

# **Nationwide Mortgage Licensing System & Registry**

## **Mortgage Call Reports**

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**XML Specification**

Release 2012.3

## Change Log

Date	Description	Release	Version
5/15/2012	<p>XSD files updates for Form Version 2 (No changes to Form Version 1):            The following fields now allow positive and negative dollar amounts.            (Previously only positive amounts.):</p> <p style="padding-left: 40px;">AC600_1            AC610_3            AC610_5</p> <p>NOTE: there are no changes to this document, only to the associated XSD files:            MCRUploadSchemaExpandedV2.xsd            MCRUploadSchemaStandardV2.xsd</p>	2012.3	7.0
4/10/2012	<ul style="list-style-type: none"> <li>• Added note about &lt;xs:sequence&gt; enforcement of element order in the xml. This has always been true, but now is explicitly noted.</li> <li>• Added the “well formed xml” validation.</li> <li>• Added note concerning the order in which some Level 1 validations are performed.</li> </ul>	2012.3	7.0
4/4/2012	<ul style="list-style-type: none"> <li>• Missing new message text has been added.</li> <li>• Names of new sample files have been added.</li> <li>• All “TBD” have been replaced.</li> </ul>	2012.3	6.0
3/23/2012	<ul style="list-style-type: none"> <li>• Added Examples for Form Version 2</li> </ul>	2012.3	5.0
3/1/2012	<ul style="list-style-type: none"> <li>• Note that in <u>this version of the document</u> all changes related to the 2012.3 release are highlighted in Yellow.</li> <li>• A new form version is being introduced in this release. Throughout the document wherever relevant, the impact of this new form version is explained.</li> <li>• New validations for 2012.3 were added to Table 6 - Validation Rules and Messages and a column was added to distinguish which validations apply to which form version.</li> <li>• Some sections were moved for a more orderly presentation. When the content has not changed, the section is not highlighted.</li> </ul>	2012.3	4.0
4/5/2011	<p>In 4.4 <u>Upload Validation</u> the rules and message text have been updated for validations 10 and 11.</p>	2011.2	3.0
3/17/2011	<p>The following updates were made:</p> <ul style="list-style-type: none"> <li>• XSD and sample XML files will now be delivered as separate documents. Sample XML file descriptions are defined in the Supporting Files section.</li> <li>• Added final validations including messages and descriptions.</li> <li>• Added Schema validation notes.</li> <li>• Added section describing working with list data.</li> </ul>	2011.2	2.0

	<ul style="list-style-type: none"> <li>• Added basic steps in the users upload process.</li> </ul> <p>Schema changes that include:</p> <ol style="list-style-type: none"> <li>1. A separate XSD has been defined for the Standard MCR's. The Standard MCR contains subset of the fields in the Expanded MCR and the Standard format XSD does not contain the Expanded-only fields.</li> <li>2. User-defined data types have been defined for every field (which previously used standard XML types). See the end for the XSD files for the definitions in the "simpleType" nodes.</li> <li>3. Section nodes (e.g. ScheduleASection, ScheduleBSection, etc) have been restricted to only 1 occurrence each when applicable.</li> <li>4. The max number of "Lines of Credit" items has been restricted to 3000.</li> <li>5. The ItemId tag in the "Lines of Credit" is no longer required. See the XML spec document for specifics on how this tag is used.</li> <li>6. The ItemId tag in the "MLO" is no longer required. See the XML spec document for specifics on how this tag is used.</li> <li>7. The max number of "MLO" items has been restricted to 3000.</li> <li>8. The "stateCode" attribute of the "RMLA" node is now required.</li> <li>9. An allowed stateCode of "VI" was added.</li> <li>10. The "reportingDate" value must now be greater than or equal to "2011-01-01".</li> </ol>		
2/10/2011	Initial draft	2011.2	1.0

# 1 Overview

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As of Release 2011.2, companies have the ability to create, manage, and submit Mortgage Call Reports (MCR) within NMLS through submission of an MCR filing. An MCR filing can be created and maintained manually within NMLS or through an upload of an XML file to NMLS.

The upload feature will allow companies to streamline the filing process for Mortgage Call Reports by extracting information from their own internal systems and providing it to NMLS. An XML upload may be used in order to create an initial MCR filing, change information on a pending MCR filing or amend information on a previously-submitted MCR filing.

This document provides the specification for the XML file in support of creating and updating an MCR filing. Note that this document is not intended to provide an overview of Mortgage Call Report requirements. For detailed information for Mortgage Call Reports, including an explanation of each field, please refer to the [NMLS Resource Center](#).

## 1.1 Audience

This document is intended to be used by technical staff responsible for building the XML file for a Mortgage Call Report. It is expected that readers of this document have existing knowledge of XML.

