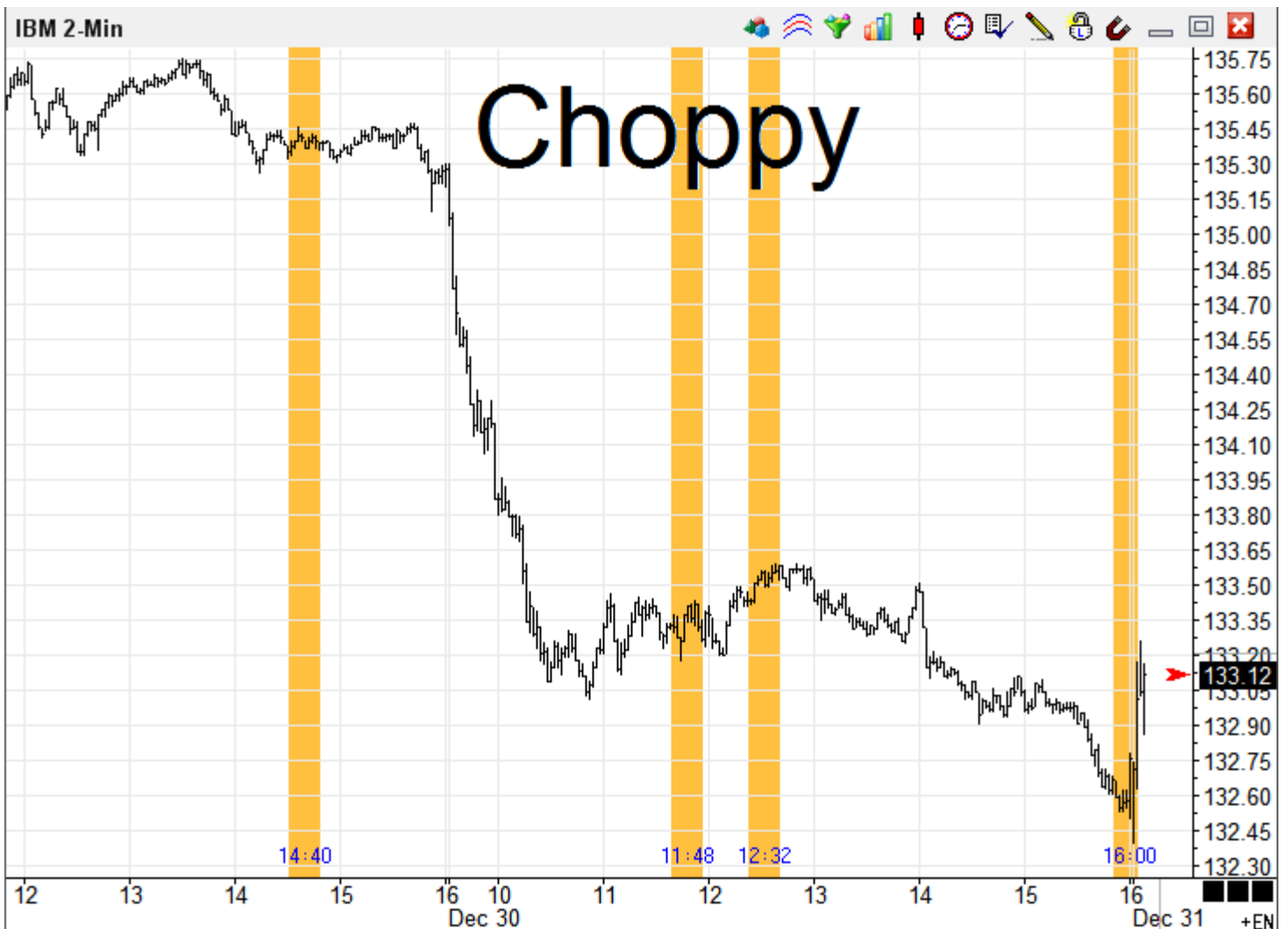


Ensign Neural Zone

Ensign Software offers for an additional subscription fee a unique and proprietary study for intra-day traders called Ensign Neural Zone. This study is not available in any other charting software. This study is based on neural networks which Ensign has been working with since 2002. A neural network extracts a forecast of tomorrow's price action by examining past data. Sounds a bit mysterious and complex, and indeed it is. We all feel that the market repeats itself, and accordingly use tools like cycles to measure repetitions in time, Fibonacci to measure repetitions in price, and Elliott waves to see repetitions in patterns. Ensign's neural network mathematically discovers through an iterative process characteristics in the training data that contribute to a useful time prediction.

Ensign's research has weathered the test of time, and is now released as the Ensign Neural Zone study. The study is designed to be displayed on a 2-minute chart, and shows TIME periods for when the market has a **higher probability** for changing direction. The best time for initiating a trade is referred to as a Primary zone, and the best time for managing stops is referred to as a Secondary zone.

The examples chosen for this documentation are typical Ensign Neural Zones. They are not cherry picked to be the best examples because that would give a false impression and expectation. The Ensign Neural Zone presentation will be discussed with some examples.



