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**Integration Guide**

**Rate and Fee Calculator**

**LVIS: Lender Vendor**

**Integration Services**

**Version 1.5**

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 7/05/2016 | 1.0 | Initial Draft | Shannon Bunting |
| 3/06/2017 | 1.1 | Final Draft | Shannon Bunting |
| 5/18/2017 | 1.2 | General Updates  Added FAQ section | Shannon Bunting |
| 5/24/2017 | 1.3 | Removed XML file attachments | Shannon Bunting |
| 3/25/2022 | 1.4 | Updated production and stage API endpoints | Chee Lee |
| 6/19/2024 | 1.5 | Updated to add OAuth 2.0 requirements | Reachny Tan/Chee Lee |

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# INTRODUCTION

The Lender Vendor Integration Services (LVIS) platform serves as First American’s primary integration system for Title- and Closing/Escrow-related services, including rates and fees. This document will describe the process by which external parties may interact with First American for the purpose of requesting Title Rates, Settlement Services, Recording Fees, and fees for Endorsements for Loan Estimates and Closing Disclosures. In some cases, the GFE and HUD-1 are also supported.

## Purpose

The purpose of this iGuide is to provide technical information to First American’s business partners and customers who desire to build an electronic interface to First American in order to request and receive Title and Closing/Escrow-related rates and fees.

## Intended Audience

The intended audience of this document is technical personnel involved in building an XML interface to First American’s LVIS system.

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# SYSTEM OVERVIEW



# TECHNICAL OVERVIEW

## Standards

First American is an active participant in the Mortgage Industry Standards Maintenance Organization (MISMO), and as such, uses the MISMO XML standards whenever possible. Since one size does not always fit all, MISMO leaves room for each company to modify the standards to fit their specific needs.

To minimize the use of EXTENSIONS to house data specific to rate calculations, we have elected to use existing elements for our data—even though on its face it may not be a perfect fit. We decided on this implementation in order to allow for an easier integration process for our Customers since no First American-specific elements will be needed to obtain rates and fees through this interface.

### MISMO

MISMO version 3.4 is the standard used throughout this document. Detailed information regarding MISMO standards can be found on their website: <http://mismo.org>.

### Data Types

The following MISMO data types are used as part of this interface. Please refer to the MISMO website for detailed information on these types.

| Class Word | MISMO Data Type | XML Data Type |
| --- | --- | --- |
| Amount | MISMOAmount | xsd:decimal |
| Code | MISMOCode | xsd:string |
| Datetime | MISMODatetime | xsd:dateTime |
| Description | MISMOString | xsd:string |
| Identifier | MISMOIdentifier | xsd:string |
| Indicator | MISMOIndicator | xsd:boolean |
| Name | MISMOString | xsd:string |
| Number | MISMONumber  MISMONumericString | xsd:integer |
| Rate | MISMORate | xsd:decimal |
| Text | MISMOString | xsd:string |
| Type | xxxxEnum | xsd:string |
| URI | MISMOURI | xsd:anyURI |
| URL | MISMOURL | xsd:anyURI |
| Value | MISMOValue | xsd:string |
| XML | MISMOXML | xsd:any |

#### Resource Information

**MISMO**

For more information regarding MISMO and MISMO standards, please visit <http://mismo.org>.

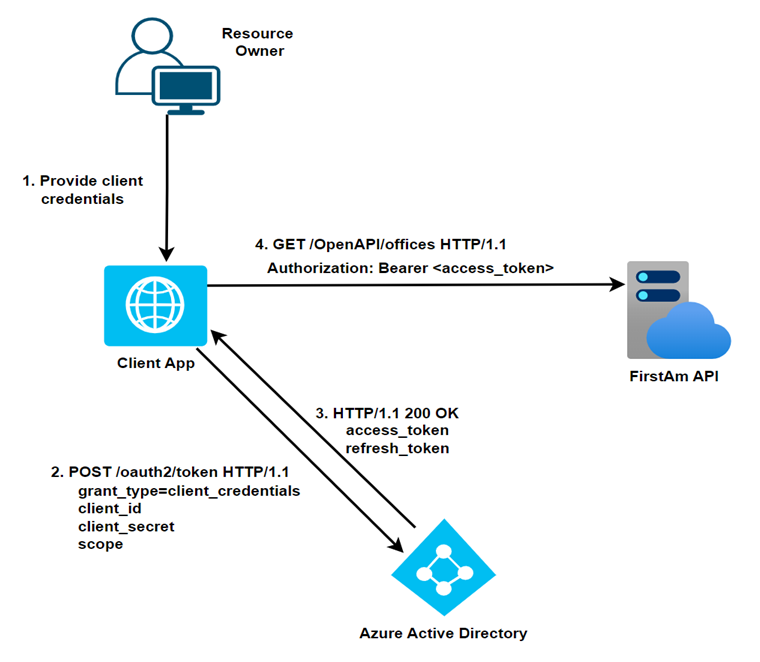
**CFPB**

The Consumer Financial Protection Bureau (CFPB) set forth rules governing the use of the Loan Estimate (LE) and the Closing Disclosure (CD), which replaces (in most cases) the Good Faith Estimate (GFE) and the HUD-1. For more information regarding these rules and regulations, and how related data must be reported, please visit <http://www.consumerfinance.gov/>.

# SERVICE ACCESS AND SECURITY

First American’s preferred method of API authentication is a token validation. The token will be validated at our API Gateway layer and will respond with an HTTP 4XX error if the token is invalid. Each client must register their application with First American’s integration team prior to testing. Once the client application is registered, you will receive a *ClientID* and *Secret* to use for requesting an access token from Azure Active Directory. Please review the generic authentication diagram below.

**Note**: this is just an example, and the actual URLs and parameters will be provided during the partner engagement process.



A client application must request a token prior to making calls to First American’s LVIS APIs. In your application code you will need to make an HTTP POST request to Azure Active Directory endpoint with a header of “*Content-Type:application/x-www-form-urlencoded*” using your client\_Id, client\_Secret, scope, and grant\_type=client\_credentials.

API: https://login.microsoftonline.com/{tenantId}/oauth2/v2.0/token

A screen shot of a computer

Description automatically generated

After a successful HTTP 200 response you will receive a JSON object with an access token like this:

A computer screen shot of a black screen

Description automatically generated

Tokens have a life span of 1 hour. ***It is recommended that the client apps implement a caching mechanism to prevent unnecessary token requests***.

**API Calls**

Once you have a valid token, you can now make calls to First American’s LVIS APIs. In this example the Calculator API is called by passing the token with a header “Authorization: Bearer <token>”.



## Connection

All communication between the Requesting Party and the Calculator is Synchronous. The maximum amount of connection time allowed is 120 seconds, after which, a timeout shall occur. When the initial request is received, LVIS shall respond with the requested data or a processing error, thus establishing the synchronous connection.

## Transport Mechanism and Communication

All messages exchanged between LVIS and the integrating system shall be done using the HTTPS transport protocol using RESTful services (WebApi).

Request payloads should be sent via the HTTP POST request method.

NOTE: SOAP-based services can be made available, upon request.

### Endpoints

LVIS non-prod and prod endpoints will be provided during the engagement process.

### Testing

Testing shall be conducted in a coordinated manner, organized by a First American Project Manager. Standard test cases that must be run and approved by both the integrating partner and First American shall be provided at the time testing is scheduled to begin.

Testing expectations and guidelines shall be communicated in the context of the project, and the project will be managed by a First American project manager. Expectations will be clearly conveyed to all parties when testing is to begin.

Approval for move to Production is dependent on successful completion of the scenarios.

## Simulator

First American has created a windows-based application that demonstrates the behavior of requesting and receiving rates and fees. The simulator is fully functional and can be used to understand how the integration will work and to observe how the calculator API is exercised. It is intended to be used as a testing tool and developer aid and should not be used as the final solution for any integrating system.

### Simulator Username and Password (Config file)

#### Sample Code

Sample code that goes with the simulator in .NET can be made available upon request.

## Frequently Asked Questions

A list of common scenarios posed as questions and answers can be found in section 9. Understanding the display and selection process involved in receiving rates and fees can be difficult due to the large amounts of data being transmitted. The purpose of this section is to help the integrating partner determine the best way to display the product and service options to facilitate the request and response process.

# Products

## Products and Services

First American’s LVIS platform currently supports requests for rates and fees for Title (including Endorsements), Settlement Services, and Recording Fees. These rates and fees are intended to be provided in the Loan Estimate and/or the Closing Disclosure form, and in some instances, the GFE/HUD-1. This section explains what products and services are available and how to request them.

All services may be requested individually as well as in any combination of the four available.

### Title Rates

Title Rates are provided based on First American availability and state filings.

### Endorsements

Endorsements may be priced in conjunction with a Title product—based on availability—or it may be priced on its own.

### Settlement Services

Settlement Services are provided in some states. Where available, the settlement location’s city, county, and state are required in order to return applicable fees. In some cases, LVIS can return the default service for the state if the exact location is unknown.

### Recording Fees

Recording Fees for state and local taxes and recorded documents may be requested individually or in conjunction with another product.

### Closing Protection Letter

In some states, a Closing Protection Letter (CPL) is required along with a Title Policy. In other cases, a CPL is an optional product that can be added to a Title Policy. In such cases, CPL options shall be presented in the response, including a required indicator, if applicable.

### Loan Estimate / Closing Disclosure

The default data provided by LVIS is for the Loan Estimate and the Closing Disclosure. In some cases, however, there may be a specific need to request a GFE and HUD-1. In that event, LVIS shall provide the option of requesting those we’ll give them the data for those forms

# Fee Request Overview

## State’s County and City Data

All rate requests require that a city, county, and state be provided for the location of the subject property, and in the case of Settlement Services, the same elements may also be required for the location in which the closing will take place. It is assumed that all requesting systems have such data available; however, if that is not the case, LVIS shall provide a method for requesting (1) a list of counties for a given state and/or (2) a list of cities within a given county for a given state. Cities may be requested for one, specific county or for all counties in a specific state. State data must be requested on a state-by-state basis; multiple states in a single request are not supported.

## Response Scenarios

There are three basic scenarios for which rates and fees are returned:

1. Rates and Fees are available given the information provided – no additional information is needed.
2. More information is needed before Rates and Fees may be provided – a list of questions will be provided to gather the information needed.
3. More information is needed; however, First American has established ‘default’ answers to the questions. As such, the Rates and Fees are available, IF the requesting party agrees with the default answers given with the associated questions.

### Scenario 1 – Rates and Fees are Available

If the information provided in the request is sufficient to determine Rates and Fees, and no additional (secondary, or level 2) questions are required, then all applicable Rate and Fee data shall be returned to the requesting party.

### Scenario 2 – Need Information, Secondary Questions Required

If the information provided in the request is not sufficient by itself to determine Rates and Fees, then LVIS shall provide a list of questions (L2 questions – Level 2, or secondary) to be answered in order to determine the Rates and Fees. All questions and answers must be returned in order to receive the Rate and Fee data.

### Scenario 3 – Need Information, Default Answers Available

In some cases, First American has established default answers to common questions needed to determine Rates and Fees. If these default answers are available, then LVIS shall return the Rates and Fees along with the questions and the default answers used to determine those Rates and Fees. Should the User choose to accept the provided Rates and Fees using the default answers, there is no further action to be taken.

**\*Please note**: In this case, it is highly recommended that the requesting system display the questions and answers to the User for review in order to confirm their validity before accepting and using the Rates and Fees provided. In the event that the User chooses to change the answers, this scenario, in effect, becomes Scenario 2 described above.

## Request Types and Required Fields

The Rates and Fees request process consists of three to four sets of requests and responses, depending on individual scenarios:

1. **Property Types**: Returns Property Type list for a given state based on the effective date.
2. **Transaction Types**: Returns Transaction Type list for a given state based on the effective date and specified Property Type.
3. **Product List Request**: Returns listing of all available policies, rate types, settlement services endorsements, recording options, and CPLs if applicable
4. **Rate Calculation Request (L1):** Returns rates and fees IF there is no additional information needed OR if default answers are available for the applicable questions
5. **Rate Calculation Request (L2):** Returns rates and fees based on answers supplied in the L2 request

Refer to sections 7 and 8, respectively, for detailed information on all requests and responses, which are provided along with their corresponding XML samples.

### Request Process Overview



### County Detail Request

<?xml version="1.0" encoding="utf-8"?>

<LVIS\_XML>

<LVIS\_HEADER>

<LVISActionType>CountyDetail</LVISActionType>

<ClientCustomerId>1111</ClientCustomerId>

<ClientUniqueRequestId>888</ClientUniqueRequestId>

<FAProviderId>999</FAProviderId>

</LVIS\_HEADER>

<LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

<LVIS\_REQUEST\_PARAMS>

<LVIS\_NAME\_VALUE>

<Name>PropertyStateCode</Name>

<Value>CA</Value>

</LVIS\_NAME\_VALUE>

</LVIS\_REQUEST\_PARAMS>

</LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

</LVIS\_XML>

* REQUEST: LVISActionType = CountyDetail
* RETURNS: All Counties in a given State

|  |  |
| --- | --- |
| Parameter Name | Value |
| PropertyStateCode | State Code |

### City Detail Request

#### All Counties and Cities in Specified State

* REQUEST: LVISActionType = CityDetail
* RETURNS: All Cities in the given state and their corresponding Counties

<?xml version="1.0" encoding="utf-8"?>

<LVIS\_XML>

<LVIS\_HEADER>

<LVISActionType>CityDetail</LVISActionType>

<ClientCustomerId>1111</ClientCustomerId>

<ClientUniqueRequestId>888</ClientUniqueRequestId>

<FAProviderId>999</FAProviderId>

</LVIS\_HEADER>

<LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

<LVIS\_REQUEST\_PARAMS>

<LVIS\_NAME\_VALUE>

<Name>PropertyStateCode</Name>

<Value>CA</Value>

</LVIS\_NAME\_VALUE>

<LVIS\_NAME\_VALUE>

<Name>PropertyCountyName</Name>

<Value>Orange</Value>

</LVIS\_NAME\_VALUE>

</LVIS\_REQUEST\_PARAMS>

</LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

</LVIS\_XML>

|  |  |
| --- | --- |
| Parameter Name | Value |
| PropertyStateCode | State Code |

#### All Cities in Specified County

* REQUEST: LVISActionType = CityDetail
* RETURNS: All Cities in the specified County

|  |  |
| --- | --- |
| Parameter Name | Value |
| PropertyStateCode | State Code |
| PropertyCountyName | County Name |

### Property Types Request

* REQUEST: LVISActionType = PropertyTypes
* RETURNS: All Property Types for the specified State and Effective Date

|  |  |
| --- | --- |
| Parameter | Required |
| Property State | X |
| Effective Date\* | O |

\*Please note: If no Effective Date is provided, then the System shall assume a date equal to the request received date.

### Transaction Types Request

* REQUEST: LVISActionType = TransactionTypes
* RETURNS: All Transaction Types for the specified State, Effective Date, and Property Type

|  |  |
| --- | --- |
| Parameter | Required |
| Property State | X |
| Effective Date\* | O |
| Property Type | X |

\*Please note: If no Effective Date is provided, then the System shall assume a date equal to the request received date.

### Product List Request

* REQUEST: LVISActionType = ProductList
* RETURNS: Title Policies, Policy Rate Types, Settlement Services, Endorsements, Recording Fees, and Default Products (if available)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Parameter | Title Rates | Settlement Services | Recording Fees | Endorsement Fees |
| Property State | X | X | X | X |
| Property County | X | X | X | X |
| Property City | O | O | X | O |
| Closing State | O | X | X | O |
| Closing County | O | X | X | O |
| Closing City | O | X | X | O |
| Transaction Type | X | X | X | X |
| Sales Amount1 | O | O | O | O |
| Loan Amount | X | X | X | X |
| Property Type | X | X | X | X |
| Effective Date2 | O | O | O | O |
| Title Selected\* | True | False | False | False |
| Settlement Services Selected\* | False | True | False | False |
| Recording Selected\* | False | False | True | False |
| Endorsements Selected\* | False | False | False | True |

1 Sale Amount is only required for Purchase-related transactions; otherwise, this parameter is unnecessary.

2 If no Effective Date is provided, then the System shall assume a date equal to the request received date.

\* A “True” or “False” indicator must be provided for each option available. At least one option must be true in every request. Setting all options to “True” is permissible when requesting rates and fees for all services concurrently.

### Rate Calculation (L1\*, L2\*) Request

* REQUEST: LVISActionType = RateCalc
* RETURNS: Rates, fees, and questions with default answers (if available)

| Data Point | Title Rates | Settlement Services | Recording Fees | Endorsement Fees |
| --- | --- | --- | --- | --- |
| COMMON REQUEST DATA | | | | |
| Property State | X | X | X | X |
| Property County | X | X | X | X |
| Property City | X | X | X | X |
| Property Type ID | X | X | X | X |
| Closing State | -- | X | X | -- |
| Closing County | -- | X | X | -- |
| Closing City | -- | X | X | -- |
| Transaction Type ID | X | X | X | X |
| Sale Amount1 | X | X | X | X |
| Loan Amount | X | X | X | X |
| Loan Application Date2 | O | O | O | O |
| Loan Estimate Indicator | O | O | O | O |
| Loan Estimate Doc Indicator | O | O | O | O |
| REQUEST-SPECIFIC DATA | | | | |
| Title Policy Category ID | X | -- | -- | -- |
| Title Policy ID | X | -- | -- | -- |
| Title Policy Name | X | -- | -- | -- |
| Rate Type Name | X | -- | -- | -- |
| Rate Type ID | X | -- | -- | -- |
| Endorsement Name | -- | -- | -- | X |
| Endorsement ID | -- | -- | -- | X |
| Closing Type Name | -- | X | -- | -- |
| Closing Type ID | -- | X | -- | -- |
| Recording Document Name | -- | -- | X | -- |
| Recording Document Type | -- | -- | X | -- |

\* Please refer to the appropriate XML Element Table for complete list of all request elements.

1 Sale Amount is required for Purchase-related transactions; otherwise, this field may be considered optional.

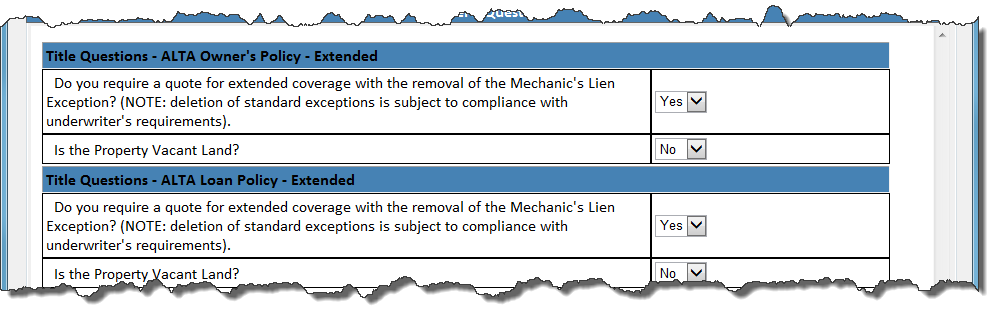
2 If no Loan Application Date is provided, then the System shall assume a date equal to the request received date.

## Secondary Questions

Secondary questions—also known as level 2 or L2 questions—refer to the questions required to be answered before a rate quote can be returned. When required, LVIS shall return these questions and answers in the response XML in two ways: (1) formatted HTML and (2) proprietary XML format. One of these two methods must be utilized since all questions must be answered before a rate can be returned.

### HTML

The response file shall contain a section with embedded HTML content. The HTML content contains the questions and answer options required to be answered in order to return the requested rates and fees. The purpose of providing this content is to provide the integrating partner with the option of being able to easily present the questions and answers graphically to its users.



### Proprietary XML

Should the integrating partner choose to display the questions and answers within the LOS itself, then the same data is provided in a proprietary XML format that can be parsed and utilized in a similar manner.

<RateCalcQandA>

<Param>

<Name>Is this Vacant Land?</Name>

<Value>2</Value>

<ParamCode>1204</ParamCode>

<ValueType>STRING</ValueType>

</Param>

<Question>Is the Property Vacant Land?</Question>

<Options>

<KeyValue>

<Key>Yes</Key>

<Value>1</Value>

</KeyValue>

<KeyValue>

<Key>No</Key>

<Value>2</Value>

</KeyValue>

</Options>

<Answers>

<string>2</string>

</Answers>

<DefaultAnswer>2</DefaultAnswer>

<LinkKey>P0\_1204</LinkKey>

<IsPrompt>true</IsPrompt>

<Description/>

</RateCalcQandA>

# Phase I: Pre-Request

Request Message – City/County Detail

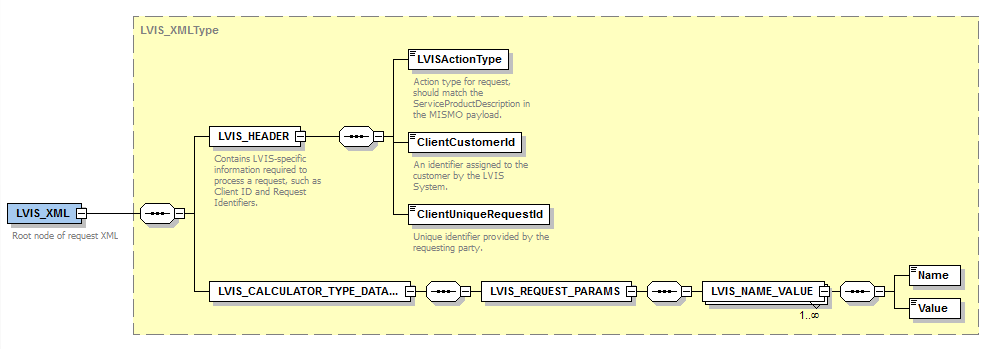
## Phase I Requests

### Graphical Overview – All Phase I Requests

This diagram depicts a high-level overview of the MESSAGE node and sequenced elements required for the following requests:

* CityDetail (Optional)
* CountyDetail (Optional)
* Property Types
* Transaction Types
* Product List

All elements are detailed in the following XML table and subsequent samples.



### Request XML Element Table

The following table lists all of the elements that can be accommodated for all of the Phase I Pre-Requests. **Required** elements are designated with an ‘**R**’ in the ‘R’ column and are also shown in bold text.

Please note that MISMO version 3.4 was used as a basis for the following table. The fields shown below are those that may be used for this request purpose. If additional MISMO v3.4 elements or attributes not shown below are submitted, it is acceptable for them to be present in the request; however, they will not be parsed or transformed during the request process.

| XML Element Table – Phase I: Pre- Request | | | |
| --- | --- | --- | --- |
| R | Name | Data Type | Description |
| R | LVIS\_XML | -- | Root node for LVIS request |
|  | LVIS\_HEADER | -- | Contains LVIS-specific information required to process a request, such as Client ID and Request Identifiers. |
|  | LVISActionType | ENUM | Identifies the type of request being made.  Values:   * CityDetail * CountyDetail * ProductList * PropertyTypes * TransactionTypes |
|  | ClientCustomerId | String | The unique identifier assigned to the Requesting Party by First American for each Customer location. This number is tied internally to ordering account information for use with the Service Provider(s). It is supplied with request transactions to allow the service provider to identify the billing account to be used.  This identifier will be assigned by First American for each client location. For a rate calculator, this may be one identifier per customer. |
|  | ClientUniqueRequestId | String | Unique identifier provided by the requesting party. |
|  | LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST | -- | Container Element |
|  | LVIS\_REQUEST\_PARAMS | -- | Container Element |
|  | LVIS\_NAME\_VALUE | -- | Repeatable container for sets of request data. Refer to table 7.1.2.2 for a list of which parameters are required for each of the action types listed above. |
|  | Name | ENUM | Name of parameter for which a value is being provided. Refer to table 7.1.2.1 for more detailed information.  Values:   * ClosingCountyName * ClosingStateCode * EffectiveDate * IsClosing * IsEndorsements * IsRecording * IsTitle * LoanAmount * PropertyCountyName * PropertyStateCode * PropertyType * SalesAmount * SelectedPolicy * TransactionType |
|  | Value | String | The value that corresponds to the name parameter. |

#### Parameter Description Table

|  |  |
| --- | --- |
| Parameter Name | Description |
| ClosingCountyName | The name of the county in which the Closing will take place |
| ClosingStateCode | Two-letter code for one, specific state |
| EffectiveDate | The date for which the fee(s) are effective. Usually, this date is the Loan Application Date. |
| IsClosing | Provide a “True” or “False” value for this parameter if requesting fees for Settlement Services. |
| IsEndorsements | Provide a “True” or “False” value for this parameter if requesting fees for Endorsements. |
| IsRecording | Provide a “True” or “False” value for this parameter if requesting fees for Recording. |
| IsTitle | Provide a “True” or “False” value for this parameter if requesting fees for Title. |
| LoanAmount | The loan amount associated with the loan for which fees are being requested. |
| PropertyCountyName | The name of the county in which the Property is located |
| PropertyStateCode | The name of the state in which the Property is located |
| PropertyType | The type of property for which the request was submitted. The value should be parsed from the PropertyTypes response. |
| SalesAmount | The sale amount associated with the loan for which fees are being requested. |
| SelectedPolicy | Used when adding additional policies to an existing policy or set of policies. Must provide existing Policy ID and the Rate Type ID. Example:  <Name>SelectedPolicy</Name>  <Key>469/1</Key>d |
| TransactionType | The type of transaction associated with the loan for which fees are being requested. The value should be parsed from the TransactionTypes response. |

#### Parameter Usage Table

| Parameter Name | City Detail | County Detail | ProductList | Property Types | Transaction Types |
| --- | --- | --- | --- | --- | --- |
| ClosingCountyName | -- | O | R | -- | -- |
| ClosingStateCode | R | R | R | -- | -- |
| EffectiveDate | -- | -- | -- | R | R |
| IsClosing | -- | -- | R  (True or False) | -- | -- |
| IsEndorsements | -- | -- | R  (True or False) | -- | -- |
| IsRecording | -- | -- | R  (True or False) | -- | -- |
| IsTitle | -- | -- | R  (True or False) | -- | -- |
| LoanAmount | -- | -- | R | -- | -- |
| PropertyCountyName | -- | -- | R | -- | -- |
| PropertyStateCode | -- | -- | R | R | R |
| PropertyType | -- | -- | R |  | R |
| SalesAmount | -- | -- | R | -- | -- |
| SelectedPolicy | -- | -- | R\* | -- | -- |
| TransactionType | -- | -- | R | -- | -- |

\*Required for requests to add additional policies.

