



# Network Intelligence API Reference Guide

Revision 14

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# About This Guide

## Introduction

This guide describes the Connectbase Application Program Interface (API) Network Intelligence APIs.

## Accessing the Portal

Using any standard web browser, you can access the Connectbase API portal by entering the following URL: <https://developer.connectbase.com>.

- If this is your first time visiting the site, click [Sign up](#) to register as a new API user.
- If you are already a registered user, [Sign in](#) using your API login and password.

## Related Documentation

Refer to the following documents for detailed information about each of the supported Connectbase API products:

- *Address Autocomplete API Reference Guide*
- *Address Validation API Reference Guide*
- *Advanced CPQ API Reference Guide*
- *Building Competitive Rating API Reference Guide*
- *Connectbase Developer Portal Overview Guide*
- *Connected World Availability API Reference Guide*
- *Connected World Account API Reference Guide*
- *Connected World Building API Reference Guide*
- *Connected World Building Lists API Reference Guide*
- *Connected World Contacts API Reference Guide*
- *Connected World Distributions API Reference Guide*
- *CPQ API Reference Guide*
- *CPQ Components Management API Reference Guide*
- *Demand Engine API Reference Guide*
- *Geocode API Reference Guide*
- *International Processor API Reference Guide*
- *Locations Intelligence API Reference Guide*
- *Network Path API Reference Guide*
- *NNI Management API Reference Guide*
- *Rate Card Management API Reference Guide*
- *Route Management API Reference Guide*
- *Tenant API Reference Guide*

## Acronym List

This document uses the following acronyms.

| Acronym | Description                        |
|---------|------------------------------------|
| API     | Application Program Interface      |
| HTTP    | Hyper Text Transfer Protocol       |
| JSON    | JavaScript Object Notation         |
| N/A     | Not applicable                     |
| URL     | Uniform Resource Locator           |
| USPS    | United States Postal Service       |
| WISP    | Wireless Internet Service Provider |

## Contact Customer Support

If you require technical assistance or wish to report an issue to the Connectbase Support team, please log into the Connectbase Customer Support portal at <https://support.connectbase.com> and log a ticket.

For other general information, you can contact Customer Support by email at [support@connectbase.com](mailto:support@connectbase.com) or by phone at (508) 202-1807 between the hours of 8:00 a.m. and 5:00 p.m. EST.

# About Network Intelligence V6 APIs

Get network information based on a specific address, such as broadband, cableco, nearnet, onnet, telco, wisp, etc. The APIs include the following:

- *GET all*
- *GET broadband*
- *POST Bulk Address*
- *GET Bulk Address Callback*
- *GET cableco*
- *GET Conformed Providers*
- *GET Building Providers*
- *GET Building Providers by Address*
- *GET nearnet*
- *GET onnet*
- *GET telco*
- *GET wisp*



Network Intelligence data persists in cache for up to 2 hours. If you update your instance data, and then run a Network Intelligence API call, the revised data will not display in the response until after the cache is cleared.

# Network Intelligence V6 APIs

## GET all

Issue this call to get **all** network finder data for a specified address.

### Requirements and Special Considerations

This API call requires the address and subscription key. Other request parameters are optional, but they enable you to refine or limit your search criteria. <https://api.connected2fiber.com/address-autocomplete/{address}>

### Request URL

[https://api.connected2fiber.com/network-intelligence/v6/all\[?validation\] \[&address\]\[&lat\] \[&lon\]](https://api.connected2fiber.com/network-intelligence/v6/all[?validation] [&address][&lat] [&lon])

| Request parameters | Characteristic | Description/Requirements  |
|--------------------|----------------|---|
| address            | string         | address to be located   |
| validation         | Boolean        | Validates and formats the input address before processing. Defaults to “true” |
| lat (optional)     | string         | Latitude to use instead of address; however, address is still required.       |
| lon (optional)     | string         | Longitude to use instead of address; however, address is still required.      |

| Request headers           | Characteristic | Description/Requirements   |
|---------------------------|----------------|--|
| Ocp-Apim-Subscription-key | string         | The subscription key that provides access to this API, which can be found in your Profile. |

### Get all Success Response Example

```
{
  "status": "success",
  "body": {
    "location": {
      "street": "134 Flanders Rd",
      "city": "Westborough",
      "state": "MA",
      "country": "USA",
      "postal": "01581",
      "latitude": 42.276488,
      "longitude": -71.570729
    },
    "data": {
      "telco": {
        "type": "Telco",
        "building_cli": "",
        "swc_cli": "WSBOMASU1ED",
        "lata": "128",
        "lata_nm": "EASTERN MASS",
        "ocn": "9102",
        "ocn_name": "VERIZON NEW ENGLAND INC."
      }
    }
  }
}
```

### Get all Success Response Example

```

"state": "MA",
"npa": "508",
"nxx": "366",
"rate_center": "WESTBORO",
"lec": "VERIZON",
"central_office_address": {
  "status": "success",
  "message": null,
  "address": "25 Summer St",
  "city": "Westborough",
  "state": "Massachusetts",
  "zip": "01581"
}

```

### Get all response attributes and data types

| Response Attribute  | Attribute Description  | Data Type |
|---|--|-----------|
| status  | <ul style="list-style-type: none"> <li>Success</li> <li>Failed</li> </ul>  | string    |
| location  | object wrapper   | object    |
| street  | The street address for the location.   | string    |
| city  | The city in which the location resides.  | string    |
| state   | The state in which the location resides.   | string    |
| postal  | The zip code in which the location resides.  | int       |
| country   | The country in which the location resides.   | string    |
| latitude  | The angular distance of a place north or south of the earth's equator, or of a celestial object north or south of the celestial equator, usually expressed in degrees and minutes.   | string    |
| longitude   | The angular distance of a place east or west of the meridian at Greenwich, England, or west of the standard meridian of a celestial object, usually expressed in degrees and minutes.  | string    |
| data  | object wrapper   | object    |
| telco   | object wrapper   | object    |
| type  | Telco, WISP, etc.  | string    |
| building_clli (blank/null unless specifically provided by the customer) | <p>Common Language Information Services Identifier (CLLI), used to identify the building location. Network Site codes are typically used to identify building locations, specific to an address.</p> <p>First four characters represent a geographical code, the fifth and sixth characters represent a geopolitical code. The remaining two characters are uniquely assigned by iconectiv® to identify the building location.</p> | string    |
| swc_clli  | Serving Wire Center Clli code  | string    |



| Response Attribute     | Attribute Description   | Data Type      |
|------------------------|---|----------------|
| lata                   | 3-digit code that represents the boundary of the Local Access and Transport Area.   | string         |
| lata_nm                | LATA provider name<br><br>Local Access and Transport Area defines geographical boundaries of local telephone service networks.  | string         |
| ocn                    | Operating company number; a 4-character ID used to identify a company that provides local exchange telephone services.  | string         |
| ocn_name               | The company name associated with the OCN,   | string         |
| state                  | The state in which the company resides.   | string         |
| npa                    | Numbering Plan Areas, each identified by a three-digit NPA code, commonly called an area code.<br><br>NPAs represent an aggregation of exchange areas for which the given code is applicable. These Code/Exchange area relationships are assigned by the North American Numbering Plan Administration (NANPA) and published in the Local Exchange Routing Guide (LERG) database published monthly by 'iconectiv'. | string         |
| nxx                    | Area Code/Prefix (NPA/NXX) Assignment.<br><br>Valid Prefixes per NPA are published according to exchange switch specifications published in the LERG. A subset of NPA/NXX combinations are serviced by the incumbent Local Exchange Carriers (ILECS) operating Serving Wire Centers.  | string         |
| rate_center            | A geographical area used to determine the boundaries for local calling, billing, and assigning specific phone numbers.  | string         |
| lec                    | The name of the Local Exchange Carrier  | string         |
| central_office_address | object  | object wrapper |
| status                 | Success or Failed   | string         |
| message                | Where applicable, displays the error message if status = Failed.  | string         |
| address                | The street address for the central office.  | string         |
| city                   | The city in which the central office is located.  | string         |
| state                  | The state in which the central office is located.   | string         |

| Response Attribute | Attribute Description   | Data Type    |
|--------------------|---|--------------|
| zip                | The postal code in which the central office is located.   | string       |
| cableco            | The name of the cable company.  | object       |
| cable_provider     | The cable company provider's name   | string       |
| phone              | The phone number associated with the company.   | string       |
| website            | The company website URL   | string       |
| wisp               | The name of the Wireless Internet Service Provider  | object       |
| count              | The number of providers   | int          |
| providers          | The list of providers   | array        |
| type               | The type of provider, such as Telco, for example.   | string       |
| result             | object  | object array |
| access_media       | The medium used for connectivity to the building or specified location. <ul style="list-style-type: none"> <li>• Coax/HFC</li> <li>• Copper</li> <li>• Fiber</li> <li>• Wireless – Fixed</li> <li>• Wireless – Mobile</li> <li>• Wireless – Satellite</li> <li>• Other</li> </ul> | string       |
| tech               | Where provided, the technology provided, such as "Optical Carrier / Fiber to the end user", for example.  | string       |
| max_ad_up          | Maximum advertised upstream speed/ bandwidth offered by the provider in the block for Consumer service  | int          |
| max_cir_up         | Maximum contractual upstream bandwidth offered by the provider in the block for Business service (filer directed to report 0 if the contracted service is sold on a "best efforts" basis without a guaranteed data-throughput rate)   | int          |
| max_ad_down        | Maximum advertised downstream speed/ bandwidth offered by the provider in the block for Consumer service  | int          |
| max_cir_down       | Maximum contractual downstream bandwidth offered by the provider in the block for Business service (filer directed to report 0 if the contracted service is sold on a "best efforts" basis without a guaranteed data-throughput rate)   | int          |
| provider_name      | The name of the provider  | string       |

### Get all Error Response Example

```
{
  "status": "fail",
  "error": "Unable to find address."
}
```

## GET broadband

Issue this call to get **broadband** network finder data for a specified location.

### Requirements and Special Considerations

This API call requires the address or lat/long and subscription key.

### Request URL

```
https://api.connected2fiber.com/network-intelligence/v6/ broadband[?address][&lat]
[&lon]
```

| Request parameters | Characteristic | Description/Requirements   |
|--------------------|----------------|--|
| address            | string         | address to be located  |
| lat (optional)     | string         | Latitude to use instead of address; however, address is still required.  |
| lon (optional)     | string         | Longitude to use instead of address; however, address is still required. |

| Request headers           | Characteristic | Description/Requirements   |
|---------------------------|----------------|--|
| Ocp-Apim-Subscription-key | string         | The subscription key that provides access to this API, which can be found in your Profile. |

### Get broadband Success Response Example

```
{
  "status": "success",
  "body": {
    "result": [{
      "access_media": "Fiber",
      "tech": "Optical Carrier / Fiber to the end user",
      "max_ad_down": 1000,
      "max_ad_up": 20
    }, {
      "access_media": "Fiber",
      "tech": "Optical Carrier / Fiber to the end user",
      "max_ad_down": 0,
      "max_ad_up": 0,
      "provider_name": "Providing The Most Reliable Internet At Verizon Fios"
    }, {
      "access_media": "Fiber",
      "tech": "Optical Carrier / Fiber to the end user",
      "max_ad_down": 0,
      "max_ad_up": 0,
      "provider_name": "Providing The Most Reliable Internet At Verizon Fios"
    }, {
      "access_media": "Fiber",
      "tech": "Optical Carrier / Fiber to the end user",

```

## Get broadband Success Response Example

```
"max_ad_down": 0,
"max_ad_up": 0,
"provider_name": "Windstream"
}, {
  "access_media": "Copper",
  "tech": "ADSL2, ADSL2+",
  "max_ad_down": 0,
  "max_ad_up": 0,
  "provider_name": "Windstream"
}, {
  "access_media": "Copper",
  "tech": "Other Copper Wireline",
  "max_ad_down": 0,
  "max_ad_up": 0,
  "provider_name": "Windstream"
}, {
  "access_media": "Copper",
  "tech": "Other Copper Wireline",
  "max_ad_down": 0,
  "max_ad_up": 0,
  "provider_name": "Windstream"
}, {
  "access_media": "Coax/HFC",
  "tech": "Cable Modem other than DOCSIS 1, 1.1, 2.0, 3.0, or 3.1",
  "max_ad_down": 0,
  "max_ad_up": 0,
  "provider_name": "Spectrotel"
}, {
  "access_media": "Coax/HFC",
  "tech": "Cable Modem - C DOCSIS 3.0",
  "max_ad_down": 500,
  "max_ad_up": 20
}, {
  "access_media": "Wireless - Fixed",
  "tech": "Terrestrial Fixed Wireless",
  "max_ad_down": 0,
  "max_ad_up": 0,
  "provider_name": "Usai.Net"
}, {
  "access_media": "Wireless - Fixed",
  "tech": "Terrestrial Fixed Wireless",
  "max_ad_down": 0,
  "max_ad_up": 0,
  "provider_name": "Windstream"
}, {
  "access_media": "Wireless - Fixed",
  "tech": "Terrestrial Fixed Wireless",
  "max_ad_down": 50,
  "max_ad_up": 50,
  "provider_name": "Netblazr"
}, {
  "access_media": "Coax/HFC",
  "tech": "Cable Modem - C DOCSIS 3.1",
  "max_ad_down": 987,
  "max_ad_up": 35,
  "provider_name": "Comcast"
}, {
  "access_media": "Coax/HFC",
  "tech": "Cable Modem - C DOCSIS 3.1",
  "max_ad_down": 1000,
  "max_ad_up": 20
}, {
  "access_media": "Copper",
  "tech": "Asymmetric xDSL",
  "max_ad_down": 15,
  "max_ad_up": 1,
  "provider_name": "Providing The Most Reliable Internet At Verizon Fios"
}, {
```

## Get broadband Success Response Example

```

    "access_media": "Copper",
    "tech": "Asymmetric xDSL",
    "max_ad_down": 0,
    "max_ad_up": 0,
    "provider_name": "Windstream"
  }, {
    "access_media": "Fiber",
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_down": 0,
    "max_ad_up": 0,
    "provider_name": "Vyvx Llc"
  }, {
    "access_media": "Fiber",
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_down": 0,
    "max_ad_up": 0,
    "provider_name": "Cogent Communications Inc"
  }, {
    "access_media": "Fiber",
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_down": 0,
    "max_ad_up": 0,
    "provider_name": "Crown Castle"
  }
],
"location": {
  "street": "800 Boylston St",
  "city": "Boston",
  "state": "MA",
  "country": "USA",
  "postal": "02199",
  "longitude": -71.08225,
  "latitude": 42.34868
}
}
}

```

## Get broadband response attributes and data types

| Response Attribute | Attribute Description  | Data Type      |
|--------------------|--|----------------|
| status             | <ul style="list-style-type: none"> <li>Success</li> <li>Failed</li> </ul>  | string         |
| body               | object   | object wrapper |
| result             | object   | object array   |
| access_media       | <p>The medium used for connectivity to the building or specified location.</p> <ul style="list-style-type: none"> <li>Coax/HFC</li> <li>Copper</li> <li>Fiber</li> <li>Wireless – Fixed</li> <li>Wireless – Mobile</li> <li>Wireless – Satellite</li> <li>Other</li> </ul> | string         |
| tech               | Where provided, the technology provided, such as “Optical Carrier / Fiber to the end user”, for example.   | string         |

| Response Attribute | Attribute Description   | Data Type      |
|--------------------|---|----------------|
| max_ad_up          | Maximum advertised upstream speed/ bandwidth offered by the provider in the block for Consumer service  | int            |
| max_ad_down        | Maximum advertised downstream speed/ bandwidth offered by the provider in the block for Consumer service  | int            |
| provider_name      | The name of the provider  | string         |
| location           | object  | object wrapper |
| street             | The street address for the location.  | string         |
| city               | The city in which the location resides.   | string         |
| state              | The state in which the location resides.  | string         |
| postal             | The zip code in which the location resides.   | int            |
| country            | The country in which the location resides.  | string         |
| latitude           | The angular distance of a place north or south of the earth's equator, or of a celestial object north or south of the celestial equator, usually expressed in degrees and minutes.    | string         |
| longitude          | The angular distance of a place east or west of the meridian at Greenwich, England, or west of the standard meridian of a celestial object, usually expressed in degrees and minutes. | string         |

#### Get broadband Error Response Example

```
{
  "status": "fail",
  "error": "Unable to find address."
}
```

## POST Bulk Address

Use this API to request network intelligence for multiple addresses simultaneously. The request id provided in the response is used in the [Get Bulk Address Callback](#) API to retrieve the results.

