

Buddyllan Optimiser

Introduction

I described in a previous article the Optimizer of our EA "Buddyllan" available at : <https://www.mql5.com/en/market/product/28759#!tab=comments>.

This article aimed to show the basic mechanisms used.

Here I will describe the implementation of a complete optimization system that will select automatically the most favorable pairs in the last weeks.

I will not go back on the principles presented in our previous article, I encourage you to read it.

This solution is ready-to-use, you won't have to modify it.

Implementation

So, as explained in previous article, you need 2 instances of MT5, not necessarily at the same broker but it is preferable (easier to set up).

A "Master" instance (which will trade during the week) and a "slave" instance which will only be used for optimizations.

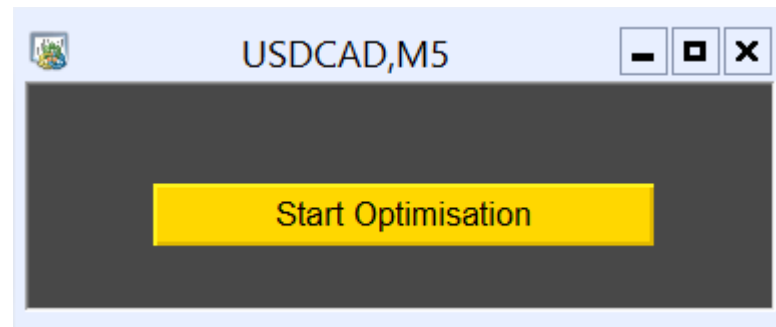
First on the "Master" instance, we will open a dozen Charts on currencies that interest you - select major currencies that are not too volatile - and attach to each of these charts the EA "Buddyllan".

Open a new chart - on any pair - and attach the "BuddyllanOptimiser" EA to it after compiling it, the important thing is to give it the full path of the slave instance ("Terminal Tester Data Path" parameter) which you get via the "Open Data Folder" in the "File" menu of the slave instance terminal.

Don't forget to allow "DLL import".

You can use in a first time other default parameters.

The following window will appear at the top right of your screen:



The EA "Buddyllan" manages global variables, the SL/TP values are set in this way as well as others ones which allow or not the trading of such pair.

The BuddyllanOptimiser EA will valorise these global variables according to the results obtained.

Do not perform multiple optimizations at the same time.

Optimisation

The optimization can be started manually or via the scheduler, it optimizes the pairs automatically each week.

The whole process is automatic, it will open the windows of the selected pairs, reduce the others.

You can also select the nature of the agents (local, remote or cloud) - if your EA are running on some virtual host, the cloud can be a good solution - You can set the number of pairs that the EA will select and trade (it is advisable not to use more than 4 pairs for an account of 10k for a "safe" trading).

```

2018.08.05 09:28:56.941 BuddyIlanOptimizer (EURUSD,M5) Optimisation "EURUSD" is starting ...
2018.08.05 09:29:02.968 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:29:02.968 BuddyIlanOptimizer (EURUSD,M5) Current Symbol=EURUSD - Symbol Tester Instance=EURUSD
2018.08.05 09:29:02.968 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:29:02.968 BuddyIlanOptimizer (EURUSD,M5) [EURUSD] Optimisation SL-1 (M15)
2018.08.05 09:29:26.088 BuddyIlanOptimizer (EURUSD,M5) Waiting report (3) ...
2018.08.05 09:29:37.085 BuddyIlanOptimizer (EURUSD,M5) Report found ...
2018.08.05 09:29:39.811 BuddyIlanOptimizer (EURUSD,M5) Loading XML File Optimiser\BuddyIlanReport.xml
2018.08.05 09:29:39.814 BuddyIlanOptimizer (EURUSD,M5) [3,11140.0900,1140.0900,2.5112,1.4278,0.4079,0.0851,0,25.6083,454,1250,] Pro
2018.08.05 09:29:39.814 BuddyIlanOptimizer (EURUSD,M5) [0,10001.8200,1.8200,0.0036,1.0008,0.0022,0.0155,0,8.0957,504,500,] Profit=1
2018.08.05 09:29:39.815 BuddyIlanOptimizer (EURUSD,M5) [4,11412.6300,1412.6300,3.1184,1.5800,0.5397,0.1011,0,23.9790,453,1500,] Pro
2018.08.05 09:29:39.815 BuddyIlanOptimizer (EURUSD,M5) [1,10441.6500,441.6500,0.9201,1.1819,0.3576,0.0497,0,11.8863,480,750,] Profi
2018.08.05 09:29:39.815 BuddyIlanOptimizer (EURUSD,M5) [2,11200.9100,1200.9100,2.6336,1.4411,0.5164,0.0829,0,21.3063,456,1000,] Pro
2018.08.05 09:29:39.815 BuddyIlanOptimizer (EURUSD,M5) -> SL=1500 (Profit=1412.63 DD=24)
2018.08.05 09:29:41.452 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:29:41.452 BuddyIlanOptimizer (EURUSD,M5) Current Symbol=EURUSD - Symbol Tester Instance=EURUSD
2018.08.05 09:29:41.453 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:29:41.453 BuddyIlanOptimizer (EURUSD,M5) [EURUSD] Optimisation SL-1 (M30)

