



Fannie Mae™

Fannie Mae Desktop Underwriter Specification Implementation Guide

Document Version 2.6

Version Date: September 28, 2022



Table of Contents

Chapter 1: Introduction	4
Introduction.....	4
Purpose	4
Scope.....	4
Before Starting.....	4
Chapter 2: Implementation Options - Overview	6
Understanding the MISMO v3.4 Reference Model Build 324	6
The MISMO v3.4 Reference Model	6
Navigating the MISMO v3.4 Reference Model.....	7
Contents of the MISMO v3.4 Logical Data Dictionary (LDD)	7
Understanding Fannie Mae's DU Spec	8
Navigating the Fannie Mae DU Spec	8
The DU Map Tab	9
Understanding Conditionality.....	11
Government Loans.....	12
FHA Loans.....	12
VA Loans.....	12
Credit Request	12
EarlyCheck	15
Chapter 3: Planning for Implementation.....	16
The Structure of the Loan Application Submission File.....	16
Creating an XML Schema based submission file	17
Chapter 4: Understanding the DU Spec from a Business Perspective	19
What Information is in the redesigned Form 1003 vs. the DU Specification?	19
Describing the Information contained in the DU Specification.....	19
XML Content Section	19
Form Header Section	19
Section 1: Borrower Information	20
Section 2: Financial Information – Assets and Liabilities	24
Section 3: Financial Information – Real Estate.....	25
Section 4: Loan and Property Information.....	26



Section 5: Declarations	26
Section 6: Acknowledgements and Agreements.....	26
Section 7: Military Service	27
Section 8: Demographic Information.....	27
Section 9: Loan Originator Information.....	28
Lender Loan Information	28
Chapter 5: URLA (Form 1003) Sections vs. MISMO Data Structures	31
Appendix A	58
Glossary of terms	58
Appendix B	59
Useful Links:	59



Fannie Mae Implementation Guide Revision History

Document Date	Version No.	Description
September 28, 2022	2.6	Updated document to reflect the recent DU Spec 1.8.3 publication. Removed the FAQs section to an independent document: <i>Frequently Asked Questions for the DU Spec</i>
June 29, 2021	2.5	Minor formatting changes throughout document. Updated Chapter 4: Section 1b FAQs: Updated 15, 20, 22, 24, 26, 30, 37, 38, 41, 42 and added 2 new. Updated Chapter 6: 1a, 2a, 3a, L1, L3, L4
December 18, 2019	2.4	Minor formatting changes throughout document. Updated Chapter 2: Credit Request paragraph. Updated Chapter 4: Section names corrected to match redesigned URLA. FAQs: Updated 5, 7, 8, 9, 11, 14, 15, 22, 23, 28, 30, 31, 32, and added 11 new. Updated Chapter 6: Updated all diagrams for legend change and content.
May 15, 2019	2.3	Updated Chapter 6: Form Header, 1a, L4 FAQs: Updated 8, 10, 13, 21, 23, 25 and added 11 new.
February 26, 2019	2.2	FAQs: Updated 13, 21, 23, 25 New 14, 15, 22, 26, 27, 28 Updated Section 5: Declarations Updated Chapter 6: 1b, 1d, 3a, 4c, 5ab, 7, L1, L4
January 17, 2019	2.1	Updates related to the new Fannie Wrapper and associated links; Updates to FAQs; and a few minor typos corrected
October 2, 2018	2.0	Update of all sections
August 29, 2017	1.0	Initial publication



Chapter 1: Introduction

This chapter includes the following topics:

- Introduction
- Purpose of document
- Document organization
- Before You Start

Introduction

Fannie Mae and Freddie Mac (the GSEs), in an effort to promote further alignment in the mortgage industry, have developed the Uniform Loan Application Dataset (ULAD), a common dataset, in support of the redesigned Uniform Residential Loan Application (URLA). The ULAD Mapping Document maps each redesigned Form 1003 field to a corresponding Mortgage Industry Standards Maintenance Organization (MISMO®) v3.4 data point. MISMO, a subsidiary of the Mortgage Bankers Association (MBA), has developed a data standard for the exchange of mortgage related data aimed at reducing costs and increasing transparency. Leveraging the MISMO standard, Fannie Mae has developed and published the updated data requirements specification for Desktop Underwriter® (DU®), referred to as the DU Specification (DU Spec), which includes the ULAD and additional information to support data collection for Conventional, FHA, and VA loans.

Purpose

The DU Spec is intended to serve as the requirements for business and technical organizations to create the new DU Loan Application Submission files based on the MISMO v3.4 Reference Model. The DU Spec provides an overview of the data architecture, including reference information about the allowable structures, sequence, values, conditionality, and format of the DU Loan Application Submission files. This document, the Desktop Underwriter Specification Implementation Guide, provides additional supporting information for business and technical organizations as they implement the new DU Spec.

Scope

The following is a summary of the document chapters and purpose:

- Chapter 2 - provides an overview of the MISMO v3.4 Reference Model, the associated schemas, and the corresponding MISMO Logical Data Dictionary (LDD). This chapter also provides an outline of the DU Spec, with important information about the data mapping, conditionality, conditionality statements, cardinality, and implementation notes.
- Chapter 3 - provides helpful information to support the planning and implementation of the data requirements outlined in the DU Spec. In addition, this chapter also includes sample steps to create an XML schema-based Loan Application Submission file.
- Chapter 4 - provides information to help clarify the different purposes of the ULAD Mapping Document and the DU Spec (from a business point of view).
- Chapter 5 - includes a set of diagrams that show the MISMO v3.4 data structures that support each section of the redesigned Form 1003.
- Appendix A - contains a Glossary.
- Appendix B – includes useful links to MISMO and DU Spec related materials

Before Starting

This section aims to provide a basic understanding of how to read the DU Spec and experienced developers may want to skip to the next chapter. To upgrade your business solution to work with MISMO v3.4, you will need to understand the MISMO Reference Model and its supporting artifacts. Refer to the section [*Understanding the MISMO v3.4 Reference Model Build 324*](#) for more information.



Comparing the redesigned Form 1003 to the MISMO Data Model

In certain scenarios it may be helpful to create a side-by-side comparison of the redesigned Form 1003 and the corresponding MISMO model diagrams as depicted in Chapter 5. This side-by-side view will help you understand the hierarchical manner of the data relationships in MISMO to the fields in the redesigned Form 1003 sections.

- Specific business sections on the form will map to specific data structures in the model (i.e., Assets, Liabilities, Acknowledgements, Lender Information, etc.)
- Consult these diagrams that describe the business functions based on the DU Spec requirements for underwriting a loan (Chapter 5) to understand the data hierarchy involved per business function.

Identify Data Issues

- 1) After constructing the Loan Application Submission file, make sure to validate the file:
 - a. Most XML editors will allow the user to save a file even if it does not pass validation. It is a best practice to validate the Loan Application Submission file prior to submission to Fannie Mae.
 - b. The validation should be against the associated schemas: the MISMO v3.4 Build 324 Schema (Schema) and the DU Wrapper Schema that Fannie Mae will provide. Please refer to <https://singlefamily.fanniemae.com/media/document/xlsx/du-specification-mismo-v-34> and <https://singlefamily.fanniemae.com/media/document/zip/fannie-mae-du-schemas> respectively.
 - c. XML errors should be resolved prior to submitting the Loan Application Submission file to DU.
- 2) Helpful hints to resolve issues or errors in the creation of the Loan Application Submission file:
 - a. When trying to find and compare data, the DU Spec follows the order of the redesigned Form 1003 layout; whereas the Loan Application Submission file follows the MISMO v3.4 Build 324 Schema hierarchy which is mostly in alphabetical order. The DU Spec can be reorganized to match the schema hierarchy by sorting on the MISMO v3.4 XPATH column for alphabetical order.
 - b. The Containers in a Parent Container may not always be in alphabetical order. For example, the MISMO Containers under PARTY are not aligned in alphabetical order; however, it should be taken into consideration when building the Loan Application Submission file and validating it against the schema. The validation may generate an error if you are strictly following the alphabetical order. Refer to example 1 below where we demonstrate the Elements (Containers) are not in alphabetical order as in the XML:

```
<PARTIES>
<!--Borrower Personal Information-->
  <PARTY>
    <INDIVIDUAL>
      <ALIASES>
        <ALIAS>
          <NAME>
            <FirstName>SUE</FirstName>
            <LastName>SUMMER</LastName>
            <MiddleName>VICTORIA</MiddleName>
          </NAME>
        </ALIAS>
        <ALIAS>
```

Not In Alphabetic Order

Elements

- TAXPAYER_IDENTIFIERS
- REFERENCE
- EXTENSION
- ADDRESSES
- INDIVIDUAL
- LANGUAGES
- LEGAL_ENTITY
- ROLES

Example 1 Order of Containers in MISMO Schema



Chapter 2: Implementation Options - Overview

This chapter includes the following topics:

- Understanding the MISMO v3.4 Reference Model Build 324
- Understanding Fannie Mae's DU Spec
- Government Loans
- Credit Request
- EarlyCheck™

Understanding the MISMO v3.4 Reference Model Build 324

The DU Spec is based on the MISMO v3.4 Reference Model Build 324. In order to create a Loan Application Submission file that works with MISMO v3.4 we recommended you have a full understanding of the MISMO v3.4 Reference Model and its supporting artifacts. Getting familiar with MISMO key terms will help in navigating through MISMO v3.4 and its supporting documents. Refer to the *Glossary* section of this document for more information on key MISMO terms.

The MISMO v3.4 Reference Model

The MISMO v3.4 Reference Model is a framework representing data and the collection of data grouped under a consistent concept. The model includes over 10,000 data points and enumerations with definitions and allowable values. The schema is a representation of this data and relationships and must be used when implementing the Loan Application Submission file.

MISMO v3.4 Reference Model is organized in a hierarchical structure with containers and data points that originate from a single ancestor, the MESSAGE container. The following (Figure. 1) is a sample representation of the schema and the hierarchical relationships between containers.

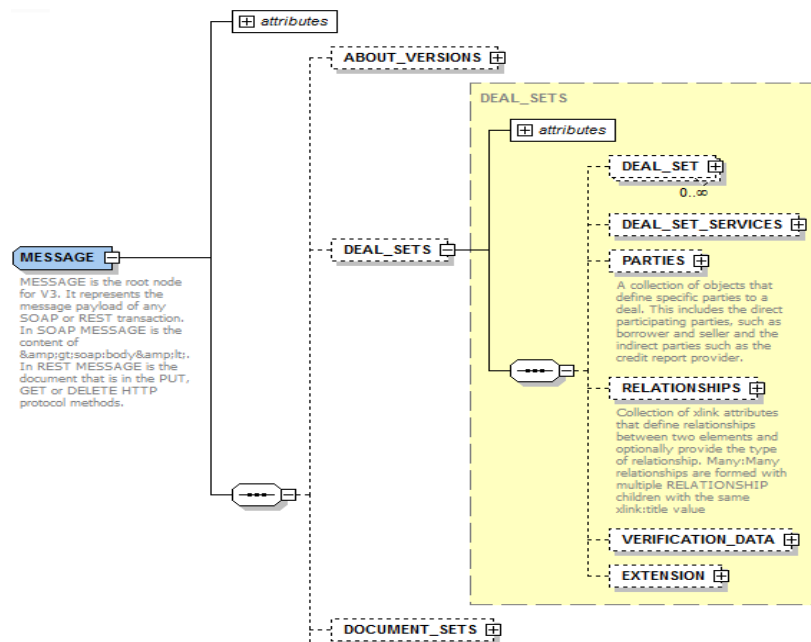


Figure. 1 Hierarchical relation of containers in Deal Sets structure

The MISMO v3.4 Reference Model includes several supporting documents for the data model and are available on the MISMO.org website.



Navigating the MISMO v3.4 Reference Model

The use of an XML editor, which offers a graphical user interface (GUI) for visualizing XML documents, may be used to display the hierarchical order of the model starting at the root container and following downward by expanding with child containers. See Figure. 2.

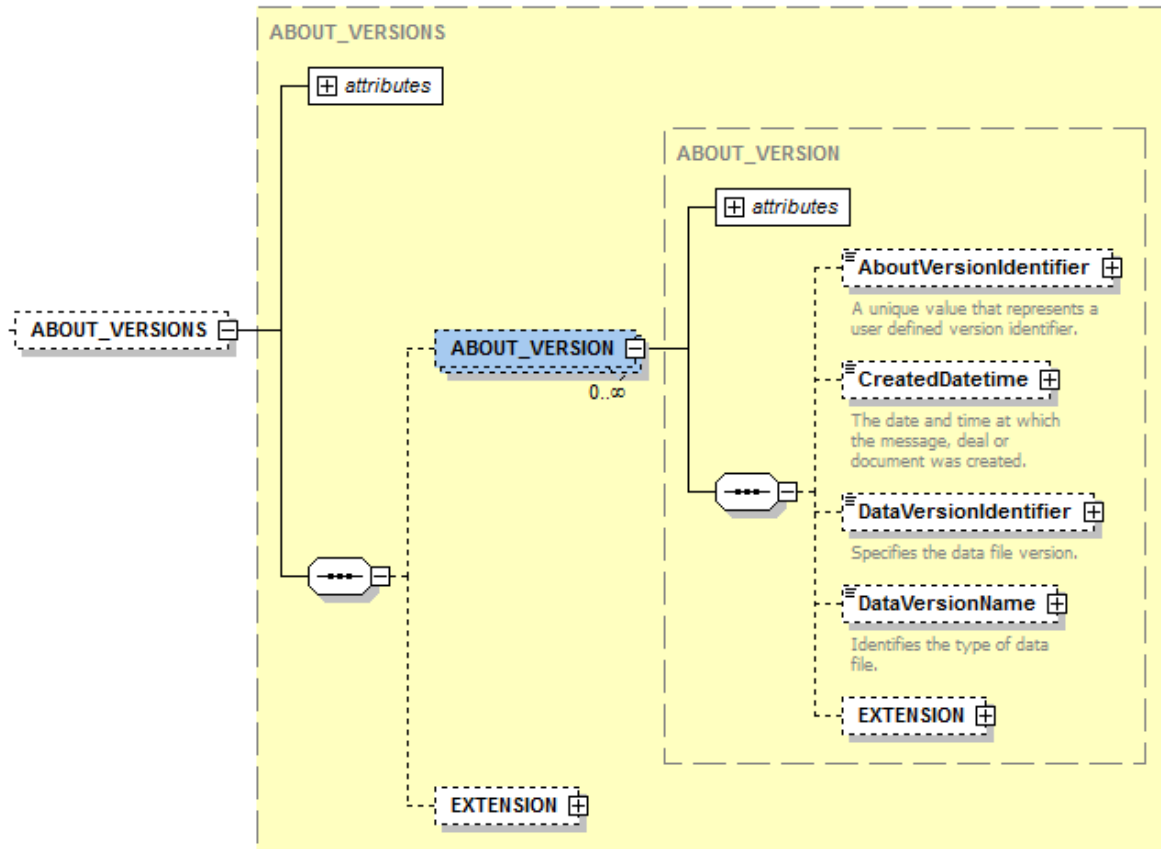


Figure. 2 Example of a Complex Type container and a Single Type container

Contents of the MISMO v3.4 Logical Data Dictionary (LDD)

The LDD is a Microsoft Office Excel® workbook containing information about all the data components of the MISMO v3.4 Reference Model. The file includes a set of different tabs organized in alphabetical order, as follows:

- LDD Report_V3.4.0.0_B324 provides an inventory of the version 3.4 model content, including:
 - Data point names and definitions
 - Containers in which the data points reside
 - Attributes
 - ArcRoles
 - Enumerations

Extensions

As defined in the MISMO MEG 25 publication: *The EXTENSION container provides maximum flexibility to a given version of a MISMO message by establishing a structured framework for adding data. Organizations can take advantage of XML Namespaces to place required data points not yet defined in the MISMO standard OR proprietary data points that shall never be included in the MISMO standard into a message for exchange with business partners. The definition of the EXTENSION container makes it possible to add additional content yet still validate against the MISMO standardized schema.*



The DU Spec includes the following Parent Containers within EXTENSION containers:

- DU:BORROWER_FEATURE
- DU:CONSTRUCTION_EXTENSION
- DU:EMPLOYMENT_EXTENSION
- DU:LOAN_DETAIL_EXTENSION
- DU:PROPERTY_VALUATION_DETAIL_EXTENSION
- DU:UNDERWRITING_VERIFICATION
- ULAD:ASSET_DETAIL_EXTENSION
- ULAD:DECLARATION_DETAIL_EXTENSION
- ULAD:GOVERNMENT_MONITORING_DETAIL_EXTENSION
- ULAD:HMDA_ETHNICITY
- ULAD:HMDA_RACE_DESIGNATION_EXTENSION
- ULAD:LANGUAGE_EXTENSION
- ULAD:URLA_TOTAL_EXTENSION
- ULAD:QUALIFICATION_EXTENSION

Data points within Extension containers have to be in alphabetical order

The loan application submission is based on the MISMO Reference Data Model, and DU expects that data points and attributes in this file are in alphabetical order. This means that the XML Submission file must comply with alphabetical order for data points within extension containers as well. For example, *ULAD:LanguageCodeOtherDescription* and *ULAD:LanguageRefusalIndicator* must be placed in alphabetical order to avoid schema errors.

```
<LANGUAGES>
  <LANGUAGE>
    <LanguageCode>xxx</LanguageCode>
    <EXTENSION>
      <OTHER>
        <ULAD:LANGUAGE_EXTENSION>
          <ULAD:LanguageCodeOtherDescription>French</ULAD:LanguageCodeOtherDescription>
          <ULAD:LanguageRefusalIndicator>>false</ULAD:LanguageRefusalIndicator>
        </ULAD:LANGUAGE_EXTENSION>
      </OTHER>
    </EXTENSION>
  </LANGUAGE>
</LANGUAGES>
```

Understanding Fannie Mae's DU Spec

The implementation of the DU Spec to create a Loan Application Submission file for DU requires familiarity with the MISMO v3.4 XML Schema and its corresponding LDD. The DU Spec is based on the structures and definitions in the schema as well as the LDD documents and provides specific information on how to create the XML file for DU.

Navigating the Fannie Mae DU Spec

The DU Spec is organized in named tabs in a Microsoft Office Excel workbook. The following is a list of the tabs and a brief description, where necessary, in the DU spec:

- Front Cover
- Revision History
- Read Me
- Tab Description



- Column Description
- DU Map Update – Highlights changes since the previous published version.
- DU Map – contains Data Points with Definitions, Parent Containers, XPATHs, Enumerations, Attributes, etc. Note: All Data Points have a Unique Identifier that will help the reader with mapping the spec to the redesigned Form 1003, when necessary.
- DU Enumerations – Includes the allowable values that are supported by DU and the enumeration definition provided by MISMO. Note: All DU Spec enumerations are linked to the Map tab through the Unique Identifier. When an enumeration does not exist in the MISMO 3.4 reference model, and the enumeration “Other” is a valid enumeration Fannie Mae will allow the use of free-form text data. The lender should include the free-form text in the TypeOtherDescription data points.
- Cardinality – Defines the minimum and maximum number of times that containers can repeat in DU.
- ArcRoles – List of supported Xlinks (ArcRoles) required by DU to relate data (e.g., liability to an asset) or associate information that appears multiple times (i.e. relate the income types of a borrower who has multiple current employments).
- DU Removals – List of current DU data points and EDI codes that will no longer be supported in the DU Spec.

The DU Map Tab

The DU Map Tab is the core of the DU Spec. The columns are grouped under section headings to make it easier for lenders and technology solution providers to understand the data mapping. Refer to Figure 3 which illustrates the sections and columns. The following sections describe how each group of columns can be used to help you understand the DU Spec. The last columns and how it maps to the redesigned Form 1003 and previous DU specifications.

DU Map

Section Header Rows

Sub-section Header Rows

Attribute Rows

Cell or Row Updates

Identification Reference

Unique ID

Sort ID

Form Field ID

Form Field Name

MISMO v3.4 Information

MISMO v3.4 XPath

MISMO v3.4 Parent Container

MISMO v3.4 Data Point Name

MISMO v3.4 Data Point Definition

DU Supported Enumerations

DU Data Point Format

1

XML Content

0.0001

12

8.01

Lender Loan No./Universal Loan Identifier

MESSAGE/DEAL_SETS/DEAL_SET/DEALS/DEAL/LOANS/LOAN/LOAN_IDENTIFIER/LOAN_IDENTIFIER

LOAN_IDENTIFIER

LoanIdentifierType

The type of identifier used for a loan.

LenderLoan

Enumerated

Legacy Reference

MISMO v3.4 Attribute Information

MISMO v3.4 Attribute Name

MISMO v3.4 Attribute Definition

MISMO v3.4 DU Attribute Enumeration Usage

MISMO v3.4 DU Attribute Description

Conditionality information

Desktop Underwriter (OU)

FHA (G)

VA (G)

Credit Request (CR)

Early Check (EC)

Conditionality Statements for DU, CR, and EC

Conditionality Statements for FHA and VA (G)

Implementation information

Implementation Notes for DU, CR, and EC

Implementation Notes for FHA and VA (G)

Loan Role Type

Revisions

DU Element ID

DU Element Name

MISMO 2.3.1 Mapping

O

O

O

O

R

Updated v1.2

Updated v1.3

Updated v1.7

EH-040

Date

<_DATA_INFORMATION
DATA_VERSION

Also accepts offset from Universal time (UTC) +hh:mm or -hh:mm

Also accepts offset from Universal time (UTC) +hh:mm or -hh:mm

Figure. 3 List of Columns in the DU Map tab

Identification Reference Columns

These four columns correlate the MISMO data points to the corresponding redesigned Form 1003 fields and the form fields of the Supplemental Consumer Information Form and ease the navigation and sorting on the DU Map tab.

