CoreLogic

Connect2Data® XML

Implementation Guide

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1.0 Introduction

This chapter provides an overview of the Connect2Data features and explains what you will find in this guide.

1.1 Purpose

Connect2Data is a backend request and delivery system that has no front-end interface. Most clients will construct a front-end interface designed to suit the needs of their users. This guide will assist individuals implementing Connect2Data (C2D) for Property Information in conjunction with MISMO XML Standards. Mortgage Industry Standards Maintenance Organization (MISMO) was established by the Mortgage Bankers Association of America (MBA) to coordinate the development and maintenance of Internet based Extensible Markup Language (XML) real estate finance specifications.

This guide covers the Connect2Data request and response XML structure section by section. It provides detailed explanations, examples and sample XML with property data. Some elements and attributes appear in the Connect2Data DTDs to conform to the MISMO standard, but Connect2Data may not use all of these elements or attributes at this time

1.2 XML Examples

This document contains numerous examples of XML and portions of XML documents. These examples are provided to illustrate the structure of an XML Request or Response. Data included in a sample is for demonstration purposes only. The names, addresses, APNs, etc. in this document are fictitious. Unless stated, the samples may not contain all of the elements required for a complete Connect2Data XML Request. For complete XML samples please refer to the C2D support website.

1.3 Version and Release

This implementation guide is based on Version 2.0 of the Connect2Data XML system by CoreLogic and version 2.1 of the REPI Candidate MISMO XML standard.

1.4   What You Will Need

Connect2Data DTD (Document Type Definition) files. These files are used to develop, write, and read XML data files. They define the structure of each data set.

- C2DRequestv2.0.dtd – to request property information products (reports).

- C2DResponsev2.0.dtd – to generate property information reports– such as a Subject Property Report, Comparable, and AVM reports.

- LDD (Logical Data Dictionary) – Defines each data element used in the DTD.

- C2D support Website URL and login. All the above items can be found on the C2D support Website at **http://cssupport.connect2data.com/support** for our staging environment or **http://support.connect2data.com/support** for our production environment. Your C2D Support Site login credentials correspond with your account validation ID's used in your XML Request.

- Your own data.

1.5   References

The following references may be helpful in understanding and implementing Connect2Data XML.

The MISMO Logical Data Dictionary (LDD), and Document Type Definitions (DTDs), sample files, and implementation guides available for download from the MISMO web site at **www.mismo.org**.

IMPLEMENTATION GUIDE ▪ Connect2Data® XML

2.0 Connect2Data XML DTD Structure

This chapter provides an overview of basic XML concepts, Connect2Data DTD structure, and MISMO standard naming conventions.

2.1 Processing a Request

Overview

The connectivity protocol for the current version of Connect2Data (C2D) is HTTP(s). For security purposes we highly recommend the use of https when posting a request to our system. The only accepted method for sending a request is the POST method. The structure of the POST command will differ depending on the programming language used.

For example, Java Posting method:

URL url=new URL (https://staging.connect2data.com/)

The following diagram illustrates an example of the basic flow of information from the client's system to Connect2Data for property information from the CoreLogic database.

2-1   Connect2Data XML DTD Structure

2.2 Connection URLs

Production:
https://xml.connect2data.com

Customer staging
(used for preproduction setup and testing)
https://staging.connect2data.com

> NOTE: C2D WILL REQUIRE ALL REQUESTS TO USE HTTPS IF THEY CONTAIN NPPI DATA. THIS IS FOR COMPLIANCE CONCERNS AND THE TRANSMISSION OF NON PUBLIC PERSONAL INFORMATION CONTAINED IN BOTH THE REQUEST AND THE RESPONSE. IF NPPI DATA IS DETECTED A STATUS 0105 WILL BE SENT BACK TO THE SUBMITTER. THE NPPI DATA IS AS FOLLOWS: FICO, DATE OF BIRTH, SOCIAL SECURITY NUMBER, BROKER ID, AND BROKER SSN.

Data Flow   Summary of data flow:

1. End user inputs the search and product criteria via a web page and submits an HTML request.

2. Client's system receives the request and translates the HTML to XML.

3. Client POSTs XML to Connect2Data (C2D) for property information from the CoreLogic database (URL is https://staging.connect2data.com/).

4. C2D processes the request.

5. C2D returns an XML response to the client.

6. Client receives the XML from C2D and translates the response back into HTML.

7. Client sends the HTML back to the end user's web page.

8. End user receives the HTML response.

References   The following resources, available from the W3.org web site, may be helpful in understanding the POST method for posting requests to a server.

- Hypertext Transfer Protocol—HTTP/1.1 at **http://www.w3.org/Protocols/rfc2616/rfc2616.html**

- Section 8- Connections at **http://www.w3.org/Protocols/rfc2616/rfc2616-sec8.html#sec8.2**

- Section 9-Method Definitions, 9.5 POST at **http://www.w3.org/Protocols/rfc2616/rfc2616-sec9.html#sec9**

Request Scenario   The following table outlines a basic request scenario and the processing that occurs in each C2D module.

BASIC SCENARIO			
STEP	ACTION	RESULT	EXCEPTIONS
1	Connect2Data Service Customer posts an XML request to the C2D staging web server. **https://staging.connect2data.com/**	Connect2Data accepts the request	
2	C2D parses the XML	XML parsed successfully and processing continues.	Parsing is unsuccessful. Process terminates and C2D returns a status message.
3	C2D validates the XML against the DTD	XML is valid and well formed, processing continues.	XML is invalid or not well formed. Process terminates and C2D returns a status message.
4	C2D authenticates Login name and customer authorization for requested product types. C2D checks to see if login and password are active and valid and customer has authorization for the requested product types.	The customer is granted access to the requested product types.	Login/password is not valid, is inactive or customer does not have authorization for the requested product type. Process terminates and C2D returns a status message.
5	C2D applies business rules to request XML Ex. Address, owner or, apn information is not provided for a property search	Request is valid and processing continues.	XML violates a business rule. Process terminates and C2D returns a status message.
6	The address is standardized.	Processing continues.	
7	C2D searches for the desired property. The system searches for the subject property by the criteria submitted.	A single subject is found, the rest of the request is performed	Multiple properties match the criteria submitted—Property List returned. No properties found matching criteria in request—Process terminates and C2D returns a status message.
8	C2D logs status as successful for the requested product types.		
9	Processing is complete.	C2D returns a response back to the user.	

2.3 Connect2Data XML DTD Structure

Overview The DTD (Document Type Definition) defines elements and attributes. Elements contain other elements or attributes and attributes hold the actual data values. Elements are strictly ordered and must appear in the same order in the XML Request document as they appear in the DTD. XML documents consist of a nested hierarchy of elements with a single root element.

Elements Elements define objects and hierarchical relationships between objects. Elements may contain data, be empty, and contain only attributes or sub-elements.

Element Types

The following element types occur in the Connect2Data DTD:

TYPE	DESCRIPTION
Container	Logical grouping of strongly related elements. May contain other elements, empty elements, attributes, or text. Element names are always in UPPERCASE letters, and have a start tag (<) and an end tag (/>).
EMPTY	Has no child element. Only contains attributes. Element names are always in UPPERCASE letters. Does not need a separate "end" tag, but requires a slash and closing bracket (/>).
ANY	Can contain zero or more child elements of any declared type.

Rules

The following rules apply to Elements in XML Tags:

All words and acronyms contained in an element tag name are represented in capital letters.

An underscore (_) separates all words and acronyms in element tag.

Operators

Operators determine whether an element is required or optional. Operators also determine whether the element is repeatable in the XML document.

The following operators occur in the Connect2Data DTD:

TYPE	DESCRIPTION
Asterisk (*)	Element is optional and can be used in an XML file more than one time.
Question mark (?)	Element is optional and it can only be used once in an XML file.
Plus sign (+)	Element is required and can be used one or more times in an XML file.

Sample DTD Entry

The following XML illustrates element types and operators in the Connect2Data DTD:

```
<!ELEMENT REQUEST_GROUP (REQUESTING_PARTY*, RECEIVING_PARTY?, SUBMITTING_PARTY?, REQUEST)>

<!ATTLIST REQUEST_GROUP MISMOVersionID CDATA #FIXED "2.1">

<!ELEMENT REQUESTING_PARTY (CONTACT_DETAIL*, PREFERRED_RESPONSE*)>

<!ATTLIST REQUESTING_PARTY
        _Name CDATA #IMPLIED
        _StreetAddress CDATA #IMPLIED
        _StreetAddress2 CDATA #IMPLIED
        _City CDATA #IMPLIED
        _State CDATA #IMPLIED
        _PostalCode CDATA #IMPLIED>
```

> NOTE: THIS SAMPLE XML DOES NOT CONTAIN REAL DATA, NOR IS IT USABLE OUTSIDE OF THIS EXAMPLE.

Attributes

Attributes provide more information about the element that it is included with, such as the source of the data, the type of data or actual values for the data.

The Connect2Data DTD uses the following attribute types:

TYPE	DESCRIPTION	RULES
Enumerated	List of allowable values defined in the DTD.	Only values defined in the enumerated list in the DTD are valid. Only one value from the list permitted in the XML document.
String	Alphanumeric data. The DTD does not specify a list of valid values.	
Boolean	Special type of enumerated value that always has values of "Y"-yes/true or "N"-no/false.	
Numeric	Non-monetary data such as rates, percents, counts, or totals.	Only numbers "0" – "9" permitted. Decimals (0.0) are permitted.
Money	Monetary values. Same characteristics as numeric elements.	Fractional dollar amounts expressed in two decimal places. Whole dollar does not include the "00" decimal value No dollar signs.
Date/Time	Date and/or time data only. MISMO has adopted the ISO 8601 international standard for representing dates and times.	YYYYMMDD hh:mm:ss format. Ex. 08/29/2002 = 20020829 Time is represented as a 24 hour clock (military time e.g., 14:00 = 2pm)

Rules

The following rules apply to Attributes in XML tags:

- All words contained in an attribute are represented in Upper_Lower Camel Case
- Example: "street address" appears as _StreetAddress
- All data is in upper case.
- "Y" is true and "N" is false for Boolean variables.
- All numbers are unformatted except for decimal points.
- All decimal points are explicit.
- Dollar signs are not included for currency.

2.4 Class Words and XML Data Types

Connect2Data XML elements, attributes, and enumerated values follow the MISMO standard naming conventions. See MISMO XML Design Rules and Guidelines for a detailed explanation of attribute naming standards (download at **www.mismo.org**).

The following matrix defines the naming conventions used in Connect2Data XML:

CLASS WORD	DEFINITION	XML DATA TYPE
Address	A geographic location	String
Amount	Any quantity of money (dollar amount)	Money
City	City location	String
Code	Identifies classification of nouns	String
Count	A number reached by keeping count	Numeric
Date	A calendar date or range of dates	Date/Time
Day	The day portion of the calendar date	Numeric
Description	Narrative text that defines or describes a specific thing	String
Factor	A quantity that when multiplied together with another quantity yields a given product	Numeric
Identifier	Alphanumeric string used to uniquely identify an item	String
Indicator	Denotes that a condition is true or false	Boolean
Limit	The greatest or smallest amount or number allowed	Numeric
Month	The month portion of the calendar date	Date/Time
Name	Identifies specific person or entity	String
Number	A numeric reference or identification	Numeric
Percent	A Percentage is a number representing a part of a whole, represented as a quotient multiplied by 100. It is a ratio between data values.	Numeric
Period	An interval of time	Numeric
Rate	A quantitative measure expressing a cost or service per unit. A Rate is a numeric comparison between two values, a fraction expressed as a decimal.	Numeric
Term	An interval of time	Numeric
Time	The time an even occurs	Date/Time
Type	Specifies a list of types	Enumerated
Year	The year portion of the calendar date (4 digits)	Date/Time

2.5 The MISMO Transaction Envelope

MISMO has developed a set of Transaction Envelope DTDs used to wrap the PROPERTY INFORMATION REQUEST and PROPERTY INFORMATION RESPONSE transaction data. The Connect2Data DTDs incorporate the MISMO Transaction Envelope DTDs.

The Transaction Envelope elements and attributes encompass the basic information common to most transactions (i.e., elements that identify the requesting party, receiving party, responding party and other reference data that is commonly exchanged between business partners). See the MISMO XML Implementation Guide: General Information—Version 2 for a full description of all MISMO Transaction Envelope elements and attributes.

2.5.1 XML REQUEST

Ordering Multiple C2D Reports in a Single Request

In C2D, multiple main reports can be ordered in a single request. For e.g., - C2D support the ordering of a LSRM Report and GeoAVM with a single C2D request if the login credentials have access to both these reports. This is achieved by setting multiple report attributes to 'Y' e.g., _LoanSafeRiskManager='Y' and _GEOAVM = 'Y" in the REQUESTDATA -> PROPERTY_INFORMATION_REQUEST -> _CONNECT2DATA_ PRODUCT element. C2D executes these reports sequentially for each of these products.

Sample MISMO ENVELOPE ELEMENTS XML

```
<!--    ****MISMO ENVELOPE ELEMENTS****         -->
<!-- Use of the MISMO Envelope is optional with the exception of the REQUEST_GROUP and REQUEST elements.-->
<!-- Only one REQUEST  is permitted per REQUEST_GROUP -->
<!ELEMENT REQUEST_GROUP (REQUESTING_PARTY* , RECEIVING_PARTY? , SUBMITTING_PARTY? , REQUEST)>
<!ATTLIST REQUEST_GROUP MISMOVersionID CDATA #FIXED '2.1' >
<!ELEMENT REQUESTING_PARTY (CONTACT_DETAIL* , PREFERRED_RESPONSE*)>
<!ATTLIST REQUESTING_PARTY _Name        CDATA #IMPLIED
                _StreetAddress CDATA #IMPLIED
                _StreetAddress2 CDATA  #IMPLIED
                _City      CDATA #IMPLIED
                _State      CDATA #IMPLIED
                _PostalCode  CDATA #IMPLIED >
<!ELEMENT CONTACT_DETAIL (CONTACT_POINT*)>
<!ATTLIST CONTACT_DETAIL _Name CDATA #IMPLIED >
<!ELEMENT CONTACT_POINT EMPTY>
<!ATTLIST CONTACT_POINT _RoleType        (Home | Mobile | Work ) #IMPLIED
                _Type        (Email | Fax | Other | Phone ) #IMPLIED
                _TypeOtherDescription CDATA  #IMPLIED
                _Value        CDATA #IMPLIED
                _PreferenceIndicator (Y | N ) #IMPLIED >
<!ELEMENT PREFERRED_RESPONSE EMPTY>
<!ATTLIST PREFERRED_RESPONSE _Format         CDATA #FIXED 'XML'
                _DestinationDescription CDATA  #IMPLIED >
<!ELEMENT RECEIVING_PARTY (CONTACT_DETAIL*)>
```

> NOTE: THIS SAMPLE XML DOES NOT CONTAIN REAL DATA, NOR IS IT USABLE OUTSIDE OF THIS EXAMPLE.

```
        <!ATTLIST RECEIVING_PARTY _Name        CDATA #IMPLIED

                _StreetAddress CDATA #IMPLIED

                _StreetAddress2 CDATA #IMPLIED

                _City      CDATA #IMPLIED

                _State     CDATA #IMPLIED

                _PostalCode  CDATA #IMPLIED >
        <!ELEMENT SUBMITTING_PARTY (CONTACT_DETAIL* , PREFERRED_RESPONSE*)>
        <!ATTLIST SUBMITTING_PARTY _Name        CDATA #IMPLIED

                _StreetAddress CDATA #IMPLIED

                _StreetAddress2 CDATA  #IMPLIED

                _City      CDATA #IMPLIED

                _State     CDATA #IMPLIED

                _PostalCode  CDATA #IMPLIED >

        <!ELEMENT REQUEST (KEY* , REQUESTDATA*)>
        <!ATTLIST REQUEST _RequestDateTime      CDATA #IMPLIED

            InternalAccountIdentifier CDATA #IMPLIED

            LoginAccountIdentifier CDATA #IMPLIED

            LoginAccountPassword  CDATA #IMPLIED

            _JobIdentifier       CDATA #IMPLIED

            _HVERequestType      (01 | 02 | AUTO ) #IMPLIED

            _HVCustomerIdentifier CDATA #IMPLIED

            _RecordIdentifier     CDATA #IMPLIED >
        <!ELEMENT KEY EMPTY>
        <!ATTLIST KEY _Name CDATA #IMPLIED

            _Value CDATA  #IMPLIED >
        <!ELEMENT REQUESTDATA (PROPERTY_INFORMATION_REQUEST)>
```

REQUEST_GROUP

Purpose	REQUEST_GROUP is the root element for a Connect2Data Request XML document. It contains a sequence of elements that make up the MISMO Envelope.
Attributes	MISMOVersionID
Rules	MISMO Transaction Envelope is optional with the exception of the REQUEST_GROUP AND REQUEST elements
	Only one REQUEST is permitted per REQUEST_GROUP
Uses	REQUESTING_PARTY, RECEIVING_PARTY, SUBMITTING_PARTY, REQUEST
Used By	Not used by other elements.

REQUESTING_PARTY

Purpose   REQUESTING_PARTY contains attributes about the customer requesting property information.

Attributes   REQUESTING_PARTY has the following attributes:

ATTRIBUTE NAME	DESCRIPTION
_Name	Name of the requesting party.
_StreetAddress	Number and street name of the requesting party.
_StreetAddress2	Number and street name of the requesting party.
_City	City
_State	Two character abbreviation of the state.
_PostalCode	Five-digit zip code.

Uses   CONTACT_DETAIL, PREFERRED_RESPONSE

Used By   REQUEST_GROUP

RECEIVING_PARTY

Purpose   RECEIVING_PARTY contains attributes about the party that is receiving the request transaction. The receiving party for Connect2Data requests is CoreLogic.

Attributes   RECEIVING_PARTY has the following attributes:

ATTRIBUTE NAME	DESCRIPTION
_Name	Name of the receiving party.
_StreetAddress	Number and street name of the receiving party.
_StreetAddress2	Number and street name of the receiving party.
_City	City
_State	Two character abbreviation of the state.
_PostalCode	Five-digit zip code.

Uses   CONTACT_DETAIL

Used By   REQUEST_GROUP

SUBMITTING_PARTY

Purpose   SUBMITTING_PARTY contains attributes about the customer submitting property information.

Attributes   SUBMITTING_PARTY has the following attributes:

ATTRIBUTE NAME	DESCRIPTION
_Name	Name of the submitting party.
_StreetAddress	Number and street name of the submitting party.
_StreetAddress2	Number and street name of the submitting party.
_City	City
_State	Two character abbreviation of the state.
_PostalCode	Five-digit zip code.

Uses   CONTACT_DETAIL, PREFERRED_RESPONSE

Used By   REQUEST_GROUP

REQUEST

Purpose   REQUEST contains attributes necessary for authenticating and authorizing users for Connect2Data.

Attributes   REQUEST has the following attributes:

ATTRIBUTE NAME	DESCRIPTION
_RequestDateTime	Date/Time Requesting Party made the request
InternalAccountIdentifier	Optional identification mechanism.
LoginAccountIdentifier	User account number-required to access system
LoginAccountPassword	User password-required to access system
_JobIdentifier	Optional identification mechanism that can be used for invoicing. Maximum character length = 50.
_HVERequestType	HVE Report types: 01, 02, 05, 07 and AUTO.
_HVCustomerIdentifier	Customer account number used to correctly bill customer.

Uses   KEY, REQUESTDATA

Used By   REQUEST_GROUP

KEY: LOAN ORIGINATION SYSTEM (LOS) INFORMATION

Purpose The Loan Origination System (LOS) data fields shown in the table below are primarily used for tracking, entitlement, and production support.

Attributes LOSName is a required field for all transactions sent to the Connect2Data platform and is the name of your organization's loan origination system. Please consult your integrations manager on the value to use for LOSName.

All other LOS-related data fields are used in tandem with the LoanSafe Risk Manager suite and LoanSafe Connect. The data fields ensure that the data requested is provided to those with the correct access. Outside of the LoanSafe suite, the data fields are also used for production support and audits.

To insert data in LOS table, you must supply information in the following fields: Fields marked as Required need to be input.

LOS KEY	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
LOSName	Name of the LOS (Loan Origination System) sending the data	Required	String
LOSClientName	Company name of the client	Optional	String
LOSClientID	Unique ID the LOS assigned to the client	Optional	String
LOSUserID	UserID the LOS assigned to the client's end-user	Optional	String
LOSUserEmail	Email address of the client/end-user	Optional	String
LOSUserFirstName	First name of the client/end-user	Optional	String
LOSUserLastName	Last name of the client/end-user	Optional	String
LOSUserRole	Role or title of the client/end-user	Optional	String
LOSPostURL	URL for CoreLogic to post back to	Optional	String
LOSPostToken	Token associated to the client and loan number	Optional	String

Used By REQUEST

REQUESTDATA

Purpose REQUESTDATA contains elements pertaining to Property Request Information.

Attributes Does not contain any attributes.

Uses PROPERTY_INFORMATION_REQUEST

Used By REQUEST

2.5.2   XML RESPONSE

Party role names change in the RESPONSE envelope. The REQUESTING_PARTY from the Request becomes the RESPOND_TO_PARTY in the Response. The RECEIVING_PARTY in the Request becomes the RESPONDING_PARTY in the Response.

Sample MISMO ENVELOPE ELEMENTS XML

```
<!--      **** MISMO ENVELOPE ELEMENTS****        -->
<!ELEMENT RESPONSE_GROUP (RESPONDING_PARTY? , RESPOND_TO_PARTY? , RESPONSE)>
<!ATTLIST RESPONSE_GROUP MISMOVersionID CDATA #FIXED '2.1' >
<!ELEMENT RESPONDING_PARTY (CONTACT_DETAIL*)>
<!ATTLIST RESPONDING_PARTY
          _Name       CDATA #IMPLIED
          _StreetAddress CDATA #IMPLIED
          _StreetAddress2 CDATA  #IMPLIED
          _City       CDATA #IMPLIED
          _State      CDATA #IMPLIED
          _PostalCode  CDATA  #IMPLIED >
<!ELEMENT RESPOND_TO_PARTY (CONTACT_DETAIL*)>
<!ATTLIST RESPOND_TO_PARTY
          _Name       CDATA #IMPLIED
          _StreetAddress CDATA #IMPLIED
          _StreetAddress2 CDATA  #IMPLIED
          _City       CDATA #IMPLIED
          _State      CDATA #IMPLIED
          _PostalCode  CDATA  #IMPLIED >
<!ELEMENT CONTACT_DETAIL (CONTACT_POINT*)>
<!ATTLIST CONTACT_DETAIL
          _Name CDATA  #IMPLIED >
<!ELEMENT CONTACT_POINT EMPTY>
<!ATTLIST CONTACT_POINT
          _RoleType (Home | Mobile | Work ) #IMPLIED
          _Type   (Email | Fax | Other | Phone ) #IMPLIED
          _TypeOtherDescription CDATA  #IMPLIED
          _Value       CDATA #IMPLIED
          _PreferenceIndicator (Y | N ) #IMPLIED >
<!ELEMENT KEY EMPTY>
<!ATTLIST KEY
          _Name CDATA  #IMPLIED
          _Value CDATA  #IMPLIED >
<!ELEMENT RESPONSE_DATA (PROPERTY_INFORMATION_RESPONSE?)>
<!ELEMENT RESPONSE (KEY* , RESPONSE_DATA* , STATUS*)>
<!ATTLIST RESPONSE
          ResponseDateTime      CDATA #IMPLIED
          InternalAccountIdentifier CDATA #IMPLIED
          _JobIdentifier       CDATA #IMPLIED
          _RecordIdentifier     CDATA  #IMPLIED >
```

> NOTE: THIS SAMPLE XML DOES NOT CONTAIN REAL DATA, NOR IS IT USABLE OUTSIDE OF THIS EXAMPLE.