```

```

2018.08.05 09:30:04.783 BuddyIlanOptimizer (EURUSD,M5) Waiting report (3) ...
2018.08.05 09:30:15.746 BuddyIlanOptimizer (EURUSD,M5) Report found ...
2018.08.05 09:30:18.483 BuddyIlanOptimizer (EURUSD,M5) Loading XML File Optimiser\BuddyIlanReport.xml
2018.08.05 09:30:18.486 BuddyIlanOptimizer (EURUSD,M5) [1,10064.3800,64.3800,0.1963,1.0433,0.0469,0.0222,0,13.2824,328,750,] Profit
2018.08.05 09:30:18.486 BuddyIlanOptimizer (EURUSD,M5) [2,10705.8300,705.8300,2.2336,1.5418,0.4322,0.1009,0,15.1960,316,1000,] Profi
2018.08.05 09:30:18.486 BuddyIlanOptimizer (EURUSD,M5) [0,10292.3500,292.3500,0.8425,1.2782,0.9885,0.0837,0,2.8783,347,500,] Profit
2018.08.05 09:30:18.486 BuddyIlanOptimizer (EURUSD,M5) [4,10805.1700,805.1700,2.5480,1.6205,0.4924,0.1066,0,15.1036,316,1500,] Profi
2018.08.05 09:30:18.486 BuddyIlanOptimizer (EURUSD,M5) [3,10805.1700,805.1700,2.5480,1.6205,0.4924,0.1066,0,15.1036,316,1250,] Profi
2018.08.05 09:30:18.486 BuddyIlanOptimizer (EURUSD,M5) -> SL=1250 (Profit=805.17 DD=15)
2018.08.05 09:30:18.486 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:30:18.486 BuddyIlanOptimizer (EURUSD,M5) [EURUSD] Best Timeframe: M30 (Profit=805.17 DD=15.1)
2018.08.05 09:30:20.140 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:30:20.140 BuddyIlanOptimizer (EURUSD,M5) Current Symbol=EURUSD - Symbol Tester Instance=EURUSD
2018.08.05 09:30:20.140 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:30:20.140 BuddyIlanOptimizer (EURUSD,M5) [EURUSD] Optimisation STO
2018.08.05 09:30:48.284 BuddyIlanOptimizer (EURUSD,M5) Waiting report (3) ...
2018.08.05 09:30:53.755 BuddyIlanOptimizer (EURUSD,M5) Report found ...
2018.08.05 09:30:56.764 BuddyIlanOptimizer (EURUSD,M5) Loading XML File Optimiser\BuddyIlanReport.xml
2018.08.05 09:30:56.766 BuddyIlanOptimizer (EURUSD,M5) [2,10785.7900,785.7900,2.2976,1.4944,0.6972,0.0938,0,11.2252,342,false,true,]
2018.08.05 09:30:56.766 BuddyIlanOptimizer (EURUSD,M5) [1,10805.1700,805.1700,2.5480,1.6205,0.4924,0.1066,0,15.1036,316,true,false,]
2018.08.05 09:30:56.766 BuddyIlanOptimizer (EURUSD,M5) [0,10955.8000,955.8000,2.6773,1.6464,0.5845,0.1149,0,14.8692,357,false,false,]
2018.08.05 09:30:56.766 BuddyIlanOptimizer (EURUSD,M5) [3,10510.7800,510.7800,1.7922,1.3219,0.4532,0.0669,0,11.2252,285,true,true,]
2018.08.05 09:30:56.766 BuddyIlanOptimizer (EURUSD,M5) -> STOFILTER=false STOTimeFrameFilter=false (Profit=955.80)
2018.08.05 09:30:56.767 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:30:56.767 BuddyIlanOptimizer (EURUSD,M5) [EURUSD] Optimisation SL-2
