==============================
"Graalino-Pro"
user's manual
Document version 2.21. January 2018.

1. **General trading rules to avoid losses:**

1.1. Trading is a risky business.

1.2. Do not expect profits each and every week.

1.3. We recommend to start using "Graalino" with setting the risk-parameter of one trade to 1% (one percent). Later You can set it to default 1.5%.

1.4. We also recommend to use accounts with normal leverage (1:10...1:50...1:100), not higher. "Graalino" works with accounts with any leverage from 1:1 to 1:500.

1.5. We recommend to set "**Adaptive_Pos_Size**" parameter to "TRUE" on real money accounts, and always use it on real accounts.

1.6. Avoid short-term trading currencies on the last 1-2 days of each month.

1.7. Do not short-term trade currencies on 1-2 days before and 30 hours after important news.

1.8. Do not use "Graalino-Pro" expert on a combination [Currency pair + Timeframe] if the PROFIT-FACTOR, obtained by backtesting on period of last 3-5 months is LESS THAN **1.50**. Profit-factor is a ratio between sum of all profits and the sum of all losses during the particular period of trading. If the Profit-Factor is 1.0 or higher, the expert (or trader) is generally profitable.
Profitable trading on Forex market is possible only if the backtesting shows up profit-factor **1.50** or higher.
For example, if backtesting on AUDUSD on timeframe M60 (H1) shows up profit-factor **1.30**, trading is not recommended. But AT THE SAME TIME the profitable trading is possible on the same AUDUSD but on M30 timeframe. See file "Pairs-List.txt" for details.

1.9. The "Graalino-Pro" expert is profitable, because it usually predicts the change of a trend on 2-3 day BEFORE this change is visible on charts, or can be detected by common tools like so-called "technical indicators". Therefore do no be upset by drawdown after opening position on next 1-2 days. This is normal. The rest of the market traders simply does not aware of this trend change yet. Graalino does know it better (due to a very complicated algorithm and very extensive calculations). Simply wait 2-3 days.

1.10. If You see a drawdown in equity of Your trading account by 10% or more - this means the Forex market is simply going totally random and chaotic (usually at the end of each month, the last 2-3 says, or after the yet another socialistic decision of some of the Central Banks). Simply stop trading, turn off automatic trading, manually close all positions and wait 4-5 trading days.

1.11. If You see series of losses on a particular currency pair, this means the market of this currency pair is recently affected by big structural changes, or big hedges. Simply re-optimize parameters for this pair, using nearest pair's history of 1-2 months.

2. ========= GENERAL DESCRIPTION and Features. ============
2.1. This computer program "Graalino-Pro" is an expert adviser software for semi-automatic trading. It is intended for use only with other software called "Metatrader MT4". Metatrader MT4 is a trading software package made by Metaquotes Software Company. MT4 is a version number 4 of Metatrader terminal software. Expert "Graalino" for MT4 is compatible only with version 4 (called MT4) of Metatrader terminal (any of the various builds after 600 ... 646... 840), and is NOT compatible with version 5 (called MT5) of Metatrader terminal.

2.2. =========== Professional features of "Graalino-Pro": ===========

- Stable profits on ANY major or cross currency pair, commodity, metal, CFD share, index etc.
- Consistent results over long periods.
- Typical profitability is 0.5% ... 1.0% per month per each currency pair (with risk set to 1.5%).
Diversification on 30+ pairs provides trading with the resulting total profitability of 1…5% per month.
- Typical drawdown is 3%...7% on each currency pair.
- Typical equity drawdown is 8%...10% while trading on 35+ currency pairs at the same time.
- Typical maximal equity drawdown is 12% on 30+ pairs.
- Expert usually makes 1-2 trades/per month on average.
- Optimal timeframes are: M240(H4), M60(H1). No limitation on any other timeframes.
- It uses a professional money-management: size of position to open is 1...2% of equity or balance.
- Position's size is never increased.
- It opens only one long or one short market position per each financial instrument.
- Stop-Loss is always set, usually around 1…2% of the price.
- The special "Adaptive mode", reduces the size of the next position to open if the previous trade was a loss.
- It also has "Close Only Mode" for the trading before important news.
- Can work on ECN accounts with the delayed SL-TP setting.
- Needs minor re-optimization every 1-2 months.
- There is no limitation on a number of trading accounts, no remote connection to license server required, no passwords checks, etc.