Primary Zones

The Primary zones are shown with the gold stripes to represent the 'golden zones' for when the market is predicted to change direction. The calculations are based on the session data and are independent of prior calculations. The Ensign Neural Zones for a session are available and displayed IN ADVANCE on the chart. So the forecast for December 30th was showing on the chart prior to the start of the session on December 30th. Slide a chart leftward to show future zones in the right side margin of the chart.

Note: 24-hour trading for futures and Forex is broken into 8-hour sessions. Calculations for the Asian session (16:00 – 24:00 EST), the European session (00:00 – 8:00 EST), and the U.S. Session (8:00 – 16:00 EST) are made for the next day a couple hours after a session ends.

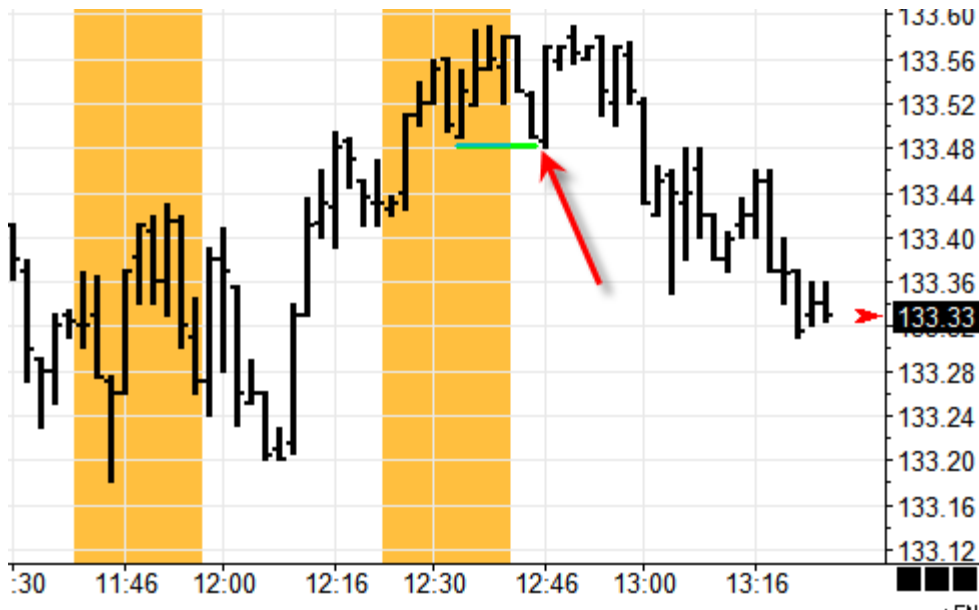
There will be 2 to 4 Primary zones showing per session, with 2 being the most common quantity. The example for December 30th on the IBM 2-minute chart has 3 primary zones at the following times:

11:48 - Ok, but not ideal. The ideal time for this zone would have been 1 hour earlier. However, it is still a useful zone helping a trader to be patient in keeping a short trade taken in the prior session around 14:40.

12:32 - This was a very nice swing point. From this swing high, the market trended lower for the balance of the session to the next primary zone positioned at the close of the trading day.

16:00 - This primary zone was on the low of the day, and thus was another excellent time forecast.

