TradeSim®

Advanced Trading Simulator and Back Tester

Application Note 4

Creating a Trade Database with Multiple Periodicity

- ✓ TradeSim Standard Edition
- ✓ TradeSim Professional Edition
- ✓ TradeSim Enterprise Edition
- ✓ Metastock Version 7.xx and above
- ✓ TradeSim/Metastock Plugin Version 5.0.5 and above

Last Update 7 October 2004

Contents

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Introduction

When running a trade database exploration in Metastock it is not possible to change the periodicity on the fly so it is not possible to generate a trade database which contains trades from different time frames. For example you may have a trading system and/or systems and want to generate a trade database that consists of a mixture of trades from a daily and weekly periodicity. Because you can only assign one periodicity to an exploration it is not possible to create trades in the same database, which have different periodicities by running a single trade database exploration.

By running multiple trade database explorations each with a different periodicity it is possible to create a single trade database by appending trades from each exploration using the AppendTrades function. This function is used to suppress recreation of the trade database file so that additional trade data can be appended to an existing trade database file of the same trade database name.
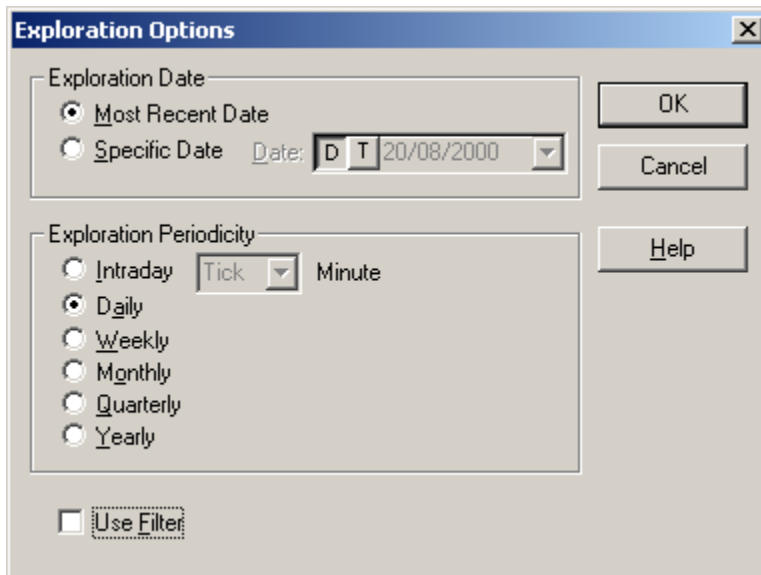
Example

As an example we wish to create a multiple periodicity trade database consisting of daily, weekly and monthly periodicity. For the purposes of brevity the actual code for the trading system is not shown. Also it is not necessary for the trading system code and/or the security list be the same for each different periodicity.

Daily Periodicity Exploration

The first trade database exploration should not contain a call to the AppendTrades function.

```
ExtFml( "TradeSim.Initialize");    { Initialize internal variables }

ExtFml( "TradeSim.SetValue",SystemID,0);{ Assign a system ID to identify the
daily trades in the trade database manager }

ExtFml( "TradeSim.RecordTrades",

       "Multi Periodicity Example",    { Trade Data Filename }

        LONG,                     { Trade Position Type }

        EntryTrigger,             { Entry Trigger }

        EntryPrice,               { Entry Price }

        InitialStop,              { Initial Stop }

        ExitTrigger,              { Exit Trigger }

        ExitPrice,                { Exit Price }

        START);                   { Trade Recorder Control }
```

Make sure the Periodicity is set to Daily in the Exploration Options.

