



Financial & Corporate Compliance

Wiz SaaS Suite

Wiz SaaS API Guide

Document control

| Document details | |
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| Title | Wiz SaaS API Guide |
| Creation date | April 17, 2024 |
| Last updated | August 23, 2024 |
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| Version | 1.3 |
| File name | Wiz SaaS API Guide.docx |

Version history

| Version | Date | Author | Comment |
|---------|------------|-----------------------|---|
| 1.0 | 04/17/2024 | Wiz SaaS Product Team | Initial Creation |
| 1.1 | 05/07/2024 | Wiz SaaS Product Team | Added Community Development specifications and sample |
| 1.2 | 06/24/2024 | Wiz SaaS Product Team | Added information for Edit Check & Create LAR APIs and updated the structure of the guide |
| 1.3 | 08/23/2024 | Wiz SaaS Product Team | Updated to reflect the need to use API credentials |

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1. Introduction

Wolters Kluwer's HMDA & Small Business lending online data management tool, *Wiz SaaS Suite*, offers users a set of powerful HMDA & Small Business compliance tools at www.wizenterprise.com. In addition, *Wiz SaaS Suite* functionality can be embedded into Loan Origination Systems using our APIs. Integrating *Wiz SaaS Suite* into a LOS provides users with the ability to manage HMDA and/or Small Business data quality at the time of origination.

Institutions using *Wiz SaaS Suite* functionality directly through a LOS integration also have the flexibility of accessing their HMDA & Small Business data directly through their institution specific website on www.wizenterprise.com. Hosted by Wolters Kluwer, clients can log into their website to manage their data and perform standard HMDA & Small Business data management tasks including edit checks, geocoding, rate spread calculation, and reporting. In addition, *Wiz SaaS Suite* users will have access to a set of standard reports as well as an easy-to-use Submission Wizard.

Wiz SaaS Suite solutions are designed to help institutions manage their HMDA & Small Business compliance program as an ongoing business activity. The combination of imbedded *Wiz SaaS Suite* APIs and the data management tools at www.wizenterprise.com provide clients the tools they need to properly manage their HMDA & Small Business-related processes.

Any product related questions can be directed to WizSaaSProductTeam@wolterskluwer.com. Any support related questions can be directed to SaaS WizSupport@wolterskluwer.com.

2. Wiz SaaS APIs

Wiz SaaS Suite APIs can easily be integrated into your Loan Origination System. These APIs are exposed for public consumption. Below is the list of available APIs.

- [Insert/Update](#) – The Insert/Update API can be used to add new records and update existing records into a specified data file.
- [Geocoding](#) – The Geocoding API processes addresses on loan applications and returns geographic information such as census tract, MSA, county and state codes. Optional demographic information is also returned by the geocoding service.
- [Edit Check](#) – The Edit Check API cross checks the data in your loan application against the CFPB's data requirements for the specified activity year. The Edit Check service will return the CFPB's edit & validation codes and descriptions for records that contain invalid data or require additional verification.
- [Rate Spread](#) – The Rate Spread API calculates the spread between the specified Annual Percentage Rate (APR) and a survey-based estimate of APRs currently offered on prime mortgage loans of a comparable type utilizing the Average Prime Offer Rate (APOR) fixed & adjustable tables, action taken, rate type, rate lock date, and loan term.
- [Get LAR](#) – The Get LAR API returns a list of the data files that has been created by an institution for the specified file type.
- [Get Record](#) – The Get Record API returns the loan information from the specified file and record.
- [Create LAR](#) – The Create LAR API can be used to create a new file without logging into the UI.

All data elements within the request will be validated by column code, data type, and size. Data elements not matching these criteria will either be nullified or truncated.

2.1 Single mode processing

Single record requests for these APIs translate to real-time results for geocoding, edit check, and rate spread calculation. Integration partners can also utilize these APIs to add a new record or update an existing record as well as to retrieve the list of available files or individual loan information.

Note: Multiple records can be processed in a single mode request. However, the size of the request file cannot exceed 32MB.

2.2 Batch mode processing

Batch mode processing is not currently available.

3. Authentication and Authorization

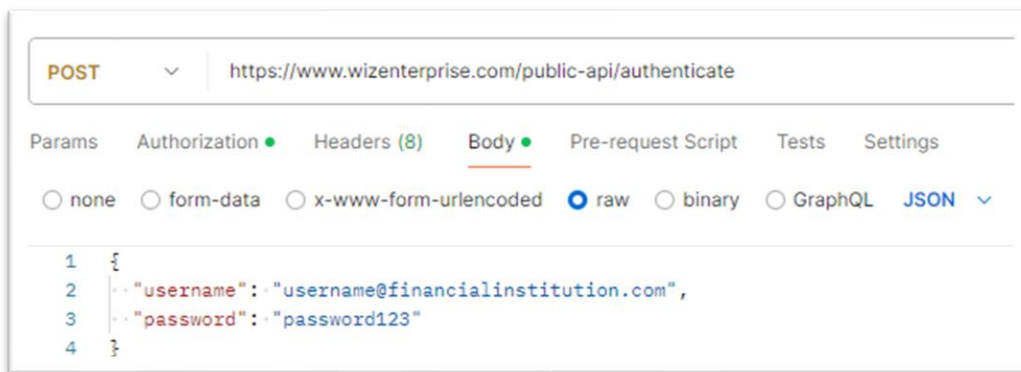
Integration partners are required to use our authenticate endpoint and provide a username and password. An administrator will need to log into the application and create API credentials to use any of the APIs. These API credentials can be created under **Admin > API credentials**.

Endpoint:

POST: <https://www.wizenterprise.com/public-api/authenticate>

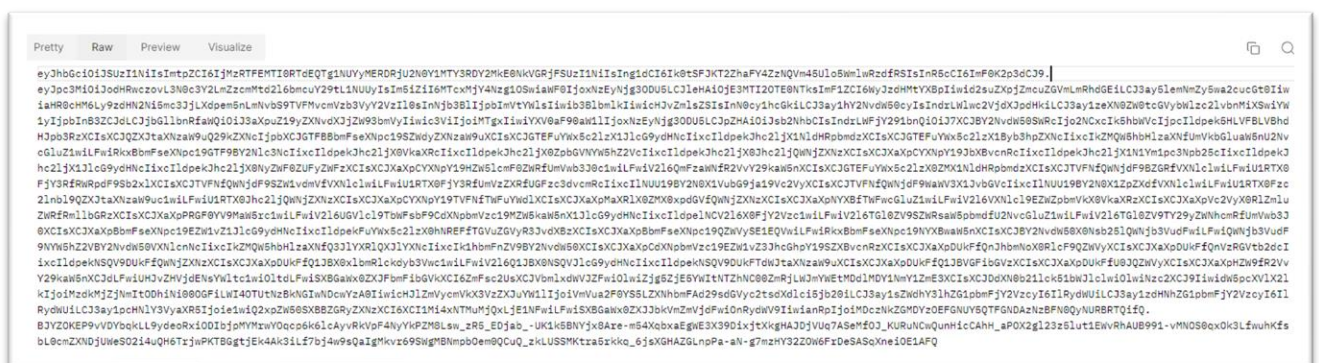
3.1 Sample request

```
{
  "username": "username@financialinstitution.com",
  "password": "password123"
}
```



3.2 Sample response

Upon validating the credentials, the endpoint will return an access token which will then need be included in the header for all other API endpoints. This token expires after 1 hour.



4. Insert\Update

Below are the endpoints that can be utilized to insert new records or update existing records for a specified file:

- POST: <https://www.wizenterprise.com/public-api/lars/{LarID}>
- PUT: <https://www.wizenterprise.com/public-api/lars/{LarID}>

The request body structure for both Insert & Update requires both **attributes** and **data** elements. The attributes section is for passing configuration options and the data section is for the actual data to insert or update. The elements are not case sensitive.

Important! The LarId needs to be specified in the URL for both Insert and Update. This ID can be retrieved by either calling one of the GET Lars APIs or by logging into the UI and going into Data preparation > File Management and expanding the details of the destination file.

Note: If the destination file contains any user defined fields those fields can also be included as part of the insert\update request.

4.1 Attributes descriptions

| Element | Description |
|--------------------|--|
| MatchColumn | <p>*Required for update only* Field that will be used to find the record(s) in the destination file to update.</p> <p>Note: For HMDF files it is recommended to use RowID, Applnumb, or ULI. For SBDF files it is recommended to use RowID, Applnumb, or UID.</p> <p>Note: In our next release it will be possible to use any field that is present in the destination file as the MatchColumn. Users will also be able to specify multiple match columns.</p> |
| GeocodeSettings | <p>Optional geocoding settings that can be specified.</p> <p>Note: The recommended settings will be used for any geocode setting that is not included with the request.</p> |
| AggressivenessMode | <p>Specifies the level of geocoding strictness. The following levels of strictness are supported:</p> <ul style="list-style-type: none">• Lenient: Returns a match when the house number and side of the street match properly to the Geocoder's reference addresses.• Moderate: Returns a match only when the house number and street direction; or house number, side of the street and street type match properly to the Geocoder's reference addresses.• Strict: Returns a match only when the house number, side of the street, street type, street direction and Zip |

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| | <p>Code match properly to the Geocoder's reference addresses.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 - Lenient • 1 - Moderate (Recommended) • 2 - Strict |
| IsZipPercentMatchEnabled | <p>Determines if ZIP% matches will be returned or not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • True - ZIP% matches will be returned (Recommended) • False - ZIP% matches will not be returned |
| ZipPercentageLevel | <p>Specifies which type of Zip Percent fallback method is used. This fallback method allows you to match records to a Zip Code only if a specified percentage of that Zip Code falls within a single census tract. You can specify that 90%, 95%, or 99% of a Zip Code must fall within a single census tract to be matched to that tract.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 - If 90% of a Zip Code falls within a census tract, the address will match to that census tract • 1 - If 95% of a Zip Code falls within a census tract, the address will match to that census tract (Recommended) • 2 - 99% of a Zip Code falls within a census tract, the address will match to that census tract |
| IsTractMatchEnabled | <p>Determines if Tract Matches will be returned or not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • True - Tract matches will be returned (Recommended) • False - Tract matches will not be returned |
| IsZipCentroidMatchEnabled | <p>Determines if ZIP (5 digits) level matches will be returned or not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • True - ZIP level matches will be returned • False - ZIP level matches will not be returned (Recommended) |
| IsZip2CentroidMatchEnabled | <p>Determines if ZIP2 (7 digits) level matches will be returned or not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • True - ZIP2 level matches will be returned |

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| | <ul style="list-style-type: none"> False - ZIP2 level matches will not be returned (Recommended) |
| IsZip4CentroidMatchEnabled | <p>Determines if ZIP4 (9 digits) level matches will be returned or not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> True - ZIP4 level matches will be returned (Recommended) False - ZIP4 level matches will not be returned |
| AllowWeakParcelAndTractsMatch | <p>Determines if the system will return weak parcel and weak tract matches. When the option is enabled, the geocoder will return a B1 parcel match when the gsLocationCode is returned as AP22, AP23, or AP24 (weak parcel matches) and a B8 tract match when the gsLocationcode is returned as ZB9A, ZB9B, ZB9C, ZT9A, ZT9B, ZT9C, ZB7A, ZB7B, ZB7C, ZT7A, ZT7B, or ZT7C (weak tract matches).</p> <p>Possible values are:</p> <ul style="list-style-type: none"> True - Weak Parcel and Tract Matches are allowed False - Weak Parcel and Tract Matches are not allowed (Recommended) |
| OverrideManuallyGeocodedRecords | <p>Determines if the system will attempt to regeocode any records that are already geocoded in the request (records that have ManualGeocode=True)</p> <p>Possible values are:</p> <ul style="list-style-type: none"> True - Override manually geocoded records False - Do not override manually geocoded records (Recommended) |

4.2 Data descriptions

4.2.1 Small Business DF (SBDF) file type

| Element | Description |
|------------|---|
| UID | Unique identifier. LEI + 25 characters (uppercase letters, #, or combination). |
| ApplDate | Application date. All standard date formats are supported. Note: Upon submission the dates will be converted to YYYYMMDD. |
| app_method | Application Method. Possible values are 1,2,3,4: 1 - In-person 2 - Telephone 3 - Online 4 - Mail |

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| app_recipient | Application Recipient. Possible values are 1,2: 1 - Submitted directly to financial institution or affiliate 2 - Submitted indirectly via a third party |
| ct_credit_product | Credit Product. Possible values are 1, 2, 3, 4, 5, 6, 7, 8, 977,988: 1 - Term loan - unsecured 2 - Term loan - secured 3 - Line of credit - unsecured 4 - Line of credit - secured 5 - Credit card account, not private-label 6 - Private-label credit card account 7 - Merchant cash advance 8 - Other sales-based financing transaction 977 - Other 988 - Not provided |
| ct_credit_product_ff | Other credit product description. Must not exceed 300 characters in length. |
| ct_guarantee | Type of guarantee. Multiple values are allowed, and each value must equal 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 977,999. If multiple values are specified they must be separated with a semicolon. 1 - Personal guarantee - owner(s) 2 - Personal guarantee - non-owner(s) 3 - SBA guarantee - 7(a) program 4 - SBA guarantee - 504 program 5 - SBA guarantee - other 6 - USDA guarantee 7 - FHA insurance 8 - Bureau of Indian Affairs guarantee 9 - Other Federal guarantee 10 - State government guarantee 11 - Local government guarantee 977 - Other 999 - No guarantee |
| ct_guarantee_ff | Other guarantee description. Must not exceed 300 characters in length. |
| ct_loan_term_flag | Loan term. Possible values are 900,988,999: 900 - Applicable and reported 988 - Applicable but not provided 999 - Not applicable |
| ct_loan_term | Loan Term (months). When present, must be a whole number that is greater than or equal to 1 and should be less than 1200. |

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| credit_purpose | Credit Purpose. Multiple values are allowed, and each value must equal 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 977, 988, 999. If multiple values are specified, they must be separated with a semicolon. 1 - Purchase, construction/improvement, or refinance of non-owner-occupied real property 2 - Purchase, construction/improvement, or refinance of owner-occupied real property 3 - Purchase, refinance, or rehabilitation/repair of motor vehicle(s) 4 - Purchase, refinance, or rehabilitation/repair of equipment 5 - Working capital (includes inventory or floor planning) 6 - Business start-up 7 - Business expansion 8 - Business acquisition 9 - Refinance existing debt (other than refinancings listed above) 10 - Line increase 11 - Overdraft 977 - Other 988 - Not provided 999 - Not applicable |
| credit_purpose_ff | Other credit purpose description. Must not exceed 300 characters in length. |
| amount_applied_for_flag | Amount applied for flag. Possible values are 900, 988, 999: 900 - Applicable and reported 988 - Applicable but not provided 999 - Not applicable |
| amount_applied_for | Amount applied for. When present, it must be a numeric value that is greater than 0. For example, if the amount is \$12,345, enter 12345. |
| amount_approved | Amount approved. When present, it must be a numeric value that is greater than 0. For example, if the amount is \$101.23, enter 101.23. |
| Action | Action taken. Possible values are 1, 2, 3, 4, or 5: 1 - Originated 2 - Approved but not accepted 3 - Denied 4 - Withdrawn by applicant 5 - Incomplete |
| ActionDate | Action taken date. All date formats are supported. Note: Upon submission the dates will be converted to YYYYMMDD. |
| denial_reasons | Denial reason(s). Multiple values are allowed, and each value must equal 1, 2, 3, 4, 5, 6, 7, 8, 9, 977, 999. If multiple values are specified, they must be separated with a semicolon. 1 - Credit characteristics of the business 2 - Credit characteristics of the principal owner(s) or guarantor(s) 3 - Use of credit proceeds 4 - Cashflow 5 - Collateral 6 - Time in business 7 - Government loan program criteria 8 - Aggregate exposure 9 - Unverifiable information |

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| | 977 - Other 999 - Not Applicable |
| denial_reasons_ff | Other denial reason description. Must not exceed 300 characters in length. |
| pricing_interest_rate_type | Interest rate type. Possible values are 1, 2, 3, 4, 5, 6, 999: 1 - The transaction has an adjustable interest rate and does not have an initial rate period 2 - The transaction has a fixed interest rate and does not have an initial rate period 3 - The transaction has an initial rate period greater than 12 months, during which the interest rate is adjustable 4 - The transaction has an initial rate period greater than 12 months, during which the interest rate is fixed 5 - The transaction has an initial rate period less than or equal to 12 months, after which the interest rate is adjustable 6 - The transaction has an initial rate period less than or equal to 12 months, after which the interest rate is fixed 999 - Not applicable |
| pricing_init_rate_period | Interest rate type. When present, must be a whole number greater than 0. |
| pricing_fixed_rate | Fixed interest rate. When present, must be a numeric value that should generally be greater than 0.1. For example, if 4.500%, enter either 4.5, 4.50, or 4.500. |
| pricing_adj_margin | Adjustable-rate margin. When present, must be a numeric value that should generally be greater than 0.1. For example, if 2.500%, enter either 2.5, 2.50, or 2.500. |
| pricing_adj_index_name | Adjustable-rate index name. Possible values are 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 977, 999: 1 - Wall Street Journal Prime 2 - 6-month CD rate 3 - 1-year T-Bill 4 - 3-year T-Bill 5 - 5-year T-Note 6 - 12-month average of 10-year T-Bill 7 - Cost of Funds Index (COFI) - National 8 - Cost of Funds Index (COFI) - 11th District 9 - Constant Maturity Treasury (CMT) 10 - Internal Proprietary Index 977 - Other 999 - Not applicable |
| pricing_adj_index_name_ff | Adjustable-rate index other description. Must not exceed 300 characters in length. |
| pricing_adj_index_value | Adjustable-rate index. When present must be a numeric value. For example, if 3.100%, enter 3.1, 3.10, or 3.100. |
| pricing_origination_charges | Total origination charges. When present must be a numeric value. For example, if \$2,500, enter 2500 or 2500.00. If -\$100, enter -100. |
| pricing_broker_fees | Total broker fees. When present must be a numeric value. For example, if \$1,125, enter 1125 or 1125.00. If \$0 enter 0. |

