Insurance

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

224

Reporting of Maid and Foreign Worker policy information to Govt Agency

Description

Facilitates agency reporting of new and updates to insurance policy details for Maids and Foreign Workers.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record
2. Update existing record

Provider

Govt.

Consumer

Insurers

Data Standards

Govt. Proprietary data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

225

Retrieve NCD related information based on NRIC / FIN / Company registration no / Vehicle number

Description

Retrieve No-Claims-Discount details based on NRIC / FIN / Company registration no / Vehicle number for new/renewal of vehicle insurance policies.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve NCD data

Provider

e-Claim Service provider

Consumer

Insurers

Data Standards

ACORD XML for Property and Casualty Insurance

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

226

Transmission of Vehicle details to Transportation Authority

Description

Agency reporting of new and updates to vehicle details. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new vehicle record
2. Update existing vehicle record

Provider

Govt.

Consumer

Insurers

Data Standards

Electronic Data Interchange For Administration, Commerce and Transport (EDIFACT)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

227

Transmission of Motor Claim Data to e-Claim service provider

Description

Agency reporting of vehicle claims data by insurers for industry analysis and benchmarking.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new motor claim record
2. Update an existing motor claim record

Provider

e-Claim Service provider

Consumer

Insurers

Data Standards

ACORD XML for Property and Casualty Insurance

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

228

eKYC - Authentication for Individuals

Description

Retrieve personal data from Govt. databases for individual authentication during 1) creation of new accounts; 2) client servicing requests.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve authentication information

Provider

Govt. / MyInfo

Consumer

AMC, Bank, Insurers

Data Standards

SAML 2.0

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

229

eKYC - Authentication for organisations

Description

Retrieve corporate data from Govt. databases for corporate authentication during 1) creation of new accounts; 2) client servicing requests.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve authentication information

Provider

Govt. / CorpInfo

Consumer

AMC, Bank, Insurers, Regulator

Data Standards

SAML 2.0

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

230

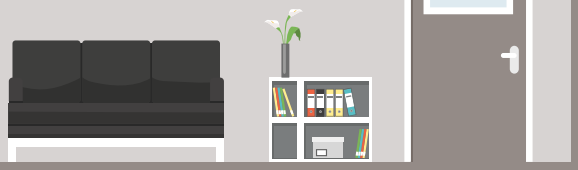
Customer Data Retrieval - Individuals

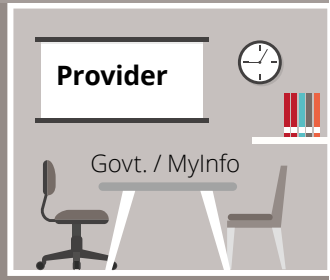
Description

This API will fetch the customer data from the provider (Govt. / MyInfo) based on a unique identifier and an Authorisation from the individual to share the data with the requestor. This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.).
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve authentication information





Consumer

AMC, Bank, Insurers

Data Standards

Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

231

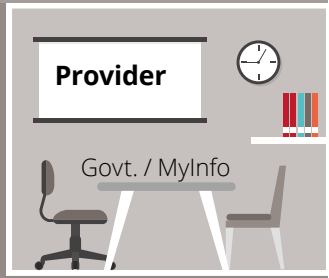
Customer Data Retrieval (Contact category) - Individuals

Description

This API will fetch the customer details from the provider (Govt. / MyInfo) based on a unique identifier and an Authorisation from the individual to share the data with the requestor. This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.).
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve contact information



Consumer

AMC, Banks, Insurers

Data Standards

Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

232

Customer Data Retrieval (Income & CPF category) - Individuals

Description

This API will fetch the customer details from the provider (MyInfo/ Govt.) based on a unique identifier and an Authorisation from the individual to share the data with the requestor. This data will be used for electronic form filing and underwriting purposes by requesting organisations (AMC, Banks, Insurers, etc.).
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve income & cpf information

Provider

MyInfo

Consumer

AMC, Banks, Insurers

Data Standards

Singapore Data Ref Model (SG-DRM) data standa rd

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

233

Customer Data Retrieval (Education & Employment) - Individuals

Description

This API will fetch the customer details from the provider (MyInfo/ Govt.) based on a unique identifier and an Authorisation from the individual to share the data with the requestor. This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.).
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve education & employment information

Provider

MyInfo

Consumer

AMC, Banks, Insurers

Data Standards

Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

234

Customer Data Retrieval (Family) - Individuals

Description

This API will fetch the customer details from the provider (MyInfo/ Govt.) based on a unique identifier and an Authorisation from the individual to share the data with the requestor. This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.). (1) Data retrieval of an individual during applications for new insurance policy, bank account opening, loan account opening, credit card, investment account, etc. across all business channels

(2) Data retrieval of additions to an individual's family (birth, marriage) for the purpose of upsell/ cross-sell across all business channels
(3) Data retrieval of deletions to an individual's family (divorce/separation) for the purpose of account updates across all business channels.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve family information of individuals

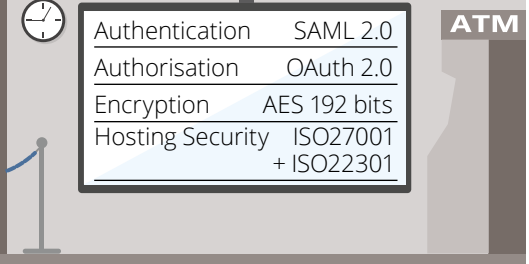
Consumer

AMC, Banks, Insurers

Data Standards

Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards



API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

235

Customer Data Retrieval (Personal category) - Organisations

Description

This API will fetch the customer details from the provider (Govt./CorpInfo) based on a unique identifier and an Authorisation from the organisation to share the data with the requestor. This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.).
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve personal information

Consumer

AMC, Banks, Insurers

Data Standards

ACRA's revised XBRL filing standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

236

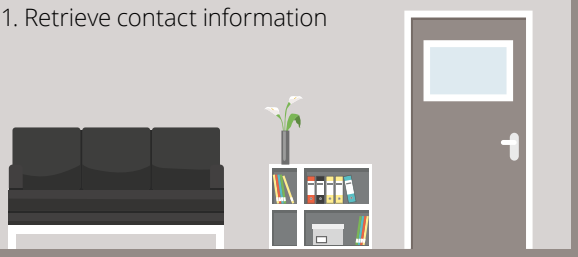
Customer Data Retrieval (Contact category) - Organisations

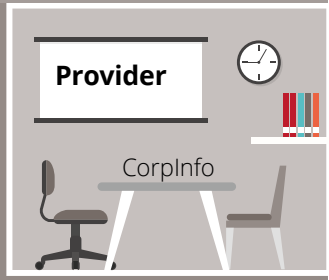
Description

This API will fetch the customer details from the provider (CorpInfo/ Govt.) based on a unique identifier and an Authorisation from the organisation to share the data with the requestor. This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.).
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve contact information





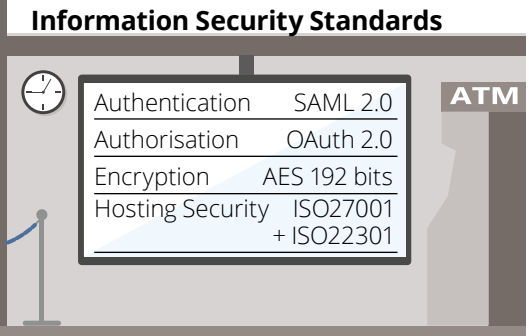
Consumer

AMC, Banks, Insurers

Data Standards

ACRA's revised XBRL filing standard

Information Security Standards



API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

237

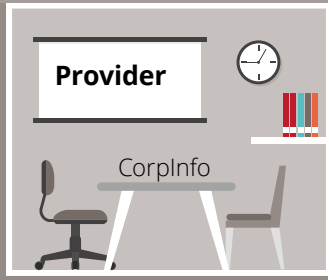
Customer Data Retrieval (Income & CPF category) - Organisations

Description

This API will fetch the customer details from the provider (CorpInfo/ Govt.) based on the registration details and an Authorisation from the customer to share the data with the requestor. This data will be used for electronic form filing and underwriting purposes by requesting organisations (AMC, Banks, Insurers, etc.).
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve income & cpf information for organisations



Consumer

AMC, Banks, Insurers

Data Standards

ACRA's revised XBRL filing standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

238

Customer Data Retrieval (Vehicle information)

Description

This API will fetch the customer vehicle details from the provider (MyInfo/ Govt.) based on the registration details and an Authorisation from the customer to share the data with the requestor.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve vehicle information

Provider

Land Transport Authority (LTA)

Consumer

Insurers

Data Standards

Electronic Data Interchange For Administration, Commerce and Transport (EDIFACT)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

239

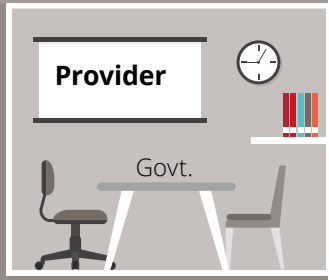
Customer Data Retrieval (Death information)

Description

This API will fetch the death records of people in Singapore from the provider (Govt.) based on the request from an AMC, bank or Insurer. (1) Death record retrieval by an AMC company for processing of termination of account (due to death)
(2) Death record retrieval by a bank for processing of termination of account or loan (due to death)
(3) Death record retrieval by an insurance company for processing of claims (due to death)
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve death records



Consumer

AMC, Banks, Insurers

Data Standards

XML/JSON based data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

240

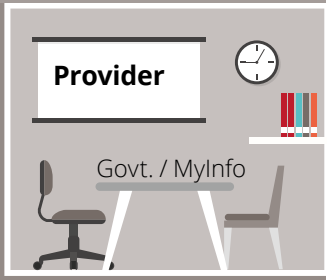
Validation of Customer Data (Personal category) - Individuals

Description

This API will validate the details provided by the customer against the customer details stored with the provider (MyInfo/ Govt.). This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.). (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for correctness



Consumer

AMC, Banks, Insurers

Data Standards

Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

241

Validation of Customer Data (Contact category) - Individuals

Description

This API will validate the details provided by the customer against the customer details stored with the provider (MyInfo/ Govt.). This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.). (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for correctness

Consumer

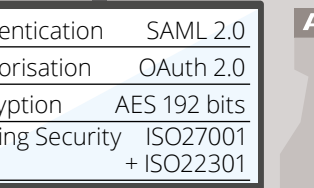
AMC, Banks, Insurers

Data Standards

Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301



API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

242

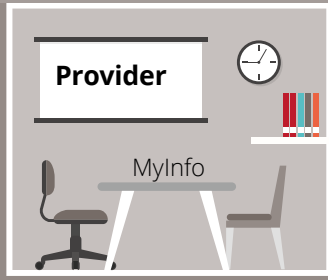
Validation of Customer Data (Income & CPF category) - Individuals

Description

This API will validate the details provided by the customer against the customer details stored with the provider (MyInfo/ Govt.). This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.).
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for correctness



Consumer

AMC, Banks, Insurers

Data Standards

Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

243

Validation of Customer Data (Education & Employment) - Individuals

Description

This API will validate the details provided by the customer against the customer details stored with the provider (MyInfo/ Govt.). This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.).
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for correctness

Consumer

AMC, Banks, Insurers

Data Standards

Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

244

Validation of Customer Data (Family) - Individuals

Description

This API will validate the details provided by the customer against the customer details stored with the provider (MyInfo/ Govt.). This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.). (1) Data retrieval of an individual during applications for new insurance policy, bank account opening, loan account opening, credit card, investment account, etc. across all business channels

(2) Data retrieval of additions to an individual's family (birth, marriage) for the purpose of upsell/ cross-sell across all business channels
(3) Data retrieval of deletions to an individual's family (divorce/separation) for the purpose of account updates across all business channels
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for correctness

Consumer

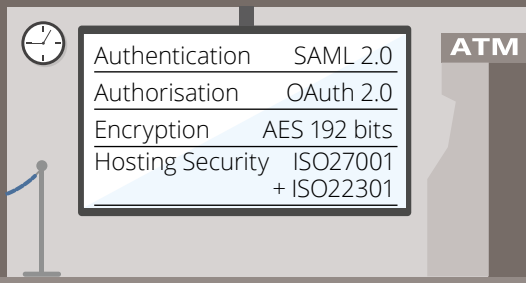
AMC, Banks, Insurers

Data Standards

Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301



API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

245

Validation of Customer Data (Address from postal code) - Individual

Description

This API will provide and interface for Banks, Insurance and AMCs to retrieve address details of a customer based on the postal code of the customer.

Functionality

1. Validate the information received for correctness

Provider

Govt.

