

# Phoenix 5

## The Ultimate Guide

(version 2.0)

Copyright 2006 Hendrick

<b>Updates:</b> .....	3
<b>What is Phoenix?</b> .....	4
<b>Attach Phoenix to a chart</b> .....	6
<b>The three modes of Phoenix</b> .....	7
<b>Settings:</b> .....	8
<b>Example</b> .....	11
<b>How to get a Modeling Quality of 90% when testing EA's in MT4</b> .....	14

**Updates:**

2006.11.4

The following pairs are available in the code: USDJPY, EURJPY, GBPJPY

2006.11.5

The following pairs are available in the code: USDJPY, EURJPY, GBPJPY, USDCHF, GBPUSD.

A more comprehensive explanation about the 3 Phoenix modes.

The ModelingQuality90% is now part of this guide.

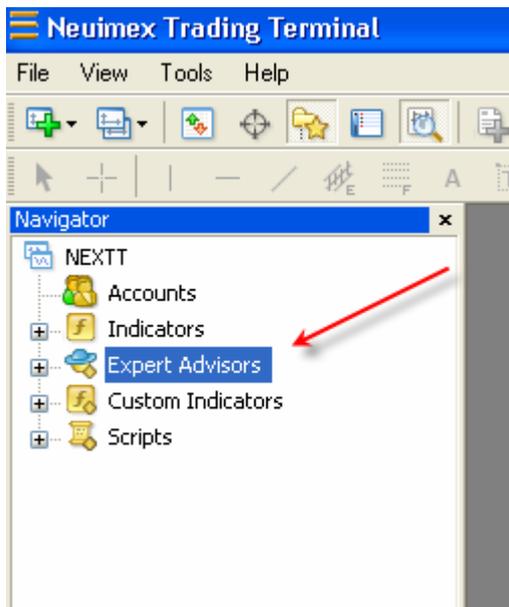
## What is Phoenix?

Phoenix is an Expert Advisor for the MetaTrader 4 platform. More about MetaTrader and Expert Advisors you will find here:

<http://www.metaquotes.net/terminal>

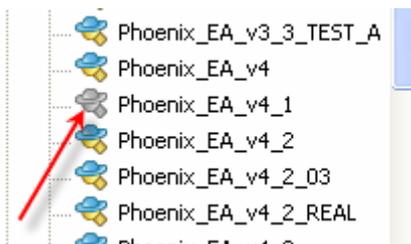
Phoenix (the Expert Advisor) comes as a file with the extension .mq4. You have to place this file in the subfolder “experts” of the folder where you installed the Client Terminal.

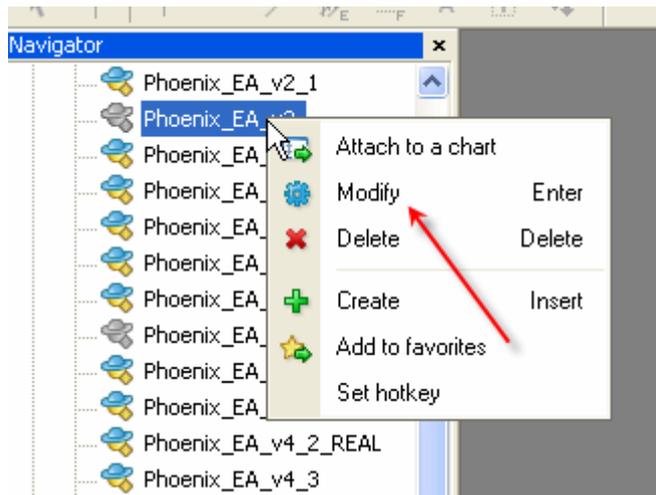
When you open the Client Terminal you will find the Expert Advisors option in your Navigator window:



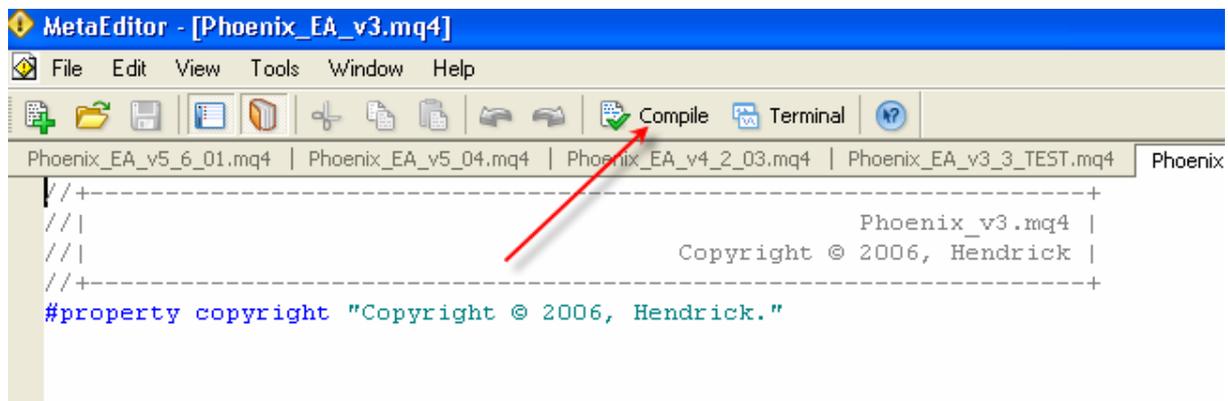
Double-click “Expert Advisors” and you will see the newly added Phoenix EA.

If Phoenix is greyed out like in the example then there is something wrong with the code.





Select the EA, click your right mouse button and choose Modify. This will open the EA in MetaEditor where you have the option to compile it:

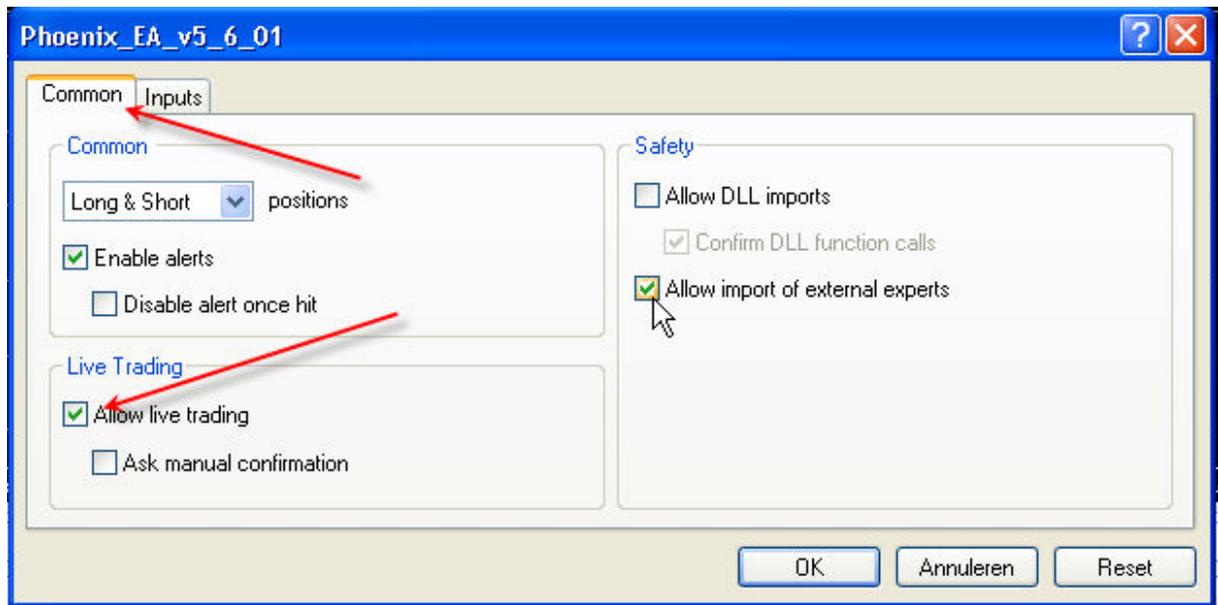


Compile it and close MetaEditor. If it's still greyed out and you don't know how to code, then you're in big trouble! The EA will not work. Try do download it once again or ask someone in the Phoenix forums to help you.

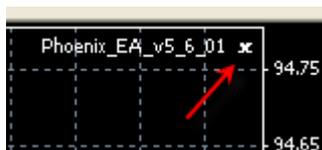
## Attach Phoenix to a chart

Open a chart with a 15M TimeFrame. Select the EA in the Navigator window, click and hold your left mouse button and drag the EA onto the chart and release the left mouse button.

A new window is opened where you can set up the EA. First click the Common tab and make sure that you enable the *Allow live trading* option.



