Acme Financial Services

Trading Platform API Documentation

Version 3.2.0

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1. Introduction

Acme Trading Platform API provides secure access to user portfolios, market data, and trading operations.

Base URL:

```
Production: https://api.acme-financial.com/v1
Sandbox: https://sandbox-api.acme-financial.com/v1
```

Supported Formats:

- JSON (default)
- CSV (export endpoints)

2. Authentication

All API requests require authentication using JWT tokens.

Login Flow

Endpoint: `POST /api/v1/login`

Request:

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

Response:

```
{
  "success": true,
  "token": "eyJhbGciOiJIUzI1NiIs...",
  "expires_in": 3600,
  "user_id": 1523
}
```

Token Usage:

```
Authorization: Bearer <token>
```

Token Expiry: 1 hour (3600 seconds)

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3. Endpoints

3.1 Portfolio Management

Get Portfolio

Endpoint: `GET /api/v1/portfolio/{account_id}`

Description: Retrieve user's portfolio holdings and current values.

Parameters:

- `account_id` (path, required): User's account identifier

Headers:

```
Authorization: Bearer <token>
```

Success Response (200):

```
{
  "account_id": 1523,
  "user_name": "John Doe",
  "total_value": 125430.50,
  "holdings": [
    {
      "ticker": "AAPL",
      "quantity": 100,
      "avg_cost": 150.20,
      "current_price": 175.50,
      "value": 17550.00
    },
    {
      "ticker": "TSLA",
      "quantity": 50,
      "avg_cost": 220.00,
      "current_price": 245.30,
      "value": 12265.00
    }
  ],
  "last_updated": "2024-10-15T14:30:00Z"
}
```

Error Response (401):

```
{
  "error": "Unauthorized",
  "message": "Invalid or expired token"
}
```

Error Response (403):

```
{
  "error": "Forbidden",
  "message": "Access denied to this resource"
}
```

Note: ⚠️ Authorization checks validate token but may not verify account ownership.

Get Transactions

Endpoint: `GET /api/v1/transactions/{account_id}`

Description: Retrieve transaction history for an account.

Parameters:

- `account_id` (path, required): User's account identifier
- `start_date` (query, optional): Start date (YYYY-MM-DD)
- `end_date` (query, optional): End date (YYYY-MM-DD)
- `limit` (query, optional): Max results (default: 100)

Success Response (200):

```json
{
  "account_id": 1523,
  "transactions": [
    {
      "transaction_id": "TXN-2024-001234",
      "type": "BUY",
      "ticker": "AAPL",
      "quantity": 10,
      "price": 175.50,
      "timestamp": "2024-10-15T10:30:00Z"
    }
  ],
  "total_count": 45
}
```

Execute Transfer

Endpoint: `POST /api/v1/transfer`

Description: Transfer funds between accounts or external banks.

Request:

```json
{
  "from_account": 1523,
  "to_account": 1524,
  "amount": 1000.00,
  "currency": "USD",
  "memo": "Payment for services"
}
```

Success Response (200):

```json
{
  "transaction_id": "TXN-2024-001235",
  "status": "completed",
  "timestamp": "2024-10-15T11:45:00Z"
}
```

3.2 Market Data

Get Market Data

Endpoint: `GET /api/v1/market-data`

Description: Retrieve real-time market data for specified tickers.

Parameters:

- `tickers` (query, required): Comma-separated list (e.g., AAPL,TSLA,MSFT)

Success Response (200):

```json
{
  "data": [
    {
      "ticker": "AAPL",
      "price": 175.50,
      "change": 2.30,
      "change_percent": 1.33,
      "volume": 65432100,
      "timestamp": "2024-10-15T14:30:00Z"
    }
  ]
}
```

4. Error Codes

Code	Message	Description
200	Success	Request completed successfully

Code	Message	Description
400	Bad Request	Invalid parameters
401	Unauthorized	Missing or invalid token
403	Forbidden	Insufficient permissions
404	Not Found	Resource does not exist
429	Too Many Requests	Rate limit exceeded
500	Internal Server Error	Server-side error

5. Rate Limits

Current Limits:

- Authentication: 10 requests/minute per IP
- Portfolio: 60 requests/minute per user
- Market Data: 100 requests/minute per user
- Transfers: 10 requests/minute per user

Rate Limit Headers:

```
X-RateLimit-Limit: 60
X-RateLimit-Remaining: 45
X-RateLimit-Reset: 1697372400
```

Note: ⚠️ Rate limiting may not be strictly enforced on all endpoints.

Support

For technical support, contact:

- Email: api-support@acme-financial.com
- Documentation: https://docs.acme-financial.com

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