Consumer

Banks, Insurers and AMCs

Data Standards

SingPost Proprietary data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

246

Validation of Customer Data - Organisations

Description

This API will validate the details provided by the customer against the customer details stored with the provider (Govt./ CorpInfo). This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.).
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for correctness

Provider

Govt. / CorpInfo

Consumer

AMC, Banks, Insurers

Data Standards

Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

247

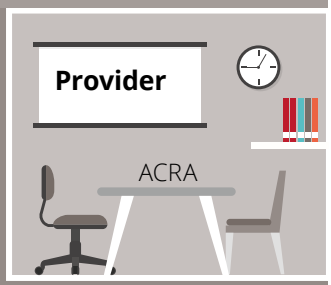
Validation of Customer Data (Contact category) - Organisations

Description

This API will validate the details provided by the customer against the customer details stored with the provider (Corpinfo/ Govt.). This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.).
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for correctness



Consumer

AMC, Banks, Insurers

Data Standards

ACRA's revised XBRL filing standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

248

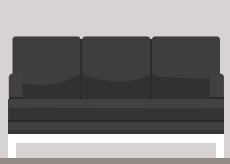
Validation of Data Retrieval (Income & CPF category) - Organisations

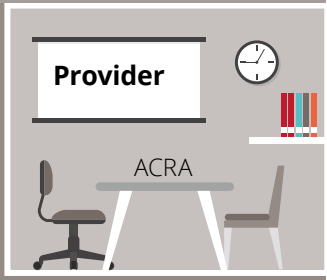
Description

This API will validate the details provided by the customer against the customer details stored with the provider (Corpinfo/ Govt.). This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.).
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for correctness





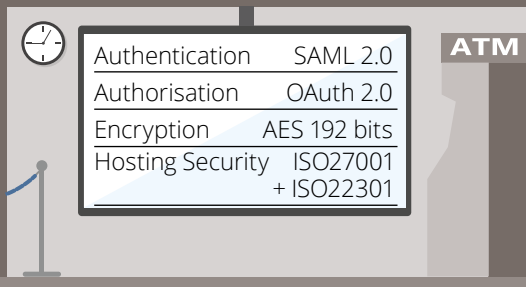
Consumer

AMC, Banks, Insurers

Data Standards

ACRA's revised XBRL filing standard

Information Security Standards



API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

249

Validation of Customer Data (Vehicle information)

Description

This API will validate the details provided by the customer against the customer details stored with the provider (MyInfo/ Govt.).
This data will be used for electronic form filing purpose by requesting organisations (AMC, Banks, Insurers, etc.). Vehicle data retrieval by an insurance company during the application of a new policy and/or renewals of policies across all business channels.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the information received for correctness

Provider

Land Transport Authority (LTA)

Consumer

Insurers

Data Standards

Electronic Data Interchange For Administration, Commerce and Transport (EDIFACT)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

250

Retrieve customer health records

Description

This API will fetch the customer health records from the provider (Govt.) based on a unique identifier and an Authorisation from the customer to share the data with the requestor. This data will be used for underwriting, claims, renewals and revivals of insurance policies. (1) Health data retrieval by an insurance company to assist with the underwriting decision for a new policy or loan (2) Health data retrieval by an insurance company to assist with the claims decision for an existing policy holder

(3) Health data retrieval by an insurance company to assist with the renewal premium calculations (for health insurance) for an existing policy holder (4) Health data retrieval by an insurance company to assist with the premium calculations for the revival of a lapsed policy

(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve customer health data

Consumer

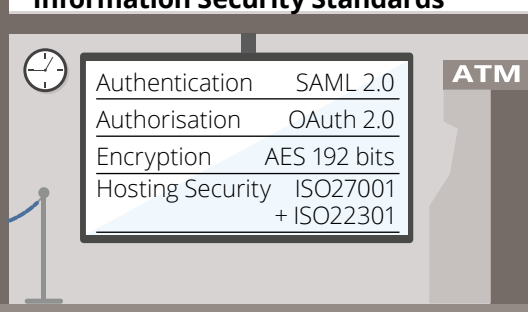
Banks and Insurers

Data Standards

Health Level 7 (HL7) / Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

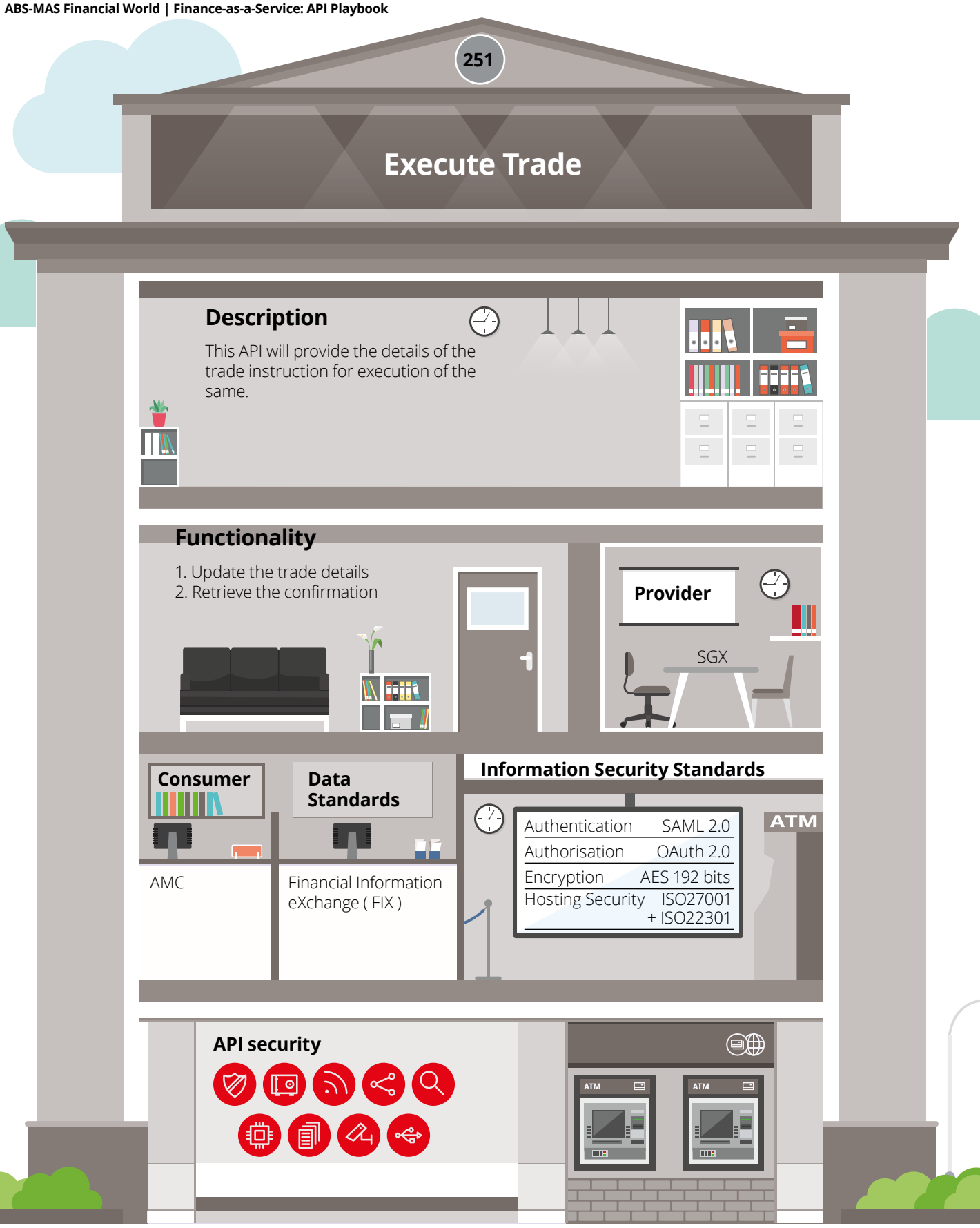
Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301



API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

252

Receive Trade Confirmation

Description

This API will retrieve the confirmation of the trade from the exchange.

Functionality

1. Retrieve trade confirmation

Provider

SGX

Consumer

AMC

Data Standards

Financial Information eXchange (FIX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

253

Send agent details to GIA

Description

Agency reporting of insurance agent details to General Insurance Association.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Update the fraud database

Provider

General Insurance Association

Consumer

Insurance

Data Standards

GIA Proprietary data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

254

Subscription/redemption of SGS Bonds & T-Bills

Description

The API will provide an interface for subscribing and redeeming investments in SGS bonds and T-Bills.

Functionality

1. Update subscription details
2. Retrieve subscription details
3. Retrieve the details of trades
4. Update trade details

Provider

SGX

Consumer

Banks

Data Standards

Financial Information eXchange (FIX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

255

Retrieve Property Price Index /Resale price index

Description

The API will provide an interface for Banks to retrieve Property Price Index /Resale price index from URA by reporting period, property category (residential/commercial/HDB), type of property, area of property from Govt Agency.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve property price index/ resale price index

Provider

Govt.

Consumer

Banks

Data Standards

Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

256

Exchange of customer's loan application status

Description

The API will provide an interface for Banks to exchange customer's loan application status with Govt Agency.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve confirmation details of loan application

Provider

Govt.

Consumer

Banks

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

257

Buyer to provide transaction details

Description

The API will provide an interface for the buyer to upload the transaction details (invoices, etc.) for purchases made against the commercial loans taken by the buyer.

Functionality

1. Update the transaction details

Provider

Banks

Consumer

All Corporates

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

258

Request for Line of Credit - Provide documents (Buyer)

Description

The API will provide an interface for the buyer to upload the request for line of credit and supporting documents. Banks require supporting documents for underwriting loans from the buyer.

Functionality

1. Update the request for LC
2. Retrieve supporting documents

Provider

Banks

Consumer

All Corporates

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	SFTP
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

259

Request for Line of Credit - Provide details (Buyer)

Description

The API will provide an interface for the buyer to provide the details of the transaction for which the credit is expected. Banks require buyer details for underwriting loans.

Functionality

1. Update the transaction details

Provider

Banks

Consumer

All Corporates

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

260

Provide confirmation of line of credit

Description

The API will provide an interface for the buyer to pull the approved line of credit from the bank. Once a line of credit is approved,the buyer needs the details of the LOC. This API can be used by the buyer to fetch the approved LOC.

Functionality

1. Retrieve the letter of credit

Provider

Banks

Consumer

All Corporates

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

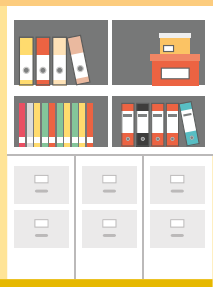
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

261

Receive invoices from seller (accounts receivable) - document

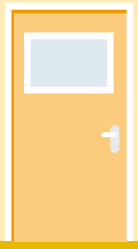
Description

The API will provide an interface for the seller to upload the request for line of credit. The bank needs to receive invoice documents from seller (accounts receivable).



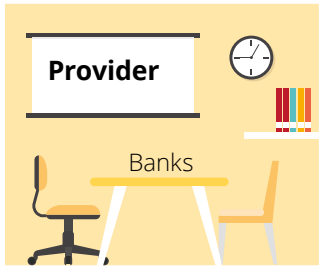
Functionality

1. Update the request for LC
2. Retrieve supporting documents



Provider

Banks



Consumer

All Corporates

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	ASFTP
Hosting Security	ISO27001 + ISO22301

ATM

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

262

Receive invoices from seller (accounts receivable) - data

Description

The API will provide an interface for the seller to upload the request for line of credit and the details of the transaction. The bank needs to receive transaction information from the seller (accounts receivable).

Functionality

1. Update the supporting information

Provider

Banks

Consumer

All Corporates

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

263

Remit foreign exchange to CLS

Description

API for banks to interact with the CLS system for dealing with FX disbursements.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Update the outgoing disbursement
2. Retrieve the confirmation

Provider

CLS

Consumer

Bank

Data Standards

Open Financial Exchange (OFX) / MAS defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

264

Customer 360 view of their financials

Description

The API will provide an interface for customers to view and aggregate their end to end financials. This API will help customers to view all their financial transactions, statements.

Functionality

1. Retrieve the customer account details
2. Create request

Provider

Bank, AMC, Insurers, other FIs

Consumer

Bank, AMC, Insurer, Other FIs and any other customer

Data Standards

Open Financial Exchange (OFX) / MAS defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301 + PCIDSS

ATM

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

265

Fund value query

Description

This API will process the queries raised by the existing customers related to the fund value of their investments across all business channels and customer touch points.