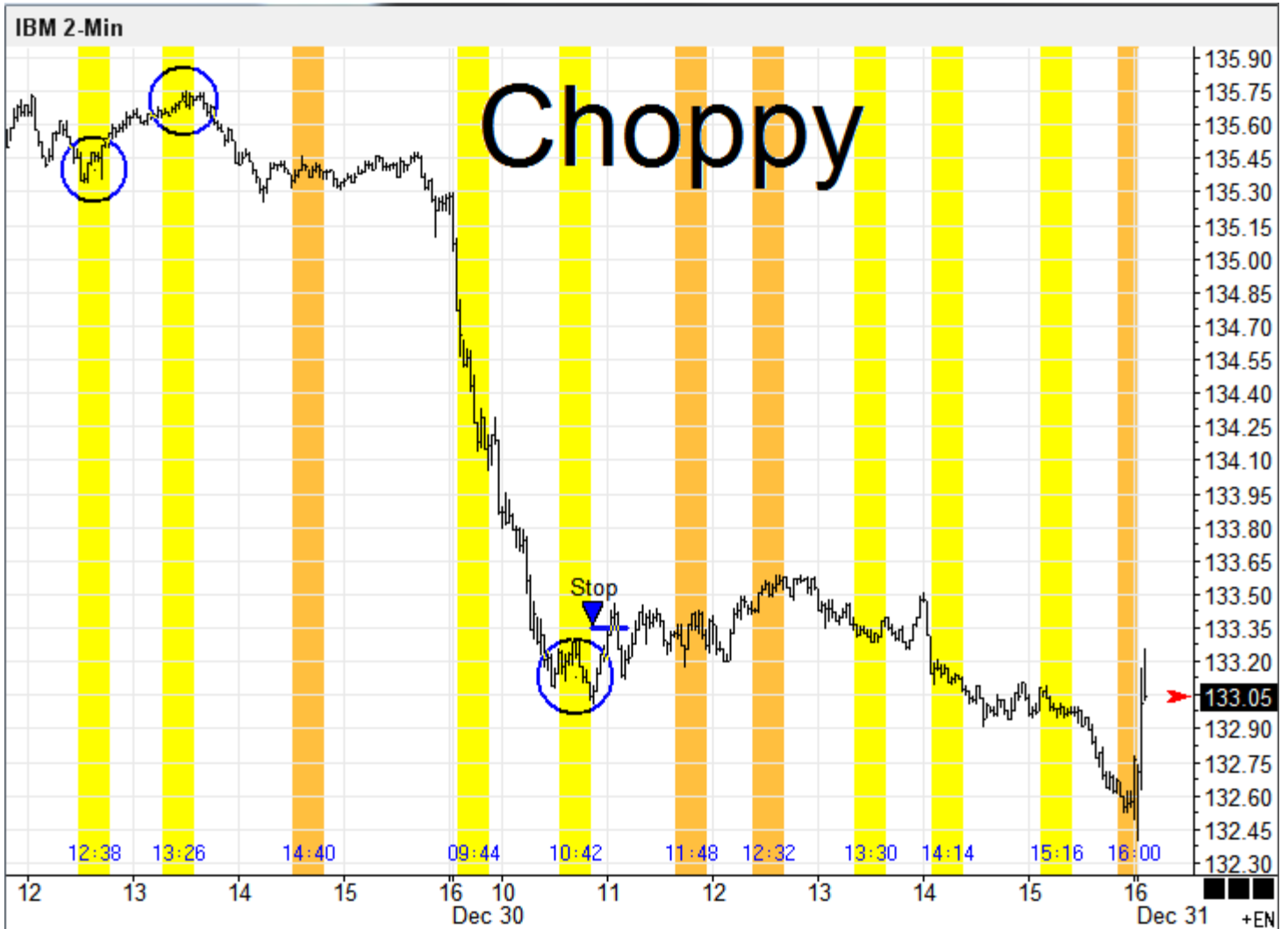
Now, how might a trader have used the 4 primary zones which are shown on this example 2-minute chart? One possibility is to use a trailing 4-bar High / Low stop and enter counter to the direction of the move into and through the primary zone. The zone is a predicted time for a direction change and thus the best time for initiating a trade. The next image shows the 12:32 zone as an example of an entry short at a trailing stop based on bars in the golden zone. Price action into and through this zone was upward, so a trailing sell stop could be used to catch the turn downward if a downward move develops.



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Secondary Zones

Zones with lower probability for a direction change can be shown in yellow. Because a direction change can happen, Secondary zones could be used as the time to manage an existing trade by moving protective stops. There may be 0 to 5 secondary zones shown per session. The IBM 2-minute example continues by showing the Secondary zones for December 30th.



Circles have been manually drawn on three of the Secondary zones that caught excellent swing points. The previous critique was that the 11:48 Primary zone was an hour late. The swing low at 10:50 was, however, identified in advance as a Secondary zone, and would have been an ideal time to manage a short trade initiated from the prior day by moving a protective stop lower to lock in a profit.

One possible placement of a stop would be +/- a couple pips or points above or below the range of the bars that occupy a zone. Using this idea, the protective stop for the short trade might have been moved to \$133.35 when the Secondary zone at 10:42 is exited. Such a stop would have been hit by the 11:02 bar.

Label

A label is shown in a large font at the start of a session for the anticipated nature of the upcoming session. Our example chart shows the word 'Choppy'. Knowing in advance what kind of market to expect is a huge help.

The labels are based on the number of swing points in the forecast. The following labels are shown.

Trend Two Primary zones, and no Secondary zones. The forecast is for the market to trend through the session. Typically, session High and session Low will be near the session time boundaries. Note: When a market is strongly trending two adjacent sessions may both trend in the same direction. Since every forecast has at least two Primary zones, the zones are not to be interpreted as turns. A better interpretation is they show the time of the session high and session low, and are the best times for initiating and managing trades.

Pivot The session has three zones in the forecast.

Zig-Zag The session has two or three Secondary zones in the forecast.

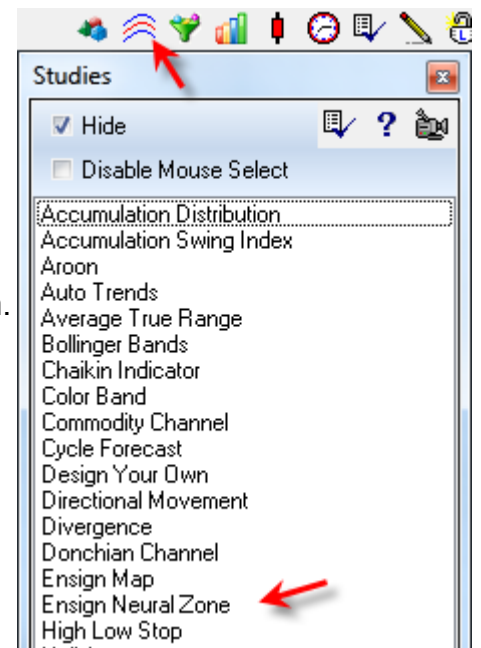
Choppy The session has multiple Secondary zones, which indicates lots of minor swings.

Unavailable Either the Ensign Neural Zone has not been calculated yet, or the study has been applied to a chart that is not a member of the supported Symbol Universe.

