
Model Review: MITA Enroll Provider

HL7 MITA Project

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Monday, January 12, 2009, Q3 and Q4

Tuesday, January 13, 2009, Q3 and Q4



Mikey says...

“This is a GRAND opportunity for anyone involved in MITA to develop a new skill! UML modelers right now are a scarce resource...!

This may be the perfect opportunity for someone to step outside the world of their miserable little cubicle, spread their wings, and fly with reckless abandon toward the brave new world of business process modeling.

....it IS a golden opportunity to become part of an elite class of “crossover analysts” who dwell in the netherworld between the Land of Requirements Development and the Land of Systems Design, never really fitting in with either class, not having a clan of your own with which to identify, always being on the outside looking in, always the Bride’s Maid and never the...Bride....okay forget all of that... “

Where to begin?

Get involved:

- HL7 Financial Management Group
 - HL7 MITA Project Work Group
 - ✓ Business Process Team
 - ✓ Data Analytics Team
 - ✓ Education and Training Team
 - ✓ Modelers Team
 - ✓ Vocabulary Team



Where to begin?

The business process templates version 2.01

http://newgforge.hl7.nscee.edu/docman/?group_id=40

HL7GForge: MITA Project: Document Manager: Display Document - Microsoft Internet Explorer provided by DHS, State of MN

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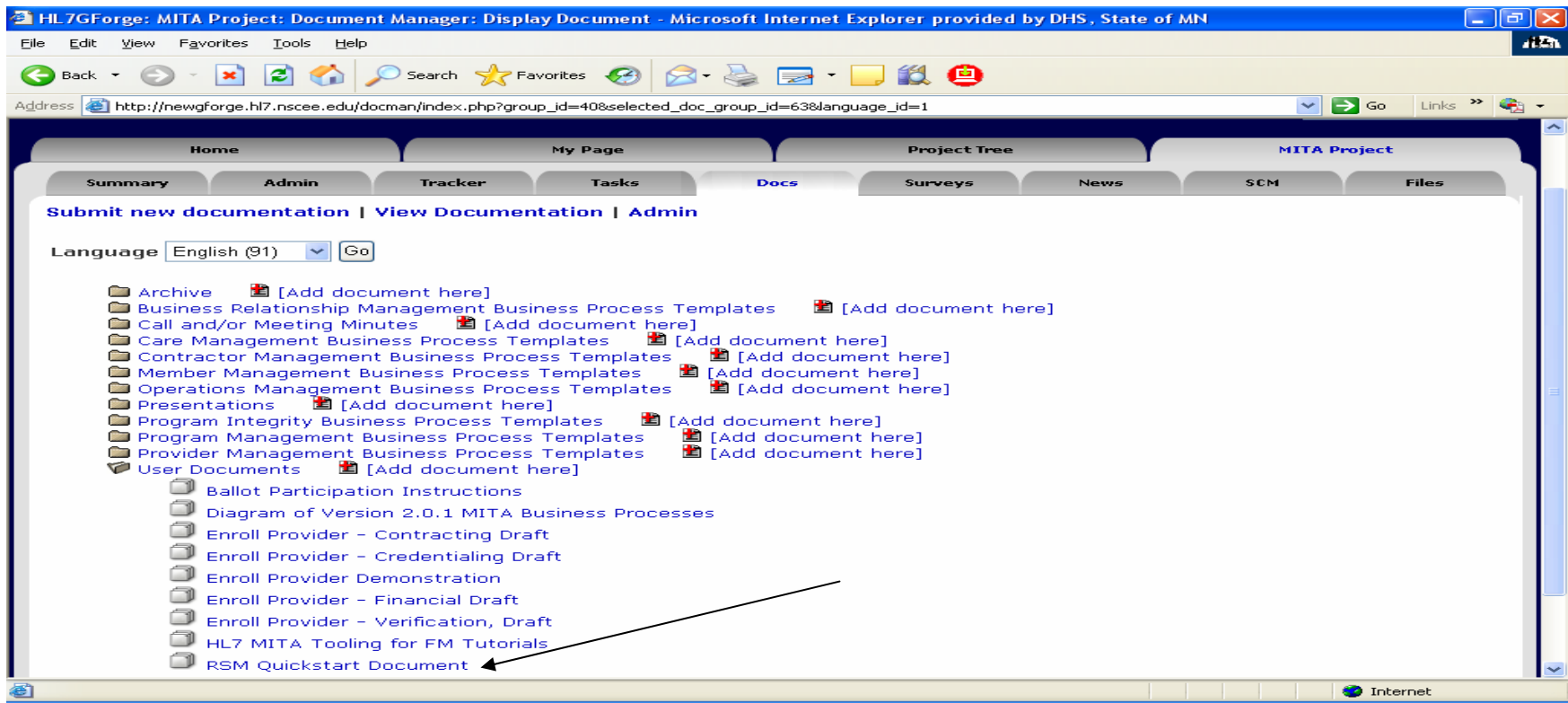
- Archive [Add document here]
- Business Relationship Management Business Process Templates [Add document here]
- Call and/or Meeting Minutes [Add document here]
- Care Management Business Process Templates [Add document here]
- Contractor Management Business Process Templates [Add document here]
- Member Management Business Process Templates [Add document here]
- Operations Management Business Process Templates [Add document here]
- Presentations [Add document here]
- Program Integrity Business Process Templates [Add document here]
- Program Management Business Process Templates [Add document here]
- Provider Management Business Process Templates [Add document here]
- User Documents [Add document here]

powered by **FORGE**

Internet

RSM Tool – Quickstart Document

Documentation in GForge to assist modelers in setting up the RSM software, plug-ins, and workspace.





HL7 Tools, Plug-ins, Workspace, Project

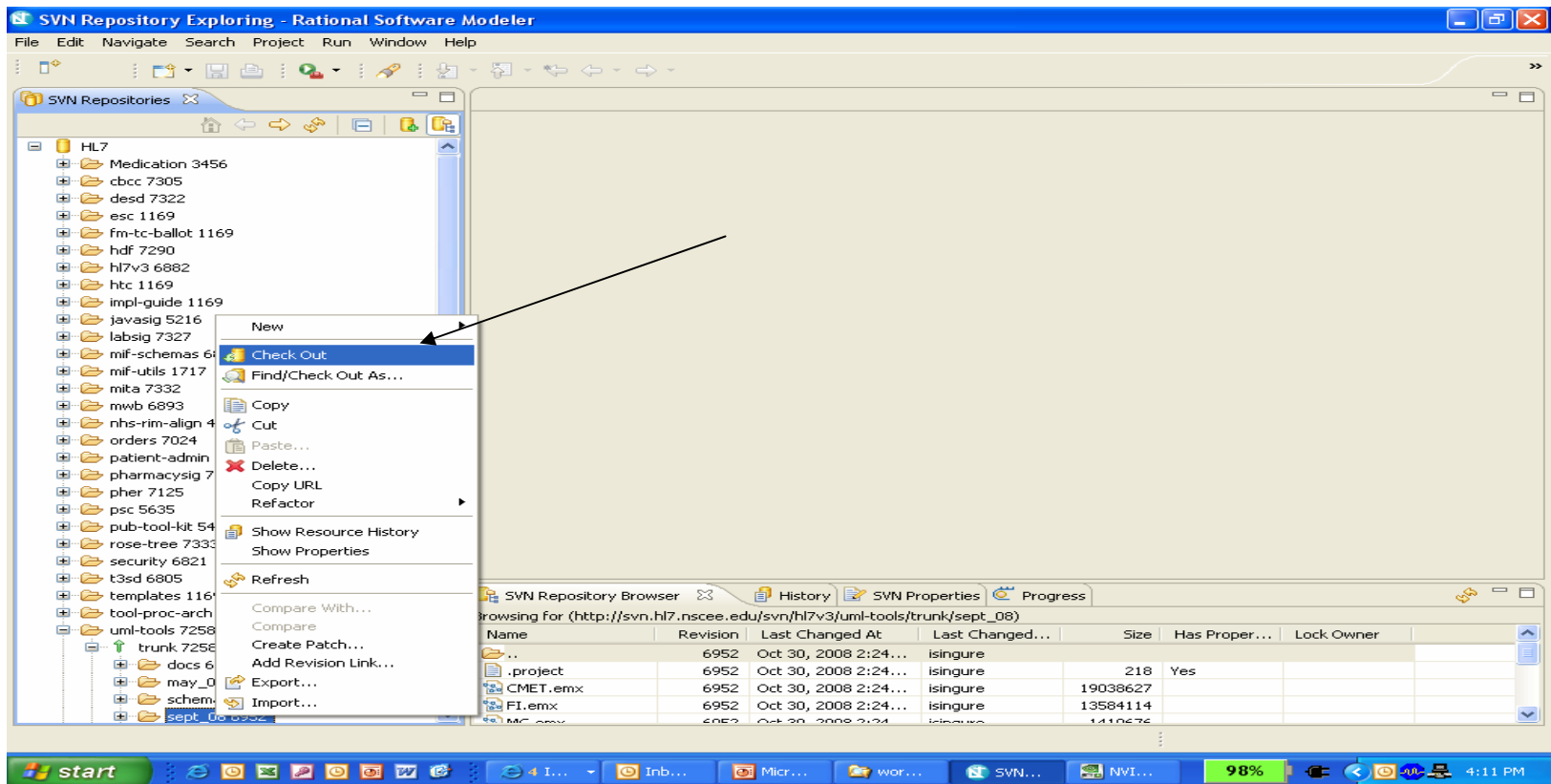
- RSM – licenses available to check out
- Access to GForge
- HL7 Plug-in
- Subversive Client installation in RSM
- Hypermodel installation in RSM
- Importing projects to a workspace
- Updates
- E-mail for assistance
 - WBonney@hl7.org (Wilfred Bonney)
 - Ioana@eversolve.com (Ioana Singureanu)
 - Bernard.Jackson@foxsys.com (Bernard Jackson)
 - Leslie.Welsh.Flaherty@state.mn.us (Leslie Flaherty)

MITA Wikispaces and GForge

- For review purposes, the diagrams and models are put into .pdf format and loaded into GForge and MITA Wikispaces.
- E-mail notification to the FM list-serv when new .pdfs are available for review.
- Models need review, input, and documentation.
- Modeling team will be developing a process for the versioning and change report control.

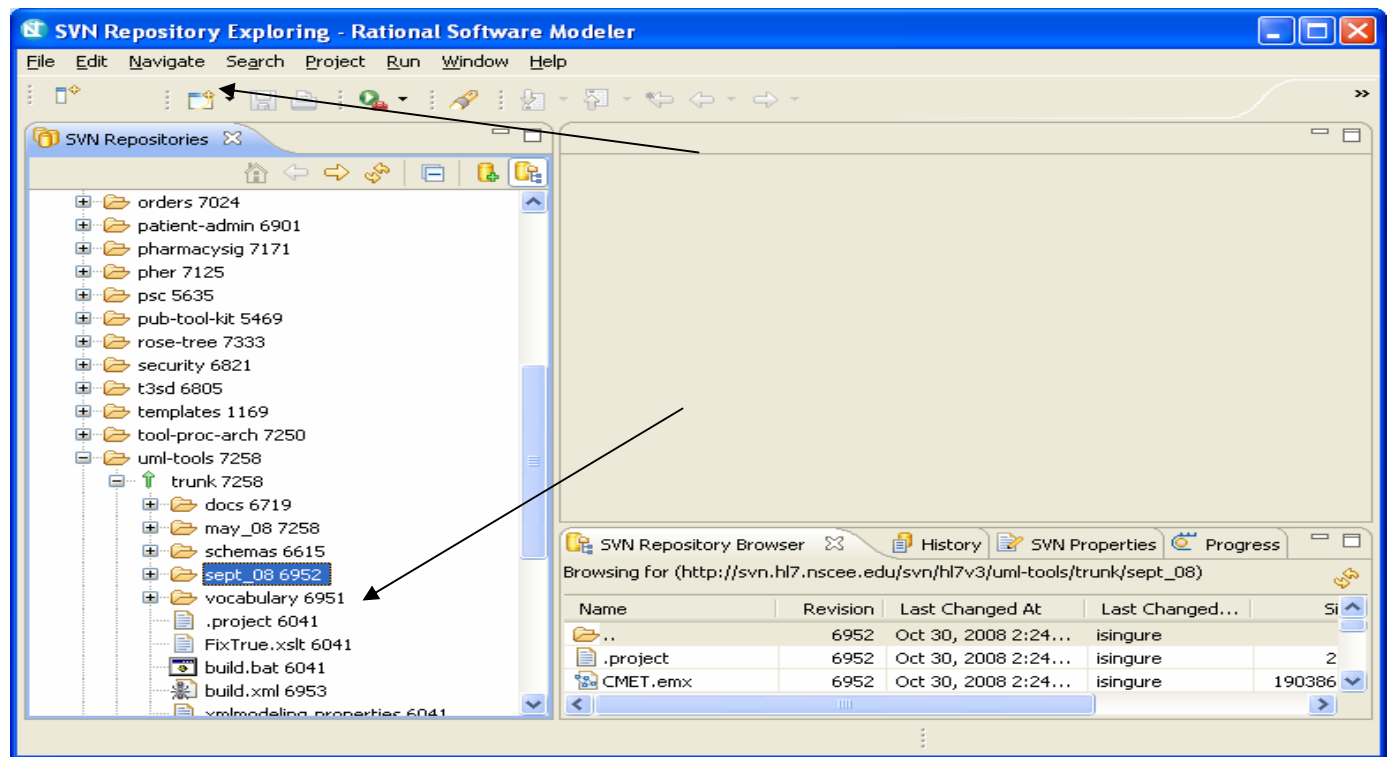
Load the uml-tools folder

Highlight the recent version; right-click; select “Check Out”



The UML Tools

Ensure the most recent version of HL7 UML Tools is loaded into your workspace. If not, switch to the SVN Perspective and find the uml-tools folder in the HL7 repository:



RSM - Structuring the Project in SVN

The business process templates are loaded into the SVN.