2018.08.05 09:31:24.880 BuddyIlanOptimizer (EURUSD,M5) Waiting report (3) ...
2018.08.05 09:31:30.349 BuddyIlanOptimizer (EURUSD,M5) Report found ...
2018.08.05 09:31:33.077 BuddyIlanOptimizer (EURUSD,M5) Loading XML File Optimiser\BuddyIlanReport.xml
2018.08.05 09:31:33.079 BuddyIlanOptimizer (EURUSD,M5) [0,10187.0700,187.0700,0.4688,1.1374,0.5706,0.0515,0,3.2113,399,500,] Profit
2018.08.05 09:31:33.079 BuddyIlanOptimizer (EURUSD,M5) [1,10206.0800,206.0800,0.5585,1.1240,0.1501,0.0400,0,13.0799,369,750,] Profi
2018.08.05 09:31:33.079 BuddyIlanOptimizer (EURUSD,M5) [4,10955.8000,955.8000,2.6773,1.6464,0.5845,0.1149,0,14.8692,357,1500,] Profi
2018.08.05 09:31:33.079 BuddyIlanOptimizer (EURUSD,M5) [3,10955.8000,955.8000,2.6773,1.6464,0.5845,0.1149,0,14.8692,357,1250,] Profi
2018.08.05 09:31:33.079 BuddyIlanOptimizer (EURUSD,M5) [2,10861.5300,861.5300,2.4132,1.5771,0.5276,0.1107,0,14.9514,357,1000,] Profi
2018.08.05 09:31:33.079 BuddyIlanOptimizer (EURUSD,M5) -> SL=1250 (Profit=955.80 DD=15)
2018.08.05 09:31:33.079 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:31:33.079 BuddyIlanOptimizer (EURUSD,M5) [EURUSD] Optimisation TP
2018.08.05 09:32:01.130 BuddyIlanOptimizer (EURUSD,M5) Waiting report (3) ...
2018.08.05 09:32:17.693 BuddyIlanOptimizer (EURUSD,M5) Waiting report (6) ...
2018.08.05 09:32:34.210 BuddyIlanOptimizer (EURUSD,M5) Waiting report (9) ...
2018.08.05 09:32:50.661 BuddyIlanOptimizer (EURUSD,M5) Report found ...
2018.08.05 09:32:53.389 BuddyIlanOptimizer (EURUSD,M5) Loading XML File Optimiser\BuddyIlanReport.xml
2018.08.05 09:32:53.391 BuddyIlanOptimizer (EURUSD,M5) [4,11103.7100,1103.7100,4.8622,1.3832,0.6749,0.0950,0,14.6904,227,70,] Profi
2018.08.05 09:32:53.391 BuddyIlanOptimizer (EURUSD,M5) [3,12032.9300,2032.9301,7.7593,2.1145,1.1349,0.1951,0,14.8346,262,60,] Profi
2018.08.05 09:32:53.391 BuddyIlanOptimizer (EURUSD,M5) [0,10955.8000,955.8000,2.6773,1.6464,0.5845,0.1149,0,14.8692,357,30,] Profit
2018.08.05 09:32:53.391 BuddyIlanOptimizer (EURUSD,M5) [1,11058.5100,1058.5100,3.4367,1.5315,0.6473,0.1030,0,14.7338,308,40,] Profi
2018.08.05 09:32:53.391 BuddyIlanOptimizer (EURUSD,M5) [2,11737.0800,1737.0800,6.1599,2.0080,0.9698,0.1778,0,15.2019,282,50,] Profi
2018.08.05 09:32:53.391 BuddyIlanOptimizer (EURUSD,M5) -> TP=60 (Profit=2032.93 DD=14.834600)
2018.08.05 09:32:53.391 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:32:53.391 BuddyIlanOptimizer (EURUSD,M5) [EURUSD] -> Timeframe=M30 SL=1250 TP=60 STOFILTER=false STOTimeFrameFilter=fa
2018.08.05 09:32:53.391 BuddyIlanOptimizer (EURUSD,M5) =====

