

# CO-OP LOCATOR API

## DOCUMENTATION

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# Contents

- Overview ..... 3**
  - Recommendations ..... 3
  - Endpoints ..... 4
  - Headers ..... 4
  - URL Parameters ..... 4
  - Response ..... 5
  - Error Response ..... 6
- International Search ..... 7**
  - Endpoints ..... 7
  - Headers ..... 7
  - URL Parameters ..... 7
  - Response ..... 7
  - Error Response ..... 9
  - Valid Country Codes ..... 9
- State Search ..... 10**
  - Endpoints ..... 10
  - Headers ..... 10
  - URL Parameters ..... 10
  - Response ..... 11
  - Error Response ..... 12
  - Valid State Codes ..... 13



### Overview

CO-OP's Locator API lets credit unions add locator services to their branded mobile applications, home banking systems, and public websites. The API is built using the latest JSON structure and allows credit unions to search by a variety of search terms to get a list of ATM or CO-OP Shared Branch locations near the search terms.

Shared Branch locations can be in branch in the teller line or self-service Shared Branch Express machines. When displaying Shared Branch locations on your locator, it is important to separate these two types of locations. Member confusion over the services provided at a location should be avoided. Shared Branch Express locations are easily identifiable using two parameters:

- **locatortype** or **loctype** - Optional - S = Shared Branch
- **selfserviceavailable** or **selfservice** - Yes

Testing your code implementation often occurs using the production environment, and most credit unions perform all of their testing in production. CO-OP does provide a test environment should your credit union require one. Unique test API keys are required for the test environment and can be requested via email at [admin@coop.org](mailto:admin@coop.org)

**Note:** Registration of an API key is required to use the Locator API. You can register at <http://www.co-opfs.org/public/webservices.cfm>. All requests for the Locator API data will be rejected if you do not provide a valid API key. International search requires a separate API key and can be requested via email using [admin@coop.org](mailto:admin@coop.org). A state search requires a separate API key that must be requested using [admin@coop.org](mailto:admin@coop.org).

### Recommendations

CO-OP highly recommends testing the JSON messaging prior to developing the backend application. CO-OP uses a tool to develop JSON coding called Postman, which is a free download via the Internet. CO-OP highly recommends using Postman or a similar tool when developing your JSON coding.

Searches are required to meet the following parameter requirements:

- Custom API key.
- Search criteria within the United States contains one of the three following:
  - o ZIP/postal code
  - o Both a city and a state
  - o Both a longitude and latitude
- ZIP or postal codes must be either five or six characters.
- Searches for locations outside of the U.S.:
  - o Requires a separate API key
  - o Must include the valid two-character country code (such as UK).
  - o Do not use "location" criteria such as address, city or ZIP.

### Proximity Search

The Locator Proximity Search provides all of the parameters needed to perform a domestic search for ATM or CO-OP Shared Branch locations via the API. Sample requests and responses are provided to aid in your coding efforts.



## Overview (Continued)

### Endpoints

- <https://api.co-opfs.org/locator/proximitysearch>
- <https://apitest.co-opfs.org/locator/proximitysearch> (Requires a separate test API key and can be requested via email using admin@coop.org)

### Example

<https://api.co-opfs.org/locator/proximitysearch?zipcode=91730&maxResults=100&offset=100>

### Headers

- **Accept**
  - o application/json
  - o application/xml
- **Version** - 1
- **Authorization** - YOUR\_API\_KEY (Provided by CO-OP)

### URL Parameters

- **\*zipcode** or **zip** - The zip code for the search center
- **\*latitude** or **lat** - The latitude for the search center (Both Latitude and Longitude are required in a search with these parameters)
- **longitude** or **long** - The longitude for the search center
- **\*city** - The city of the location
- **state** - The state abbreviation of the location

