



TE Connect PPE Integration Guide

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TE Pricing Engine Authentication Configuration

1. Navigate to **Organization Admin → Pricing Engine Authentication**.
2. In the Pricing Engine drop-down list, select **TE Connect**.

Pricing Engine Authentication

Pricing Engine

TE Connect

Save

3. Enter the appropriate information in the **PPE Endpoint** and **PPE API Token** fields.



Pricing Engine Authentication

Save

Pricing Engine

TE Connect

PPE Endpoint *

Please input PPE Endpoint

PPE API Token *

Please input PPE API Token

Eye icon

- Click the **Save** button in the upper-right corner of the page.

Once this is saved, any PPE requests initiated in a TE Connect–enabled marketing asset or a from TE contact record will be sent via a JSON `POST` to the configured endpoint, with the API token value passed in the header of the request as an `api-token` key/value pair.

TE Pricing Engine Defaults Configuration

1. Navigate to **Organization Admin → Pricing Engine Defaults**.
2. In the drop-down list in the upper-right corner of the page, select **Pricing Engine: TE Connect**.

Pricing Engine Defaults

Pricing Engine: TE Connect Save

Marketing Contacts

Custom Loan Products

Users can create custom loan products:

You must have at least one default loan product to change this setting.

Yes No

Desired Price Default Desired Price Minimum Desired Price Maximum

100	- +	100	- +	100	- +
-----	-----	-----	-----	-----	-----

Note: these settings only apply when users are creating custom loan products.

Default Borrower Information

Set default borrower information for pricing engine searches and select whether or not users can edit default values during rate flyer searches.

Field	Value	Editable?

Default Loan Products

Configure default loan products that will be available to users when creating rate flyers.

Add Default Loan Product

Conforming 10 Year Fixed	Edit	Delete
Conforming 10/1 ARM	Edit	Delete
Conforming 15 Year Fixed	Edit	Delete
Conforming 30 Year Fixed	Edit	Delete
Conforming 5/1 ARM	Edit	Delete
Conforming 7/1 ARM	Edit	Delete
FHA 10 Year Fixed	Edit	Delete

More

3. With this option selected, you have the same options as you do for all PPE experiences, for both Marketing (rate flyers) and Contact (rate quotes) initiation.
4. Configure the various sections according to the information below and click the **Save** button in the upper-right corner of the page.



Custom Loan Products

No configuration is necessary in this section. These options have no effect on the request sent to the PPE; they are used for the Total Expert UI only.

Default Borrower Information

No configuration is necessary in this section. These options have no effect on the request sent to the PPE; they are used for the Total Expert UI only.

Default Loan Products

Default loan products added here primarily drive the default options to the Total Expert user. The specific field options are the only available values to request from the PPE.

Custom fields configured in each individual default loan product are passed to the PPE, nested under the individual request that uses the default loan product.

The screenshot shows the 'Default Loan Products' configuration page. It includes sections for 'Default Loan Products' (with '30 Year Fixed' and '30 Year FHA' options), 'Custom Fields' (with fields for 'test3', 'test4', 'test5', 'test6', and 'test1'), and 'Rate Flyers' (with 'Desired Price Default' set to 99.75, 'Desired Price Minimum' set to 95, and 'Desired Price Maximum' set to 105). The 'Custom Fields' section is highlighted with a red box.

Custom Fields

Custom fields configured in this section are passed to the PPE in the top-level `custom` node of the request to the PPE.



Pricing Engine Defaults

Custom Loan Products for Rate Flyers
Users can create custom loan products:
You must have at least one default loan product to change this setting.
 Yes No

Desired Price Default	Desired Price Minimum	Desired Price Maximum
99.75	95	105

Note: these settings only apply when users are creating custom loan products.

Default Borrower Information for Rate Flyers
Set default borrower information for pricing engine searches and select whether or not users can edit default values during Rate Flyer searches.

Field	Value	Editable?
Debt-to-Income Ratio	32	<input checked="" type="checkbox"/>
FICO Score	738	<input checked="" type="checkbox"/>

Default Loan Products
Configure default loan products that will be available to users during pricing engine searches.

Add Default Loan Product

30 Year Fixed	Edit	Delete
30 Year FHA	Edit	Delete

Custom Fields
Use custom fields to pass additional information to your pricing engine.

test3	Text Input	<input checked="" type="checkbox"/> Delete
test4	User - External ID	<input checked="" type="checkbox"/> Delete
test5	User - Location ID	<input checked="" type="checkbox"/> Delete

Add Custom Field

Lead Source

The lead source value configured here is passed to the PPE in the top-level `lead_source` field of the request to the PPE.