RESPONSE_GROUP

Purpose	RESPONSE_GROUP is the root element for a Connect2Data Response XML document. It contains a sequence of elements that make up the MISMO Envelope.
Attributes	MISMOVersionID
Uses	RESPONDING_PARTY, RESPOND_TO_PARTY, RESPONSE
Used By	Not used by other elements.

RESPONDING_PARTY

Purpose	RESPONDING_PARTY contains attributes about the entity that prepared the response. In Connect2Data, the Responding Party is always CoreLogic.
Attributes	RESPONDING_PARTY has the following attributes:

ATTRIBUTE NAME	DESCRIPTION
_Name	Name of the organization. The organization is always CoreLogic.
_StreetAddress	Responding party's street address.
_StreetAddress2	Responding party's street address.
_City	City
_State	Two character abbreviation of the state.
_PostalCode	Five-digit zip code.

Uses	CONTACT_DETAIL
Used By	RESPONSE_GROUP

RESPOND_TO_PARTY

| Purpose | RESPOND_TO_PARTY contains attributes about the entity receiving the response. |

Attributes   RESPOND_TO_PARTY has the following attributes:

ATTRIBUTE NAME	DESCRIPTION
_Name	Name of the organization.
_StreetAddress	Respond to party's street address.
_StreetAddress2	Respond to party's street address.
_City	City
_State	Two character abbreviation of the state.
_PostalCode	Five-digit zip code.

Uses   CONTACT_DETAIL

Used By   RESPONSE_GROUP

RESPONSE

Purpose   RESPONSE contains attributes user account information.

Attributes   RESPONSE has the following attributes:

ATTRIBUTE NAME	DESCRIPTION
_ResponseDateTime	Date/Time Responding Party created the request.
InternalAccountIdentifier	Account number for internal use.
_JobIdentifier	Optional identification mechanism that can be used to track events back to the customer invoice. Maximum character length = 50

Uses   KEY, RESPONSE_DATA, STATUS

Used By   RESPONSE_GROUP

2.5.3 Status Messages

There are different Status massages returned from Connect2Data based on your requests and inputs. The Status messages provide information about the application processing the request—whether the request was successfully processed, failed a validation, or suffered some other type of failure. A complete reference list of Status messages is available on the Support Site in PDF format.

To open the Status message file, follow the steps below.

1. Click the below URL.
   https://xml.connect2data.com/support/content/assets/files/downloads/C2D_ Status_Messages.pdf

2. After clicking the above URL it will open the Support Site Login window where you will have to enter your credentials (username and password).

3. After successfully logging in, the Status messages document will be opened.

3.0 C2D Searches

This chapter provides an overview of the CONNECT2DATA search types and the criteria for requesting reports. Refer to the C2D support website, http://support. connect2data.com, for detailed report specifications.

NOTE: If the property owner has filed an Opt-out request with the Direct Marketing Association's (DMA) Mail Preference Service (MPS), the words no mail, enclosed in parentheses, will precede the property name when a report is produced. Example: (no mail) 123 Anywhere St., New York, NY 13159-9764 R002.

3.1 Maximizing Your XML Search Success Rate

Overview

Providing the cleanest data possible will maximize your success rate when locating property information. The following guidelines will help you format your data when submitting a property search request.

General

Provide the house number, street name, city and state or zip code.

Entering a City and State or a Zip Code will send your search criteria through a more comprehensive search process, which will significantly increase the chance of you locating the requested property. CoreLogic employs an enhanced searching algorithm that utilizes the city name with the property state and/or ZIP code to provide you with the best possible match to your desired search results. Therefore, it's recommended to use a city name with the state and/or ZIP code whenever possible.

Include owner name, pre/post directional, prefix, and suffix or unit number only as necessary to narrow the search. In other words, the addition of these data elements will require an exact match of all submitted fields in order to locate a property. For example, if you submit a request of 1223 E Main St, Los Angeles, CA with an owner name of David Warren it may not be located for one of several reasons including:

- Different pre-direction
- Different suffix
- Different owner name

Format

Use the following address formatting guidelines to increase your search success rate:

Street Number
Submit numeric values without hyphens or any other punctuation.

Do not include a zero in this field when searching a street name without an address.

Pre-Direction

Pre-Direction can be used in cases where the direction precedes the street name. For example, if searching 100 S Main Street, "S" would be entered as the pre direction. If required to further limit a property search, you may select one of the pre-direction options:

- N = North
- NE = Northeast
- NW = Northwest
- W = West
- S = South
- SE = Southeast
- SW = Southwest
- E = East

Street Name

Enter the street name of the subject property address. This is an alphanumeric field but should not include punctuation of any type such as a period or dash. If you are searching a numeric street name, you should enter the appropriate numbered street name format, for example, either 1st or First, 7th or Seventh, etc.

Post-Direction

Post-Direction is used in cases where the direction follows the street name. For example, if searching 900 Park Avenue NW, "NW" would be entered as the post direction. If required to further limit a property search, you may select one of the following post-direction options:

- N = North
- NE = Northeast
- NW = Northwest
- W = West
- S = South
- SE = Southeast
- SW = Southwest
- E = East

Suffix

If necessary to further refine your search, enter a valid USPS abbreviation for your street type. The following abbreviations should be used for these preferred suffixes:

- ALY = Alley
- ARC = Arcade
- AVE = Avenue
- BLVD = Boulevard
- BR = Branch
- BRG = Bridge
- BY = Bypass
- CIR = Circle
- CRES = Crescent
- CSWY = Causeway
- CT = Court
- CTR = Center
- CV = Cove
- CYN = Canyon
- DR = Drive
- EXPY = Expressway
- EXT = Extension
- FWY = Freeway
- GDNS = Garden
- HTS = Height
- HWY = Highway
- ISS = Island
- KNLS = Knoll
- LN = LANE
- LOOP = Loop
- MALL = Mall
- MNR = Manor
- OVAL = Oval
- PARK = Park

- PASS = Pass
- PATH = Path
- PIKE = Pike
- PKY = Parkway
- PL = Place
- PLZ = Plaza
- RD = Road
- ROW = Row
- SQ = Square

- ST = Street
- TER = Terrace
- TPKE = Turnpike
- TUNL = Tunnel
- VIS = Vista
- WALK = Walk
- WAY = Way
- XING = Crossing

Unit Number

Enter the subject property unit number in this field. This field accepts alpha and numeric data. Do not include hyphens or punctuation in the unit numbers.

Example: 54B; 655c; F

City

Provide the complete city name. Do not abbreviate any part of the city. This is an alpha field only. Numeric values should not be included.

Example: Sacramento not Sacto; Oklahoma City not Oklahoma Cty

State

Use the appropriate 2-letter state abbreviation. Do not provide the full state name.
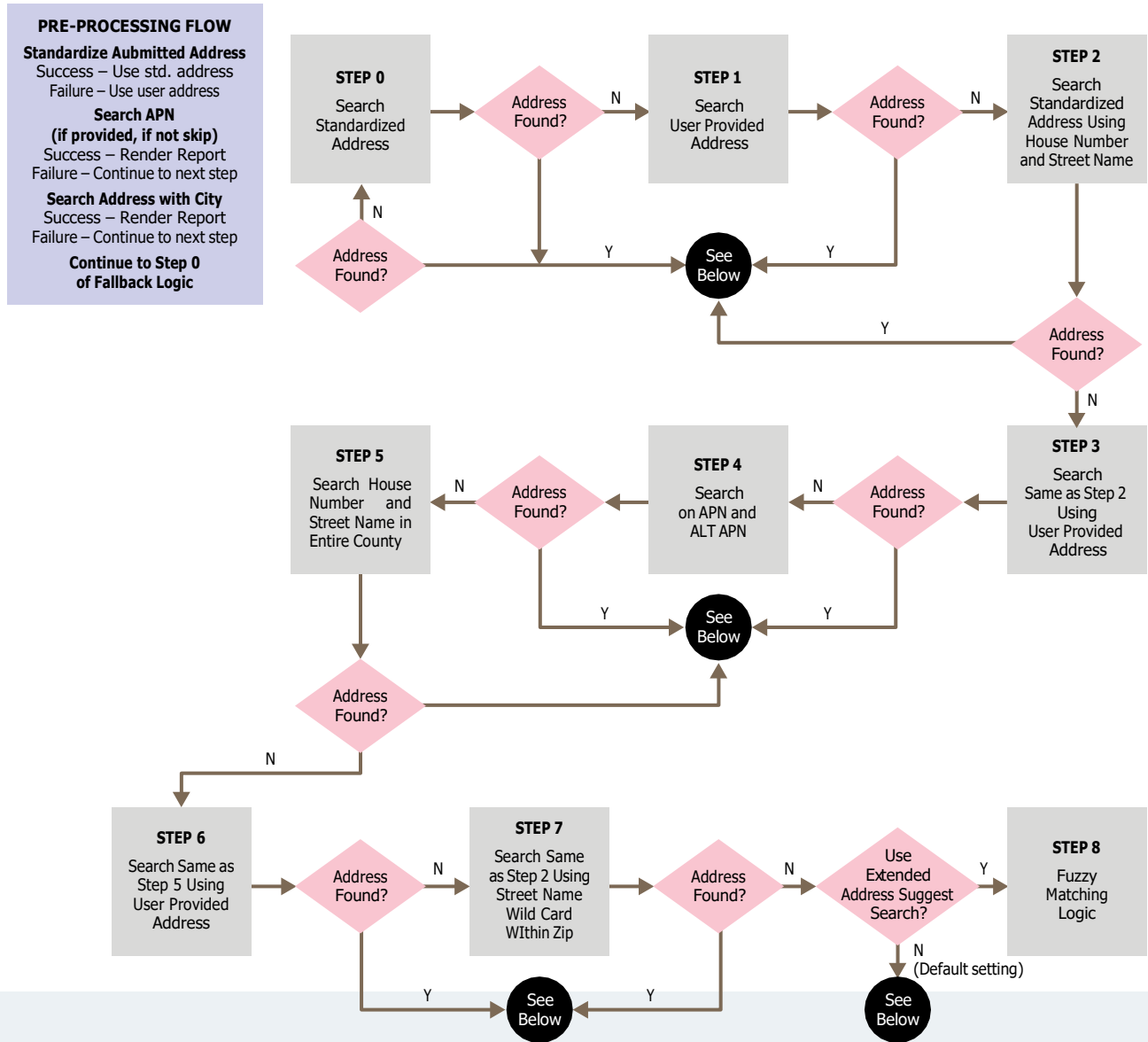
Example: AZ, CA, FL

Zip

Provide the subject property's five-digit ZIP code. ZIP plus 4 is not accepted.

Eliminate all excess zeros.

Example: 92807, 55127

3.2   Property Search Process Flow

PROPERTY SEARCH PROCESS FLOW

PRE-PROCESSING FLOW

Standardize Aubmitted Address
Success – Use std. address
Failure – Use user address

Search APN
(if provided, if not skip)
Success – Render Report
Failure – Continue to next step

Search Address with City
Success – Render Report
Failure – Continue to next step

Continue to Step 0
of Fallback Logic

STEP 0 Search Standardized Address — Address Found? N → **STEP 1** Search User Provided Address — Address Found? N → **STEP 2** Search Standardized Address Using House Number and Street Name

Address Found? (Step 0) → N; Y → See Below
Address Found? (Step 1) → Y → See Below
Address Found? (Step 2) → Y → See Below; N → **STEP 3** Search Same as Step 2 Using User Provided Address

STEP 5 Search House Number and Street Name in Entire County ← N — Address Found? ← **STEP 4** Search on APN and ALT APN ← N — Address Found? ← **STEP 3**

Address Found? (Step 4) → Y → See Below
Address Found? (Step 3) → Y → See Below
Address Found? (Step 5) → N → **STEP 6**; → (down)

STEP 6 Search Same as Step 5 Using User Provided Address → Address Found? N → **STEP 7** Search Same as Step 2 Using Street Name Wild Card WIthin Zip → Address Found? N → Use Extended Address Suggest Search? Y → **STEP 8** Fuzzy Matching Logic

Address Found? (Step 6) → Y → See Below
Address Found? (Step 7) → Y → See Below
Use Extended Address Suggest Search? → N (Default setting) → See Below

ADDRESS FOUND

If a single property match is found in **Pre-Processing** through **Step 1** a report will be rendered.

If multipile properties are found a Status 0310 Multiple Properties Found is returned for **Pre-Processing** through **Step 8**.

If no address found in address search a Status 0315 No Address Found will be returned.

For **Step 8** when Single or Multiple Properties are Found a Note with additional information will be returned.

Attributes passed in that alter the way the Fallback Logic works:

_StrictMatch Attribute set to **Y**es – if a match isn't found in Step 0, Status 0313 with a suggested single address will be returned if found in any of the other Steps.

_StrictMatch Attribute set to **N**o (Default setting) – a report will be rendered if a single match is found by any of the Steps.

_ExtendedAddressSuggestSearch Attribute set to Yes will only return an address suggestion if the County is different than the one submitted. This is true whether or not _StrictMatch is set to Yes or No a suggestion will be returned.

3.3   Login and Password

For every XML Search that you send, you must include your login ID and password. Your login and password must be correctly formatted and included in the MISMO Envelope portion of the XML REQUEST.

How to
Login

1. To login, do the following:

    a. In the REQUESTING_PARTY element, verify that your information is correct.

        For example, if the requesting party company name is Blue Sky Lending and the address is 123 Main Street Anaheim, CA 92840, then the following is true:

        < **REQUESTING_PARTY** _Name = "Blue Sky Lending" _StreetAddress = "123 Main" _City = "Anaheim" _State = "Ca" _PostalCode = "92840">

    b. In the RECEIVING_PARTY element, verify that the receiving party information is correct.

        For example, if the receiving party company name is Downtown Lending and the address is 8955 Essex Lane Newport Beach, CA 92663, then the following is true:

        < **REQUESTING_PARTY** _Name = "Downtown Lending" _StreetAddress = "8955 Essex Lane" _City = "Newport Beach" _State = "Ca" _PostalCode = "92663">

    c. In the REQUEST element, enter your login in the LoginAccountIdentifier attribute.

    d. In the REQUEST element, enter your password in the LoginAccountPassword attribute.

> NOTE: THIS PROCEDURE IS REPEATED FOR EACH REQUEST. YOU MAY SET THE ATTRIBUTE FIELDS ONCE AND THEN REUSE THE INFORMATION FOR EACH ADDITIONAL REQUEST.

3.4   Subject Property Reports

A Subject Property Report contains the characteristics of a property such as owner name, sales information, site information, and tax information. There are four types of Subject Reports:

- Subject Search Report
- Short Subject Report
- Standard Subject Report
- Detailed Subject Report

Important: For any XML REQUEST, you may only select one Subject Report. Properties can be searched by address information, owner name, and/or APN.

For Short, Standard and Detailed Subject Reports, if your property search finds a single property matching your search criteria, then the requested subject report is returned. If your search criteria finds multiple properties, then a Property List Report is returned.

For a Subject Search Report, set _SubjectPropertySearch = "Y" in the C2D request. The property address, APN and Owner name(s) will be rendered in the response on a successful property search for each property irrespective of whether there is a single property match or multiple properties matched the search criteria. This feature can be used by customers to verify basic property information as the first step of a 2 step process before ordering subsequent property reports.

3.5   Subject Property Search

3.5.1 Property Search Street Address

How to

1. To select a Subject Search Report, do the following:

    a. In the _CONNECT2DATA_PRODUCT element, enter the report attribute you want to use.

        For example, the attribute _**ShortSubjectReport** will return a short subject report.

    b.   Enter a Y for the report you want to generate.

            For example, _ShortSubjectReport = "**Y**"

2. Enter the subject property address in the _PROPERTY_ CRITERIA element.

3. Submit your request.

Note: The minimal data required to search for a subject property using a street address is:

• _StreetAddress and _PostalCode (ZIP Code), or

• _StreetAddress, _County and _State.

Note: The _StrictMatch Flag has been added to bypass the address matching fallback logic utilized by C2D. With the _StrictMatch Flag set to "Y" if an exact address match is not found the response will be a single matched address or either Status 0315 "NO RECORDS FOUND FOR SEARCH CRITERIA SUBMITTED" or Status 0310 "MULTIPLE RECORDS FOUND".

3.5.2 Property Search by Parsed Street Address

How to

1. To select the proper Subject Search Report, do the following:

   a. In the _CONNECT2DATA_PRODUCT element, find the report attribute you want to use.

      For example, **_ShortSubjectReport** = a short subject report.

   b. Enter a Y for the report you want to generate.

      For example, **_ShortSubjectReport** = "Y"

2. Enter the subject property city, state, county, and/or postal code in the _PROPERTY_CRITERIA element.

3. Enter the subject property street address in the PARSED_ STREET_ADDRESS element.

4. Submit your request.

Note: The minimal data required to search for a subject property using parsed street address is:

- _StreetAddress and _PostalCode (ZIP Code) or _County and _State, or

- _StreetAddress and _HouseNumber and _PostalCode (ZIP Code) or _County and _State

3.5.3 Subject Search by Owner Name

How to

Note: The minimal data required for a Subject Property search using owner name is:

- _OwnerLastName attribute and _PostalCode (ZIP Code), or

- _County and _State.

3.5.4 Subject Search by Formatted or Unformatted APN

How to

1. To select the proper Subject Search Report, do the following:

   a. In the _CONNECT2DATA_PRODUCT element, find the report attribute you want to use.

      For example, _ShortSubjectReport = a short subject report.

   b. Enter a Y for the report you want to generate.

      For example, _ShortSubjectReport = "Y"

2. Enter the subject _PostalCode (ZIP Code) or _County and _State in the _PROPERTY_CRITERIA fields.

3. Enter the APN in the _SUBJECT_SEARCH attribute, _AssessorsParcelIdentifier for formatted APNs.

4. Enter the APN in the _SUBJECT_SEARCH attribute, _UnformattedParcelIdentifier for unformatted APNs.

5. Submit your request.

Note: The minimal data required to search for a Subject Property using the Assessor Parcel Number is:

- _AssessorsParcelIdentifier attribute and _PostalCode (ZIP Code), or
- _UnformattedParcelIdentifier attribute and _PostalCode (ZIP Code), or
- _AssessorsParcelIdentifier attribute and _County and _State, or
- _UnformattedParcelIdentifier attribute and _County and _State, or
- _AssessorsParcelIdentifier attribute and _CountyFIPSCode (FIPS Code) or
- _UnformattedParcelIdentifier attribute and _CountyFIPSCode (FIPS Code)

3.6   Statewide Owner Search

Statewide Owner Search

To perform a Statewide Owner Search, the following conditions must be true:

- The _StatewideOwnerSearch attribute, in the _CONNECT2DATA_PRODUCT element, must be set to Y.
- The State and Owner last name fields must have a value.
- A product report must be selected along with the search criteria.

  See the *Product Reports* section below for the report types supported with Statewide Owner Search.

3.6.1   Considerations

Considerations   The following considerations are taken when running the Statewide Owner Search:

- If a full address is entered when the statewide attribute is set to Y, the search is applied to the owner name. The address is ignored. All statewide search logic is applied.

- If a zip code is entered, the search is performed, but it is filtered for the entered zip code. Filtering by the zip code finds a property when the zip code spans two counties.

- If only the owner's last name is entered, the last name is automatically wild carded. If a first name is also entered, the last name is not automatically wild carded, nor is it possible to perform a manual wildcard search.

3.6.2 Product Reports

Output   The following product reports are available with Statewide Owner Search:

- Subject
- Comparison
- ValuePoint®4 (VP4)
- Transaction History
- Legal and Vesting

Note: If a single property is found, the selected report is returned automatically. If multiple properties are found, a list is returned. The user must then select a single property and resubmit the search data. A report is then returned.

3.6.3 Output

Output
The maximum number of records that can be returned at this time is 1000. The number of records to be returned can be controlled by using an attribute:

_NumberStatewideOwnerRecordsType with values of 25, 50, 100, 200, 300, 400, 500, 750, or 1000.

Data output for each property found by a Statewide Owner Search is as follows:

- Parsed street address
- City
- State
- Zip code
- APN
- County
- First and Last name of the owner, in a single field

Along with the property information the following is also output:

- Total Multiple Record Count
- Property record number

3.7   Nationwide Search with Owner Name or Mailing Address

Nationwide Search
To perform a Nationwide Search with Owner Name or Mailing Address, the following conditions must be true:

- The _NationWideSearch attribute, in the _CONNECT2DATA_PRODUCT element, must be set to "Y" along with the base report _SubjectPropertySearch="Y"

- The Owner Last Name or Mailing Address must have a value

Note: The minimal data required for a Nationwide search is either:

- Owner Last Name

OR

- _MailingStreetAddress and _MailingCity and _MailingState

OR

- _MailingStreetAddress and _MailingPostalCode

3.7.1 Considerations

- If Mailing Street Address and parsed Street Address are both passed in the request, then Mailing Street Address will be considered for report generation.

- _NationWideSearch is an add-on that is supported with the _SubjectPropertySearch base report only. If this add-on is requested along with any other report, then the Nationwide search add-on is ignored and the requested product will be executed.

- _StatewideOwnerSearch takes priority over NationwideSearch when both are requested at the same time.

- If Owner Last Name is provided in the request along with Mailing Address then NationwideSearch with Owner Name will take priority over NationwideSearch with Mailing Address.

3.7.2 Output

Output

The maximum number of records that can be returned is 1000. The number of records to be returned can be controlled by using an attribute:

_NumberNationwideRecordsType with values of 25, 50, 100, 200, 300, 400, 500, 750, or 1000.

The response will contain the Property Address and Owner Names along with:

- Total Multiple Record Count
- Property record number

3.8   Custom Search

How to

1. Select the proper Custom Search Report by entering Y next to _CustomSearchShortReport, _CustomSearchStandardReport, or _CustomSearchDetailedReport.
   Note: Only one report may be selected at any one time.

2. If you want to receive only a record count and not the full comparable record, then enter Y in the _RecordCountOnlyIndicator.

3. Enter your search criteria in the _NON_REPEATABLE_CRITERIA.

4. City, State or State, County or Zip code are required.
   Note: See **Custom Search Criteria** for more information

5. Select the appropriate Land Use code(s).

6. Submit your request.

3.8.1 Custom Search Criteria

_CRITERIA	You may enter the city name in which you want to search in the _CRITERIA attribute: _City.
NON REPEATABLE_ CRITERIA	You may enter property specific search information in any of the following _NON_REPEATABLE_CRITERIA attributes: _County | _State | _SaleDateFromDate | _SaleDateToDate | |_LastSaleDateFrom | _LastSaleDateTo | _LastRecordingDateFrom | _LastRecordingDateTo | _SalePriceFromAmount | _SalePriceToAmount | _LivingAreaFromNumber | _LivingAreaToNumber | _BedroomsFromNumber | _BedroomsToNumber | _BathroomsFromNumber | _PoolOptionType | _BathroomsToNumber | _LotSizeFromNumber | _LotSizeToNumber | _OwnerOccupiedIndicator | _YearBuiltFromNumber | YearBuiltToNumber | _FirstMortgageTypeDescription | _FirstMortgageFromAmount | _FirstMortgageToAmount | _TotalUnitsFromNumber | TotalUnitsToNumber | _MarketArea Note: Actual date being used for the Date Option (_SalesDateFromDate and _SaleDateToDate) Search is the transactions Recording Date (Recording Date From and Recording Date To) please make the necessary adjustment to your search dates to accommodate this. It is recommended to use the following new attributes for Sale Date and/or Recording Date searches: _LastSaleDateFrom _LastSaleDateTo _LastRecordingDateFrom _LastRecordingDateTo
PARSED STREET_ ADDRESS	You may enter property address specific search information in any of the following _PARSED_STREET_ADDRESS attributes: _ApartmentOrUnit | _HouseNumber | _DirectionPrefix | _StreetName | _DirectionSuffix | _StreetSuffix
_LAND_USE	You may select any of the following land use types for you search: _ResidentialType AllResidentialTypes | SingleFamilyResidential | TownHouse | Condominium | Cabin | Co-Op | Mid-Rise-Condominium | High-Rise-Condominium | RowHouse | PUD | MobileHome | ManufacturedHousing.