#### \*One of the above is required

- **address** - Optional - The street address of the location. Used with city/state search.
- **locator type** or **loctype** - Optional - A = ATM, S = Shared Branch. All locator types are returned if locator type and loctype is excluded.
- **institution name** or **cuname** - Optional - The name of the institution
- **open24hours** - Optional - Yes/No
- **walkup** - Optional - Yes/No
- **drivethru** or **driveup** - Optional - Yes/No
- **acceptdeposit** - Optional - Yes/No
- **excludevcom** - Optional - Yes/No - Excludes all 7 - Eleven locations
- **opensundays** or **opensun** - Optional - Yes/No
- **selfserviceavailable** or **selfservice** - Optional - Yes/No
- **selfserviceonly** - Optional - Yes/No
- **maxradius** - Optional - 1-100 - The max distance from the search center
- **offset** - Optional - Default value = 0
  - offset=0&maxresults=100 - Returns rows 1-100
  - offset=100&maxresults=100 - Returns rows 101-200
  - offset=200&maxresults=100 - Returns rows 201-300
- **maxresults** = Optional - 1-100 - The maximum number of rows that get returned - Default value = 100

**Note:** driveup and walkup are mutually exclusive. A search cannot have both.



## Overview (Continued)

### Response

```

{
  "response": {
    "resultInfo": {
      "recordType": "AS",
      "map":
        "https%3A%2F%2Fco%2Dopcreditunions%2Eorg%2Flocator%2Fsearch%2Dresults%2F%3Floc
        type%3DAS%26zip%3D91730%26cuname%3D %26Submit%3DSearch%26map%3D1",

      "error": "",
      "recordTotal": "1",
      "originName": "",
      "originAddress": "",
      "originCity": "",
      "originState": "",
      "originPostal": "",
      "originLat": "34.096531",
      "originLong": "-117.584803",
      "mapZoom": "",
      "mapIcon": "",
      "originCountry": "",
      "secureMap":
        "https%3A%2F%2Fco%2Dopcreditunions%2Eorg%2Flocator%2Fsearch%2Dresults%2F%3Floc
        type%3DAS%26zip%3D91730%26cuname%3D%26Submit%3DSearch%26map%3D1"
    }
  },
  "locations": [
    {
      "id": "14758",
      "institutionName": "Arrowhead CU",
      "institutionRtn": "322282603",
      "terminalId": "599553",
      "retailOutlet": "SB Co Law and Justice Bldg",
      "locatorType": "A",
      "longitude": "-117.573459",
      "latitude": "34.104369",
      "distance": "0.8",
      "address": "8303 Haven Ave",
      "city": "Rancho Cucamonga",
      "county": "San Bernardino",
      "stateAbbreviation": "CA",
      "state": "California",
      "zip": "91730",
      "zip4": "3848",
      "countryAbbreviation": "US ",
      "country": "UNITED STATES",
      "countryname": "UNITED STATES",
      "webAddress": "www.arrowheadcu.org",
      "phone": "",
      "fax": "",
      "installationType": "Walk-Up",
      "hours_open_value": "24 HOURS ACCESS",
      "comment": "",
      7
      "accessNote": "SW corner outside cafeteria",
      "mondayOpen": "",
      "mondayClose": "",
      "tuesdayOpen": "",
      "tuesdayClose": "",
      "wednesdayOpen": "",
      "wednesdayClose": "",
      "thursdayOpen": "",
      "thursdayClose": ""
    }
  ]
}

```



## Overview (Continued)

```

"fridayOpen": "",
"fridayClose": "",
"saturdayOpen": "",
"saturdayClose": "",
"sundayOpen": "",
"sundayClose": "",
"mondayDriveThruOpen": "",
"mondayDriveThruClose": "",
"tuesdayDriveThruOpen": "",
"tuesdayDriveThruClose": "",
"wednesdayDriveThruOpen": "",
"wednesdayDriveThruClose": "",
"thursdayDriveThruOpen": "",
"thursdayDriveThruClose": "",
"fridayDriveThruOpen": "",
"fridayDriveThruClose": "",
"saturdayDriveThruOpen": "",
"saturdayDriveThruClose": "",
"sundayDriveThruOpen": "",
"sundayDriveThruClose": "",
"open24Hours": "Y",
"walkUp": "Y",
"driveThru": "N",
"hoursAvailable": "Y",
"access": "N",
"handicapAccess": "Y",
"restrictedAccess": "N",
"acceptDeposit": "Y",
"acceptCash": "Y",
"envelopeRequired": "N",
"publish": "Y",
"surcharge": "Y",
"onMilitaryBase": "N",
8
"onPremise": "N",
"cashless": "",
"driveThruOnly": "",
"secondaryStructure": "",
"limitedTransactions": "",
"militaryIdRequired": "",
"selfServiceDevice": "Y",
"selfServiceOnly": "Y",
"cuForKids": "",
"displayCU": "",
"vCom": "N",
"singleMap":
  "https%3A%2F%2Fco%2Dopcreditunions%2Eorg%2Fmap%2F%3Floctype%3DA%26lat%3D34%2E1043
  69%26lng%3D%2D117%2E573459%26zoom%3D15"
}
}
}