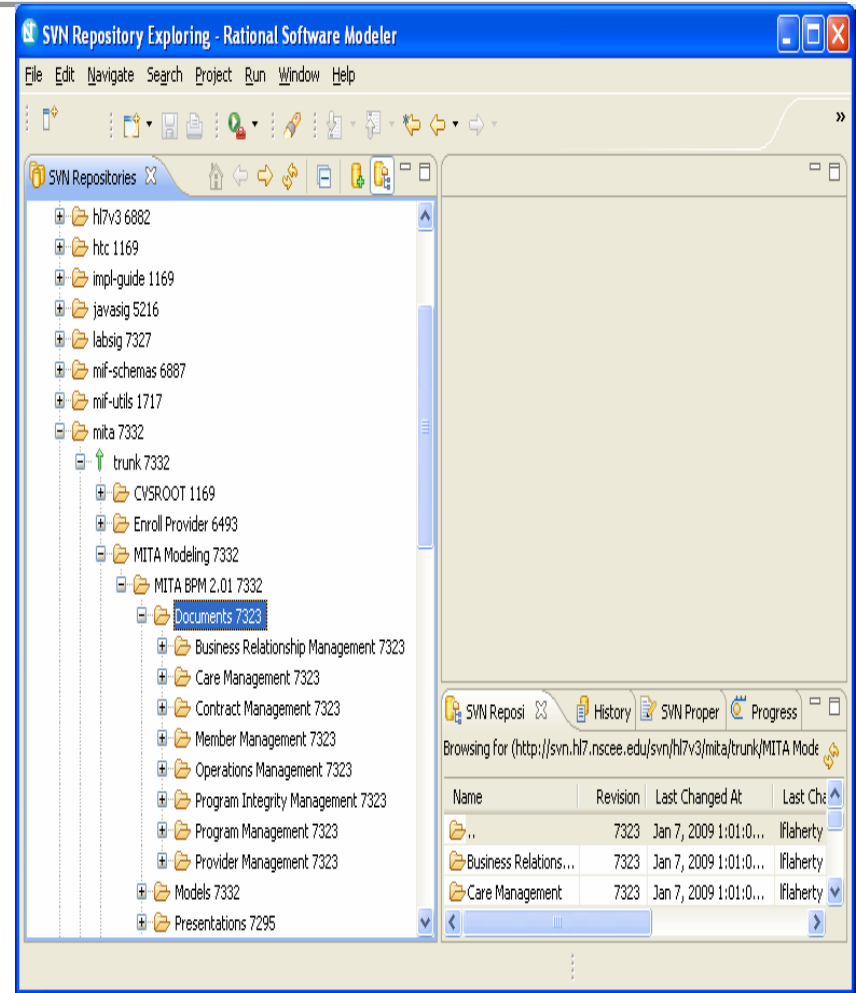
Keeping the structure of the SVN will be a responsibility of the modelers.

SVN Repository

mita

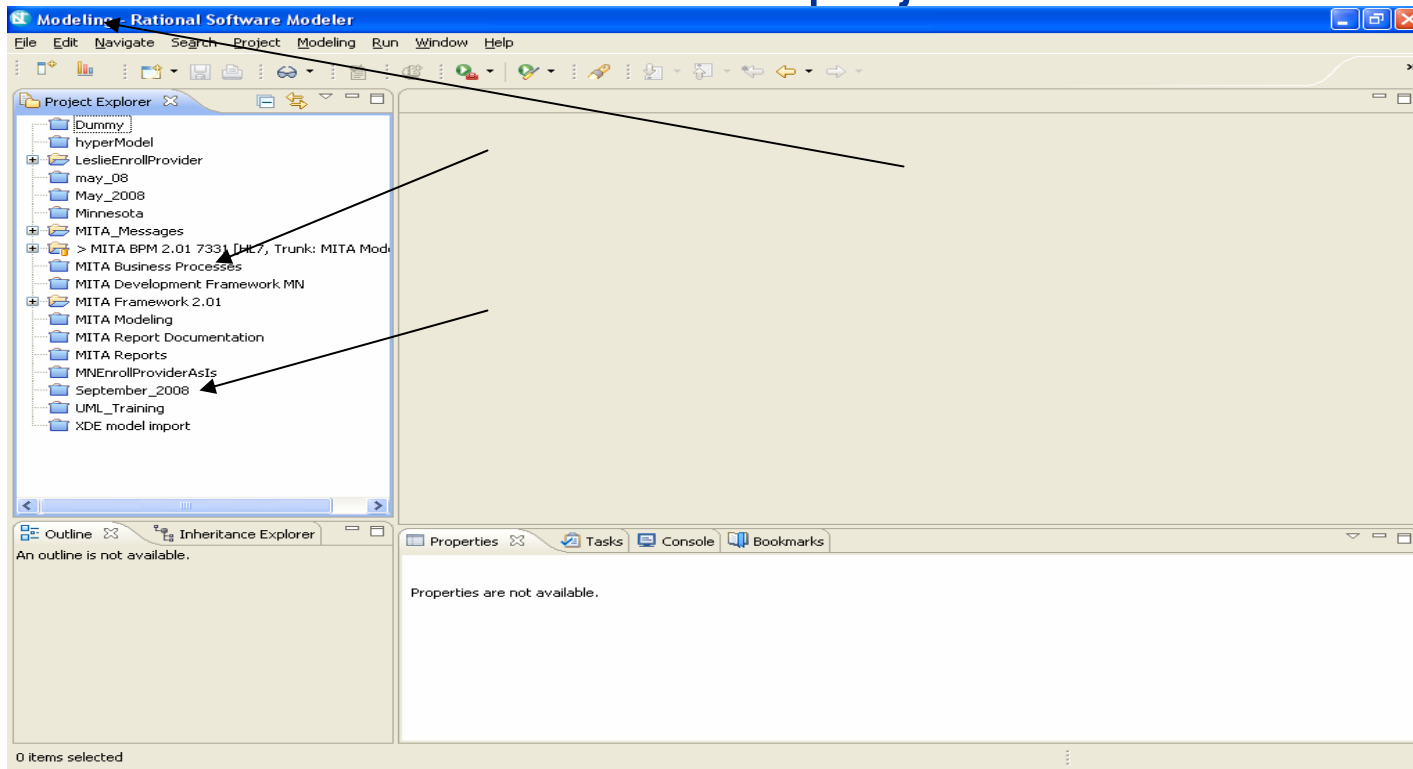
MITA BPM 2.01

Documents



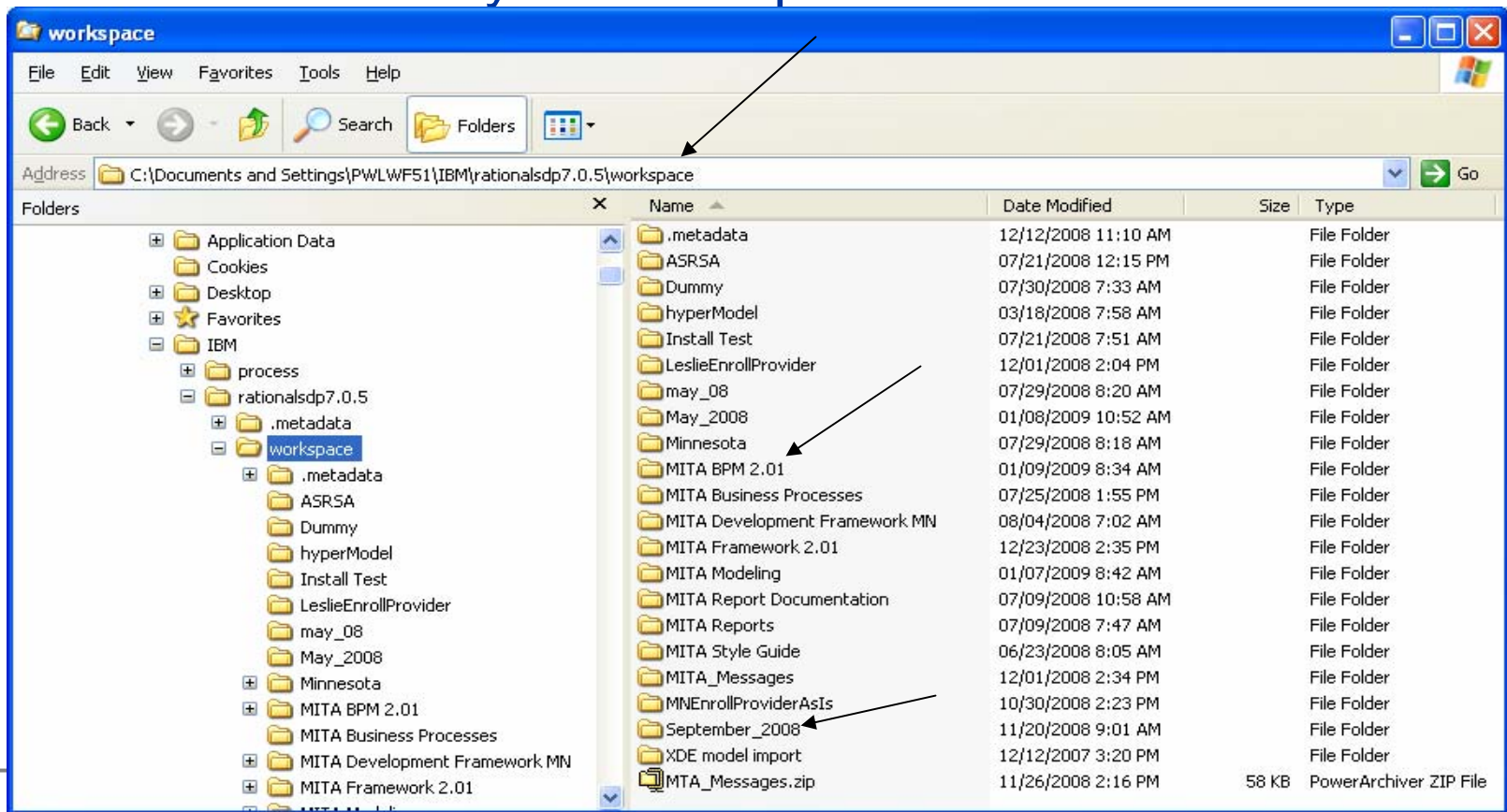
The Meat of the Matter

In the workspace – RSM Modeling Perspective
Make sure the MITA BPM 2.01 project is there



Workspace

- To ensure you have the project files needed, check the drive/location of your workspace.



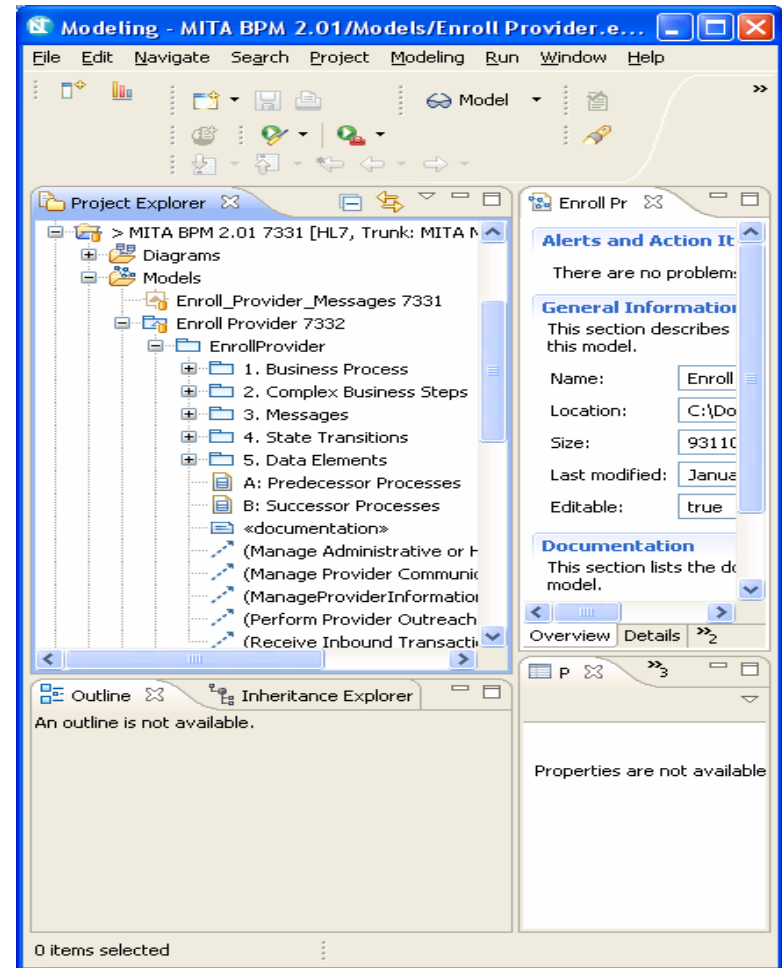
Workspace

The screenshot displays the Rational Software Modeler interface with the 'SVN Repository Exploring' workspace active. The window title is 'SVN Repository Exploring - Rational Software Modeler'. The menu bar includes File, Edit, Navigate, Search, Project, Run, Window, and Help. The toolbar contains various icons for file operations. The left-hand pane shows a tree view of SVN repositories under the 'HL7' root, with 'sept_08 6952' selected. The central pane shows the 'SVN Repository Browser' view, displaying a table of files and folders. The right-hand pane shows a context menu with options like 'Modeling', 'Report Design', and 'SVN Repository Exploring'. The Windows taskbar at the bottom shows the start button, several open applications, and the system tray with a 98% battery level and the time 4:06 PM.

