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White paper

Information Management

Using IBM Banking and Financial Markets Data Warehouse to Support FATCA

Compliance Challenges

Financial institutions are facing a series of compliance challenges. A number of regulatory initiatives have been put in place in an attempt to mitigate the risks that financial institutions are facing. These initiatives include Basel II/III, IFRS/IAS, MISMO, Sarbanes-Oxley Act, and Dodd-Frank. Recently there has been the introduction of new tax legislation in the US called the Foreign Account Tax Compliance Act (FATCA) which, like the regulatory initiatives mentioned above, present a compliance challenge to financial institutions.

The Foreign Account Taxation Compliance Act (FATCA) was introduced into U.S. law in March 2010 in order to prevent U.S. persons and entities from evading income tax by holding assets through foreign accounts. This new legislation has a global impact as it focuses primarily on the reporting of accounts held by U.S. persons in Foreign Financial Institutions (FFIs) and it implements a withholding tax on payments made to those institutions where there is deemed to be non-compliance.

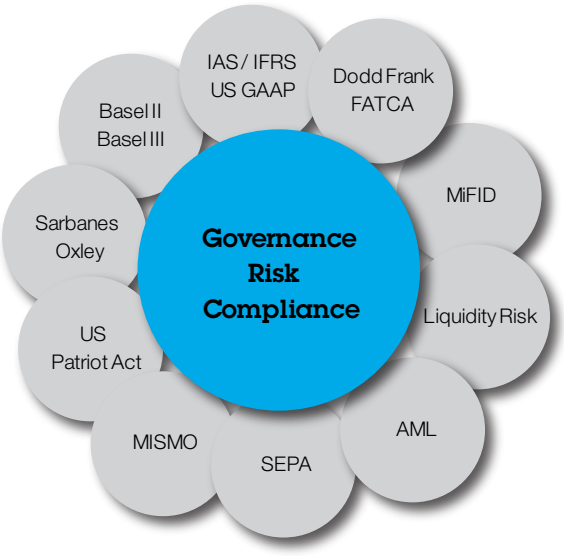

Figure 1. Compliance challenges facing financial institutions

In order to help financial institutions meet these ever increasing compliance challenges, IBM® Banking and Financial Markets Data Warehouse provides the combination of expertise in modeling techniques with deep industry knowledge and experience gained over a number of years. A key advantage of IBM Banking and Financial Markets Data Warehouse is that it provides a business focus on what is required for a given business topic, and allows the underlying implementation to follow.

Financial institutions are faced with numerous compliance requirements. It is imperative that there is as much reuse as possible in the underlying I.T. infrastructure. This is especially the case in terms of data consolidation and reporting requirements.

As the worldwide financial regulatory approach switches from light touch supervision to tougher rule enforcement, there is a growing burden on financial institutions to provide more information to regulatory agencies, with clear demonstration of compliance. So in addition to the procedural and governance changes prescribed, there is an emphasis on quantitative measurement of compliance.

In order to understand how these new rules impact them, organizations are undertaking detailed analysis to extract the critical business data elements and key measures from these detailed (and often wordy) final rule documents. This is very time consuming, as many of the documents relating to the rules are hundreds of pages in length.

In order to understand the multpiple and inconsistent requirements from numerous regulatory agencies the critical data elements and measures identified must be translated from the taxonomy of the individual regulatory agencies into common business terms used by the financial institution. They must also be mapped to the financial institution's available information to determine from where the data is sourced to comply with the reporting requirements. This mapping also feeds into a gap analysis to determine the level of coverage for the new/revised requirements, and to inform I.T. development and data remediation strategies, if required.

Organizations are struggling to meet all of the competing demands with their limited resources.

Understanding FATCA

In March 2010, the Hiring Incentive for Restoring Employment Act (HIRE) was signed into United States law. This act included the Foreign Account Tax Compliance Act (FATCA) with the objective to prevent US persons and entities from evading income tax by holding assets through foreign accounts.

Essentially there are two central themes to FATCA:

- The Reporting by Foreign Financial Institutions (FFIs) of information regarding their US account holders to the Internal Revenue Service (IRS)
- The imposition of a Withholding tax on withholdable payments where there is deemed to be non-compliance

Withholding

FATCA has a punitive side to it if there is non-compliance by the FFI or the account holder. The punitive measure is the withholding of (currently) 30 percent of a qualifying or withholdable payment made to foreign accounts where there is non-compliance.

