

# MT5 Retail Sentiment Index Indicator (Multi-Broker + CSV Data Logging)

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## Overview

Develop a MetaTrader 5 (MT5) indicator that pulls **live retail sentiment data** from multiple brokers via their APIs, calculates **Net Sentiment** (Long% – Short%), and plots each broker's sentiment as a **moving average line** over the candlestick chart.

The indicator must also:

- Display a **weighted average sentiment line** (thicker) when two or more feeds are active.
  - **Log all live data to .csv files**, organized per broker, to ensure fast historical loading.
  - **Load historical data** from .csv files to reduce reliance on live API calls and avoid chart lag.
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## Brokers & Colors

Broker	Abberviation	Color
OandaFX	OAN	Green
Dukascopy	DUK	Red
MyFxBook	MYB	Orange
IG Sentiment	IGS	Purple
FXCM	FXC	Violet
EightCap	8CA	Pink
Exness	EXN	Dark Red
IC Markets	ICM	Dark Green
Average Weighted Line	AWL	Deep Sky Blue (3x thicker)

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## Core Features

### 1. API Integration

- Pull live sentiment data for the **current chart symbol**.
- Calculate **Net Sentiment = Long% – Short%**.
- Handle missing or unavailable data **gracefully**.

### 2. Plotting

- Each broker feed is plotted as a **separate line**, using its designated color.
- Supports **customizable Moving Average types** (e.g., SMA, EMA) and periods.
- Weighted Average Line (AWL) appears only if **2 or more feeds** are active.

### 3. Display Modes

- **Default:** Overlay lines directly on the candlestick chart.
- **Optional:** Toggle to a **separate indicator window** (dashboard view).

### 4. Data Logging & Historical Loading

- Save all live sentiment data to **local .csv files**.
- Each broker's data is saved in **its own CSV file or sheet** (developer's choice).
- **Load and display historical data** from **.csv** upon chart load.
- Minimize API requests by using **existing stored data** when available.

### 5. User Settings

- API keys and endpoints (user-configurable) for each broker.
- Enable or disable individual broker feeds.
- Select **custom color** for each broker line.
- Choose **MA type and MA period** for each broker.
- Toggle **Weighted Average Line**.
- Toggle **Dashboard Mode**.
- Enable/Disable **CSV logging** and set **update interval** (e.g., every X seconds).

## 6. Performance

- Use **efficient, non-blocking API calls** (asynchronous or timer-based).
  - Real-time, buffer-based updates in MT5.
  - Optimized file writing and memory management to **prevent freezing or lag**.
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### UI Panel Requirements

- A **transparent panel** located at the **top-left** of the screen.
- Displays **toggle buttons** for each broker feed using **3-letter abbreviations**.
- When toggled **ON**, button displays in the broker's assigned color.
- When toggled **OFF**, button color changes to **light grey**.
- Panel shows these broker **abbreviations**:

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### Deliverables

- Clean, well-commented **.mq5 source file**.
  - **Setup instructions** for broker APIs and key management.
  - **User documentation** including:
    - Indicator settings
    - CSV file structure & setup
    - API integration instructions
    - UI Panel explanation
    - Troubleshooting tips
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### Skills Required

- Strong MT5/MQL5 development experience.
- Solid understanding of **REST API integration**.

- Chart plotting and **MT5 buffer management**.
- Efficient handling of **file I/O** (especially `.csv`).
- Experience building **UI components** (e.g., transparent control panels).
- Clean, modular coding practices.