#### Requirements and Special Considerations

Company Id is a required parameter.



The request\_id in the Request body can be any combination of letters, dashes, and/or numbers, but it must be a unique id per request. <https://api.connected2fiber.com/address-autocomplete/{address}>

#### Request URL

[https://api.connected2fiber.com/network-intelligence/v6/bulk\\_address\[?companyId\]](https://api.connected2fiber.com/network-intelligence/v6/bulk_address[?companyId])

| Request parameters | Characteristic | Description/Requirements                 |
|--------------------|----------------|--|
| companyId          | int            | A unique number identifying the company. |

| Request headers           | Characteristic | Description/Requirements   |
|---------------------------|----------------|--|
| Ocp-Apim-Subscription-key | string         | The subscription key that provides access to this API, which can be found in your Profile. |

### Post Bulk Address Request body

```
{
  "addresses": [{
    "address": "15323 N Scottsdale Rd",
    "city": "Scottsdale",
    "state": "AZ",
    "zipcode": "85254",
    "country": "USA"
  },
  {
    "address": "2728 N 68th St",
    "city": "Scottsdale",
    "state": "AZ",
    "zipcode": "85254",
    "country": "USA"
  },
  {
    "address": "1774 4th St",
    "city": "Berkeley",
    "state": "CA",
    "zipcode": "94710",
    "country": "USA"
  },
  {
    "address": "6600 Topanga Canyon Blvd",
    "city": "Canoga Park",
    "state": "CA",
    "zipcode": "91303",
    "country": "USA"
  },
  {
    "address": "3545 Mt Diablo Blvd",
    "city": "Lafayette",
    "state": "CA",
    "zipcode": "94549",
    "country": "USA"
  },
  {
    "address": "23811 Aliso Creek Rd",
    "city": "Laguna Niguel",
    "state": "CA",
    "zipcode": "92677",
    "country": "USA"
  }
  ],
  "request_id": "1234_command"
}
```

### Post Bulk Address Success Response Example

```
{
  "requestId": "1234_command",
  "status": "Completed",
}
```

## Post Bulk Address Success Response Example

```
"body": [{
  "location": {
    "address": "15323 N Scottsdale Rd",
    "city": "Scottsdale",
    "state": "AZ",
    "postal": "85254",
    "country": "USA",
    "latitude": "33.625314",
    "longitude": "-111.923988"
  },
  "data": {
    "telco": {
      "lec": "LUMEN TECHNOLOGIES",
      "npa": "480",
      "nxx": "315",
      "ocn": "9636",
      "lata": "666",
      "type": "Telco",
      "state": "AZ",
      "lata_nm": "PHOENIX ARIZONA",
      "ocn_name": "QWEST CORPORATION",
      "swc_clli": "SCDLAZTHDS0",
      "rate_center": "PHOENIX",
      "building_clli": "",
      "central_office_address": {
        "zip": "85253",
        "city": "Paradise Valley",
        "state": "Arizona",
        "status": "success",
        "address": "6916 E Doubletree Ranch Rd",
        "message": null
      }
    },
    "cableco": {
      "type": "Cableco",
      "phone": "866-961-0027",
      "website": "cox.com",
      "cable_provider": "COX COMMUNICATIONS"
    },
    "wisp": {
      "type": "Wireless Service Providers",
      "count": 7,
      "providers": ["T-MOBILE", "MOJO BROADBAND", "TPT GLOBAL TECH", "PHOENIX INTERNET", "GUTIERREZ-PALMENBERG INC.", "TRIAD WIRELESS", "ONE RING NETWORKS"]
    },
    "broadband": [{
      "tech": "Optical Carrier / Fiber to the end user",
      "max_ad_up": 0,
      "max_cir_up": 1000,
      "max_ad_down": 0,
      "access_media": "Fiber",
      "max_cir_down": 1000,
      "provider_name": "LUMEN TECHNOLOGIES"
    }, {
      "tech": "Cable Modem - C DOCSIS 3.1",
      "max_ad_up": 35,
      "max_cir_up": 35,
      "max_ad_down": 1000,
      "access_media": "Coax/HFC",
      "max_cir_down": 1000,
      "provider_name": "COX COMMUNICATIONS"
    }, {
      "tech": "VDSL",
      "max_ad_up": 10,
      "max_cir_up": 0,
      "max_ad_down": 100,
      "access_media": "Copper",
      "max_cir_down": 0,
    }
  ]
}]
```



## Post Bulk Address Success Response Example

```
    "provider_name": "LUMEN TECHNOLOGIES"
  }, {
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 5,
    "max_cir_up": 50,
    "max_ad_down": 50,
    "access_media": "Wireless - Fixed",
    "max_cir_down": 50,
    "provider_name": "GUTIERREZ-PALMENBERG INC."
  }, {
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 5,
    "max_cir_up": null,
    "max_ad_down": 50,
    "access_media": "Wireless - Fixed",
    "max_cir_down": null,
    "provider_name": "TRIAD WIRELESS"
  }, {
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_up": 0,
    "max_cir_up": null,
    "max_ad_down": 0,
    "access_media": "Fiber",
    "max_cir_down": null,
    "provider_name": "TPX COMMUNICATIONS"
  }, {
    "tech": "Asymmetric xDSL",
    "max_ad_up": 0.5,
    "max_cir_up": 0,
    "max_ad_down": 6,
    "access_media": "Copper",
    "max_cir_down": 0,
    "provider_name": "LUMEN TECHNOLOGIES"
  }, {
    "tech": "Other Copper Wireline",
    "max_ad_up": 0,
    "max_cir_up": 6,
    "max_ad_down": 0,
    "access_media": "Copper",
    "max_cir_down": 6,
    "provider_name": "VERIZON"
  }, {
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_up": 0,
    "max_cir_up": 0,
    "max_ad_down": 0,
    "access_media": "Fiber",
    "max_cir_down": 0,
    "provider_name": "LUMEN TECHNOLOGIES"
  }, {
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_up": 1000,
    "max_cir_up": 1000,
    "max_ad_down": 1000,
    "access_media": "Fiber",
    "max_cir_down": 1000,
    "provider_name": "COX COMMUNICATIONS"
  }
],
"onnet": {
  "type": "On Net",
  "count": 7,
  "providers": ["COX COMMUNICATIONS", "LUMEN
TECHNOLOGIES", "ZAYO", "VERIZON", "GUTIERREZ-PALMENBERG INC.", "TRIAD WIRELESS", "PHOENIX
INTERNET"]
},
"nearnnet": {
  "type": "Near Net",
  "count": 12,
```

## Post Bulk Address Success Response Example

```
    "providers": ["ZAYO", "VERIZON", "ONE RING NETWORKS", "MOJO BROADBAND", "T-  
MOBILE", "TPT GLOBAL TECH", "PHOENIX INTERNET", "GUTIERREZ-PALMENBERG INC.", "TRIAD  
WIRELESS", "COX COMMUNICATIONS", "LUMEN TECHNOLOGIES", "BLUE OCEAN"]  
  }  
}, {  
  "location": {  
    "address": "1774 4th St",  
    "city": "Berkeley",  
    "state": "CA",  
    "postal": "94710",  
    "country": "USA",  
    "latitude": "37.870259",  
    "longitude": "-122.300966"  
  },  
  "data": {  
    "telco": {  
      "lec": "AT&T",  
      "npa": "510",  
      "nxx": "292",  
      "ocn": "9740",  
      "lata": "722",  
      "type": "Telco",  
      "state": "CA",  
      "lata_nm": "SAN FRANCISCO CA",  
      "ocn_name": "PACIFIC BELL",  
      "swc_clli": "ALBYCAL1DS0",  
      "rate_center": "OKLD BKLY",  
      "building_clli": "",  
      "central_office_address": {  
        "zip": "94707",  
        "city": "Berkeley",  
        "state": "California",  
        "status": "success",  
        "address": "1612 Solano Ave",  
        "message": null  
      }  
    },  
    "cableco": {  
      "type": "Cableco",  
      "phone": "800-266-2278",  
      "website": "business.comcast.com",  
      "cable_provider": "COMCAST"  
    },  
    "wisp": {  
      "type": "Wireless Service Providers",  
      "count": 7,  
      "providers": ["TPX COMMUNICATIONS", "UNWIRED LTD", "ALPHABET", "ETHERIC  
NETWORKS", "TOWERSTREAM", "WILINE NETWORKS", "T-MOBILE"]  
    },  
    "broadband": [{  
      "tech": "Terrestrial Fixed Wireless",  
      "max_ad_up": 150,  
      "max_cir_up": 1000,  
      "max_ad_down": 150,  
      "access_media": "Wireless - Fixed",  
      "max_cir_down": 1000,  
      "provider_name": "UNWIRED LTD"  
    }, {  
      "tech": "ADSL2, ADSL2+",  
      "max_ad_up": 1.5,  
      "max_cir_up": 0,  
      "max_ad_down": 18,  
      "access_media": "Copper",  
      "max_cir_down": 0,  
      "provider_name": "AT&T"  
    }, {  
      "tech": "Symmetric xDSL",
```

## Post Bulk Address Success Response Example

```
    "max_ad_up": 0.26,
    "max_cir_up": 100,
    "max_ad_down": 0.77,
    "access_media": "Copper",
    "max_cir_down": 100,
    "provider_name": "SONIC"
  }, {
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 150,
    "max_cir_up": 100,
    "max_ad_down": 150,
    "access_media": "Wireless - Fixed",
    "max_cir_down": 100,
    "provider_name": "ETHERIC NETWORKS"
  }, {
    "tech": "Cable Modem - C DOCSIS 3.1",
    "max_ad_up": 35,
    "max_cir_up": 0,
    "max_ad_down": 1000,
    "access_media": "Coax/HFC",
    "max_cir_down": 0,
    "provider_name": "COMCAST"
  }, {
    "tech": "Other Copper Wireline",
    "max_ad_up": 0,
    "max_cir_up": 1.5,
    "max_ad_down": 0,
    "access_media": "Copper",
    "max_cir_down": 1.5,
    "provider_name": "VERIZON"
  }, {
    "tech": "Asymmetric xDSL",
    "max_ad_up": 0.26,
    "max_cir_up": 0,
    "max_ad_down": 0.77,
    "access_media": "Copper",
    "max_cir_down": 0,
    "provider_name": "AT&T"
  }, {
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_up": 1000,
    "max_cir_up": 1000,
    "max_ad_down": 1000,
    "access_media": "Fiber",
    "max_cir_down": 1000,
    "provider_name": "SONIC"
  }, {
    "tech": "VDSL",
    "max_ad_up": 20,
    "max_cir_up": 0,
    "max_ad_down": 100,
    "access_media": "Copper",
    "max_cir_down": 0,
    "provider_name": "AT&T"
  }, {
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_up": 1000,
    "max_cir_up": null,
    "max_ad_down": 2000,
    "access_media": "Fiber",
    "max_cir_down": null,
    "provider_name": "SONIC CORP"
  }, {
    "tech": "Other Copper Wireline",
    "max_ad_up": 0.26,
    "max_cir_up": 12,
    "max_ad_down": 0.77,
    "access_media": "Copper",
```

## Post Bulk Address Success Response Example

```
        "max_cir_down": 12,
        "provider_name": "SONIC"
    }],
    "onnet": {
        "type": "On Net",
        "count": 6,
        "providers": ["AT&T", "COMCAST", "UNWIRED LTD", "ZAYO", "PAXIO", "ETHERIC
NETWORKS"]
    },
    "nearnnet": {
        "type": "Near Net",
        "count": 20,
        "providers": ["UNION PACIFIC RAILROAD", "WINDSTREAM", "LUMEN
TECHNOLOGIES", "WILINE NETWORKS", "VERIZON", "CISCO", "ZAYO", "TELIA
COMPANY", "SONIC", "GEOLINKS", "ETHERIC NETWORKS", "UNWIRED LTD", "T-
MOBILE", "ALPHABET", "TOWERSTREAM", "COMCAST", "AT&T", "CALLONE", "PAXIO", "EXTENET
SYSTEMS"]
    }
}, {
    "location": {
        "address": "23811 Aliso Creek Rd",
        "city": "Laguna Niguel",
        "state": "CA",
        "postal": "92677",
        "country": "USA",
        "latitude": "33.556231",
        "longitude": "-117.716885"
    },
    "data": {
        "telco": {
            "lec": "AT&T",
            "npa": "949",
            "nxx": "249",
            "ocn": "9740",
            "lata": "730",
            "type": "Telco",
            "state": "CA",
            "lata_nm": "LOS ANGELES CA",
            "ocn_name": "PACIFIC BELL",
            "swc_clli": "LGNGCA12DS0",
            "rate_center": "CAPITRNVLVLY",
            "building_clli": "",
            "central_office_address": {
                "zip": "92677",
                "city": "Laguna Niguel",
                "state": "California",
                "status": "success",
                "address": "24421 Aliso Creek Rd",
                "message": null
            }
        },
        "cableco": {
            "type": "Cableco",
            "phone": "866-961-0027",
            "website": "cox.com",
            "cable_provider": "COX COMMUNICATIONS"
        },
        "wisp": {
            "type": "Wireless Service Providers",
            "count": 3,
            "providers": ["TPX COMMUNICATIONS", "T-MOBILE", "GEOLINKS"]
        },
        "broadband": [{
            "tech": "Cable Modem - C DOCSIS 3.1",
            "max_ad_up": 35,
            "max_cir_up": 35,
            "max_ad_down": 1000,
```