A Withholdable Payment can be any US source, Fixed Determinable Annual or Periodic (FDAP) income such as salaries, interest, dividends, rent. US Payors, which are the source of the payment and other parties along the chain from payor to payee might be required to act as a Withholding Agent regarding the payment.

A Withholdable Agent is any person, US or foreign, in whatever capacity acting, that has the control, receipt, custody, disposal, or payment of a withholdable payment.

It is imperative for a withholding agent to identify who the payee is and to determine the FATCA classification (Chapter 4) of that payee.

FFI Agreement

FATCA requires foreign financial institutions (FFIs) to register with the IRS and agree to enter into an FFI Agreement. An FFI that enters into such an agreement is referred to as a Participating FFI. Under FATCA a Participating FFI has a number of specific obligations including:

Identification and documentation of account holders
The participating FFI must implement a due diligence process as expressed in the FATCA legislation to determine whether each account is a US account or an account held by a recalcitrant account holder or nonparticipating FFI. A recalcitrant account holder is any account holder that fails to provide the information required to determine whether the account is a US account, or the information required to be reported by the FFI, or that fails to provide a waiver of a foreign law that would prevent reporting. A participating FFI must review an account holders account for US indicia to ascertain the account holders US status.

Reporting
A participating FFI is required to report to the IRS, on an annual basis, information regarding each account held by US customer, recalcitrant account holders or accounts that are held by a non-financial foreign entity (NFFE) that is a US owned foreign entity.

Such information includes:

- Name, address and taxpayer identification number (TIN) of each US account holder
- Account number
- Account balance
- Payment details

Withholding
A participating FFI is required to deduct and withhold tax of 30 percent regarding payments made to recalcitrant account holders and nonparticipating FFIs to the extent required under FATCA legislation. In such a circumstance, a participating FFI that is prohibited by foreign law from withholding must close or transfer the account.

Verification
A participating FFI is required to establish and implement a compliance program for satisfying its FATCA requirements.

Intergovernmental agreements and FATCA compliance

The US Treasury Department recognizes the fact that legislation in some jurisdictions might prevent financial institutions from complying with FATCA and therefore potentially exposing the financial institution to withholding. To address this issue the US Treasury Department, along with foreign governments, has developed two model intergovernmental agreements, which help overcome local impediments and allow foreign financial institutions to comply with FATCA while remaining true to local legislation.

IBM Banking and Financial Markets Data Warehouse Components

IBM Banking and Financial Markets Data Warehouse is a family of models that accelerates the design of enterprise data warehouse business intelligence solutions, driven by financial-services-centered business requirements. It has the flexibility to create a range of data warehouse solutions from departmental data marts to enterprise-wide data warehouses. The data warehouse is designed for iterative implementation, adding segments of business capability during short development cycles, while minimizing rework associated with the incorporation of new business requirements over time.

Frequently the problem for organizations is not the amount of data available, but rather the consistency, accuracy, timeliness and complexity of it. IBM Banking and Financial Markets Data Warehouse offers not just a set of an isolated set of terms, logical models, and analytical requirements, but an integrated set of models that provides traceability throughout the layers of the information architecture back to source systems.

Business Terms

The Business Terms glossary enables non-technical business experts to describe and define, in their own words, the concepts they use every day. Clearly defined business terms help standardization and communication within an organization. Mappings to the other models make it possible to create a common, enterprise-wide picture of the data requirements and to transform these requirements into I.T. data structures.

The glossary is a comprehensive list of terms pertaining to financial services and general business that includes:

- Definitions written in plain business language
- Detailed data elements that specify what each business term means for the financial services organization
- Terms that might be related to one another through relationships

