



S-Trader



2673

14.86

12.28

8.81

2.1

2.77

10.97

21.72

12.59

6.98

3.15

5.28

2.11

3.09

7.87

16.84

13.03

12.24

15.97

1.62

0.77

1.92

2.63

8.45

4.52

1.11

1.51

2.58

+0.52%

+0.18%

+0.18%

+0.18%

+0.40%

+0.40%



EFT | Ehler Fisher Transform

Contents

Description	3
Formula	3
Parameters	4
Output value(s)	4
Plot	4
Quant Script™ Syntax	5
Dialogs	5
Chart Study Dialog	5
Sample Chart With Study	6
Quant Script™ Wizard Study Dialog	7
Quant Script™ Study Dialog	8



Description

The Ehler Fisher Transform (EFT) indicator by John Ehlers is a range oscillator showing where most recent period price is within the past n-days highest and lowest levels. It has some smoothing, plus what's known in mathematics as a fisher transform. The range position is similar to Stochastics and to Williams %R (see Williams %R). But the fisher transformation stretches out values near the n period high and low to make large peaks so as to help highlight those extremes.

Formula

Step 1: Calculate $MEDIAN = (High + Low)/2$

Step 2: Calculate $HIGH^{MEDIAN} = HHV(MEDIAN)$ over the selected n Lookup periods ;

Step 3: Calculate $LOW^{MEDIAN} = LLV(MEDIAN)$ over the selected n Lookup periods

Step 4: Calculate $RAW = (MEDIAN - LOW^{MEDIAN}) / (HIGH^{MEDIAN} - LOW^{MEDIAN})$;

Step 5: Calculate $SMOOTHING = EMA$ of RAW over the selected m RAW smoothing periods; IF $SMOOTHING = 1$, RESET TO 0.99999 (it CANNOT BE 1);

Step 6: Calculate $X = LN((1+SMOOTHING)/(1-SMOOTHING))$

Step 7: Fisher Transform Line = EMA of X for selected p Fisher smoothing periods

Step 8: Signal Line = EMA of Fisher Transform for selected q Fisher Signal periods



Parameters

Lookup Periods	Any number of periods
Raw Smoothing Periods	Any available moving average type
Fisher Smoothing Periods	Any number of periods
Fisher Signal Periods	Any available moving average type

Output value(s)

There are two output values resulting from the formula, the Ehler Fisher Transform and the Ehler Fisher Transform Signal.

Plot

The plot is in a separate panel at the bottom.