Pricing Engine Defaults

Field	Value	Editable?
Debt-to-Income Ratio	32	<input checked="" type="checkbox"/>
FICO Score	738	<input checked="" type="checkbox"/>
First Time Home Buyer	No	<input checked="" type="checkbox"/>
Months Reserves	12	<input checked="" type="checkbox"/>
Waive Escrows	No	<input checked="" type="checkbox"/>
Self Employed	No	<input checked="" type="checkbox"/>
Desired Lock Period	30 Days	<input checked="" type="checkbox"/>

Lead Source for All Loan Products
This will be sent to Optimal Blue when a pricing call is made for a loan product.

Lead Source

Organization Setting (TE Admin Only)

To ensure that requests from a contact record are sent to the configured TE Connect PPE, configure the organization setting `rate_quote_default_ppe` to the value **TE Connect**:



Expert Bank											rate_quote			
Actions	Name	Group	Value	Applied Value Type	Access	Encryption Enabled	Created At	Created By	Updated At	Last Updated By				
	rate_quote_default_ppe	General	TE Connect	Custom			1/14/2026 6:01:26 AM A day ago	System	1/15/2026 8:11:06 AM 6 hours ago	Mike Russell				

Get Pricing as TE User

Marketing Material

As a Total Expert user enabled for TE Connect, you can create a rate-enabled flyer to populate offers from your PPE:

1. Navigate to **Print Marketing** → **Create New**.
2. Select a TE Connect-enabled flyer:

The screenshot shows the TotalExpert software interface. On the left, there is a sidebar with various menu items: Dashboard, Leads & Contacts, Co-Marketing Partners, Loans, Activity Stream, Tasks, Campaigns, Journeys, Lead Capture Apps, Print Marketing (which is expanded and has 'Create New' selected), Saved, Orders, Image Library, Web Marketing, and Email Marketing. The main content area shows a list of flyers. One flyer is selected, and a context menu is open over it, with the 'Actions' dropdown highlighted. The menu options are 'Select', 'Edit Tags', and 'Sample PDF'. The flyer title is 'TEC CoBranded Rate Flyer - MLS'.

3. Select a co-marketing partner in the **Co-marketing Partner Profile** drop-down list.
4. Search for and select a listing (if enabled for the flyer).
5. Click the **Search Loan Products** button.



TotalExpert

Search all contacts + grid ? user Super Admin

TEC CoBranded Rate Flyer - MLS

Step 1: Select Media Options

Co-marketing Partner Profile
Select a Profile

User Profile
Super Admin Pririgo

Step 2: Search for a Listing to Market

Search By MLS # Search

Select State* For MLS Search
Nebraska

Search By Location
68521 Search

Listing Status
Active

Search By Agent Name Search

Step 3: Pricing Options

Search Loan Products

Choose a Listing

SW Corner NW 56th & W Fletcher Street, Lincoln, NE 68521 ACTIVE

Listing Source: MLS
List Agent:
Brokerage: Woods Bros Realty
MLS#22316190 | 0 bed|0 bath|0 sqft

Select

TBD 1st Street & Alvo Road, Lincoln, NE 68521 ACTIVE

Listing Source: MLS
List Agent:
Brokerage: Nebraska Realty
MLS#22324070 | 0 bed|0 bath|0 sqft

Select

1900 W Alvo Road, Lincoln, NE 68521 ACTIVE

Listing Source: MLS
List Agent:
Brokerage: Nebraska Realty
MLS#22320132 | 0 bed|0 bath|0 sqft

Select

1900 W Alvo Road, Lincoln, NE 68521 ACTIVE

Listing Source: MLS
List Agent:
Brokerage: Nebraska Realty
MLS#22415265 | 0 bed|0 bath|0 sqft

Select

6. Complete the Create Quote form including:

- Loan
 - Default product or custom product (if configured)
 - Price, loan amount, AUS, and so on.
- Borrower
 - DTI, FICO, and so on
- Property
 - Type, use, and location

Note

Much of this will be populated from your PPE defaults or MLS listing.

- Click the **Search Rates** button.