```

```

2018.08.05 09:32:53.391 BuddyIlanOptimizer (EURUSD,M5) [EURUSD] -> Global variable set
2018.08.05 09:32:53.412 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:32:53.412 BuddyIlanOptimizer (EURUSD,M5) Select 4 best currencies for this account:
2018.08.05 09:32:53.449 BuddyIlanOptimizer (EURUSD,M5) -1- We will trade EURUSD (Gain=2032.93 with DD=14.8 during last 45 days)
2018.08.05 09:32:53.717 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:32:53.717 BuddyIlanOptimizer (EURUSD,M5) [EURUSD] Optimization complete
2018.08.05 09:32:53.718 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:32:53.718 BuddyIlanOptimizer (EURUSD,M5)
2018.08.05 09:32:53.790 BuddyIlanOptimizer (EURUSD,M5)
2018.08.05 09:32:53.790 BuddyIlanOptimizer (EURUSD,M5) Optimisation "USDCAD" is starting ...
2018.08.05 09:32:59.892 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:32:59.892 BuddyIlanOptimizer (EURUSD,M5) Current Symbol=USDCAD - Symbol Tester Instance=USDCAD
2018.08.05 09:32:59.892 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:32:59.892 BuddyIlanOptimizer (EURUSD,M5) [USDCAD] Optimisation SL-1 (M15)
2018.08.05 09:33:23.180 BuddyIlanOptimizer (EURUSD,M5) Waiting report (3) ...
2018.08.05 09:33:40.664 BuddyIlanOptimizer (EURUSD,M5) Waiting report (6) ...
2018.08.05 09:33:46.161 BuddyIlanOptimizer (EURUSD,M5) Report found ...
2018.08.05 09:33:48.894 BuddyIlanOptimizer (EURUSD,M5) Loading XML File Optimiser\BuddyIlanReport.xml
2018.08.05 09:33:48.896 BuddyIlanOptimizer (EURUSD,M5) [2,10801.2800,801.2800,1.5836,1.4287,0.4773,0.0750,0,15.0149,506,1000,] Profit
2018.08.05 09:33:48.896 BuddyIlanOptimizer (EURUSD,M5) [4,11692.2500,1692.2500,3.4606,2.0920,1.5923,0.1383,0,9.3756,489,1500,] Profit
2018.08.05 09:33:48.896 BuddyIlanOptimizer (EURUSD,M5) [0,10019.3800,19.3800,0.0352,1.0092,0.0139,0.0142,0,12.7265,550,500,] Profit
2018.08.05 09:33:48.896 BuddyIlanOptimizer (EURUSD,M5) [1,10570.3100,570.3100,1.1117,1.2633,0.3509,0.0567,0,14.7890,513,750,] Profit
2018.08.05 09:33:48.896 BuddyIlanOptimizer (EURUSD,M5) [3,10935.4700,935.4700,1.9209,1.5056,0.5708,0.0870,0,14.6697,487,1250,] Profit
2018.08.05 09:33:48.896 BuddyIlanOptimizer (EURUSD,M5) -> SL=1500 (Profit=1692.25 DD=9)