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| pricing_initial_charges | Initial annual charges. When present must be a numeric value. For example, if \$1,034, enter 1034 or 1034.00. |
| pricing_mca_addcost_flag | Additional cost for merchant cash advances. Possible values are 900, 999: 900 - Applicable 999 - Not applicable |
| pricing_mca_addcost | Additional cost for merchant cash advances amount. When present must be a numeric value. For example, if \$3,500, enter 3500 or 3500.00. |
| pricing_prepenalty_allowed | Prepayment penalty could be imposed. Possible values are 1, 2, 999: 1 - Yes 2 - No 999 - Not applicable |
| pricing_prepenalty_exists | Prepayment penalty exists. Possible values are 1, 2, 999: 1 - Yes 2 - No 999 - Not applicable |
| census_tract_adr_type | Type of address. Possible values are 1, 2, 3, 988: 1 - Address of location where the loan proceeds will principally be applied. 2 - Address or location of borrower's main office or headquarters 3 - Another address or location associated with the applicant 988 - Not provided by applicant and otherwise undetermined. |
| gross_annual_revenue_flag | Revenue flag. Possible values are 900, 988: 900 - Applicable and reported 988 - Applicable but not provided |
| gross_annual_revenue | Gross annual revenue. When present must be a numeric value. For example, if \$855,430, enter 855430 or 855430.00. |
| naics_code_flag | NAICS flag. Possible values are 900, 988: 900 - Applicable and reported 988 - Applicable but not provided |
| naics_code | NAICS Code. When present must be a 3-digit numeric value. |
| number_of_workers | Number of workers. Possible values are 1, 2, 3, 4, 5, 6, 7, 8, 9, 988: 1 - Firms with no workers 2 - Firms with 1 to 4 workers 3 - Firms with 5 to 9 workers 4 - Firms with 10 to 19 workers 5 - Firms with 20 to 49 workers 6 - Firms with 50 to 99 workers 7 - Firms with 100 to 249 workers 8 - Firms with 250 to 499 workers 9 - Firms with 500 or more workers 988 - Not Provided |
| time_in_business_type | Time in business type. Possible values are 1, 2, 3, 988: 1 - Enter the number of years 2 - Less than two years 3 - Two or more years 988 - Not provided |

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| time_in_business | Number of years in business. When present must be a whole number greater than or equal to 0. |
| business_ownership_status | Minority, women, and LGBTQ+ owned business status. Multiple values are allowed, and possible values are 1, 2, 3, 955, 966, 988. If multiple values are specified, they must be separated with a semicolon. 1 - Minority-owned business 2 - Women-owned business 3 - LGBTQI+-owned business 955 - None of these apply 966 - Applicant did not wish to provide 988 - Not provided by applicant |
| num_principal_owners_flag | Principal owners. Possible values are 900, 988: 900 - Reported 988 - Not Provided |
| num_principal_owners | Number of principal owners. Possible values are 0, 1, 2, 3, 4: 0 - 0 principal owners 1 - 1 principal owner 2 - 2 principal owners 3 - 3 principal owners 4 - 4 principal owners |
| po_1_ethnicity | Ethnicity of principal owner 1. Multiple values are allowed, and possible values are 1, 11, 12, 13, 14, 2, 966, 977, 988. If multiple values are specified, they must be separated with a semicolon. 1 - Hispanic or Latino 11 - Mexican 12 - Puerto Rican 13 - Cuban 14 - Other Hispanic or Latino ethnicity 2 - Not Hispanic or Latino 966 - Applicant does not wish to provide 977 - Applicant responded in free-form text 988 - Not provided by applicant |
| po_1_ethnicity_ff | Ethnicity of principal owner 1: other Hispanic or Latino ethnicity description. Must not exceed 300 characters in length. |

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| po_1_race | <p>Race of principal owner 1. Multiple values are allowed, and each value must equal 1, 2, 21, 22, 23, 24, 25, 26, 27, 3, 31, 32, 33, 34, 35, 36, 37, 4, 41, 42, 43, 44, 5, 966, 971, 972, 973, 974, 988. If multiple values are specified they must be separated with a semicolon.</p> <p>1 - American Indian or Alaska Native 2 - Asian 21 - Asian Indian 22 - Chinese 23 - Filipino 24 - Japanese 25 - Korean 26 - Vietnamese 27 - Other Asian Race 3 - Black or African American 31 - African American 32 - Ethiopian 33 - Haitian 34 - Jamaican 35 - Nigerian 36 - Somali 37 - Other Black or African American Race 4 - Native Hawaiian or Other Pacific Islander 41 - Native Hawaiian 42 - Guamanian or Chamorro 43 - Samoan 44 - Other Pacific Islander Race 5 - White 966 - Applicant does not wish to provide 971 - Applicant responded in free-form text for American Indian or Alaska Native Principal Tribe 972 - Applicant responded in free-form text for Other Asian race 973 - Applicant responded in free-form text for Other Black or African Race 974 - Applicant responded in free-form text for Other Pacific Islander race 988 - Not provided by applicant</p> |
| po_1_race_anai_ff | Race of principal owner 1: American Indian or Alaska Native Enrolled or Principal tribe. Must not exceed 300 characters in length. |
| po_1_race_asian_ff | Race of principal owner 1: Other Asian race. Must not exceed 300 characters in length. |
| po_1_race_baa_ff | Race of principal owner 1: Other Black or African American race. Must not exceed 300 characters in length. |
| po_1_race_pi_ff | Race of principal owner 1: Other Pacific Islander race. Must not exceed 300 characters in length. |
| po_1_gender_flag | <p>Sex/gender of principal owner 1. Possible values must equal 1, 966, 988:</p> <p>1 - Applicant responded 966 - Applicant did not want to provide 988 - Not provided by applicant</p> |

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| po_1_gender_ff | Sex/gender of principal owner 1: Other gender description. Must not exceed 300 characters in length. |
| po_2_ethnicity | <p>Ethnicity of principal owner 2. Multiple values are allowed, and possible values are 1, 11, 12, 13, 14, 2, 966, 977, 988. If multiple values are specified, they must be separated with a semicolon.</p> <p>1 - Hispanic or Latino 11 - Mexican 12 - Puerto Rican 13 - Cuban 14 - Other Hispanic or Latino ethnicity 2 - Not Hispanic or Latino 966 - Applicant does not wish to provide 977 - Applicant responded in free-form text 988 - Not provided by applicant</p> |
| po_2_ethnicity_ff | Ethnicity of principal owner 2: other Hispanic or Latino ethnicity description. Must not exceed 300 characters in length. |
| po_2_race | <p>Race of principal owner 2. Multiple values are allowed, and each value must equal 1, 2, 21, 22, 23, 24, 25, 26, 27, 3, 31, 32, 33, 34, 35, 36, 37, 4, 41, 42, 43, 44, 5, 966, 971, 972, 973, 974, 988. If multiple values are specified they must be separated with a semicolon.</p> <p>1 - American Indian or Alaska Native 2 - Asian 21 - Asian Indian 22 - Chinese 23 - Filipino 24 - Japanese 25 - Korean 26 - Vietnamese 27 - Other Asian Race 3 - Black or African American 31 - African American 32 - Ethiopian 33 - Haitian 34 - Jamaican 35 - Nigerian 36 - Somali 37 - Other Black or African American Race 4 - Native Hawaiian or Other Pacific Islander 41 - Native Hawaiian 42 - Guamanian or Chamorro 43 - Samoan 44 - Other Pacific Islander Race 5 - White 966 - Applicant does not wish to provide 971 - Applicant responded in free-form text for American Indian or Alaska Native Principal Tribe 972 - Applicant responded in free-form text for Other Asian race 973 - Applicant responded in free-form text for Other Black or African Race 974 - Applicant responded in free-form text for Other Pacific</p> |

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| | Islander race 988 - Not provided by applicant |
| po_2_race_anai_ff | Race of principal owner 2: American Indian or Alaska Native Enrolled or Principal tribe. Must not exceed 300 characters in length. |
| po_2_race_asian_ff | Race of principal owner 2: Other Asian race. Must not exceed 300 characters in length. |
| po_2_race_baa_ff | Race of principal owner 2: Other Black or African American race. Must not exceed 300 characters in length. |
| po_2_race_pi_ff | Race of principal owner 2: Other Pacific Islander race. Must not exceed 300 characters in length. |
| po_2_gender_flag | Sex/gender of principal owner 2. Possible values must equal 1, 966, 988: 1 - Applicant responded 966 - Applicant did not want to provide 988 - Not provided by applicant |
| po_2_gender_ff | Sex/gender of principal owner 2: Other gender description. Must not exceed 300 characters in length. |
| po_3_ethnicity | Ethnicity of principal owner 3. Multiple values are allowed, and possible values are 1, 11, 12, 13, 14, 2, 966, 977, 988. If multiple values are specified, they must be separated with a semicolon. 1 - Hispanic or Latino 11 - Mexican 12 - Puerto Rican 13 - Cuban 14 - Other Hispanic or Latino ethnicity 2 - Not Hispanic or Latino 966 - Applicant does not wish to provide 977 - Applicant responded in free-form text 988 - Not provided by applicant |
| po_3_ethnicity_ff | Ethnicity of principal owner 3: other Hispanic or Latino ethnicity description. Must not exceed 300 characters in length. |

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| po_3_race | <p>Race of principal owner 3. Multiple values are allowed, and each value must equal 1, 2, 21, 22, 23, 24, 25, 26, 27, 3, 31, 32, 33, 34, 35, 36, 37, 4, 41, 42, 43, 44, 5, 966, 971, 972, 973, 974, 988. If multiple values are specified they must be separated with a semicolon.</p> <p>1 - American Indian or Alaska Native 2 - Asian 21 - Asian Indian 22 - Chinese 23 - Filipino 24 - Japanese 25 - Korean 26 - Vietnamese 27 - Other Asian Race 3 - Black or African American 31 - African American 32 - Ethiopian 33 - Haitian 34 - Jamaican 35 - Nigerian 36 - Somali 37 - Other Black or African American Race 4 - Native Hawaiian or Other Pacific Islander 41 - Native Hawaiian 42 - Guamanian or Chamorro 43 - Samoan 44 - Other Pacific Islander Race 5 - White 966 - Applicant does not wish to provide 971 - Applicant responded in free-form text for American Indian or Alaska Native Principal Tribe 972 - Applicant responded in free-form text for Other Asian race 973 - Applicant responded in free-form text for Other Black or African Race 974 - Applicant responded in free-form text for Other Pacific Islander race 988 - Not provided by applicant</p> |
| po_3_race_anai_ff | Race of principal owner 3: American Indian or Alaska Native Enrolled or Principal tribe. Must not exceed 300 characters in length. |
| po_3_race_asian_ff | Race of principal owner 3: Other Asian race. Must not exceed 300 characters in length. |
| po_3_race_baa_ff | Race of principal owner 3: Other Black or African American race. Must not exceed 300 characters in length. |
| po_3_race_pi_ff | Race of principal owner 3: Other Pacific Islander race. Must not exceed 300 characters in length. |
| po_3_gender_flag | <p>Sex/gender of principal owner 3. Possible values must equal 1, 966, 988:</p> <p>1 - Applicant responded 966 - Applicant did not want to provide 988 - Not provided by applicant</p> |

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| po_3_gender_ff | Sex/gender of principal owner 3: Other gender description. Must not exceed 300 characters in length. |
| po_4_ethnicity | <p>Ethnicity of principal owner 4. Multiple values are allowed, and possible values are 1, 11, 12, 13, 14, 2, 966, 977, 988. If multiple values are specified, they must be separated with a semicolon.</p> <p>1 - Hispanic or Latino 11 - Mexican 12 - Puerto Rican 13 - Cuban 14 - Other Hispanic or Latino ethnicity 2 - Not Hispanic or Latino 966 - Applicant does not wish to provide 977 - Applicant responded in free-form text 988 - Not provided by applicant</p> |
| po_4_ethnicity_ff | Ethnicity of principal owner 4: other Hispanic or Latino ethnicity description. Must not exceed 300 characters in length. |
| po_4_race | <p>Race of principal owner 4. Multiple values are allowed, and each value must equal 1, 2, 21, 22, 23, 24, 25, 26, 27, 3, 31, 32, 33, 34, 35, 36, 37, 4, 41, 42, 43, 44, 5, 966, 971, 972, 973, 974, 988. If multiple values are specified they must be separated with a semicolon.</p> <p>1 - American Indian or Alaska Native 2 - Asian 21 - Asian Indian 22 - Chinese 23 - Filipino 24 - Japanese 25 - Korean 26 - Vietnamese 27 - Other Asian Race 3 - Black or African American 31 - African American 32 - Ethiopian 33 - Haitian 34 - Jamaican 35 - Nigerian 36 - Somali 37 - Other Black or African American Race 4 - Native Hawaiian or Other Pacific Islander 41 - Native Hawaiian 42 - Guamanian or Chamorro 43 - Samoan 44 - Other Pacific Islander Race 5 - White 966 - Applicant does not wish to provide 971 - Applicant responded in free-form text for American Indian or Alaska Native Principal Tribe 972 - Applicant responded in free-form text for Other Asian race 973 - Applicant responded in free-form text for Other Black or African Race 974 - Applicant responded in free-form text for Other Pacific</p> |

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| | Islander race 988 - Not provided by applicant |
| po_4_race_anai_ff | Race of principal owner 4: American Indian or Alaska Native Enrolled or Principal tribe. Must not exceed 300 characters in length. |
| po_4_race_asian_ff | Race of principal owner 4: Other Asian race. Must not exceed 300 characters in length. |
| po_4_race_baa_ff | Race of principal owner 4: Other Black or African American race. Must not exceed 300 characters in length. |
| po_4_race_pi_ff | Race of principal owner 4: Other Pacific Islander race. Must not exceed 300 characters in length. |
| po_4_gender_flag | Sex/gender of principal owner 4. Possible values must equal 1, 966, 988: 1 - Applicant responded 966 - Applicant did not want to provide 988 - Not provided by applicant |
| po_4_gender_ff | Sex/gender of principal owner 4: Other gender description. Must not exceed 300 characters in length. |
| po_1_gender | *Optional* Sex/gender of principal owner 1: Possible values are 1, 2, 3: 1 - Male 2 - Female 3 - Other |
| po_2_gender | *Optional* Sex/gender of principal owner 2: Possible values are 1, 2, 3: 1 - Male 2 - Female 3 - Other |
| po_3_gender | *Optional* Sex/gender of principal owner 3: Possible values are 1, 2, 3: 1 - Male 2 - Female 3 - Other |
| po_4_gender | *Optional* Sex/gender of principal owner 4: Possible values are 1, 2, 3: 1 - Male 2 - Female 3 - Other |
| LEI | *Optional* LEI assigned to filing institution. Must not exceed 20 characters in length. |
| Applnumb | *Optional* Application Number used in UID. Must not exceed 25 characters in length. |
| Address | *Optional* Street address. Used for geocoding purposes. Must not exceed 100 characters in length. |
| City | *Optional* City name. Used for geocoding purposes. Must not exceed 35 characters in length. |
| State_abrv | *Optional* State abbreviation. Used for geocoding purposes. Must not exceed 2 characters in length. |

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| Zip | *Optional* ZIP code. Used for geocoding purposes. Must not exceed 5 characters in length. |
| Zip4 | *Optional* ZIP4 code. Used for geocoding purposes. Must not exceed 4 characters in length. |
| ManualGeocode | *Optional* Manual geocode flag. Set to True for records that have already been geocoded to prevent the system from regeocoding the record. |
| State | State code. Typically provided when the record is already geocoded. Must not exceed 2 characters in length. |
| MSA | MSA code. Typically provided when the record is already geocoded. Must not exceed 5 characters in length. |
| County | County code. Typically provided when the record is already geocoded. Must not exceed 5 characters in length. Note: If a 5-digit County code is provided the system will use the last 3 digits for the County. If the State field is also blank the system will use the first 2 digits for the State. |
| CensusTrac | Census tract code. Typically provided when the record is already geocoded. Must not exceed 11 characters in length. Note: If an 11-digit CensusTrac code is provided the system will use the last 7 digits for the Censustrac and format it properly. |
| Instit_id | *Optional* Institution Id. Must not exceed 10 characters in length. |
| Imprt_Stat | *Optional* Imported State code. Must not exceed 2 characters in length. |
| Imprt_MSA | *Optional* Imported MSA code. Must not exceed 5 characters in length. |
| Imprt_Cnty | *Optional* Imported County code. Must not exceed 3 characters in length. |
| Imprt_Trct | *Optional* Imported Census Tract code. Must not exceed 7 characters in length. |
| Imprt_Cnty_5 | *Optional* Imported County 5 code. Must not exceed 5 characters in length. |
| Imprt_Trct_11 | *Optional* Imported Census Tract 11 code. Must not exceed 11 characters in length. |
| Maturity_date | *Optional* Maturity date. All date formats are supported. |
| Affiliate | *Optional* Affiliate code. Must not exceed 1 character in length. Possible values are 1,2: 1 - No 2 - Yes |
| Source | *Optional* Source. Must not exceed 7 characters in length. |
| longitude | *Optional* Longitude value. Decimal field that must not exceed 9 characters in length. Note: If our system is used to geocode the records, the Latitude & Longitude fields will automatically be populated by our geocoder. |
| latitude | *Optional* Latitude value. Decimal field that must not exceed 9 characters in length. |

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| | Note: If our system is used to geocode the records, the Latitude & Longitude fields will automatically be populated by our geocoder. |
| officername | *Optional* Officer name. Must not exceed 10 characters in length. |
| LoanProg | *Optional* Loan program. Must not exceed 100 characters in length. |
| OwnershipPct1 | *Optional* 1st Principal's % Ownership. Decimal field that must not exceed 15 characters in length. |
| OwnershipPct2 | *Optional* 2nd Principal's % Ownership. Decimal field that must not exceed 15 characters in length. |
| collateral | *Optional* Collateral type. Must not exceed 1 character in length. |
| SICCode | *Optional* Standard industrial classification (SIC) code. Must not exceed 4 characters in length. |
| TotalAssets | *Optional* Total Assets. Decimal field that must not exceed 15 characters in length. |
| TotalLiabilities | *Optional* Total Liabilities. Decimal field that must not exceed 15 characters in length. |
| DebtServiceCoverage | *Optional* Debt service coverage ratio. Decimal field that must not exceed 15 characters in length. |
| NoteRate | *Optional* Note Rate. Decimal field that must not exceed 15 characters in length. |
| Map_Label | *Optional* Map label. Used to customize labels when synchronizing data files with the map. Must not exceed 100 characters in length. |

4.2.2 Mortgage DF (HMDF) file type

| Element | Description |
|---------------------|--|
| RecordID | Record ID. Value is expected to be 2 which indicates record level data. Note: This field gets automatically in the submission file, so technically it is not required to be populated. |
| LEI | LEI assigned to filing institution. Must not exceed 20 characters in length. |
| ULI | Universal Loan Identifier. LEI + 23 characters + Check Digit. Must not exceed 45 characters in length. |
| ApplDate | Application date. All standard date formats are supported. Note: Upon submission the dates will be converted to YYYYMMDD. |
| LoanType | Loan Type. Possible values are 1,2,3,4: 1 - Conventional 2 - FHA 3 - VA 4 - FSA /RHS |
| Purpose | Loan Purpose. Possible values are 1,2,31,32,4,5: 1 - Home Purchase 2 - Home Improvement 31 - Refinancing 32 - Cash-out Refinancing 4 - Other 5 - Not Applicable |
| Preapproval | Preapproval. Possible values are 1,2: 1- Preapproval Requested 2- Preapproval Not Requested |
| ConstructionMethod | Construction Method. Possible values are 1,2: 1 - Site built 2 - Manufactured home |
| OccupancyType | Occupancy Type. Possible values are 1,2,3: 1 - Principal residence 2 - Second residence 3 - Investment property |
| LoanAmountInDollars | Loan Amount. When present, it must be a numeric value that is greater than or equal to 0. For example, if the amount is \$200101.23, enter 200101.23. |
| Action | Action Taken. Possible values are 1,2,3,4,5,6,7,8: 1 - Originated 2 - Approved not Accepted 3 - Application Denied 4 - Application withdrawn by applicant 5 - File closed for incompleteness 6 - Purchased Loan 7 - Preapproval Request Denied 8 - Preapproval request approved but not accepted |
| ActionDate | Action Taken date. All date formats are supported. Note: Upon submission the dates will be converted to YYYYMMDD. |