Functionality

1. Retrieve the fund value
2. Create request

Provider

AMC

Consumer

Bank, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

266

NAV query

Description

This API will process the queries raised by the existing customers related to the NAV of their funds across all business channels and customer touch points.

Functionality

1. Retrieve the NAV
2. Create request

Provider

AMC

Consumer

Bank, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

267

Maturity Date

Description

This API will process the queries raised by the existing customers related to the maturity date of their investments across all business channels and customer touch points.

Functionality

1. Retrieve the maturity date
2. Create request

Provider

AMC

Consumer

Bank, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

ATM

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

268

Asset Management fees

Description

This API will process the queries raised by the existing customers related to the asset management fees charged by the firm across all business channels and customer touch points.

Functionality

1. Retrieve the asset management fees
2. Create request

Provider

AMC

Consumer

Bank, Insurers, Aggregators, Other partners and end customer

Data Standards

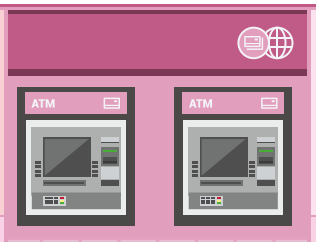
Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

269

Fund management style

Description

This API will process the queries raised by the existing customers related to the type of asset management (active/passive) for their funds across all business channels and customer touch points.

Functionality

1. Retrieve the fund management style details
2. Create request

Provider

AMC

Consumer

Bank, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

ATM

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

270

Account balance inquiry

Description

This API will process the queries raised by the existing customers related to their account balances across all business channels and customer touch points.

Functionality

1. Retrieve the account balance
2. Create request

Provider

Banks, AMC, Insurers, Govt

Consumer

AMC, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

271

Credit limit on card

Description

Process credit limit queries from business channels and customer touch points, across all the customer's credit card accounts.

Functionality

1. Retrieve the credit limit details
2. Create request

Provider

Banks

Consumer

AMC, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301 + PCIDSS

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

272

Loan EMI amount

Description

Process loan EMI (equated monthly installment) amounts queries from business channels and customer touch points, across all the customer's loan accounts.

Functionality

1. Retrieve the loan EMI amount details
2. Create request

Provider

Banks

Consumer

AMC, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

273

Loan EMI due date

Description

Process loan EMI (equated monthly installment) due date queries from business channels and customer touch points, across all the customer's loan accounts.

Functionality

1. Retrieve the loan EMI due date
2. Create request

Provider

Banks

Consumer

AMC, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

274

Credit card payment due date

Description

Process credit card payment due date queries from business channels and customer touch points, across all the customer's credit card accounts.

Functionality

1. Retrieve the credit card payment due date
2. Create request

Provider

Banks

Consumer

AMC, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301 + PCIDSS

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

275

Premium amount inquiry

Description

This API will process the top 10 queries raised by the existing customers related to their insurance premium amounts across all business channels and customer touch points.

Functionality

1. Retrieve the premium amount
2. Create request

Provider

Insurer

Consumer

AMC, Banks, Aggregators, Other partners and end customer

Data Standards

ACORD XML

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

276

Fund value query

Description

This API will process the top 10 queries raised by the existing customers related to fund value of their policies across all business channels and customer touch points.

Functionality

1. Retrieve the fund value
2. Create request

Provider

Insurer

Consumer

AMC, Banks, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

277

Maturity Date

Description

This API will process the top 10 queries raised by the existing customers related to the maturity date of their policies across all business channels and customer touch points.

Functionality

1. Retrieve the maturity date
2. Create request

Provider

Insurer

Consumer

AMC, Banks, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

278

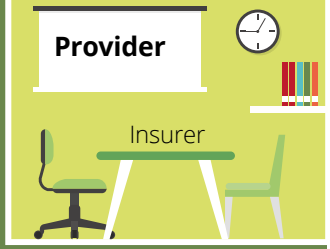
Premium due date

Description

Process the top 10 queries raised by the existing customers related to the due date of their premiums across all business channels and customer touch points.

Functionality

1. Retrieve the premium due date
2. Create request



Consumer

AMC, Banks, Aggregators, Other partners and end customer

Data Standards

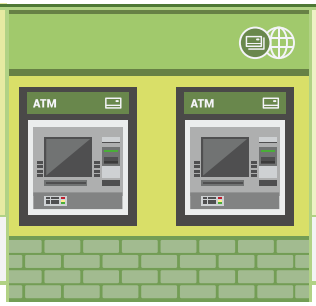
ACORD XML

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

279

Term inquiry

Description

This API will process the top 10 queries raised by the existing customers related to the term of the policy across all business channels and customer touch points.

Functionality

1. Retrieve the policy term details
2. Create request

Provider

Insurer

Consumer

AMC, Banks, Aggregators, Other partners and end customer

Data Standards

ACORD XML

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

280

Customer non-financial requests - change of name

Description

Client servicing API to accept and process request for change of name.

Functionality

1. Update the name of the person and upload the supporting documents
2. Create request

Provider

Cross Industry

Consumer

AMC, Banks, Aggregators, Other partners and end customer

Data Standards

XML/JSON based data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

281

Customer non-financial requests - change of address

Description

Client servicing API to accept and process request for change of address.

Functionality

1. Update the address and the supporting documents
2. Create request

Provider

Cross Industry

Consumer

AMC, Banks, Aggregators, Other partners and end customer

Data Standards

XML/JSON based data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

282

Customer non-financial requests - change of nominee

Description

Client servicing API to accept and process request for change of nominee.

Functionality

1. Update the nominee of the account and upload the supporting documents
2. Create request

Provider

Cross Industry

Consumer

AMC, Banks, Aggregators, Other partners and end customer

Data Standards

XML/JSON based data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

283

Customer non-financial requests - change of contact details

Description

Client servicing API to accept and process request for change of contact details.

Functionality

1. Update the contact details and upload the supporting documents
2. Create request

Provider

Cross Industry

Consumer

AMC, Banks, Aggregators, Other partners and end customer

Data Standards

XML/JSON based data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

284

Customer non-financial requests - change of mode of communication

Description

Client servicing API to accept and process request for change of mode of communication (email, sms, post etc).

Functionality

1. Update the preferred mode of communication
2. Create request

Provider

Cross Industry

Consumer

AMC, Banks, Aggregators, Other partners and end customer

Data Standards

XML/JSON based data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

285

Customer financial requests for AMC - fund switch

Description

Accept and process requests related to fund switches by existing customers on their accounts with the FI.

Functionality

1. Update the fund details on customer's request
2. Retrieve confirmation of execution
3. Create request

Provider

AMC

Consumer

Bank, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

286

Customer financial requests for AMC - top up

Description

Accept and process requests related to top ups by existing customers on their accounts with the FI.

Functionality

1. Update the premium top-up on customer's request
2. Retrieve confirmation of execution
3. Create request

Provider

AMC

Consumer

Bank, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

287

Customer financial requests for AMC - investment strategy change

Description

Accept and process requests related to investment strategy changes by existing customers on their accounts with the FI.

Functionality

1. Update the investment strategy on customer's request
2. Retrieve confirmation of execution
3. Create request

Provider

AMC

Consumer

Bank, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

288

Customer financial requests for AMC - partial withdrawal

Description

Accept and process requests related to partial withdrawals by existing customers on their accounts with the FI.

Functionality

1. Update the investment amount on customer's behalf
2. Retrieve confirmation of execution
3. Create request

Provider

AMC

Consumer

Bank, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

289

Customer financial requests for AMC - trade request

Description

Accept and process requests related to trade requests by existing customers on their accounts with the FI.

Functionality

1. Update the trade request
2. Update the trade details
3. Retrieve confirmation of execution
4. Create request

Provider

AMC

Consumer

Bank, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

ATM

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

290

Customer financial requests for Banks - transfer of funds

Description

Accept and process requests related to transfer of funds by existing customers on their accounts with the FI.

Functionality

1. Update the fund transfer request
2. Update the transfer details
3. Retrieve confirmation of execution
4. Create request

Provider

Banks

Consumer

AMC, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

291

Customer financial requests for Banks - increase in credit limit of credit card

Description

Accept and process requests related to increase of credit limit by existing customers on their credit card accounts with the FI.

Functionality

1. Update the credit limit of credit card
2. Retrieve confirmation of execution
3. Create request

Provider

Banks

Consumer

AMC, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301 + PCIDSS

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

292

Customer financial requests for Banks - foreclosure of loans

Description

Accept and process requests related to foreclosure of loans by existing customers on their loan accounts with the FI.

Functionality

1. Update the foreclosure details
2. Retrieve confirmation of execution
3. Create request

Provider

Banks

Consumer

AMC, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

293

Customer financial requests for Banks - creating a fixed deposit

Description

Accept and process requests related to opening a fixed/term deposit account by existing customers of the FI.

Functionality

1. Update the fixed deposit details
2. Retrieve confirmation of execution
3. Create request

Provider

Banks

Consumer

AMC, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

294

Customer financial requests for Banks - cancellation of credit card

Description

Accept and process requests related to cancellation of credit card accounts by existing customers of the FI.

Functionality

1. Update the credit card account
2. Retrieve confirmation of execution
3. Create request

Provider

Banks

Consumer

AMC, Insurers, Aggregators, Other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301 + PCIDSS

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

295

Customer financial requests for Insurers - change in premium amount

Description

Accept and process requests related to change in premium amounts by existing customers on their policies with the FI.

Functionality

1. Update the premium amount
2. Retrieve the confirmation of execution
3. Create request

Provider

Insurer

Consumer

AMC, Banks, Aggregators, Other partners and end customer

Data Standards

ACORD XML

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

296

Customer financial requests for Insurers - change in sum assured

Description

Accept and process requests related to change in sum assured by existing customers on their policies with the FI.

Functionality

1. Update the sum assured
2. Retrieve the confirmation of execution
3. Create request

Provider

Insurer

Consumer

AMC, Banks, Aggregators, Other partners and end customer

Data Standards

ACORD XML

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

297

Customer financial requests for Insurers - change in term

Description

Accept and process requests related to change in term by existing customers on their policies with the FI.

Functionality

1. Update the term details
2. Retrieve the confirmation of execution
3. Create request

Provider

Insurer

Consumer

AMC, Banks, Aggregators, Other partners and end customer

Data Standards

ACORD XML

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

298

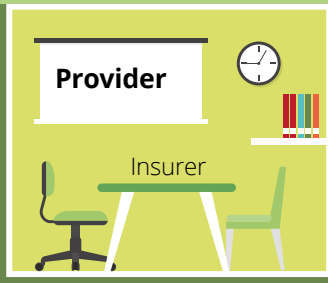
Customer financial requests for Insurers - addition/deletion of riders

Description

Accept and process requests related to addition/deletion of riders by existing customers on their policies with the FI.

Functionality

1. Update the rider details
2. Retrieve the confirmation of execution
3. Create request



Consumer

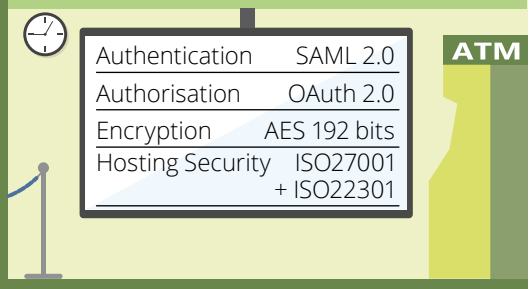
AMC, Banks, Aggregators, Other partners and end customer

Data Standards

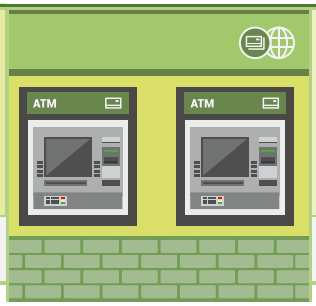
ACORD XML for Life Insurance

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301



API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

299

Customer financial requests for Insurers - free look cancellation

Description

Accept and process requests related to free-look cancellations by existing customers on their new/revised policies with the FI.

