NewsHound

Expert Advisor
(June 1, 2016)

NewsHound is a MetaTrader 4 (MT4) Expert Advisor (EA) that allows you to trade the spike in price caused by Forex news announcements. You provide a few parameters to define when to enter a trade and how to manage it and NewsHound does everything else for you, automatically. You can set the EA in place minutes or hours prior to the trade and then, just seconds before the news announcement, NewsHound will straddle the current price with pending Buy and/or Sell orders. When the price spike activates the pending order, the NewsHound sets your initial stop loss and, as the trades moves along in profit, it trails the stop loss, pip by pip, behind the price. It then takes profit at specified profit points or lets the trade fall back to exit in profit at the stop loss point. Because the price moves so quickly on an announcement, the NewsHound can manage the trade much quicker and more efficiently than you could do so manually.

NewsHound will handle fractional pricing (5 decimal places, 3 for the Yen pairs)

The **NewsHound** Expert Advisor runs on the MetaTrader4 trading platform. If you don't already have the MT4 platform installed, please go to your broker's site and download the MT4 trading platform

Note: It is highly recommended that you use an ECN broker for trading the news. Dealing brokers are notorious for increasing the spreads before news announcements and for slipping your entry price.

Once your MT4 platform is set up, you'll need to install the **NewsHound** Expert Advisor files, which can be downloaded from the Forex Tool Shed web site, www.forextoolshed.com.

Installing NewsHound

Here are the step by step instructions for downloading and installing the **NewsHound** EA into your MT4 platform folders.

- Open your web browser and go to: **www.forextoolshed.com**. Click on the **Downloads** link and then click on the **NewsHound Login** button and enter the appropriate password. If you have lost your password, please contact fxtools@forextoolshed.com.

∫ Now, simply click on the **Install** link and you will be guided thru the install process. The wizard will automatically install files into the appropriate folders for multiple MT4 platforms.