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| Address | Street address. Used for geocoding purposes. Must not exceed 100 characters in length. |
| City | City name. Used for geocoding purposes. Must not exceed 35 characters in length. |
| State_abrv | State abbreviation. Used for geocoding purposes. Must not exceed 2 characters in length. |
| Zip | ZIP code. Used for geocoding purposes. Must not exceed 5 characters in length. |
| Zip4 | ZIP4 code. Used for geocoding purposes. Must not exceed 4 characters in length. |
| ManualGeocode | *Optional* Manual geocode flag. Set to True for records that have already been geocoded to prevent the system from regeocoding the record. |
| State | State code. Typically provided when the record is already geocoded. Must not exceed 2 characters in length. |
| MSA | MSA code. Typically provided when the record is already geocoded. Must not exceed 5 characters in length. |
| County | County code. Typically provided when the record is already geocoded. Must not exceed 5 characters in length. Note: If a 5-digit County code is provided the system will use the last 3 digits for the County. If the State field is also blank the system will use the first 2 digits for the State. |
| CensusTrac | Census tract code. Typically provided when the record is already geocoded. Must not exceed 11 characters in length. Note: If an 11-digit CensusTrac code is provided the system will use the last 7 digits for the Censustrac and format it properly. |
| Ethnicity_1 | Ethnicity1 of Applicant. Possible values are 1,11,12,13,14,2,3,4,5: 1 - Hispanic or Latino 11 - Mexican 12 - Puerto Rican 13 - Cuban 14 - Other Hispanic or Latino 2 - Not Hispanic or Latino 3 - Information not provided by applicant in mail, Internet, or telephone application 4 - Not Applicable |
| Ethnicity_2 | Ethnicity2 of Applicant. Possible values are 1,11,12,13,14,2: 1 - Hispanic or Latino 11 - Mexican 12 - Puerto Rican 13 - Cuban 14 - Other Hispanic or Latino 2 - Not Hispanic or Latino |
| Ethnicity_3 | Ethnicity3 of Applicant. Possible values are 1,11,12,13,14,2: 1 - Hispanic or Latino 11 - Mexican 12 - Puerto Rican |

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| | 13 - Cuban 14 - Other Hispanic or Latino 2 - Not Hispanic or Latino |
| Ethnicity_4 | Ethnicity4 of Applicant. Possible values are 1,11,12,13,14,2: 1 - Hispanic or Latino 11 - Mexican 12 - Puerto Rican 13 - Cuban 14 - Other Hispanic or Latino 2 - Not Hispanic or Latino |
| Ethnicity_5 | Ethnicity5 of Applicant. Possible values are 1,11,12,13,14,2: 1 - Hispanic or Latino 11 - Mexican 12 - Puerto Rican 13 - Cuban 14 - Other Hispanic or Latino 2 - Not Hispanic or Latino |
| EthnicityOther | Ethnicity1 of Applicant. Free form text field. Must not exceed 100 characters. |
| Coa_Ethnicity_1 | Ethnicity1 of Co-Applicant. Possible values are 1,11,12,13,14,2,3,4,5: 1 - Hispanic or Latino 11 - Mexican 12 - Puerto Rican 13 - Cuban 14 - Other Hispanic or Latino 2 - Not Hispanic or Latino 3 - Information not provided by applicant in mail, Internet, or telephone application 4 - Not applicable 5 - No co-applicant |
| Coa_Ethnicity_2 | Ethnicity2 of Co-Applicant. Possible values are 1,11,12,13,14,2: 1 - Hispanic or Latino 11 - Mexican 12 - Puerto Rican 13 - Cuban 14 - Other Hispanic or Latino 2 - Not Hispanic or Latino |
| Coa_Ethnicity_3 | Ethnicity3 of Co-Applicant. Possible values are 1,11,12,13,14,2: 1 - Hispanic or Latino 11 - Mexican 12 - Puerto Rican 13 - Cuban 14 - Other Hispanic or Latino 2 - Not Hispanic or Latino |
| Coa_Ethnicity_4 | Ethnicity4 of Co-Applicant. Possible values are 1,11,12,13,14,2: 1 - Hispanic or Latino 11 - Mexican 12 - Puerto Rican 13 - Cuban 14 - Other Hispanic or Latino |

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| | 2 - Not Hispanic or Latino |
| Coa_Ethnicity_5 | Ethnicity5 of Co-Applicant. Possible values are 1,11,12,13,14,2: 1 - Hispanic or Latino 11 - Mexican 12 - Puerto Rican 13 - Cuban 14 - Other Hispanic or Latino 2 - Not Hispanic or Latino |
| Coa_EthnicityOther | Ethnicity of Applicant. Free form text field. Must not exceed 100 characters. |
| Ethnicity_Determinant | Ethnicity of Applicant Collected on the Basis of Visual Observation or Surname. Possible values are 1,2,3: 1 - Collected on basis of visual observation or surname 2 - Not collected on basis of visual observation or surname 3 - Not applicable |
| Coa_Ethnicity_Determinant | Ethnicity of Co-Applicant Collected on the Basis of Visual Observation or Surname. Possible values are 1,2,3: 1 - Collected on basis of visual observation or surname 2 - Not collected on basis of visual observation or surname 3 - Not applicable 4 - No co-applicant |
| Race_1 | Race1 of Applicant. Possible values are 1,2,21,22,23,24,25,26,27,3,4,41,42,43,44,5,6,7: 1 - American Indian or Alaska Native 2 - Asian 21 - Asian Indian 22 - Chinese 23 - Filipino 24 - Japanese 25 - Korean 26 - Vietnamese 27 - Other Asian 3 - Black or African American 4 - Native Hawaiian/Pacific Islander 41 - Native Hawaiian 42 - Guamanian/Chamorro 43 - Samoan 44 - Other Pacific Islander 5 - White 6 - Not Provided 7 - Not Applicable |
| Race_2 | Race2 of Applicant. Possible values are 1,2,21,22,23,24,25,26,27,3,4,41,42,43,44,5: 1 - American Indian or Alaska Native 2 - Asian 21 - Asian Indian 22 - Chinese 23 - Filipino 24 - Japanese |

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| | 25 - Korean 26 - Vietnamese 27 - Other Asian 3 - Black or African American 4 - Native Hawaiian/Pacific Islander 41 - Native Hawaiian 42 - Guamanian/Chamorro 43 - Samoan 44 - Other Pacific Islander 5 - White |
| Race_3 | Race3 of Applicant. Possible values are 1,2,21,22,23,24,25,26,27,3,4,41,42,43,44,5: 1 - American Indian or Alaska Native 2 - Asian 21 - Asian Indian 22 - Chinese 23 - Filipino 24 - Japanese 25 - Korean 26 - Vietnamese 27 - Other Asian 3 - Black or African American 4 - Native Hawaiian/Pacific Islander 41 - Native Hawaiian 42 - Guamanian/Chamorro 43 - Samoan 44 - Other Pacific Islander 5 - White |
| Race_4 | Race4 of Applicant. Possible values are 1,2,21,22,23,24,25,26,27,3,4,41,42,43,44,5: 1 - American Indian or Alaska Native 2 - Asian 21 - Asian Indian 22 - Chinese 23 - Filipino 24 - Japanese 25 - Korean 26 - Vietnamese 27 - Other Asian 3 - Black or African American 4 - Native Hawaiian/Pacific Islander 41 - Native Hawaiian 42 - Guamanian/Chamorro 43 - Samoan 44 - Other Pacific Islander 5 - White |
| Race_5 | Race5 of Applicant. Possible values are 1,2,21,22,23,24,25,26,27,3,4,41,42,43,44,5: 1 - American Indian or Alaska Native 2 - Asian |

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| | 21 - Asian Indian 22 - Chinese 23 - Filipino 24 - Japanese 25 - Korean 26 - Vietnamese 27 - Other Asian 3 - Black or African American 4 - Native Hawaiian/Pacific Islander 41 - Native Hawaiian 42 - Guamanian/Chamorro 43 - Samoan 44 - Other Pacific Islander 5 - White |
| Race1_Other | Race of Applicant free form text field for code 1. Free form text field. Must not exceed 100 characters. |
| Race27_Other | Race of Applicant free form text field for code 27. Free form text field. Must not exceed 100 characters. |
| Race44_Other | Race of Applicant free form text field for code 44. Free form text field. Must not exceed 100 characters. |
| CoaRace_1 | Race1 of Co-Applicant. Possible values are 1,2,21,22,23,24,25,26,27,3,4,41,42,43,44,5,6,7: 1 - American Indian or Alaska Native 2 - Asian 21 - Asian Indian 22 - Chinese 23 - Filipino 24 - Japanese 25 - Korean 26 - Vietnamese 27 - Other Asian 3 - Black or African American 4 - Native Hawaiian/Pacific Islander 41 - Native Hawaiian 42 - Guamanian/Chamorro 43 - Samoan 44 - Other Pacific Islander 5 - White 6 - Not Provided 7 - Not Applicable |
| CoaRace_2 | Race2 of Co-Applicant. Possible values are 1,2,21,22,23,24,25,26,27,3,4,41,42,43,44,5: 1 - American Indian or Alaska Native 2 - Asian 21 - Asian Indian 22 - Chinese 23 - Filipino 24 - Japanese 25 - Korean 26 - Vietnamese |

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| | 27 - Other Asian 3 - Black or African American 4 - Native Hawaiian/Pacific Islander 41 - Native Hawaiian 42 - Guamanian/Chamorro 43 - Samoan 44 - Other Pacific Islander 5 - White |
| CoaRace_3 | Race3 of Co-Applicant. Possible values are 1,2,21,22,23,24,25,26,27,3,4,41,42,43,44,5: 1 - American Indian or Alaska Native 2 - Asian 21 - Asian Indian 22 - Chinese 23 - Filipino 24 - Japanese 25 - Korean 26 - Vietnamese 27 - Other Asian 3 - Black or African American 4 - Native Hawaiian/Pacific Islander 41 - Native Hawaiian 42 - Guamanian/Chamorro 43 - Samoan 44 - Other Pacific Islander 5 - White |
| CoaRace_4 | Race4 of Co-Applicant. Possible values are 1,2,21,22,23,24,25,26,27,3,4,41,42,43,44,5: 1 - American Indian or Alaska Native 2 - Asian 21 - Asian Indian 22 - Chinese 23 - Filipino 24 - Japanese 25 - Korean 26 - Vietnamese 27 - Other Asian 3 - Black or African American 4 - Native Hawaiian/Pacific Islander 41 - Native Hawaiian 42 - Guamanian/Chamorro 43 - Samoan 44 - Other Pacific Islander 5 - White |
| CoaRace_5 | Race5 of Co-Applicant. Possible values are 1,2,21,22,23,24,25,26,27,3,4,41,42,43,44,5: 1 - American Indian or Alaska Native 2 - Asian 21 - Asian Indian 22 - Chinese |

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| | 23 - Filipino 24 - Japanese 25 - Korean 26 - Vietnamese 27 - Other Asian 3 - Black or African American 4 - Native Hawaiian/Pacific Islander 41 - Native Hawaiian 42 - Guamanian/Chamorro 43 - Samoan 44 - Other Pacific Islander 5 - White |
| CoaRace1_Other | Race of Co-Applicant free form text field for code 1. Free form text field. Must not exceed 100 characters. |
| CoaRace27_Other | Race of Co-Applicant free form text field for code 27. Free form text field. Must not exceed 100 characters. |
| CoaRace44_Other | Race of Co-Applicant free form text field for code 44. Free form text field. Must not exceed 100 characters. |
| Race_Determinant | Race of Applicant Collected on the Basis of Visual Observation or Surname. Possible values are 1,2,3: 1 - Collected on basis of visual observation or surname 2 - Not collected on basis of visual observation or surname 3 - Not applicable |
| CoaRace_Determinant | Race of Co-Applicant Collected on the Basis of Visual Observation or Surname. Possible values are 1,2,3: 1 - Collected on basis of visual observation or surname 2 - Not collected on basis of visual observation or surname 3 - Not applicable 4 - No co-applicant |
| Sex | Sex of Applicant. Possible values are 1,2,3,4,6: 1 - Male 2 - Female 3 - Information not provided by applicant in mail, internet, or telephone application 4 - Not applicable 6- Applicant selected both male and female |
| CoaSex | Sex of Co-Applicant. Possible values are 1,2,3,4,6: 1 - Male 2 - Female 3 - Information not provided by applicant in mail, internet, or telephone application 4 - Not applicable 5 - No co-applicant 6- Applicant selected both male and female |
| Sex_Determinant | Sex of Applicant Collected on the Basis of Visual Observation or Surname. Possible values are 1,2,3: 1 - Collected on basis of visual observation or surname 2 - Not collected on basis of visual observation or surname 3 - Not applicable |

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| CoaSex_Determinant | Sex of Co-Applicant Collected on the Basis of Visual Observation or Surname. Possible values are 1,2,3: 1 - Collected on basis of visual observation or surname 2 - Not collected on basis of visual observation or surname 3 - Not applicable 4 - No co-applicant |
| Age | Age of Applicant. Possible values are any integer up to 4 digits or 8888: 8888 - Not applicable |
| Coa_Age | Age of Co-Applicant. Possible values are any integer up to 4 digits or 8888, 9999: 8888 - Not applicable 9999 - No co-applicant |
| Income | Applicant Income. Possible values are any numeric value or NA. Note: Income is expected to be rounded to 1000. |
| Purchaser | Type of Purchaser. Possible values are 0,1,2,3,4,5,6,71,72,8,9: 0 - Not applicable 1 - Fannie Mae 2 - Ginnie Mae 3 - Freddie Mac 4 - Farmer Mac 5 -Private securitizer 6 - Commercial bank, savings bank, or savings association 71 - Credit union, mortgage company, or finance company 72 -Life insurance company 8 - Affiliate institution 9 - Other type of purchaser |
| Rate_Spread | Rate Spread. Possible values are a numeric value that does not exceed 5 characters in length and 3 digits after the decimal or NA. |
| HOEPA_Status | HOEPA Status. Possible values are 1,2,3: 1 - High-cost mortgage 2 - Not a high-cost mortgage 3 - Not applicable |
| Lien_Status | Lien Status. Possible values are 1,2: 1 - Secured by a First Lien 2 - Secured by a Subordinate Lien |
| CreditScore | Credit score of Applicant. Possible values are any integer up to 4 digits or 7777,8888: 7777 - Credit score is not a number 8888 - Not applicable |
| Coa_CreditScore | Credit score of Co-Applicant. Possible values are any integer up to 4 digits or 7777,8888: 7777 - Credit score is not a number 8888 - Not applicable 9999 - No co-applicant |
| CreditModel | Credit scoring model of applicant. Possible values are 1,2,3,4,5,6,7,8,9,11,12,13,14,15: 1 - Equifax Beacon 5.0 2 - Experian Fair Isaac 3 - FICO Risk Score Classic 04 |

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| | 4 - FICO Risk Score Classic 98 5 - VantageScore 2.0 6 - VantageScore 3.0 7 - More than one credit scoring model 8 - Other credit scoring model 9 - Not applicable 11 - FICO Score 9 12 - FICO Score 8 13 - FICO Score 10 14 - FICO Score 10T 15 - VantageScore 4.0 |
| CreditModelOther | Credit scoring model of applicant free form text field for code 8. Must not exceed 100 characters. |
| Coa_CreditModel | Credit scoring model of co-applicant. Possible values are 1,2,3,4,5,6,7,8,9,11,12,13,14,15: 1 - Equifax Beacon 5.0 2 - Experian Fair Isaac 3 - FICO Risk Score Classic 04 4 - FICO Risk Score Classic 98 5 - VantageScore 2.0 6 - VantageScore 3.0 7 - More than one credit scoring model 8 - Other credit scoring model 9 - Not applicable 10 - No co-applicant 11 - FICO Score 9 12 - FICO Score 8 13 - FICO Score 10 14 - FICO Score 10T 15 - VantageScore 4.0 |
| Coa_CreditModelOther | Credit scoring model of co-applicant free form text field for code 8. Must not exceed 100 characters. |
| Denial1 | Reason for Denial1. Possible values are 1,2,3,4,5,6,7,8,9,10: 1 - Debt-to-Income 2 - Employment History 3 - Credit History 4 - Collateral 5 - Insufficient Cash 6 - Unverified Info 7 - Credit Application Incomplete 8 - Mortgage Insurance Denied 9 - Other 10 - Not applicable |
| Denial2 | Reason for Denial2. Possible values are 1,2,3,4,5,6,7,8,9: 1 - Debt-to-Income 2 - Employment History 3 - Credit History 4 - Collateral 5 - Insufficient Cash 6 - Unverified Info |

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| | 7 - Credit Application Incomplete 8 - Mortgage Insurance Denied 9 - Other |
| Denial3 | Reason for Denial3. Possible values are 1,2,3,4,5,6,7,8,9: 1 - Debt-to-Income 2 - Employment History 3 - Credit History 4 - Collateral 5 - Insufficient Cash 6 - Unverified Info 7 - Credit Application Incomplete 8 - Mortgage Insurance Denied 9 - Other |
| Denial4 | Reason for Denial4. Possible values are 1,2,3,4,5,6,7,8,9: 1 - Debt-to-Income 2 - Employment History 3 - Credit History 4 - Collateral 5 - Insufficient Cash 6 - Unverified Info 7 - Credit Application Incomplete 8 - Mortgage Insurance Denied 9 - Other |
| DenialOther | Reason for Denial free form text field for code 9. Must not exceed 255 characters. |
| TotalLoanCosts | Total Loan Costs. Possible values are a numeric value that does not exceed 15 characters in length or 3 digits after the decimal or NA. Note: Any values that exceed 3 digits after the decimal will be truncated. |
| TotalPtsAndFees | Total Points and Fees. Possible values are a numeric value that does not exceed 15 characters in length or 3 digits after the decimal or NA. Note: Any values that exceed 3 digits after the decimal will be truncated. |
| OrigFees | Origination Fees. Possible values are a numeric value that does not exceed 15 characters in length or 3 digits after the decimal or NA. Note: Any values that exceed 3 digits after the decimal will be truncated. |
| DiscountPts | Discount Points. Possible values are a numeric value that does not exceed 15 characters in length or 3 digits after the decimal or NA. Note: Any values that exceed 3 digits after the decimal will be truncated. |
| LenderCredits | Lender Credits. Possible values are a numeric value that does not exceed 15 characters in length or 3 digits after the decimal or NA. Note: Any values that exceed 3 digits after the decimal will be truncated. |
| InterestRate | Interest Rate. Possible values are a numeric value that does not exceed 17 characters in length or 15 digits after the decimal or NA. Note: Any values that exceed 15 digits after the decimal will be truncated. |