Functionality

1. Update the policy details
2. Retrieve the confirmation of execution
3. Update the disbursement details
4. Create request

Provider

Insurer

Consumer

AMC, Banks, Aggregators, Other partners and end customer

Data Standards

ACORD XML

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

300

Submission of Policy and Claim Data

Description

Agency filing of insurance policy and claim data by insurers for industry analysis and benchmarking.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for policy/ claim
2. Updating an existing record for policy/claim

Provider

e-Claim Service provider

Consumer

Insurers

Data Standards

ACORD XML

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

301

Customer complaints against AMC

Description

Accept and register customer complaints related to asset management products for reference by the regulator and FI. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Update the complaint details
2. Create the complaint

Provider

Regulator

Consumer

AMC, Banks, Insurers, aggregators, other partners and end customer

Data Standards

Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

302

Customer complaints against banks

Description

Accept and register customer complaints related to banking products for reference by the regulator and FI.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Update the complaint details
2. Create the complaint

Provider

Regulator

Consumer

AMC, Banks, Insurers, aggregators, other partners and end customer

Data Standards

Regulator defined data standards

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

303

Customer complaints against Insurer

Description

Accept and register customer complaints related to insurance products for reference by the regulator and FI. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Update the complaint details
2. Create the complaint

Provider

Regulator

Consumer

AMC, Banks, Insurers, aggregators, other partners and end customer

Data Standards

Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

304

Customer complaints against AMC (Internal)

Description

Accept and register existing customer complaints related to asset management products.

Functionality

1. Update the complaint details
2. Create the complaint

Provider

AMC

Consumer

AMC, Banks, Insurers, aggregators, other partners and end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

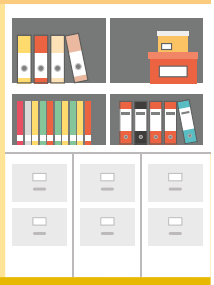
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

305

Customer complaints against banks (Internal)

Description

Accept and register existing customer complaints related to banking products.



Functionality

1. Update the complaint details
2. Create the complaint

Provider

Banks

Consumer

AMC, Banks, Insurers, aggregators, other partners and end customer

Data Standards

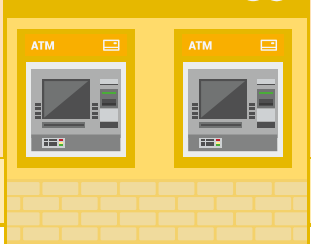
Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

306

Customer complaints against Insurer (Internal)

Description

Accept and register existing customer complaints related to insurance products.

Functionality

1. Update the complaint details
2. Create the complaint

Provider

Insurer

Consumer

AMC, Banks, Insurers, aggregators, other partners and end customer

Data Standards

ACORD XML

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

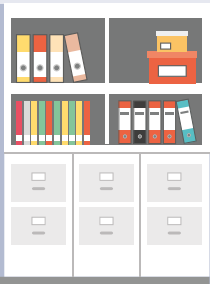
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

307

Distributor/Agent complaints against AMC

Description

Accept and register complaints by distributor/agent/ sales partners in relation to asset management products for reference by the regulator and FI. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)



Functionality

1. Update the complaint details
2. Create the complaint

Consumer

Distributors, agents and other FIs

Data Standards

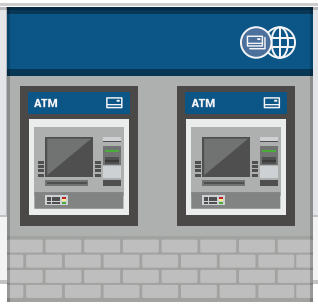
Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

308

Distributor/Agent complaints against bank

Description

Accept and register complaints by distributor/agent/sales partners in relation to banking products for reference by the regulator and FI.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Update the complaint details
2. Create the complaint

Provider

Regulator

Consumer

Distributors, agents and other FIs

Data Standards

Regulator defined data standards

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

309

Distributor/Agent complaints against Insurers

Description

Accept and register complaints by distributor/ agent/sales partners in relation to insurance products for reference by the regulator and FI. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Update the complaint details
2. Create the complaint

Provider

Regulator

Consumer

Distributors, agents and other FIs

Data Standards

Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

310

Distributor/Agent complaints against AMC (Internal)

Description

Accept and register complaints by existing distributors/agents/sales partners in relation to asset management products.

Functionality

1. Update the complaint details
2. Create the complaint

Provider

AMC

Consumer

Distributors, agents and other FIs

Data Standards

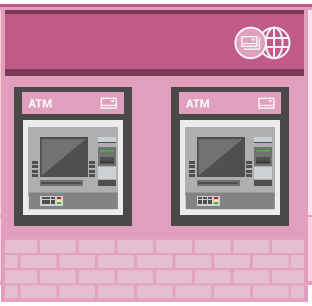
Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

311

Distributor/Agent complaints against bank (Internal)

Description

Accept and register complaints by existing distributors/agents/sales partners in relation to banking products.

Functionality

1. Update the complaint details
2. Create the complaint

Provider

Banks

Consumer

Distributors, agents and other FIs

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

312

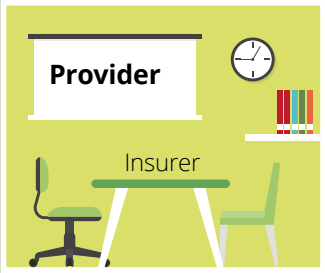
Distributor/Agent complaints against Insurers (Internal)

Description

Accept and register complaints by existing distributors/agents/sales partners in relation to insurance products.

Functionality

1. Update the complaint details
2. Create the complaint



Consumer

Distributors, agents and other FIs

Data Standards

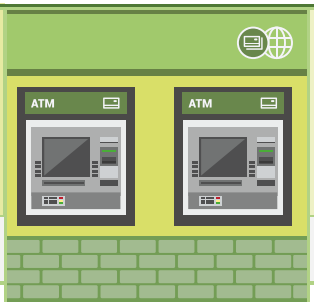
ACORD XML

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

313

Retrieve insurance and tax outstanding for organisations

Description

Inquire on insurance and tax payment details of organisations for compliance verification of customer loans portfolio.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve insurance and tax outstanding details

Provider

Govt.

Consumer

Banks

Data Standards

XML/JSON based data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

314

Filing of approved claims data of Singapore citizen's severe disability insurance scheme

Description

Agency filing of approved claims data of Singapore citizen's severe disability insurance scheme (ElderShield).
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for claims
2. Update an existing record for claims

Provider

Govt.

Consumer

Insurer

Data Standards

ACORD XML for Life Insurance

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

315

Death notification of cases where CPF investment scheme account is closed

Description

This API will submit Death notification of cases where CPF investment scheme account is closed.

Functionality

1. Update an existing record in the event of a death

Provider

CPFIS approved agent banks

Consumer

Insurer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

316

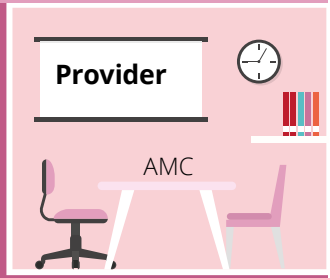
Customer service feedback for AMCs

Description

Client servicing API to request customer feedback on the service provided by the FI.

Functionality

1. Retrieve feedback from customer



Consumer

Banks, Insurers, Other Fis, end customer

Data Standards

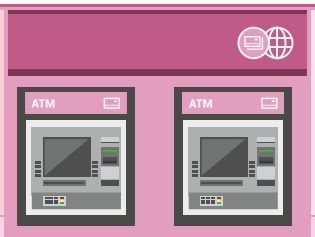
Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

317

Customer serivce feedback for Banks

Description

Client servicing API to request customer feedback on the service provided by the FI.

Functionality

1. Retrieve feedback from customer

Provider

Banks

Consumer

AMCs, Insurers, Other Fis, end customer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

318

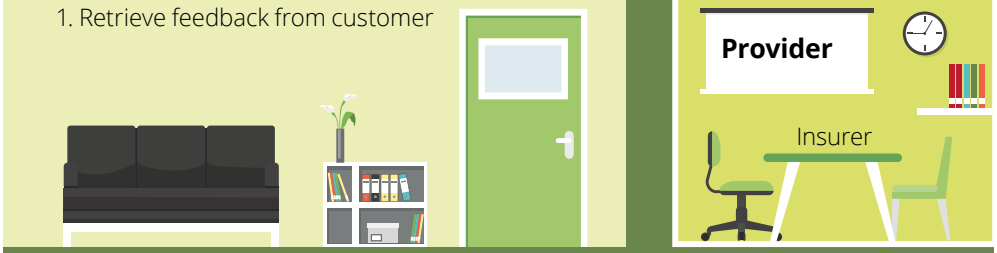
Customer serivce feedback for Insurers

Description

Client servicing API to request customer feedback on the service provided by the FI.

Functionality

1. Retrieve feedback from customer



Consumer

AMCs, Banks, Other Fis, end customer

Data Standards

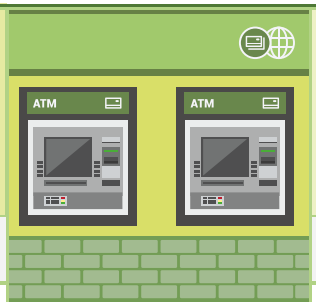
ACORD XML

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

319

Unified Payment Interface - Account Details

Description

Accept and process payments/disbursements requests using defined payment method (wire transfer, cheque, credit card, mobile wallet, etc.) and payment details (initiator account details, target account details, bank details, etc.). Example context include 1) payments towards new AMC investments; 2) payments towards loan EMIs, credit card bills etc; 3) payments towards policy premiums 4) dividends and interest disbursements; 5) insurance claims etc.

Functionality

1. Update payment details
2. Retrieve confirmation of execution
3. Create payment details

Provider

ACH

Consumer

AMC, Banks, Insurers, aggregators, other partners and end customer

Data Standards

SWIFT, ISO 20022

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301 + PCIDSS

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

320

Unified Payment Interface - Unique Identifier

Description

Accept and process payments/disbursements requests using defined payment method (wire transfer, cheque, credit card, mobile wallet, etc.) and a unique payment identifier. Example context include 1) payments towards new AMC investments; 2) payments towards loan EMIs, credit card bills etc; 3) payments towards policy premiums 4) dividends and interest disbursements; 5) insurance claims etc.

Functionality

1. Update payment details
2. Retrieve confirmation of execution
3. Create payment details

Provider

ACH

Consumer

AMC, Banks, Insurers, aggregators, other partners and end customer

Data Standards

SWIFT, ISO 20022

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301 + PCIDSS

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

321

Validation for AMC regulatory returns

Description

Pre-filing validation for AMC regulatory returns.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the report for compliance with format

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

322

Regulatory reporting for AMCs

Description

Submission for AMC regulatory returns.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

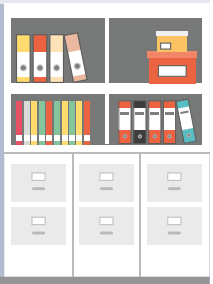
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

323

Validation for banking regulatory returns

Description

Pre-filing validation for banking regulatory returns. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)



Functionality

1. Validate the report for compliance with format

Consumer

Banks

Data Standards

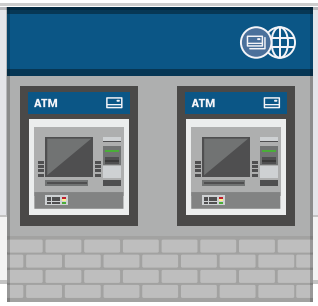
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

324

Regulatory reporting for banks

Description

Submission for banking regulatory returns. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Consumer

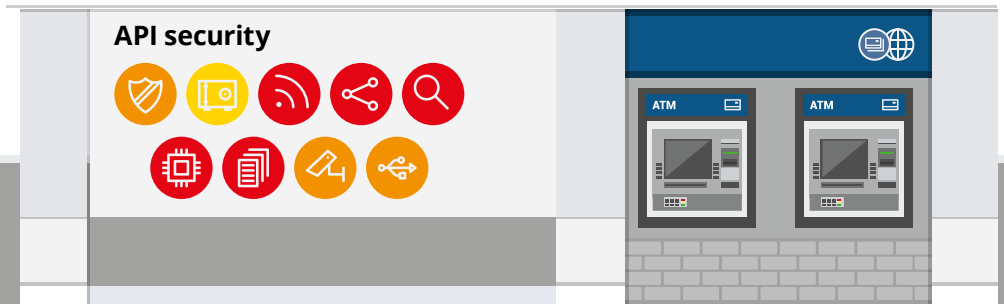
Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

325

Validation for insurance regulatory returns

Description

Pre-filing validation for insurance regulatory returns. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the report for compliance with format

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

326

Regulatory reporting for insurers

Description

Submission for insurance regulatory returns. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Consumer

Insurers

Data Standards

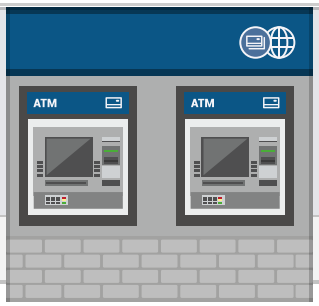
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