Apply the Study to a Chart

Open a 2-minute chart for a symbol that is listed in the Symbol Universe. Click on the Ensign Neural Zone entry on the Studies list.

Tip: Slide the chart leftward to increase the right side margin to see Ensign Neural Zone stripes in the future. The forecasts are made 24-hours in advance. Some of our example charts at the end of this documentation show Neural zones in the future in the right side margin.



Properties

Ensign Neural Zone Properties Window

Primary: 9
 Secondary: 9
 >> Near: 3
 Near >>: 0
 Font Size: 36
 Shift -L/R+: 0
 Offset Pri: 0.0
 Offset Sec: 0.0

Location: Chart
 Color Band Positions: None
 Study Scale: Default
 Label: Top
 Grid: None
 Name:

Show	Color	Style	Marker	Color	Variable
<input checked="" type="checkbox"/> Primary	Blue	—	ZON	Orange	0
<input checked="" type="checkbox"/> Secondary	Red	—	ZON	Yellow	0
<input checked="" type="checkbox"/> Near			ZON	Green	

Use as Default
 Plot Behind Bars
 Privatize
 Show Label
 Show Timestamp
 Show Range
 Speak Approach
 Speak In Primary
 Speak Secondary

Tab: Default
 Copy to Tab

Primary, Secondary, >> Near, Near >> - These are bar counts for the width of the zone. On a 2-minute chart, a 9 represents a time period of 18 minutes. >> Near is the width of an approaching zone. Near >> is the width of a departing zone. The Near zones are shown adjacent to Primary and Secondary zones.

Font Size - Sets the size of the Label. A size of 48 is a very large label.

Shift -L/R+ - Move the Label's horizontal position -Leftward or +Rightward. 0 places the Label at the start of a session.

Label - Use the combo box to select Top, Middle, or Bottom of the chart or sub-window.

Show - Check the boxes to show or hide the zones.

Marker - Use the ZON marker to show a zone stripe on the chart.

Color - Select the color of the zone. Gold is recommended for the Primary zone and yellow for the Secondary zone.

Show Label - Show or hide the Ensign Neural Zone label on the chart.

Show Timestamp - Show a Timestamp for the center of the zone. The time is placed at the bottom of the chart and uses the color of the color box nearest the Primary check box. In this example, the time color would be shown in Blue.

Show Range - Show range High and Low lines. The range is obtained from the bars in a zone. Primary range lines use the color and line style from the Primary row. Secondary range lines use the color and line style from the Secondary row.

Offset Pri, Offset Sec - Adjust the range lines. Add an offset to the range High, and subtract an offset from the range Low.

Speak Approach - Speak an alert when time enters a >> Near zone ahead of a Primary zone. The >> Near count controls this advance warning alert. In the example, the alert will be given 6 minutes before a Primary zone is entered because the >> Near count is 3 bars on a 2-minute chart.

Speak In Primary, Secondary - Speak an alert when a Primary zone is entered, and when the Secondary zone is entered.

For these three voice alerts, the alert is given upon entry into the zone. The zone does not have to be visible.

Symbol Universe

The Ensign Neural Zone study is not a calculation that can be made internally by the program. The calculation is complex and requires Neural Net software which costs several thousands of dollars. Therefore, the study is calculated on Ensign's servers for a fixed set of symbols each day, and distributed to Ensign subscribers using the Internet.

Ensign Neural Zones are calculated daily for the following symbols. Although eSignal continuation symbols are shown for Futures, Ensign Neural Zones can also be applied to continuation symbols on the Interactive Brokers, TransAct Futures, IQFeed, TraderBytes, Barchart and TD Ameritrade feeds.

Forex	Futures	Stocks	Indices
EUR/GBP	BO #F	AAPL	\$INDU - Dow Jones Industrial
EUR/USD	C #F		
GBP/USD	CL #F		
GER30	ES #F		
NAS100	EU #F		
USD/JPY	GC #F		
US30	NG #F		
	NQ #F		
	PL #F		
	RTY #F		
	S #F		
	SI #F		
	US #F		
	W #F		
	YM #F		
	ZB #F		

Ensign Software monitors which Neural Zone files are downloaded. Ensign reserves the right to remove symbols which are not being followed, and add symbols when requested.

Subscription

Ensign Neural Zones are available for one month as a free trial period for evaluating whether the study serves a purpose in your approach to trading. Thereafter, access to the study is by an additional subscription fee of \$25 per month, or an annual payment of \$250. The subscription for the Ensign Neural Zone study is optional and is in addition to your subscription for Ensign 10.