## Post Bulk Address Success Response Example

```
    "access_media": "Coax/HFC",
    "max_cir_down": 1000,
    "provider_name": "COX COMMUNICATIONS"
  }, {
    "tech": "ADSL2, ADSL2+",
    "max_ad_up": 1.5,
    "max_cir_up": 0,
    "max_ad_down": 18,
    "access_media": "Copper",
    "max_cir_down": 0,
    "provider_name": "AT&T"
  }, {
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_up": 0,
    "max_cir_up": null,
    "max_ad_down": 0,
    "access_media": "Fiber",
    "max_cir_down": null,
    "provider_name": "WHITESKY"
  }, {
    "tech": "Asymmetric xDSL",
    "max_ad_up": 0.51,
    "max_cir_up": 0,
    "max_ad_down": 6,
    "access_media": "Copper",
    "max_cir_down": 0,
    "provider_name": "AT&T"
  }
],
"onnet": {
  "type": "On Net",
  "count": 4,
  "providers": ["AT&T", "COX COMMUNICATIONS", "LUMEN TECHNOLOGIES", "VIASAT
COMMUNICATIONS"]
},
"nearnnet": {
  "type": "Near Net",
  "count": 12,
  "providers": ["EDISON CARRIER SOLUTIONS", "CROWN CASTLE", "SOUTHERN
CALIFORNIA EDISON COMPANY", "GEOLINKS", "MHO", "T-MOBILE", "AT&T", "EDISON
INTERNATIONAL", "COX COMMUNICATIONS", "VERIZON", "LUMEN TECHNOLOGIES", "STRUCTURAL
ENGINEERS"]
}
}, {
  "location": {
    "address": "2728 N 68th St",
    "city": "Scottsdale",
    "state": "AZ",
    "postal": "85257",
    "country": "USA",
    "latitude": "33.478885",
    "longitude": "-111.935394"
  },
  "data": {
    "telco": {
      "lec": "LUMEN TECHNOLOGIES",
      "npa": "480",
      "nxx": "312",
      "ocn": "9636",
      "lata": "666",
      "type": "Telco",
      "state": "AZ",
      "lata_nm": "PHOENIX ARIZONA",
      "ocn_name": "QWEST CORPORATION",
      "swc_clli": "SCDLAZMADS0",
      "rate_center": "PHOENIX",
      "building_clli": "",
      "central_office_address": {
```

## Post Bulk Address Success Response Example

```
        "zip": "85251",
        "city": "Scottsdale",
        "state": "Arizona",
        "status": "success",
        "address": "7145 E 1st St",
        "message": null
    }
},
"cableco": {
    "type": "Cableco",
    "phone": "866-961-0027",
    "website": "cox.com",
    "cable_provider": "COX COMMUNICATIONS"
},
"wisp": {
    "type": "Wireless Service Providers",
    "count": 4,
    "providers": ["GUTIERREZ-PALMENBERG INC.", "PHOENIX INTERNET", "TRIAD
WIRELESS", "T-MOBILE"]
},
"broadband": [{
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 50,
    "max_cir_up": null,
    "max_ad_down": 300,
    "access_media": "Wireless - Fixed",
    "max_cir_down": null,
    "provider_name": "TRIAD WIRELESS"
}, {
    "tech": "Other Copper Wireline",
    "max_ad_up": 0,
    "max_cir_up": 1.5,
    "max_ad_down": 0,
    "access_media": "Copper",
    "max_cir_down": 1.5,
    "provider_name": "VERIZON"
}, {
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 1,
    "max_cir_up": 5,
    "max_ad_down": 15,
    "access_media": "Wireless - Fixed",
    "max_cir_down": 20,
    "provider_name": "GUTIERREZ-PALMENBERG INC."
}, {
    "tech": "Cable Modem - C DOCSIS 3.1",
    "max_ad_up": 35,
    "max_cir_up": 35,
    "max_ad_down": 1000,
    "access_media": "Coax/HFC",
    "max_cir_down": 1000,
    "provider_name": "COX COMMUNICATIONS"
}, {
    "tech": "VDSL",
    "max_ad_up": 10,
    "max_cir_up": 0,
    "max_ad_down": 100,
    "access_media": "Copper",
    "max_cir_down": 0,
    "provider_name": "LUMEN TECHNOLOGIES"
}, {
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_up": 940,
    "max_cir_up": 1000,
    "max_ad_down": 940,
    "access_media": "Fiber",
    "max_cir_down": 1000,
    "provider_name": "LUMEN TECHNOLOGIES"
}
```

## Post Bulk Address Success Response Example

```
    }, {
      "tech": "Optical Carrier / Fiber to the end user",
      "max_ad_up": 940,
      "max_cir_up": 0,
      "max_ad_down": 940,
      "access_media": "Fiber",
      "max_cir_down": 0,
      "provider_name": "LUMEN TECHNOLOGIES"
    }],
    "onnet": {
      "type": "On Net",
      "count": 6,
      "providers": ["LUMEN TECHNOLOGIES", "COX COMMUNICATIONS", "T-
MOBILE", "GUTIERREZ-PALMENBERG INC.", "TRIAD WIRELESS", "ZAYO"]
    },
    "nearnnet": {
      "type": "Near Net",
      "count": 9,
      "providers": ["SRP TELECOM", "ZAYO", "VERIZON", "T-MOBILE", "PHOENIX
INTERNET", "GUTIERREZ-PALMENBERG INC.", "TRIAD WIRELESS", "COX COMMUNICATIONS", "LUMEN
TECHNOLOGIES"]
    }
  }
}, {
  "location": {
    "address": "3545 Mt Diablo Blvd",
    "city": "Lafayette",
    "state": "CA",
    "postal": "94549",
    "country": "USA",
    "latitude": "37.891697",
    "longitude": "-122.119982"
  },
  "data": {
    "telco": {
      "lec": "AT&T",
      "npa": "925",
      "nxx": "283",
      "ocn": "9740",
      "lata": "722",
      "type": "Telco",
      "state": "CA",
      "lata_nm": "SAN FRANCISCO CA",
      "ocn_name": "PACIFIC BELL",
      "swc_clli": "LFYTCAL1DS0",
      "rate_center": "LAFAYETTE",
      "building_clli": "",
      "central_office_address": {
        "zip": "94549",
        "city": "Lafayette",
        "state": "California",
        "status": "success",
        "address": "3610 Happy Valley Rd",
        "message": null
      }
    },
    "cableco": {
      "type": "Cableco",
      "phone": "800-266-2278",
      "website": "business.comcast.com",
      "cable_provider": "COMCAST"
    },
    "wisp": {
      "type": "Wireless Service Providers",
      "count": 3,
      "providers": ["T-MOBILE", "ETHERIC NETWORKS", "TPX COMMUNICATIONS"]
    },
    "broadband": [{
```

## Post Bulk Address Success Response Example

```
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 80,
    "max_cir_up": 100,
    "max_ad_down": 80,
    "access_media": "Wireless - Fixed",
    "max_cir_down": 100,
    "provider_name": "ETHERIC NETWORKS"
  }, {
    "tech": "Cable Modem - C DOCSIS 3.1",
    "max_ad_up": 35,
    "max_cir_up": 0,
    "max_ad_down": 1000,
    "access_media": "Coax/HFC",
    "max_cir_down": 0,
    "provider_name": "COMCAST"
  }],
  "onnet": {
    "type": "On Net",
    "count": 4,
    "providers": ["COMCAST", "AT&T", "WILINE NETWORKS", "ETHERIC NETWORKS"]
  },
  "nearnnet": {
    "type": "Near Net",
    "count": 10,
    "providers": ["LUMEN TECHNOLOGIES", "ZAYO", "WAVE
BAND", "GEOLINKS", "ETHERIC NETWORKS", "T-MOBILE", "COMCAST", "AT&T", "EXTENET
SYSTEMS", "UNWIRED LTD"]
  }
}, {
  "location": {
    "address": "6600 Topanga Canyon Blvd",
    "city": "Canoga Park",
    "state": "CA",
    "postal": "91303",
    "country": "USA",
    "latitude": "34.190029",
    "longitude": "-118.605659"
  },
  "data": {
    "telco": {
      "lec": "AT&T",
      "npa": "818",
      "nxx": "226",
      "ocn": "9740",
      "lata": "730",
      "type": "Telco",
      "state": "CA",
      "lata_nm": "LOS ANGELES CA",
      "ocn_name": "PACIFIC BELL",
      "swc_clli": "CNPKCA01DS0",
      "rate_center": "CANOGAPARK",
      "building_clli": "",
      "central_office_address": {
        "zip": "91303",
        "city": "Canoga Park",
        "state": "California",
        "status": "success",
        "address": "22012 Vanowen St",
        "message": null
      }
    }
  },
  "cableco": {
    "type": "Cableco",
    "phone": "203-905-7801",
    "website": "spectrum.com",
    "cable_provider": "SPECTRUM"
  }
},
```



## Post Bulk Address Success Response Example

```
"wisp": {
  "type": "Wireless Service Providers",
  "count": 5,
  "providers": ["ONE RING NETWORKS", "GEOLINKS", "GO CREATIVE
WIRELESS", "STARRY INC", "T-MOBILE"]
},
"broadband": [{
  "tech": "Terrestrial Fixed Wireless",
  "max_ad_up": 40,
  "max_cir_up": null,
  "max_ad_down": 100,
  "access_media": "Wireless - Fixed",
  "max_cir_down": null,
  "provider_name": "GO CREATIVE WIRELESS"
}, {
  "tech": "Terrestrial Fixed Wireless",
  "max_ad_up": 200,
  "max_cir_up": null,
  "max_ad_down": 200,
  "access_media": "Wireless - Fixed",
  "max_cir_down": null,
  "provider_name": "STARRY INC"
}, {
  "tech": "Other Copper Wireline",
  "max_ad_up": 0,
  "max_cir_up": 20,
  "max_ad_down": 0,
  "access_media": "Copper",
  "max_cir_down": 20,
  "provider_name": "TPX COMMUNICATIONS"
}, {
  "tech": "Other Copper Wireline",
  "max_ad_up": 0.51,
  "max_cir_up": 1.5,
  "max_ad_down": 6,
  "access_media": "Copper",
  "max_cir_down": 1.5,
  "provider_name": "KINETIC"
}, {
  "tech": "Cable Modem - C DOCSIS 3.1",
  "max_ad_up": 35,
  "max_cir_up": 0,
  "max_ad_down": 940,
  "access_media": "Coax/HFC",
  "max_cir_down": 0,
  "provider_name": "SPECTRUM"
}, {
  "tech": "Other Copper Wireline",
  "max_ad_up": 0.51,
  "max_cir_up": 1.5,
  "max_ad_down": 6,
  "access_media": "Copper",
  "max_cir_down": 1.5,
  "provider_name": "CYBERNET COMMUNICATIONS INC."
}, {
  "tech": "Other Copper Wireline",
  "max_ad_up": 0.51,
  "max_cir_up": 6,
  "max_ad_down": 6,
  "access_media": "Copper",
  "max_cir_down": 6,
  "provider_name": "FUSION CONNECT"
}, {
  "tech": "Optical Carrier / Fiber to the end user",
  "max_ad_up": 0,
  "max_cir_up": 1,
  "max_ad_down": 0,
  "access_media": "Fiber",
```

## Post Bulk Address Success Response Example

```
    "max_cir_down": 6,
    "provider_name": "SPECTROTEL"
  }, {
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_up": 0,
    "max_cir_up": 8,
    "max_ad_down": 0,
    "access_media": "Fiber",
    "max_cir_down": 100,
    "provider_name": "WINDSTREAM"
  }, {
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_up": 0,
    "max_cir_up": 100,
    "max_ad_down": 0,
    "access_media": "Fiber",
    "max_cir_down": 100,
    "provider_name": "TPX COMMUNICATIONS"
  }, {
    "tech": "Other Copper Wireline",
    "max_ad_up": 0,
    "max_cir_up": 11,
    "max_ad_down": 0,
    "access_media": "Copper",
    "max_cir_down": 11,
    "provider_name": "VERIZON"
  }, {
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 1000,
    "max_cir_up": 1000,
    "max_ad_down": 1000,
    "access_media": "Wireless - Fixed",
    "max_cir_down": 1000,
    "provider_name": "GEOLINKS"
  }, {
    "tech": "ADSL2, ADSL2+",
    "max_ad_up": 0,
    "max_cir_up": null,
    "max_ad_down": 0,
    "access_media": "Copper",
    "max_cir_down": null,
    "provider_name": "KINETIC"
  }, {
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 100,
    "max_cir_up": null,
    "max_ad_down": 100,
    "access_media": "Wireless - Fixed",
    "max_cir_down": null,
    "provider_name": "ONE RING NETWORKS"
  }, {
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_up": 0,
    "max_cir_up": 300,
    "max_ad_down": 0,
    "access_media": "Fiber",
    "max_cir_down": 300,
    "provider_name": "VERIZON"
  }, {
    "tech": "Other Copper Wireline",
    "max_ad_up": 0,
    "max_cir_up": 1.5,
    "max_ad_down": 0,
    "access_media": "Copper",
    "max_cir_down": 1.5,
    "provider_name": "NETFORTRIS INC."
  }, {
    "tech": "Asymmetric xDSL",
```

## Post Bulk Address Success Response Example

```

    "max_ad_up": 0.51,
    "max_cir_up": 1.5,
    "max_ad_down": 6,
    "access_media": "Copper",
    "max_cir_down": 1.5,
    "provider_name": "KINETIC"
  }, {
    "tech": null,
    "max_ad_up": 0,
    "max_cir_up": 0,
    "max_ad_down": 0,
    "access_media": "Fiber",
    "max_cir_down": 0,
    "provider_name": "EARTHLINK LLC"
  }
],
"onnet": {
  "type": "On Net",
  "count": 11,
  "providers": ["AT&T", "SPECTRUM", "HARGRAY", "FRONTIER COMMUNICATIONS
CORPORATION", "GEOLINKS", "GO CREATIVE WIRELESS", "STARRY INC", "SOUTHERN CALIFORNIA
EDISON COMPANY", "T-MOBILE", "COMCAST", "CROWN CASTLE"]
},
"nearnet": {
  "type": "Near Net",
  "count": 17,
  "providers": ["EDISON CARRIER
SOLUTIONS", "VERIZON", "EDISON INTERNATIONAL", "ZAYO", "SOUTHERN CALIFORNIA EDISON
COMPANY", "STRUCTURAL ENGINEERS", "GEOLINKS", "MHO", "ONE RING NETWORKS", "STARRY INC", "T-
MOBILE", "GO CREATIVE WIRELESS", "FRONTIER COMMUNICATIONS
CORPORATION", "AT&T", "SPECTRUM", "CROWN CASTLE", "CALLONE"]
}
}
},
"totalRecords": 6,
"invalidRecords": 0,
"duplicateRecords": 0,
"failedRecords": 0,
"inProgressRecord": 0,
"completedRecord": 6
}