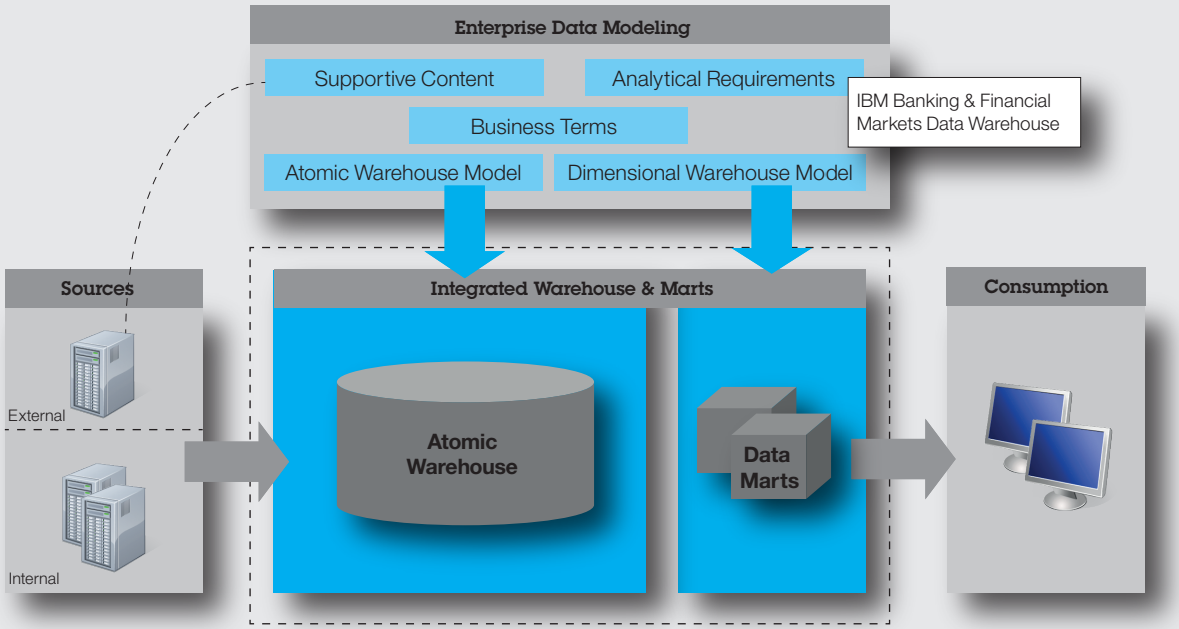

Figure 2. IBM Banking and Financial Markets Data Warehouse solution architecture

Analytical Requirements

Analytical Requirements reflect the most common queries and analyses for business performance measurement and reporting, while supporting other analytical functions, such as adhoc reporting and decision support. They enable rapid scoping and prototyping of data marts, which provide a subject-specific analytical layer in a data warehouse solution.

Each Analytical Requirement can be divided into measures, which are numerical facts that convey quantitative information of importance to the organization, and dimensions that categorize measures. These measures and dimensions are mapped to both the Atomic and Dimenionsonal Warehouse Models, so that the scoping of the reporting and analysis requirements automatically selects the most appropriate data warehouse entities and attributes to support those requirements. Analytics development teams can use these Analytical Requirements to create designs for specific data marts or dimensional solutions that can serve as the source for a range of reports and charts.

Atomic Warehouse Model

The Atomic Warehouse Model is a logical, specialized model derived from the Business Terms. It is optimized as a data repository that can hold long-term history, usually across the entire enterprise.

It provides the data design support needed to create a uniform model of the enterprise-level business requirements as specific, flexible and efficient structures dedicated to the long-term storage of historical facts. It features a flexible atomic data area (primary data storage area) as well as the typical summaries needed by most financial institutions to roll up the detail data for analysis purposes. A portion of the Atomic Warehouse Model is generated in the initial project phase. Other areas can be generated as the financial institutions covers more business areas over time.

Dimensional Warehouse Model

The Dimensional Warehouse Model is a logical model derived from the Business Terms and the Analytical Requirements and provides an optimized data repository for supporting analytical queries. It provides the data design support needed to transform the enterprise-level business requirements into business-specific and efficient structures dedicated to the design of a dimensional data repository.

This repository holds sufficient and complete data to meet the needs of business user analysis. Dimensional models are easily understood by business users. They are optimized for data querying rather than for transactional speed, and their structure makes it is easier to extend them to support new data requirements. The Dimensional Warehouse Model contains star schema style dimensional data structures organized around fact entities that support the Analytical Requirements.

Supportive Content

Supportive Content provides a method of mapping both external and internal terms from business standards and other requirements to the Business Terms and to the Atomic and Dimensional Warehouse Models. This helps business users understand how such business terms are represented in the models, using the naming and definitions of the source. The benefit of such a hierarchy is in logically organizing the data requirements into cohesive groupings, and in translating requirement data needs into their support in the data model.