- The original order of the DU Spec is in the order of the fields in the redesigned Form 1003 “URLA Borrower Information Numbered Form” and “URLA Lender Loan Information Numbered Form.”



- The Unique ID field is a unique numeric reference number for each data point in the DU Spec. If there is a specific question regarding a data point, be sure to provide the Unique ID in your communication to Fannie Mae.
- The Sort ID column provides the ability to reorganize the data based on the original DU Spec order.
- The Form Field ID is a numeric value assigned to each field in the redesigned Form 1003. The Form Field Name is the corresponding field name for the Form Field ID.
- The Form Field Name contains the name of the field as shown on the redesigned Form 1003 documents for each Form Field ID.
- The Form Field IDs can be found in the “1003 - Borrower Information Numbered Form” and “1003 - Lender Loan Information Numbered Form.” These components of the redesigned Form 1003 and all the other components and versions of redesigned forms and supporting documents can be found on the Fannie Mae URLA webpage at:

<https://www.fanniemae.com/singlefamily/uniform-residential-loan-application>

MISMO v3.4 Information Columns

The following is a set of six columns (in Figure. 3) used to identify the MISMO v3.4 data points within the DU Spec:

- Data Point XPATH
- Parent Container
- Data Point Name
- Data Point Definition
- Valid Enumerations accepted by DU
- Data Format

MISMO v3.4 Attribute Information Columns

The Attribute columns provide additional information about the behavior of the MISMO containers (i.e. repeating containers for multiple instances, etc.) and are not considered part of the data point mappings.

The basic building blocks of the XML schema are data points and attributes. An attribute is used to add a unique label to a container or data point and its values must be in quotation marks. The DU Spec contains a list of attributes that is a subset of all available attributes in MISMO. For more information, refer to the attribute columns (MISMO v3.4 Attribute Name, MISMO v3.4 Attribute Definition, and MISMO v3.4 Attribute Usage Description) under the ULAD Mapping document or the DU Spec.

Conditionality Information Columns

These columns contain the conditionality for the following types of Loan Application Submission files for DU:

- DU (Conventional)
- FHA (Government)
- VA (Government)
- Credit
- EarlyCheck

Note: The conditionality for each of the data points has been listed in separate columns for clarity and ease of use for the different products.

The conditionality statements are considered “pseudo code” and should not be used for production code. The conditionality statements illustrate the expected behavior of conditional data points.



Implementation Information Columns

These columns contain information, in addition to the conditionality for each data point, about the usage and expected behavior for the data points and are grouped in two categories: (1) DU, Credit Request, and EarlyCheck; (2) FHA, VA.

Loan Role Type

This column provides a reference to whether a data point is associated to the Subject Loan or the Related Loan.

Residential Loan Application Data Format Columns (RLD 1003 3.2 Table Reference)

The DU Spec includes four columns to help identify the existing DU Element (ID # and Name) that corresponds to the new DU Map MISMO v3.4 data point. These columns include:

- DU Element ID
- DU Element Name
- MISMO 2.3.1 Mapping

The DU Spec contains additional data points not represented on the redesigned Form 1003. To identify the data points not on the form, click on the column “Form Field Name” and filter by ‘Not on Form.’

Understanding Conditionality

Conditionality defines the behavior associated with a data point and will vary according to the underwriting requirements for different loan products. There are three types of conditionality in the DU Spec:

- Required (R) - The associated data point must always be included in the Loan Application Submission file.
- Conditional (C) - The associated data point must be included in the Loan Application Submission file when a defined business condition exists as articulated in the Conditionality Statement.
- Optional (O) - The associated data point may be included in the Loan Application Submission file if the data is collected by the business and/or technical organization.

The conditionality has been determined by following business criteria established by Fannie Mae Credit Policy. The following key questions were considered when building the conditionality formulae:

- Does this data point a key component of the dataset that will always be part of the transaction no matter how the transaction varies?
- What is the business condition or transaction characteristics that determines whether the data point is required?
- Is the data point unique within the transaction, or is it one of a possible group or series, that would lead to the need to provide more than one instance?
- Is this in line with Fannie Mae Credit Policy business rules?

The following are conditionality examples in the DU Spec:

- ***Required*** data point: *MortgageType*
 - *MortgageType* = “Conventional” OR “FHA” OR “VA” OR “USDARuralDevelopment” and is required in each transmission
 - Required data points will not have a conditionality statement as they are always needed
- ***Conditionally Required*** data point: *BorrowerResidencyBasisType*



- *BorrowerResidencyBasisType* = IF (*BorrowerResidencyType* = "Current" AND exists) OR (*BorrowerResidencyType* = "Prior" AND exists) is required when the borrower has provided a current or prior address information
- Conditionally required data points will always have a conditionality statement
- **Optional** data point: *PropertyAcquiredDate* is not needed for DU but may be provided if collected.
 - Optional data points do not have conditionality requirements.

Conditionality in attributes: The DU Spec only includes conditionality for two attributes: 1) The *MISMOReferenceModelIdentifier* -describes the MISMO version; and 2) the *LoanRoleType* -includes two enumerations and needs to be indicated to denote the type of association the loan plays in the transaction (e.g., *RelatedLoan*). Both attributes are required, while the rest of the attributes in the DU Spec have a conditionality indicated as not applicable (N/A).

Government Loans

FHA loans and VA loans supported by DU have different data needs than do Conventional loans; and consequently, they have different conditions and conditionality statements.

FHA Loans

The FHA Loan conditionality and the corresponding conditionality statements in the DU Spec were reviewed by FHA and correspond to the 2019 version of the FHA Total Scorecard Underwriting requirements. Lenders and technology solution providers (TSPs) should use the information in the FHA column for data point usage.

VA Loans

The VA Loan conditionality and the corresponding conditionality statements in the DU Spec are used by the VA. The DU Spec contains a number of data points used by the VA that are not included in the redesigned Form 1003. Lenders and TSPs should use the information on all the VA fields (including those not present in the redesigned Form 1003) in the VA column for the data points used for VA loans.

Credit Request

There are no changes to the single borrower credit request; however, for a joint credit report the Loan Application Submission file must contain the following ArcRole "SharesJointCreditReportWith". For further information on the ArcRole, please consult the DU Spec – ArcRoles tab. Credit request data points are identified within the DU Map Tab in the Credit Request column of the Conditionality Information columns.

To determine what financial information is shared, DU uses a granular approach by inspecting the RELATIONSHIP container in your Loan Application Submission file to understand which borrowers are associated to each asset, liability and expense.

Whether borrowers request joint credit or not, each asset/liability/expense should be associated with each applicable borrower using ArcRoles. DU requires each asset/liability/expense be associated with at least ONE borrower:

ASSET_IsAssociatedWith_ROLE
LIABILITY_IsAssociatedWith_ROLE
EXPENSE_IsAssociatedWith_ROLE

An example of RELATIONSHIPS structure in the XML



```

<RELATIONSHIPS xsi:type="RELATIONSHIPS">
  <!-- Linking Borrower to Assets-->
  <RELATIONSHIP SequenceNumber="1" xlink:from="ASSET_1" xlink:to="BORROWER_1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/ASSET_IsAssociatedWith_ROLE"/>
  <RELATIONSHIP SequenceNumber="2" xlink:from="ASSET_2" xlink:to="BORROWER_1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/ASSET_IsAssociatedWith_ROLE"/>
  <RELATIONSHIP SequenceNumber="8" xlink:from="ASSET_3" xlink:to="BORROWER_1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/ASSET_IsAssociatedWith_ROLE"/>
  <RELATIONSHIP SequenceNumber="4" xlink:from="ASSET_4" xlink:to="BORROWER_1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/ASSET_IsAssociatedWith_ROLE"/>
  <!-- Linking Assets to corresponding Borrower's Liability-->
  <RELATIONSHIP SequenceNumber="9" xlink:from="ASSET_8" xlink:to="LIABILITY_1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/ASSET_IsAssociatedWith_LIABILITY"/>
  <!-- Linking Borrower to Expenses-->
  <RELATIONSHIP SequenceNumber="18" xlink:from="EXPENSE_1" xlink:to="BORROWER_2" xlink:arcrole="urn:fdc:mismo.org:2009:residential/EXPENSE_IsAssociatedWith_ROLE"/>
  <!-- Linking Borrower to Liabilities-->
  <RELATIONSHIP SequenceNumber="13" xlink:from="LIABILITY_1" xlink:to="BORROWER_1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/LIABILITY_IsAssociatedWith_ROLE"/>
  <RELATIONSHIP SequenceNumber="14" xlink:from="LIABILITY_2" xlink:to="BORROWER_1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/LIABILITY_IsAssociatedWith_ROLE"/>
  <RELATIONSHIP SequenceNumber="15" xlink:from="LIABILITY_3" xlink:to="BORROWER_1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/LIABILITY_IsAssociatedWith_ROLE"/>
  <!-- Linking Borrower to Borrower for Joint Asset/Liability/Credit Report-->
  <RELATIONSHIP SequenceNumber="32" xlink:from="BORROWER_2" xlink:to="BORROWER_1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/ROLE_SharesJointCreditReportWith_ROLE"/>

```

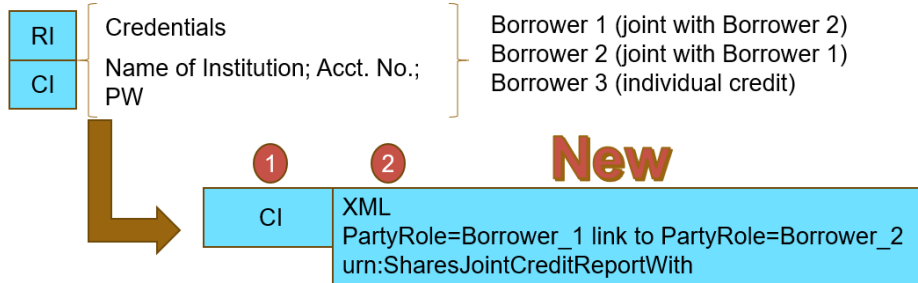
How to request a joint or individual credit report

In the DU Spec a new ArcRole was added to identify borrower pairs who share a joint credit report. This means that the Loan Application Submission file must include the correct labels to instruct DU which borrower pairs share joint credit (see sample below) in addition to which borrower(s) are associated to each asset, liability and expense. When borrowers do not share joint credit or only one borrower applies for the loan, the new ArcRole “SharesJointCreditReportWith” is not needed. Moreover, a borrower can only have one ArcRole stating with whom they share joint credit.

The following provides a visual representation and the expected ArcRole usage in the Loan Application Submission file and the related XIS Control Input (CI). To avoid errors, it is important that the XIS CREDIT_INFORMATION element, which is part of the CI, and the new ArcRole “SharesJointCreditReportWith” are consistent.

Scenario: Three Borrowers, two that have joint credit and one that has individual credit information apply for a loan and submit to DU.

Request a Joint Credit Report for Specific Borrowers



ROLE to ROLE	MESSAGE/DEAL_SETS/DEAL_SET/DEALS/DEAL/RELATIONSHIPS/RELATIONSHIP	Sequence Number	arcrole="urn:fdc:mismo.org:2009:residential/ROLE_SharesJointCreditReportWith_ROLE"	ROLE_SharesJointCreditReportWith_ROLE	Relate two borrowers who are included in a joint credit report.
			from	ROLE	Note: For a Joint Credit Report, place the Primary Borrower under "to" and additional Borrower under "from"
			to	ROLE	

The three borrowers with unique xlink:label values:



Steps to Request Joint Credit Report within the loan application

(1)

```
<PARTIES>
  <PARTY SequenceNumber="1">
    <INDIVIDUAL><NAME><FullName>John P Homeowner</FullName></NAME></INDIVIDUAL>
    <ROLES>
      <ROLE xlink:label="Borrower_1"/>
      <ROLE_DETAIL><PartyRoleType>Borrower</PartyRoleType></ROLE_DETAIL>
    </ROLES>
  </PARTY>

  <PARTY SequenceNumber="2">
    <INDIVIDUAL><NAME><FullName>Mary O Homeowner</FullName></NAME></INDIVIDUAL>
    <ROLES>
      <ROLE xlink:label="Borrower_2"/>
      <ROLE_DETAIL><PartyRoleType>Borrower</PartyRoleType></ROLE_DETAIL>
    </ROLES>
  </PARTY>

  <PARTY SequenceNumber="3">
    <INDIVIDUAL><NAME><FullName>Homer Loanseeker</FullName></NAME></INDIVIDUAL>
    <ROLES>
      <ROLE xlink:label="Borrower_3"/>
      <ROLE_DETAIL><PartyRoleType>Borrower</PartyRoleType></ROLE_DETAIL>
    </ROLES>
  </PARTY>
```

A snapshot of the RELATIONSHIPS for the sample loan.

Borrowers 1 and 2 share a joint credit report and the relationship is listed below.

Borrower 3 has individual credit - no ArcRole required for credit.

Steps to Request Joint Credit Report

(2)

```
<RELATIONSHIPS xsi:type="RELATIONSHIPS">
  <!-- Linking Borrower to Assets-->
  <RELATIONSHIP SequenceNumber="1" xlink:from="ASSET_1" xlink:to="BORROWER_1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/ASSET_IsAssociatedWith_ROLE"/>
  <RELATIONSHIP SequenceNumber="2" xlink:from="ASSET_1" xlink:to="BORROWER_2" xlink:arcrole="urn:fdc:mismo.org:2009:residential/ASSET_IsAssociatedWith_ROLE"/>
  <RELATIONSHIP SequenceNumber="3" xlink:from="ASSET_2" xlink:to="BORROWER_1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/ASSET_IsAssociatedWith_ROLE"/>
  <RELATIONSHIP SequenceNumber="4" xlink:from="ASSET_3" xlink:to="BORROWER_2" xlink:arcrole="urn:fdc:mismo.org:2009:residential/ASSET_IsAssociatedWith_ROLE"/>
  <!-- Linking Borrower to Liabilities-->
  <RELATIONSHIP SequenceNumber="5" xlink:from="LIABILITY_1" xlink:to="BORROWER_1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/LIABILITY_IsAssociatedWith_ROLE"/>
  <RELATIONSHIP SequenceNumber="6" xlink:from="LIABILITY_1" xlink:to="BORROWER_2" xlink:arcrole="urn:fdc:mismo.org:2009:residential/LIABILITY_IsAssociatedWith_ROLE"/>
  <RELATIONSHIP SequenceNumber="7" xlink:from="LIABILITY_2" xlink:to="BORROWER_3" xlink:arcrole="urn:fdc:mismo.org:2009:residential/LIABILITY_IsAssociatedWith_ROLE"/>
  <RELATIONSHIP SequenceNumber="8" xlink:from="LIABILITY_2" xlink:to="BORROWER_1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/LIABILITY_IsAssociatedWith_ROLE"/>
  <!-- Linking Borrower to Borrower for Joint Asset/Liability/Credit Report-->
  <RELATIONSHIP SequenceNumber="9" xlink:from="BORROWER_2" xlink:to="BORROWER_1" xlink:arcrole="urn:fdc:mismo.org:2009:residential/ROLE_SharesJointCreditReportWith_ROLE"/>
</RELATIONSHIPS>
```

XIS Control Input (CI)

```
<DU_UNDERWRITE_REQUEST>
  <CREDIT CopyLiabilitiesIndicator="0">
  <SERVICE_PROVIDER _Name="200" _AccountNumber="123456" _Password="fnma"/>
  <CREDIT_INFORMATION SSN="999601111" CreditRequestType="0" />
  <CREDIT_INFORMATION SSN="999405000" CreditRequestType="1" />
</CREDIT>
  <FANNIEMAE_UNDERWRITING_ENGINE _Name="DU"/>
  <_RETURN_FILE _FileType="2"/>
  <_RETURN_FILE _FileType="3"/>
  <_RETURN_FILE _FileType="5"/>
  <_RETURN_FILE _FileType="8"/>
  <SOFTWARE_PROVIDER _AccountNumber="XYZXYZ01X"/>
  <DATA_FILE _Type="1003 MISMO" _VersionNumber="3.4" _Name="LOAN_APPLICATION"/>
</DU_UNDERWRITE_REQUEST>
```



EarlyCheck

The current process for EarlyCheck will remain the same; however, there are changes in conditionality for existing data points and new data points. The conditionality for EarlyCheck is included in the DU Spec. These data points are identified in the DU Map tab in the EarlyCheck column of the Conditionality Information columns.



Chapter 3: Planning for Implementation

The Structure of the Loan Application Submission File

The XML is a file with a well-defined structure which provides flexibility to represent complicated data structures. There are several advantages of using XML over a fixed length file format. Here are a few important ones:

1. *Organization.* An XML file can have nested objects with data organized by groups in hierarchical order. XML files have tag values that can be easily configured by searching through the tags and changing the value making the data easier to retrieve and update with an XML structure than in the case of a fixed length file format.
2. *Attributes.* It is possible to assign attributes to a given XML element beyond the data value of that container. In the DU Spec, there are attributes to provide more information about the data order, the role of an associated loan, and the version of the MISMO reference model. An example of the use of attributes for data order is to add a sequence number attribute to identify the different employers that a borrower may have when the borrower reports multiple current jobs.

A SequenceNumber is not a required attribute but is a best practice when paired with the xlink:label attribute. The SequenceNumber attribute can provide an order for multi-instance containers and is a mechanism to distinguish them from one another. For example, the borrower may report ownership of multiple assets and the following XML illustrates the usage of SequenceNumber to identify each individual ASSET container:

```
<ASSET SequenceNumber="7" xlink:label="ASSET_7">
  <ASSET_DETAIL>
    <AssetCashOrMarketValueAmount>2300.00</AssetCashOrMarketValueAmount>
    <AssetType>ProceedsFromSaleOfNonRealEstateAsset</AssetType>
  </ASSET_DETAIL>
</ASSET>
<ASSET SequenceNumber="8" xlink:label="ASSET_8">
  <OWNED_PROPERTY>
    <OWNED_PROPERTY_DETAIL>
      <OwnedPropertyDispositionStatusType>Retain</OwnedPropertyDispositionStatusType>
      <OwnedPropertyMaintenanceExpenseAmount>225.00</OwnedPropertyMaintenanceExpenseAmount>
      <OwnedPropertySubjectIndicator>true</OwnedPropertySubjectIndicator>
    </OWNED_PROPERTY_DETAIL>
    <PROPERTY>
      <ADDRESS>
        <AddressLineText>1234 Country Rd</AddressLineText>
        <CityName>Wooster</CityName>
        <PostalCode>44691-1234</PostalCode>
        <StateCode>OH</StateCode>
      </ADDRESS>
      <PROPERTY_DETAIL>
        <PropertyEstimatedValueAmount>250000.00</PropertyEstimatedValueAmount>
      </PROPERTY_DETAIL>
    </PROPERTY>
  </OWNED_PROPERTY>
</ASSET>
```

Example 2 Attributes and when Sequence number usage

3. *Context.* The data contained within a fixed length file format is meaningless if the position, field length and data explanation are not known. This is not the case with an XML file. The hierarchical nature of an XML file provides a greater degree of context to the information. An example of this



is a street is part of an address, which is part of an owned property record which is also a part of a borrower's asset record. This structure in XML shows how a header is not needed and the relationship of the street address to the asset. Refer to Example 3 to visualize the concept in an XML code:

```
<ASSET>
  <OWNED_PROPERTY>
    <PROPERTY>
      <ADDRESS>
        <AddressLineText>123 Main St.</AddressLineText>
        <CityName>Metropolis</CityName>
      </ADDRESS>
    </PROPERTY>
  </OWNED_PROPERTY>
</ASSET>
```

Example 3 XML code example to illustrate absence of a header

Creating an XML Schema based submission file

The MISMO_3.4.0_B324.xsd file is the schema for the DU Spec. Depending on the XML editor tool, the XML file should be placed in the same folder where the MISMO schema file is saved.

An XML editor will first need to identify a root element to create the XML file. MESSAGE should be chosen at the root as this denotes the parent container and common ancestor to all containers within the XML file for the DU Spec. Refer to Figure 4 for creating a root element.

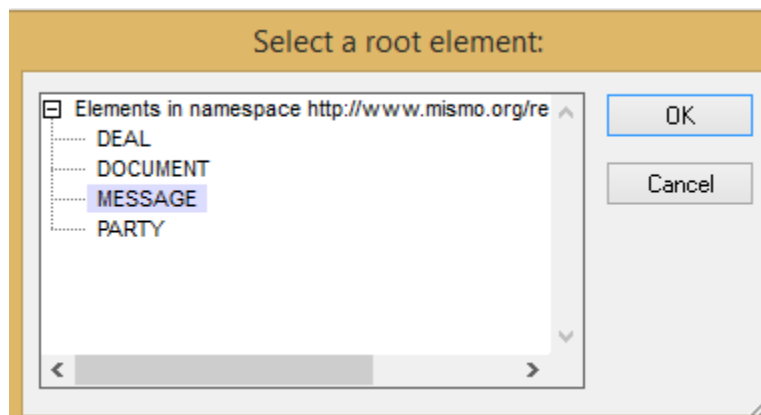


Figure. 4 Establishing a Root element - Dialog Box in Altova XMLSpy®

After indicating the root element, the editor should render an XML page where the Loan Application Submission file can be constructed step by step by adding the data points from the DU Spec. For more information on creating XML schema-based files, please refer to the W3 XML Tutorial on the <http://www.w3schools.com> website.

Schema Validation

When a DU customer submits a Loan Application Submission file to DU, an XML interrogation process performs a series of steps to ensure the file is both well-formed and valid with respect to the MISMO schema, the ULAD extension schema and the DU extension schema. The validation is used to determine compliance against MISMO specifications set forth in the MISMO Engineering Guidelines (MEGs), for example, containers must follow the hierarchical order established in the schema, containers must be in capital letters, etc. Please refer to the MISMO Engineering Guidelines for a complete list.