327

Validation for exceptional banking regulatory returns

Description

Pre-filing validation for exceptional banking regulatory returns. Exceptions are items which are threatening to the business such as natural calamity or labor disputes.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the report for compliance with format

Provider

Regulator

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

328

Exceptional regulatory reporting for banks

Description

Submission for exceptional banking regulatory returns. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Provider

Regulator

Consumer

Banks

Data Standards

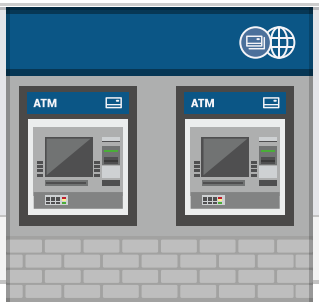
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

329

Validation for exceptional insurance regulatory returns

Description

Pre-filing validation for exceptional insurance regulatory returns. Exceptions are items which are threatening to the business such as natural calamity or labor disputes.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the report for compliance with format

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

330

Exceptional regulatory reporting for Insurers

Description

Submission for exceptional insurance regulatory returns. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

331

Validation for exceptional AMC regulatory returns

Description

Pre-filing validation for exceptional AMC regulatory returns. Exceptions are items which are threatening to the business such as natural calamity or labor disputes.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the report for compliance with format

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- Access Controls
- Secure API development lifecycle & code reviews
- Strongly Recommended
- 2-Factor Authentication
- Security Events & Incident Monitoring
- Robust Failover mechanisms
- Recommended
- Hosting Environment Security
- Secured Audit Trails
- Vulnerability Analysis & Penetration Testing
- Optional

332

Exceptional regulatory reporting for AMCs

Description

Submission for exceptional AMC regulatory returns.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

333

Validation of regulatory reporting against guidelines for Banks

Description

This API will validate the data within the report to ensure that it conforms to the stipulated format and language. These can include reporting customer account irregularities, breach of technical guidelines etc.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the report for compliance with format

Consumer

Banks

Data Standards

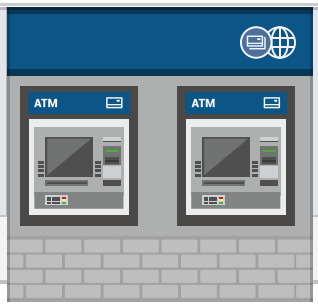
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

334

Submission of regulatory reporting against guidelines for Banks

Description

This API will provide an interface for Banks to share the details of the reports with the regulator. Based on the result of the validation, the API will update the repository with the correct data or send a rejection to the requestor.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Consumer

Banks

Data Standards

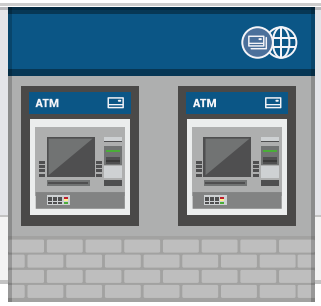
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

335

Validation of regulatory reporting against guidelines for Insurance

Description

This API will validate the data within the report to ensure that it conforms to the stipulated format and language. These can include reporting customer account irregularities, breach of technical guidelines etc.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the report for compliance with format

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

336

Submission of regulatory reporting against guidelines for Insurance

Description

This API will provide an interface for Insurance companies to share the details of the reports with the regulator. Based on the result of the validation, the API will update the repository with the correct data or send a rejection to the requestor. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Consumer

Insurers

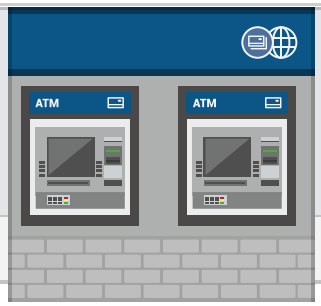
Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

337

Validation of regulatory reporting against guidelines for AMCs

Description

This API will validate the data within the report to ensure that it conforms to the stipulated format and language. These can include reporting customer account irregularities, breach of technical guidelines etc.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Validate the report for compliance with format

Consumer

AMC

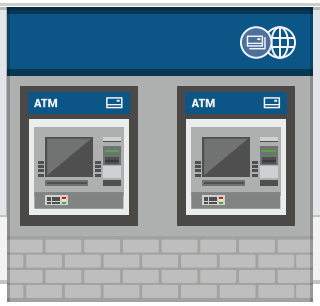
Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

338

Submission of regulatory reporting against guidelines for AMCs

Description

This API will provide an interface for AMC companies to share the details of the reports with the regulator. Based on the result of the validation, the API will update the repository with the correct data or send a rejection to the requestor.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Consumer

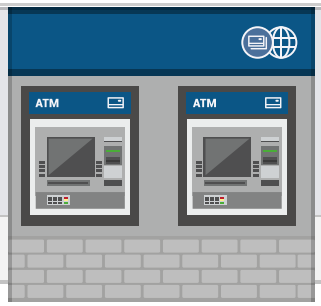
AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301



API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

339

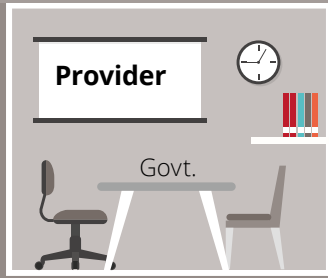
Fraud detection for Banks

Description

This API will provide an interface for Banks to report customers (retail and institutional) who have committed fraud.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report



Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

340

Serial Number tracking of Central Bank Notes

Description

The API will help MAS receive information from banks at a regular frequency on the distribution of the central bank notes.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Update the movement of notes

Provider

Regulator / Central Bank

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

341

Fraud detection for Insurance

Description

This API will provide an interface for insurers to report customers (retail and institutional) who have committed fraud.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

342

Fraud detection for Motor Insurance

Description

This API will provide an interface for motor insurers to report customers (retail and institutional) who have committed fraud.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Provider

General Insurance Association

Consumer

Insurers

Data Standards

ACORD

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

343

Fraud detection for AMCs

Description

This API will provide an interface for AMCs to report customers (retail and institutional) who have committed fraud.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Provider

Govt.

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

344

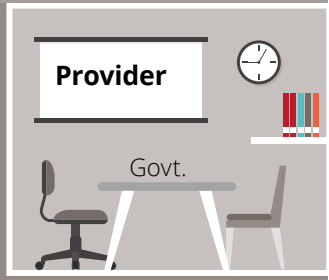
Fraud detection master list

Description

This API will provide an interface for Banks, Insurers and AMCs to query relevant watchlists/fraudlalent activities for a specific customer.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report



Consumer

Banks, Insurers and AMCs

Data Standards

eXtensible Business Reporting Language (XBRL) / Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

345

Money Laundering detection list for Banks

Description

This API will provide an interface for Banks to report customers (retail and institutional) who have committed money laundering.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Provider

Govt.

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

346

Money Laundering detection list for Insurance

Description

This API will provide an interface for Insurer to report customers who have committed money laundering.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Provider

Govt.

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

347

Money Laundering detection list for AMCs

Description

This API will provide an interface for AMCs to report customers who have committed money laundering. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Provider

Govt.

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

348

Money Laundering master list

Description

This API will provide an interface for Banks, Insurers and AMCs to query about money laundering activities of a specific customer.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Provider

Govt.

Consumer

Banks, Insurer and AMCs

Data Standards

eXtensible Business Reporting Language (XBRL) / Singapore Data Ref Model (SG-DRM) data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

349

NAV Reporting

Description

This API will provide an interface for AMCs and Insurance companies to share the NAV details of products with the regulator, other channel partners and customers.

Functionality

1. Create new instance of NAV delivery

Provider

Cross Industry

Consumer

Insurers, Banks, other FIs, end customers, MAS and channel partners

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

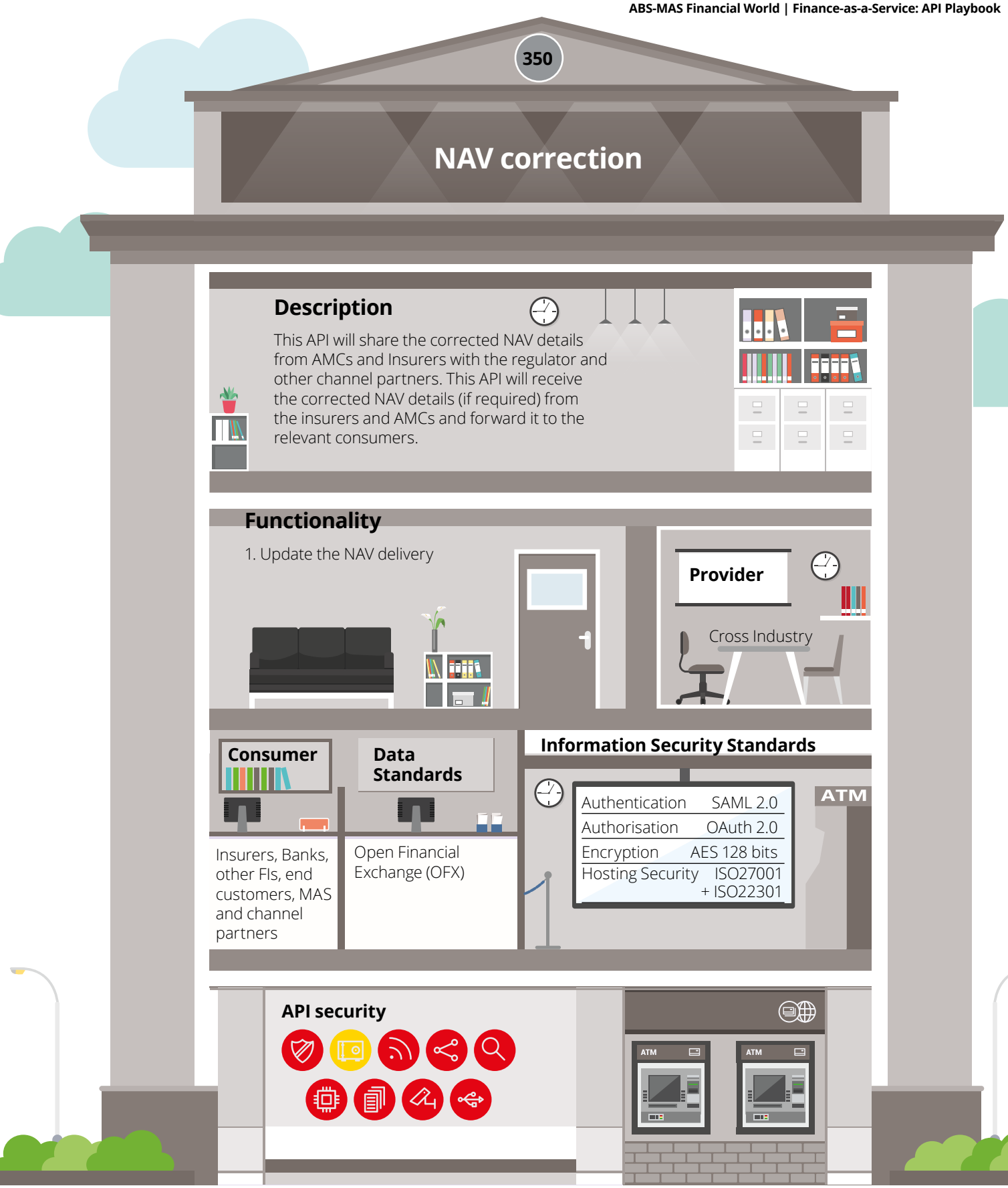
Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

351

Send Foreign worker bond policy details

Description

Agency filing of foreign worker bond policy details.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of foreign workers policy bond details
2. Update the foreign workers policy details

Provider

Govt.