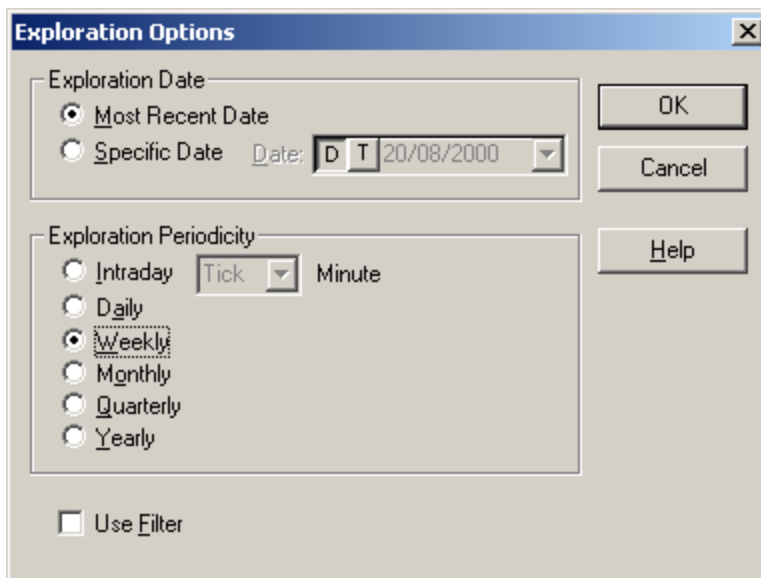## Weekly Periodicity Exploration

Subsequent trade database explorations should always contain a call to the AppendTrades function so that the trade data will be properly appended to the existing trade database.

```
ExtFml( "TradeSim.Initialize");   { Initialize internal variables }

ExtFml( "TradeSim.AppendTrades"); { Append Trades to the existing file }

ExtFml( "TradeSim.SetValue",SystemID,1);{ Assign a system ID to identify the
weekly trades in the trade database manager }

ExtFml( "TradeSim.RecordTrades",

        "Multi Periodicity Example",    { Trade Data Filename }

         LONG,                    { Trade Position Type }

         EntryTrigger,            { Entry Trigger }

         EntryPrice,              { Entry Price }

         InitialStop,             { Initial Stop }

         ExitTrigger,             { Exit Trigger }

         ExitPrice,               { Exit Price }

         START);                  { Trade Recorder Control }
```

Make sure the Periodicity is set to Weekly in the Exploration Options.

Monthly Periodicity Exploration

Subsequent trade database explorations should always contain a call to the AppendTrades function so that the trade data will be properly appended to the existing trade database.

```
ExtFml( "TradeSim.Initialize");   { Initialize internal variables }

ExtFml( "TradeSim.AppendTrades"); { Append Trades to the existing file }

ExtFml( "TradeSim.SetValue",SystemID,2);{ Assign a system ID to identify the
monthly trades in the trade database manager }

ExtFml( "TradeSim.RecordTrades",

        "Multi Periodicity Example",    { Trade Data Filename }

         LONG,                    { Trade Position Type }
```

```
        EntryTrigger,           { Entry Trigger }

        EntryPrice,             { Entry Price }

        InitialStop,            { Initial Stop }

        ExitTrigger,            { Exit Trigger }

        ExitPrice,              { Exit Price }

        START);                 { Trade Recorder Control }
```
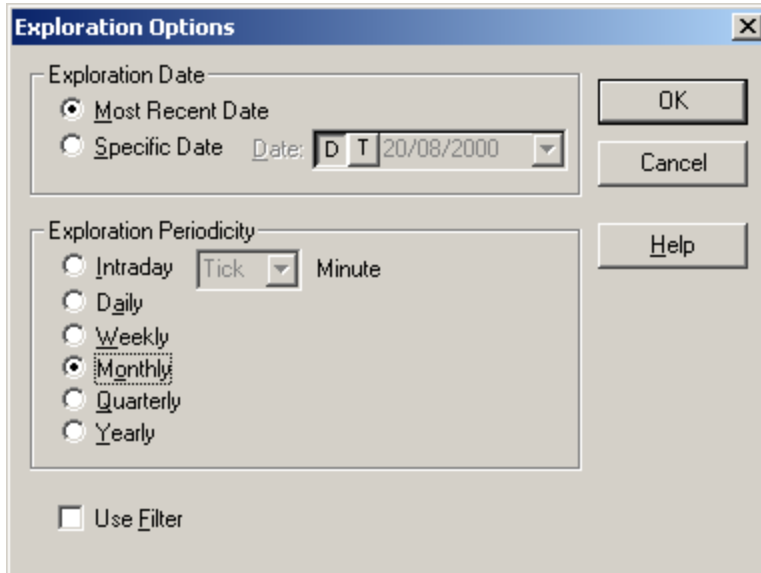
Make sure the Periodicity is set to Monthly in the Exploration Options.

Running The Exploration

To create the composite trade database file first run the daily exploration followed by the weekly and finally the monthly exploration. It is important that the exploration without the AppendTrades call is always run first before the others otherwise any existing trade data will be overwritten.

After you have created the trade database load it into TradeSim and inspect the results. If the trades have been generated correctly sorting by symbol should display trades for each symbol from the different periodicities.

If you observe the screen shot from the trade database manager below you will notice that the monthly trades (Sys ID=2) appear earlier than the weekly trades (Sys ID=1) or daily trades (Sys ID=0). At first this appears puzzling but when you note that each trade database was run with an identical number of 200 bars for each security then you will realize that 200 monthly bars starts a lot earlier than 200 weekly or 200 daily bars. To equalize the date range for each exploration you should use the SetStartRecordDate and SetEndRecordDate calls.