Name	Revision	Last Changed At	Last Changed...	Size	Has Proper...	Lock Owner
..	6952	Oct 30, 2008 2:24...	isingure			
.project	6952	Oct 30, 2008 2:24...	isingure	218	Yes	
CMET.emx	6952	Oct 30, 2008 2:24...	isingure	19038627		
FI.emx	6952	Oct 30, 2008 2:24...	isingure	13584114		
MC.emx	6952	Oct 30, 2008 2:24...	isingure	1410676		

File structure in workspace

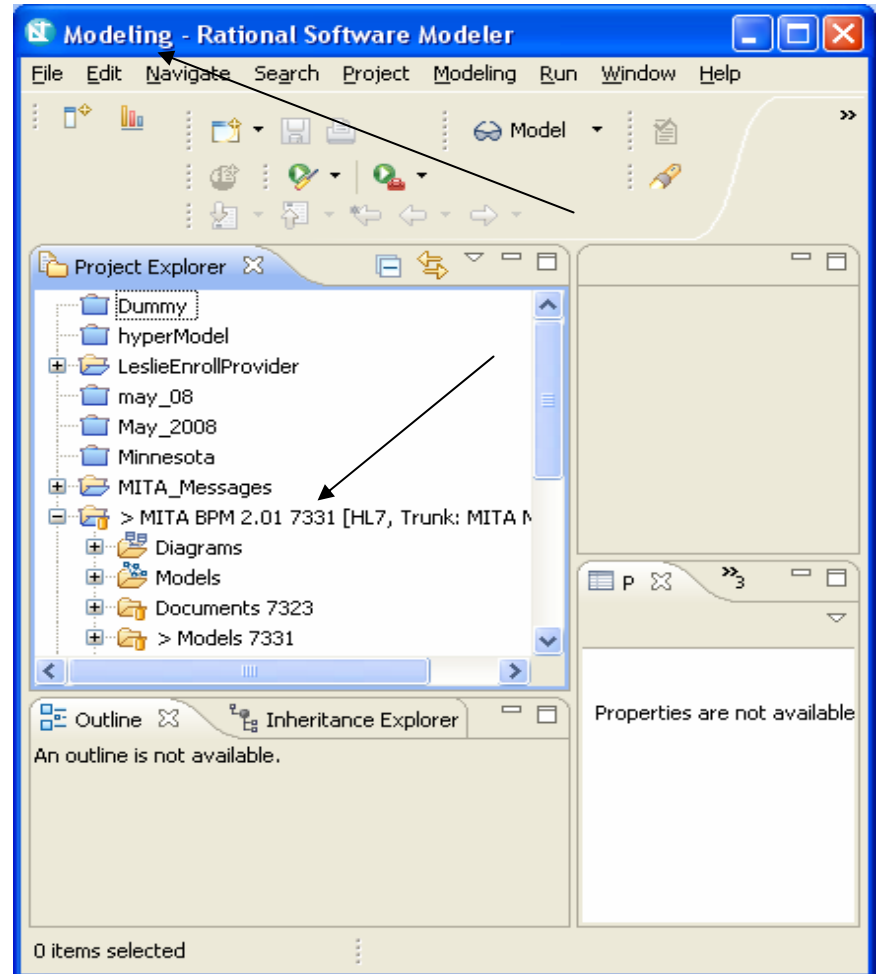
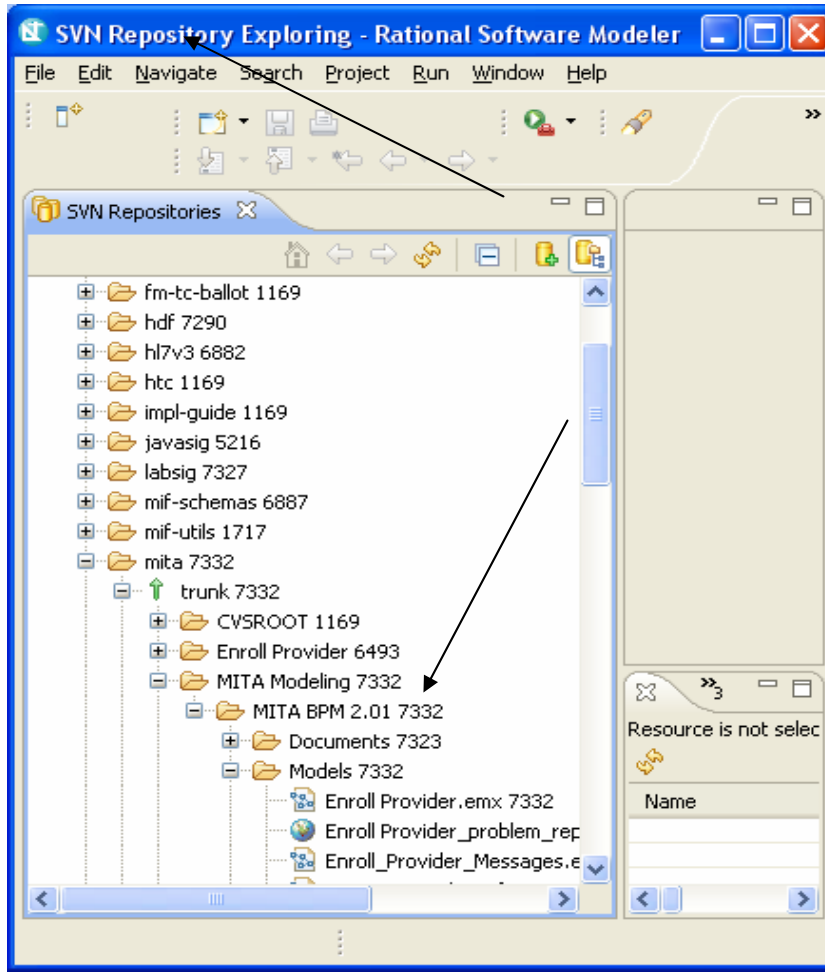
Each new project folder will have a menu that includes the business processes, complex business steps, messages, state transitions, data elements, and so on as the model is developed.



The MITA Modeling Project Folder

- Presently, there are few people with access to “write” to the HL7 SVN mita folder.
 - Important to limit “write” access to ensure version control and “team” work on the models is kept in tact.
 - ✓ The modelers may “lock” the versions down.
 - Others can “view” and “check out” the project folder.
 - As the modelers update the SVN project folder, the version number will change (tomorrow, 7331 may be 7338).
 - Check the Modeling Perspective version number against the HL7 SVN version number.
 - ✓ Synchronize with the SVN version.
 - ✓ The Modeling Perspective will bring in and overwrite.

Synchronize



Your Way is Okay!

- UML is a science and an art.
 - There is more than one correct way to model.
 - Will likely make the HL7 review process more time consuming.
 - Important to continue development of MITA Development Framework (MDF) documentation.
- Business processes are written at level 1 or 2 maturity capability; modeling is to be done at a Level 3 capability.
 - Not always certain what level 3 will look like.
 - MITA Business Capability Matrices (BCM) are not complete.



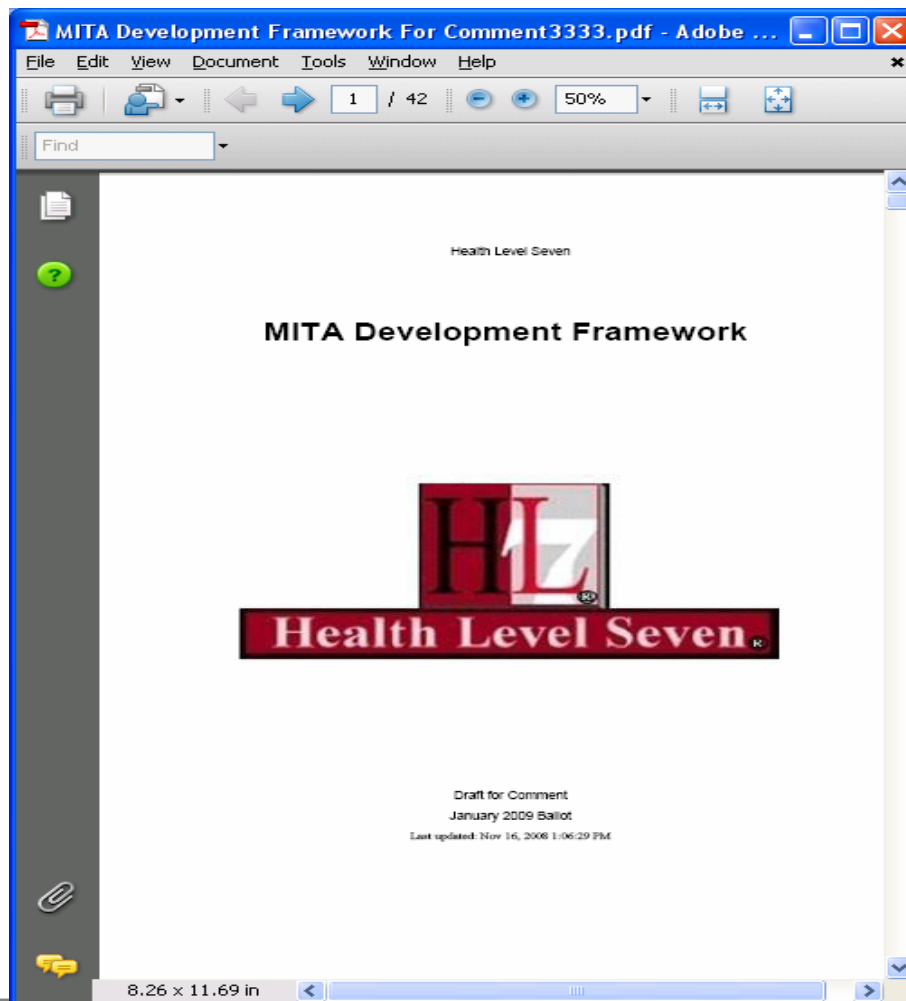
Why Enroll Provider?

- Enroll Provider Version 2.0 demonstrated at MMIS 2007.
 - NMEH, BARB, and HL7 MITA Work Group have reviewed since MMIS 2007 demonstration.
 - Modeling version 2.01 of Enroll Provider began following HL7 2008 Phoenix.
 - MITA Development Framework (MDF) balloted at HL7 2008 Vancouver and passed at HL7 2009 Orlando.
 - Sets up a cookbook of the methodology for modeling the MITA business processes.
 - First drafts of the 2.01 Enroll Provider business process models posted on MITA Wikispaces and SVN following HL7 2008 Vancouver.
-

...in the beginning

- Looking at a Word document with the business process can be overwhelming.
- Just digging in – but where?
- Start; if something pops out – move over to another part of the diagram and put a placeholder.
- Messaging doesn't seem the natural beginning, but as we've learned, it is the best place to start.

The MITA Development Framework (MDF)

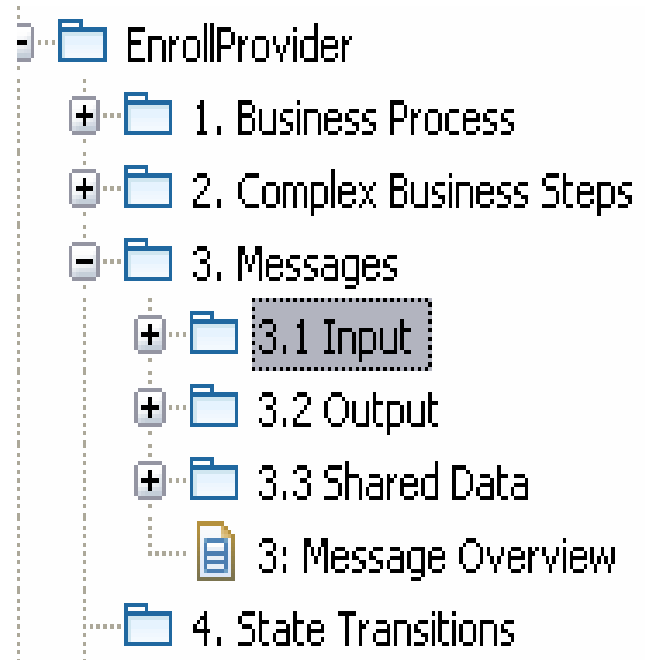


Messages – Input or Trigger Data

Use the business process narrative.

Based on the trigger information identify the attributes or business objects.

Revisit input message classes as new information is uncovered from reading the process description.



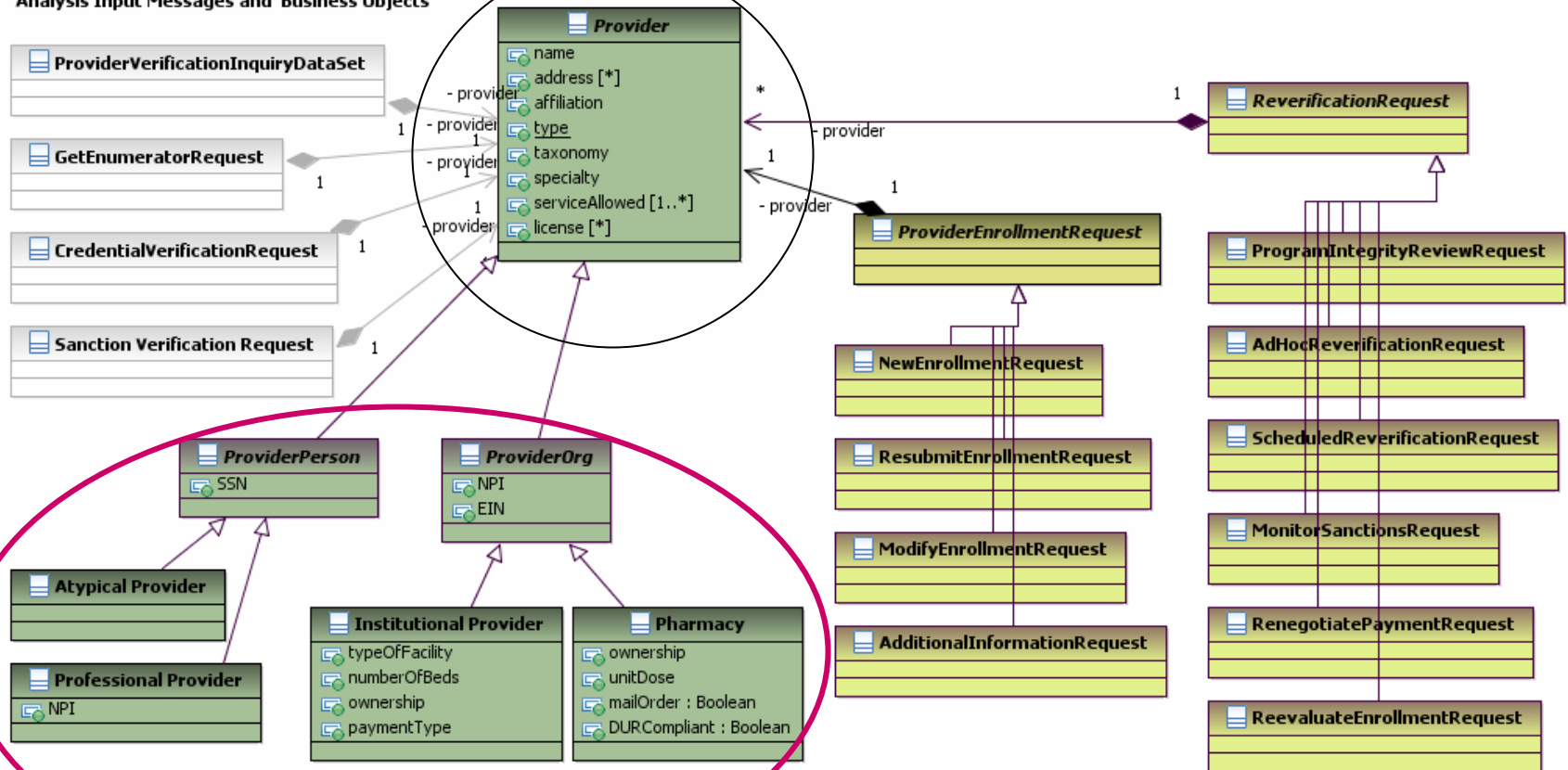
Identifying variations

In this process description there are “enrollment variations” that refer to various types of providers (“specializations”). If necessary note if more analysis is required for “variations” – other types of providers may need to be added (HL7 MITA Project).