Consumer

Insurance

Data Standards

HR-XML

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

352

Send Motor Claims details

Description

Agency filing of motor claims details.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of claims

Provider

General Insurance Association

Consumer

Insurance

Data Standards

Proprietary data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

353

Send Quarterly premium figures

Description

Agency filing of policy quarterly premium details.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Provider

General Insurance Association

Consumer

Insurance

Data Standards

Proprietary data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

354

Send Unclaimed proceeds details to LIA

Description

Agency filing of unclaimed insurance proceeds details to LIA. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create new instance of report

Provider

Life Insurance Association

Consumer

Insurance

Data Standards

LIA Proprietary data standard

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

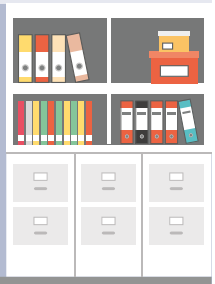
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

355

Regulatory reporting on financial data

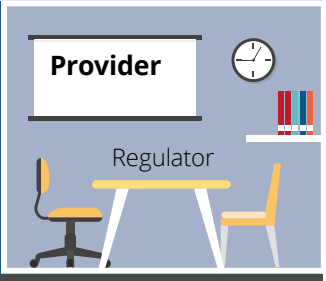
Description

Filing of required financial data (such as quarterly income and expenses)
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)



Functionality

1. Create a new record for report
2. Update an existing record for report



Consumer

AMC

Data Standards

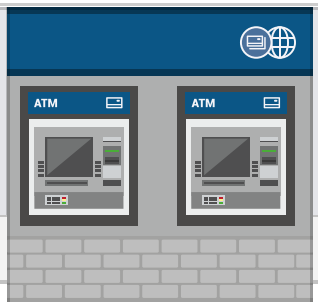
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

356

Reporting of credit facilities details

Description

Filing of credit facilities details
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for report
2. Update an existing record for report

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

357

Regulatory reporting on annual RBC forms 1,2,3,4

Description

Submission of annual RBC forms 1,2,3,4 based on audited financials
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for report
2. Update an existing record for report

Consumer

AMC

Data Standards

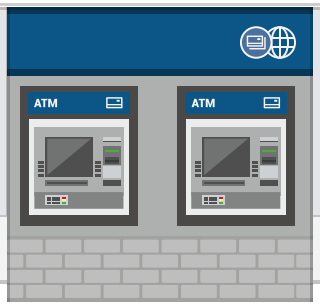
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

358

Regulatory reporting on matters adversely affecting financial position

Description

Submission of regulatory reports on matters adversely affecting financial position, fitness and propriety, under-margined accounts etc.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for report
2. Update an existing record for report

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

359

Regulatory reporting of suspicious activity reports

Description

Filing of suspicious activity reports in accordance with CMG-N01
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for report
2. Update an existing record for report

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

360

Regulatory reporting on appointment of Directors or change in shareholding

Description

Submission of regulatory reports on appointment of CEO or Directors, change of CEO's or Director's business interests or shareholding, change in nature of CEO's or Director's appointment or change in CEOs or Director's country of residence (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for report
2. Update an existing record for report

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

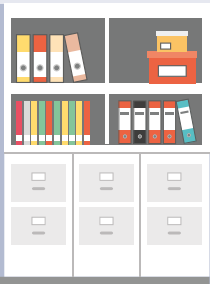
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

361

Regulatory reporting of quarterly Balanced Scorecard reports

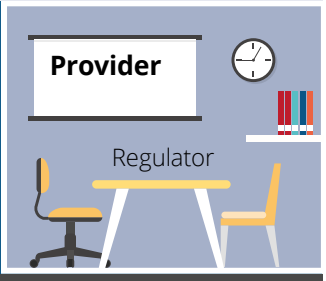
Description

Submission of quarterly Balanced Scorecard reports in accordance with FAA-N20
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)



Functionality

1. Create a new record for report
2. Update an existing record for report



Consumer

AMC

Data Standards

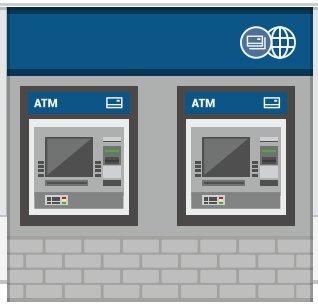
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

362

Regulatory reporting of updates and notices

Description

Submission of regulatory updates such as SFA, SFR, FAA, FAR, MAS notices and guidelines, MAS circulars etc. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for report
2. Update an existing record for report

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

363

MAS notification - appointment of new representative

Description

Submission of notification to MAS regarding appointment of new representatives
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for new agent

Provider

Regulator

Consumer

AMC, Banks, Insurance

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

364

MAS notification -cessation of representatives

Description

Submission of notification to MAS regarding cessation of representatives.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Update an existing record in the event of a rep quitting

Provider

Regulator

Consumer

AMC, Banks, Insurance

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

365

MAS notification - add activities of representative

Description

Submission of notification to MAS regarding adding activities of the representatives.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. create a new record for a new activity
2. Update an existing activity record

Provider

Regulator

Consumer

AMC, Banks, Insurance

Data Standards

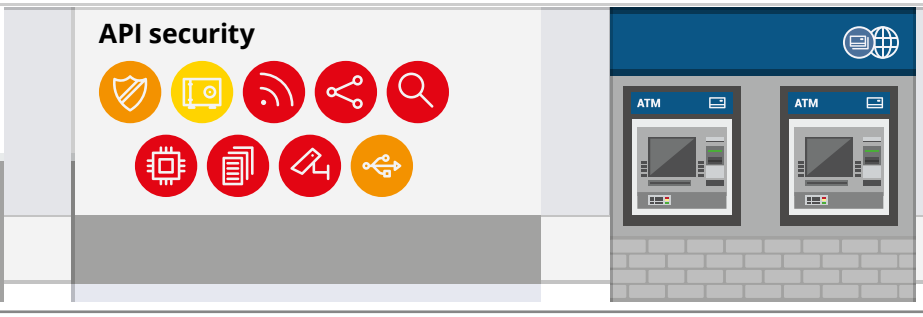
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

366

MAS notification - change of particulars of representative

Description

Submission of notification to MAS regarding change of particulars of the representative
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Update an existing rep detail record
2. Create a new record for rep detail

Provider

Regulator

Consumer

AMC, Banks, Insurance

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

367

Regulatory reporting of statement of assets and liabilities

Description

Regulatory submission of the statement of assets and liabilities.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for report
2. Update an existing record for report

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

368

Regulatory reporting of statement of financial resources

Description

Regulatory submission of statement of financial resources, total risk requirement and aggregate indebtedness
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for report
2. Update an existing record for report

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

369

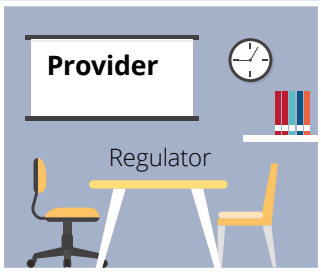
Regulatory reporting of the statement of capital market license account holder

Description

Regulatory submission of statement relating to the accounts of a holder of a capital markets services license
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for report
2. Update an existing record for report



Consumer

AMC

Data Standards

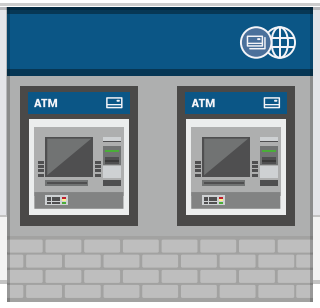
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

370

Regulatory reporting of Form X

Description

Regulatory reporting of Form X (RBC ratio)
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for report
2. Update an existing record for report

Provider

Regulator

Consumer

AMC

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

371

FATCA Customer account balance and income

Description

This API will provide an interface for AMC companies to share the details of FATCA customer account balance and income. Based on the result of the validation the API will update the repository with the correct data or send a rejection to the requestor.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for report
2. Update an existing record for report

Provider

Govt.

Consumer

AMC

Data Standards

IRAS defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

372

Reporting pursuant to SGX-ST Rule 4.6.9

Description

This API will provide an interface for AMC companies to share the details of required regulatory reporting. Based on the result of the validation the API will update the repository with the correct data or send a rejection to the requestor. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new record for report
2. Update an existing record for report

Provider

SGX

Consumer

AMC

Data Standards

Market Data Definition Language (MDDL)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	N.A.
Hosting Security	ISO27001

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

373

Annual reporting of Form 1

Description

Annual reporting of Form 1 - Balance sheet (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

374

Annual reporting of Form 2

Description

Annual reporting of Form 2 - P&L (audited & unaudited)
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

375

Annual reporting of Form 3

Description

Annual reporting of Form 3 - Statement of individual life policies
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

376

Annual reporting of Form 4

Description

Annual reporting of Form 4 - Statement of group life policies.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

377

Annual reporting of Form 8

Description

Annual reporting of Form 8 - Balance sheet of global business operations
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

378

Annual reporting of Form 9

Description

Annual reporting of Form 9 - P&L for global business operations
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

379

Annual reporting of Form 13

Description

Annual reporting of Form 13 - Statement of Lapses (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

380

Annual reporting of Form 14

Description

Annual reporting of Form 14 - Abstract of valuation results
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

381

Annual reporting of Form 16

Description

Annual reporting of Form 16 - Statement of analysis of experience of the Insurance Fund (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

382

Annual reporting of Form 17

Description

Annual reporting of Form 17 - Actuary's certification of policy liabilities (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

383

Annual reporting of Form 18

Description

Annual reporting of Form 18 - Statement of participating fund allocations
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

384

Annual reporting of Form 19

Description

Annual reporting of Form 19 - Actuary's certification of participating fund allocations
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

385

Annual reporting of Form 21

Description

Annual reporting of Form 21 - Statement of fund solvency requirement of Insurance Fund (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

386

Annual reporting of Form 22

Description

Annual reporting of Form 22 - Statement of total asset & liability risk of registered Insurer
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

387

Quarterly reporting of Form 1

Description

Quarterly reporting of Form 1 - Balance sheet (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

388

Quarterly reporting of Form 2

Description

Quarterly reporting of Form 2 - P&L account (audited and unaudited)
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

389

Quarterly reporting of Form 3

Description

Quarterly reporting of Form 3 - Statement of individual life policies
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

390

Quarterly reporting of Form 4

Description

Quarterly reporting of Form 4 - Statement of group life policies
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

391

Quarterly reporting of Form 8

Description

Quarterly reporting of Form 8 - Balance sheet for global business operations
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

392

Quarterly reporting of Form 21

Description

Quarterly reporting of Form 21 - Statement of fund solvency requirement of Insurance Fund
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

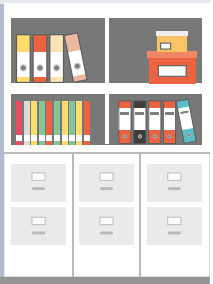
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

393

Quarterly reporting of Form 23

Description

Quarterly reporting of Form 23 - Statement of capital adequacy requirement of registered insurer (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)



Functionality

1. Create a new report record
2. Update an existing record

Consumer

Insurers

Data Standards

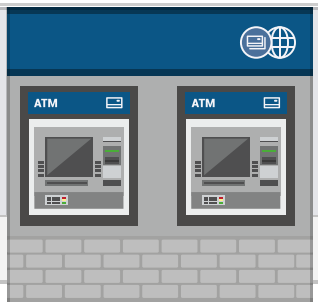
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

394

Quarterly reporting of Form 7

Description

Quarterly reporting of Form 7 - Statement of accident and health benefits
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

395

Quarterly reporting of Form 114

Description

Quarterly reporting of Form 114 - Statement of returns for reinsurance
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

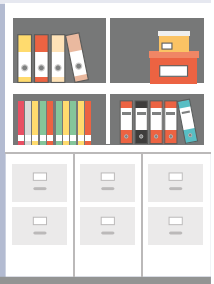
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

396

Annual & quarterly reporting of asset and liability exposures for Insurers

Description

Annual & quarterly reporting of notice on asset and liability exposures for Insurers (audited and unaudited) (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)



Functionality

1. Create a new report record
2. Update an existing record

Consumer

Insurers

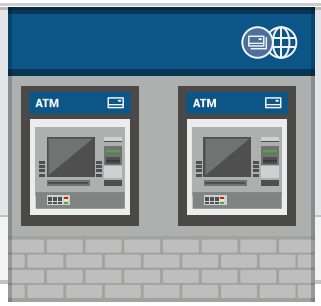
Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

397

Monthly report of Loan To Foreign Residents

Description

Monthly reporting of loans given to foreign residents (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

398

Quarterly reporting of Form 24

Description

Quarterly reporting of Form 24 - Certificate on the accounts of general/life business
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

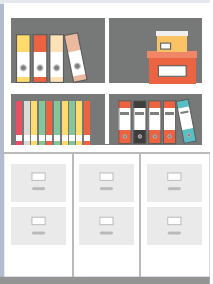
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

399

Quarterly reporting of Form 25

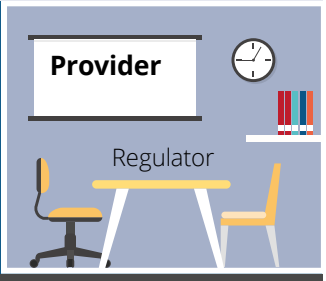
Description

Quarterly reporting of Form 25 - Report of the appointed auditor under section 36(6) of the Insurance Act (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)



Functionality

1. Create a new report record
2. Update an existing record



Consumer

Insurers

Data Standards

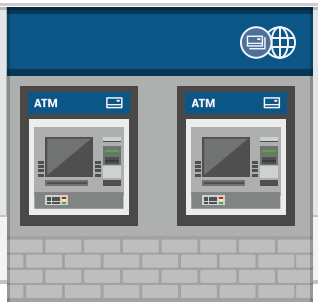
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

400

Quarterly reporting of Form 26

Description

Quarterly reporting of Form 26 - Auditor's supplementary report
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Regulator

Consumer

Insurers

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM

ATM

Legend:

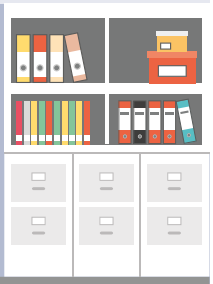
- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

401

Annual reporting of Title Of Assets

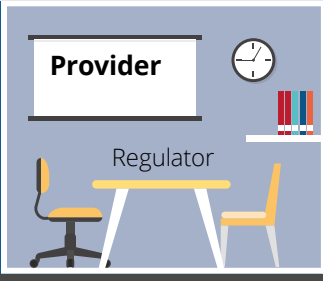
Description

Filing of regulatory returns.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)



Functionality

1. Create a new report record
2. Update an existing record



Consumer

Insurers

Data Standards

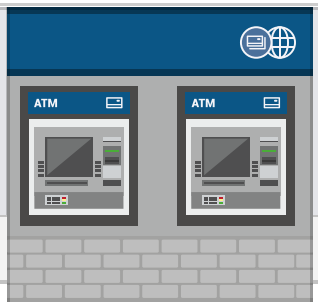
eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security



Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

402

Submit FATCA report to Govt Agency

Description

Agency filing of FATCA regulatory reports. (n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Create a new report record
2. Update an existing record

Provider

Govt.