```

## POST Bulk Address response attributes and data types

| Response Attribute | Attribute Description   | Data Type      |
|--------------------|---|----------------|
| requestId          | A unique identifier for the request   | string         |
| status             | Indicates that status of API completion.  | string         |
| body               | object  | object wrapper |
| location           | object  | object wrapper |
| address            | The street address of the location.   | string         |
| city               | The city in which the location resides.   | string         |
| state              | The state in which the location resides.  | string         |
| postal             | The postal code of the location   | string         |
| country            | The country in which the location resides.  | string         |
| latitude           | The angular distance of a place north or south of the earth's equator, or of a celestial object north or south of the | string         |

| Response Attribute | Attribute Description  | Data Type      |
|--------------------|--|----------------|
|                    | celestial equator, usually expressed in degrees and minutes.   |                |
| longitude          | The angular distance of a place east or west of the meridian at Greenwich, England, or west of the standard meridian of a celestial object, usually expressed in degrees and minutes.  | string         |
| data               | object   | object wrapper |
| telco              | object   | object wrapper |
| lec                | Local Exchange Carrier   | string         |
| npa                | <p>Numbering Plan Areas, each identified by a three-digit NPA code, commonly called an area code.</p> <p>NPAs represent an aggregation of exchange areas for which the given code is applicable. These Code/Exchange area relationships are assigned by the North American Numbering Plan Administration (NANPA) and published in the Local Exchange Routing Guide (LERG) database published monthly by 'iconectiv'.</p> | string         |
| nxx                | <p>Area Code/Prefix (NPA/NXX) Assignment.</p> <p>Valid Prefixes per NPA are published according to exchange switch specifications published in the LERG. A subset of NPA/NXX combinations are serviced by the incumbent Local Exchange Carriers (ILECS) operating Serving Wire Centers.</p>  | string         |
| ocn                | Operating company number; a 4-character ID used to identify a company that provides local exchange telephone services.   | string         |
| lata               | 3-digit code that represents the boundary of the Local Access and Transport Area.  | string         |
| type               | Identifies the type of carrier, such as Telco, for example.  | string         |
| state              | The name of the state  | string         |
| lata_nm            | <p>LATA provider name</p> <p>Local Access and Transport Area defines geographical boundaries of local telephone service networks.</p>  | string         |
| ocn_name           | The name of the provider associated with the OCN number.   | string         |
| swc_clli           | Serving Wire Center clli code  | string         |

| Response Attribute  | Attribute Description   | Data Type      |
|---|---|----------------|
| rate_center   | In the North American Numbering Plan , a rate center (rate centre in Canada) is a geographically-specified area used for determining mileage and/or usage dependent rates in the public switched telephone network.   | string         |
| building_clli (blank/null unless specifically provided by the customer) | Common Language Information Services Identifier (CLLI), used to identify the building location. Network Site codes are typically used to identify building locations, specific to an address.<br><br>First four characters represent a geographical code, the fifth and sixth characters represent a geopolitical code. The remaining two characters are uniquely assigned by iconectiv® to identify the building location. | string         |
| central_office_address  | object wrapper  | object         |
| zip   | The zip code for the central office location.   | string         |
| city  | The city in which the location resides.   | string         |
| state   | The state in which the location resides.  | string         |
| status  | Success or fail   | string         |
| address   | The street address of the central office location.  | string         |
| message   | Any additional information provided by the customer.  | string         |
| cableco   | Object wrapper for cableco data   | object         |
| type  | The type of service provider, such as Cableco or Wireless Service Providers, etc.   | string         |
| phone   | The phone number of the provider.   | string         |
| website   | The website for the providers   | string         |
| cable_provider  | The name of the cable provider  | string         |
| wisp  | Object wrapper for wisp data  | object         |
| type  | The type of service provider, such as Cableco or Wireless Service Providers, etc.   | string         |
| count   | The number of providers found   | int            |
| providers   | Lists the provider names found  | string         |
| broadband   | object  | object wrapper |
| tech  | Indicates the technology, such as "Optical Carrier / Fiber to the end user",  | string         |

| Response Attribute | Attribute Description   | Data Type |
|--------------------|---|-----------|
| max_ad_up          | Maximum advertised upstream speed/ bandwidth offered by the provider in the block for Consumer service  | int       |
| max_cir_up         | Maximum contractual upstream bandwidth offered by the provider in the block for Business service (filer directed to report 0 if the contracted service is sold on a “best efforts” basis without a guaranteed data-throughput rate)   | int       |
| max_ad_down        | Maximum advertised downstream speed/ bandwidth offered by the provider in the block for Consumer service  | int       |
| access_media       | The medium used for connectivity to the building or specified location. <ul style="list-style-type: none"> <li>• Coax/HFC</li> <li>• Copper</li> <li>• Fiber</li> <li>• Wireless – Fixed</li> <li>• Wireless – Mobile</li> <li>• Wireless – Satellite</li> <li>• Other</li> </ul> | string    |
| max_cir_down       | Maximum contractual downstream bandwidth offered by the provider in the block for Business service (filer directed to report 0 if the contracted service is sold on a “best efforts” basis without a guaranteed data-throughput rate)   | int       |
| provider_name      | The name of the provider  | string    |
| tech               | Indicates the technology, such as "Optical Carrier / Fiber to the end user",  | string    |
| onnet              | Object wrapper for onnet data   | object    |
| type               | The type of service provider, such as Cableco or Wireless Service Providers, etc.   | string    |
| count              | The number of providers found   | int       |
| providers          | Lists the provider names found  | string    |
| nearnet            | Object wrapper for nearnet data   | object    |
| type               | The type of service provider, such as Cableco or Wireless Service Providers, etc.   | string    |
| count              | The number of providers found   | int       |
| providers          | Lists the provider names found  | string    |
| totalRecords       | The total number of records found   | int       |
| invalidRecords     | The number of invalid records found   | int       |
| duplicateRecords   | The number of duplicate records found.  | int       |
| failedRecords      | The number of failed records.   | int       |

| Response Attribute | Attribute Description                    | Data Type |
|--------------------|--|-----------|
| inProgressRecord   | The number of records still in progress. | int       |
| completedRecord    | The number of completed records.         | int       |

### POST Bulk Address Error Response Example

```
{
  "status": "fail",
  "message": "Request Id already exists"
}
```

## GET Bulk Address Callback

Use this API to call back the results for a given request id. The request id is returned in the response of the *POST Bulk Address* API.

### Requirements and Special Considerations

Request Id is a required parameter. <https://api.connected2fiber.com/address-autocomplete/{address}>

### Request URL

[https://api.connected2fiber.com/network-intelligence/v6/bulk\\_address/{requestId}](https://api.connected2fiber.com/network-intelligence/v6/bulk_address/{requestId})

| Request parameters | Characteristic | Description/Requirements                           |
|--------------------|----------------|--|
| requestId          | string         | Request Id that is passed to the Bulk Address API. |

| Request headers           | Characteristic | Description/Requirements   |
|---------------------------|----------------|--|
| Ocp-Apim-Subscription-key | string         | The subscription key that provides access to this API, which can be found in your Profile. |

### Get Bulk Address Callback Success Response Example

```
{
  "requestId": "1234_command",
  "status": "Completed",
  "body": [{
    "location": {
      "address": "15323 N Scottsdale Rd",
      "city": "Scottsdale",
      "state": "AZ",
      "postal": "85254",
      "country": "USA",
      "latitude": "33.625314",
      "longitude": "-111.923988"
    },
    "data": {
      "telco": {
        "lec": "LUMEN TECHNOLOGIES",
        "npa": "480",
        "nxx": "315",
        "ocn": "9636",
        "lata": "666"
      }
    }
  ]
}
```

## Get Bulk Address Callback Success Response Example

```
    "type": "Telco",
    "state": "AZ",
    "lata_nm": "PHOENIX ARIZONA",
    "ocn_name": "QWEST CORPORATION",
    "swc_clli": "SCDLAZTHDS0",
    "rate_center": "PHOENIX",
    "building_clli": "",
    "central_office_address": {
      "zip": "85253",
      "city": "Paradise Valley",
      "state": "Arizona",
      "status": "success",
      "address": "6916 E Doubletree Ranch Rd",
      "message": null
    }
  },
  "cableco": {
    "type": "Cableco",
    "phone": "866-961-0027",
    "website": "cox.com",
    "cable_provider": "COX COMMUNICATIONS"
  },
  "wisp": {
    "type": "Wireless Service Providers",
    "count": 7,
    "providers": ["T-MOBILE", "MOJO BROADBAND", "TPT GLOBAL TECH", "PHOENIX
INTERNET", "GUTIERREZ-PALMENBERG INC.", "TRIAD WIRELESS", "ONE RING NETWORKS"]
  },
  "broadband": [{
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_up": 0,
    "max_cir_up": 1000,
    "max_ad_down": 0,
    "access_media": "Fiber",
    "max_cir_down": 1000,
    "provider_name": "LUMEN TECHNOLOGIES"
  }, {
    "tech": "Cable Modem - C DOCSIS 3.1",
    "max_ad_up": 35,
    "max_cir_up": 35,
    "max_ad_down": 1000,
    "access_media": "Coax/HFC",
    "max_cir_down": 1000,
    "provider_name": "COX COMMUNICATIONS"
  }, {
    "tech": "VDSL",
    "max_ad_up": 10,
    "max_cir_up": 0,
    "max_ad_down": 100,
    "access_media": "Copper",
    "max_cir_down": 0,
    "provider_name": "LUMEN TECHNOLOGIES"
  }, {
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 5,
    "max_cir_up": 50,
    "max_ad_down": 50,
    "access_media": "Wireless - Fixed",
    "max_cir_down": 50,
    "provider_name": "GUTIERREZ-PALMENBERG INC."
  }, {
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 5,
    "max_cir_up": null,
    "max_ad_down": 50,
    "access_media": "Wireless - Fixed",
    "max_cir_down": null,
    "provider_name": "TRIAD WIRELESS"
  }
]
```



## Get Bulk Address Callback Success Response Example

```
    }, {
      "tech": "Optical Carrier / Fiber to the end user",
      "max_ad_up": 0,
      "max_cir_up": null,
      "max_ad_down": 0,
      "access_media": "Fiber",
      "max_cir_down": null,
      "provider_name": "TPX COMMUNICATIONS"
    }, {
      "tech": "Asymmetric xDSL",
      "max_ad_up": 0.5,
      "max_cir_up": 0,
      "max_ad_down": 6,
      "access_media": "Copper",
      "max_cir_down": 0,
      "provider_name": "LUMEN TECHNOLOGIES"
    }, {
      "tech": "Other Copper Wireline",
      "max_ad_up": 0,
      "max_cir_up": 6,
      "max_ad_down": 0,
      "access_media": "Copper",
      "max_cir_down": 6,
      "provider_name": "VERIZON"
    }, {
      "tech": "Optical Carrier / Fiber to the end user",
      "max_ad_up": 0,
      "max_cir_up": 0,
      "max_ad_down": 0,
      "access_media": "Fiber",
      "max_cir_down": 0,
      "provider_name": "LUMEN TECHNOLOGIES"
    }, {
      "tech": "Optical Carrier / Fiber to the end user",
      "max_ad_up": 1000,
      "max_cir_up": 1000,
      "max_ad_down": 1000,
      "access_media": "Fiber",
      "max_cir_down": 1000,
      "provider_name": "COX COMMUNICATIONS"
    }
  ],
  "onnet": {
    "type": "On Net",
    "count": 7,
    "providers": ["COX COMMUNICATIONS", "LUMEN TECHNOLOGIES", "ZAYO", "VERIZON", "GUTIERREZ-PALMENBERG INC.", "TRIAD WIRELESS", "PHOENIX INTERNET"]
  },
  "nearnnet": {
    "type": "Near Net",
    "count": 12,
    "providers": ["ZAYO", "VERIZON", "ONE RING NETWORKS", "MOJO BROADBAND", "T-MOBILE", "TPT GLOBAL TECH", "PHOENIX INTERNET", "GUTIERREZ-PALMENBERG INC.", "TRIAD WIRELESS", "COX COMMUNICATIONS", "LUMEN TECHNOLOGIES", "BLUE OCEAN"]
  }
}, {
  "location": {
    "address": "1774 4th St",
    "city": "Berkeley",
    "state": "CA",
    "postal": "94710",
    "country": "USA",
    "latitude": "37.870259",
    "longitude": "-122.300966"
  },
  "data": {
    "telco": {
```

## Get Bulk Address Callback Success Response Example

```
    "lec": "AT&T",
    "npa": "510",
    "nxx": "292",
    "ocn": "9740",
    "lata": "722",
    "type": "Telco",
    "state": "CA",
    "lata_nm": "SAN FRANCISCO CA",
    "ocn_name": "PACIFIC BELL",
    "swc_clli": "ALBYCA11DS0",
    "rate_center": "OKLD BKLY",
    "building_clli": "",
    "central_office_address": {
      "zip": "94707",
      "city": "Berkeley",
      "state": "California",
      "status": "success",
      "address": "1612 Solano Ave",
      "message": null
    }
  },
  "cableco": {
    "type": "Cableco",
    "phone": "800-266-2278",
    "website": "business.comcast.com",
    "cable_provider": "COMCAST"
  },
  "wisp": {
    "type": "Wireless Service Providers",
    "count": 7,
    "providers": ["TPX COMMUNICATIONS", "UNWIRED LTD", "ALPHABET", "ETHERIC NETWORKS", "TOWERSTREAM", "WILINE NETWORKS", "T-MOBILE"]
  },
  "broadband": [{
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 150,
    "max_cir_up": 1000,
    "max_ad_down": 150,
    "access_media": "Wireless - Fixed",
    "max_cir_down": 1000,
    "provider_name": "UNWIRED LTD"
  }, {
    "tech": "ADSL2, ADSL2+",
    "max_ad_up": 1.5,
    "max_cir_up": 0,
    "max_ad_down": 18,
    "access_media": "Copper",
    "max_cir_down": 0,
    "provider_name": "AT&T"
  }, {
    "tech": "Symmetric xDSL",
    "max_ad_up": 0.26,
    "max_cir_up": 100,
    "max_ad_down": 0.77,
    "access_media": "Copper",
    "max_cir_down": 100,
    "provider_name": "SONIC"
  }, {
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 150,
    "max_cir_up": 100,
    "max_ad_down": 150,
    "access_media": "Wireless - Fixed",
    "max_cir_down": 100,
    "provider_name": "ETHERIC NETWORKS"
  }, {
    "tech": "Cable Modem - C DOCSIS 3.1",
    "max_ad_up": 35,
```

## Get Bulk Address Callback Success Response Example

```
        "max_cir_up": 0,
        "max_ad_down": 1000,
        "access_media": "Coax/HFC",
        "max_cir_down": 0,
        "provider_name": "COMCAST"
    }, {
        "tech": "Other Copper Wireline",
        "max_ad_up": 0,
        "max_cir_up": 1.5,
        "max_ad_down": 0,
        "access_media": "Copper",
        "max_cir_down": 1.5,
        "provider_name": "VERIZON"
    }, {
        "tech": "Asymmetric xDSL",
        "max_ad_up": 0.26,
        "max_cir_up": 0,
        "max_ad_down": 0.77,
        "access_media": "Copper",
        "max_cir_down": 0,
        "provider_name": "AT&T"
    }, {
        "tech": "Optical Carrier / Fiber to the end user",
        "max_ad_up": 1000,
        "max_cir_up": 1000,
        "max_ad_down": 1000,
        "access_media": "Fiber",
        "max_cir_down": 1000,
        "provider_name": "SONIC"
    }, {
        "tech": "VDSL",
        "max_ad_up": 20,
        "max_cir_up": 0,
        "max_ad_down": 100,
        "access_media": "Copper",
        "max_cir_down": 0,
        "provider_name": "AT&T"
    }, {
        "tech": "Optical Carrier / Fiber to the end user",
        "max_ad_up": 1000,
        "max_cir_up": null,
        "max_ad_down": 2000,
        "access_media": "Fiber",
        "max_cir_down": null,
        "provider_name": "SONIC CORP"
    }, {
        "tech": "Other Copper Wireline",
        "max_ad_up": 0.26,
        "max_cir_up": 12,
        "max_ad_down": 0.77,
        "access_media": "Copper",
        "max_cir_down": 12,
        "provider_name": "SONIC"
    }
    ]],
    "onnet": {
        "type": "On Net",
        "count": 6,
        "providers": ["AT&T", "COMCAST", "UNWIRED LTD", "ZAYO", "PAXIO", "ETHERIC
NETWORKS"]
    },
    "nearnet": {
        "type": "Near Net",
        "count": 20,
        "providers": ["UNION PACIFIC RAILROAD", "WINDSTREAM", "LUMEN
TECHNOLOGIES", "WILINE NETWORKS", "VERIZON", "CISCO", "ZAYO", "TELIA
COMPANY", "SONIC", "GEOLINKS", "ETHERIC NETWORKS", "UNWIRED LTD", "T-
MOBILE", "ALPHABET", "TOWERSTREAM", "COMCAST", "AT&T", "CALLONE", "PAXIO", "EXTENET
SYSTEMS"]
    }
}
```