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| PPPTerm | Prepayment Penalty Term. Possible values are any integer up to 4 digits or NA. |
| DTIRatio | Debt-to-Income Ratio. Possible values are a numeric value that does not exceed 15 characters in length or 8 digits after the decimal or NA. Note: Any values that exceed 8 digits after the decimal will be truncated. |
| CLTV | Combined Loan-to-Value Ratio. Possible values are a numeric value that does not exceed 15 characters in length or 8 digits after the decimal or NA. Note: Any values that exceed 8 digits after the decimal will be truncated. |
| Loan_Term_Months | Loan Term. Possible values are any integer up to 4 digits or NA. |
| IntroRatePeriod | Introductory Rate Period. Possible values are any integer up to 4 digits or NA. |
| BalloonPMT | Balloon Payment. Possible values are 1,2: 1 - Balloon payment 2 - No balloon payment |
| IOPMT | Interest-only Payments. Possible values are 1,2: 1 - Interest-only payments 2 - No interest-only payment |
| NegAM | Negative Amortization. Possible values are 1,2: 1. Negative amortization 2. No negative amortization |
| NonAmortz | Other Non-Amortizing features. Possible values are 1,2: 1 - Other non-fully amortizing features 2 - No other non-fully amortizing features |
| PropertyValue | Property Value. Possible values are a numeric value that does not exceed 15 characters in length or 2 digits after the decimal or NA. Note: Any values that exceed 2 digits after the decimal will be truncated. |
| MHSecPropType | Manufactured Home Secured Property Type. Possible values are 1,2,3: 1 - Manufactured home and land 2 - Manufactured home and not land 3 - Not applicable |
| MHLandPropInt | Manufactured Home Land Property Interest. Possible values are 1,2,3,4,5: 1 - Direct ownership 2 - Indirect ownership 3 - Paid leasehold 4 - Unpaid leasehold 5 - Not applicable |
| TotalUnits | Total Units. Possible values are any integer up to 4 digits. |
| MFAHU | Multifamily Affordable Units. Possible values are any integer up to 4 digits or NA. |
| APPMethod | Submission of Application. Possible values are 1,2,3: 1 - Submitted directly to your institution |

| | |
|---------------|---|
| | 2 - Not submitted directly to your institution 3 - Not applicable |
| PayableInst | Initially Payable to Your Institution. Possible values are 1,2,3: 1 - Initially payable to your institution 2 - Not initially payable to your institution 3 - Not applicable |
| NMLSRID | Mortgage Loan Originator NMLSR Identifier. Possible values are any integer up to 12 digits or NA. |
| AUSystem1 | Automated Underwriting System1. Possible values are 1,2,3,4,5,6,7: 1 - Desktop Underwriter 2 - Loan Prospector 3 - Technology Open to Approved Lenders (TOTAL) Scorecard 4 - Guaranteed Underwriting System (GUS) 5 - Other 6 - Not applicable 7 - Internal Proprietary System |
| AUSystem2 | Automated Underwriting System2. Possible values are 1,2,3,4,5,7: 1 - Desktop Underwriter 2 - Loan Prospector 3 - Technology Open to Approved Lenders (TOTAL) Scorecard 4 - Guaranteed Underwriting System (GUS) 5 - Other 7 - Internal Proprietary System |
| AUSystem3 | Automated Underwriting System3. Possible values are 1,2,3,4,5,7: 1 - Desktop Underwriter 2 - Loan Prospector 3 - Technology Open to Approved Lenders (TOTAL) Scorecard 4 - Guaranteed Underwriting System (GUS) 5 - Other 7 - Internal Proprietary System |
| AUSystem4 | Automated Underwriting System4. Possible values are 1,2,3,4,5,7: 1 - Desktop Underwriter 2 - Loan Prospector 3 - Technology Open to Approved Lenders (TOTAL) Scorecard 4 - Guaranteed Underwriting System (GUS) 5 - Other 7 - Internal Proprietary System |
| AUSystem5 | Automated Underwriting System5. Possible values are 1,2,3,4,5,7: 1 - Desktop Underwriter 2 - Loan Prospector 3 - Technology Open to Approved Lenders (TOTAL) Scorecard 4 - Guaranteed Underwriting System (GUS) 5 - Other 7 - Internal Proprietary System |
| AUSystemOther | Automated Underwriting System free form text field for code 5. Must not exceed 255 characters. |
| AUSResult1 | Automated Underwriting System Result1. Possible values are 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24: 1 - Approve/Eligible 2 - Approve/Ineligible |

| | |
|------------|---|
| | 3 - Refer/Eligible 4 - Refer/Ineligible 5 - Refer with Caution 6 - Out of scope 7 - Error 8 - Accept 9 - Caution 10 - Ineligible 11 - Incomplete 12 - Invalid 13 - Refer 14 - Eligible 15 - Unable to Determine or Unknown 16 - Other 17 - Not applicable 18 - Accept/Eligible 19 - Accept/Ineligible 20 - Accept/Unable to Determine 21 - Refer with Caution/Eligible 22 - Refer with Caution/Ineligible 23 - Refer/Unable to Determine 24 - Refer with Caution/Unable to Determine |
| AUSResult2 | Automated Underwriting System Result2. Possible values are 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,18,19,20,21,22,23,24: 1 - Approve/Eligible 2 - Approve/Ineligible 3 - Refer/Eligible 4 - Refer/Ineligible 5 - Refer with Caution 6 - Out of scope 7 - Error 8 - Accept 9 - Caution 10 - Ineligible 11 - Incomplete 12 - Invalid 13 - Refer 14 - Eligible 15 - Unable to Determine or Unknown 16 - Other 18 - Accept/Eligible 19 - Accept/Ineligible 20 - Accept/Unable to Determine 21 - Refer with Caution/Eligible 22 - Refer with Caution/Ineligible 23 - Refer/Unable to Determine 24 - Refer with Caution/Unable to Determine |
| AUSResult3 | Automated Underwriting System Result3. Possible values are 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,18,19,20,21,22,23,24: 1 - Approve/Eligible |

| | |
|------------|---|
| | 2 - Approve/Ineligible 3 - Refer/Eligible 4 - Refer/Ineligible 5 - Refer with Caution 6 - Out of scope 7 - Error 8 - Accept 9 - Caution 10 - Ineligible 11 - Incomplete 12 - Invalid 13 - Refer 14 - Eligible 15 - Unable to Determine or Unknown 16 - Other 18 - Accept/Eligible 19 - Accept/Ineligible 20 - Accept/Unable to Determine 21 - Refer with Caution/Eligible 22 - Refer with Caution/Ineligible 23 - Refer/Unable to Determine 24 - Refer with Caution/Unable to Determine |
| AUSResult4 | Automated Underwriting System Result4. Possible values are 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,18,19,20,21,22,23,24: 1 - Approve/Eligible 2 - Approve/Ineligible 3 - Refer/Eligible 4 - Refer/Ineligible 5 - Refer with Caution 6 - Out of scope 7 - Error 8 - Accept 9 - Caution 10 - Ineligible 11 - Incomplete 12 - Invalid 13 - Refer 14 - Eligible 15 - Unable to Determine or Unknown 16 - Other 18 - Accept/Eligible 19 - Accept/Ineligible 20 - Accept/Unable to Determine 21 - Refer with Caution/Eligible 22 - Refer with Caution/Ineligible 23 - Refer/Unable to Determine 24 - Refer with Caution/Unable to Determine |
| AUSResult5 | Automated Underwriting System Result5. Possible values are 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,18,19,20,21,22,23,24: 1 - Approve/Eligible |

| | |
|----------------|--|
| | 2 - Approve/Ineligible 3 - Refer/Eligible 4 - Refer/Ineligible 5 - Refer with Caution 6 - Out of scope 7 - Error 8 - Accept 9 - Caution 10 - Ineligible 11 - Incomplete 12 - Invalid 13 - Refer 14 - Eligible 15 - Unable to Determine or Unknown 16 - Other 18 - Accept/Eligible 19 - Accept/Ineligible 20 - Accept/Unable to Determine 21 - Refer with Caution/Eligible 22 - Refer with Caution/Ineligible 23 - Refer/Unable to Determine 24 - Refer with Caution/Unable to Determine |
| AUSResultOther | Automated Underwriting System Result free form text field for code 16. Must not exceed 255 characters. |
| REVMTG | Reverse Mortgage. Possible values are 1,2: 1 - Reverse mortgage 2 - Not a reverse mortgage |
| OpenLOC | Open-End Line of Credit. Possible values are 1,2: 1 - Open-end line of credit 2 - Not an open-end line of credit |
| BUSCML | Business or Commercial Purpose. Possible values are 1,2: 1 - Primarily for business/commercial purpose 2 - Not primarily for business/commercial purpose |
| Is_Exempt | *Optional* Partial exemption flag. Possible values are True,False: True – Record is partially exempt under SB 2155 False – Record is not particularly exempt under SB 2155. Note: To configure the HMDF fields are considered partially exempt, a user must log into UI and go to Admin > Institution Settings > Exemptions. |
| NoCoapplicant | *Optional* No Co-applicant flag. Possible values are True, False: True – No Co-applicant False – There is a Co-applicant |
| RateType | *Optional* Amortization Type. Possible values are 1,2: 1 – Fixed Rate 2 – Variable Rate |
| Rate_Lock_Date | *Optional* Rate Set Date. All date formats are supported. |
| APR | *Optional* Annual Percentage Rate. Decimal field that must not exceed 5 characters in length and 3 digits after the decimal. |

| | |
|---------------|--|
| Instit_id | *Optional* Institution Id. Must not exceed 10 characters in length. |
| Imprt_Stat | *Optional* Imported State code. Must not exceed 2 characters in length. |
| Imprt_MSA | *Optional* Imported MSA code. Must not exceed 5 characters in length. |
| Imprt_Cnty | *Optional* Imported County code. Must not exceed 3 characters in length. |
| Imprt_Trct | *Optional* Imported Census Tract code. Must not exceed 7 characters in length. |
| Imprt_Cnty_5 | *Optional* Imported County 5 code. Must not exceed 5 characters in length. |
| Imprt_Trct_11 | *Optional* Imported Census Tract 11 code. Must not exceed 11 characters in length. |
| Maturity_date | *Optional* Maturity date. All date formats are supported. |
| Affiliate | *Optional* Affiliate code. Must not exceed 1 character in length. Possible values are 1,2: 1 - No 2 - Yes |
| Source | *Optional* Source. Must not exceed 7 characters in length. |
| longitude | *Optional* Longitude value. Decimal field that must not exceed 9 characters in length. Note: If our system is used to geocode the records, the Latitude & Longitude fields will automatically be populated by our geocoder. |
| latitude | *Optional* Latitude value. Decimal field that must not exceed 9 characters in length. Note: If our system is used to geocode the records, the Latitude & Longitude fields will automatically be populated by our geocoder. |
| officername | *Optional* Officer name. Must not exceed 10 characters in length. |
| LoanProg | *Optional* Loan program. Must not exceed 100 characters in length. |
| FirstName | *Optional* First name of Applicant. Must not exceed 30 characters in length. |
| LastName | *Optional* Last name of Applicant. Must not exceed 30 characters in length. |
| CFirstName | *Optional* First name of Co-Applicant. Must not exceed 30 characters in length. |
| CLastName | *Optional* Last name of Co-Applicant. Must not exceed 30 characters in length. |
| Beacon | *Optional* Beacon credit score. Decimal field that must not exceed 15 characters in length and 3 digits after the decimal. |
| Cust_credt | *Optional* Custom credit score. Decimal field that must not exceed 15 characters in length and 3 digits after the decimal. |
| Fair_Isaac | *Optional* Fair Isaac credit score. Integer field that must be 3 digits or less. |
| Branchnumb | *Optional* Branch number. Must not exceed 10 characters in length. |

| | |
|------------------|---|
| FERatio | *Optional* Front-end Ratio. Decimal field that must not exceed 15 characters in length and 3 digits after the decimal. |
| BERatio | *Optional* Back-end Ratio. Decimal field that must not exceed 12 characters in length and 3 digits after the decimal. |
| LTV | *Optional* Loan-to-Value Ratio. Decimal field that must not exceed 12 characters in length and 3 digits after the decimal. |
| NoteRate | *Optional* Note Rate. Decimal field that must not exceed 12 characters in length and 3 digits after the decimal. |
| RateDiff | *Optional* Rate difference. Decimal field that must not exceed 12 characters in length and 3 digits after the decimal. |
| Marital_Status | *Optional* Marital Status of Applicant. Possible values are Y,N: Y - Married N - Unmarried |
| CoMartial_Status | *Optional* Marital Status or Co-Applicant. Possible values are Y,N: Y - Married N - Unmarried |
| Map_Label | *Optional* Map label. Used to customize labels when synchronizing data files with the map. Must not exceed 100 characters in length. |

4.2.3 Community Development (COMD) file type

| Element | Description |
|------------|---|
| Product | Product Type. Must not exceed 1 character in length. Possible values are I, L, S: I - Investment L - Lending S - Services |
| CDCode | *Optional* Community Development code. Must not exceed 1 character in length. Possible values are 1,2,3,4: 1 - Affordable Housing 2 - Services Targeted at LMI Individuals 3 - Economic Development to Small Business 4 - Revitalize/Stabilize LMI Geographies |
| InvestType | *Optional* Type of Investment. Must not exceed 1 character in length. Possible values are 1,2: 1 - Investment 2 - Grant/Donation |
| Hours | *Optional* Total hours of service activity. Possible values are any integer up to 4 digits. |
| LoanAmount | *Optional* Loan amount (in thousands). Decimal field that must not exceed 12 characters in length and 3 digits after the decimal. |
| Applnumb | Application or Record number. Must not exceed 25 characters in length. |
| Affiliate | *Optional* Affiliate. Possible values are 1,2: 1 - No 2 - Yes |
| Action | Optional* Action taken. Possible values are 1,2,3,4,5,6,7,8: 1 - Originated 2 - Approved Not Accepted |

| | |
|------------|--|
| | 3 - Denied 4 - Withdrawn 5 - Closed Incomplete 6 - Purchased 7 - Preapproval Denied 8 - Preapproval Not Accepted |
| ActionDate | *Optional* Action taken date. All date formats are supported. |
| Qualified | *Optional* Qualified status. Possible values are 1,2: 1 - No 2 - Yes |
| Address | *Optional* Street address. Used for geocoding purposes. Must not exceed 100 characters in length. |
| City | *Optional* City name. Used for geocoding purposes. Must not exceed 35 characters in length. |
| State_Abrv | *Optional* State abbreviation. Used for geocoding purposes. Must not exceed 2 characters in length. |
| Zip | *Optional* ZIP code. Used for geocoding purposes. Must not exceed 5 characters in length. |
| Zip4 | *Optional* ZIP4 code. Used for geocoding purposes. Must not exceed 4 characters in length. |
| State | *Optional* State code. Typically provided when the record is already geocoded. Must not exceed 2 characters in length. |
| MSA | *Optional* MSA code. Typically provided when the record is already geocoded. Must not exceed 5 characters in length. |
| County | *Optional* County code. Typically provided when the record is already geocoded. Must not exceed 3 characters in length. |
| CensusTrac | *Optional* Census tract code. Typically provided when the record is already geocoded. Must not exceed 7 characters in length. |
| Latitude | *Optional* Latitude value. Decimal field that must not exceed 9 characters in length. Note: If our system is used to geocode the records, the Latitude & Longitude fields will automatically be populated by our geocoder. |
| Longitude | *Optional* Longitude value. Decimal field that must not exceed 9 characters in length. Note: If our system is used to geocode the records, the Latitude & Longitude fields will automatically be populated by our geocoder. |

4.3 Sample requests

4.3.1 Small Business DF (SBDF)

```
{
  "data": [
    {
      "Action": "1",
      "ActionDate": "2024-02-01",
      "Address": "2778 Vineyards Dr. Apt 1022",
```

```
"Affiliate": "1",
"amount_applied_for": "1",
"amount_applied_for_flag": "1",
"app_method": "1",
"app_recipient": "1",
"ApplDate": "2024-01-03",
"Applnumb": "1",
"business_ownership_status": "1;2;3",
"census_tract_adr_type": "1",
"CensusTrac": "1801.03",
"City": "Atlanta",
"collateral": "1",
"County": "013",
"County_5": "13013",
"credit_purpose": "1",
"credit_purpose_ff": "1",
"ct_credit_product": "1",
"ct_credit_product_ff": "1",
"ct_guarantee": "1",
"ct_guarantee_ff": "1",
"ct_loan_term": "1",
"ct_loan_term_flag": "1",
"DebtServiceCoverage": "1",
"denial_reasons": "1",
"denial_reasons_ff": "1",
"gross_annual_revenue": "1",
"gross_annual_revenue_flag": "1",
"Instit_id": "1",
"LEI": "555533728abcdefghij",
"LoanAmount": "4",
"LoanProg": "1",
"Map_Label": "TestMapLabel",
"Maturity_date": "2024-01-01",
"naics_code": "446",
"naics_code_flag": "1",
"NoteRate": "1",
"num_principal_owners": "1",
"num_principal_owners_flag": "1",
"number_of_workers": "1",
"officername": "TestOfName",
"OwnershipPct1": "1",
"OwnershipPct2": "1",
"po_1_ethnicity": "1",
"po_1_ethnicity_ff": "1",
"po_1_gender": "1",
"po_1_gender_ff": "1",
"po_1_gender_flag": "1",
"po_1_race": "1",
```

```
"po_1_race_anai_ff": "1",
"po_1_race_asian_ff": "1",
"po_1_race_baa_ff": "1",
"po_1_race_pi_ff": "1",
"po_2_ethnicity": "1",
"po_2_ethnicity_ff": "1",
"po_2_gender": "1",
"po_2_gender_ff": "1",
"po_2_gender_flag": "1",
"po_2_race": "1",
"po_2_race_anai_ff": "1",
"po_2_race_asian_ff": "1",
"po_2_race_baa_ff": "1",
"po_2_race_pi_ff": "1",
"po_3_ethnicity": "1",
"po_3_ethnicity_ff": "1",
"po_3_gender": "1",
"po_3_gender_ff": "1",
"po_3_gender_flag": "1",
"po_3_race": "1",
"po_3_race_anai_ff": "1",
"po_3_race_asian_ff": "1",
"po_3_race_baa_ff": "1",
"po_3_race_pi_ff": "1",
"po_4_ethnicity": "1",
"po_4_ethnicity_ff": "1",
"po_4_gender": "1",
"po_4_gender_ff": "1",
"po_4_gender_flag": "1",
"po_4_race": "1",
"po_4_race_anai_ff": "1",
"po_4_race_asian_ff": "1",
"po_4_race_baa_ff": "1",
"po_4_race_pi_ff": "1",
"pricing_broker_fees": "1",
"pricing_fixed_rate": "1",
"pricing_init_rate_period": "1",
"pricing_initial_charges": "1",
"pricing_interest_rate_type": "1",
"pricing_mca_addcost": "1",
"pricing_mca_addcost_flag": "1",
"pricing_origination_charges": "1",
"pricing_prep Penalty_allowed": "1",
"pricing_prep Penalty_exists": "1",
"pricing_var_index_name": "1",
"pricing_var_index_name_ff": "1",
"pricing_var_index_value": "1",
"pricing_var_margin": "1",
```

```

    "SICCode": "7231",
    "Source": "1",
    "STATE_ABRV": "GA",
    "time_in_business": "1",
    "time_in_business_type": "1",
    "TotalAssets": "1",
    "TotalLiabilities": "1",
    "UID": "18989387547925",
    "Zip": "30354",
    "Zip4": "1234"
  }
],
"attributes": {
  "geocodeSettings": {
    "aggressivenessMode": 1,
    "zipPercentageLevel": 1,
    "isZipPercentMatchEnabled": true,
    "isTractMatchEnabled": true,
    "isZipCentroidMatchEnabled": false,
    "isZip2CentroidMatchEnabled": false,
    "isZip4CentroidMatchEnabled": true,
    "overrideManuallyGeocodedRecords": true,
    "allowWeakParcelAndTractsMatch": false
  }
}
}