## 1.2 Contact Information / Technical Issues

For questions or issues using the upload feature within NMLS, contact either the NMLS Call Center or your Account Administrator. The NMLS Call Center will not provide support for creating or troubleshooting XML files

## 1.3 Prerequisites for Creating and Submitting MCR Filings

A company must have a submitted MU1 filing in NMLS in order to upload an XML file for a Mortgage Call Report. The user attempting to upload the file must have an NMLS user account with the appropriate MCR role. To determine if your account has the appropriate role to perform XML file uploads for Mortgage Call Reports, contact your Account Administrator.

# 2 Upload File Process

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## 2.1 Using the Upload Process for Filing MCRs

An XML file can be uploaded to create or amend an MCR filing as described below.

**Table 1 – Creating and Amending via Uploads**

<b>Company needs to...</b>	<b>Performed when....</b>	<b>NMLS Action</b>
Upload a new MCR Filing	An MCR filing does not exist (in any status) for the Company for the Reporting Period.	NMLS will create a new MCR filing and new FC, RMLA or RMLA-General components for each component contained in the XML.  In addition, NMLS will create any missing, but required, components

Company needs to...	Performed when....	NMLS Action
		automatically when creating an MCR filing for a quarterly period type (Q1, Q2, Q3 or Q4).
Add one or more components to a pending MCR filing	A pending MCR filing exists (Filing Status = Pending Initial or Pending Amendment) and the company wishes to add another component through an upload file. For instance, the company needs to add an RMLA for a state that is not currently represented in the MCR filing.	NMLS will add the MCR component to the MCR filing corresponding to the same reporting period without altering the data in any existing component.
Edit one or more components of a pending MCR filing	A pending MCR filing exists (Filing Status = Pending Initial or Pending Amendment) for the Reporting Period and the company wishes to update some or all of the data.	NMLS will update the pending filing with the information provided in the XML.  Any data elements not included in the XML file will be carried forward from the pending MCR filing. Any data elements included in the XML file without a value will be treated as an indication to clear the corresponding value in the amended MCR filing.
Amend one or more components of a processed MCR filing	An MCR filing exists in a Processed status for the Reporting Period to be edited.	NMLS will create a pending amendment to the processed MCR filing from the data elements provided in the XML file.  Any data elements not present in the XML file will be carried forward from the processed MCR filing. Any data elements included in the XML file without a value will be treated as an indication to clear the corresponding value in the pending amendment to the MCR filing.

## 2.2 The Upload Process (Step By Step)

The following steps outline the process of uploading an XML file to NMLS in order to initiate creation of an MCR filing. For additional information on using the Upload feature in NMLS, please refer to the [NMLS Resource Center](#).

1. Construct an XML file conforming to the required schema (.XSD file) for the MCR format type and Form Version. For each Form Version there is separate schema for Expanded MCRs and Standard MCRs. See section **3.1 Form Versions** below for more information on Form Versions and selecting the correct XSD.
2. From the Upload MCR Filing page in NMLS, locate your XML file and choose the upload button.
3. Wait for NMLS to immediately perform Level 1 validations (see **Table 6** below in **Upload Validations** section) against the XML file. If any Level 1 validations fail, the relevant message is displayed and the file is not uploaded.

- The system will normally only display the first level 1 validation encountered since most failures prevent further validation.
  - If the file is not schema-compliant, the upload will fail but the message will not describe the exact schema error.
4. If your file passes Level 1 validations, it will be queued for Level 2 validations (see **Table 6** below in **Upload Validations** section) and displayed on the MCR Upload File History page with a status of “Upload Pending”.
- Level 2 validations generally occur within a few minutes. You can refresh the MCR Upload File History page to watch for the status to be updated.
  - If any of the Level 2 validations fail, the file is given a status of “Invalid” and a link is provided to view the error messages.
5. If the file passes Level 2 validations, the following actions are taken based on current MCR filings:
- If you currently do not have any MCR filing (regardless of status) that matches the Year, Period Type and Period End Date of your upload file, NMLS:
    - i. Creates a new MCR filing with a status of “Pending – Initial”.
    - ii. Adds all the data from your upload to the MCR filing.
  - If you currently have an MCR filing in a status of “Pending-Initial” or “Pending-Amendment” that matches the Year, Period Type and Period End Date of your upload file, NMLS merges the data from the upload file with the data currently in the MCR filing according to the rule in the **Merging Rules** section.
  - If you currently have an MCR filing in a “Filing Processed” status that matches the Year, Period Type and Period End Date of your update file, NMLS creates a revision of the processed MCR filing, sets the status to “Pending-Amendment” and merges the data from the upload file with the data currently in the filing according to the **Merging Rules**.

**IMPORTANT:** the upload process will not submit your MCR filing. You must manually run completeness checks against each component and submit the filing in NMLS.