_LAND_USE
(continued)

_ResidentialIncomeAndOtherType
AllResIncomeAndOtherTypes | Hotel | Duplex | ResortHotel | Motel | Apartment_Hotel | MobileHome | PrivateProperty | ResidentialHall_Dormatories | Apartment | MultiFamilyTenAndOverUnits | MixedComplex | MobileHomeCo-Op | Fraternity_ SororityHouse | 2to4Units | CondominiumProject | MultiFamilyDwelling | MobileHomePark | CommonArea | Triplex | Quadraplex | MobileHomePrivateProperty.

_CommercialType
AllCommercialTypes | DepartmentStore | FastFoodFranchise | AirRights | Facilities | AutoEquipment | MultipleUses | StoreFranchise | AutoRepair | AutoSalesAutoWrecking | BusinessPark | Carwash | CommercialBuilding | Cemetery | CommercialCondominium | ConvalescentHospital | ConventionCenter | DepartmentStore | Facilities | Finance_ Insurance_RealEstate | FinancialBuilding | FuneralHome | Garage | GreenHouse | Hospital | Kennel | AnimalHospital | LoftBuilding | MedicalBuilding.

_IndustrialType
AllIndustrialTypes | Commercial_Industrial | BulkPlant | Industrial | LumberMill | DumpSite | IndustrialPlant | Cannery | DurableGoods | LightIndustrial | MetalProduct | MiniWarehouse | IndustrialPark | Chemical | Non-DurableGoods | Brewery | MineralRights | MultiTenantIndustrial | LumberYard | FoodProcessing | MineralProcessing | Petroleum | GrainElevator | Packing | IndustrialCondominium | Mine_Quarry | HeavyIndustrial.

_VacantLandType
AllVacantTypes | FloodPlain | AgriculturalLand | Desert | IndustrialAcreage | CommercialAcreage | MarshLand | BarrenLand | CommercialLot | NaturalResources | IndustrialLot | CommonLand | MultiFamilyAcreage | MountainousLand.

_AgriculturalType
AllAgriculturalTypes | Forest | FallowLand | Agricultural | AgriculturalPlant | FieldAndSeed | Livestock | Greenbelt | Nursery_Horticulture | Fisheries | AnimalFarm | Orchard | DairyFarm | CitrusGrove | Farms | AvocadoGrove | Vineyard | Pasture | PoultryRanch | TruckCrops.

_LAND_USE *(continued)*	**_PublicAndSemiPublicType** AllPublicAndSemiPublicTypes | CorrectionalFacility | PrivateSchool | Public | CommunityCenter | Vocational_TradeSchool | TaxExempt | HistoricalDistrict | EducationalService | StateProperty | FederalBuilding | Art | CountyProperty | SecondaryEducationalSchool | PublicSchool | MunicipalProperty | MilitaryBuilding | PublicService | Police_Fire_CivilDefense | PossessoryInterest | Charity | Embassies_Chanceries | NurserySchool | Religious | HighSchool | IndianReservation. **_RecreationalType** AllRecreationalTypes | Lake_River_Beach | CountryClub | Recreational | MarinaFacility | Dancehall | Amphitheater | Park | GolfCourse | AmusementArcade | Racetrack | Gymnasium | AmusementPark | Racquet_TennisCourt | SwimmingPool | Auditorium | RVPark | Drive-inTheater | BowlingAlley | SkatingRink | Theater | BilliardHall | Stadium | TouristAttraction_Exhibits | Club | Stable. **_TransportationAndUtilityType** AllTransportAndUtilityTypes | Port_Harbor | TransportFacility | Telephone_CommunicationFacility | RailroadFacility | TruckTerminal | AircraftFacility | RecordingStudio | Utilities | Airport | RadioFacility | WasteDisposal | ElectricalFacility | Easement | Well_Water | GasProduction | Transport | Well_Gas-Oil | MarineFacility | TVFacility | Pipeline. **_SameAsSubjectType** Yes | Ignore **_OtherLandUseDescription**
RESPONSE CRITERIA	You may select the number of custom search returns you wish to receive in this element. In the attribute _NumberCustomSearchRecordsType, you may enter 5| 10 | 15 | 20 | 25 | 50 | 100 | 200 | 300 | 400 | 500 | 750 | 1000 as the number of records you want returned.
_PLATTED_LAND	PropertyLotIdentifier PropertyBlockIdentifier PropertySubdivisonIdentifier PropertyTract Identifier
UNPLATTED LAND	_TownshipNumber _RangeNumberIdentifier _SectionNumberIdentifier

3.8.2 Custom Search Sort

Output   _SortByThe _SortBy attribute is contained in the _SORT_OPTION element. It is repeatable and will allow up to four concurrent sorts of the output data. The first occurrence of _SortBy is first position followed by the second and then the third and so on. The data items you can sort on are: APN, DistanceFromSubject, HouseNumber, StreetName, and OwnerName

3.9   Document Image Search

Overview   Document Image search provides direct access to document images associated with a property. Image data is returned in the EMBEDDED FILE and DOCUMENT elements.

Requirements   The data set required to search for a document image contains two parts:

- First, you must supply search criteria that narrows a property to a specific region:

  a. ZIP Code or State AND County or City AND State
      OR

  b. Street Address AND City or County/FIPS Code.

- Second, you must supply search criteria that narrows down to the specific document image desired in that region:

  a. The Sale Document Number AND Sale Recording Date—to locate the document related to the most recent transaction
      OR

  b. The Sale Document Number AND Sale Recording Date—to locate the document related to a prior transaction.

Note: Document numbers and Recording Dates are available on the Legal and Vesting Report, Voluntary Lien, Instant Transaction History, Open Lien, Detailed Foreclosure.

Within the reports listed in the note above there are several Attributes that display the information required.

- _XXXDocumentNumberIdentifier: This attribute can either return the Document Number or Book/Page. The default is Book/Page if available.

- _XXXBookPage: Only returns Book/Page if available.

- _XXXInstrumentNumberIdentifier: Only returns Document Number if available.

corelogic.com

How to

1. To find a document, enter Y in the _DocumentImage attribute for _CONNECT2DATA_PRODUCT.
2. To find a specific document, you do one of the following:
   a. In the _PROPERTY_CRITERIA element, enter the appropriate property information (at least _State and _County), AND

   b. In the _DOCUMENT_SEARCH element, enter the sale document number, recording date, finance document number identifier, and/or finance recording date.
3. Submit your request.

Note: the more _PROPERTY_CRITERIA information detail that you supply, the better the hit rate and the more accurate the document selection process will be. Including _PROPERTY_ CRITERIA is a must in order to obtain the correct document image report.

3.9.1 Image Files

Overview

Assessor Maps and Document Image files must be converted from binary format to text format to be transmitted back in the XML stream. Connect2Data uses Base64 Encoding to encode images into a format that can be included as part of the Response XML. Encoded image files are returned in a text string as a series of characters that must be decoded to be viewed.

3.10 Report Search Options

Wild Card (*) Usage

The asterisk (*) is a wild card that can be used for:
- Street name

For example, a partial street name followed by an asterisk such as "green" will result in properties with a street name beginning with "green," such as Greenfield, Greenleaf and Green River.*
- City

XML Sample

```
<_PROPERTY_CRITERIA _StreetAddress = "23 Star*"
_StreetAddress2 = ""
_City = "Newport Beach"
_State = "CA"
_County = ""
_PostalCode = "92663"
_Country = ""
_LastSalePriceAmount = ""
_LastSaleDate = ""
_ValuationDate = ""
_PriorTransactionType = "Purchase">
```

Dash "-" Usage	The dash (-) can be used in the _HouseNumber field to search for a range of house numbers on a street. Some street addresses contain a dash as part of the house number, e.g., 145-B, 1450-2. It is best to search without the "-" in these cases.
	For example, _HouseNumber = "100-150" with _StreetName = "Vine" will locate properties on Vine between and including the house numbers 100 and 150.

XML Sample	<_PROPERTY_CRITERIA _StreetAddress = "100-150 Vine" _StreetAddress2 = "" _City = "Newport Beach" _State = "CA" _County = "" _PostalCode = "92663" _Country = "" _LastSalePriceAmount = "" _LastSaleDate = "" _ValuationDate = "" _PriorTransactionType = "Purchase">

_StandardizedHouseNumber	Handles house numbers containing alpha-numeric characters. • It is recommended to use _StandardizedHouseNumber for addresses that contain a dash (100-1) rather than _HouseNumber
_HouseNumberFrom and _HouseNumberTo	• Added to better represent range searches.
_CountyFIPSCode	Allows users to pass in the County FIPS Code as Search Criteria.
Filters	The following Attributes can be used as filters but cannot be submitted independent of other address components: • DirectionPrefix • DirectionSuffix • StreetSuffix

3.11   Street Address Standardization

Output	CoreLogic has designed a street address correction process that will fix poorly formatted or misspelled address information in report requests sent to Connect2Data.
	Address standardization is applied to all data entered in the CoreLogic database to ensure the greatest chance for a match between the criteria submitted for the search and the data in the database.

Process	Search requests that include a ZIP code or County/State with a street address will go through the address standardization process.

- If address standardization fails to find a property by the ZIP code or County/State combination submitted, the request is sent to the CoreLogic database for a match.
- If address standardization finds more than one property record, the search is sent to CoreLogic database.

- If an XML request does not contain a ZIP code or County/State combination, it is sent directly to the CoreLogic database and does not go through the address standardization process.

Examples	The following are some examples of what street address standardization does:

- Corrects minor misspellings of street names and city names.

  For example, "Vyne" will be corrected to "Vine", and "Anahiem" will be corrected to "Anaheim."

- Drops or corrects street suffixes and street directional as necessary.

  For example, "av" will be corrected to "avenue", and "east" will be dropped if the property searched does not contain "east."

- Completes street names for multi-name streets.

  For example, "Wilson" will be corrected to "Wilson Point" if such a street exists and a valid street number is also provided.

3.12   Assessor Map Search

Overview	The result of an Assessor Map search is returned in the EMBEDDED_FILE and DOCUMENT elements if a single map is associated with a subject property.
Requirements	The minimal data required to search for an Assessor Map is a subject search criteria that results in locating a single property.
	Note: If multiple maps are found for a single search, an Assessor Map List is returned.
How to	

1. To find an assessor map, enter Y in the _AssessorMap attribute for _CONNECT2DATA_PRODUCT.
2. To find a specific map, you do one of the following:
   a. In the ¬_PROPERTY_CRITERIA element, enter the appropriate property information, or
   b. In the _SUBJECT_SEARCH element, enter parcel number in the _AssessorsParcelIdentifier attribute.
3. Submit your request.

Note: The more information you supply the better the hit rate.

3.12.1 Index Map Search

The INDEX MAP shows the map page(s) the subdivision for a property is contained. Within the index map, the number indicates the corresponding page number of the book. The attribute to pass in is _MapIdentifier the exact Map ID information should be used. Users are not permitted to enter both an address and the _MapIdentifier. Since an Index can contain multiple sheets the _ReturnAllSheetsIndicator Attribute can be used.

3.12.2 Assessor Map Sheet List

Purpose	The Assessor Map List is returned if a search returns a property with more than one map.
	Note: returning all maps may significantly increase response time.
Content	The following information is returned on the Map List:

- Assessor Map Sheet Number
- AssessorsParcelIdentifier
- Owner Name
- Address
- County
- State

3.13   Multiple Search Detailed Report

Purpose	The Multiple APN Search provides the capability of passing in multiple formatted APNs (permitted range 1 to 200). For the properties that are matched the return is a Multiple Search Detailed Report. This report matches the Detailed Subject Report in data output.
How to	1. To select the proper Multi Search Detailed Report, do the following:

      a. In the _CONNECT2DATA_PRODUCT element, find the report attribute you want to use.

        For example, _MultipleSearchDetailedReport = a Detailed Property report.

      b. Enter a Y for the report you want to generate.

        For example, _MultipleSearchDetailedReport = "Y"

XML Request / Response Samples	Refer to the Connect2Data Support site for XML samples.

Required Fields

To generate a Multi APN Search you must supply information in the following fields:

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_AssessorsParcelIdentifier	Formatted Assessor's Parcel Identifiers (APN numbers)	Required	String
_County	County of subjects	Required	String
_State	State of Subjects	Required	String

Note:

1. Maximum number of APNs that can be submitted is 200

2. APN must be formatted without any quotes or commas

3. Duplicate APNs are not supported

4. Multi APN's are submitted as follows:

```
<_SEARCH_CRITERIA>
    <_MULTIPLE_SEARCH>
        <_CRITERIA
          _AssessorsParcelIdentifier="XXX-XXX-XX"/>
        <_CRITERIA
          _AssessorsParcelIdentifier=" XXX-XXX-XX "/>
        <_CRITERIA
          _AssessorsParcelIdentifier=" XXX-XXX-XX "/>
        <_NON_REPEATABLE_CRITERIA
          _County="County Name"
          _State="State two character Code"/>
```

CORELOGIC Reports

3.14   Comparable Sales Report

Comparable Sales Report

A Comparable Sales Report includes property information for comparable properties that have sold near the subject property.

A single subject property must be located to find comparables. If the search subject criteria submitted results in multiple properties, a property list is returned.

There are three different Comparable Sales Reports supported by C2D:

- Short Comparable Report
- Standard Comparable Report
- Detailed Comparable Report

Report Search Parameters

The search parameters for comparable sales reports are:

- Geographic
- Date
- Living Area

How to

1. To select the proper Comparable Sales Report, do the following:

   a. In the _CONNECT2DATA_PRODUCT element, find the report attribute you want to use.

      For example, _ShortComparableReport = a short comparable sales report.

   b. Enter a Y for the report you want to generate.

      For example, _ShortComparableReport = "Y"

   c. Enter the subject _PostalCode (ZIP Code) or _County and _State in the _PROPERTY_CRITERIA fields.

2. If you want to increase the number of comparable properties returned, then enter a valid number in the _NumberComparablesType attribute field. The following number of comps are supported (| 5 | 10 | 20 | 25 | 50 |) "10 is the default selection.

3. Submit your request.

3.14.1 Search Options

Geographic Search Options

_GeographicConstraintType: Used to specify a single geographic constraint for comparable searches.

For example, setting a SameZipCode will cause the system to search for comparable sales within the same ZIP code as the subject property.

_DistanceFromSubjectNumber: Distance from subject property to search for comparable sales. Attribute rules: Tenths-of-a-mile increments (radius).

For example, a value of ". 5" will search for comparable sales one-half mile around the subject property. 9.99 is the maximum radius distance allowed.

Date Search Options

_SaleDateFromDate and **_SaleDateToDate**: Starting and ending date ranges to search for comparable sales.

Attribute rules: entry format is month and year, YYYYMMDD. Search cannot include both Date Range and Months Back Number.

Note: Actual date being used for the Date Option (_ SalesDateFromDate and _SaleDateToDate) Search is the transactions Recording Date (Recording Date From and Recording Date To) please make the necessary adjustment to your search dates to accommodate this. It is recommended to use the following new attributes for Sale Date and/or Recording Date searches:

_LastSaleDateFrom

_LastSaleDateTo

_LastRecordingDateFrom

_LastRecordingDateTo

_MonthsBackNumber: Number of months back to search for comparable sales.

Attribute rules: search cannot include MonthsBackNumber a date range.

Living Area Search Options

_LivingAreaVariancePercent: Difference in living square feet that the comparable sale can have from the subject, as expressed in a percentage.

Attribute rules: search cannot include Living Area Variance Percent and a Living Area Range.

_LivingAreaFromNumber and **_LivingAreaToNumber:** Low and high value ranges for the Gross Living Area in square feet.

Attribute rules: search cannot include Living Area Variance Percent and a Living Area Range.

_BedroomsFromNumber and **_BedroomsToNumber:** Beginning and ending bedroom number range.

Pool: Enumerated choices. See DTD for valid options.

LandUse: Land Use Type to include in search. Multiple values are allowed. See DTD for valid options. If _SameAsSubject is set to yes and any other LandUse Type is selected the search will return LandUse Types same as the subject property or LandUse Types additionally selected. When set to ignore than any LandUse Type can be returned.

_YearBuiltFromNumber and **_YearBuiltToNumber** Allow for search of comparables falling into the provided Year Built range.

Polygon Search

_Latitude & _Longitude: Allows searching for properties by the use of an irregularly shaped map area by specifying the coordinates of the corners of the desired area. The Polygon Search always takes the precedence over a Radius search.

(_DistanceFromSubjectNumber will be ignored if a Polygon Search is present).

Note 1: Each set of the **_Latitude & _Longitude** attributes will need to be placed under a separate _COORDINATES element under _POLYGON_SEARCH under _COMPARABLE_SEARCH.

Note 2: Polygon Search works in conjunction with the Subject Property address and Comparable Search. First the properties within the polygon lat / long coordinates are fetched and then the comparable search criteria is applied. If no comparable search search criteria is provided then the Default comparable search criteria in the next section is applied.

Default Search Criteria

ATTRIBUTE	DEFAULT VALUE
_DistanceFromSubjectNumber	10
_PoolOptionType	PropertiesWithAndWithoutPools
_MonthsBackNumber	6
_LivingAreaVariancePercent	15
_IncludeStreetMapIndicator	N

Default Number of Comparables returned = 10

3.15   Comparable Farm Report

Comparable Sales Farm Report

Comparable Sales Farm Reports include property information for many comparable properties that have sold near the subject property. Up to 1000 comparable property reports may be returned based on your subject property information. Enumeration options: (5 | 10 | 15 | 20 | 25 | 50 | 100 | 200 | 300 | 400 | 500 | 750 | 1000) "100" is the default selection.

A single subject property must be located in order to find comparables. If the search subject criteria submitted results in multiple properties, a property list is returned

3.15.1 Comparable Farm Report Search Parameters

Geographic Search Options

_GeographicConstraintType: Used to specify a single geographic constraint for comparable searches.

For example, setting a SameZipCode will cause the system to search for comparable sales within the same ZIP code as the subject property.

_DistanceFromSubjectNumber: Distance from subject property to search for comparable sales. Attribute rules: Tenths-of-a-mile increments (radius).

For example, a value of ". 5" will search for comparable sales one-half mile around the subject property. .99 is the maximum radius distance allowed.

Date Search Options

_SaleDateFromDate and _SaleDateToDate: Starting and ending date ranges to search for comparable sales.

Attribute rules: entry format is month and year, YYYYMMDD. Search cannot include both Date Range and Months Back Number.

Note: Actual date being used for the Date Option (_ SalesDateFromDate and _SaleDateToDate) Search is the transactions Recording Date (Recording Date From and Recording Date To) please make the necessary adjustment to your search dates to accommodate this. It is recommended to use the following new attributes for Sale Date and/or Recording Date searches:

_LastSaleDateFrom

_LastSaleDateTo

_LastRecordingDateFrom

LastRecordingDateTo

_MonthsBackNumber: Number of months back to search for comparable sales.

Attribute rules: search cannot include MonthsBackNumber a date range.

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Living Area Search Options

_LivingAreaVariancePercent: Difference in living square feet that the comparable sale can have from the subject, as expressed in a percentage.

Attribute rules: search cannot include Living Area Variance Percent and a Living Area Range.

_LivingAreaFromNumber and **_LivingAreaToNumber:** Low and high value ranges for the Gross Living Area in square feet.

Attribute rules: search cannot include Living Area Variance Percent and a Living Area Range.

_BedroomsFromNumber and **_BedroomsToNumber:** Beginning and ending bedroom number range.

Pool: Enumerated choices. See DTD for valid options.

LandUse: Land Use Type to include in search. Multiple values are allowed. See DTD for valid options. If _SameAsSubject is set to yes and any other LandUse Type is selected the search will return LandUse Types same as the subject property or LandUse Types additionally selected. When set to ignore than any LandUse Type can be returned.

_YearBuiltFromNumber and **_YearBuiltToNumber** Allow for search of comparables falling into the provided Year Built range.

Polygon Search

_Latitude & _Longitude: Allows searching for properties by the use of an irregularly shaped map area by specifying the coordinates of the corners of the desired area. The Polygon Search always takes the precedence over a Radius search.

(_DistanceFromSubjectNumber will be ignored if a Polygon Search is present).

Note 1: Each set of **_Latitude & _Longitude** attributes will need to be placed under a separate _COORDINATES element under _POLYGON_SEARCH under _COMPARABLE_SEARCH.

Note 2: Polygon Search works in conjunction with the Subject Property address and Comparable Search. First the properties within the polygon lat / long coordinates are fetched and then the comparable search criteria is applied. If no comparable search search criteria is provided then the Default comparable search criteria in the next section is applied.

Default Search Criteria

ATTRIBUTE	DEFAULT VALUE
_DistanceFromSubjectNumber	10
_PoolOptionType	PropertiesWithAndWithoutPools
_MonthsBackNumber	6
_LivingAreaVariancePercent	15
_IncludeStreetMapIndicator	N

Default Number of Comparables returned = 10

3.15.2 Sample Comparable Farm Search

Requirements

1. To select the proper Comp Farm Sales Report, do the following:

   a. In the _CONNECT2DATA_PRODUCT element, find the report attribute you want to use.

   For example, _StandardCompFarmReport = a standard comp farm report.

   b. Enter a Y for the report you want to generate.

   For example, _StandardCompFarmReport = "Y"

2. Enter your subject property address in the _PROPERTY_CRITERIA attribute fields.

3. If you want to return only a count of available comparables, enter Y in the _CompFarmRecCountOnly attribute field under the _COMPARABLE_SEARCH element.

4. If you want to refine you comp search, enter the appropriate information in the attributes fields under the _COMPARABLE_SEARCH element.

   For example, if you want to include properties with at least 3 bedrooms, enter 3 in the _BedroomsFromNumber attribute.

5. If you want to increase the number of comparable properties returned, enter a valid number in the _NumberComparablesType attribute filed.

_CompFarmRecCountOnly

The search criteria for Comparable Sales Farm Reports includes the CompFarmRecCountOnly parameter that if set to Y, returns only a total count of comparable sales and not specific comparable property reports. There is no billing if this option is used.

For example, if you want to find out how many comparable sales are available for a subject property, then you may enter your property information and enter Y in the _ CompFarmRecCountOnly field. C2D returns only the number of available comparable sales.

Because, no reports are returned there is no billing. You may select the specific number of comp reports you wish to receive.

3.16   Polygon Search Report

Overview

Polygon Search report provides all the property details for all properties located within a set of defined Polygon Coordinates. The existing filter attributes present under the _COMPARABLE_SEARCH section are used for applying filters to the Polygon Search report.

How to

To select the proper Polygon Search report, do the following:

1. The _PolygonSearch attribute in the _CONNECT2DATA_ PRODUCT element, must be set to "Y."

    For example, _PolygonSearch="Y"

2. Provide at least four latitude/longitude coordinates that define a closed Polygon under _COORDINATES in _POLYGON_SEARCH as follows:

```
<_POLYGON_SEARCH>
  <_COORDINATES
     _Latitude=""
     _Longitude="" /> </_POLYGON_SEARCH>
```

Note: Each set of _Latitude and _Longitude attributes must be placed in separate _COORDINATES elements under _POLYGON_SEARCH under _COMPARABLE_SEARCH.

