

Shopify & Facebook Ads Data Extractor API Documentation

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Introduction

This documentation provides a comprehensive guide to using the Shopify & Facebook Ads Data Extractor API, a FastAPI-based service that allows you to extract and consolidate data from Shopify and Facebook Ads platforms.

Health Check Endpoint

Endpoint: GET /health

Description: Simple health check to verify the API is running.

Request

```
GET /health HTTP/1.1
Host: localhost:8000
```

Response

```
{
  "status": "ok"
}
```

Root Endpoint

Endpoint: GET /

Description: Welcome endpoint with links to documentation.

Request

```
GET / HTTP/1.1
Host: localhost:8000
```

Response

```
{
  "message": "Welcome to the Shopify & Facebook Ads Data Extractor API",
  "docs_url": "/docs",
  "redoc_url": "/redoc"
}
```

Shopify Products Endpoint

Endpoint: GET /api/v1/shopify/products

Description: Retrieve products from Shopify.

Query Parameters

- `limit` (optional): Maximum number of products to retrieve (default: 50)

Request

```
GET /api/v1/shopify/products?limit=10 HTTP/1.1
Host: localhost:8000
```

Response

```
{
  "products": [
    {
      "id": 123456789,
      "title": "Example Product",
      "product_type": "Apparel",
      "created_at": "2023-09-01T12:00:00Z",
      "updated_at": "2023-09-10T14:30:00Z",
      "variants": [
        {
          "id": 987654321,
          "product_id": 123456789,
          "title": "Small / Blue",
          "price": "29.99",
          "sku": "APP-BLU-S",
          "inventory_quantity": 15
        },
        {
          "id": 987654322,
          "product_id": 123456789,
          "title": "Medium / Blue",
          "price": "29.99",
          "sku": "APP-BLU-M",
          "inventory_quantity": 10
        }
      ]
    }
  ]
}
```

Error Response

```
{
  "detail": "Error fetching Shopify products: Authentication error"
}
```

Shopify Orders Endpoint

Endpoint: `GET /api/v1/shopify/orders`

Description: Retrieve orders from Shopify.

Query Parameters

- `days` (optional): Number of days to look back (default: 30)
- `limit` (optional): Maximum number of orders to retrieve (default: 50)

Request

```
GET /api/v1/shopify/orders?days=7&limit=5 HTTP/1.1
Host: localhost:8000
```

Response

```
{
  "orders": [
    {
      "id": 445566778,
      "order_number": 1001,
      "customer": {
        "id": 112233,
        "email": "customer@example.com",
        "first_name": "John",
        "last_name": "Doe"
      },
      "created_at": "2023-09-15T10:30:00Z",
      "total_price": "59.98",
      "line_items": [
        {
          "id": 887766,
          "product_id": 123456789,
          "variant_id": 987654321,
          "title": "Example Product - Small / Blue",
          "quantity": 2,
          "price": "29.99"
        }
      ]
    }
  ]
}
```

Error Response

```
{
  "detail": "Error fetching Shopify orders: Invalid API key or access token"
}
```

Facebook Adsets Endpoint

Endpoint: GET /api/v1/facebook/adsets

Description: Retrieve ad sets from Facebook Ads.

Query Parameters

- `limit` (optional): Maximum number of ad sets to retrieve (default: 50)

Request

```
GET /api/v1/facebook/adsets?limit=10 HTTP/1.1
Host: localhost:8000
```

Response

```
{
  "adsets": [
    {
      "id": "23842613501234567",
      "name": "Summer Sale - Lookalike Audience",
      "campaign_id": "23842613501111111",
      "daily_budget": "50.00",
      "start_time": "2023-08-01T00:00:00+0000",
      "end_time": "2023-09-30T23:59:59+0000",
      "targeting": {
        "age_min": 25,
        "age_max": 45,
        "genders": [1, 2],
        "geo_locations": {
          "countries": ["US", "CA"]
        }
      }
    }
  ]
}
```

Error Response

```
{
  "detail": "Error fetching Facebook ad sets: Invalid access token"
}
```

Facebook Ads Endpoint

Endpoint: GET /api/v1/facebook/ads

Description: Retrieve ads from Facebook Ads.

Query Parameters

- `limit` (optional): Maximum number of ads to retrieve (default: 50)

Request

```
GET /api/v1/facebook/ads?limit=10 HTTP/1.1
Host: localhost:8000
```

Response

```
{
  "ads": [
    {
      "id": "23842613502222222",
      "name": "Summer Sale - Image Ad 1",
      "adset_id": "23842613501234567",
      "status": "ACTIVE",
      "created_time": "2023-08-05T14:22:30+0000"
    },
    {
      "id": "23842613502222223",
      "name": "Summer Sale - Image Ad 2",
      "adset_id": "23842613501234567",
      "status": "PAUSED",
      "created_time": "2023-08-05T14:25:45+0000"
    }
  ]
}
```

Error Response

```
{
  "detail": "Error fetching Facebook ads: Permission error"
}
```

Facebook Insights Endpoint

Endpoint: GET /api/v1/facebook/insights

Description: Retrieve performance insights from Facebook Ads.