Attaching the EA

Open your platform and under the Navigator window, open the "Expert Advisors" group. Right-click on the "**NewsHound**" Advisor and select "**Attach to a chart**" (you could also just apply the ##NewsHound template to your chart and then click on the smiley fact in the upper right corner of the chart). Choose "**Allow Live Trading**" under the **Common** tab and click **OK**. You'll see **NewsHound** on the top right corner of your chart. If the Advisor is live and running, you'll see a smiley face ☺. If it is not live and working then you'll see a sad face ☹ or an x. If it's an x, click the ![Expert Advisors] button at the top of your tool bar to activate (You'll see a green circle with an arrow on the button ![Expert Advisors] if it is activated.) If it was a sad face, then click on the **x**, click on the common tab and click on the **Allow live trading** box to leave a check mark.
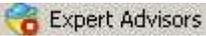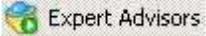
I would suggest that you make this the default by going to the **Options** menu, **Expert Advisors** tab, and checking the **Allow live trading** box.
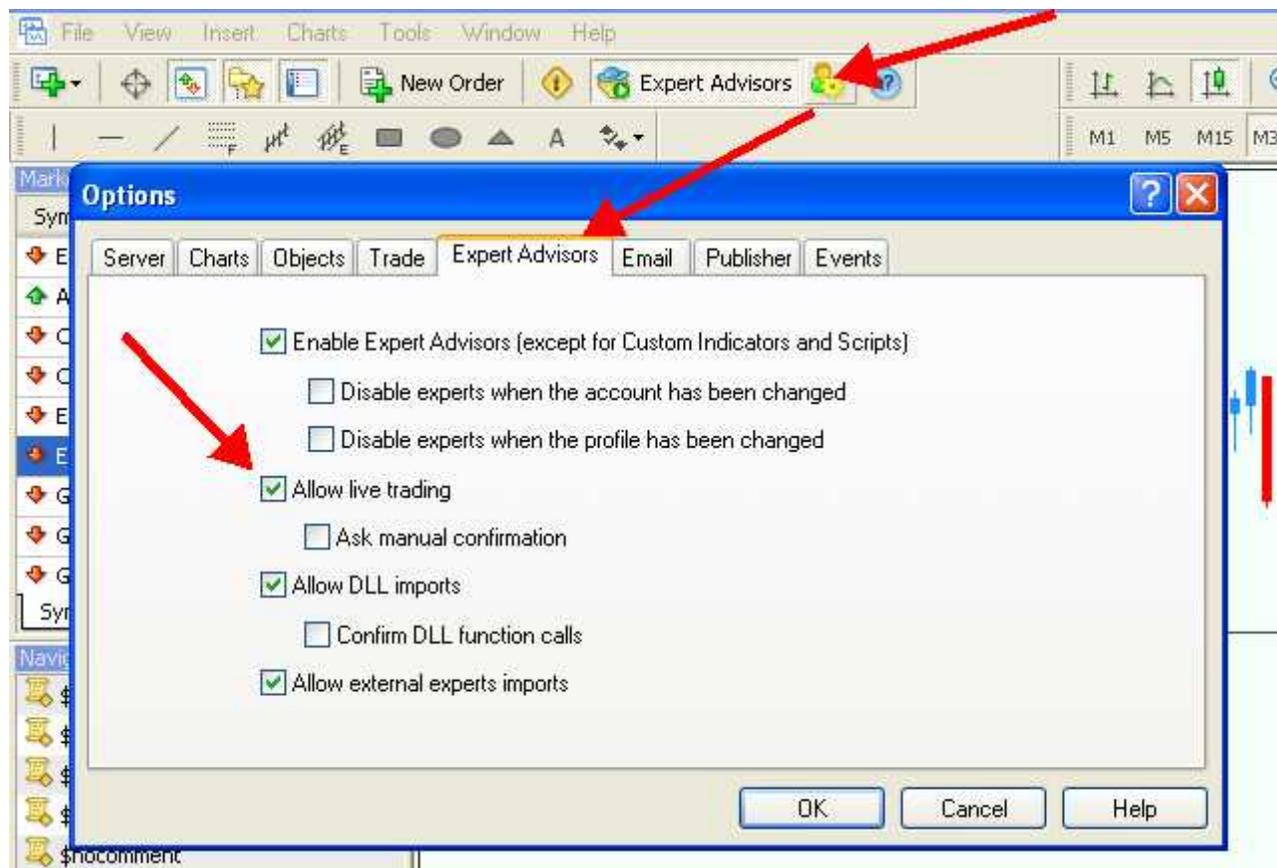
Parameters

The EA requires that you enter some parameters, so that it knows when and where you want to create orders and how you want it to manage the SL's (stop losses) and TP's (take profits). The following screen shot shows the default parameters. To get to this window, right click anywhere on your chart, move your cursor to Expert Advisors, left click on Properties, and then left click on the Input tab. (Or you can left click on the Smiley face in the upper right corner of your chart.) Notice that TPs, Stops, and Stop triggers are expressed in terms of the distance in pips (whole pips, not fractional pips) away from break-even.

Although there are a lot of parameters, you can run NewsHound right out of the box by changing just the ones indicated by the red arrows.

Variable	Value
Preset_Name	NewsHound
News_Day	0
News_Time	830
Lead_Time_Seconds	7
Lag_Time_Seconds	10
Channel_Width	24
Order_Lots	0.01
First_TP	0
Second_TP	0
Use_Percent_for_TP_Lots	false
First_TP_Lots	0.0
Second_TP_Lots	0.0
Max_Loss	10
Plus_Spread	false
Hard_Stop	true
Trail_Stop_Trigger	6
Trail_Stop_By	5
Spread_Threshhold	15
Slippage	10
Pre_News_Alarm_Minutes	10
Alarm_Sound_File	bugle.wav
Buy_Only	false
Sell_Only	false
Broker_NewYork_Offset	7
Magic_Number	12321
Alert_Popup	true
Alert_Sound	false
Alert_Email	false
Background_is_Dark	true
Screen_Shot	true
Show_Comments	true
Trade_Comment	

To change the value of a parameter, double left click on the value box. If it's a True or False parameter, click on the appropriate entry otherwise enter an appropriate numeric value. To close the Value box, left click on any other entry in the list.