Output   The maximum number of records that can be returned is 1000. The number of records to be returned can be controlled by using an attribute:

_NumberPolygonRecordsType with values of 5, 10, 15, 20, 25, 50, 100, 200, 300, 400, 500, 750, or 1000.

The response will contain the Property Address and Owner Names along with:

* Total Multiple Record Count

* Property record number

* Property Details

3.17   Neighborhood Report

Overview   Neighborhood report is an information report detailing specific information about the surrounding neighborhood. You can search for information concerning any or all of the following:

* Demographics

* Schools

* Businesses

* Crime

How to   To generate a Neighborhood report, do the following:

1. Enter Y in the _NeighborhoodReport attribute for _CONNECT2DATA_PRODUCT.

2. Enter Y in the any of the _NeighborhoodReport associated attributes for which you want to find information:

    * _NeighborhoodDemographicsIndicator

    * _NeighborhoodSchoolInformationIndicator

    * _NeighborhoodBusinessInformationIndicator

    * _NeighborhoodCrimeInformationIndicator

3. In the _PROPERTY_CRITERIA element, enter the property address, including city, state, zip, and any other appropriate information.

3.18 Property List Report

Property
List Report

The Property List Report is returned when more than one property matches the search criteria submitted in a request. The information on this report such as APN or Owner Name can be used to submit another request.

Note: The following information is returned for each property found:

- APN
- OWNER NAME
- STREET ADDRESS
- COUNTY
- STATE

Note: By default, up to the first 25 properties are listed. This default can be changed to "50" or "100" by submitting a value in the request :

- _RESPONSE_CRITERIA, _NumberSubjectPropertiesType attribute.
- Additional address attributes such as _ApartmentOrUnit can be submitted in a new request to narrow the search to a single property.

3.19 Property Validation Service

The Property Validation Service verifies that an address is actually a valid address. When used for validation prior to acceptance of an address into a Loan Origination System (LOS), Property Validation Service minimizes the cost of failed processing and removal of invalid address from the system.

How to

To select the Property Validation Service Report, do the following:

1. In the _CONNECT2DATA_PRODUCT element, locate the _PropertyValidationService attribute and enter "Y".

    For example, _PropertyValidationService = "Y"

Important: Please note the following requirements:

- The minimal data required to perform property validation is:

  _StreetAddress and _PostalCode (ZIP Code), or

  _StreetAddress, _County and _State.

- If an owner name is part of the search, the name must be entered into the Borrower field.

3.20   Legal and Vesting Report

Legal and Vesting Report

A Legal and Vesting report details the legal recorded ownership and property vesting for your selected subject property. The report includes: property information, legal description, ownership, property tax, and transaction history.

How to

1. To select Legal and Vesting, in the _CONNECT2DATA_PRODUCT element, enter Y for _LegalAndVestingReport attribute.

2. To generate a legal and vesting report, do one of the following:

   a. In the _PROPERTY_CRITERIA element, enter the property address, or

   b. In the _SUBJECT_SEARCH element, enter the owner name or APN.

3. Submit your request.

3.21   Instant Legal and Vesting Report

Instant Legal & Vesting Report

The Instant Legal and Vesting report is a streamlined report that displays basic property information, as well as, the complete vesting for the subject property separate from any transaction history information. The report includes: property information, legal description, ownership, property tax, and transaction history.

How to

1. To select Instant Legal and Vesting, in the _CONNECT2DATA_PRODUCT element, enter Y for _InstantLandV attribute.

2. To generate a legal and vesting report, do one of the following:

   a. In the _PROPERTY_CRITERIA element, enter the property address, or

   b. In the _SUBJECT_SEARCH element, enter the owner name or APN.

3. Submit your request.

3.22   Transaction History Report

Instant
Transaction
History
Report

The Transaction History report is a streamlined report that displays basic property information, as well as, the complete transaction history for the subject property separate from any vesting information. The report includes: property information, sales information, and finance information.

How to

1. To select Transaction History report, in the _CONNECT2DATA_ PRODUCT element, enter Y for _InstantTransactionHistory attribute.

2. To generate a Transaction History, do one of the following:

    a. In the _PROPERTY_CRITERIA element, enter the property address, or

    b. In the _SUBJECT_SEARCH element, enter the owner name or APN.

3. Submit your request.

Note: The attribute _ InstantTransactionHistory still contains the word Instant in it for backward compatibility purpose.

3.23   Fast L & V Report

Overview

The Fast Legal & Vesting report contains the full legal description and vesting as described on the actual document instrument for the subject property.

_Status and Report Coverage Process Flow

When C2D receives a Fast L & V request, a response is immediately sent back to the sender with a status condition of SUCCESSFUL, a code of 501, and the _Description of "REQUEST SUCCESSFULLY RECEIVED FOR PROCESSING."

The address supplied in the Fast L & V Request is checked against the CoreLogic product coverage.

• If the property falls outside of product coverage for this report request only, then a message is returned that states:

   THE REQUEST IS OUTSIDE OF OUR FAST COVERAGE AREA. DO YOU WISH REQUEST TO BE SENT TO OUR FIELD-ABSTRACTING NETWORK?

• If the address is within the FAST coverage area, then the Fast L & V report is created.

_ManualAbstractionIndicator

Outside Coverage Area

What is Outside Coverage Area? Outside Coverage Area is the physical geographic region that falls outside of FAST coverage. This area requires Manual Abstraction and as such, requires additional time to complete the Fast L & V report.

If the property falls outside of product coverage for this report only, then a message is returned. If you wish to order a Manual Abstraction, then you must mark the _ManualAbstractionIndicator = Y and re-submit the Request.

Clients may send the original request with the "_ManualAbstractionIndicator = Y" to automatically bypass the product coverage message and send the request to manual abstraction if necessary with no user intervention.

Optional Acknowledgement Indicator

Outside Coverage Area

Due to the asynchronous process required for a Fast L and V report, an ***optional*** "Acknowledgement Process" has been built into Connect2Data.

Within the request there is an optional attribute called _ FastLandVAcknowledgementIndicator. This is a Boolean attribute with choices of Y or N. The default is "N".

If the request is sent with this indicator set to "Y" then Connect2Data will expect a properly formatted acknowledgement message from the client verifying receipt of the final report. If a proper acknowledgement is not received by Connect2Data from the client, C2D will resend the report to the client and expect an acknowledgement. This process will be repeated several times. If after three failed attempts Connect2Data will send the report to an exception file and the client contacted to inquire if there is a problem on the client's receiving web server. Once this is resolved the file(s) will be resent.

***Note that most web based systems today do not need this type of "Acknowledgement" process. This is included as an optional service to clients.

Rules

When the report is received by the client a synchronous "Acknowledgement" response is to be returned to the Connect2Data system.

The format of the "Acknowledgement" message is as follows.

```
<?xml version='1.0' encoding='UTF-8'?>

<RESPONSE_GROUP MISMOVersionID='2.1'><RESPONDING_PARTY _Name='Blue Sky Lending' _StreetAddress='123 Main' _City='Anaheim' _State='Ca' _PostalCode='92840'/>

<RESPOND_TO_PARTY _Name='CoreLogic' _StreetAddress='' _City='' _State='' _PostalCode=''/>

<RESPONSE>

<RESPONSE_DATA>

<PROPERTY_INFORMATION_RESPONSE>

<STATUS _Condition='SUCCESSFUL      ' _Code='0400'
    _Description='SUCCESSFULLY PROCESSED. NO RESPONSE-LEVEL ERRORS ENCOUNTERED'/>

<_PRODUCT _FastLandV='Y'>

<STATUS _Condition='SUCCESSFUL      ' _Code='0502' _Description='REPORT SUCCESSFULLY RECEIVED.'/>

</_PRODUCT>

</PROPERTY_INFORMATION_RESPONSE>

</RESPONSE_DATA>

</RESPONSE>

</RESPONSE_GROUP>
```

> THE MISMO ENVELOPE INFORMATION IS OPTIONAL.

> STATUS IS REQUIRED.

> OTHER REQUIRED FIELDS ARE:
> _FASTLANDV = "Y"
> _CONDITION = ""
> _CODE = "502"
> _DESCRIPTION = ""

3.23.1 Receiving a Fast L & V report

Report Receipt Method

The process flow for a Fast L & V report is asynchronous. In other words, once the request is made and a verified response is returned notifying the user that the report is being processed, the connection is closed. CoreLogic will send the final report to the client via an HTTPS POST method. In order for this process to function the user must include a DestinationDescription which is the URL of the client's web site waiting to receive the report. Thus, the client must have a web site running to receive FAST L & V reports.

Rules   To generate a valid Fast Legal & Vesting Report, the XML REQUEST must include the following:

- Loan Number (Maximum)
- A Unique "Record Identifier"
- Address information (Parsed address input is not currently supported. Use PROPERTY_CRITERIA \ _StreetAddress attribute for address input, e.g., 123 Main St.
- City or Zip Code
- State (Two letter abbreviation, e.g., CA)
- County
- Borrower First and Last Name (Up to four borrowers are supported)
- DestinationDescription (The URL of the Client's web site that CoreLogic will use to return the final report)

3.24   Voluntary Lien Report

Overview   The Voluntary Lien Report offers customers a comprehensive and user-friendly view into a target property's current and historical ownership and encumbrance status. Mortgage based defaults are found in the Voluntary Lien Report. This is an extension of Transaction History that includes Assignments, Releases, and Foreclosure documents in the history string. Voluntary Lien is all deeds and mortgages we have on record for the property.

How to   To generate a Voluntary Lien report, do the following:

1. Enter Y in the _VoluntaryLienReport attribute for _CONNECT2DATA_PRODUCT.
2. In the _PROPERTY_CRITERIA element, enter the property address, or
3. In the _SUBJECT_SEARCH element, enter the owner name or APN.

Note: If multiple properties are found based on the input criteria, then a multiple property list will be returned to the user.

3.25   Open Lien Report

Overview   Open Lien Report provides transaction history with open lien indicators to identify open liens on the subject property. The Open Lien Report contains only open mortgage liens (all voluntary). Should a brief history of all transactions be required the request can include the number of month's history to be included on the report.

How to   How to To generate an Open Lien Report, do the following:

1. Enter Y in the _OpenLien attribute for _CONNECT2DATA_
PRODUCT.

2. Enter (Y/N) for the indicator _IncludeLastTransactionIndicator
depending on if you want to include the last transaction
whether it is Open or Closed.

3. Enter (Y/N) for the indicator _MatchWithOnlyReleaseIndicator
depending on if you only want to match records where
CoreLogic collects release documents from the County .

4. Enter required information, and optional information if
desired, using the following field reference table as a guide.

**Required
Fields**   To generate an Open Lien report, you must supply information in
the following fields:

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_Address1	Full street address of subject property	Required	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required if ZIP is not provided	String
_County	County of subject property	Optional	String
_Unit	Unit number of subject property	Optional	String
_Zip	5-digit ZIP postal code (i.e. 95630) of subject property	Required	String
CUST_ESTIMATE	Estimated value of subject property	Optional	Integer
PARCEL	The Subject Property's parcel number (APN)	Optional	String

3.26   Standard Delinquent Tax Report

Overview   This report generates County Tax data which will provide
information on the Tax Status of the subject property and provides
answers to questions like, "Are the taxes current or are they
delinquent?"

How to   To generate a Standard Delinquent Tax report, do the following:

1. Enter Y in the _StandardDelinquentTaxReport attribute for
_CONNECT2DATA_PRODUCT.

2. Enter required information, and optional information if
desired, using the following field reference table as a guide.

Required Fields

To generate a Standard Delinquent Tax report, you must supply information in the following fields:

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_Address1	Full street address of subject property	Required	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required if ZIP is not provided	String
_County	County of subject property	Optional	String
_Unit	Unit number of subject property	Optional	String
_Zip	5-digit ZIP postal code (i.e. 95630) of subject property	Required	String

3.27   Geocode Information

Overview

Geocodes are a selectable option for Subject Property Reports, Comparable Report, Comp Farm Reports, Custom Search Reports, and Neighborhood Foreclosure Summary reports. Geocode will return the Latitude and Longitude of a property. Geocodes must be used in conjunction with one of the above reports as they are not available as a standalone item. The CoreLogic Geocodes are a combination of Best of Breed vendor supplied Geocodes supplemented with CoreLogic parcel centroids. This provides greater accuracy, meaning the customer receives the most accurate Geocodes available.

How to

To include Geocodes, do the following:

1. Enter Y in the _IncludeGeoCode attribute for _CONNECT2DATA_PRODUCT.

Source Codes

The Source Codes returned in the SourceCode attribute are as follows:
(ex. SourceCode="PB")

AB – Vendor Geocode – Location Quality Code will be populated

PB – CoreLogic parcel boundary database. No Location Quality Code will be included.
Geocoded location is the center of the parcel boundary.

S – Street Map data. No Location Quality Code will be included. Location is a center of a geographic object such as Zip code, state, county, or city.

Required Fields

There are no required fields for GeoCode just the normal required for the base report being ordered.

3.28   Adjustable Rate Mortgage Data

Overview

ARM Data is a selectable option to enhance the transaction data output of the Transaction History Report, Voluntary Lien Report, Open Lien Report, and Legal and Vesting with Transaction History Report. Options available for selection are to include ARM Data when available or to not include the data. The default selection will be "No" not to include. In cases where ARM Data is not available the entire section will be suppressed.

How to

To include ARM Data, do the following:

1. Enter Y in the _IncludeARMDataWhenAvailable attribute for _CONNECT2DATA_PRODUCT. The default value is 'N' not to include.

Required Fields

There are no required fields for ARM Data just the normal fields required for the base report being ordered. Refer to the base reports section for additional information.

3.29   Mortgage Modification Information

Overview

By including the Attribute _ IncludeMortgageModificationOriginalInfo the base report will be augmented with the inclusion data specific to a Mortgage Modification transaction.

How to

To include Mortgage Modification Data, do the following:

1. Enter Y in the _IncludeMortgageModificationOriginalInfo attribute for _CONNECT2DATA_PRODUCT. The default value is 'N' not to include.

Required Fields

There are no required fields for Mortgage Modification Data just the normal fields required for the base report being ordered. Refer to the base reports section for additional information.

Data appended to base report

_MortgageModificationOriginalDate
_MortgageModificationOriginalDocumentNumber
_MortgageModificationOriginalBookandPage
_MortgageModificationChangeAmount
_AdditionalMortgageModificationOriginalDate
_AdditionalMortgageModificationOriginalDocumentNumber
_AdditionalMortgageModificationOriginalBookandPage
_AdditionalMortgageModificationChangeAmount

3.30   Neighborhood Foreclosure Summary

Overview

The output provides lenders with key data about the surrounding neighborhood within a Radius of the subject property. The data provides in summary form the properties in the pre-foreclosure (default) , auction, and the REO Stage of Foreclosure.

How to

To generate a Neighborhood Foreclosure Summary report, do the following:

1. Enter Y in the _NeighborhoodForeclosureSummary attribute for _CONNECT2DATA_PRODUCT.

2. Enter required information, and optional information if desired, using the following field reference table as a guide.

Required Fields

To generate a Neighborhood Foreclosure Summary report, you must supply information in the following fields:

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_Address1	Full street address of subject property	Required	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required if ZIP is not provided	String
_County	County of subject property	Optional	String
_Unit	Unit number of subject property	Optional	String
_Zip	5-digit ZIP postal code (i.e. 95630) of subject property	Required	String
_DistanceFromSubjectNumber	Distance from Subject Property	Optional Defaults to .5	

3.31   Involuntary Lien Report

Overview

Mechanics and Home Owner Association Liens will be output providing a broader look into the current status of a subject property. A mechanic's lien is a security interest in the title to property for the benefit of those who have supplied labor or materials that improve the property. An HOA Lien can be placed on a property by the Home Owners Association for a variety of reasons.

How to

To generate an Involuntary Lien Report, do the following:

1. Enter Y in the _InvoluntaryLienReport attribute for _CONNECT2DATA_PRODUCT. The default value is 'N' not to include.

Required
Fields

To generate the Involuntary Lien report, you must supply information in the following fields:

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_Address1	Full street address of subject property	Required	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required if ZIP is not provided	String
_County	County of subject property	Optional	String
_Unit	Unit number of subject property	Optional	String
_Zip	5-digit ZIP postal code (i.e. 95630) of subject property	Required	String

3.32 Detailed Foreclosure Report

Overview

The Foreclosure Detail Report will list the current foreclosure stage (Default, Auction, and REO) and the associated data. It will be combined with a Short Subject Detail and Voluntary Lien which will display only foreclosure related transactions back to the most recent sale.

How to

To generate a Detailed Foreclosure Report, do the following:

1. Enter Y in the _DetailedForeclosureReport attribute for _CONNECT2DATA_PRODUCT. The default value is 'N' not to include.

Required Fields

To generate a Detailed Foreclosure report, you must supply information in the following fields:

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_Address1	Full street address of subject property	Required	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required if ZIP is not provided	String
_County	County of subject property	Optional	String
_Unit	Unit number of subject property	Optional	String
_Zip	5-digit ZIP postal code (i.e. 95630) of subject property	Required	String
_OwnerFirstName	The first name of the subject property owner	Optional	String
_OwnerLastName	The last name of the subject property owner	Optional	String
_AssessorsParcelIdentifier	County Assessors identification of a property for tax purposes	Optional	String
_UnformattedParcelIdentifier	Unformatted County Assessors identification of a property for tax purposes	Optional	String
_Municipality	Name of the Municipality where subject property (parcel) is located	Optional	String

3.33   ReverseAlert

Overview

Many reverse mortgage servicers are looking for ways to monitor their reverse mortgage portfolios for adverse actions. That is why CoreLogic has created ReverseAlert, a post-closing tool that is a cost-effective solution that gives you visibility into your reverse mortgage portfolio.

ReverseAlert brings to your attention adverse actions that may affect on-going Reverse Mortgage program eligibility.

How to

To generate a ReverseAlert Report, do the following:

1. Enter Y in the _ReverseAlertReport attribute for _CONNECT2DATA_PRODUCT. The default value is 'N' not to include.

Required Fields

To generate a ReverseAlert report, you must supply information in the following fields:

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_Address1	Full street address of subject property	Required	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required if ZIP is not provided	String
_County	County of subject property	Optional	String
_Unit	Unit number of subject property	Optional	String
_Zip	5-digit ZIP postal code (i.e. 95630) of subject property	Required	String
_ProceedUsedAmount	The amount of loan proceeds used by the customer	Optional	String

3.34 Flood Map Report

Overview

The Flood Map Report provides current flood data for the subject property. The report provides information on the Flood Zone, Panel Number, Panel Date, Community Name, whether the property is within a Special Flood Hazard Area, and if the property is within 250 feet of multiple flood zones. In a case where the property is within 250 feet of multiple flood zones the Flood Zone identified for the property will be that of the highest risk flood zone. Unlike other reports on C2D the Flood Map Report is a PDF report but the XML response will not contain any of the flood data.

How to

To generate a Flood Map Report, do the following:

1. Enter Y in the _FloodMapReport attribute for _CONNECT2DATA_PRODUCT. The default value is 'N' not to include.

Required Fields

To generate a Flood Map report, you must supply information in the following fields:

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_Address1	Full street address of subject property	Required	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required if ZIP is not provided	String
_County	County of subject property	Optional	String
_Unit	Unit number of subject property	Optional	String
_Zip	5-digit ZIP postal code (i.e. 95630) of subject property	Required	String

3.35 Market Trend Data (LAMAR Components)

Overview

Listing and Market Activity Report (LAMAR) Components combines Multiple Listing Service (MLS) data received directly from MLS organizations, with data from the CoreLogic public record database to offer risk managers, underwriters, appraisers and servicers a comprehensive view of a subject property including local market conditions. Mortgage servicers and valuation professionals are empowered to make better informed lending and funding decisions.

How to

To generate a Market Trend Components, do the following:

1. Enter Y in the _LMARIncludeSubjectProperty attribute for _CONNECT2DATA_PRODUCT. The default value is 'N' not to include.

2. Enter Y in the _LMARIncludePropertyImage attribute for _CONNECT2DATA_PRODUCT. The default value is 'N' not to include.

3. Enter Y in the _LMARIncludeMarketTrendData attribute for _CONNECT2DATA_PRODUCT. The default value is 'N' not to include.

Required Fields

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_PostalCode	Zip code of subject property	Required if other fields are not provided	String
_StreetAddress	Full street address of subject property	Required if ZIP is not provided	String
_County	County of subject property	Required if ZIP is not provided	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required if ZIP is not provided	String

4. Enter Y in the _LMARIncludeListingData attribute for _CONNECT2DATA_PRODUCT. The default value is 'N' not to include.

The components above can be ordered individually or together in the same XML Request. Refer to Connect2Data Support Site for sample Request and Response.

Required Fields

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_StreetAddress	Full street address of subject property	Required	String
_County	Full street address of subject property	Required if ZIP is not provided	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required	String

3.36 Listing and Market Activity Report (LAMAR)

Overview   Listing and Market Activity Report (LAMAR) combines Multiple
Listing Service (MLS) data received directly from MLS organizations,
with data from the CoreLogic public record database to offer risk
managers, underwriters, appraisers and servicers a comprehensive
view of a subject property including local market conditions.
Mortgage servicers and valuation professionals are empowered to
make better informed lending
and funding decisions.

How to   To generate a LAMAR Report, do the following:

1. Enter Y in the _LisitngAndMarketActivityReport attribute for
   _CONNECT2DATA_PRODUCT. The default value is 'N' not to
   include.

Note 1: Enter 'Y' in the _ReturnAllPhotos attribute under
_SUBJECT_SEARCH to get back all the property image urls in the
response. The default value for this attribute is 'N' which will return
only a single image.

Note 2: Enter "Y" in the _IncludeGeoCode attribute under _
CONNECT2DATA_PRODUCT to obtain the _Lat (latitude) and _Long
(longitude) values under Subject, Comparable and Nearby Listing
sections in the LAMAR response. The default value for this attribute
is 'N'. This is a billable event.

Refer to Connect2Data Support Site for sample Request and Response.

Required
Fields

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_StreetAddress	Full street address of subject property	Required if APN is not Provided	String
_County	Full street address of subject property	Required if ZIP and City not provided	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required if ZIP is not provided	String
_PostalCode	Zip code of subject property	Required if city and state not provided	String
_AssessorsParcelIdentifier	APN of search criteria	Required if Street Address is not provided	String

Default Criteria

The Comp Selection logic is based on below criterion:

Comps Search:

	REQUIRED FROM CALLING APP	DEFAULT VALUE	CONFIGURABLE BY CALLING APP
Subject Address	Y	Supplied by user	Y
Distance from Subject	N	10 miles	Y
Sale Date Range	N	One year from today	Y
+/- %GLA	N	15%	Y
Land Use	N	Same as Subject	Y
Status Category	N	U or S	Y
Lot Size	N	15%	Y
Sort By	N	Distance from subject	N

- DISTANCE from the subject property – (DEFAULT_SEARCH_ RADIUS = 10 miles from subject property)

- MLS_SALE_DATE (One year from current date is the default search criteria)

- GLA- 15%

- For MLS Comparables by default Pending (U) and Sold/Leased (S) comparable status categories are returned

- The other Listing Categories supported here are Active (A) and Expired/Withdrawn/Off Market (X)

- Minimum of 20 (default value) nearest Comparables are fetched sorted by distance from subject.

- User can retrieve a maximum of 250 Comparables for a subject property.