```

4.3.2 Mortgage DF (HMDF)

```

{
  "data": [
    {
      "manualGeocode": "True",
      "Action": "1",
      "actionDate": "2020-03-03",
      "Address": "6605 MEADOW PARK TERRACE",
      "Affiliate": "1",
      "Age": "31",
      "AgencyCode": "1",
      "ApplDate": "2015-03-02",
      "Applnumb": "3",
      "APPMethod": "3",
      "APR": "11",
      "AUSResult1": "3",
      "AUSResult2": "3",
      "AUSResult3": "3",
      "AUSResult4": "3",
      "AUSResult5": "3",
      "AUSResultOther": "Text",

```

```
"AUSystem1": "1",
"AUSystem2": "1",
"AUSystem3": "1",
"AUSystem4": "1",
"AUSystem5": "1",
"AUSystemOther": "Text",
"BalloonPMT": "2",
"Beacon": "1",
"BERatio": "1",
"Branchnumb": "1",
"BUSCML": "2",
"CensusTrac": "1002.10",
"CFirstName": "TestCFirstName",
"City": "RICHMOND",
"CLastName": "TestCLastName",
"CLTV": "23",
"Coa_Age": "1",
"Coa_CreditModel": "9",
"Coa_CreditModelOther": "Test",
"Coa_CreditScore": "8888",
"Coa_Ethnicity_1": "4",
"Coa_Ethnicity_2": "12",
"Coa_Ethnicity_3": "12",
"Coa_Ethnicity_4": "12",
"Coa_Ethnicity_5": "12",
"Coa_Ethnicity_Determinant": "4",
"Coa_EthnicityOther": "Text",
"CoaRace_1": "4",
"CoaRace_2": "4",
"CoaRace_3": "4",
"CoaRace_4": "4",
"CoaRace_5": "4",
"CoaRace_Determinant": "4",
"CoaRace1_Other": "Text4",
"CoaRace27_Other": "Text5",
"CoaRace44_Other": "Text6",
"CoaSex": "1",
"CoaSex_Determinant": "1",
"CoMarital_Status": "1",
"Comdevelop": "1",
"ConstructionMethod": "2",
"County": "",
"CreditModel": "4",
"CreditModelOther": "Text",
"CreditScore": "123",
"Cust_credt": "1",
"Denial1": "6",
"Denial2": "4",
```

```
"Denial3": "5",
"Denial4": "5",
"DenialOther": "Text",
"DiscountPts": "3999",
"DTIRatio": "50",
"Ethnicity_1": "4",
"Ethnicity_2": "12",
"Ethnicity_3": "12",
"Ethnicity_4": "12",
"Ethnicity_5": "12",
"Ethnicity_Determinant": "4",
"EthnicityOther": "TEXT",
"Fair_Isaac": "1",
"FERatio": "1",
"FirstName": "TestFirstName",
"HOEPA_Status": "1",
"Imprt_Cnty": "041",
"Imprt_Cnty_5": "51041",
"Imprt_MSA": "40060",
"Imprt_Stat": "51",
"Imprt_Trct": "1002.10",
"Imprt_Trct_11": "51041100210",
"Income": "345678",
"Instit_id": "1",
"InterestRate": "6.7",
"IntroRatePeriod": "24",
"IOPMT": "1",
"IsExempt": "True",
"LastName": "TestLastName",
"latitude": "",
"LEI": "1234567890abcdefghij",
"LenderCredits": "2399",
"Lien_Status": "2",
"Loan_Term_Months": "240",
"LoanAmountInDollars": "100000",
"LoanProg": "1",
"LoanType": "2",
"longitude": "",
"LTV": "1",
"Map_Label": "TestMap_Label",
"Marital_Status": "1",
"Maturity_date": "2015-10-01",
"MFAHU": "5",
"MHLandPropInt": "4",
"MHSecPropType": "1",
"MSA": "",
"NegAM": "2",
"NMLSRID": "NA",
```

```

    "NoCoApplicant": "False",
    "NonAmortz": "1",
    "NoteRate": "1",
    "OccupancyType": "1",
    "officername": "TestOfName",
    "OpenLOC": "2",
    "OrigFees": "3201",
    "PayableInst": "3",
    "PPPTerm": "24",
    "Preapproval": "1",
    "PropertyValue": "680000",
    "Purchaser": "2",
    "Purpose": "31",
    "Race_1": "4",
    "Race_2": "42",
    "Race_3": "42",
    "Race_4": "42",
    "Race_5": "42",
    "Race_Determinant": "4",
    "Race1_Other": "Text1",
    "Race27_Other": "Text2",
    "Race44_Other": "Text3",
    "Rate_lock_date": "2020-01-01",
    "Rate_Spread": "NA",
    "Rate_spread_input": "False",
    "RateDiff": "1",
    "RateType": "1",
    "RecordId": "2",
    "REVMTG": "2",
    "Sex": "4",
    "Sex_Determinant": "1",
    "Source": "Test123",
    "State": "",
    "STATE_ABRV": "VA",
    "TotalLoanCosts": "2399",
    "TotalPtsAndFees": "1000",
    "TotalUnits": "5",
    "ULI": "188084098094809144",
    "Var_Term": "2",
    "Zip": "23225",
    "Zip4": "1234"
  }
],
"attributes": {
  "geocodeSettings": {
    "aggressivenessMode": 0,
    "zipPercentageLevel": 0,
    "isZipPercentMatchEnabled": true,

```

```

        "isTractMatchEnabled": true,
        "isZipCentroidMatchEnabled": true,
        "isZip2CentroidMatchEnabled": true,
        "isZip4CentroidMatchEnabled": true,
        "overrideManuallyGeocodedRecords": true,
        "allowWeakParcelAndTractsMatch": true
    }
}

```

4.3.3 Community Development (COMD)

```

{
  "data": [
    {
      "Product": "L",
      "CDCCode": "2",
      "InvestType": "",
      "Hours": "16",
      "LoanAmount": "100",
      "Applnumb": "9987574",
      "Affiliate": "1",
      "Action": "1",
      "actionDate": "2024-02-01",
      "Qualified": "2",
      "Address": "110 LINDEN STREET",
      "City": "MASSAPEQUA",
      "State_Abrv": "NY",
      "Zip": "11758",
      "Zip4": ""
    }
  ],
  "attributes": {
    "geocodeSettings": {
      "aggressivenessMode": 0,
      "zipPercentageLevel": 0,
      "isZipPercentMatchEnabled": true,
      "isTractMatchEnabled": true,
      "isZipCentroidMatchEnabled": true,
      "isZip2CentroidMatchEnabled": true,
      "isZip4CentroidMatchEnabled": true,
      "overrideManuallyGeocodedRecords": true,
      "allowWeakParcelAndTractsMatch": true
    }
  }
}

```

4.4 Sample response

```
{
  "status": "1 record(s) inserted successfully into 61748",
  "validationErrors": {},
  "data": [
    {
      "RowId": "24"
    }
  ]
}
```

5.Geocoding

Below is the Geocoding API endpoint:

- POST: <https://www.wizenterprise.com/public-api/lardata/geocode>

The request body structure for the Geocoding API requires both **attributes** and **data** elements. The attributes section is for passing the geocoding settings and the data section is for the address information. The elements are not case sensitive and do not need to be specified in a particular order.

Note: The only required Attribute is **ActivityYear**. The other elements are considered geocoding settings and if they are not specified in the request, the settings will be retrieved from the user's geocoding settings that are configured in the UI under **Data preparation > Edit > Geocode**. If the user hasn't customized any settings in the UI, our recommended settings will be used.

5.1 Attributes descriptions

| Element | Description |
|--------------------|--|
| ActivityYear | <p>The year provided should match that of the Action Date of the application. This setting has implications for geographic and demographic data associated with the geocode.</p> <ul style="list-style-type: none">• Activity years 2012-2021 will utilize Census 2010 information to geocode the record.• Activity years 2022 and later will utilize Census 2020 information to geocode the record. <p>Note: We consume all changes implemented by the FFIEC for CRA & HMDA purposes.</p> |
| AggressivenessMode | <p>Specifies the level of geocoding strictness. The following levels of strictness are supported:</p> <ul style="list-style-type: none">• Lenient: Returns a match when the house number and side of the street match properly to the Geocoder's reference addresses.• Moderate: Returns a match only when the house number and street direction; or house number, side of the street and street type match properly to the Geocoder's reference addresses.• Strict: Returns a match only when the house number, side of the street, street type, street direction and Zip Code match properly to the Geocoder's reference addresses. <p>Possible values are:</p> <ul style="list-style-type: none">• 0 - Lenient• 1 - Moderate (Recommended)• 2 - Strict |

| | |
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| IsZipPercentMatchEnabled | <p>Determines if ZIP% matches will be returned or not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • True - ZIP% matches will be returned (Recommended) • False - ZIP% matches will not be returned |
| ZipPercentageLevel | <p>Specifies which type of Zip Percent fallback method is used. This fallback method allows you to match records to a Zip Code only if a specified percentage of that Zip Code falls within a single census tract. You can specify that 90%, 95%, or 99% of a Zip Code must fall within a single census tract to be matched to that tract.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 - If 90% of a Zip Code falls within a census tract, the address will match to that census tract • 1 - If 95% of a Zip Code falls within a census tract, the address will match to that census tract (Recommended) • 2 - 99% of a Zip Code falls within a census tract, the address will match to that census tract |
| IsTractMatchEnabled | <p>Determines if Tract Matches will be returned or not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • True - Tract matches will be returned (Recommended) • False - Tract matches will not be returned |
| IsZipCentroidMatchEnabled | <p>Determines if ZIP (5 digits) level matches will be returned or not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • True - ZIP level matches will be returned • False - ZIP level matches will not be returned (Recommended) |
| IsZip2CentroidMatchEnabled | <p>Determines if ZIP2 (7 digits) level matches will be returned or not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • True - ZIP2 level matches will be returned • False - ZIP2 level matches will not be returned (Recommended) |
| IsZip4CentroidMatchEnabled | <p>Determines if ZIP4 (9 digits) level matches will be returned or not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • True - ZIP4 level matches will be returned (Recommended) • False - ZIP4 level matches will not be returned |
| AllowWeakParcelAndTractsMatch | <p>Determines if the system will return weak parcel and weak tract matches. When the option is enabled, the geocoder will return a B1 parcel match when the gsLocationCode is returned as AP22, AP23,</p> |

| | |
|--|---|
| | <p>or AP24 (weak parcel matches) and a B8 tract match when the gsLocationcode is returned as ZB9A, ZB9B, ZB9C, ZT9A, ZT9B, ZT9C, ZB7A, ZB7B, ZB7C, ZT7A, ZT7B, or ZT7C (weak tract matches).</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • True - Weak Parcel and Tract Matches are allowed • False - Weak Parcel and Tract Matches are not allowed (Recommended) |
|--|---|

5.2 Data descriptions

| Element | Description |
|------------|--|
| Address | Street address. Must not exceed 100 characters in length. |
| City | City name. Must not exceed 35 characters in length. |
| State_abrv | State abbreviation. Must not exceed 2 characters in length. |
| Zip | ZIP code. Must not exceed 5 characters in length. |
| Zip4 | *Optional* ZIP4 code. Must not exceed 4 characters in length. |
| Income | <p>*Optional* The applicant's yearly income, in thousands, rounded to the nearest thousand. Examples: An income of \$52,500 would be submitted as 53, An income of \$52,499 would be submitted as 52. Leave blank or enter "NA" if the requirement to report gross annual income does not apply. Value must have no more than 12 digits before and 3 digits after the decimal point or be NA.</p> <p>Note: If Income isn't present or equals NA, the BorrowerIncomeCategory will always equal 5.</p> |

5.3 Response definitions

| Element | Description |
|------------------|--|
| TotalRecords | Number of records processed. |
| MatchedRecords | Number of records that returned a match. |
| UnmatchedRecords | Number of records that did not return a match. |
| Address | Address from the request. |
| City | City from the request. |
| State_Abrv | State abbreviation from the request. |
| Zip | Zip code from the request. |

| | |
|----------------|---|
| Zip4 | Zip4 code from the request (if provided). |
| Income | Applicant's annual income from the request (if provided). |
| State | The two-digit State code to which the address was matched. |
| MSA | The five-digit MSA code to which the address was matched. |
| County | The three-digit County code to which the address was matched. |
| CensusTrac | The Census Tract to which the address was matched. |
| MmwAddress | The standardized address the geocoder used to match the record. |
| MmwCity | The standardized city the geocoder used to match the record. |
| MmwState | The standardized state the geocoder used to match the record. |
| MmwZip | The standardized ZIP code the geocoder used to match the record. |
| MmwZip4 | The standardized ZIP4 code the geocoder used to match the record. |
| Latitude | The Latitude to which the address was matched. |
| Longitude | The Longitude to which the address was matched. |
| MmwStat | The match status code. Please refer to the Match Status definitions section for the definitions of these codes. |
| GsLocationCode | The location code which indicates the accuracy of the assigned geocode. Note: These codes are defined by our geocoding data provider. |
| BlockGrp | The Block Group to which the address was matched. |
| BlockCode | The Block Code to which the address was matched. |
| GsMatchCode | The match code which indicates the portions of the address that matched or did not match. |

| | |
|-----------------------------|--|
| | Note: These codes are defined by our geocoding data provider. |
| CountyName | The County Name to which the address was matched. |
| IsGeocodeMatched | Indicates whether the geocoder found a match or not. |
| MatchDescription | Description of the match returned by the geocoder. |
| Trct_incm_Catg | <p>Tract Income Category of the census tract based on the tract income level.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 1 = Low • 2 = Moderate • 3 = Middle • 4 = Upper • 5 = NA |
| County_5 | The 5-digit county code returned by the geocoder. |
| Tract_11 | The 11-digit census tract code returned by the geocoder. |
| Distressed_Underserved | <p>Indicates whether the census tract returned by the geocoder is considered distressed or underserved.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = False • 1 = True |
| CRA_Eligible | <p>Indicates whether the census tract returned by the geocoder is considered CRA Eligible or not. A record is considered CRA Eligible if the BorrowerIncomeCategory is 1 (Low) or 2 (Moderate), the Trct_Incm_Catg is 1 (Low) or 2 (Moderate), or Distressed_Underserved is 1 (True).</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 0 = Not CRA Eligible • 1 = CRA Eligible |
| Asian_Perc | Percent of Asian persons living in the census tract to which the address was matched. |
| Black_Perc | Percent of Black persons living in the census tract to which the address was matched. |
| Hispanic_Perc | Percent of Hispanic persons living in the census tract to which the address was matched. |
| MedianFamilyIncomeProjected | The FFIEC's Updated Median Family Income number for the census tract to which the address was |

| | |
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| | <p>matched.</p> <p>Note: This field is expected to be removed in a future release.</p> |
| MedianFamilyIncome | The US Census Bureau Median Family Income number for the census tract to which the address was matched. |
| MedianHouseholdIncome | The US Census Bureau Median Household Income for the census tract to which the address was matched. |
| HUDMedian | The MSA/Non-MSA HUD/FFIEC updated median income. |
| MsaMedian | The MSA/Non-MSA US Census Bureau median income. |
| MsaName | The MSA Name to which the address was matched. |
| FamiliesBelowPovertyLevel | Count of families below poverty level living in the census tract to which the address was matched. |
| LowIncomeFamilies | Count of low-income families per total families living in the census tract to which the address was matched. |
| ModerateIncomeFamilies | Count of moderate-income families per total families living in the census tract to which the address was matched. |
| MiddleIncomeFamilies | Count of middle-income families per total families living in the census tract to which the address was matched. |
| UpperIncomeFamilies | Count of upper-income families per total families living in the census tract to which the address was matched. |
| OwnerOccupiedIncome | Count of owner-occupied units in the census tract to which the address was matched. |
| OwnerOccupiedIncome14 | Count of 1-4 family units in the census tract to which the address was matched. |
| RentalOccupiedIncome | Count of rental-occupied units in the census tract to which the address was matched. |
| MinorityCount | Count of minority persons living in the census tract to which the address was matched. |
| PercentFamiliesBelowPovertyLevel | Percent of families below poverty level per total families living in the census tract to which the address was matched. |
| PercentLowIncomeFamilies | Percent of low-income families per total families living in the census tract to which the address was matched. |

| | |
|--------------------------------|---|
| PercentModerateIncomeFamilies | Percent of moderate-income families per total families living in the census tract to which the address was matched. |
| PercentMiddleIncomeFamilies | Percent of middle-income families per total families living in the census tract to which the address was matched. |
| PercentUpperIncomeFamilies | Percent of upper-income families per total families living in the census tract to which the address was matched. |
| PercentMinority | Percent of minority persons living in the census tract to which the address was matched. |
| FamiliesPercentTotalHouseholds | Percent of families per total households living in the census tract to which the address was matched. |
| TractIncomeLevel | Tract median family income as a percent of the MSA median family income. |
| BorrowerIncomeLevel | Applicant income as a percent of the MSA Median Income. |
| BorrowerIncomeCategory | Applicant Income Category based on the BorrowerIncomeLevel Possible values are: <ul style="list-style-type: none"> • 1 = Low • 2 = Moderate • 3 = Middle • 4 = Upper • 5 = NA |

5.4 Match Status definitions

| Code | Description |
|------|---|
| B1 | The address entered received a best match from parcel database. |
| B2 | The address entered received a best match from address database. |
| B3 | The address entered received an intersection match. |
| B5 | The address entered matched to an alternate name for the street. |
| B6 | The location of this address is known but has not been added to the parcel database. The address entered matched to a temporary placeholder from parcel database. |
| B7 | The location of this address is known but has not been added to the address database. The address entered matched to a temporary placeholder from address database. |

