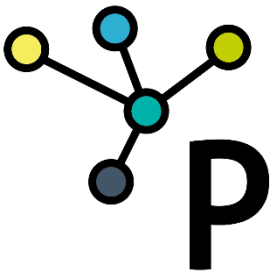

PacificEast

DataPrime API Developer's Guide

Document Version 1.1.1 – April 28th, 2025

API Version 1.1

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PacificEast Development

Overview

PacificEast web services provide access to the best data in the industry. With access to multiple vendors and data sources, PacificEast strives to provide the most relevant and up-to-date responses to your queries. PacificEast is committed to providing the best solution to your data needs by combining our sophisticated algorithms with a wide array of data sources.

Architecture

PacificEast web services are hosted in several data centers throughout North America and are configured to provide rapid failover in the event of issues. PacificEast uses a combination of load balancing, failover and external monitoring to maintain high service uptimes.

Security

PacificEast web services use Transport Layer Security (TLS) for all communication between client applications and the PacificEast servers. Each request to an PacificEast web service must include the account key that was assigned by PacificEast.

Production vs. Development

All development work must be done on PacificEast's client development servers. Once development has been completed, clients may request that their account on the production servers be enabled by contacting their account manager or by emailing devsupport@pacificeast.com.

Access to the development servers is granted solely for the purpose of testing code integration with the PacificEast web services. The development servers are not to be used for stress or load testing. Queries to the development servers should not exceed 100 queries per day or 1,000 queries total. Queries exceeding these totals may be billable. If additional queries are needed, please contact your account manager or email devsupport@pacificeast.com. Excessive use of the development servers will result in access being revoked. Access to the development servers will be disabled after the production account has been enabled.

The development servers have access to the same data sources as the production servers. However, the production servers are quicker and have redundancy and load-balancing features implemented. While we do our best to ensure that the development servers are available at all times, there may be times when a web service on a development server is unavailable because of maintenance. These periods will usually be very brief and we will do our best to perform maintenance outside of regular business hours. However, please note that there will not be maintenance notifications issued for our development servers. If you have a question about the status of a particular service on a development server, please email devsupport@pacificeast.com.

Production servers should be available at all times. Using multiple data centers and load-balancing, we strive to provide uninterrupted service to our clients. However, there may be times when maintenance,

either our own or at our downstream providers, will affect our services. Whenever possible, we will – provide maintenance notifications at least a week before the scheduled maintenance.

Support

During development, support for PacificEast web services can be obtained by emailing our development support group at devsupport@pacificeast.com. Please be sure to include details about the nature of the problem and your contact information.

Support for production systems can be obtained by emailing devsupport@pacificeast.com. For emergency support, please call our 1-800 number.

Authentication

Service authentication is performed using a custom header and the account key assigned by PacificEast. Each request must include a header with the name *X-PacificEast-Acct* and the account key as the value.

For example, if your account key is "abc123" then the header included with each request should look like:

X-PacificEast-Acct : abc123

Requests not containing the *X-PacificEast-Acct* header will be rejected with a 403 (Unauthorized) response.

Requests

The transaction uses the input name and address information to find matching name and address records. See the tables below for more information.

Table 1 – Parameters

Parameter	Description	Type	Required
accountKey	The account key assigned by PacificEast.	Text	Y
jobCode	An identifier (twenty characters maximum) that can be included for reporting purposes. Queries with the same job code will be grouped together on the invoice.	Text	N
referenceID	An identifier that can be used by the client application to uniquely identify the transaction. This text will be returned in the response.	Text	N
firstName	First name of the contact.	Text	N
lastName	Last name of the contact.	Text	Y
address1	Street address of the contact.	Text	N
address2	Unit or apartment number.	Text	N
city	City of the contact.	Text	N
state	Two character state abbreviation.	Text	N
postalCode	The five or nine (ZIP+4) digit ZIP code	Text	N

Not every parameter is required but a minimum of first name, last name, address1 and a location (either city + state or a postal code) is needed. The more information that can be supplied in the query the better chance of finding a good match.