2.3. While "Graalino-Pro" expert is written by a group of banking experts, skilled in math, programming and finance, however the publisher gives Customer NO GUARANTEE of Customer's trading profits made by using the "GRAALINO" software or services.

================== 3. INSTALLATION. =============================
3.1. "Graalino-Pro" program is distributed by the Publisher as a pack of files with the extensions .ex4 and .DLL, enclosed into a package in a form of .RAR or .ZIP archive.

3.2. Unpacking files.
Un-zip (or un-rar) Graalino package by the WinZip or WinRar program into the directory (folder) "experts" (or "MQL4\experts\") within the folder where your Metatrader MT4 is installed. Normally the MT4 terminal is installed in folder with the name of your broker, something like "C:\Program Files\Axxxx-MT4\" (that is if you use broker "Axxxx").

Put un-zipped files from Graalino package into sub-folder "experts" of this "C:\Program Files\Axxxx-MT4\" directory (folder), keeping the structure of folders from within the Graalino distribution (zipped) package.
Files in "Graalino" distribution package are zip-ed with the folder "MQL4\experts" built into archive as a reminder where to unzip them. Do not put Graalino files into "MQL4\experts\experts\" sub-folder.

3.3. Graalino expert tracks and manages ALL open orders (positions) on a given chart, even if they have been opened manually, or by other software experts.

3.4. The start of an expert is managed by "Auto-trade" button in Metatrader MT4 terminal. The expert is starting it's extensive calculations only after pressing "Auto-trade" button in MT4 terminal for a couple of seconds.
If "Auto-trade" button was already ON during the initial load of MT4 terminal (with the expert attached to a chart), then the expert will wait 30 seconds before starting heavy calculations.
If You are starting MT4 terminal with "Auto-trade" button in ON position and after that You de-press "Auto-trade" to OFF position within first 30 seconds after MT4 initial load, then the expert will NOT start calculations until You press "Auto-trade" button again to ON position for at least couple of seconds.
This behavior protects MT4 terminal from hanging up during initial load.

3.5. For the slowing down the trading activity before important news or holidays the Graalino expert has a special parameter "CLOSE ONLY Mode".

3.6. This expert is able to use CUDA technology on video card GPU for acceleration of numeric calculations. Graalino is the world's first MT4 trading software, which is directly using CUDA, and is one of only 5-7 commercially available financial applications in the world, which are directly using CUDA.

3.7. To use CUDA acceleration You need a nVidia-based video card GTS450, or GTX460, or GTX560, or GTX660, or newer card to use this feature, as well as the latest drivers for it from nVidia, instead of drivers built into operating system. Graalino of version 2.21 requires driver's CUDA subsystem ("runtime") of version 5.5 or higher. This means the presence of graphics driver from nVidia of version 320.49 or higher (newer). You can download it from nVidia's web-site.

3.8. CUDA acceleration is recommended for testing and optimization, with 50 or more "**Tune_Steps**" calculation points.

3.9. Do not optimize in CUDA mode on the same terminal (the same .EXE process) that You are using for trading at this moment. This is one of limitations of CUDA technology and MT4 terminal.

================= **EASY DEMO MODE** =============================
3.10. This mode is intended for very easy and demo trading. While this mode is very simplified in setting optimal parameters, it is a fully-functional trading mode.

3.11. If parameter "**EASY_DEMO_MODE**" is set "TRUE", the expert-advisor switches into demo (but still fully-functional) mode. The most important parameters
"Range_High_Limit",
"Range_Low_Limit",
"Smooth_Trend_Levels_Limit",

"Tune_Steps",
"Low_Cut_Limit,"
"Open_Close_Threshold",
"Take_Profit",
"Stop_Loss"
are taken by the expert from the built-in (inner) hidden table.

3.12. Please take into account that the inner demo table is optimal only at the moment of release (compilation, build) of the program by the Publisher, and valid only for 2-3 months or shorter period. After that the demo mode is not recommended and the most important parameters are to be set by user (trader) manually via terminal or by loading a special preset (.set) file for each financial instrument (currency pair).

================ 4. OPTIMIZATION. =============================

4.1. Do not optimize parameters on Saturday or on Sunday, because:
a). several brokers set the spread and margins on Friday's night incorrectly, therefore the MT4 tester shows up incorrect results, usually with lower profit-factor.
b). MT4 tester calculates cross-rates, needed for profit-loss calculations on the terminal side, instead of broker's server-side in normal mode on work days, which could also lead to incorrect results.
c). Bible prohibits work on Saturday (and on the following half of Sunday too).

