Fannie Mae

Desktop Underwriter Specification MISMO V3.4
Implementation Guide

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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 Form 1003 field to a corresponding Mortgage Industry Standards Maintenance Organization (MISMO®) v3.4 data point. MISMO, a subsidiary of the Mortgage Bankers Associates (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 data loan submission files based on MISMO v3.4 Reference Model. The DU Spec provides an overview of the data architecture, including reference information about the allowable structure, sequence, values, conditionality and format of the DU data loan submission XML files. The DU Spec also describes how the data from the Residential Loan Data 1003 v3.2 flat file and the MISMO v2.3.1 XML file compares to the data mapped to the MISMO v3.4 Reference Model. This document, the Desktop Underwriter Specification MISMO V3.4 Implementation Guide, will provide 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. This chapter describes the concepts of transitioning from the 1003 v3.2 flat file or MISMO v2.3.1 DTD to the MISMO v3.4 XML file. 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 - provides FAQs for creating and testing Loan Application Submission files (XML).
- Chapter 6 - includes a set of diagrams that show the MISMO v3.4 data structures that support each section of the Form 1003.
- Appendices - contains a Glossary.

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 Form 1003 to the MISMO Data Model**

In certain scenarios it may be helpful to create a side by side comparison of the Form 1003 and the corresponding MISMO model diagrams as depicted in Chapter 6. This side by side view will help to better understand the hierarchical manner of the data relationships in MISMO to the fields in the 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 6) to better 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 Schema Extension file that Fannie Mae will provide. Please refer to [http://www.mismo.org/standards-and-resources/residential-specifications/mismo-version-34](http://www.mismo.org/standards-and-resources/residential-specifications/mismo-version-34) and [https://www.fanniemae.com/content/tool/ulad-du-schema-extensions.zip](https://www.fanniemae.com/content/tool/ulad-du-schema-extensions.zip) 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 Form 1003 layout; whereas the Loan Application Submission file follows the MISMO v3.4 Build 324 Schema hierarchy which is always 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:

![Example 1 Order of Containers in MISMO Schema](image)
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 of 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
  - ARC Roles
  - Enumerations

Understanding Fannie Mae’s DU Spec
The implementation of the DU Spec to create a Loan Application Submission file for DU will require 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 and 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:

- Read Me
- Tab Description
- Column Description
- DU Map Updates – 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 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.
- 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 and how it maps to the redesigned Form 1003 and previous DU specifications.

Identification Reference Columns

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

![Figure 3 List of Columns in the DU Map tab](image-url)
• 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 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 Form 1003 documents for each Form Field ID.

• The Form Field IDs can be found in the “URLA Borrower Information Numbered Form” and “URLA Lender Information Numbered Form.” These components of the redesigned Form 1003 and all of the other components and versions of redesigned forms and supporting documents can be found on the Fannie Mae URLA webpage. https://www.fanniemae.com/singlefamily/uniform-residential-loan-application

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
• DU Field Information
• MISMO 2.3.1 Mapping

This information is taken from the Residential Loan Data Format 1003, V. 3.2 Integration Guide found on the Fannie Mae Technology Integration for DU web page at:

https://www.fanniemae.com/singlefamily/technology-integration?taskId=task-97

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.

Conditionality Information Columns
These columns contain the conditionality for the following types of loan 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.

The DU Spec contains additional data points not represented on the 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:

- Is 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 USDA RuralDevelopment 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.

**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 2014 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 Form 1003. Lenders and TSPs should use the information on all the VA fields (including those not present in the Form 1003) in the VA column for the data points used for VA loans.

**Credit Request**
There are no changes to the current process of requesting credit through DU. The DU Spec has been updated so the data needed for a credit request can be submitted in an XML format. These data points are identified within the DU Map Tab in the Credit Request column of the Conditionality Information columns.

**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

This chapter includes the following topics:

- Changing from the 1003 v3.2 flat file to an XML file
- Upgrading from the MISMO DTD XML file to a MISMO Schema Based XML file
- Creating an XML Schema based XML file

Changing from the 1003 v3.2 flat file to an XML file

The following provides details on how to move from a 1003 v3.2 flat file to an XML schema submission file.

