

Social Media Automation API - Complete Documentation








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Overview

The Social Media Automation API is a commercial-grade platform for automated content posting to Facebook and Instagram with AI-powered keyword extraction and intelligent image optimization.

Key Features

-  Multi-platform posting (Facebook & Instagram)
-  AI-powered keyword extraction (Google Vision API)
-  Automatic image optimization for each platform
-  OAuth 2.0 authentication with PKCE
-  Scheduled posting
-  Batch processing
-  Comprehensive analytics

Base URL

Production: <https://api.yourdomain.com>

Staging: <https://staging-api.yourdomain.com>

Getting Started

1. Create an Account

```
bash
```

```
POST /api/v1/register
```

```
Content-Type: application/json
```

```
{  
  "email": "user@example.com",  
  "password": "secure_password"  
}
```

2. Get Your API Key

After registration, retrieve your API key from the dashboard or via:

```
bash
```

```
POST /api/v1/auth/login
```

3. Make Your First Request

```
bash
```

```
curl -H "Authorization: Bearer YOUR_API_KEY" \  
https://api.yourdomain.com/api/v1/accounts
```

Authentication

API Key Authentication

All API requests require authentication using Bearer tokens:

```
http
```

```
Authorization: Bearer YOUR_API_KEY
```

OAuth 2.0 for Social Accounts

To connect Facebook/Instagram accounts, users must complete OAuth flow:

1. **Initiate OAuth:** `GET /api/v1/auth/connect/facebook`
 2. **User authorizes** on Meta's platform
 3. **Callback handled:** `GET /api/v1/auth/callback?code=...&state=...`
 4. **Store tokens** securely in database
-

API Endpoints

Image Management

Upload Image

http

`POST /api/v1/upload`

Content-Type: multipart/form-data

Authorization: Bearer YOUR_API_KEY

file: [image file]

Response:

json

```
{
  "image_id": "550e8400-e29b-41d4-a716-446655440000",
  "original_filename": "sunset.jpg",
  "file_size_mb": 2.5,
  "dimensions": [1920, 1080],
  "upload_timestamp": "2025-01-15T10:30:00Z"
}
```

Supported Formats:

- JPEG (.jpg, .jpeg)
- PNG (.png)
- GIF (.gif)

Size Limits:

- Maximum: 10MB
- Recommended: 5MB or less

Extract Keywords

http

GET /api/v1/keywords/{image_id}?max_keywords=10

Authorization: Bearer YOUR_API_KEY

Response:

json

```
{
  "image_id": "550e8400-e29b-41d4-a716-446655440000",
  "keywords": [
    {
      "keyword": "sunset",
      "score": 0.95,
      "sources": ["label", "web_entity"],
      "occurrences": 2
    },
    {
      "keyword": "beach",
      "score": 0.88,
      "sources": ["label", "object"]
    }
  ],
  "hashtags": ["#Sunset", "#Beach", "#Ocean", "#Travel"],
  "total_detected": 15
}
```

Post Management

Create Post

http

POST /api/v1/posts

Content-Type: application/json

Authorization: Bearer YOUR_API_KEY

```
{
  "platforms": ["facebook", "instagram"],
  "post_types": {
    "facebook": "feed",
    "instagram": "feed_square"
  },
  "caption": "Amazing sunset at the beach! #sunset #beach",
  "image_ids": ["550e8400-e29b-41d4-a716-446655440000"],
  "scheduled_for": "2025-01-20T18:00:00Z",
  "auto_hashtags": true
}
```

Post Types:

Facebook:

- `feed` - Regular feed post (1200x630)
- `story` - Story post (1080x1920)

Instagram:

- `feed_square` - Square feed post (1080x1080)
- `feed_portrait` - Portrait feed post (1080x1350)
- `story` - Story post (1080x1920)
- `carousel` - Multiple images (requires multiple image_ids)

Response:

json

```
{
  "post_id": "660e8400-e29b-41d4-a716-446655440001",
  "status": "scheduled",
  "platforms": ["facebook", "instagram"],
  "scheduled_for": "2025-01-20T18:00:00Z",
  "created_at": "2025-01-15T10:35:00Z"
}
```