## Get Bulk Address Callback Success Response Example

```
    }
  }, {
    "location": {
      "address": "23811 Aliso Creek Rd",
      "city": "Laguna Niguel",
      "state": "CA",
      "postal": "92677",
      "country": "USA",
      "latitude": "33.556231",
      "longitude": "-117.716885"
    },
    "data": {
      "telco": {
        "lec": "AT&T",
        "npa": "949",
        "nxx": "249",
        "ocn": "9740",
        "lata": "730",
        "type": "Telco",
        "state": "CA",
        "lata_nm": "LOS ANGELES CA",
        "ocn_name": "PACIFIC BELL",
        "swc_clli": "LGNGCAL2DS0",
        "rate_center": "CAPITRNVLV",
        "building_clli": "",
        "central_office_address": {
          "zip": "92677",
          "city": "Laguna Niguel",
          "state": "California",
          "status": "success",
          "address": "24421 Aliso Creek Rd",
          "message": null
        }
      },
      "cableco": {
        "type": "Cableco",
        "phone": "866-961-0027",
        "website": "cox.com",
        "cable_provider": "COX COMMUNICATIONS"
      },
      "wisp": {
        "type": "Wireless Service Providers",
        "count": 3,
        "providers": ["TPX COMMUNICATIONS", "T-MOBILE", "GEOLINKS"]
      },
      "broadband": [{
        "tech": "Cable Modem - C DOCSIS 3.1",
        "max_ad_up": 35,
        "max_cir_up": 35,
        "max_ad_down": 1000,
        "access_media": "Coax/HFC",
        "max_cir_down": 1000,
        "provider_name": "COX COMMUNICATIONS"
      }, {
        "tech": "ADSL2, ADSL2+",
        "max_ad_up": 1.5,
        "max_cir_up": 0,
        "max_ad_down": 18,
        "access_media": "Copper",
        "max_cir_down": 0,
        "provider_name": "AT&T"
      }, {
        "tech": "Optical Carrier / Fiber to the end user",
        "max_ad_up": 0,
        "max_cir_up": null,
        "max_ad_down": 0,
        "access_media": "Fiber",
```

## Get Bulk Address Callback Success Response Example

```
        "max_cir_down": null,
        "provider_name": "WHITESKY"
    }, {
        "tech": "Asymmetric xDSL",
        "max_ad_up": 0.51,
        "max_cir_up": 0,
        "max_ad_down": 6,
        "access_media": "Copper",
        "max_cir_down": 0,
        "provider_name": "AT&T"
    }
  ],
  "onnet": {
    "type": "On Net",
    "count": 4,
    "providers": ["AT&T", "COX COMMUNICATIONS", "LUMEN TECHNOLOGIES", "VIASAT
COMMUNICATIONS"]
  },
  "nearnnet": {
    "type": "Near Net",
    "count": 12,
    "providers": ["EDISON CARRIER SOLUTIONS", "CROWN CASTLE", "SOUTHERN
CALIFORNIA EDISON COMPANY", "GEOLINKS", "MHO", "T-MOBILE", "AT&T", "EDISON
INTERNATIONAL", "COX COMMUNICATIONS", "VERIZON", "LUMEN TECHNOLOGIES", "STRUCTURAL
ENGINEERS"]
  }
}, {
  "location": {
    "address": "2728 N 68th St",
    "city": "Scottsdale",
    "state": "AZ",
    "postal": "85257",
    "country": "USA",
    "latitude": "33.478885",
    "longitude": "-111.935394"
  },
  "data": {
    "telco": {
      "lec": "LUMEN TECHNOLOGIES",
      "npa": "480",
      "nxx": "312",
      "ocn": "9636",
      "lata": "666",
      "type": "Telco",
      "state": "AZ",
      "lata_nm": "PHOENIX ARIZONA",
      "ocn_name": "QWEST CORPORATION",
      "swc_clli": "SCDLAZMADS0",
      "rate_center": "PHOENIX",
      "building_clli": "",
      "central_office_address": {
        "zip": "85251",
        "city": "Scottsdale",
        "state": "Arizona",
        "status": "success",
        "address": "7145 E 1st St",
        "message": null
      }
    }
  },
  "cableco": {
    "type": "Cableco",
    "phone": "866-961-0027",
    "website": "cox.com",
    "cable_provider": "COX COMMUNICATIONS"
  },
  "wisp": {
    "type": "Wireless Service Providers",
    "count": 4,

```

## Get Bulk Address Callback Success Response Example

```
    "providers": ["GUTIERREZ-PALMENBERG INC.", "PHOENIX INTERNET", "TRIAD WIRELESS", "T-MOBILE"]
  },
  "broadband": [{
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 50,
    "max_cir_up": null,
    "max_ad_down": 300,
    "access_media": "Wireless - Fixed",
    "max_cir_down": null,
    "provider_name": "TRIAD WIRELESS"
  }, {
    "tech": "Other Copper Wireline",
    "max_ad_up": 0,
    "max_cir_up": 1.5,
    "max_ad_down": 0,
    "access_media": "Copper",
    "max_cir_down": 1.5,
    "provider_name": "VERIZON"
  }, {
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 1,
    "max_cir_up": 5,
    "max_ad_down": 15,
    "access_media": "Wireless - Fixed",
    "max_cir_down": 20,
    "provider_name": "GUTIERREZ-PALMENBERG INC."
  }, {
    "tech": "Cable Modem - C DOCSIS 3.1",
    "max_ad_up": 35,
    "max_cir_up": 35,
    "max_ad_down": 1000,
    "access_media": "Coax/HFC",
    "max_cir_down": 1000,
    "provider_name": "COX COMMUNICATIONS"
  }, {
    "tech": "VDSL",
    "max_ad_up": 10,
    "max_cir_up": 0,
    "max_ad_down": 100,
    "access_media": "Copper",
    "max_cir_down": 0,
    "provider_name": "LUMEN TECHNOLOGIES"
  }, {
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_up": 940,
    "max_cir_up": 1000,
    "max_ad_down": 940,
    "access_media": "Fiber",
    "max_cir_down": 1000,
    "provider_name": "LUMEN TECHNOLOGIES"
  }, {
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_up": 940,
    "max_cir_up": 0,
    "max_ad_down": 940,
    "access_media": "Fiber",
    "max_cir_down": 0,
    "provider_name": "LUMEN TECHNOLOGIES"
  }
  ],
  "onnet": {
    "type": "On Net",
    "count": 6,
    "providers": ["LUMEN TECHNOLOGIES", "COX COMMUNICATIONS", "T-MOBILE", "GUTIERREZ-PALMENBERG INC.", "TRIAD WIRELESS", "ZAYO"]
  },
  "nearnet": {
    "type": "Near Net",
```

## Get Bulk Address Callback Success Response Example

```
        "count": 9,
        "providers": ["SRP TELECOM", "ZAYO", "VERIZON", "T-MOBILE", "PHOENIX
INTERNET", "GUTIERREZ-PALMENBERG INC.", "TRIAD WIRELESS", "COX COMMUNICATIONS", "LUMEN
TECHNOLOGIES"]
    }
}, {
  "location": {
    "address": "3545 Mt Diablo Blvd",
    "city": "Lafayette",
    "state": "CA",
    "postal": "94549",
    "country": "USA",
    "latitude": "37.891697",
    "longitude": "-122.119982"
  },
  "data": {
    "telco": {
      "lec": "AT&T",
      "npa": "925",
      "nxx": "283",
      "ocn": "9740",
      "lata": "722",
      "type": "Telco",
      "state": "CA",
      "lata_nm": "SAN FRANCISCO CA",
      "ocn_name": "PACIFIC BELL",
      "swc_clli": "LFYTCA11DS0",
      "rate_center": "LAFAYETTE",
      "building_clli": "",
      "central_office_address": {
        "zip": "94549",
        "city": "Lafayette",
        "state": "California",
        "status": "success",
        "address": "3610 Happy Valley Rd",
        "message": null
      }
    },
    "cableco": {
      "type": "Cableco",
      "phone": "800-266-2278",
      "website": "business.comcast.com",
      "cable_provider": "COMCAST"
    },
    "wisp": {
      "type": "Wireless Service Providers",
      "count": 3,
      "providers": ["T-MOBILE", "ETHERIC NETWORKS", "TPX COMMUNICATIONS"]
    },
    "broadband": [{
      "tech": "Terrestrial Fixed Wireless",
      "max_ad_up": 80,
      "max_cir_up": 100,
      "max_ad_down": 80,
      "access_media": "Wireless - Fixed",
      "max_cir_down": 100,
      "provider_name": "ETHERIC NETWORKS"
    }, {
      "tech": "Cable Modem - C DOCSIS 3.1",
      "max_ad_up": 35,
      "max_cir_up": 0,
      "max_ad_down": 1000,
      "access_media": "Coax/HFC",
      "max_cir_down": 0,
      "provider_name": "COMCAST"
    }
  ],
  "onnet": {
```

## Get Bulk Address Callback Success Response Example

```
    "type": "On Net",
    "count": 4,
    "providers": ["COMCAST", "AT&T", "WILINE NETWORKS", "ETHERIC NETWORKS"]
  },
  "nearnnet": {
    "type": "Near Net",
    "count": 10,
    "providers": ["LUMEN TECHNOLOGIES", "ZAYO", "WAVE
BAND", "GEOLINKS", "ETHERIC NETWORKS", "T-MOBILE", "COMCAST", "AT&T", "EXTENET
SYSTEMS", "UNWIRED LTD"]
  }
}, {
  "location": {
    "address": "6600 Topanga Canyon Blvd",
    "city": "Canoga Park",
    "state": "CA",
    "postal": "91303",
    "country": "USA",
    "latitude": "34.190029",
    "longitude": "-118.605659"
  },
  "data": {
    "telco": {
      "lec": "AT&T",
      "npa": "818",
      "nxx": "226",
      "ocn": "9740",
      "lata": "730",
      "type": "Telco",
      "state": "CA",
      "lata_nm": "LOS ANGELES CA",
      "ocn_name": "PACIFIC BELL",
      "swc_clli": "CNPKCA01DS0",
      "rate_center": "CANOGAPARK",
      "building_clli": "",
      "central_office_address": {
        "zip": "91303",
        "city": "Canoga Park",
        "state": "California",
        "status": "success",
        "address": "22012 Vanowen St",
        "message": null
      }
    },
    "cableco": {
      "type": "Cableco",
      "phone": "203-905-7801",
      "website": "spectrum.com",
      "cable_provider": "SPECTRUM"
    },
    "wisp": {
      "type": "Wireless Service Providers",
      "count": 5,
      "providers": ["ONE RING NETWORKS", "GEOLINKS", "GO CREATIVE
WIRELESS", "STARRY INC", "T-MOBILE"]
    },
    "broadband": [{
      "tech": "Terrestrial Fixed Wireless",
      "max_ad_up": 40,
      "max_cir_up": null,
      "max_ad_down": 100,
      "access_media": "Wireless - Fixed",
      "max_cir_down": null,
      "provider_name": "GO CREATIVE WIRELESS"
    }, {
      "tech": "Terrestrial Fixed Wireless",
      "max_ad_up": 200,
```



## Get Bulk Address Callback Success Response Example

```
"max_cir_up": null,
"max_ad_down": 200,
"access_media": "Wireless - Fixed",
"max_cir_down": null,
"provider_name": "STARRY INC"
}, {
  "tech": "Other Copper Wireline",
  "max_ad_up": 0,
  "max_cir_up": 20,
  "max_ad_down": 0,
  "access_media": "Copper",
  "max_cir_down": 20,
  "provider_name": "TPX COMMUNICATIONS"
}, {
  "tech": "Other Copper Wireline",
  "max_ad_up": 0.51,
  "max_cir_up": 1.5,
  "max_ad_down": 6,
  "access_media": "Copper",
  "max_cir_down": 1.5,
  "provider_name": "KINETIC"
}, {
  "tech": "Cable Modem - C DOCSIS 3.1",
  "max_ad_up": 35,
  "max_cir_up": 0,
  "max_ad_down": 940,
  "access_media": "Coax/HFC",
  "max_cir_down": 0,
  "provider_name": "SPECTRUM"
}, {
  "tech": "Other Copper Wireline",
  "max_ad_up": 0.51,
  "max_cir_up": 1.5,
  "max_ad_down": 6,
  "access_media": "Copper",
  "max_cir_down": 1.5,
  "provider_name": "CYBERNET COMMUNICATIONS INC."
}, {
  "tech": "Other Copper Wireline",
  "max_ad_up": 0.51,
  "max_cir_up": 6,
  "max_ad_down": 6,
  "access_media": "Copper",
  "max_cir_down": 6,
  "provider_name": "FUSION CONNECT"
}, {
  "tech": "Optical Carrier / Fiber to the end user",
  "max_ad_up": 0,
  "max_cir_up": 1,
  "max_ad_down": 0,
  "access_media": "Fiber",
  "max_cir_down": 6,
  "provider_name": "SPECTROTEL"
}, {
  "tech": "Optical Carrier / Fiber to the end user",
  "max_ad_up": 0,
  "max_cir_up": 8,
  "max_ad_down": 0,
  "access_media": "Fiber",
  "max_cir_down": 100,
  "provider_name": "WINDSTREAM"
}, {
  "tech": "Optical Carrier / Fiber to the end user",
  "max_ad_up": 0,
  "max_cir_up": 100,
  "max_ad_down": 0,
  "access_media": "Fiber",
  "max_cir_down": 100,
```

## Get Bulk Address Callback Success Response Example

```
    "provider_name": "TPX COMMUNICATIONS"
  }, {
    "tech": "Other Copper Wireline",
    "max_ad_up": 0,
    "max_cir_up": 11,
    "max_ad_down": 0,
    "access_media": "Copper",
    "max_cir_down": 11,
    "provider_name": "VERIZON"
  }, {
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 1000,
    "max_cir_up": 1000,
    "max_ad_down": 1000,
    "access_media": "Wireless - Fixed",
    "max_cir_down": 1000,
    "provider_name": "GEOLINKS"
  }, {
    "tech": "ADSL2, ADSL2+",
    "max_ad_up": 0,
    "max_cir_up": null,
    "max_ad_down": 0,
    "access_media": "Copper",
    "max_cir_down": null,
    "provider_name": "KINETIC"
  }, {
    "tech": "Terrestrial Fixed Wireless",
    "max_ad_up": 100,
    "max_cir_up": null,
    "max_ad_down": 100,
    "access_media": "Wireless - Fixed",
    "max_cir_down": null,
    "provider_name": "ONE RING NETWORKS"
  }, {
    "tech": "Optical Carrier / Fiber to the end user",
    "max_ad_up": 0,
    "max_cir_up": 300,
    "max_ad_down": 0,
    "access_media": "Fiber",
    "max_cir_down": 300,
    "provider_name": "VERIZON"
  }, {
    "tech": "Other Copper Wireline",
    "max_ad_up": 0,
    "max_cir_up": 1.5,
    "max_ad_down": 0,
    "access_media": "Copper",
    "max_cir_down": 1.5,
    "provider_name": "NETFORTRIS INC."
  }, {
    "tech": "Asymmetric xDSL",
    "max_ad_up": 0.51,
    "max_cir_up": 1.5,
    "max_ad_down": 6,
    "access_media": "Copper",
    "max_cir_down": 1.5,
    "provider_name": "KINETIC"
  }, {
    "tech": null,
    "max_ad_up": 0,
    "max_cir_up": 0,
    "max_ad_down": 0,
    "access_media": "Fiber",
    "max_cir_down": 0,
    "provider_name": "EARTHLINK LLC"
  }
],
"onnet": {
  "type": "On Net",
```