## 2.3 Upload Considerations

When attempting to upload an XML file, the following should be considered:

1. XML files may only be uploaded during system hours. Visit the NMLS Resource Center for [Hours of Operation](#).
2. XML files will be processed in near real-time; except during periods of peak system usage, when processing of uploaded files may be delayed.
3. While an upload is queued and before it has completed processing you will not be able to perform the following actions on an MCR filing that matches the Year, Period Type and Period End Date of the upload:
  - a. Upgrade the MCR filing from Standard to Expanded format
  - b. Delete the MCR filing
  - c. Delete any component in the MCR filing
  - d. Submit the MCR filing
  - e. Upload another file for the same Year, Period Type and Period End Date of the pending upload
4. An XML file may contain data for only one Reporting Period.

### 3 MCR Upload File Validation and Structure

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This section describes the rules for constructing a valid MCR Upload file. This includes both business rules and data schema rules.

#### 3.1 Form Versions

Over time it becomes necessary to add/delete/change fields in the MCR form components. Such changes are part of an NMLS release and require the introduction of a new MCR Form Version. This also necessitates a new Schema file for validating your XML upload file in the new form version. The Form Version of the MCR form is set as the most recent Form Version active in NMLS when the MCR form is initially created, regardless of the Reporting Period. Any MCR form which is pending submission when a new Form Version is released or which is amended after a new Form Version is released will retain the original Form Version. To understand further impacts of Form Versioning on XML Schema validations see section **3.3 XML Schema Validation**.

##### 3.1.1 Selecting the Correct Form Version

Refer to section **4 Associated Files** to determine the exact XSD schema file and FormVersion to use.

**Table 2 - Selecting the Correct Form Version for your Schema**

Action	Form Version
I am creating a new MCR filing. An MCR has never been submitted for this Reporting Period and there is no pending MCR for this Reporting Period.	Use the most current Form Version for the Format Type of the MCR.
I am updating a pending MCR that has never been submitted but was created before the Form Version change.	Use the Form Version that was originally used when the MCR filing was created.
I am revising a previously-submitted MCR filing.	Use the Form Version that was originally used for that MCR filing. The Form Version of a submitted MCR filing is displayed on the <a href="#">View MCR Components</a> page in the company's composite record in NMLS.

The following table contains a summary of MCR Form Version changes:

**Table 3 - MCR Format Types and Components**

Release	Date of Release	Forms Changed	Form Version
Release 2012.3	July 23, 2012	E-MCR, S-MCR	V2
Release 2011.2	April 30, 2011	E-MCR, S-MCR	V1

#### 3.2 MCR Filing Structure and Requirements

An MCR is comprised of one or more components, including a Financial Condition component (FC) and/or one or more Residential Mortgage Loan Activity components (RMLA) and an RMLA-General component. The FC is comprised of the filing entity's financial data at a MU1 level. An RMLA is the component of the MCR that gathers information regarding the filing entity's loan activity at a state level. Each RMLA includes data for a specific state. Whenever at least one RMLA component is present in the MCR, a single RMLA-

General component must also be present. The RMLA-General is not state specific but captures information that is applicable across all states. (The RMLA-General component was introduced with Form Version “v2”).

The MCR filing requirement is based on the filing entity’s GSE-approval status and the states where the entity was licensed during the reporting period. An entity that is GSE-approved is required to submit an MCR in Expanded (E) format including an E-FC and applicable E-RMLAs, within 45 days of the end of each calendar quarter. An entity that is not GSE-approved is required to submit an MCR in Standard (S) Format, with applicable S-RMLAs within 45 days of each calendar quarter and an S-MCR with an S-FC component within 90 days of their Fiscal Year End. Alternatively, a non-GSE-approved entity can elect to fulfill their quarterly S-RMLA requirement by submitting an E-MCR (containing both the E-FC and applicable E-RMLAs). Additionally, all entities can submit an S-MCR containing an S-FC component on a fiscal annual, fiscal quarterly or fiscal year-to-date basis.

The information in the paragraph above is summarized in the following table:

**Table 4 - MCR Format Types and Components**

Format Type	Company GSE-status	Relevant Period Types			
		Quarterly (Calendar)	Annual (FYE)*	Quarterly (FYE)*	Year To Date*
Expanded	GSE-approved	R			
	Non-GSE-approved	A			
Standard	GSE-approved		A	A	A
	Non-GSE-approved	R**	R	A	A

R = Required    A = Allowed

\* Financial Condition component only.

\*\* Requirement can be satisfied by submission of an Expanded MCR.

### 3.3 XML Schema Validation

Your XML file must conform to the XSD schema associated with the Format Type and Form Version of the MCR. Much of the validation of the upload file occurs as part of XML schema validation. There are numerous tools available for users to run their own schema validation on upload files before attempting to upload. Those tools will provide user with specific messages on what schema restrictions have failed. NMLS will not provide these specific messages. A file which does not conform to the correct schema definition for the filing will fail validation rule #4 in **Table 6 – Validation Rules and Messages** below (see Upload Validations section).