4.2. For the purpose of profitable trading the Graalino expert software needs optimized parameters. These parameters can be set while putting expert onto chart, or by pressing F7 key in MT4 terminal if the expert is already on chart. These parameters can also be imported into terminal to a chart by loading special preset file, prepared by optimization by the Graalino Software team, or by yourself.

4.3. Warning: the MT4 tester in testing mode or in optimization mode starts the trading simulation with only 1000 bars in history, submitted by tester to an expert. Therefore, if there are not enough bars in history, the Graalino expert is simply skipping bars and is waiting for a proper number of bars, required by "**Range_High_Limit**" parameter. Proper warning is issued by expert into the screen of chart.

4.4. .... Optimization's Start......................................
Graalino expert works and opens trading positions ON A NEW BAR ONLY. It does not require "tick" optimization.
"Tick mode" optimization is sometimes needed only for the MT4 tester for the purpose of tester's automatic background download of history bars from the broker. The expert is following the ticks only for the chart/screen font scaling and for the initialization.

4.5. Preferred, most profitable timeframes for the version 2.21 are:
M240 (requires at least 36 months of history bars),
M60 (requires at least 8-9 months of history bars),
M30 (requires at least 5-6 months of history bars),
M15 (requires at least 2-3 months of history bars),

The timeframes M5, M1 could be also profitable. Actually, the experts fits ANY timeframe if there are global trends on it, and if there are enough bars in history.

Preferred timeframe for day-trading (by version **2.21** or higher) is **M1**.

4.6. .... **SET OPTIMIZATION PARAMETERS** ....

4.6.1. Use "**Range_High_Limit**", setting it from 300 to 1200 by the step 50.
4.6.2. Set "**Range_Low_Limit**" to 60. This is a typical value for many currency pairs.

4.6.3. Set parameter "**Backtest_Start_Date**" to 18-24 months before the current date (on H4 timeframe).
4.6.4. Set tester's start date in terminal to 36 months before the current date (on H4 timeframe).

4.6.5. Set "**Smooth_Trend_Levels_Limit**" to 65. This is a typical value for many currency pairs.
4.6.6. Set "**Tune_Steps**" to 150. This is an optimal value for many currency pairs.
4.6.7. Set "**Low_Cut_Limit**" to 60. This is a typical value for many currency pairs.
4.6.8. Set "**Open_Close_Threshold**" to 2000. This is a typical value for many currency pairs.

4.6.9. Set "**Stop_Loss**" to 5000. That is 5.0% of a price on Forex and other instruments.
4.6.10. Set "**Take_Profit**" to 8000. That is 8.0 % of a price on Forex and other symbols.
4.6.11. Set "**Use_Adaptive_Lot_Size**" to FALSE. That parameter is for trading, not for finding optimal parameters.
4.6.12. Set "**ECN_Mode**" to FALSE. That is for delayed setting of Take_Profit and Stop_Loss on special
ECN trading accounts.
4.6.13. Set "**Max_Risk_Percent**" to 2.0. That is 2.0% of account's balance (equity) for opening one position per currency pair.
4.6.14. Set "**Portfolio_Instruments**" to 50 - by the typical maximal number of currency pairs You may want to trade on one account at one time.
4.6.15. Set parameter **"Unity_Mode"** to **"Fast_Classic"** if you need faster optimization.
The parameters, obtained in modes "Fast_Classic" and "Robust_via_Classic" ARE NOT COMPATIBLE on timeframes **H4,** but usually are compatible (comparable, very close) on timeframe **M1.**

4.7. .... **OPTIMIZATION** ....
4.7.1. Optimize by one parameter "**Range_High_Limit**" setting it from 300 to 1200 by the step 50.

Graalino expert does not need EXACT values of "**Range_High_Limit**" , like 1193. Stepping by 50 is Ok for most cases.
Use "**Expected payoff**" or "**Profit factor**" target in tester.
Do not use "**Genetic algorithm**" in tester.
After running optimization pick the value of "**Range_High_Limit**" from the optimization table or from optimization chart with the highest "**Expected payoff**" or highest "**Profit factor**" results.