```

[...]

```

2018.08.05 09:36:40.846 BuddyIlanOptimizer (EURUSD,M5) [USDCAD] -> Timeframe=M15 SL=1500 TP=70 STOFILTER=false STOTimeFrameFilter=fa
2018.08.05 09:36:40.846 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:36:40.846 BuddyIlanOptimizer (EURUSD,M5) [USDCAD] -> Global variable set
2018.08.05 09:36:40.847 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:36:40.847 BuddyIlanOptimizer (EURUSD,M5) Select 4 best currencies for this account:
2018.08.05 09:36:40.875 BuddyIlanOptimizer (EURUSD,M5) -1- We will trade USDCAD (Gain=3178.44 with DD=13.9 during last 45 days)
2018.08.05 09:36:40.929 BuddyIlanOptimizer (EURUSD,M5) -2- We will trade EURUSD (Gain=2032.93 with DD=14.8 during last 45 days)
2018.08.05 09:36:41.050 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:36:41.050 BuddyIlanOptimizer (EURUSD,M5) [USDCAD] Optimization complete
2018.08.05 09:36:41.050 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:36:41.051 BuddyIlanOptimizer (EURUSD,M5)
2018.08.05 09:36:41.073 BuddyIlanOptimizer (EURUSD,M5)
2018.08.05 09:36:41.073 BuddyIlanOptimizer (EURUSD,M5) Optimisation "EURCAD" is starting ...
2018.08.05 09:36:47.124 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:36:47.124 BuddyIlanOptimizer (EURUSD,M5) Current Symbol=EURCAD - Symbol Tester Instance=EURCAD
2018.08.05 09:36:47.124 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:36:47.124 BuddyIlanOptimizer (EURUSD,M5) [EURCAD] Optimisation SL-1 (M15)
2018.08.05 09:37:10.416 BuddyIlanOptimizer (EURUSD,M5) Waiting report (3) ...
2018.08.05 09:37:26.944 BuddyIlanOptimizer (EURUSD,M5) Report found ...
2018.08.05 09:37:29.688 BuddyIlanOptimizer (EURUSD,M5) Loading XML File Optimiser\BuddyIlanReport.xml

```

```

2018.08.05 09:37:29.691 BuddyIlanOptimizer (EURUSD,M5) [0,9712.3200,-287.6800,-0.5110,0.8479,-0.3455,-0.0178,0,8.3190,563,500,] Pro
2018.08.05 09:37:29.691 BuddyIlanOptimizer (EURUSD,M5) [2,10457.7200,457.7200,0.8636,1.2053,0.1547,0.0397,0,29.0938,530,1000,] Prof
2018.08.05 09:37:29.691 BuddyIlanOptimizer (EURUSD,M5) [3,11043.1100,1043.1100,1.9719,1.5423,0.2996,0.0827,0,34.2211,529,1250,] Pro
2018.08.05 09:37:29.691 BuddyIlanOptimizer (EURUSD,M5) [1,10338.7500,338.7500,0.6356,1.1724,0.2304,0.0442,0,14.4519,533,750,] Profi
2018.08.05 09:37:29.691 BuddyIlanOptimizer (EURUSD,M5) [4,11151.6400,1151.6400,2.1811,1.6467,0.3647,0.0951,0,31.0370,528,1500,] Pro
2018.08.05 09:37:29.691 BuddyIlanOptimizer (EURUSD,M5) -> SL=1500 (Profit=1151.64 DD=31)
2018.08.05 09:37:31.327 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:37:31.327 BuddyIlanOptimizer (EURUSD,M5) Current Symbol=EURCAD - Symbol Tester Instance=EURCAD
2018.08.05 09:37:31.327 BuddyIlanOptimizer (EURUSD,M5) =====