PreSet_Name: Once you have the parameters set to your satisfaction, you can save the parameter set so that it can be loaded in the future. This field contains the name you will give that saved file. You could use the name of the announcement as the preset name. The name will appear in the upper left corner of the chart to which the EA is attached:

News_Day: The day of the month on which the announcement will occur. This is the Broker's day. Be carefull because the New York day may not co-incide with the broker's day. If left as zero, the current broker day will be assumed. If the announcement is more than 24 hours ahead of time, you must specify the News_Day.

News_Time: The time that the news announcement is to be issued. Use Eastern (New York) Time. A 24 hour clock is used. For example 4:30 pm would be entered as 1630.

> Note: **Although you can set the news time hours, even days, ahead of time, it is highly recommended that you be in front of your charts when the announcement occurs. If the price spikes far enough to trigger an order, but not far enough to move the stop loss into profit, you may be able to take actions to prevent or minimize a loss. ForexToolShed.com has scripts that you can quickly drag and drop on your chart to close or delete an order.**

Lead_Time_Seconds: This is the number of seconds prior to the announcement time that you want the pending orders to be created. Do not make this number too large, as the price fluctuates a bit before the announcement and might trigger the orders prematurely. Five to ten seconds is reasonable.

Lag_Time_Seconds: When the numbers issued in the news announcement are close to the expected numbers, the market may not move enough to activate the pending orders. If you enter a number in this field, then that number of seconds after the news time, any pending orders not activated will be deleted. Keep in mind however, that sometimes the announcement is issued late, in which case you would miss the trade. (Another reason for being at your charts when the announcement occurs.) The default setting is 10 seconds.

Channel_Width: This is the width of the channel which will bracket the current price. Pending orders will be created on each edge of the channel. Do not make your channel too narrow, otherwise the request for the pending order could be rejected or it could be triggered before the news announcement is released Some brokers require that a pending order be at least 10 pips away from the current bid price   The default width is 24 pips. Note that the spread is added to the width that you specify.

Order_Lots: Number of lots to be traded. 1.0 is 1 standard lot, 0.1 is 1 mini, 0.01 is one micro lot.

First_TP: This TP Target is how many pips away from break-even that you want your first Take Profit. The EA knows how much your spread is, so this is the true number of pips profit.

Second_TP: This is how many pips away from break-even that you want your second Take Profit.

Note: The use of the First and Second_TP parameters is optional. The default way for NewsHound to exit the trade is via the Trailing Stop (see Trail_Stop_By parameter below).

Use_Percent_for_TP_Lots: For the **First** and **Second_TP_Lots** parameters below, you may specify either a fixed number of lots or the percentage of the total lots for the order--NewsHound will calculate how many lots that actually is. If you wish to use percentage instead of fixed lots, set this parameter to true and in the TP_Lots fields below, enter the percentage as a decimal number, e.g. **.**25 = 25%, 1**.**0 = 100%.

First_TP_Lots: If you wish to close a just a portion of your total order at the first TP point, then enter the number of lots to close here--fractional lots (eg. **.**2 or **.**05) are allowed—or enter a percentage of the total order. If the First_TP parameter is zero, the First_TP_Lots parameter is ignored.

Second_TP_Lots: If you wish to close a specific portion of your total order at the second TP point, then enter the number of lots (fixed or percentage) to close here. If the Second_TP parameter is zero, the Second_TP_Lots parameter is ignored.

Max_Loss: This is maximum number of pips that NewsHound will allow the trade to go against you. Think of it as the initial Stop Loss. (The default Max Loss is set for 10 pips).
Note: This is a positive, non-zero number! If a Max_Loss of less than zero is encountered, it will be changed to a positive number. If NewsHound encounters a Max_Loss of zero, it will be changed to 999 (that's a pretty big loss!).