The 1003 v3.2 Flat File

Flat files have a fixed length file format which is the solution used when data is in a flat table; however, in the updated Loan Application Submission file, data will be grouped and organized in a Fannie Mae relational database. The relational database will require relational links to other tables (e.g., borrower information, property information, etc.), that can be better accomplished with the use of an XML file. In addition, special characters (e.g., a comma in the address text or field separators inside the flat file) may break and corrupt the data submission in the flat file. By using an XML file that is hierarchical and object-oriented, lenders and TSPs are less likely to encounter these issues.

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.

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 2 to visualize the concept in an XML code:

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

Example 2 XML code example to illustrate absence of a header
Upgrading from the MISMO DTD XML file to a MISMO Schema Based XML file

The MISMO v2.3.1 DTD file format is based on an older industry standard Document Type Definition (DTD) that is no longer supported by MISMO. The MISMO reference model is now up to version 3.4 and is a schema based XML file format that represents data and groupings of data associated with business functions.

Moving from a 1003 flat file or a DTD file to an XML schema based file

If this is your first time creating an XML schema based file, consider using an XML editor with advanced tools for editing an XML. An XML editor will help create a loan submission file and make it easier to debug the file by validating it against the MISMO schema and the Fannie Mae extended schemas. Additionally, there are vendor systems and other tools that allow for automatic XML file creation from the lender’s source data. Regardless to the vendor system or tool, the resulting Loan Application Submission file must conform to the MISMO schema and the Fannie Mae extended schema files.

The MISMO v3.4 Reference Model and documents that support the data model have a suffix of “B324” which refers to the latest build of version 3.4 officially released by MISMO. Fannie Mae recommends reviewing these documents using an XML editor to better help you understand the MISMO v3.4 data model structures. This will make it easier to understand how to transition from a flat file to an XML schema based file.

Creating 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.

![Select a root element](image)

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 w3schools.com website.
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 Form 1003, review the 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:

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 (US 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.

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.

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 type of loan. The start date must be provided for FHA loans. 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 Form 1003. Refer to the DU Spec and search for more information on employment data information and conditionality.

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 and the corresponding value even though the URLA form does not specify foreign or seasonal income. The following examples apply:

- **IncomeType = Base** and **CurrentIncomeMonthlyTotalAmount = 1500.00**
- **ForeignIncomeIndicator = true** and **CurrentIncomeMonthlyTotalAmount = 1000.00**
Each self-employed borrower will not enter an amount for each income type, but will indicate only their total monthly income (or loss with a negative value). Additionally, self-employed borrowers should indicate if they have an ownership share of more or less than 25%.

DU does not require the lender to provide the Gross Monthly Income Total for borrowers who are not self-employed. This information is optional and DU will calculate the total by aggregating the income items provided by the borrower. However for self-employed borrowers, DU will require the data point EmploymentMonthlyIncomeAmount and this amount may be positive or negative.

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/singlefamily/uniform-residential-loan-application.

1d. Previous Employment/Self-Employment and Income (provide at least 2 years current and previous employment)
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.

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

1e. Income from Other Sources
A borrower that has income from non-employment sources should use the list provided in the Form 1003 to indicate the income type and corresponding monthly income amount. For income from other sources, the EmploymentIncomeIndicator should be false.

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 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 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 You Have
Borrowers can identify other non-account assets 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 child care 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 Form 1003 table includes information about the property 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 3 applies:

```xml
<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 3 Example of attribute use in XML
```
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 four types of occupancy on the URLA: (1) Primary Residence, (2) Second Home, (3) Investment, and (4) FHA Secondary Residence. The first three enumerations for the data point in the DU Spec are indicated in the PropertyUsageType; however, if occupancy will be FHA Secondary Residence, use the FHASecondaryResidenceIndicator.

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.b.)