Consumer

Insurer

Data Standards

IRAS defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

403

OA/SRS Deduction advice and profit/loss

Description

Accept and process requests for CPF OA (Ordinary Account)/SRS (Supplementary Retirement Scheme) deduction advice.

Functionality

1. Create a new report record
2. Update an existing record

Provider

Banks

Consumer

Insurer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

404

OA/SRS Payment Advice

Description

Accept and process requests for CPF OA (Ordinary Account)/SRS (Supplementary Retirement Scheme) payment advice.

Functionality

1. Create a new report record
2. Update an existing record

Provider

Banks

Consumer

Insurer

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

405

Credit report retrieval

Description

This API will fetch the credit report of a customer based on a unique identifier (and Authorisation from the customer) from the credit bureaus.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve credit report

Provider

Credit Bureau

Consumer

Banks, Insurers, AMC

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

406

Forex rate retrieval

Description

Retrieve historical forex rates data from regulator for industry analytics, regulatory reporting etc.

Functionality

1. Retrieve forex rates

Provider

Regulator / Central Bank

Consumer

Banks, AMC

Data Standards

Market Data Definition Language (MDDL)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

407

Interest rate retrieval

Description

Retrieve historical interest rates data from regulator for industry analytics, regulatory reporting etc.

Functionality

1. Retrieve interest rates

Provider

Regulator / Central Bank

Consumer

Banks

Data Standards

eXtensible Business Reporting Language (XBRL) / Regulator defined data standards

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

408

Redeem Credit card Points

Description

This API will provide an interface for merchants to help customers redeem loyalty program reward points.

Functionality

1. Create new transaction
2. Update reward points
3. Retrieve confirmation

Provider

Banks

Consumer

Merchants

Data Standards

Open Financial Exchange (OFX)

Information Security Standards

Authentication	OpenID Connect
Authorisation	OAuth 2.0
Encryption	AES 192 bits
Hosting Security	ISO27001 + ISO22301 + PCIDSS

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

409

Retrieve index and market details

Description

Retrieve latest and historical index, securities and market data from regulator for industry analytics, regulatory reporting etc.

Functionality

1. Retrieve index rates

Provider

SGX

Consumer

AMC, Insurers

Data Standards

Market Data Definition Language (MDDL)

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM

ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

410

Receive 'XOL Statement' from Reinsurer

Description

This API will Receive Reported XOL Statement from Reinsurance companies. This will be used for reinsurer to share information to indemnify insurer for losses that exceed a specified limit.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve reported XOL statement

Provider

Reinsurer

Consumer

Insurers

Data Standards

ACORD XML for Reinsurance and Large Commercial

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

411

Receive 'XOL Adjustment' from Reinsurer

Description

This API will Receive Reported XOL Deposits and Adjustments from Reinsurance companies. This will be used for reinsurer to share information to indemnify insurer for losses that exceed a specified limit.
(n.b. API implementation subject to jurisdictional requirements, as well as legal, policy and technical considerations by the respective agency.)

Functionality

1. Retrieve reported XOL deposits and adjustments details

Provider

Reinsurer

Consumer

AMC, Insurers

Data Standards

ACORD XML for Reinsurance and Large Commercial

Information Security Standards

Authentication	SAML 2.0
Authorisation	OAuth 2.0
Encryption	AES 128 bits
Hosting Security	ISO27001 + ISO22301

ATM

API security

ATM ATM

Legend:

- Strong Encryption
- 2-Factor Authentication
- Hosting Environment Security
- Access Controls
- Security Events & Incident Monitoring
- Secured Audit Trails
- Secure API development lifecycle & code reviews
- Robust Failover mechanisms
- Vulnerability Analysis & Penetration Testing
- Strongly Recommended
- Recommended
- Optional

Glossary

Name	Definitions
2FA	Two Factor Authentication
ABS	Association of Banks in Singapore
ACH	Automated Clearing House
ACORD	Association for Cooperative Operations Research and Development
ACRA	Accounting And Corporate Regulatory Authority
Activity Diagrams	Activity diagram is basically a flow chart to represent the flow from one activity to another activity. The activity can be described as an operation of the system.
Actor	An actor specifies a role played by a user or any other system that interacts with the subject
ADF	Access Control Decision Function
AEF	Access Control Enforcement Function
AES	Advanced Encryption Standard
AJAX	Asynchronous JavaScript and XML allows the client to send & retrieve data from the server without reloading the page
AMC	Asset Management Company
API	Application Programming Interface
API Economy	The API Economy is the economy where companies expose their (internal) business assets or services in the form of (Web) APIs to parties with the goal of unlocking additional business value through the creation of new asset classes
App	Application
ARCM	Agents' Registration CPD Management System
ASEAN	Association of Southeast Asian Nations
ATM	Automated Teller Machine
Atomic Operation	An operation during which a processor can simultaneously read a location and write it in the same operation is called atomic operation
Audit Trails	A system that traces the detailed transactions relating to any item in an accounting record
B2B	Business-to-Business
B2C	Business-to-Consumer
CEO	Chief Executive Officer
CipherText	Ciphertext is an encrypted text. Plaintext is what you have before encryption, and ciphertext is the encrypted result
CLS	Continuous Linked Settlements
CMG	Crisis Management Group
CMS	Content Management System
Collection+JSON	A hypermedia-type for the management and querying of simple collections
Consumer	Represents the organisation/company which utilises the service of the provided API

Name	Definitions
Context diagrams	A Context Diagram shows the system under consideration as a single high-level process and then shows the relationship that the system has with other external entities (systems, organisational groups, etc.)
CPFB	Central Provident Fund Board
CPFIS	Central Provident Fund Investment Scheme
CSA	Customer Service Associate
Current State	Present set of circumstances which are used for assessing issues and opportunities
Customer	This term encompasses both internal and external customer An internal customer is an individual who is directly connected to the organisation An external customer is an individual/organisation who is the recipient of goods, services, products or ideas, and is not part of the organisation
Data Exchange	Data exchange is the process of taking structured data from the source and transforming it into structured data under a target schema, so that the target data is an accurate representation of the source data
Data Format	A data format is a pre-established layout for data
Data Syntax	A data syntax defines the set of rules/data standards for any given data element
DELETE	The HTTP method for deleting resources with a RESTful API
Desired State	It is the future state which is in line with the business objectives and goals
Developer Community	It is an association of software professionals who provide system integration and development services
DFDL	Data Format Description Language
DPS	Dependents' Protection Scheme
E-Commerce	Electronic-Commerce
EDIFACT	Electronic Data Interchange For Administration, Commerce and Transport
Email	Electronic Mail
EMI	Equated Monthly Instalment
Entities	Entities are the actors participating in an API data exchange
ETag	Entity Tag is a header which designates a version of a representation. Useful for caching and/or conditional requests
Error Handling	Error handling refers to the anticipation, detection, and resolution of programming, application, and communications errors.
Exception Handling	Exception handling is the process of responding to anomalous conditions which require special processing – often changing the normal flow of program execution
FAA	Financial Advisers Act
FAR	Financial Advisers Regulations
FATCA	Foreign Account Tax Compliance Act
Financial Institutions (FIs)	Financial Institutions (FIs) are companies engaged in the business of dealing with monetary transactions such as deposits, loans, insurance, derivatives ,etc.
FIN	Foreign Identification Number

Name	Definitions
Financial Services/FSI	This term is used to refer to the services provided by the financial institutions
FinTech	Financial Technology, nowadays better known under the term 'FinTech', describes a business that aims at providing financial services by making use of software and modern technology. FinTech companies are generally start-ups founded with the purpose of disrupting incumbent financial systems or partnering with FIs to create innovative new financial products and services
Firewall	A firewall is a network security system, either hardware- or software-based, that controls incoming and outgoing network traffic based on a set of rules
FIX	Financial Information eXchange
Forex (FX)	Foreign Exchange
FpML	Financial products Markup Language
FSI	Financial Services Industry
FTP	File Transfer Protocol
Functional Requirements	A functional requirement defines a function of a system or its components
FW	Foreign Worker
GET	The HTTP method for retrieving resources from a RESTful API
GIA	General Insurance Association
Gov. / Govt.	Government
GRLC	Global Reinsurance and Large Commercial
HAL	Hypertext Application Language is a simple format that gives a consistent and easy way to hyperlink between resources in your API
HATEOAS	Hypermedia as the Engine of Application State is A feature of the REST architecture allowing the client to navigate through hypermedia exposed by the API
HDB	Housing Development Board
HL-7	Health Level-7
HMAC	Keyed-Hash message authentication code
HR-XML	Human Resources eXtensible Markup Language
HTTP	HyperText Transfer Protocol is how websites and APIs communicate over the internet
HTTPS	HyperText Transfer Protocol Secure is how websites and APIs communicate securely over the internet
Hypermedia Protocol	Hypermedia protocols are used to build systems that exhibit characteristics of scalability, uniformity, performance, and encapsulation
IAM	Identity and Access Management
IDS	Intrusion Detection System (IDS) is a network component which enables detection of unauthorised network access
IEC	International Electrotechnical Commission
I-EDI	Internet-based Electronic Data Interchange (interactive exchange protocol)
IETF WG	Internet Engineering Task Force Working Group

Name	Definitions
IFX	Interactive Financial eXchange
InfoSec	Information Security
Internet of things	System of interconnected devices of everyday use which have network connectivity, allowing them to send and receive data
Interoperability	Interoperability is the ability of a system or a product to work with other systems or products without special effort on the part of the customer
IPS	Intrusion Prevention Systems (IPS) prevents the unauthorised network access
IPSR	Industry Performance Statistics Reporting
IRAS	Inland Revenue Authority of Singapore
ISA	Internal Security Assessor
ISMS	Information Security Management System
ISO	International Organisation for Standardisation
IT	Information Technology
IT Maturity	Technology maturity refers to where on the evolutionary curve a given technology is
IT Strategy	IT strategy is the discipline that defines how IT will be used to help businesses win in their chosen business context
JMS	Java Message Service
JSON	JavaScript Object Notation is a data format commonly used for APIs requests parameters and response body
JSON-LD	JSON for Linked Data is a method of encoding Linked Data using JSON
JWT	JSON Web Token
KPI	A key performance indicator (KPI) is a business metric used to evaluate factors that are crucial to the success of an organisation
LC	Letter of Credit
Legacy Systems	A legacy system, in the context of computing, refers to outdated computer systems, programming languages or application software that are used instead of available upgraded versions
LIA	Life Insurance Association
LOC	Line of Credit
LTA	Land Transport Authority
MAC	Message Authentication Code
MAS	Monetary Authority of Singapore
MDDL	Market Data Definition Language
Metadata	A set of data that describes and gives information about other data
MIME	Multipurpose Internet Mail Extensions
MOH	Ministry of Health
MOM	Ministry of Manpower
MRM	Message Repository Manager