### XML Samples

#### CountyDetail XML Sample

<?xml version="1.0" encoding="utf-8"?>

<LVIS\_XML>

<LVIS\_HEADER>

<LVISActionType>CountyDetail</LVISActionType>

<ClientCustomerId>1111</ClientCustomerId>

<ClientUniqueRequestId>2222</ClientUniqueRequestId>

</LVIS\_HEADER>

<LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

<LVIS\_RE QUEST\_PARAMS>

<LVIS\_NAME\_VALUE>

<Name>PropertyStateCode</Name>

<Value>CA</Value>

</LVIS\_NAME\_VALUE>

</LVIS\_REQUEST\_PARAMS>

</LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

</LVIS\_XML>

#### CityDetail XML Sample – All Counties and Cities

<?xml version="1.0" encoding="utf-8"?>

<LVIS\_XML>

<LVIS\_HEADER>

<LVISActionType>CityDetail</LVISActionType>

<ClientCustomerId>1111</ClientCustomerId>

<ClientUniqueRequestId>2222</ClientUniqueRequestId>

</LVIS\_HEADER>

<LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

<LVIS\_REQUEST\_PARAMS>

<LVIS\_NAME\_VALUE>

<Name>PropertyStateCode</Name>

<Value>CA</Value>

</LVIS\_NAME\_VALUE>

</LVIS\_REQUEST\_PARAMS>

</LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

</LVIS\_XML>

#### CityDetail XML Sample – All Cities in Specified County

<LVIS\_XML>

<LVIS\_HEADER>

<LVISActionType>CityDetail</LVISActionType>

<ClientCustomerId>1111</ClientCustomerId>

<ClientUniqueRequestId>2222</ClientUniqueRequestId>

</LVIS\_HEADER>

<LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

<LVIS\_REQUEST\_PARAMS>

<LVIS\_NAME\_VALUE>

<Name>PropertyStateCode</Name>

<Value>CA</Value>

</LVIS\_NAME\_VALUE>

<LVIS\_NAME\_VALUE>

<Name>PropertyCountyName</Name>

<Value>Orange</Value>

</LVIS\_NAME\_VALUE>

</LVIS\_REQUEST\_PARAMS>

</LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

</LVIS\_XML>

#### PropertyTypes XML Sample

<?xml version="1.0" encoding="utf-8"?>

<LVIS\_XML>

<LVIS\_HEADER>

<LVISActionType>PropertyTypes</LVISActionType>

<ClientCustomerId>1111</ClientCustomerId>

<ClientUniqueRequestId>2222</ClientUniqueRequestId>

</LVIS\_HEADER>

<LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

<LVIS\_REQUEST\_PARAMS>

<LVIS\_NAME\_VALUE>

<Name>PropertyStateCode</Name>

<Value>CA</Value>

</LVIS\_NAME\_VALUE>

<LVIS\_NAME\_VALUE>

<Name>EffectiveDate</Name>

<Value>3/6/2017</Value>

</LVIS\_NAME\_VALUE>

</LVIS\_REQUEST\_PARAMS>

</LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

</LVIS\_XML>

#### TransactionTypes XML Sample

<?xml version="1.0" encoding="utf-8"?>

<LVIS\_XML>

<LVIS\_HEADER>

<LVISActionType>TransactionTypes</LVISActionType>

<ClientCustomerId>1111</ClientCustomerId>

<ClientUniqueRequestId>2222</ClientUniqueRequestId>

</LVIS\_HEADER>

<LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

<LVIS\_REQUEST\_PARAMS>

<LVIS\_NAME\_VALUE>

<Name>PropertyStateCode</Name>

<Value>CA</Value>

</LVIS\_NAME\_VALUE>

<LVIS\_NAME\_VALUE>

<Name>PropertyType</Name>

<Value>Residential</Value>

</LVIS\_NAME\_VALUE>

<LVIS\_NAME\_VALUE>

<Name>EffectiveDate</Name>

<Value>3/6/2017</Value>

</LVIS\_NAME\_VALUE>

</LVIS\_REQUEST\_PARAMS>

</LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

</LVIS\_XML>

#### ProductList XML Sample

<?xml version="1.0" encoding="utf-8"?>

<lvis:LVIS\_XML xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:lvis="http://services.firstam.com/lvis/v2.0">

<lvis:LVIS\_HEADER>

<lvis:LVISActionType>ProductList</lvis:LVISActionType>

<lvis:ClientCustomerId>1111</lvis:ClientCustomerId>

<lvis:ClientUniqueRequestId>2222</lvis:ClientUniqueRequestId>

</lvis:LVIS\_HEADER>

<lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

<lvis:LVIS\_REQUEST\_PARAMS>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>PropertyStateCode</lvis:Name>

<lvis:Value>CA</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>PropertyCountyName</lvis:Name>

<lvis:Value>Alameda</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>PropertyCityName</lvis:Name>

<lvis:Value>Alameda</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>ClosingStateCode</lvis:Name>

<lvis:Value>CA</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>ClosingCountyName</lvis:Name>

<lvis:Value>Alameda</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>ClosingCityName</lvis:Name>

<lvis:Value>Alameda</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>TransactionType</lvis:Name>

<lvis:Value>Sale w/ Mortgage</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>SalesAmount</lvis:Name>

<lvis:Value>350000</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>LoanAmount</lvis:Name>

<lvis:Value>200000</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>EffectiveDate</lvis:Name>

<lvis:Value>5/18/2017 11:36:07 AM</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>PropertyType</lvis:Name>

<lvis:Value>Residential</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>IsTitle</lvis:Name>

<lvis:Value>True</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>IsClosing</lvis:Name>

<lvis:Value>True</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>IsRecording</lvis:Name>

<lvis:Value>True</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>IsEndorsements</lvis:Name>

<lvis:Value>True</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

</lvis:LVIS\_REQUEST\_PARAMS>

</lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

</lvis:LVIS\_XML>

#### ProductList – ADD PRODUCT XML Sample

<?xml version="1.0" encoding="utf-8"?>

<lvis:LVIS\_XML xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:lvis="http://services.firstam.com/lvis/v2.0">

<lvis:LVIS\_HEADER>

<lvis:LVISActionType>PolicyTypesForAddPolicy</lvis:LVISActionType>

<lvis:ClientCustomerId>1111</lvis:ClientCustomerId>

<lvis:ClientUniqueRequestId>2222</lvis:ClientUniqueRequestId>

</lvis:LVIS\_HEADER>

<lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

<lvis:LVIS\_REQUEST\_PARAMS>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>PropertyStateCode</lvis:Name>

<lvis:Value>NY</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>PropertyCountyName</lvis:Name>

<lvis:Value>Bronx</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>PropertyCityName</lvis:Name>

<lvis:Value>Bronx</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>ClosingStateCode</lvis:Name>

<lvis:Value/>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>ClosingCountyName</lvis:Name>

<lvis:Value/>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>ClosingCityName</lvis:Name>

<lvis:Value/>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>TransactionType</lvis:Name>

<lvis:Value>Sale w/ Mortgage</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>SalesAmount</lvis:Name>

<lvis:Value>750000</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>LoanAmount</lvis:Name>

<lvis:Value>50000</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>PropertyType</lvis:Name>

<lvis:Value>Residential</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>EffectiveDate</lvis:Name>

<lvis:Value>3/27/2017 1:34:59 PM</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>SelectedPolicy</lvis:Name>

<lvis:Value>471/1</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

<lvis:LVIS\_NAME\_VALUE>

<lvis:Name>SelectedPolicy</lvis:Name>

<lvis:Value>469/1</lvis:Value>

</lvis:LVIS\_NAME\_VALUE>

</lvis:LVIS\_REQUEST\_PARAMS>

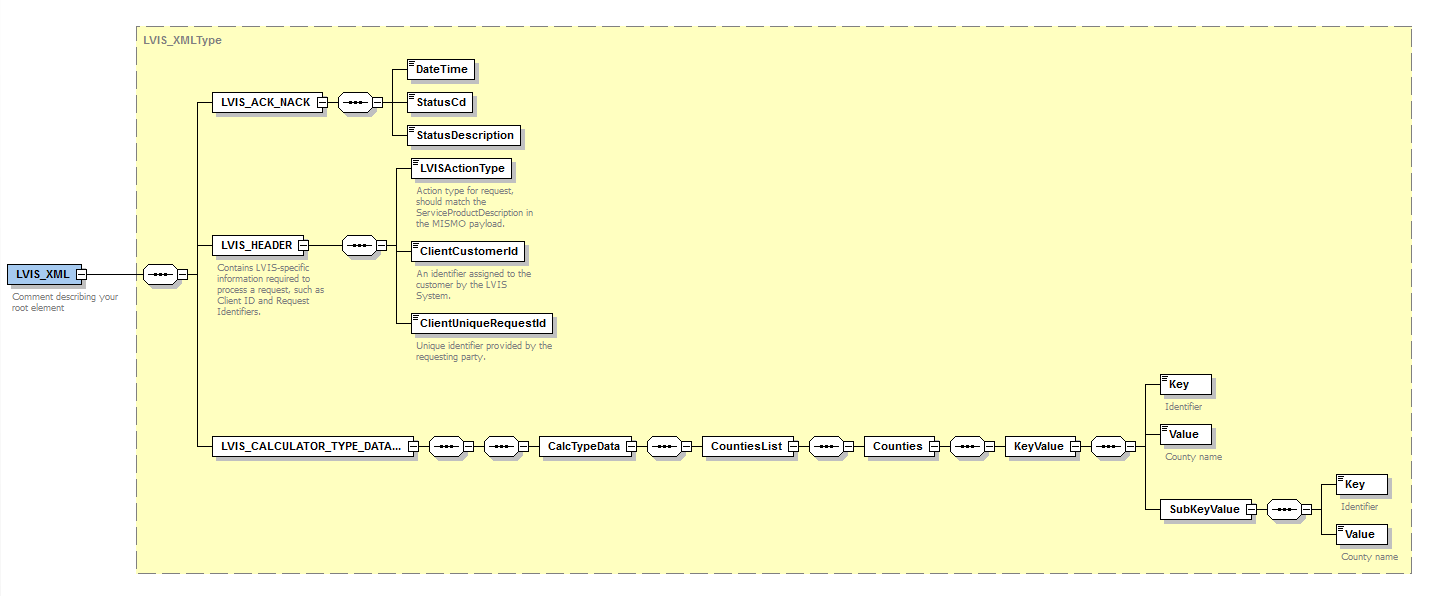
</lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_REQUEST>

</lvis:LVIS\_XML>

## Phase I Responses

### Graphical Overview – City/County Detail Response

This diagram depicts a high-level overview of the LVIS\_XML node and sequenced elements provided in the CountyDetail response. All elements are detailed in the following XML table and subsequent samples.



### Response XML Element Table

The following table lists all of the elements that will be provided in the County and City Detail responses.

| XML Element Table – Phase I: City/County Response | | | |
| --- | --- | --- | --- |
| R | Name | Data Type | Description |
| R | LVIS\_XML | -- | Root node for LVIS request |
|  | LVIS\_ACK\_NACK | -- | Container Element |
|  | DateTime | dateTime | Date and time of the response |
|  | StatusCd | String | Status identifier |
|  | StatusDescription | String | Description of status |
|  | LVIS\_HEADER | -- | Contains LVIS-specific information required to process a request, such as Client ID and Request Identifiers. |
|  | LVISActionType | ENUM | Identifies the type of request being made.  Values:   * CityDetail * CountyDetail * ProductList * PropertyTypes * TransactionTypes |
|  | ClientCustomerId | String | The unique identifier assigned to the Requesting Party by First American for each Customer location. This number is tied internally to ordering account information for use with the Service Provider(s). It is supplied with request transactions to allow the service provider to identify the billing account to be used.  This identifier will be assigned by First American for each client location. For a rate calculator, this may be one identifier per customer. |
|  | ClientUniqueRequestId | String | Unique identifier provided by the requesting party. |
|  | LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE | -- | Container Element |
|  | CalcTypeData | -- | Container Element |
|  | CountiesList | -- | Container Element |
|  | Counties | -- | Container Element |
|  | KeyValue | -- | Container Element |
|  | Key | String | Identifier associated with the Value content |
|  | Value | String | Contains the City or County name, depending on request type. |
|  | SubKeyValue | -- | Container Element for embedded list of KeyValue data. Used for returning list of City names for a given County. |
|  | Key | String | Identifier associated with the Value content |
|  | Value | String | Contains the City or County name, depending on request type. |

### XML Samples

#### CountyDetail Response

<?xml version="1.0" encoding="utf-8"?>

<lvis:LVIS\_XML xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:lvis="http://services.firstam.com/lvis/v2.0">

<lvis:LVIS\_ACK\_NACK>

<lvis:DateTime>2017-03-09T17:01:33.6784339-08:00</lvis:DateTime>

<lvis:StatusCd>1000</lvis:StatusCd>

<lvis:StatusDescription>Request Successfully Processed</lvis:StatusDescription>

</lvis:LVIS\_ACK\_NACK>

<lvis:LVIS\_HEADER>

<lvis:LVISActionType>CountyDetail</lvis:LVISActionType>

<lvis:ClientCustomerId>1111</lvis:ClientCustomerId>

<lvis:ClientUniqueRequestId>2222</lvis:ClientUniqueRequestId>

</lvis:LVIS\_HEADER>

<lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE>

<lvis:CalcTypeData>

<lvis:CountiesList>

<lvis:Counties>

<lvis:KeyValue>

<lvis:Key>381</lvis:Key>

<lvis:Value>Alameda</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>382</lvis:Key>

<lvis:Value>Alpine</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>383</lvis:Key>

<lvis:Value>Amador</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>384</lvis:Key>

<lvis:Value>Butte</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>385</lvis:Key>

<lvis:Value>Calaveras</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>386</lvis:Key>

<lvis:Value>Colusa</lvis:Value>

</lvis:KeyValue>

…

#### CityDetail Response – Cities in Given County

<?xml version="1.0" encoding="utf-8"?>

<lvis:LVIS\_XML xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:lvis="http://services.firstam.com/lvis/v2.0">

<lvis:LVIS\_ACK\_NACK>

<lvis:DateTime>2017-03-09T17:01:36.5607221-08:00</lvis:DateTime>

<lvis:StatusCd>1000</lvis:StatusCd>

<lvis:StatusDescription>Request Successfully Processed</lvis:StatusDescription>

</lvis:LVIS\_ACK\_NACK>

<lvis:LVIS\_HEADER>

<lvis:LVISActionType>CityDetail</lvis:LVISActionType>

<lvis:ClientCustomerId>1111</lvis:ClientCustomerId>

<lvis:ClientUniqueRequestId>2222</lvis:ClientUniqueRequestId>

</lvis:LVIS\_HEADER>

<lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE>

<lvis:CalcTypeData>

<lvis:CountiesList>

<lvis:Counties>

<lvis:KeyValue>

<lvis:Key>381</lvis:Key>

<lvis:Value>Alameda</lvis:Value>

<lvis:SubKeyValues>

<lvis:KeyValue>

<lvis:Key>6430</lvis:Key>

<lvis:Value>Alameda</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>6442</lvis:Key>

<lvis:Value>Albany</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>22164</lvis:Key>

<lvis:Value>Berkeley</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>8428</lvis:Key>

<lvis:Value>Castro Valley</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>24873</lvis:Key>

<lvis:Value>Dublin</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>10463</lvis:Key>

<lvis:Value>Emeryville</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>11126</lvis:Key>

<lvis:Value>Fremont</lvis:Value>

</lvis:KeyValue>

#### CityDetail Response – Counties and Cities

<?xml version="1.0" encoding="utf-8"?>

<lvis:LVIS\_XML xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:lvis="http://services.firstam.com/lvis/v2.0">

<lvis:LVIS\_ACK\_NACK>

<lvis:DateTime>2017-03-22T09:08:02.8423369-07:00</lvis:DateTime>

<lvis:StatusCd>1000</lvis:StatusCd>

<lvis:StatusDescription>Request Successfully Processed</lvis:StatusDescription>

</lvis:LVIS\_ACK\_NACK>

<lvis:LVIS\_HEADER>

<lvis:LVISActionType>CityDetail</lvis:LVISActionType>

<lvis:ClientCustomerId>1111</lvis:ClientCustomerId>

<lvis:ClientUniqueRequestId>2222</lvis:ClientUniqueRequestId>

</lvis:LVIS\_HEADER>

<lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE>

<lvis:CalcTypeData>

<lvis:CountiesList>

<lvis:Counties>

<lvis:KeyValue>

<lvis:Key>420</lvis:Key>

<lvis:Value>Los Angeles</lvis:Value>

<lvis:SubKeyValues>

<lvis:KeyValue>

<lvis:Key>6164</lvis:Key>

<lvis:Value>Acton</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>6210</lvis:Key>

<lvis:Value>Agoura Hills</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>6295</lvis:Key>

<lvis:Value>Alhambra</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>6556</lvis:Key>

<lvis:Value>Altadena</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>21507</lvis:Key>

<lvis:Value>Arcadia</lvis:Value>

</lvis:KeyValue>

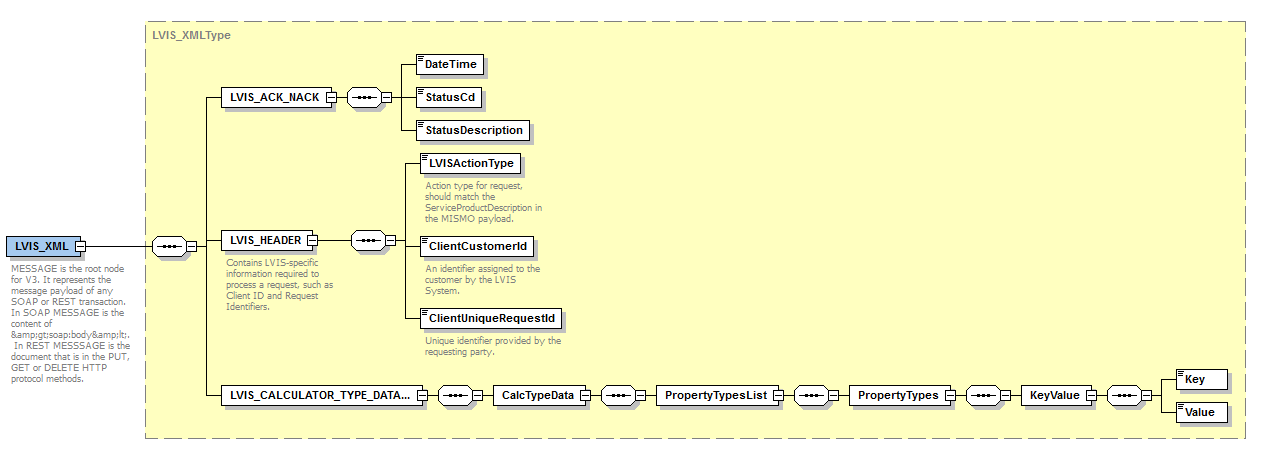
<lvis:KeyValue>

<lvis:Key>38045</lvis:Key>

<lvis:Value>Arleta</lvis:Value>

</lvis:KeyValue>

### Graphical Overview – Property Types Response



### Response XML Element Table

The following table lists all of the elements that will be provided in the PropertyTypes response.

| XML Element Table – Phase I: PropertyTypes Response | | | |
| --- | --- | --- | --- |
| R | Name | Data Type | Description |
| R | LVIS\_XML | -- | Root node for LVIS request |
|  | LVIS\_ACK\_NACK | -- | Contains the status of the message being returned. If positive, the appropriate response data will follow below. |
|  | DateTime | dateTime | Date and time of the response |
|  | StatusCd | String | Status identifier |
|  | StatusDescription | String | Description of status |
|  | LVIS\_HEADER | -- | Contains LVIS-specific information required to process a request, such as Client ID and Request Identifiers. |
|  | LVISActionType | ENUM | Identifies the type of response being returned.  Values:   * PropertyTypes |
|  | ClientCustomerId | String | The unique identifier assigned to the Requesting Party by First American for each Customer location. This number is tied internally to ordering account information for use with the Service Provider(s). It is supplied with request transactions to allow the service provider to identify the billing account to be used.  This identifier will be assigned by First American for each client location. For a rate calculator, this may be one identifier per customer. |
|  | ClientUniqueRequestId | String | Unique identifier provided by the requesting party. |
|  | LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE | -- | Container Element |
|  | CalcTypeData | -- | Container Element |
|  | PropertyTypesList | -- | Container Element |
|  | PropertyTypes | -- | Container Element |
|  | KeyValue | -- | Repeatable container for multiple values |
|  | Key | String | Identifier associated with the Value content |
|  | Value | String | Contains the property type available for the request provided |

### XML Samples

#### PropertyTypes Response

<?xml version="1.0" encoding="utf-8"?>

<lvis:LVIS\_XML xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:lvis="http://services.firstam.com/lvis/v2.0">

<lvis:LVIS\_ACK\_NACK>

<lvis:DateTime>2017-03-09T17:01:30.7081369-08:00</lvis:DateTime>

<lvis:StatusCd>1000</lvis:StatusCd>

<lvis:StatusDescription>Request Successfully Processed</lvis:StatusDescription>

</lvis:LVIS\_ACK\_NACK>

<lvis:LVIS\_HEADER>

<lvis:LVISActionType>PropertyTypes</lvis:LVISActionType>

<lvis:ClientCustomerId>1111</lvis:ClientCustomerId>

<lvis:ClientUniqueRequestId>2222</lvis:ClientUniqueRequestId>

</lvis:LVIS\_HEADER>

<lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE>

<lvis:CalcTypeData>

<lvis:PropertyTypesList>

<lvis:PropertyTypes>

<lvis:KeyValue>

<lvis:Key>1</lvis:Key>

<lvis:Value>Residential</lvis:Value>

</lvis:KeyValue>

</lvis:PropertyTypes>

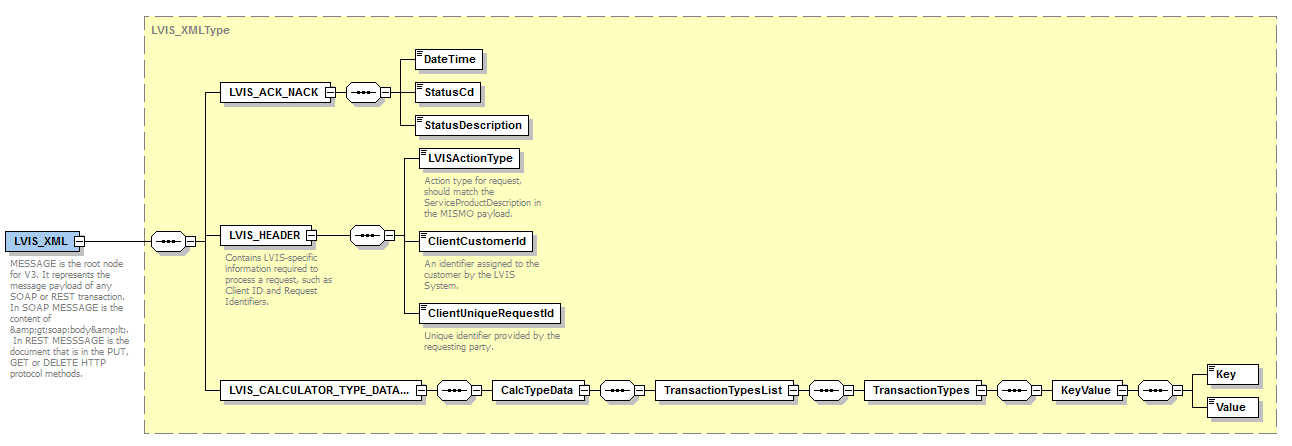
</lvis:PropertyTypesList>

</lvis:CalcTypeData>

</lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE>

</lvis:LVIS\_XML>

### Graphical Overview – Transactions Types Response



### Response XML Element Table

The following table lists all of the elements that will be provided in the PropertyTypes response.

| XML Element Table – Phase I: TransactionTypes Response | | | |
| --- | --- | --- | --- |
| R | Name | Data Type | Description |
| R | LVIS\_XML | -- | Root node for LVIS request |
|  | LVIS\_ACK\_NACK | -- | Contains the status of the message being returned. If positive, the appropriate response data will follow below. |
|  | DateTime | dateTime | Date and time of the response |
|  | StatusCd | String | Status identifier |
|  | StatusDescription | String | Description of status |
|  | LVIS\_HEADER | -- | Contains LVIS-specific information required to process a request, such as Client ID and Request Identifiers. |
|  | LVISActionType | ENUM | Identifies the type of response being returned.  Values:   * TransactionTypes |
|  | ClientCustomerId | String | The unique identifier assigned to the Requesting Party by First American for each Customer location. This number is tied internally to ordering account information for use with the Service Provider(s). It is supplied with request transactions to allow the service provider to identify the billing account to be used.  This identifier will be assigned by First American for each client location. For a rate calculator, this may be one identifier per customer. |
|  | ClientUniqueRequestId | String | Unique identifier provided by the requesting party. |
|  | LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE | -- | Container Element |
|  | CalcTypeData | -- | Container Element |
|  | TransactionTypesList | -- | Container Element |
|  | TransactionTypes | -- | Container Element |
|  | KeyValue | -- | Repeatable container for multiple values |
|  | Key | String | Identifier associated with the Value content |
|  | Value | String | Contains the transaction type available for the request provided |

### XML Samples

#### TransactionTypes Response

<?xml version="1.0" encoding="utf-8"?>

<lvis:LVIS\_XML xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:lvis="http://services.firstam.com/lvis/v2.0">

<lvis:LVIS\_ACK\_NACK>

<lvis:DateTime>2017-03-09T17:01:32.199286-08:00</lvis:DateTime>

<lvis:StatusCd>1000</lvis:StatusCd>

<lvis:StatusDescription>Request Successfully Processed</lvis:StatusDescription>

</lvis:LVIS\_ACK\_NACK>

<lvis:LVIS\_HEADER>

<lvis:LVISActionType>TransactionTypes</lvis:LVISActionType>

<lvis:ClientCustomerId>1111</lvis:ClientCustomerId>

<lvis:ClientUniqueRequestId>2222</lvis:ClientUniqueRequestId>

</lvis:LVIS\_HEADER>

<lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE>

<lvis:CalcTypeData>

<lvis:TransactionTypesList>

<lvis:TransactionTypes>

<lvis:KeyValue>

<lvis:Key>50</lvis:Key>

<lvis:Value>Binder Extension</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>4</lvis:Key>

<lvis:Value>Construction Loan</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>5</lvis:Key>

<lvis:Value>Equity Loan</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>8</lvis:Key>

<lvis:Value>Refinance</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>9</lvis:Key>

<lvis:Value>REO Sale w/ Mortgage</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>10</lvis:Key>

<lvis:Value>REO Sale/Cash</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>11</lvis:Key>

<lvis:Value>Sale w/ Mortgage</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>12</lvis:Key>

<lvis:Value>Sale/Cash</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>13</lvis:Key>

<lvis:Value>Sale/Exchange</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>15</lvis:Key>

<lvis:Value>Second Mortgage</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>17</lvis:Key>

<lvis:Value>Short Sale</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>33</lvis:Key>

<lvis:Value>Timeshare</lvis:Value>

</lvis:KeyValue>

</lvis:TransactionTypes>

</lvis:TransactionTypesList>

</lvis:CalcTypeData>

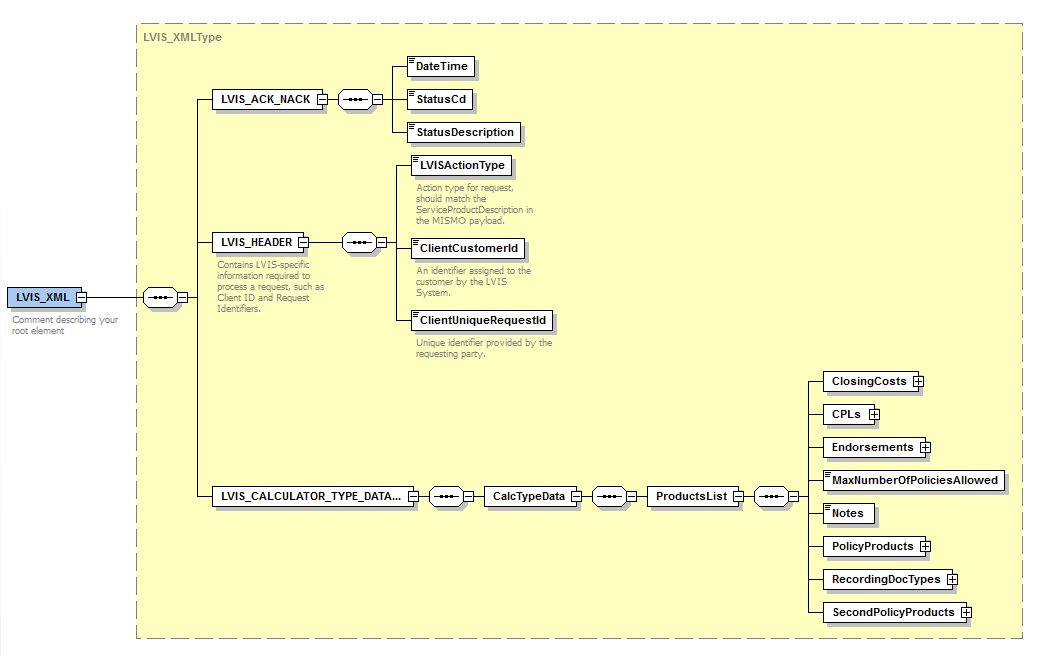
</lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE>

</lvis:LVIS\_XML>

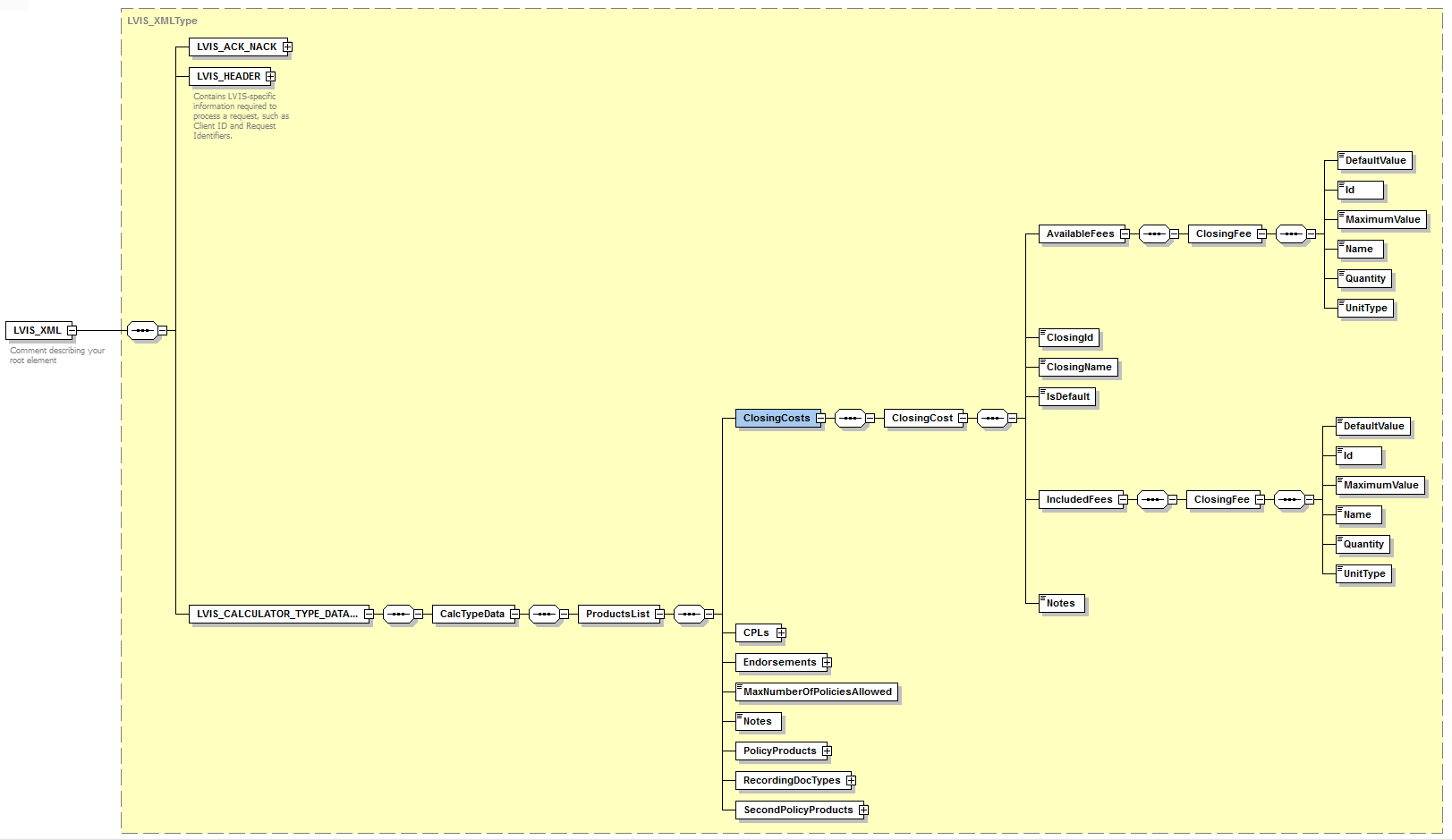
### Graphical Overview – Product List Response

This diagram depicts a high-level overview of the ProductList node and sequenced elements provided in the response. All elements are detailed in the following XML table and subsequent samples.