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 of the declarations related to the Property and the Borrower’s finances are required and must be answered and provided 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.
Section 7: Demographic Information of Borrower

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

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. Refer to example 4 for a combination of four ethnicity origins:

```
<GOVERNMENT_MONITORING>
  <HMDA_ETHNICITY_ORIGINS>
    <HMDA_ETHNICITY_ORIGIN>
      <HMDAEthnicityOriginType>Cuban</HMDAEthnicityOriginType>
    </HMDA_ETHNICITY_ORIGIN>
    <HMDA_ETHNICITY_ORIGIN>
      <HMDAEthnicityOriginType>Mexican</HMDAEthnicityOriginType>
    </HMDA_ETHNICITY_ORIGIN>
    <HMDA_ETHNICITY_ORIGIN>
      <HMDAEthnicityOriginType>Other</HMDAEthnicityOriginType>
    </HMDA_ETHNICITY_ORIGIN>
    <HMDA_ETHNICITY_ORIGIN>
      <HMDAEthnicityOriginType>Argentinian</HMDAEthnicityOriginType>
    </HMDA_ETHNICITY_ORIGIN>
  </HMDA_ETHNICITY_ORIGINS>
  <HMDA_RACES>
    <HMDA_RACE>
      <HMDARaceType>White</HMDARaceType>
    </HMDA_RACE>
    <HMDA_RACE>
      <HMDARaceType>Other</HMDARaceType>
    </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_ETHNICITY>
            <ULAD:HMDAEthnicityType>NotHispanicOrLatino</ULAD:HMDAEthnicityType>
          </ULAD:HMDA_ETHNICITY>
        </ULAD:HMDA_ETHNICITIES>
      </ULAD:GOVERNMENT_MONITORING_EXTENSION>
    </OTHER>
  </EXTENSION>
</GOVERNMENT_MONITORING>
```

Example 4 Other ethnicity origin types
Sex
Sex is reported in the \textit{HMDAGenderType} data point under a detail structure for a single answer. If the borrower checked both Male and Female on the Form 1003, use the \textit{ApplicantHasSelectedBothMaleAndFemale} enumeration. If the borrower did not wish to provide this information then use \textit{HMDAGenderRefusalIndicator}.

Race
Race is reported in the \textit{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 \textit{HMDARaceDesignationTypeOtherDescription}.

If the borrower identified as a member of an American Indian or Alaska Native tribe, use the \textit{HMDARaceTypeAddtionalDescription} to provide the name of the tribe as in the following example 5:

\begin{verbatim}
<GOVERNMENT_MONITORING>
  <HMDA_RACES>
    <HMDA_RACE>
      <EXTENSION>
        <ULAD:OTHER>
          <ULAD:HMDA_RACE_EXTENSION>
            <ULAD:HMDA_RACE_DETAIL>
              <ULAD:HMDARaceType>AmericanIndianOrAlaskaNative</ULAD:HMDARaceType>
              <ULAD:HMDARaceTypeAdditionalDescription>Chehaw</ULAD:HMDARaceTypeAdditionalDescription>
            </ULAD:HMDA_RACE_DETAIL>
          </ULAD:HMDA_RACE_EXTENSION>
        </ULAD:OTHER>
        <//EXTENSION>
      </HMDA_RACE>
    </HMDA_RACES>
  </EXTENSION>
</GOVERNMENT_MONITORING>
\end{verbatim}

Example 5: 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 8: 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 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.

L.1. 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.

L.2. 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.

L.3. Mortgage Loan Information

All of 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.

L.4. 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.

L.5. Homeownership Education and Housing Counseling

The data points for this section are optional for Conventional and VA loans. 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.
Chapter 5: Frequently Asked Questions

1. What is the difference between the ULAD Mapping Document and the DU Specification (DU Spec)?

The ULAD Mapping document is a one to one mapping of MISMO data points to the redesigned Form 1003. It is a joint GSE reference document to help lenders and vendors understand how the form is mapped to MISMO v3.4. Fannie Mae expects DU customers to use the DU Spec to create the Loan Application Submission file. The DU Spec is not a one to one match for the data fields on the redesigned Form 1003. The DU Spec contains additional data elements needed to underwrite a loan.

