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Metamodel for the Federal Transition Framework (FTF)

Version 1.0

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^{*} original .zip file: gov/07-09-04

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Preface

About the Object Management Group

OMG

Founded in 1989, the Object Management Group, Inc. (OMG) is an open membership, not-for-profit computer industry standards consortium that produces and maintains computer industry specifications for interoperable, portable and reusable enterprise applications in distributed, heterogeneous environments. Membership includes Information Technology vendors, end users, government agencies and academia.

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As noted, OMG specifications address middleware, modeling and vertical domain frameworks. A catalog of all OMG Specifications is available from the OMG website at:

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Specifications within the Catalog are organized by the following categories:

OMG Modeling Specifications

- UML
- MOF
- XMI
- CWM
- Profile specifications

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- CORBA/IIOP
- IDL/Language Mappings
- Specialized CORBA specifications
- CORBA Component Model (CCM)

Platform Specific Model and Interface Specifications

CORBAservices

- CORBAfacilities
- OMG Domain specifications
- OMG Embedded Intelligence specifications
- OMG Security specifications.

All of OMG's formal specifications may be downloaded without charge from our website. (Products implementing OMG specifications are available from individual suppliers.) Copies of specifications, available in PostScript and PDF format, may be obtained from the Specifications Catalog cited above or by contacting the Object Management Group, Inc. at:

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Typographical Conventions

The type styles shown below are used in this document to distinguish programming statements from ordinary English. However, these conventions are not used in tables or section headings where no distinction is necessary.

Times/Times New Roman - 10 pt.: Standard body text

Helvetica/Arial - 10 pt. Bold: OMG Interface Definition Language (OMG IDL) and syntax elements.

Courier - 10 pt. Bold: Programming language elements.

Helvetica/Arial - 10 pt: Exceptions

Note – Terms that appear in *italics* are defined in the glossary. Italic text also represents the name of a document, specification, or other publication.

Issues

The reader is encouraged to report any technical or editing issues/problems with this specification to http://www.omg.org/technology/agreement.htm.

1 Scope

The specification is designed to move the evolution of the Federal Transition Framework into the general community of the OMG (industrial, governmental, and academic). The initial standard is therefore based on the existing release of the Federal Transition Framework released by the President's Office of Management and Budget.

A key aspect of this specification is to move the FTF specification's primary representation from an XML Schema representation to a Platform Independent Model of the FTF semantics from which the XML Schema is derived as a Platform Specific Model. This opens the evolution of the FTF to its expression in multiple technologies (Platform Specific Models) going forward.

2 Conformance

Implementations of this specification will conform with the semantics expressed in the platform independent model, and in particular, will be able to generate and/or consume XML documents that are conformant with the XML Schemas specified for the Federal Transition Framework (referenced in Clause 8).

2.1 Changes to Existing OMG Specifications

No changes to existing OMG standards are required in support of this specification.

3 Normative References

OMG Document: gov/2007-09-04

Title: Federal Transition Framework Specification

Description: A "zip" file of the documents comprising the FTF Specification. These files contain minor

changes from the original Revised Submission as suggested by the OMG Architecture Board.

The following files are in the above zip file, comprising the specification.

File: FTF-Submission.doc

Title: Federal Transition Framework Submission - Specification Document

Description: Submission to the OMG's Federal Transition Framework RFP

File: FTF-CMOF-XMI-PIM.xml

Title: Federal Transition Framework Submission - CMOF XMI

Description: The CMOF representation of the platform independent model in XMI format. The definitive

specification of the Federal Transition Framework Platform Independent Model.

File: FederalTransitionFramework.xsd

Title: Federal Transition Framework Submission - Federal Transition Framework XML Schema PSM

Description: The XMI-compliant XML Schema representation of the FTF platform specific model generated

from the Platform Independent Model (gov/2007-08-02).

File: OrganizationStructure.xsd

Title: Federal Transition Framework Submission - Organization Model XML Schema PSM

Description: The XMI-compliant XML Schema representation of the "Organization" platform specific

model generated from the Platform Independent Model (gov/2007-08-02). This supports formal organizational references in the FTF. It is based on work emerging from the OMG's BMIDTF,

though highly subsetted to only the elements needed.

File: FTF-Subset-of-FEACRM.xsd

Title: Federal Transition Framework Submission - FTF Subset of the Federal Enterprise Architecture

Consolidated Reference Model XML Schema PSM

Description: A subset of the XMI-compliant XSD representation of the FEA CRM platform specific model

in gov/2007-08-04. It contains only the elements of the CRM that are referenced explicitly in the FTF XML Schema (gov/2007-08-03). Only this subset is submitted as a normative portion

of the FTF Specification.