Then click the Inputs tab where you can set up the EA (more about that later). When you are finished, click the OK button. In the upper right corner you will see the name of the EA. In this case it has a cross at the end:



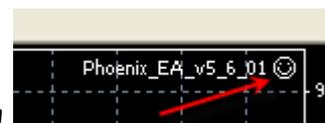
It means that you have to click the Expert Advisors button at the top of your Terminal to enable the Expert Advisors:



It will change into this



... and the cross has changed into a happy smiling face!



Everything is ready now for the EA to do its work.

## The three modes of Phoenix

Phoenix can be used in three different modes:

### Mode1:

This is the *Phoenix Classic* mode. In this mode it's working the same as the previous version (version 4.2). But now you have 2 extra options:

#### *CloseAfterHours*

With this parameter trades are closed after a certain number of hours. So `CloseAfterHours=36` means that the trade will be closed (in profit or in loss) exactly 36 hours after the `OrderOpenTime`.

#### *BreakEvenAfterPips*

By using this option the `StopLoss` will be set to breakeven as soon as your trade is a certain number of pips in profit.

### Mode2:

This is the *Phoenix Second Trade* mode. In this mode a second trade in the same direction will be opened as soon as your first trade is a certain number of pips in profit. The second trade uses a different SL and TP than your first trade and there is an extra option you can use in this mode: `Mode2_CloseFirstTrade`. If this option is set to `True` the first trade will be closed as soon as the second trade is opened.

### Mode3:

This is the *Phoenix 123* mode. In this mode the number of lots will be split in three to open three trades at a time. Each trade has a different `TakeProfit`:

First trade TP is  $0.5 * \text{original TP}$

Second trade TP is original TP

Third trade TP is  $1.5 * \text{original TP}$

So with a TP of 42 we have the following:

TP first trade=21

TP second trade=42

TP third trade=63

Furthermore trade 2 and 3 will be closed as soon as trade 1 is a certain number of pips in loss.

By using mode 3 there will be less profit than using the other modes, but the max drawdown will be a lot less and there will be no peaks in your account balance.

## Settings:

There are a lot of settings in Phoenix. Most of them are coded in the EA itself and part of them have to be set by the user. You may ask yourself why certain settings are available in the EA Inputs window if they are taken care of by the code itself. That's because when you want to back test the EA. You can easily then change those settings in the Input window instead of changing the code itself.

In the following summary you see all the parameters. One column is called LIVE. When you see a green L it means that this parameter is set directly from the code. A red L means that you have to set the parameter yourself.

General Settings	Default	Mode	Live	
PhoenixMode	3	123	L	You have to use here 1, 2 or 3 to select the Mode Phoenix will be used in.
Lots	1	123	L	Number of lots per trade. If MM=true then leave it at 1. MM will take care of the lot size.
MaximumRisk	0.07	123	L	
DecreaseFactor	0	123	L	Only valid if MM=true. As soon as you have two consecutive losses, MM will decrease the amount of lots. Default is 3.
MM	True	123	L	
MicroAccount	False	123	L	
PrefSettings	True	123	L	Use PrefSettings=true for forward testing (and live-accounts).  If PrefSettings=true the EA will use the following settings directly from the code:
CloseAfterHours	0	12	L	Close trade after x hours. With the value 0 the function will not be used.
BreakEvenAfterPips	0	1	L	As soon as your trade is an x numbers of pips in profit your SL will be moved to breakeven (OrderOpenPrice())
Phoenix Mode 1				"Phoenix Classic"
TakeProfit	0	12	L	
StopLoss	0	12	L	
TrailingStop	0	12	L	

Phoenix Mode 2			"Phoenix Second Trade"	
Mode2_OpenTrade_2	0	2	L	When your first trade is an x number of pips in profit a second trade in the same direction will be opened.
Mode2_TakeProfit	0	2	L	TakeProfit for second trade
Mode2_StopLoss	0	2	L	StopLoss for second trade
Mode2_CloseFirstTrade	False	2	L	An option to close the first trade (and take profit) as soon as the second trade is opened.
Phoenix Mode 3			"Phoenix 123"	
Mode3_CloseTrade2_3	0	3	L	If the first trade is an x number of pips in loss then close trade 2 and 3.
Mode3_TakeProfit	0		L	TakeProfit mode 3
Mode3_StopLoss	0		L	TakeProfit mode 3
Signal1				
UseSignal1	True		L	
Percent	0		L	
EnvelopePeriod	0		L	
Signal2				
UseSignal2	True		L	
SMAPeriod	0		L	
SMA2Bars	0		L	
Signal3				
UseSignal3	True		L	
OSMAFast	0		L	
OSMASlow	0		L	
OSMASignal	0		L	
Signal4				