Get Post Status

http

GET /api/v1/posts/{post_id}

Authorization: Bearer YOUR_API_KEY

Response:

json

```
{
  "post_id": "660e8400-e29b-41d4-a716-446655440001",
  "status": "posted",
  "platform_results": {
    "facebook": {
      "status": "success",
      "post_id": "123456789_987654321",
      "url": "https://facebook.com/123456789/posts/987654321",
      "posted_at": "2025-01-20T18:00:05Z"
    },
    "instagram": {
      "status": "success",
      "post_id": "18123456789012345",
      "url": "https://instagram.com/p/ABC123xyz",
      "posted_at": "2025-01-20T18:00:08Z"
    }
  },
  "created_at": "2025-01-15T10:35:00Z",
  "updated_at": "2025-01-20T18:00:10Z"
}
```

Status Values:

- `draft` - Post created but not scheduled
- `scheduled` - Scheduled for future posting
- `processing` - Currently being posted
- `posted` - Successfully posted to all platforms
- `failed` - Failed to post (check error_message)
- `cancelled` - Cancelled by user

Cancel Scheduled Post

http

DELETE /api/v1/posts/{post_id}

Authorization: Bearer YOUR_API_KEY

Response:

json

```
{  
  "message": "Post cancelled successfully",  
  "post_id": "660e8400-e29b-41d4-a716-446655440001"  
}
```

Account Management

Connect Social Account

http

POST /api/v1/auth/connect

Content-Type: application/json

Authorization: Bearer YOUR_API_KEY

```
{  
  "platform": "facebook",  
  "account_id": "123456789",  
  "account_name": "My Business Page",  
  "access_token": "EAAxxxxx...",  
  "expires_at": "2025-03-15T00:00:00Z"  
}
```

Response:

json

```
{
  "id": "770e8400-e29b-41d4-a716-446655440002",
  "platform": "facebook",
  "account_name": "My Business Page",
  "connected_at": "2025-01-15T10:40:00Z",
  "status": "active"
}
```

List Connected Accounts

http

GET /api/v1/accounts

Authorization: Bearer YOUR_API_KEY

Response:

json

```
[
  {
    "id": "770e8400-e29b-41d4-a716-446655440002",
    "platform": "facebook",
    "account_name": "My Business Page",
    "connected_at": "2025-01-15T10:40:00Z",
    "status": "active"
  },
  {
    "id": "880e8400-e29b-41d4-a716-446655440003",
    "platform": "instagram",
    "account_name": "@mybusiness",
    "connected_at": "2025-01-15T10:45:00Z",
    "status": "active"
  }
]
```

Image Processing

Platform-Specific Requirements

Facebook

Post Type	Dimensions	Aspect Ratio	Max Size
Feed	1200x630	1.91:1	4MB
Story	1080x1920	9:16	4MB
Profile	180x180	1:1	4MB

Instagram

Post Type	Dimensions	Aspect Ratio	Max Size
Feed (Square)	1080x1080	1:1	8MB
Feed (Portrait)	1080x1350	4:5	8MB
Story	1080x1920	9:16	8MB
Reels	1080x1920	9:16	8MB

Automatic Processing

The API automatically:

- 1. Resizes images to platform requirements
- 2. Crops with content-aware algorithms
- 3. Optimizes quality (72 DPI web standard)
- 4. Compresses to stay within size limits
- 5. Converts formats if needed

OAuth Flow

Step-by-Step Guide

1. Initiate OAuth

javascript

// Frontend code

window.location.href = `https://api.yourdomain.com/api/v1/auth/connect/facebook?user_id=\${userId}`;

2. User Authorizes

User is redirected to Facebook's authorization page and grants permissions.

3. Handle Callback

http

GET /api/v1/auth/callback?code=AUTH_CODE&state=STATE_TOKEN

The API automatically:

- Validates the state parameter (CSRF protection)
- Exchanges code for access token
- Retrieves user's Facebook pages
- Fetches connected Instagram accounts
- Stores encrypted tokens in database

4. Tokens Stored

Long-lived tokens (60 days) are automatically stored and refreshed.

