**Implementing the UCD Subschema Package for UCD v2.0 File Validation**

Fannie Mae and Freddie Mac (the GSEs) have created a UCD Subschema Package (Subschema) that incorporates containers, data points, enumerations and attributes identified in UCD v2.0 The Subschema is based on MISMO v3.3.0\_B299 and is used in conjunction with MISMO v3.3.0\_B299 schema files to validate test UCD XML files.

The purpose of the Subschema is to assist you with your development efforts. The Subschema was created for use by software partners and direct integrators to validate test XML files to ensure that the XML file complies with UCD v2.0. The Subschema also will flag as schema errors containers, data points and attributes present in the XML file that are not included in UCD v2.0.

The GSEs will *not* use the Subschema to enforce the data content of production files after the UCD v2.0 mandate.

**Note**: Containers and data points that are required in the XML file because they satisfy a conditionality (for example, the data point CeilingRatePercent is required IF AmortizationType = ”AdjustableRate”) are NOT enforced by the Subschema. Except for enumerations related to ucd:FeeItemType described below, the UCD Subschema only validates that a valid MISMO v3.3.0\_B299 enumeration is in the file. If UCD v2.0 further restricts enumerations, that is not validated by the Subschema.

The schema files required to complete the Subschema validation are listed below and available on the GSEs’ UCD webpages in a .*ZIP* file. To implement the subschema, extract all schema files from the .ZIP file into one folder.

**UCD Subschema Files**

**UCD\_Subschema\_3.3.0\_B299.xsd** – This schema file is the root schema file for the UCD Subschema. This replaces the use of the MISMO\_3.3.0\_B299.xsd file.

**UCD\_Subschema.xsd** – This schema file contains all the containers, data points and attributes related to UCD v2.0. It enforces the inclusion of all containers, data points and attributes that are *required* in UCD v2.0. This replaces the use of the MISMOComplexTypesB299.xsd file.

**UCD.xsd** – This is the UCD v2.0 EXTENSION schema enabling validation of the ucd:FeeItemType enumerations. This ucd:FEE\_DETAIL\_EXTENSION contains ucd:FeeItemType with all supported (and only valid) enumerations, ucd:FeeItemTypeOtherDescription and DisplayLabelText. As illustrated in the preceding sentence, the schema uses a namespace value of “ucd:”. All EXTENSION container and data point names in the EXTENSION must include this prefix.

**UCD\_Subschema\_Wrapper.xsd** – This schema file allows for validation of both the UCD Subschema (based on MISMO v3.3.0) and UCD (EXTENSION) schemas. To validate a UCD v2.0 XML file against the Subschema, assign this schema to the XML file.

**MISMO v.3.3.0\_B299 Schema Files**

These MISMO schema files need to be included in the same folder as the UCD Subschema files to properly validate UCD v2.0 XML files. If needed, these files can be found on the MISMO website ([mismo.org](https://fnma-my.sharepoint.com/personal/gaur3r_fanniemae_com/Documents/Work%20Docs/MISMO%203.3.0/ReferenceModel_v3.3.0_B299/Production%20Schema%20Files/mismo.org)).

* ExtensionDetails.xsd
* MISMOComplexTypeExtensionsB299.xsd
* MISMODataTypesB299.xsd
* MISMOEnumeratedTypesB299.xsd
* xlink.xsd
* xlinkMISMOB299.xsd
* xml.xsd