Default Criteria
(continued)

The Nearby Listing Selection logic is based on below criterion:

Nearby Listing Search:

	REQUIRED FROM CALLING APP	DEFAULT VALUE	CONFIGURABLE BY CALLING APP
Subject Address	Y	Supplied by user	Y
Distance from Subject	N	10 miles	Y
Sale Date Range	N	One year from today	Y
+/- %GLA	N	15%	Y
Land Use	N	Same as Subject	Y
Status Category	N	A & U	Y
Lot Size	N	15%	Y
Sort By	N	Distance from subject	N

- DISTANCE from the subject property – (DEFAULT_SEARCH_RADIUS = 10 miles from subject property)
- MLS_SALE_DATE (One year from current date is the default search criteria)
- GLA- 15%
- For Nearby Listings by default Active (A) and Pending (U) comparable status categories are returned
- The other Listing Categories supported here are Sold/Leased (S) and Expired/Withdrawn/Off Market (X)
- Minimum of 20 (default value) nearest Nearby Listings are fetched sorted by distance from subject.
- User can retrieve a maximum of 250 Nearby Listings for a subject property.

3.37   Voluntary and Involuntary Lien Report

Overview

The Voluntary and Involuntary Lien report contains transaction history, voluntary & involuntary liens as well as nationwide coverage for judgments, bankruptcies and tax liens. The transaction summary table has a new look with an easier-to-read configuration that groups related transactions together. This report provides Assessor and Delinquent Tax information, Ownership and Vesting Information, Delinquent Tax Data, Most Recent Deed Details, and Personal transactions.

How to

To generate a Voluntary and Involuntary Lien report, do the following:

1. Enter Y in the _VoluntaryAndInVoluntaryLienReport attribute for _CONNECT2DATA_PRODUCT. The default value is 'N' not to include.

Refer to Connect2Data Support Site for sample Request and Response.

Required
Fields

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_StreetAddress	Full street address of subject property	Required	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required if ZIP is not provided	String
_PostalCode	Zip code of subject property	Required	String
_OwnerLastName	Last Name of Owner	Required	String
_OwnerFirstName	First Name of Owner	Required	String
_UnformattedParcelIdentifier	Attribute is used to place last four digits of Social Security Number of First Owner	Optional	String
_OwnerLastName2	Last Name of Second Owner	Optional	String
_OwnerFirstName2	First Name of Second Owner	Optional	String
_UnformattedParcelIdentifier2	Attribute is used to place last four digits of social security number of Second Owner	Optional	String

3.38   BPO Check

Overview

BPO Check focuses on the appraised value rather than the quality of the appraisal composition. Similar to other products in the LoanSafe suite, alert flags will be generated with recommended corrective actions.

Customers may want to use BPO Check instead of LoanSafe Appraisal Manager in the case where comprehensive appraisal review is not necessary. Sometimes the lender may not have MISMO or first generation PDF but they still want an indication of valuation risk.

How to

To generate a BPO Check report, do the following:

1. Enter Y in the _BPOCheck attribute for _CONNECT2DATA_ PRODUCT. The default value is 'N' not to include.

Refer to Connect2Data Support Site for sample Request and Response.

Required
Fields

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_StreetAddress	Full street address of subject property	Required	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required if ZIP is not provided	String
_PostalCode	Zip code of subject property	Required	String
_UserAppraisedValue	User appraised value of property		
_RequestedLoanAmount	Loan Amount being requested		
_OwnerLastName	Last Name of Owner		
_OwnerFirstName	First Name of Owner		
_UnformattedParcelIdentifier	Unformatted APN, Folio, Parcel Number		
_LandUse	Property Land Use i.e. SFR		
Comparable			
_Address	Full street address of subject property	Required	
_City	City of subject property	Required if ZIP is not provided	
_State	State of subject property	Required if ZIP is not provided	
_PostalCode	Zip code of subject property	Required	

3.39   Property Status Indicators

Overview

The Property Status Indicators when added to a base report provide indicators on whether a property is in Foreclosure and what Stage of Foreclosure the property may be in. Another indicator will indicate if the property was a Short Sale. The final indicator indicates the type of status that was last posted (i.e. when the status last had a value, did that status represent 'For Sale' or 'For Rent'). Note that the value of this indicator may not necessarily represent the current actual status of the property—it is the type that was last posted.

How to

To include Property Status Indicators do the following:

1. Enter Y in the _ForeclosureIndicator, _ShortSaleIndicator, and ListingType. Each indicator can be selected separately by including in the _CONNECT2DATA_PRODUCT element. The default value is 'N' not to include.

Required
Fields

There are no required fields for Property Status Indicators just the normal fields required for the base report being ordered. Refer to the base reports section for additional information. Reports that can have the Property Status Indicators included are Subject Property Reports, Comparable Reports, Comparable Farm Reports, Transaction History, Voluntary Lien, and Custom Search.

3.40   MLS Data – Standalone

Overview MLS Data is a Standalone product that provides MLS data for the property address submitted when and where available. The data includes the following Elements and Attributes:

MLS Data output by _MLSData:

_MLS_PROPERTY_INFORMATION
MLSPropertyStateName
MLSPropertyCityName
MLSPropertyUnitNumber
MLSPropertyStreetSuffix
MLSPropertyHouseNumber

_MLS_LOCATION_INFORMATION
MLSWaterFrontPresent
MLSViewDescription
MLSView
MLSSubDivision
MLSSchoolDistrict

_MLS_PROPERTY_CHARACTERISTICS
MLSTotalUnits
MLSPoolPresent
MLSParkingCarPort
MLSParkingTotal
MLSGarageParkingSpaces
MLSGarageStyle
MLSStyleNV
MLSStories
MLSBasementFinishedPercent
MLSTotalBaths
MLSBedroom
MLSLotAreaSqFt
MLSLotAreaAcres
MLSLivingArea
MLSYearBlt
MLSPropertyTypeCode
MLSPropertyType

MLS_LISTING_INFORMATION
MLSStdContractDate
MLSSaleDate
MLSCurrentListPrice
MLSListType
MLSREOIndicator
MLSListingDate
MLSStatus
MLSSoldPrice

How to   To include MLS Data do the following:

1. Enter Y in the _MLSData attribute in the _CONNECT2DATA_PRODUCT element. The default value is 'N' not to include.

Required Fields

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_Address	Full street address of subject property	Required	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required if ZIP is not provided	String
_PostalCode	Zip code of subject property	Required	String

3.41   MLS Data – Add-On

Overview

MLS Data is an Add-On product that provides MLS data for the property address submitted when and where available. The data includes the following Elements and Attributes:

MLS Data output by _MLSData:

_MLS_PROPERTY_INFORMATION
    MLSPropertyStateName
    MLSPropertyCityName
    MLSPropertyUnitNumber
    MLSPropertyStreetSuffix
    MLSPropertyHouseNumber

_MLS_LOCATION_INFORMATION
    MLSWaterFrontPresent
    MLSViewDescription
    MLSView
    MLSSubDivision
    MLSSchoolDistrict

_MLS_PROPERTY_CHARACTERISTICS
    MLSTotalUnits
    MLSPoolPresent
    MLSParkingCarPort
    MLSParkingTotal
    MLSGarageParkingSpaces
    MLSGarageStyle
    MLSStyleNV
    MLSStories
    MLSBasementFinishedPercent
    MLSTotalBaths
    MLSBedroom
    MLSLotAreaSqFt
    MLSLotAreaAcres
    MLSLivingArea
    MLSYearBlt
    MLSPropertyTypeCode
    MLSPropertyType

MLS_LISTING_INFORMATION
    MLSStdContractDate
    MLSSaleDate
    MLSCurrentListPrice
    MLSListType
    MLSREOIndicator
    MLSListingDate
    MLSStatus
    MLSSoldPrice

_IncludeMLSData Add-On can be added to the following reports:

- Property Subject (Detail, Standard, and Short)

- Comparable Report (Detail, Standard, and Short)

- Comparable Farm Report (Detail, Standard, and Short)

How to

To include MLS Data to one of the base reports listed above do the following:

1. Enter Y in the _IncludeMLSData attribute in the _CONNECT2DATA_PRODUCT element along with the associated base report Attribute. The default value is 'N' not to include.

Required Fields

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_IncludeMLSData	Will add MLS data to existing report when available	Required	String

3.42   Building Permit

How to

To generate a Building Permit report, do the following:

1. Enter Y in thethe _BuildingPermit attribute for _CONNECT2DATA_PRODUCT.

2. The minimum input criteria to generate _BuildingPermit report and the priority in which they are needed are as follows:

   • APN & FIPS (_AssessorsParcelIdentifier, _CountyFIPSCode)

   • APN, County & state (_AssessorsParcelIdentifier, _County, _State)

   • AddressLine1 & ZIP (_StreetAddress, _PostalCode)

   • AddressLine1, City & state (_StreetAddress, _City, _State)

   • Parsed Street Address & ZIP

   • Parsed Street Address, City & state

3. Output can include the following:

   • XML only

   • XML with embedded PDF - _IncludePDFIndicator.

   • XML with embedded HTML - _IncludeHTMLIndicator

   • XML with embedded PDF and HTML - _IncludePDFIndicator   and _IncludeHTMLIndicator

   • Include the above attributes in the _CONNECT2DATA_ PRODUCT container. By passing in the _ IncludeHTMLIndicator and/or _IncludePDFIndicator one can receive the PDF and/or HTML.

   • Enter required information, and optional information if desired, using the following field.

Required Fields

To generate a Building Permit report, you must supply information in the following fields: Fields marked as Required need to be input.

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_StreetAddress	AddressLine1	Required if ZIP or City and State is provided	String
_City	City	Required if AddressLine1 and State is provided	String
_State	State	Required if City and AddressLine1 or APN and County is provided	String
_County	County	Required if APN and state is provided	Integer
_AssessorsParcelIdentifier	APN	Required if FIPS or county and state are provided	
_PostalCode	5-digit ZIP postal code (i.e., 95630)	Required if AddressLine1 or Parsed Street Address is provided	String
_CountyFIPSCode	FIPS	Required if APN is Provided	String
Parsed Street Address*		Required if ZIP or City and State are provided	

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_ApartmentOrUnit	Apartment Number	Optional	String
_DirectionPrefix	Direction Prefix	Optional	String
_DirectionSuffix	Direction Suffix	Optional	String
_StandardizedHouseNumber	Standardized House Number	Optional	String
_StreetName	Street Name	Required	String
_StreetSuffix	Street Suffix	Optional	String
_HouseNumber	House Number	Required	String
_HouseNumberSuffix	House Number Suffix	Optional	String

3.43 Name Address Search Report

Overview   The Name Address Search report is intended to allow clients to confirm that an Owner Name / Property Address combination is valid. The report will search for matching property data and return the results found—a match of Owner Full Name to the Address, a match of just the Owner Last Name to the Address, or a match to the Address only (no match on Owner).

How to

1. To select the proper Name Address Search request, do the following:

    a. The _NameAddressSearchReport attribute, in the _CONNECT2DATA_PRODUCT element, must be set to "Y"

   Note: The minimal data required for a Name Address Search report is either:

   • _StreetAddress and _PostalCode (ZIP Code), or

   • _StreetAddress, _City and _State.

Output

1. If there is a match for input address and consumer full name (Primary or secondary) then the response will populate the indicator _NameAddressSearchResult="H"

2. If there is a match for input address and consumer last name (Primary or secondary) then the response will populate the indicator _NameAddressSearchResult="H"

3. If there is a match for input address then the response will populate the indicator _NameAddressSearchResult="A"

4. If there is no match for input address and/or consumer name then the response will generate a failure and populate the indicator _NameAddressSearchResult="U"

3.44   Homeowners Association (HOA) Report

Overview   The Homeowners Association report shows details describing the Homeowners Association governing the requested property, if any. The report takes the property address (or other identifiers, such as APN) as inputs. Then, assuming the property is managed by an Association, outputs Association information such as the Association contact information and fees.

How to   To generate a Homeowners Association report, do the following:

1.   Enter Y in the _HOA attribute for _CONNECT2DATA_PRODUCT.

2.   The minimum input criteria to generate an _HOA report and the priority in which they are evaluated are as follows:

   • APN & FIPS (_AssessorsParcelIdentifier, _CountyFIPSCode)

   • APN, County & state (_AssessorsParcelIdentifier, _County, _State)

   • AddressLine1 & ZIP (_StreetAddress, _PostalCode)

   • AddressLine1, City & state (_StreetAddress, _City, _State)

   • Parsed Street Address & ZIP

   • Parsed Street Address, City & state

3.   Output can include the following:

   • XML only

   • XML with embedded PDF - _IncludePDFIndicator.

   • XML with embedded HTML - _IncludeHTMLIndicator

   • XML with embedded PDF and HTML - _IncludePDFIndicator and _IncludeHTMLIndicator

   • Include the above attributes in the _CONNECT2DATA_ PRODUCT container. By passing in the _IncludeHTMLIndicator and/or _IncludePDFIndicator, the requestor will receive the PDF and/or HTML content.

   • Enter required information, and optional information if desired, using the following table as guidance.

Required Fields

To generate a Homeowners Association report, you must supply information in the following fields. Fields marked as Required must be supplied.

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_StreetAddress	AddressLine1	Required if ZIP or City and State is provided	String
_City	City	Required if AddressLine1 and State is provided	String
_State	State	Required if City and AddressLine1 or APN and County is provided	String
_County	County	Required if APN and state is provided	Integer
_AssessorsParcelIdentifier	APN	Required if FIPS or county and state are provided	
_PostalCode	5-digit ZIP postal code (i.e., 95630)	Required if AddressLine1 or Parsed Street Address is provided	String
_CountyFIPSCode	FIPS	Required if APN is Provided	String
Parsed Street Address*		Required if ZIP or City and State are provided	

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_ApartmentOrUnit	Apartment Number	Optional	String
_DirectionPrefix	Direction Prefix	Optional	String
_DirectionSuffix	Direction Suffix	Optional	String
_StandardizedHouseNumber	Standardized House Number	Optional	String
_StreetName	Street Name	Required	String
_StreetSuffix	Street Suffix	Optional	String
_HouseNumber	House Number	Required	String
_HouseNumberSuffix	House Number Suffix	Optional	String

3.45 Propensity Model

How to To generate a Propensity Model Report, do the following:

1. Enter Y in the _PurchasePropensityReport attribute for Purchase Model under _CONNECT2DATA_PRODUCT.
   or

2. Enter Y in the _HelocPropensityReport attribute for Heloc Model under _CONNECT2DATA_PRODUCT.
   or

3. Enter Y in the _RefiPropensityReport attribute for Refinance Model under _CONNECT2DATA_PRODUCT.

4. The minimum input criteria to generate Propensity Model Report and the priority in which they are evaluated are as follows:

   • APN & FIPS (_AssessorsParcelIdentifier, _CountyFIPSCode)

   • APN, County & state (_AssessorsParcelIdentifier, _County, _State)

   • AddressLine1 & ZIP (_StreetAddress, _PostalCode)

   • AddressLine1, City & state (_StreetAddress, _City, _State)

   • Parsed Street Address & ZIP

   • Parsed Street Address, City & state

5. Output can include the following:

   • XML only

   • Enter required information, and optional information if desired, using the following table as guidance.

Required Fields

To generate a Propensity Model Report, you must supply information in the following fields. Fields marked as Required must be supplied.

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_StreetAddress	AddressLine1	Required if ZIP or City and State is provided	String
_City	City	Required if AddressLine1 and State is provided	String
_State	State	Required if City and AddressLine1 or APN and County is provided	String
_County	County	Required if APN and state is provided	Integer
_AssessorsParcelIdentifier	APN	Required if FIPS or county and state are provided	
_PostalCode	5-digit ZIP postal code (i.e., 95630)	Required if AddressLine1 or Parsed Street Address is provided	String
_CountyFIPSCode	FIPS	Required if APN is Provided	String
Parsed Street Address*		Required if ZIP or City and State are provided	

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_ApartmentOrUnit	Apartment Number	Optional	String
_DirectionPrefix	Direction Prefix	Optional	String
_DirectionSuffix	Direction Suffix	Optional	String
_StandardizedHouseNumber	Standardized House Number	Optional	String
_StreetName	Street Name	Required	String
_StreetSuffix	Street Suffix	Optional	String
_HouseNumber	House Number	Required	String
_HouseNumberSuffix	House Number Suffix	Optional	String

4.0 CoreLogic Automated Valuation Reports

Overview

The Automated Valuation Model (AVM) provides an estimated value for single-family, condominium, townhouse, and planned unit development (PUD) properties. Valuation results are returned on ValuePoint 4, and HVE reports (refer to the HVE Implementation Guide for Freddie Mac AVM).

Retro Date

Users wanting a valuation based on a retro date should pass in the following attribute "_ValuationDate". The date format is YYYYMMDD. The AVMs supporting retro dates are the standalone CoreLogic AVMs with the exception of PreQual Pro which does not support retro dates. For information on support for retro dates with cascading AVMs refer to the Vector XML Section.

FSD score in all In-house AVMs

Forecast Standard Deviation (FSD) is a new AVM score that is consistent across all CoreLogic AVM models, which include VP4, PASS, PB6, and HPA. An FSD score means that there is a 68% chance (1 standard deviation) that the AVM estimate is within +/− % of the actual value. For instance a score of 20 means there is a 68% chance that the score is within +/− 20% of the actual value. This score is in addition to the existing confidence score already provided. The FSD score is an integer (whole number) with a range from 0 to 100. The actual values will typically be from 5 to 40, with a lower score being better.

The XML will be ForecastedStandardDeviation under the AUTOMATED_VALUATION element.

Following are samples of what the Forecasted Standard Deviation will look like for each of the four reports it has been added to.

Valuation Results

1. ValuePoint4   ✔ VP4 Valuation Successful   Back to top

For Property Located At
614 Begonia AVE
Corona Del Mar, CA 92625-2013
Owner Name: **GRAY THOMAS A**

Valuation Result

Estimated Value:	$1,963,000
Estimated Value Range:	$1,821,000 - $2,064,000
Processed Date:	Friday, August 4, 2006
Confidence Score:	69
Forecast Standard Deviation:	69

This data set was prepared on **08/07/2006** as electronic file number **18542417** .

614 BEGONIA
CORONA DEL MAR,CA 92625
Owner: **GRAY THOMAS A**   County: **ORANGE, CA**

Value	$1,620,000	Confidence Score	67
Highest Reasonable	$2,110,000	Forecast Standard Deviation	69
Lowest Reasonable	$1,290,000		

4.1   ValuePoint®4 (VP4)

Overview

ValuePoint4 Report includes property valuation information and provides the ability for the user to supply search parameters such as valuation date.

The _Valuation Date field supports the entry of a retroactive date for property valuations. If this field is not included in the request or is blank, the default for this field is the current date.

How to

1. To generate a Value Point 4 report, enter Y in the _ValuePoint4 attribute for _CONNECT2DATA_PRODUCT.

2. Enter your subject property address in _PROPERTY_CRITERIA or _PARSED_STREET_ADDRESS.

3. Enter your comparable sales criteria in the _COMPARABLE_SEARCH element.

4. Submit your request.

Note: the more information you supply the better the hit rate.

4.2   PASS®

Overview

PASS provides current market value estimations in online, real-time fashion for residential properties.

The AVM report includes an estimated value for subject property, a value range, confidence score, property information, sales history and comparables.

How to

1. To generate a Pass report, enter Y in the following attribute in _CONNECT2DATA_PRODUCT for the following products:

    • _BasisPASS

2. Enter your subject property address in _PROPERTY_CRITERIA or _PARSED_STREET_ADDRESS.

How to
(continued)

3. Enter your subject supplemental sales criteria in the _SUBJECT_SEARCH element.

    • _UserProvidedEstimatedValue

4. Submit your request.

Note: the more information you supply the better the hit rate.

4.3   Prospector

Overview

Prospector is a CoreLogic produced AVM that returns an estimated value based on subject property location data.

You can perform a search using either an Address or APN as input. However, associated input data points are slightly different for each type. Following are the requirements:

IF YOU SEARCH WITH:	YOU MUST INCLUDE:
Address	City and State, or County and State, or Postal Code
APN	County and State, or Postal Code
	Note: For APN, you can include a City with the County and State input, but you cannot use City and State without County.

Overview
(continued)

Important: Prospector does not support searching with an Owner name only. Input data must include a full address or an APN.

Owner name is an acceptable data point for a Prospector search, but it cannot be used without the address or APN data. This is because Prospector, by design, might locate multiple properties based on your input.

For instance, a search including 123 Anywhere Street as a data point might also return 123 Anywhere Dr. and 123 Anywhere Ave., in the same city. Or the property might be a condominium, with multiple owner names returned for the same address, with different unit numbers. In either case, the Owner name then is significant for identifying the desired property, but not for the search itself.

How to   To generate a Prospector report using Address as input:

1. Enter Y in the _Prospector attribute for _CONNECT2DATA_PRODUCT.

2. Enter your subject property address in _PROPERTY_ CRITERIA or _PARSED_STREET_ADDRESS.

3. Enter either the city or county and state, or postal code in _PROPERTY_CRITERIA.

4. Enter an owner name in _SEARCH_CRITERIA if desired.

5. Submit your request.

To generate a Prospector report using APN as input:

1. Enter Y in the _Prospector attribute for _CONNECT2DATA_PRODUCT.

2. Enter the APN in _SEARCH_CRITERIA

3. Enter both the county and state, or postal code in _ PROPERTY_CRITERIA.

4. Enter an owner name in _SEARCH_CRITERIA if desired.

5. Submit your request.

4.4   GeoAVM® Report

Purpose   GeoAVM is an AVM Cascade that is based on State or County (FIPS code). The AVM's in the cascade are ranked by State and or County based on their accuracy and hit rate as analyzed by either CoreLogic data or by a customer's custom cascade. GeoAVM will cascade through all AVM's until it finds the property and provides a value.

How to   To generate a GeoAVM, do the following:

1. Enter Y in the _GeoAVM attribute for _CONNECT2DATA_ PRODUCT.

   Including the HTML code in the report makes the report very large. The default status is to exclude the HTML code. You can choose to have the HTML code included in the report by setting the _IncludeHTMLIndicator attribute to Y, in the _CONNECT2DATA_PRODUCT container.

2. Enter required information, and optional information if desired, using the following field reference table as a guide.

Required Fields

To generate a GeoAVM, you must supply information in the following fields:

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_StreetAddress	Full street address of subject property	Required	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required if ZIP is not provided	String
_County	County of subject property	Optional	String
_Unit	Unit number of subject property	Optional	String
_PostalCode	5-digit ZIP postal code (i.e. 95630) of subject property	Required	String
_UserProvidedEstimatedValue	Estimated value of subject property	Optional	Integer
_AssessorsParcelIdentifier	The Subject Property's parcel number (APN)	Optional	String

4.5   Total Home Value for Consumers: Standard

Overview

Total Home Value for Consumers: Standard (THV-C) is a consumer-quality AVM for mortgage lenders and online real estate information providers, allowing them to use their own website to display home values for any U.S. address that a consumer may submit. The consumer website is used for various marketing purposes, such as lead generation and upsell/cross sell opportunities.

How to

1. To generate a Total Home Value for Consumers: Standard report, enter Y in the _THVCStandard attribute for _ CONNECT2DATA_PRODUCT.

2. Enter your subject property address in _PROPERTY_ CRITERIA or _PARSED_STREET_ADDRESS.

3. Submit your request.

Note: the more information you supply the better the hit rate.

Required Fields

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_StreetAddress	Full street address of subject property	Required	String
_City	City of subject property	Required if PostalCode is not provided	String
_State	State of subject property	Required if PostalCode is not provided	String
_PostalCode	Zip code of subject property	Required if StreetAddress is provided.	String

4.6   Total Home Value[x]

Overview

Total Home Value[x], uses a state-of-the-art, single model methodology (only one model needs to be validated and is tuned by use case) that leverages artificial intelligence and machine learning capabilities built on Cloud technology. A property database of more than 5.5 billion records, updated daily, captures 99.9% of U.S. properties and spans more than 50 years to produce automated valuations that can be used anywhere a current property value is relevant.