Note that each Form Version has its own schema definitions and any upload must conform to the correct schema for the Form Version and Format Type. An upload with the wrong Form Version information in the MCR Header tag (see **Table 5 – Filing Metadata and Allowed Values**) will cause error #13 in **Table 6 – Validation Rules and Messages** below. An upload which contains fields that pertain to the wrong Form Version (where the header tag is otherwise correct) will cause the Schema validation error #4 in **Table 6 – Validation Rules and Messages** below.

### 3.4 Filing Metadata and Allowed Values

The XML file for an MCR filing may be in either the Expanded or Standard Mortgage Call Report format. The XML file may contain full or partial data for a Mortgage Call Report. Regardless of the type of MCR filing being submitted, the XML file must include the following metadata (header) information:

- The MCR header data element as shown in these examples:

MCR Description	MCR Header Tag
Expanded MCR for Calendar Quarter 1	<Mcr type="E" year="2012" periodType="MCRQ1" formVersion="v2" >
Standard MCR for Year To Date	<Mcr type="S" year="2012" periodType="MCRYTD" ReportingDate="2012-11-30" formVersion="v2">

- At least one component (FC, RMLA or RMLA-General) header data element as shown in the following examples:

Component Type	Applicable From Versions	Component Header Tag
FC	v1, v2	<Fc>
RMLA	v1, v2	<Rmla stateCode="RI">
RMLA-General	v2	<Rmlag>

The following table describes the allowed values for these data elements. Please see the schema and XML examples associated with this document for the exact specification of the XML structure.

**Table 5 – Filing Metadata and Allowed Values**

Tag	Attribute	Applicable Form Versions	Definition	Allowable Values																				
Mcr	type	v1, v2	The format type (Standard vs. Expanded) of the MCR filing.	<table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>S</td> <td>Standard</td> </tr> <tr> <td>E</td> <td>Expanded</td> </tr> </tbody> </table>	Value	Description	S	Standard	E	Expanded														
Value	Description																							
S	Standard																							
E	Expanded																							
Mcr	year*	v1, v2	The year for which the MCR filing applies.	Any 4-digit year for which an MCR filing may be submitted.																				
Mcr	periodType*	v1, v2	The period type for the MCR filing. This may be a calendar quarter, fiscal quarter, annual or year-to-date period.	<table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>MCRQ1</td> <td>Q1</td> </tr> <tr> <td>MCRQ2</td> <td>Q2</td> </tr> <tr> <td>MCRQ3</td> <td>Q3</td> </tr> <tr> <td>MCRQ4</td> <td>Q4</td> </tr> <tr> <td>MCRFQ1</td> <td>Fiscal Q1</td> </tr> <tr> <td>MCRFQ2</td> <td>Fiscal Q2</td> </tr> <tr> <td>MCRFQ3</td> <td>Fiscal Q3</td> </tr> <tr> <td>MCRANNUAL</td> <td>Fiscal Annual</td> </tr> <tr> <td>MCRYTD</td> <td>Year to Date</td> </tr> </tbody> </table>	Value	Description	MCRQ1	Q1	MCRQ2	Q2	MCRQ3	Q3	MCRQ4	Q4	MCRFQ1	Fiscal Q1	MCRFQ2	Fiscal Q2	MCRFQ3	Fiscal Q3	MCRANNUAL	Fiscal Annual	MCRYTD	Year to Date
Value	Description																							
MCRQ1	Q1																							
MCRQ2	Q2																							
MCRQ3	Q3																							
MCRQ4	Q4																							
MCRFQ1	Fiscal Q1																							
MCRFQ2	Fiscal Q2																							
MCRFQ3	Fiscal Q3																							
MCRANNUAL	Fiscal Annual																							
MCRYTD	Year to Date																							

Tag	Attribute	Applicable Form Versions	Definition	Allowable Values				
Mcr	reportingDate*	v1, v2	The date which marks the end of the reporting period for which the MCR filing applies. The user must provide this date when the filing type is "Year To Date", otherwise this field is optional since the system will derive the date based on calendar year period or company FYE where applicable.	Any date, in YYYY-MM-DD format, which is less than the current date.				
Mcr	formVersion**	v2	The form version of the filing.	<table border="1"> <thead> <tr> <th>Form Version</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>v2</td> <td>v2</td> </tr> </tbody> </table>	Form Version	Value	v2	v2
Form Version	Value							
v2	v2							
Fc		v1, v2	The header tag for a Financial Condition component. There are no attributes for this tag.	N/A				
Rmla	stateCode	v1, v2	The RMLA represents data for this state.	The two-letter postal code abbreviation corresponding to the state/territory.				
Rmla-G**		v2	The header tag for an RMLA General. There are no attributes for this tag.	N/A				

\* Data that together defines the Reporting Period.