Create Quote

Loan Search rates for up to 4 loan products

Loan Product 1: 30 Year Fixed		<input type="button" value="Delete"/>	<input type="button" value="Save"/>
30 Year Fixed			
Property Price *	Appraised Price *		
\$ 795,000	\$ 795,000		
Down Payment *	Loan Amount *	LTV	
\$ 159,000	20 %	\$ 636,000	80 %
Loan Type *	Amortization Type *		
Conforming	Fixed		
Loan Term *	Desired Price *		
30 years	100		
Marketing Materials Name *			
30 Year Fixed			
Show Fewer Options			
Interest Only?	Automated Underwriting System		
<input type="radio"/> No	<input type="radio"/> Yes	<input type="button" value="DU"/>	
Product Type			
<input type="button" value="Please Select"/>			

[Add a Loan Product](#)

Borrower

Debt-to-Income Ratio *	FICO Score *
32	738
Months Reserves *	Desired Lock Period *
12	30 Days
First Time Home Buyer?	Waive Escrows?
<input checked="" type="radio"/> No	<input type="radio"/> Yes
<input type="radio"/> No	<input checked="" type="radio"/> Yes
Self Employed?	
<input type="radio"/> No	<input checked="" type="radio"/> Yes

Property

Property Type *	Property Use *
Single Family	Primary Residence
Number of Stories *	Taxes
1	\$ 4,751
Number of Units *	
1	
Street Address	City
7021 Stonebrook Parkway	Lincoln
State	Zip Code *
NE	68521
County	
Lancaster	

Make this my default search for this template

7. Select the preferred offer (or offers if you configured more than 1 loan product) returned from the PPE.
8. Click the **Confirm and Create Flyer** button.

Create Quote

1 Select Loan Product 1

	Product Name	Rate	Price	APR	P&I	MI	Total Payment	Closing Cost	Amortization Term	Amortization Type	AR Inc
<input checked="" type="radio"/>	30 Year Fixed	5.125%	100.123	5.250%	\$2000	0	\$2077.04	0	360	Fixed	SO
<input type="radio"/>	30 Year Fixed	5.250%	100.234	5.375%	\$3000	0	\$3067.04	0	345	Fixed	LIE

Investor Wells Fargo Date 5.125% Price 100.123 APR 5.250% Total Payment \$2077.04

< 1 >



9. Review your marketing asset and make any final changes, or go back to search for other loan scenarios.
10. Complete the process of creating the flyer as you would with any other print piece, including any required approvals.

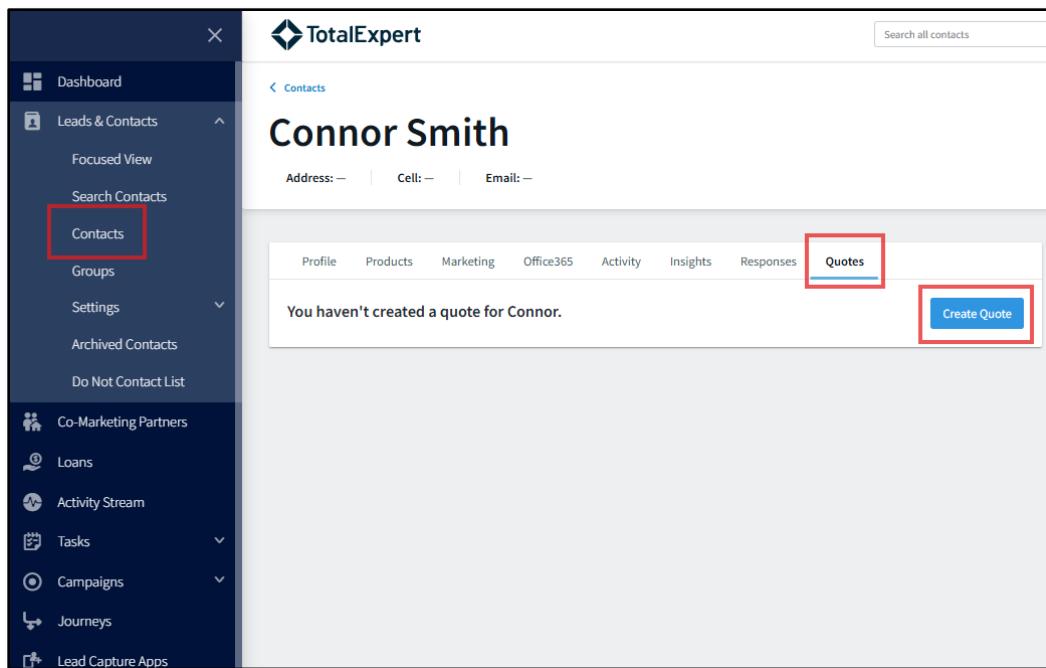
Contact

Note

This section includes brief instructions. For more complete details, see [Rate Quotes on Contact Records](#).