```

## Error Response

```

{
  "response": {
    "exceptions": [{
      "errorCode": 2101,
      "detail": "You must provide at least one of: ZipCode, Longitude and Latitude, City
and State or Country."
    }],
    "count": 1,
    "status": "FAILED"
  }
}

```





## International Search

The Locator International Search provides all the parameters needed to perform a search for international ATM and CO-OP Shared Branch locations. Sample requests and responses are provided to aid in your coding efforts. International Searches require a unique API key and must be requested via email using [admin@coop.org](mailto:admin@coop.org).

### Endpoints

- <https://api.co-opfs.org/locator/internationalsearch>
- <https://apitest.co-opfs.org/locator/internationalsearch> (Requires a separate test API key and can be requested via email using admin@coop.org)

### Example

<https://api.co-opfs.org/locator/internationalsearch?country=IT&locatortype=A>

### Headers

- **Accept**
  - o application/json
  - o application/xml
- **Version** - 1
- **Authorization** - YOUR\_API\_KEY (Provided by CO-OP)

### URL Parameters

- **country** - Country abbreviation
- **locatortype** or **loctype** - Optional - A = ATM, S = Shared Branch - All locator types are returned if locatortype and loctype is excluded

### Response

```
{
  "response": {
    "resultInfo": {
      "recordType": "AS",
      "map":
        "https%3A%2F%2Fco%2Dopcreditunions%2Eorg%2Flocator%2Fsearch%2Dresults%2F%3Floc
        type%3DAS%26zip%3D%26cname%3D%26submit%3DSearch%26map%3D1",
      "error": "",
      "recordTotal": "9",
      "originName": "",
      "originAddress": "",
      "originCity": "",
      "originState": "",
      "originPostal": "",
      "originLat": "",
      "originLong": "",
      "mapZoom": "",
      "mapIcon": "",
      "originCountry": "",
      "secureMap":
        "https%3A%2F%2Fco%2Dopcreditunions%2Eorg%2Flocator%2Fsearch%2Dresults%2F%3Floc
        type%3DAS%26zip%3D%26cname%3D%26submit%3DSearch%26map%3D1"
```



## International Search (Continued)

```

},
"locations": [
  {
    "id": "24835",
    "institutionName": "Global CU",
    "institutionRtn": "325180595",
    "terminalId": "ACQ895",
    "retailOutlet": "",
    "locatorType": "S",
    "longitude": "12.612300",
    "latitude": "46.036400",
    "distance": "",
    "address": "PSC 103 Box 3000 APO AE 09603",
    "city": "Aviano Air Base Branch - Italy",
    "county": "",
    "stateAbbreviation": "",
    "state": "",
    "zip": "09603",
    "zip4": "",
    "countryAbbreviation": "IT ",
    "country": "ITALY",
    "countryname": "ITALY",
    "webAddress": "www.globalcu.org",
    "phone": "0113904343",
    "fax": "0113904346",
    "installationType": "",
    "hours_open_value": "",
    "comment": "",
    "accessNote": "",
    "mondayOpen": "9:00",
    "mondayClose": "4:00",
    "tuesdayOpen": "9:00",
    "tuesdayClose": "4:00",
    "wednesdayOpen": "9:00",
    "wednesdayClose": "4:00",
    "thursdayOpen": "9:00",
    "thursdayClose": "4:00",
    "fridayOpen": "9:00",
    "fridayClose": "4:00",
    "saturdayOpen": "Closed",
    "saturdayClose": "",
    "sundayOpen": "Closed",
    "sundayClose": "",
    "mondayDriveThruOpen": "",
    "mondayDriveThruClose": "",
    "tuesdayDriveThruOpen": "",
    "tuesdayDriveThruClose": "",
    "wednesdayDriveThruOpen": "",
    "wednesdayDriveThruClose": "",
    "thursdayDriveThruOpen": "",
    "thursdayDriveThruClose": "",
    "fridayDriveThruOpen": "",
    "fridayDriveThruClose": "",
    "saturdayDriveThruOpen": "",
    "saturdayDriveThruClose": "",
    "sundayDriveThruOpen": "",
    "sundayDriveThruClose": "",
    "open24Hours": "N",
    "walkUp": "Y",
    "driveThru": "N",
    "hoursAvailable": "Y",
    "access": "",
    "handicapAccess": "",
    "restrictedAccess": "Y",
  }
]