Provider Enrollment Variations		
Type	Subtypes	Data
Institutional Provider	The Institutional Provider application must accommodate a range of institutional provider types (e.g., inpatient, nursing home, day care), different types of applicants (e.g., the primary provider, billing agent, pay-to entity), and care settings (e.g., outpatient, emergency room, assisted living).	Type of facility, bed size, taxonomy. Type of institutional services, ownership, tax code, DRG or other payment type.
Professional Provider	The Professional Provider application must accommodate a range of professional provider types (e.g., Physician, Osteopath, Podiatrist, Chiropractor, Clinic, Lab, Radiology, other), different types of applicants (e.g., the primary provider, billing agent, pay-to entity), and care settings (e.g., solo office practice, group practice, rural health clinic). Enumerate a group health practice separately from the individual physicians associated with it.	Provider Type, affiliation, location

Input Messages

Analysis Input Messages and Business Objects

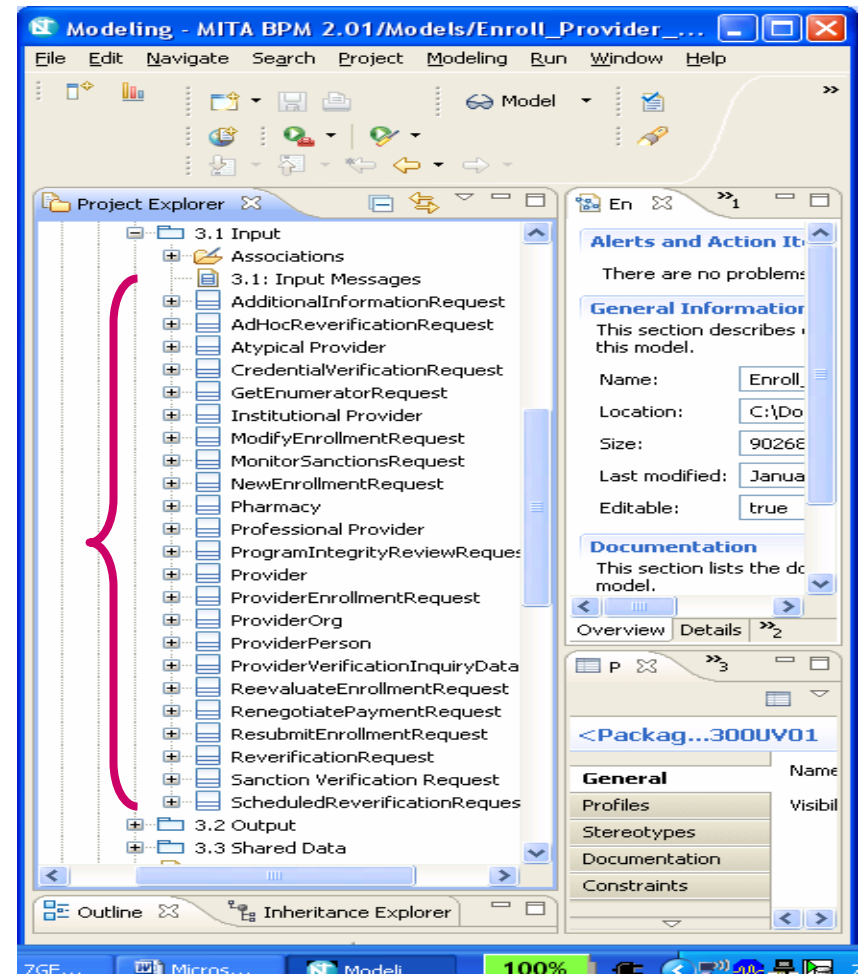


Input Messages

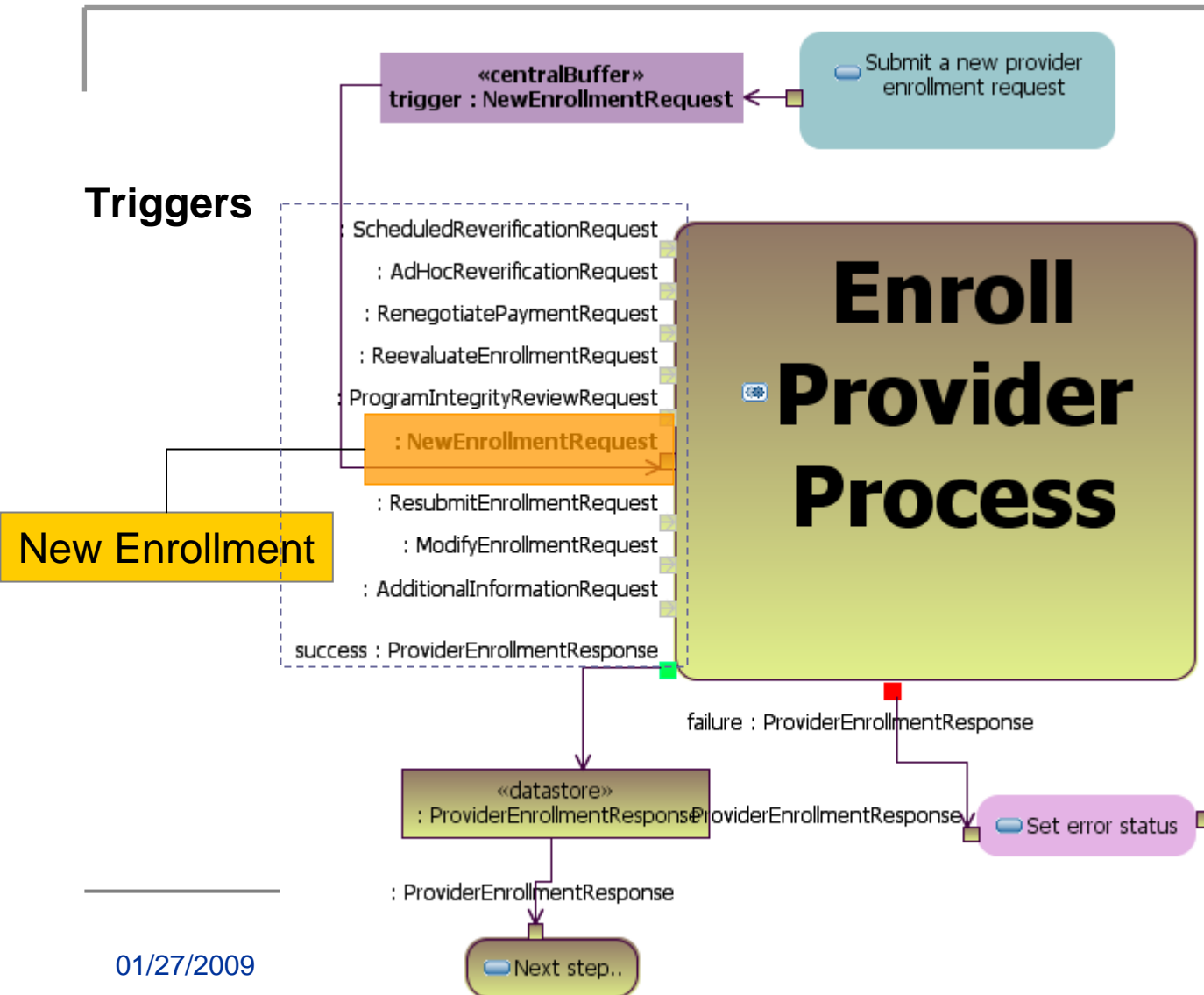
The class diagram on the previous slide is represented in the list under Input Messaging.

The Associations is the overall class diagram in the previous slide.

Each time a new message is created in the class diagram, the message is then available to pull into this or other business process activity diagram.



Use Triggers to Reference the Process



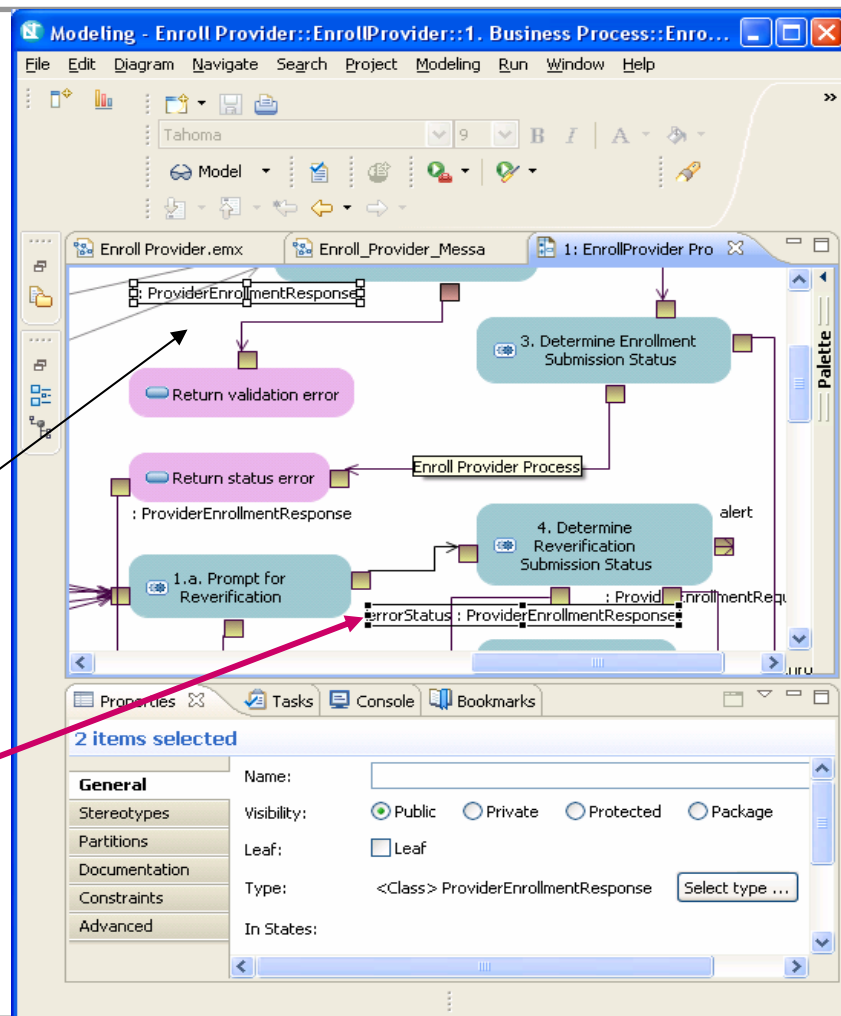
Messaging

The messages can be searched for the appropriate verbiage, or a new one may be discovered.

The messages may be used several times and if necessary the status defined.

Provider Enrollment Response;

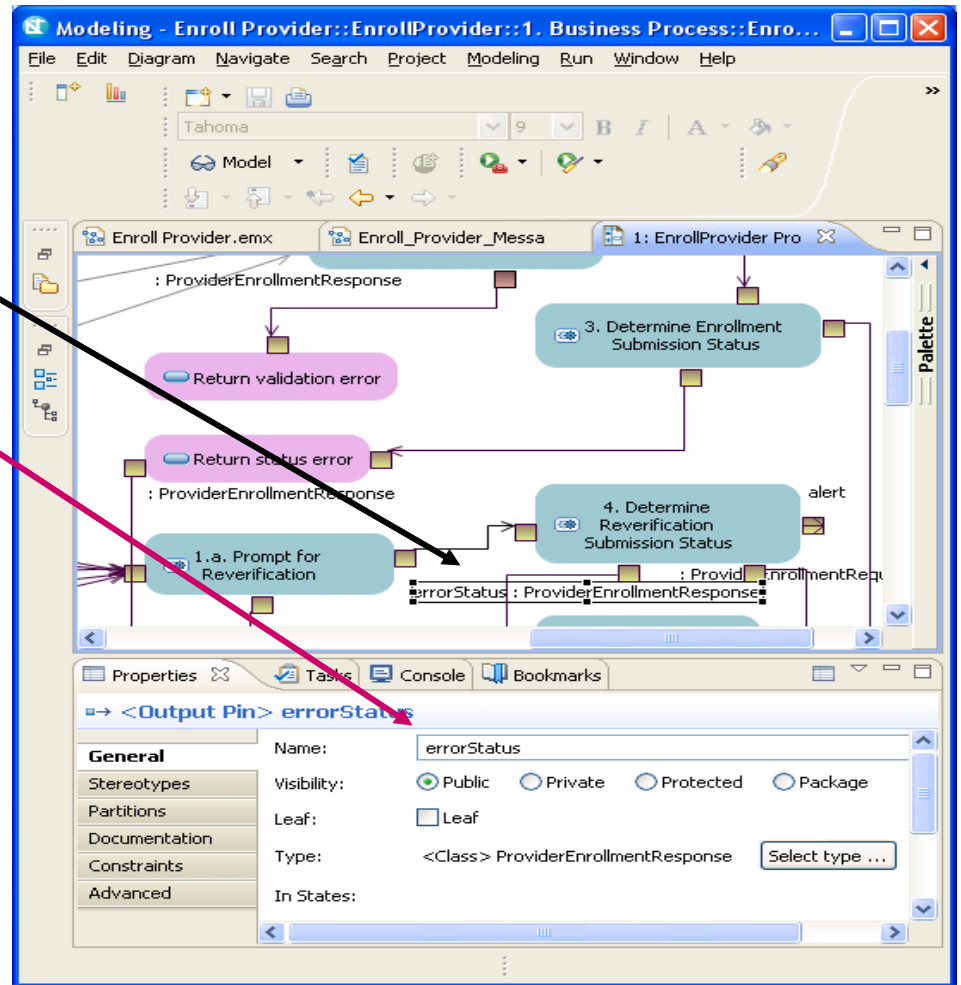
error status: Provider Enrollment Response



Messaging – reuse

When using the message in an alternate way, it will be given a name.