Business Case

Total Home Value[x] for Consumers - Highest hit-rate AVM with rounded values for displaying AVM information on a website for consumers.

Total Home Value[x] for Marketing - Highest hit-rate AVM for marketing uses, such as segmentation, and validating consumer-reported home value estimates at time of application.

Total Home Value[x] for Originations - Highest level of accuracy when performing property valuation during the loan underwriting process for purchases, refinances, and home equity/HELOCs.

Total Home Value[x] for Risk Management - High level of accuracy and hit rate combination for quality control, workflow, new portfolio evaluation, and other risk management uses.

RealAVM (powered by THV[x]) – Realtor applications

To generate a Total Home Value[x]: enter Y in the attribute for _CONNECT2DATA_PRODUCT section (values can be Y or N; by default it is N) that allow the request THVX reports:

_THVConsumers
_THVMarketing
_THVOriginations
_THVRiskManagement
_THVRealAVM

5.0 Third Party Automated Valuation Reports

5.1 *i*-Val

Overview   The *i*-Val Report is an AVM report generated by Real Info Inc. and provided by CoreLogic C2D.

How to   To generate an *i*-Val report, do the following:

1. Enter Y in the _IVal attribute for _CONNECT2DATA_ PRODUCT.
2. In the _PROPERTY_CRITERIA element, enter the property address, including Address, city state, zip

5.2 ValueSure

Overview   ValueSure is an AVM offered by Hansen Quality, a Fidelity National Financial Company. The FNIS® ValueSure automated valuation model (AVM) helps mortgage originators, lenders, loan servicing companies and investors to quickly estimate property value for single family and condominium properties anywhere in the U.S.

How to   To generate a ValueSure report, do the following:

1. Enter Y in the _ValueSure attribute for _CONNECT2DATA_PRODUCT.
2. In the _PROPERTY_CRITERIA element, enter the property address, including Address, city state, zip

5.3 HVE

HVE Type 01

Overview   HVE Request Type 01 requires only the minimal data set: A property address and postal code.

How to	1.	To generate an HVE Type 01, enter 01 in the _HVERequestType attribute for REQUEST.	5-2

How to

1. To generate an HVE Type 01, enter 01 in the _HVERequestType attribute for REQUEST.

2. Enter Y in the _HVE attribute for the _CONNECT2DATA_ PRODUCT element.

3. Enter your subject property address in _PROPERTY_ CRITERIA or _PARSED_STREET_ADDRESS. (Note: Zipcode is required)

4. Submit your request.

Note: the more information you supply the better the hit rate.

HVE Type 02

Overview

An HVE Request Type 02 requires additional seed data. This seed data includes data about the prior transaction, including the property type (single family vs. condominium), prior transaction type (purchase vs. refinance) and the corresponding dates and values.

Connect2Data has added a third option "AUTO". When invoked, this option will automatically order a 02 request type if there is enough seed information to fulfill this request type.

How to

1. To generate an HVE Type 02, enter 02 in the _HVERequestType attribute for REQUEST.

2. Enter Y in the _HVE attribute for the _CONNECT2DATA_ PRODUCT element.

3. Enter your subject property address in _PROPERTY_ CRITERIA or _PARSED_STREET_ADDRESS. (Note: Zipcode is required)

4. Submit your request.

Note 1: the more information you supply the better the hit rate.

Note 2: HVE Type 02 is being sunset. Going forward, only HVE Request Type 01 will be supported.

5.4 HVC

Overview

An HVC Request is treated as an HVE Type 07 request. This requires additional seed data. This seed data includes data about the valuation, valuation type, loan, and borrower information.

How to

Request

In order to request an HVC report the following must be set in the XML request.

1. _HVERequestType = "07"

2. _HVE = "Y"

3. _ResidentialType is a required field

4. _LoanPurposeType is available to all HV products (Purchase, CashOutRefinance, NonCashOutRefinance, Home Improvement, Debt Consolidation and OtherEquity) however; the last 3 options are only available for request type 07. Type 01 and 02 only allow Purchase, CashOutRefinance and NonCashOutRefinance. (HVE needs to conform to this.)

5. Additional fields are required for a type 07 search:

    a. _ValuationDate

    b. _UserProvidedEstimatedValue

    c. _LoanPurposeType
        i.   Purchase
        ii. CashOutRefinance
        iii. NonCashOutRefinance
        iv. HomeImprovement
        v.   DebtConsolidation
        vi. OtherEquity

    d. _LoanAmount

    e. _SecondaryLoanAmount (Only if _LoanPurposeType = HomeImprovement, DebtConsolidation or OtherEquity)

    f. _CreditScoreIdentifier (300–850)

6. Additional "Optional" fields are now supported:

    a. _ValuationType
        i.   Appraisal
        ii. Purchase
        iii. Estimate

    b. _CustomerReferenceIdentifier

HVC reports, while structured much like an HVE report will be billed separately using a different product code.

Note: the more information you supply the better the hit rate.

5.5   Vero Value

Overview Vero Value is an AVM report generated by Veros Software Inc. and provided by CoreLogic C2D.

The AVM report includes an estimated value for subject property, a value range, confidence score, property information, sales history and comparable properties.

How to
1. To generate a Vero Value report, enter Y in the _VeroValue attribute for _CONNECT2DATA_PRODUCT.

2. Enter your subject property address in _PROPERTY_ CRITERIA or _PARSED_STREET_ADDRESS.

3. Submit your request.

Note: the more information you supply the better the hit rate.

5.6   VeroPreferred

Overview VeroPreferred is an AVM report generated by Veros Software Inc. and provided by CoreLogic C2D.

The AVM report includes an estimated value for subject property, a value range, confidence score, property information, sales history and comparable properties.

How to Standalone VeroPreferred report is supported via Whitney flow only.

1. To generate a VeroPreferred report, enter Y in the _**VeroPreferred** attribute for _CONNECT2DATA_PRODUCT.

2. In the _PROPERTY_CRITERIA element, enter the property address, including Address, City, State and Zip.

3. Submit your request.

Note: the more information you supply the better the hit rate.

5.7   VeroAdvantage

Overview

VeroAdvantage is an AVM report generated by Veros Software Inc. and provided by CoreLogic C2D.

The AVM report includes an estimated value for subject property, a value range, confidence score, property information, sales history and comparable properties.

How to

1. To generate a VeroAdvantage report, enter Y in the _ **VeroAdvantage** attribute for _CONNECT2DATA_PRODUCT.

2. In the _PROPERTY_CRITERIA element, enter the property address, including Address, City, State and Zip.

3. Submit your request.

Note: the more information you supply the better the hit rate.

5.8   SiteX

Overview

SiteX is an AVM report generated by Black Knight Financial Services and provided by CoreLogic C2D.

How to

1. To generate a SiteX report, enter Y in the **_SiteX** attribute for _CONNECT2DATA_PRODUCT.

2. In the _PROPERTY_CRITERIA element, enter the property address, including Address, City, State and Zip.

3. Submit your request.

Note: the more information you supply the better the hit rate.

6.0 Analytic Reports

6.1   GeoAVM Distressed™ Report

Overview

The GeoAVM Distressed product produces a "Disposition" or "Distressed" value and value range, a result of the AVM result in combination with multiple HistoryPro Recon outputs. Presently, the GeoAVM Distressed product outputs the three values (the Disposition value, a High value, and a Low value) and the referenced HistoryPro result. Optionally, a retro date may be passed in to trigger a 'retro' GeoAVM Distressed which runs both retro AVM and HistoryPro Retro Recon. Ultimately, this report will likely have multiple 'tiers' or flavors differing primarily in which supplemental report data is provided. There are at least three lending scenarios for which GeoAVM Distressed is best suited: early stage loss mitigation on the first mortgage, loss mitigation for second mortgage lenders, and managing FFIEC requirements. For all three scenarios GeoAVM Distressed will offer a more cost effective report which can be used to make early strategic decisions.

How to

To generate a GeoAVM Distressed report, do the following:

1. Enter Y in the _GeoAVMDistressed attribute for

Required Fields

To generate a GeoAVM Distressed report, you must supply information in the following fields:

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_Address1	Full street address of subject property	Required	String
_City	City of subject property	Required if ZIP is not provided	String
_State	State of subject property	Required if ZIP is not provided	String
_County	County of subject property	Optional	String
_Unit	Unit number of subject property	Optional	String
_Zip	5-digit ZIP postal code (i.e., 95630) of subject property	Required	String
_ValuationDate	Date you want the valuation for	Optional	Integer
_UserProvidedEstimatedValue	Estimated value of subject property	Optional	String
_RequestedLoanAmount	Amount of loan		

6.2   LoanSafe Risk Manager™

Overview

Residential mortgage fraud continues to evolve and escalate, requiring lenders, servicers and investors to adopt increasingly advanced detection and decision analytics. LoanSafe Risk Manager answers that need by combining CoreLogic data, analytics and precision into two modules—LoanSafe Fraud Manager and LoanSafe Collateral Manager—that work in tandem to maximize fraud detection and minimize collateral risk.

Product Description

When you request LoanSafe Risk Manager, you automatically receive data from both the LoanSafe Fraud Manager and LoanSafe Collateral Manager products. In short, LoanSafe Risk Manager serves as a container product for those who want to use both LoanSafe Fraud Manager and LoanSafe Collateral Manager data. The LoanSafe Risk Manager report includes the fraud and collateral risk scores as well as the fraud and appraisal alerts. In addition, it provides the detailed data behind the scores and alerts to permit further due diligence when needed.

LoanSafe Blended Reissue/Rerun

See Appendix B section 7.0

How to

To generate or order a new LoanSafe Risk Manager report, follow these steps:

1. Enter Y in the _LoanSafeRiskManager attribute of _CONNECT2DATA_PRODUCT element.
2. Enter "Submit" in the _ActionType attribute of PROPERTY_INFORMATION_REQUEST element.
3. *Optional:* You can choose to include the HTML code in the report by setting the _IncludeHTMLIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the HTML code makes the report very large. The default status is to exclude the HTML code.
4. *Optional:* You can choose to include the PDF code in the report by setting the _IncludeFraudPDFIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the PDF code makes the report very large. The default status is to exclude the PDF code.
5. Enter the required and optional information as outlined in the LoanSafe Risk Manager Suite **Input Data file**. *See the "Input Data" section within the LoanSafe Fraud Manager section below for more information.*
6. XML only (For RiPT formatted XML include the following **_IncludeRiptXml**)

How to

To rerun a LoanSafe Risk Manager report you generated yourself, follow these steps:

1. Enter Y in the _LoanSafeRiskManager attribute of CONNECT2DATA_PRODUCT element.
2. Enter "Reissue" in the _ActionType attribute of PROPERTY_INFORMATION_REQUEST element.
3. Enter a report order ID value in the _OrderGatewayId attribute of REQUEST element and the submitted loan number in the **_LoanNumber** attribute of **_LOAN_CRITERIA** element.
4. *Optional*: You can choose to include the HTML code in the report by setting the _IncludeHTMLIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the HTML code in the report makes the report very large. The default status is to exclude the HTML code.
5. *Optional*: You can choose to include the PDF code in the report by setting the _IncludeFraudPDFIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the PDF code makes the report very large. The default status is to exclude the PDF code.
6. Enter the required and optional information as outlined in the LoanSafe Risk Manager Suite **Input Data file**. See the "Input Data" section within the LoanSafe Fraud Manager section below for more information.
7. XML only (For RiPT formatted XML include the following _IncludeRiptXml).

How to

To reissue a LoanSafe Risk Manager report another organization generated, follow these steps:

1. Enter Y in the _LoanSafeRiskManager attribute of CONNECT2DATA_PRODUCT element.
2. Enter "Reissue" in the _ActionType attribute of PROPERTY_ INFORMATION_REQUEST element.
3. Enter "SourceMasterId" and "SourceLoanNumber" as key value pairs under REQUEST element.
4. *Optional*: You can choose to include the HTML code in the report by setting the _IncludeHTMLIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the HTML code in the report makes the report very large. The default status is to exclude the HTML code.
5. *Optional*: You can choose to include the PDF code in the report by setting the _IncludeFraudPDFIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the PDF code in the report makes the report very large. The default status is to exclude the PDF code.
6. Enter the required and optional information as outlined in the LoanSafe Risk Manager Suite **Input Data file**. See the "Input Data" section within the LoanSafe Fraud Manager section below for more information.
7. XML only (For RiPT formatted XML include the following _IncludeRiptXml).

6.3   LoanSafe Fraud Manager™

Overview

LoanSafe Fraud Manager uses patented predictive-analytics scoring technology to expose suspicious mortgage loans at the application stage, enabling you to quickly identify each loan's fraud risk prior to funding. In addition, you can use LoanSafe Fraud Manager to analyze portfolios, enabling you to spot questionable loans and take proactive steps to prevent early payment defaults and buybacks.

The solution draws on the widest possible array of proprietary and consortium data, creating and applying fraud risk patterns based on historical patterns of fraudulent and legitimate loans to determine the likelihood that a loan may result in a fraud-driven loss. Using loan application and CoreLogic data, LoanSafe Fraud Manager enables you to detect fraud within seconds.

Product Description

The LoanSafe Fraud Manager report provides the fraud risk score, the fraud and appraisal alerts, and the detailed data behind the score and alerts to permit further due diligence, when needed. The product also returns license verification results for the mortgage loan originator and appraiser, along with results of the WatchList screening against government, mortgage industry and client-specific watch lists.

| LoanSafe Blended Reissue/Rerun | See Appendix B section 7.0 |

How to

To generate or order a new LoanSafe Fraud Manager report, do the following:

1. Enter Y in the _LoanSafeFraudManager attribute of _CONNECT2DATA_PRODUCT element.
2. Enter "Submit" in the _ActionType attribute of PROPERTY_ INFORMATION_REQUEST element.
3. *Optional:* You can choose to include the HTML code in the report by setting the _IncludeHTMLIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the HTML code makes the report very large. The default status is to exclude the HTML code.
4. *Optional:* You can choose to include the PDF code in the report by setting the _IncludeFraudPDFIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the PDF code makes the report very large. The default status is to exclude the PDF code.
5. Enter the required and optional information as outlined in the LoanSafe Risk Manager Suite **Input Data file**. See the "Input Data" below.
6. XML only (For RiPT formatted XML include the following _IncludeRiptXml).

How to

To rerun a LoanSafe Fraud Manager report you generated yourself, follow these steps:

1. Enter Y in the _LoanSafeFraudManager attribute of _CONNECT2DATA_PRODUCT element.
2. Enter "Reissue" in the attribute _ActionType of PROPERTY_ INFORMATION_REQUEST element.
3. Enter a report order ID value in the _OrderGatewayId attribute of REQUEST element and the submitted loan number in the **_LoanNumber** attribute of **_LOAN_CRITERIA** element.
4. *Optional*: You can choose to include the HTML code in the report by setting the _IncludeHTMLIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the HTML code in the report makes the report very large. The default status is to exclude the HTML code.
5. *Optional*: You can choose to include the PDF code in the report by setting the _IncludeFraudPDFIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the PDF code in the report makes the report very large. The default status is to exclude the PDF code.
6. Enter the required and optional information as outlined in the LoanSafe Risk Manager Suite **Input Data file**. See the "Input Data" below.
7. XML only (For RiPT formatted XML include the following _IncludeRiptXml).

How to

To reissue a LoanSafe Fraud Manager report another organization generated, follow these steps:

1. Enter Y in the _LoanSafeFraudManager attribute of _CONNECT2DATA_PRODUCT element.

2. Enter "Reissue" in the attribute _ActionType of PROPERTY_INFORMATION_REQUEST element.

3. Enter "SourceMasterId" and "SourceLoanNumber" as key value pairs under REQUEST element.

4. *Optional*: You can choose to include the HTML code in the report by setting the _IncludeHTMLIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the HTML code in the report makes the report very large. The default status is to exclude the HTML code.

5. *Optional*: You can choose to include the PDF code in the report by setting the _IncludeFraudPDFIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the PDF code in the report makes the report very large. The default status is to exclude the PDF code.

6. Enter the required and optional information as outlined in the LoanSafe Risk Manager Suite **Input Data file**. See the "Input Data" below.

7. XML only (For RiPT formatted XML include the following _IncludeRiptXml).

Input Data Fields

The LoanSafe Risk Manager Suite **Input Data file** outlines the required and optional data fields to request LoanSafe Risk Manager, LoanSafe Fraud Manager and LoanSafe Collateral Manager.

Most of the required and optional input data for LoanSafe Risk Manager and LoanSafe Fraud Manager can be found on the Form 1003 Uniform Residential Loan Application. Only the mortgage ratios and the loan participant names are not specified in Form 1003. Where applicable, names, license numbers and addresses of loan participants should be provided in the request XML to allow end users to benefit from the various product features.

Input data can be grouped into the following categories:

Form 1003 Information:

- Mortgage Loan Information: Includes the channel, loan program data and mortgage ratios

- Subject Property Information: Includes the property address and type

- Borrower(s) Information: Includes the name, Social Security Number and address, along with income and employment information

Input Data Fields *(continued)*	Non-Borrower Loan Participant Information:
	Clients typically prefer the ability to control which loan participants they submit for screening.

- **Mortgage Loan Originator (MLO) Information:** Includes the name, NMLS ID and address of the MLO, which could refer to the mortgage broker, lender, branch or loan officer, where applicable
  - ◊ Used for the NMLS (Nationwide Mortgage Licensing System) ID/License Verification feature available in LoanSafe Risk Manager and LoanSafe Fraud Manager
  - ◊ Up to six MLOs (MLO role, name, address, and NMLS ID) can be provided in a single request
- **Appraiser Information:** Includes the name, appraiser license number and address, where applicable
  - ◊ Used for the Appraiser License Verification feature available in LoanSafe Risk Manager and LoanSafe Fraud Manager
  - ◊ Up to five appraisers can be provided in a single request
- **Other Loan Actor or Additional Parties:** Includes the loan participant role or title, name (individual and/or company) and address of all other loan participants, such as the underwriter, title agent, listing agent, buyer agent
  - ◊ Used for the WatchList screening feature of LoanSafe Risk Manager and LoanSafe Fraud Manager
  - ◊ Up to 50 Additional Party entries can be provided in the request. Each additional party entry can contain both an individual name and a company name (allowing a total of 100 Additional Parties to be screened)

6.4   LoanSafe Collateral Manager™

Overview	LoanSafe Collateral Manager analyzes property and neighborhood characteristics to determine the risk of foreclosure and associated loss severity of each mortgage. The proprietary risk management engine evaluates numerous elements, including multiple relationships and comparisons between property characteristics, pricing and appraisal attributes, geographic conditions, and other key collateral metrics.
Product Description	The LoanSafe Collateral Manager report provides the collateral risk score, fraud and appraisal alerts, and detailed data behind the score and alerts to permit further due diligence, when needed.
LoanSafe Blended Reissue/Rerun	See Appendix B section 7.0

How to

To generate or order a new LoanSafe Collateral Manager report, follow these steps:

1. Enter Y in the _LoanSafeCollateralManager attribute of _CONNECT2DATA_PRODUCT element.

2. Enter "Submit" in the _ActionType attribute of PROPERTY_INFORMATION_REQUEST element.

3. *Optional:* You can choose to include the HTML code in the report by setting the _IncludeHTMLIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the HTML code makes the report very large. The default status is to exclude the HTML code.

4. *Optional:* You can choose to include the PDF code in the report by setting the _IncludeFraudPDFIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the PDF code makes the report very large. The default status is to exclude the PDF code.

5. Enter the required and optional information as outlined in the LoanSafe Risk Manager Suite **Input Data file**

6. XML only (For RiPT formatted XML include the following _IncludeRiptXml)

How to

To rerun a LoanSafe Collateral Manager report you generated yourself, follow these steps:

1. Enter Y in the _LoanSafeCollateralManager attribute of _CONNECT2DATA_PRODUCT element.

2. Enter "Reissue" in the attribute _ActionType of PROPERTY_INFORMATION_REQUEST element.

3. Enter a report order ID value in the _OrderGatewayId attribute of REQUEST element and the submitted loan number in the **_LoanNumber** attribute of **_LOAN_CRITERIA** element.

4. *Optional*: You can choose to include the HTML code in the report by setting the _IncludeHTMLIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the HTML code makes the report very large. The default status is to exclude the HTML code.

5. *Optional*: You can choose to include the PDF code in the report by setting the _IncludeFraudPDFIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the PDF code makes the report very large. The default status is to exclude the PDF code.

6. Enter the required and optional information as outlined in the LoanSafe Risk Manager Suite **Input Data file**

7. XML only (For RiPT formatted XML include the following _IncludeRiptXml).

How to

To reissue a LoanSafe Collateral Manager report another organization generated, follow these steps:

1. Enter Y in the _LoanSafeCollateralManager attribute of _CONNECT2DATA_PRODUCT element.

2. Enter "Reissue" in the attribute _ActionType of PROPERTY_ INFORMATION_REQUEST element.

3. Enter "SourceMasterId" and "SourceLoanNumber" as key value pairs under REQUEST element.

4. *Optional*: You can choose to include the HTML code in the report by setting the _IncludeHTMLIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the HTML code in the report makes the report very large. The default status is to exclude the HTML code.

5. *Optional*: You can choose to include the PDF code in the report by setting the _IncludeFraudPDFIndicator attribute to Y in the _CONNECT2DATA_PRODUCT container. Note that including the PDF code in the report makes the report very large. The default status is to exclude the PDF code.

6. Enter the required and optional information as outlined in the LoanSafe Risk Manager Suite **Input Data file**

7. XML only (For RiPT formatted XML include the following _IncludeRiptXml).

Input Data Fields

To generate a LoanSafe Collateral Manager report, the *subject property address* and the appraised property value or the *estimated property value* are required to be provided in the request.

6.5   Property Complexity Score (PCS)

solution that integrates robust data sets from resources such as the Multiple Listing Service (MLS) with exclusive national listings from Partner InfoNet, and Automated Valuation Models (AVMs) along with an array of capabilities including an advanced analytic model, configurable tools, a compliance rules engine, and an overall risk score. The LoanSafe Appraisal Manager risk score enables reviewers to quickly and accurately prioritize appraisals at the highest risk of repurchase and allocate review resources more effectively.

How to

To generate a PCS report, do the following:

1. Enter Y in the _PropertyComplexityScore attribute for _CONNECT2DATA_PRODUCT.

   a. Output can include the following:
      i. XML only

2. Enter required information, and optional information if desired, using the following field reference table as a guide.

Required Fields

To generate a Property Complexity Score report, you must supply information in the following fields: Fields marked as Required need to be input.

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_StreetAddress	Full address of subject property	Required	String
_City	City in which subject property is located	Required	String
_State	State in which subject property is located	Required	String
_PostalCode	5-digit ZIP postal code of subject property	Recommended	Integer

6.6   OnSite Plus

Overview

All the features and benefits of our successful industry adopted report OnSite:

Features:

- An exterior physical inspection of the subject property
- An Overall condition rating using a patent pending algorithm based on the answers to Property condition questions
- Photos of the subject property, street view, address verification, damages, and external factors
- Aerial Maps
- External Factors that may affect marketability
- Subject property detail including land use and zoning
- Local market conditions

Overview
(continued)

Benefits:

- Tailored specifically to assist in meeting new regulatory guidelines

  Can be bundled with CoreLogic's industry-leading AVMs and AVM Cascades or can be ordered as a standalone product

- Platforms support rule-based logic to bump from AVM result to request for OnSite, including pre-screens for:

- Property Type *Condo-Hotels *Confidence Score Sufficiency

- Value Deviations *Collateral Risk * Natural Disaster Areas

- CoreLogic has the most complete Data and Analytics in the market. This enables us to provide robust, timely and comprehensive information about Local Market Conditions

- CoreLogic has information on 147,000,000 properties representing 99.9% of all parcels

PLUS

Licensed Inspectors – Inspections performed by a nationwide panel of 10,000 licensed real estate brokers and agents.