Payment by a \$250 check for an annual subscription to the Ensign Neural Zone can be mailed to:

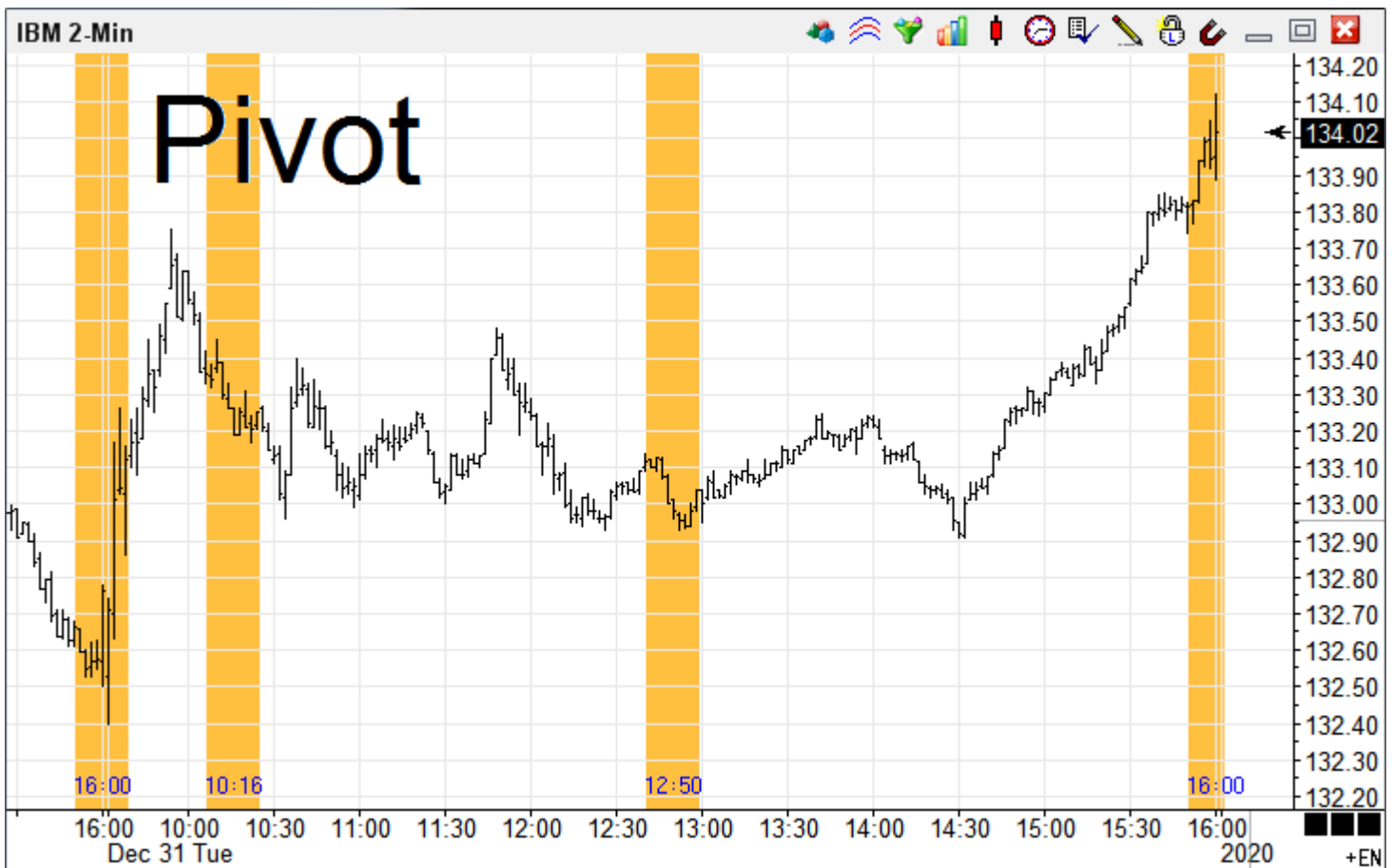
Ensign Software, Inc.
2036 W. 450 S.
Saint George, UT, 84770

Monthly subscription or an annual payment on a credit card can be arranged with Ensign Billing who already handles your current subscription to Ensign 10.