The RSM tool will display the message accordingly

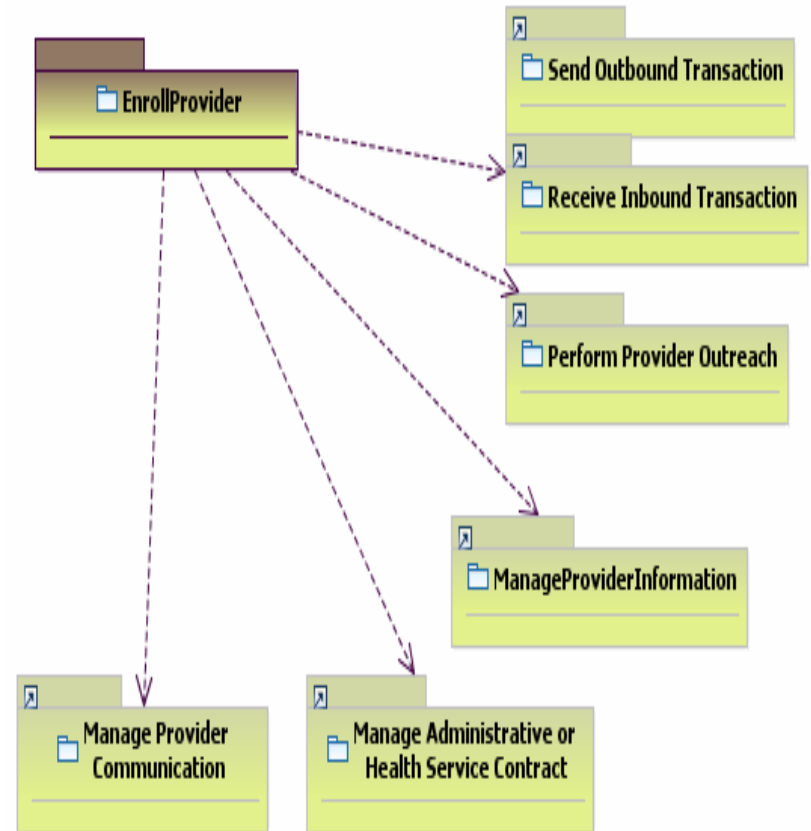
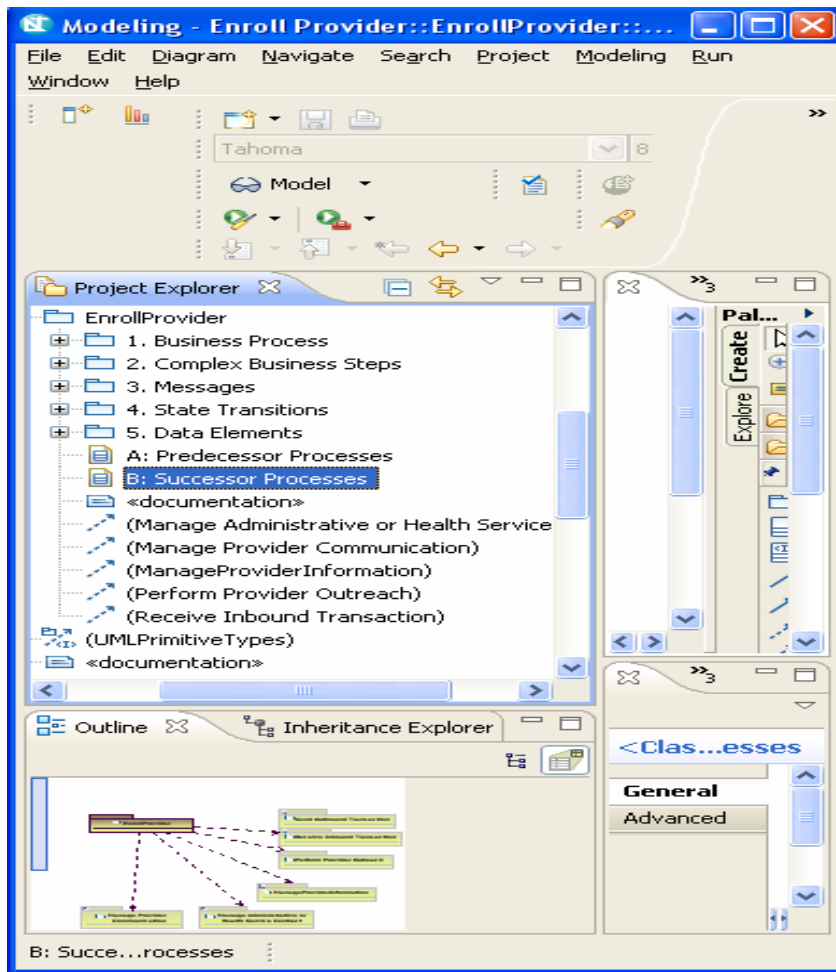


Reusing Business Processes

- Create placeholders for all the processes this process requires
 - “predecessor”
 - “successor”
- Information about reused processes is sometimes hidden in the description of a step
- Drag-and-drop the process reused into our diagram as we create it.

Predecessor	<ul style="list-style-type: none"> - The Receive Inbound Transaction authenticates submitter, verifies application format, may translate, may scan, logs in request, and produces the enrollment application message which is sent to the Enroll Provider process. - The Manage Provider Communication process may send inquiries about the enrollment process or prompts to re-verify provider - The Monitor Performance and Business Activity process may send prompts to reevaluate provider enrollment - The Program Integrity Area processes may request enrollment review activities 	Receive Inbound Transaction, Manage Provider Communication, Monitor Performance and Business Activity
Successor	<ol style="list-style-type: none"> 1. Manage Provider Communication process 2. Monitor Performance and Business Activity process 3. Manage Provider Information process 4. Operations Management Area business processes 5. Send Outbound Transaction process 6. Receive Inbound Transaction process 	Manage Provider Communication, Manage Provider Information, Send Outbound Transaction, Receive Inbound Transaction

Successor and Predecessor



Reusing Business Processes

Business Process

Receive Inbound Transaction
 Manage Provider Communication
 Monitor Performance and
 Business Activity
 Manage Provider Information
 Send Outbound Transaction

Business Area

Provider Management
 Program Integrity Management
 Operations Management

Predecessor	<ul style="list-style-type: none"> - The Receive Inbound Transaction authenticates submitter, verifies application format, may translate, may scan, logs in request, and produces the enrollment application message which is sent to the Enroll Provider process. - The Manage Provider Communication process may send inquiries about the enrollment process or prompts to re-verify provider - The Monitor Performance and Business Activity process may send prompts to reevaluate provider enrollment - The Program Integrity Area processes may request enrollment review activities 	Receive Inbound Transaction, Manage Provider Communication, Monitor Performance and Business Activity
Successor	<ol style="list-style-type: none"> 1. Manage Provider Communication process 2. Monitor Performance and Business Activity process 3. Manage Provider Information process 4. Operations Management Area business processes 5. Send Outbound Transaction process 6. Receive Inbound Transaction process 	Manage Provider Communication, Manage Provider Information, Send Outbound Transaction, Receive Inbound Transaction

Reusing Business Processes

Other business processes may be referenced, not referenced, or incorrectly referenced within the business process template.

Business Process Steps:

13. Request that the **Perform Provider Outreach and Education** process send relevant State policy information.

Result:

2. The Provider data store is updated, enrollment data required for operations is made available, and alerts are broadcast to subscribing processes such as **Capitation and Premium Payment**, **Prepare Provider EFT/Check**, **Perform Provider Outreach**, and the **Manage Provider Communication** processes.

Process

Perform Provider Outreach
Capitation and Premium
Payment

Prepare Provider EFT/Check

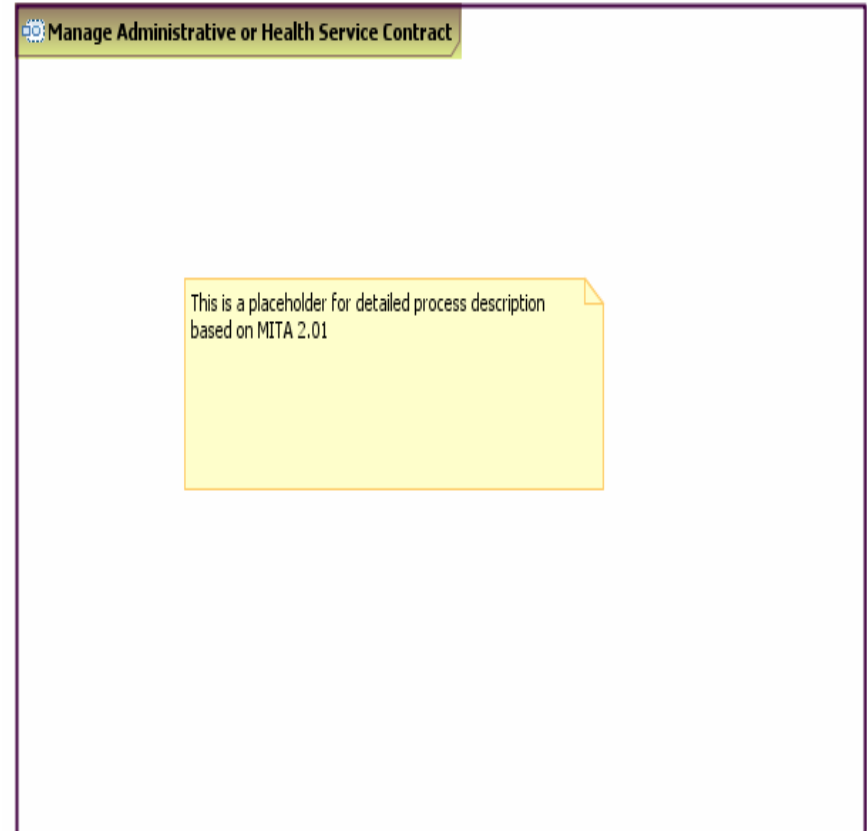
Manage Administrative or
Health Services Contract



Placeholders for Future Models

There may be instances in which other business processes may be used, or, perhaps other steps, etc., that weren't in the template.

Creating a placeholder is a good way to prevent losing the potential need for the additional diagram/model.

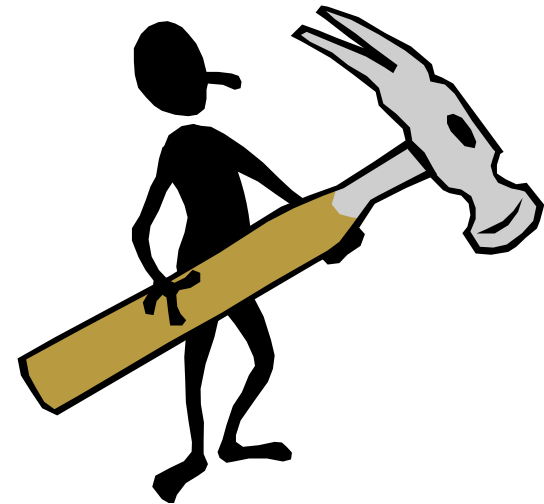
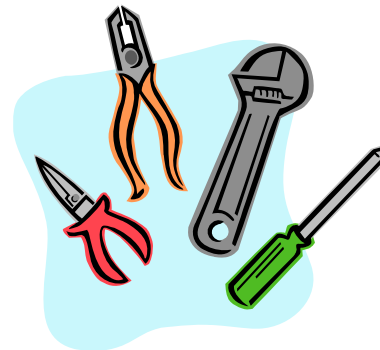


Business Process Description

There are incorrect, missing or redundant pieces in some of the MITA business processes.

Modeling will be done as correctly as feasible to a Level 3 Maturity.

Levels 1, 2, and 3 maturity capability for Enroll Provider have not been established as yet by the BARB.



Looking for clues...

The business process description may contain pieces of information that will belong in messaging, attributes, reused processes, successors, predecessors, etc.



Search for clues!