UseSignal4	True		L	
Fast_Period	0		L	
Fast_Price	1		L	
Slow_Period	0		L	
Slow_Price	1		L	
DVBuySell	0		L	
DVStayOut	0		L	
<b>Signal5</b>				
UseSignal5	True		L	
TradeFrom1	0		L	If you want to trade 24 hours then TradeFrom1 is 0 and TradeUntil1 is 24.
TradeUntil1	24		L	
TradeFrom2	0		L	
TradeUntil2	0		L	
TradeFrom3	0		L	
TradeUntil3	0		L	
TradeFrom4	0		L	
TradeUntil4	0		L	

## Example

Suppose you want to do a forward test or want to use your live-account for the GBPJPY in Mode 3. You have to change the parameters of the Input window as follows:

General Settings	Default	Live	
PhoenixMode	3	L	This is Mode 3
Lots	1	L	We're using the Money management function so we leave this to 1.
MaximumRisk	0.07	L	Default is 0.05 but if you feel comfortable with Phoenix and the GBPJPY, you could risk some more than usual.
DecreaseFactor	0	L	From your back testing you've never seen 2 or more consecutive losses. So you don't need this function.
MM	True	L	I think it's very useful to use the Money management function.
MicroAccount	False	L	No, we don't have a MicroAccount.
PrefSettings	True	L	Very important! For forward testing and live-accounts you use PrefSettings=true. In that case all the green "L's" are directly taken from the code itself.
CloseAfterHours	0	L	Seems to work for some pairs. But in this case you don't want to use it.
BreakEvenAfterPips	0	L	Same as CloseAfterHours.
Phoenix Mode 1		"Phoenix Classic"	
TakeProfit	0	L	
StopLoss	0	L	
TrailingStop	0	L	
Phoenix Mode 2		"Phoenix Second Trade"	
Mode2_OpenTrade_2	0	L	
Mode2_TakeProfit	0	L	
Mode2_StopLoss	0	L	
Mode2_CloseFirstTrade	False	L	Not important because PhoenixMode2 is set

			to False.
<b>Phoenix Mode 3</b>		<b>"Phoenix 123"</b>	
Mode3_CloseTrade2_3	0	L	It's green, so we let the EA use the setting from the code itself.
Mode3_TakeProfit	0	L	Same
Mode3_StopLoss	0	L	Same
<b>Signal1</b>			
UseSignal1	True	L	Always use True
Percent	0	L	
EnvelopePeriod	0	L	
<b>Signal2</b>			
UseSignal2	True	L	Always use True
SMAPeriod	0	L	
SMA2Bars	0	L	
<b>Signal3</b>			
UseSignal3	True	L	Always use True
OSMAFast	0	L	
OSMASlow	0	L	
OSMASignal	0	L	
<b>Signal4</b>			
UseSignal4	True	L	Always use True
Fast_Period	0	L	
Fast_Price	1	L	We leave this to 1 for the moment
Slow_Period	0	L	
Slow_Price	1	L	We leave this to 1 for the moment

DVBuySell	0	L	
DVStayOut	0	L	
<b>Signal5</b>			
UseSignal5	True	L	Always use True
TradeFrom1	0	L	We want to trade 24 hours a day. In that case we use 0 for this parameter and 24 for the following.
TradeUntil1	24	L	
TradeFrom2	0	L	
TradeUntil2	0	L	
TradeFrom3	0	L	
TradeUntil3	0	L	
TradeFrom4	0	L	
TradeUntil4	0	L	

## How to get a Modeling Quality of 90% when testing EA's in MT4

For those of you who want to test Phoenix (or any other EA) this manual shows you how to get a Modeling Quality of 90%:

### Use a separate installation of MT4 for testing

Install MetaTrader in a separate folder. You're going to use this one for testing only. After the installation open a demo-account so MT4 can update itself. After the update you click on *Help* and *About*. Now you should see something like this:

Version: 4.00 Build 198  
(12 Oct 2006)

**After that, delete your account! This is necessary, because when your Terminal is connected to the broker and you open a chart your History will be overwritten and that's not what we want.**