4 Terms and Definitions

Terms and definitions of the Federal Transition Framework are defined in the context of the models in which they occur in Clause 7 and 8.

The terms and definitions of the Federal Enterprise Architecture Consolidated Reference models are found in two official US documents:

 The FEA Consolidated Reference Models, Version 2.2 http://www.whitehouse.gov/omb/egov/documents/FEA_CRM_v22_Final_July_2007.pdf 2. The Data Reference Model, Version 2.0 http://www.whitehouse.gov/omb/egov/documents/DRM_2_0_Final.pdf.

The following non-technical terms need particular note.

- FTF In this specification "FTF" always is interpreted as the Federal Transition Framework... it never means 'Finalization Task Force.'
- OMB is the US President's Office of Management and Budget (it's not a "typo" of "OMG").

5 Symbols and Typographical Conventions

The specification is presented in standard UML 2.0 notation. The specification has three principal packages (see Clause 7). Orange-colored types are those defined by the FTF; green types are defined by the FEA Consolidated Reference Model, and yellow-colored types represent person or organization types.

6 Additional Information

6.1 Acknowledgements

The following companies submitted and/or supported this specification:

Submitters

- Adaptive
- · MEGA International
- Model Driven Solutions
- · Telelogic AB
- · Troux Technologies

Supporters

- Everware-CBDI
- RedHat, Inc.
- TethersEnd Consulting
- US Department of Treasury
- US National Archives and Records Administration
- US President's Office of Management and Budget
- Unisys

7 Structural Overview

7.1 Platform Independent Model

The Platform Independent Model (PIM) is fully specified in OMG Document: gov/2007-08-02, "Federal Transition Framework Submission - CMOF XMI," the CMOF representation of the platform independent model in XMI format. This constitutes the definitive specification of the Federal Transition Framework Platform Independent Model.

The model was specified using the UML modeling tool, MagicDraw v12.5. Though not formally part of this specification, the model has been posted to OMG Document gov/2007-08-09. The diagrams included in this document were generated from that model as were the XML Schemas, which are designated as the Platform Specific Models of this specification. (See Clause 3, "Normative References").

7.2 Federal Enterprise Architecture Consolidated Reference Models (FEA-CRM)

The FTF is constructed to facilitate as well as take advantage of the FEA-CRM. The Federal Enterprise Architecture Framework Reference Models defines five layers of enterprise architecture called "Reference Models" (Performance, Business, Data, Service Component, and Technology). The FTF similarly has layers (discussed below in Section 7.3, "FTF Layers"). Some FTF entities reference FEA-CRM entities. However, there is no formal model of the FEA-CRM. It is primarily a textually specified model (with the exception of the Data Reference Model, DRM, discussed below.)

As a lemma to formalizing these relationships, the specification provides a model of the FEA-CRM derived from the textual document. The FEA-CRM document is a mixture of meta-level and instance level specification. The FEA-CRM model developed as part of this specification addresses only the meta-level and is therefore not a full rendition of the FEA-CRM. There is no commitment by any governmental agency to adopt this as "the" model of the FEA-CRM. The model will serve as a focal point for discussions of possible future work in the Government DTF and to provide the model needed to "tie" the FTF to the FEA-CRM, consistent with its intent.

An exception to the mixture of meta and instance levels in the FEA-CRM is the Data Reference Model (DRM). It is specified as a meta-model and is rendered in this work faithfully.

Since the FTF uses only a subset of the DRM, an additional XML Schema is provided that has only that subset in it. This will prevent the clutter of extraneous entities that will not be used in the generation or consumption of FTF documents.

7.3 FTF Layers

The FTF has five layers corresponding to those in the FEA-CRM (above). In addition to those layers, the design of the FTF also incorporates the idea of EA Cross-Agency Initiatives, described in the previous section. The six layers of the FTF are:

- Initiative: Describes a specific federal cross-agency initiative represented in the FTF, including initiative deliverables, approved implementation guidance for agencies and any communities of interest supporting the CAI.
- Strategy and Performance: Describes the outcomes, objectives and mandates representing the strategic goals of a given CAI, aligned to the FEA Performance Reference Model.
- Business: Describes the common business processes and initiatives specific to the CAI, aligned to the FEA Business Reference Model.

- Data: Describes the common information exchange packages, data repositories and standards of a given CAI, which are structured using the framework of the FEA Data Reference Model (version 2.0).
- Service Component: Describes the common shared IT services, components and component repositories specific to a given CAI, aligned to the FEA Service Component Reference Model.
- Technology: Describes the common technology standards, government off-the-shelf products and shared licensing opportunities specific to a given CAI, aligned to the FEA Technical Reference Model.