As a Total Expert user enabled for TE Connect, you can create a rate quote for a specific contact from their contact populated by offers from your PPE:

1. Navigate to **Leads & Contacts → Contacts**.
2. Click the name the contact record you want to create a quote for. This opens the contact details page.
3. Click the **Quotes** tab.
4. Click the **Create Quote** button.



5. Complete the Create Quote form including:
 - a. Loan
 - i. Loan purpose (contact only)
 - ii. Loan to compare with (contact and refinance only)
 - iii. Default product or custom product (if configured)
 - iv. Price, loan amount, AUS, and so on.
 - b. Borrower
 - i. DTI, FICO, and so on
 - c. Property
 - i. Type, use, and location

**Note**

Additional input fields are available here compared to the similar form for marketing material.

d. Click the **Search Rates** button.

6. Select the offer returned from the PPE.
 7. Click the **Save Quote** button.
 8. Review and email the quote to your contact, or go back to search for other loan scenarios.



Pricing Request

When you submit a PPE request, either from a marketing template or from a contact record, the following things occur:

- POST: {{endpoint configured in Pricing Engine Authentication}}
 - Header: `api-token`: {{value configured in Pricing Engine Authentication}}
- Request Body:
 - JSON required, see block below
 - * indicates that the value is always sent
 - ^ indicates that the value is conditional
 - `request.loan` with a single loan request

```
{  
    "org_context": {  
        "name": "Expert Bank", //TE Org Name, *  
        "org_id": "622", //TE Org ID, *  
        "ppe_service_url": "https://apim.workato.com/teconnect/example-ppe-v1/example-ppe" //Configured  
        TE Connect URL in Pricing Auth Settings, *  
    },  
    "user_context": {  
        "username": "super.admin@prgo-example.com", //Requesting user TE username, *  
        "external_id": "1234", //Requesting user TE external ID, ^: sent if configured  
        "email": "super.admin@prgo-example.com", //Requesting user TE email address, *  
        "id": "22419214" //Requesting user TE ID, *  
    },  
    "invocation_context": {  
        "type": "Marketing Material", //Marketing Material, Contact - indicative of where the PPE  
        request was invoked in TE, *  
        "contact_id": "339444304", //TE Contact ID if request invoked from Contact, ^: sent if request  
        type is Contact  
        "loan_to_compare_id": "", //TE Loan ID if request invoked from Contact and a 'loan to compare'  
        selected, ^: sent if request is contact, purpose is refinance and if loan to compare selected.  
        "asset_id": "676994" //Marketing Material asset ID if invoked from a print flyer, *  
    },  
    "custom": [ //Array of custom field names and values configured in top level Pricing Engine Defaults  
    Config, ^: sent if configured  
    {  
        "name": "test3",  
        "value": "test5"  
    }  
],  
    "lead_source": "1234", //Lead Source value configured in the Pricing Engine Defaults Config, ^: sent  
    if configured  
    "request": {  
        "property": {  
            "value": 795000, //Property value figure entered in the Create Quote interface, *  
            "type": "SingleFamily", //Potential Enums: SingleFamily, Condo, ManufacturedDoubleWide,  
            Condotel, Modular, PUD, Timesharer, ManufacturedSingleWide, Coop, NonWarrantableCondo, Townhouse,  
            DetachedCondo; *  
            "use": "PrimaryResidence", //Potential Enums: PrimaryResidence, SecondHome,  
            InvestmentProperty; *  
            "stories": 1, //Stories of the property financed, *  
            "taxes annual": 4751, //Annual taxes value of the property financed, ^sent if provided  
            "units": 1, //Units of the property financed, *  
            "insurance annual": 1400, //Annual insurance of the property financed, ^ sent if provided  
            "state": "NE", //Two letter acronym of state location of property financed, *  
            "zip_code": "68521", //Zip code of location of property financed  
            "county": "Lancaster", //County location of property financed, *  
            "fips": "31109", //FIPS code location of property financed, *  
            "new_construction": true, //Boolean, if property financed is new construction, ^: sent only  
            for Contact request types  
            "unique_property": true //Boolean, if property financed is a unique property, ^: sent only  
            for Contact request types  
        },  
        "loan": {  
    }
```



```
        "request_id": "d7831ccb-d4e2-456b-ae90-3338c634669d", //Unique identifier of the request, use in response to correlate request/response in TE UI, *
        "loan_purpose": "Purchase", //Potential Enums: Purchase, Refinance; *: refinance only available for Contact request types
        "refinance": {
            "purpose": "CashoutRefinance", //Potential Enums: CashoutRefinance, RateAndTermRefinance, InterestRateReductionRefinance, StreamlineRefinance; Only passed if loan_purpose=Refinance; ^: only sent if Contact request type and if loan_purpose is refinance
            "amount_of_cash_out": 30000 //Cashout value figure entered in the Create Quote interface, ^: only sent if Contact request type, if loan_purpose is refinance, refinance.purpose is CashoutRefinance and if provided.
        },
        "downpayment_value": 159000, //Downpayment value figure entered in the Create Quote interface, *
        "loan_amount": 636000, //Loan amount value figure entered in the Create Quote interface, *