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| B8 | The street name entered is correct, but the street number is not listed within the list of available ranges for this street. Because the entire street is contained within a single census tract, the address entered was matched to that tract. |
| B9 | The street name entered is correct (to an alternate name), but the street number is not listed within the list of available ranges for this street. Because the entire street is contained within a single census tract, the address entered was matched to that tract. |
| 10 | The state abbreviation entered is incorrect. This address cannot be geocoded. |
| 11 | The city name entered does not exist in the state that you entered. This address cannot be geocoded. |
| 12 | The street address entered is incomplete or incorrectly formatted. This address cannot be geocoded. |
| 13 | You are not licensed to geocode in the state that you entered. Please review your license agreement to determine which geographies your institution is licensed for. |
| 14 | The street name entered does not exist in the city that you entered. This address cannot be geocoded. |
| 15 | The street name entered is correct, but the street number is not within the correct range for this street. This address cannot be geocoded. |
| 16 | There is more than one street segment with the given address number. This address cannot be geocoded |
| 17 | The address contains two valid streets that do not intersect. This address cannot be geocoded |
| 18 | The city name entered is not covered by Wolters Kluwer's databases |
| 99 | The record was Manually geocoded |
| Z4 | ZIP +4 Match |
| Z2 | Zip +2 Match |
| Z5 | ZIP Match |
| ZA | 99% of the ZIP Code is within a single Census Tract |
| ZB | 95% of the ZIP Code is within a single Census Tract |
| ZC | 90% of the ZIP Code is within a single Census Tract |

5.5 Sample request

```
{
  "Data": [
    {
      "Address": "1600 Pennsylvania Avenue NW",
      "City": "Washington",
      "STATE_ABRV": "DC",
      "Zip": "20500",
      "Income": "125"
    }, {
      "Address": "4 Jersey St",
      "City": "Boston",
      "STATE_ABRV": "MA",
      "Zip": "02215",
      "Zip4": "0"
    }
  ],
  "Attributes": {
    "ActivityYear": "2024",
    "AggressivenessMode": "1",
    "ZipPercentageLevel": "1",
    "IsZipPercentMatchEnabled": "true",
    "IsTractMatchEnabled": "true",
    "IsZipCentroidMatchEnabled": "false",
    "IsZip2CentroidMatchEnabled": "false",
    "IsZip4CentroidMatchEnabled": "true",
    "AllowWeakParcelAndTractsMatch": "false"
  }
}
```

5.6 Sample response

```
{
  "validationErrors": {},
  "data": [
    {
      "Address": "1600 Pennsylvania Avenue NW",
      "City": "Washington",
      "STATE_ABRV": "DC",
      "Zip": "20500",
      "Income": "125",
      "State": "11",
      "MSA": "47764",
      "County": "001",
      "CensusTrac": "9800.00",
      "MmwAddress": "",
      "mmwCity": "WASHINGTON",
      "mmwState": "DC",
      "mmwZip": "20500",
      "mmwZip4": "",
      "latitude": "38.895682",
      "longitude": "-77.036476",
      "mmwStat": "ZA",
      "gsLocationCode": "",
      "BlockGrp": "0",
      "BlockCode": "0",
      "gsMatchCode": "",
      "CountyName": "DISTRICT OF COLUMBIA",

```

```

"StreetNumber": "1600",
"StreetPreDirection": "",
"StreetName": "PENNSYLVANIA",
"StreetSuffix": "AVE",
"StreetPostDirection": "NW",
"PoBox": "",
"Route": "",
"BoxNumber": "",
"SuiteType": "",
"SuiteNumber": "",
"IsGeocodeMatched": "True",
"MatchDescription": "ZIP 99% match.",
"Trct_incm_Catg": "5",
"County_5": "11001",
"Tract_11": "11001980000",
"Distressed_Underserved": "0",
"CRA_Eligible": "0",
"Asian_Perc": "1.14",
"Black_Perc": "64.77",
"Hispanic_Perc": "2.84",
"MedianFamilyIncomeProjected": null,
"MedianFamilyIncome": "0",
"MedianHouseholdIncome": "0",
"HUDMedian": "106818",
"MsaMedian": "106818",
"MsaName": "Washington, DC-MD",
"FamiliesBelowPovertyLevel": "0",
"LowIncomeFamilies": "0",
"ModerateIncomeFamilies": "0",
"MiddleIncomeFamilies": "0",
"UpperIncomeFamilies": "3",
"OwnerOccupiedIncome": "0",
"OwnerOccupiedIncome14": "0",
"RentalOccupiedIncome": "3",
"RentalUnits": "3",
"MinorityCount": "130",
"PercentFamiliesBelowPovertyLevel": "0",
"PercentLowIncomeFamilies": "0",
"PercentModerateIncomeFamilies": "0",
"PercentMiddleIncomeFamilies": "0",
"PercentUpperIncomeFamilies": "100",
"PercentMinority": "73.86",
"FamiliesPercentTotalHouseholds": "100",
"TractIncomeLevel": "0",
"BorrowerIncomeLevel": "117.02",
"BorrowerIncomeCategory": "3"
},
{
  "Address": "4 Jersey St",
  "City": "Boston",
  "STATE_ABRV": "MA",
  "Zip": "02215",
  "Zip4": "0",
  "State": "25",
  "MSA": "14454",
  "County": "025",
  "CensusTrac": "0102.06",
  "MmwAddress": "4 JERSEY ST",

```

```

"mmwCity": "BOSTON",
"mmwState": "MA",
"mmwZip": "02215",
"mmwZip4": "4148",
"latitude": "42.346893",
"longitude": "-71.098494",
"mmwStat": "B1",
"gsLocationCode": "AP05",
"BlockGrp": "1",
"BlockCode": "0",
"gsMatchCode": "S80",
"CountyName": "SUFFOLK COUNTY",
"StreetNumber": "4",
"StreetPreDirection": "",
"StreetName": "JERSEY",
"StreetSuffix": "ST",
"StreetPostDirection": "",
"PoBox": "",
"RutalRoute": "",
"BoxNumber": "",
"SuiteType": "",
"SuitNumber": "",
"IsGeocodeMatched": "True",
"MatchDescription": "Parcel match.",
"Trct_incm_Catg": "5",
"County_5": "25025",
"Tract_11": "25025010206",
"Distressed_Underserved": "0",
"CRA_Eligible": "0",
"Asian_Perc": "34.77",
"Black_Perc": "2.32",
"Hispanic_Perc": "10.35",
"Income": "0",
"MedianFamilyIncomeProjected": null,
"MedianFamilyIncome": "0",
"MedianHouseholdIncome": "57331",
"HUDMedian": "112607",
"MsaMedian": "112607",
"MsaName": "Boston, MA",
"FamiliesBelowPovertyLevel": "23",
"LowIncomeFamilies": "155",
"ModerateIncomeFamilies": "6",
"MiddleIncomeFamilies": "19",
"UpperIncomeFamilies": "38",
"OwnerOccupiedIncome": "69",
"OwnerOccupiedIncome14": "31",
"RentalOccupiedIncome": "1078",
"RentalUnits": "1153",
"MinorityCount": "1114",
"PercentFamiliesBelowPovertyLevel": "10.55",
"PercentLowIncomeFamilies": "71.10",
"PercentModerateIncomeFamilies": "2.75",
"PercentMiddleIncomeFamilies": "8.72",
"PercentUpperIncomeFamilies": "17.43",
"PercentMinority": "51.72",
"FamiliesPercentTotalHouseholds": "19.01",
"TractIncomeLevel": "0",
"BorrowerIncomeLevel": "0",

```

```

    "BorrowerIncomeCategory": "5"
  }
]
}

```

6.Edit Check

Below are the Edit Check API endpoints:

- POST: <https://www.wizenterprise.com/public-api/lardata/editcheck>
- GET: <https://www.wizenterprise.com/public-api/lardata/editcheck/descriptions/{Lartype}/{ActivityYear}>

The request body structure for the Edit Check API requires both **attributes** and **data** elements. The attributes section is for passing the edit check settings and the data section is for the loan record data to validate against the CFPB's edit codes and descriptions. The elements are not case sensitive and do not need to be specified in a particular order.

Note: The edit check descriptions are optional to be returned as part of the POST editcheck API. The GET API can be called separately to return all the descriptions for a specified lar type and activity year.

6.1 Attributes descriptions

| | |
|------------------------|--|
| LarType | <p>The file type of the records to run the edit checks for.</p> <p>Use HMDF for Mortgage DF and SBDF for Small Business DF.</p> |
| ActivityYear | <p>The year provided should match that of the Action Date of the record(s) that are being checked for edits. This setting has implications for edits that are being returned.</p> <p>Note: We consume all changes implemented by the CFPB & FFIEC for CRA & HMDA purposes.</p> |
| EnableCalculateColumns | <p>Determines whether Calculated Columns should be executed or not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • True – Run Calculated Columns (Recommended) • False – Do not run Calculated Columns |
| IncludeLarColumns | <p>Determines whether the Lar Columns should be returned in the response or not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • True – Include Lar Columns in the response • False – Do not include Lar Columns in the response (Recommended) |

| | |
|---------------------|---|
| IncludeDescriptions | <p>Determines whether the Edit Check Descriptions should be included in the response or not.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • True – Include edit check descriptions in the response • False – Do not include edit check descriptions in the response (Recommended) <p>Note: The edit check descriptions can be retrieved using our separate GET API.</p> |
|---------------------|---|

6.2 Data descriptions

The data descriptions for the Edit Check API are consistent with the descriptions for the Insert\Update API. Below are links to those descriptions.

- [Small Business DF \(SBDF\)](#)
- [Mortgage DF \(HMDF\)](#)

6.3 Sample requests

6.3.1 Small Business DF

```
{
  "data": [
    {
      "LEI": "555533728abcdefghij",
      "UID": 1234567890123,
      "UIDSTATUS": "",
      "APP_METHOD": 1,
      "APP_RECIPIENT": 1,
      "AMOUNT_APPLIED_FOR_FLAG": 1,
      "AMOUNT_APPLIED_FOR": 1,
      "AMOUNT_APPROVED": "",
      "DENIAL_REASONS": 1,
      "DENIAL_REASONS_FF": 1,
      "CENSUS_TRACT_ADR_TYPE": 1,
      "NAICS_CODE_FLAG": 1,
      "NAICS_CODE": 446,
      "GROSS_ANNUAL_REVENUE_FLAG": 1,
      "GROSS_ANNUAL_REVENUE": 1,
      "NUMBER_OF_WORKERS": 1,
      "TIME_IN_BUSINESS_TYPE": 1,
      "TIME_IN_BUSINESS": 1,
      "BUSINESS_OWNERSHIP_STATUS": 1,
      "NUM_PRINCIPAL_OWNERS_FLAG": 1,
      "NUM_PRINCIPAL_OWNERS": 1,
    }
  ]
}
```

```
"PO_1_ETHNICITY": 1,
"PO_1_ETHNICITY_FF": 1,
"PO_1_RACE": 1,
"PO_1_RACE_ANAI_FF": 1,
"PO_1_RACE_ASIAN_FF": 1,
"PO_1_RACE_BAA_FF": 1,
"PO_1_RACE_PI_FF": 1,
"PO_1_GENDER_FLAG": 1,
"PO_1_GENDER": 1,
"PO_1_GENDER_FF": 1,
"PO_2_ETHNICITY": 1,
"PO_2_ETHNICITY_FF": 1,
"PO_2_RACE": 1,
"PO_2_RACE_ANAI_FF": 1,
"PO_2_RACE_ASIAN_FF": 1,
"PO_2_RACE_BAA_FF": 1,
"PO_2_RACE_PI_FF": 1,
"PO_2_GENDER_FLAG": 1,
"PO_2_GENDER": 1,
"PO_2_GENDER_FF": 1,
"PO_3_ETHNICITY": 1,
"PO_3_ETHNICITY_FF": 1,
"PO_3_RACE": 1,
"PO_3_RACE_ANAI_FF": 1,
"PO_3_RACE_ASIAN_FF": 1,
"PO_3_RACE_BAA_FF": 1,
"PO_3_RACE_PI_FF": 1,
"PO_3_GENDER_FLAG": 1,
"PO_3_GENDER": 1,
"PO_3_GENDER_FF": 1,
"PO_4_ETHNICITY": 1,
"PO_4_ETHNICITY_FF": 1,
"PO_4_RACE": 1,
"PO_4_RACE_ANAI_FF": 1,
"PO_4_RACE_ASIAN_FF": 1,
"PO_4_RACE_BAA_FF": 1,
"PO_4_RACE_PI_FF": 1,
"PO_4_GENDER_FLAG": 1,
"PO_4_GENDER": 1,
"PO_4_GENDER_FF": 1,
"CT_CREDIT_PRODUCT": 1,
"CT_CREDIT_PRODUCT_FF": 1,
"CT_GUARANTEE": 1,
"CT_GUARANTEE_FF": 1,
"CT_LOAN_TERM_FLAG": "" ,
"CT_LOAN_TERM": 900,
"CREDIT_PURPOSE": 1,
"CREDIT_PURPOSE_FF": 1,
```

```
"PRICING_INTEREST_RATE_TYPE": 1,
"PRICING_FIXED_RATE": 1,
"PRICING_INIT_RATE_PERIOD": 1,
"PRICING_ADJ_MARGIN": "",
"PRICING_ADJ_INDEX_VALUE": "",
"PRICING_ADJ_INDEX_NAME": "",
"PRICING_ADJ_INDEX_NAME_FF": "",
"PRICING_ORIGINATION_CHARGES": 1,
"PRICING_BROKER_FEES": 1,
"PRICING_INITIAL_CHARGES": 1,
"PRICING_MCA_ADDCOST_FLAG": 1,
"PRICING_MCA_ADDCOST": 1,
"PRICING_PREPENALTY_ALLOWED": 1,
"PRICING_PREPENALTY_EXISTS": 1,
"ROWID": 1,
"APPLNUMB": 1,
"APPLDATE": "10/3/2010",
"LOANAMOUNT": 4,
"ACTION": 1,
"ACTIONDATE": "6/1/2022",
"ADDRESS": "2778 Vineyards Dr. Apt 1022",
"CITY": "Atlanta",
"STATE_ABRV": "GA",
"ZIP": 30354,
"ZIP4": 1234,
"STATE": 15,
"MSA": "",
"COUNTY": 13,
"COUNTY_5": 15013,
"TRACT_11": 15013180103,
"CENSUSTRAC": 1801.03,
"INSTIT_ID": 1,
"SIZECATG": 1,
"IMPRT_STAT": 13,
"IMPRT_MSA": 12060,
"IMPRT_CNTY": 13,
"IMPRT_TRCT": 1801.03,
"IMPRT_CNTY_5": 13013,
"IMPRT_TRCT_11": 15015180103,
"MATURITY_DATE": "1/1/2015",
"REVCATG": 3,
"AFFILIATE": 1,
"SOURCE": 1,
"ASSESSMENT": "",
"PERCMINOR": "",
"TRCT_INCM_CATG": 5,
"PERCMEDIAN": "",
"MNRTY_TRCT": 6,
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"MMWADDRESS": "",
"MMWCITY": "",
"MMWSTATE": "",
"MMWZIP": "",
"MMWZIP4": "",
"STNDSTAT": "",
"GSMATCHCODE": "",
"GSLOCATIONCODE": "",
"GSMATCHRESULT": "",
"CONGDIST": "",
"LATITUDE": 33.753746,
"LONGITUDE": -84.38633,
"BLOCKGRP": "",
"GDTMCD": "",
"GDTPLACE": "",
"MMWSTAT": 99,
"RACEETH": "",
"QUALITYCHK": "",
"OFFICERNAME": "TestOfName",
"LOANPROG": 1,
"OWNERSHIPCT1": 1,
"OWNERSHIPCT2": 1,
"COLLATERAL": 1,
"CALCRACE": 99,
"CALCETHNICITY": 6,
"CALCGENDER": 7,
"FLGENDER": 7,
"MINORITY_STATUS": 2,
"LTIRATIO": "",
"ASSESSMENTNAME": "",
"ASIAN_PERC": "",
"BLACK_PERC": "",
"HISPANIC_PERC": "",
"SICCODE": 7231,
"TOTALASSETS": 1,
"TOTALLIABILITIES": 1,
"DEBTSERVICECOVERAGE": 1,
"CRA_ELIGIBLE": "",
"DISTRESSED_UNDESERVED": "",
"NOTERATE": 1,
"MAP_LABEL": "TestMapLabel"
}
],
"attributes": {
  "larType": "SBDF",
  "activityYear": 2024,
  "enableCalculateColumns": true,
  "includeLarColumns": false,

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```
    "includeDescriptions": true
  }
}
```