\*\* The actual tag or attribute name is subject to change until development has been completed.

### 3.5 Upload Validations

Two types of validations will be conducted on XML files:

1. Schema and metadata validation (Level 1) to ensure that the upload file matches the expected file format. Level 1 validations are run when the file is first uploaded and the file will only upload if all Level 1 validations pass.
2. Data content validation (Level 2) to ensure that the upload file represents an appropriate type of Mortgage Call Report for the company. Level 2 validations are run after the file is successfully uploaded. If the file fails a Level 2 upload the status is set to "Invalid" and the data is not merged into a filing.

#### 1.1.1 Validation Rules and Messages

Table 6 – Validation Rules and Messages

#	Form Version	Rule	Validation Level	Message
1	All	The file name must have an “.xml” extension.	1	FILE NOT UPLOADED - The file must be in XML format with an .xml file extension.
2	All	The length of the file name (including the extension) must not be over 50 characters.	1	FILE NOT UPLOADED - The file name must not exceed 50 characters.
3	All	The size of the file must not be greater than 8 mb.	1	FILE NOT UPLOADED - The file exceeds 8 MB size limit.
4	All	All XML schema validations must pass. Note that for each Form Version there are separate schema files (.XSD) for the standard and expanded versions of the form. See section <b>3.5.1 Schema Validation Notes</b> in this document for more information.	1	FILE NOT UPLOADED - Your file does not conform to a valid MCR filing schema. Please check your file against the <a href="#">MCR XML Specification</a> available on the NMLS Resource Center. .
5	All	The Period End Date ( <i>reportingDate</i> ) is required when the Period Type ( <i>periodType</i> ) is “Year To Date”.	1	FILE NOT UPLOADED - Period End Date must be provided.
6	All	The period end date ( <i>reportingDate</i> ) must be before the current system date.	1	FILE NOT UPLOADED - The end date for the MCR filing period indicated must be in the past.
7	All	There must not already be an upload for the company with the same year ( <i>year</i> ), period type ( <i>periodType</i> ) and period end date ( <i>reportingDate</i> ) with a status of “Upload Pending” or “Upload Failed”.	1	FILE NOT UPLOADED – There is an MCR Upload file in an Upload Pending status for the Year, Period Type and Period End Date indicated in this file.
8	v1	The upload must include at least one component required by the period type ( <i>periodType</i> ): <ul style="list-style-type: none"> <li>• When the period type is “Fiscal Q1”, “Fiscal Q2”, “Fiscal Q3”, “Fiscal Annual” or “Year to Date” the upload must contain an FC component.</li> <li>• When the period type is ”Q1”, “Q2”, “Q3”, or “Q4” the upload must contain at least one component which can be either an FC or an RMLA.</li> </ul>	1	FILE NOT UPLOADED - The upload must include at least one component required for the Period Type.

9	v2	<p>The upload must include at least one component required by the period type (<code>periodType</code>):</p> <ul style="list-style-type: none"> <li>• When the period type is "Fiscal Q1", "Fiscal Q2", "Fiscal Q3", "Fiscal Annual" or "Year to Date" the upload must contain an FC component.</li> <li>• When the period type is "Q1", "Q2", "Q3", or "Q4" the upload must contain at least one component which can be either an FC, RMLA or RMLA General.</li> </ul>	1	FILE NOT UPLOADED - The upload must include at least one component required for the Period Type.
10	All	<p>The Year must be between the current year minus 2 and the current year plus 1.</p> <p>Note that validation #4 covers years &lt; 2011.</p>	1	FILE NOT UPLOADED - Year may not be a future year (except for certain fiscal filings that may reflect the next year) and must be no more than two years prior to the current year.
11	All	<p>When the Period Type is "Q1", "Q2", "Q3" or "Q4" your company must have filed an MU1 during or prior to the calendar quarter represented by the Reporting Period and the selected reporting period must be on or after Q1 2011.</p>	1	FILE NOT UPLOADED - You are not authorized to create an MCR filing for the year and period provided. Your company either did not have an MU1 on file as of the period end date or the selected reporting period is prior to the date that MCR filings are accepted by NMLS.
12	All	<p>When the Period Type is "Annual" your company must have filed an MU1 during or prior to the fiscal year represented by the Reporting Period and the selected Reporting Period must end on or after April 1, 2011. If your fiscal year end is between January 1 and March 31 you will not be able to file an Annual MCR until 2012.</p>	1	FILE NOT UPLOADED - You are not authorized to create an MCR filing for the year and period provided. Your company either did not have an MU1 on file as of the period end date or the selected reporting period is prior to the date that MCR filings are accepted by NMLS.