Plus_Spread: If you wish to have the currency's spread added to the Max_Loss, you can set this parameter's value to true. **You should only use this parameter if you are using an ECN broker, as a dealing broker will often increase the spread before a news announcement.**

Hard_Stop: The Max_Loss stop loss above is a stealth stop—the broker cannot see it. If you wish to use a hard, non-stealth stop loss, in addition to the Max_Loss, then set this parameter to true. the hard stop is the same as the Max_Loss). Think of the Hard_Stop as an emergency (power out?) stop loss. If you are not going to be at your chart when the news announcement occurs (not recommended), you should leave this parameter set to true (default).

Trail_Stop_By: Set this value to the number of pips that you want the Stop Loss to trail the current price. This Trailing Stop trails pip by pip.

Trail_Stop_Trigger: Enter the profit point (number of pips beyond break-even) where you want to trigger the trailing stop.

Spread_Threshhold: The spread is often increased by a dealing broker just before a news announcement. You may set a threshold here (number of pips), above which you do not want NewsHound to take a trade.

Slippage: This is the number of pips deviation in price that you are willing to tolerate. If the dealer slips the price more than this number of pips, a trade will not be taken.

Pre_News_Alarm_Minutes: If you wish to be alerted prior to the scheduled news time, enter here the number of minutes prior to the news time. You will be alerted via sound and pop-up window.

Alarm_Sound_File: This is the name of the sound file to be used for the Pre_News_Alarm.

Buy_Only: If you wish to only take the Buy side of the trade bracket, set this value to true.

Sell_Only: If you wish to only take the Sell side of the bracketed trades, set this value to true.

Broker_NewYork_Offset: This is the difference between your broker's server time and Eastern Time (New York). For FXDD USA, the offset is 3 hours.   You can find your Broker's time at the top of the Market Watch window:

Magic_Number: NewsHound will assign a magic number to the orders that it creates. This number is used to control which order NewsHound will manage. The magic number 12321.

> FYI**:**   A magic number can only be assigned to an order by a script or EA. For non-NewsHound orders, our script, **OpenMagic**, can be used to place a market or pending Buy/Sell order with a magic number assigned to it.

Alert_Popup: If you wish to be alerted with a pop-up alert message, then set this value to **true**.

Alert_Sound: If you wish to be alerted with a sound when profit is taken (ka-ching) or when a trade is stopped out (siren), then set this value to **true**.

Alert_Email: If you wish to be alerted with an email or text message, then set this value to **true**.

Expire_Minutes: If you wish to have the pending orders expire (be deleted) after a certain elapsed time, then enter the number of minutes here. This value must be zero or greater than 11. Some brokers do not allow expiration of orders, in which case you should set the parameter to zero.

Background_is_Dark: If the background color of your chart is a light color, then set this parameter value to false, otherwise keep the default of true. This is used to determine the color of label text (not comment text) at the top and bottom of the chart.

Screen_Shot: If this parameter is set to **true**, a screen shot will be taken when NewsHound creates the pending orders and when it completes a trade. (See the description of Screen Shots, below.) If you have a problem and want assistance, it is recommended that you have screen shots enabled so that you can send a picture to Support.

Show_Comments: This parameter enables/disables the display of parameters and trade status text on the screen. Disabling the comments is usefull when they would obscure or be in the way of indicators and lines for a particular strategy.

Trade_Comment: Any text entered in this field will appear in the comments field of the Terminal window of your MT4 platform:
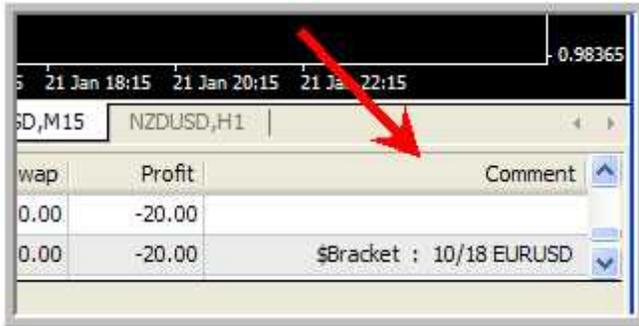
Don't be intimidated by the number of parameters. Once you have your parameters set up, you can save them as a "preset" file, then the next time you trade the announcement, you can load the preset and only need to change a couple of parameters, like News_Time, News_Day, and Order_Lots.
To get you started, a preset file that utilizes the trailing stop is included in the download file.
(It's the only one I use.)