TradeSim® Enterprise Edition [MACD Crossover] - [Trade Database Manager]

File   Tools   Window   Help

Trade	Sys ID	Pos	Symbol	Entry Date	Exit Date	Level	Bars	Days	Initial Stop	Entry Price	Exit Price	% Change	Exit Status
3	2	Long	AMC	30/09/1993	31/05/1994	0	8	243	$0.0000	$7.3386	$7.6739	4.57%	Normal Exit
15	2	Long	AMC	30/06/1995	31/10/1995	0	4	123	$0.0000	$8.2807	$7.8500	-5.20%	Normal Exit
29	2	Long	AMC	30/05/1997	31/10/1997	0	5	154	$0.0000	$6.9407	$5.3510	-22.90%	Normal Exit
36	2	Long	AMC	30/11/1998	30/11/1999	0	12	365	$0.0000	$5.5361	$5.4465	-1.62%	Normal Exit
54	2	Long	AMC	31/08/2000	29/09/2000	0	1	29	$0.0000	$5.4863	$5.0745	-7.51%	Normal Exit
60	2	Long	AMC	31/01/2001	28/02/2003	0	25	758	$0.0000	$5.8395	$8.2400	41.11%	Normal Exit
79	1	Long	AMC	16/11/2001	05/04/2002	0	20	140	$0.0000	$6.9238	$7.3416	6.03%	Normal Exit
106	1	Long	AMC	10/05/2002	28/06/2002	0	7	49	$0.0000	$8.7600	$8.1600	-6.85%	Normal Exit
115	1	Long	AMC	30/08/2002	06/09/2002	0	1	7	$0.0000	$8.8600	$8.4000	-5.19%	Normal Exit
133	1	Long	AMC	03/01/2003	07/02/2003	0	5	35	$0.0000	$8.6800	$8.2800	-4.61%	Normal Exit
154	1	Long	AMC	24/04/2003	06/06/2003	0	6	43	$0.0000	$8.3500	$8.2000	-1.80%	Normal Exit
163	1	Long	AMC	18/07/2003	24/10/2003	0	14	98	$0.0000	$8.4400	$8.5200	0.95%	Normal Exit
194	0	Long	AMC	13/02/2004	01/04/2004	0	34	48	$0.0000	$7.7500	$7.9400	2.45%	Normal Exit
219	1	Long	AMC	19/03/2004	23/04/2004	0	5	35	$0.0000	$8.0300	$7.0800	-11.83%	Normal Exit
248	0	Long	AMC	13/05/2004	12/07/2004	0	41	60	$0.0000	$6.8400	$7.0200	2.63%	Normal Exit
299	0	Long	AMC	17/08/2004	17/09/2004	0	23	31	$0.0000	$6.8200	$7.3800	8.21%	Normal Exit
85	1	Long	AMP	30/11/2001	26/04/2002	0	21	147	$0.0000	$19.0590	$18.5500	-2.67%	Normal Exit
125	1	Long	AMP	01/11/2002	24/01/2003	0	12	84	$0.0000	$12.3500	$9.8000	-20.65%	Normal Exit
152	1	Long	AMP	17/04/2003	16/05/2003	0	4	29	$0.0000	$8.0100	$5.2500	-34.46%	Normal Exit
159	1	Long	AMP	27/06/2003	19/12/2003	0	25	175	$0.0000	$5.0200	$4.8100	-4.18%	Normal Exit
212	1	Long	AMP	05/03/2004	17/09/2004	0	28	196	$0.0000	$5.2000	$6.2300	19.81%	Normal Exit
239	0	Long	AMP	28/04/2004	30/04/2004	0	2	2	$0.0000	$5.9600	$5.7700	-3.19%	Normal Exit
262	0	Long	AMP	07/06/2004	08/07/2004	0	22	31	$0.0000	$5.7400	$6.2400	8.71%	Normal Exit

Start Entry Date   30/06/1993   ▼   Stop Entry Date   29/09/2004   ▼   314 trades selected from a total of 314 trades

Setup loaded from 'C:\TradeSimData\MACD Crossover.ses'

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Reference Literature

This list of references is by no means exhaustive but represents material, which is either recommended, or for general reading.

1) Compuvision Australia. TradeSim User Manual.

2) Equis. *Metastock for Windows 95/98 & NT*. This is the user manual that comes with Metastock Version 7.0 and is a prerequisite for using TradeSim.

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