A validation process will take place on a Loan Application Submission file after DU has determined it to be both well-formed XML and schema compliant. The validation process will then determine if the file is compliant to the DU Specifications and business rules. For more details, see the [“DU Error Codes”](#) available on the Technology Integration page for DU.

What are the schema files that DU requires for a DU Spec loan file submission?

DU requires the MISMO v3.4 Schema and other schema files to support a DU Spec Loan Application Submission file. The MISMO v3.4 Schema is part of a set of files under the MISMO v3.4 Reference model. The other schema files are extensions to support the DU Spec. These extension files are the ULAD Schema Extension and the DU Schema V3_4 Extension. The ULAD Schema Extension and the DU Schema V3_4 Extension are both instantiated in the DU Wrapper 3.4.0_B324 Schema. The DU Wrapper Schema also validates that each Extension container is correctly placed in the Loan Application Submission file.

The aforementioned files are available for download and the following instructions illustrate the steps to gather these files, the DU Schema Extension and DU wrapper contain updates related to the DU v1.8.2 Spec:

- a) Download the MISMO v.3.4 Reference Model (Build 324) which includes the schema and supporting files from the Residential Specifications page in the MISMO site:

<https://www.mismo.org/standards-resources/mismo-product/mismo-version-3-4>

Download the Joint ULAD Schema Extension, the DU Schema Extension, and the DU Wrapper from the same zip file on the Fannie Mae Technology Integration site:

<https://singlefamily.fanniemae.com/media/document/zip/fannie-mae-du-schemas>

- b) Ensure that all these files are located in the same directory and accessible when you validate your Loan Application Submission file



Chapter 4: Understanding the DU Spec from a Business Perspective

This chapter includes the following topics:

- What information is in the redesigned Form 1003 vs. the DU spec?
- Describing the information contained in the DU Specification
- Implementing ArcRoles in the XML file

This section will provide business teams with a better understanding of the data needed for DU. For further information on how to complete the redesigned Form 1003, review the redesigned Form 1003 Instructions on the URLA Web Page.

What Information is in the redesigned Form 1003 vs. the DU Specification?

The redesigned Form 1003 has sections populated by the borrower and other sections populated by the lender. The DU Spec is sorted in the order of the sections of the redesigned Form 1003 and includes data that is not captured in the form. This additional data is used to support the underwriting of loans submitted to DU and DU for Government Loans (DUG). The data that is not on the form is identified in the DU Map tab with “Not on Form” in the form field name column. Keep in mind, not every data point on the redesigned Form 1003 is included in the DU Spec.

Describing the Information contained in the DU Specification

Refer to the DU Spec for specific information on each data point’s conditionality on the Technology Integration for DU web page at:

<https://www.fanniemae.com/singlefamily/technology-integration>

It is important to understand when and why information is needed and how conditionality is used with the data points.

XML Content Section

This section does not appear in the redesigned Form 1003 but will be included in the XML file. This data is used as a File Header (not to be confused with Form Header) and contains the MISMO v3.4 file transmission information for DU.

Form Header Section

This section is used to provide information about the loan application that could be used by DU and other downstream systems to identify the loan.

MISMO allows multiple identifiers to be associated with each loan. Agency Case Number, FHA Case Number, Universal Loan Identifier (ULI) Number, and the Lender Loan Number are all acceptable loan identifiers. If multiple identifiers exist for a loan, you will be required to indicate the type of identifier to distinguish the different values, for example:

- A loan submitted by a lender will include a *LoanIdentifierType* of “*LenderLoan*” or “*UniversalLoan*” and the corresponding identifier value.
- An FHA loan will require a *LoanIdentifierType* of “*AgencyCase*”.

In the form header section, DU expects to see a value for an *AutomatedUnderwritingCaseIdentifier* on resubmissions. This data point is not on the redesigned Form 1003.



Section 1: Borrower Information

This section is used to provide information on the applicant.

1a. Personal Information

In the redesigned Form 1003 each borrower will provide their name starting with First, Middle, Last and Suffix. For DU to pull a credit report, the First Name and Last Name must always be provided. Middle and Suffix are optional with Suffix being a new data point for DU. The redesigned Form 1003 will ask for the borrower's alternate name following the same order as indicated in the Name field. The data in the Loan Application Submission file will follow the schema which is in alphabetical order (First, Last, Middle, and Suffix). For more information on this subject, refer to Chapter 1, Identify Data Issues.

Each borrower must enter their Social Security Number or Individual Taxpayer Identification Number (ITIN), provide their date of birth, and indicate their legal status (U.S. Citizen, etc.).

Marital Status

Each borrower may indicate their marital status. For an unmarried borrower with a partner, lenders may present the Unmarried Addendum to the borrower.

Contact Information

Telephone information should not include letters or special characters. International phone numbers may be added without special characters (e.g., "+", etc.). This information is conditional for DU but optional for Government loans. The email address is optionally collected, if provided.

Borrower's Address

If a borrower has been at their current address for less than two years, the previous address information should be provided. Mailing address can be provided if it is different from the current address. A borrower will need to indicate if they own the property, pay rent or if they live rent free, indicating no primary housing expense (i.e., they do not pay rent to anyone). DU will collect this information.

1b. Current Employment/Self Employment and Income

Each borrower will indicate their current job(s) and income in this table. The employer's name, address, employee's position description and telephone are optional across all types of loan. The start date must be provided for all instances of current employment. The borrower's time in their line of business is only consumed by FHA and should be provided to DU in months, regardless of how the borrower indicates it in the redesigned Form 1003. Refer to the DU Spec and search for more information on employment data information and conditionality.

DU expects to receive the data point *EmploymentIncomeIndicator* as true in the loan application file to identify income from employment. This indicator is used to differentiate employment income from other-sourced non-employment income, for which the indicator is false.

The gross monthly income should be provided by an income type (i.e. base, bonus, etc.) and a corresponding value. Please refer to the DU Spec for a list of enumerations that DU will accept. In addition, DU will also accept foreign income and seasonal income. These should be provided in your submission file as indicators with the corresponding value even though the URLA form does not specify foreign or seasonal income. The foreign income and seasonal income indicators are in an EXTENSION container under the employment structure; hence the indicator applies to the employer level not to each income type. Please refer to the DU Spec for data point notation and to the Frequently Asked Questions for the ULAD for examples.



The foreign and seasonal indicators are specified at the employment level. Hence, the information is not specific to an income type (i.e. bonus, commission, etc.). The following examples illustrate foreign income that will be related through an ArcRole to an Employer, which means that all income items are characterized by the indicator regardless of it being true or false. When a borrower has both regular and seasonal/foreign income from the same employer, separate instances of employment must be included in the Loan Application Submission file, one instance for the foreign/seasonal and an additional instance for the regular income from that employment with the foreign / seasonal indicators set for each instance.

Income Type usage example:

```
<CURRENT_INCOME>
  <CURRENT_INCOME_ITEMS>
    <!--Income from Current Employer 1-->
    <CURRENT_INCOME_ITEM SequenceNumber="1" xlink:label="CURRENT_INCOME_ITEM_1">
      <CURRENT_INCOME_ITEM_DETAIL>
        <CurrentIncomeMonthlyTotalAmount>5000.00</CurrentIncomeMonthlyTotalAmount>
        <EmploymentIncomeIndicator>true</EmploymentIncomeIndicator>
        <IncomeType>Base</IncomeType>
      </CURRENT_INCOME_ITEM_DETAIL>
    </CURRENT_INCOME_ITEM>
  </CURRENT_INCOME_ITEMS>
</CURRENT_INCOME>
```

Foreign Income Indicator usage example:

```
<EMPLOYERS>
  <EMPLOYER SequenceNumber="1" xlink:label="EMPLOYER_1">
    <LEGAL_ENTITY>
      <LEGAL_ENTITY_DETAIL>
        <FullName>Abacus</FullName>
      </LEGAL_ENTITY_DETAIL>
    </LEGAL_ENTITY>
    <EMPLOYMENT>
      <EmploymentStatusType>Current</EmploymentStatusType>
      <SpecialBorrowerEmployerRelationshipIndicator>>false</SpecialBorrowerEmployerRelationshipIndicator>
      <EXTENSION>
        <OTHER>
          <DU:EMPLOYMENT_EXTENSION>
            <DU:ForeignIncomeIndicator>>false</DU:ForeignIncomeIndicator>
            <DU:SeasonalIncomeIndicator>>false</DU:SeasonalIncomeIndicator>
          </DU:EMPLOYMENT_EXTENSION>
        </OTHER>
      </EXTENSION>
    </EMPLOYMENT>
  </EMPLOYER>
</EMPLOYERS>
```

Relating the Income to the Employment:

<!-- Linking Borrower's Income to Current Employer-->

```
<RELATIONSHIP SequenceNumber="5" xlink:from="CURRENT_INCOME_ITEM_1" xlink:to="EMPLOYER_1"
xlink:arcrole="urn:fdc:mismo.org:2009:residential/CURRENT_INCOME_ITEM_IsAssociatedWith_EMPLOYER"/>
<RELATIONSHIP SequenceNumber="6" xlink:from="CURRENT_INCOME_ITEM_2" xlink:to="EMPLOYER_1"
xlink:arcrole="urn:fdc:mismo.org:2009:residential/CURRENT_INCOME_ITEM_IsAssociatedWith_EMPLOYER"/>
```

Important note for FHA and VA loans: Foreign and Seasonal Income indicators are not currently supported by DUG. Seasonal / Foreign Income may be entered as the enumeration "Other"; lenders should ensure that they are following applicable FHA and VA guidelines for their use.



All self-employed borrowers should indicate whether their ownership share is equal to 25% or more or an ownership share of less than 25%. Each self-employed borrower, with ownership interest of 25% or more will not enter an amount for each income type (Gross Monthly Income) but will indicate their income amount (Monthly Income or Loss).

DU does not require the lender to provide the Gross Monthly Income Total for a borrower's employment income. DU will calculate the total by aggregating the income items provided. However, for self-employed borrowers with ownership interest of 25% or more, DU will require the data point *EmploymentMonthlyIncomeAmount* and this amount may be positive or negative.

For self-employed borrowers with an ownership share of less than 25%, income should be collected as Gross Monthly Income from Form Field ID's 1b.10.1 through 1b.10.6 in the orange-highlighted section.

1b.1
1b. Current Employment/Self-Employment and Income ☐ Does not apply

Employer or Business Name 1b.2 _____ Phone (1b.3) _____ - _____ Street 1b.4.1 _____ Unit # 1b.4.2 _____ City 1b.4.3 _____ State 1b.4.4 _____ ZIP 1b.4.5 _____ Country 1b.4.6 _____		Gross Monthly Income Base \$ 1b.10.1 /month Overtime \$ 1b.10.2 /month Bonus \$ 1b.10.3 /month Commission \$ 1b.10.4 /month Military Entitlements \$ 1b.10.5 /month Other \$ 1b.10.6 /month TOTAL \$ 1b.10 /month
Position or Title 1b.5 _____ Start Date 1b.6 / ____ / ____ (mm/dd/yyyy) How long in this line of work? 1b.7 Years ____ Months		
Check if this statement applies: 1b.8 <input type="checkbox"/> I am employed by a family member, property seller, real estate agent, or other party to the transaction.		
1b.9 <input type="checkbox"/> Check if you are the Business Owner or Self-Employed <input type="radio"/> I have an ownership share of less than 25%. Monthly Income (or Loss) \$ 1b.9.1 <input type="radio"/> I have an ownership share of 25% or more. \$ 1b.9.2		

To reflect income as Gross Monthly Income (1b.10.1 through 1b.10.6 in the orange-highlighted section), use a separate CURRENT_INCOME_ITEM container for each *IncomeType*. Please refer to the example below:

```
<CURRENT_INCOME>
  <CURRENT_INCOME_ITEMS>
    <!--Income from Current Employer 1-->
    <CURRENT_INCOME_ITEM SequenceNumber="1" xlink:label="CURRENT_INCOME_ITEM_1">
      <CURRENT_INCOME_ITEM_DETAIL>
        <CurrentIncomeMonthlyTotalAmount>7000.00</CurrentIncomeMonthlyTotalAmo
        <EmploymentIncomeIndicator>true</EmploymentIncomeIndicator>
        <IncomeType>Base</IncomeType>
      </CURRENT_INCOME_ITEM_DETAIL>
    </CURRENT_INCOME_ITEM>
    <CURRENT_INCOME_ITEM SequenceNumber="2" xlink:label="CURRENT_INCOME_ITEM_2">
      <CURRENT_INCOME_ITEM_DETAIL>
        <CurrentIncomeMonthlyTotalAmount>200.00</CurrentIncomeMonthlyTotalAmou
        <EmploymentIncomeIndicator>true</EmploymentIncomeIndicator>
        <IncomeType>Overtime</IncomeType>
      </CURRENT_INCOME_ITEM_DETAIL>
    </CURRENT_INCOME_ITEM>
    <CURRENT_INCOME_ITEM SequenceNumber="3" xlink:label="CURRENT_INCOME_ITEM_3">
      <CURRENT_INCOME_ITEM_DETAIL>
        <CurrentIncomeMonthlyTotalAmount>800.00</CurrentIncomeMonthlyTotalAmou
        <EmploymentIncomeIndicator>true</EmploymentIncomeIndicator>
        <IncomeType>Bonus</IncomeType>
      </CURRENT_INCOME_ITEM_DETAIL>
    </CURRENT_INCOME_ITEM>
  </CURRENT_INCOME_ITEMS>
</CURRENT_INCOME>
```



The submission file shall include an employment container in this example of a borrower that owns less than 25% of the business declared for self-employment.

```
<EMPLOYERS>
  <EMPLOYER SequenceNumber="1" xlink:label="EMPLOYER_1">
    <LEGAL_ENTITY>
      <LEGAL_ENTITY_DETAIL>
        <FullName>Barnaby's Home Improvement</FullName>
      </LEGAL_ENTITY_DETAIL>
    </LEGAL_ENTITY>
    <EMPLOYMENT>
      <EmploymentBorrowerSelfEmployedIndicator>true</EmploymentBorrowerSelfEmployedIndicator>
      <EmploymentClassificationType>Primary</EmploymentClassificationType>
      <EmploymentStartDate>1998-02-02</EmploymentStartDate>
      <EmploymentStatusType>Current</EmploymentStatusType>
      <OwnershipInterestType>LessThan25Percent</OwnershipInterestType>
      <SpecialBorrowerEmployerRelationshipIndicator>false</SpecialBorrowerEmployerRelationshipIndicator>
    </EMPLOYMENT>
  </EMPLOYER>
</EMPLOYERS>
```

It will be necessary to include an ArcRole for each CURRENT_INCOME_ITEM to associate it with the Employer.

```
<!-- Linking Borrower's Income to Current Employer-->
<RELATIONSHIP SequenceNumber="21" xlink:from="CURRENT_INCOME_ITEM_1" xlink:to="EMPLOYER_1"
xlink:arcrole="urn:fdc:mismo.org:2009:residential/CURRENT_INCOME_ITEM_IsAssociatedWith_EMPLOYER"/>
<RELATIONSHIP SequenceNumber="22" xlink:from="CURRENT_INCOME_ITEM_2" xlink:to="EMPLOYER_1"
xlink:arcrole="urn:fdc:mismo.org:2009:residential/CURRENT_INCOME_ITEM_IsAssociatedWith_EMPLOYER"/>
<RELATIONSHIP SequenceNumber="23" xlink:from="CURRENT_INCOME_ITEM_3" xlink:to="EMPLOYER_1"
xlink:arcrole="urn:fdc:mismo.org:2009:residential/CURRENT_INCOME_ITEM_IsAssociatedWith_EMPLOYER"/>
```

1c. IF APPLICABLE, Complete Information for Additional Employment/Self-Employment and Income

If a borrower has more than one current job, they will enter that information in this subsection and if needed repeat the subsection for additional current jobs. You should group and relate the borrower's multiple current employers using ArcRoles. Moreover, you should be aware that your Loan Application Submission file will include a method to link multiple employers with corresponding income for one or more borrowers using ArcRoles. If you need more information, refer to the DU Spec under the ArcRoles tab and the ArcRoles supporting documentation on the URLA web page at:

https://www.fanniemae.com/content/technology_requirements/ulad-data-relationships.pdf

1d. IF APPLICABLE, Complete Information for Previous Employment/Self-Employment and Income

The information in this section is similar to the tables in 1b and 1c above, except the borrower will only provide the total income per month (not broken down by income type) and indicate if they were the business owner or self-employed.

1e. Income from Other Sources

A borrower that has income from non-employment sources should use the list provided in the redesigned Form 1003 to indicate the income type and corresponding monthly income amount. For income from other sources, the *EmploymentIncomeIndicator* should be false. For more information on income, please consult the Frequently Asked Questions in Chapter 5.



Income from military employment

The military base pay should be entered in the Base field of the Gross Monthly Income in the employment sections. The military entitlements and allowances are submitted in the IncomeType data point and should be totaled and included in the “Military Entitlements” field in the employment sections of the Borrower Information and Additional Borrower Form. Please consult the DU Spec for information on the data structure that will be used in your Loan Application Submission file.

Unique ID	Sort ID	Form Field ID	Form Field Name	MISMO v3.4 Parent Container	MISMO v3.4 Data Point Name	MISMO v3.4 Data Point Definition	DU Supported Enumerations
4.0026	105	1b.10.1 1b.10.2 1b.10.3 1b.10.4 1b.10.5 1b.10.6	Base Overtime Bonus Commission Military Entitlements Other	CURRENT_INCOME_ITEM_DETAIL	IncomeType	A value from a MISMO prescribed list that specifies borrower income items listed on a mortgage loan application.	Base Bonus Commissions ContractBasis MilitaryBasePay MilitaryClothesAllowance MilitaryCombatPay MilitaryFlightPay MilitaryHazardPay MilitaryOverseasPay MilitaryPropPay MilitaryQuartersAllowance MilitaryRationsAllowance MilitaryVariableHousingAllowance Other Overtime

Reporting Employment

The employment for the borrower may be reported as either Primary or Secondary by using the *EmploymentClassificationType* in your Loan Application Submission file. The time spent or highest income have no relation to Primary or Secondary employment. When you submit your Loan Application Submission file, you will need to relate the borrower’s income with the employer (please refer to ArcRoles in DU Spec or the previous section of Relating the Income to Employment under *1b. Current Employment/Self Employment and Income* and indicate under the employer container instance if this is the Primary or Secondary employment.

Section 2: Financial Information – Assets and Liabilities

This section is used to provide information on the borrower’s assets, debts, and expenses that will be considered when qualifying the borrower for the loan. Regardless of how many times shared assets and liabilities may be listed on the redesigned Form 1003, when submitting shared assets and liabilities in the Loan Application Submission file they should only be submitted once.

2a. Assets – Bank Accounts, Retirement, and Other Accounts You Have

Borrowers that have liquid asset accounts will identify the type, the financial institution, the account number and indicate a cash or market value per account. The list provided in the redesigned Form 1003 should be used as a reference to help borrowers complete this section. DU will calculate the total based on the information provided on this table.

2b. Other Assets and Credits You Have

Borrowers can identify other non-account assets and credits such as earnest money, cash from the expected sale of an asset or real estate property, etc. DU will accept credit amounts as valid sources of borrower funds to close a mortgage loan transaction (i.e., Lease Purchase Funds, Sweat Equity, Trade Equity from Property Swap, etc.). DU will calculate the total based on the information provided on this table.



2c. Liabilities – Credit Cards, Other Debts, and Leases that You Owe

Borrowers with liabilities such as Installments loans, Leases (other than Real Estate), and Revolving Accounts (i.e., Credit Cards, Open 30-Day) will report outstanding balances in this section. If a liability with an associated unpaid balance is reported, DU will expect to find information about the corresponding type of account such as Creditor name, account number and monthly payment. DU has the ability to auto populate liabilities from the credit report, which lenders can decide to accept or not. DU expects that liabilities with a zero balance, such as an Open 30-Day account paid monthly, to be reported.

2d. Other Liabilities and Expenses

Other liabilities and expenses should be reported by the borrower (i.e., Alimony, Child Support, Separate Maintenance, and Job-Related Expenses). Job related expenses are generally only required for VA loans and include items such as childcare expenses.

Section 3: Financial Information – Real Estate

This section is used to provide information on real properties the borrower(s) own.

3a. Property You Own

Borrowers must identify information on real estate that they own. In the case of a refinance application, DU expects the Loan Application Submission file to include the *OwnedSubjectPropertyIndicator*. The redesigned Form 1003 table includes information about the property value, status, intended occupancy, and the associated mortgage unless the borrower owns the property free of liabilities. Note that if the monthly insurance and taxes are included in the mortgage payment, the information should not also be identified separately in Insurance, Taxes, and Association Dues. The nature of this information is distributed among different MISMO containers and it will be necessary to link them to allow DU to understand the relationship, especially in the case of multiple properties and mortgages.

Refer to the corresponding diagram under Chapter 6 to better visualize the above concepts. The diagrams will give you context when discussing the information with your technical team.

3b. IF APPLICABLE, Complete Information for Additional Property

The purpose of this table is to identify additional properties. The table could repeat as necessary for additional properties a borrower owns. DU will expect the Loan Application Submission file to include multiple instances to allow reporting of all REO properties that the borrower declares. An ArcRole should be used to associate the REO properties to the corresponding liabilities (mortgages or home equity lines of credit), refer to the ArcRole Tab for more information. The following attribute in example 4 applies:

```
<ASSET SequenceNumber="8" xlink:label="ASSET_8">
: <LIABILITY SequenceNumber="1" xlink:label="LIABILITY_1">
: <RELATIONSHIP SequenceNumber="9" xlink:from="ASSET_8" xlink:to="LIABILITY_1"
xlink:arcrole="urn:fdc:mismo.org:2009:residential/ASSET_IsAssociatedWith_LIABILITY"/>
```

Example 4 Example of attribute use in XML

Refer to the [ULAD Data Relationships using Xlink and MISMO ArcRoles Document](#) and the ULAD ArcRoles tab in the ULAD Mapping document for more information on how to associate an Owned Property to a Liability.