Gated community access – Clients can now provide special access instructions, such as gate code keys, that enable our inspectors to complete more inspections. Higher hit rate means more cost savings for our clients.

Faster turn time – Typically within 3 business days.

How to

To generate a _OnSitePlus report, do the following:

1. Enter Y in the _OnSitePlus attribute for _CONNECT2DATA_PRODUCT.

2. Output can include the following:

   - XML only

Required Fields

To generate an OnSite Plus report, you must supply information in the following fields: Fields marked as Critical must be input and those marked as Required are strongly suggested to best improve accuracy of results.

SECTION	C2D XML ELEMENT	C2D XML ATTRIBUTE	DESCRIPTION	REQUIRED/ OPTIONAL	REQUIRED/ OPTIONAL BY LOANSAFE PRODUCT
Subject Property Data	_PROPERTY_ CRITERIA	_StreetAddress	Full Address (Subject Property)	Critical	CM
	PROPERTY CRITERIA	_City	City (Subject Property)	Required	CM
	PROPERTY CRITERIA	_State	State (Subject Property)	Required	CM
	PROPERTY CRITERIA	_PostalCode	5-digit ZIP Code (Subject Property)	Critical	CM
	PROPERTY CRITERIA	_PlusFourPostalCode	Extended ZIP code	Encouraged	
	_LOAN_CRITERIA	_AppraisedValueAmount	Appraised Value or Borrower Estimate	Critical	CM
	_LOAN_CRITERIA	_UserProvidedEstimatedValue	Borrower Estimate	Critical	CM
	PROPERTY_ INFORMATION_ REQUEST	_SpecialInstructionsDescription	Entry access or other special instruction that the Inspector may need.	Required	

6.7   Archive Retrieval

Overview Archive Retrieval is a service provided by C2D to fetch archived reports.

How to
1. To generate an Archived Report, enter Y in OM supported report name (mentioned below) attribute under _CONNECT2DATA_PRODUCT.
2. Enter "ArchiveRetrieve" for the attribute _ActionType under PROPERTY_INFORMATION_REQUEST element.
3. Enter OrderID in the attribute _ReportOrderId or _OrderGatewayId.
4. Submit your request.

Required Fields To generate OnSite/OnSitePlus Archived report, you must supply information in the following fields:

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_ReportOrderId	OrderId of report generated	Required	String
_ActionType	Value should be "ArchiveRetrieve"	Required	String

To generate other achieved reports (LoanSafeCollateralManager, LoanSafeFraudManager, LoanSafeRiskManager, LoanSafeAppraisalManager, CascadingAVM, BorrowerLoanActivityReport, ValuePoint4, ComplianceEase, BasisPASS, BuildingPermit, HOA, HelocPropensityReport, PurchasePropensityReport, RefiPropensityReport, SiteX, HVE, ValueSure, PassProspector, VeroAdvantage, VeroPreferred, VeroValue, IVal, GeoAVMDistressed, ValuePoint4Default), you must supply information in the following fields:

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_OrderGatewayID	OrderId of report generated	Required	String
_ActionType	Value should be "ArchiveRetrieve"	Required	String

6.8   OnSite/OnSitePlus Report Status

Overview

This report is used to get the status of OnSite/OnSitePlus reports from RIPT.

How to

1. To generate a Status Report, enter Y in OnSite/OnSitePlus attribute under _CONNECT2DATA_ PRODUCT.

2. Enter "GetStatus" for the attribute _ActionType under PROPERTY_INFORMATION_REQUEST element.

3. Enter OrderID in the attribute _ReportOrderId.

4. Submit your request.

Required Fields

To generate OnSite/OnSitePlus Archived report, you must supply information in the following fields:

XML FIELD NAME	DESCRIPTION	OPTIONAL/ REQUIRED	DATA TYPE
_ReportOrderId	OrderId of report generated	Required	String
_ActionType	Value should be "GetStatus"	Required	String

7.0 Vector Rules Messaging

Overview

A custom Vector update rolled out to all Vector customers. Two group options allow an admin to turn on or off Rules Messaging in Vector HTML and XML.

Exclusion Rules Messaging

Exclusion Rules Messaging will set all reports executed through Vector to a Failed Acceptance Status if the Exclusion Rule criteria are met. For example, if an exclusion rule for fraud is hit, then all reports executed after the exclusion rule will have a status of failed acceptance.

In XML, the Cascade Status is set to:

Code 532 – Exclusion Rule: Fraud. This code fires when Exclusion Rule Messaging is active and a subject search contains a zip code or is in a county designated in an Exclusion rule. This code does not fire if Exclusion Messaging is turned off.

Example: _Condition=FAILURE _Code=0532 _Description=POTENTIAL NON-STANDARD ACTIVITY WAS FOUND ON THE SUBJECT PROPERTY ADDRESS.

_AcceptanceIndicator = N

Code 533 – Exclusion Rule: Natural Disaster. This code fires when Exclusion Rule Messaging is active and a subject search contains a zip code or is in a county designated in an Exclusion rule. This code does not fire if Exclusion Messaging is turned off.

Example: _Condition=FAILURE _Code=0533 _Description=THE SUBJECT PROPERTY ADDRESS IS LOCATED IN AN AREA IDENTIFIED AS A NATURAL DISASTER AREA.

_AcceptanceIndicator = N

Code 534 – Exclusion Rule: Value. This code fires when Exclusion Rule Messaging is active and a subject search contains a zip code or is in a county designated in an Exclusion rule. This code does not fire if Exclusion Messaging is turned off.

Example: _Condition=FAILURE _Code=0534 _Description=THE PROVIDED ESTIMATED VALUE DOES NOT MEET YOUR EXCLUSION RULE CRITERIA.

_AcceptanceIndicator = N

HistoryPro Rule Messaging

HistoryPro Rule Messaging will set all reports executed through Vector to a Failed Acceptance Status if the HistoryPro Rule fails acceptance. For example, if a HistoryPro score does not meet the minimum set, then acceptance fails and all reports executed after the HistoryPro rule will have a status of failed acceptance.

In XML, the Cascade Status is set to:

Code 721 – Collateral Quality Failed Acceptance. This code fires when HistoryPro Messaging is active and a HistoryPro report fails Acceptance. This code does not fire if Exclusion Messaging is turned on and an Exclusion Rule fails acceptance.

Example: _Condition=FAILURE _Code=0721 _Description=FAILED Collateral Quality ACCEPTANCE RULE.

_AcceptanceIndicator = N

8.0 CustomXML Integrations

Overview

The reports detailed in this section make use of the CustomXML Framework which provides a flexible platform for receipt and delivery of data via XML in the customer's or other format. Integrations utilizing CustomXML do not adhere to C2D Standard XML input and output formats as described in previous sections of the Integration Guide.

For more information regarding CustomXML integrations please contact your Sales or Integration managers for additional details.

8.1 OnSite

Overview

In December 2010, Federal Guidelines went into effect that require regulated financial institutions to ascertain the physical condition of a property and the economic or local market conditions when an Automated Valuation Model (AVM) is used for lending purposes.

OnSite is a new property condition report coupled with local market conditions and patent-pending features that are specifically designed to help institutions meet the requirements set forth in these Guidelines.

8.1.1 OnSite delivers

- Exterior physical inspection of the subject property
- Photos of the property (front view, side view, street view, and address verification)
- Overall condition rating - objectively based on a patent-pending algorithm using the physical inspection results

  External factors observed, positive and negative, adjacent to the subject property or within the immediate neighborhood
- Subject property detail including land use and zoning
- Local market conditions
- Built-in quality assurance process.

8.1.2   OnSite benefits

- Designed specifically to assist in meeting regulatory guidelines for use of AVMs in lending decisions

- Can be ordered with our industry-leading AVMs and AVM Cascades

- Includes robust, timely information about local market conditions

- Leverages most comprehensive data in the market, covering 99.9% of parcels in the U.S.

- Patent-pending algorithm uses inspection results to calculate objective overall condition rating

- Inspection performed by trained and experienced inspectors

- Platforms support rule-based logic to order OnSite as a result of AVM outcome

With OnSite, CoreLogic clients can now cost-effectively supplement existing AVM solutions with the physical condition and characteristics of the subject property and the economic or local market conditions surrounding the property needed to help comply with Guidelines.

OnSite Report results from Rules setup for the customer within Vector Rules. Depending on the results of the customers cascade an OnSite Report may be requested. The completed OnSite report can be delivered to the customer via standard C2D XML format. And can include XML, XML with embedded PDF, XML with embedded HTML, or XML with both PDF and HTML. Customer will have to be provisioned for Vector and Vector OnSite Product Code.

Appendix A   Vector XML

1.0   Vector XML - About this Guide

This guide is designed to explain the minimum requirements for requesting a Cascading AVM report via Connect2Data. Please refer to the Connect2Data Request and Response DTDs and Implementation Guide for full explanations of additional report types and options available.

2.0   XML Request Sample

The following is an XML request sample that can be used to request a Cascading AVM from Connect2Data. The _CascadingAVM = "Y" attribute needs to be set under the _CONNECT2DATA_PRODUCT element type. The actual cascade AVM to be run (i.e. Enterprise, Core, Precision, Distressed, CoreMLS etc.) is based on the configuration already established in Vector Admin.

Note: - A credential can only be associated with a single Cascade Type. If you wish to run multiple different Cascade Types, then separate credentials will be required to be provisioned for each.

```
<?xml version = "1.0" encoding = "UTF-8"?>
<!DOCTYPE REQUEST_GROUP SYSTEM "C2DRequestv2.0.dtd">
<REQUEST_GROUP MISMOVersionID = "2.1">
        <REQUESTING_PARTY _Name = "Blue Sky Lending" _StreetAddress = "123 Main" _City = "Anaheim" _State = "Ca"
_PostalCode = "92840">
<PREFERRED_RESPONSE _Format = "XML" _DestinationDescription = ""/>
</REQUESTING_PARTY>
<RECEIVING_PARTY _Name = "Blue Sky Lending" _StreetAddress = "123 Main" _City = "Anaheim" _State = "Ca" _PostalCode
= "92840"/>
<REQUEST _RequestDateTime = "" InternalAccountIdentifier = "" LoginAccountIdentifier = "" LoginAccountPassword
= "" _JobIdentifier = "TEST MASTER V2.0" _HVERequestType = "02" _HVCustomerIdentifier = "" _RecordIdentifier =
"12345A8" _CascadingAVMRuleIdentifier = "" _CascadingAVMReportType = "Full" _CascadingAVMReturnType = "AllAVMs"
_CascadingReportTypeOtherDescription = "" _CascadingReturnTypeOtherDescription = "">
<REQUESTDATA>
<PROPERTY_INFORMATION_REQUEST _ActionType = "Submit">
<_CONNECT2DATA_PRODUCT _CascadingAVM = "Y"/>
<_PROPERTY_CRITERIA _StreetAddress = "" _StreetAddress2 = "" _City = "" _State = "" _County = "" _PostalCode = ""
_Country = "" _LastSalePriceAmount = "" _LastSaleDate = "" _ValuationDate = "" _PriorTransactionType = "Purchase">
<PARSED_STREET_ADDRESS _ApartmentOrUnit = "" _DirectionPrefix = "" _DirectionSuffix = "" _HouseNumber = ""
_StreetName = "" _StreetSuffix = ""/>
<_LAND_USE _ResidentialType = "SingleFamilyResidential"/>
</_PROPERTY_CRITERIA>
<_SEARCH_CRITERIA>
<_SUBJECT_SEARCH _UserProvidedEstimatedValue = "" _RequestedLoanAmount = ""/>
</_SEARCH_CRITERIA>
<_RESPONSE_CRITERIA _NumberComparablesType = "10" _NumberCompFarmRecordsType = "50" _
NumberSubjectPropertiesType = "25"/>
</PROPERTY_INFORMATION_REQUEST>
</REQUESTDATA>
</REQUEST>
</REQUEST_GROUP>
```

RETRO DATE

Users wanting a valuation based on a retro date should pass in the following attribute "_ValuationDate". The date format is YYYYMMDD.

3.0   Response Information

The response information is returned synchronously in the same connection as initiated by the user upon login.

The response will repeat any of the information entered for the MISMO Envelope information input from the request. (See the Connect2data I-guide for a complete explanation of the Envelope structure).

After this you will see the STATUS information.

3.1   Status Messages

There are three levels of STATUS Messages

1. The first status level is the response level status. This status provides information about the application processing the request, whether the request was successfully processed, validation failure or other failure.

   ```
   <PROPERTY_INFORMATION_RESPONSE>
   <STATUS _Condition = "SUCCESSFUL" _Code = "0400" _Description = "SUCCESSFULLY PROCESSED. NO RESPONSE-
   LEVEL ERRORS ENCOUNTERED"/>
   ```

2. The second status level is for the Cascade status. This status provides information about the over-all Vector processing.

   ```
   <_PRODUCT _IncludeSearchCriteriaIndicator = "Y" _CascadingAVM = "Y">
   <STATUS _Condition = "SUCCESSFUL" _Code = "0500" _Description = "REPORT RETURNED SUCCESSFULLY. NO
   ERRORS ENCOUNTERED."/>
   ```

3. The third level is for the individual reports run in the cascade. This status provides information about what happened during the processing of the report.

   ```
   <_CASCADING_AVM_RESULTS _AVMVendorProductName = "ValuePoint4">
   <STATUS _Condition = "SUCCESSFUL" _Code = "0700" _Description = "REPORT RETURNED SUCCESSFULLY"/>
   ```

Extended status messaging is available when Pre-run or Post-run rules fail.

1. To activate extended messaging the following flag must be set to "Y"es. The default seeting is "N"o.

   i. _ExtendedVectorStatusMessaging = "Y"

The specific status messages returned when this flag is set to "Y"es area as follows:

CODE	STATUS	DESCRIPTION
725	FAILURE	RULE NOT FOUND FOR PROPERTY TYPE.
726	FAILURE	RULE NOT FOUND FOR PROVIDED ESTIMATED VALUE
727	FAILURE	LAND USE CODE VALIDATION FAILED.
728	FAILURE	HVC VENDOR UNAVAILABLE.
729	FAILURE	HISTORYPRO VENDOR UNAVAILABLE.
732	FAILURE	FAILED ACCEPTANCE RULE: Confidence Score is below minimum acceptable range.

CODE	STATUS	DESCRIPTION
733	FAILURE	FAILED ACCEPTANCE RULE: FSD is above maximum acceptable range.
734	FAILURE	FAILED ACCEPTANCE RULE: AVM valuation is higher than the acceptable value range.
735	FAILURE	FAILED ACCEPTANCE RULE: AVM valuation is lower than the acceptable value range.
736	FAILURE	FAILED ACCEPTANCE RULE: AVM value falls below LTV acceptance range.
737	FAILURE	FAILED ACCEPTANCE RULE: Transaction is outside valuation tolerance.
738	FAILURE	FAILED ACCEPTANCE RULE: Potential non-standard transfer activity was found on the selected property address.

3.2   Cascading AVM Results

The AVM information for each AVM will be returned under the _CASCADING_AVM_ RESULTS element. The key fields here are as follows:

- _AVMVendorProductName
- _RunDate
- _LowValueRangeAmount
- _HighValueRangeAmount
- _ValuationDate
- _ValuationScoreIdentifier
- _IndicatedValueAmount

Below is a sample of this section of the XML output

```
<_CASCADING_AVM_RESULTS _AVMVendorProductName = "ValuePoint4">
<STATUS _Condition = "SUCCESSFUL" _Code = "0500" _Description = "REPORT RETURNED SUCCESSFULLY"/>
<_AUTOMATED_VALUATION _RunDate = "20031209" _LowValueRangeAmount = "250000.0" _HighValueRangeAmount =
"300000.0" _ValuationDate = "20031209" _ValuationScoreIdentifier = "92" _IndicatedValueAmount =
```

3.3   Property Information

Following the valuation data will be the property data. Each AVM vendor will provide basic property information for the property being valued.

3.4   Comparable Sale Information

Each valuation model with the Cascading AVM will provide up to 5 comps when available. Note there may be occurrences under certain circumstances that no comparable sales will be returned.

3.5   XML Sample Response

This is representative of the data that will be returned for a Cascading AVM report but may change slightly from the final release. Please refer to the Cascading AVM Data Dictionary for more information on the elements and attributes contained in the report. A complete list of the most current error messages is also contained in this I-Guide.

```
<?xml version = "1.0" encoding = "UTF-8"?>
<!DOCTYPE  RESPONSE_GROUP  SYSTEM  "http://xml.connect2data.com/C2DResponsev2.0.dtd">
<RESPONSE_GROUP MISMOVersionID = "2.1">

<RESPONDING_PARTY _Name = "CoreLogic" _StreetAddress = "" _City = "" _State = "" _PostalCode = ""/>

<RESPOND_TO_PARTY _Name = "Blue Sky Lending" _StreetAddress = "123 Main" _City = "Anaheim" _State = "Ca"
_PostalCode = "92840"/>
```

```
<RESPONSE ResponseDateTime = "04-07-2004 02:54" InternalAccountIdentifier = "" _JobIdentifier = "TEST MASTER
V2." _CascadingAVMReferenceIdentifier = "" _CascadingAVMReportType = "Full" _CascadingAVMReturnType = "AllAVMs"
_CascadingReportTypeOtherDescription = "" _CascadingReturnTypeOtherDescription = "">

<RESPONSE_DATA>
<PROPERTY_INFORMATION_RESPONSE>
<STATUS _Condition = "SUCCESSFUL " _Code = "0400" _Description = "SUCCESSFULLY PROCESSED. NO RESPONSE-LEVEL
ERRORS ENCOUNTERED"/>

<_PRODUCT _CascadingAVM = "Y">
<STATUS _Condition = "SUCCESSFUL " _Code = "0500" _Description = "REPORT RETURNED SUCCESSFULLY. NO ERRORS
ENCOUNTERED."/>

</_PRODUCT>
<_PROPERTY_INFORMATION _ReportType = "CascadingAVM">
<_CASCADING_AVM_RESULTS _AVMVendorProductType = "VeroValue">
<STATUS _Condition = "SUCCESSFUL " _Code = "0700" _Description = "AVM REPORT RETURNED SUCCESSFULLY. NO ERRORS
ENCOUNTERED."/>

<_AUTOMATED_VALUATION _RunDate = "20040407" _ConfidenceScoreIndicator = "" _LowValueRangeAmount = "336000.0"
_HighValueRangeAmount = "381000.0" _ValuationDate = "0" _ValuationCommentIdentifier = "" _ValuationScoreIdentifier =
"96" _IndicatedValueAmount = "370000.0" _InternalRunIdentifier = "1081374880170721" _SpotValue = "" _ForecastValue =
"" _FraudScoreIdentifier = "" _FraudFlagIdentifier = "" _AcceptanceIndicator = "Y" _AlternativeConfidenceScoreIdentifier =
"" _CollateralScoreIdentifier = "" _LTVPercent = "0.0" _AVMToEstValuePercent = "0.0"/>

<PROPERTY _StreetAddress = "23 STARFISH CT" _StreetAddress2 = "" _City = "NEWPORT BEACH" _State = "CA" _PostalCode
= "92663" _County = "ORANGE" _PlusFourPostalCode = "" CensusTractIdentifier = "063601" _AssessorsParcelIdentifier =
"93338323" _FIPSCode = "" _Municipality = "" _FlipDescription = "">

<_PARSED_STREET_ADDRESS _HouseNumber = "23" _StreetName = "STARFISH" _StreetSuffix = "CT" _DirectionPrefix = ""
_DirectionSuffix = "" _ApartmentOrUnit = ""/>

<PROPERTY_OWNER _OwnerName = "RAMET GARY" _AbsenteeIndicator = ""/>

<_PROPERTY_CHARACTERISTICS>

<_SITE>
<_DIMENSIONS _LotAreaSquareFeetNumber = "0.0" _LotAreaAcresNumber = "0"/>
<_CHARACTERISTICS _LandUseDescription = "CONDO"/>
</_SITE>

<_IMPROVEMENTS>
<_GENERAL_DESCRIPTION _YearBuiltDateIdentifier = "1977" _TotalStoriesNumber = "2"/>
<_ROOM_COUNT _TotalRoomCount = "0" _TotalBedroomsCount = "3" _TotalBathsCount = "2.5" _
TotalLivingAreaSquareFeetNumber = "1415.0" _TotalFullBathsCount = "0" _TotalHalfBathsCount = "0"/>

<_COOLING _CentralizedIndicator = ""/>


<_FEATURES>
<_FIREPLACES _HasFeatureIndicator = "N" _CountNumber = "0"/>
<_POOL _HasFeatureIndicator = "Y" _Description = ""/>
</_FEATURES>

<_PARKING _SpacesCount = "0"/>
</_IMPROVEMENTS>
</_PROPERTY_CHARACTERISTICS>

<_PROPERTY_TAX _ImprovementValueAmount = "87561.0" _LandValueAmount = "78240.0" _TotalAssessedValueAmount =
"165801.0" _AssessmentYear = "0"/>
```

```
<_PROPERTY_HISTORY>
<_SALES_HISTORY _SellerName = "" _OneSaleTypeDescription = "" _LastSalesDate = "0" _LastSalesPriceAmount
= "0.0" _SaleCodeIdentifier = "" _PriorSellerName = "" _PriorSalePriceAmount = "0.0" _PriorSaleDate = "0" _
PriorSaleCodeTypeDescription = ""/>
<_MORTGAGE_HISTORY _LoanCodeIdentifier = "" _PriorFirstMortgageAmount = "" _PriorLoanCodeIdentifier = "" _
FirstMortgageAmount = "0.0" _FirstMortgageTypeDescription = "" _SecondMortgageAmount = "0.0"/>
</_PROPERTY_HISTORY>
</PROPERTY>

<_DATA_PROVIDER_COMPARABLE_SALES _ComparableNumber = "1" _DistanceFromSubjectNumber = "0.1">

<PROPERTY _StreetAddress = "4 NORTHWIND CT" _StreetAddress2 = "" _City = "" _State = "" _PostalCode = "0" _County =
"ORANGE" _PlusFourPostalCode = "" CensusTractIdentifier = "063601" _AssessorsParcelIdentifier = "93338185" _FIPSCode =
"" _Municipality = "" _FlipDescription = "">

<_PARSED_STREET_ADDRESS _HouseNumber = "4" _StreetName = "NORTHWIND" _StreetSuffix = "CT" _DirectionPrefix =
"" _DirectionSuffix = "" _ApartmentOrUnit = ""/>

<PROPERTY_OWNER _OwnerName = "WHITLOCK DARREL" _AbsenteeIndicator = ""/>

<_PROPERTY_CHARACTERISTICS>
<_SITE>
<_DIMENSIONS _LotAreaSquareFeetNumber = "0.0" _LotAreaAcresNumber = "0"/>
<_CHARACTERISTICS _LandUseDescription = "CONDO"/>
</_SITE>

<_IMPROVEMENTS>
<_GENERAL_DESCRIPTION _YearBuiltDateIdentifier = "1977" _TotalStoriesNumber = "0"/>
<_ROOM_COUNT _TotalRoomCount = "0" _TotalBedroomsCount = "3" _TotalBathsCount = "2.5" _
TotalLivingAreaSquareFeetNumber = "1417.0" _TotalFullBathsCount = "0" _TotalHalfBathsCount = "0"/>

<_COOLING _CentralizedIndicator = ""/>

<_FEATURES>
<_FIREPLACES _HasFeatureIndicator = "N" _CountNumber = "0"/>
<_POOL _HasFeatureIndicator = "Y" _Description = ""/>
</_FEATURES>

<_PARKING _SpacesCount = "0"/>
</_IMPROVEMENTS>
</_PROPERTY_CHARACTERISTICS>

<_PROPERTY_TAX _ImprovementValueAmount = "81569.0" _LandValueAmount = "162925.0" _TotalAssessedValueAmount =
"244494.0" _AssessmentYear = "0"/>

<_PROPERTY_HISTORY>

<_SALES_HISTORY _SellerName = "" _OneSaleTypeDescription = "" _LastSalesDate = "20030930" _LastSalesPriceAmount
= "375000.0" _SaleCodeIdentifier = "" _PriorSellerName = "" _PriorSalePriceAmount = "235000.0" _PriorSaleDate =
"20010412" _PriorSaleCodeTypeDescription = ""/>

<_MORTGAGE_HISTORY _LoanCodeIdentifier = "" _PriorFirstMortgageAmount = "" _PriorLoanCodeIdentifier = "" _
FirstMortgageAmount = "0.0" _FirstMortgageTypeDescription = "" _SecondMortgageAmount = "0.0"/>



</_PROPERTY_HISTORY>
</PROPERTY>
</_DATA_PROVIDER_COMPARABLE_SALES>
</_CASCADING_AVM_RESULTS>
```

```
</_PROPERTY_INFORMATION>
</PROPERTY_INFORMATION_RESPONSE>
</RESPONSE_DATA>
</RESPONSE>
</RESPONSE_GROUP>
```