4.7.2. Write down and fix the value of "**Range_High_Limit**" from the result of optimization with the best "Expected payoff" result, and then optimize with those constant "**Range_High_Limit**" value, on the following parameters one after another:

4.7.3. Optimize on "**Range_Low_Limit**" from 40 to 150 by the step 10. Optimal value is usually between 60...140.

4.7.4. Optimize on "**Smooth_Trend_Levels_Limit**" from 40 to 120 by the step 3. Optimal value is usually around 65.

4.7.5. Optimize on "**Low_Cut_Limit**" from 40 to 150 by the step 10. Optimal value is usually around 60.

4.7.6. Optimize on "**Open_Close_Threshold**" from 1000 to 2500 by the step 100. Optimal value is usually around 2000. If you can not find optimal profitable value, optimize from 1000 to 20000 by the step 500. Some pairs like NZDSGD may require value as high as 8000.

4.7.7. If the best "**Profit factor**" obtained after step (4.7.6) is less than 1.50, then do not trade this currency pair at this time. You can trade it later when the market will be less random, with more definitive trends. Or You can trade it in the future with improved version of Graalino expert.

4.7.8. (Optional) Optimize on "**Stop_Loss**" set from 300 to 3000 by the step 100. Optimal value is usually about 1100 (1.1% of the price on Forex).

4.7.9. (Optional) Optimize on "**Take_Profit**" set from 400 to 7000 by the step 100. Optimal is usually about 5500 (5.5% of the price). Optimization on this parameter is useful if a currency pair is moving in a log-term flat (side move), without definitive trend. Optimum in this case is usually 500… 900.

Pick the values of parameters with the highest obtained "**Expected payoff**" or highest "**Profit factor**".

4.7.10. You can put the number -1000 ("minus 1000") into the field "**Range_High_Limit**" and Graalino expert software will NOT trade this currency pair.

4.8. ---- Main parameters of Graalino expert, directly affecting profitability: --------

"**Range_High_Limit**" : high limit of range of bars tested by expert software while finding
        trends in a price stream. There should be available twice bars of history on chart,
        provided by MT4 terminal and by your broker.
        Set it from 300 to 1200. Optimal value is usually between 400 ... 900.
        If set to any NEGATIVE value, the expert will not trade it, regardless of other settings.

"**Range_Low_Limit**" : low limit of range of bars.
        Set it from 40 to 150 by the step 10. Optimum is usually 70..140.

"**Smooth_Trend_Levels_Limit**" : period of smoothing. Typical value for many currency pairs is 65.

"**Tune_Steps**": number of tuning steps in calculations. Usually 140...160 are needed for a stable
        trading.

"**Low_Cut_Limit**" : filter's limit of range of bars.
        Set it from 30 to 150 by the step 5. Optimum is usually 60.

"**Open_Close_Threshold**": threshold of trend's change, from 1000 to 5000. Optimum is usually 2000.

"**Take_Profit**" , "**Stop_Loss**" : pseudo-points, inner universal units for all currency pairs;
        These are NOT the "points", as pre-defined in MT4 terminal or set by your broker.

Normally Take_Profit is 2000 ... 4000 here, Stop_Loss is between 1000... 2000 here. (Multiply it by 0.001%, and You will get Take_Profit and Stop_Loss in PERCENT of price).

4.9. ------- Secondary parameters of Graalino expert. ---------------------------------

"**Use_Adaptive_Pos_Size**" : mode of money-management.
    For backtesting optimization of all currency pairs use "FALSE", disabling this mode.
    For real trading of highly PROFITABLE currency pairs use "FALSE", disabling this mode.
    For real trading of LOW PROFITS currency pairs use "TRUE", enabling this mode.
    This "Adaptive" mode in a long-term trading can recover small profits from minor losses by reducing drawdowns. This mode halves the losses and halves the profits.
    Use "TRUE" for enabling this mode for the low profit-factor currency pairs, if You get small gain or small loss during backtest optimization, with profit-factor of 0.8..... 1.2.
    This mode is more robust in worst-case scenario but usually is less profitable in best-case scenario.

"**Max_Risk_Percent**" : Default is 1.5% (1.5 percent) of available equity of your account is being used to open one trading position. Never set it higher than 10%.

"**Portfolio_Instruments**": Default is 50. This parameter works and usually is useful ONLY in low-leverage accounts (like contest), or CFD shares, or futures, when due to the limitation of Metatrader MT4 the expert software calculates risk as too low and normally opens too big position on one currency pair, with very low margin left for trading on other currency pairs. Put the maximal total number of tradable currency pairs into this field (99 is max in MT4).
    This parameter set to default=50 normally does not affect trading on accounts with normal leverage (1:50 ... 1:100), or high (1:200 ... 1:500 ... 1:1000). Graalino does not take into account "leverage" parameter set by broker and calculates the position size without knowing the actual leverage value.