Name	Definitions
NAV	Net Asset Value
NCD	No claim discount
NIST	National Institute of Standards and Technology
Non Functional Requirements	A non-functional requirement is a requirement that specifies criteria that can be used to define the operation of a system, rather than specific behaviours
NRIC	National Registration Identity Card
NSA	National Security Agency
OA	Ordinary Account
OASIS	The Organisation for the Advancement of Structured Information Standards
OAuth	Open Authentication
OFX	Open Financial Exchange
OLife	Life Data Model Specification
OSI	Open System Interconnection
P&C Insurance	Property and Casualty Insurance
PCard	Purchasing Card
PCI DSS	Payment Card Industry Data Security Standard
PDPA	Personal Data Protection Act
Penetration testing	Penetration testing (also called pen testing) is the practice of testing a computer system, network or Web application to find vulnerabilities that an attacker could exploit
PII	Personally identifiable information is any data that could potentially identify a specific individual. Any information that can be used to distinguish one person from another and can be used for de-anonymising anonymous data can be considered PII
POST	The HTTP method for creating resources with a RESTful API
Provider	Represents the organisation/company which hosts the API
PUT	The HTTP method for updating resources with a RESTful API
QSA	Qualified Security Assessor
RAML	RESTful API Modelling Language
RBC ratio	Risk-Based Capital
Rep	Representative
REST	REpresentational State Transfer
RFC	Request for Comments
RLC	Reinsurance and Large Commercial
RMB	Renminbi (Yuan)
ROC	Report on Compliance
RSA	Rivest-Shamir-Adleman
SA	Special Account

Name	Definitions
SAML	Security Assertion Markup Language
SAQ	Self-Assessment Questionnaire
SCP	Secure Copy Protocol
SDLC	Systems Development Life Cycle
SDMX	Statistical Data and Metadata eXchange
SECSH	Secure Shell
Sequence Diagrams	A Sequence diagram is an interaction diagram that shows how objects operate with one another and in what order. It is a construct of a message sequence chart. A sequence diagram shows object interactions arranged in time sequence
SFA	Securities And Futures Act
SFR	Securities And Futures Regulations
SFTP	Secure File Transfer Protocol
SG	Singapore
SGS	Singapore Government Securities
SGX	Singapore Exchange Limited
SGX-ST	Singapore Exchange Limited - Securities Trading
SHA	Secure Hash Algorithm
SIBOR	Singapore Interbank Offered Rate
SIEM	Security Incident and Event Management
SingPass	Singapore Personal Access (SingPass) is a nation-wide online account management and authentication platform for access to Singapore Government e-services
SIREN	Specification for Representing Entities is a specification for presenting entities via a Web API. Siren offers structures to communicate information about entities, actions for executing state transitions, and links for client navigation
SLA	Service-Level Agreement
SMS	Short Message Service
SMTP	Simple Mail Transfer Protocol is an Internet standard for electronic mail (email) transmission
SOA	Service-Oriented Architecture is a style of computer software where services are provided to the other components by application components, through a communication protocol over a network
SOAP	Simple Object Access Protocol
Source Code Stub	A source code stub is a piece of code used to stand in for some other programming functionality. A stub may simulate the behaviour of existing code (such as a procedure on a remote machine) or be a temporary substitute for yet-to-be-developed code
SRS	Supplementary Retirement Scheme
SSH	Secure Shell protocol
SSO	Single Sign On
SSTC	Security Services Technical Committee

Name	Definitions
Stateful	A stateful protocol requires the server to maintain the internal state or session information
Stateless	A stateless protocol does not require the server to retain session information or status about each communications partner for the duration of multiple requests.
STEM	Science Technology Engineering and Mathematics
SWIFT	The Society for Worldwide Interbank Financial Telecommunication
T-Bills	Treasury Bills
TCP	Transmission Control Protocol
TLS	Transport Layer Security
TRM	Technology Risk Management
TTFHW	Time to First Hello World
TTFPA	Time to First Profitable App
TXLife	Life Business Message Specification
UNIFI	Universal financial industry message scheme
UNIX	Uniplexed Information and Computing Service
URA	Urban Redevelopment Authority
URI	Universal Resource Identifiers
URL	Uniform Resource Locator
Use cases	A use case is a list of actions or event steps, typically defining the interactions between the actors. These are employed in Unified Modelling Language (UML)
Vulnerability analysis	Vulnerability analysis, also known as vulnerability assessment, is a process that defines, identifies, and classifies the security holes (vulnerabilities) in a computer, network, or communications infrastructure
W3C	World Wide Web Consortium is an international community that develops open standards to ensure the long-term growth of the Web
WSDL	Web Service Definition Language
WSRM	WS-Reliable Messaging
WSS	Web Services Security
WS-Trust	Web Services-Trust
XBRL	eXtensible Business Reporting Language
XML	eXtensible Markup Language
XOL	Excess of Loss
XTbML	Tabular Data Specification

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Acknowledgements

In Conversation

How will the introduction of this API PlayBook improve your bank's partnership with the FinTech ecosystem?

Susan Hwee
Head Group Technology & Operations, CIO
UOB

"At UOB, building the digital engine that underpins all our delivery and payments capabilities had been a key strategic focus. The API infrastructure layer was one of the architectural pillars of the digital engine.

So, when the industry came together to agree on a set of common technical and security standards in the API playbook, we were delighted as it was a good opportunity for all the banks to share and contribute.

This list of recommended APIs will provide a good baseline for not just Fintech but also government agencies and other online service providers to collaborate with the banking industry to develop and co-create services of value to the communities we serve."

"Finance-as-a-Service is powering the transformation from a 'Traditional Economy' to an 'API Economy' fueled by the symbiotic integration, collaboration and partnership of Financial and Technology enabled services via fast-paced and dynamic innovations as well as technical advances in the Digital Technology domain.

This API PlayBook is published at a time when the FinTech evolutionary journey has just begun, and will be instrumental in helping organisations understand ways to build a diverse, vibrant and cohesive FinTech ecosystem. It brings a wealth of industry expertise, knowledge and recommendations together in the form of guidelines covering the end-to-end lifecycle, implementation, usage, standardisation, and most importantly, the Governance of APIs. Another useful aspect of the PlayBook is the section on recommended APIs, which provides FinTech players essential information and recommendations on the types of APIs that make the most economic sense to develop."

Abhijit Dasgupta
Digital Risk Head – Consumer Technology ASIA-EMEA
Citibank (Singapore)

Hans Brown
Head of Client Technology Solutions – Asia Pacific Technology ASIA-EMEA
The Bank of New York Mellon

"Having a common set of agreed standards and clear guidelines are the hallmarks of an effective API program that caters for rapid and Agile/ DevOps delivery of services. With effective governance, dual speed service delivery can occur where core API's can be strictly governed for the enterprise, and façade APIs can be exposed at a rapid pace to generate differing client experiences and to accommodate industry interoperability. Through these means, BNY Mellon can leverage its existing API program while allowing data interchange and service interoperability in accordance with the new standards."

What would be your first piece of advice to an organisation embarking on the API journey?

Susan Hwee
Head Group Technology & Operations, CIO
UOB

> Organisations embarking on this journey should begin with a vision of what they want to achieve from both customer and business points of view. At the same time, senior business and technology sponsorship, supported by a strong governance framework to align outcomes.

Abhijit Dasgupta
Digital Risk Head – Consumer Technology ASIA-EMEA
Citibank (Singapore)

> The key ingredients to making your mark in FinTech is to always 'think outside the box', be 'forward compatible' in your outlook and be focused on developing niche products. Organizations should also invest in developing a strong talent pool and adopt a robust Digital Governance Framework, all of which will contribute towards strengthening the collaboration between the Financial and Technical Services sectors in newer and more diverse ways and to enable them to generate strong economic equity as they embark on their API roadmap.

Hans Brown
Head of Client Technology Solutions – Asia Pacific Technology ASIA-EMEA
The Bank of New York Mellon

> Think of the journey of the "client" whether the client is another system or a person, map out the client's journey in achieving their objective. Instrument, analyse and take decisions that remove all possible points of friction in that journey. Be flexible enough in your thinking to understand that you cannot possibly do it all and seek to collaborate with partners that have a platform and learn as much as you can from them.

ABS Taskforce on API

Sanjeev Mehra
Managing Director, Head of Global Product Development, Global Consumer Technology
Citibank (Singapore)

> A watershed moment for financial services globally, demonstrating bold thought leadership to open up the financial ecosystem and unleash an economic force multiplier for Singapore towards its Smart Nation vision. Humbled and privileged to be a part of it.

Abhijit Dasgupta
Digital Risk Head – Consumer Technology ASIA-EMEA
Citibank (Singapore)

> A comprehensive and well defined Digital Risk Governance Reference Architecture will be a key enabler for Financial Institutions and FinTechs to harness the full potential of the API economy with in-built safety and soundness.

Gary Strain
Managing Director, DBS Consumer Banking and Wealth Technology
DBS

> The humble API is the building block of the next generation of global systems; at DBS, we have been readying ourselves for this new generation of connected systems.

David Walker
Executive Director, DBS Consumer Banking and Wealth Technology
DBS

> Banking, as with most industries, is facing a material transformation to belong in the open, connected global economy ... the secure API is the entry ticket.

Lee Mun Liong
Chief Information Officer
HSBC (Singapore)

> It is a significant step in the financial industry with regards to FinTechs and a great collaborative effort with the MAS and ABS.

Lim Kuo Siong
CIO Singapore
Maybank Singapore

> An important milestone in enabling borderless banking-as-a-service in the new economy.

Patrick Yap
EVP, Technology & Infrastructure and EA
Maybank Singapore

> It's important we take the first step in defining the financial industry's API playbook and guidelines for Singapore as we progress towards an API-economy.

Praveen Raina
Head, Group Technology
OCBC

> API is critical enablement technology and one of the catalysts to expand businesses and opportunities beyond our current channels. APIs will be game changer to transform our businesses from inside out as it provides agility and builds seamless collaborations with partners and customers to better serve our customers.

Sarabjit Singh Anand
Head of Country Technology Management, Singapore
Standard Chartered

> Technology Innovation - Creating opportunities to exceed customer expectations and build a smart nation.

Hans Brown
Head of Client Technology Solutions – Asia Pacific Technology ASIA-EMEA
The Bank of New York Mellon

> APIs are a foundational ingredient that enable organisations to digitise at speed. They enable fast, consistent and with the right instrumentation, evidence based assessments of these interactions. BNY Mellon's API strategy is a key cornerstone in the development of the NEXEN platform ecosystem which has transformed the way we work internally, with our clients and our industry stakeholders.

Michael Gardner
Head of Center - BNY Mellon Innovation Center Silicon Valley
The Bank of New York Mellon

> By standardising and modernising certain types of interactions, APIs will allow Singapore to pioneer new models for driving economic development in Southeast Asia and globally with unprecedented levels of governance and operational efficiency. These APIs also create the preconditions for a vibrant and thriving FinTechs ecosystem, to ensure consumer convenience, the modernity of the banking system, and velocity relative to technological and societal changes.

Susan Hwee
Head Group Technology & Operations, CIO
UOB

> The real story behind our API initiative is one of collaboration across the Financial Services Industry. We are confident that the API framework that we are implementing is going to propel Singapore to one of the top spots globally for Financial Technology innovation.

Eduard Fabian
Head Group Technology Retail And Wholesale Bank
UOB

> The API Playbook creates the framework for banks to explore new ecosystem-based business models that were not possible previously. It also enables us to maximise the investments we made internally into open architecture standards that can now be leveraged externally.

Mohit Mehrotra
Monitor Deloitte, Consulting Lead Partner
Deloitte Southeast Asia

> Organisations need to ensure APIs have the clarity of a well-positioned product - a clear intention, a clean definition of the value, and perhaps more importantly, a clearly defined audience. It is important to plant the seed of how business services and APIs can unlock new business models.

Ho Kok Yong
SEA Financial Services Industry Leader
Deloitte Southeast Asia

> Open APIs are especially important. They are great time savers and will contribute significantly to a thriving FinTechs ecosystem.

Anubrata Chakrabarti
Technology Strategy & Architecture Leader Consulting
Deloitte India

> API economy is a paradigm shift. It is going to change the way banking technology is perceived, designed and implemented. With crowd sourcing made possible in a secured way it will eventually yield more power to the end customer and make digital channel the de facto standard for banking across customer segments.

Suyog Shah
Technology Strategy and Architecture Director
Consulting
Deloitte India

> API economy will bring interoperability in the Financial Services industry. It will transform the business environment to be more agile and flexible, improve customer experience and enable ease of doing business.

Murad Baig
Associate Director
Consulting
Deloitte UK

> Balance sheets will not be enough for Banks to be profitable; Banks must become platforms in the future to provide products and services by leveraging their ecosystem to create value.

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