A Note about the News_Time parameter.

Because people live in different parts of the world and brokers servers are located in different parts of the world, there needs to be a constant for calculating time differences. The New York time zone has been chosen to be that constant and the Broker_NewYork_Offset parameter is used to indicate the difference between the New York and broker time zones. The simplest way is to determine the correct Offset is to set the News_Time parameter to a couple of minutes in the future (so you don't have to wait for a news event) and then try different settings for the Offset until the program triggers at the right time. Once you have determined the Offset, it will always be the same for your broker. Needless to say, you should do this trial and error in a test account.

A Note about Stops.

The Max Loss and Trailing stop are "invisible" stops. NewsHound keeps track of where the stop is, but doesn't send a "move stop" request to the server. When the price falls back to hit this invisible stop, NewsHound sends a request to the server to close the trade. You will not see these invisible stops in the MT4 Terminal window, nor as a line on your chart. You can track the locations (break-even +/- pips) of the invisible stops, as they change, in the "**Curr SL:**" line in the status text info on the left side of the chart window.

Screen Shots

A picture will be taken of the screen when NewsHound completes its trading process (closes the trade). The picture will be saved on your hard drive in the ***platformname/experts/files*** folder. The file name will be **ss_NewsHound_symbol_ymoddhhmm**, where "symbol" is the currency pair being managed, "ymoddhhmm" is a number representing the year, month, day, hour and minute that the shot was taken. The filename will be suffixed with a single lowercase letter: "**s**" for stopped out, "**t**" for take profit, and "**x**" if trade was closed externally. You should purge these files periodically.

The NewsHound in Action

When you attach NewsHound to a chart, a summary of your input parameters is displayed in the upper left corner of the chart. As you wait for the announcement, you will see a countdown to trade time and the spread for the currency. Until the countdown get to 60 seconds, the count will be erratic because the count is only updated on a price tick (change). From the 60 second point, it will count pretty much second by second.

When the countdown gets to the news time minus the Lead Time Seconds, a pending Buy and/or pending Sell order will be created. You will hear a meep-meep sound when this occurs and will see a dot-dash line appear on the chart for each pending order. If you get an "Invalid Stop" message, it means that either the specified channel was too narrow or that the price moved before the order could be created (the pending order price must be at least 10 pips away from the current bid price). If you have the Hard_Stop parameter set to true, you will also see the red dot-dash stop loss lines on the chart. The spread that is in effect when the pending orders are created will also be shown in the bottom right corner of the chart.