The following diagram (Figure 7.1) provides an overview of the relationships among the layers, and the entity types existing within each layer. The layers are organized from top to bottom in the order described above. Orange-colored types are those defined by the FTF; green types are defined by the FEA Consolidated Reference Model, and yellow-colored types represent person or organization types.

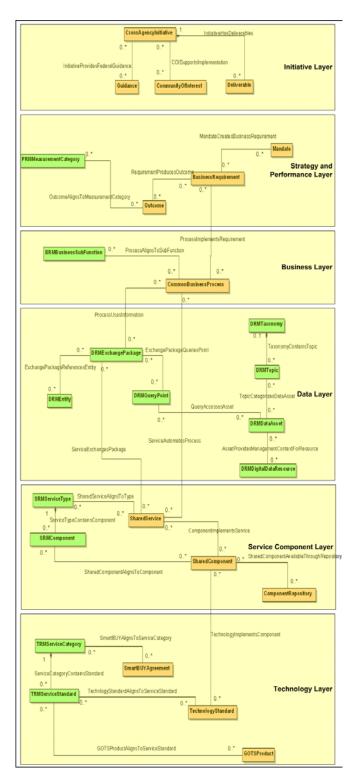


Figure 7.1 - Overview of the Federal Transition Framework

The details of each layer are provided in sub clause 7.6.

7.4 Organization Model

In addition to modeling the FEA-CRM in support of the FTF, a terse Organization Model was designed to move implicit relationships to Organization units out of text attributes. It is a highly subsetted derivation of emerging work of the BMI DTF.

7.5 Common Object Attributes

There is a set of entity attributes common to all entity types in the FTF, with the exception of the types derived from the FEA Consolidated Reference Model, and the Party type. These attributes are listed below.

Attribute	Туре	Description
Name	String	Instance name. Should be brief and natural, and it should uniquely identify the entity instance.
Description	String	Brief description of the entity instance
URL	String	Internet Uniform Resource Locator that provides additional information pertinent to a specific object within the FTF.

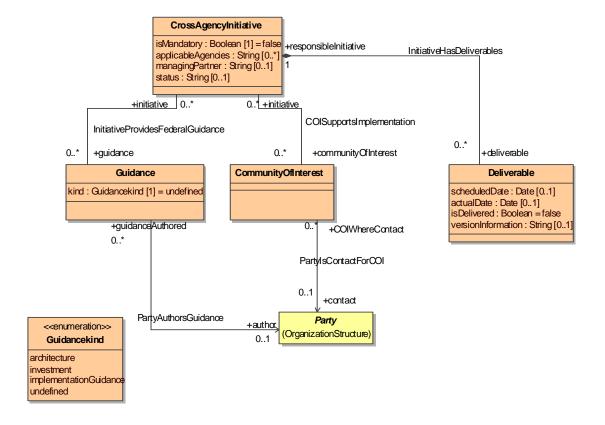
The common attributes are not repeated in the descriptions unless there is a special provision for how the attribute is used with a particular entity.

8 FTF Metamodel Elements by Layer

8.1 Initiative Layer

The Initiative Layer describes important elements of common federal cross-agency initiatives including:

- The initiatives themselves
- · Relevant sources of federal guidance
- · Communities of interest within the Federal government providing support to agencies implementing the initiative
- Deliverables produced by the initiative that may be of value to agencies



Entity Name	Cross-Agency Initiative (CAI)	
Entity Description	Describes a common federal initiative or IT management requirement	
Relationships	Deliverable, Community of Interest, Guidance	

Examples	IPv6, IT Infrastructure Optimization LOB, Grants LOB, e-Authentication Service Component	
Entity Source	OMB	
Unique Attributes	Туре	Description
Mandatory / Informational	True/False	Agencies are expected to incorporate the FTF Catalog content for all CAIs designated as Mandatory, providing that the CAI is relevant to the agency's lines of business (see "Applicable Agencies"), below. Non-Mandatory CAIs are designated as Informational, meaning that agencies may elect to incorporate the FTF content for that CAI into their target architectures, but are not required to do so.
Applicable Agencies	String	Describes criteria to determine which federal agencies this initiative applies to
Managing Partner	String	Name of agency responsible for managing the cross-agency initiative