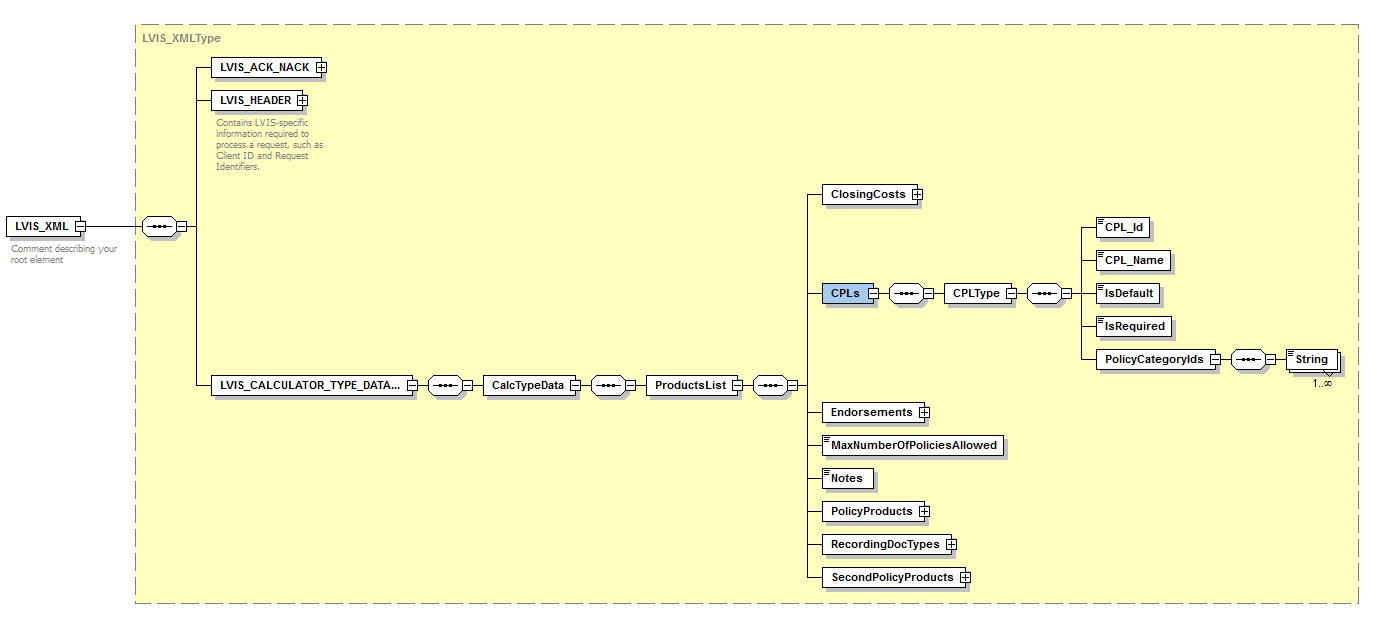
Expanded overviews for each product type are shown after the following XML Elements Table



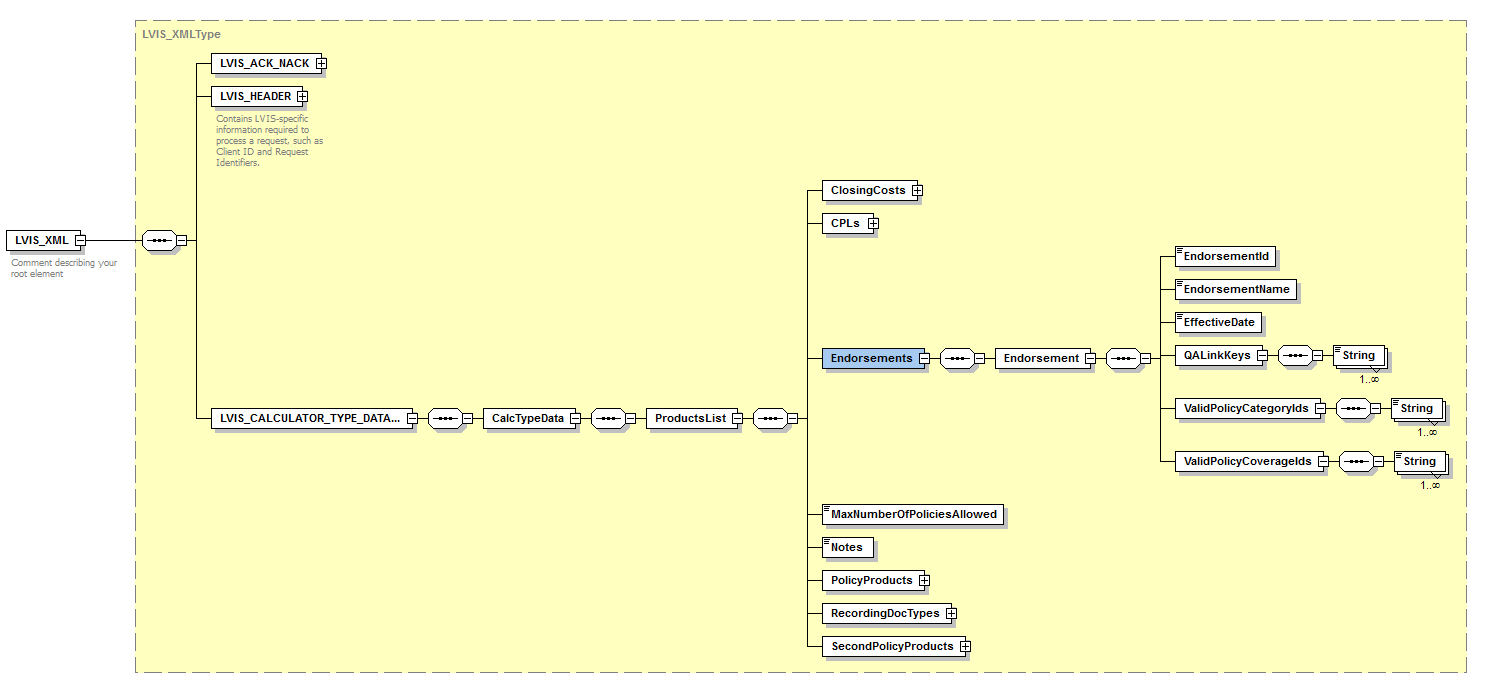
#### Closing Costs Overview



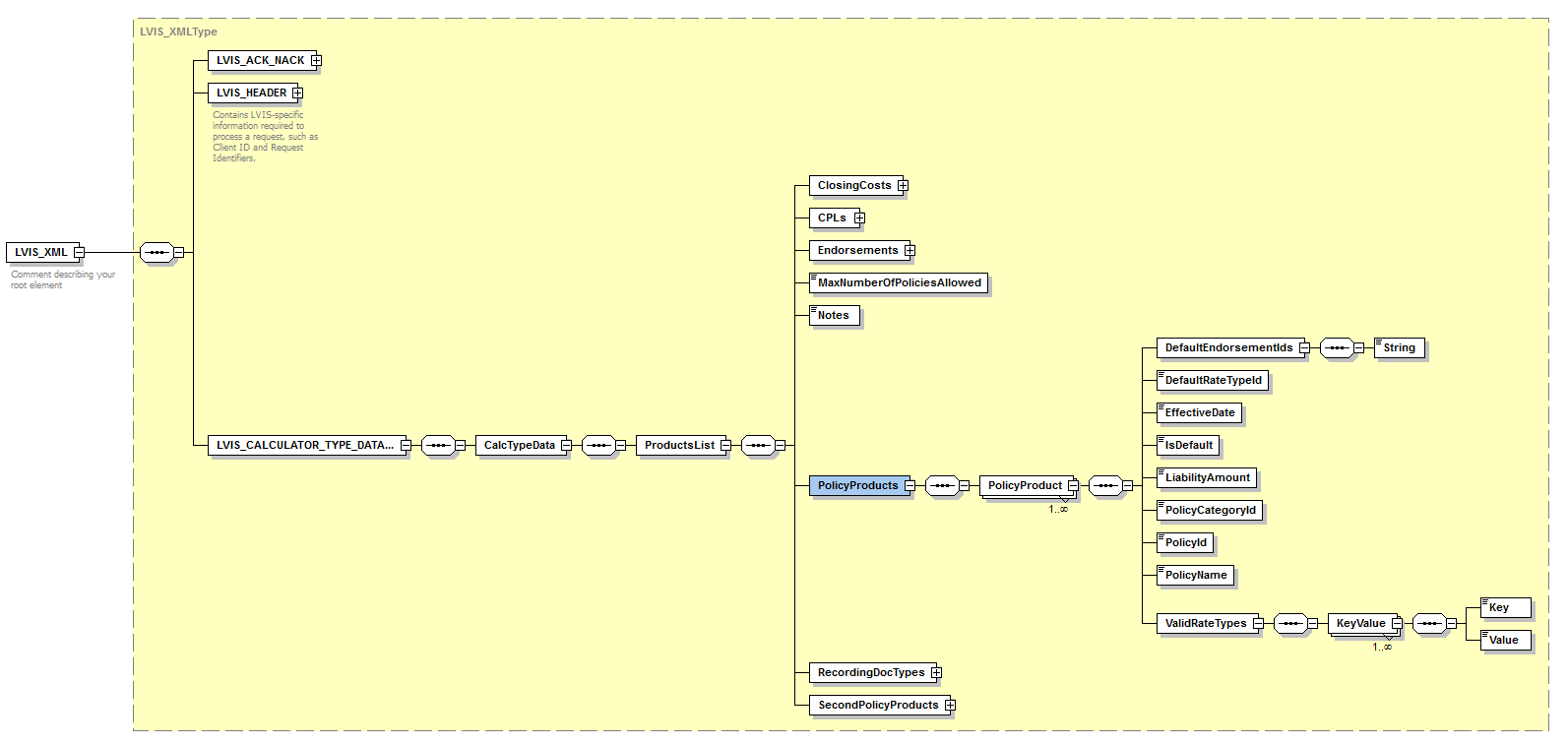
#### CPL Overview



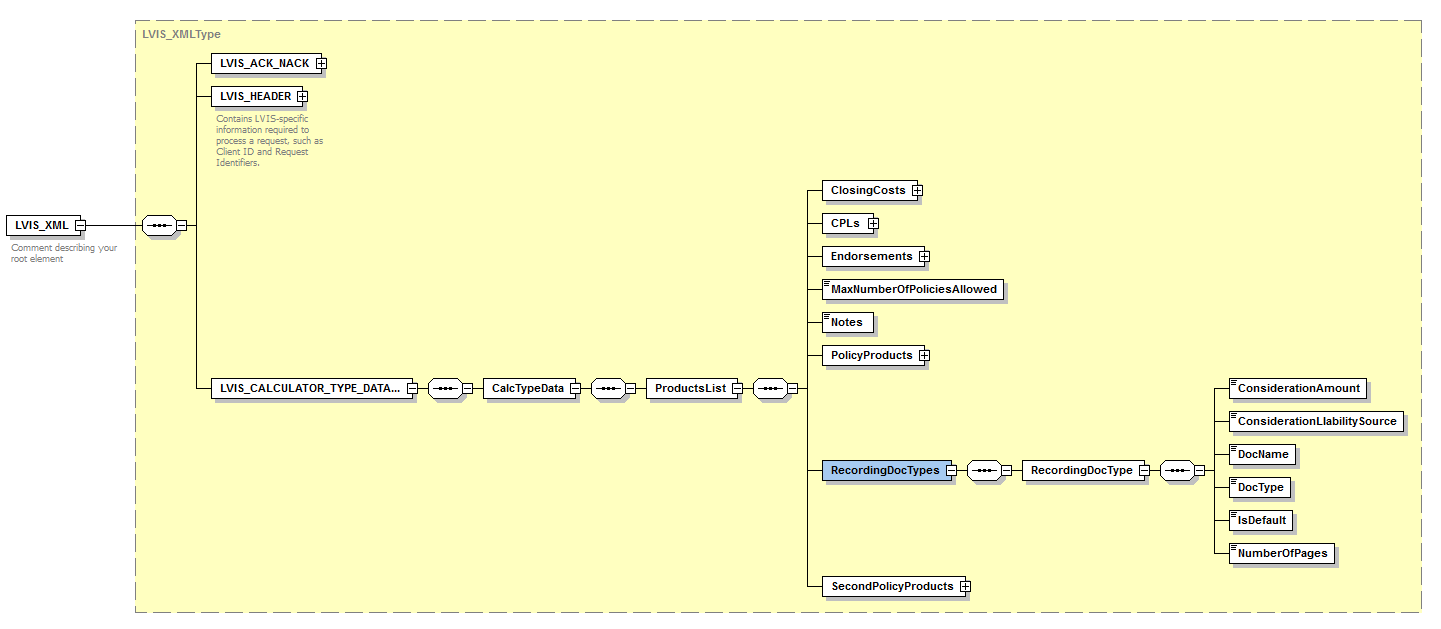
#### Endorsement Overview



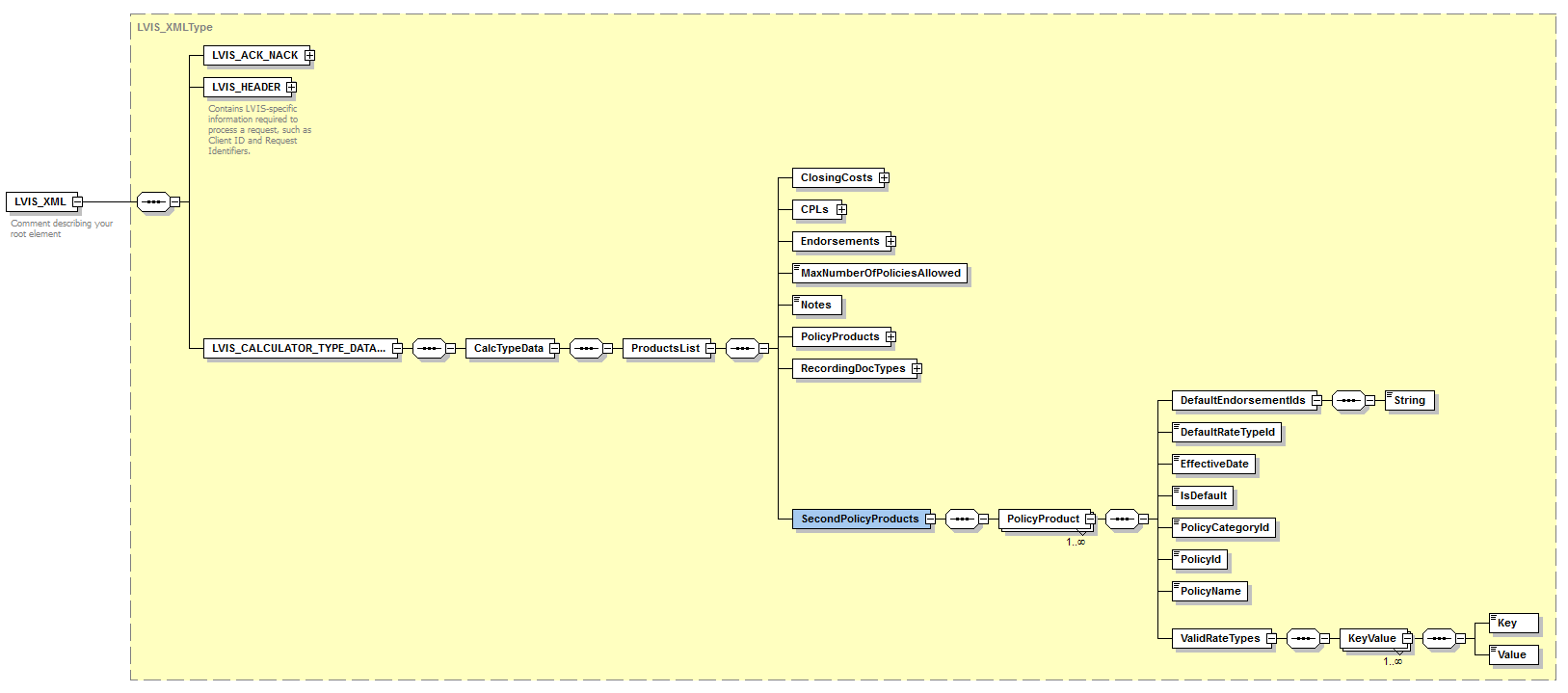
#### Policy Products Overview



#### Recording Doc Types Overview



#### Second Policy Products Overview



### Response XML Element Table

The following table lists all of the elements that may be returned in the response to the ProductList request. The response will contain all of the products that are available to be requested based on the request data provided. A detailed overview of each product section and corresponding samples follows this XML Table.

| XML Element Table – Phase I: ProductList Response | | | |
| --- | --- | --- | --- |
| R | Name | Data Type | Description |
| R | LVIS\_XML | -- | Root node for response file |
| R | LVIS\_ACK\_NACK | -- | Contains the status of the message being returned. If positive, the appropriate response data will follow below. |
| R | DateTime | dateTime | Date and time of the response |
| R | StatusCd | String | Status identifier |
| R | StatusDescription | String | Description of status |
| R | LVIS\_HEADER | -- | Contains LVIS-specific information required to process a request, such as Client ID and Request Identifiers. |
| R | LVISActionType | ENUM | Identifies the type of response being returned.  Values:   * CityDetail * CountyDetail * ProductList |
| R | ClientCustomerId | String | The unique identifier assigned to the Requesting Party by First American for each Customer location. This number is tied internally to ordering account information for use with the Service Provider(s). It is supplied with request transactions to allow the service provider to identify the billing account to be used.  This identifier will be assigned by First American for each client location. For a rate calculator, this may be one identifier per customer. |
| R | ClientUniqueRequestId | String | Unique identifier provided by the requesting party. |
| R | LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE | -- | Container Element |
| R | CalcTypeData | -- | Container Element |
|  | ProductsList | -- | Contains a collection of products available to order based on the request submitted.  Available options are:   * PolicyProducts * SecondPolicyProducts * Endorsements * CPLs * ClosingCosts * RecordingDocTypes |
|  | ClosingCosts | -- | Container Element for fees related to settlement services |
|  | ClosingCost | -- | Repeatable container for closing costs |
|  | AvailableFees | -- | Collection of available closing fees.  Available fees are those that are available to add on to the specific closing cost |
|  | ClosingFee | -- | Repeatable container for each available closing fee. Closing fees are specific to a State and County |
|  | DefaultValue | Integer | Default number of the particular closing quantity |
|  | Id | Integer | Unique identifier for the Closing Fee |
|  | MaximumValue | Integer | The maximum number of the particular quantity that can be requested |
|  | Name | String | Name of the Closing Fee |
|  | Quantity | Integer | Indicates the quantity of a dynamic fee. The fee would be charged based on the quantity selected. Not applicable for Static Fees. |
|  | UnitType | String | Will always be set to ‘Quantity’ |
|  | ClosingId | Integer | Identifier associated with the specific ClosingName |
|  | ClosingName | String | Name of the specific closing type associated with the ClosingId |
|  | IsDefault | Boolean | Indicates whether or not the specific policy is considered a default product given the request parameters provided.  Values:   * True * False |
|  | IncludedFees | -- | Collection of closing fees included in the fee.  Included fees are those that are included as part of the specific closing cost.  These items typically have no fees associated with them, and they usually have related notes. |
|  | ClosingFee | -- | Repeatable container for each available closing fee. Closing fees are specific to a State and County |
|  | DefaultValue | Integer | Default number of the particular closing fee that can be requested. May be changed. |
|  | Id | Integer | Unique identifier for the Closing Fee |
|  | MaximumValue |  | The maximum number of the particular Closing Fee that can be requested. |
|  | Name | String | Name of the Closing Fee |
|  | Quantity | Integer | Indicates the desired quantity of a dynamic fee. The fee would be charged based on the number selected.  **Note**: This is not applicable for Static fees. |
|  | UnitType |  | Will always be set to ‘Quantity’ |
|  | Notes | String | Notes that are associated with the specific Closing cost.  Note: When present, these notes MUST be displayed along with its associated closing cost. |
|  | CPLs | -- | Container Element for collection of CPL Types |
|  | CPLType | -- | Repeatable container for each CPL Type available for the given request parameters |
|  | CPL\_Id | Integer | Unique identifier for the specific CPL Type |
|  | CPL\_Name | String | Name of the CPL associated with the identifier |
|  | IsDefault | Boolean | Indicates whether or not the specific CPL is considered a default product given the request parameters provided.  Values:   * True * False |
|  | IsRequired | Boolean | Indicates whether or not the CPL must be included in the rate quote.  Values:   * True * False |
|  | PolicyCategoryIds | Integer | Repeatable container for valid policy categories |
|  | String | String | Indicates the Policy Category type to which the specified Endorsement may be associated.  Values:   * -1 (All Types) * 1 (Owner) * 2 (Loan) * 4 (Guarantee) * 5 (Limited Coverage Junior Loan) * 6 (Leasehold Owner) * 7 (Leasehold Loan) * 8 (Report) * 9 (Limited Coverage Loan)   **Please note**: This Category ID is required to identify whether or not a CPL is valid for a selected Policy. Each Policy has a corresponding Category ID**.** |
|  | Endorsements | -- | Container Element for collection of Endorsement data |
|  | Endorsement | -- | Repeatable container for available Endorsements |
|  | EndorsementId | Integer | Unique identifier for the specified Endorsement |
|  | EndorsementName | String | Name of the Endorsement |
|  | EffectiveDate | dateTime | Date it became effective |
|  | QALinkKeys | -- | Container Element |
|  | String | String | Repeatable element that contains an identifier used to associate a policy with a question |
|  | ValidPolicyCategoryIds | Integer | Repeatable container for valid policy categories. |
|  | String | ENUM | Indicates the Policy Category type to which the specified Endorsement may be associated.  Values:   * -1 (All Types) * 1 (Owner) * 2 (Loan) * 4 (Guarantee) * 5 (Limited Coverage Junior Loan) * 6 (Leasehold Owner) * 7 (Leasehold Loan) * 8 (Report) * 9 (Limited Coverage Loan)   **Please note**: This Category ID is required to identify whether or not an Endorsement is valid for a selected Policy. Each Policy has a corresponding Category ID**.** |
|  | ValidPolicyCoverageIds | Integer | Repeatable container for policy coverage IDs |
|  | String | ENUM | Indicates the Policy Coverage type to which the specified Endorsement may be associated.   * -1 (all coverage types) * 1 (Standard) * 2 (Extended) * 3 (Eagle)   **Please note:** This Coverage ID is required to determine whether or not an Endorsement is valid for a selected Policy. Each Policy has a corresponding Coverage ID. |
| R | MaxNumberOfPoliciesAllowed | Integer | The total number of Title Policies that may be requested based on the request parameters |
| R | Notes | String | Notes associated with the products available.  **Note**: All notes **MUST** be displayed to the User. |
|  | PolicyProducts | -- | Container element for Title Policy data |
|  | PolicyProduct | -- | Repeating container element for Title Policy information |
|  | DefaultEndorsementIds | Integer | Identifiers for Endorsements that can be displayed by default along with the specified Title Policy. |
|  | String | String | Repeatable element for the Endorsement identifier. |
|  | DefaultRateTypeId | Integer | The identifier for the default Rate Type for the specified Policy. |
|  | EffectiveDate | dateTime | The effective date of the policy |
|  | IsDefault | Boolean | Indicates whether or not the specific policy is considered a default product given the request parameters provided.  This indicator may be used to determine if a specific policy should be shown in a product dropdown list instead of displaying a blank option.  There is only ONE default product in the PolicyProducts container.  Values:   * True * False |
|  | LiabilityAmount | Decimal | The amount of the policy coverage  For Owner’s Policies, the Liability Amount is usually the full price of the property.  For Lender’s Policies, the Liability Amount is usually the Loan Amount. |
|  | PolicyCategoryId | ENUM | Numeric value indicating the policy category  Values:   * -1 (All Types) * 1 (Owner) * 2 (Loan) * 4 (Guarantee) * 5 (Limited Coverage Junior Loan) * 6 (Leasehold Owner) * 7 (Leasehold Loan) * 8 (Report) * 9 (Limited Coverage Loan) |
|  | PolicyId | Integer | Unique numeric identifier for the specific Title Policy |
|  | PolicyName | String | Name of the Title Policy |
|  | ValidRateTypes | -- | Collection of rate types associated with the specified Title Policy |
|  | KeyValue | -- | Container for repeatable Key name/value pairs |
|  | Key | Integer | Numeric identifier for the described rate type |
|  | Value | String | Name of rate type associated with the numeric identifier  Each Rate Type is intended to be displayed with the PolicyProduct data under which it falls.  There should be no assumption that the Rate Types described in one PolicyProduct section shall be the same for another Policy Product section. |
|  | RecordingDocTypes | -- | Container Element for collection of Recording Document information |
|  | RecordingDocType | -- | Repeatable container for Recording Document Types |
|  | ConsiderationAmount | Decimal | The amount used to calculate the recording document.  The Conveyance Deed and Deed of Trust default to a liability amount if provided by the User.   * Conveyance Deed – Sale Amount * Mortgage (Deed of Trust) – Loan Amt * All others require User input |
|  | ConsiderationLiabilitySource | ENUM | Source of consideration amount.  Values:   * Loan Amount * Sales Amount |
|  | DocName | String | Name of document to be recorded |
|  | DocType | ENUM | Type of document to be recorded  Values:   * Affidavit * Amendment * Assignment * DeathCertificate * Deed * Mortgage * POA * Satisfaction * Subordination * UCC1County * UCC3County * UCCTerminationCounty |
|  | IsDefault | Boolean | Indicates whether or not the specific Recording Document is considered a default product given the request parameters provided.  Values:   * True * False |
|  | NumberOfPages | Integer | The estimated number of pages of the document being considered for Recording |
|  | SecondPolicyProducts | -- | Container element for information associated with a second Title Policy |
|  | PolicyProduct | -- | Repeating container element for second title policy information |
|  | DefaultEndorsementIds | Integer | Identifiers for Endorsements that can be displayed by default along with the specified Title Policy. |
|  | String | String | Repeatable element for the Endorsement identifier. |
|  | DefaultRateTypeId | Integer | The identifier for the default Rate Type for the specified Policy. |
|  | EffectiveDate | dateTime | The effective date of the policy |
|  | IsDefault | Boolean | Indicates whether or not the specific policy is considered a default product given the request parameters provided.  This indicator may be used to determine if a specific policy should be shown in a product dropdown list instead of displaying a blank option.  There is only ONE default product in the SecondPolicyProducts container.  Values:   * True * False |
|  | PolicyCategoryId | ENUM | Numeric value indicating the policy category  Values:   * 1 (Owner) * 2 (Loan) * 4 (Guarantee) * 5 (Limited Coverage Junior Loan) * 6 (Leasehold Owner) * 7 (Leasehold Loan) * 8 (Report) * 9 (Limited Coverage Loan) |
|  | PolicyId | Integer | Unique numeric identifier for the specific Title Policy |
|  | PolicyName | String | Name of the Title Policy |
|  | ValidRateTypes | -- | Collection of rate types associated with the specified Title Policy |
|  | KeyValue | -- | Container for repeatable Key name/value pairs |
|  | Key | Integer | Numeric identifier for the described rate type |
|  | Value | String | Name of rate type associated with the numeric identifier  Each Rate Type is intended to be displayed with the PolicyProduct data under which it falls.  There should be no assumption that the Rate Types described in one PolicyProduct section shall be the same for another Policy Product section. |