Query Parameters

- **days** (optional): Number of days to look back (default: 30)
- **level** (optional): Level of insights (account, campaign, adset, or ad) (default: "account")

Request

```
GET /api/v1/facebook/insights?days=7&level=adset HTTP/1.1
Host: localhost:8000
```

Response

```
{
  "insights": [
    {
      "date_start": "2023-09-10",
      "date_stop": "2023-09-10",
      "adset_id": "23842613501234567",
      "impressions": "1245",
      "clicks": "56",
      "spend": "25.67",
      "cpc": "0.458",
      "ctr": "4.5"
    },
    {
      "date_start": "2023-09-11",
      "date_stop": "2023-09-11",
      "adset_id": "23842613501234567",
      "impressions": "1320",
      "clicks": "63",
      "spend": "27.82",
      "cpc": "0.442",
      "ctr": "4.8"
    }
  ]
}
```

Error Response

```
{
  "detail": "Error fetching Facebook insights: Invalid date range"
}
```

Combined Data Endpoint

Endpoint: GET /api/v1/combined-data

Description: Retrieve data from both Shopify and Facebook Ads in a single request.

Query Parameters

- `product_limit` (optional): Maximum number of Shopify products (default: 50)
- `order_days` (optional): Days to look back for Shopify orders (default: 30)
- `order_limit` (optional): Maximum number of Shopify orders (default: 50)
- `fb_adset_limit` (optional): Maximum number of Facebook ad sets (default: 50)
- `fb_ad_limit` (optional): Maximum number of Facebook ads (default: 50)
- `fb_insight_days` (optional): Days to look back for Facebook insights (default: 30)
- `fb_insight_level` (optional): Level for Facebook insights (default: "account")

Request

```
GET /api/v1/combined-data?product_limit=5&order_days=7&fb_insight_days=7 HTTP/1.1
Host: localhost:8000
```

Response

```
{
  "shopify": {
    "products": [
      {
        "id": 123456789,
        "title": "Example Product",
        "product_type": "Apparel",
        "created_at": "2023-09-01T12:00:00Z",
        "updated_at": "2023-09-10T14:30:00Z",
        "variants": [
          {
            "id": 987654321,
            "product_id": 123456789,
            "title": "Small / Blue",
            "price": "29.99",
            "sku": "APP-BLU-S",
            "inventory_quantity": 15
          }
        ]
      }
    ]
  },
  "orders": [
    {
      "id": 445566778,
      "order_number": 1001,
      "customer": {
        "id": 112233,
        "email": "customer@example.com",
        "first_name": "John",
        "last_name": "Doe"
      },
      "created_at": "2023-09-15T10:30:00Z",
      "total_price": "59.98",
      "line_items": [
        {
          "id": 887766,
          "product_id": 123456789,
          "variant_id": 987654321,
          "title": "Example Product - Small / Blue",
          "quantity": 2,
          "price": "29.99"
        }
      ]
    }
  ],
  "facebook": {
    "adsets": [
      {
        "id": "23842613501234567",
```

```

    "name": "Summer Sale - Lookalike Audience",
    "campaign_id": "23842613501111111",
    "daily_budget": "50.00",
    "start_time": "2023-08-01T00:00:00+0000",
    "end_time": "2023-09-30T23:59:59+0000",
    "targeting": {
      "age_min": 25,
      "age_max": 45,
      "genders": [1, 2],
      "geo_locations": {
        "countries": ["US", "CA"]
      }
    }
  ],
  "ads": [
    {
      "id": "23842613502222222",
      "name": "Summer Sale - Image Ad 1",
      "adset_id": "23842613501234567",
      "status": "ACTIVE",
      "created_time": "2023-08-05T14:22:30+0000"
    }
  ],
  "insights": [
    {
      "date_start": "2023-09-10",
      "date_stop": "2023-09-10",
      "impressions": "2850",
      "clicks": "132",
      "spend": "65.23",
      "cpc": "0.494",
      "ctr": "4.6"
    }
  ]
}

```

Error Response

```

{
  "detail": "Error fetching combined data: One or more API requests failed"
}

```

Step-by-Step Guide to Using the API

1. Setup and Installation

1. Clone the project repository
2. Create a virtual environment:

```

python -m venv venv
source venv/bin/activate # On Windows: venv\Scripts\activate

```

3. Install dependencies:

```

pip install -r requirements.txt

```

4. Set up environment variables in the `.env` file with your API credentials

2. Running the API

1. Start the FastAPI server:

```
python run.py
```

2. The API will be available at `http://localhost:8000`
3. Access the interactive Swagger documentation at `http://localhost:8000/docs`

3. Authentication

1. Ensure your API credentials are correctly set in the `.env` file
2. For Shopify, create a private app in your Shopify admin panel
3. For Facebook, create a developer account and app with Marketing API permissions

4. Making API Requests

Using Curl

```
# Get Shopify products
curl -X GET "http://localhost:8000/api/v1/shopify/products?limit=10"

# Get Facebook insights
curl -X GET "http://localhost:8000/api/v1/facebook/insights?days=7&level=adset"
```

Using Python Requests

```
import requests

# Get Shopify orders
response = requests.get("http://localhost:8000/api/v1/shopify/orders",
                        params={"days": 7, "limit": 5})
orders = response.json()

# Get combined data
response = requests.get("http://localhost:8000/api/v1/combined-data",
                        params={"product_limit": 5, "fb_insight_days": 7})
data = response.json()
```