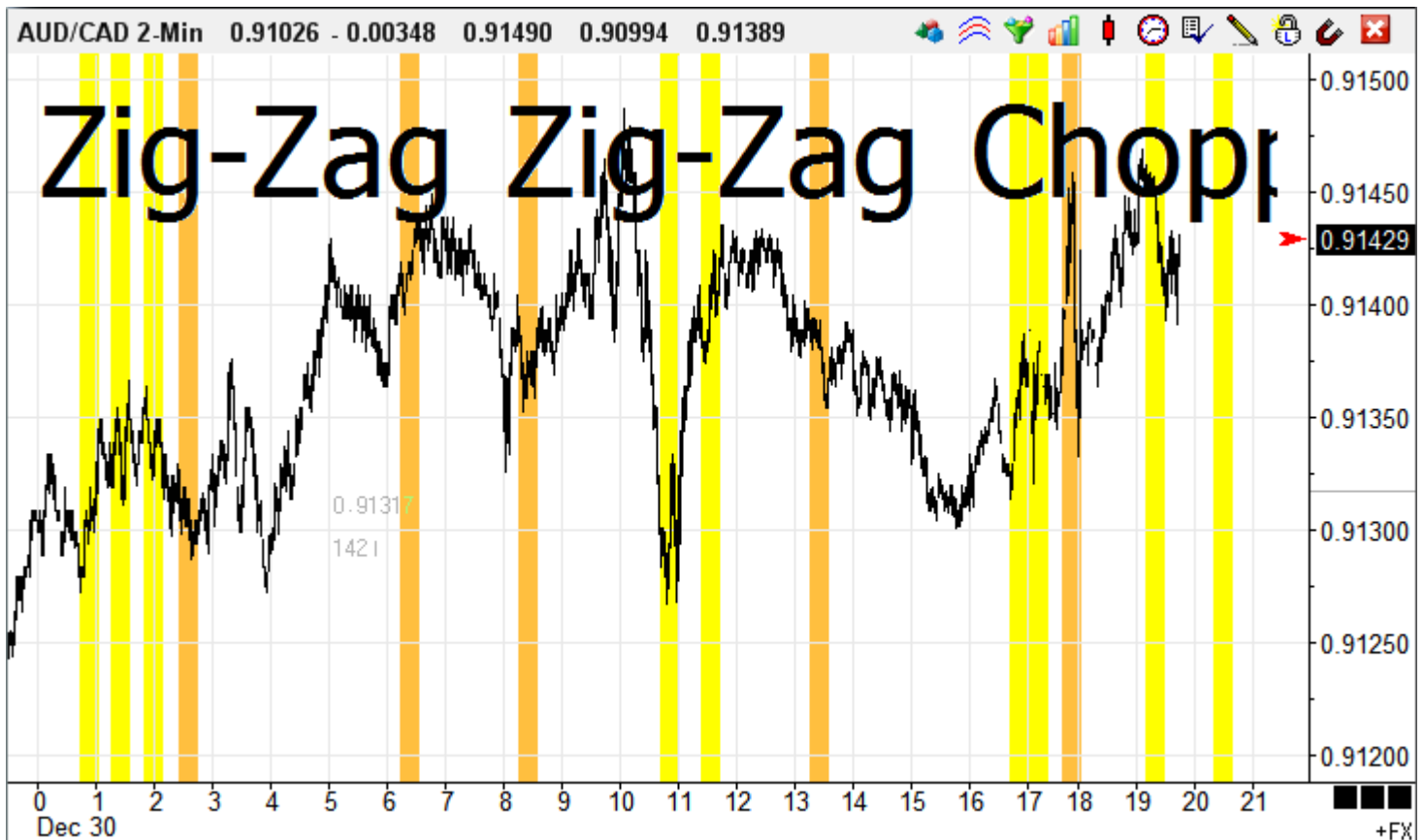
billing@ensignsoftware.net

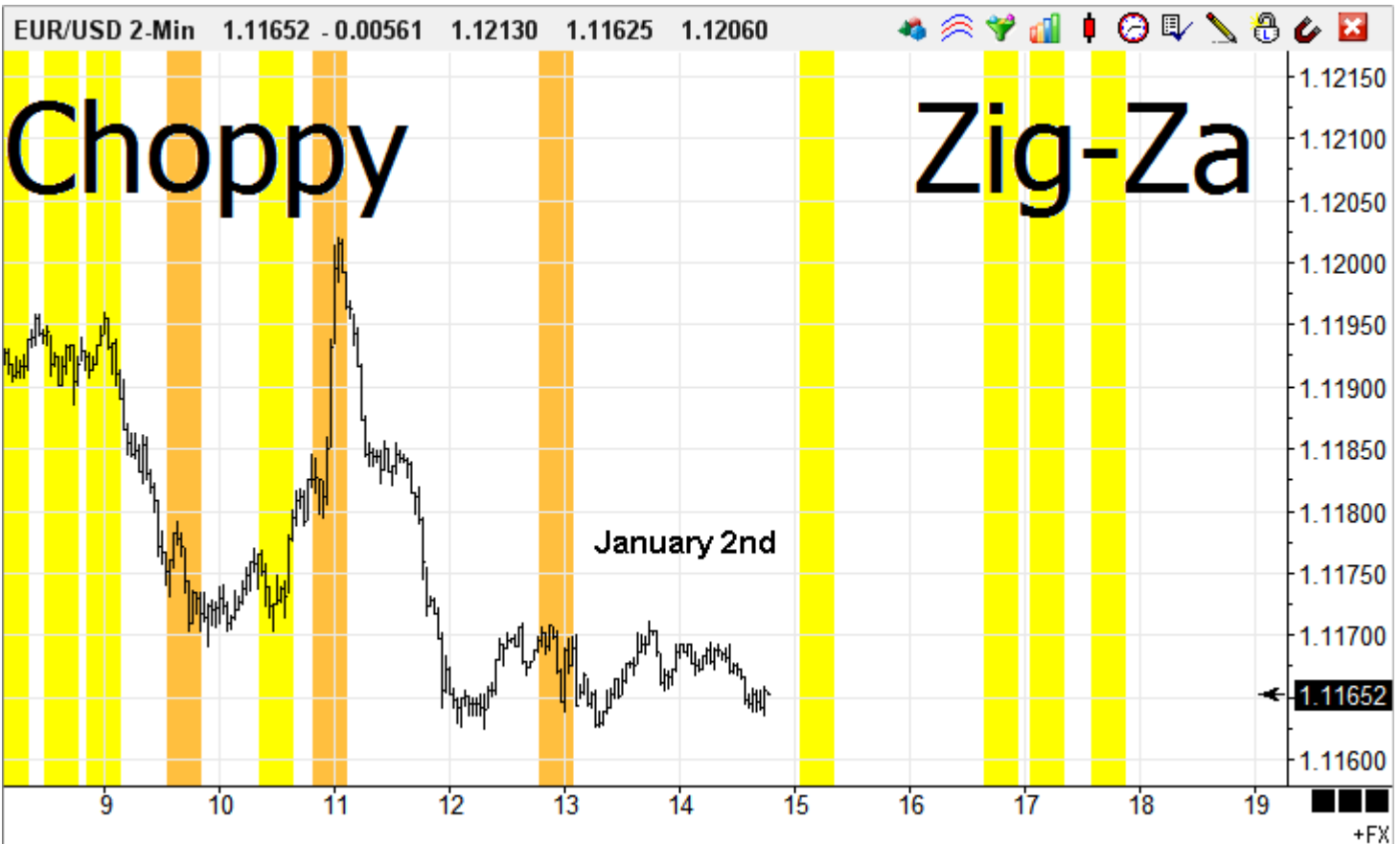