13	v1, v2	<p>The Form Version of the upload must match the Form Version required by the MCR Filing.</p> <p><b>IMPORTANT NOTES:</b></p> <ul style="list-style-type: none"> <li>For Filings that require Form Version “v1” the Form Version attribute must not be present.</li> <li>For Form Versions “v2” or greater the attribute value must equal the Form Version required by the filing.</li> </ul>	1	FILE NOT UPLOADED - the form version of the XML file does not match the required form version for the filing.
14	v1, v2	The file must contain “well-formed” XML.	1	FILE NOT UPLOADED - The file must contain well formed XML.
15	All	When the Year, Period Type and Period End date for the upload matches the information for an existing filing for the company (in any status), the Format Type ( <i>type</i> ) of the upload must match the Format Type of the latest revision of the filing.	2	The MCR type included in the XML header must match the format type of the filing you are trying to amend.
16	All	The Period End Date must be within the last two years.	2	You cannot create an MCR filing for a period more than two years ago.
17	All	When the Period Type is “Q1”, “Q2”, “Q3” or “Q4” and your company is GSE approved the Format Type must be “Expanded”.	2	If the Period Type is Q1, Q2, Q3 or Q4 the Format Type must be ‘E’ - Expanded.
18	All	When the Period Type is “Fiscal Q1”, “Fiscal Q2”, “Fiscal Q3”, “Annual” or “Year To Date” then the Format Type must be “Standard”.	2	If the Period Type is not Q1, Q2, Q3 or Q4 the Format Type must be ‘S’ - Standard.
19	All	The upload can only contain one RMLA component per state.	2	The upload must contain only one RMLA component per state.
20	v1	When the Period Type is “Fiscal Q1”, “Fiscal Q2”, “Fiscal Q3”, “Annual” or “Year To Date” then the upload cannot contain any RMLA components.	2	A RMLA component cannot be submitted for this Period Type.
21	All	When the Period Type is “Q1”, “Q2”, “Q3” or “Q4” and the Format Type is “Standard” then the upload must not contain an FC component.	2	An FC component cannot be submitted in connection with a Standard filing for this period type.

22	v2	If the Period Type is “Fiscal Q1”, “Fiscal Q2”, “Fiscal Q3”, “Annual” or “Year To Date” the upload cannot contain an RLMA-General component.	2	An RMLA-General component cannot be submitted for this Period Type.
23	v2	If the Period Type is “Q1”, “Q2”, “Q3” or “Q4” the upload can only contain an RMLA-General component if at least one of the following is true: <ul style="list-style-type: none"> <li>the upload contains at least one state-specific RMLA component</li> <li>at least one RMLA component exists for the same year (<i>year</i>), period type (<i>periodType</i>) and period end date (<i>reportingDate</i>) in any status</li> </ul>	2	An RMLA-General component cannot be submitted because a state-specific RMLA does not exist for the same filing period.

If all conditions have been met, the MCR filing will be created (or amended) based on data provided in the XML file. If any condition fails, the user must upload a new XML file that satisfies all conditions.

### 3.5.1 Schema Validation Notes

Users should use the associated XSD files to understand the data requirements and ensure that their files pass this validation. The following notes are not intended to be comprehensive but should be helpful in understanding common schema validation failures.

- Any elements included in the upload that are not defined in the schema will cause the file to fail schema validation (#4). This includes elements from the Expanded schema if they are included in a Standard filing upload or elements from the wrong Form Version.
- If the MCR Form Version is “v1”, any upload that contains an RMLA-General component will trigger the Schema Validation error (#4).
- Empty numeric elements (e.g. <A010\_1></A010\_1>) will cause a schema validation failure. Empty string elements will be accepted and will cause any data in the corresponding filing to be nulled out.
- Most elements can only occur once in the file. Multiple instances of these data elements will cause a schema validation failure.
- Most of the fields within the filing are restricted by custom data types. These data types are defined at the end of the XSD files and define such things as number of digits allowed before and after the decimal, minimum values, string length, allowed value lists, etc.
- Note that all container nodes include the <xs:sequence> element which specifies that **the child elements must appear in the sequence specified in the XSD.**
- The Validation # value in **Table 6** is for reference only and does not signify the order in which validations are performed. Understanding the following sequence of Level 1 Validation steps, however, may help in your debugging efforts. In each case processing stops upon the first validation failure reached:

Sequence	Validation #'s	System Processing
1	1, 2, 3	The system examines the file’s properties and determines whether it should attempt to load the file.
2	14	The system attempts to load the file as XML. If it does not contain well formed XML processing ends and the validation message is displayed. The problem with the file could be anything from a file containing binary data to an XML file missing an end tag.
3	4	The system validates the XML schema against the proper XSD based on the format type (standard or expanded) and form version

		declared in the file's <mcr> tag.
4	13	The system determines if the form version declared in the file matches the form version required by the filing being created or editing.
5	*	The system performs the remaining Level 1 validations.

### 3.6 Merging Rules

Merging refers to the process of NMLS updating an existing MCR filing with data from a new upload file. The rules used to merge data are explained further in this section.