Entity Name	Guidance		
Entity Description	Document(s) that provide approved federal guidance to federal agencies in implementing the CAI. The source of this guidance may be OMB, the CIO Council or other designated agencies or bodies.		
Relationships	Cross-Agency Initiat	Cross-Agency Initiative, Party	
Examples	"Integrating IPv6 into Agency EA Planning" (pub. by the CIO Council)		
Entity Source	OMB, CIO Council		
Unique Attributes	Туре	Description	
Author	String	Organization responsible for producing guidance	

Entity Name	Deliverable	
Entity Description	Products (including documents, models, components, and other architecture artifacts) published by the initiative that may be of benefit to individual agencies. This information can be used to generate a timeline view of the cross-agency initiative efforts.	
Relationships	Cross-Agency Initiative	
Examples	Guidance documents, architecture models, software components	
Entity Source	OMB, CIO Council	
Unique Attributes	Туре	Description

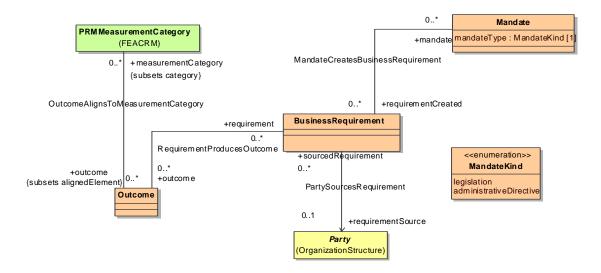
Scheduled Date	Date	Date deliverable is or was expected to be available (may be in the future)
Actual Date	Date	Date deliverable was actually made available
Is Delivered	Boolean	Whether deliverable is currently available for download and/or use by agencies
Version Information	String	Current version of the deliverable

Entity Name	Community of Intere	Community of Interest	
Entity Description	Group established within the Federal government to promote and support implementation efforts for this CAI by Federal agencies		
Relationships	Cross-Agency Initiat	ive	
Examples	AIC IPv6 Working Group		
Entity Source	Any Federal agency		
Unique Attributes	Туре	Description	
No additional attributes			

8.2 Strategy and Performance Layer

The Strategy and Performance Layer describes important elements of CAIs including:

- Federal mandates for IT management and specific agency requirements associated with them.
- Expected performance outcomes for the initiative, linked to the FEA Performance Reference Model.



Entity Name	PRM Measurement C	PRM Measurement Category	
Entity Description	Provides general classifications of measurement indicators within the Performance Reference Model (PRM)		
Relationships	Outcome		
Examples	Community and Social Services, Defense and National Security		
Entity Source	FEA Consolidated Reference Model		
Unique Attributes	Type Description		
No additional attributes			

Entity Name	Outcome		
Entity Description	Measurable agency performance outcome expected as a result of initiative. Performance improvements may be in the areas of business process improvements, cost savings and cost avoidance, technology implementation or other measures as enumerated within the PRM.		
Relationships	Business Requiremen	Business Requirement	
Examples	"25% improvement in vaccination delivery schedule"		
Entity Source	Cross-Agency Initiative Managing Partner		
Unique Attributes	Type Description		
No additional attributes			

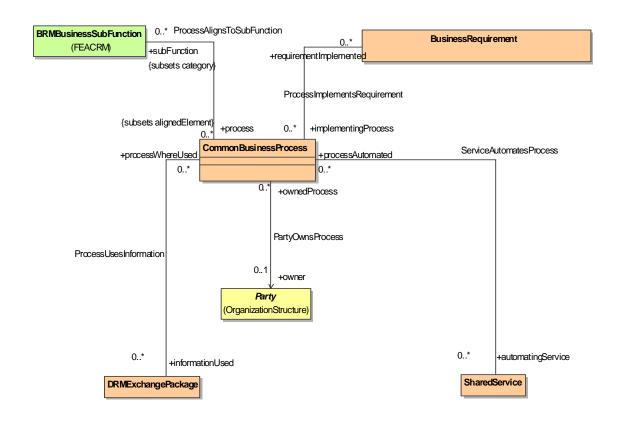
Entity Name	Mandate	
Entity Description	Federal legislation or administrative directive that serves a source for compliance requirements for Federal agencies.	
Relationships	Business Requirement	
Examples	E-Government Act, OMB Memorandum 05-22	
Entity Source	OMB, Congress, Policy Authority	
Unique Attributes	Туре	Description
Туре	Enumeration	Indicates whether mandate is legislation or administrative directive.