2. What documentation or tools are available to understand the MISMO v3.4 Reference Model?

Fannie Mae recommends downloading the MISMO v3.4 Reference Model from the MISMO web site at:

   http://www.mismo.org/standards-and-resources/residential-specifications/mismo-version-34

The information is compressed in a zip file and includes the LDD, MISMO v3.4 Reference Model and other supporting documents.

3. Which XML editors does Fannie Mae recommend?

Fannie Mae does not endorse a particular XML editor or software but suggests working with an XML editor that includes a graphic interface and a validation tool. These features will help to view the data structures and with debugging issues.

4. Where could I get more information or additional material on the DU Use Cases?

Consult the Fannie Mae Integration web page at the following link:

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

5. What are attributes? Does the DU Spec include attributes?

The basic building blocks of the XML schema are data points and attributes. An attribute is used to add a unique label to a 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 attributes 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.

6. When is the sequence number attribute used?

Sequence numbers are used when there are multiple values for the same data point within a repeating structure. The sequence number provides 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 example 6 XML illustrates the usage of sequence number to identify the relationships:
Example 6: XML code example to illustrate usage of sequence number attribute

7. Do attributes have conditionality?

The DU Spec only includes conditionality for two attributes: 1) The MISMO Reference Model Identifier 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).

8. Is it possible to report an enumeration that is not present in the DU Spec?

When an enumeration does not exist in the DU Spec, Fannie Mae will allow the use of free-form text data when there is an “Other” enumeration. The lender should include the free-form text in the TypeOtherDescription data points. There are no restrictions on text attribute (e.g., font type, case sensitive, etc.). In some instances, there are specific descriptions for the TypeOtherDescription data points that must be used.
9. **Is there a MISMO data point to capture the borrower’s signature?**

The 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. A copy of the electronic signature could also be saved under the FOREIGN_OBJECT container.

10. **What are extensions? Does the DU Spec file include 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:

- LANGUAGE_EXTENSION
- UNDERWRITING_VERIFICATION
- ASSET_DETAIL_EXTENSION
- DECLARATION_DETAIL_EXTENSION
- HMDA_ETHNICITY
- GOVERNMENT_MONITORING_DETAIL_EXTENSION
- HMDA_RACE_DESIGNATION_EXTENSION
- LOAN_DETAIL_EXTENSION
- URLA_TOTAL_EXTENSION

11. **Why are the following data points not in the borrower section: “Mortgage Type Applied For,” “Note Rate,” “Loan Term,” “Fixed or Adjustable”?**

These data points were reviewed and discussed with lenders and industry stakeholders and it was determined that the lender is best positioned to provide this information and not the borrower. As for the Loan Application Submission file, the data is sorted by the hierarchical order dictated by the MISMO schema.

12. **What field should be used to identify the “sales price”?**

The data point for “sales price” is “SalesContractAmount” and it’s unique ID 7.0001 in the DU Spec document. This data point is mapped to the “Sales Contract Price” in the Qualifying the Borrower Section of the Lender Loan Information Form in the redesigned Form 1003.

13. **Do you support Excessive Contributions? If so, what fields will be used to submit this information?**

Fannie Mae Credit Policy has determine that Interested Party Contributions (IPC)s will not be collected for Conventional loans. In the case of FHA loans, only use one total amount for Sales Concessions without indicating a type of concession.
14. Where can I find the supporting documents for the updated AUS specification?

All of the updated supporting documents are located on the DU Integration Web Page. The Purchase XML Sample and the Refinance XML Sample are included in the DU Specification MISMO V3.4 Test Case Suite. The Extension File to the MISMO v 3.4 Schema is called the Fannie Mae DU Extension Schema, also on the DU Integration Web Page.

15. What are the plans to support DU interfaces? Are you retiring XIS, making updates to the GUI?

For system to system calls, the existing XIS interface will be updated to support both DO broker and lender functions: import, request credit, underwrite, and export using the DU Spec format. There are also plans for a new GUI/UX that will support editing of the DU Spec data, including the new fields, for both DO brokers and lenders.