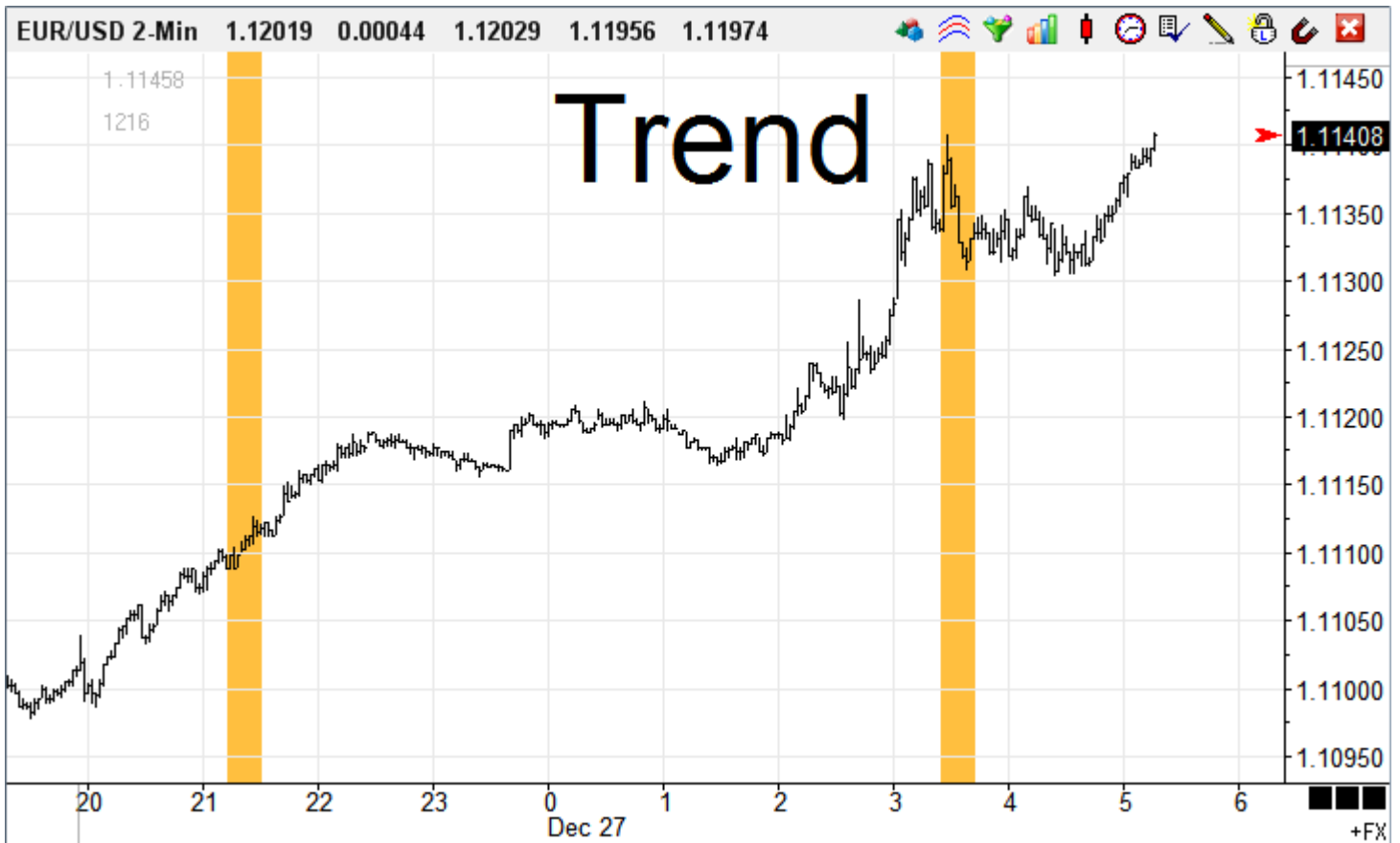
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208-552-2230

