

# Hotspot Access Points

## Endpoints Summary

Method	Path	Swagger
GET	<a href="#">/hotspot_access_points/</a>	<a href="#">Swagger ↗</a>

“ The Hotspot Access Points API provides endpoints for managing and retrieving information about physical network access point locations within your organization. These endpoints allow you to fetch detailed location data, filter by geographical coordinates, and manage access point metadata for network infrastructure monitoring and reporting.

**Base URL:** <https://gate.zequenze.com/api/v1>

**Authentication:** All endpoints require a Bearer token:

Authorization: Bearer <your-api-token>

## Overview

The Hotspot Access Points API enables you to manage and query physical network access point locations across your organization's infrastructure. This API is essential for network administrators, IT teams, and facility managers who need to maintain accurate records of wireless access point deployments.

### Key Features:

- Retrieve comprehensive access point location data including geographical coordinates
- Filter access points by modification dates and coordinate availability
- Access detailed address information including city, state, postal codes, and country data
- Support for pagination to handle large deployments efficiently
- Integration with organizational structures for multi-tenant environments

## Common Use Cases:

- Network infrastructure auditing and documentation
- Geographic visualization of access point coverage areas
- Location-based network performance monitoring
- Facility management and space planning
- Compliance reporting for network infrastructure

The API follows REST principles and returns data in JSON format with standardized pagination for list endpoints. All location data includes metadata such as creation dates and last modification times to support change tracking and audit requirements.

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# Endpoints

## GET /hostspot\_access\_points/

**Description:** Retrieves a paginated list of all hotspot access points within your organization. This endpoint provides comprehensive location data including geographical coordinates, address details, and organizational metadata. It's the primary endpoint for discovering and enumerating network access point locations.

### Use Cases:

- Generate network infrastructure reports showing all access point locations
- Create geographic visualizations of network coverage areas
- Audit access point deployments across multiple facilities
- Export location data for facility management systems
- Monitor recent changes to access point configurations

### Full URL Example:

```
https://gate.zequence.com/api/v1/hostspot_access_points/?have_coordinates=true&limit=50&offset=0
```

### Parameters:

Parameter	Type	In	Required	Description
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last_change__gte	string	query	No	Filter results to show only access points modified on or after the specified date. Accepts ISO format: <code>2000-01-01</code> , <code>2000-01-01 00:01:00</code> , or <code>2000-01-01 00:01:00+00:00</code>
limit	integer	query	No	Number of results to return per page. Default and maximum values depend on your organization's configuration
offset	integer	query	No	The initial index from which to return results. Used for pagination through large datasets
have_coordinates	boolean	query	No	When set to <code>true</code> , returns only access points that have latitude and longitude coordinates configured

### cURL Example:

```
curl -X GET
"https://gate.zequenze.com/api/v1/hostspot_access_points/?have_coordinates=true&limit=25&last_change__gte=2024-01-01" \
-H "Authorization: Bearer YOUR_API_TOKEN" \
-H "Content-Type: application/json"
```

### Example Response:

```
{
  "count": 127,
  "next": "https://gate.zequenze.com/api/v1/hostspot_access_points/?limit=25&offset=25",
  "previous": null,
  "results": [
    {
      "id": 1001,
      "name": "Building A - First Floor Lobby",
      "short_name": "bldg-a-lobby",
```

```
    "is_active": true,
    "description": "Main entrance lobby access point serving reception area and visitor
seating",
    "organization_id": "org-12345",
    "thumbnail": "https://gate.zequenze.com/media/thumbnails/ap_1001.jpg",
    "address": "123 Corporate Drive",
    "reference": "AP-LOBBY-001",
    "city": "San Francisco",
    "postal_code": "94105",
    "state": "California",
    "region": "Bay Area",
    "country_code": "US",
    "latitude": "37.7749",
    "longitude": "-122.4194",
    "created": "2024-01-15T08:30:00Z",
    "last_change": "2024-03-10T14:22:00Z"
  },
  {
    "id": 1002,
    "name": "Building A - Conference Room Alpha",
    "short_name": "conf-alpha",
    "is_active": true,
    "description": "Conference room access point supporting up to 50 simultaneous
connections",
    "organization_id": "org-12345",
    "thumbnail": "https://gate.zequenze.com/media/thumbnails/ap_1002.jpg",
    "address": "123 Corporate Drive",
    "reference": "AP-CONF-002",
    "city": "San Francisco",
    "postal_code": "94105",
    "state": "California",
    "region": "Bay Area",
    "country_code": "US",
    "latitude": "37.7751",
    "longitude": "-122.4192",
    "created": "2024-01-15T08:45:00Z",
    "last_change": "2024-02-28T11:15:00Z"
  }
]
}
```

## Response Codes:

Status	Description
200	Success - Returns paginated list of access points
401	Unauthorized - Invalid or missing Bearer token
403	Forbidden - Token lacks permission to access this organization's data
422	Unprocessable Entity - Invalid query parameters (e.g., malformed date format)

# Common Use Cases

## Use Case 1: Network Coverage Mapping

Retrieve all access points with coordinates to create geographic visualizations of network coverage. Use the `have_coordinates=true` parameter to ensure only mappable locations are returned, then plot the latitude/longitude data on mapping platforms.

## Use Case 2: Infrastructure Change Auditing

Monitor recent modifications to access point configurations by filtering with `last_change_gte` parameter. This helps track when locations were updated, moved, or reconfigured for compliance and change management purposes.

## Use Case 3: Facility Management Integration

Export comprehensive location data including full address details and reference codes to integrate with facility management systems. The structured address fields support geocoding and space planning applications.

## Use Case 4: Multi-Location Reporting

Generate organization-wide reports by paginating through all access points across facilities. Use the `organization_id` field to group results by business units or geographic regions.

## Use Case 5: Network Capacity Planning

Analyze access point distribution and descriptions to identify areas needing additional coverage or capacity upgrades. The `is_active` field helps distinguish between deployed and decommissioned locations.

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# Best Practices

- **Pagination Strategy:** For large deployments, use reasonable page sizes (25-100 items) and implement proper pagination handling to avoid timeouts and reduce memory usage
  - **Coordinate Filtering:** When building mapping applications, always use `have_coordinates=true` to avoid processing locations without geographic data
  - **Date Filtering:** Use `last_change__gte` parameter efficiently by caching previous query timestamps to fetch only recently modified access points
  - **Error Handling:** Implement retry logic for 5xx errors and graceful degradation for 4xx errors, particularly when processing large datasets
  - **Rate Limiting:** Monitor response times and implement appropriate delays between requests when batch processing access point data
  - **Security:** Never log or expose Bearer tokens in client-side code; always handle authentication server-side in production environments
  - **Caching:** Consider caching stable access point data (locations rarely change) while refreshing dynamic fields like status and last modification dates more frequently
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Revision #4

Created 2026-02-04 05:14:43 UTC by ipena@zequenze.com

Updated 2026-02-11 03:17:53 UTC by ipena@zequenze.com