### XML Samples

#### Closing Costs Sample

<ClosingCosts>

<ClosingCost>

<ClosingId>356</ClosingId>

<ClosingName>Fees Only - No Closing</ClosingName>

<Notes/>

<IsDefault>false</IsDefault>

<AvailableFees>

<ClosingFee>

<Id>16</Id>

<Name>Additional Work Charge</Name>

<IsStatic>false</IsStatic>

<UnitType>Hourly</UnitType>

<Quantity>1</Quantity>

<MaximumValue>10</MaximumValue>

<DefaultValue>1</DefaultValue>

…

<ClosingCost>

<ClosingId>12</ClosingId>

<ClosingName>Loan Escrow Fee</ClosingName>

<Notes>Flat fee of $300, per loan, includes reconveyance tracking fee(s), overnight delivery and courier fee(s), two demands, and the issuance of up to (5) checks at no additional charge. Any checks issued over (5) shall be charged at a rate of $10.00 per check and $25.00 for each demand over (2).</Notes>

<IsDefault>false</IsDefault>

<IncludedFees>

<ClosingFee>

<Id>892</Id>

<Name>Additional Loans (1st loan included)</Name>

<IsStatic>false</IsStatic>

<UnitType>Quantity</UnitType>

<Quantity>0</Quantity>

<MaximumValue>3</MaximumValue>

<DefaultValue>0</DefaultValue>

…

#### CPL Sample

<lvis:CPLs>

<lvis:CPLType>

<lvis:CPL\_Id>5</lvis:CPL\_Id>

<lvis:CPL\_Name>Closing Protection Letter - Buyer</lvis:CPL\_Name>

<lvis:IsDefault>true</lvis:IsDefault>

<lvis:IsRequired>true</lvis:IsRequired>

<lvis:PolicyCategoryIds>

<lvis:string>-1</lvis:string>

</lvis:PolicyCategoryIds>

</lvis:CPLType>

<lvis:CPLType>

<lvis:CPL\_Id>3</lvis:CPL\_Id>

<lvis:CPL\_Name>Closing Protection Letter - Lender</lvis:CPL\_Name>

<lvis:IsDefault>true</lvis:IsDefault>

<lvis:IsRequired>true</lvis:IsRequired>

<lvis:PolicyCategoryIds>

<lvis:string>-1</lvis:string>

</lvis:PolicyCategoryIds>

</lvis:CPLType>

<lvis:CPLType>

<lvis:CPL\_Id>4</lvis:CPL\_Id>

<lvis:CPL\_Name>Closing Protection Letter - Seller</lvis:CPL\_Name>

<lvis:IsDefault>true</lvis:IsDefault>

<lvis:IsRequired>true</lvis:IsRequired>

<lvis:PolicyCategoryIds>

<lvis:string>-1</lvis:string>

</lvis:PolicyCategoryIds>

</lvis:CPLType>

</lvis:CPLs>

#### Endorsement Sample

<lvis:Endorsements>

<lvis:Endorsement>

<lvis:EndorsementId>1</lvis:EndorsementId>

<lvis:EndorsementName>[ALTA 1-06] Street Assessments</lvis:EndorsementName>

<lvis:EffectiveDate>2014-10-08</lvis:EffectiveDate>

<lvis:ValidPolicyCategoryIds>

<lvis:string>2</lvis:string>

</lvis:ValidPolicyCategoryIds>

<lvis:ValidPolicyCoverageIds>

<lvis:string>2</lvis:string>

</lvis:ValidPolicyCoverageIds>

</lvis:Endorsement>

<lvis:Endorsement>

<lvis:EndorsementId>4</lvis:EndorsementId>

<lvis:EndorsementName>[ALTA 3-06] Zoning - unimproved land</lvis:EndorsementName>

<lvis:EffectiveDate>2014-10-08</lvis:EffectiveDate>

<lvis:ValidPolicyCategoryIds>

<lvis:string>1</lvis:string>

<lvis:string>2</lvis:string>

</lvis:ValidPolicyCategoryIds>

<lvis:ValidPolicyCoverageIds>

<lvis:string>-1</lvis:string>

</lvis:ValidPolicyCoverageIds>

</lvis:Endorsement>

#### Policy Products Sample

<?xml version="1.0" encoding="utf-8"?>

<lvis:LVIS\_XML xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:lvis="http://services.firstam.com/lvis/v2.0">

<lvis:LVIS\_ACK\_NACK>

<lvis:DateTime>2017-04-18T10:27:07.7480243-07:00</lvis:DateTime>

<lvis:StatusCd>1000</lvis:StatusCd>

<lvis:StatusDescription>Request Successfully Processed</lvis:StatusDescription>

</lvis:LVIS\_ACK\_NACK>

<lvis:LVIS\_HEADER>

<lvis:LVISActionType>ProductList</lvis:LVISActionType>

<lvis:ClientCustomerId>1002</lvis:ClientCustomerId>

<lvis:ClientUniqueRequestId>1</lvis:ClientUniqueRequestId>

</lvis:LVIS\_HEADER>

<lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE>

<lvis:CalcTypeData>

<lvis:ProductsList>

<lvis:CPLs />

<lvis:Endorsements>

<lvis:MaxNumberOfPolciesAllowed>3</lvis:MaxNumberOfPolciesAllowed>

<lvis:Notes />

<lvis:PolicyProducts>

<lvis:PolicyProduct>

<lvis:DefaultRateTypeId>0</lvis:DefaultRateTypeId>

<lvis:EffectiveDate>2000-01-01</lvis:EffectiveDate>

<lvis:IsDefault>false</lvis:IsDefault>

<lvis:PolicyCategoryId>2</lvis:PolicyCategoryId>

<lvis:PolicyCoverageId>1</lvis:PolicyCoverageId>

<lvis:PolicyCoverageName>Standard</lvis:PolicyCoverageName>

<lvis:PolicyId>469</lvis:PolicyId>

<lvis:PolicyName>ALTA Loan Policy</lvis:PolicyName>

<lvis:ValidRateTypes>

<lvis:KeyValue>

<lvis:Key>1</lvis:Key>

<lvis:Value>Basic</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>231</lvis:Key>

<lvis:Value>Simultaneous - Second Loan</lvis:Value>

</lvis:KeyValue>

</lvis:ValidRateTypes>

</lvis:PolicyProduct>

<lvis:PolicyProduct>

<lvis:DefaultRateTypeId>0</lvis:DefaultRateTypeId>

<lvis:EffectiveDate>2000-01-01</lvis:EffectiveDate>

<lvis:IsDefault>false</lvis:IsDefault>

<lvis:PolicyCategoryId>2</lvis:PolicyCategoryId>

<lvis:PolicyCoverageId>2</lvis:PolicyCoverageId>

<lvis:PolicyCoverageName>Extended</lvis:PolicyCoverageName>

<lvis:PolicyId>470</lvis:PolicyId>

<lvis:PolicyName>ALTA Loan Policy - Extended</lvis:PolicyName>

<lvis:ValidRateTypes>

<lvis:KeyValue>

<lvis:Key>1</lvis:Key>

<lvis:Value>Basic</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>197</lvis:Key>

<lvis:Value>Future Financing - Binder</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>231</lvis:Key>

<lvis:Value>Simultaneous - Second Loan</lvis:Value>

</lvis:KeyValue>

</lvis:ValidRateTypes>

</lvis:PolicyProduct>

</lvis:ProductsList>

</lvis:CalcTypeData>

</lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE>

</lvis:LVIS\_XML>

#### Recording Doc Sample

<?xml version="1.0" encoding="utf-8"?>

<lvis:LVIS\_XML xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:lvis="http://services.firstam.com/lvis/v2.0">

<lvis:LVIS\_ACK\_NACK>

<lvis:DateTime>2017-03-09T17:48:30.5068024-08:00</lvis:DateTime>

<lvis:StatusCd>1000</lvis:StatusCd>

<lvis:StatusDescription>Request Successfully Processed</lvis:StatusDescription>

</lvis:LVIS\_ACK\_NACK>

<lvis:LVIS\_HEADER>

<lvis:LVISActionType>ProductList</lvis:LVISActionType>

<lvis:ClientCustomerId>1111</lvis:ClientCustomerId>

<lvis:ClientUniqueRequestId>2222</lvis:ClientUniqueRequestId>

</lvis:LVIS\_HEADER>

<lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE>

<lvis:CalcTypeData>

<lvis:ProductsList>

<lvis:MaxNumberOfPolciesAllowed>0</lvis:MaxNumberOfPolciesAllowed>

<lvis:Notes/>

<lvis:RecordingDocTypes>

<lvis:RecordingDocType>

<lvis:ConsiderationAmount>0</lvis:ConsiderationAmount>

<lvis:ConsiderationLiabilitySource>Loan Amount</lvis:ConsiderationLiabilitySource>

<lvis:DocName>Mortgage (Deed of Trust)</lvis:DocName>

<lvis:DocType>MORTGAGE</lvis:DocType>

<lvis:IsDefault>true</lvis:IsDefault>

<lvis:NumberOfPages>25</lvis:NumberOfPages>

</lvis:RecordingDocType>

<lvis:RecordingDocType>

<lvis:ConsiderationAmount>0</lvis:ConsiderationAmount>

<lvis:ConsiderationLiabilitySource>Sales Amount</lvis:ConsiderationLiabilitySource>

<lvis:DocName>Conveyance Deed</lvis:DocName>

<lvis:DocType>DEED</lvis:DocType>

<lvis:IsDefault>true</lvis:IsDefault>

<lvis:NumberOfPages>3</lvis:NumberOfPages>

</lvis:RecordingDocType>

<lvis:RecordingDocType>

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<lvis:DocName>Assignment</lvis:DocName>

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<lvis:IsDefault>false</lvis:IsDefault>

<lvis:NumberOfPages>0</lvis:NumberOfPages>

</lvis:RecordingDocType>

<lvis:RecordingDocType>

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<lvis:DocType>AMMENDMENT</lvis:DocType>

<lvis:IsDefault>false</lvis:IsDefault>

<lvis:NumberOfPages>0</lvis:NumberOfPages>

</lvis:RecordingDocType>

<lvis:RecordingDocType>

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<lvis:DocName>Subordination</lvis:DocName>

<lvis:DocType>SUBORDINATION</lvis:DocType>

<lvis:IsDefault>false</lvis:IsDefault>

<lvis:NumberOfPages>0</lvis:NumberOfPages>

</lvis:RecordingDocType>

<lvis:RecordingDocType>

<lvis:ConsiderationAmount>0</lvis:ConsiderationAmount>

<lvis:DocName>Power of Attorney</lvis:DocName>

<lvis:DocType>POA</lvis:DocType>

<lvis:IsDefault>false</lvis:IsDefault>

<lvis:NumberOfPages>0</lvis:NumberOfPages>

</lvis:RecordingDocType>

<lvis:RecordingDocType>

<lvis:ConsiderationAmount>0</lvis:ConsiderationAmount>

<lvis:DocName>Affidavit</lvis:DocName>

<lvis:DocType>AFFIDAVIT</lvis:DocType>

<lvis:IsDefault>false</lvis:IsDefault>

<lvis:NumberOfPages>0</lvis:NumberOfPages>

</lvis:RecordingDocType>

<lvis:RecordingDocType>

<lvis:ConsiderationAmount>0</lvis:ConsiderationAmount>

<lvis:DocName>Death Certificate</lvis:DocName>

<lvis:DocType>DeathCertificate</lvis:DocType>

<lvis:IsDefault>false</lvis:IsDefault>

<lvis:NumberOfPages>0</lvis:NumberOfPages>

</lvis:RecordingDocType>

<lvis:RecordingDocType>

<lvis:ConsiderationAmount>0</lvis:ConsiderationAmount>

<lvis:DocName>UCC3-County</lvis:DocName>

<lvis:DocType>UCC3COUNTY</lvis:DocType>

<lvis:IsDefault>false</lvis:IsDefault>

<lvis:NumberOfPages>0</lvis:NumberOfPages>

</lvis:RecordingDocType>

</lvis:RecordingDocTypes>

</lvis:ProductsList>

</lvis:CalcTypeData>

</lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE>

</lvis:LVIS\_XML>

#### Second Policy Products Sample

<?xml version="1.0" encoding="utf-8"?>

<lvis:LVIS\_XML xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:lvis="http://services.firstam.com/lvis/v2.0">

<lvis:LVIS\_ACK\_NACK>

<lvis:DateTime>2017-03-09T17:01:48.2138873-08:00</lvis:DateTime>

<lvis:StatusCd>1000</lvis:StatusCd>

<lvis:StatusDescription>Request Successfully Processed</lvis:StatusDescription>

</lvis:LVIS\_ACK\_NACK>

<lvis:LVIS\_HEADER>

<lvis:LVISActionType>ProductList</lvis:LVISActionType>

<lvis:ClientCustomerId>1111</lvis:ClientCustomerId>

<lvis:ClientUniqueRequestId>2222</lvis:ClientUniqueRequestId>

</lvis:LVIS\_HEADER>

<lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE>

<lvis:CalcTypeData>

<lvis:ProductsList>

<lvis:CPLs/>

<lvis:Endorsements/>

<lvis:MaxNumberOfPolciesAllowed>3</lvis:MaxNumberOfPolciesAllowed>

<lvis:Notes/>

<lvis:PolicyProducts>

<lvis:SecondPolicyProducts>

<lvis:PolicyProduct>

<lvis:DefaultRateTypeId>0</lvis:DefaultRateTypeId>

<lvis:EffectiveDate>2000-01-01</lvis:EffectiveDate>

<lvis:IsDefault>false</lvis:IsDefault>

<lvis:PolicyCategoryId>2</lvis:PolicyCategoryId>

<lvis:PolicyId>469</lvis:PolicyId>

<lvis:PolicyName>ALTA Loan Policy</lvis:PolicyName>

<lvis:ValidRateTypes>

<lvis:KeyValue>

<lvis:Key>1</lvis:Key>

<lvis:Value>Basic</lvis:Value>

</lvis:KeyValue>

</lvis:ValidRateTypes>

</lvis:PolicyProduct>

<lvis:PolicyProduct>

<lvis:DefaultEndorsementIds>

<lvis:string>108</lvis:string>

<lvis:string>215</lvis:string>

<lvis:string>16</lvis:string>

</lvis:DefaultEndorsementIds>

<lvis:DefaultRateTypeId>1</lvis:DefaultRateTypeId>

<lvis:EffectiveDate>2000-01-01</lvis:EffectiveDate>

<lvis:IsDefault>true</lvis:IsDefault>

<lvis:PolicyCategoryId>2</lvis:PolicyCategoryId>

<lvis:PolicyId>470</lvis:PolicyId>

<lvis:PolicyName>ALTA Loan Policy - Extended</lvis:PolicyName>

<lvis:ValidRateTypes>

<lvis:KeyValue>

<lvis:Key>1</lvis:Key>

<lvis:Value>Basic</lvis:Value>

</lvis:KeyValue>

</lvis:ValidRateTypes>

</lvis:PolicyProduct>

<lvis:PolicyProduct>

<lvis:DefaultRateTypeId>0</lvis:DefaultRateTypeId>

<lvis:EffectiveDate>2000-01-01</lvis:EffectiveDate>

<lvis:IsDefault>false</lvis:IsDefault>

<lvis:PolicyCategoryId>1</lvis:PolicyCategoryId>

<lvis:PolicyId>471</lvis:PolicyId>

<lvis:PolicyName>ALTA Owner's Policy</lvis:PolicyName>

<lvis:ValidRateTypes>

<lvis:KeyValue>

<lvis:Key>1</lvis:Key>

<lvis:Value>Basic</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>194</lvis:Key>

<lvis:Value>Resale - Binder</lvis:Value>

</lvis:KeyValue>

</lvis:ValidRateTypes>

</lvis:PolicyProduct>

<lvis:PolicyProduct>

<lvis:DefaultRateTypeId>0</lvis:DefaultRateTypeId>

<lvis:EffectiveDate>2000-01-01</lvis:EffectiveDate>

<lvis:IsDefault>false</lvis:IsDefault>

<lvis:PolicyCategoryId>1</lvis:PolicyCategoryId>

<lvis:PolicyId>472</lvis:PolicyId>

<lvis:PolicyName>ALTA Owner's Policy - Extended</lvis:PolicyName>

<lvis:ValidRateTypes>

<lvis:KeyValue>

<lvis:Key>1</lvis:Key>

<lvis:Value>Basic</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>194</lvis:Key>

<lvis:Value>Resale - Binder</lvis:Value>

</lvis:KeyValue>

</lvis:ValidRateTypes>

</lvis:PolicyProduct>

</lvis:SecondPolicyProducts>

</lvis:ProductsList>

</lvis:CalcTypeData>

</lvis:LVIS\_CALCULATOR\_TYPE\_DATA\_RESPONSE>

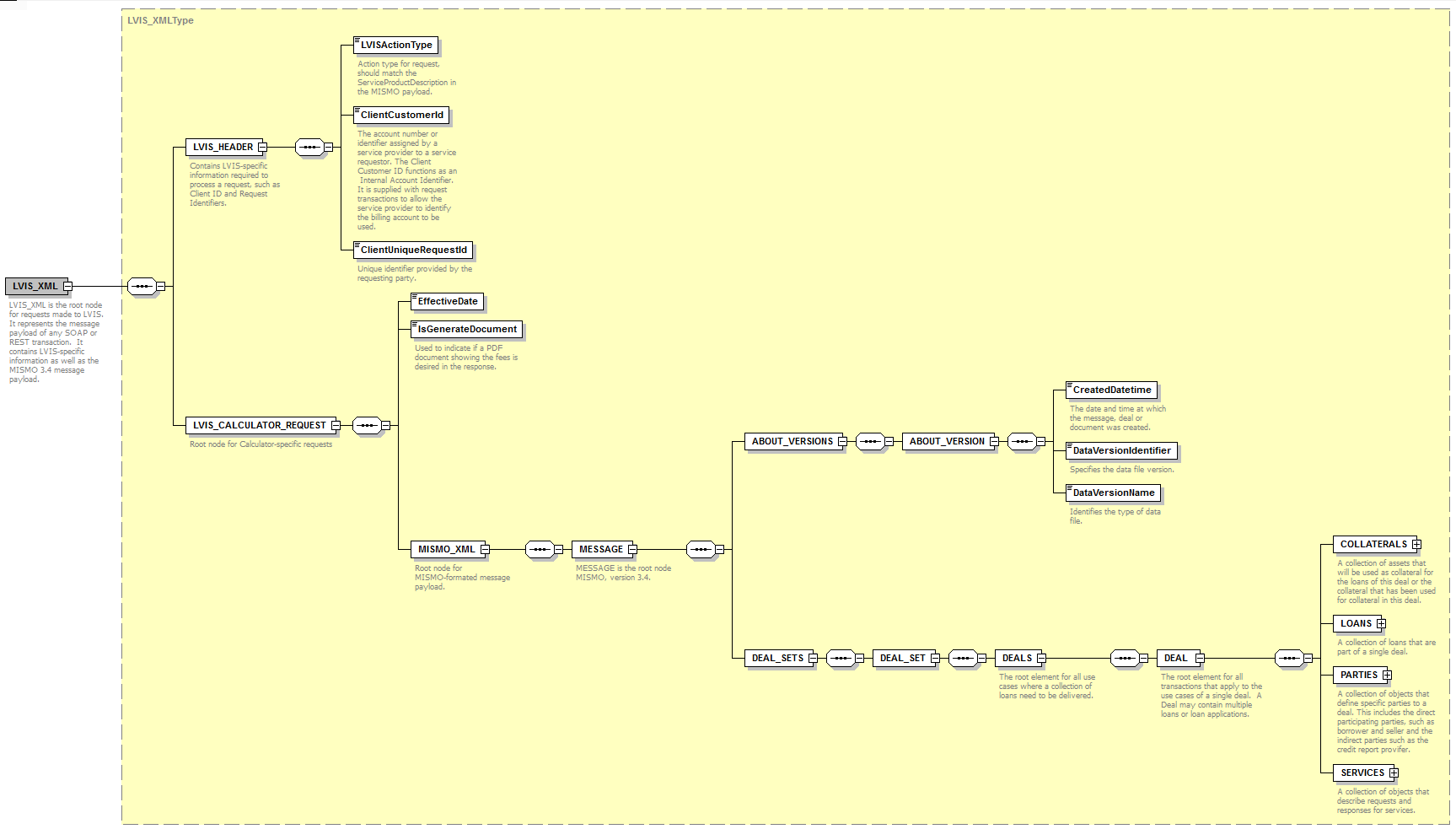
</lvis:LVIS\_XML>

# Phase II: RateCalculation - L1 and L2

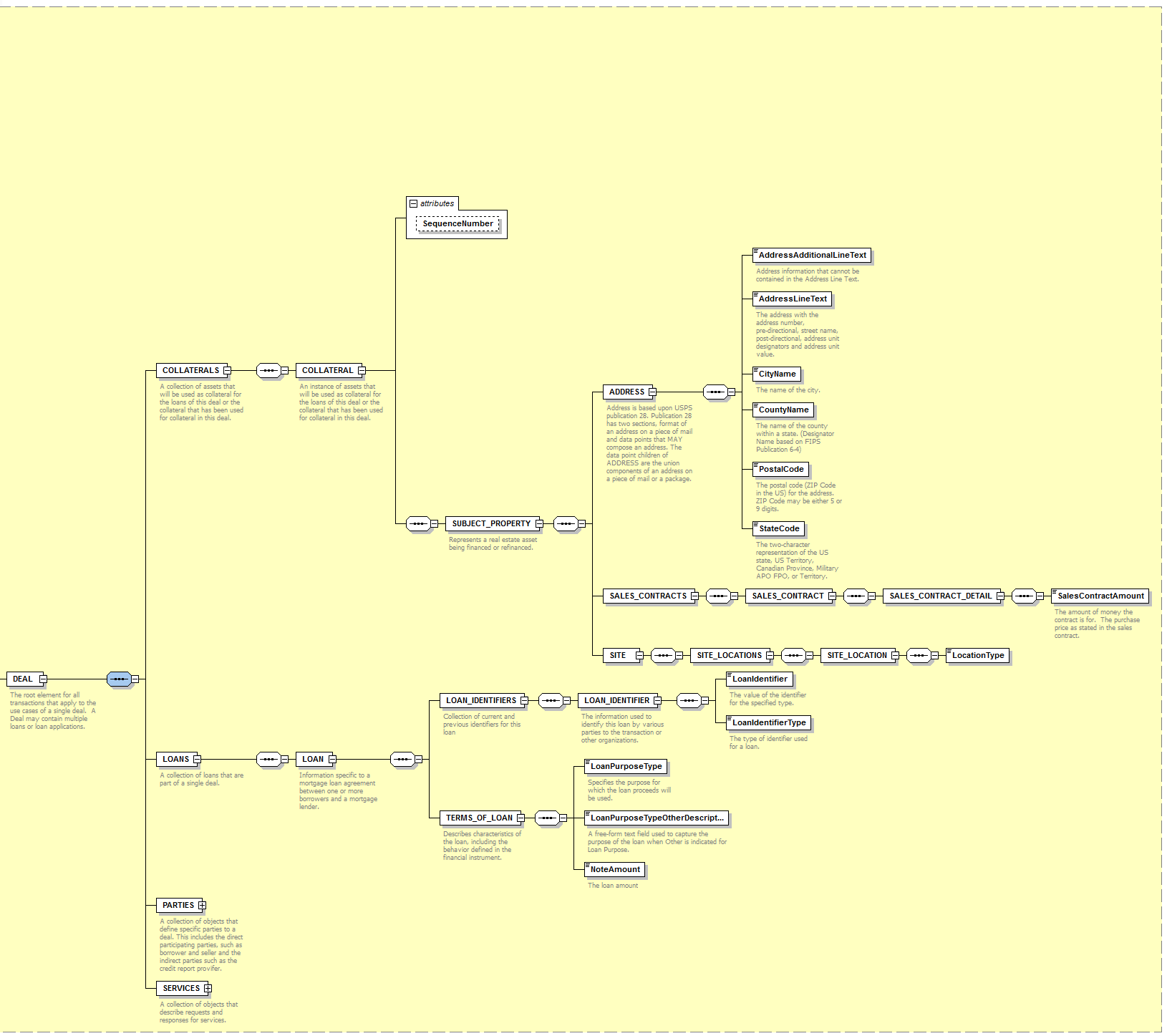
## RateCalculation L1 – Request

### Graphical Overview of L1 Request

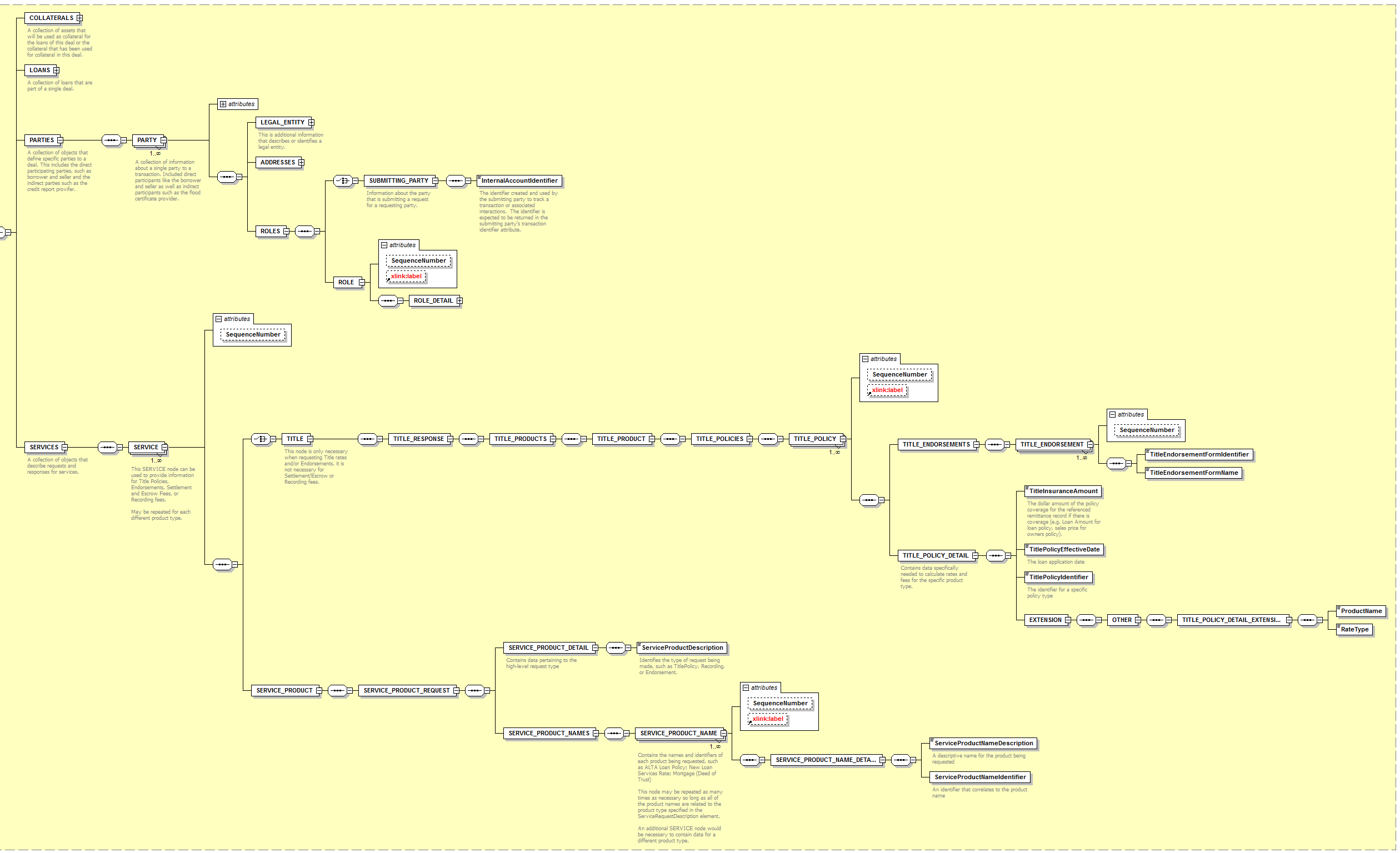
#### High Level Elements



#### COLLATERALS and LOANS Containers



#### PARTIES and SERVICES Containers



### XML Element Table – L1 Request

The following table lists all of the elements that can be accommodated for the L1 Request. **Required** elements are designated with an ‘**R**’ in the ‘R’ column and are also shown in **bold** text.