Once NewsHound detects an open order, status information about the trade is displayed is displayed in the upper left corner and the parameters are shown below the status info text (below the dotted line). The status information changes as the trade progresses.
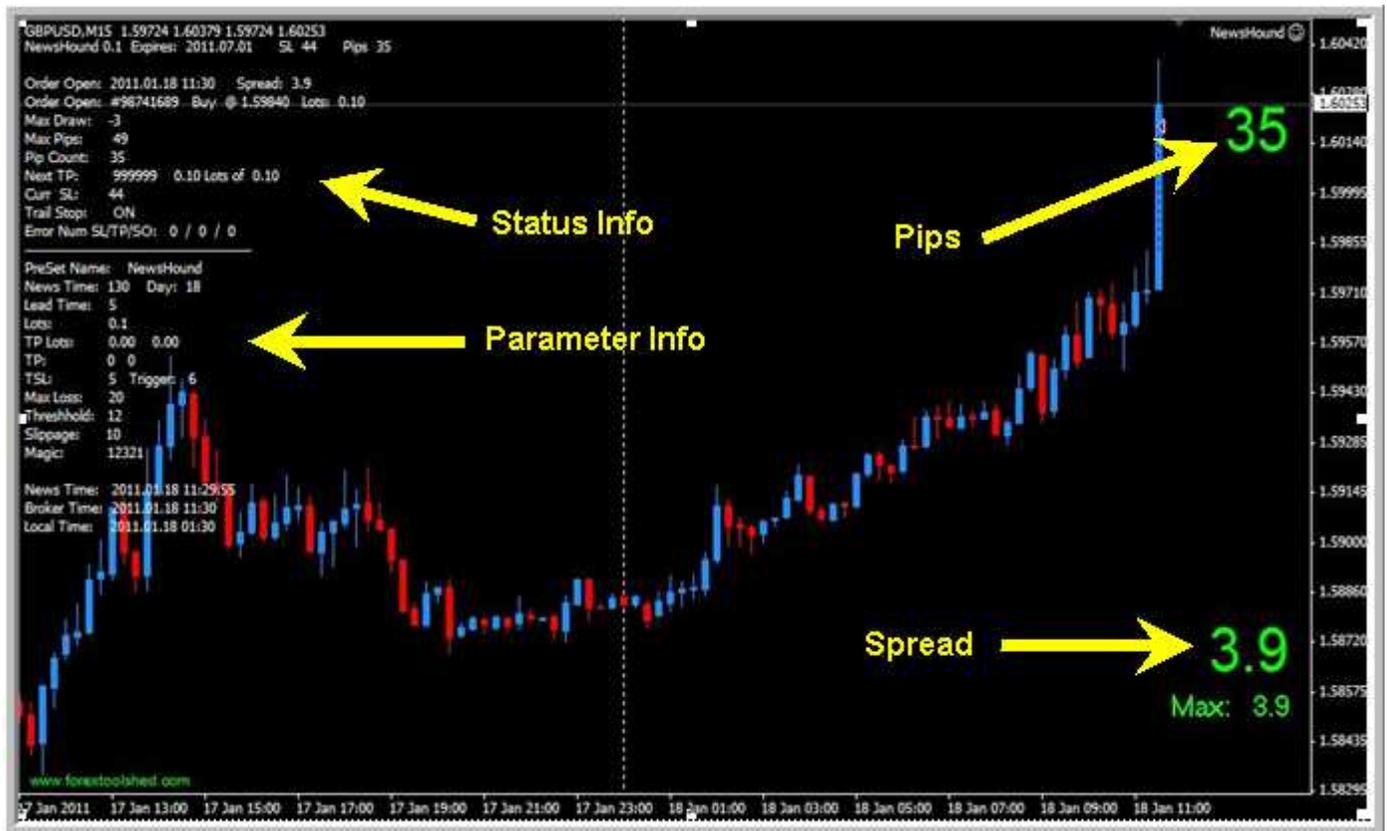
The following is the result of a trade taken with NewsHound:

The spreads shown in the lower right corner of the above image are defined as follows:

Curr Spread: The tick by tick spread from the time NewsHound was attached to the chart until the trade was ended (or No Trade message was given).

Pend: The spread at the time the pending orders were created.

Open: The spread at the time the pending order was Opened (activated).

Max: The maximum spread that occurred between the time the pending orders were and the time the trade was ended.

Limit: This is the value of the *Threshhold* parameter.

Note: You cannot attach more than one EA to a chart. The second EA will remove and replace the first EA.

Note: Please give NewsHound a helping hand by closing all unnecessary programs on your PC. You absolutely do not want your email program to be downloading mail, or Automatic Updates to be updating your system, or scanning programs to be operating, when the announcement comes out, as it will slow the NewsHound program down, making it less responsive to market conditions and prone to undesirable results.

Note: Be aware that when you switch Profiles or change Accounts, Expert Advisors will be disabled. To prevent this, you must **uncheck** a couple of boxes on the options menu. On the toolbar, click on **Tools**, then **Options**. Click on the **Expert Advisors** tab and remove the check marks as shown below: **Your PC must be on and your trade station running for the EA to work.**

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Trouble Shooting

If you believe you have discovered a problem with the NewsHound and would like some help solving it, then perform the following:

⌡ If your chart shows some aspect of the problem, take a screen shot of the chart, to include the parameters that NewsHound shows on the left side of the chart.

⌡ Compose an email, describing the nature of the problem and attach/include the screen shots that you took. If you had the **Screen_Shot** parameter turned on, you should also attach the screen shots that NewsHound made—they are in the ***[platformname]/experts/files*** folder.