#### 3.6.1 Non List Data

Non-List data in the XML upload includes all fields except the Section I – Lines of Credit and Section I – MLOs sections of the RLMA. The following rules are used to merge data from an upload file with an existing MCR filing in the system:

1. Data elements within the existing filing that don't have a matching data element in the upload remain unchanged.
2. Data elements in the XML upload which are valid for the filing and form type but do not exist in the current filing are inserted into the filing.
3. Data elements in the XML upload which match data elements within the existing filing replace the data within the filing.
4. Data is replaced at the lowest level in the XML path. Only "leaf" nodes are affected.

#	Existing Filing Data	Upload Data	Merge Result
1, 2	<ScheduleASection> <A010_1>1234</A010_1> <A020_1>43</A020_1> </ScheduleASection>	<ScheduleASection> <A264_1>4321</A264_1> <A266_1>232</A266_1> </ScheduleASection>	<ScheduleASection> <A010_1>1234</A010_1> <A020_1>43</A020_1> <A264_1>4321</A264_1> <A266_1>232</A266_1> </ScheduleASection>
3	<ScheduleASection> <A010_1>0</A010_1> <A020_1>0</A020_1> </ScheduleASection>	<ScheduleASection> <A010_1>1233</A010_1> </ScheduleASection>	<ScheduleASection> <A010_1>1233</A010_1> <A020_1>0</A020_1> </ScheduleASection>
4	<ScheduleASection> <A010_1>1234</A010_1> <A020_1>43</A020_1> </ScheduleASection>	<ScheduleASection> </ScheduleASection>	<ScheduleASection> <A010_1>1234</A010_1> <A020_1>43</A020_1> </ScheduleASection>  Note that the empty section on upload does not affect the filing data. Only leaf nodes are compared.

#### 3.6.2 List Data

There are two sections within the MCR components that contain list data, Lines of Credit on the RMLA-General<sup>1</sup> and Section I – MLO(s) on the RMLA. The system merges upload data in these sections differently than non-list data. In the upload file these records can contain an optional <ItemId> element. The value in this element corresponds with the "Record ID" column in MCR filing. List data from an upload is handled based on the following rules:

1. Records that do not include the <ItemId> element are added to the filing regardless of whether they may be duplicates. The system assigns an Item ID value to the record.

<sup>1</sup> Note that previously, in Form Version "v1", the Lines of Credit section was part of the RMLA component.

2. Records that do include the <ItemId> element are compared by the Item ID value against data in the filing:
  - a. When the Item ID value in the upload matches a record in the filing, the record in the filing is updated with the data from the upload.
  - b. When the Item ID value in the upload does not match a record in the filing, the upload record is discarded.

The following example illustrates the rules described above.

1. A filing is first created using an upload which contains the following MLO data. (Note that in this example the complete XML is shown. Further examples in the section only display the relevant XML for brevity's sake.):

```
<Mcr type="E" year="2011" periodType="MCRQ1">
  <Rmla stateCode="IA">
    <ListSectionOfSectionIMlosItem>
      <DetailItemList>
        <SectionIMlosItem>
          <ACMLO>367024</ACMLO>
          <ACMLO_2>11234500</ACMLO_2>
          <ACMLO_3>21</ACMLO_3>
        </SectionIMlosItem>
        <SectionIMlosItem>
          <ACMLO>367026</ACMLO>
          <ACMLO_2>49008227</ACMLO_2>
          <ACMLO_3>15</ACMLO_3>
        </SectionIMlosItem>
        <SectionIMlosItem>
          <ACMLO>367027</ACMLO>
          <ACMLO_2>0</ACMLO_2>
          <ACMLO_3>0</ACMLO_3>
        </SectionIMlosItem>
      </DetailItemList>
    </ListSectionOfSectionIMlosItem>
  </Rmla>
</Mcr>
```

2. Once the upload has completed processing the MLO section of the RMLA in the pending filing will look like this:

	Record ID	MLO NMLS ID	Employee Name	Amount (\$)	Count (#)
 	1	367024	Ruth, George H	11,234,500	21
 	2	367026	Cobb, Tyrus A	49,008,227	15
 	3	367027	Ryan, Lynn Nolan	0	0
	<b>Totals:</b>		<b>3</b>	<b>60,242,727</b>	<b>36</b>

 Add New

3. This section can be updated in a number of ways depending upon the inclusion or exclusion of the Item ID:
  - a. **New records without the Item ID**

If the following records were subsequently uploaded without an Item ID tag, they would be added to the filing regardless of whether or not the upload contained duplicates. The system currently does not identify duplicate records and it is up to the user to ensure there are not duplicate records in list data.

```
<SectionIMlosItem>
  <ACMLO>367027</ACMLO>
  <ACMLO_2>0</ACMLO_2>
  <ACMLO_3>0</ACMLO_3>
</SectionIMlosItem>
<SectionIMlosItem>
  <ACMLO>367030</ACMLO>
  <ACMLO_2>545333</ACMLO_2>
  <ACMLO_3>3</ACMLO_3>
</SectionIMlosItem>
```