Section 4: Loan and Property Information

This section is used to gather information on the loan and the subject property. The borrower is required to provide information on the purpose of the loan, the state where the property is located, the property's number of units, and the intended occupancy.

4a. Loan and Property Information

Borrowers will indicate the loan amount requested and purpose of the loan, which could be either Purchase or Refinance. There are three types of occupancy on the URLA: (1) Primary Residence, (2) Second Home, and (3) Investment. The FHA Secondary Residence is used in addition to these values. The three values for the occupancy in the DU Spec are enumerated under the *PropertyUsageType*; however, if occupancy will be FHA Secondary Residence, set the *PropertyUsageType*="PrimaryResidence" and use the *FHASSecondaryResidenceIndicator*

4b. Other New Mortgage Loans on the Property You are Buying or Refinancing

Borrowers applying for additional loans secured by the subject property must provide the creditor's information and type of lien(s) associated. For example, if the borrower is obtaining a new second mortgage at the same time they are obtaining the first subject mortgage, the information will be entered in this section.

Subordinate Liens beyond the second position need to be designated as "Other" under the *LienPriorityType* for DU.

4c. Rental Income on the Property You want to Purchase

If the subject property is a 2-4 Unit Primary or Investment property that the borrower is purchasing, the borrower will provide an estimate of expected monthly rental income. Lenders will calculate a net rental income. (Note that rental income on a property the borrower already owns is entered in section 3.a.)

4d. Gifts or Grants You Have Been Given or Will Receive for this Loan

Borrowers who receive gifts and/or grants for the loan, must indicate the amount or market value and the party that provided it. (If the gift or grant has been deposited into an asset account of the borrower, e.g., checking account, then the amount of the gift is included in that asset account in addition to this section.)

Section 5: Declarations

Almost all the declarations related to the Property and the Borrower's finances must be answered on the redesigned Form 1003. The DU Spec does not capture any declaration explanations and therefore they do not need to be included in the Loan Application Submission file.

Section 6: Acknowledgements and Agreements

FHA loans require the date that the signature was executed to be included in the Loan Application Submission file. The signature date is optional for Conventional and VA loans.

The redesigned Form 1003 includes a section for the borrower's signature; however, the Loan Application Submission file will only be populated with the date the loan application was signed. Lenders are not required to send a copy of the loan application in PDF but may be required to store a copy of the signed application in the loan file depending on the loan type and investor/insurer/guarantor policies.



Section 7: Military Service

This information is required for VA loans and optional for all other types of loans. Each borrower is asked to indicate if they (or their deceased spouse) ever served or are currently serving in the United States Armed Forces.

Section 8: Demographic Information

This information is not required by DU since this information is not used for underwriting but can be included in the XML if available. However, this information must be provided when delivering the loan to Fannie Mae, so it is required by EarlyCheck.

Ethnicity and Ethnicity Origin

Ethnicity is reported with *HMDAEthnicityType* under a repeating structure for multiple answers. A borrower may have identified as Hispanic or Latino, Not Hispanic or Latino, or as both. In that case, use the *HMDAEthnicityType* to capture both instances. If the borrower did not wish to provide this information, use the *HMDAEthnicityRefusalIndicator*.

Ethnicity Origin is reported with *HMDAEthnicityOriginType* under a repeating structure for multiple answers, e.g., Cuban, Mexican, Argentinian, Colombian, etc. If the borrower identified with many types included in the enumerations list, report each origin type separately under the repeating container. If the borrower identified with values not included in the enumerations list or a combination, use “Other” and list them under the *HMDAEthnicityOriginTypeOtherDescription* separated by commas. Note that if the borrower did not check the “Other Hispanic and Latino” box, but filled in the blank with an Ethnicity Origin, the lender does not have to send *HMDAEthnicityOriginType*=“Other” and can just send the *HMDAEthnicityOriginTypeOtherDescription* by itself. Refer to example 5 for a combination of four ethnicity origins:

```
<HMDA_ETHNICITY_ORIGINS>
  <HMDA_ETHNICITY_ORIGIN>
    <HMDAEthnicityOriginType>Mexican</HMDAEthnicityOriginType>
  </HMDA_ETHNICITY_ORIGIN>
  <HMDA_ETHNICITY_ORIGIN>
    <HMDAEthnicityOriginType>Cuban</HMDAEthnicityOriginType>
  </HMDA_ETHNICITY_ORIGIN>
  <HMDA_ETHNICITY_ORIGIN>
    <HMDAEthnicityOriginType>Other</HMDAEthnicityOriginType>
    <HMDAEthnicityOriginTypeOtherDescription>Argentinian</HMDAEthnicityOriginTypeOtherDescription>
  </HMDA_ETHNICITY_ORIGIN>
</HMDA_ETHNICITY_ORIGINS>
<HMDA_RACES>
  <HMDA_RACE>
    <HMDA_RACE_DETAIL>
      <HMDARaceType>Asian</HMDARaceType>
    </HMDA_RACE_DETAIL>
  </HMDA_RACE>
</HMDA_RACES>
<EXTENSION>
  <OTHER>
    <ULAD:GOVERNMENT_MONITORING_EXTENSION>
      <ULAD:HMDA_ETHNICITIES>
        <ULAD:HMDA_ETHNICITY>
          <ULAD:HMDAEthnicityType>HispanicOrLatino</ULAD:HMDAEthnicityType>
        </ULAD:HMDA_ETHNICITY>
      </ULAD:HMDA_ETHNICITIES>
    </ULAD:GOVERNMENT_MONITORING_EXTENSION>
  </OTHER>
</EXTENSION>
```

Example 5 Other ethnicity origin types



Sex

Sex is reported in the *HMDAGenderType* data point under a detail structure for a single answer. If the borrower checked both Male and Female on the redesigned Form 1003, use the *ApplicantHasSelectedBothMaleAndFemale* enumeration. If the borrower did not wish to provide this information, then use *HMDAGenderRefusalIndicator*.

Race

Race is reported in the *HMDARaceType* data point under a repeating structure for multiple answers. If the borrower identified with more than one race included in the enumerations list, report each race separately under the repeating container, e.g., Black or African American, White. If the borrower identified as Other Asian, e.g., Pakistani, Laotian, etc; or as Other Pacific Islander, e.g., Fijian, Tongan, etc., use the *HMDARaceDesignationTypeOtherDescription*.

If the borrower identified as a member of an American Indian or Alaska Native tribe, use the *HMDARaceTypeAdditionalDescription* to provide the name of the tribe as in the following example 6:

```
<HMDA_RACES>
|
| <HMDA_RACE>
| | <HMDA_RACE_DETAIL>
| | | <HMDARaceType>Asian</HMDARaceType>
| | </HMDA_RACE_DETAIL>
| </HMDA_RACE>
| <HMDA_RACE>
| | <HMDA_RACE_DETAIL>
| | | <HMDARaceType>BlackOrAfricanAmerican</HMDARaceType>
| | </HMDA_RACE_DETAIL>
| </HMDA_RACE>
</HMDA_RACES>
```

Example 6 Additional race type description

The MISMO HMDA Implementation Toolkit v.1.16 on the MISMO.org website is a tool that will help implementers understand the usage of the HMDA data in MISMO.

Section 9: Loan Originator Information

FHA loans require the Loan Originator Organization Name, Loan Originator Name, and NMLS IDs if the information is available. Although this information is optional for Conventional loans, DU will collect it, if made available.

Lender Loan Information

This section is used to capture the information completed by the lender on the application. It is important to remember that the borrower does not complete any of the data points in this section.

L1. Property and Loan Information

The Lender will need to provide certain details regarding the loan transaction. These details can include information around the subject property or borrower residing in a Community Property State, items related to a Construction Loan, Refinance Type and Program, information on Energy Improvements, and the associated Project Type for the subject property.



L2. Title Information

For all loan types, lenders must submit whether the Estate will be held in Fee Simple or Leasehold. For FHA loans, if the Estate is Leasehold, then the expiration date for the lease must be provided.

L3. Mortgage Loan Information

All the data points in this section are required with the exception of the time periods for the Adjustable Rate. The Proposed Housing Expenses should be provided by indicating each housing expense type and the corresponding monthly payment amount. DU will use this information to calculate the total. Proposed Monthly Payment as a total does not need to be included in the Loan Application Submission file.

L4. Qualifying the Borrower – Minimum Required Funds or Cash Back

The loan amount is required regardless of the type of mortgage. The sales contract amount is only required for purchase transactions. All of the data points in this section will be consumed by DU if provided in the Loan Application Submission file. Data points representing the total amounts are optional since DU will calculate the amount based on the information provided. In this section, FHA and VA loans follow the same conditionality approach as DU.

The value for “M. Other Credits” in the DU Spec has been split into two data points: *PurchaseCreditType* and *ClosingAdjustmentItemType*. The respective amounts for these data points shall be provided under *PurchaseCreditAmount* and *ClosingAdjustmentItemAmount*. DU will add these amounts as it does in the case of other total amounts.

There are instances in the DU Spec when multiple data points are used to represent a single value. This is the case when MISMO does not have one data point that includes all different types of values, i.e. Other Credits.

Homeownership Education and Housing Counseling

This section was removed from the redesigned URLA form and included on the Supplemental Consumer Information Form and is in the DU Spec as section Homeownership Education and Housing Counseling. FHA loans require the counseling type indicators and based on the response provided, the name of the counseling agency, the borrower’s name, and the date of the completion of the housing counseling/education program. Conventional loans conditionally require counseling type indicators. The data points for this section are currently optional for VA loans.

Implementing ArcRoles in the XML file

ArcRoles are required when a relationship within the XML file is not established through containment. ArcRoles allow for relationships between containers in different areas of the XML file. These relationships can be established by following the list of available ArcRoles in the corresponding ArcRole tab of the DU Spec. Other relationships not included in the DU Spec will be ignored by DU or may even result in a transaction error. For more information on the notation or a step-by-step explanation on how to build an ArcRole, please refer to the following joint GSE publication:

https://www.fanniemae.com/content/technology_requirements/ulad-data-relationships.pdf



ArcRoles require that all labels included in the ArcRole syntax are unique within the file. This is necessary to create relationships without ambiguity. For example - two assets cannot have the same value for the `xlink:label`.

An error in DU will be generated if the ArcRole doesn't pass validation and it will stop the transaction to allow you to make corrections.

To prevent fatal errors, you need to ensure that the construction of the `xlink:label` values used for each ArcRole is valid and unique. For guidance in the creation of ArcRoles,



Chapter 5: URLA (Form 1003) Sections vs. MISMO Data Structures

This chapter includes a set of diagrams that show the MISMO data structures that supports each section of the redesigned Form 1003 (not all data points may be listed in the structures):

XML Content

Form Header

1a. Personal Information (2 pages)

1b. Current Employment/Self Employment and Income (1c. is a repeat of 1b.)

1d. Previous Employment/Self Employment and Income

1e. Income from Other Sources

2a. Assets - Bank Accounts, Retirement, and Other Accounts You Have

2b. Other Assets and Credits You Have

2c. Liabilities - Credit Cards, Other Debts, and Leases that You Owe

2d. Other Liabilities and Expenses

3a. Property You Own (3b. is a repeat of 3a.)

4a. Loan and Property Information

4b. Other New Mortgage Loans on the Property You are Buying or Refinancing

4c. Rental Income on the Property You Want to Purchase

4d. Gifts or Grants You Have Been Given or Will Receive for This Loan

5a. About this Property and Your Money for this Loan

5b. About Your Finances

6. Acknowledgements and Agreements

7. Military Service

8. Demographic Information

9. Loan Originator Information

L1. Property and Loan Information

L2. Title Information

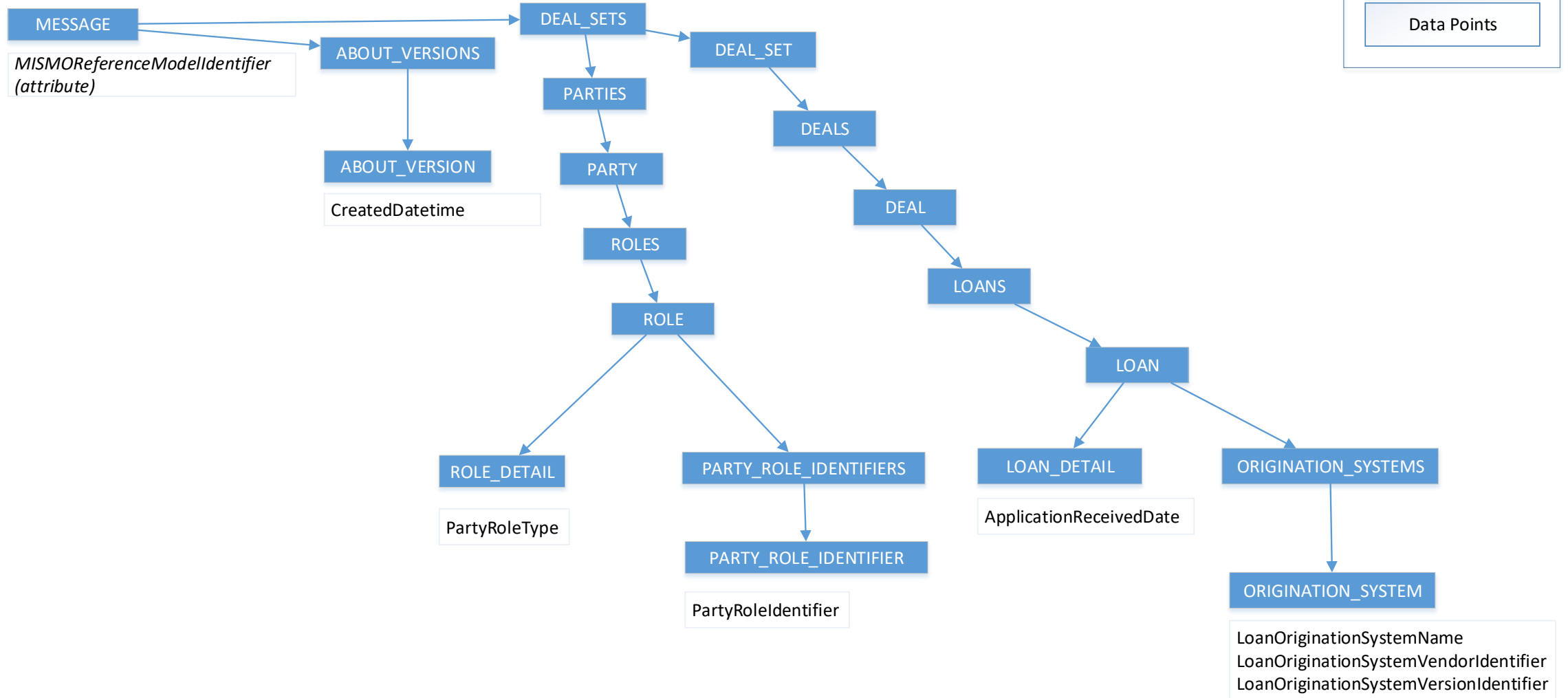
L3. Mortgage Loan Information (3 pages)

L4. Qualifying the Borrower (2 pages)

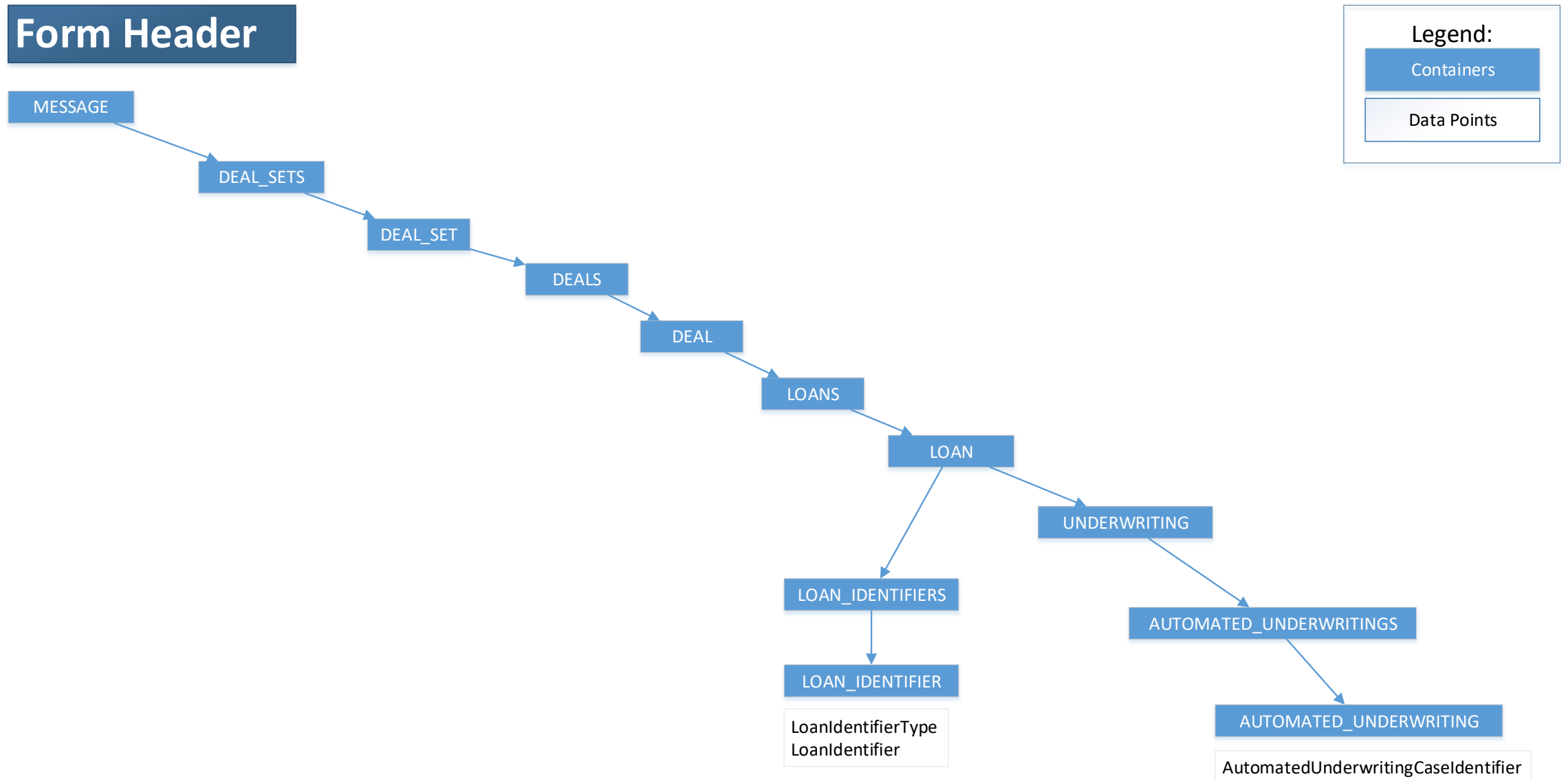
Homeownership Education and Housing Counseling