PM Enroll Provider

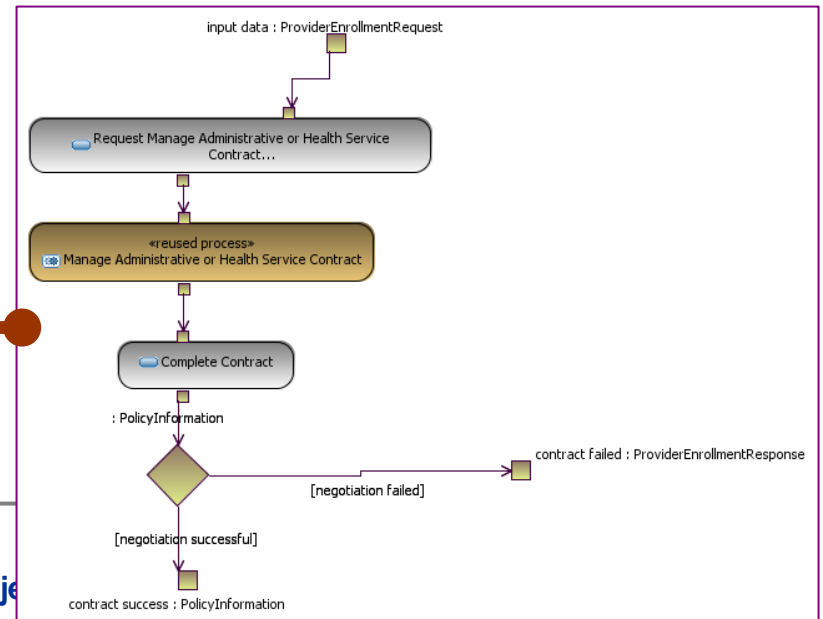
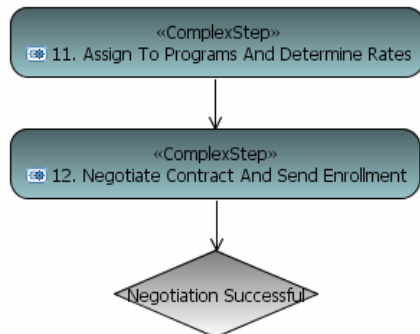
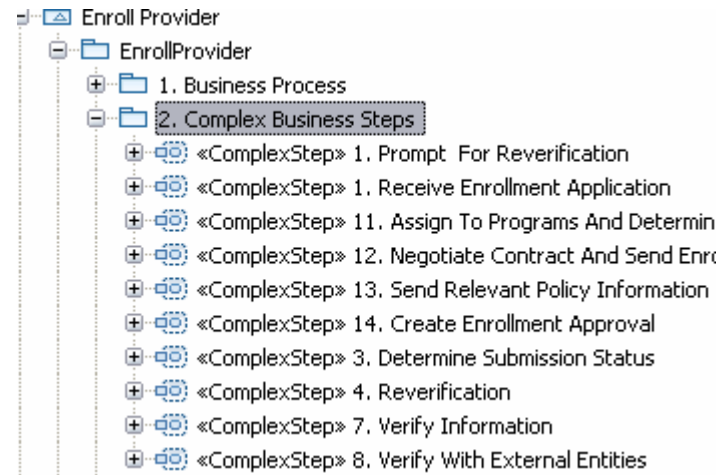
Tier 3: Enroll Provider		
Item	Details	Links
Description	<p>The <i>Enroll Provider</i> business process is responsible for managing providers' enrollment in programs, including</p> <ul style="list-style-type: none"> - Receipt of enrollment application data set from the Manage Provider Communication process - Processing of applications, including status tracking (e.g., new, resubmission, duplicate) and validating application meets state submission rules, e.g., syntax/semantic conformance - Validation that the enrollment meets state rules by <ul style="list-style-type: none"> ▪ Performing primary source verification of verifies provider credentials and sanction status with external entities, including: <ul style="list-style-type: none"> • Education and training/Board certification • License to practice • DEA/CDS Certificates • Medicare/Medicaid sanctions • Disciplinary/sanctions against licensure • Malpractice claims history • NPDB and HIPDB disciplinary actions/sanctions ▪ Verifying or applying for NPI enumeration with the NPPES ▪ Verifying SSN or EIN and other business information - Determine contracting parameters, e.g., provider taxonomy, type, category of service for which the provider can bill - Establish payment rates and funding sources, taking into consideration service area, incentives or discounts - Negotiate contracts - Supporting receipt and verification of program contractor's provider enrollment roster information, e.g., from MCO and HCBS organizations - Requesting that the Manage Provider Information process load initial and changed enrollment information, including providers contracted with program contractors into the Provider Registry 	<p>Business Process Model location: Business Area: Provider Management; Tier 2: Provider Enrollment</p>

Simple Business Step

- The step is created directly in the main process diagram
- Add descriptions and it is finished!

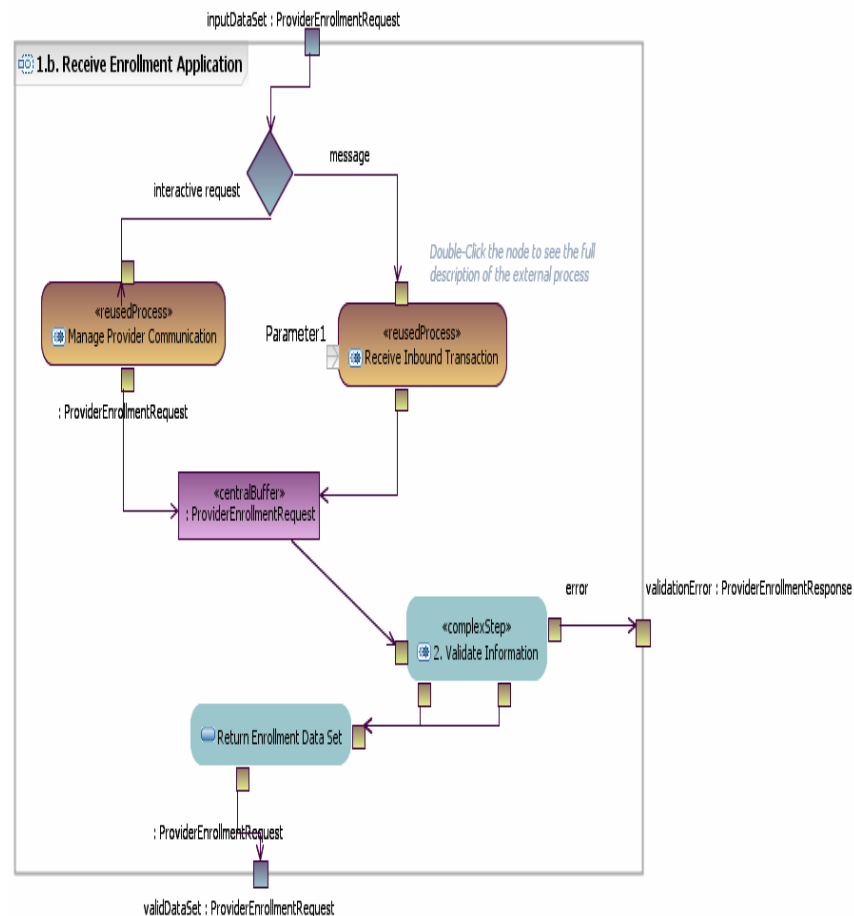
Complex Business Step

If a step contains other steps, decision logic, or reuses other processes, create a separate activity in the “Complex Business Steps” package. Then, drag-and-drop into the main process.



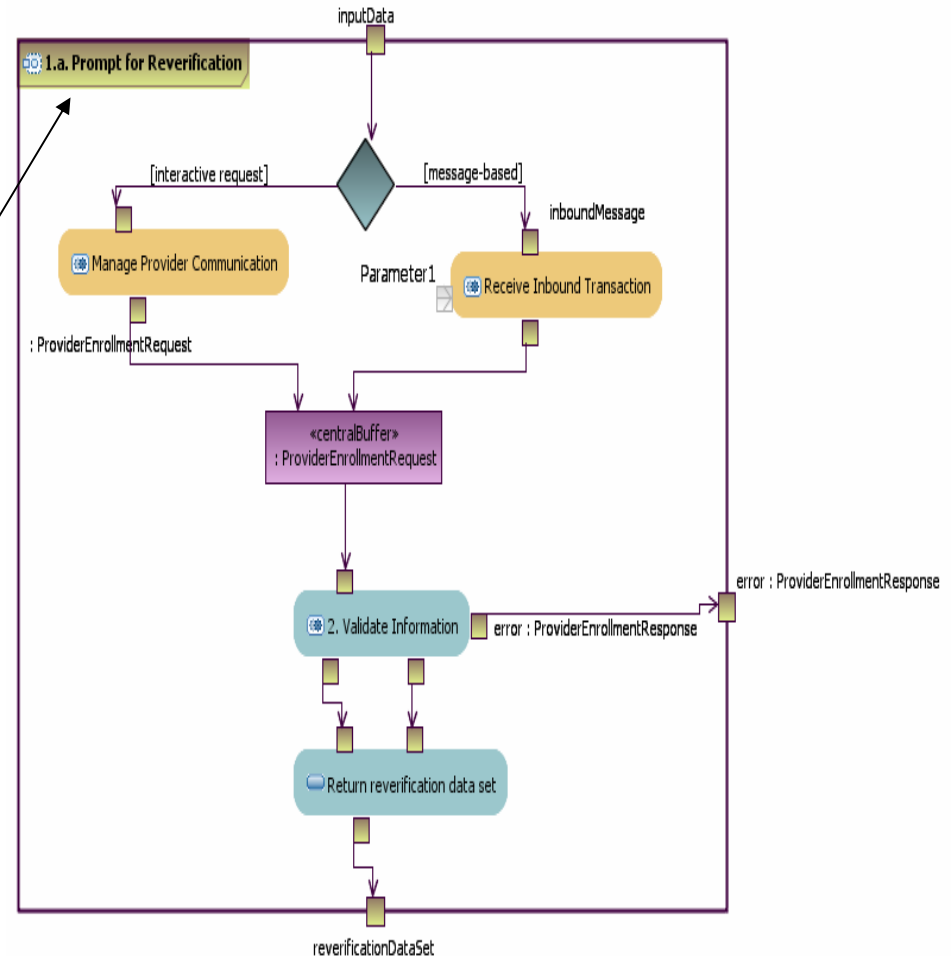
Complex Business Step #1 – Enroll Provider

1. Start: Receive enrollment application and other pertinent enrollment communication data set, **or** prompt for reverification of currently enrolled provider.

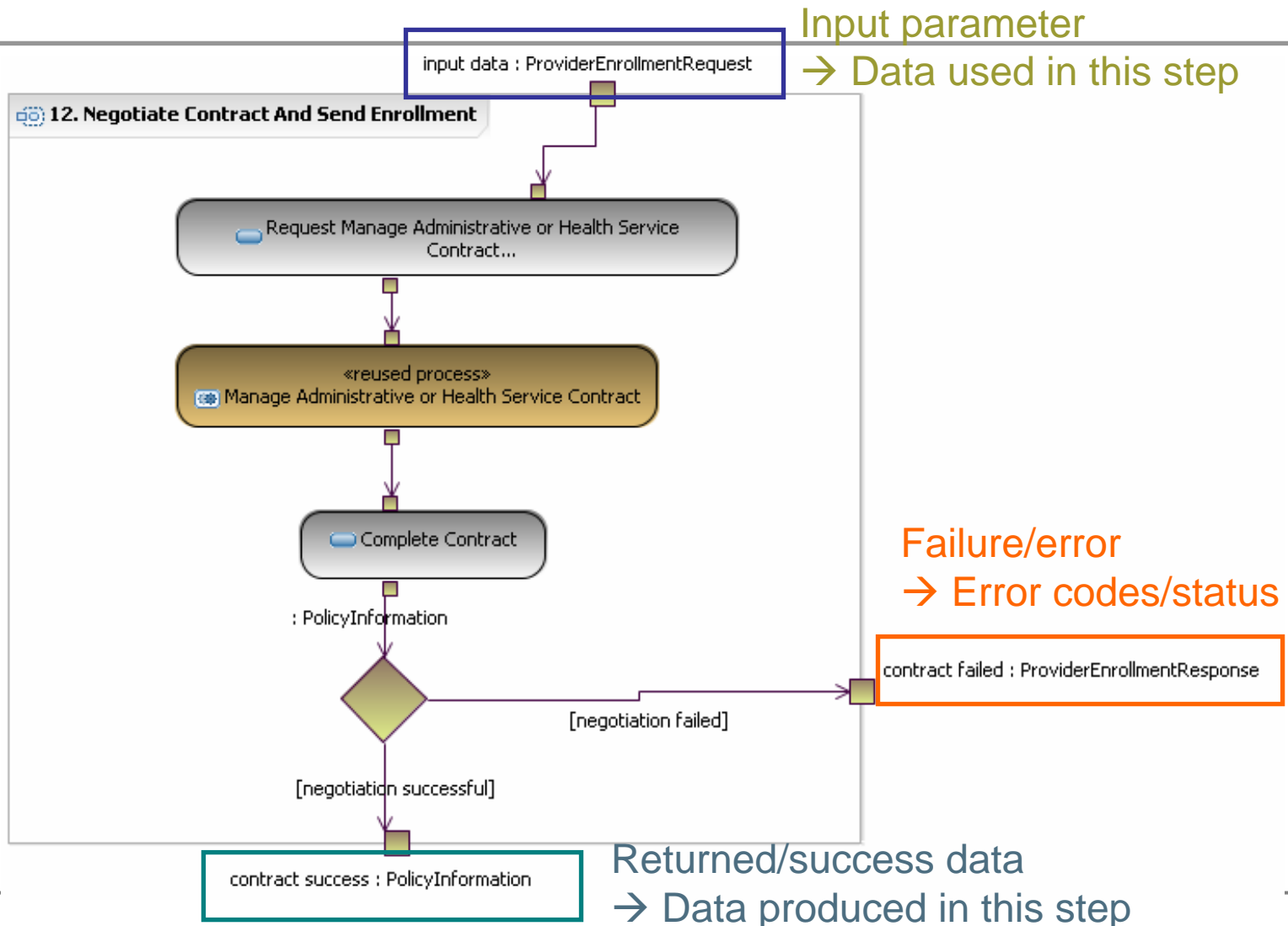


Complex Business Process Step

1. Start: Receive enrollment application and other pertinent enrollment communication data set, **or** prompt for reverification of currently enrolled provider.