## Get Bulk Address Callback Success Response Example

```

    "count": 11,
    "providers": ["AT&T", "SPECTRUM", "HARGRAY", "FRONTIER COMMUNICATIONS
CORPORATION", "GEOLINKS", "GO CREATIVE WIRELESS", "STARRY INC", "SOUTHERN CALIFORNIA
EDISON COMPANY", "T-MOBILE", "COMCAST", "CROWN CASTLE"]
  },
  "nearnnet": {
    "type": "Near Net",
    "count": 17,
    "providers": ["EDISON CARRIER
SOLUTIONS", "VERIZON", "EDISON INTERNATIONAL", "ZAYO", "SOUTHERN CALIFORNIA EDISON
COMPANY", "STRUCTURAL ENGINEERS", "GEOLINKS", "MHO", "ONE RING NETWORKS", "STARRY INC", "T-
MOBILE", "GO CREATIVE WIRELESS", "FRONTIER COMMUNICATIONS
CORPORATION", "AT&T", "SPECTRUM", "CROWN CASTLE", "CALLONE"]
  }
}
  },
  "totalRecords": 6,
  "invalidRecords": 0,
  "duplicateRecords": 0,
  "failedRecords": 0,
  "InProgressRecord": 0,
  "completedRecord": 6
}

```

## Get Bulk Address Callback response attributes and data types

| Response Attribute | Attribute Description   | Data Type      |
|--------------------|---|----------------|
| requestId          | A unique identifier for the request   | string         |
| status             | Indicates that status of API completion.  | string         |
| body               | object  | object wrapper |
| location           | object  | object wrapper |
| address            | The street address of the location.   | string         |
| city               | The city in which the location resides.   | string         |
| state              | The state in which the location resides.  | string         |
| postal             | The postal code of the location   | string         |
| country            | The country in which the location resides.  | string         |
| latitude           | The angular distance of a place north or south of the earth's equator, or of a celestial object north or south of the celestial equator, usually expressed in degrees and minutes.    | string         |
| longitude          | The angular distance of a place east or west of the meridian at Greenwich, England, or west of the standard meridian of a celestial object, usually expressed in degrees and minutes. | string         |
| data               | object  | object wrapper |
| telco              | object  | object wrapper |
| lec                | Local Exchange Carrier  | string         |

| Response Attribute  | Attribute Description  | Data Type |
|---|--|-----------|
| npa   | <p>Numbering Plan Areas, each identified by a three-digit NPA code, commonly called an area code.</p> <p>NPAs represent an aggregation of exchange areas for which the given code is applicable. These Code/Exchange area relationships are assigned by the North American Numbering Plan Administration (NANPA) and published in the Local Exchange Routing Guide (LERG) database published monthly by 'iconectiv'.</p> | string    |
| nxx   | <p>Area Code/Prefix (NPA/NXX) Assignment.</p> <p>Valid Prefixes per NPA are published according to exchange switch specifications published in the LERG. A subset of NPA/NXX combinations are serviced by the incumbent Local Exchange Carriers (ILECS) operating Serving Wire Centers.</p>  | string    |
| ocn   | Operating company number; a 4-character ID used to identify a company that provides local exchange telephone services.   | string    |
| lata  | 3-digit code that represents the boundary of the Local Access and Transport Area.  | string    |
| type  | Identifies the type of carrier, such as Telco, for example.  | string    |
| state   | The name of the state  | string    |
| lata_nm   | <p>LATA provider name</p> <p>Local Access and Transport Area defines geographical boundaries of local telephone service networks.</p>  | string    |
| ocn_name  | The name of the provider associated with the OCN number.   | string    |
| swc_clli  | Serving Wire Center clli code  | string    |
| rate_center   | In the North American Numbering Plan , a rate center (rate centre in Canada) is a geographically-specified area used for determining mileage and/or usage dependent rates in the public switched telephone network.  | string    |
| building_clli (blank/null unless specifically provided by the customer) | Common Language Information Services Identifier (CLLI), used to identify the building location. Network Site codes are typically used to identify building locations, specific to an address.  | string    |

| Response Attribute     | Attribute Description   | Data Type      |
|------------------------|---|----------------|
|                        | First four characters represent a geographical code, the fifth and sixth characters represent a geopolitical code. The remaining two characters are uniquely assigned by iconectiv® to identify the building location.              |                |
| central_office_address | object wrapper  | object         |
| zip                    | The zip code for the central office location.   | string         |
| city                   | The city in which the location resides.   | string         |
| state                  | The state in which the location resides.  | string         |
| status                 | Success or fail   | string         |
| address                | The street address of the central office location.  | string         |
| message                | Any additional information provided by the customer.  | string         |
| cableco                | Object wrapper for cableco data   | object         |
| type                   | The type of service provider, such as Cableco or Wireless Service Providers, etc.   | string         |
| phone                  | The phone number of the provider.   | string         |
| website                | The website for the providers   | string         |
| cable_provider         | The name of the cable provider  | string         |
| wisp                   | Object wrapper for wisp data  | object         |
| type                   | The type of service provider, such as Cableco or Wireless Service Providers, etc.   | string         |
| count                  | The number of providers found   | int            |
| providers              | Lists the provider names found  | string         |
| broadband              | object  | object wrapper |
| tech                   | Indicates the technology, such as "Optical Carrier / Fiber to the end user",  | string         |
| max_ad_up              | Maximum advertised upstream speed/ bandwidth offered by the provider in the block for Consumer service  | int            |
| max_cir_up             | Maximum contractual upstream bandwidth offered by the provider in the block for Business service (filer directed to report 0 if the contracted service is sold on a "best efforts" basis without a guaranteed data-throughput rate) | int            |
| max_ad_down            | Maximum advertised downstream speed/ bandwidth offered by the provider in the block for Consumer service  | int            |
| access_media           | The medium used for connectivity to the building or specified location.   | string         |

| Response Attribute | Attribute Description   | Data Type |
|--------------------|---|-----------|
|                    | <ul style="list-style-type: none"> <li>• Coax/HFC</li> <li>• Copper</li> <li>• Fiber</li> <li>• Wireless – Fixed</li> <li>• Wireless – Mobile</li> <li>• Wireless – Satellite</li> <li>• Other</li> </ul>                             |           |
| max_cir_down       | Maximum contractual downstream bandwidth offered by the provider in the block for Business service (filer directed to report 0 if the contracted service is sold on a “best efforts” basis without a guaranteed data-throughput rate) | int       |
| provider_name      | The name of the provider  | string    |
| tech               | Indicates the technology, such as "Optical Carrier / Fiber to the end user",  | string    |
| onnet              | Object wrapper for onnet data   | object    |
| type               | The type of service provider, such as Cableco or Wireless Service Providers, etc.   | string    |
| count              | The number of providers found   | int       |
| providers          | Lists the provider names found  | string    |
| nearnet            | Object wrapper for nearnet data   | object    |
| type               | The type of service provider, such as Cableco or Wireless Service Providers, etc.   | string    |
| count              | The number of providers found   | int       |
| providers          | Lists the provider names found  | string    |
| totalRecords       | The total number of records found   | int       |
| invalidRecords     | The number of invalid records found   | int       |
| duplicateRecords   | The number of duplicate records found.  | int       |
| failedRecords      | The number of failed records.   | int       |
| inProgressRecord   | The number of records still in progress.  | int       |
| completedRecord    | The number of completed records.  | int       |

#### Get Bulk Address Callback Error Response Example

```
{
  "status": "fail",
  "message": "Request Id already exists"
}
```

## GET cableco

Issue this call to retrieve the cable provider data for a specified address,

## Requirements and Special Considerations

This API call requires the address and subscription key. The validation parameter is an optional parameter, but it enables you to utilize address validation. <https://api.connected2fiber.com/address-autocomplete/{address}>

## Request URL

<https://api.connected2fiber.com/network-intelligence/v6/cableco> [?validation][&address][&lat][&lon]

| Request parameters | Characteristic | Description/Requirements  |
|--------------------|----------------|---|
| address            | string         | Address   |
| validation         | Boolean        | Validates and formats the input address before processing. Defaults to "true" |
| lat (optional)     | string         | Latitude to use instead of address; however, address is still required.       |
| lon (optional)     | string         | Longitude to use instead of address; however, address is still required.      |

| Request headers           | Characteristic | Description/Requirements   |
|---------------------------|----------------|--|
| Ocp-Apim-Subscription-key | string         | The subscription key that provides access to this API, which can be found in your Profile. |

## Get cableco Success Response Example

```
{
  "status": "success",
  "body": {
    "cableProvider": "COMCAST",
    "phone": "800-391-3000",
    "type": "Cableco",
    "website": "xfinity.com",
    "location": {
      "street": "800 Boylston St",
      "city": "Boston",
      "state": "MA",
      "country": "USA",
      "postal": "02199",
      "longitude": -71.08225,
      "latitude": 42.34868
    }
  }
}
```

## Get cableco attributes and data types

| Response Attribute | Attribute Description  | Data Type |
|--------------------|--|-----------|
| status             | <ul style="list-style-type: none"><li>Success</li><li>Failed</li></ul> | string    |
| cableProvider      | The name of the cable provider.  | string    |
| phone              | The phone number of the cable provider.                                | string    |

| Response Attribute | Attribute Description   | Data Type |
|--------------------|---|-----------|
| type               | The type of cable provider.   | string    |
| website            | The website of the cable provider.  | string    |
| location           | object wrapper  | object    |
| street             | The street address for the location.  | string    |
| city               | The city in which the location resides.   | string    |
| state              | The state in which the location resides.  | string    |
| postal             | The zip code in which the location resides.   | int       |
| country            | The country in which the location resides.  | string    |
| latitude           | The angular distance of a place north or south of the earth's equator, or of a celestial object north or south of the celestial equator, usually expressed in degrees and minutes.    | string    |
| longitude          | The angular distance of a place east or west of the meridian at Greenwich, England, or west of the standard meridian of a celestial object, usually expressed in degrees and minutes. | string    |

#### Get cableco Error Response Example

```
{
  "status": "fail",
  "error": "Unable to find address."
}
```

## GET Conformed Providers

Issue this call to get the Connectbase conformed provider name for a specific carrier.

#### Requirements and Special Considerations

This API call requires the address and subscription key. Special characters such as the ampersand (IE AT&T) should be omitted or URL-encoded when being passed. <https://api.connected2fiber.com/address-autocomplete/{address}>

#### Request URL

[https://api.connected2fiber.com/network-intelligence/v6/providers\[?name\]](https://api.connected2fiber.com/network-intelligence/v6/providers[?name])

| Request parameters | Characteristic | Description/Requirements |
|--------------------|----------------|--------------------------|
| name               | string         | Name of desired carrier. |

| Request headers           | Characteristic | Description/Requirements   |
|---------------------------|----------------|--|
| Ocp-Apim-Subscription-key | string         | The subscription key that provides access to this API, which can be found in your Profile. |



### Get Conformed Providers Success Response Example

```
{
  "status": "found",
  "input_name": "ATT",
  "confirmed_name": "AT&T"
}
```

### Get Conformed Providers response attributes and data types

| Response Attribute | Attribute Description  | 103BData Type |
|--------------------|--|---------------|
| status             | <ul style="list-style-type: none"><li>Success</li><li>Failed</li></ul> | string        |
| input_name         | The user entered provider name to be conformed by Connectbase.         | string        |
| confirmed_name     | The conformed provider name returned in the response.                  | string        |

### Get Conformed Providers Error Response Example

```
{
  "statusCode": 401,
  "message": "Access denied due to invalid subscription key. Make sure to provide a valid key for an active subscription."
}
```

## GET Building Providers

Issue this call to return a list of building providers from Network Finder data and client building data. This API returns both domestic and international locations, where applicable.

### Requirements and Special Considerations

This call requires that you input either the address or lat/longs, companyid and subscription key. Other request parameters are optional such as validation and siteDistance, but they enable you to refine or limit your search criteria.

**Note:** The response will include the top ten responses based on the supplier, access medium, connection status, and network connection status.

### Request URL

<https://api.connected2fiber.com/network-intelligence/v6/> [?companyid][&validation][&siteDistance][&address][&lat][&lon]

| Request parameters    | Characteristic | Description/Requirements  |
|-----------------------|----------------|---|
| address               | string         | Address   |
| validation (optional) | Boolean        | Specifies whether address validation is utilized by the API. True or False.   |
| companyid             | number         | Company id related to the provider/building results needed to filter results. |

| Request parameters         | Characteristic | Description/Requirements  |
|----------------------------|----------------|---|
| siteDistance<br>(optional) | number         | Site distance from the location/address. You can enter a number between 0 – 5000 (ft). If no number is entered, the system will return results based on the default value of 2000 ft. |
| lat (optional)             | number         | Latitude. Range is -90 to 90.   |
| lon (optional)             | number         | Longitude. Range is -180 to 180.  |

| Request headers           | Characteristic | Description/Requirements   |
|---------------------------|----------------|--|
| Ocp-Apim-Subscription-key | string         | The subscription key that provides access to this API, which can be found in your Profile. |

### Success Response Example 1 – Pull NI by Addresses



The following sample responses show only a subset of returned providers. These examples are intended to show the response attributes that will be returned for each provider in the response. The actual response will include the top ten responses based on the supplier, access medium, connection status, and network connection status.

```
{
  "status": "success",
  "body": {
    "location": {
      "street": "53 Sumner St",
      "city": "Milford",
      "state": "MA",
      "country": "USA",
      "postal": "01757",
      "latitude": "42.153816",
      "longitude": "-71.519359",
      "streetPostDirection": "",
      "streetPreDirection": ""
    },
    "inputAddress": "53 Sumner Street, Milford, MA, 01757",
    "data": [
      {
        "closestSite": "53 Sumner St, Milford, MA, 01757",
        "siteDistance": 0,
        "latitude": "42.153816",
        "longitude": "-71.519359",
        "connectionStatus": "OnNet",
        "provider": "COMCAST",
        "providerType": "Market",
        "source": "C2F Network Finder",
        "accessMedium": "Fiber",
        "networkConnectionStatus": "Connected"
      },
      {
        "closestSite": "53 Sumner St, Milford, MA, 01757",
        "siteDistance": 0,
        "latitude": "42.153816",
        "longitude": "-71.519359",
        "connectionStatus": "OnNet",
        "provider": "COMCAST",
        "providerType": "Market",
        "source": "C2F Network Finder",
        "accessMedium": "Coax/HFC",