	Record ID	MLO NMLS ID	Employee Name	Amount (\$)	Count (#)
 	1	367024	Ruth, George H	11,234,500	21
 	2	367026	Cobb, Tyrus A	49,008,227	15
 	3	367027	Ryan, Lynn Nolan	0	0
 	4	367027	Ryan, Lynn Nolan	0	0
 	5	367030	palmer, james	545,333	3
		<b>Totals:</b>	<b>5</b>	<b>60,788,060</b>	<b>39</b>

[+ Add New](#)

**b. Updating records using Item ID – Example 1**

In order to update a record in the list you would include the <ItemId> tag in the XML record. The value of the Item ID must correspond to the Record ID value shown in the Filing. Uploading the following XML after step 2 will produce the data shown immediately following. Note that for the second record no update or insert was performed since no record where Item ID = 6 exists in the filing data.

```
<SectionIMlosItem>
  <ItemId>3</ItemId>
  <ACMLO>367027</ACMLO>
  <ACMLO_2>123456</ACMLO_2>
  <ACMLO_3>12</ACMLO_3>
</SectionIMlosItem>
<SectionIMlosItem>
  <ItemId>6</ItemId>
  <ACMLO>154232</ACMLO>
  <ACMLO_2>0</ACMLO_2>
  <ACMLO_3>0</ACMLO_3>
</SectionIMlosItem>
```

	Record ID	MLO NMLS ID	Employee Name	Amount (\$)	Count (#)
 	1	367024	Ruth, George H	11,234,500	21
 	2	367026	Cobb, Tyrus A	49,008,227	15
 	3	367027	Ryan, Lynn Nolan	123,456	12
		<b>Totals:</b>	<b>3</b>	<b>60,366,183</b>	<b>48</b>



**c. Updating records using Item ID – Example 2**

Note that when updating a record using the Item ID, only the supplied values are replaced. Uploading the following XML after step 2 produces the results immediately following:

```
<SectionIMlosItem>
  <ItemId>3</ItemId>
  <ACMLO_2>999999</ACMLO_2>
  <ACMLO_3>9</ACMLO_3>
</SectionIMlosItem>
```

	Record ID	MLO NMLS ID	Employee Name	Amount (\$)	Count (#)
 	1	367024	Ruth, George H	11,234,500	21
 	2	367026	Cobb, Tyrus A	49,008,227	15
 	3	367027	Ryan, Lynn Nolan	999,999	9
		<b>Totals:</b>	<b>3</b>	<b>61,242,726</b>	<b>45</b>



## 4 Associated Files

Several files are available in support of developing an upload XML file, as described in the following table.

**Table 7 – Schema Files**

Format Type	Form Version	Schema File
Standard MCR	v1	MCRUploadSchemaStandard.xsd
Standard MCR	v2	MCRUploadSchemaStandardV2.xsd
Expanded MCR	v1	MCRUploadSchemaExpanded.xsd
Expanded MCR	v2	MCRUploadSchemaExpandedV2.xsd

**Table 8 – Sample XML Files**

File Name	Form Version	Description
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MCRFullExpandedv1.xml	v1	An Expanded MCR example with the FC component and one RMLA component and all fields populated.
MCRFullStandardFCv1.xml	v1	A Standard MCR example with the FC component with all fields populated.
MCRFullStandardRMLAv1.xml	v1	A Standard MCR filing example with one RMLA component with all fields populated.
MCRMinimumv1.xml	v1	An example of the absolute minimum XML that the upload functionality will accept.
MCRMLOAddv1.xml	v1	An MCR upload example where MLOs are being added. No other fields are included.
MCRMLOUpdatev1.xml	v1	An MCR upload example where MLOs are being updated. No other fields are included.
MCRFullExpandedv2.xml	v2	An Expanded MCR example with the FC component, RMLA-General component and one RMLA component and all fields populated.
MCRFullStandardFCv2.xml	v2	A Standard MCR example with the FC component with all fields populated.
MCRFullStandardRMLAGV2.xml	v2	A Standard MCR example of the RMLA-General component with all fields populated. An empty RMLA component is included to enable the upload to pass all validations.
MCRFullStandardRMLAv2.xml	v2	A Standard MCR filing example with one RMLA component with all fields populated.
MCRMinimumv2.xml	v2	An example of the absolute minimum XML that the upload functionality will accept.
MCRMLOAddv2.xml	v2	An MCR upload example where MLOs are being added. No other fields are included.
MCRMLOUpdatev2.xml	v2	An MCR upload example where MLOs are being updated. No other fields are included.