16. Is there any training on the DU Spec or Redesigned 1003 available?

Fannie Mae has prepared training material to help DU customers. Please refer to the Training section (located on the left column) of the URLA web page:

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

17. Why are ArcRoles needed? How do I establish an ArcRole for my Loan Application Submission file?

ArcRoles (XML Links) consist of a defined relationship between two data facts (data points) or groups of facts (containers). These relationships can be established by following the list of available ArcRoles in the corresponding ArcRole tab of the DU Spec. For more information on the notation or a step-by-step explanation on how to build an ArcRole, please refer to the following GSE Joint publication:

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

18. What is a 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. This last one is a validation 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.

19. Who should questions regarding the implementation or the DU spec be submitted to?

Customers should contact the following groups for support on implementation questions on the DU Spec: Integration Team: integration_support@fanniemae.com
ULAD Team: ulad@fanniemae.com

20. How can I easily identify the changes/edits between DU Spec Versions?

Changes are identified in the Revision History tab of the DU Spec. Furthermore, there will be a tab dedicated to the DU Map Updates, please refer to the last column to filter by the updated version number.
21. What are the schema files that DU requires for a DU Spec loan file submission? Are these files available for download and if so, where can these be found?

DU requires the MISMO v3.4 Schema and other schema files to support a DU Spec loan file submission. 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 DU Spec, these extension files are the Joint GSE Schema Extension and the DU Schema extension.

The aforementioned files are available for download and the following instructions illustrate the steps to gather these files:

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: http://www.mismo.org/standards-and-resources/residential-specifications

b) Download the Joint GSE Schema Extension from the Fannie Mae Uniform Residential Loan Application site: https://www.fanniemae.com/content/tool/mismo-aus-gse-extensions.zip

c) Download the DU Schema Extension from the Fannie Mae Technology Integration site: https://www.fanniemae.com/content/tool/ulad-du-schema-extensions.zip

d) Ensure that all of these files are located in the same directory and accessible when you validate your submission file
Chapter 6: 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 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 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: Demographic Information of Borrower
8: Loan Originator Information
L1. Property and Loan Information
L2. Title Information
L3. Mortgage Loan Information (3 pages)
L4. Qualifying the Borrower (2 pages)
L5. Homeownership Education and Housing Counseling
Unmarried Addendum
XML Content

MESSAGE

MISMOReferenceModelIdentifier
(attribute)

ABOUT_VERSIONS

DEAL_SETS

PARTIES

DEAL_SET

ROLES

ROLE

ROLE_DETAIL

ROLE_ROLE_IDENTIFIERS

PARTY_ROLE_IDENTIFIER

PartyRoleType

PartyRoleIdentifier

ABOUT_VERSION

CreatedDatetime

DEALS

DEAL

LOANS

LOAN

LOAN_DETAIL

ApplicationReceivedDate

Legend:

MISMO Containers

MISMO Data Points
1a. Personal Information

Legend:
- MISM0 Containers
- MISM0 Data Points
1a. Personal Information

**Legend:**
- MISMO Containers
- MISMO Data Points

**PARTY**
- TAXPAYER_IDENTIFIERS
  - TAXPAYER_IDENTIFIER
    - TaxpayerIdentifierType
    - TaxpayerIdentifierValue

**ROLES**
- ROLE
  - BORROWER
    - MILITARY_SERVICES
      - MilitaryStatusType
      - MilitaryServiceExpectedCompletionDate
    - RESIDENCES
      - ADDRESS
        - AddressLineText
        - AddressUnitIdentifier
        - CityName
        - StateCode
        - PostalCode
        - CountryCode
      - LANDLORD
        - MonthlyRentAmount
      - RESIDENCE_DETAIL
        - BorrowerResidencyDurationMonthsCount
        - BorrowerResidencyBasisType
        - BorrowerResidencyType
    - DEPENDENTS
      - DEPENDENT
        - DependentAgeYearsCount
      - HOUSING_EXPENSES
        - HOUSING_EXPENSE_SUMMARY
          - HousingExpensePresentTotalMonthlyPaymentAmount
      - DECLARATION
        - CitizenshipResidencyType
    - DECLARATION_DETAIL
      - OpportunityType