```

### Success Response Example 1 – Pull NI by Addresses

```
    "networkConnectionStatus": "Connected"
  }
}
```

### Get Building Providers Error Response Example 1– Pull NI by Addresses

```
{
  "statusCode": 400,
  "message": "Please enter the address in below order:  
Street name, City, State, Country"
}
```

### Get Building Providers Success Response Example 2 – Pull NI by Latlong

```
{
  "status": "success",
  "message": "",
  "body": {
    "location": {
      "street": "53 Sumner St",
      "city": "Milford",
      "state": "MA",
      "country": "US",
      "postal": "01757",
      "latitude": "42.15381",
      "longitude": "-71.519359",
      "streetPostDirection": "",
      "streetPreDirection": ""
    },
    "data": [{
      "closestSite": "53 Sumner St, Milford, MA, 01757",
      "siteDistance": 2,
      "latitude": "42.153816",
      "longitude": "-71.519359",
      "connectionStatus": "OnNet",
      "provider": "VERIZON",
      "providerType": "Market",
      "source": "CB Network Finder",
      "accessMedium": "Fiber",
      "networkConnectionStatus": "Connected"
    }, {
      "closestSite": "53 Sumner St, Milford, MA, 01757",
      "siteDistance": 2,
      "latitude": "42.153816",
      "longitude": "-71.519359",
      "connectionStatus": "Near Net",
      "provider": "GTT",
      "providerType": "Market",
      "source": "CB Network Finder",
      "accessMedium": "Fiber",
      "networkConnectionStatus": "Not Connected"
    }
  ]
}
```

### Get Building Providers Error Response Example 2 – Pull NI by Latlongs

```
{
  "statusCode": 400,
  "message": "Please enter the address in below order:"
}
```

## Get Building Providers Error Response Example 2 – Pull NI by Latlongs

```
Street name, City, State, Country"  
}
```

### Get Building Providers response attributes and data types

| Response Attribute  | Attribute Description   | Data Type |
|---------------------|---|-----------|
| status              | <ul style="list-style-type: none"><li>• Success</li><li>• Failed</li></ul>  | string    |
| message             | Where applicable, displays the error message if status = Failed.  | string    |
| body                | object wrapper  | object    |
| location            | object wrapper  | object    |
| street              | The street address for the location.  | string    |
| city                | The city in which the location resides.   | string    |
| state               | The state in which the location resides.  | string    |
| postal              | The zip code in which the location resides.   | int       |
| country             | The country in which the location resides.  | string    |
| latitude            | The angular distance of a place north or south of the earth's equator, or of a celestial object north or south of the celestial equator, usually expressed in degrees and minutes.    | string    |
| longitude           | The angular distance of a place east or west of the meridian at Greenwich, England, or west of the standard meridian of a celestial object, usually expressed in degrees and minutes. | string    |
| StreetPostDirection | An address element that indicates geographic location such as N, S, E, W, NE, NW, SE, and SW that is placed to the left of (before) the street name such as E HOOVER ST.              | string    |
| streetPreDirection  | An address element that indicates geographic location such as N, S, E, W, NE, NW, SE, and SW that is placed to the right of (after) the street name such as BAY DRIVE W.              | string    |
| inputAddress        | The address entered to retrieve building providers.   | string    |
| data                | object wrapper  | object    |
| closestSite         | Identifies the closest site to the provider.  | string    |
| siteDistance        | Identifies the distance to the provider, in feet.   | int       |
| connectionStatus    | A metric used to identify the connectivity status of fiber-connected buildings.<br><br>Range of valid values:   | string    |

| Response Attribute | Attribute Description   | Data Type |
|--------------------|---|-----------|
|                    | <p>Near Net</p> <p>OffNet</p> <p>On Net–Limited Access</p> <p>OnNet</p> <p>Prospect</p>   |           |
| provider           | <p>The name of the provider.</p> <p>The source of the provider name is sourced as follows:</p> <p>If locations were published from Network Radar or are otherwise known as supplier buildings:</p> <ul style="list-style-type: none"> <li>• If Supplier Name can be standardized properly from the Connectbase reference table, returns the Supplier Name as the provider;</li> <li>• Else, returns Provider Name</li> </ul> <p>If locations are NOT supplier buildings, returns the Company Name as provider.</p>  | string    |
| providerType       | <p>If locations were published from Network Radar, or otherwise known as supplier building, checks if the supplier is in the Competitor Supplier List:</p> <ul style="list-style-type: none"> <li>• If competitor flag is true, returns “Competitor”</li> <li>• If competitor flag is false, returns “Provider”.</li> </ul> <p>If locations were NOT published from Network Radar, or known as supplier buildings, checks for the company of the user:</p> <ul style="list-style-type: none"> <li>• If user has access to that location in the TCW, return “Our Access”</li> <li>• Else, “Market”</li> </ul> <p>Range of valid values:</p> <ul style="list-style-type: none"> <li>• Our Access</li> <li>• Market</li> <li>• Competitor</li> <li>• Provider</li> </ul> | string    |
| source             | <p>If locations were published from Network Radar, or otherwise known as a supplier building, return “Network Radar”;</p>   | string    |

| Response Attribute      | Attribute Description  | Data Type |
|-------------------------|--|-----------|
|                         | <p>If it is not from Supplier Building, check for the following:</p> <ul style="list-style-type: none"> <li>• if it is from My Buildings</li> <li>• if it is known as service providers' footprint or inventory</li> </ul> <p>Returns "My Building";</p> <ul style="list-style-type: none"> <li>• If it is from Connectbase serviceability warehouse</li> </ul> <p>Returns "CB Serviceability";</p> <p>Else would be "CB Network Finder".</p> <p>Range of valid values:</p> <ul style="list-style-type: none"> <li>• My Building</li> <li>• CB Network Finder</li> <li>• CB Serviceability</li> <li>• Network Radar</li> </ul> |           |
| accessMedium            | <p>The medium used for connectivity to the building or specified location.</p> <p>Range of valid values:</p> <ul style="list-style-type: none"> <li>• Coax/HFC</li> <li>• Copper</li> <li>• Fiber</li> <li>• Wireless – Fixed</li> <li>• Wireless – Mobile</li> <li>• Wireless – Satellite</li> <li>• Other</li> </ul>   | string    |
| networkConnectionStatus | <p>A metric used to identify the connectivity status of fiber-connected buildings.</p> <p>Range of valid values:</p> <ul style="list-style-type: none"> <li>• Near Net</li> <li>• OffNet</li> <li>• On Net–Limited Access</li> <li>• OnNet</li> <li>• Prospect</li> </ul>  | string    |

## GET Building Providers by Address

Issue this call to return a list of building providers from network finder data and client building data, which includes support for international locations.

## Requirements and Special Considerations

This call requires the address and subscription key. Other request parameters are optional, but they enable you to refine or limit your search criteria.



The response will include the top ten responses based on the supplier, access medium, connection status, and network connection status.

## Request URL

`https://api.connected2fiber.com/network-intelligence/v5/{address}?companyid={companyid}&validation]`

| Request parameters      | Characteristic | Description/Requirements  |
|-------------------------|----------------|---|
| address                 | string         | address   |
| validation (optional)   | Boolean        | Specifies whether address validation is utilized by the API   |
| companyid               | number         | Company id related to the provider/building results needed to filter results.   |
| siteDistance (optional) | number         | Site distance from the location/address. You can enter a number between 0 – 5000 (ft). If no number is entered, the system will return results based on the default value of 2000 ft. |

| Request headers          | Characteristic | Description/Requirements   |
|--------------------------|----------------|--|
| Ocp-Api-Subscription-key | string         | The subscription key that provides access to this API, which can be found in your Profile. |

## Get Building Providers by Address Success Response Example



The following sample response shows only a subset of returned providers. The example is intended to show the response attributes that will be returned for each provider in the response. The actual response will include the top ten responses based on the supplier, access medium, connection status, and network connection status.

```
{
  "status": "success",
  "body": {
    "location": {
      "street": "53 Sumner St",
      "city": "Milford",
      "state": "MA",
      "country": "USA",
      "postal": "01757",
      "latitude": "42.153816",
      "longitude": "-71.519359",
      "streetPostDirection": "",
      "streetPreDirection": ""
    }
  }
}
```

### Get Building Providers by Address Success Response Example

```

},
"inputAddress": "53 Sumner Street, Milford, MA, 01757",
"data": [{
  "closestSite": "53 Sumner St, Milford, MA, 01757",
  "siteDistance": 0,
  "latitude": "42.153816",
  "longitude": "-71.519359",
  "connectionStatus": "OnNet",
  "provider": "COMCAST",
  "providerType": "Market",
  "source": "C2F Network Finder",
  "accessMedium": "Fiber",
  "networkConnectionStatus": "Connected"
}, {
  "closestSite": "53 Sumner St, Milford, MA, 01757",
  "siteDistance": 0,
  "latitude": "42.153816",
  "longitude": "-71.519359",
  "connectionStatus": "OnNet",
  "provider": "COMCAST",
  "providerType": "Market",
  "source": "C2F Network Finder",
  "accessMedium": "Coax/HFC",
  "networkConnectionStatus": "Connected"
}]
}
}

```

### Get Building Providers by Address response attributes and data types

| Response Attribute  | Attribute Description   | Data Type |
|---------------------|---|-----------|
| status              | <ul style="list-style-type: none"> <li>Success</li> <li>Failed</li> </ul>   | string    |
| location            | object wrapper  | object    |
| street              | The street address for the location.  | string    |
| city                | The city in which the location resides.   | string    |
| state               | The state in which the location resides.  | string    |
| postal              | The zip code in which the location resides.   | int       |
| country             | The country in which the location resides.  | string    |
| latitude            | The angular distance of a place north or south of the earth's equator, or of a celestial object north or south of the celestial equator, usually expressed in degrees and minutes.    | string    |
| longitude           | The angular distance of a place east or west of the meridian at Greenwich, England, or west of the standard meridian of a celestial object, usually expressed in degrees and minutes. | string    |
| StreetPostDirection | An address element that indicates geographic location such as N, S, E, W, NE, NW, SE, and SW that is placed to the left of (before) the street name such as E HOOVER ST.              | string    |



| Response Attribute | Attribute Description  | Data Type |
|--------------------|--|-----------|
| streetPreDirection | An address element that indicates geographic location such as N, S, E, W, NE, NW, SE, and SW that is placed to the right of (after) the street name such as BAY DRIVE W.   | string    |
| inputAddress       | The address entered to retrieve building providers.  | string    |
| data               | object wrapper   | object    |
| closestSite        | Identifies the closest site to the provider.   | string    |
| siteDistance       | Identifies the distance to the provider, in feet.  | int       |
| connectionStatus   | <p>A metric used to identify the connectivity status of fiber-connected buildings.</p> <p>Range of valid values:</p> <ul style="list-style-type: none"> <li>• Near Net</li> <li>• OffNet</li> <li>• On Net–Limited Access</li> <li>• OnNet</li> <li>• Prospect</li> </ul>  | string    |
| provider           | <p>The name of the provider.</p> <p>The source of the provider name is sourced as follows:</p> <p>If locations were published from Network Radar or are otherwise known as supplier buildings:</p> <ul style="list-style-type: none"> <li>• If Supplier Name can be standardized properly from the ConnectBase reference table, returns the Supplier Name as the provider;</li> <li>• Else, returns Provider Name</li> </ul> <p>If locations are NOT supplier buildings, returns the Company Name as provider.</p> | string    |
| providerType       | <p>If locations were published from Network Radar, or otherwise known as supplier building, checks if the supplier is in the Competitor Supplier List:</p> <ul style="list-style-type: none"> <li>• If competitor flag is true, returns “Competitor”</li> <li>• If competitor flag is false, returns “Provider”.</li> </ul> <p>If locations were NOT published from Network Radar, or known as supplier buildings, checks for the company of the user:</p>   | string    |

| Response Attribute      | Attribute Description  | Data Type |
|-------------------------|--|-----------|
|                         | <ul style="list-style-type: none"> <li>• If user has access to that location in the TCW, return “Our Access”</li> <li>• Else, “Market”</li> </ul> <p>Range of valid values:</p> <ul style="list-style-type: none"> <li>• Our Access</li> <li>• Market</li> <li>• Competitor</li> <li>• Provider</li> </ul>   |           |
| source                  | <p>If locations were published from Network Radar, or otherwise known as a supplier building, return “Network Radar”;</p> <p>If it is not from Supplier Building, check for the following:</p> <ul style="list-style-type: none"> <li>• if it is from My Buildings</li> <li>• if it is known as service providers’ footprint or inventory</li> </ul> <p>Returns “My Building”;</p> <ul style="list-style-type: none"> <li>• If it is from Connectbase serviceability warehouse</li> </ul> <p>Returns “CB Serviceability”;</p> <p>Else would be “CB Network Finder”.</p> <p>Range of valid values:</p> <ul style="list-style-type: none"> <li>• My Building</li> <li>• CB Network Finder</li> <li>• CB Serviceability</li> <li>• Network Radar</li> </ul> | string    |
| accessMedium            | <p>The medium used for connectivity to the building or specified location.</p> <p>Range of valid values:</p> <ul style="list-style-type: none"> <li>• Coax/HFC</li> <li>• Copper</li> <li>• Fiber</li> <li>• Wireless – Fixed</li> <li>• Wireless – Mobile</li> <li>• Wireless – Satellite</li> <li>• Other</li> </ul>   | string    |
| networkConnectionStatus | <p>A metric used to identify the connectivity status of fiber-connected buildings.</p> <p>Range of valid values:</p>   | string    |

| Response Attribute | Attribute Description  | Data Type |
|--------------------|--|-----------|
|                    | <ul style="list-style-type: none"> <li>Near Net</li> <li>OffNet</li> <li>On Net–Limited Access</li> <li>OnNet</li> <li>Prospect</li> </ul> |           |

### Get Building Providers by Address Error Response Example

```
{
  "statusCode": 400,
  "message": "Please enter the address in below order:
Street name, City, State, Country"
}
```

## GET nearnet

Issue this call to retrieve the NearNet providers for a specified address.

### Requirements and Special Considerations

This call requires the address and subscription key. Other request parameters are optional, but they enable you to refine or limit your search criteria. <https://api.connected2fiber.com/address-autocomplete/{address}>

### Request URL

[https://api.connected2fiber.com/v6/nearnet\[?radius\]\[&lat\]\[&lon\] \[&address\] \[&companyId\]](https://api.connected2fiber.com/v6/nearnet[?radius][&lat][&lon] [&address] [&companyId])

| Request parameters   | Characteristic | Description/Requirements  |
|----------------------|----------------|---|
| address              | string         | address   |
| radius               | string         | Distance in feet from given location that should be searched for matches.     |
| lat (optional)       | string         | Latitude to use instead of address; however, address is still required.       |
| lon (optional)       | string         | Longitude to use instead of address; however, address is still required.      |
| companyId (optional) | number         | Company id related to the provider/building results needed to filter results. |

| Request headers           | Characteristic | Description/Requirements   |
|---------------------------|----------------|--|
| Ocp-Apim-Subscription-key | string         | The subscription key that provides access to this API, which can be found in your Profile. |

### Get nearnet Success Response Example

```
{
  "status": "success",
  "body": {
    "type": "Near Net",
  }
}
```

### Get narnet Success Response Example

```
"providers": ["Verizon"],
"count": 1,
"location": {
  "street": "Sumner",
  "city": "Milford",
  "state": "MA",
  "country": "USA",
  "postal": "01757",
  "longitude": -71.51926,
  "latitude": 42.15394
}
```

### Get narnet response attributes and data types

| Response Attribute | Attribute Description   | Data Type |
|--------------------|---|-----------|
| status             | <ul style="list-style-type: none"><li>Success</li><li>Failed</li></ul>  | string    |
| type               | Network connection status, such as OnNet or Near Net.   | string    |
| providers          | The Near Net list of providers.   | array     |
| count              | The number of Near Net providers found.   | int       |
| location           | object wrapper  | object    |
| street             | The street address for the location.  | string    |
| city               | The city in which the location resides.   | string    |
| state              | The state in which the location resides.  | string    |
| postal             | The zip code in which the location resides.   | int       |
| country            | The country in which the location resides.  | string    |
| latitude           | The angular distance of a place north or south of the earth's equator, or of a celestial object north or south of the celestial equator, usually expressed in degrees and minutes.    | string    |
| longitude          | The angular distance of a place east or west of the meridian at Greenwich, England, or west of the standard meridian of a celestial object, usually expressed in degrees and minutes. | string    |

### Get narnet Error Response Example

```
{
  "status": "fail",
  "error": "Unable to find address."
}
```

## GET onnet

Issue this call to retrieve OnNet provider data for a specified address.