        "loan_type": "Conforming", //Potential Enums: Conforming, NonConforming, FHA, VA, USDA, Rural, Housing; *
        "amortization_type": "Fixed", //Potential Enums: Fixed, ARM; *
        "arm_fixed_term": 0, //ARM fixed term in months (1, 3, 6, 12, etc), ^: only sent if amortization type is ARM
        "loan_term": 360, //Loan term in months (120, 360, etc), *
        "desired_price": 99.75, //Desired price of offer entered in Create Quote interface, *
        "interest_only": false, //Boolean, if offer should be interest only, *
        "automated_underwriting_system": "NotSpecified", //Potential Enums: DU, LP, NotSpecified, InvestorAUS, ManualTraditional; *
        "exempt_from_va_funding_fee": false, //Boolean, if offer should be exempt from VA funding fee, *
        "heloc_drawn_amount": 15000, //Desired HELOC draw amount entered in Create Quote interface, *
        "borrower_paid_mi": true, //Boolean, if offer has borrower paid mortgage insurance, *
        "prepay_penalty": "2", //Potential Enums: None, 1, 2, 3, 4, 5; Example, 1 equals a 1 year prepayment penalty; ^: only sent for Contact request types
        "debt_consolidation": true, //Boolean, if cashout reason is debt consolidation, ^: only sent for Contact request types
        "lien_position": "First", //Potential Enums: First, Second; *
        "second_lien_amout": 30000, //Second lien amount entered in Create Quote interface; ^: only sent for Contact request types
        "custom": [ //Array of custom field names and values configured in Default Loan Product in Pricing Engine Defaults Config, ^: sent if configured
            {
                "name": "test1",
                "value": "test2"
            }
        ]
    },
    "borrower": {
        "debt_to_income_ratio": 32, //DTI value entered in the Create Quote interface, *
        "fico_score": 738, //FICO value entered in the Create Quote interface, *
        "months_reserves": 12, //Months reserved value entered in the Create Quote interface, *
        "desired_lock_period": 30, //Desired lock period entered in the Create Quote Interface, *
        "first_time_home_buyer": false, //Boolean, if first time home buyer, *
        "waive_escrows": false, //Boolean, if escrows are waived, *
        "self_employed": false, //Boolean, if borrower is self employed, *
        "va_first_time_use": true, //Boolean, if borrower is first time VA borrower, ^: only sent for Contact request types.
        "income_verification_type": "PersonalBankStmt1Mo", //Potential Enums: FullDoc, PersonalBankStmt1Mo, PersonalBankStmt6Mos, PersonalBankStmt12Mos, PersonalBankStmt18Mos, PersonalBankStmt24Mos, BusinessBankStmt1Mo, BusinessBankStmt6Mos, BusinessBankStmt12Mos, BusinessBankStmt18Mos, BusinessBankStmt24Mos, OneYearAltDoc, AssetRelated, InvestorDscr, RestrictedStock, InvestorNoRatio, PersonalBankStmt3Mos, BusinessBankStmt3Mos, TwoYearAltDoc, WrittenVOE, Stated, OneYear1099, TwoYear1099, PLOneYear, PLTwoYear, NoIncomeVerification; ^: only sent for Contact request types.
        "time_since": {
            "bankruptcy": 0, //Months since bankruptcy: 0, 12, 24, 36, 48, 60, 72; Greater than 5 Years option in Create Quote interface passed as 72; ^: only sent for Contact request types.
            "foreclosure": 0 //Months since foreclosure: 0, 12, 24, 36, 48, 60, 72; Greater than 5 Years option in Create Quote interface passed as 72; ^: only sent for Contact request types.
        },
        "housing_event": {
            "type": "None", //Potential Enums: None, Modification, DeedInLieu, Foreclosure, ShortSale, Forbearance; ^: only sent for Contact request types.
            "seasoning": "NotApplicable" //Potential Enums: NotApplicable, Last1To12Months, Last13To24Months, Last25To36Months, Last37To48Months, Last49to60Months, MoreThanFiveYearsAgo; ^: only sent for Contact request types.
        },
    }
}
```



```
        "mortgage_lates": {
            "greater_than_30days_12months": 0, //Count of lates figure entered in Create Quote
            interface; ^: only sent for Contact request types.
            "greater_than_60days_12months": 0, //Count of lates figure entered in Create Quote
            interface; ^: only sent for Contact request types.
            "greater_than_90days_12months": 0, //Count of lates figure entered in Create Quote
            interface; ^: only sent for Contact request types.
            "greater_than_120days_12months": 0, //Count of lates figure entered in Create Quote
            interface; ^: only sent for Contact request types.
            "greater_than_30days_24months": 0, //Count of lates figure entered in Create Quote
            interface; ^: only sent for Contact request types.
            "greater_than_60days_24months": 0, //Count of lates figure entered in Create Quote
            interface; ^: only sent for Contact request types.
            "greater_than_90days_24months": 0, //Count of lates figure entered in Create Quote
            interface; ^: only sent for Contact request types.
            "greater_than_120days_24months": 0, //Count of lates figure entered in Create Quote
            interface; ^: only sent for Contact request types.
            "citizenship": "NonPermResidentAlien", //Potential Enums: USCitizen, PermResidentAlien,
            USCitizenAbroad, ForeignNational, NonPermResidentAlien;
            ^: only sent for Contact request types.
            "debt_service_coverage_ratio": 30 //DSCR value entered into the Create Quote interface,
            ^: only sent if Contact request type, if income_verification_type is InvestorDscr
        }
    }
}
```

