



S-Trader





COG | Center Of Gravity

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Description

The Center Of Gravity (COG) is calculated from the sum of prices over a user defined period.

Formula

Step 1: For the requested n periods, we calculate each individual $Price_i * (i+1)$ as well as the sum of all such terms;

Step 2: For the requested n periods, we calculate the sum of each individual $Price_i$ as well;

Step 3: The Center of Gravity = $(-1)^* (\text{Result At Step 1} / \text{Result At Step 2})$.

Parameters

Source	Any price source (O, H, L, C, Vol, OI) or any other built-in or custom study
Periods	Any number of periods

Output value(s)

There is one output value resulting from the formula, the Center of Gravity.

Plot

The plot is in a separate panel at the bottom.

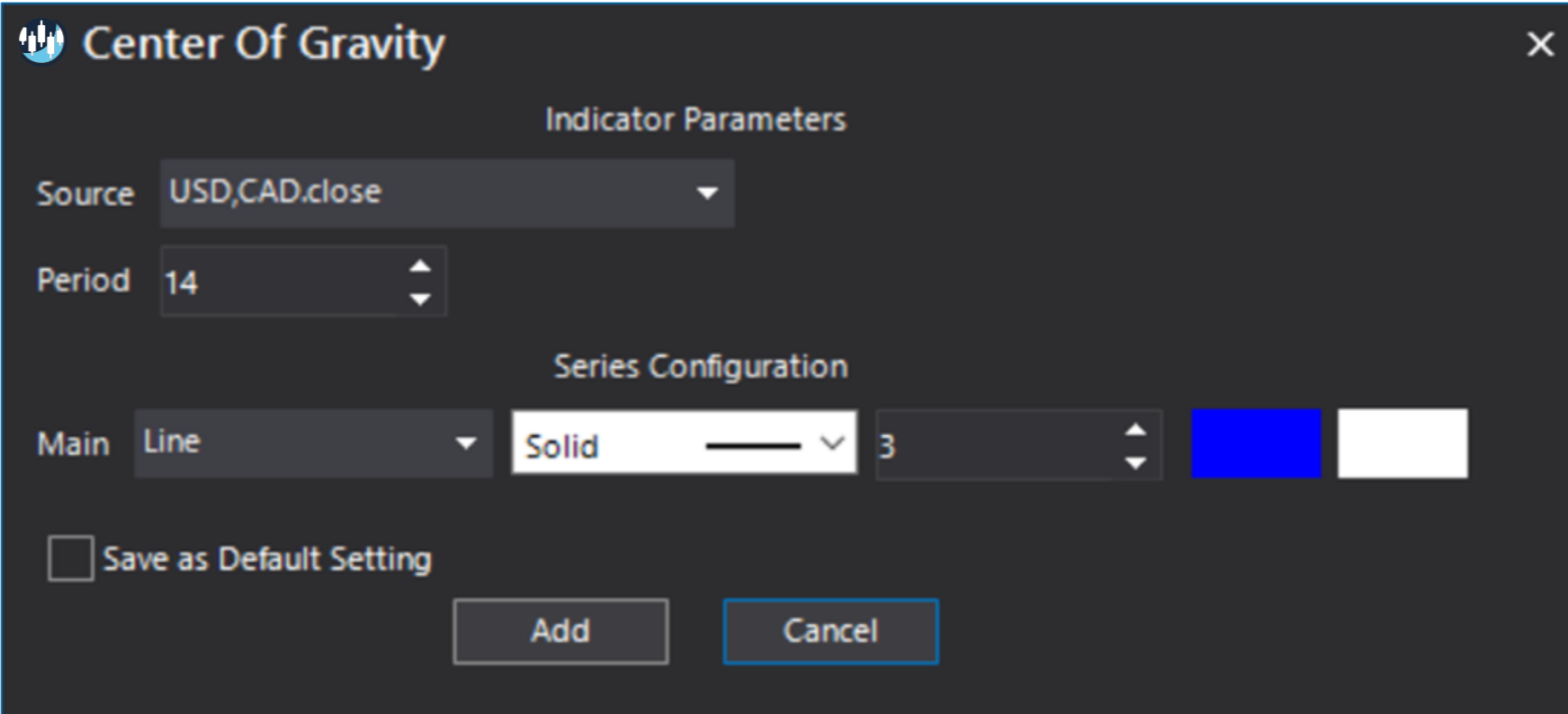


Quant Script™ Syntax

Short Form	<i>COG</i> (Source, Periods)
Long Form	<i>CenterOfGravity</i> (Source, Periods)