⌡ Attach/include the experts log file for the appropriate (server) day from the ***[platformname]/ experts/log*** folder, or excerpt the portion that relates to your trade problem. Do the same thing for the Journal log file, which is the ***[platformname]/logs*** folder.

⌡ It's very important that you include, in some form, the NewsHound Input Parameters that you used for the problem trade.   They are included in the Experts log file.
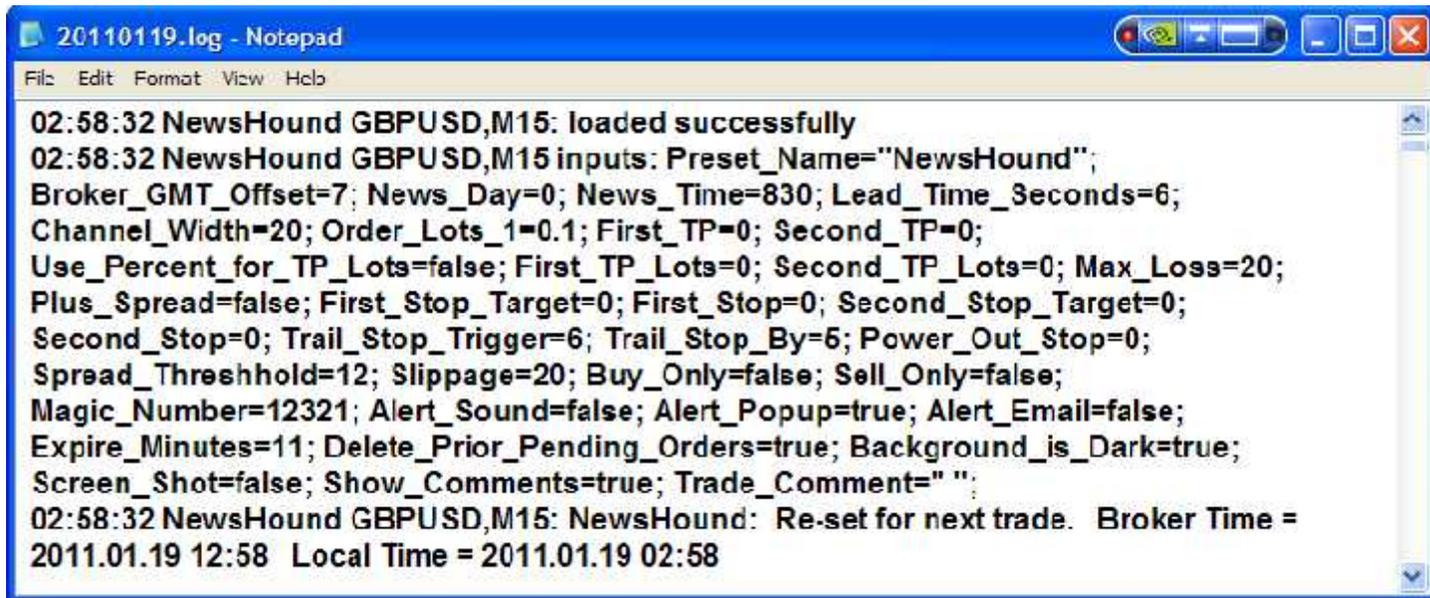
```
20110119.log - Notepad
File  Edit  Format  View  Help

02:58:32 NewsHound GBPUSD,M15: loaded successfully
02:58:32 NewsHound GBPUSD,M15 inputs: Preset_Name="NewsHound";
Broker_GMT_Offset=7; News_Day=0; News_Time=830; Lead_Time_Seconds=6;
Channel_Width=20; Order_Lots_1=0.1; First_TP=0; Second_TP=0;
Use_Percent_for_TP_Lots=false; First_TP_Lots=0; Second_TP_Lots=0; Max_Loss=20;
Plus_Spread=false; First_Stop_Target=0; First_Stop=0; Second_Stop_Target=0;
Second_Stop=0; Trail_Stop_Trigger=6; Trail_Stop_By=5; Power_Out_Stop=0;
Spread_Threshhold=12; Slippage=20; Buy_Only=false; Sell_Only=false;
Magic_Number=12321; Alert_Sound=false; Alert_Popup=true; Alert_Email=false;
Expire_Minutes=11; Delete_Prior_Pending_Orders=true; Background_is_Dark=true;
Screen_Shot=false; Show_Comments=true; Trade_Comment=" ";
02:58:32 NewsHound GBPUSD,M15: NewsHound:  Re-set for next trade.  Broker Time =
2011.01.19 12:58   Local Time = 2011.01.19 02:58
```