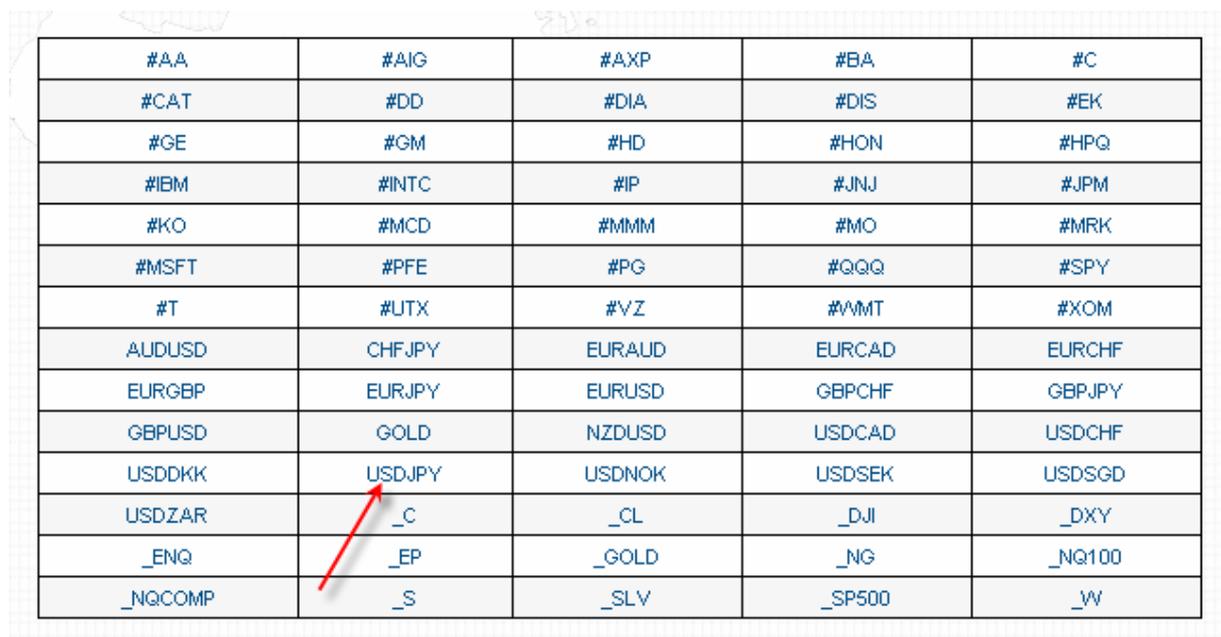
Open your Windows Explorer and look for the folder where you have installed your test version of MT4. Open the folder *History* and delete everything that ends with **\*.hst**. Now you're ready to import the historical data for the pairs that you want to test.

### Where to get the historical data

Go to:

<http://www.alpari-idc.com/en/dc/databank.php>

In this example we need the USDJPY:



#AA	#AIG	#AXP	#BA	#C
#CAT	#DD	#DIA	#DIS	#EK
#GE	#GM	#HD	#HON	#HPQ
#IBM	#INTC	#IP	#JNJ	#JPM
#KO	#MCD	#MMM	#MO	#MRK
#MSFT	#PFE	#PG	#QQQ	#SPY
#T	#UTX	#VZ	#VMT	#XOM
AUDUSD	CHFJPY	EURAUD	EURCAD	EURCHF
EURGBP	EURJPY	EURUSD	GBPCHF	GBPJPY
GBPUSD	GOLD	NZDUSD	USDCAD	USDCHF
USDDKK	USDJPY	USDNOK	USDSEK	USDSGD
USDZAR	_C	_CL	_DJI	_DXY
_ENQ	_EP	_GOLD	_NG	_NQ100
_NQCOMP	_S	_SLV	_SP500	_W

Click on the USDJPY symbol and look in the next screen for FORMAT – MT4 and then click on the M1 data:

▣ **FORMAT - MT4**

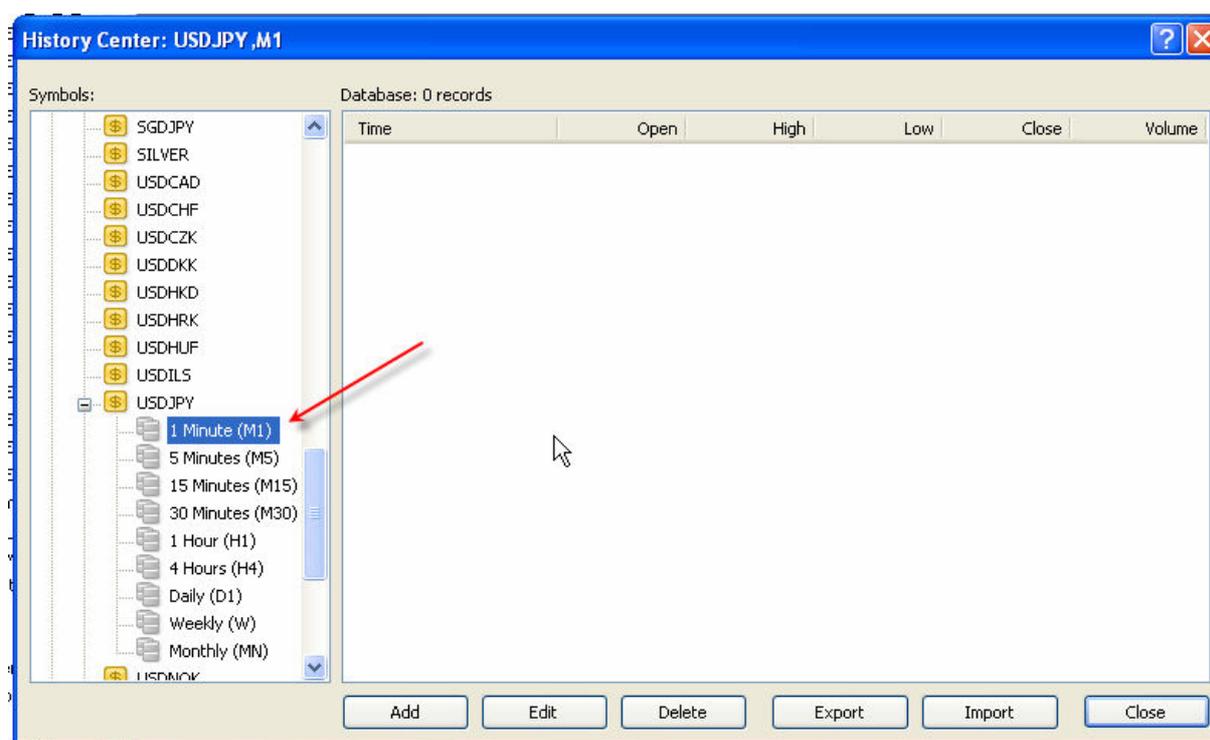
Type	Period	Size
D1	31.12.1979 - 22.09.2006	121.63 Kb
M1	16.06.2004 13:39 - 22.09.2006 22:59	6626.22 Kb

Save the zip-file into a separate folder (DownloadSymbols or something like that) and unzip the file. You now have M1 historical data for the USDJPY for more than 2 years.

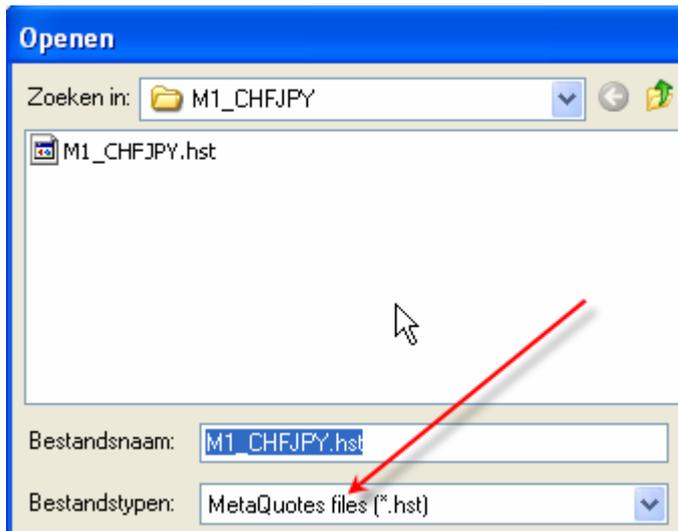
### How to import historical data in MT4:

Open the test version of MT4. You will get 2 screens about opening an account. You have to cancel both because we don't want to use an account for this test-version!