Entity Name	Business Requirement	
Entity Description	Specific agency requirement for compliance with this initiative that derives from a Mandate (see above). A Requirement describes a specific, measurable expectation for agency conformance.	
Relationships	Outcome, Mandate, Party	
Examples	"all agencies' infrastructure (network backbones) must be using IPv6, and agency networks must interface with this infrastructure, by June 30, 2008."	
Entity Source	OMB, Congress, Policy Authority	
Unique Attributes	Туре	Description
Requirement Source	String	Mandate instituting the requirement

8.3 Business Layer

The Business Layer encompasses entities and relationships pertaining to cross-agency business activities, including:

- Common cross-agency business processes defined by the CAI for their line of business.
- Linkage to the FEA Business Reference Model.
- Linkage to related strategic requirements, shared services, and information exchange packages.



Entity Name	BRM Business Subfunction	
Entity Description	Breaks a line of business down into smaller, more concrete functions.	
Relationships	Common Business Process	
Examples	Public Relations, Record Retention	
Entity Source	FEA Consolidated Reference Model	
Unique Attributes	Туре	Description
Number	Integer	Unique identity code assigned by FEA to each Subfunction.

Entity Name	Common Business Process
Entity Description	A business process is an activity performed by agencies that yields a result of measurable value to one or more stakeholders. Each BRM Business Subfunction can be further decomposed into multiple business processes.

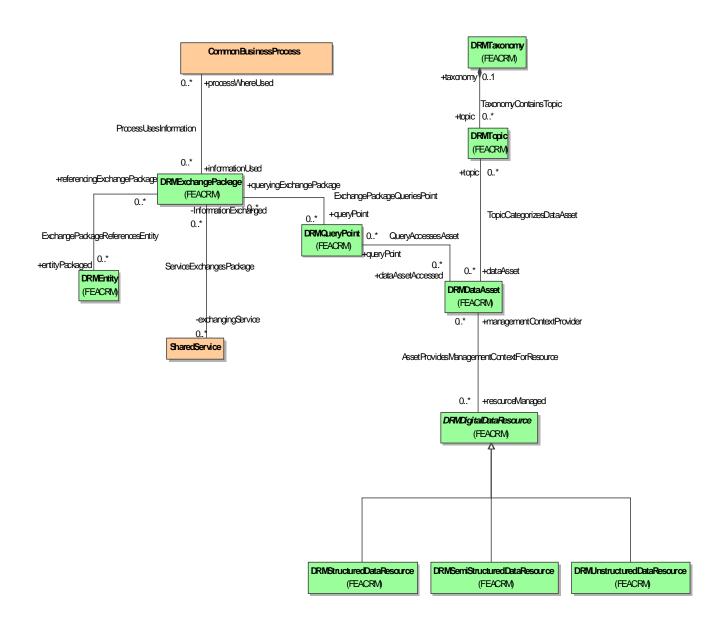
Relationships	BRM Business Subfunction, Business Requirement, DRM Exchange Package, Shared Service	
Examples	"IPv6 Address Space Acquisition"	
Entity Source	Cross-Agency Initiative Task Force	
Unique Attributes	Туре	Description
Process Owner	String	Agency formally charged with ownership of the common process.

8.4 Data Layer

The Data layer encompasses entities and relationships pertaining to data exchanged as part of a common business process, including

- Information exchange packages defining the format for data sharing
- Data resources such as databases containing common federal data
- Data taxonomies for this cross-agency initiative

All of the entity types defined within the FTF Data Layer are defined within the FEA Data Reference Model 2.0. The entity type descriptions and attributes are taken directly from the DRM. The cross-agency initiatives are responsible for creating the instances of these types for their specific initiatives.



Entity Name	DRM Taxonomy
Entity Description	A collection of controlled vocabulary terms organized into a hierarchical structure. Taxonomies provide a means for categorizing or classifying information within a reasonably well-defined associative structure. Each term in a taxonomy is in one or more parent/child (broader/narrower) relationships to other terms.
Relationships	DRM Topic

Examples	A taxonomy expressed in W3C Web Ontology Language (OWL) format.	
Entity Source	FEA Data Reference Model 2.0	
Unique Attributes	Туре	Description
No additional attributes		

Entity Name	DRM Topic	
Entity Description	A category within a Taxonomy. A Topic is the central concept for applying context to data. For example, an agency may have a Taxonomy representing their organizational structure. In such a Taxonomy, each role in the organizational structure (e.g., CIO) represents a Topic. Topic is often synonymous with "node."	
Relationships	DRM Taxonomy, DRM Data Asset	
Examples	Country	
Entity Source	FEA Data Reference Model 2.0	
Unique Attributes	Туре	Description
No additional attributes		

Entity Name	DRM Data Asset		
Entity Description	A managed container for data. In many cases, this will be a relational database; however, a Data Asset may also be a Web site, a document repository, directory, or data service.		
Relationships	DRM Topic, DRM D	DRM Topic, DRM Digital Data Resource, DRM Query Point	
Examples	Relational databases, web services, directory, document repository		
Entity Source	FEA Data Reference Model 2.0		
Unique Attributes	Type Description		
Туре	String	Type of Data Asset – e.g., database, Web site, registry, directory, data service, etc.	
Geospatial Enabled	True/False	Designates whether or not the Data Asset supports or provides Geospatial data.	