## Requirements and Special Considerations

This API call requires the address and subscription key. Other request parameters are optional, but they enable you to refine or limit your search criteria. <https://api.connected2fiber.com/address-autocomplete/{address}>

## Request URL

[https://api.connected2fiber.com/network-intelligence/v6/onnet\[?address\] \[&lat\]\[&lon\] \[&companyId\]](https://api.connected2fiber.com/network-intelligence/v6/onnet[?address] [&lat][&lon] [&companyId])

| Request parameters   | Characteristic | Description/Requirements  |
|----------------------|----------------|---|
| address              | string         | Address   |
| lat (optional)       | string         | Latitude to use instead of address; however, address is still required.       |
| lon (optional)       | string         | Longitude to use instead of address; however, address is still required.      |
| companyId (optional) | number         | Company id related to the provider/building results needed to filter results. |

| Request headers           | Characteristic | Description/Requirements   |
|---------------------------|----------------|--|
| Ocp-Apim-Subscription-key | string         | The subscription key that provides access to this API, which can be found in your Profile. |

## Get onnet Success Response Example

```
{
  "status": "success",
  "body": {
    "type": "On Net",
    "providers": ["Comcast", "Verizon"],
    "count": 2,
    "location": {
      "street": "Sumner",
      "city": "Milford",
      "state": "MA",
      "country": "USA",
      "postal": "01757",
      "longitude": -71.51926,
      "latitude": 42.15394
    }
  }
}
```

## Get onnet response attributes and data types

| Response Attribute | Attribute Description  | Data Type |
|--------------------|--|-----------|
| status             | <ul style="list-style-type: none"><li>Success</li><li>Failed</li></ul> | string    |
| type               | The network connection status, such as On Net, for example.            | string    |
| providers          | The nearest list of providers.   | array     |

| Response Attribute | Attribute Description   | Data Type |
|--------------------|---|-----------|
| count              | The number of nearest providers found.  | int       |
| location           | object wrapper  | object    |
| street             | The street address for the location.  | string    |
| city               | The city in which the location resides.   | string    |
| state              | The state in which the location resides.  | string    |
| postal             | The zip code in which the location resides.   | int       |
| country            | The country in which the location resides.  | string    |
| latitude           | The angular distance of a place north or south of the earth's equator, or of a celestial object north or south of the celestial equator, usually expressed in degrees and minutes.    | string    |
| longitude          | The angular distance of a place east or west of the meridian at Greenwich, England, or west of the standard meridian of a celestial object, usually expressed in degrees and minutes. | string    |

#### Get onnet Error Response Example

```
{
  "status": "fail",
  "error": "Unable to find address."
}
```

## GET telco

Issue this call to retrieve telco data for a specified address.

#### Requirements and Special Considerations

This API call requires the address and subscription key. Other request parameters are optional, but they enable you to refine or limit your search criteria. <https://api.connected2fiber.com/address-autocomplete/{address}>



The “Get Telco” API endpoint captures the nearest telco data when a given lat/long falls within, or close to a waterway, for example. In this case, Connectbase will use the nearest telco that is less than 200 meters to the input address to provide telco data.

#### Request URL

[https://api.connected2fiber.com/network-intelligence/v6/telco \[?address\]\[&lat\]\[&lon\]](https://api.connected2fiber.com/network-intelligence/v6/telco [?address][&lat][&lon])

| Request parameters | Characteristic | Description/Requirements  |
|--------------------|----------------|---|
| address            | string         | Address   |
| lat (optional)     | string         | Latitude to use instead of address; however, address is still required. |

| Request parameters | Characteristic | Description/Requirements   |
|--------------------|----------------|--|
| lon (optional)     | string         | Longitude to use instead of address; however, address is still required. |

| Request headers           | Characteristic | Description/Requirements   |
|---------------------------|----------------|--|
| Ocp-Apim-Subscription-key | string         | The subscription key that provides access to this API, which can be found in your Profile. |

### Get telco Success Response Example

```
{
  "status": "success",
  "body": {
    "type": "Telco",
    "building_clli": "",
    "swc_clli": "WSBOMASULED",
    "lata": "128",
    "lata_nm": "EASTERN MASS",
    "ocn": "9102",
    "ocn_name": "VERIZON NEW ENGLAND INC.",
    "state": "MA",
    "npa": "508",
    "nxx": "366",
    "rate_center": "WESTBORO",
    "lec": "VERIZON",
    "central_office_address": {
      "status": "success",
      "message": null,
      "address": "25 Summer St",
      "city": "Westborough",
      "state": "Massachusetts",
      "zip": "01581"
    },
    "location": {
      "street": "134 Flanders Rd",
      "city": "Westborough",
      "state": "MA",
      "country": "USA",
      "postal": "01581",
      "latitude": 42.276488,
      "longitude": -71.570729
    }
  }
}
```

### Get telco response attributes and data types

| Response Attribute  | Attribute Description   | Data Type |
|---|---|-----------|
| type  | The type of service provider, such as Telco, for example.   | string    |
| building_clli (blank/null unless specifically provided by the customer) | Common Language Information Services Identifier (CLLI), used to identify the building location. Network Site codes are typically used to identify building locations, specific to an address.<br><br>First four characters represent a geographical code, the fifth and sixth | string    |

| Response Attribute | Attribute Description   | Data Type |
|--------------------|---|-----------|
|                    | characters represent a geopolitical code. The remaining two characters are uniquely assigned by iconectiv® to identify the building location.   |           |
| swc_clli           | Serving Wire Center Clli code   | string    |
| lata               | 3-digit code that represents the boundary of the Local Access and Transport Area.   | string    |
| lata_nm            | LATA provider name<br><br>Local Access and Transport Area defines geographical boundaries of local telephone service networks.  | string    |
| ocn                | Operating company number; a 4-character ID used to identify a company that provides local exchange telephone services.  | string    |
| ocn_name           | The company name associated with the OCN,   | string    |
| state              | The state in which the telco provider resides.  | string    |
| npa                | Numbering Plan Areas, each identified by a three-digit NPA code, commonly called an area code.<br><br>NPAs represent an aggregation of exchange areas for which the given code is applicable. These Code/Exchange area relationships are assigned by the North American Numbering Plan Administration (NANPA) and published in the Local Exchange Routing Guide (LERG) database published monthly by 'iconectiv'. | string    |
| nxx                | Area Code/Prefix (NPA/NXX) Assignment.<br><br>Valid Prefixes per NPA are published according to exchange switch specifications published in the LERG. A subset of NPA/NXX combinations are serviced by the incumbent Local Exchange Carriers (ILECS) operating Serving Wire Centers.  | string    |
| lec                | The Local Exchange Carrier  | string    |
| location           | object wrapper  | object    |
| street             | The street address for the telco provider.  | string    |
| city               | The city in which the telco provider resides.   | string    |
| state              | The state in which the telco provider resides.  | string    |
| postal             | The zip code in which the telco provider resides.   | int       |



| Response Attribute | Attribute Description   | Data Type |
|--------------------|---|-----------|
| country            | The country in which the telco provider resides.  | string    |
| latitude           | The angular distance of a place north or south of the earth's equator, or of a celestial object north or south of the celestial equator, usually expressed in degrees and minutes.    | string    |
| longitude          | The angular distance of a place east or west of the meridian at Greenwich, England, or west of the standard meridian of a celestial object, usually expressed in degrees and minutes. | string    |

#### Get telco Error Response Example

```
{
  "status": "fail",
  "error": "Unable to find address."
}
```

## GET wisp

Issue this call to retrieve wireless providers for a specified address.

#### Requirements and Special Considerations

This API call requires the address and subscription key. Other request parameters are optional, but they enable you to refine or limit your search criteria.<https://api.connected2fiber.com/address-autocomplete/{address}>

#### Request URL

<https://api.connected2fiber.com/network-intelligence/v6/wisp> [?validation][&address][&lat][&lon]

| Request parameters | Characteristic | Description/Requirements   |
|--------------------|----------------|--|
| address            | string         | Address  |
| lat (optional)     | string         | Latitude to use instead of address; however, address is still required.  |
| lon (optional)     | string         | Longitude to use instead of address; however, address is still required. |

| Request headers           | Characteristic | Description/Requirements   |
|---------------------------|----------------|--|
| Ocp-Apim-Subscription-key | string         | The subscription key that provides access to this API, which can be found in your Profile. |

#### Get wisp Success Response Example

```
{
```

### Get wisp Success Response Example

```
"status": "success",
"body": {
  "count": 9,
  "providers": ["NETBLAZR", "NEXTLINK WIRELESS", "TOWERSTREAM", "NETBLAZR", "NEXTLINK WIRELESS", "TOWERSTREAM", "NETBLAZR", "NEXTLINK WIRELESS", "TOWERSTREAM"],
  "type": "Wireless Service Providers",
  "location": {
    "street": "Boylston",
    "city": "Boston",
    "state": "MA",
    "country": "USA",
    "postal": "02199",
    "longitude": -71.08225,
    "latitude": 42.34868
  }
}
```

### GET Wisp response attributes and data types

| Response Attribute | Attribute Description   | Data Type |
|--------------------|---|-----------|
| status             | <ul style="list-style-type: none"><li>Success</li><li>Failed</li></ul>  | string    |
| providers          | The wisp list of providers.   | array     |
| count              | The number of wisp providers found.   | int       |
| location           | object wrapper  | object    |
| street             | The street address for the location.  | string    |
| city               | The city in which the location resides.   | string    |
| state              | The state in which the location resides.  | string    |
| postal             | The zip code in which the location resides.   | int       |
| country            | The country in which the location resides.  | string    |
| latitude           | The angular distance of a place north or south of the earth's equator, or of a celestial object north or south of the celestial equator, usually expressed in degrees and minutes.    | string    |
| longitude          | The angular distance of a place east or west of the meridian at Greenwich, England, or west of the standard meridian of a celestial object, usually expressed in degrees and minutes. | string    |

### Get wisp Error Response Example

```
{
  "status": "failed",
  "error": "No data was found for this address."
}
```

# Network Intelligence API Error Response Status Codes

The following table lists the error response status codes for Network Intelligence V6.

| Error code | Description                             | Response  |
|------------|---|---|
| 200        | Your request was processed successfully | “Success”   |
|            |   | “No data found at this location”  |
| 400        | Fail                                    | “Latitude must be less than or equal to 90”   |
|            |   | “Longitude must be less than or equal to 180”   |
| 401        | Not authorized                          | “Access restricted to authenticated clients only”   |
| 403        | Forbidden                               | “Access denied due to invalid input. Please ensure that the subscription key and companyId are accurate.” |
| 404        | Requested resource not found            | “Address not found”   |
| 500        | Internal server error                   | “Server encountered something unexpected”   |

# Revision History

| Revision | Date               | Description  |
|----------|--------------------|--|
| 00       | July 27, 2020      | This is the initial release for supported APIs for Network Intelligence, V4.   |
| 01       | May 17, 2021       | <p>Added Network Intelligence, V5. There are no user input changes different from the V4 implementation. Changes to V5 were implemented on the back end to improve processing and responses. For example, country name now displays following the ISO-3 standard. In V4 Canada returned as CA. Now in V5, Canada returns as CAN. Additionally, the GET all response now includes broadband.</p> <p>Added new sample success response examples for GET all and GET Telco.</p> |
| 02       | August 11, 2021    | <p>Corrected error response examples.</p> <p><i>Changed from this:</i></p> <p>“error”: “Address could not be recognized. Please enter a valid address.”</p> <p><i>To this:</i></p> <p>“error”: “Unable to find address.”</p>   |
| 03       | September 06, 2021 | Added POST Bulk Address and GET Bulk Address Callback (NI, V6).  |
| 04       | November 30, 2021  | POST Bulk Address – Added a notation that the request_id in the Request body must be unique per request.   |
| 05       | February 02, 2022  | <p>Rebranded the document template with a new title page, company name, logo, and updated fonts.</p> <p>Added new input parameters to the Get Buildings Providers API to obtain closest site information (siteDistance).</p>   |
| 06       | March 01, 2022     | <p>The following APIs have been deprecated from the developer portal:</p> <ul style="list-style-type: none"> <li>• Network Intelligence API</li> <li>• Network Intelligence API, v2</li> <li>• Network Intelligence API, v4</li> <li>• Network Intelligence API, v5</li> <li>• Network Finder, v2</li> <li>• Network Finder, v3</li> </ul>   |
| 07       | April 13, 2022     | Added new sample responses for GET all, POST Bulk Address, and GET Telco to correct bldg_cli response to null response unless specifically   |

| Revision | Date               | Description  |
|----------|--------------------|--|
|          |                    | provided by customer, and increased swc_cli response to 11 characters.   |
| 08       | Oct 10, 2022       | <ul style="list-style-type: none"> <li>Renamed Get Building Provider to Get Building Provider by Address, which enables users to pull Network Intelligence by addresses.</li> <li>Added a new endpoint Get Building Provider, which enables users to pull Network Intelligence by address or lat/longs as input.</li> <li>Incorporated response attributes and data types for all APIs.</li> </ul>   |
| 09       | October 27, 2022   | <ul style="list-style-type: none"> <li>Added Provider, providerType, and Source fields to the Get Building Providers APIs.</li> </ul>  |
| 10       | December 21, 2022  | <ul style="list-style-type: none"> <li>Improved error messaging to provide clearer information about the cause of the error condition. See <a href="#">Error Response Status Codes and Descriptions</a> for details.</li> <li>Network provider responses now display the top ten responses, instead of only the top two, based on supplier, access medium, connection status, and network connection status. See <a href="#">GET Building Providers</a> and <a href="#">GET Building Providers by Address</a></li> </ul> |
| 12       | April 27, 2023     | <ul style="list-style-type: none"> <li>Revised/updated the POST Bulk Address and GET Bulk Address Callback Success Response Examples and Response Attributes and Data Types.</li> </ul>  |
| 13       | June 22, 2023      | Network Intelligence data persists in cache for up to 2 hours. If you update your instance data, and then run a Network Intelligence API call, the revised data will not display in the response until after the cache is cleared.   |
| 14       | September 25, 2023 | New publication of the document with minor editorial updates.  |