In MT4 click *Tools* and *History Center* and look for the USDJPY. Double-click the 1Minute button. There should be no data in this screen:



Now click the *Import*-button and go to the folder were you have saved the file M1\_USDJPY.hst. Make sure that you've selected the right file-type (MetaQuotes files):

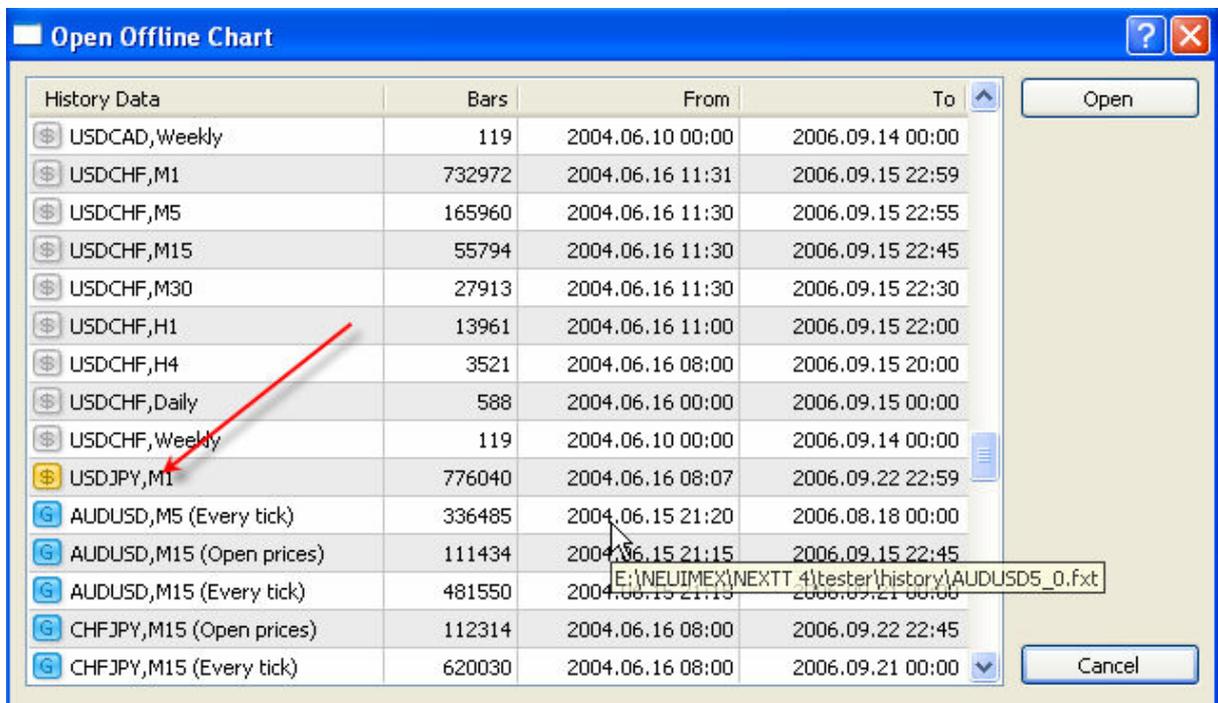


When the data is imported, close the Import-screen with the OK-button. You have now imported the data in the History Center. You can close this screen with the Close-button.

### Converting the M1-data

Now we are going to convert the M1 data for the other time frames (M15, M30, M60, M240, M1440 and M10080).

Click on *File, Open Offline* and look for USDJPY, M1. Select this and click the Open button