Entity Name	DRM Digital Data Resource	
Entity Description	A digital container for information, which may be stored in structured, semi-structured on unstructured forms. This type is further subtyped into Structured, Semi-Structured, and Unstructured Data Resource, as per the DRM 2.0.	
Relationships	DRM Data Asset	
Examples	Relational databases, semi-structured data files, unstructured documents.	
Entity Source	FEA Data Reference Model 2.0	
Unique Attributes	Туре	Description
Туре	Enumeration	Type of Resource – structured, semi-structured, or unstructured

Entity Name	DRM Query Point	
Entity Description	An endpoint providing an interface for accessing and querying a Data Asset. A concrete representation of a Query Point may be a specific URL at which a query Web Service may be invoked. A Query Point returns a result set specified in an Exchange Package.	
Relationships	DRM Data Asset, DRM Exchange Package	
Examples	"http://www.example.com/querypoint3"	
Entity Source	FEA Data Reference Model 2.0	
Unique Attributes	Туре	Description
Query Languages	String	A stipulation of the query languages supported by a Query Point (e.g., SQL-92, CQL (Z39.50), XQuery, HTTP GET, etc.).

Entity Name	DRM Exchange Package	
Entity Description	A description of a specific recurring data exchange between a supplier and a consumer. An Exchange Package contains information (metadata) relating to the exchange (such as Supplier ID, Consumer ID, validity period for data, etc.), as well as a reference to the Payload (message content) for the exchange. An Exchange Package can also be used to define the result format for a query accepted and processed by a Query Point in a data sharing scenario.	
Relationships	Common Business Process, DRM Entity, DRM Query Point, Shared Service	
Examples	Electronic Healthcare Record	
Entity Source	FEA Data Reference Model 2.0	
Unique Attributes	Туре	Description

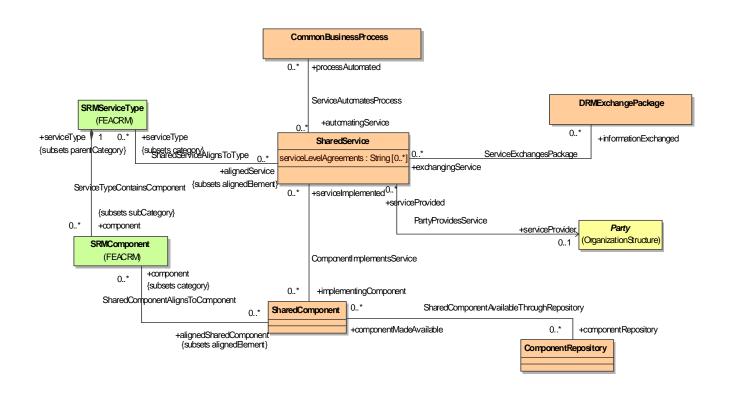
Classification	String	The security classification for an Exchange Package.
Frequency	String	The frequency at which the exchange occurs

Entity Name	DRM Entity	DRM Entity	
Entity Description	An abstraction for a person, place, object, event, or concept described (or characterized) by common Attributes. For example, "Person" and "Agency" are Entities. An instance of an Entity represents one particular occurrence of the Entity, such as a specific person or a specific agency.		
Relationships	DRM Exchange Package		
Examples	Person, Agency		
Entity Source	FEA Data Reference Model 2.0		
Unique Attributes	Type Description		
No additional attributes			

8.5 Service Component Layer

The Service Component Layer encompasses entities and relationships pertaining to shared IT services and components utilized by the CAI, including

- Shared IT services (e.g., Grants.gov)
- Potentially shareable service components (e.g., e-Authentication)
- Relevant Federal repositories of components for this CAI (e.g., Core.gov)



Entity Name	SRM Service Type		
Entity Description	Defines the second le	Defines the second level of detail describing a business-oriented service	
Examples	Tracking and Workfl	Tracking and Workflow, Routing and Scheduling	
Relationships	SRM Component, Shared Service		
Entity Source	FEA Consolidated Reference Model		
Unique Attributes	Type Description		
No additional attributes			