3.6   The Repeating _CASCADING_AVM_RESULTS element

Note: that the _CASCADING_AVM_RESULTS element may be repeated if multiple AVM reports are run. There will be cases where the first AVM will fail and the second will be successful. Or all AVMs may fail due to stringent qualification rules. Below is a portion of the XML output illustrating the repeating structure of the _CASCADING_ AVM_RESULTS element.

```
<_PROPERTY_INFORMATION _ReportType = "CascadingAVM">
<_CASCADING_AVM_RESULTS _AVMVendorProductName = "VP4">
<STATUS _Condition = "FAILED" _Code = "0701" _Description = "VALUE FAILED ACCEPTANCE RULE"/>
<_AUTOMATED_VALUATION _RunDate = "20031209" _LowValueRangeAmount = "380000.0" _HighValueRangeAmount
= "515000.0" _ValuationDate = "20031209" _ValuationScoreIdentifier = "89" _IndicatedValueAmount = "448000.0"
_InternalRunIdentifier = "1070389088510"/>
REPORT XML DATA HERE
</_CASCADING_AVM_RESULTS>
<_CASCADING_AVM_RESULTS _AVMVendorProductName = "Basis">
<STATUS _Condition = "FAILED" _Code = "0701" _Description = "SYSTEM FAILURE"/>
<_AUTOMATED_VALUATION _RunDate = "20031209" _InternalRunIdentifier = "1070389099520"/>
</_CASCADING_AVM_RESULTS>
<_CASCADING_AVM_RESULTS _AVMVendorProductName = "Veros">
<STATUS _Condition = "FAILED" _Code = "0701" _Description = "SALES INADEQUATE TO SUPPORT ANALYSIS."/>
<_AUTOMATED_VALUATION _RunDate = "20031209" _InternalRunIdentifier = "1070389099520"/>
</_CASCADING_AVM_RESULTS>
```

4.0   AVM Report Specifications

4.1   Brief Report

ATTRIBUTE	DESCRIPTION
AcceptanceIndicator	This is a flag Y or N that will indicate to the user if the individual AVM in question passed the acceptance criteria set in the Web configuration utility.
ApartmentOrUnit	Building apartment or unit number.
AVMVendorProductType	The product type of the returned AVM report.
CascadingAVMReportType	An enumerated list identifying a full or brief AVM report. The option of "other" is included for future use.
CascadingAVMReferenceIdentifier	This is an identification number that is used to store and retrieve the entire AVM report from the archive database. A cascading AVM report may include one or several individual AVM reports from different vendors.
CascadingAVMReturnType	An enumerated list which identifies whether or not single or all AVM reports are returned within the cascading AVM engine. The option of "other" is included for future use.
CascadingAVMRuleIdentifier	The AVM Rule requested by the user.
CascadingAVMRuleVersionIdentifier	The AVM rule version used by the AVM configuration utility
City	Property city name.

ATTRIBUTE	DESCRIPTION
County	County where the property is located.
DirectionPrefix	Street address direction indicator to the left of the street name
DirectionSuffix	Street address direction indicator to the right of the street name
HouseNumber	Property address numeric house number
HPA2000AddressStandardized	HPA2000 address standardization indicator. Y or N.
IndicatedValueAmount	Property Value arrived at by automated valuation means
InternalRunIdentifier	Vendor Identification mechanism for each individual AVM returned.
PASSAddressStandardized	PASS address standardization indicator. Y or N.
PlusFourPostalCode	Four-digit additional zip code for the property.
PostalCode	Five-digit zip code for the property.
PowerBaseAddressStandardized	PowerBase address standardization indicator. Y or N.
RunDate	Date valuation report was run
SigmaScoreIdentifier	An additional confidence score for valuation based on FSD (Forecast Standard Deviation).
State	Two character abbreviation of the state.
State	Two character abbreviation of the state.
StreetAddress	House number and street name of the property.
StreetAddress2	Line two of property street address.
StreetName	Street address street name
StreetSuffix	Street suffix name, e.g., DR, AVE, ST.
ValuationScoreIdentifier	The confidence score used to determine a confidence level of the value estimate.
VeroValueAddressStandardized	VeroValue address standardization indicator. Y or N.
VP4AddressStandardized	Value Point 4 address standardization indicator. Y or N.

4.2 Full Report

ATTRIBUTE	DESCRIPTION
AbsenteeIndicator	Indicates whether or not the property owner resides at the property.
AcceptanceIndicator	This is a flag Y or N that will indicate to the user if the individual AVM in question passed the acceptance criteria set in the Web configuration utility.
AlternativeConfidenceScoreIdentifier	Some AVMs can take the needed price as input and calculate an alternative confidence score. (Reserved for Future use.)
ApartmentOrUnit	Building apartment or unit number.
AssessmentYear	The year of the tax assessment for the property
AssessorsParcelIdentifier	County Assessors identification of a property for tax purposes
AVMVendorProductType	The product type of the returned AVM report.
CascadingAVMReferenceIdentifier	This is an identification number that is used to store and retrieve the entire AVM report from the archive database. A cascading AVM report may include one or several individual AVM reports from different vendors.
CascadingAVMReportType	An enumerated list identifying a full or brief AVM report. The option of "other" is included for future use.

ATTRIBUTE	DESCRIPTION
CascadingAVMReturnType	An enumerated list which identifies whether or not single or all AVM reports are returned within the cascading AVM engine. The option of "other" is included for future use.
CascadingAVMRuleIdentifier	The AVM Rule requested by the user.
CascadingAVMRuleVersionIdentifier	The AVM rule version used by the AVM configuration utility
CensusTractIdentifier	Census Tract of the subject property Neighborhood Identifies census tract as defined by the U.S. Census Bureau where subject property is located.
CentralizedIndicator	Subject property has a central cooling unit indicator. Values returned are Y or N.
City	Property city name.
Code	Numeric code uniquely identifies each status condition.
CollateralScoreIdentifer	Indication of likely future property value deterioration. Measures the same thing as forecast value, but is presented as a score rather than a value. (Reserved for Future use)
ComparableNumber	The number of the comparable sale in the list.
Condition	Reports the result of the request.
County	County where the property is located.
Description	Description of pool for the subject property.
DirectionPrefix	Street address direction indicator to the left of the street name
DirectionSuffix	Street address direction indicator to the right of the street name
DistanceFromSubjectNumber	The value of the distance between the comparable and subject property.
FIPSCode	FIPS Code
FirstMortgageAmount	Amount of VARCHAR used to purchase a property which is funded through a mortgage with seniority over other loans on the property.
FirstMortgageTypeDescription	Identifies the type of 1st mortgage
FlipDescription	Flip is a property that has sold twice in a 24 month period. When such activity is seen in either the subject property or one of the comps, it is identified by a flag and then the string "This property has transferred ownership more than once within two years from the valuation date."
ForecastValue	12-24 month forecast for probable selling price. (Reserved for Future Use)
FraudFlagIdentifier	An identifying flag to show an indication of possible fraud. (Reserved for Future Use)
FraudScoreIdentifier	An identifying score to show an indication of possible fraud. (Reserved for Future Use)
HasFeatureIndicator	Identifies the existence of a fireplace(s) and/or pool within the subject property or comparable property.
HighValueRangeAmount	The upper end of value range for the subject property.
HouseNumber	Property address numeric house number
HPA2000AddressStandardized	HPA2000 address standardization indicator. Y or N.
ImprovementValueAmount	The taxable value of the property improvements
IndicatedValueAmount	Property Value arrived at by automated valuation means
InternalRunIdentifier	Identification mechanism
LandUseDescription	Description of the Subject site land use

ATTRIBUTE	DESCRIPTION
LandValueAmount	The taxable value of the property land.
LastSalesDate	Date of most recent subject property sale
LastSalesPriceAmount	Most Recent subject property sale price.
LotAreaSquareFeetNumber	Lot area in acres
LowValueRangeAmount	The lower end of value range for the subject property.
Municipality	Municipality and/or Township name.
OneSaleTypeDescription	This shows whether the sale price indicated represents the entire price for the transaction. e.g., Full indicates that the sale price indicated represents the entire price of the transaction. Partial means that part of the full sale price was represented.
OwnerName	Name of property owner.
PASSAddressStandardized	PASS address standardization indicator. Y or N.
PlusFourPostalCode	Four-digit additional zip code for the property.
PostalCode	Five-digit zip code for the property.
PowerBaseAddressStandardized	PowerBase address standardization indicator. Y or N.
PriorFirstMortgageAmount	Amount of VARCHAR used to purchase a property in a prior transaction which is funded through a mortgage with seniority over other loans on the property. (Applies to the second most recent transaction in this case)
PriorLoanCodeIdentifier	Prior loan code identification code.
PriorSaleCodeTypeDescription	Sale code type of second most recent transaction.
PriorSaleDate	The date on which a transaction was commenced. Generally refers to the date on which a deed was signed. (Applies to the second most recent transaction)
PriorSalePriceAmount	Amount paid for a property in dollars. (Applies to the second most recent transaction)
PriorSellerName	Prior property seller's name.
ReportType	Type of report returned.
ReportTypeOtherDescription	Description of the "other" cascading AVM Report type.
ResponseDateTime	XML RESPONSE Date and Time
RunDate	Date valuation report was run
SaleCodeIdentifier	Identifies if the property was a Multi or Split type of sale transaction.
SecondMortgageAmount	Amount used to purchase a property which is funded through a mortgage that is subordinate to the first mortgage on the property.
SellerName	Name of the seller of a property.
SigmaScoreIdentifier	An additional confidence score for valuation based on FSD (Forecast Standard Deviation).
SpacesCount	Number of Cars That Can Be Stored
SpotValue	AVM valuation for a point estimate of probable Sales price.
State	Two character abbreviation of the state.
StreetAddress	House number and street name of the property.
StreetAddress2	Line two of property street address.
StreetName	Street address street name
StreetSuffix	Street suffix name, e.g., DR, AVE, ST.

ATTRIBUTE	DESCRIPTION
TotalAssessedValueAmount	Combined value of the assessed land and improvements of the property.
TotalBathsCount	Total number of baths on the property regardless of grade.
TotalBedroomsCount	Total number of bedrooms in the property.
TotalFullBathsCount	The total number of full baths on the property regardless of grade
TotalHalfBathsCount	Total number of half baths on the property regardless of grade.
TotalLivingAreaSquareFeetNumber	Total living area square footage of the property.
TotalRoomCount	Total number of rooms in the property.
TotalStoriesNumber	Number of stories for the subject property.
ValuationCommentIdentifier	Indicates whether a property valuation was successfully performed.
ValuationScoreIdentifier	Valuation Score
VeroValueAddressStandardized	VeroValue address standardization indicator. Y or N.
VP4AddressStandardized	Value Point 4 address standardization indicator. Y or N.
YearBuiltDateIdentifier	Subject property year built.

Appendix B   Addons

1.0   Suppress DocType

Set the attribute _IncludeDocTypeIndicator="N" under the _CONNECT2DATA_ PRODUCT section in the C2D request xml to disable the DOCTYPE content in the response - i.e. <!DOCTYPE RESPONSE_GROUP SYSTEM https://xml.connect2data. com/C2DResponsev2.0.dtd> will not be displayed in the C2D Response XML. The DOCTYPE content will be displayed by default if the above mentioned attribute is not provided in the request xml or if _IncludeDocTypeIndicator="Y".

2.0   Parsed Owner Name

Set the attribute _IncludeParsedOwnerNameIndicator="Y" under the _ CONNECT2DATA_ PRODUCT section in the C2D request xml to parse out the Owner name into first, middle, and last name in the response. In the case of multiple property owners, C2D would now return a PROPERTY_OWNER element for each property owner and within that the Owner name would be parsed by first, middle, and last name. This add-on only applies for single property matches. When multiple properties are matched the owner name does not get parsed.

3.0   Custom Logos

Capability exists to brand a Property, Transaction, and AVM report PDF with the customers provided Logo. A new attribute _CustomLogoFileName has been created that will need to be included in the _CONNECT2DATA_PRODUCT element. The attribute value will be the file name of the logo file. The logo will be stored on our side and if the attribute exists in the Request XML we will do a lookup and when the PDF is rendered the customers logo will be used. The reports that are currently supported by this new feature are as follows:

- Comparable Sales
- Detailed Subject Property
- Transaction History
- Voluntary Lien
- Neighborhood Report
- ValuePoint®4 (VP4)

- Prospector
- GeoAVM Distressed™
- Real AVM
- PASS®
- Short Subject Property
- Standard Subject Property

Logo artwork should be submitted to CoreLogic using the following criteria:

- Height: 190px
- Width: 250px

- Resolution: 300 dpi
- File Type: PNG is the preferred format

4.0   Output Formats Supported

Below is a list of report output formats that are currently supported. Please check with your account manager for the latest list.

PRODUCT	OUTPUT FORMAT AVAILABILITY			
	XML	IMAGE	PDF	HTML
PROPERTY REPORTS				
Involuntary Lien Reports	Y	N	N	N
Subject Property Detail Reports	Y	N	Y	N
Standard Subject Property Report	Y	N	Y	N
Short Subject Property Report	Y	N	Y	N
Comparable Sales	Y	N	Y	N
Detailed Comparable Farm	Y	N	N	N
Custom Search - Short	Y	N	N	N
Custom Search - Standard	Y	N	N	N
Custom Search - Detailed	Y	N	N	N
Neighborhood Info Report	Y	N	Y	N
Doc Image Report	Y	N	Y	N
Foreclosure Reports	Y	N	N	N
Foreclosure Activity/Detail	Y	N	N	N
Legal and Vesting	Y	N	N	N
Instant Legal and Vesting	Y	N	N	N
Fast Legal and Vesting	Y	N	Y	N
Open Lien Report	Y	N	N	N
Voluntary Lien Report	Y	N	Y	N
Voluntary and Involuntary Lien Report	Y	N	Y	Y
Transaction History	Y	N	Y	N
MLS Data Reports				
Listing and Market Activity Report	Y	N	Y	Y
Listing & Market Activity Report COMPONENTS	Y	N	Y	N
Subject Property/Comps	Y	N	Y	N
Nearby Listings/Listing History	Y	N	Y	N
Property Photo	Y	Y	Y	N
Market Trends	Y	N	Y	N
MLS Data - Standalone	Y	N	N	N
VALUATION PRODUCTS				
Full AVM Reports				
PASS®, ValuePoint®4	Y	N	Y	N
GeoAVM Core™, GeoAVM Precision™	Y	N	Y	N
GeoAVM Core Plus™, GeoAVM Precision Plus™	Y	N	Y	N
Freddie Mac HVE, VeroValue, i-Val	Y	N	Y	N
GeoAVM Distressed™	Y	N	Y	Y
PASS® Prospector	Y	N	Y	N
OnSite Full	Y	N	Y	N
OnSite Plus Full	Y	N	Y	N

PRODUCT	OUTPUT FORMAT AVAILABILITY			
	XML	IMAGE	PDF	HTML
FRAUD & VERIFICATION PRODUCTS				
Borrower Activity Report	Y	N	Y	Y
Property Complexity Score - End User	Y	N	N	N
MarketStandings™ (fka MarketConnect)	Y	N	N	Y
LoanSafe Collateral Manager™	Y	N	Y	Y
LoanSafe Fraud Manager™	Y	N	Y	Y
LoanSafe Risk Manager™ (Suite)	Y	N	Y	Y
LoanSafe Appraisal Manager™ (LSAM)	Y	N	Y	Y
BPO Check Report	Y	N	Y	Y
Freddie Mac's Home Value Calibrator	Y	N	Y	N

5.0   Pending Records

Set the attribute _IncludePendingRecordsIndicator ="Y" under the _ CONNECT2DATA_ PRODUCT section in the C2D request xml to include pending records in the C2D XML response for Searches.

6.0   Addons to Product Mapping

Following is the entire list of addons that are currently supported for C2D reports.

_IncludeMLSData	_IncludeHTMLIncomeProIndicator
_IncludeRiptXml	_IncludeHTMLGeoAVMIndicator
_ForeclosureIndicator	_PropertyValidationService
_ShortSaleIndicator	_IncludeHTMLHistoryProIndicator
_ListingType	_IncludeMarketTrendDataOnlyIndicator
_IncludePendingRecordsIndicator	_IncludeLastTransactionIndicator
_IncludeSearchCriteriaIndicator	_MatchWithOnlyReleaseIndicator
_StandardizeAddressForHVEIndicator	_SingleVectorPDFIndicator
_IncludeDocTypeIndicator	_IncludeHTMLValuePoint4DefaultIndicator
_AVMFallBackIndicator	_IncludeARMDataWhenAvailable
_ManualAbstractionIndicator	_IncludeGeoCode
_FastLandVAcknowledgementIndicator	_IncludeParsedOwnerNameIndicator
_FastLandVIncludeImagesIndicator	_InternalUse
_ValueWizardMapIndicator	_IncludeVectorHTMLIndicator
_IncludePDFIndicator	_IncludeDelinquentTaxSummary
_IncludeFraudPDFIndicator	_IncludeHTMLIndicator
_NeighborhoodDemographicsIndicator	_IncludeJobIDInPDF
_NeighborhoodSchoolInformationIndicator	_IncludeMortgageModificationOriginalInfo
_NeighborhoodBusinessInformationIndicator	_ExtendedVectorStatusMessaging
_NeighborhoodCrimeInformationIndicator	_IncludeFloodData
_IncludeHTMLLoanSafeIndicator	_StatewideOwnerSearch
_IncludeHTMLThirdPartyScoreIndicator	_CustomLogoFileName

Following are the list of add on associations to various products. Please contact your Administrator if you need to be provisioned with access to any of these addons.

ADDONS	PRODUCTS
_IncludeMLSData	_ShortSubjectReport
	_StandardSubjectReport
	_DetailedSubjectReport
	_ShortComparableReport
	_StandardComparableReport
	_DetailedComparableReport
	_ShortCompFarmReport
	_StandardCompFarmReport
	_DetailedCompFarmReport
_ForeclosureIndicator	_ShortSubjectReport
	_StandardSubjectReport
	_DetailedSubjectReport
	_ShortComparableReport
	_StandardComparableReport
	_DetailedComparableReport
	_ShortCompFarmReport
	_StandardCompFarmReport
	_DetailedCompFarmReport
	_CustomSearchShortReport
	_CustomSearchStandardReport
	_CustomSearchDetailedReport
	_InstantTransactionHistory
	_VoluntaryLienReport
_ShortSaleIndicator	_ShortSubjectReport
	_StandardSubjectReport
	_DetailedSubjectReport
	_ShortComparableReport
	_StandardComparableReport
	_DetailedComparableReport
	_ShortCompFarmReport
	_StandardCompFarmReport
	_DetailedCompFarmReport
	_CustomSearchShortReport
	_CustomSearchStandardReport
	_CustomSearchDetailedReport
	_InstantTransactionHistory
	_VoluntaryLienReport

continues

ADDONS	PRODUCTS
_ListingType	_ShortSubjectReport
	_StandardSubjectReport
	_DetailedSubjectReport
	_ShortComparableReport
	_StandardComparableReport
	_DetailedComparableReport
	_ShortCompFarmReport
	_StandardCompFarmReport
	_DetailedCompFarmReport
	_CustomSearchShortReport
	_CustomSearchStandardReport
	_CustomSearchDetailedReport
	_InstantTransactionHistory
	_VoluntaryLienReport
_CustomLogoFileName	_DetailedComparableReport
_IncludeFloodData	_DetailedSubjectReport
_AVMFallBackIndicator	_ValuePoint4
_NationWideSearch	_SubjectPropertySearch
_IncludeGeoCode	_ShortSubjectReport
	_StandardSubjectReport
	_DetailedSubjectReport
	_ShortSubjectDataCoOp
	_DetailedSubjectDataCoOp
	_ShortComparableReport
	_StandardComparableReport
	_DetailedComparableReport
	_ShortCompFarmReport
	_StandardCompFarmReport
	_DetailedCompFarmReport
	_CustomSearchShortReport
	_CustomSearchStandardReport
	_CustomSearchDetailedReport
	_NeighborhoodForeclosureSummary

7.0   LoanSafe Blended Reissue/Rerun

LoanSafe Blended Reissue is a solution that provides CoreLogic clients (Primary Lenders) in mortgage origination and mortgage lending a way for prospective mortgage buyers (Secondary Lenders) to reissue or rerun their existing LoanSafe reports. The reports that are currently supported by this new feature are as follows:

- LoanSafe Risk Manager™

- LoanSafe Fraud Manager™

- LoanSafe Collateral Manager™ (Coming Soon)

SourceMasterId - The alpha-numeric identifier of the report to be reissued. This is the Master ID provided by the original lender. The Master ID starts with the letters "MI" and is 34 characters. A new Master ID will be generated with the reissued report. This is a required input key for reissuing a report.

Response Xpath - /RESPONSE_GROUP/RESPONSE/@_MasterId

SourceLoanNumber - The original lender's unique record number for a loan application. This is a required input key for reissuing a report.

Response Xpath - /RESPONSE_GROUP/RESPONSE/RESPONSE_DATA/PROPERTY_ INFORMATION_RESPONSE/_PRODUCT/_SEARCH_CRITERIA/_LOAN_CRITERIA/@_ LoanNumber

_OrderGatewayId - The alpha-numeric identifier of the report to be rerun. This is the report order ID returned in the report response and it starts with the letters "OM". A new report order ID will be generated with every report. This is a required input field for rerunning a report.

Response Xpath - /RESPONSE_GROUP/RESPONSE/@_OrderGatewayId.

_LoanNumber - Lender or customer-assigned unique identifier for the mortgage loan.

Response Xpath - /RESPONSE_GROUP/RESPONSE/RESPONSE_DATA/PROPERTY_ INFORMATION_RESPONSE/_PROPERTY_INFORMATION/_PRODUCT/_SEARCH_ CRITERIA/_LOAN_CRITERIA/@_LoanNumber

provided the indicator **_IncludeSearchCriteriaIndicator="Y"** is present in the request.

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Notes

For more information, visit corelogic.com or call 866–774–3282.

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