```







## International Search (Continued)

```

    "acceptDeposit": "",
    "acceptCash": "",
    "envelopeRequired": "",
    "publish": "",
    "surcharge": "",
    "onMilitaryBase": "",
    "onPremise": "",
    "cashless": "N",
    "driveThruOnly": "N",
    "secondaryStructure": "N",
    "limitedTransactions": "N",
    "militaryIdRequired": "N",
    "selfServiceDevice": "N",
    "selfServiceOnly": "N",
    "cuForKids": "N",
    "displayCU": "Y",
    "vCom": "N",
    "singleMap":
      "https%3A%2F%2Fco%2Dopcreditunions%2Eorg%2Fmap%2F%3Floctype%3DS%26lat%3D46
      %2E036400%26lng%3D12%2E612300%26zoom%3D15"
  }
}
}

```

## Error Response

```

{
  "response": {
    "exceptions": [{
      "errorCode": 2100,
      "detail": "Please enter a valid Country abbreviation (2 Characters).",
    }],
    "status": "FAILED",
    "count": 1
  }
}

```

## Valid Country Codes

COUNTRY_VALUE	country_abbrev	COUNTRY_VALUE	country_abbrev
UNITED KINGDOM	UK	ITALY	IT
BAHRAIN	BH	JAPAN	JP
NETHERLANDS	NL	KOREA, REPUBLIC OF	KR
BELGIUM	BE	PUERTO RICO	PR
CANADA	CA	CYPRUS	CYP
GERMANY	DE	SPAIN	ES
GREECE	GR	UNITED STATES	US
GUAM	GU	DJIBOUTI	DJ
ICELAND	IS		



## State Search

The Locator State Search provides all of the parameters needed to perform a full state search for ATM or CO-OP Shared Branch locations via the API (a search for all these locations within a particular state). Sample requests and responses are provided to aid in your coding efforts. State Search requires a Unique API key and must be requested via email at [admin@coop.org](mailto:admin@coop.org).

### Endpoints

- <https://api.co-opfs.org/locator/stateSearch>
- <https://apitest.co-opfs.org/locator/stateSearch> (Requires unique API Key and must be requested via email using admin@coop.org)

### Example

<https://api.co-opfs.org/locator/stateSearch?offset=0&maxresults=1&state=CA>

### Headers

- **Accept**
  - o application/json
  - o application/xml
  - o text/csv
- **Version** - 1
- **Authorization** - YOUR\_API\_KEY (Provided by CO-OP)

### URL Parameters

- **state** - Required - Must provide a state abbreviation to execute a search
- **offset** - Optional - Default value = 0 offset=0&maxrows=100 - Returns rows 1-100 offset=100&maxrows=100 - Returns rows 101-200 offset=200&maxrows=100 - Returns rows 201-300
- **maxresults** - Optional - 1-100 - Default value = 100
- **city** - Optional - Filter results by city
- **name** - Optional - Filter results by institution name
- **locatortype** - Optional - A = ATM, S = Shared Branch - Both ATM and Shared Branch locations are returned if locatortype is excluded
- **excludevcom** - Optional - Yes/No - Exclude 7-Eleven locations

