



API Developer Portal Overview Guide

Confidential – Proprietary Information

Revision 04

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About This Guide

Introduction

This guide provides an overview of the Connectbase Application Program Interface (API) developer portal, Connectbase APIs, and describes how to access and use the portal.

The API developer portal leverages APIs in the company's core platform, *The Connected World*, to provide development teams in the connectivity industry with several core capabilities designed to promote trusted sharing of network information within and across organizations.

Audience

This reference guide is written for software developers who need to retrieve location intelligence information from, or add location data to, *The Connected World*.

Related Documentation

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

- *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 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
CPQ	Configure, Price, Quote
cURL	Client URL Request Library
HTTP	Hyper Text Transfer Protocol
JAVA	The JAVA programming language
JSON	JavaScript Object Notation
N/A	Not applicable
PHP	Recursive acronym; Hypertext Preprocessor
REST	Representational State Transfer
URL	Uniform Resource Locator
USPS	United States Postal Service
WISP	Wireless Internet Service Provider

Customer Support

If you need assistance using the Connectbase APIs, please contact Customer Service by email at support@connectbase.com or by phone at (508) 202-1807 between the hours of 8:00 a.m. and 5:00 p.m. EST.

1.0 About the API Developer Portal

About the API Developer Portal

The Connectbase Application Program Interface (API) developer portal enables software developers to integrate their “Connected World” data directly into their existing enterprise resource applications.

The API architecture follows HTTP rules and uses the latest REST principles to ensure all APIs are easily consumable. Within the Connectbase API Portal, API publishers can engage directly with their API community, keeping them up to date via the integrated blog. Developers can log and discuss issues and even submit their applications to the application gallery.

In addition to the reference information provided in this document, a subset of API documentation is accessible online through the API portal and code samples are provided in a variety of languages.

2.0 Accessing the Portal

Accessing the Portal

Using any standard web browser, you can access the 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.

API Authentication

As with most APIs, most endpoints require authentication. To access any of the Connectbase APIs, you must first register for the specific product(s) containing the APIs you wish to use. Upon approval from a Connectbase administrator, the corresponding API keys are provided to you within the portal.

API User Profiles

Once you are logged into the API as a registered user, you can access your user profile to see a list of your registered APIs along with the corresponding authentication keys.

Additionally, from within your user profile, you can change your personal account information, change your password, register for additional products, or close your account.

3.0 Using the Portal

Portal Overview

The Connectbase API Portal allows you to access current data within “The Connected World”, which can be directly integrated into your preferred applications. Through the API portal, several common operations can be performed on Connectbase objects. As stated previously, developers must authenticate with the API before issuing requests.

Connectbase API s

The Connectbase API portal provides access to these APIs based upon your user subscription:

API	DESCRIPTION
Address Autocomplete	Use this API to search the database using a partial address. The resulting return is a list of parsed, autocompleted USPS addresses that match the search criteria provided.
Address Validation API	Use this API to validate a complete USPS address inclusive of a secondary address line (IE Apt, Ste, FL) and to obtain more detailed information about the address location.
Advanced CPQ API (v1 and v2)	Use this set of APIS to create deals, configure pricing requirements, and return quotes for locations.
Building Competitive Rating API	Use this API to retrieve the competitive rating for a location. Competitive Ratings data helps you to better understand the competitive landscape and more effectively price services.
Connected World Availability API	Use this set of APIs to share information with your partner(s) about the buildings and the products and services you offer at those buildings.

API	DESCRIPTION
Connected World Building	Use this set of APIs to create, retrieve, update, or remove buildings or building attributes to/from your instance.
Connected World Account API	Use this API to retrieve your company's Connectbase account information.
Connected World Building Lists API	Use this set of APIs to retrieve building list data in your instance.
Connected World Contacts API	Use this set of APIs to add, retrieve or update contact information in your instance.
Connected World Distributions API	Use this set of APIs to create, get, initiate, or update a distribution.
CPQ API	<p>Use this set of APIs to create deals, configure pricing requirements, and return quotes for locations.</p> <p>Note: Connectbase recommends using the Advanced CPQ APIs in place of the standard CPQ APIs for improved results. The Advanced CPQ is the next gen set of APIs for configuring and retrieving pricing and quotes.</p>
CPQ Components API	Use this set of APIs to set up "reusable" pricing groups for use in a CPQ quote under the configured conditions.
Demand Engine API	Use this set of APIs to programmatically extract analytics from the Connectbase Demand Engine.
Geocode API	Use this API to pass a location in a request body that will return the latitude and longitude of the given location. The response also indicates an accuracy rating and accuracy type.
International Address Validation API	Use this API for address validation and formatting of international addresses.
Location Intelligence API	Use this API to retrieve census block information using latitude and longitude search.