Please note that MISMO version 3.4 was used as a basis for the following table. The fields shown below are those that may be used for this request purpose. If additional MISMO v3.4 elements or attributes not shown below are submitted, it is acceptable for them to be present in the request; however, they will not be parsed or transformed during the request process.

| XML Element Table – L1 Request | | | |
| --- | --- | --- | --- |
| R | Name | Data Type | Description |
| R | **LVIS\_XML** | -- | Root node for response file |
| R | **LVIS\_HEADER** | -- | Contains LVIS-specific information required to process a request, such as Client ID and Request Identifiers. |
| R | **LVISActionType** | ENUM | Identifies the type of request being made.  Values:   * RateCalc * RateCalcNoAutoCalc   By default, the RateCalc request runs in the “Quick Quote” mode, which means that if there are Level 2 questions AND there are corresponding default answers, then the System provides rates and fees based on those default answers. Default answers may be changed.  Should the Customer choose to always be prompted with the Level 2 questions instead of using the default answers, then the request type of RateCalcNoAutoCalc should be used. |
| R | **ClientCustomerId** | String | The unique identifier assigned to the Requesting Party by First American for each Customer location. This number is tied internally to ordering account information for use with the Service Provider(s). It is supplied with request transactions to allow the service provider to identify the billing account to be used.  This identifier will be assigned by First American for each client location. For a rate calculator, this may be one identifier per customer. |
| R | **ClientUniqueRequestId** | String | Unique identifier provided by the requesting party. |
| R | **LVIS\_CALCULATOR\_ REQUEST** | -- | Container Element |
| R | **EffectiveDate** | dateTime | The date for which the fee(s) are effective. Usually, this date is the Loan Application Date. |
|  | IsGenerateDocument | Boolean | Indicates whether or not a PDF document displaying returned rate data is requested. |
| R | **MISMO\_XML** | -- | MISMO 3.4 Container Element |
| R | **MESSAGE** | -- | Container Element |
| R | **ABOUT\_VERSIONS** | -- | Container Element |
| R | **ABOUT\_VERSION** | -- | Container Element |
| R | **CreatedDatetime** | dateTime | The date and time at which the message, deal, or document was created.  Examples:   * Complete Date: * CCYY-MM-DD * CCYY/MM/DD * No ‘day’ value: CCYY-MM * Time: HH:MM:SS * Both: CCYY-MM-DDTHH:MM:SS * 2012-12-12T11:15:06 |
| R | **DataVersionIdentifier** | String | Specifies the data file version. |
| R | **DataVersionName** | String | Identifies the type of data file. |
| R | **DEAL\_SETS** | -- | Container Element |
| R | **DEAL\_SET** | -- | Container Element |
| R | **DEALS** | -- | Container Element |
| R | **DEAL** | -- | Container Element |
| R | **COLLATERALS** | -- | Container Element |
| R | **COLLATERAL** | -- | Container Element |
|  | SequenceNumber | Integer | An integer value used to provide an order to multi-instance sibling elements. The value must be unique for each sibling element. |
| R | **SUBJECT\_PROPERTY** | -- | Container Element |
| R | **ADDRESS** | -- | Container Element |
|  | AdditionalAddressLineText | String | Address information that cannot be contained in the Address Line Text |
| R | **AddressLineText** | String | The address with the address number, pre-directional, street name, post-directional, address unit designators and address unit value. |
| R | **CityName** | String | The name of the city |
| R | **CountyName** | String | The name of the county within a state. (Designator Name based on FIPS Publication 6-4) |
| R | **PostalCode** | String | The postal code (ZIP Code in the US) for the address. ZIP Code may be either 5 or 9 digits. |
| R | **StateCode** | Alpha | The two-character representation of the US state, US Territory, Canadian Province, Military APO FPO, or Territory for the Subject Property. |
|  | SALES\_CONTRACTS | -- | Container Element |
|  | SALES\_CONTRACT | -- | Container Element |
|  | SALES\_CONTRACT\_DETAIL | -- | Container Element |
|  | SalesContractAmount | Decimal | The amount of money the contract is for. The purchase price as stated in the sales contract. |
|  | SITE | -- | Container Element |
|  | SITE\_LOCATIONS | -- | Container Element |
|  | SITE\_LOCATION | -- | Container Element |
| R | **LocationType** | String | The type of location influences associated with the property. Common example is ‘Residential’. |
|  | LOANS | -- | Container Element |
|  | LOAN | -- | Container Element |
|  | LOAN\_IDENTIFIERS | -- | Collection of current and previous identifiers for this loan |
|  | LOAN\_IDENTIFIER | -- | The information used to identify this loan by various parties to the transaction or other organizations. |
|  | LoanIdentifier | String | The value of the identifier for the specified type. |
|  | LoanIdentifierType | ENUM | The type of identifier used for a loan.  Value:   * LenderLoan |
|  | TERMS\_OF\_LOAN | -- | Describes characteristics of the loan, including the behavior defined in the financial instrument. |
|  | LoanPurposeType | ENUM | Specifies the purpose for which the loan proceeds will be used. |
|  | LoanPurposeTypeOtherDescription | String | A free-form text field used to capture the purpose of the loan when Other is indicated for Loan Purpose. |
|  | NoteAmount | Decimal | The loan amount |
|  | PARTIES | -- | Collection of parties associated with the request. |
|  | PARTY | -- | Container Element |
|  | SequenceNumber | Integer | An integer value used to provide an order to multi-instance sibling elements. The value must be unique for each sibling element. |
|  | xlink:label | String | XML Linking Language (xlink) allowing the creation and description of links between resources.  Used to link a particular loan, such as the Subject Loan, to associated fees, comments, etc.  Example:   * xlink:label=”SubjectLoan”   See the RELATIONSHIPS section for additional details. |
|  | LEGAL\_ENTITY | -- | Container Element |
|  | LEGAL\_ENTITY\_DETAIL | -- | Container Element |
|  | FullName | String | The unparsed name of a legal entity. |
|  | ADDRESSES | -- | Container Element |
|  | ADDRESS | -- | Container Element |
|  | SequenceNumber | Integer | An integer value used to provide an order to multi-instance sibling elements. The value must be unique for each sibling element. |
|  | AddressAdditionalLineText | String | Address information that cannot be contained in the Address Line Text. |
|  | AddressLineText | String | The address with the address number, pre-directional, street name, post-directional, address unit designators and address unit value. |
|  | CityName | String | The name of the city. |
|  | CountyName | String | The name of the county within a state. (Designator Name based on FIPS Publication 6-4) |
|  | PostalCode | Integer | The postal code (ZIP Code in the US) for the address. ZIP Code may be either 5 or 9 digits. |
|  | StateCode | String | The two-character representation of the US state, US Territory, Canadian Province, Military APO FPO, or Territory. |
|  | ROLES | -- | Container Element |
|  | SUBMITTING\_PARTY | -- | Container Element  Information about the party that is submitting a request for a requesting party. |
|  | InternalAccountIdentifier | String | The identifier created and used by the submitting party to track a transaction or associated interactions. The identifier is expected to be returned in the submitting party's transaction identifier attribute. |
|  | ROLE | -- | Container Element |
|  | SequenceNumber | Integer | An integer value used to provide an order to multi-instance sibling elements. The value must be unique for each sibling element. |
|  | xlink:label | String | XML Linking Language (xlink) allowing the creation and description of links between resources.  Used to link a particular loan, such as the Subject Loan, to associated fees, comments, etc.  Example:   * xlink:label=”SubjectLoan”   See the RELATIONSHIPS section for additional details. |
|  | ROLE\_DETAIL | -- | Container Element |
|  | PartyRoleType | ENUM | Identifies the role that the party plays in the transaction. Parties may be either a person or legal entity. A party may play multiple roles in a transaction. |
|  | SERVICES | -- | Container Element |
|  | SERVICE | -- | Repeatable container that may contain request data for the following product types: Title Policies, Settlement Service Fees, Recording Fees, and/or Endorsements.  Each product type must use its own instance of the SERVICE node.  The order in which the product types are presented is not required to be in any particular order. |
|  | SequenceNumber | Integer | A sequential integer value used to provide an order to multi-instance sibling elements. The value must be unique for each sibling element.  This first SERVICE instance must use the SequenceNumber of “1”. |
|  | TITLE | -- | Container Element |
|  | TITLE\_RESPONSE | -- | Container Element |
|  | TITLE\_PRODUCTS | -- | Container Element |
|  | TITLE\_PRODUCT | -- | Container Element |
|  | TITLE\_POLICIES | -- | Container Element |
|  | TITLE\_POLICY | -- | Container Element |
|  | SequenceNumber | Integer | An integer value used to provide an order to multi-instance sibling elements. The value must be unique for each sibling element. |
|  | xlink:label | String | XML Linking Language (xlink) allowing the creation and description of links between resources.  Used to link a particular loan, such as the Subject Loan, to associated fees, comments, etc.  Example:   * xlink:label=”SubjectLoan”   See the RELATIONSHIPS section for additional details. |
|  | TITLE\_ENDORSEMENTS | -- | Container Element |
|  | TITLE\_ENDORSEMENT | -- | Container Element |
|  | SequenceNumber | Integer | An integer value used to provide an order to multi-instance sibling elements. The value must be unique for each sibling element. |
|  | TitleEndorsementFormIdentifier | String | The number that uniquely identifies the Title Endorsement Document. |
|  | TitleEndorsementFormName | String | The detailed name of the Title Endorsement Document. |
|  | TITLE\_POLICY\_DETAIL | -- | Container Element |
| CR | TitleInsuranceAmount | Decimal | The dollar amount of the policy coverage for the referenced remittance record if there is coverage (e.g. Loan Amount for loan policy, Sales Price for owner’s policy).  This element is required only when requesting Title Policies and/or Endorsements |
| CR | TitlePolicyEffectiveDate | dateTime | The loan application date  This element is required only when requesting Title Policies and/or Endorsements |
|  | TitlePolicyIdentifier | String | Identifier for a specific policy type. |
|  | EXTENSION | -- | Container Element |
|  | OTHER | -- | Container Element |
|  | TITLE\_POLICY\_DETAIL\_EXTENSION | -- | Container Element |
|  | ProductName | String | Name of Title Policy |
|  | RateType | String | Name of Rate Type |
|  | SERVICE\_PRODUCT | -- | Container Element |
|  | SERVICE\_PRODUCT\_REQUEST | -- | Container Element |
|  | SERVICE\_PRODUCT\_DETAIL | -- | Container Element |
| R | **ServiceProductDescription** | ENUM | This element describes the type of product being requested. Must be included in each instance of the SERVICE node to indicate the contents of the specific node.  Values:   * Endorsement * Recording * Settlement * TitlePolicy |
|  | SERVICE\_PRODUCT\_NAMES | -- | Container Element |
|  | SERVICE\_PRODUCT\_NAME | -- | Contains the names and identifiers of each product being requested, such as ALTA Loan Policy; New Loan Services Rate; Mortgage (Deed of Trust)  This node may be repeated as many times as necessary so long as all of the product names are related to the product type specified in the *ServiceProductDescription* element.  An additional SERVICE node would be necessary to contain data for a different product type. |
|  | SequenceNumber | Integer | A sequential integer value used to provide an order to multi-instance sibling elements. The value must be unique for each sibling element. |
|  | xlink:label | String | Label to tie a specific policy to a particular rate type.  Example:  PRODUCT\_POLICY\_1  XML Linking Language (xlink) allowing the creation and description of links between resources.  Used to link a particular loan, such as the Subject Loan, to associated fees, comments, etc.  Example:   * xlink:label=”SubjectLoan”   See the RELATIONSHIPS section for additional details. |
|  | SERVICE\_PRODUCT\_NAME\_DETAIL | -- | Container Element |
|  | ServiceProductNameDescription | String | A descriptive name for the product being requested |
|  | ServiceProductNameIdentifier | String | An identifier that correlates to the product name |

### L1 Request XML Sample

<?xml version="1.0" encoding="utf-8"?>

<lvis:LVIS\_XML xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:lvis="http://services.firstam.com/lvis/v2.0">

<lvis:LVIS\_HEADER>

<lvis:LVISActionType>RateCalc</lvis:LVISActionType>

<lvis:ClientCustomerId>1111</lvis:ClientCustomerId>

<lvis:ClientUniqueRequestId>2222</lvis:ClientUniqueRequestId>

</lvis:LVIS\_HEADER>

<lvis:LVIS\_CALCULATOR\_REQUEST>

<lvis:EffectiveDate>2017-0327</lvis:EffectiveDate>

<lvis:IsGenerateDocument>false</lvis:IsGenerateDocument>

<lvis:MISMO\_XML>

<MESSAGE MISMOReferenceModelIdentifier="3.4.0" xmlns="http://www.mismo.org/residential/2009/schemas">

<ABOUT\_VERSIONS>

<ABOUT\_VERSION>

<CreatedDatetime>2017-03-09T17:01:51.761242-08:00</CreatedDatetime>

<DataVersionIdentifier>1.1.0</DataVersionIdentifier>

<DataVersionName>LenderSimulator</DataVersionName>

</ABOUT\_VERSION>

</ABOUT\_VERSIONS>

<DEAL\_SETS>

<DEAL\_SET>

<DEALS>

<DEAL>

<COLLATERALS>

<COLLATERAL SequenceNumber="1">

<SUBJECT\_PROPERTY>

<ADDRESS>

<AddressAdditionalLineText>Unit 3</AddressAdditionalLineText>

<AddressLineText>123 Main st</AddressLineText>

<CityName>Alameda</CityName>

<CountyName>Alameda</CountyName>

<PostalCode>12345</PostalCode>

<StateCode>CA</StateCode>

</ADDRESS>

<SALES\_CONTRACTS>

<SALES\_CONTRACT>

<SALES\_CONTRACT\_DETAIL>

<SalesContractAmount>350000</SalesContractAmount>

</SALES\_CONTRACT\_DETAIL>

</SALES\_CONTRACT>

</SALES\_CONTRACTS>

<SITE>

<SITE\_LOCATIONS>

<SITE\_LOCATION>

<LocationType>Residential</LocationType>

</SITE\_LOCATION>

</SITE\_LOCATIONS>

</SITE>

</SUBJECT\_PROPERTY>

</COLLATERAL>

</COLLATERALS>

<LOANS>

<LOAN xlink:label="SubjectLoan" SequenceNumber="1">

<LOAN\_IDENTIFIERS>

<LOAN\_IDENTIFIER SequenceNumber="1">

<LoanIdentifier>1234567</LoanIdentifier>

<LoanIdentifierType>LenderLoan</LoanIdentifierType>

</LOAN\_IDENTIFIER>

</LOAN\_IDENTIFIERS>

<TERMS\_OF\_LOAN>

<LoanPurposeType>Other</LoanPurposeType>

<LoanPurposeTypeOtherDescription>Sale w/ Mortgage</LoanPurposeTypeOtherDescription>

<NoteAmount>200000</NoteAmount>

</TERMS\_OF\_LOAN>

</LOAN>

</LOANS>

<PARTIES>

<PARTY xlink:label="PARTY1" SequenceNumber="1">

<LEGAL\_ENTITY>

<LEGAL\_ENTITY\_DETAIL>

<FullName>Lender Name</FullName>

</LEGAL\_ENTITY\_DETAIL>

</LEGAL\_ENTITY>

<ADDRESSES>

<ADDRESS SequenceNumber="1">

<AddressAdditionalLineText>line 2</AddressAdditionalLineText>

<AddressLineText>123 Main st</AddressLineText>

<CityName>Los Angeles</CityName>

<CountyName>Los Angeles</CountyName>

<PostalCode>96401</PostalCode>

<StateCode>CA</StateCode>

</ADDRESS>

</ADDRESSES>

<ROLES>

<ROLE xlink:label="PARTY1\_ROLE1" SequenceNumber="1">

<ROLE\_DETAIL>

<PartyRoleType>Lender</PartyRoleType>

</ROLE\_DETAIL>

</ROLE>

<ROLE xlink:label="PARTY1\_ROLE2" SequenceNumber="2">

<SUBMITTING\_PARTY>

<InternalAccountIdentifier>1025</InternalAccountIdentifier>

</SUBMITTING\_PARTY>

<ROLE\_DETAIL>

<PartyRoleType>SubmittingParty</PartyRoleType>

</ROLE\_DETAIL>

</ROLE>

</ROLES>

</PARTY>

</PARTIES>

<SERVICES>

<SERVICE SequenceNumber="1">

<TITLE>

<TITLE\_RESPONSE>

<TITLE\_PRODUCTS>

<TITLE\_PRODUCT>

<TITLE\_POLICIES>

<TITLE\_POLICY xlink:label="429\_1" SequenceNumber="1">

<TITLE\_POLICY\_DETAIL>

<TitleInsuranceAmount>350000</TitleInsuranceAmount>

<TitlePolicyEffectiveDate>2017-03-09</TitlePolicyEffectiveDate>

<TitlePolicyIdentifier>429</TitlePolicyIdentifier>

<EXTENSION>

<OTHER>

<lvis:TITLE\_POLICY\_DETAIL\_EXTENSION>

<lvis:ProductName>Eagle Owner's Policy</lvis:ProductName>

<lvis:RateType>Basic</lvis:RateType>

</lvis:TITLE\_POLICY\_DETAIL\_EXTENSION>

</OTHER>

</EXTENSION>

</TITLE\_POLICY\_DETAIL>

</TITLE\_POLICY>

<TITLE\_POLICY xlink:label="470\_2" SequenceNumber="2">

<TITLE\_POLICY\_DETAIL>

<TitleInsuranceAmount>200000</TitleInsuranceAmount>

<TitlePolicyEffectiveDate>2017-03-09</TitlePolicyEffectiveDate>

<TitlePolicyIdentifier>470</TitlePolicyIdentifier>

<EXTENSION>

<OTHER>

<lvis:TITLE\_POLICY\_DETAIL\_EXTENSION>

<lvis:ProductName>ALTA Loan Policy - Extended</lvis:ProductName>

<lvis:RateType>Basic</lvis:RateType>

</lvis:TITLE\_POLICY\_DETAIL\_EXTENSION>

</OTHER>

</EXTENSION>

</TITLE\_POLICY\_DETAIL>

</TITLE\_POLICY>

</TITLE\_POLICIES>

</TITLE\_PRODUCT>

</TITLE\_PRODUCTS>

</TITLE\_RESPONSE>

</TITLE>

<SERVICE\_PRODUCT>

<SERVICE\_PRODUCT\_REQUEST>

<SERVICE\_PRODUCT\_DETAIL>

<ServiceProductDescription>TitlePolicy</ServiceProductDescription>

</SERVICE\_PRODUCT\_DETAIL>

</SERVICE\_PRODUCT\_REQUEST>

</SERVICE\_PRODUCT>

</SERVICE>

</SERVICES>

</DEAL>

</DEALS>

</DEAL\_SET>

</DEAL\_SETS>

</MESSAGE>

</lvis:MISMO\_XML>

</lvis:LVIS\_CALCULATOR\_REQUEST>

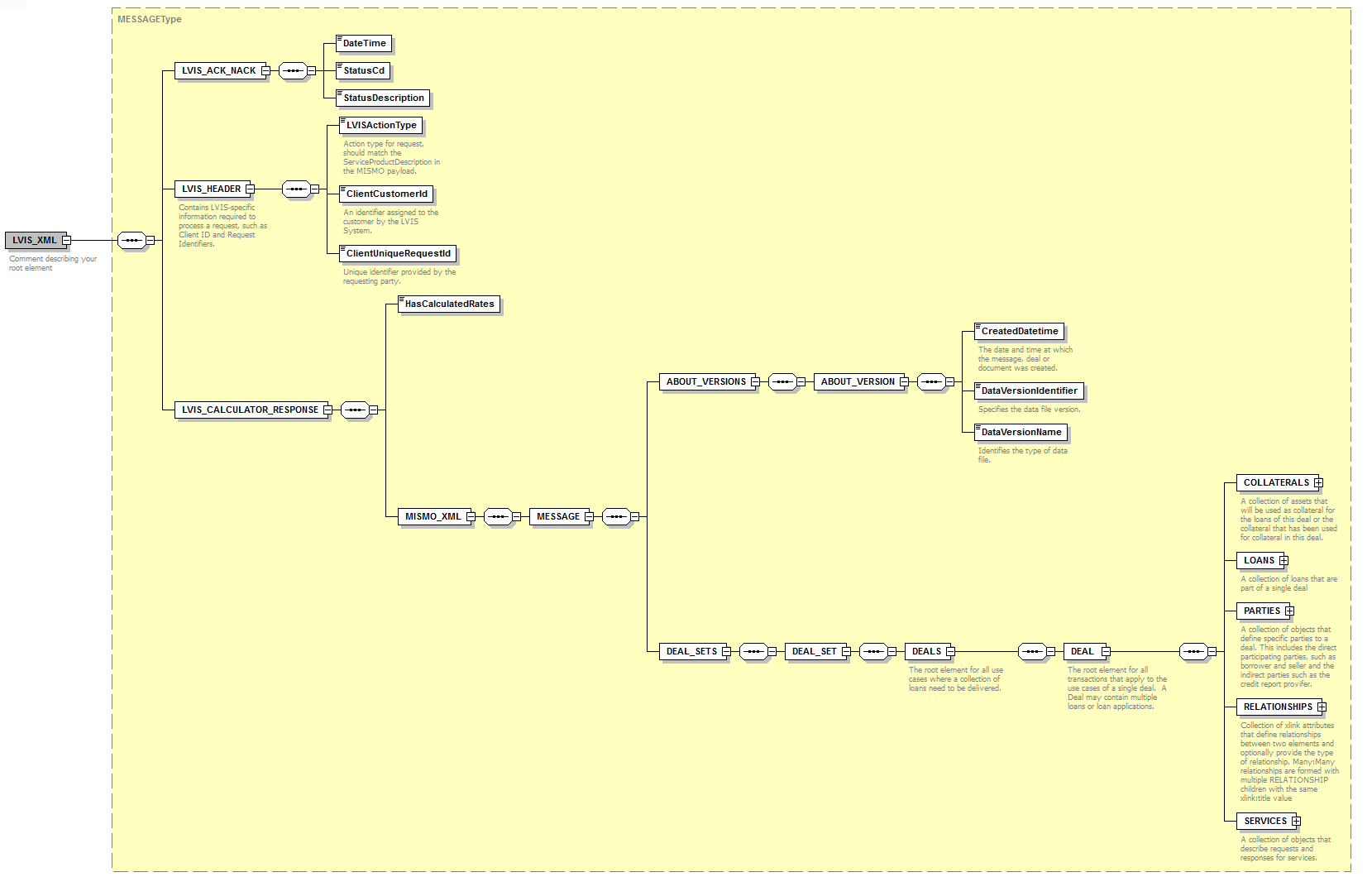
</lvis:LVIS\_XML>

## RateCalculation L1 – Response

### Graphical Overview of RESPONSE Message

This diagram depicts a high-level overview of the LVIS\_XML node and sequenced elements provided in the L1 response. All elements are detailed in the following XML table and subsequent samples.

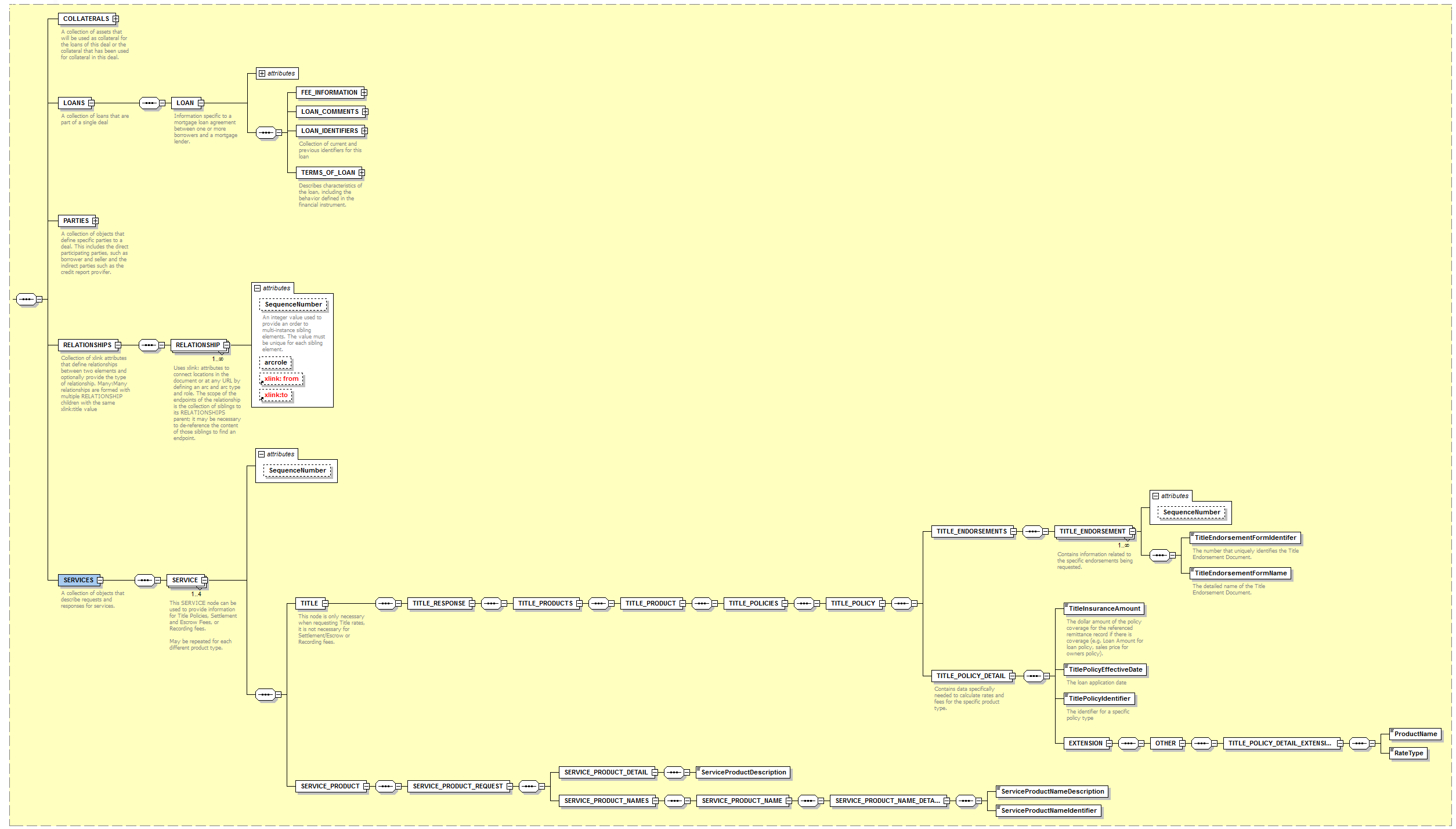
#### L1 Response –High Level Elements – No L2 Questions



#### L1 Response – Fee Data

#### 

#### L1 Response – Relationship and Service Data



### XML Element Table – L1 Response – No L2 Questions

The following table lists and describes each of the fields returned in the L1 Response. In this response, no additional (L2) questions were necessary to obtain the fee quote. As a result, all fee data is present in the LOAN container as shown below.