```

[...]

```

2018.08.05 09:43:45.653 BuddyIlanOptimizer (EURUSD,M5) [EURGBP] -> Timeframe=M15 SL=750 TP=50 STOFILTER=false STOTimeFrameFilter=tru
2018.08.05 09:43:45.653 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:43:45.653 BuddyIlanOptimizer (EURUSD,M5) [EURGBP] -> Global variable set
2018.08.05 09:43:45.653 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:43:45.653 BuddyIlanOptimizer (EURUSD,M5) Select 4 best currencies for this account:
2018.08.05 09:43:45.834 BuddyIlanOptimizer (EURUSD,M5) -1- We will trade USDCAD (Gain=3178.44 with DD=13.9 during last 45 days)
2018.08.05 09:43:45.845 BuddyIlanOptimizer (EURUSD,M5) -2- We will trade EURCAD (Gain=1590.00 with DD=11.1 during last 45 days)
2018.08.05 09:43:45.857 BuddyIlanOptimizer (EURUSD,M5) -3- We will trade EURUSD (Gain=2032.93 with DD=14.8 during last 45 days)
2018.08.05 09:43:45.874 BuddyIlanOptimizer (EURUSD,M5) -4- We will trade EURGBP (Gain=1260.91 with DD=15.0 during last 45 days)
2018.08.05 09:43:45.896 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:43:45.896 BuddyIlanOptimizer (EURUSD,M5) [EURGBP] Optimization complete
2018.08.05 09:43:45.896 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:43:45.896 BuddyIlanOptimizer (EURUSD,M5)
2018.08.05 09:43:45.938 BuddyIlanOptimizer (EURUSD,M5)
2018.08.05 09:43:45.938 BuddyIlanOptimizer (EURUSD,M5) Optimisation "USDJPY" is starting ...
2018.08.05 09:43:51.969 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:43:51.969 BuddyIlanOptimizer (EURUSD,M5) Current Symbol=USDJPY - Symbol Tester Instance=USDJPY
2018.08.05 09:43:51.969 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:43:51.969 BuddyIlanOptimizer (EURUSD,M5) [USDJPY] Optimisation SL-1 (M15)
2018.08.05 09:44:16.349 BuddyIlanOptimizer (EURUSD,M5) Waiting report (3) ...
2018.08.05 09:44:27.490 BuddyIlanOptimizer (EURUSD,M5) Report found ...

```

[...]

```

2018.08.05 09:56:45.096 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:56:45.097 BuddyIlanOptimizer (EURUSD,M5) [AUDUSD] Optimisation TP
2018.08.05 09:57:13.276 BuddyIlanOptimizer (EURUSD,M5) Waiting report (3) ...
2018.08.05 09:57:31.632 BuddyIlanOptimizer (EURUSD,M5) Waiting report (6) ...
2018.08.05 09:57:48.755 BuddyIlanOptimizer (EURUSD,M5) Report found ...
2018.08.05 09:57:51.498 BuddyIlanOptimizer (EURUSD,M5) Loading XML File Optimiser\BuddyIlanReport.xml
2018.08.05 09:57:51.502 BuddyIlanOptimizer (EURUSD,M5) [3,12771.4600,2771.4600,10.1519,2.6841,2.6189,0.2551,0,8.8072,273,60,] Profi
2018.08.05 09:57:51.502 BuddyIlanOptimizer (EURUSD,M5) [4,12579.4000,2579.3999,9.9977,1.9906,1.2045,0.1718,0,18.4280,258,70,] Profi
2018.08.05 09:57:51.502 BuddyIlanOptimizer (EURUSD,M5) [2,12311.6800,2311.6799,7.5299,2.3627,2.1844,0.2149,0,9.0769,307,50,] Profit