API	DESCRIPTION
Network Intelligence API	Use this set of APIs to get network information based on a specific address, such as broadband, cableco, nearnet, onnet, telco, wisp, etc.
Network Path API	<p>Use this set of APIs to submit an A and Z location that returns a geojson-formatted response for those two endpoints, inclusive of all paths or a specific company path.</p> <p>It will assign a Segment ID, calculate distance and latency, and present that information in the response in addition to the geojson data. There is also a secondary endpoint which allows for two different segment ids to be compared and determines if they are diverse from one other.</p>
NNI Management API	Use this set of APIs create, delete, or retrieve NNI locations.
Rate Card API	Use this set of APIs to manage your rate cards.
Shareable Routes - Route Management API	<p>Use this API to retrieve route information from The Connected World platform's US Shareable Routes and International Shareable Routes data points.</p> <p>The response provides the fiber routes within a radius given as a value (siteDistance) as well as the provider of those routes.</p>
Tenant API	Use this API to retrieve a list of tenants for a specified company and building ID in a JSON array.

Connectbase API Calls

API calls represent specific operations that your client applications can invoke to perform tasks. Each API provides API calls that you can invoke to perform the specified operations. All Connectbase supported APIs and corresponding API calls are detailed in the sections that follow.

Connectbase Code Samples

Within the Connectbase API Portal, code samples are provided per API operation in a variety of languages as listed below.

- Curl
- C#
- Java
- JavaScript
- ObjC
- PHP
- Python
- Ruby

Defining HTTP Requests

Communication in HTTP centers around a concept called the Request-Response Cycle. To make a valid request, the client needs to include four things:

1. URL (Uniform Resource Locator)
2. Method
3. List of Headers
4. Body

URL

URLs become an easy way for the client to tell the server which things it wants to interact with, called resources.

Request Method

The method request tells the server what kind of action the client wants the server to take in. The most common request methods in API's include:

- **GET**— Asks the server to retrieve a resource. GET requests include all required data in the URL.
- **POST**— Asks the server to create a new resource. POST requests supply additional data from the client to the server in the message body.
- **PUT**— Asks the server to edit/update an existing resource.
- **DELETE**— Asks the server to delete a resource.
- **PATCH** — Asks the server to update a partial resource. For instance, when you only need to update one field of the resource.

Headers

Headers provide meta-information about a request. The response header contains the date, size, and type of file that the server is sending back to the client.

Body

The request body contains the data the client wants to send to the server. HTTP Body data is the data bytes transmitted in an HTTP transaction message immediately following the headers, if there is any.

Most HTTP requests are GET requests without bodies. Most HTTP requests with bodies use the POST or PUT request method.

Receiving HTTP Responses

Once a call is issued, the server responds with a status code. Status code are three-digit numbers.

The following table provides a sample listing of HTTP responses:

Response	Description
200 OK	The request was successful (some API calls may return 201 instead).
201 Created	The request was successful, and a resource was created
204 No Content	The request was successful but there is no representation to return (i.e., the response is empty)

Response	Description
400 Bad Request	The request could not be understood or was missing required parameters
401 Unauthorized	Authentication failed, or the user does not have permissions for the requested operation
403 Forbidden	Access denied
404 Not Found	Resource was not found
405 Method Not Allowed	Requested method is not supported for resource
500 Internal Server Error	The server encountered an internal error

Appendix A – Revision History

Appendix A – Revision History

Revision	Date	Description
00	September 30, 2019	The former Connectbase API Reference Guide has been divided into individual product guides. This document was extracted from the original document to be a standalone introduction to the Connectbase API product suite.
01	October 03, 2019	Changed all references to Network Data APIs to Network Intelligence APIs to reflect name change.
02	September 30, 2020	Reorganized the APIs in alphabetical order as is shown within the developer portal. Added Network Path API
03	February 08, 2021	Revised the API call limit to 180 calls/min with no weekly limit.
	February 01, 2022	Rebranded the document template with a new title page, company name, logo, and updated fonts.
04	January 25, 2023	Revised the document to reflect the APIs as they are listed in the newly rebranded dev.connectbase.com portal.