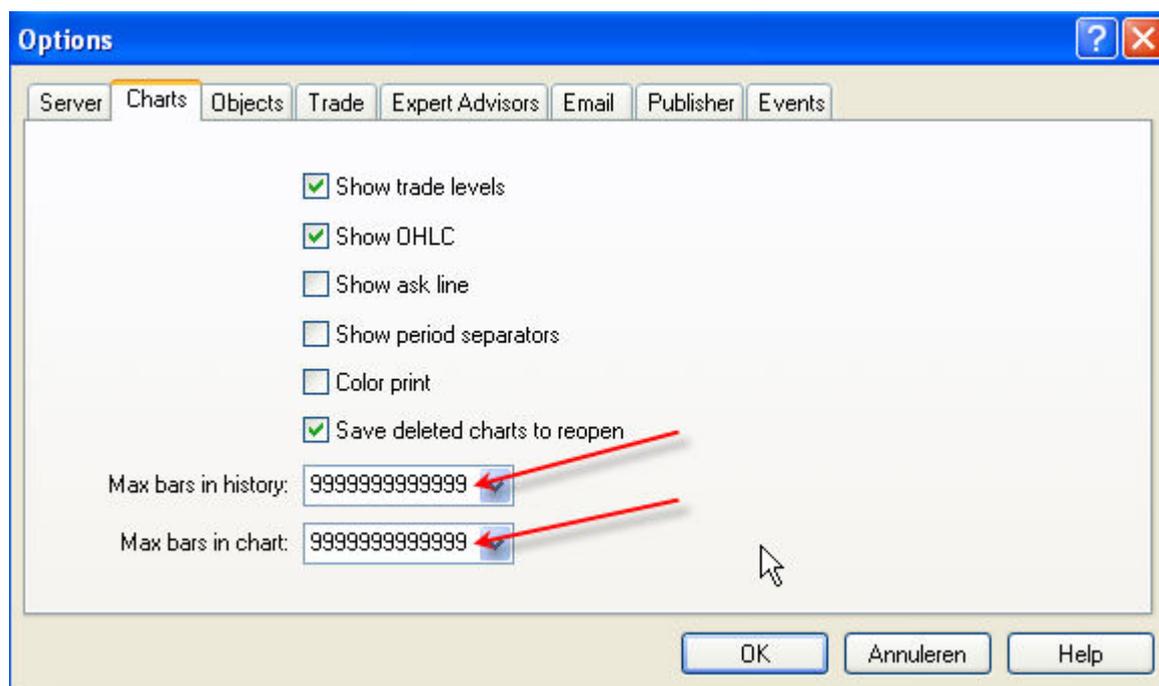


You now have an **offline** chart for the USDJPY M1 on your screen.



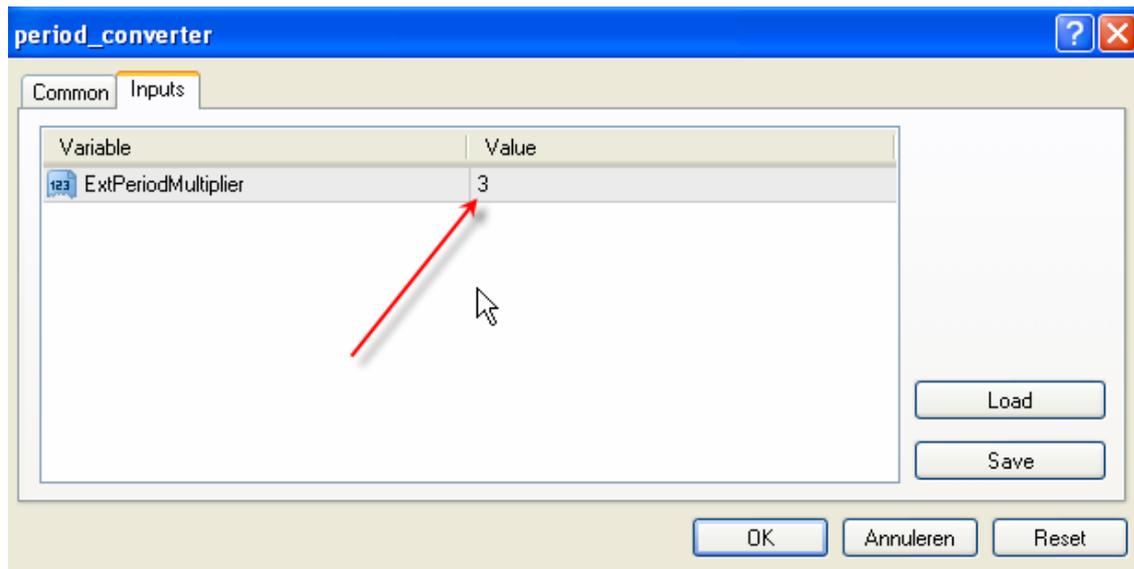
One more thing and I'm not sure if it's still necessary but you have to change the Max bars for your History and your Charts:

Click *Tools*, *Options*, and *Charts* and change it like this:



Close this screen with the OK-button.

On the left side of your screen you have your Navigator screen. If not you can open this with CTRL N. Under Scripts you see the script *period\_converter*. Double-click on it:



Now we have to convert the M1 data to the other TimeFrames. To start with the conversion from M1 to M5, change the value of the Variable ExtPeriodMultiplier to 5 and hit the OK-button. The screen disappears and the script is busy converting the data:

**The script needs some time for the conversion so you have to wait 20 to 30 seconds before double-clicking it again!!**

After the wait-time double-click the script again. You get a warning-screen asking if you really want to stop the script. Yes we want, so click Yes:



Now you have the start-screen of the script again and you can use the next setting (15). After that repeat the procedure for the rest of the settings. So we have: 5, 15, 30, 60, 240, 1440 and 10080. Don't forget the wait-time!

After the last one **restart MT4**, go to you Strategy Tester and you have a Modeling Quality of 90% for the USDJPY!!