IBM Banking and Financial Markets Data Warehouse Support for FATCA

IBM Banking and Financial Markets Data Warehouse is at a mature stage, having been developed over a number of years, and provides comprehensive data coverage for all lines of business in a financial institution. The primary area of model development for FATCA support has been in Supportive Content, since this part of the model reflects the taxonomy used in legislation. Supportive Content identifies critical data elements required for FATCA in the terminology of the ligislation, with a context of why they are required.

Supportive Content

Supportive content is the interface between the source, sometimes complex documentation, and the more detailed, logical models of the IBM Banking and Financial Markets Data Warehouse.

The FATCA legislation document, related tax forms and the set of documents relating to the Inter Governmental Agreements have each been analyzed in depth in order to identify the key, critical business data elements, which exist within them. These critical data elements are then grouped and logically presented in an easily consumable format using the language found in the source.

Both business and IT users can use supportive content to get a complete overview of the data content that is of significant interest to the Financial Institution.

More importantly, the FATCA supportive content is mapped directly to both Business Terms and to the Atomic Warehouse model guiding the user to the most appropriate FATCA-related content in those models.

FATCA critical data elements have been captured and logically organized under the following headings:

- FATCA US Taxpayer Compliance
- FATCA Foreign Financial Institution Compliance
- FATCA US Withholding Agent Compliance
- FATCA Inter Governmental Agreements

Each section gives a complete breakdown of the data requirements of each FATCA area as it is defined in the FATCA documentation.

FATCA US Taxpayer Compliance

- Specifies the data elements that need to be reported for individual US taxpayers.
- Supports the profiling of individual customers and a possible service offered to customers.

FATCA Foreign Financial Institution Compliance

- Specifies the reporting, withholding and due diligence requirements of Foreign Financial Institutions
- Supports the identification of relevant account information, Chapter 4 Status and withholding thresholds

FATCA US Withholding Agent Compliance

- Identifies the classification and withholding requirements of US based withholding agents

FATCA Inter Governmental Agreements

- Identifies the key data elements required for the support of Model 1 and Model 2 inter-governmental agreements

Analytical Requirements and Dimensional Warehouse Model

The IBM Banking and Financial Markets Data Warehouse contain Analytical Requirements, which reflect the most common types of query and analysis for specific business areas that most users need to perform.

IBM Banking and Financial Markets Data Warehouse consists of a proven, flexible and scalable data warehouse infrastructure to address the following business reporting and analysis needs:

- Asset & Liability Management
- Investment Management
- Profitability
- Regulatory Compliance
- Relationship Marketing
- Risk Management
- Wealth Management

A number of these existing Analytical Requirements can be used in support of FATCA analysis and reporting.

IBM Banking and Financial Markets Data Warehouse provides specific FATCA-related measure and dimensions which facilitate the analysis of FATCA regarding its impact on the finanical institution. These aid the definition of FATCA-specific reporting requirements and use FATCA terminology to allow business users articulate their requirements.

The FATCA content is mapped to the Atomic and Dimensional Warehouse models. This means that the scoping of the analytical requirements, and supportive content, automatically selects the most appropriate data warehouse model entities and attributes to support those requirements.

These FATCA-specific Analytical Requirements are:

FATCA Implementation Analysis
Perhaps the first key questions that a Financial Institution might have regarding the impact of FATCA on them is the cost.

As FATCA has only recently been introduced, many Financial Institutions are being faced with the difficulty of understanding the impact that the implementation of FATCA has on their business. IBM Banking and Financial Markets Data Warehouse contains a set of measures and dimensions to allow the Financial Institution to:

- Analyze the current mix of customers who might be subject to foreign financial asset reporting under FATCA, for financial institutions who are outside the US
- Identify the gross level measures that those customers would need to report to the Internal Revenue Service of the United States.

- Analyze the geographical spread of US Persons, with a view to assessing where the expertise for FATCA compliance needs to be centered to cater for the greatest number of customers.

FATCA Compliance Analysis
The IBM Banking Data Warehouse contains a set of measures and dimensions to allow the Financial Institution to analyze the Financial Institution's accounts to measure compliance with FATCA regulation post implementation and to identify the volumes and type of accounts impacted most by the compliance rules.