6.3.2 Mortgage DF (HMDF)

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{
  "data": [
    {
      "ISEXEMPT": "",
      "EDITCOUNT": 23,
      "LEI": "98379875871987814444",
      "RECORDID": 2,
      "ULI": "98379875871987814444193",
      "ULISTATUS": 2,
      "APPLNUMB": 1,
      "APPLDATE": "3/2/2015",
      "LOANTYPE": 2,
      "PURPOSE": 31,
      "PREAPPROVAL": 1,
      "CONSTRUCTIONMETHOD": 2,
      "OCCUPANCYTYPE": 1,
      "LOANAMOUNTINDOLLARS": 100000,
      "LOANAMOUNT": 100,
      "ACTION": 1,
      "ACTIONDATE": "3/3/2020",
      "ADDRESS": "6605 MEADOW PARK TERRACE",
      "CITY": "RICHMOND",
      "STATE_ABRV": "VA",
      "ZIP": 23225,
      "ZIP4": 1234,
      "STATE": 51,
      "MSA": 40060,
      "COUNTY": 41,
      "COUNTY_5": 51041,
      "TRACT_11": 51041100210,
      "CENSUSTRAC": 1002.1,
      "ETHNICITY": 4,
      "ETHNICITY_1": 4,
      "ETHNICITY_2": 12,
      "ETHNICITY_3": 12,
      "ETHNICITY_4": 12,
      "ETHNICITY_5": 12,
      "ETHNICITYOTHER": "TEXT",
      "NOCOAPPLICANT": false,
      "COA_ETHNICITY": 4,
      "COA_ETHNICITY_1": 4,
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    }
  ]
}
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"COA_ETHNICITY_4": 12,
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"RACE_5": 42,
"RACE1_OTHER": "Text1",
"RACE27_OTHER": "Text2",
"RACE44_OTHER": "Text3",
"COARACE": 4,
"COARACE_1": 4,
"COARACE_2": 4,
"COARACE_3": 4,
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"COARACE_5": 4,
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"COARACE27_OTHER": "Text5",
"COARACE44_OTHER": "Text6",
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"SEX": 4,
"COASEX": 1,
"SEX_DETERMINANT": 1,
"COASEX_DETERMINANT": 1,
"AGE": 31,
"COA_AGE": 1,
"INCOME": 345678,
"PURCHASER": 2,
"RATE_SPREAD": 7.71,
"HOEPA_STATUS": 1,
"LIEN_STATUS": 2,
"CREDITSCORE": 123,
"COA_CREDITSCORE": 8888,
"CREDITMODEL": 4,
"CREDITMODELOTHER": "Text",
"COA_CREDITMODEL": 9,
"COA_CREDITMODELOTHER": "Test",
"DENIAL1": 6,
"DENIAL2": 4,
"DENIAL3": 5,
"DENIAL4": 5,
"DENIALOTHER": "Text",
"TOTALLOANCOSTS": 2399,
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"TOTALPTSANDFEES": 1000,
"ORIGFEES": 3201,
"DISCOUNTPTS": 3999,
"LENDERCREDITS": 2399,
"INTERESTRATE": "6.700000000000000",
"PPPTERM": 24,
"DTIRATIO": 50,
"CLTV": 23,
"LOAN_TERM_MONTHS": 240,
"LOAN_TERM": 20,
"INTRORATEPERIOD": 24,
"BALLOONPMT": 2,
"IOPMT": 1,
"NEGAM": 2,
"NONAMORTZ": 1,
"PROPERTYVALUE": 680000,
"MHSECPROPTYPE": 1,
"MHLANDPROPINT": 4,
"TOTALUNITS": 5,
"MFAHU": 5,
"APPMETHOD": 3,
"PAYABLEINST": 3,
"NMLSRID": 798951,
"AUSYSTEM1": 1,
"AUSYSTEM2": 1,
"AUSYSTEM3": 1,
"AUSYSTEM4": 1,
"AUSYSTEM5": 1,
"AUSYSTEMOTHER": "Text",
"AUSRESULT1": 3,
"AUSRESULT2": 3,
"AUSRESULT3": 3,
"AUSRESULT4": 3,
"AUSRESULT5": 3,
"AUSRESULTOTHER": "Text",
"REVMTG": 2,
"OPENLOC": 2,
"BUSCML": 2,
"APR": 11,
"APOR": 3.29,
"APOR_DATE": "12/30/2019",
"RATE_SPREAD_INPUT": false,
"RAW_RATE_SPREAD": 7.71,
"RATEYPE": 1,
"RATE_LOCK_DATE": "1/1/2020",
"VAR_TERM": 2,
"INSTIT_ID": 1,
"AGENCYCODE": 1,
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"IMPRT_STAT": 51,
"IMPRT_MSA": 40060,
"IMPRT_CNTY": 41,
"IMPRT_TRCT": 1002.1,
"IMPRT_CNTY_5": 51041,
"IMPRT_TRCT_11": 51041100210,
"MATURITY_DATE": "10/1/2015",
"T_RATE_USED": "",
"COMDEVELOP": 1,
"SOURCE": "Test123",
"ASSESSMENT": "",
"RECUPD": "",
"LARTYPE": "",
"PERCMINOR": 70.8872,
"TRCT_INCM_CATG": 3,
"PERCMEDIAN": 99.1137,
"MNRTY_TRCT": 4,
"APPL_INCM_PERC": 316845.1,
"APPL_INCM_CATG": 4,
"MMWADDRESS": "6605 MEADOW PARK TER",
"MMWCITY": "NORTH CHESTERFIELD",
"MMWSTATE": "VA",
"MMWZIP": 23225,
"MMWZIP4": 7453,
"STNDSTAT": "SA0",
"GSMATCHCODE": "SA0",
"GSLOCATIONCODE": "AP05",
"GSMATCHRESULT": 0,
"CONGDIST": "",
"LATITUDE": 37.481077,
"LONGITUDE": -77.518012,
"BLOCKGRP": 1,
"GDTMCD": 0,
"GDTPLACE": 0,
"MMWSTAT": "B1",
"RACEETH": "",
"COARACEETH": "",
"QUALITYCHK": "",
"OFFICERNAME": "TestOfName",
"LASTNAME": "TestLastName",
"FIRSTNAME": "TestFirstName",
"CLASTNAME": "TestCLastName",
"CFIRSTNAME": "TestCFirstName",
"BEACON": 1,
"FAIR_ISAAC": 1,
"CUST_CREDT": 1,
"LOANPROG": 1,
"BRANCHNUMB": 1,
```

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"FERATIO": 1,
"BERATIO": 1,
"LTV": 1,
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"CALCGENDER": 4,
"FLGENDER": 1,
"CALCAGE": 3,
"CALCMARITAL_STATUS": 3,
"MINORITY_STATUS": 2,
"MARITAL_STATUS": 1,
"COMARITAL_STATUS": 1,
"LTIRATIO": 0,
"ASSESSMENTNAME": "",
"ASIAN_PERC": 4.19,
"BLACK_PERC": 34.06,
"HISPANIC_PERC": 26.48,
"CRA_ELIGIBLE": 0,
"DISTRESSED_UNDESERVED": 0,
"AFFILIATE": 1,
"GENDERIZED": "",
"ETHNICITYPROXY": "",
"COAETHNICITYPROXY": "",
"NOTERATE": 1,
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"COARACEPROXY": "",
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"RBISGAPIPCT": "",
"CORBISGAPIPCT": "",
"RBISGBLACKORAAPCT": "",
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"RBISGWHITEPCT": "",
"CORBISGWHITEPCT": "",
"RBISGHISPANICPCT": "",
"CORBISGHISPANICPCT": "",
"RBISGTWOORMOREPCT": "",
"CORBISGTWOORMOREPCT": "",
"MAP_LABEL": "TestMap_Label"
}
],
"attributes": {
  "larType": "HMDF",
  "activityYear": 2024,
  "enableCalculateColumns": true,

```

```

    "includeLarColumns":false,
    "includeDescriptions":false
  }
}

```

6.4 Sample responses

6.4.1 Small Business DF (SBDF)

```

{
  "validationErrors": {},
  "data": [
    {
      "EditStatus":
"E0001,E0160,E0240,E0321,E0460,E0580,E0700,E0740,E0860,E2000,E2001,E2004,E2005,E2007,E2008,E2011,E2012,E2016,E2017,E2018,E2021,E2022,E2023,E2024,E2025,E2026,E2028,E2040,E2041,E2042,E2043,E2060,E2061,E2062,E2063,E2080,E2081,E2082,E2083,E2100,E2101,E2102,E2103,E2120,E2121,E2122,E2123,E2140,E2141,E2142,E2143,W0003,W0762,W2010,W2036",
      "editStatusDescriptions": {
        "E0001": "Unique identifier must be at least 21 characters in length and at most 45 characters in length.",
        "E0160": "Loan term: NA/NP flag must equal 900, 988, or 999.",
        "E0240": "Amount applied For: NA/NP flag must equal 900, 988, or 999.",
        "E0321": "The date indicated by action taken date must occur within the current reporting period: October 1, 2024 to December 31, 2024.",
        "E0460": "Adjustable rate transaction: index name must equal 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 977, or 999.",
        "E0580": "MCA/sales-based: additional cost for merchant cash advances or other sales-based financing: NA flag must equal 900 or 999.",
        "E0700": "Gross annual revenue: NP flag must equal 900 or 988.",
        "E0740": "North American Industry Classification System (NAICS) code: NP flag must equal 900 or 988.",
        "E0860": "Number of principal owners: NP flag must equal 900 or 988.",
        "E2000": "When credit product does not equal 977 (other), free-form text field for other credit products must be blank.\r\nWhen credit product equals 977, free-form text field for other credit products must not be blank.",
        "E2001": "When type of guarantee does not contain 977 (other), free-form text field for other guarantee must be blank.\r\nWhen type of guarantee contains 977, free-form text field for other guarantee must not be blank.",
        "E2004": "When loan term: NA/NP flag does not equal 900 (applicable and reported), loan term must be blank.\r\nWhen loan term: NA/NP flag equals 900, loan term must not be blank.",
        "E2005": "When credit purpose does not contain 977 (other), free-form text field for other credit purpose must be blank.\r\nWhen credit purpose contains 977, free-form text field for other credit purpose must not be blank.",
        "E2007": "When amount applied for: NA/NP flag does not equal 900 (applicable and reported), amount applied for must be blank.\r\nWhen amount applied for: NA/NP flag equals 900, amount applied for must not be blank.",

```

"E2008": "When action taken does not equal 1 (originated) or 2 (approved but not accepted), amount approved or originated must be blank.\r\nWhen action taken equals 1 or 2, amount approved or originated must not be blank.",

"E2011": "When action taken equals 3 (denied), denial reason(s) must not contain 999 (not applicable).\r\nWhen action taken does not equal 3, denial reason(s) must equal 999.",

"E2012": "When denial reason(s) does not contain 977 (other), field free-form text field for other denial reason(s) must be blank.\r\nWhen denial reason(s) contains 977, free-form text field for other denial reason(s) must not be blank.",

"E2016": "When interest rate type does not equal 3 (initial rate period > 12 months, adjustable interest), 4 (initial rate period > 12 months, fixed interest), 5 (initial rate period <= 12 months, adjustable interest), or 6 (initial rate period <= 12 months, fixed interest), initial rate period must be blank.\r\nWhen interest rate type equals 3, 4, 5, or 6, initial rate period must not be blank",

"E2017": "When interest rate type does not equal 2 (fixed interest rate, no initial rate period), 4 (initial rate period > 12 months, fixed interest rate), or 6 (initial rate period <= 12 months, fixed interest rate), fixed rate: interest rate must be blank.\r\nWhen interest rate type equals 2, 4, or 6, fixed rate: interest rate must not be blank.",

"E2018": "When interest rate type does not equal 1 (adjustable interest rate, no initial rate period), 3 (initial rate period > 12 months, adjustable interest rate), or 5 (initial rate period <= 12 months, adjustable interest rate), adjustable rate transaction: margin must be blank.\r\nWhen interest rate type equals 1, 3, or 5, adjustable rate transaction: margin must not be blank.",

"E2021": "When interest rate type does not equal 1 (adjustable interest rate, no initial rate period), or 3 (initial rate period > 12 months, adjustable interest rate), adjustable rate transaction: index value must be blank.\r\nWhen interest rate type equals 1 or 3, adjustable rate transaction: index value must not be blank.",

"E2022": "When credit product does not equal 7 (merchant cash advance), 8 (other sales-based financing transaction) or 977 (other), MCA/sales-based: additional cost for merchant cash advances or other sales-based financing: NA flag must be 999 (not applicable).",

"E2023": "When MCA/sales-based: additional cost for merchant cash advances or other sales-based financing: NA flag does not equal 900 (applicable), MCA/sales-based: additional cost for merchant cash advances or other sales-based financing must be blank.\r\nWhen MCA/sales-based: additional cost for merchant cash advances or other sales-based financing: NA flag equals 900, 'MCA/sales-based: additional cost for merchant cash advances or other sales-based financing' must not be blank.",

"E2024": "When census tract: type of address equals 988 (not provided by applicant and otherwise undetermined), census tract: tract number must be blank.\r\nWhen census tract: type of address equals 1 (address or location where the loan proceeds will principally be applied), 2 (address or location of borrower's main office or headquarters), or 3 (another address or location associated with the applicant), census tract: tract number must not be blank.",

"E2025": "When gross annual revenue: NP flag does not equal 900 (reported), gross annual revenue must be blank.\r\nWhen gross annual revenue: NP flag equals 900, gross annual revenue must not be blank.",

"E2026": "When North American Industry Classification System (NAICS) code: NP flag does not equal 900 (reported), North American Industry Classification System (NAICS) code must be blank.\r\nWhen North American Industry Classification System (NAICS) code: NP flag equals 900, North American Industry Classification System (NAICS) code must not be blank.",

"E2028": "When number of principal owners: NP flag does not equal 900 (reported), number of principal owners must be blank.\r\nWhen number of principal owners: NP flag equals 900, number of principal owners must not be blank.",

"E2040": "When ethnicity of principal owner 1 does not contain 977 (the applicant responded in the free-form text field), ethnicity of principal owner 1: free-form text field for other Hispanic or Latino must be blank. \r\nWhen ethnicity of principal owner 1 contains 977, ethnicity of principal owner 1: free-form text field for other Hispanic or Latino must not be blank.",

"E2041": "When ethnicity of principal owner 2 does not contain 977 (the applicant responded in the free-form text field), ethnicity of principal owner 2: free-form text field for other Hispanic or Latino must be blank. \r\nWhen ethnicity of principal owner 2 contains 977, ethnicity of principal owner 2: free-form text field for other Hispanic or Latino must not be blank.",

"E2042": "When ethnicity of principal owner 3 does not contain 977 (the applicant responded in the free-form text field), ethnicity of principal owner 3: free-form text field for other Hispanic or Latino must be blank. \r\nWhen ethnicity of principal owner 3 contains 977, ethnicity of principal owner 3: free-form text field for other Hispanic or Latino must not be blank.",

"E2043": "When ethnicity of principal owner 4 does not contain 977 (the applicant responded in the free-form text field), ethnicity of principal owner 4: free-form text field for other Hispanic or Latino must be blank. \r\nWhen ethnicity of principal owner 4 contains 977, ethnicity of principal owner 4: free-form text field for other Hispanic or Latino must not be blank.",

"E2060": "When race of principal owner 1 does not contain 971 (the applicant responded in the free-form text field for American Indian or Alaska Native Enrolled or Principal Tribe), race of principal owner 1: free-form text field for American Indian or Alaska Native Enrolled or Principal Tribe must be blank. \r\nWhen race of principal owner 1 contains 971, race of principal owner 1: free-form text field for American Indian or Alaska Native Enrolled or Principal Tribe must not be blank.",

"E2061": "When race of principal owner 2 does not contain 971 (the applicant responded in the free-form text field for American Indian or Alaska Native Enrolled or Principal Tribe), race of principal owner 2: free-form text field for American Indian or Alaska Native Enrolled or Principal Tribe must be blank. \r\nWhen race of principal owner 2 contains 971, race of principal owner 2: free-form text field for American Indian or Alaska Native Enrolled or Principal Tribe must not be blank.",

"E2062": "When race of principal owner 3 does not contain 971 (the applicant responded in the free-form text field for American Indian or Alaska Native Enrolled or Principal Tribe), race of principal owner 3: free-form text field for American Indian or Alaska Native Enrolled or Principal Tribe must be blank. \r\nWhen race of principal owner 3 contains 971, race of principal owner 3: free-form text field for American Indian or Alaska Native Enrolled or Principal Tribe must not be blank.",

"E2063": "When race of principal owner 4 does not contain 971 (the applicant responded in the free-form text field for American Indian or Alaska Native

Enrolled or Principal Tribe), race of principal owner 4: free-form text field for American Indian or Alaska Native Enrolled or Principal Tribe must be blank. \r\nWhen race of principal owner 4 contains 971, race of principal owner 4: free-form text field for American Indian or Alaska Native Enrolled or Principal Tribe must not be blank.",

"E2080": "When race of principal owner 1 does not contain 972 (the applicant responded in the free-form text field for other Asian race), race of principal owner 1: free-form text field for other Asian must be blank. \r\nWhen race of principal owner 1 contains 972, race of principal owner 1: free-form text field for other Asian must not be blank.",

"E2081": "When race of principal owner 2 does not contain 972 (the applicant responded in the free-form text field for other Asian race), race of principal owner 2: free-form text field for other Asian must be blank. \r\nWhen race of principal owner 2 contains 972, race of principal owner 2: free-form text field for other Asian must not be blank.",

"E2082": "When race of principal owner 3 does not contain 972 (the applicant responded in the free-form text field for other Asian race), race of principal owner 3: free-form text field for other Asian must be blank. \r\nWhen race of principal owner 3 contains 972, race of principal owner 3: free-form text field for other Asian must not be blank.",

"E2083": "When race of principal owner 4 does not contain 972 (the applicant responded in the free-form text field for other Asian race), race of principal owner 4: free-form text field for other Asian must be blank. \r\nWhen race of principal owner 4 contains 972, race of principal owner 4: free-form text field for other Asian must not be blank.",

"E2100": "When race of principal owner 1 does not contain 973 (the applicant responded in the free-form text field for other Black or African race), race of principal owner 1: free-form text field for other Black or African American must be blank. \r\nWhen race of principal owner 1 contains 973, race of principal owner 1: free-form text field for other Black or African American must not be blank.",

"E2101": "When race of principal owner 2 does not contain 973 (the applicant responded in the free-form text field for other Black or African race), race of principal owner 2: free-form text field for other Black or African American must be blank. \r\nWhen race of principal owner 2 contains 973, race of principal owner 2: free-form text field for other Black or African American must not be blank.",

"E2102": "When race of principal owner 3 does not contain 973 (the applicant responded in the free-form text field for other Black or African race), race of principal owner 3: free-form text field for other Black or African American must be blank. \r\nWhen race of principal owner 3 contains 973, race of principal owner 3: free-form text field for other Black or African American must not be blank.",

"E2103": "When race of principal owner 4 does not contain 973 (the applicant responded in the free-form text field for other Black or African race), race of principal owner 4: free-form text field for other Black or African American must be blank. \r\nWhen race of principal owner 4 contains 973, race of principal owner 4: free-form text field for other Black or African American must not be blank.",

"E2120": "When race of principal owner 1 does not contain 974 (the applicant responded in the free-form text field for other Pacific Islander race), race of principal owner 1: free-form text field for other Pacific Islander race must be

```

blank. \r\nWhen race of principal owner 1 contains 974, Race of Principal Owner 1: Free-
form Text Field for Other Pacific Islander race must not be blank.",
    "E2121": "When race of principal owner 2 does not contain 974 (the
applicant responded in the free-form text field for other Pacific Islander race), race of
principal owner 2: free-form text field for other Pacific Islander race must be
blank. \r\nWhen race of principal owner 2 contains 974, Race of Principal Owner 2: Free-
form Text Field for Other Pacific Islander race must not be blank.",
    "E2122": "When race of principal owner 3 does not contain 974 (the
applicant responded in the free-form text field for other Pacific Islander race), race of
principal owner 3: free-form text field for other Pacific Islander race must be
blank. \r\nWhen race of principal owner 3 contains 974, Race of Principal Owner 3: Free-
form Text Field for Other Pacific Islander race must not be blank.",
    "E2123": "When race of principal owner 4 does not contain 974 (the
applicant responded in the free-form text field for other Pacific Islander race), race of
principal owner 4: free-form text field for other Pacific Islander race must be
blank. \r\nWhen race of principal owner 4 contains 974, Race of Principal Owner 4: Free-
form Text Field for Other Pacific Islander race must not be blank.",
    "E2140": "When sex/gender of principal owner 1: NP flag does not equal 1
(the applicant responded in the free-form text field), sex/gender of principal owner 1:
free-form text field for self-identified sex/gender must be blank. \r\nWhen sex/gender
of principal owner 1: NP flag equals 1, sex/gender of principal owner 1: free-form text
field for self-identified sex/gender must not be blank.",
    "E2141": "When sex/gender of principal owner 2: NP flag does not equal 1
(the applicant responded in the free-form text field), sex/gender of principal owner 2:
free-form text field for self-identified sex/gender must be blank. \r\nWhen sex/gender
of principal owner 2: NP flag equals 1, sex/gender of principal owner 2: free-form text
field for self-identified sex/gender must not be blank.",
    "E2142": "When sex/gender of principal owner 3: NP flag does not equal 1
(the applicant responded in the free-form text field), sex/gender of principal owner 3:
free-form text field for self-identified sex/gender must be blank. \r\nWhen sex/gender
of principal owner 3: NP flag equals 1, sex/gender of principal owner 3: free-form text
field for self-identified sex/gender must not be blank.",
    "E2143": "When sex/gender of principal owner 4: NP flag does not equal 1
(the applicant responded in the free-form text field), sex/gender of principal owner 4:
free-form text field for self-identified sex/gender must be blank. \r\nWhen sex/gender
of principal owner 4: NP flag equals 1, sex/gender of principal owner 4: free-form text
field for self-identified sex/gender must not be blank.",
    "W0003": "The first 20 characters of the unique identifier should match
the Legal Entity Identifier (LEI) for the financial institution.",
    "W0762": "When present, North American Industry Classification System
(NAICS) code should be a valid NAICS code.",
    "W2010": "The date indicated by application date should generally be less
than two years (730 days) before action taken date.",
    "W2036": "When number of principal owners equals 1, ethnicity of
principal owner 1, race of principal owner 1, and sex/gender of principal owner 1: NP
flag should not be blank.\r\nDemographic fields for principal owners 2, 3, and 4 should
be blank."
}

```

```
    }  
  ]  
}
```

6.4.2 Mortgage DF (HMDF)

```
{  
  "validationErrors": {},  
  "data": [  
    {  
      "EditStatus":  
"V612,V614,V619,V625,V626,V627,V628,V629,V630,V631,V633,V634,V635,V636,V638,V641,V643,V64  
5,V654,V662,V667,V669,V670,V671,V672,V673,V679,V689,V690,V693,V694,V702,V703,V716,V720,Q6  
01,Q606,Q614,Q615,Q630,Q631,Q649"  
    }  
  ]  
}
```

7. Rate Spread

Below is the Rate Spread API endpoint:

- POST: <https://www.wizenterprise.com/public-api/lardata/ratespread>

The request body structure for the Rate Spread API requires only **data** elements. These data elements are the input fields needed to calculate Rate Spread. The elements are not case sensitive and do not need to be specified in a particular order.