REST format

Queries submitted to the service are formatted in a REST style URL with input criteria submitted in key-value pairs. The only exception is the *lastName* parameter which forms the first part of the REST query string. For example, to search for John Smith at 123 Main St, Seattle, WA with an account key of 'abc123' the following URL would be used:

…/DataPrime.svc/Smith?firstName=John&address1=123%20Main%20St&city=Seattle&state=WA&accountKey=abc123

All values must be percent encoded (URL encoded) so that the final query string is a valid Uniform Resource Identifier (URI). See https://en.wikipedia.org/wiki/Percent-encoding for more information.

Transaction Responses

IDICIAError

The IDICIAError object is returned when a transaction fails and contains information on why the transaction failed.

Table 2 – IDICIAError

Field	Description	Type
status	Indicates if the query was successfully executed or not. The status should have a value of -1 if an IDICIAError object is received	Integer
errorInfo	An ErrorInfo object (see below)	ErrorInfo

Table 3 – ErrorInfo

Field	Description	Type
code	The error code describing the type of error that occurred. See Appendix A – Error Codes for a list of possible error codes.	Integer
description	A text description of the error.	Text
internalCode	For PacificEast internal use. You may be asked to provide this value when working with PacificEast support to resolve an issue.	Text

DataPrimeResponse

A successful transaction is returned in an DataPrimeResponse object.

Table 4 –DataPrimeResponse

Field	Description	Type
status	Indicates if the query was successfully executed or not. -1 An error occurred executing the query. 0 Query executed successfully.	Integer
lookupResult	The result of the contact search. Possible values are: -1 – An error occurred executing the search. 0 – No matches were found for the input query information.	Integer

	1 – One or more matches were found.	
referenceID	The referenceID that was included in the input.	Text
addressAction	Indicates what action, if any, was taken on the input address. Possible values are: 0 – The input address is the best address. 1 – Input address was corrected. 2 – NCOA match found for input address. 3 – Non-NCOA match found for input address. 4 – NCOA match found for input address but not deliverable (NIXIE). 5 – NCOA match found for corrected address. 6 - NCOA match found for input address but no forwarding address was left (MLNA). 7 – NCOA match found for corrected input address but no forward address was left (MLNA). 8 - NCOA match found for corrected input address but not deliverable (NIXIE).	Integer
addresses	An array of Address objects. See below. Multiple addresses may be returned if historical information is found.	Address
Names	An array of Name objects. See below. Multiple names may be returned.	Name
dob	Date of birth in YYYY or YYYYMM format if available.	Text
knownDeceased	Whether the contact is known to be deceased. Note that a value of 'false' does not mean the contact is not deceased, it simply means it is not known whether the contact is deceased or not.	Boolean
verifiedIdentity	Indicates if the name of the searched contact has been previously associated with the searched address.	Boolean

Table 5 –Address

Field	Description	Type
address1	The street address.	Text
address2	Secondary address information.	Text
carrierRoute	USPS carrier route	Text
city	City	Text
country	Two character country code.	Text
deliveryPointCode	USPS delivery point code with check digit.	Text
deliveryScore	A numeric score indicating the quality of the address ranging from 1 (highest) to 9 (lowest).	Integer
dpvFootnote	List of USPS Delivery Point Validation footnotes. Zero or more footnotes will be returned in a semi-colon delimited list. Possible values include:	Text

	AA - Input matched ZIP+4 file A1 - Input did not match ZIP+4 file BB - Input matched to DPV CC - Input primary # matched, secondary # invalid M1 - Input primary # missing M3 - Input primary # invalid N1 - Input primary # matched, unit # missing P1 - Input PO/RR/HC box # missing P3 - Input PO/RR/HC box # invalid RR - Input matched to CMRA R1 - Input matched to CMRA, secondary # missing F1 - Input matched ZIP+4 file, military G1 - Input matched ZIP+4 file, general delivery U1 - Input matched ZIP+4 file, unique ZIP	
dwellingType	Indicates the dwelling type of the address if available. Possible values are: F – firm record G – general delivery H – high-rise, building or apartment M – multi-carrier record P – post office box R – rural route or highway contract S – street record Blank - unknown	Text
effectiveDate	The earliest known date the record was valid in YYYYMM format.	Text
isCMRA	Whether or not the address is a commercial mail receiving agency (CMRA).	Boolean
isMostRecent	Whether or not the address is the most recent on record.	Boolean
lacsFootnote	Additional information about a Locatable Address Conversion System (LACS) lookup. Possible values include: A – Successful match. 00 – No match. 09 – High rise default, likely missing secondary information. 14 – Match was made but new address is undeliverable. 92 – Match was made but secondary information dropped from input.	Text
lacsIndicator	The result of the LACS lookup (1 character)	Text
noStat	Indicates that the address is not receiving delivery.	Text
postalCode	Nine digit ZIP code.	Text
state	Two character state abbreviation.	Text