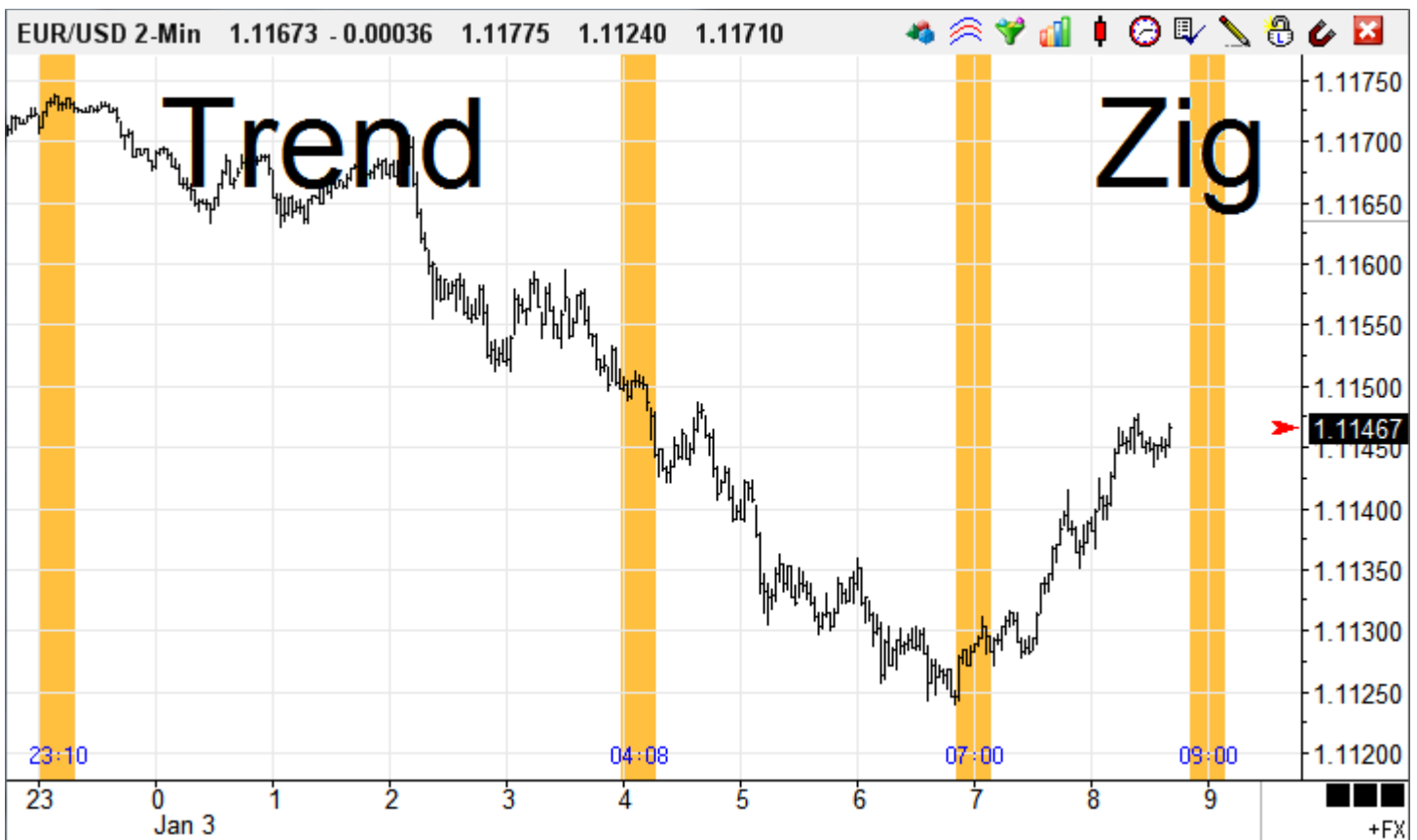
More Examples



This is a follow up to the IBM example chart. It shows excellent zone correlations on December 31st.







The following are possible trades and stops based on the Ensign Neural Zone study on this EUR/USD chart.

1. Use the range of the 23:10 zone to be stopped into a short trade around 1.1170.
2. Use the range of the 04:08 zone to move a protective stop lower, to around 1.1153.
3. Possibly add another short position by being stopped into the position at around 1.1143.
4. Use the range of the 07:00 zone to move a protective stop lower, to around 1.1133.
5. Be stopped into a long position around 1.1133 based on the range of the 07:00 zone.
6. Wait until bars fill in the upcoming 09:00 zone to determine where to move the protective stop for the long position. The stop (yet to be determined) would probably be above 1.1145.

The three trades taken based on these 'golden zones' would have been profitable. Initial stops could have been placed +/- a couple of pips above or below the range of the bars in the golden zone.

Tip: Check the Show Range property to have the range High and range Low calculated and drawn by the Ensign Neural Zone study. The suggest extra 'couple of pips' can be implemented with the Offset Pri and Offset Sec edit boxes.

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Global Variables

The Neural Zone study will populate a set of Global Variables with trade statistics when a trading system is designed using DYO trade statements in the Action category.

Index:

220	Win Count
221	Loss Count
222	Win \$ x Leverage
223	Loss \$ x Leverage
224	Net \$ x Leverage
225	Net \$ x Leverage / Count
226	Trade Count
227	Profit \$ x Leverage
228	Max Gain x Leverage
229	Max Loss x Leverage
230	Entry Price
231	Exit Price
232	Stop Price
233	Trade Price
234	Direction
235	Trade Type
236	Enter = 0 Exit = 1
237	Position Size
238	Prior Trade Position Size