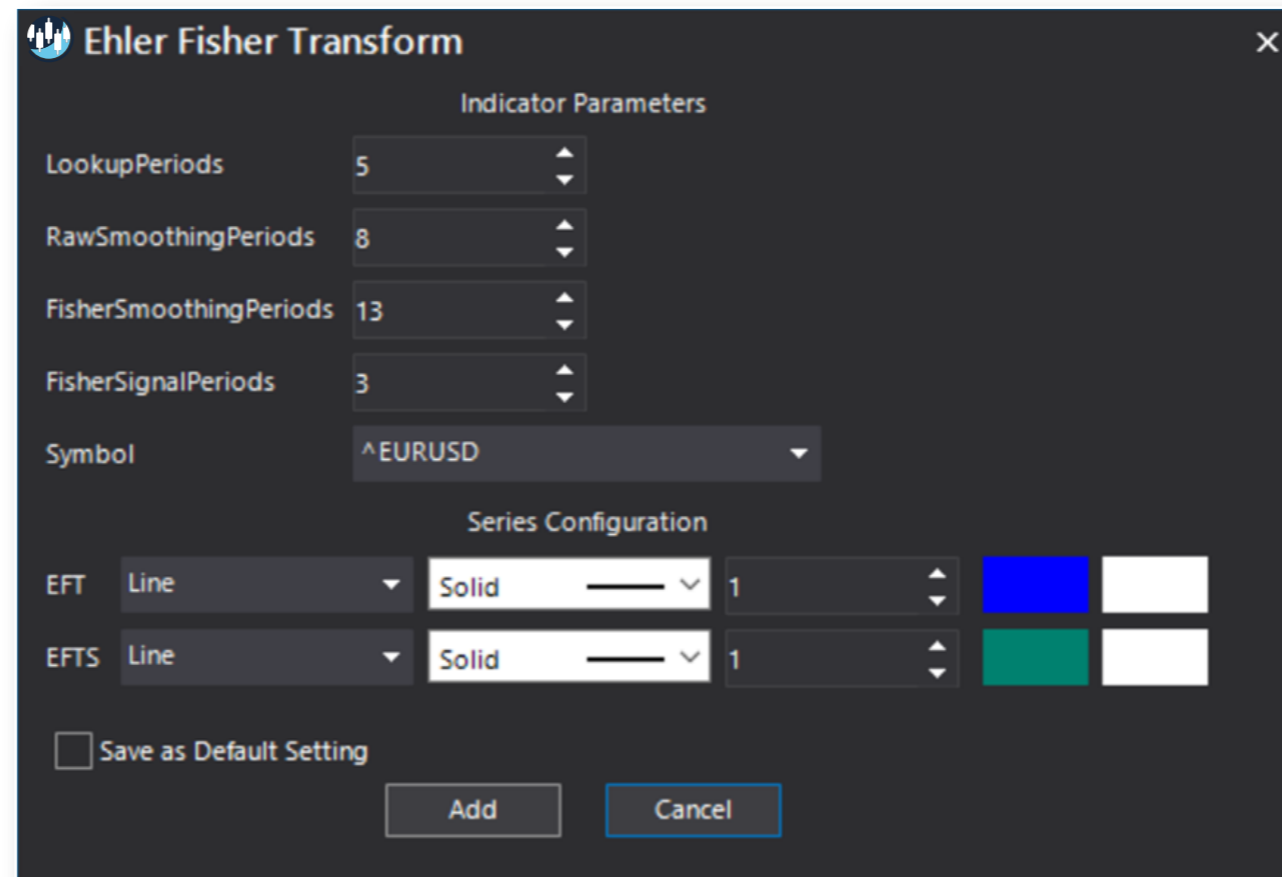


Quant Script™ Syntax

Short Form	<i>EFT</i> (Lookup Periods, Raw Smoothing Periods, Fisher Smoothing Periods, Fisher Signal Periods)
	<i>EFTS</i> (Lookup Periods, Raw Smoothing Periods, Fisher Smoothing Periods, Fisher Signal Periods)
Long Form	<i>EhlerFisherTransform</i> (Lookup Periods, Raw Smoothing Periods, Fisher Smoothing Periods, Fisher Signal Periods)
	<i>EhlerFisherTransformSignal</i> (Lookup Periods, Raw Smoothing Periods, Fisher Smoothing Periods, Fisher Signal Periods)