**OTHERS**
- LEGEND
  - MISMO Containers
  - MISMO Data Points

MISMO Data Points
- MISMO Containers
- MISMO Data Points

Continued
1d. Previous Employment/Self-Employment and Income

BORROWER

EMPLOYERS

EMPLOYER

INDIVIDUAL

LEGAL_ENTITY

NAME

LEGAL_ENTITY_DETAIL

FULL_NAME

ADDRESS

EMPLOYMENT

EmploymentStatusType

EmploymentPositionDescription

EmploymentStartDate

EmploymentEndDate

EmploymentBorrowerSelfEmployedIndicator

EmploymentMonthlyIncomeAmount

1e. Income from Other Sources

BORROWER

CURRENT_INCOME

CURRENT_INCOME_ITEMS

CURRENT_INCOME_DETAIL

CURRENT_INCOME_ITEM

URLABorrowerTotalOtherIncomeAmount

CURRENT_INCOME_ITEM_DETAIL

IncomeType

IncomeTypeOtherDescription

ForeignIncomeIndicator

SeasonalIncomeIndicator

CurrentIncomeMonthlyTotalAmount

EmploymentIncomeIndicator

Legend:
MISMO Containers
Income Containers
Employment Containers
MISMO Data Points
2a. Assets - Bank Accounts, Retirement, and Other Accounts You Have

- **ASSETS**
  - **ASSET**
    - **ASSET_DETAIL**
      - **ASSET_HOLDER**
        - **NAME**
          - **FullName**
          - **AssetType**
          - **AssetAccountIdentifier**
          - **AssetCashOrMarketValueAmount**
          - **SequenceNumber**

2b. Other Assets You Have

- **DEAL**
  - **LOANS**
    - **LOAN**
      - **ASSETS**
      - **ASSET**
        - **ASSET_DETAIL**
          - **ASSET_HOLDER**
            - **NAME**
              - **FullName**
              - **AssetType**
              - **AssetTypeOtherDescription**
              - **AssetCashOrMarketValueAmount**
              - **SequenceNumber**
          - **PURCHASE_CREDITS**
            - **PURCHASE_CREDIT**
              - **PurchaseCreditType**
              - **PurchaseCreditAmount**
2c. Liabilities - Credit Cards, Other Debts, and Leases that You Owe

**Legend:**
- MISMO Containers
- MISMO Data Points

**MISMO Data Points**
- NAME
  - FullName

**MISMO Containers**
- LIABILITY
  - SequenceNumber (attribute)
  - LIABILITY_HOLDER
    - NAME
      - FullName
  - LIABILITY_DETAIL
    - LiabilityType
    - LiabilityTypeOtherDescription
    - LiabilityAccountIdentifier
    - LiabilityUnpaidBalanceAmount
    - LiabilityPayoffStatusIndicator
    - LiabilityMonthlyPaymentAmount
    - LiabilityRemainingTermMonthsCount
    - LiabilityExclusionIndicator

2d. Other Liabilities and Expenses

**Legend:**
- CAIVRSIdentifier

**MISMO Data Points**
- EXPENSE
  - SequenceNumber (attribute)
  - ExpenseType
  - ExpenseTypeOtherDescription
  - ExpenseMonthlyPaymentAmount
  - ExpenseRemainingTermMonthsCount

**MISMO Containers**
- DEAL
  - PARTIES
    - PARTY
    - ROLES
      - ROLE
      - BORROWER
        - GOVERNMENT_BORROWER
        - CAIVRSIdentifier
3a. Property You Own

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Legend:
MISMO Containers
MISMO Data Points

OwnedPropertySubjectIndicator
OwnedPropertyDispositionStatusType
OwnedPropertyMaintenanceExpenseAmount
OwnedPropertyRentalIncomeGrossAmount
OwnedPropertyRentalIncomeNetAmount
OwnedPropertyLienUPFAmount

PA别1

SequenceNumber (attribute)