```

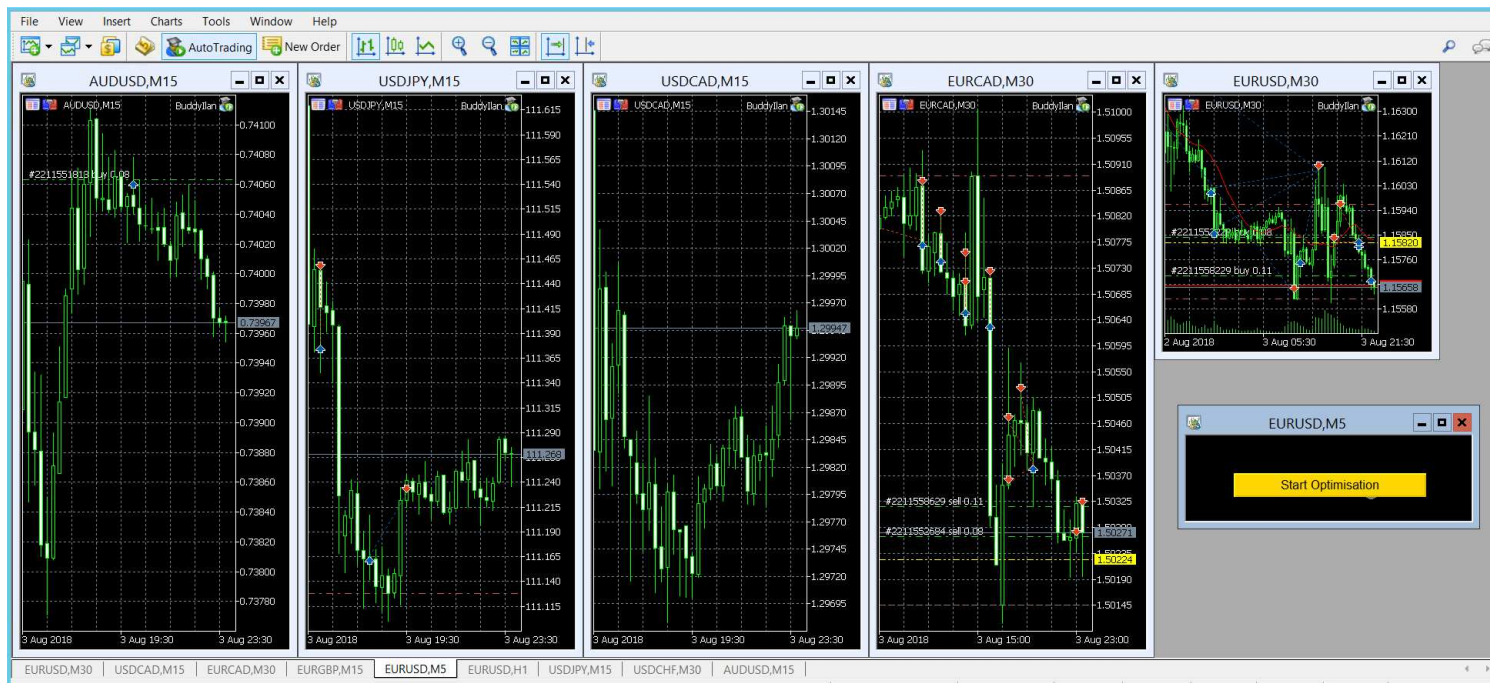
```

2018.08.05 09:57:51.502 BuddyIlanOptimizer (EURUSD,M5) [0,11617.8200,1617.8199,3.8984,2.0317,1.6805,0.1521,0,8.6042,415,30,] Profit
2018.08.05 09:57:51.502 BuddyIlanOptimizer (EURUSD,M5) [1,12001.6700,2001.6700,5.8358,2.2194,2.0792,0.1921,0,8.4176,343,40,] Profit
2018.08.05 09:57:51.502 BuddyIlanOptimizer (EURUSD,M5) -> TP=60 (Profit=2771.46 DD=8.807200)
2018.08.05 09:57:51.502 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:57:51.502 BuddyIlanOptimizer (EURUSD,M5) [AUDUSD] -> Timeframe=M15 SL=1000 TP=60 STOFILTER=false STOTimeFrameFilter=fa
2018.08.05 09:57:51.502 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:57:51.502 BuddyIlanOptimizer (EURUSD,M5) [AUDUSD] -> Global variable set
2018.08.05 09:57:51.505 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:57:51.505 BuddyIlanOptimizer (EURUSD,M5) Select 4 best currencies for this account:
2018.08.05 09:57:51.584 BuddyIlanOptimizer (EURUSD,M5) -1- We will trade AUDUSD (Gain=2771.46 with DD=8.8 during last 45 days)
2018.08.05 09:57:51.600 BuddyIlanOptimizer (EURUSD,M5) -2- We will trade USDJPY (Gain=2443.36 with DD=10.6 during last 45 days)
2018.08.05 09:57:51.620 BuddyIlanOptimizer (EURUSD,M5) -3- We will trade USDCAD (Gain=3178.44 with DD=13.9 during last 45 days)
2018.08.05 09:57:51.756 BuddyIlanOptimizer (EURUSD,M5) -4- We will trade EURCAD (Gain=1590.00 with DD=11.1 during last 45 days)
2018.08.05 09:57:51.756 BuddyIlanOptimizer (EURUSD,M5) --- We will NOT trade EURUSD (Gain=2032.93 with DD=14.8 during last 45 days)
2018.08.05 09:57:51.756 BuddyIlanOptimizer (EURUSD,M5) --- We will NOT trade EURGBP (Gain=1260.91 with DD=15.0 during last 45 days)
2018.08.05 09:57:51.756 BuddyIlanOptimizer (EURUSD,M5) --- We will NOT trade USDCHF (Gain=1268.99 with DD=17.6 during last 45 days)
2018.08.05 09:57:51.850 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:57:51.850 BuddyIlanOptimizer (EURUSD,M5) [AUDUSD] Optimization complete
2018.08.05 09:57:51.850 BuddyIlanOptimizer (EURUSD,M5) =====
2018.08.05 09:57:51.850 BuddyIlanOptimizer (EURUSD,M5) Time elapsed during optimization: 0h 28mn