Entity Name	SRM Component
Entity Description	A self contained business process or service with predetermined functionality exposed through a business or technology interface.
Relationships	SRM Service Type, Shared Component
Examples	Process Tracking, Case Management, Conflict Resolution

Entity Source	FEA Consolidated Reference Model	
Unique Attributes	Type Description	
No additional attributes		

Entity Name	Shared Service	
Entity Description	Shared services are federal e-government implementations such as Line of Business Centers of Excellence or other services shared across multiple agencies.	
Relationships	SRM Service Type, Common Business Process, DRM Exchange Package, Party, Shared Component	
Examples	HR Centers of Excellence	
Entity Source	Line of Business or E-Government Initiative	
Unique Attributes	Type Description	
Service Level Agreements	String	Description of service level agreements established for this service.
Service Provider	String	Name of organization providing the shared service

Entity Name	Shared Component		
Entity Description	Logical "building blocks" of a shared service		
Relationships	SRM Component, Co	SRM Component, Component Repository	
Examples	e-Authentication		
Entity Source	Line of Business or E-Government Initiative		
Unique Attributes	Type Description		
No additional attributes			

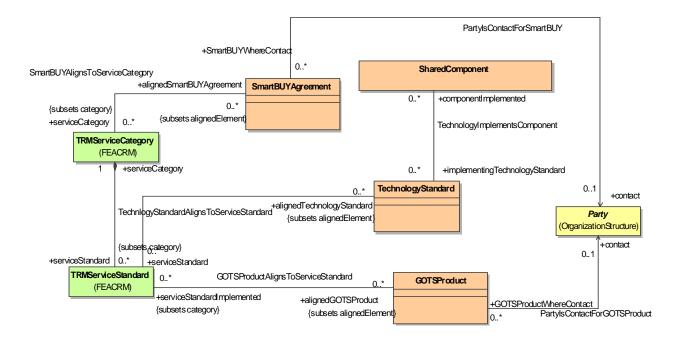
Entity Name	Component Repository	
Entity Description	Online service hosting components for reuse by federal agencies	
Relationships	Shared Component	
Examples	CORE.gov	
Entity Source	Line of Business or E-Government Initiative	

Unique Attributes	Туре	Description
No additional attributes		

8.6 Technology Layer

The Technology Layer encompasses entities and relationships pertaining to common Federal technology infrastructure elements, including:

- · Technology specifications including NIST standards and approved industry standards
- Government off-the-shelf (GOTS) applications
- · Approved SmartBUY licensing agreements for this CAI



Entity Name	TRM Service Category	
Entity Description	Used to classify lower levels of technologies, standards, and specifications in respect to the business or technology function they serve.	
Relationships	TRM Service Standard, SmartBUY Agreement	
Examples	Access Channels, Service Transport	
Entity Source	FEA Consolidated Reference Model	
Unique Attributes	Type Description	
No additional attributes		

Entity Name	TRM Service Standard		
Entity Description	Used to define the sta	Used to define the standards and technologies supporting the Service Category.	
Relationships	TRM Service Category, Technology Standard, GOTS Product		
Examples	Web Browser, Wireless/PDA		
Entity Source	FEA Consolidated Reference Model		
Unique Attributes	Type Description		
No additional attributes			

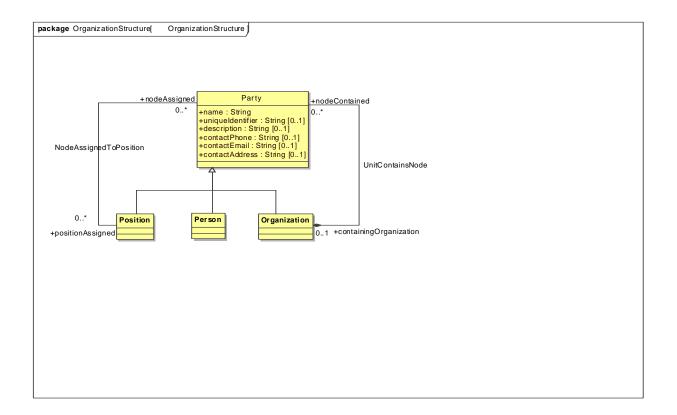
Entity Name	Technology Standard	Technology Standard	
Entity Description	Approved federal technologies, standards, and specifications in respect to the business or technology function they serve.		
Relationships	TRM Service Standard, Shared Component		
Examples	NIST Standards, Voluntary Consensus Standards		
Entity Source	OMB		
Unique Attributes	Type Description		
No additional attributes			