"**Early_Open_Percent**" : 25(%) default. The expert opens small position in the direction of the trend immediately after loading the terminal (or expert). Default size of "early" position is 25% of normal size. Zero value "0" turns this mode off.

"**Early_Open_Delay_Sec**": Default random delay for "early open" position is 200 seconds.

"**ECN_Mode**": in a special so-called ECN account in the moment when your order is processed and the trading position is about to open the broker normally does not set Take_Profit and Stop_Loss values of position to be opened from your order. Broker's ECN mode requires that Stop_Loss and Take_Profit values to be set 5-10 seconds later by a special "modify order" message from trader's MT4 terminal to broker.
    Graalino expert can do it for you.

"**Order_Comment_Prefix**" : By default the expert puts the string "G" into comment field of each order sent by an expert to a broker. You can choose your own prefix string to put into "comment" field of each order sent by an expert to broker. Or you can put spaces into this field.

"**Version_Into_Comment**" : By default, the expert adds it's version number into the "comment" string of each order sent by an expert to broker. By setting this parameter to

FALSE you can avoid this action.
Default is FALSE.

"**Time_Frame_In_Comment**" : By default, the expert adds letters M15, or M30 etc.
into Order's comment filed. This simplifies later analysis of trades.

"**Adaptive_First_Drop**": The reduction of size of position to open in "**Adaptive Mode**", if
previous trade was a loss. Default = 1.5 times (-33%).

"**Adaptive_Max_Drop**": The maximal drop of size of position to open in "**Adaptive Mode**".
Default= 3.0 times.

"**Text_Color**": default is Gainsboro color (for black screen). The color of text messages
on chart screen.

4.10. The "optimized" set of parameters does not mean "guaranteed profitable". Profits depend
on volatile market conditions.

4.11. The job of a trader is to find optimal parameters for Graalino per each currency pair - by a
backtesting and optimization.
Publisher of Graalino periodically provides the presets files with optimized parameters. The
presets are prepared by careful optimization, and save a lot of time and efforts of the customer.
As of Graalino version 2.21 the parameters should be transferred into parameters' field of
Graalino expert manually or by loading a special preset (.set) file for each financial instrument.
The preset files (.set) with the latest parameters are available by subscription. They are normally
included with no additional cost into full paid subscription of Graalino package.

4.12. The date of a preset file, as well as the name of the "Author" in a preset file are not
protected and are provided for information purposes only.

4.13. Do not trust anonymous preset files from unknown origin. It can be an outdated, or a not
profitable preset, of simply a bad joke, leading to a loss of money.

4.14. ============== **RE-OPTIMIZATION.** =========================
Normally, the optimal parameters vary by small fractions in time. Keep them close to optimal
values, obtained earlier. The most volatile parameter is "**Range_High_Limit**".
                    Typical optimal values:
// tested till 12-Nov-2015
// total = 34 pairs
//..
// This table's fields description:
// Name, Time_Frame, High_Range_Limit, Low_Range_Limit,
//   Smooth_Trend_Level,
//   Tune_Steps, Low_Cut_Limit, Open_Close_Threshold,
//   Take_Profit, Stop_Loss,
//   **Profit_Factor from testing, s**tart dd-mm-yy---stop dd-mm-yy
//===

//	TF	HL	LL	SM	Tune	Cut	Trsh	TP	SL	PF	
"AUDCAD",	"240",	"+350",	"90",	"67",	"150",	"60",	"1300",	"1.5",	"3",	"5500",	"1600", "+1.56",//10-02-13--06-10-15*L
"AUDCHF",	"240",	"+400",	"60",	"65",	"150",	"100",	"2400",	"1.5",	"3",	"6400",	"1800", "+3.27",//10-02-13--07-10-15*L
"AUDJPY",	"240",	"+650",	"100",	"100",	"150",	"80",	"2300",	"1.5",	"3",	"2400",	"2100", "+4.85",//10-02-13--07-10-15*L
"AUDNZD",	"240",	"+550",	"130",	"69",	"150",	"60",	"1800",	"1.5",	"3",	"5400",	"1700", "+4.09",//10-02-13--07-10-15*L
"AUDSGD",	"240",	"+500",	"50",	"46",	"150",	"60",	"1700",	"1.5",	"3",	"8000",	"1800", "+3.89",//10-02-13--08-10-15*L
"AUDUSD",	"240",	"+500",	"30",	"62",	"150",	"60",	"4700",	"1.5",	"3",	"8000",	"2300", "+4.05",//10-02-13--08-10-15*L
"CADCHF",	"240",	"+600",	"40",	"60",	"150",	"50",	"1900",	"1.5",	"3",	"3800",	"3500", "+6.24",//10-02-15--16-11-15*L