When the request is received, the endpoint recipient translates TE data inputs to their corresponding PPE fields as closely as they can or applies defaults that apply for all requests.

If any offers are returned, the endpoint recipient translates their results to TE's anticipated response payload:

- JSON required
- Response code for Success: 201 or 200
- Results are stored in an array, with corresponding `request_id` echo to apply to the TE loan product request
- Required response values are marked with * below
 - `Request_id`
 - `Rate`
 - `Price`
 - `APR`
 - `Monthly Principal and Interest`
 - `Total Loan Amount`
 - `Total Monthly Payment`

```
{
    "results": [
        {
            "request_id": "da611ac2-bd7b-4101-8777-7fadd9c227c8", //Echo of correlating request
            identifier, *
            "product name": "30 Year Fixed", //Product name of offer
            "rate": "5.250", //Rate of offer, *
            "price": "100.234", //Price of offer, *
            "net price": "100.345", //Net price of offer
            "apr": "5.375", //APR of offer, *
            "monthly_principal_and_interest": "3000.00", //Monthly principal and interest of offer, *
            "monthly_mi": "67.04", //Monthly mortgage insurance premium of offer
            "total_monthly_payment": "3067.04", //Total monthly payment of offer, *
            "closing_cost": "2000.00", //Total closing costs of offer, including upfront government fees
            "amortization_term": "345", //Amortization term of offer
            "amortization_type": "ARM", //Amortization type of offer
            "arm_index": "LIBOR", //ARM index of offer
            "arm_margin": "2.6", //ARM margin of offer
        }
    ]
}
```



```
        "discount": "150.02", //Discount dollar value of offer (points)
        "rebate": "225.02", //Rebate dollar value of offer
        "price_status": "Available", //Current investor status of offer
        "last_update": "2025-12-19 16:24:27", //Date and time of last updated offers of investor
        "investor": "US Bank", //Investor of offer
        "total_loan_amount": "636000.00" //Total loan amount of offer (including financed govie
fees, etc, *
    }
]
}
```

Other response codes include:

- 300 – success, but ineligible
 - There might be no offers for 1 loan product, but offers for others.

```
{
  "results": [
    {
      "request_id": "", //echo of correlating request identifier
      "message": "No product found"
    }
  ]
}
```

- 400 – Authentication failure

```
{
  "error": "Unauthorized",
  "error_description": "The access token provided is invalid"
}
```

- 500 – System Error