Required Permissions

Facebook:

- `pages_show_list` - View pages
- `pages_read_engagement` - Read engagement
- `pages_manage_posts` - Create posts
- `pages_manage_engagement` - Manage interactions

Instagram:

- `instagram_basic` - Basic access
- `instagram_content_publish` - Publish content

Rate Limits

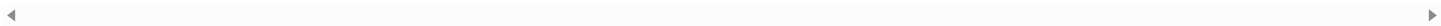
API Rate Limits

Tier	Requests/Minute	Requests/Hour	Posts/Month
Free	10	100	10
Basic	30	500	100

Tier	Requests/Minute	Requests/Hour	Posts/Month
Pro	60	2000	1000
Enterprise	Unlimited	Unlimited	Unlimited

Platform Rate Limits

Facebook:



- 200 calls per hour per user
- 4800 calls per day per app

Instagram:

- 200 API calls per hour per user
- 25 posts per day per account

Rate Limit Headers

```
http
X-RateLimit-Limit: 60
X-RateLimit-Remaining: 45
X-RateLimit-Reset: 1642253400
```

Error Handling

Error Response Format

```
json
```

```
{
  "error": {
    "code": "INVALID_IMAGE_FORMAT",
    "message": "Only JPEG, PNG, and GIF formats are supported",
    "details": {
      "received_format": "BMP",
      "supported_formats": ["JPEG", "PNG", "GIF"]
    }
  },
  "timestamp": "2025-01-15T10:50:00Z",
  "request_id": "req_123456789"
}
```

Common Error Codes

Code	HTTP Status	Description
UNAUTHORIZED	401	Invalid or missing API key
FORBIDDEN	403	Insufficient permissions
NOT_FOUND	404	Resource not found
INVALID_REQUEST	400	Invalid request parameters
RATE_LIMIT_EXCEEDED	429	Too many requests
PLATFORM_ERROR	502	Social platform API error
PROCESSING_ERROR	500	Internal processing error

Meta App Review Guide

Prerequisites

1. Business Verification
- Complete Meta Business verification
 - Provide business documents
 - Verify business phone and address
2. App Configuration
- Add privacy policy URL
 - Add terms of service URL
 - Configure data deletion callback

- Set up webhook endpoints

Required Documentation

1. Privacy Policy

Must include:

- What data you collect
- How data is used
- How data is stored
- Data retention policy
- User rights (access, deletion)
- Contact information

2. Terms of Service

Must include:

- Service description
- User responsibilities
- Acceptable use policy
- Termination conditions
- Liability limitations

3. Data Deletion Instructions

Provide URL that handles data deletion requests:

<https://yourdomain.com/data-deletion>

App Review Submission

Required Materials

1. Screen Recording (2-3 minutes)

- Show complete OAuth flow
- Demonstrate posting functionality

- Show permission usage
- Include audio narration

2. Step-by-Step Instructions

1. Click "Connect Facebook Account"
2. Log in with provided test account
3. Authorize all requested permissions
4. Upload an image
5. Create a post to Facebook page
6. View posted content on Facebook

3. Test Credentials

- Test Facebook account email
- Test account password
- Test page name/ID

4. Permission Justifications pages_manage_posts:

"This permission is required to create and publish posts on behalf of the user's Facebook pages. Our service automates social media posting, and users explicitly choose when and what content to post."

instagram_content_publish:

"This permission allows our service to publish content to users' Instagram Business accounts. Users maintain full control over content, scheduling, and can cancel posts at any time."

Review Process Timeline

- **Submission:** 1 day
- **Review:** 3-5 business days
- **Revisions** (if needed): 2-3 days
- **Total:** ~1-2 weeks

Common Rejection Reasons

1. **✗ Insufficient demonstration**
 - Solution: Provide clear, complete screen recording
2. **✗ Missing business verification**
 - Solution: Complete Business Manager verification first
3. **✗ **Vague**