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"CADJPY", "240", "+750", "60",      "50", "155", "60",  "2600", "1.5", "3", "1200", "2200", "+2.34",//10-02-13--12-10-15*L
"CHFJPY", "240", "+450", "60",      "82", "150", "60",  "2200", "1.5", "3", "4800", "2600", "+3.59",//10-02-13--12-10-15*L
"GBPAUD", "240", "+550", "60",      "65","150", "60",   "1900", "1.5", "3", "5900", "1000", "+6.53",//10-02-13--15-10-15*L
"GBPCAD", "240", "+300", "50",      "32", "150", "60",  "7700", "1.5", "3", "8100", "1400", "+2.71",//10-02-13--15-10-15*L
"GBPCHF", "240", "650", "100",      "230", "150", "80", "2100", "1.5", "3", "9900", "2000", "+5.18",//10-02-13--17-11-15*L
"GBPJPY", "60", "+650", "60",       "45", "150", "60",  "2000", "1.5", "3", "700", "800", "+3.51",//10-05-15--03-11-15*S
"GBPNZD", "240", "+1200", "60",     "45","150", "60",   "2200", "1.5", "3", "9900", "1300", "+1.46",//10-02-13--04-11-15*L
"GBPSGD", "240", "+1200", "60",     "35", "150", "60",  "2000", "1.5", "3", "4800", "1000", "+3.44",//10-02-13--03-11-15*L
"GBPUSD", "240", "+450", "60",      "210", "150", "50", "2000", "1.5", "3", "1200", "1000", "+4.51",//10-02-13--29-10-15*L
"NZDCAD", "240", "+600", "60",      "63", "150", "60",  "1700", "1.5", "3", "8000", "2300", "+9.99",//10-02-13--19-10-15*L
"NZDCHF", "240", "+1350", "60",     "70", "150", "60",  "1300", "1.5", "3", "8000", "1300", "+1.69",//10-02-13--18-11-15*L
"NZDJPY", "240", "+650", "60",      "35", "150", "70",  "2900", "1.5", "3", "8000", "1800", "+1.83",//10-02-13--05-11-15*L
"NZDSGD", "240", "+1300", "60",     "75", "150", "60",  "1900", "1.5", "3", "9000", "1300", "+3.22",//10-02-13--05-11-15*L
"NZDUSD", "240", "+550", "60",      "135", "150", "60", "3300", "1.5", "3", "9900", "2900", "+7.80", //10-02-13--29-10-15*L
"SGDJPY", "240", "+1450", "60",     "61", "150", "60",  "2700", "1.5", "3", "4200", "1700", "+3.15", //10-02-13--20-10-15*L
"USDCAD", "240", "+500", "50",      "65", "150", "60",  "3100", "1.5", "3", "6700", "2000", "+5.43",//10-02-13--20-10-15*L
"USDCHF", "60", "+450", "60",       "85", "150", "60",  "2000", "1.5", "3", "900", "1000", "+9.28",//10-02-15--12-11-15*S
"USDJPY", "240", "+650", "60",      "180", "150", "60", "3600", "1.5", "3", "8400", "1400","+2.79", //10-02-13--28-10-15*L
"USDMXN", "240", "+350", "60",      "81", "150", "60",  "1600", "1.5", "3", "2500", "1700", "+8.14",//10-02-13--21-10-15*L
"USDPLN", "240", "+1500", "60",     "70", "150", "60",  "2200", "1.5", "3", "8000", "1600", "+5.54", //10-02-13--09-11-15*L
"USDSEK", "60", "+1350", "60",      "55", "150", "50",  "2300", "1.5", "3", "8000", "800",  "+3.91",//10-02-15--12-11-15*S
"USDSGD", "240", "+400", "60",      "101", "150", "70", "1900", "1.5", "3", "5700", "2000", "+8.50",//10-02-13--22-10-15*L
"USDTRY", "240", "+1300", "60",     "75","150", "60",   "2000", "1.5", "3", "8000", "2500", "+4.78", //10-02-13--10-11-15*L
"USDZAR", "240", "+1150", "60",     "70", "150", "60",  "3800", "1.5", "3", "8000", "1300", "+1.89", //10-02-13--11-11-15*L
//.............../ METALS \................................................................................
"XAUUSD", "240", "+700", "60",      "65", "150", "60",  "3600", "1.5", "3", "2800", "3500", "+3.68",//10-02-13--29-09-15*L
```

====== 5. Trading =========================

5.1. Please notice that this adaptive trend expert works in a classic way: "Cut the losses, keep profits grow". This may confuse the novice traders. Here an example:

Leverage **1:500**. If you take a first look at the statement **from 12-Aug-2015 till 07-Sep-2015** the results seems not very impressive:

Closed Transactions:

Ticket	Open Time	Type	Size	Item	Price	S / L	T / P	Close Time	Price	Commission	Taxes	Swap	Profit
289608399	2015.07.31 11:00:21	buy	0.01	usdcad	1.30287	1.27030	1.39382	2015.08.12 03:00:35	1.30997	0.00	0.00	-0.20	5.42
290766144	2015.08.11 10:49:38	sell	0.01	audcad	0.95652	0.98043	0.95020	2015.08.12 04:31:12	0.95020	0.00	0.00	-0.03	4.80
289682648	2015.07.31 16:30:08	buy	0.04	usddkk	6.72178	6.56718	7.19085	2015.08.12 18:00:09	6.66951	0.00	0.00	-0.04	-31.35
290416609	2015.08.07 08:00:05	sell	0.04	chfsgd	1.41254	1.44785	1.31511	2015.08.12 18:07:27	1.44785	0.00	0.00	0.24	-100.74
289608402	2015.07.31 11:00:23	buy	0.02	usdpln	3.79289	3.69807	4.05682	2015.08.13 07:58:24	3.75450	0.00	0.00	-1.01	-20.45
290098701	2015.08.05 12:00:10	buy	0.02	gbpchf	1.52712	1.48894	1.63355	2015.08.13 09:26:03	1.52805	0.00	0.00	0.38	1.90
290835368	2015.08.11 17:30:05	sell	0.02	gbpsgd	2.18314	2.23806	2.03162	2015.08.13 09:40:53	2.18264	0.00	0.00	-0.12	0.72
294183492	2015.09.04 12:00:34	buy	0.07	xagusd	14.755	13.870	17.074		14.648	0.00	0.00	-0.18	-37.45
290778155	2015.08.11 12:00:33	buy	0.01	xauusd	1113.025	1057.374	1268.398		1122.840	0.00	0.00	-0.83	9.82
										0.00	0.00	-97.89	4 192.85
												Floating P/L:	**4 094.96**

Working Orders:

Ticket	Open Time	Type	Size	Item	Price	S / L	T / P	Market Price	
						No transactions			

Summary:

Deposit/Withdrawal:	2.86	Credit Facility:	0.00		
Closed Trade P/L:	-367.42	Floating P/L:	4 094.96	Margin:	516.54
Balance:	9 667.85	Equity:	13 762.81	Free Margin:	13 246.27

Details:
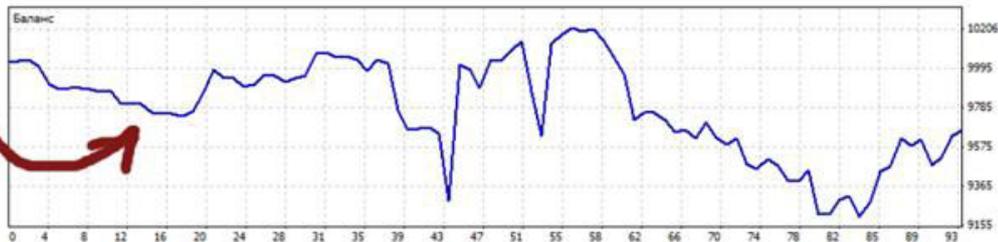
Gross Profit:	3 167.74	Gross Loss:	3 535.16	Total Net Profit:	-367.42
Profit Factor:	0.90	Expected Payoff:	-3.99		
Absolute Drawdown:	829.84	Maximal Drawdown: 1 013.56 (9.92%)		Relative Drawdown: 9.92% (1 013.56)	
Total Trades:	92	Short Positions (won %):	45 (57.78%)	Long Positions (won %):	47 (40.43%)
		Profit Trades (% of total):	45 (48.91%)	Loss trades (% of total):	47 (51.09%)
Largest		profit trade:	724.81	loss trade:	-361.09
Average		profit trade:	70.39	loss trade:	-75.22
Maximum		consecutive wins ($):	4 (155.16)	consecutive losses ($):	4 (-484.31)
Maximal		consecutive profit (count):	724.81 (1)	consecutive loss (count):	-508.!
Average		consecutive wins:	2	consecutive losses:	

profit factor = **0.90**

drawdown = **9.9 %**

profitable trades = **49%**

P/L = -367 USD with depo 10000 USD.

But if you take a look to an EQUITY, you may notice that the **floating P/L is 4000 USD**, and an equity is **13700 USD**.

Why? Because this trend expert constantly **holds profitable positions** on 34 currency pairs, while periodically **cutting** some doubtful positions (and re-opening them in the other direction). As a result the real equity drawdown in real trading is much smaller than the one shown in statement, and the trading is less risky.

5.2. Please notice a simple rule to boost profits on a correction after big gain on news.

Rule: manually close all positions and take a rest for 5-7 days till correction ends, enjoy profits.

Equity chart

"Black Monday" 24-Aug-2015
Bad for many traders
We gain here

Correction by big banks started.
Rule: manually close all positions