Unmarried Addendum

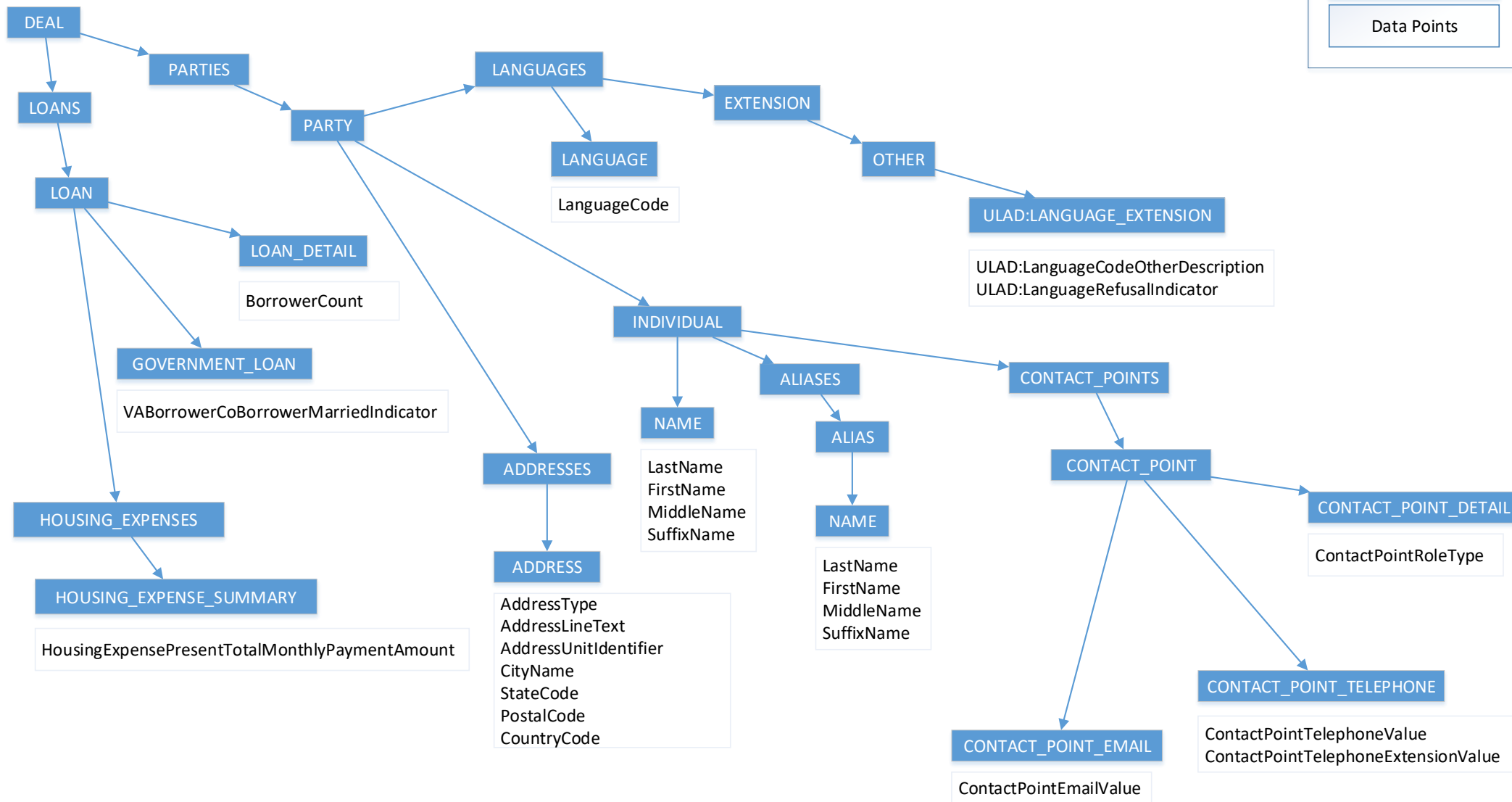
XML Content



Form Header

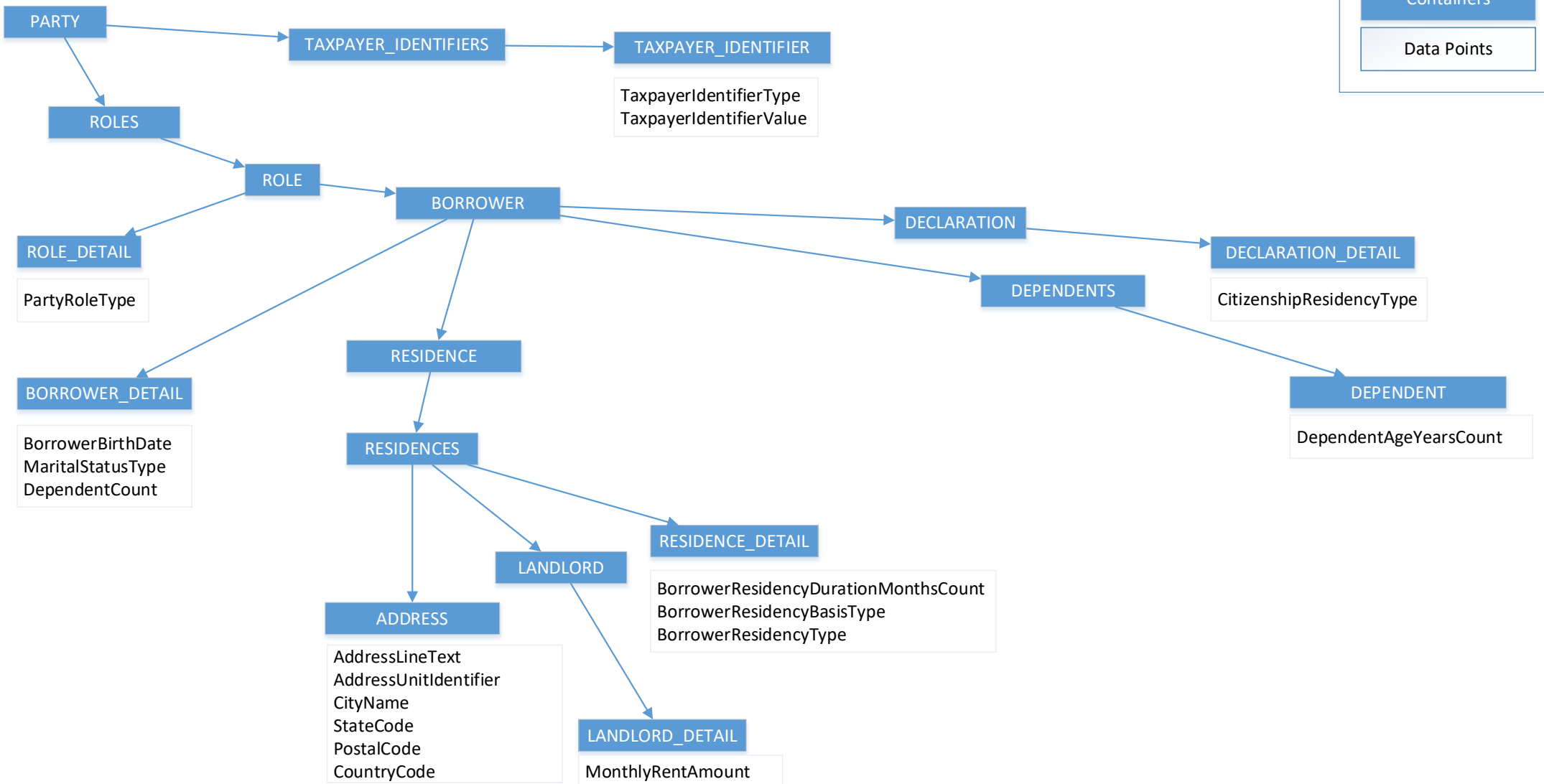


1a. Personal Information

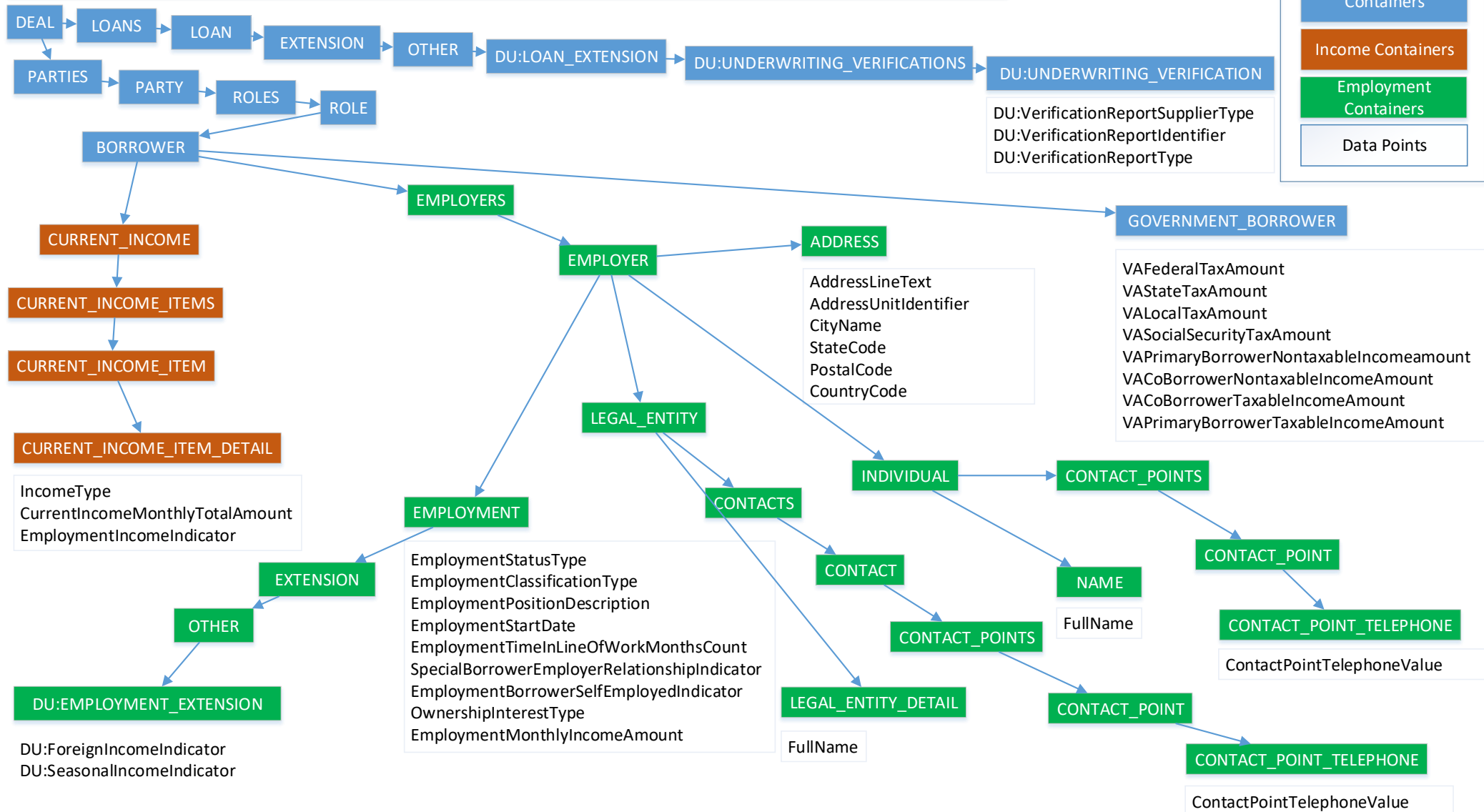


1a. Personal Information

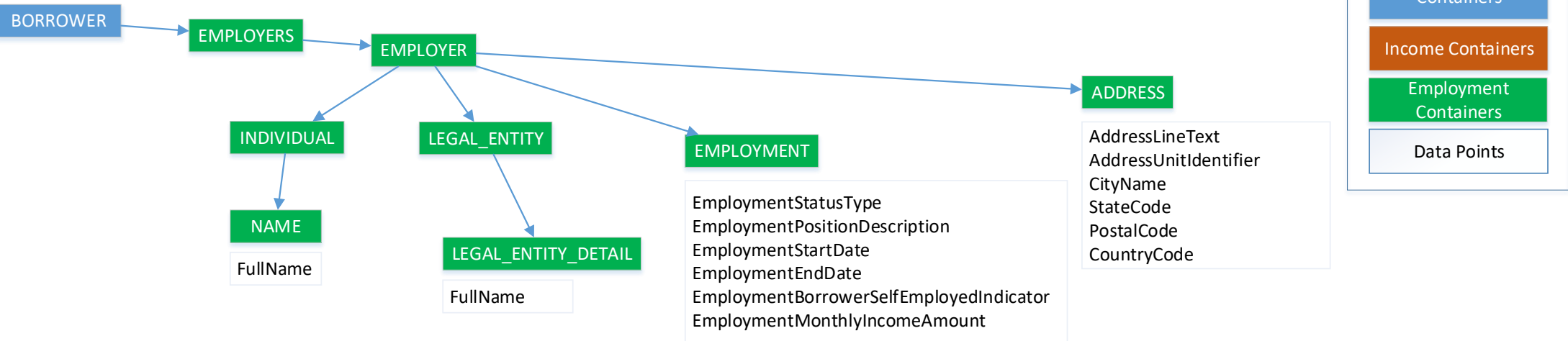
Continued



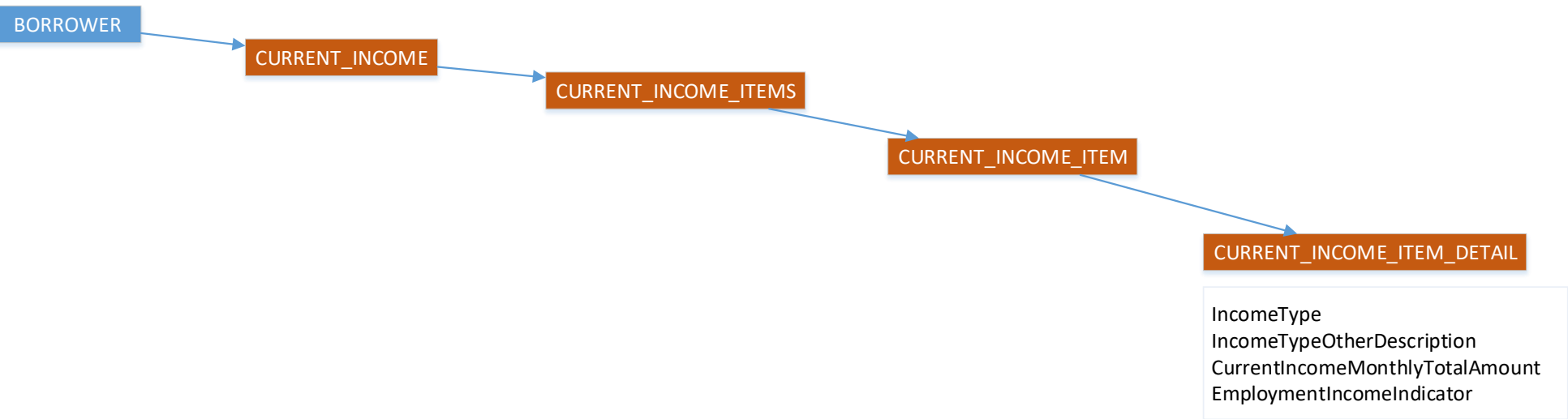
1b. Current Employment/Self-Employment and Income



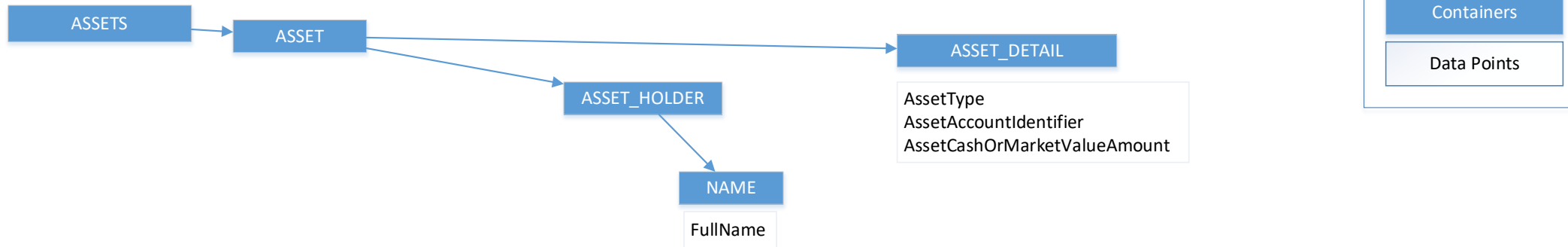
1d. Previous Employment/Self-Employment and Income



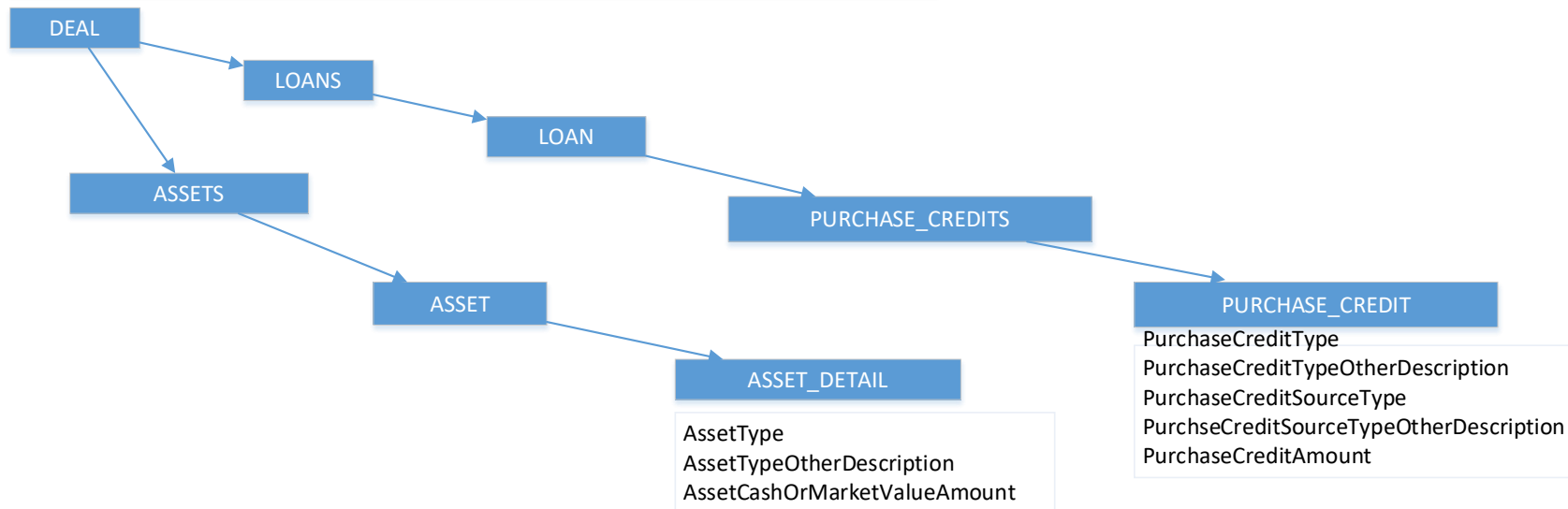
1e. Income from Other Sources



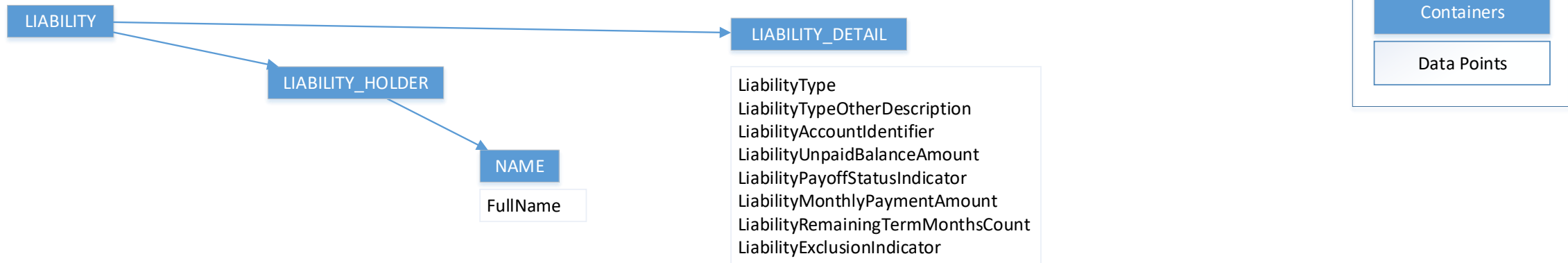
2a. Assets - Bank Accounts, Retirement, and Other Accounts You Have



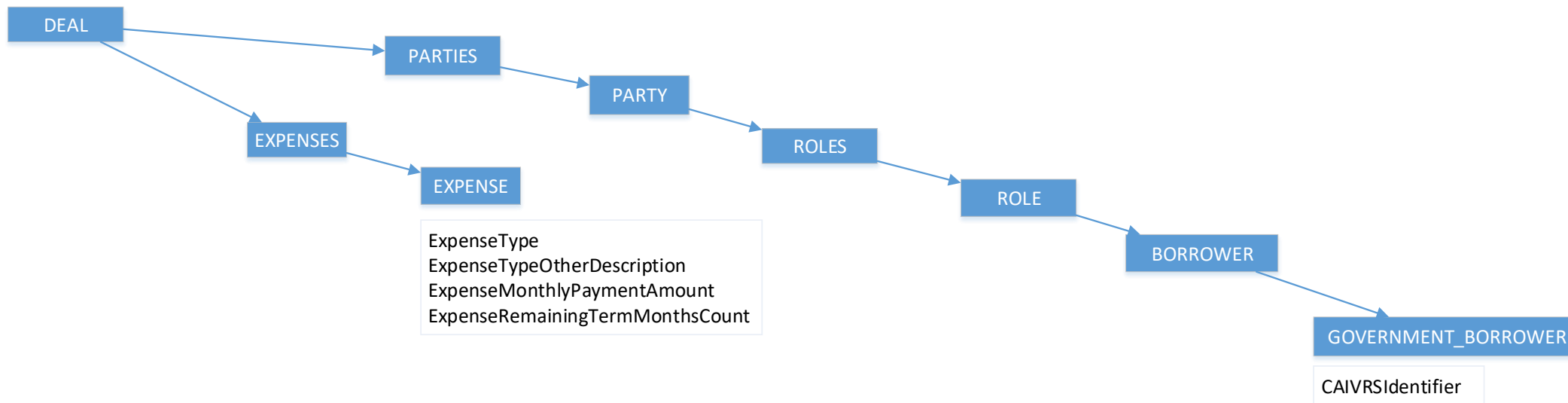
2b. Other Assets and Credits You Have



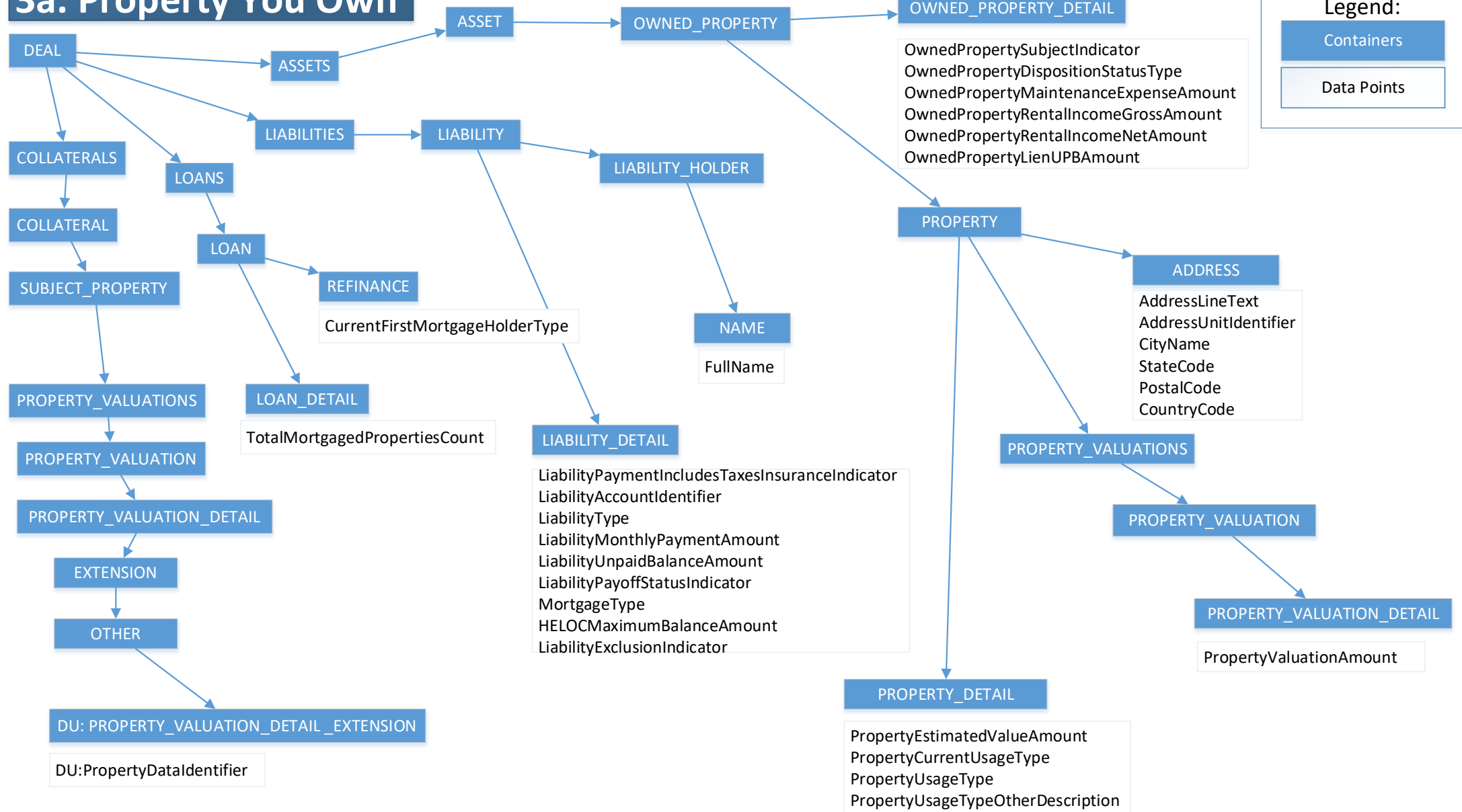
2c. Liabilities - Credit Cards, Other Debts, and Leases that You Owe