**Note:** offset, maxresults, city and name are not used if accept header is set to text/csv.



## State Search (Continued)

### Response

```

{
  "response": {
    "resultInfo": {
      "locatorType": "AS",
      "recordCount": "1",
      "recordsAvailable": "6256",
      "state": "CA"
    },
    "locations": [
      {
        "id": "1197",
        "institutionName": "1st United Services CU",
        "institutionRtn": "321174000",
        "terminalId": "CKJO2019",
        "retailOutlet": "",
        "locatorType": "A",
        "longitude": "-122.270232",
        "latitude": "37.869705",
        "address": "2175 Milvia St",
        "city": "Berkeley",
        "county": "Alameda",
        "stateAbbreviation": "CA",
        "state": "California",
        "zip": "94704",
        "zip4": "1112",
        "countryAbbreviation": "US ",
        "country": "UNITED STATES",
        "webAddress": "www.1stuscu.org",
        "phone": "",
        "fax": "",
        "installationType": "Walk-Up",
        "hours_open_value": "BUSINESS HOURS ACCESS",
        "comment": "",
        "accessNote": "",
        "mondayOpen": "",
        "mondayClose": "",
        "tuesdayOpen": "",
        "tuesdayClose": "",
        "wednesdayOpen": "",
        "wednesdayClose": "",
        "thursdayOpen": "",
        "thursdayClose": "",
        "fridayOpen": "",
        "fridayClose": "",
        "saturdayOpen": "",
        "saturdayClose": "",
        "sundayOpen": "",
        "sundayClose": "",
        "mondayDriveThruOpen": "",
        "mondayDriveThruClose": "",
        "tuesdayDriveThruOpen": "",
        "tuesdayDriveThruClose": "",
        "wednesdayDriveThruOpen": "",
        "wednesdayDriveThruClose": "",
        "thursdayDriveThruOpen": "",
        "thursdayDriveThruClose": "",
        "fridayDriveThruOpen": "",
        "fridayDriveThruClose": "",
        "saturdayDriveThruOpen": "",
        "saturdayDriveThruClose": "",
        "sundayDriveThruOpen": "",
        "sundayDriveThruClose": ""
      }
    ]
  }
}

```





## State Search (Continued)

```

    "open24Hours": "N",
    "walkUp": "Y",
    "driveThru": "N",
    "hoursAvailable": "Y",
    "access": "Y",
    "handicapAccess": "Y",
    "restrictedAccess": "Y",
    "acceptDeposit": "Y",
    "acceptCash": "Y",
    "envelopeRequired": "N",
    "publish": "Y",
    "surcharge": "Y",
    "onMilitaryBase": "N",
    "onPremise": "Y",
    "cashless": "",
    "driveThruOnly": "",
    "secondaryStructure": "",
    "limitedTransactions": "",
    "militaryIdRequired": "",
    "selfServiceDevice": "Y",
    "selfServiceOnly": "Y",
    "cuForKids": "",
    "displayCU": "",
    "vCom": "N",
    "singleMap":
      "http%3A%2F%2Fcoop019901%2Dstaging%2EElevatoragency%2Ecom%2Flocator%2FsingleMap%2F%3Flongitude%3D%2D122%2E270232%26locationtype%3DA%26latitude%3D-37%2E869705"
  }
}

```

## Error Response

```

{
  "response": {
    "exceptions": [{
      "errorCode": 2003,
      "detail": "The state parameter is missing."
    }],
    "count": 1,
    "status": "FAILED"
  }
}

```





## State Search (Continued)

### Valid State Codes

STATE_VALUE	state_abbrev	STATE_VALUE	state_abbrev
Alabama	AL	New Mexico	NM
Alaska	AK	New York	NY
Arizona	AZ	North Carolina	NC
Arkansas	AR	North Dakota	ND
California	CA	Ohio	OH
Colorado	DE	Oklahoma	OK
Connecticut	CT	Oregon	OR
Delaware	DE	Pennsylvania	PA
District Of Columbia	DC	Rhode Island	RI
Florida	FL	South Carolina	SC
Georgia	GA	Tennessee	TN
Hawaii	HI	Texas	TX
Idaho	ID	Utah	UT
Illinois	IL	Vermont	VT
Indiana	IN	Virginia	VA
Iowa	IA	Washington	WA
Kansas	KS	West Virginia	WV
Kentucky	KY	Wisconsin	WI
Louisiana	LA	Wyoming	WY
Maine	ME	Alberta	AB
Maryland	MD	British Columbia	BC
Massachusetts	MA	Manitoba	MB
Michigan	MI	New Brunswick	NB
Minnesota	MN	Newfoundland-Labrador	NL
Mississippi	MS	Nouvelle-Ecosse	NS
Missouri	MO	Ontario	ON
Montana	MT	Quebec	QC
Nebraska	NE	Saskatchewan	SK
Nevada	NV	Military Base	AE
New Hampshire	NH	Puerto Rico	PR
New Jersey	NJ		