and take a rest for 5-7 days
till corection ends,
enjoy profits

Notice correction after boost on news,
skip 5-7 days of correction after boost.
The resulting equity chart.

====== 5.3. Choosing currency pairs for trading with Graalino-Pro. =============

GENERAL RECOMMENDATIONS:
= Preferred timeframes:
      M240 (requires at least 36 months of history bars),
      M60 (requires at least 4-5 months of history bars),
      M30 (requires at least 3-4 months of history bars),
      M15 (requires at least 2-3 months of history bars),

= Major currency pairs, major crosses -> YES.
 Please note that pairs with several currencies heavily "managed" by Central Banks (like CHF,
NOK) are less profitable. (We are extensively working on this issue, improving the algorithms).

= "Euro" currency pairs -> NO.
= "Euro" priced commodities -> NO.

= Minor currency pairs (exotic crosses) -> YES, with limitations.
 Please note that some crosses are heavily hedged by Big Banks, and therefore there are simply
 NO fundamental trends in their movements (We are extensively working on this issue too).

= Spot metals (GOLD, SILVER) -> YES.
= Spot commodities: cotton, sugar (except pork, prohibited by the Bible) -> YES.

= Oil, natural gas, oil-based currencies NOK, RUB -> NO.

= CFD Stocks (manufacturing and retail companies)-> YES.

= CFD US Stocks -> NO.
= CFD Stocks (semiconductor or computer hardware companies)-> NO.
= CFD Stocks (Oil, oil-related, war-related companies) -> NO.

= FUTURES -> YES, but usually requires "merged" history of 3000 bars.
= OPTIONS -> NO.

====== 6. Demo-TRIAL or FULL version's limitations. ===================

Demo 30-days Trial version is actually a FULL version, limited only by 30-days period.
Trial version works almost exactly like full subscription version with nearest higher version number.
Paid 12-months FULL subscription version is limited to 370 days.

The limitations are built into Ex4 and DLL files of a software package. There are no other limitation except legal constraints built into the Contract.

===== 7. Special Message for crackers and hackers. ===================

You and me, we both do know that in a modern computer world there is no such thing as "unbreakable" or "uncrackable" software. That is only a matter of time and efforts to crack any computer program.
But before cracking or before using the cracked version of this software please take into account this software is FOR MANAGING MONEY. Think about it before the use of the "fully cracked" version.

That is very simple: if it really works, it is worth to buy it. (And you will also get all updates, fixes, new versions, as well as tech support).

If this software does not work, there is no reason to spend time and painful hacking efforts to crack it. (We put aside here the pure scientific interest from the row "How does it work?").
Right?
Thank you for understanding.

===== 8. Technical support ===================
See web-site:
podolyak.vacau.com

===== 9. About "Ocean Breeze" and "Graalino" ===================

"Ocean Breeze" and "Graalino-Pro" team is currently located in Ukraine.

Team's leader is Sergiy Podolyak. He holds a MSc degree in econometrics (Kiev University in Ukraine). He is also an author of several patents and articles on Digital Signal Processing (DSP) and high-end audio.

Linkedin profile: https://ua.linkedin.com/in/sergiy-podolyak-a34079110