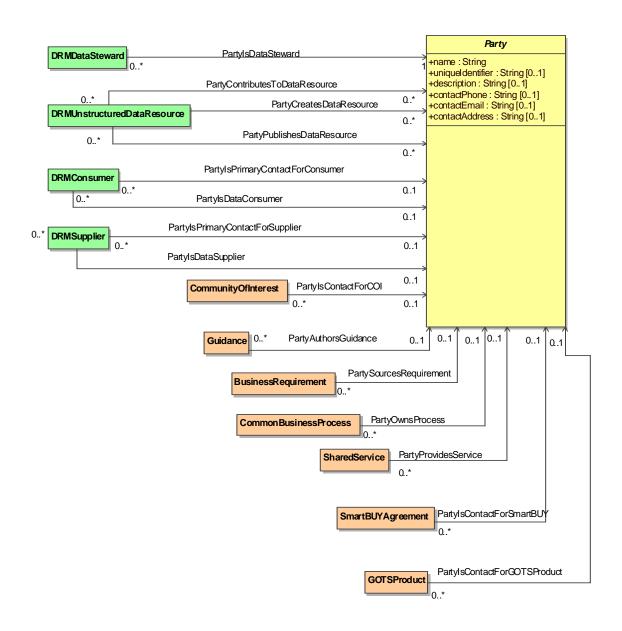
Entity Name	GOTS Product	
Entity Description	Government off-the-shelf technology products agencies can utilize without the payment of license fees. Note: the inclusion of a GOTS product within the FTF does not mandate agencies adopt this product, or prefer it to a commercial product (unless otherwise specified); it merely indicates a product is available for usage by agencies should they elect to do so.	
Relationships	TRM Service Standard, Party	
Examples	e-CPIC	
Entity Source	Any Federal agency	
Unique Attributes	Туре	Description
No additional attributes		

Entity Name	SmartBUY Agreement	
Entity Description	Government-wide blanket purchase agreement for specific vendors approved under the OMB SmartBUY program.	
Relationships	TRM Service Category, Party	
Examples	Prosight, Oracle	
Entity Source	OMB	
Unique Attributes	Туре	Description
No additional attributes		

8.7 Other Types

One additional type has been added to the FTF Metamodel to represent persons and organizations consistently as entities within the metamodel. This type is known as Party:





Entity Name	Party	
Entity Description	Person or organization associated with some other type defined in the FTF metamodel.	
Examples	John Smith, Bureau of Industry	
Entity Source	OMB	
Unique Attributes	Туре	Description

Contact Phone	String	Individual contact for agreement
Contact E-Mail	String	E-mail address of contact
Contact Address	String	Individual contact for community

Annex A

List of Acronyms

Abbreviation	Notes
Chips	Clearing House Inter-Bank Payments System www.chips.org
CLS	Continuous Linked Settlement http://www.cls-services.com
FATF	The FATF is an inter-governmental body whose purpose is the development and promotion of national and international policies to combat money laundering and terrorist financing.
FIX	Financial Information eXchange http://www.fixprotocol.org
FpML	Financial products Markup Language) is the industry-standard protocol for complex financial products. http://www.fpml.org
IFX	Interactive Financial eXchange www.ifxforum.org
Giovannini	The Giovannini Group is a group of financial-market participants, under the chairmanship of Alberto Giovannini (chairman - Unifortune Asset Management SGR), which advises the European Commission on financial market issues.
MDDL	Market Data Definition Language www.mddl.org
MiFID	MiFID will replace the existing Investment Services Directive (ISD), the most significant European Union legislation for investment intermediaries and financial markets since 1995.
Omgeo	Omgeo plays a core role as the orchestrator of post-trade pre-settlement trade management within the global securities industry www.omgeo.com
RTGS	Real-Time Gross Settlement
RIXML	RIXML.org is a consortium of buy-side and sell-side firms that has established an open standard for investment and financial research. www.rixml.org
Sepa	Single Euro Payments Area
Swift	Society for Worldwide Interbank Financial Telecommunication supplies secure messaging services. http://www.swift.com

Target2	TARGET2 is to become a system that provides extensively harmonized services via an integrated IT infrastructure, improves cost-efficiency, is prepared for swift adaptation to future developments, including the enlargement of the Eurosystem. http://www.ecb.int/paym/target/target2/html/index.en.html
Twist	Transaction Workflow Innovation Standards Team www.twiststandards.org
Unifi	UNIversal Financial Industry message scheme (ISO20022) www.iso20022.org
XBRL	XBRL is a language for the electronic communication of business and financial data. http://www.xbrl.org

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Mandate 12

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