LIABILITY

OwnedPropertyCurrentFirstMortgageHolderType

ROLE

BorrowerTotalMortgagedPropertiesCount

BORROWER

BORROWER_DETAIL

SALES_CONTRACT

SALES_CONTRACT_DETAIL

SALES_CONTRACTS

PROPERTY

ADDRESS

EXTENSION

OTHER

PROPERTY_DETAIL

PROPERTY_VALUATIONS

PROPERTY_VALUATION

PROPERTY_VALUATION_DETAIL

PROPERTY_VALLIATION

PROPERTYHOLDER

PROPERTY

NAME

fullName

ADDRESSLINE1

AddressUnitIdentifier

CityName

StateCode

PostalCode

Currentresidenceindicator

OwnedPropertyPaymentIncludesTaxesInsuranceIndicator

OwnedPropertyAccountIdentifier

OwnedPropertyType

OwnedPropertyMonthlyPaymentAmount

OwnedPropertyUnpaidBalanceAmount

OwnedPropertyPayoffStatusIndicator

HELLOCMAXIMUMBALANCEAMOUNT

SalesContractAmount

propertyEstimatedValueAmount
4a. Loan and Property Information

**Deal**
- **Collaterals**
  - **Loans**
    - **Loan**
      - **Terms Of Loan**
        - LoanPurposeType

**Subject Property**
- **Address**
  - AddressLineText
  - AddressUnitDesignatorType
  - AddressUnitIdentifier
  - CityName
  - StateCode
  - PostalCode
  - CountyName

**Location Identifier**
- **Property Valuations**
  - **Property Valuation**
    - FinancedUnitCount
    - PropertyEstimatedValueAmount
    - PropertyUsageType
    - FHASecondaryResidenceIndicator
    - PropertyMixedUsageIndicator
    - ConstructionMethodType
    - ConstructionMethodTypeOtherDescription

**FIPS Information**
- FIPSStateNumericCode
- FIPSCountySubdivisionCode
- FIPSPlaceCode

**Property Valuation Detail**
- PropertyValuationAmount

Legend:
- MISMO Containers
- MISMO Data Points
4b. Other New Mortgage Loans on the Property You Are Buying or Refinancing

Legend:
- MISMO Containers
- MISMO Data Points
4c. Rental Income on the Property You Want to Purchase

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

Legend:
- MIMO Containers
- MIMO Data Points

Additional Data Points:
- RentalEstimatedGrossMonthlyRentAmount
- RentalEstimatedNetMonthlyRentAmount

Asset Type Additional Attributes:
- FundsSourceType
- FundsSourceOtherDescription
- AssetCashOrMarketValueAmount

IncludedInAssetAccountIndicator
5a. About this Property and Your Money for this Loan
5b. About Your Finances

Legend:
- MIMO Containers
- MIMO Data Points

- IntentToOccupyType
- HomeownerPastThreeYearsType
- PriorPropertyUsageType
- FHASecondaryResidenceIndicator
- PriorPropertyTitleType
- UndisclosedBorrowedFundsIndicator
- UndisclosedBorrowedFundsAmount
- UndisclosedMortgageApplicationIndicator
- UndisclosedCreditApplicationIndicator
- PropertyProposedCleanEnergyLienIndicator
- UndisclosedCoMakerOrNoteIndicator
- OutstandingJudgmentsIndicator
- PresentlyDelinquentIndicator
- PartyToLawsuitIndicator
- PriorPropertyDeedInLieuConveyedIndicator
- PriorPropertyShortSaleCompletedIndicator
- PriorPropertyForeclosureCompletedIndicator
- BankruptcyIndicator

- BankruptcyChapterType
- DeclarationExplanationDescription
- DeclarationExplanationType
- DeclarationDetail
- DeclarationDetailExtension
- Other
Section 6: Acknowledgements and Agreements
Section 7: Demographic Information

**Legend:**
- **MISMO Containers**
- **MISMO Data Points**

**MISMO Containers**
- HMDA_EthnicityOrigins
- HMDA_Races
- HMDA_Race_Designations
- HMDA_Race_Designation

**MISMO Data Points**
- HMDA_EthnicityType
- HMDA_GenderType
- HMDA_RaceType

- HMDA_EthnicityOriginType
- HMDA_GenderRefusalIndicator
- HMDA_RaceRefusalIndicator
- HMDA_EthnicityCollectedBasedOnVisualObservationOrSurnameIndicator
- HMDA_GenderCollectedBasedOnVisualObservationOrNameIndicator
- HMDA_RaceCollectedBasedOnVisualObservationOrSurnameIndicator