Complex Step Detail

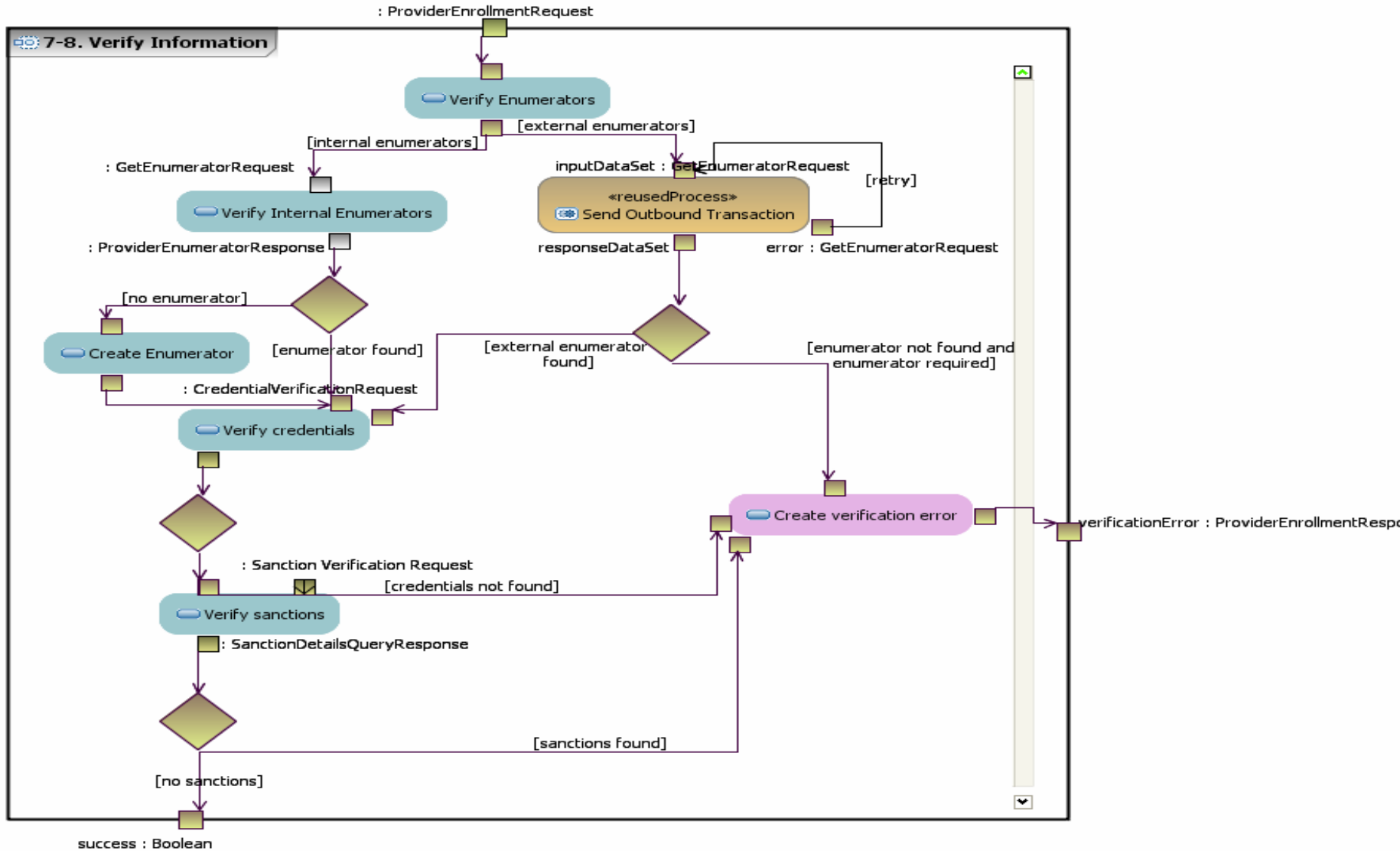




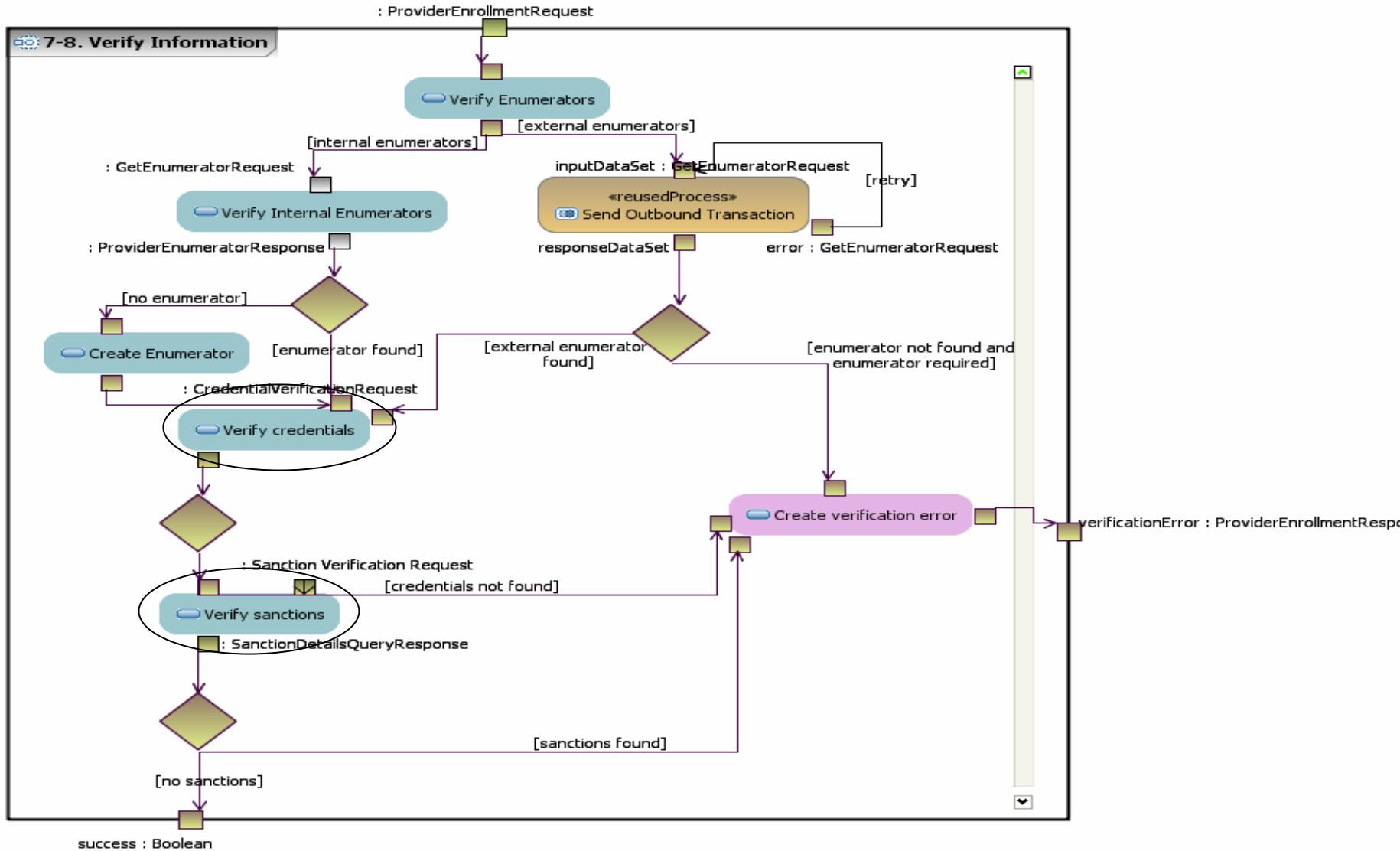
Business Process Steps 7 & 8 - Enroll Provider

7. Verify information in the enrollment application or record with internal and external sources, including:
 - a. Enumerators, including NPI, SSN, EIN, internal enumerators. If lacking, facilitate enumeration.
 - b. Sanction status, e.g., HIPDB, NPDB, Boards, criminal background checks; and provider performance profiles and State prescription monitoring programs (PMP).
 - c. Credentials, e.g., licensure, specialty boards, and school, affiliations
8. Verify with external entities by sending inquiry data sets via Send Outbound Transaction and evaluating response data sets received from the Receive Inbound Transaction process. Verify with internal sources via services, interfaces, or manually.

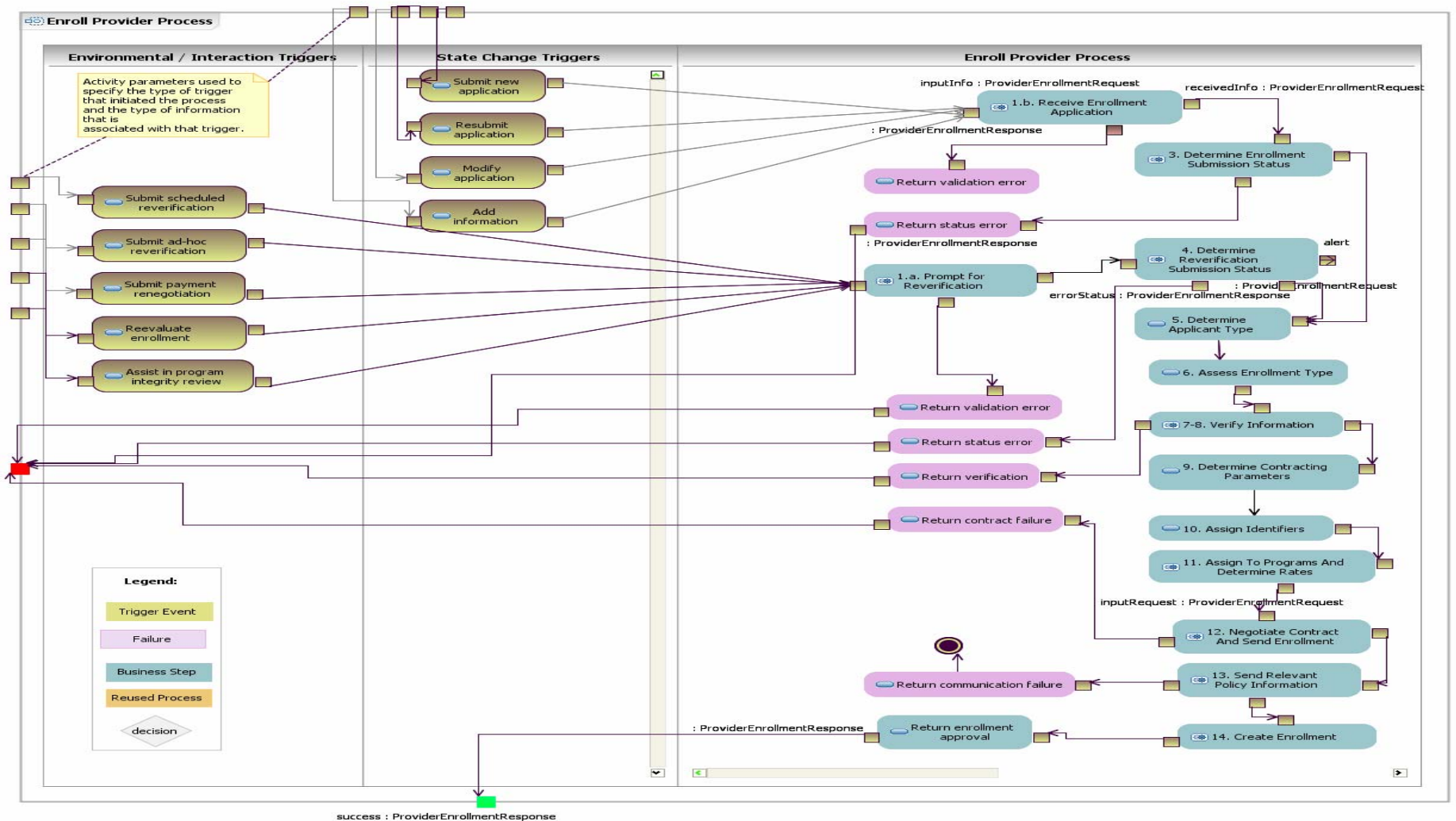
Enroll Provider - Verify Information



Step 7-8. Verify Information – Registries Galore!



The Overall Process – Enroll Provider



Challenges

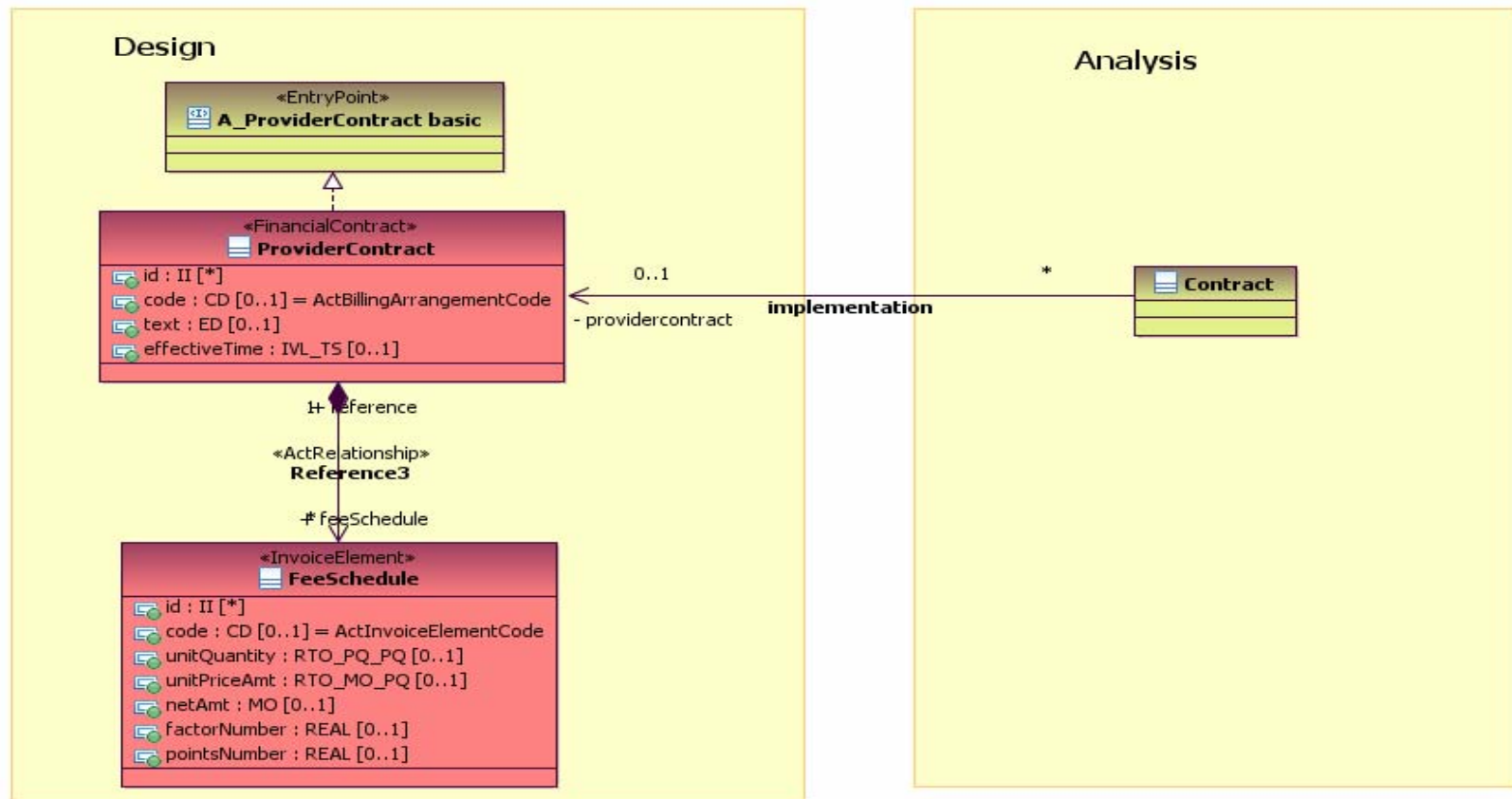
- The MITA business process flaws/limitations become readily apparent when modeling.
 - Modelers can make corrections/modifications prior to sending to governance for review.
 - As flaws/errors are found, how can we keep track?
 - As changes are made to the models to represent the business process at a Level 3 capability, how can we document that information?