Table 6 –Name

Field	Description	Type
firstName	The first name of the contact.	Text
fullName	The full name of the contact, including prefixes and suffixes.	Text
lastName	The last name of the contact.	Text
middleName	The middle name or initial of the contact.	Text
prefix	Any known prefix for the contact (e.g., “Dr”).	Text
suffix	Any known suffix for the contact (e.g., “Sr.”).	Text

Samples

The following samples show various transactions using the service. Only the last portion of the resource and the parameters are shown. The JSON response has been formatted for easier readability.

Note: the data in the responses is fictional and is just a representation of the data that would be returned by the service.

Append Samples

Sample #1 – Invalid Authentication

This request shows the IdiciaError response that is returned when the authentication header is missing or invalid.

Request

…/DataPrime.svc/smith

Response


```
{
  “status”: -1,
  “errorInfo”:
       {
    “code”: 1,
    “description”: “Unauthorized access.”,
    “internalCode”: 0
       }
}
```


Sample #2 – Basic Query

This request shows a basic query requesting the first name ‘John’, last name ‘Smith’ at 123 North Rd, Seattle, WA:

Request

…/DataPrime.svc/smith?firstName=john&address1=123%20North%20Rd&city=Seattle&state=WA

Response


```
{
   "addressAction": 0,
   "addresses": [
      {
         "address1": "123 North Rd",
         "address2": "",
         "carrierRoute": "C072",
         "city": "Seattle",
         "country": "US",
         "deliveryPointCode": "352",
         "deliveryScore": 1,
         "dpvFootnote": "AA;BB",
         "dwellingType": "S",
         "effectiveDate": "201704",
         "isCMRA": false,
         "isMostRecent": true,
         "lacsFootnote": "",
         "lacsIndicator": "",
         "noStat": "N",
```

```
            "postalCode": "981011931",
            "state": "WA"
        },
        {
            "address1": "PO Box 1774",
            "address2": "",
            "carrierRoute": "B003",
            "city": "Seattle",
            "country": "US",
            "deliveryPointCode": "743",
            "deliveryScore": 1,
            "dpvFootnote": "AA;BB",
            "dwellingType": "P",
            "effectiveDate": "",
            "isCMRA": false,
            "isMostRecent": false,
            "lacsFootnote": "",
            "lacsIndicator": "",
            "noStat": "N",
            "postalCode": "981171342",
            "state": "WA"
        }
    ],
    "dob": "196302",
    "knownDeceased": false,
    "lookupResult": 1,
    "names": [
        {
            "firstName": "John",
            "fulLName": "John Smith",
            "lastName": "Smith",
            "middleName": "",
            "prefix": "",
            "suffix": ""
        },
        {
            "firstName": "John",
            "fulLName": "John W Smith Sr",
            "lastName": "Smith",
            "middleName": "W",
            "prefix": "",
            "suffix": "Sr"
        }
    ],
    "referenceID": null,
    "status": 0,
        “verifiedIdentity”: true
}
```

Appendix A – Error Codes

The following are possible error codes that may be returned in the ErrorCode field of the ErrorInfo object.

Table 7 – Error Codes

Error Code	Description
0	Unknown error.
1	Unauthorized access.
2	Invalid query. The *description* field may provide more information.
3	Query execution error. Retrying the query may provide a successful result.
4	Unauthorized data source. A data source to which the account does not have access has been requested.
5	Unauthorized permissible purpose. The use of the requested permissible purpose has not been granted to the account.
6	Unauthorized query type. The type of query requested is not permitted for the account.

Appendix B – Document History

API Version	Doc. Version	Date	Description
1.0	1.0.0	2021/2/16	Initial release
1.0	1.0.1	2021/9/8	Branding update
1.1	1.1.0	2024/12/18	Authentication information update
1.1	1.1.1	2025/4/28	Updated samples