⌡ Send the email to: **fxtools@forextoolshed.com**.

Error Messages

NewHound will edit the Input Parameters for accuracy and validity. Here is a list of the error messages that you could receive--most of them are self explanatory. The messages will be displayed in the upper left corner of the chart.

> **Missing Order_Lots:**   The Order_Lots field can not be zero**.**
>
> **Buy_Only and Sell_Only cannot both be chosen**
>
> **First_TP was specified, but First_TP_Lots field is zero**
>
> **Second_TP was specified, but Second_TP_Lots field is zero**
>
> **Second_TP was specified, but First_TP is missing**
>
> **TP Lots must not be greater than 1, when Use_Percent_for_TP_Lots is true**
>
> **Missing a way to exit the trade:**   You must specify either First_TP or Trail_Stop_By
>
> **Already past News Time:**   Perhaps you need to specify the News_Day.

There are certain condition that will prevent NewsHound from taking a trade. In these cases, a large bold message will be shown across the middle of the chart:

No Trade: Open Orders Exist!   The open orders (with magic #12321) must be closed.

No Trade: Pending Orders Exist!   Delete the existing pending orders**.**

No Trade: Trade window too small.   The trade window is the time interval between the Lead_Time_Seconds and Lag_Time_Seconds. You may need to Increase the Lead or Lag time**.**

No Trade: Error creating orders: 130.   Either the **Channel_Width** is too small or the price moved within 10 pips of the Pending Order Price. You will also get a popup message showing the broker's error message, usually an "Invalid Stop Loss" message. (It actually has nothing to do with Stop Loss).

No Trade: Lag Time exceeded! The pending orders were not triggered within the number of **Lag_Time_Seconds** after News_Time, so the pending orders were deleted.

No Trade: Spread Threshhold Exceeded!   The broker has raised the spread so that it exceeds your specified **Spread_Threshhold**.

Occasionally, when NewsHound sends a request to the server, the server will return an error message, which NewsHound will display in a popup window and in the **Experts** log and/or **Journal** log. NewsHound will resend a server request for some types of errors, like "Re-quote" or "Invalid Price", but for others, like "Market Closed", it doesn't. Here is a list of possible Server errors:

Error Message	Error Number
COMMON_ERROR	2
INVALID_TRADE_PARAMETERS	3
SERVER_BUSY	4
OLD_VERSION	5
NO_CONNECTION	6
NOT_ENOUGH_RIGHTS	7
TOO_FREQUENT_REQUESTS	8
MALFUNCTIONAL_TRADE	9
ACCOUNT_DISABLED	64
INVALID_ACCOUNT	65
TRADE_TIMEOUT	128
INVALID_PRICE	129
INVALID_STOPS	130
INVALID_TRADE_VOLUME	131
MARKET_CLOSED	132
TRADE_DISABLED	133
NOT_ENOUGH_MONEY	134
PRICE_CHANGED	135
OFF_QUOTES	136
BROKER_BUSY	137
REQUOTE	138

ORDER_LOCKED	139
LONG_POSITIONS_ONLY_ALLOWED	140
TOO_MANY_REQUESTS	141
TRADE_MODIFY_DENIED	145
TRADE_CONTEXT_BUSY	146
TRADE_EXPIRATION_DENIED	147
TRADE_TOO_MANY_ORDERS	148
UNKNOWN ERROR	149

Note: Error #149 usually means that your broker does not allow hedging. The buy and sell pending orders constitute a hedge, even though only one of the orders is opened.