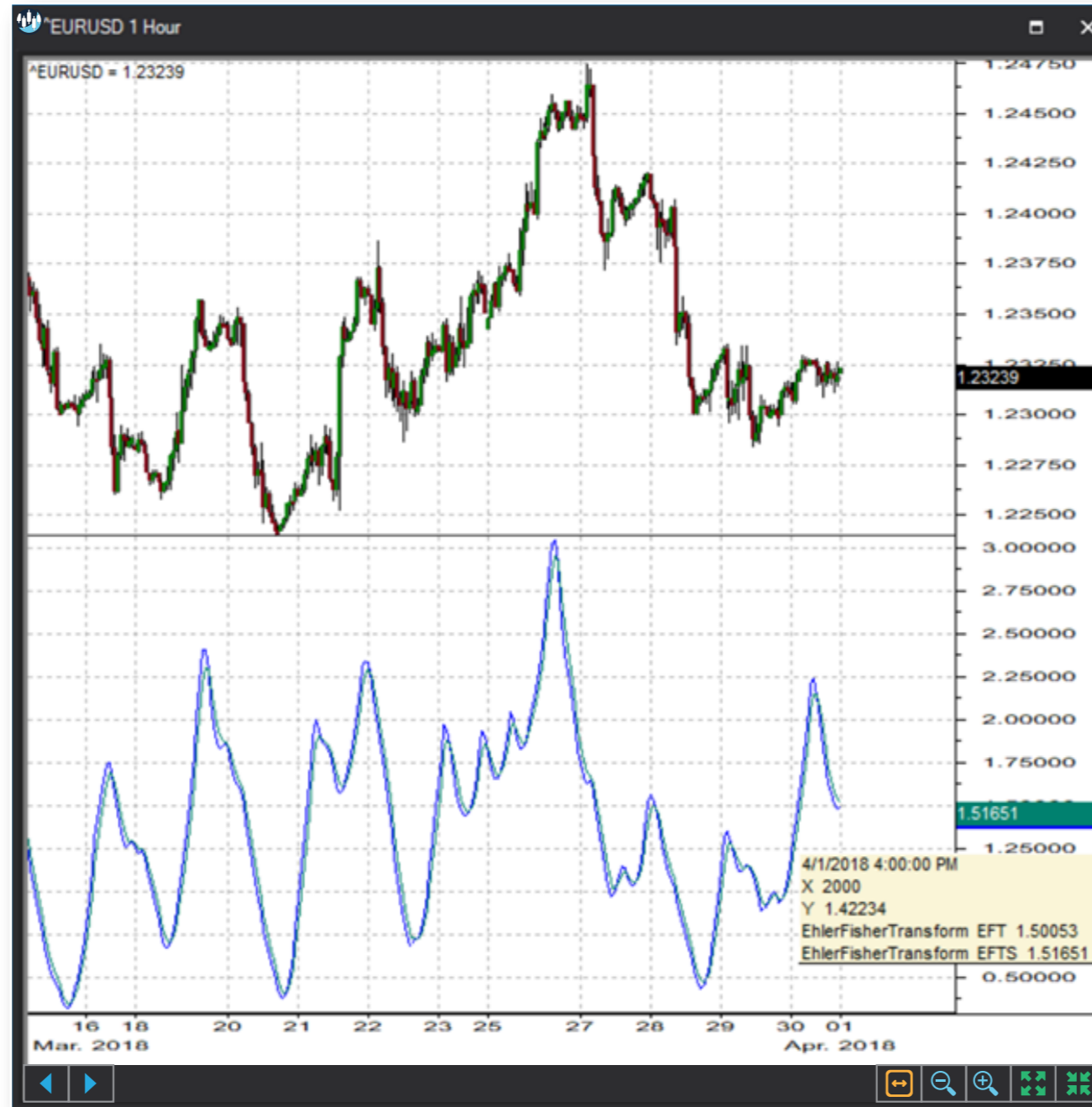
Dialogs

Chart Study Dialog





Sample Chart With Study





Quant Script™ Wizard Study Dialog

The image shows two overlapping dialog boxes from the S-Trader desktop platform. The 'Custom Study Wizard' dialog is on the left, and the 'Add Variable' dialog is on the right.

Custom Study Wizard

- Save To Group: Default
- Custom Study Name: [Empty text box]
- Password: [Empty text box]
- Result: Line, Solid, 2, [Color swatches]
- Reverse_Result: Line, Solid, 2, [Color swatches]
- Add To New Panel:
- Buttons: Add New Variable, Edit Selected Variable
- Table with columns: Name, Description
- Buttons: OK, Cancel

Add Variable

- Name: [Empty text box]
- Description: [Empty text box]
- Volatility list: ATR, AverageTrueRange, ChaikinVolatility, CV, EFT, EFTS, EhlerFisherTransform (selected), EhlerFisherTransformSignal, HighMinusLow, HistoricalVolatilityIndex, HML, HVI, MassIndex, MI, TR, TrueRange, ZVAL
- Parameters: LookupPeriods (5), RawSmoothingPeriods (8), FisherSmoothingPeriods (13), FisherSignalPeriods (3)
- Button: Create Script Line
- Text: EhlerFisherTransform(5, 8, 13, 3)
- Buttons: OK, Cancel



Quant Script™ Study Dialog

Custom Study Editor

Save To Group: 6_VOLATILITY

Custom Study Name: EFT

Password:

Result: Line, Solid, 2

Reverse_Result: Line, Solid, 2

Formula: SET RESULT = EFT(5, 8, 13, 3)
SET REVERSE_RESULT = EhlerFisherTransform(5, 8, 13, 3)

Buttons: OK, Cancel