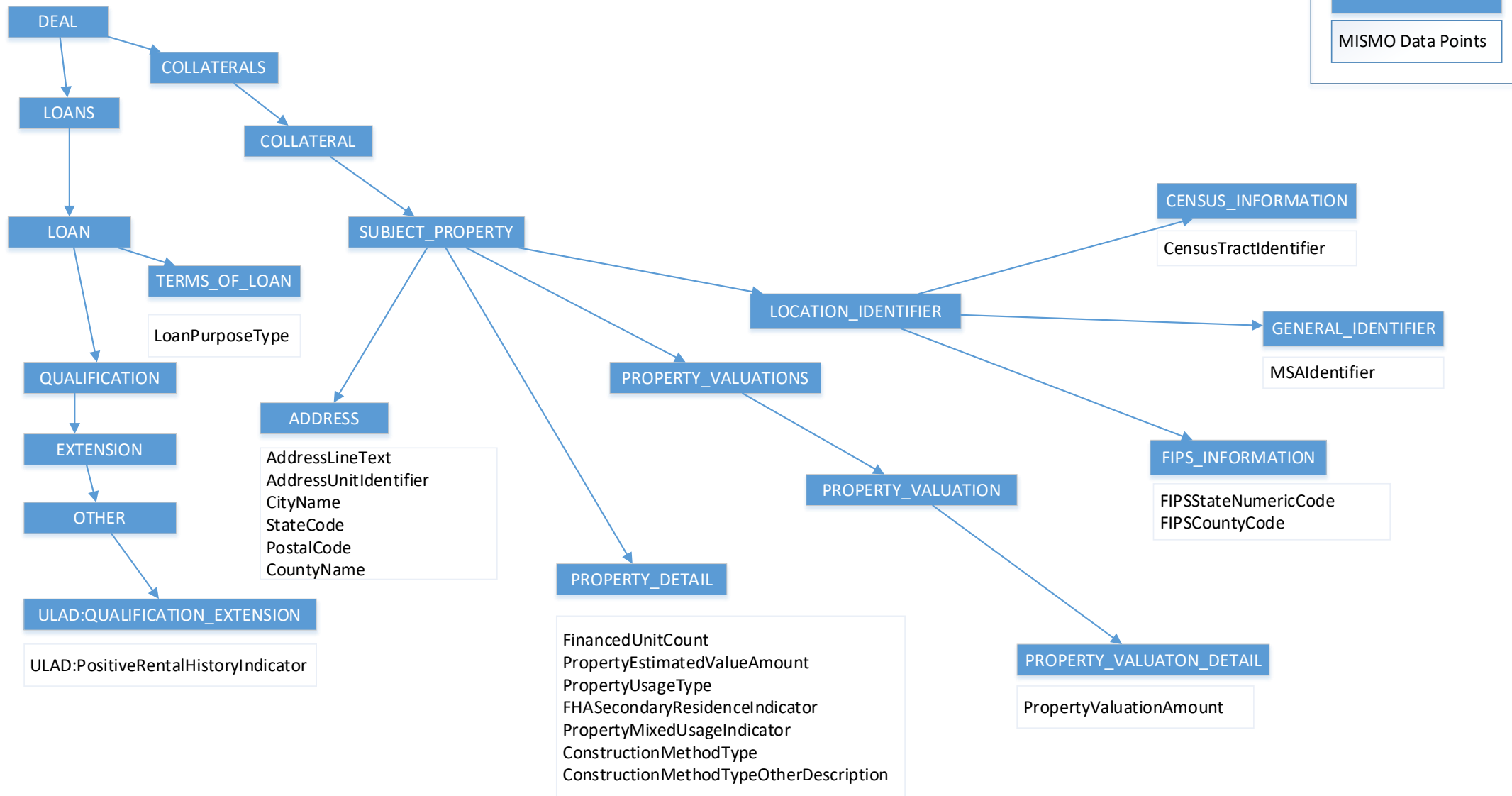
2d. Other Liabilities and Expenses



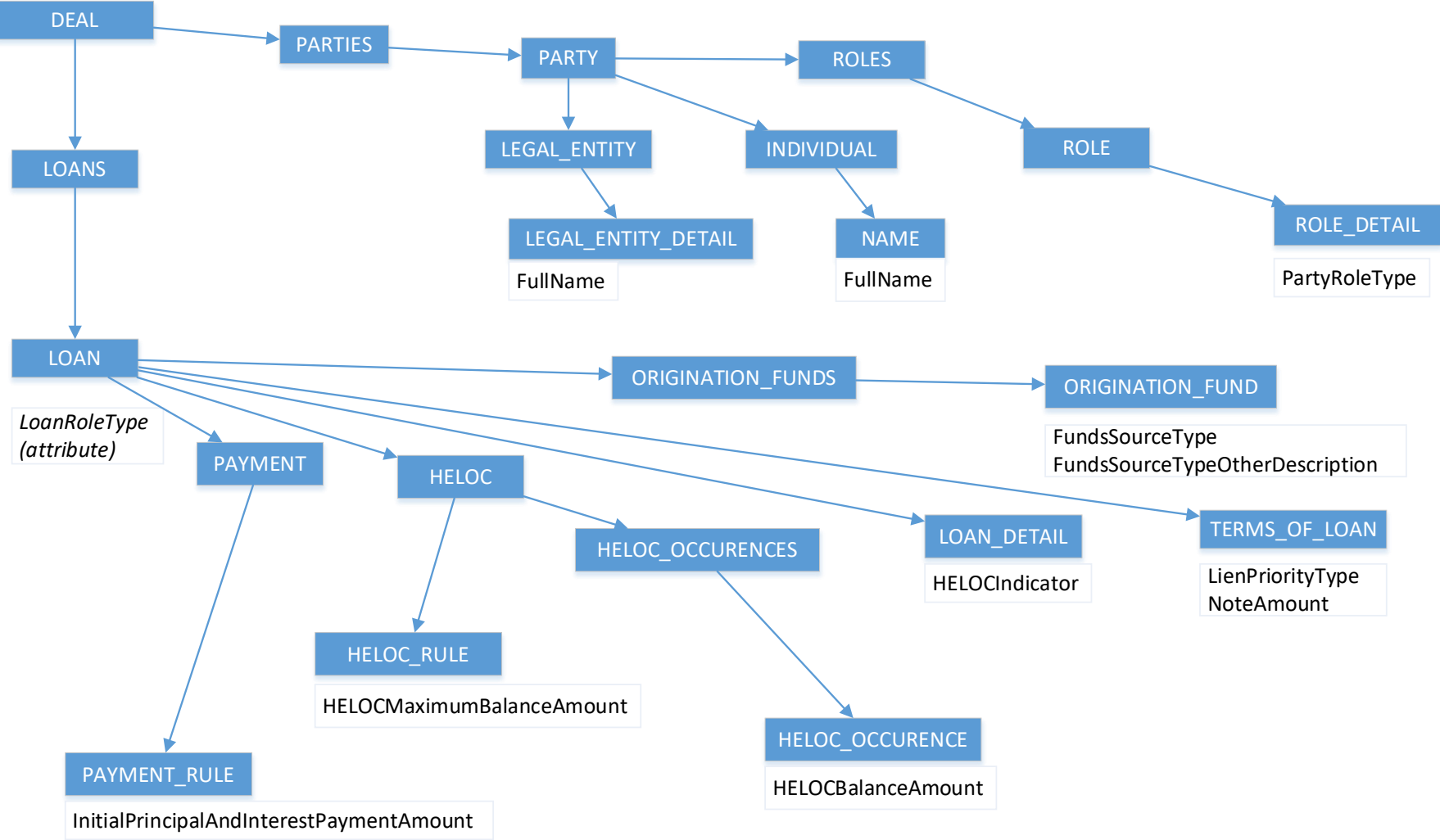
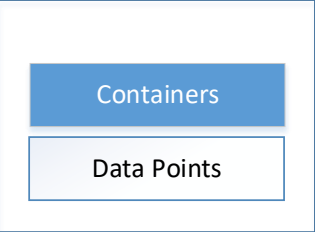
3a. Property You Own



4a. Loan and Property Information



4b. Other New Mortgage Loans on the Property You Are Buying or Refinancing

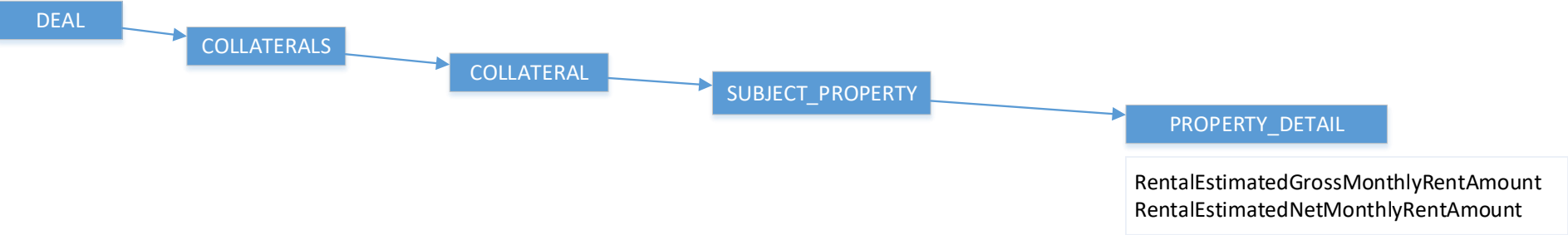


4c. Rental Income on the Property You Want to Purchase

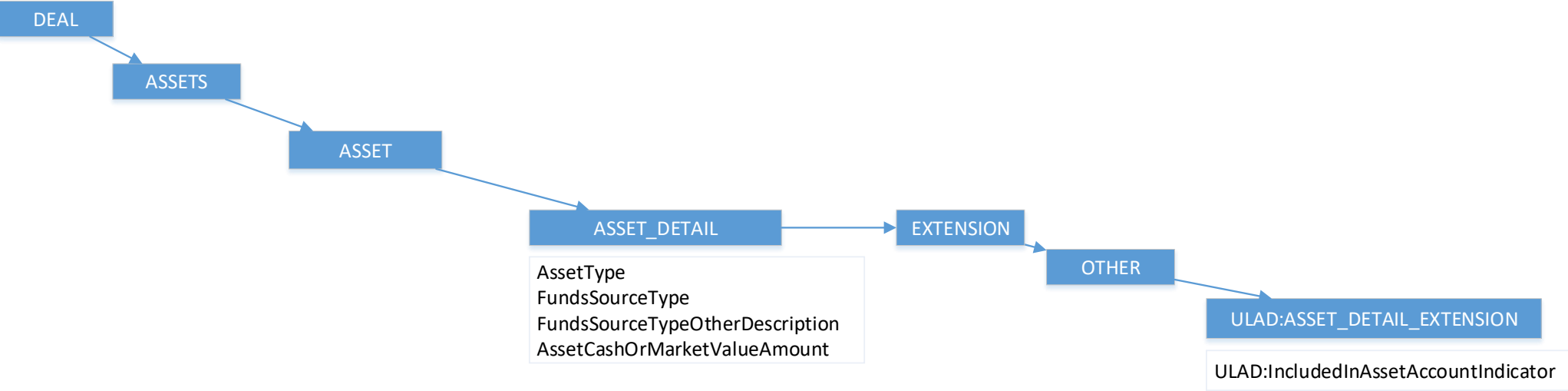
Legend:

Containers

Data Points



4d. Gifts or Grants You Have Been Given or Will Receive for This Loan



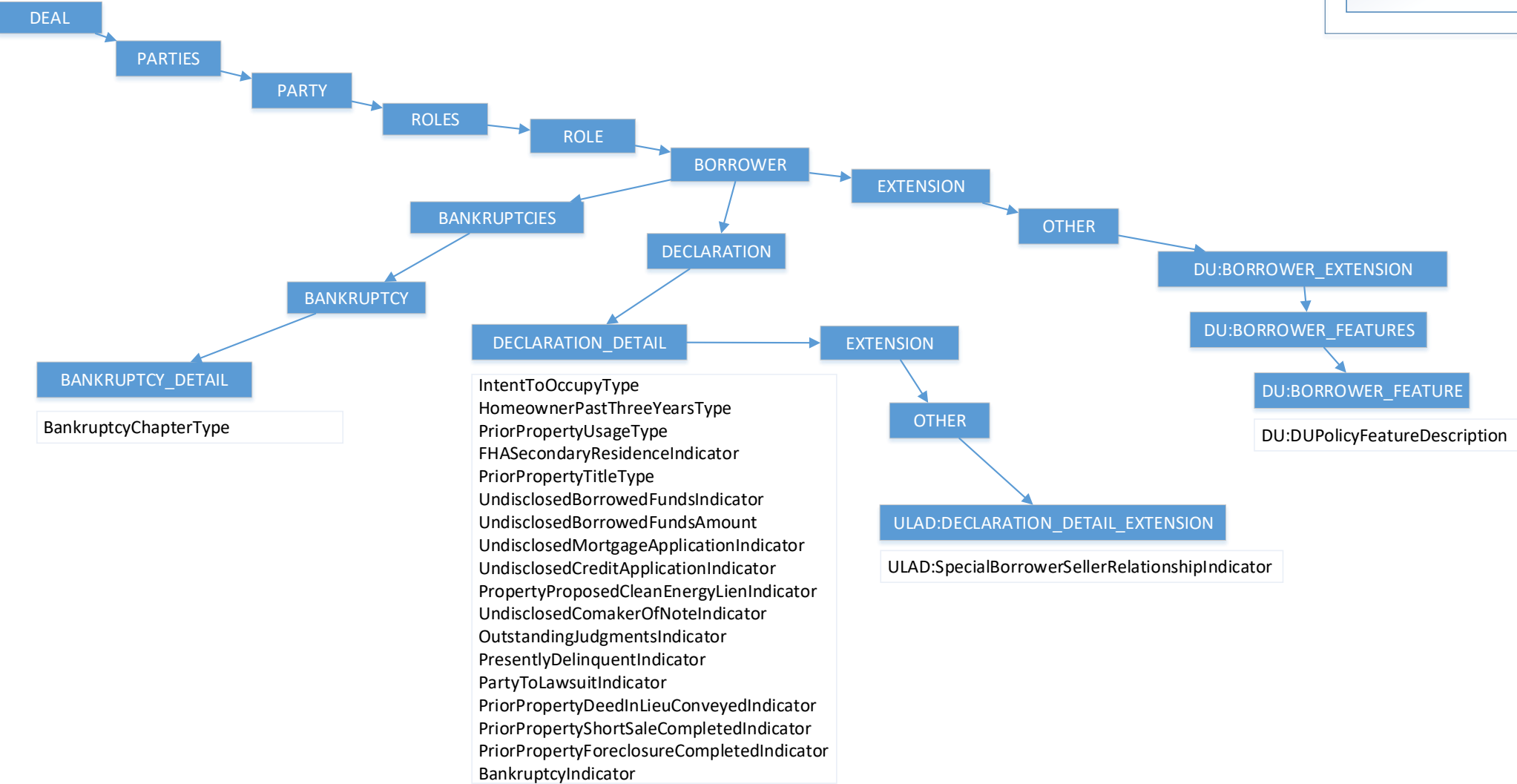
5a. About this Property and Your Money for this Loan

5b. About Your Finances

Legend:

Containers

Data Points

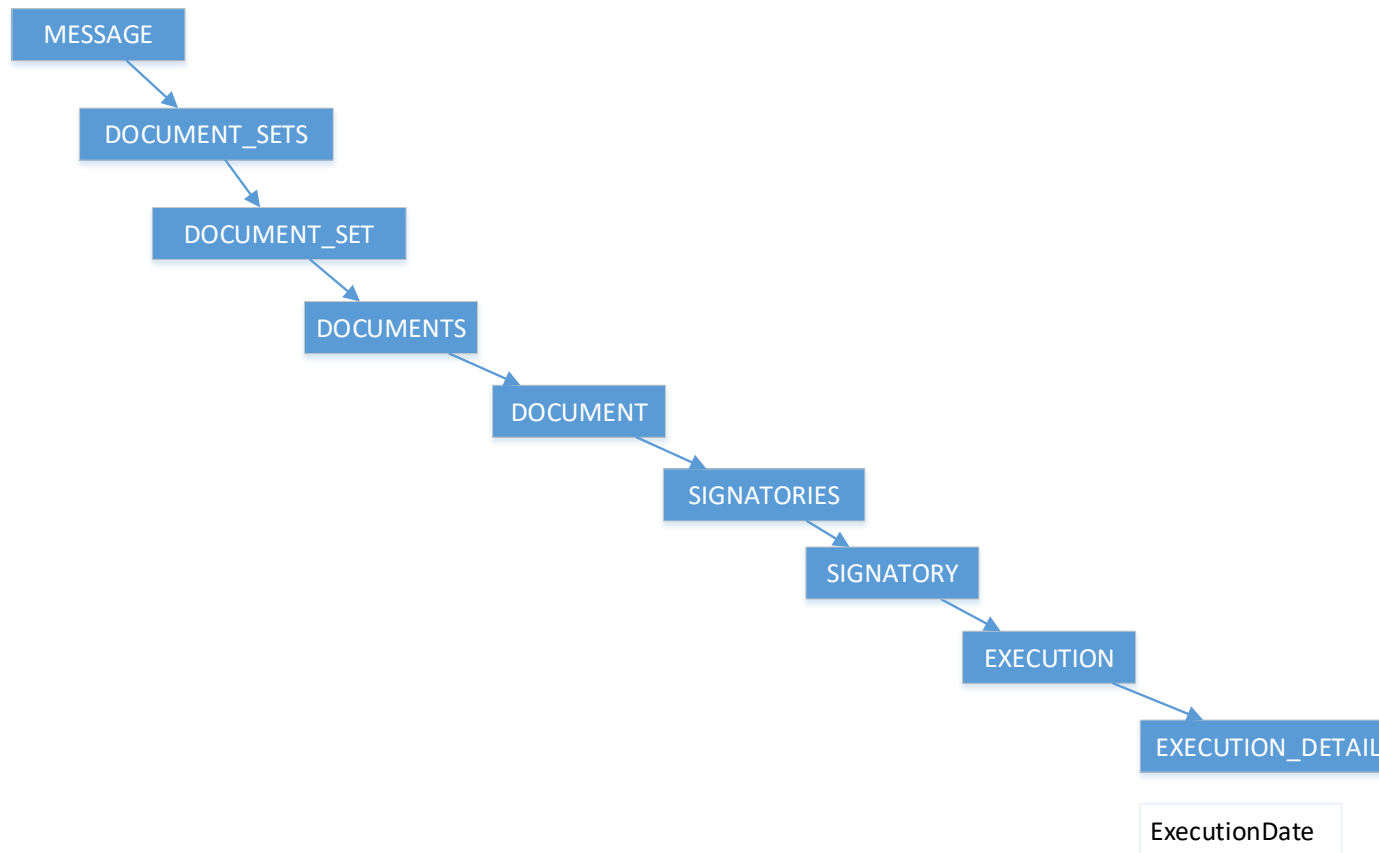


Section 6: Acknowledgements and Agreements

Legend:

Containers

Data Points

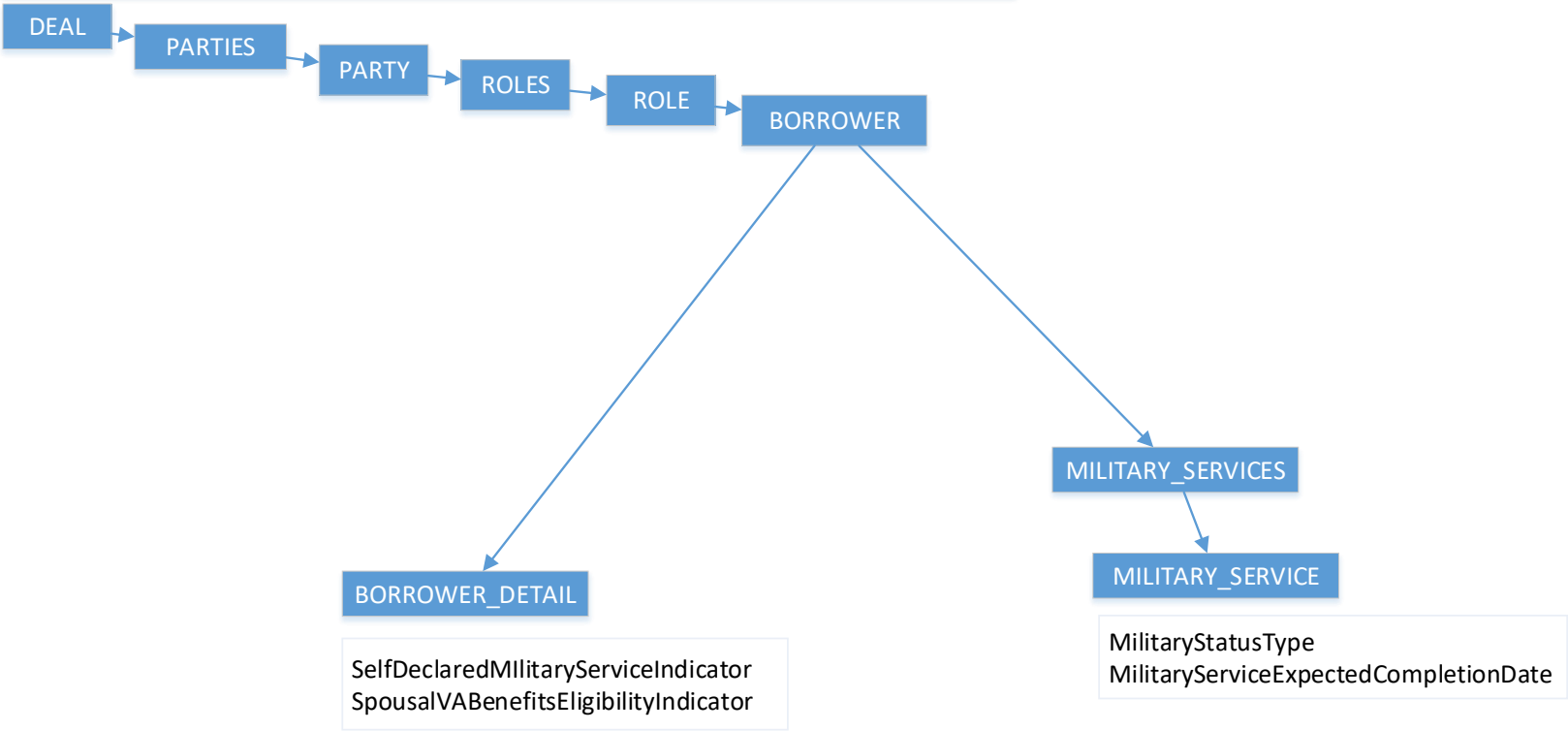


Section 7: Military Service

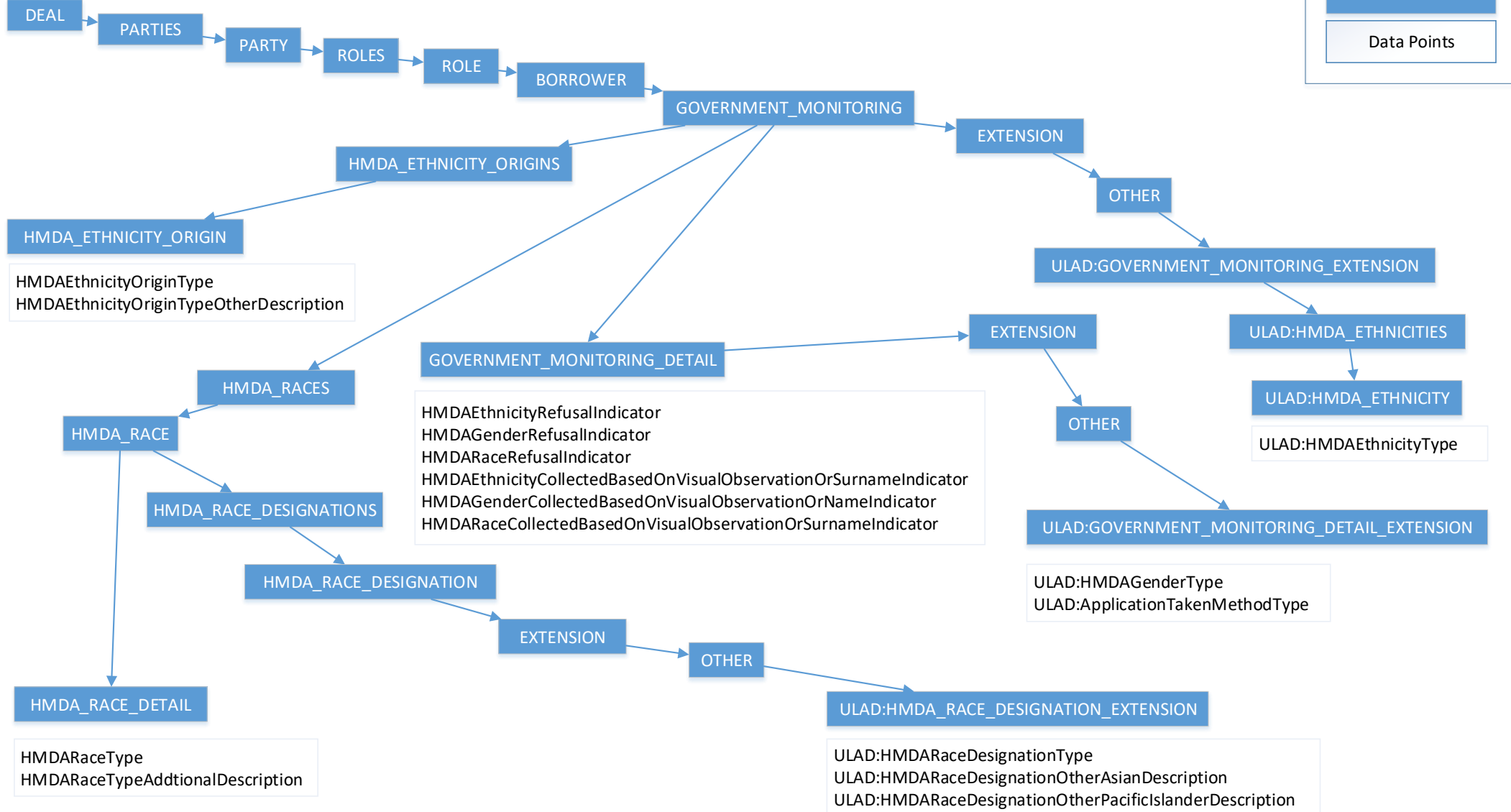
Legend:

Containers

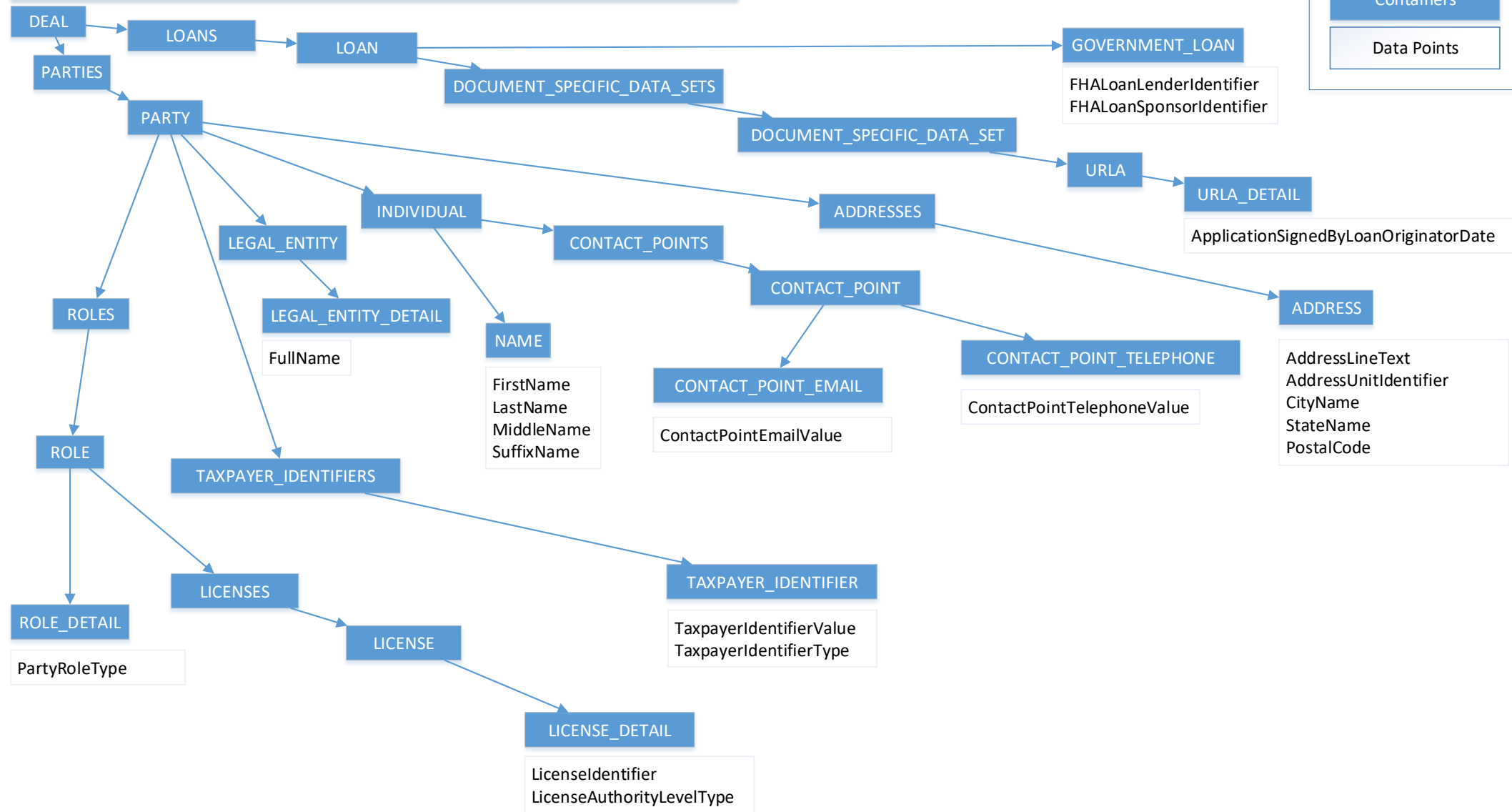
Data Points



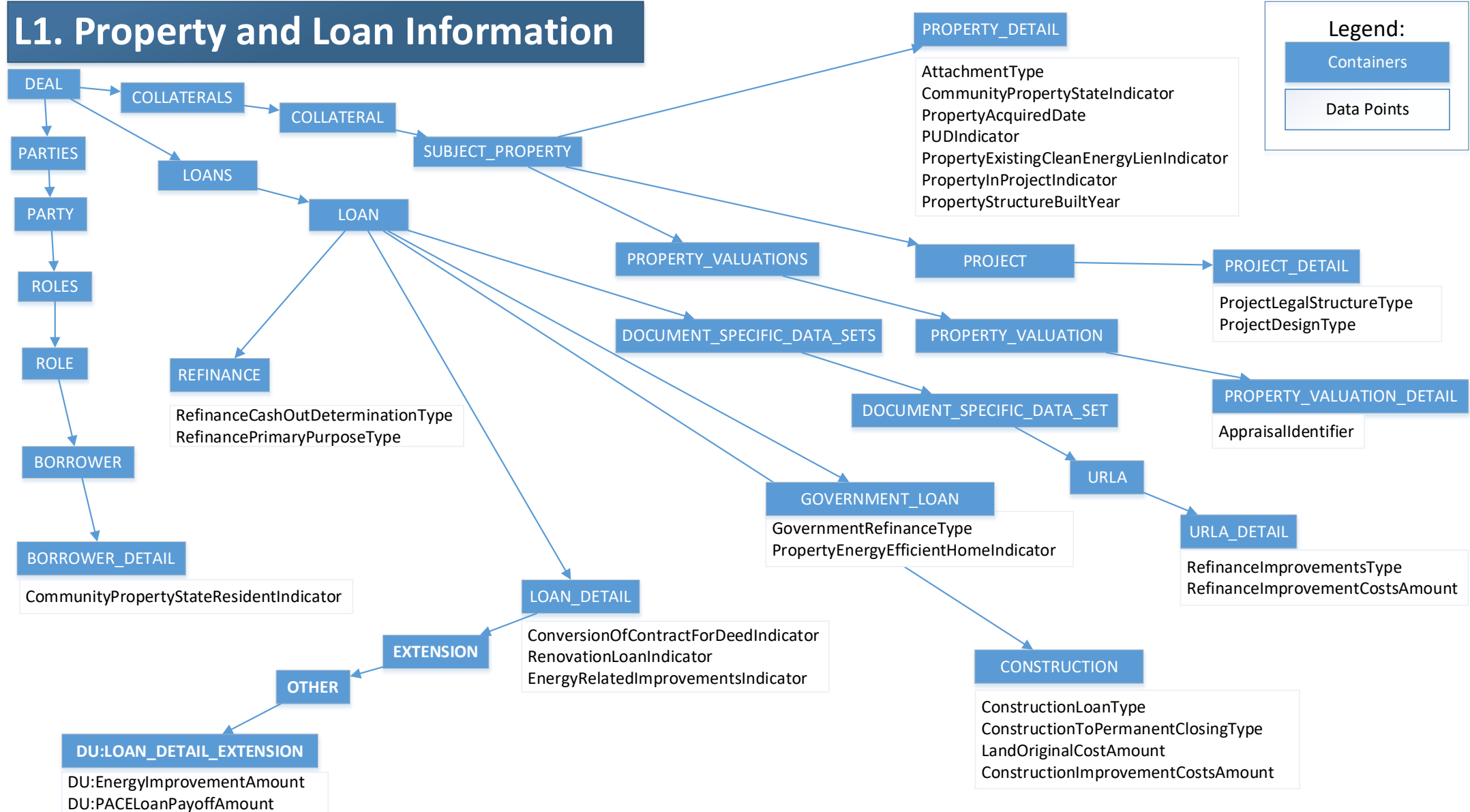
Section 8: Demographic Information



Section 9: Loan Originator Information



L1. Property and Loan Information

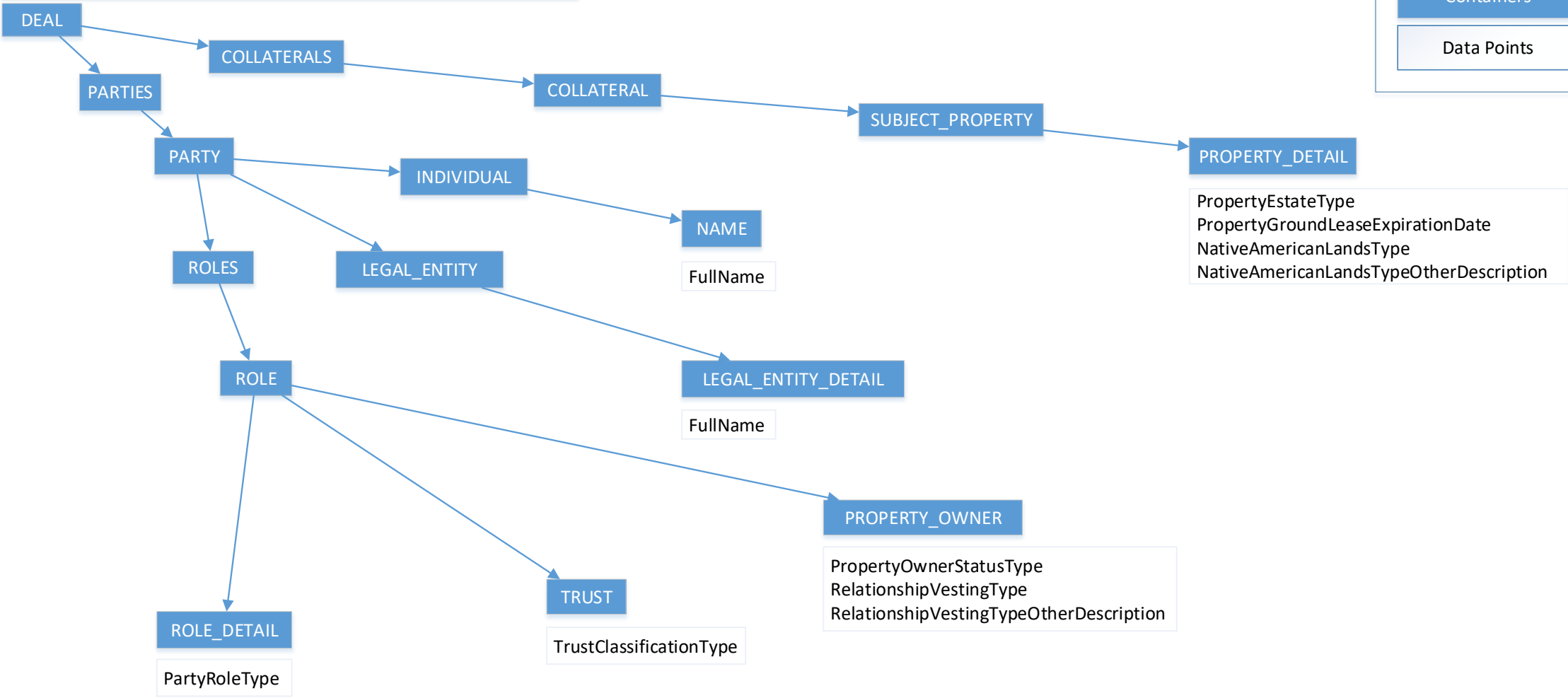


L2. Title Information

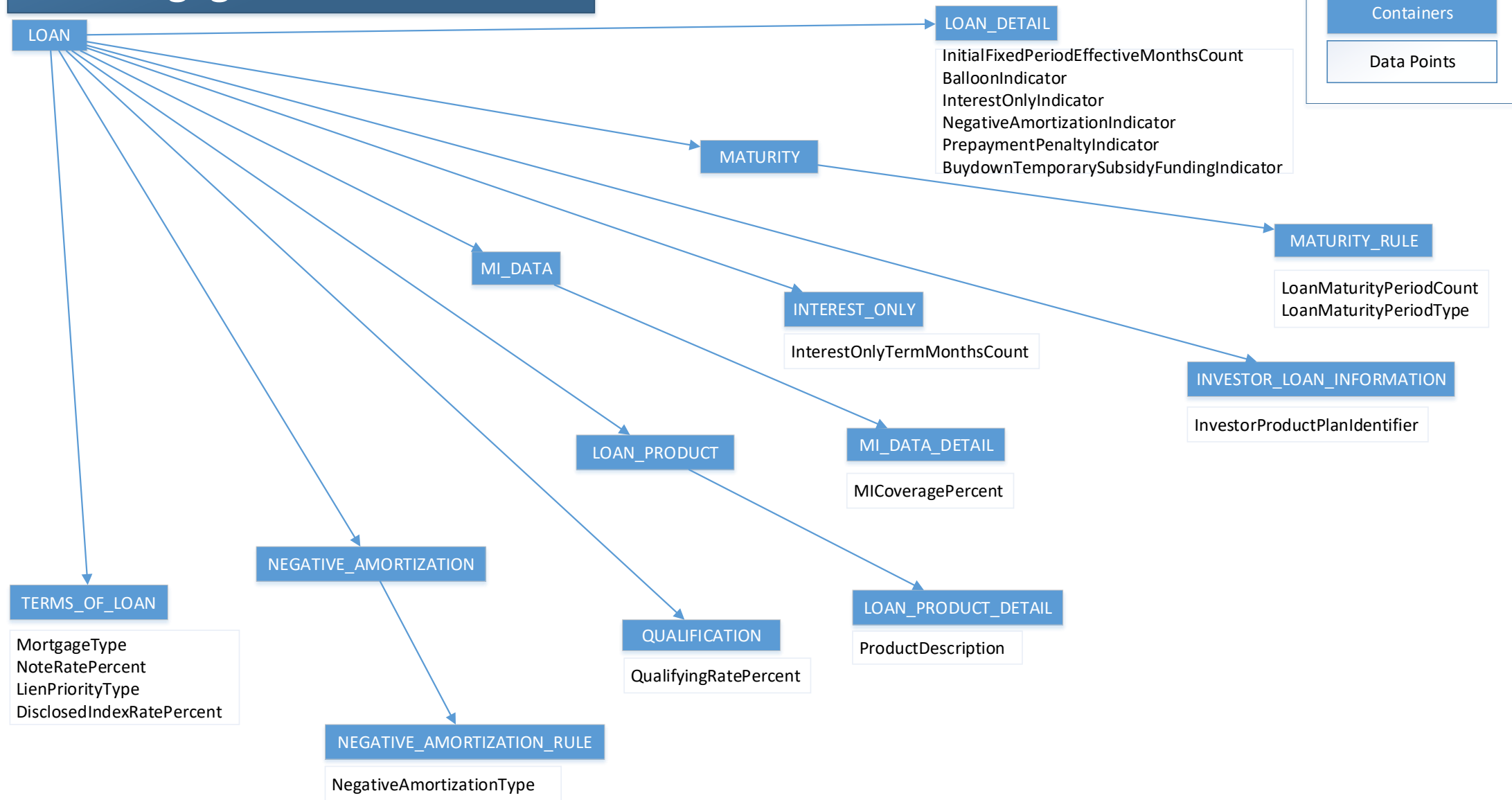
Legend:

Containers

Data Points

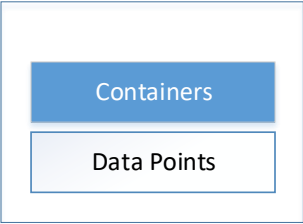
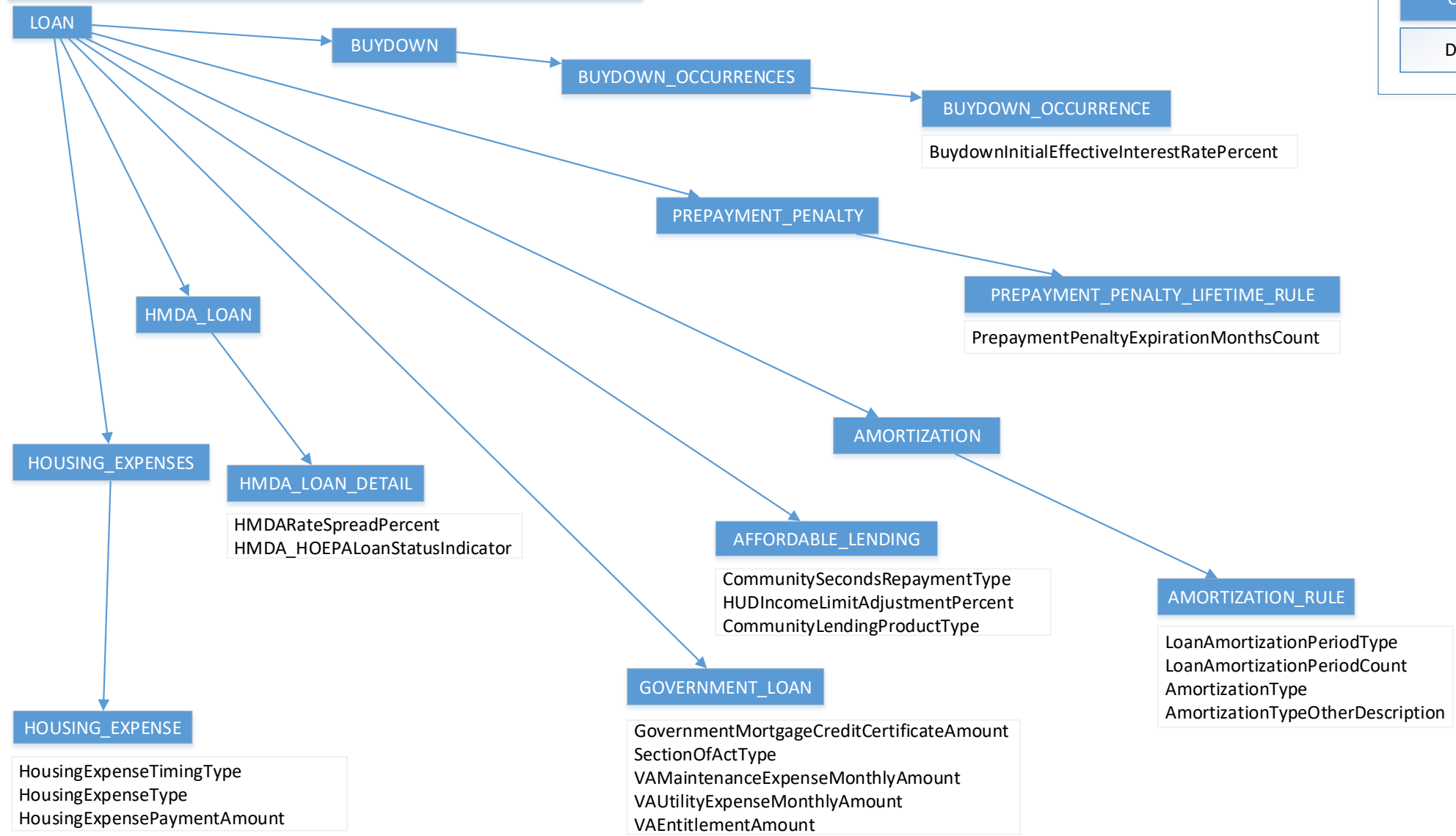


L3. Mortgage Loan Information



L3. Mortgage Loan Information

Continued



L3. Mortgage Loan Information

Continued

Containers

Data Points

ADJUSTMENT

INTEREST_RATE_ADJUSTMENT

INTEREST_RATE_LIFETIME_ADJUSTMENT_RULE

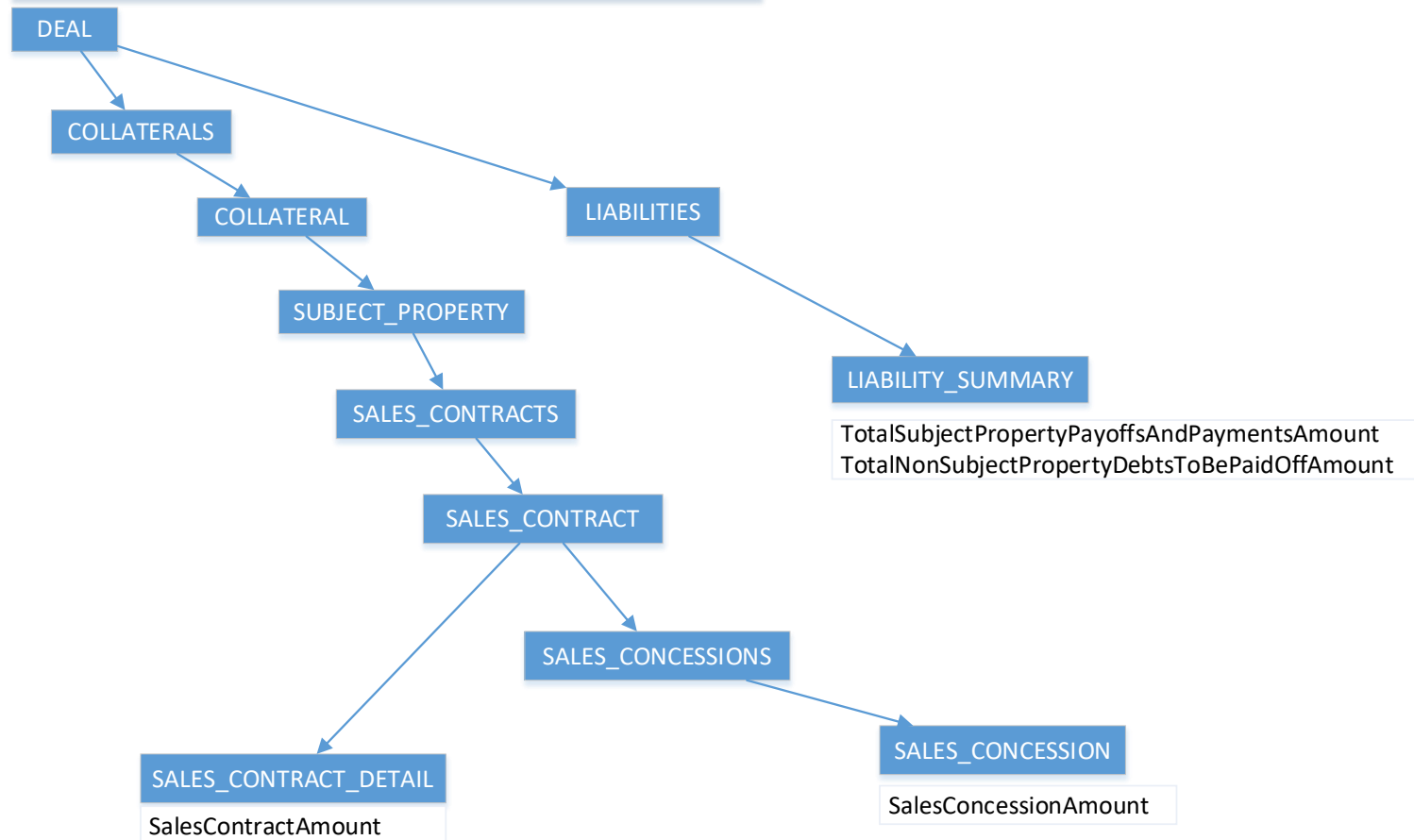
MarginRatePercent
CeilingRatePercent

INTEREST_RATE_PER_CHANGE_ADJUSTMENT_RULES

INTEREST_RATE_PER_CHANGE_ADJUSTMENT_RULE

AdjustmentRuleType
PerChangeRateAdjustmentFrequencyMonthsCount

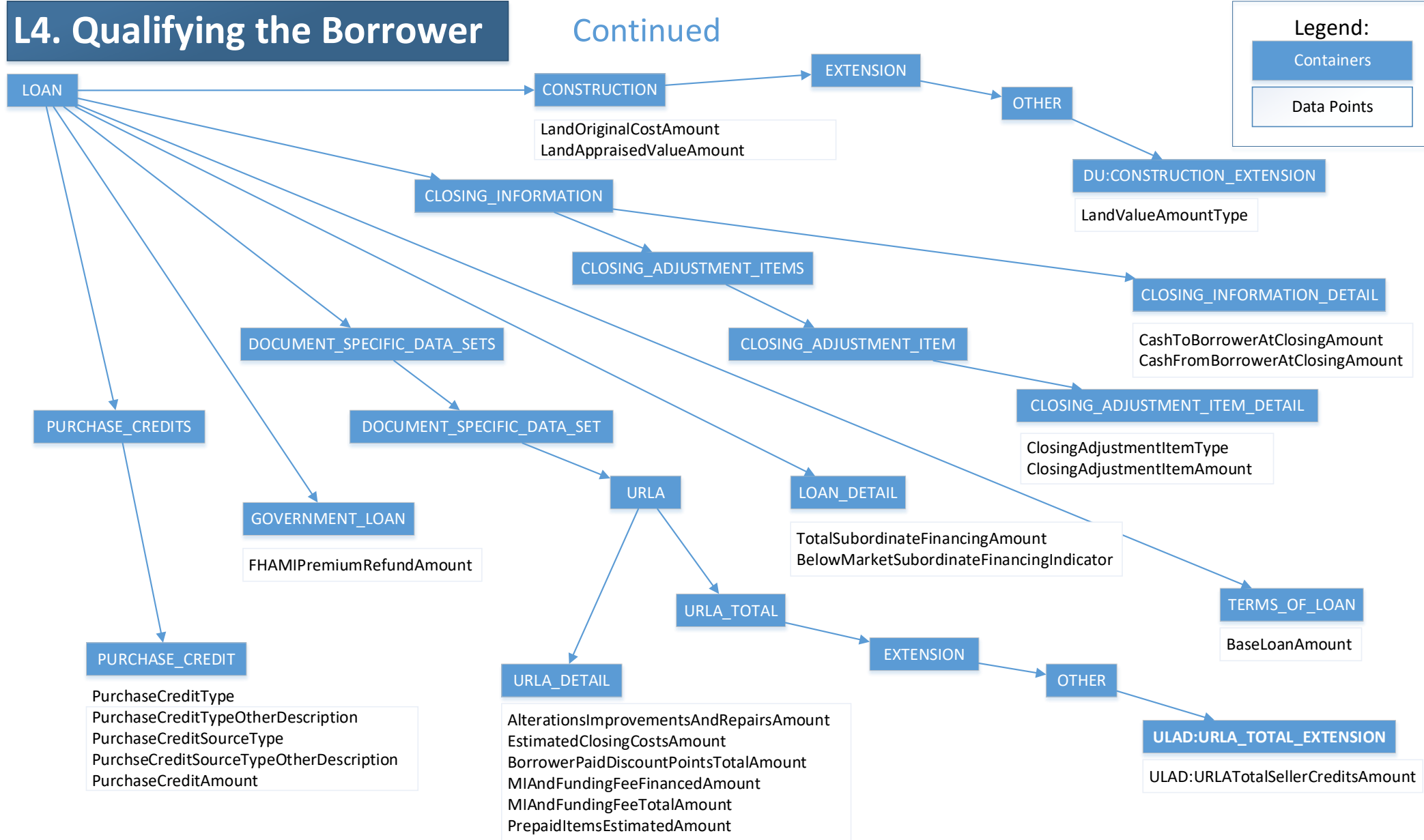
L4. Qualifying the Borrower



Legend:

Containers

Data Points

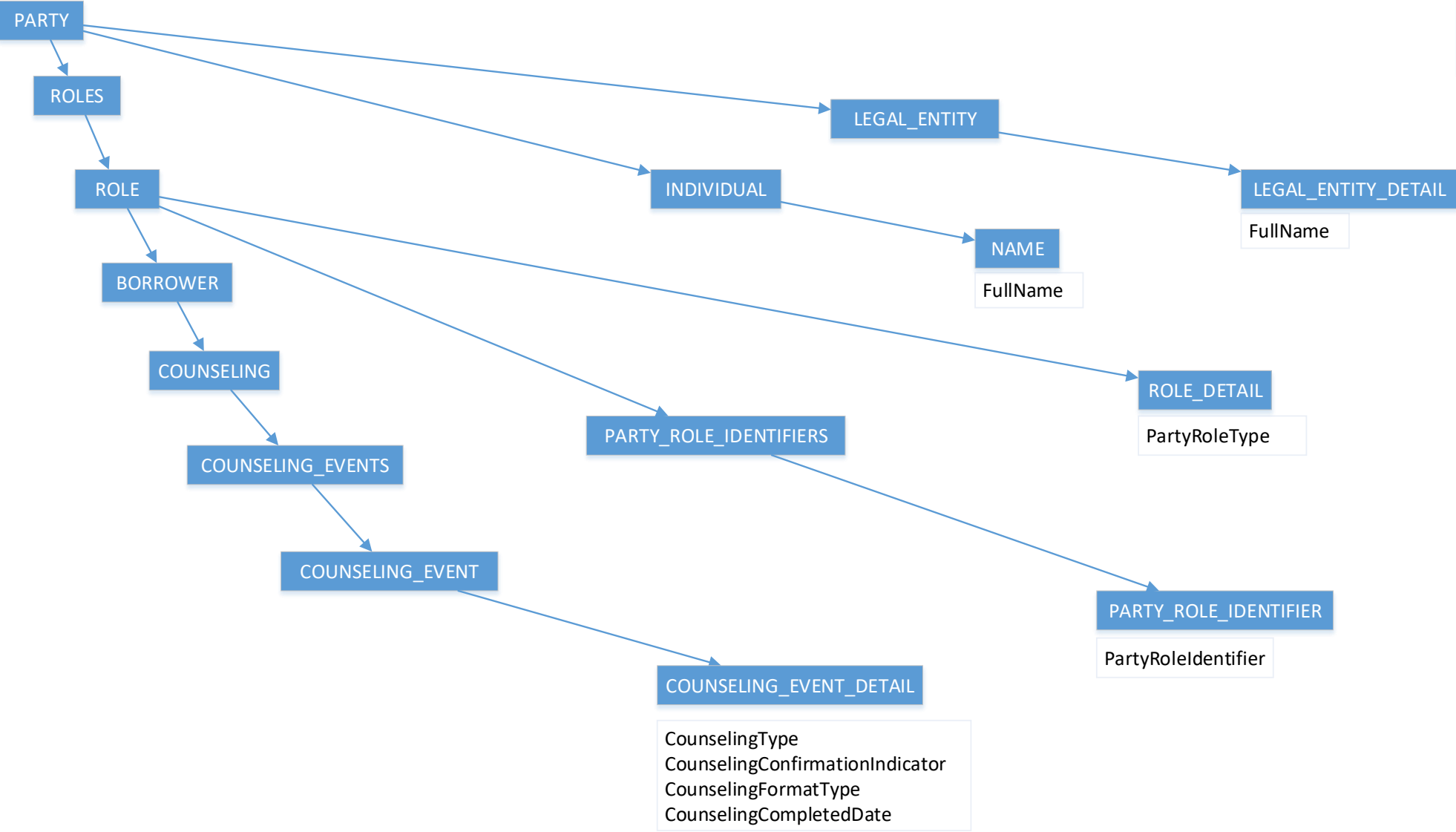


Homeownership Education and Housing Counseling

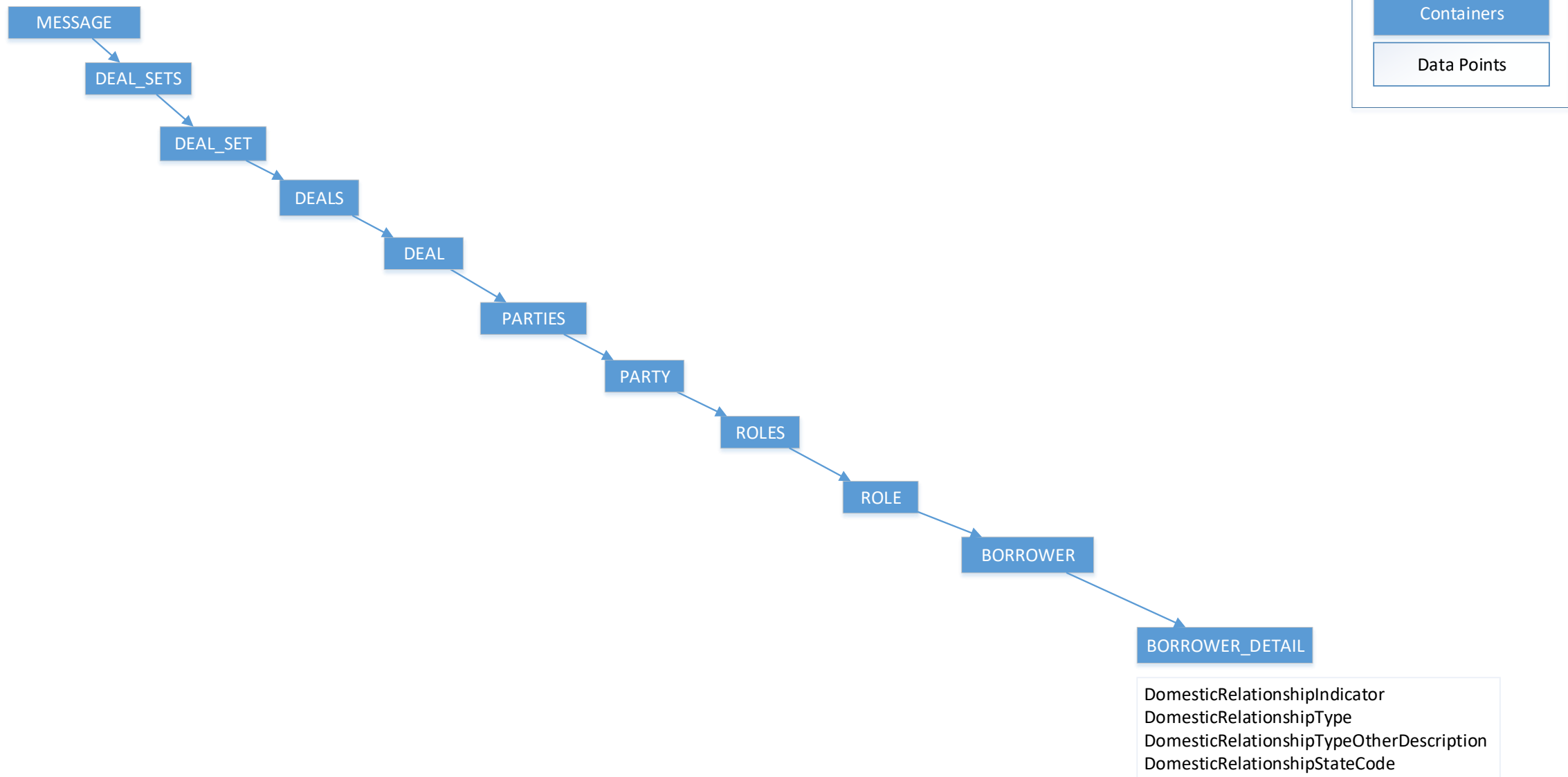
Legend:

Containers

Data Points



Unmarried Addendum





Appendix A

Glossary of terms

AUS	Automated Underwriting System
DU	Desktop Underwriter
DUG	Desktop Underwriter for Government Loans
FHFA	Federal Housing Finance Agency
GSE	Government Sponsored Enterprise(s) (Fannie Mae and Freddie Mac)
LOS	Loan Origination System
MISMO	Mortgage Industry Standards Maintenance Organization
ULAD	Uniform Loan Application Dataset (this term used throughout this document to refer to the MISMO v3.4 dataset mapped to the redesigned URLA)
UMDP	Uniform Mortgage Data Program
URLA	Uniform Residential Loan Application (also known as the Fannie Mae redesigned Form 1003)

Appendix B

Useful Links:

- MISMO V3x General Information Guide:
 - <https://www.mismo.org/standards-resources/license-form/version-3-general-information-guide>
- MISMO Residential Specifications:
 - <https://www.mismo.org/standards-and-resources/residential-specifications>
- MISMO XML Reference Model Schemas:
 - <https://www.mismo.org/standards-and-resources/residential-specifications/xml-schema>
- [Supporting documents for the updated DU Spec](#)
- [Test Cases for the updated DU Spec](#)
- [Training on the DU Spec or Redesigned 1003](#)
- Where should questions regarding implementation or the DU Spec be submitted?
 - Questions should be submitted to ulad@fanniemae.com, for more information consult the web page at <http://www.fanniemae.com/urla>