An L1 Response can be identified by the ‘HasCalculatedRates’ value equals True and by the absence of the ‘CalcRateLevel2Data’ container.

| XML Element Table – L1 Response (No L2 Questions) | | | |
| --- | --- | --- | --- |
| R | Name | Data Type | Description |
| R | LVIS\_XML | -- | Root node for response file |
| R | LVIS\_ACK\_NACK | -- | Contains the status of the message being returned. If positive, the appropriate response data will follow below. |
| R | DateTime | dateTime | Date and time of the response |
| R | StatusCd | String | Status identifier |
| R | StatusDescription | String | Description of status |
| R | LVIS\_HEADER | -- | Contains LVIS-specific information required to process a request, such as Client ID and Request Identifiers. |
| R | LVISActionType | ENUM | Identifies the type of response being returned.  Values:   * RateCalc * RateCalcNoAutoCalc |
| R | ClientCustomerId | String | The unique identifier assigned to the Requesting Party by First American for each Customer location. This number is tied internally to ordering account information for use with the Service Provider(s). It is supplied with request transactions to allow the service provider to identify the billing account to be used.  This identifier will be assigned by First American for each client location. For a rate calculator, this may be one identifier per customer. |
| R | ClientUniqueRequestId | String | Unique identifier provided by the requesting party. |
| R | LVIS\_CALCULATOR\_ RESPONSE | -- | Container Element |
| R | HasCalculatedRates | Boolean | Indicates whether or not FEE\_INFORMATION is available in the Response.  Values:   * True * False |
|  | MISMO\_XML | -- | Container Element |
| R | MESSAGE | -- | Root node for MISMO version 3, it represents the message payload of any SOAP or REST transaction. |
| R | ABOUT\_VERSIONS | -- | Container Element |
| R | ABOUT\_VERSION | -- | Container Element |
| R | CreatedDatetime | dateTime | The date and time at which the message was sent. |
|  | DataVersionIdentifier | String | Specifies the data file version. |
|  | DataVersionName | String | FALVISRateCalculator |
|  | DEAL\_SETS | -- | Container Element |
|  | DEAL\_SET | -- | Container Element |
|  | DEALS | -- | Container Element |
|  | DEAL | -- | Container Element |
|  | COLLATERALS | -- | Calculator echoes back the data sent in the request. |
|  | LOANS | -- | Container Element |
|  | LOAN | -- | Container Element |
|  | SequenceNumber | Integer | An integer value used to provide an order to multi-instance sibling elements. The value must be unique for each sibling element. |
|  | Xlink:label | String | XML Linking Language (xlink) allowing the creation and description of links between resources.  Used to link a particular loan, such as the Subject Loan, to associated fees, comments, etc.  Example:   * xlink:label=”SubjectLoan”   See the RELATIONSHIPS section for additional details. |
|  | FEE\_INFORMATION | -- | Container Element  This container will be provided in the L1 response only if the calculator was able to derive rates without L2 questions, or if the default answers were utilized for the L2 questions.  See L2 section for more details. |
|  | FEES | -- | Container Element |
|  | FEE | -- | Container for rates and fees |
|  | SequenceNumber | Integer | A sequential integer value used to provide an order to multi-instance sibling elements. The value must be unique for each sibling element. |
|  | xlink:label | String | XML Linking Language (xlink) allowing the creation and description of links between resources.  Used to link a particular product type, such as a Title Policy, to associated fees, comments, etc.  Examples:   * xlink:label=”POLICY\_1” * xlink:label=”POLICY\_1\_ENDR\_E108\_1” * xlink:label=”CLOSING\_FEE\_1” * xlink:label=”RECORDING\_FEE\_1”   See the RELATIONSHIPS section for additional details. |
|  | FEE\_DETAIL | -- | Contains fee data related to the products and/or services requested |
|  | FeeActualTotalAmount | Decimal | The actual fee to be paid by the party indicated in ‘FeePaymentPaidByType’ |
|  | FeeDescription | String | The description of the fee provided |
|  | FeePaidToType | String | Describes the type of party to whom the fee should be paid |
|  | FeeType | String | Contains the type of product or service for which a fee is provided |
|  | DisplayLabelText | String | The actual text to be displayed on the form |
|  | GFEDisclosedFeeAmount | Decimal | The amount the consumer would pay for the policy if both policies were not purchased simultaneously.  Actual vs disclosed  Disclosed Premium Amount: Non-simultaneous premium amount that needs to be disclosed for states that provide simultaneous discounted rates |
|  | IntegratedDisclosureSectionType |  | Indicates the section of the Closing Disclosure where this fee should be reported |
|  | OptionalCostIndicator | Boolean | Indicates whether or not the fee is optional  Values:   * True * False |
|  | FEE\_PAYMENTS | -- | Container Element |
|  | FEE\_PAYMENT | -- | Contains the fee described in the FEE\_DETAIL section along with the party responsible for that fee |
|  | SequenceNumber | Integer | A sequential integer value used to provide an order to multi-instance sibling elements. The value must be unique for each sibling element |
|  | FeeActualPaymentAmount | Decimal | Fee for the product specified in the FEE\_DETAIL section |
|  | FeePaymentPaidByType | ENUM | The party responsible for the fee   * Buyer * Seller * ThirdParty |
|  | FeePaymentPaidOutsideOfClosingIndicator | Boolean | Indicates whether or not the payment of the fee is to occur outside of Closing.   * True * False |
|  | LOAN\_COMMENTS | -- | Container element |
|  | LOAN\_COMMENT | -- | Used to convey additional information about the rate(s) and/or fee(s) provided in the response.  **NOTE**: Loan comments **MUST** be displayed with its associated product (see specific xlink:label for association details) |
|  | SequenceNumber | Integer | A sequential integer value used to provide an order to multi-instance sibling elements. The value must be unique for each sibling element. |
|  | xlink: label | String | XML Linking Language (xlink) allowing the creation and description of links between resources.  Used to link a particular product type, such as a Title Policy, to associated fees, comments, etc.  Example:   * xlink:label=”POLICY\_1\_NOTE\_1” * xlink:label=”POLICY\_1\_NOTE\_2” * xlink:label=”RECORDING\_FEE\_1\_NOTE\_1” * xlink:label=”RESPONSE\_NOTE\_1”   **Note**: The “RESPONSE\_NOTE” data is associated with the overall quote provided. It is a global element that should not be associated to a specific element.  This data is meant to be displayed at the bottom of the page.  See the RELATIONSHIPS section for additional details. |
|  | LoanCommentDatetime | dateTime | The date and time of the loan comment. |
|  | LoanCommentSourceDescription | String | System specific string indicating the source of the loan comment |
|  | LoanCommentText | String | Text that must be displayed along with the corresponding policy, etc. Refer to the xlink:label for the specific LOAN\_COMMENT instance. |
|  | LOAN\_IDENTIFIERS | -- | LVIS echoes back the data sent in the request. |
|  | TERMS\_OF\_LOAN | -- | LVIS echoes back the data sent in the request. |
|  | PARTIES | -- | LVIS echoes back the data sent in the request. |
|  | RELATIONSHIPS | -- | Collection of xlink attributes that define relationships between two elements and provide the type of relationship.  Many:Many relationships are formed with multiple RELATIONSHIP children with the same xlink:label value |
|  | RELATIONSHIP | -- | Uses xlink: attributes to connect locations in the document by defining an arc type, first endpoint, and second endpoint.  Links exist between products/services and fees, associated products, notes, etc. |
|  | SequenceNumber | Integer | A sequential integer value used to provide an order to multi-instance sibling elements. The value must be unique for each sibling element. |
|  | xlink:arcrole | ENUM | The name of the relationship between two endpoints.  Example:   * IsAssociatedWith |
|  | xlink:from | String | The first endpoint of the relationship  Examples:   * xlink:from=”POLICY\_1\_NOTE\_1” * xlink:from=”POLICY\_1\_NOTE\_2” * xlink:from=”RECORDING\_FEE\_1\_NOTE\_1” * xlink:from=”RESPONSE\_NOTE\_1” |
|  | xlink:to | String | The second endpoint of the relationship. This is what is pointed to by the first endpoint.  Examples:   * xlink:to=”POLICY\_1” * xlink:to=”POLICY\_1” * xlink:to=”RECORDING\_FEE\_1” * xlink:to=”RESPONSE” |
|  | SERVICES | -- | LVIS echoes back the data sent in the request. |

### L1 Response (Title) XML Sample – No L2 Questions

<?xml version="1.0" encoding="utf-8"?>

<lvis:LVIS\_XML xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:lvis="http://services.firstam.com/lvis/v2.0">

<lvis:LVIS\_ACK\_NACK>

<lvis:DateTime>2017-03-09T17:24:03.3668024-08:00</lvis:DateTime>

<lvis:StatusCd>1000</lvis:StatusCd>

<lvis:StatusDescription>Request Successfully Processed</lvis:StatusDescription>

</lvis:LVIS\_ACK\_NACK>

<lvis:LVIS\_HEADER>

<lvis:LVISActionType>RateCalc</lvis:LVISActionType>

<lvis:ClientCustomerId>1111</lvis:ClientCustomerId>

<lvis:ClientUniqueRequestId>2222</lvis:ClientUniqueRequestId>

</lvis:LVIS\_HEADER>

<lvis:LVIS\_CALCULATOR\_RESPONSE>

<lvis:HasCalcuatedRates>true</lvis:HasCalcuatedRates>

<lvis:MISMO\_XML>

<MESSAGE MISMOReferenceModelIdentifier="3.4.0" xmlns="http://www.mismo.org/residential/2009/schemas">

<ABOUT\_VERSIONS>

<ABOUT\_VERSION>

<CreatedDatetime>2017-03-09T17:23:51.4019936-08:00</CreatedDatetime>

<DataVersionIdentifier>1.1.0</DataVersionIdentifier>

<DataVersionName>LenderSimulator</DataVersionName>

</ABOUT\_VERSION>

</ABOUT\_VERSIONS>

<DEAL\_SETS>

<DEAL\_SET>

<DEALS>

<DEAL>

<COLLATERALS>

<LOANS>

<LOAN xlink:label="SubjectLoan" SequenceNumber="1">

<FEE\_INFORMATION>

<FEES>

<FEE xlink:label="FEE\_POLICY\_1" SequenceNumber="1">

<FEE\_DETAIL>

<FeeActualTotalAmount>1251.0</FeeActualTotalAmount>

<FeeDescription>Eagle Owner's Policy</FeeDescription>

<FeePaidToType>ThirdPartyProvider</FeePaidToType>

<FeeType DisplayLabelText="Eagle Owner's Policy">TitleOwnersCoveragePremium</FeeType>

<GFEDisclosedFeeAmount>933.0</GFEDisclosedFeeAmount>

<IntegratedDisclosureSectionType>OtherCosts</IntegratedDisclosureSectionType>

</FEE\_DETAIL>

<FEE\_PAYMENTS>

<FEE\_PAYMENT SequenceNumber="1">

<FeeActualPaymentAmount>1251.0</FeeActualPaymentAmount>

<FeePaymentPaidByType>Buyer</FeePaymentPaidByType>

</FEE\_PAYMENT>

</FEE\_PAYMENTS>

</FEE>

<FEE xlink:label="FEE\_POLICY\_2" SequenceNumber="2">

<FEE\_DETAIL>

<FeeActualTotalAmount>438.0</FeeActualTotalAmount>

<FeeDescription>ALTA Loan Policy - Extended</FeeDescription>

<FeePaidToType>ThirdPartyProvider</FeePaidToType>

<FeeType DisplayLabelText="ALTA Loan Policy - Extended">TitleLendersCoveragePremium</FeeType>

<GFEDisclosedFeeAmount>756.0</GFEDisclosedFeeAmount> <IntegratedDisclosureSectionType>ServicesBorrowerDidShopFor</IntegratedDisclosureSectionType>

</FEE\_DETAIL>

<FEE\_PAYMENTS>

<FEE\_PAYMENT SequenceNumber="1">

<FeeActualPaymentAmount>438.0</FeeActualPaymentAmount>

<FeePaymentPaidByType>Buyer</FeePaymentPaidByType>

</FEE\_PAYMENT>

</FEE\_PAYMENTS>

</FEE>

</FEES>

</FEE\_INFORMATION>

<LOAN\_COMMENTS>

<LOAN\_COMMENT xlink:label="RESPONSE\_NOTE\_1" SequenceNumber="1">

<LoanCommentDatetime>2017-03-09T17:24:03.3648024-08:00</LoanCommentDatetime> <LoanCommentSourceDescription>FALVISRateCalculator</LoanCommentSourceDescription>

<LoanCommentText>&amp;lt;b&amp;gt;Disclaimer Regarding Simultaneous Title Insurance Premium Rate in Purchase Transactions:&amp;lt;/b&amp;gt; &amp;lt;/br&amp;gt;For most policies, in order to comply with federal consumer protection laws, including, but not limited to, the Truth in Lending Act, the Real Estate Settlement Procedures Act, and the regulations and other guidance promulgated pursuant thereto (see: 12 CFR Part 1026 â€“ Supplement I â€“ comments 37(f)(2)-4, 37(g)(4)-2, 38(f)(2)-1, and 38(g)(4)-2), the premium when a special rate may be available based on the simultaneous issuance of a loan policy and an ownerâ€™s policy will be calculated and disclosed as follows: &amp;lt;/br&amp;gt; 1. The title insurance premium for a lenderâ€™s title policy is calculated using the full rate based on the principal of the loan amount. &amp;lt;/br&amp;gt; 2. The title insurance premium for an ownerâ€™s policy is calculated using the full rate based on the full market value/purchase price, adding the simultaneous issuance premium for the lenderâ€™s cove&amp;lt;/br&amp;gt;&amp;lt;b&amp;gt;Disclaimer:&amp;lt;/b&amp;gt; &amp;lt;/br&amp;gt;The First American Comprehensive Calculator (FACC) is an Internet-based platform, which provides our customers with a user-friendly method of obtaining estimates for certain categories of settlement related costs. There may be variables that need to be considered in determining the final rate to be charged, including geographic and transaction-specific items, which are beyond the functionality provided by the FACC. All estimates obtained through the use of this calculator are dependent upon the accuracy of the information entered into the calculator and no guarantee of issuance is expressed or implied. Please contact your local First American office or agent to confirm your quote. Contact information for First American offices and agents in your area is available at &amp;lt;a href=&amp;quot;http://www.firstam.com&amp;quot; target=&amp;quot;\_blank&amp;quot;&amp;gt;www.firstam.com.&amp;lt;/a&amp;gt;</LoanCommentText>

</LOAN\_COMMENT>

</LOAN\_COMMENTS>

<LOAN\_IDENTIFIERS>

<TERMS\_OF\_LOAN>

</LOAN>

</LOANS>

<PARTIES>

<RELATIONSHIPS>

<RELATIONSHIP SequenceNumber="1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/IsAssociatedWith" xlink:from="RESPONSE\_NOTE\_1" xlink:to="RESPONSE"/>

</RELATIONSHIPS>

<SERVICES>

</DEAL>

</DEALS>

</DEAL\_SET>

</DEAL\_SETS>

</MESSAGE>

</lvis:MISMO\_XML>

</lvis:LVIS\_CALCULATOR\_RESPONSE>

</lvis:LVIS\_XML>

### L1 Response (Title w/Endorsements) XML Sample – No L2 Questions

<FEE xlink:label="FEE\_POLICY\_2" SequenceNumber="2">

<FEE\_DETAIL>

<FeeActualTotalAmount>500.0</FeeActualTotalAmount>

<FeeDescription>ALTA Short Form Residential Loan Policy</FeeDescription>

<FeePaidToType>ThirdPartyProvider</FeePaidToType>

<FeeType DisplayLabelText="ALTA Short Form Residential Loan Policy">TitleLendersCoveragePremium</FeeType>

<GFEDisclosedFeeAmount>500.0</GFEDisclosedFeeAmount> <IntegratedDisclosureSectionType>ServicesBorrowerDidShopFor</IntegratedDisclosureSectionType>

</FEE\_DETAIL>

<FEE\_PAYMENTS>

<FEE\_PAYMENT SequenceNumber="1">

<FeeActualPaymentAmount>500.0</FeeActualPaymentAmount>

<FeePaymentPaidByType>Buyer</FeePaymentPaidByType>

</FEE\_PAYMENT>

</FEE\_PAYMENTS>

</FEE>

<FEE xlink:label="FEE\_POLICY\_2\_ENDR\_E16\_0" SequenceNumber="3">

<FEE\_DETAIL>

<FeeActualTotalAmount>180.0</FeeActualTotalAmount>

<FeeDescription>[ALTA 8.1-06 ] Environmental Protection Lien</FeeDescription>

<FeePaidToType>ThirdPartyProvider</FeePaidToType>

<FeeType>TitleEndorsementFee</FeeType>

<IntegratedDisclosureSectionType>ServicesBorrowerDidShopFor</IntegratedDisclosureSectionType>

</FEE\_DETAIL>

<FEE\_PAYMENTS>

<FEE\_PAYMENT SequenceNumber="1">

<FeeActualPaymentAmount>180.0</FeeActualPaymentAmount>

<FeePaymentPaidByType>Buyer</FeePaymentPaidByType>

</FEE\_PAYMENT>

</FEE\_PAYMENTS>

</FEE>

<FEE xlink:label="FEE\_POLICY\_2\_ENDR\_E18\_1" SequenceNumber="4">

<FEE\_DETAIL>

<FeeDescription>[ALTA 9-06 ] Restrictions, Encroachments &amp; Minerals</FeeDescription>

<FeePaidToType>ThirdPartyProvider</FeePaidToType>

<FeeType>TitleEndorsementFee</FeeType> <IntegratedDisclosureSectionType>ServicesBorrowerDidShopFor</IntegratedDisclosureSectionType>

</FEE\_DETAIL>

<FEE\_PAYMENTS/>

</FEE>

### L1 Response (Settlement) XML Sample – No L2 Questions

<FEE xlink:label="FEE\_CLOSING\_1" SequenceNumber="8">

<FEE\_DETAIL>

<FeeActualTotalAmount>1700.0</FeeActualTotalAmount>

<FeeDescription>ClosingFee</FeeDescription>

<FeePaidToType>ThirdPartyProvider</FeePaidToType>

<FeeType DisplayLabelText="Customary Closing Costs">EscrowServiceFee</FeeType> <IntegratedDisclosureSectionType>ServicesBorrowerDidNotShopFor</IntegratedDisclosureSectionType>

</FEE\_DETAIL>

<FEE\_PAYMENTS>

<FEE\_PAYMENT SequenceNumber="1">

<FeeActualPaymentAmount>1700.0</FeeActualPaymentAmount>

<FeePaymentPaidByType>Buyer</FeePaymentPaidByType>

</FEE\_PAYMENT>

</FEE\_PAYMENTS>

</FEE>

<FEE xlink:label="FEE\_CLOSING\_2" SequenceNumber="9">

<FEE\_DETAIL>

<FeeActualTotalAmount>250.0</FeeActualTotalAmount>

<FeeDescription>ClosingFee</FeeDescription>

<FeePaidToType>ThirdPartyProvider</FeePaidToType>

<FeeType DisplayLabelText="Chain of Title">EscrowServiceFee</FeeType> <IntegratedDisclosureSectionType>ServicesBorrowerDidNotShopFor</IntegratedDisclosureSectionType>

</FEE\_DETAIL>

<FEE\_PAYMENTS>

<FEE\_PAYMENT SequenceNumber="1">

<FeeActualPaymentAmount>250.0</FeeActualPaymentAmount>

<FeePaymentPaidByType>Buyer</FeePaymentPaidByType>

</FEE\_PAYMENT>

</FEE\_PAYMENTS>

</FEE>

<FEE xlink:label="FEE\_CLOSING\_3" SequenceNumber="10">

<FEE\_DETAIL>

<FeeActualTotalAmount>125.0</FeeActualTotalAmount>

<FeeDescription>ClosingFee</FeeDescription>

<FeePaidToType>ThirdPartyProvider</FeePaidToType>

<FeeType DisplayLabelText="Commitment Update Search">EscrowServiceFee</FeeType> <IntegratedDisclosureSectionType>ServicesBorrowerDidNotShopFor</IntegratedDisclosureSectionType>

</FEE\_DETAIL>

<FEE\_PAYMENTS>

<FEE\_PAYMENT SequenceNumber="1">

<FeeActualPaymentAmount>125.0</FeeActualPaymentAmount>

<FeePaymentPaidByType>Seller</FeePaymentPaidByType>

</FEE\_PAYMENT>

</FEE\_PAYMENTS>

</FEE>

### L1 Response (CPL) XML Sample – No L2 Questions

<FEE xlink:label="FEE\_POLICY\_4" SequenceNumber="6">

<FEE\_DETAIL>

<FeeActualTotalAmount>25.0</FeeActualTotalAmount>

<FeeDescription>Closing Protection Letter - Lender</FeeDescription>

<FeePaidToType>ThirdPartyProvider</FeePaidToType>

<FeeType DisplayLabelText="Closing Protection Letter - Lender">TitleLendersCoveragePremium</FeeType> <IntegratedDisclosureSectionType>ServicesBorrowerDidShopFor</IntegratedDisclosureSectionType>

</FEE\_DETAIL>

<FEE\_PAYMENTS>

<FEE\_PAYMENT SequenceNumber="1">

<FeeActualPaymentAmount>25.0</FeeActualPaymentAmount>

<FeePaymentPaidByType>Buyer</FeePaymentPaidByType>

</FEE\_PAYMENT>

</FEE\_PAYMENTS>

</FEE>

<FEE xlink:label="FEE\_POLICY\_5" SequenceNumber="7">

<FEE\_DETAIL>

<FeeActualTotalAmount>50.0</FeeActualTotalAmount>

<FeeDescription>Closing Protection Letter - Seller</FeeDescription>

<FeePaidToType>ThirdPartyProvider</FeePaidToType>

<FeeType DisplayLabelText="Closing Protection Letter - Seller">TitleLendersCoveragePremium</FeeType> <IntegratedDisclosureSectionType>ServicesBorrowerDidShopFor</IntegratedDisclosureSectionType>

</FEE\_DETAIL>

<FEE\_PAYMENTS>

<FEE\_PAYMENT SequenceNumber="1">

<FeeActualPaymentAmount>50.0</FeeActualPaymentAmount>

<FeePaymentPaidByType>Seller</FeePaymentPaidByType>

</FEE\_PAYMENT>

</FEE\_PAYMENTS>

</FEE>

### L1 Response (Recording) XML Sample – No L2 Questions

<FEES>

<FEE xlink:label="FEE\_RECORDING\_1" SequenceNumber="1">

<FEE\_DETAIL>

<FeeActualTotalAmount>97.0</FeeActualTotalAmount>

<FeeDescription>RecordingFee</FeeDescription>

<FeePaidToType>ThirdPartyProvider</FeePaidToType>

<FeeType DisplayLabelText="MORTGAGE - Recording Fee">RecordingFeeForMortgage</FeeType> <IntegratedDisclosureSectionType>TaxesAndOtherGovernmentFees</IntegratedDisclosureSectionType>

</FEE\_DETAIL>

<FEE\_PAID\_TO>

<LEGAL\_ENTITY>

<LEGAL\_ENTITY\_DETAIL>

<FullName>Alameda County Recorder</FullName>

</LEGAL\_ENTITY\_DETAIL>

</LEGAL\_ENTITY>

</FEE\_PAID\_TO>

<FEE\_PAYMENTS>

<FEE\_PAYMENT SequenceNumber="1">

<FeeActualPaymentAmount>97.0</FeeActualPaymentAmount>

<FeePaymentPaidByType>Buyer</FeePaymentPaidByType>

</FEE\_PAYMENT>

</FEE\_PAYMENTS>

</FEE>

<FEE xlink:label="FEE\_RECORDING\_2" SequenceNumber="2">

<FEE\_DETAIL>

<FeeActualTotalAmount>21.0</FeeActualTotalAmount>

<FeeDescription>RecordingFee</FeeDescription>

<FeePaidToType>ThirdPartyProvider</FeePaidToType>

<FeeType DisplayLabelText="DEED - Recording Fee">RecordingFeeForDeed</FeeType> <IntegratedDisclosureSectionType>TaxesAndOtherGovernmentFees</IntegratedDisclosureSectionType>

</FEE\_DETAIL>

<FEE\_PAID\_TO>

<LEGAL\_ENTITY>

<LEGAL\_ENTITY\_DETAIL>

<FullName>Alameda County Recorder</FullName>

</LEGAL\_ENTITY\_DETAIL>

</LEGAL\_ENTITY>

</FEE\_PAID\_TO>

<FEE\_PAYMENTS>

<FEE\_PAYMENT SequenceNumber="1">

<FeeActualPaymentAmount>21.0</FeeActualPaymentAmount>

<FeePaymentPaidByType>Buyer</FeePaymentPaidByType>

</FEE\_PAYMENT>

</FEE\_PAYMENTS>

</FEE>

<FEE xlink:label="FEE\_TRANSFER\_TAX\_1" SequenceNumber="3">

<FEE\_DETAIL>

<FeeActualTotalAmount>385.0</FeeActualTotalAmount>

<FeeDescription>TransferTax</FeeDescription>

<FeePaidToType>ThirdPartyProvider</FeePaidToType>

<FeeType DisplayLabelText="DEED - Documentary Transfer Tax">TaxStampForStateDeed</FeeType> <IntegratedDisclosureSectionType>TaxesAndOtherGovernmentFees</IntegratedDisclosureSectionType>

</FEE\_DETAIL>

<FEE\_PAYMENTS>

<FEE\_PAYMENT SequenceNumber="1">

<FeeActualPaymentAmount>385.0</FeeActualPaymentAmount>

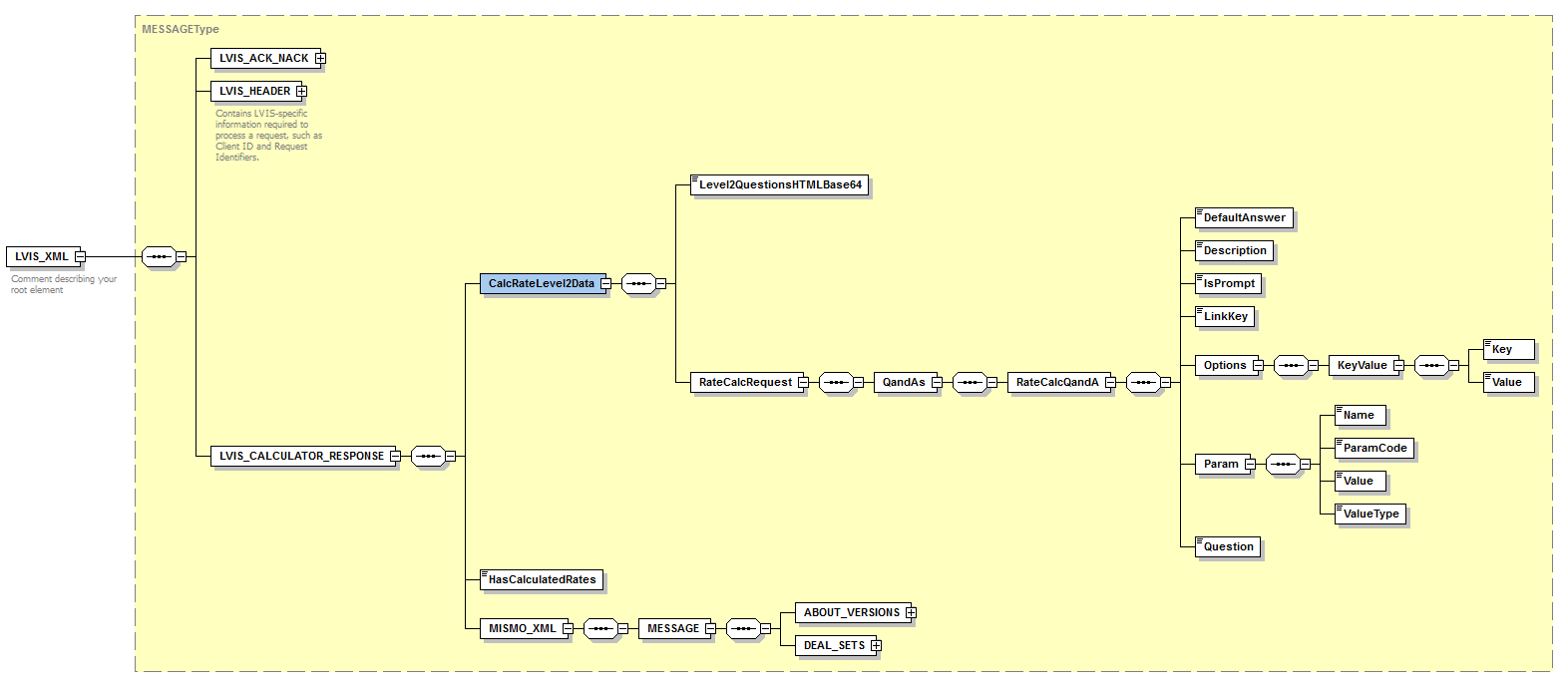
<FeePaymentPaidByType>Buyer</FeePaymentPaidByType>

</FEE\_PAYMENT>

</FEE\_PAYMENTS>

</FEE>

#### L1 Response – WITH L2 Questions



### XML Element Table – L1 Response – WITH L2 Questions

In cases where a rate cannot be provided without additional information, a response to an L1 request will contain additional L2 questions in the ‘CalcRateLevel2Data’ container. These questions must be answered before rates and fees can be provided.

The ‘HasCalculatedRates’ element in the response will indicate whether or not rate data is being returned. If False, then the data in the CalcRateLevel2Data container should be parsed and rendered to the User.

The expectation is that the User will be presented with the required questions and will answer them accordingly. The questions and their associated answers would then be returned in an L2 request.