If the data required to calculate Rate Spread is correctly provided in the request, the API will return a Rate Spread value for each of the records included in the request. If the API is not able to calculate a Rate Spread, "NC" will be returned which stands for Not Calculated.

Note: If the specified ActionDate is <=12/31/2017 the Rate Spread calculator will return NA if the difference between the APR and the APOR (Average prime offer rate) is less than 1.5 percentage points for a first-lien loan and less than 3.5 percentage points for a subordinate-lien loan.

7.1 Data descriptions

| Element | Description |
|---------|-------------|
|---------|-------------|

| | |
|----------------|--|
| Action | Action Taken. Possible values are 1,2,3,4,5,6,7,8: 1 - Originated 2 - Approved not Accepted 3 - Application Denied 4 - Application withdrawn by applicant 5 - File closed for incompleteness 6 - Purchased Loan 7 - Preapproval Request Denied 8 - Preapproval request approved but not accepted Note: Rate Spread will be calculated as NA if Action<>1,2, or 8 and ActionDate>=01/01/2018. |
| RateType | Amortization Type. Possible values are 1 or 2. 1 - Fixed Rate 2 - Variable Rate |
| Loan_Term | Loan Term. Use to specify the term for fixed rate loans. Note: The loan term is expected to be reflected in months. |
| Var_Term | Variable Term. Use to specify the term for fixed rate loans. Note: The variable term is expected to be reflected in months. |
| Rate_Lock_Date | Rate Set Date. All date formats are supported. |
| ActionDate | Action Taken date. All date formats are supported. |
| BUSCML | *Optional* Business or Commercial Purpose. Possible values are 1 or 2. |

| | |
|-------------|--|
| | 1 - Primarily for business/commercial purpose 2 - Not primarily for business/commercial purpose Note: If BUSCML=1 Rate Spread will calculate as NA. |
| REVMTG | *Optional* Reverse Mortgage. Possible values are 1 or 2. 1 - Reserve mortgage 2 - Not a reverse mortgage Note: If REVMTG=1 Rate Spread will calculate as NA. |
| Lien_Status | *Optional* Lien Status. Possible values are 1 or 2. 1 - Secured by a First Lien 2 - Secured by a Subordinate Lien Note: Lien Status is only required if the ActionDate<=12/31/2017. |

7.2 Response definitions

| Element | Description |
|-------------|---|
| Rate_Spread | Calculated Rate Spread. |
| APOR | Average Prime Offer Rate used to calculate the Rate Spread. |
| APOR_Date | Date the Average Prime Offer Rate was used from. |

7.3 Sample request

```
{
  "Data": [
    {
      "ActionDate": "04/02/2023",
      "Action": "1",
      "loan_Term": "12",
      "Rate_lock_date": "04/01/2023",
      "APR": "8.22",
      "RateType": "1"
    }
  ]
}
```

7.4 Sample response

```
{
  "validationErrors": {},
  "data": [
    {
      "ActionDate": "4/2/2023 12:00:00 AM",
```

```
    "Action": "1",
    "Loan_Term": "12",
    "Rate_lock_date": "4/1/2023 12:00:00 AM",
    "APR": "8.22",
    "RateType": "1",
    "APOR": "5.52",
    "APOR_Date": "3/27/2023 12:00:00 AM",
    "Rate_Spread": "2.7"
  }
]
}
```

8. Get LAR

Below are the Get LAR API endpoints:

- GET: <https://www.wizenterprise.com/public-api/lars/{LarType}>
- GET: <https://www.wizenterprise.com/public-api/lars/{LarType}/{ActivityYear}>

These APIs can be called to retrieve the list of available files for either a specific LAR type or both a LAR type and activity year.

8.1 LAR Type codes

Below are the different file types with their associated LAR type codes:

- **HMDA:** HMZ4
- **HMDA DF:** HMDF
- **Small Business DF:** SBDF
- **Small Business and Farm:** BUSI
- **Consumer:** CONS
- **Branch and ATM:** BATM
- **Community Development:** COMD
- **Other:** OTHR

8.2 Sample Response

```
{
  "larFiles": [
    {
      "larId": 60298,
      "title": "Piggy Bank Consumer",
      "activityYear": 2024
    }
  ]
}
```

9. Get Record

Below is the Get Record API endpoint:

- GET: <https://www.wizenterprise.com/public-api/lars/{LarID}/rows/{RowID}>

This API can be called to retrieve the loan information for the specified file and record.

9.1 Sample response

```
{
  "data": [
    {
      "RowId": "1",
      "po_3_gender_ff": null,
      "time_in_business_type": "988",
      "po_3_ethnicity": "977",
      "po_1_gender": null,
      "po_4_ethnicity_ff": "4 Ethnicity Free Form!",
      "MmwAddress": null,
      "po_1_gender_ff": null,
      "app_method": null,
      "County": null,
      "po_2_ethnicity": "1;11;12;13;14;2",
      "BlockGrp": null,
      "amount_approved": "450010.99",
      "CRA_Eligible": null,
      "UIDStatus": null,
      "AssessmentName": null,
      "LEI": null,
      "po_3_gender": null,
      "po_4_race_anai_ff": "4 AIAN Free Form!",
      "LTIRatio": null,
      "po_4_race_baa_ff": null,
      "po_4_ethnicity": "2;977",
      "time_in_business": null,
      "denial_reasons_ff": null,
      "census_tract_adr_type": "988",
      "po_4_gender": null,
      "Mnrty_trct": "6",
      "StdStat": null,
      "PercMinor": null,
      "po_4_race_asian_ff": null,
      "po_3_gender_flag": "988",
      "amount_applied_for_flag": "900",
      "Minority_Status": "3",
      "po_2_gender_ff": null,
      "actionDate": "9/14/2023 12:00:00 AM",
    }
  ]
}
```

```
"naics_code": null,
"ct_credit_product": null,
"pricing_prepenalty_allowed": "1 ",
"po_2_race": "42;971;972;973",
"Tract_11": null,
"po_3_race_anai_ff": "3 AIAN Free Form!",
"Zip": "60950",
"po_2_gender_flag": "988",
"po_3_ethnicity_ff": "3 Ethnicity Free Form!",
"po_2_race_pi_ff": null,
"pricing_prepenalty_exists": "2 ",
"Action": "1",
"pricing_initial_charges": null,
"RevCatg": "3",
"mmwZip": null,
"ct_credit_product_ff": null,
"po_2_ethnicity_ff": null,
"po_1_race": "41;971;972;973;974",
"po_1_gender_flag": "988",
"Applnumb": null,
"Trct_incm_Catg": "5",
"gsMatchCode": "Z",
"gross_annual_revenue_flag": "988",
"po_1_race_asian_ff": "1 Asian Free Form!",
"business_ownership_status": "988",
"po_1_ethnicity": "977",
"po_3_race_pi_ff": "3 PI Free Form!",
"ApplDate": "9/14/2023 12:00:00 AM",
"po_2_race_baa_ff": "10 BAA Free Form!",
"po_4_race_pi_ff": null,
"Asian_Perc": null,
"gross_annual_revenue": null,
"County_5": null,
"CongDist": null,
"pricing_broker_fees": "0",
"latitude": null,
"PercMedian": null,
"denial_reasons": "999",
"credit_purpose_ff": null,
"ct_guarantee": "999",
"ct_guarantee_ff": null,
"num_principal_owners": "4",
"MSA": null,
"pricing_origination_charges": "0",
"po_1_ethnicity_ff": "1 Ethnicity Free Form!",
"mmwCity": null,
"naics_code_flag": "988",
"Distressed_Underserved": null,
```

```
"pricing_init_rate_period": null,
"CalcGender": "7",
"gdtPlace": null,
"EditStatus": null,
"ct_loan_term": "133",
"mmwZip4": null,
"gsMatchResult": "0",
"mmwState": null,
"pricing_interest_rate_type": "1 ",
"po_1_race_baa_ff": "1 BAA Free Form!",
"amount_applied_for": "450010",
"po_2_race_anai_ff": null,
"number_of_workers": "988",
"SizeCatg": "3",
"Qualitychk": null,
"po_3_race_baa_ff": null,
"CensusTrac": null,
"pricing_fixed_rate": null,
"Zip4": null,
"pricing_mca_addcost": null,
"RaceEth": null,
"po_1_race_anai_ff": "1 AIAN Free Form!",
"CalcEthnicity": "6",
"Black_Perc": null,
"pricing_adj_index_value": null,
"FLGender": "7",
"po_2_race_asian_ff": "2 Asian Free Form!",
"pricing_adj_index_name": "977",
"Assessment": null,
"po_3_race": "4;971;972;974",
"State": null,
"credit_purpose": "2",
"Affiliate": null,
"ct_loan_term_flag": "900",
"pricing_adj_margin": null,
"gdtMCD": null,
"longitude": null,
"CalcRace": "99",
"Map_Label": null,
"pricing_mca_addcost_flag": null,
"LoanAmount": "450.01",
"CalcTimeinbusiness": null,
"mmwStat": "14",
"po_4_gender_ff": null,
"City": "Manteno",
"Address": "725 - 727 N LOCUST",
"po_4_race": "37;971",
"pricing_adj_index_name_ff": "Swap_yr_2",
```

```
    "STATE_ABRV": "IL",
    "po_3_race_asian_ff": "3 Asian Free Form!",
    "num_principal_owners_flag": "900",
    "po_4_gender_flag": "988",
    "Hispanic_Perc": null,
    "gsLocationCode": "ZC5X",
    "po_2_gender": null,
    "app_recipient": "1",
    "UID": "ThisIsTheLEI12345678ZCYRZEICHQCURK2XLAF27DTV",
    "po_1_race_pi_ff": "988"
  }
]
}
```

10. Create LAR

Below is the Create LAR API endpoint:

- POST: <https://www.wizenterprise.com/public-api/lars/>

This API can be called to create a new file in the system. Custom columns can be specified in the request which allows partners to create custom file structures to insert their records to.

10.1 Data descriptions

| Element | Description |
|--------------------|---|
| ActivityYear | The year specified should match that of the Action dates of the records that will be inserted to the file. |
| LarType | The file type. Please see the LAR Type codes section for a complete list of available file types. |
| Title | The name of the file. Note: If the specified file name already exists in the system the new file will be created with (001) at the end. |
| UserDefinedColumns | Optional section that can be used to create custom fields in the new file. <ul style="list-style-type: none">• ColumnName specifies the name of the custom column.• ColumnType specifies the type of the custom column. Available types are Text, Number, Boolean, and Date.• Size specifies the size of the custom column. Note: Size may not exceed 500 characters for Text fields or 38 characters for Number fields.• Precision should be specified for Number columns and reflects the precision of the custom column. |

10.2 Response definitions

| Element | Description |
|--------------|---|
| LarID | ID of the new file. |
| ActivityYear | Activity Year of the new file. |
| LarType | File type. Please see the LAR Type codes section for a complete list of available file types. |
| LarFileName | File name of the new file. |

10.3 Sample request

```
{
  "activityYear": 2024,
  "larType": "HMDF",
  "title": "HMDF_2024_Customcolumns1",
  "userDefinedColumns": [
    {
      "columnName": "Custom_number",
      "columnType": "Number",
      "size": 8,
      "precision": 3
    },
    {
      "columnName": "Custom_1",
      "columnType": "Text",
      "size": 500
    },
    {
      "columnName": "Custom_2",
      "columnType": "Boolean",
      "size": 2
    },
    {
      "columnName": "Custom_3",
      "columnType": "Date"
    },
    {
      "columnName": "Custom_4",
      "columnType": "Date",
      "size": 10
    },
    {
      "columnName": "Custom_5",
      "columnType": "Text",
      "size": 100
    }
  ]
}
```

10.4 Sample response

```
{
  "larId": 71804,
  "activityYear": 2024,
  "larType": "HMDF",
  "larFileName": "HMDF_2024_Customcolumns1"
}
```

11. Testing

It is recommended to utilize our Client Test (CT) environment for testing purposes.

The API endpoints for the CT environment are as follows:

- Authorization:
 - POST: <https://ct.wizenterprise.com/public-api/authenticate>
- Insert\update:
 - POST: <https://ct.wizenterprise.com/public-api/lars/{LarID}>
 - PUT: <https://ct.wizenterprise.com/public-api/lars/{LarID}>
- Geocoding:
 - POST: <https://ct.wizenterprise.com/public-api/lardata/ratespread>
- Edit Check:
 - POST: <https://ct.wizenterprise.com/public-api/lardata/editcheck>
 - GET: <https://ct.wizenterprise.com/public-api/lardata/editcheck/descriptions/{LarType}/{ActivityYear}>
- Rate Spread:
 - POST: <https://ct.wizenterprise.com/public-api/lardata/ratespread>
- Get LAR:
 - GET: <https://ct.wizenterprise.com/public-api/lars/{LarType}>
 - GET: <https://ct.wizenterprise.com/public-api/lars/{LarType}/{ActivityYear}>
- Get Record:
 - GET: <https://ct.wizenterprise.com/public-api/lars/{LarID}/rows/{RowID}>
- Create LAR:
 - POST: <https://ct.wizenterprise.com/public-api/lars/>

Note: If you have not been provisioned with access to our CT environment and would like to have access to please contact the Wiz SaaS Product Management team at WizSaaSProductTeam@wolterskluwer.com and someone on the team can assist.

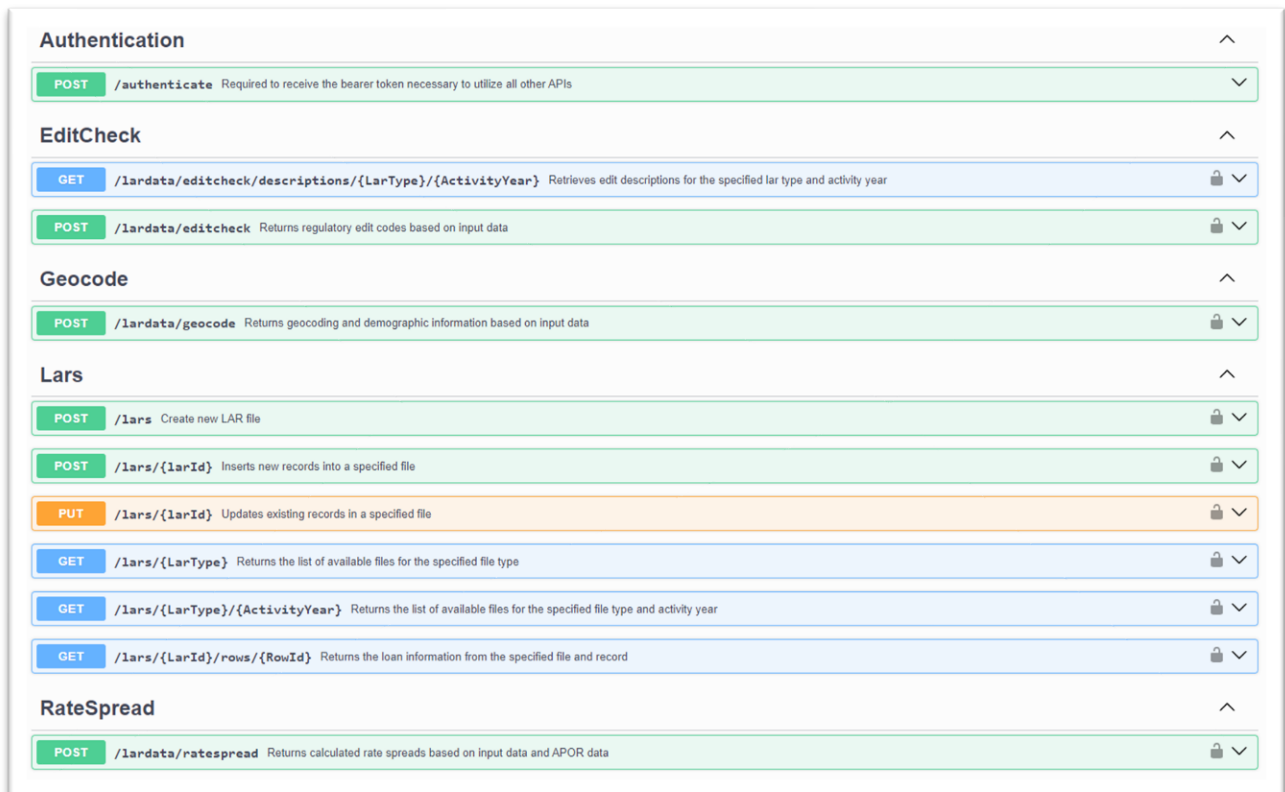
For additional information on accessing the CT environment and reporting issues please refer to the following document: [Wiz SaaS Suite Client Test Procedures.pdf](#).

12. Swagger

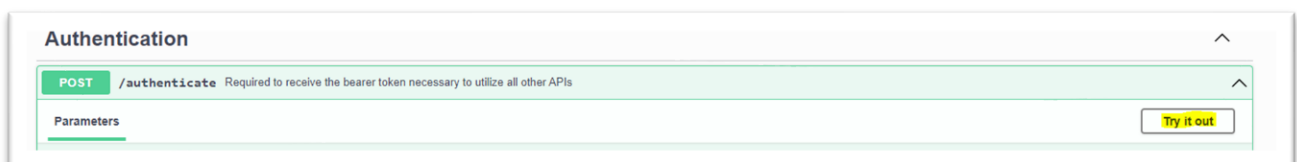
A swagger site is available and we encourage our clients and integration partners to use it for testing purposes.

The swagger site is accessible at the below URL:

<https://www.wizenterprise.com/public-api/swagger/>



After accessing the Swagger URL, users can **authenticate** by expanding the Authentication API and clicking on the **Try it out** button:



After clicking Try it out, proceed with inputting a valid username and password then click on **Execute**:

13. Response codes

Below are the possible response codes for the APIs:

- 200 – Success
- 300 - Redirect
- 400 – Bad Request
- 401 – Unauthorized
- 404 – Not Found
- 500 – Server Error

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