Dialogs

Chart Study Dialog

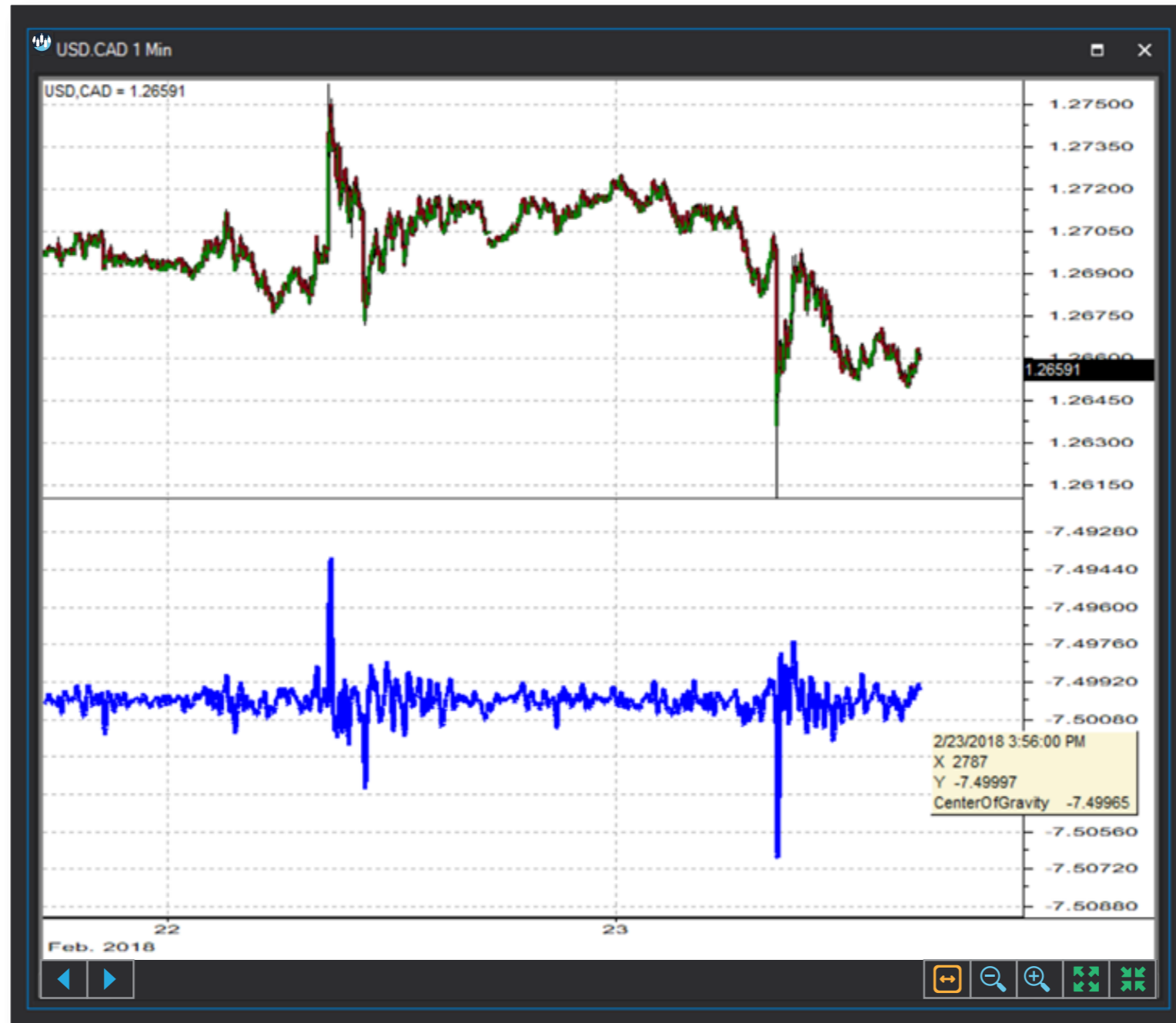


The dialog box is titled "Center Of Gravity" and contains the following settings:

- Indicator Parameters:**
 - Source: USD,CAD.close
 - Period: 14
- Series Configuration:**
 - Main: Line
 - Style: Solid
 - Width: 3
 - Color: Blue
- Save as Default Setting
- Buttons: Add, Cancel



Sample Chart With Study





Quant Script™ Wizard Study Dialog

The image shows two overlapping dialog boxes from the S-Trader platform. The top dialog is the 'Custom Study Wizard' and the bottom one is the 'Add Variable' dialog.

Custom Study Wizard:

- Save To Group: Default
- Custom Study Name: [Empty text field]
- Password: [Empty text field]
- Result: Line, DashDotDot, 2, [Color selection]
- Reverse_Result: Line, DashDot, 2, [Color selection]
- Buttons: Add New Variable, Edit Selected Variable, Add To New Panel (checked)
- Table headers: Name, Description

Add Variable:

- Name: [Empty text field]
- Description: [Empty text field]
- Source: CLOSE
- Period: 14
- Category: Oscillators - Price
- Available variables: CCI, CenterOfGravity, CFO, ChandeForecastOscillator, ChandeMomentumOscillator, CMO, COG, CommodityChannelIndex, CoppockCurve, CPKC, DetrendedPriceOscillator, DPO, ElderRayBearPower, ElderRayBullPower, ElderThermometerBear, ElderThermometerBull, ERBP
- Selected variable: CenterOfGravity(CLOSE, 14)
- Buttons: Create Script Line, OK, Cancel



Quant Script™ Study Dialog

Custom Study Editor [Close]

Save To Group: 3_OSCILLATORS_PRICE [Dropdown] A 8.25 [Dropdown]

Custom Study Name: COG

Password: [Text Field]

Result: Line [Dropdown] DashDotDot [Dropdown] 2 [Spinner] [Color Picker: Teal]

Reverse_Result: Line [Dropdown] DashDot [Dropdown] 2 [Spinner] [Color Picker: Purple]

Formula Add To New Panel

```
SET RESULT = COG(CLOSE, 14)
SET REVERSE_RESULT = CenterOfGravity(CLOSE, 14)
```

[OK] [Cancel]