This table explains the format of the questions and what needs to be displayed to the User. The L2 Request (shown in subsequent pages) describes how to submit the answers to the L2 questions in order to obtain the rate data.

| XML Element Table – L1 Response (With L2 Questions) | | | |
| --- | --- | --- | --- |
| R | Name | Data Type | Description |
| R | **LVIS\_XML** | -- | Root node for response file |
| R | **LVIS\_ACK\_NACK** | -- | Contains the status of the message being returned. If positive, the appropriate response data will follow below. |
| R | **DateTime** | dateTime | Date and time of the response |
| R | **StatusCd** | String | Status identifier |
| R | **StatusDescription** | String | Description of status |
| R | **LVIS\_HEADER** | -- | Contains LVIS-specific information required to process a request, such as Client ID and Request Identifiers. |
| R | **LVISActionType** | ENUM | Identifies the type of response being returned.  Values:   * RateCalc * RateCalcNoAutoCalc |
| R | **ClientCustomerId** | String | The unique identifier assigned to the Requesting Party by First American for each Customer location. This number is tied internally to ordering account information for use with the Service Provider(s). It is supplied with request transactions to allow the service provider to identify the billing account to be used.  This identifier will be assigned by First American for each client location. For a rate calculator, this may be one identifier per customer. |
| R | **ClientUniqueRequestId** | String | Unique identifier provided by the requesting party. |
| R | **LVIS\_CALCULATOR\_ RESPONSE** | -- | Container Element |
| R | **CalcRateLevel2Data** | -- | Container Element |
| R | **Level2QuestionsHTMLBase64** |  | Base64-encoded HTML code that can be used to display the applicable L2 questions and answers to a User |
| R | **RateCalcRequest** | -- | Container Element |
| R | **QandAs** | -- | Container Element for L2 questions and answers |
| R | **RateCalcQandA** | -- | Repeatable Container Element for each question |
|  | DefaultAnswer | String | Displays the default answer for the associated question. |
|  | Description | String | This is the explanatory text to help the User understand the question being asked.  This text should be presented to the User along with the question and answer options. |
|  | IsPrompt | Boolean | Indicates whether or not the User should be prompted to answer the question.  ONLY display the question if TRUE.  If FALSE, simply return the entire Q&A record as-is.  Values:   * False * True |
|  | LinkKey | String | Unique identifier linking a question to a specific product/service |
|  | Options | -- | Container Element for value options to be presented to User with a question |
|  | KeyValue | -- | Container Element |
|  | Key | String | Value to be displayed to the User |
|  | Value | String | Associated identifier |
|  | Param | -- | Container Element |
|  | Name | String | Parameter name |
|  | ParamCode | String | Uniquely identifies the parameter question |
|  | Value | Decimal  Integer  String | A numerical value—expressed as either a Decimal or an Integer—or a string value in each Param container |
|  | ValueType | ENUM | The type of value contained in the Value element  Values:   * Currency * Integer * String |
|  | Question | String | The text of the question to be presented to the User |
|  | MISMO\_XML | -- | Container Element |
| R | **MESSAGE** | -- | Root node for MISMO version 3, it represents the message payload of any SOAP or REST transaction. |
| R | **ABOUT\_VERSIONS** | -- | Container Element |
| R | **ABOUT\_VERSION** | -- | Container Element |
| R | **CreatedDatetime** | dateTime | The date and time at which the message was sent. |
|  | DataVersionIdentifier | String | Specifies the data file version. |
|  | DataVersionName | String | FALVISRateCalculator |
|  | DEAL\_SETS | -- | Container Element |
|  | DEAL\_SET | -- | Container Element |
|  | DEALS | -- | Container Element |
|  | DEAL | -- | Container Element |
|  | COLLATERALS | -- | LVIS echoes back the data sent in the request. |
|  | LOANS | -- | LVIS echoes back the data sent in the request. |
|  | PARTIES | -- | LVIS echoes back the data sent in the request. |
|  | SERVICES | -- | LVIS echoes back the data sent in the request. |

### L1 Response (Title) XML Sample – WITH L2 Questions

<?xml version="1.0" encoding="utf-8"?>

<lvis:LVIS\_XML xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:lvis="http://services.firstam.com/lvis/v2.0">

<lvis:LVIS\_ACK\_NACK>

<lvis:DateTime>2017-04-08T09:35:20.2981988-07:00</lvis:DateTime>

<lvis:StatusCd>1000</lvis:StatusCd>

<lvis:StatusDescription>Request Successfully Processed</lvis:StatusDescription>

</lvis:LVIS\_ACK\_NACK>

<lvis:LVIS\_HEADER>

<lvis:LVISActionType>RateCalcSimulator</lvis:LVISActionType>

<lvis:ClientCustomerId>1111</lvis:ClientCustomerId>

<lvis:ClientUniqueRequestId>2222</lvis:ClientUniqueRequestId>

</lvis:LVIS\_HEADER>

<lvis:LVIS\_CALCULATOR\_RESPONSE>

<lvis:CalcRateLevel2Data> <lvis:Level2QuestionsHTMLBase64>PEhUTUw+PEJPRFk+DQo8U1RZTEU+VEggeyBiYWNrZ3JvdW5kLWNvbG9yOiBsaWdodGJsdWU7fSA8L1NUWUxFPg0KPFRBQkxFIGJvcmRlcj0iMSIgY2VsbHBhZGRpbmc9IjMiIGNl4mbmJzcDsmbmJzcDs8L1REPjwvVFI+DQo8L1RBQkxFPg0KPHNjcmlwdD4gICBmdW5jdGlvbiBoZWxwKHRleHQpIHsNCiAgICAgIGFsZXJ0KHRleHQpOyB9DQo8L3NjcmlwdD4NCjwvQk9EWT48L0hUTUw+</lvis:Level2QuestionsHTMLBase64>

<lvis:RateCalcRequest>

<lvis:QandAs>

<lvis:RateCalcQandA>

<lvis:Answers>

<lvis:string>Bartlett</lvis:string>

</lvis:Answers>

<lvis:DefaultAnswer>Bartlett</lvis:DefaultAnswer>

<lvis:Description/>

<lvis:IsPrompt>false</lvis:IsPrompt>

<lvis:LinkKey>1</lvis:LinkKey>

<lvis:Param>

<lvis:Name>City</lvis:Name>

<lvis:ParamCode>275</lvis:ParamCode>

<lvis:Value>Bartlett</lvis:Value>

<lvis:ValueType>STRING</lvis:ValueType>

</lvis:Param>

<lvis:Question/>

</lvis:RateCalcQandA>

<lvis:RateCalcQandA>

<lvis:Answers>

<lvis:string>450000.00</lvis:string>

</lvis:Answers>

<lvis:DefaultAnswer>450000.00</lvis:DefaultAnswer>

<lvis:Description/>

<lvis:IsPrompt>false</lvis:IsPrompt>

<lvis:LinkKey>3</lvis:LinkKey>

<lvis:Param>

<lvis:Name>Liability Amount</lvis:Name>

<lvis:ParamCode>280</lvis:ParamCode>

<lvis:Value>450000.00</lvis:Value>

<lvis:ValueType>CURRENCY</lvis:ValueType>

</lvis:Param>

<lvis:Question/>

</lvis:RateCalcQandA>

<lvis:RateCalcQandA>

<lvis:Answers>

<lvis:string>No</lvis:string>

</lvis:Answers>

<lvis:DefaultAnswer>2</lvis:DefaultAnswer>

<lvis:Description/>

<lvis:IsPrompt>true</lvis:IsPrompt>

<lvis:LinkKey>CT0\_1107</lvis:LinkKey>

<lvis:Options>

<lvis:KeyValue>

<lvis:Key>Yes</lvis:Key>

<lvis:Value>1</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>No</lvis:Key>

<lvis:Value>2</lvis:Value>

</lvis:KeyValue>

</lvis:Options>

<lvis:Param>

<lvis:Name>Construction Escrow Fee (IL) $450.00</lvis:Name>

<lvis:ParamCode>1107</lvis:ParamCode>

<lvis:Value>2</lvis:Value>

<lvis:ValueType>STRING</lvis:ValueType>

</lvis:Param>

<lvis:Question>Will proceeds from the loan be used for home improvement?</lvis:Question>

</lvis:RateCalcQandA>

<lvis:RateCalcQandA>

<lvis:Answers>

<lvis:string>No</lvis:string>

</lvis:Answers>

<lvis:DefaultAnswer>2</lvis:DefaultAnswer>

<lvis:Description/>

<lvis:IsPrompt>true</lvis:IsPrompt>

<lvis:LinkKey>CT0\_1108</lvis:LinkKey>

<lvis:Options>

<lvis:KeyValue>

<lvis:Key>Yes</lvis:Key>

<lvis:Value>1</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>No</lvis:Key>

<lvis:Value>2</lvis:Value>

</lvis:KeyValue>

</lvis:Options>

<lvis:Param>

<lvis:Name>Lien Waiver Fee (IL) $150.00</lvis:Name>

<lvis:ParamCode>1108</lvis:ParamCode>

<lvis:Value>2</lvis:Value>

<lvis:ValueType>STRING</lvis:ValueType>

</lvis:Param>

<lvis:Question>Has there been any home improvements in the last two years?</lvis:Question>

</lvis:RateCalcQandA>

</lvis:QandAs>

</lvis:RateCalcRequest>

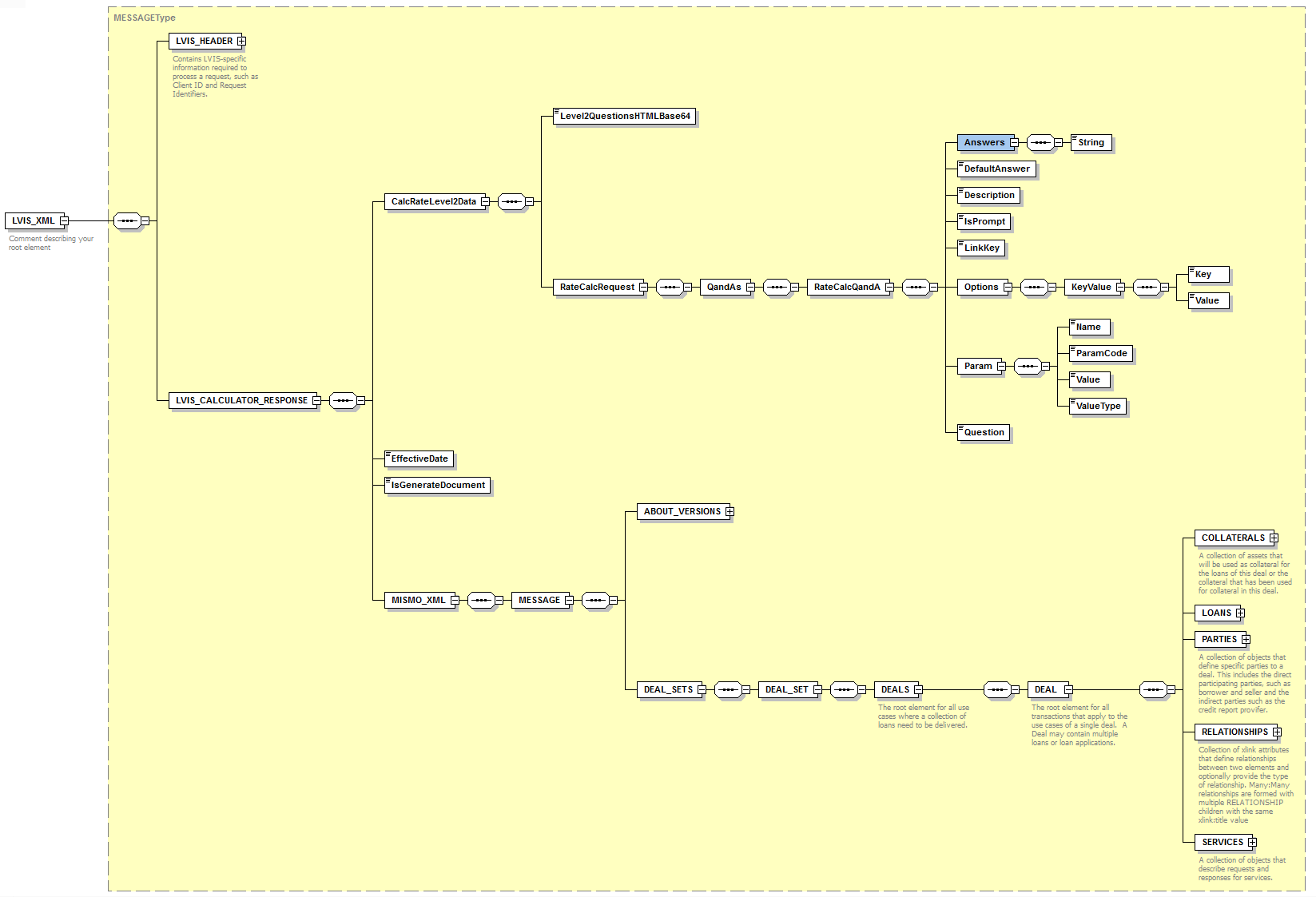
</lvis:CalcRateLevel2Data>

<lvis:HasCalcuatedRates>true</lvis:HasCalcuatedRates>

<lvis:MISMO\_XML>

## RateCalculation L2 – Request

### Graphical Overview of L2 Request



### XML Element Table – L2 Request

The L2 Request is almost identical to the L1 Response WITH L2 questions. In this case, all CalcRateLEvel2Data should be echoed back along with the User’s input for the ‘Answer’ (if not using the default). In addition to the answers, the original request data contained in the MISMO\_XML must also be returned. This is the final step in the rate request process.

| XML Element Table – L2 Request | | | |
| --- | --- | --- | --- |
| R | Name | Data Type | Description |
| R | **LVIS\_XML** | -- | Root node for response file |
| R | **LVIS\_HEADER** | -- | Contains LVIS-specific information required to process a request, such as Client ID and Request Identifiers. |
| R | **LVISActionType** | ENUM | Identifies the type of response being returned.  Values:   * RateCalc * RateCalcNoAutoCalc |
| R | **ClientCustomerId** | String | The unique identifier assigned to the Requesting Party by First American for each Customer location. This number is tied internally to ordering account information for use with the Service Provider(s). It is supplied with request transactions to allow the service provider to identify the billing account to be used.  This identifier will be assigned by First American for each client location. For a rate calculator, this may be one identifier per customer. |
| R | **ClientUniqueRequestId** | String | Unique identifier provided by the requesting party. |
| R | **LVIS\_CALCULATOR\_ RESPONSE** | -- | Container Element |
| R | **CalcRateLevel2Data** | -- | Container Element |
| R | **Level2QuestionsHTMLBase64** |  | Base64-encoded HTML code that can be used to display the applicable L2 questions and answers to a User |
| R | **RateCalcRequest** | -- | Container Element |
| R | **QandAs** | -- | Container Element for L2 questions and answers. |
| R | **RateCalcQandA** | -- | Repeatable Container Element for each question |
| R | **Answers** | -- | Container Element for answers to the question |
| R | **String** | String | Answer text |
| R | **DefaultAnswer** | String | Displays the default answer for the associated question. |
| R | **Description** |  | This is the explanatory text to help the User understand the question being asked.  This text should be presented to the User along with the question and answer options. |
| R | **IsPrompt** | Boolean | Indicates whether or not the User should be prompted to answer the question.  ONLY display the question if TRUE.  If FALSE, simply return the entire Q&A record as-is.  Values:   * False * True |
| R | **LinkKey** | String | Unique identifier linking a question to a specific product/service |
| R | **Options** | -- | Container Element for value options to be presented to User with a question |
| R | **KeyValue** | -- | Container Element |
| R | **Key** | String | Value to be displayed to the User |
| R | **Value** | String | Associated identifier |
| R | **Param** | -- | Container Element |
| R | **Name** | String | Parameter name |
| R | **ParamCode** | String | Parameter |
| R | **Value** | Decimal  Integer  String | A numerical value—expressed as either a Decimal or an Integer—or a string value in each Param container |
| R | **ValueType** | ENUM | The type of value contained in the Value element  Values:   * Currency * Integer * String |
| R | **Question** | String | The text of the question to be presented to the User |
|  | **EffectiveDate** | Datetime | The date for which the fee(s) are effective. Usually, this date is the Loan Application Date. |
| R | **IsGenerateDocument** |  | Indicates whether or not a PDF document displaying returned rate data is requested. |
| R | **MISMO\_XML** | -- | Container Element |
| R | **MESSAGE** | -- | Root node for MISMO version 3, it represents the message payload of any SOAP or REST transaction. |
| R | **ABOUT\_VERSIONS** | -- | Container Element |
| R | **ABOUT\_VERSION** | -- | Container Element |
| R | **CreatedDatetime** | dateTime | The date and time at which the message was sent. |
|  | DataVersionIdentifier | String | Specifies the data file version. |
|  | DataVersionName | String | FALVISRateCalculator |
|  | DEAL\_SETS | -- | Container Element |
|  | DEAL\_SET | -- | Container Element |
|  | DEALS | -- | Container Element |
|  | DEAL | -- | Container Element |
| R | **COLLATERALS** | -- | Send original request data |
| R | **LOANS** | -- | Send original request data |
| R | **PARTIES** | -- | Send original request data |
| R | **SERVICES** | -- | Send original request data |

### L2 Request XML Sample

<lvis:RateCalcRequest>

<lvis:QandAs>

<lvis:RateCalcQandA>

<lvis:Answers>

<lvis:string>Bartlett</lvis:string>

</lvis:Answers>

<lvis:DefaultAnswer>Bartlett</lvis:DefaultAnswer>

<lvis:Description/>

<lvis:IsPrompt>false</lvis:IsPrompt>

<lvis:LinkKey>1</lvis:LinkKey>

<lvis:Param>

<lvis:Name>City</lvis:Name>

<lvis:ParamCode>275</lvis:ParamCode>

<lvis:Value>Bartlett</lvis:Value>

<lvis:ValueType>STRING</lvis:ValueType>

</lvis:Param>

<lvis:Question/>

</lvis:RateCalcQandA>

<lvis:RateCalcQandA>

<lvis:Answers>

<lvis:string>450000.00</lvis:string>

</lvis:Answers>

<lvis:DefaultAnswer>450000.00</lvis:DefaultAnswer>

<lvis:Description/>

<lvis:IsPrompt>false</lvis:IsPrompt>

<lvis:LinkKey>3</lvis:LinkKey>

<lvis:Param>

<lvis:Name>Liability Amount</lvis:Name>

<lvis:ParamCode>280</lvis:ParamCode>

<lvis:Value>450000.00</lvis:Value>

<lvis:ValueType>CURRENCY</lvis:ValueType>

</lvis:Param>

<lvis:Question/>

</lvis:RateCalcQandA>

<lvis:RateCalcQandA>

<lvis:Answers>

<lvis:string>No</lvis:string>

</lvis:Answers>

<lvis:DefaultAnswer>2</lvis:DefaultAnswer>

<lvis:Description/>

<lvis:IsPrompt>true</lvis:IsPrompt>

<lvis:LinkKey>CT0\_1107</lvis:LinkKey>

<lvis:Options>

<lvis:KeyValue>

<lvis:Key>Yes</lvis:Key>

<lvis:Value>1</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>No</lvis:Key>

<lvis:Value>2</lvis:Value>

</lvis:KeyValue>

</lvis:Options>

<lvis:Param>

<lvis:Name>Construction Escrow Fee (IL) $450.00</lvis:Name>

<lvis:ParamCode>1107</lvis:ParamCode>

<lvis:Value>2</lvis:Value>

<lvis:ValueType>STRING</lvis:ValueType>

</lvis:Param>

<lvis:Question>Will proceeds from the loan be used for home improvement?</lvis:Question>

</lvis:RateCalcQandA>

<lvis:RateCalcQandA>

<lvis:Answers>

<lvis:string>No</lvis:string>

</lvis:Answers>

<lvis:DefaultAnswer>2</lvis:DefaultAnswer>

<lvis:Description/>

<lvis:IsPrompt>true</lvis:IsPrompt>

<lvis:LinkKey>CT0\_1108</lvis:LinkKey>

<lvis:Options>

<lvis:KeyValue>

<lvis:Key>Yes</lvis:Key>

<lvis:Value>1</lvis:Value>

</lvis:KeyValue>

<lvis:KeyValue>

<lvis:Key>No</lvis:Key>

<lvis:Value>2</lvis:Value>

</lvis:KeyValue>

</lvis:Options>

<lvis:Param>

<lvis:Name>Lien Waiver Fee (IL) $150.00</lvis:Name>

<lvis:ParamCode>1108</lvis:ParamCode>

<lvis:Value>2</lvis:Value>

<lvis:ValueType>STRING</lvis:ValueType>

</lvis:Param>

<lvis:Question>Has there been any home improvements in the last two years?</lvis:Question>

</lvis:RateCalcQandA>

</lvis:QandAs>

</lvis:RateCalcRequest>

</lvis:CalcRateLevel2Data>

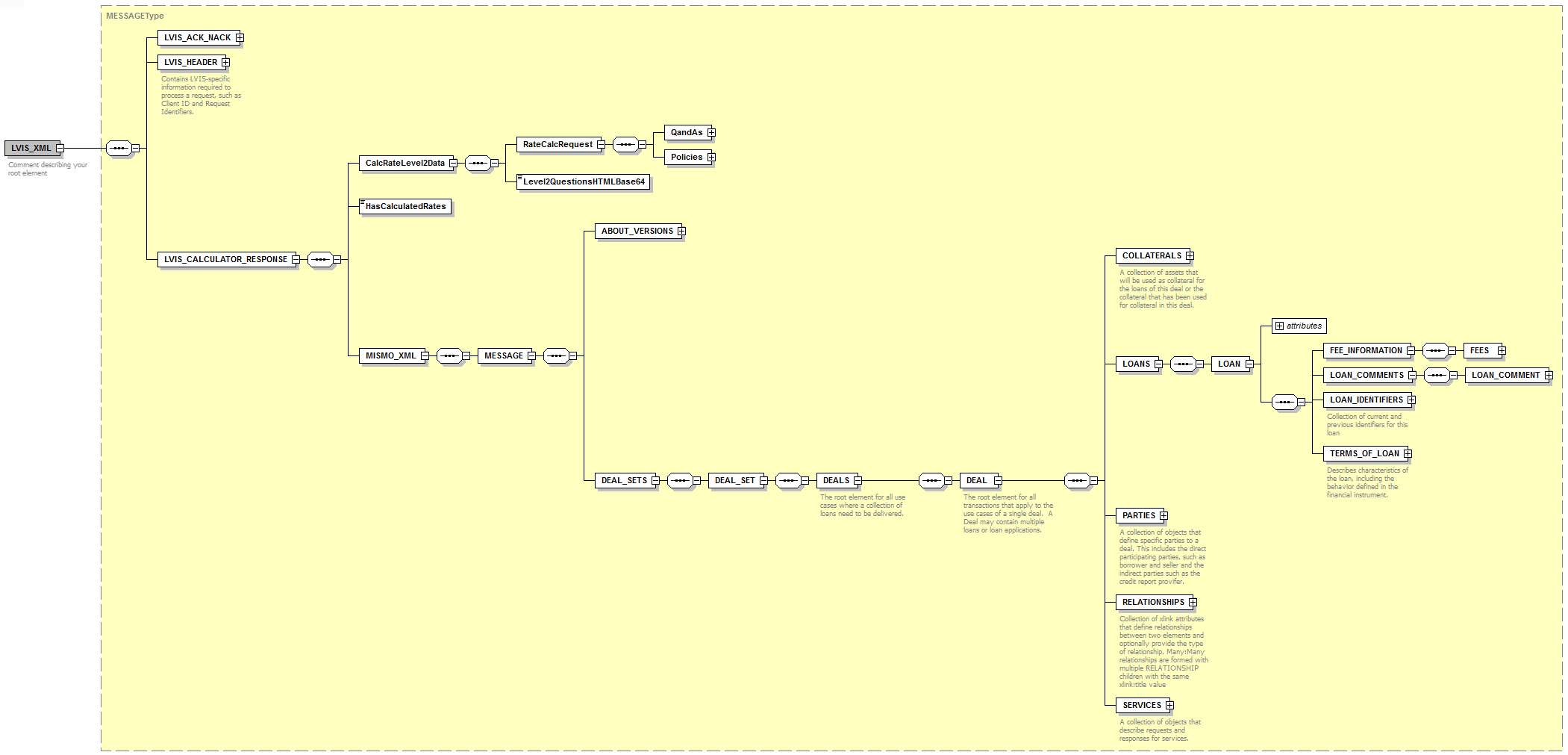
<lvis:HasCalcuatedRates>true</lvis:HasCalcuatedRates>

<lvis:MISMO\_XML>

## RateCalculation L2 – Response

### Graphical Overview of L2 Response

This diagram depicts a high-level overview of the LVIS\_XML node and sequenced elements provided in the L2 response. All elements are detailed in the following XML table and subsequent samples.



### XML Element Table – L2 Response

The L2 Response is identical to the L1 Response in that it contains FEE\_INFORMATION and LOAN\_COMMENTS. It also includes all of the data submitted in the L2 Request, such as the CalcRateLevel2Data and all of the MISMO\_XML data. Refer to XML Element Table – L1 Response – No L2 Questions and/or XML Element Table – L1 Response – WITH L2 Questions for detailed information.

## HTML

If using the HTML format for Level 2 questions provided by LVIS, then once decoded, the Level 2 questions that must be answered for a given scenario will be displayed in the manner shown below. Questions and products will vary with each scenario; however, the information will be consistently displayed as explained below.

**SECTION DIVIDER**

Each section will be separated with a blue row that contains a description of the service and product for which a question is necessary.

**QUESTIONS**

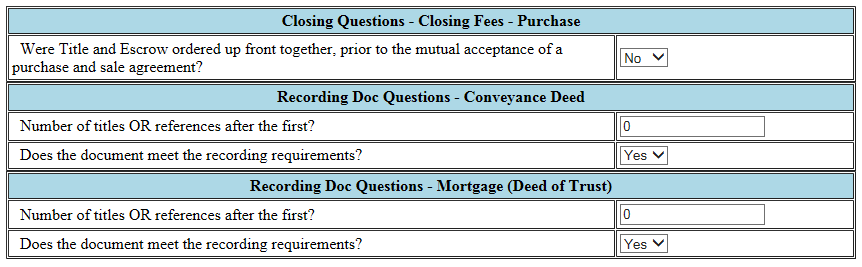
Each question will be displayed in its own row under the applicable section.

**ANSWERS**

There will be an answer section to the right of every question. The answer formats will vary based on the question presented. The currently supported answer formats are combo box and numeric.

**QUESTION** **HELP**

A button that contains help text for each of the questions presented will be displayed. A User may click on this button for help on each of the questions shown in the HTML file.



# FAQ

### How do I display and select Title Policies?

With so many request variables, determining which Title Policies to display at which times can sometimes be difficult. Here are some guidelines to help explain some common scenarios.

The Product List Response will contain the data for the available Products and/or Services selected for the loan data provided. The response contains the applicable services and are provided in the following order:

1. Title Policies (first selection) - Policy Products
2. Title Policies (second selection) – Second Policy Products
3. Endorsements
4. CPLs
5. Closing Types
6. Recording Types

The order of the response is similar to the order of options displayed in the Simulator:



One thing to note is that if Title Rates are requested, they will automatically include Endorsements, so selecting Endorsements along with Title Rates is unnecessary. However, Endorsements are available in cases where only Endorsement fees are desired.

### How do I handle defaults?

Many times, a default product is determined for a given state or set of request criteria. In that case, the Policy Product will indicate that that particular policy is the default product. That default is expressed as a Boolean element in the Policy container as shown below:

<IsDefault>false</IsDefault>

or

<IsDefault>true</IsDefault>

There is ONLY ONE default per selection (first or second) – meaning that there will be only one default product for the first selection of Title Policies and only one default product for the Second Policy Product selection of Title Policies. The default policy is not necessarily the first shown Policy in the XML response.

**NOTE**: It is important to understand that if there are two default products, and the User chooses a FIRST policy that is different from the default, then a whole *new set of Second Policies must be obtained* from the System as the current list of policies may or may not be available in conjunction with the newly selected first product. More details are provided in the Two or More Policies Available scenario below.

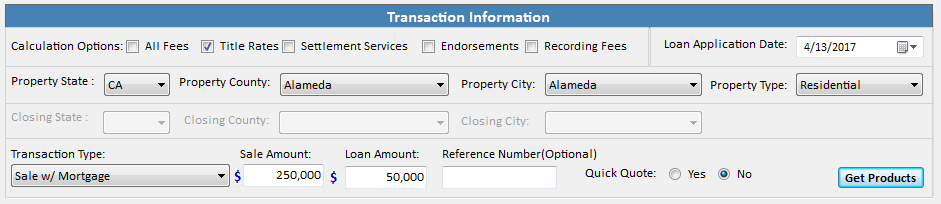
### What if there is only one Policy available?

When there is only one default Title policy available, then the Product List Response will only contain the PolicyProducts container, it will not include the SecondPolicyProducts container. This response does not necessarily mean that only one Title Policy may be ordered, however. An additional policy may be priced if the MaxNumberOfPoliciesAllowed is greater than one.