- HMDA_RaceDesignationType
- HMDA_RaceDesignationOtherAsianDescription
- HMDA_RaceDesignationOtherPacificIslanderDescription

- HMDA_EthnicityType
- HMDA_GenderType
- HMDA_RaceType
- HMDA_RaceDesignationType

- HMDA_EthnicityCollectedBasedOnVisualObservationOrSurnameIndicator
- HMDA_GenderCollectedBasedOnVisualObservationOrNameIndicator
- HMDA_RaceCollectedBasedOnVisualObservationOrSurnameIndicator

- ApplicationTakenMethodType
Section 8: Loan Originator Information

Legend:
- MISMO Containers
- MISMO Data Points

ApplicationSignedByLoanOriginatorDate
AddressLineText
AddressUnitIdentifier
AddressUnitDesignatorType
CityName
StateName
PostalCode

Role
- PartyRoleType
- Role

TAXPAYER_IDENTIFIERS
- TaxpayerIdentifier
  - TaxpayerIdentifierValue
  - TaxpayerIdentifierType

LICENSE
- License
  - LicenseIdentifier
  - LicenseAuthorityLevelType

ADDRESS
- Address
  - AddressLine
  - AddressCity
  - AddressState
  - AddressPostalCode

CONTACT_POINT
- ContactPointEmail
  - ContactPointEmailValue

CONTACT_POINT_TELEPHONE
- ContactPointTelephone
  - ContactPointTelephoneValue

PARTY
- Individual
  - Name
    - FirstName
    - LastName
    - MiddleName
  - SuffixName

ROLE
- Role

LEGAL_ENTITY
- LegalEntity
  - TaxpayerIdentifier
  - TaxpayerIdentifierValue
  - TaxpayerIdentifierType

LEGAL_ENTITY_DETAIL
- LegalEntityDetail
  - FullName

DOCUMENT_SPECIFIC_DATA_SET
- DocumentSpecificDataSet

GOVERNMENT_LOAN
- GovernmentLoan
  - FHALoanLenderIdentifier
  - FHALoanSponsorIdentifier

LOAN

PARTIES

DEAL

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L2. Title Information

Legend:
- MISO Containers
- MISO Data Points

- PropertyRoleType
- TrustClassificationType
- PropertyOwnerStatusType
- RelationshipVestingType
- NativeAmericanLandsType
- OtherDescription
- PropertyGroundLeaseExpirationDate
- PropertyEstateType
- NativeAmericanLandsType
- OtherDescription
L3. Mortgage Loan Information

- **Adjustment**: INTEREST_RATE_ADJUSTMENT
  - INDEX_RULE
    - INDEX_RULE
    - INDEX_RULE
      - INTEREST_RATE_PER_CHANGE_ADJUSTMENT_RULE
      - INTEREST_RATE_PER_CHANGE_ADJUSTMENT_RULE
    - INTEREST_RATE_LIFETIME_ADJUSTMENT_RULE
      - MarginRatePercent
      - CeilingRatePercent
  - INTEREST_RATE_ADJUSTMENT
    - INDEX_RULE
      - IndexSourceType
    - IndexSourceTypeOtherDescription

Legend:
- MISO Containers
- MISO Data Points

CONTINUED
L4. Qualifying the Borrower

DEAL

COLLATERALS

COLLATERAL

SUBJECT_PROPERTY

LIABILITIES

LIABILITY_SUMMARY

SALES_CONTRACTS

SALES_CONTRACT

SALES_CONCESSIONS

SALES_CONCESSION

Legend:

MISMO Containers

MISMO Data Points

TotalSubjectPropertyPayoffsAndPaymentsAmount
TotalNonSubjectPropertyDebtsToBePaidOffAmount

SalesContractAmount
ExcessiveFinancingConcessionsAmount

SalesConcessionType
SalesConcessionAmount
L4. Qualifying the Borrower

Continued
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 Form 1003)