The objective of Compliance Analysis is to:

- Analyze the impact of FATCA from a commercial point of view, post implementation
- Identify the volumes and types of accounts impacted
- Monitor customer and supplier compliance, giving a view of compliance through the entire supply chain

FATCA Withholding Analysis
The FATCA Withholding Analysis Analytical Requirements is designed to support the Financial Institution in the generation of reports and the analysis of payments, which are withholdable under IRS FATCA regulation. Its objective is to analyze FATCA from a withholding tax point of view to understand the amount at stake and areas/lines of business most affected.

The Dimensional Warehouse Model content is derived from the atomic data represented in the Atomic Data Model, with traceability to the Analytical Requirements from which the dimensional model elements are built. For example:

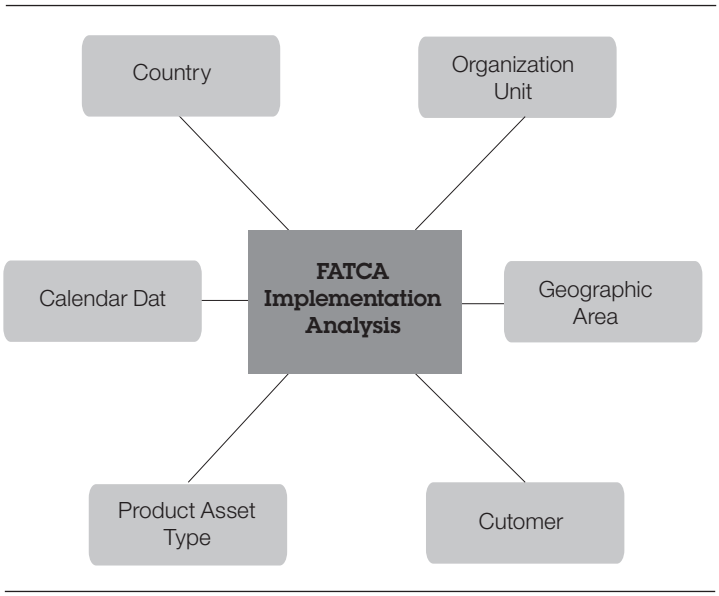

Figure 3. An example of structures in the Dimensional Warehouse Model

Business Terms

Business Terms describe the FATCA business content that is supported by the data models. Pre-existing and newly added content help provide a wide set of terms that support FATCA. For example, an FFI Agreement between a foreign financial institution and the IRS is regarded as a Cooperation Arrangement. "*Identifies an Involved Party Arrangement, which specifies the manner in which one Involved Party undertakes to act together with another Involved Party in a specific manner and/or a specific project. For example, a specific Correspondent Banking Arrangement.*"

Atomic Data Warehouse

The Atomic Warehouse Model is a design level data model that represents the enterprise-wide repository of atomic data used for informational processing.

There is a large degree of traceability from the Atomic model to the other warehouse components of supportive content, analytical requirements and business terms. Therefore, any new FATCA-specific elements identified and added to the other components are mapped to the Atomic Warehouse Model.

Figure 4 is an example of entities used in the identification of customers who may be subject to foreign financial asset reporting under FATCA.

Key information may include the Country of Citizenship of an Individual who is a Customer of the financial institution. The financial institution may also be interested to know the Geographic Area where the Customer is primarily located in order to assess where FATCA compliance expertise should be centered.

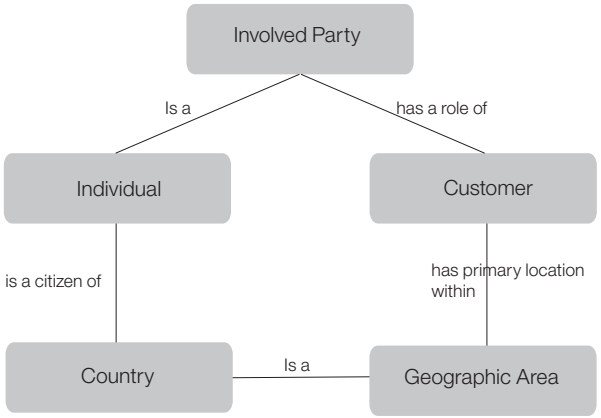

Figure 4. An example of entities in the Atomic Warehouse Model

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