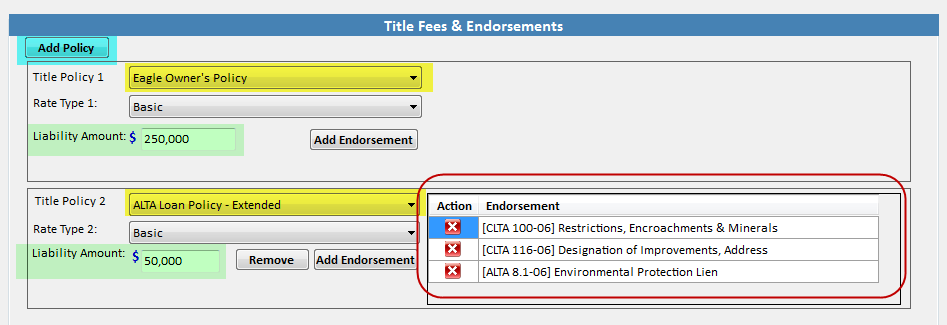
### How do I handle scenarios where two or more Policies are available?

This scenario describes how to handle requesting multiple policies where the first two policies have defaults.

Using the criteria as shown in the Simulator:



The following two products are shown by default:



There are several important things to note:

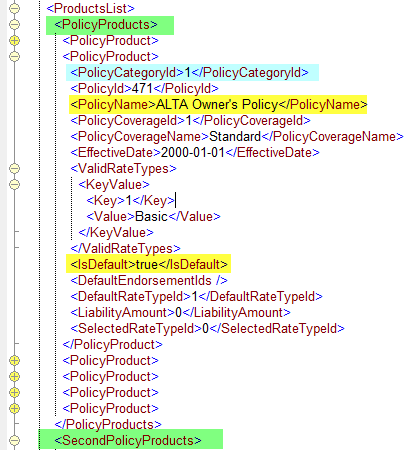
1. Notice that the Owner’s Policy is displayed first
2. The Loan Policy is displayed second
3. There is a Liability amount defaulted for each product
4. There is a set of Endorsements shown for the second Policy – the Loan Policy
5. There is an Add Policy button
6. What If I want to change a Policy?

We’ll address these items one at a time:

1. Notice that the Owner’s Policy is displayed first

If displaying a list to Users, it is important to note that the Policy in the PolicyProducts container should be displayed before any Policy in the SecondPolicyProducts container. This is important to note because changing the first Policy to something other than the default will impact which second Policies are available. The reverse is not true. Changing the SecondPolicyProduct will not affect the first Policy.

In this example, you can tell that the first default product is an Owner’s Policy because of the PolicyCategoryId of 1 (1=Owner’s Policy).



1. The Loan Policy is displayed second

In this case, there are both Owner’s and Lender’s Policies available that have defaults. The Policy shown in the SecondPolicyProducts container, the Loan Policy, is displayed second. Changing the Loan Policy to something other than the default will not affect the first, or Owner’s, Policy.

In this example, you can tell that the first default product is a Loan Policy because of the PolicyCategoryId of 2 (2=Lender’s Policy).



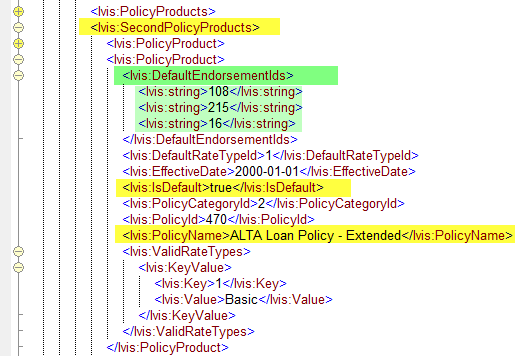
1. There is a Liability amount defaulted for each product

The Liability Amount for the Owner’s Policy is typically the full purchase price of the home. Systems do not have to show a default liability amount; the Simulator shows it as an example of what is possible based on the data provided.

The Liability Amount for the Lender’s Policy is typically the transaction’s loan amount. As with the Owner’s Policy, systems are not required to present this information as shown in the Simulator.

1. There is a set of Endorsements shown for the second Policy – the Loan Policy

Default Endorsement are indicated in the ProductList response, and they are associated with a specific policy, if available. The following example shows the default product of ‘ALTA Loan Policy – Extended’ has three default Endorsements.



1. There is an Add Policy button

This button is shown in the Simulator to indicate that additional Policies may be added to the two that are displayed. We know that is possible because of the MaxNumberOfPoliciesAllowed element, which tell us that we can have three policies for the loan data provided.

<lvis:MaxNumberOfPolciesAllowed>3</lvis:MaxNumberOfPolciesAllowed>

This element can be used to determine if or when an Add button or similar functionality should be displayed for any given scenario.

1. What if I want to change a Policy?

Policies can be changed, but there are rules that must be followed to do so. Some changes can be handled using the data already present in the ProductList response and some changes will require an additional call to obtain updated information.

Rules:

1. There may be one or two default products provided in the response
2. There will never be more than two default products provided
3. If only one default policy is provided
   1. The MaxNumberOfPoliciesAllowed must be evaluated to determine whether or not additional policies may be added for pricing.
4. If two default policies are provided
   1. The Second Policy can be changed without affecting the first policy. (This is because the System has already evaluated the first policy and knows that any of the products in the SecondPolicyProducts section can be combined with the first.)
   2. If the first policy is changed, then a new call must be completed wherein the first policy data is provided. This way the System can determine which set of second policies are available to be priced in conjunction with the selected first policy. (See section x regarding how to request additional policies when at least one has already been selected.)

### How many Policies can be ordered at once?

There is an element in the ProductList Response that provides the maximum number of Policies that can be requested for a given set of loan criteria.

<MaxNumberOfPolciesAllowed>3</MaxNumberOfPolciesAllowed>

This element can be used to determine how to display the Policies to Users and prevent them from trying to add Policies that aren’t supported.

### Does order matter? Owner’s or Lender’s?

The order DOES matter, but not necessarily by Category Types, such as Owner’s Policies or Lender’s Policies. Scenario 9.1.4 above goes into greater detail on how to determine order.

In short:

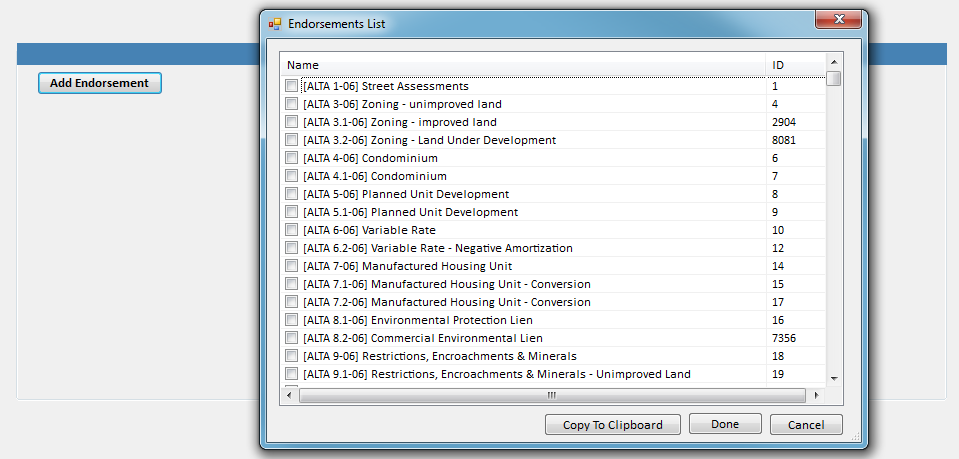
* Policies provided in the PolicyProducts container in the ProductList response should be displayed first.
* Policies provided in the SecondPolicyProducts container should be displayed second.

### How should Endorsements be displayed?

There are usually many Endorsements available for selection, and there are many ways to display them to the User.

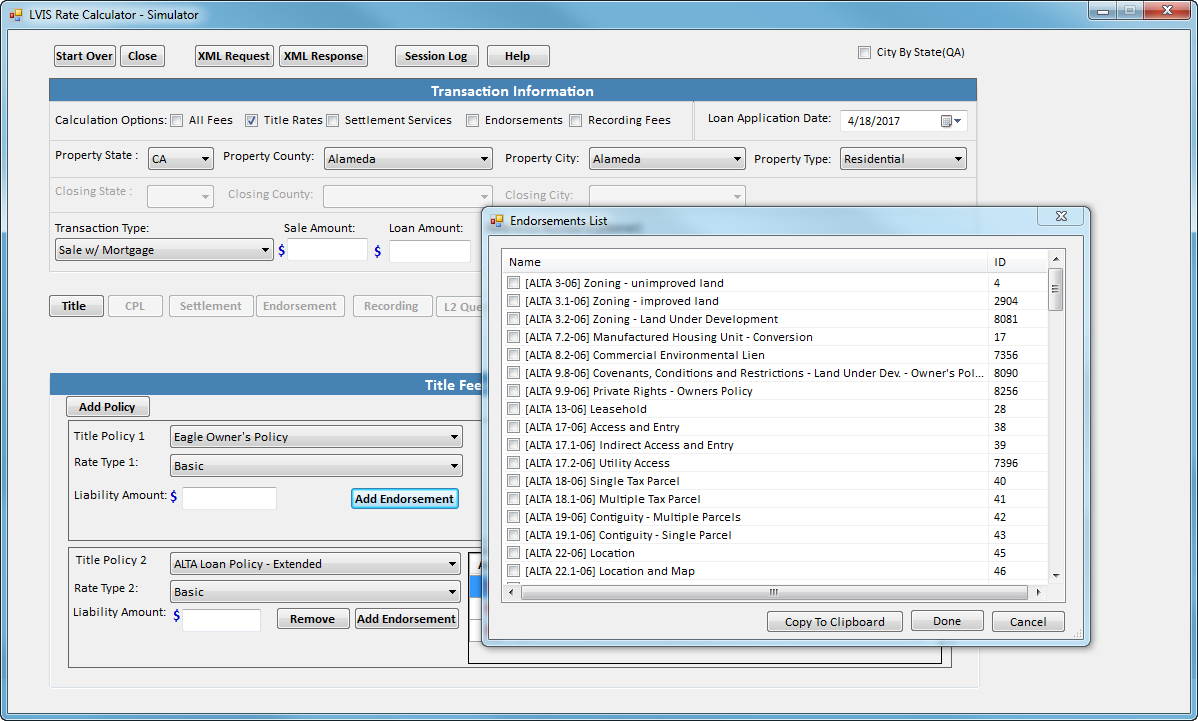
**Endorsements Only**

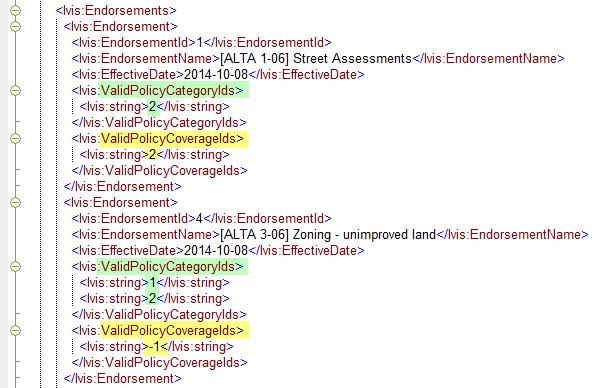
In the event that only Endorsements are requested, the list of Endorsements is based on the loan criteria submitted. In the Simulator, those Endorsements are listed in alphabetical order. Once selected, the Endorsement ID and Name must be sent in the RateCalc request for pricing.



**Title Policy and Endorsements**

If endorsements are available with Title policies, then the list of available Endorsements will contain information that can be used to tie those Endorsements to a policy, if desired.





**Policy Category:**

The CategoryIds field explains the type of policy the Endorsement may be associated with.

In this case, the first Endorsement may be associated with a Loan Policy (2), and the second Endorsement may be associated with both an Owner (1) and a Loan Policy (2).

**Policy Coverage:**

The CoverageIds field explains the type of policy coverage the Endorsement may be associated with. Both the Category AND the Coverage conditions must be met in order to associate an Endorsement to a particular policy.

In this example, the first Endorsement may be associated with an Extended (2) policy. The second Endorsement may be associated with all (-1) policy coverage types.

* Policy Category
  + -1 (All Types)
  + 1 (Owner)
  + 2 (Loan)
  + 4 (Guarantee)
  + 5 (Limited Coverage Junior Loan)
  + 6 (Leasehold Owner)
  + 7 (Leasehold Loan)
  + 8 (Report)
  + 9 (Limited Coverage Loan)
* Policy Coverage
  + -1 (all coverage types)
  + 1 (Standard)
  + 2 (Extended)
  + 3 (Eagle)

**Putting it Together**

Using the ValidPolicyCategoryIds and the ValidPolicyCoverageIds, parse the entire response to locate all Policies that match your desired conditions. For example, to find all policies that the ‘[ALTA 1-06] Street Assessments’ Endorsement can be associated with, look for all Policies that have a PolicyCategoryId of 2 AND a PolicyCoverageId of 2.

The following two policies in the ‘PoliciesProduct’ list match that criteria, so when displaying either of the following two products, the ‘[ALTA 1-06] Street Assessments’ Endorsement can be shown in the list of available Endorsements.

<lvis:PolicyProduct>

<lvis:DefaultRateTypeId>0</lvis:DefaultRateTypeId>

<lvis:EffectiveDate>2000-01-01</lvis:EffectiveDate>

<lvis:IsDefault>false</lvis:IsDefault>

<lvis:PolicyCategoryId>2</lvis:PolicyCategoryId>

<lvis:PolicyCoverageId>2</lvis:PolicyCoverageId>

<lvis:PolicyCoverageName>Extended</lvis:PolicyCoverageName>

<lvis:PolicyId>470</lvis:PolicyId>

<lvis:PolicyName>ALTA Loan Policy - Extended</lvis:PolicyName>

<lvis:PolicyProduct>

<lvis:DefaultRateTypeId>0</lvis:DefaultRateTypeId>

<lvis:EffectiveDate>2000-01-01</lvis:EffectiveDate>

<lvis:IsDefault>false</lvis:IsDefault>

<lvis:PolicyCategoryId>2</lvis:PolicyCategoryId>

<lvis:PolicyCoverageId>2</lvis:PolicyCoverageId>

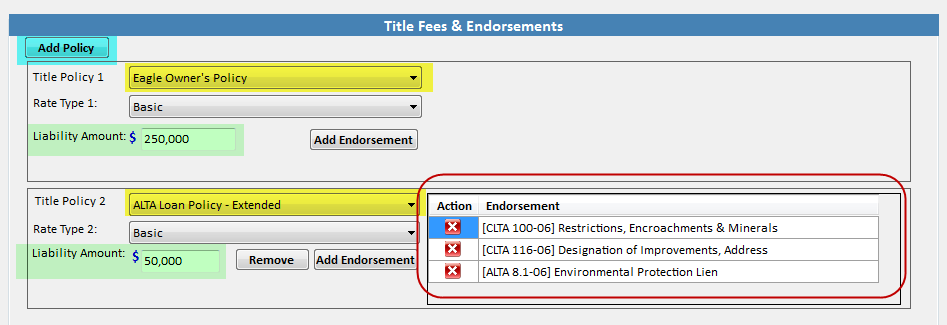
<lvis:PolicyCoverageName>Extended</lvis:PolicyCoverageName>

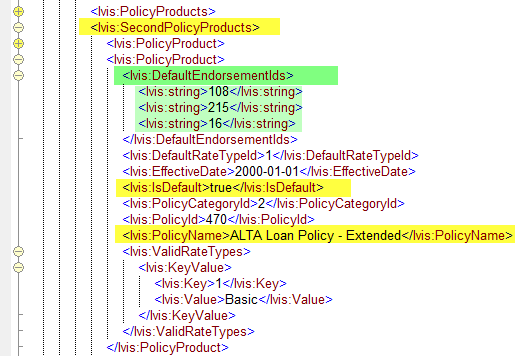
<lvis:PolicyId>485</lvis:PolicyId>

<lvis:PolicyName>ALTA Short Form Residential Loan Policy - Extended</lvis:PolicyName>

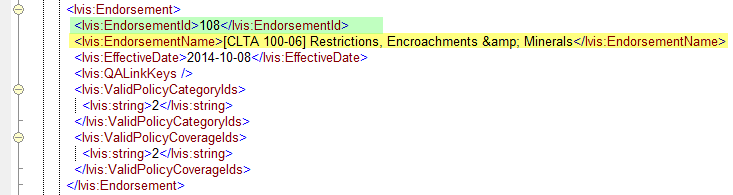
### How do I determine default Endorsements?

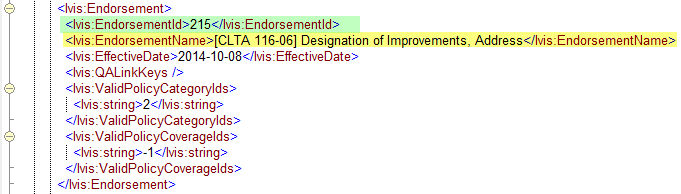
If a particular policy has default Endorsements available, then those Endorsements will be listing in the ‘PolicyProduct’ container. In the following example, there are three Endorsements that can be displayed with the ‘ALTA Loan Policy – Extended’ policy.

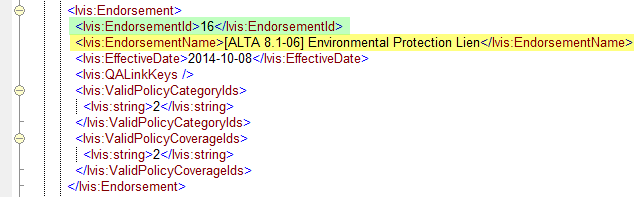




Each of the three ‘DefaultEndorsementIds’ can be used to obtain the actual name of the Endorsement by searching the Endorsement container for that Id. The name can then be used to display to the User.







### How do I know if rates are returned?

You can determine that rates are returned by looking at the ‘HasCalculatedRates’ element in the LVIS\_CALCULATOR\_RESPONSE container. If the value is ‘True’, then the fee information is available under the MISMO LOAN container.

<lvis:HasCalcuatedRates>true</lvis:HasCalcuatedRates>

If the value is ‘False’ then there are L2 questions that are required to be answered before fee information can be provided. In this case, the required questions are provided in the ‘CalcRateLevel2Data’ container. See 9.1.11 for information on handling questions.

### What does Quick Quote mean?

The concept of the Quick Quote is to provide data to the User with the fewest number of clicks. In a ‘Quick Quote’ scenario (radio button=Yes), System defaults are used for all product selections and any questions that may be applicable in order to return a list of fees.

In this scenario, the response will contain not only the rates and fees but also the questions and the default answers used. The idea behind this process is that the User will be shown the selected products and the questions (with their associated answers) so that those answers can be changed if desired. If changed, then a new calculation request would be submitted with the revised answers.

If a Quick Quote is not available it is because there are questions that must be answered that do not have default answers predefined. In this case, even though a Quick Quote was requested, no fee information will be returned because it is not available. The required questions must be answered in order to obtain fees. See section 9.1.11 to get more information on how to handle the L2 questions and answers.

### How do I handle Questions and Answers (RateCalcQandA)?

Each question in the RateCalc Response has five main parts:

1. **Question text** – Text to be displayed to the User
2. **Answer options** – Answer options for dropdown, if applicable
3. **Help text** – May be displayed to the User
4. **LinkKey** – Used to link the question to a specific product
5. **Answer** – This will contain your answer when sending in for calculation

There are two scenarios that may produce L2 questions:

* No rates available – need answers for L2 questions
* Rates available –default answers used for L2 questions

**No Rates Available:**

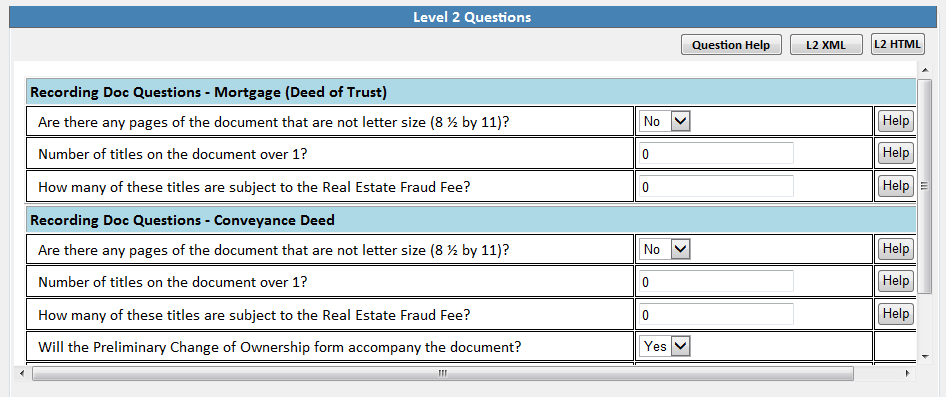
When no rates are available, it is most likely because there are L2 questions that need to be answered. (See section 9.1.9 for determining whether or not rates are available.)

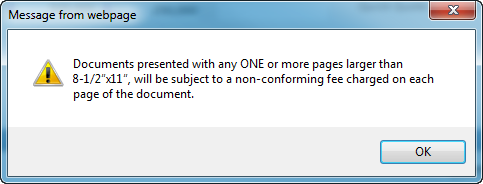
L2 questions are provided under the LVIS\_CALCULATOR\_RESPONSE in the ‘QandAs’ container. Each individual question and all of its associated data is in the ‘RateCalcQandA’ element.

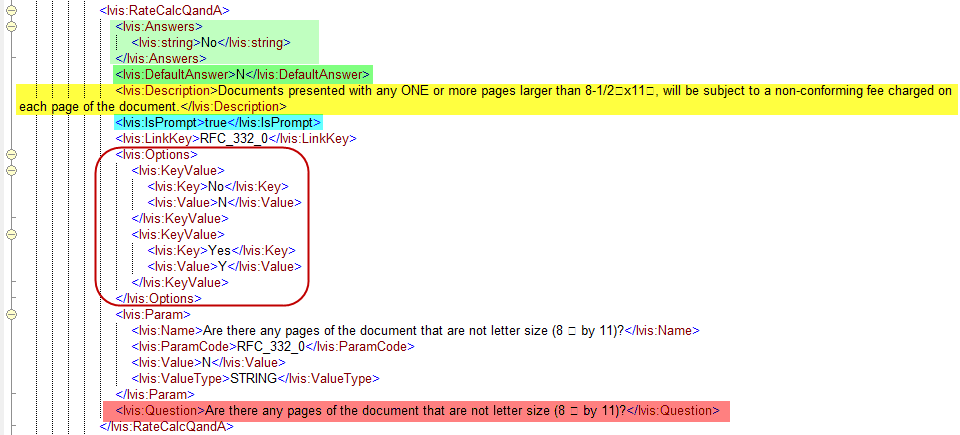
If a question is required to be answered, then the ‘IsPrompt’ element value is ‘True’. If ‘False’, the question need not (in fact, should not) be presented to the User.

<lvis:IsPrompt>true</lvis:IsPrompt>

If the question should be presented as a dropdown, then the ‘RateCalcQandA’ container will include an ‘Options’ container, which will provide the available answers to be provided to the User. If there are no ‘Options’ provided, then the answers are free-form text.

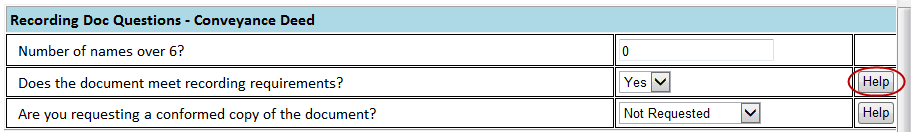


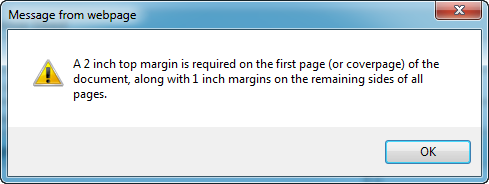




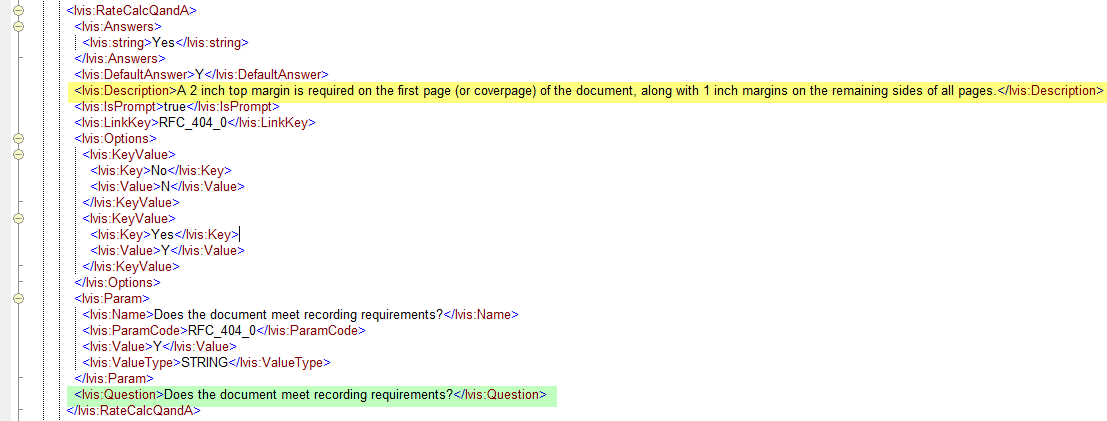
### What if I don’t understand the L2 questions?

The System provides helper text that can be displayed to the User to explain the question.





The ‘Description’ element contains the text to help explain what the question is trying to determine.



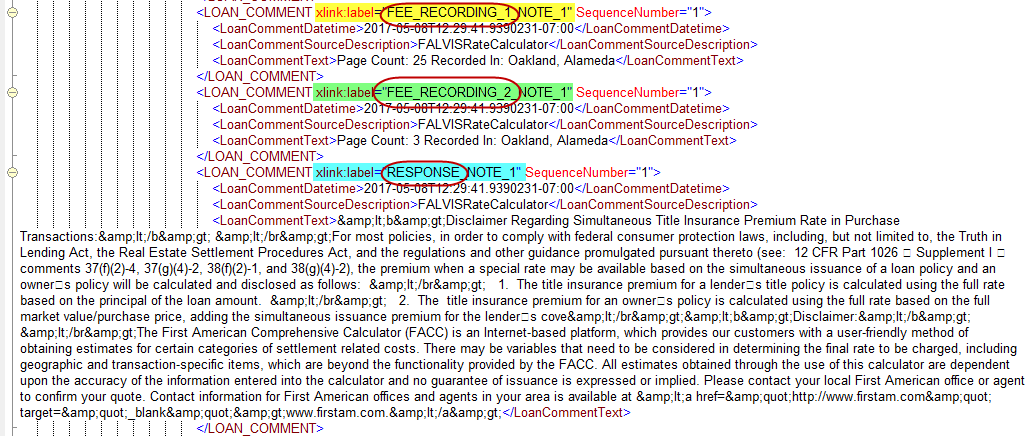
### What do I do with the Notes/Comments?

All Notes MUST be displayed to the User.

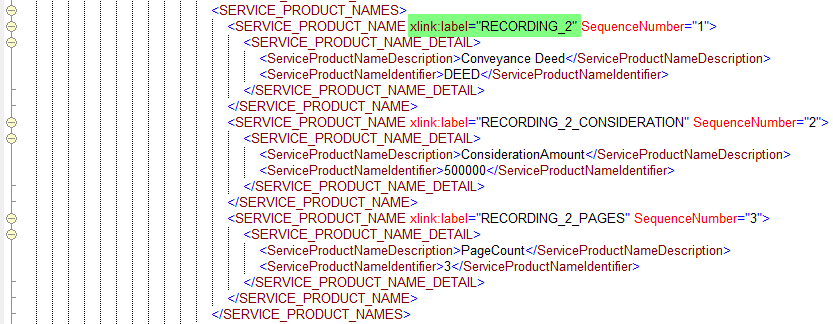
There are two different kinds of Notes or Comments:

1. **Fee-level**: This note must be displayed with its corresponding product
2. **Response-level**: This note is usually displayed at the bottom of the page. This note may include a generic disclaimer or additional text, such as information pertaining to a simultaneous rate.

A Product-level response will include a reference to a specific product in the response. For example, xlink:label="FEE\_RECORDING\_1\_NOTE\_1" is a reference to the first recording product requested, as shown below.







# 

# Appendices

## Appendix A – Data Tables

### Policy Category IDs

| ID | Name |
| --- | --- |
| 1 | Owner |
| 2 | Loan |
| 4 | Guarantee |
| 5 | Limited Coverage Junior Loan |
| 6 | Leasehold Owner |
| 7 | Leasehold Loan |
| 8 | Report |
| 9 | Limited Coverage Loan |

### Policy Coverage IDs

| ID | Name |
| --- | --- |
| 1 | Standard |
| 2 | Extended |
| 3 | Eagle |

### Action Types

| Name | Description |
| --- | --- |
| CityDetail | Used to request a list of all Cities in a given County OR all Cities in all Counties in a given Sate |
| CountyDetail | Used to request a list of Counties in a given State |
| ProductList | Used to request a list of available Products |
| RateCalc |  |
| RateCalcNoAutoCalc |  |