Challenges cont'd

- HL7 approval process will be difficult if States are unfamiliar with modeling.
- How will we get other States engaged or familiar enough with the process to review and approve models?
- Structure of the MITA business processes and maturity levels may make it difficult for states to model incremental changes.

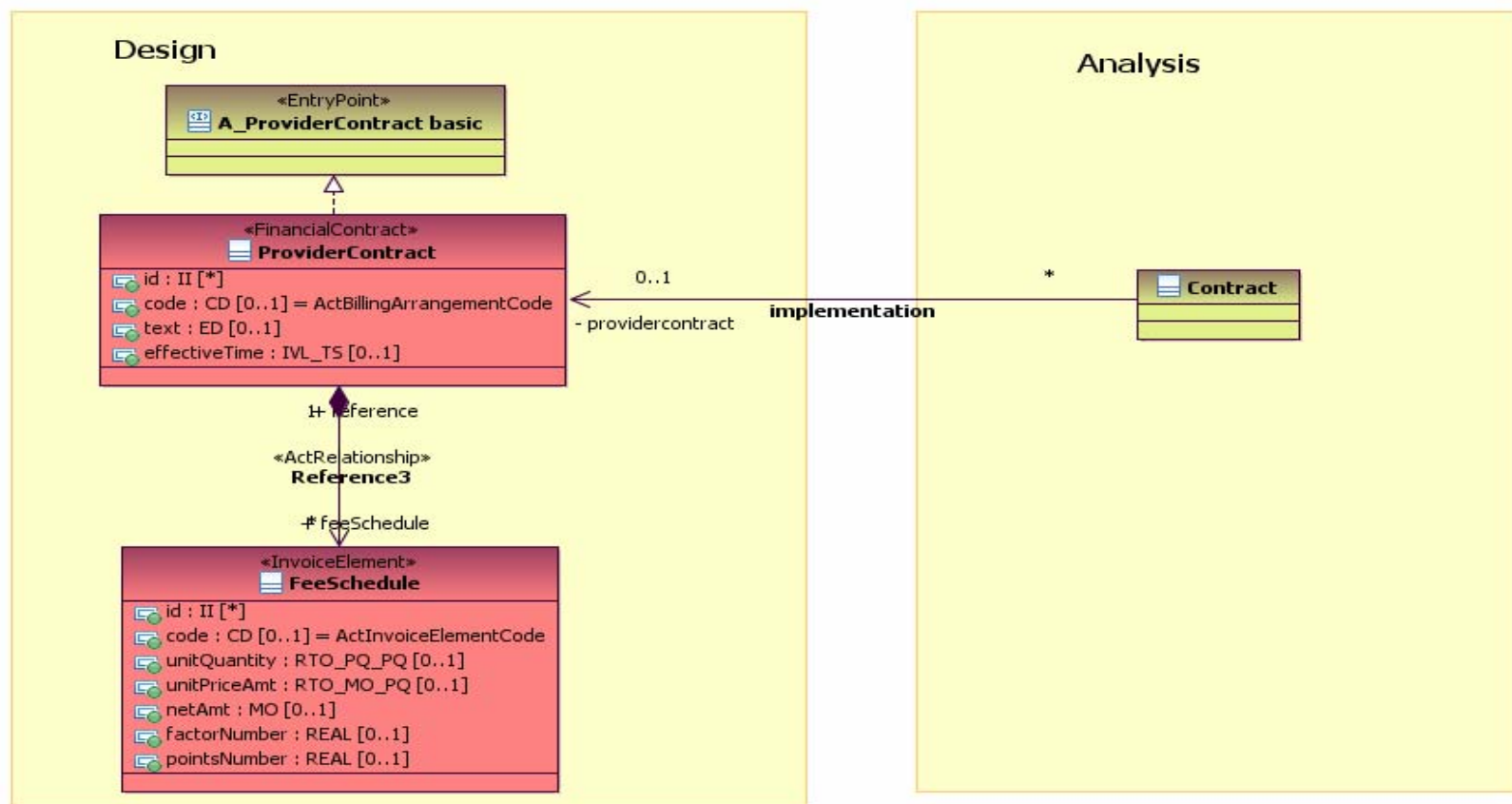
Messaging

Finding the correct data element from HL7 Rim

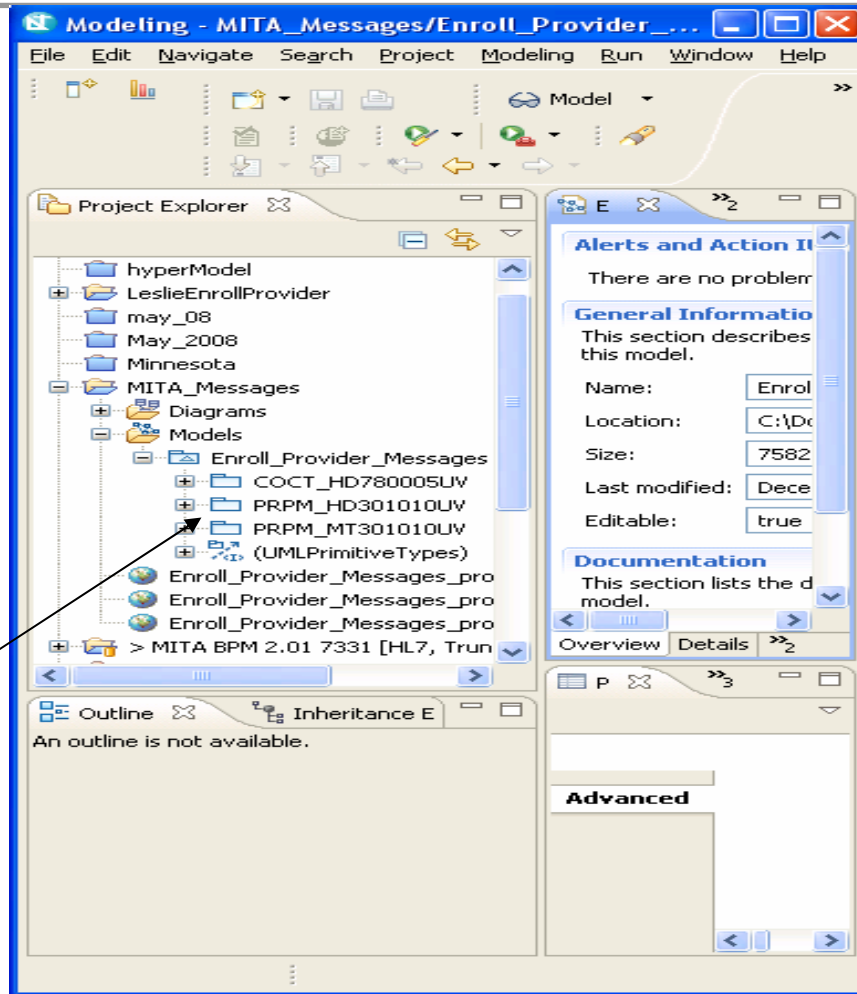


Example of Message from HL7

HL7 COCT_HD780005UV



Example of HL7 to MITA Messaging

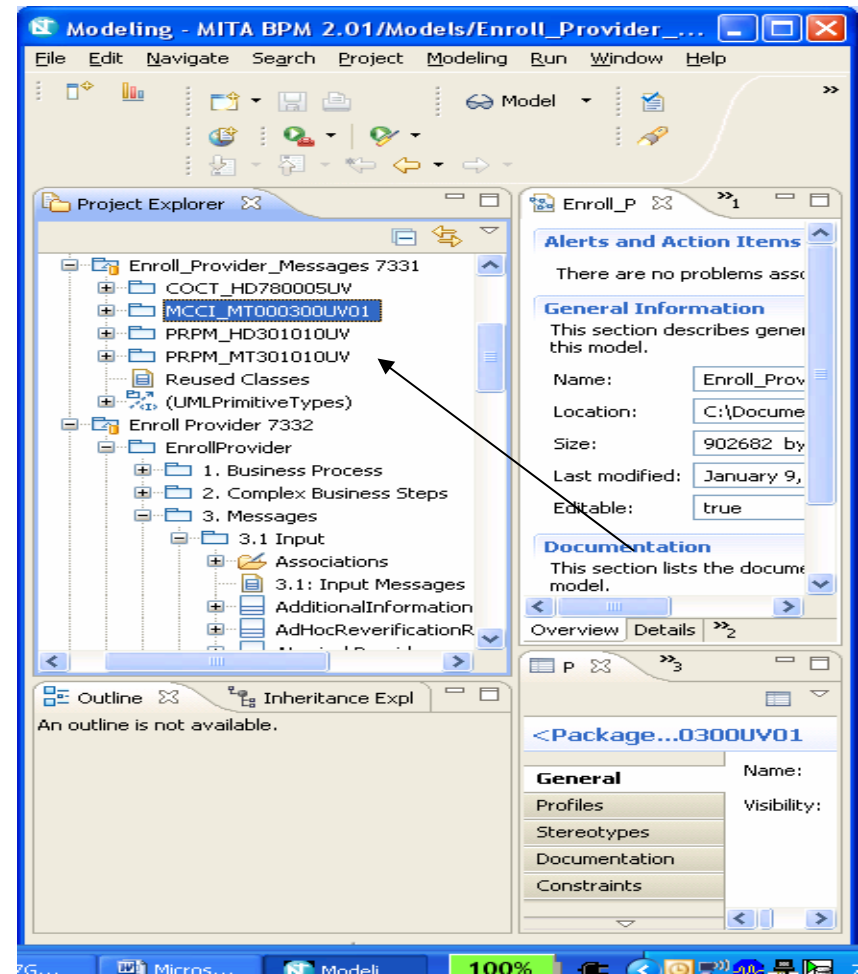


Messaging

Familiarity with the HL7 v3 RIM and DMIM.

Finding the messages that most closely represent the MITA business process.

Vocabulary and elements unique to Medicaid.



Example of HL7 to MITA Messaging

HL7 Version 3 - January 2009 - Microsoft Internet Explorer provided by DHS, State of MN

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Print Mail Stop

Address <http://www.hl7.org/v3ballot/html/welcome/environment/index.htm> Go Links

HL7 Domain: Personnel Management
Provider Registry Topic January 2009
v3

4.5 Hierarchical Message Descriptions

- ▼ **Hierarchical Message Descriptions (Sorted by Title)**
 - Add Provider([PRPM_HD301010UY](#))
 - Add Provider Accountable([PRPM_HD301015UY](#))
 - Provider Admin Report Query([PRPM_HD306610UY](#))
 - Provider Admin Report Query Response([PRPM_HD306710UY](#))
 - Provider Associated Identifiers Query([PRPM_HD306810UY](#))
 - Provider Associated Identifiers Query Response([PRPM_HD306910UY](#))
 - Provider Confirmation([PRPM_HD309010UY](#))
 - Provider Confirmation Accountable([PRPM_HD309016UY](#))
 - Provider Detail Query([PRPM_HD306010UY](#))
 - Provider Detail Query Response([PRPM_HD306110UY](#))
 - Provider Detail Query Response Accountable([PRPM_HD306115UY](#))
 - Provider Report Query([PRPM_HD306210UY](#))
 - Provider Report Query Response([PRPM_HD306310UY](#))
 - Update Provider([PRPM_HD303010UY](#))
 - Update Provider Accountable([PRPM_HD303015UY](#))
- ▼ **Hierarchical Message Descriptions (Sorted by Structured Sort Name)**
 - Provider Event Administrative Report Query([PRPM_HD306610UY](#))
 - Provider Event Administrative Report Query Response([PRPM_HD306710UY](#))
 - Provider Event Associated Identifiers Query([PRPM_HD306810UY](#))
 - Provider Event Associated Identifiers Query Response([PRPM_HD306910UY](#))
 - Provider Event Create([PRPM_HD301010UY](#))
 - Provider Event Create Accountable([PRPM_HD301015UY](#))
 - Provider Event Detail Query([PRPM_HD306010UY](#))
 - Provider Event Detail Query Response([PRPM_HD306110UY](#))

Legend

- Informative (yellow diamond)
- Reference (green diamond)
- Normative (red diamond)
- DSTU (purple diamond)
- Draft (grey diamond)
- Document Group (blue diamond)

Health Level Seven, Inc. • 3300 Washtenaw Avenue, Suite 227 • Ann Arbor, MI 48104 • +1 (734) 677-7777 (phone) • E-mail: hl7@hl7.org

Internet

Stay Involved!

- CMS
- NMEH MITA SWG
- HL7 MITA Project
 - Business Process Team
 - Data Analytics Team
 - Education and Training Team
 - Modelers Team
 - Vocabulary Team
- S-TAG
- PS-TG
- MITA TAC



Acronym Soup

- BARB – Business Architecture Review Board
- Blog – Web Log
- BCM – Business Capability Matrix
- BPM – Business Process Modeling
- CMS - Centers for Medicare and Medicaid Services
- HL7 - Health Level 7
- MITA - Medicaid Information Technology Architecture
- NMEH - National Electronic Data Interchange Healthcare
- OOAD – Object Oriented Analysis and Design
- PS-TG – Private Sector Technical Group
- RSM; RSA – Rational Software Modeler; Architect
- SOA – Services Oriented Architecture

Acronym Soup, cont'd

- S-TAG – Services Technical Advisory Group
- SVN – Subversion
- UML – Unified Modeling Language
- Web, WWW – World Wide Web
- Wiki – What I Know Is
- WSDL – Web Services Development Language

Web Resources

- <http://www.cms.hhs.gov/MedicaidInfoTechArch/>
- http://newgforge.hl7.nscee.edu/docman/?group_id=40
- <http://mita.wikispaces.com/>
- <http://www.mitahealth.org/>
- <http://www.mitamatters.blogspot.com/>
- <http://www.google.com> – type in MITA, HL7, CMS, etc.



Maintaining the Momentum

- Modeling: spend at least 3 hours per week to build expertise and retain knowledge.
 - Foster teamwork
 - Management support is critical
 - Patience
- Attend calls, conferences, and workgroups as often as possible.
- If unfamiliar with UML, require contractors for special projects to use the methodology to gain exposure.
- Not interested in modeling? Review, review, review. No experience necessary to assist in refining the diagrams.

Only the beginning...

Please join us!

Thank you