```

At the end of the optimization, the charts of the selected pairs are displayed as well as the charts of the pairs not selected but on which positions are open (the size of the latter is half the size of the charts of the selected pairs). The attached EAs will continue to manage the sequence of open positions but will not open new ones. That means that EA can open new positions but not new sequences.

Below, the charts of the 4 selected pairs are displayed as well as the one on which positions are open (EURUSD).



Earnings and DD are taken into account in the results, a low DD will always be preferred.

DLL

This time we manipulate the charts windows, MT5 does not offer native functions, so we will use Windows DLLs (user32.dll).

```
#import "user32.dll"
    int    GetParent(int hWnd);
    bool   MoveWindow(int hWnd, int x, int y, int nWidth, int nHeight, bool bRepaint );
    bool   ShowWindow( int hWnd, int nCmdShow );
#import "shell32.dll"
    int    ShellExecuteW(int hwnd,string Operation,string
                        File,string Parameters,string Directory,int ShowCmd);
#import
```

For example, to reduce all the windows to which the EA "Buddylan" is attached, we will proceed as follows :

```
void MinimizeAll()
{
    long currChart,prevChart=ChartFirst();
```

```

int i=0,limit=100;

currChart = prevChart;

while(i<limit)
{
    if( ChartGetString( currChart, CHART_EXPERT_NAME ) == "BuddyIlan" )
    {
        int chartHandle = (int) ChartGetInteger( currChart, CHART_WINDOW_HANDLE );

        ShowWindow( GetParent( chartHandle ), SW_MINIMIZE );
    }

    currChart=ChartNext(prevChart);
    if(currChart<0) break;

    prevChart=currChart;

    i++;
}
}

```

Quick Sort

The sorting of the results is done via a basic recursive sorting function:

```

void quick_sort(int low,int high)
{
    int pivot,j,i;
    _gCur temp;

    if(low<high)
    {
        pivot = low;
        i = low;
        j = high;

        while(i<j)
        {
            while( (gCur[i].GainsPonderes>=gCur[pivot].GainsPonderes) && (i<high) )
            {
                i++;
            }

            while(gCur[j].GainsPonderes<gCur[pivot].GainsPonderes)
            {
                j--;
            }

```

```
    }

    if (i<j)
    {
        temp=gCur[i];
        gCur[i]=gCur[j];
        gCur[j]=temp;
    }
}

temp=gCur[pivot];
gCur[pivot]=gCur[j];
gCur[j]=temp;
quick_sort(low,j-1);
quick_sort(j+1,high);
}
```

Conclusion

Attached are the sources of this EA and the modified file "EasyXml.mqh" (must be copied in "MQL5\Include\EasyXml").

Please feel free to contact us at this address : bpa@bpasoftware.com.