

Backtesting Automation Sequence Manager (BTSeqMgr)

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Introduction

After you have developed your trading strategy,
you will then run many optimization test for many symbols/markets and timeframes;
So you can detect the best markets and timeframes for your strategy.

As you might have discovered this is a very time consuming and error-prone task;
Which can take many days – that is why we developed the:
“Backtesting Automation Sequence Manager” - referred to in this manual as BTSeqMgr.

The “Backtesting Automation Sequence Manager (BTSeqMgr)” will wait patiently for each optimization to complete – and then setup and start the next optimization run.

Try out the “Backtesting Automation Sequence Manager (BTSeqMgr)” for up to 15 days;
download and install BTSeqMgr from:
<http://www.profsoftware.com/tsadd/btseq>

For a quick presentation of BTSeqMgr in action - go to:
<http://www.profsoftware.com/tsadd/btseq/pres.htm>

Below are the main highlight so the “Backtesting Automation Sequence Manager (BTSeqMgr)”:

- **Run unattended backtest optimizations automatically in TradeStation®**
for any list of symbols and timeframes (overnight or over a weekend)
- **Convenient Progress Monitor**
shows you the current optimization status at any time
- **Customize any of the details of the backtesting sequence**
using the inbuilt script editor interface
or edit the script directly using the advanced sequence definition language
- **Use single data and multi data charts**
- **Exclude automatically problem symbols**
- **Automatically calculates a performance summary**
- **Preview all steps** with the Show Command Button
- **Smart Abort Manager** allows you to easily abort of the optimization (to free up your computer);
but keeping track, were you stopped, so you can restart at the step you left off
- **Saves each workspace** automatically
- **Saves each optimization result automatically (MHT, XLS and CSV)**
- Detailed log file of each sequence
- Optional Integration with the “Diamond Backtesting with Walk Forward Manager (BTWFMgr)”

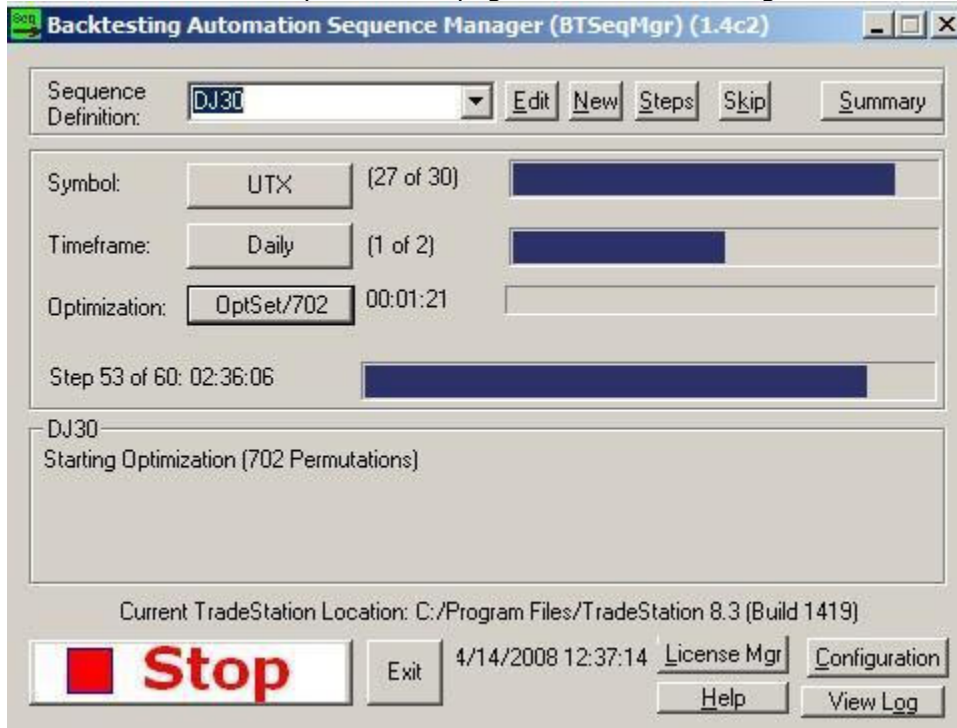
The “Backtesting Automation Sequence Manager (BTSeqMgr)”
is further enhancing one of the most powerful trading and research platforms available:
TradeStation Open Platform®
www.TradeStation.com

We are continuously striving to improve the:
“Backtesting Automation Sequence Manager (BTSeqMgr)”
and invite your feedback to: pss@pobox.com
Check also for updates – as we upload new BTSeqMgr versions on an ongoing basis to:
<http://www.profsoftware.com/tsadd/btseq>

BTSeqMgr Functions

BTSeqMgr Status and Progress Screen

Below is a screen sample if BTSeqMgr in action – running the DJ30 sample sequence:



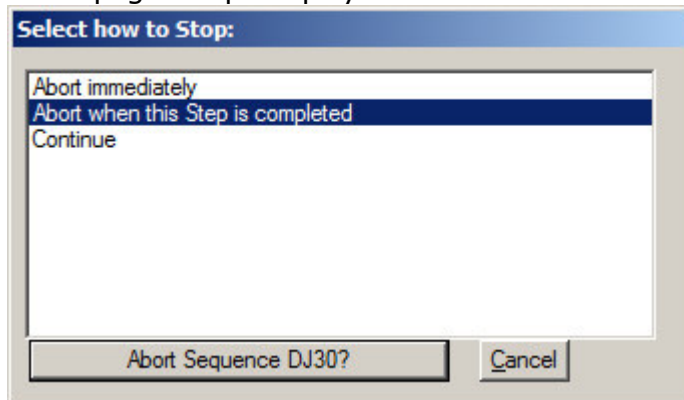
While BTSeqMgr is running your backtesting sequence it will show:

- Current Symbol (UTX – 27 of 30) – click on the button to see the full list
- Current Timeframe (Daily – 1 of 2) – click on the button to see the full list
- Current Optimization permutations (/702 permutations) – click to see the list as shown here in this screen shot
- Time running this step (00:01:21)
- Overall time running this backtesting sequence (Step 53 of 60 - 02:36:06)
- Current status – Starting Optimization (702 Permutations)

Stopping a Sequence

To stop the current backtesting sequence – click on the red STOP button.

BTSeqMgr will prompt you – how to abort:

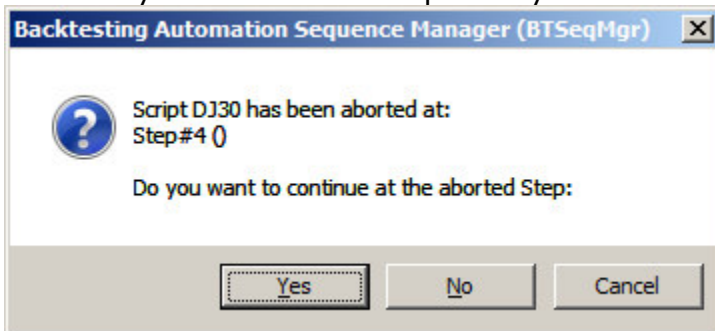


Select:

"Abort when this Step is completed" (Default) or "Abort immediately" and click on "ABORT Sequence XXX?" (If you pressed the STOP button by mistake just click on cancel or select "Continue")

Smart Abort Manager

The Smart Abort Manager will leave a mark in the sequence file, at the last processed step; so when you re-start the sequence you can continue where you left off:

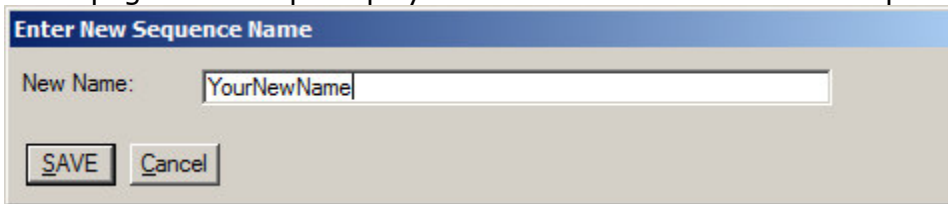


You can either continue with the next step, or start from scratch (or abort).

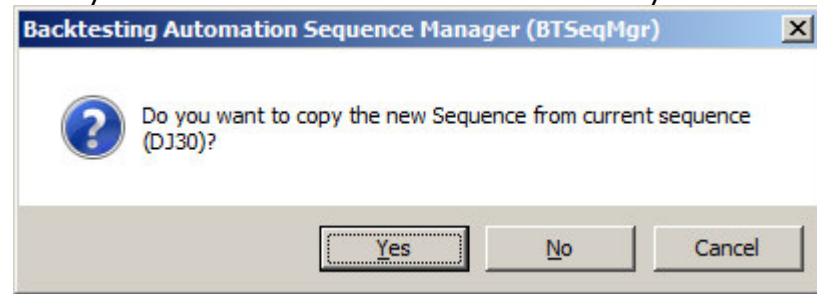
Creating a new Sequence

Click on the New button to create a new sequence.

BTSeqMgr will first prompt you for the Name of the new sequence:



Then you can either clone from the currently selected sequence – or start from scratch:



Then the "Sequence Editor" for the new sequence appears (see below).

Sequence Editor

To modify the currently selected sequence - click on the **Edit** button.

This will bring up the sequence editor – click SAVE to save all your changes!:

Here you can modify the sequence details:

Symbols	Add – adds a new symbol at the end Edit– allows you to modify the current timeframe settings Delete – deletes the currently clicked timeframe Add Symbol List – inserts a reference to use a symbol list file Save Symbol List – saves the current symbols as a new symbol list
Timeframes	Add – adds a new time frame at the end Edit– allows you to modify the current frame Delete – deletes the currently clicked symbol Add Frame List – inserts reference to use a timeframe list file Save Frame List – saves the current timeframes as a new frame list
Strategy Parameters	Add – adds a new parameter at the end Edit– allows you to modify the current parameter settings Delete – deletes the currently clicked parameter Add Parameter– inserts from TradeStation all strategy parameter and values (saves you the time to type them all in!)
End Date	This is the global end date for all range settings in the sequence
Strategy Parameters	Add – adds a new parameter at the end View – Shows the current symbol list Delete – deletes the currently clicked symbol Add Frame List – inserts reference to use a timeframe list file
Strategy workspace	Click Browse to select the workspace to be used for this sequence (The workspace should contain only ONE chart maximized)
Direct Edit	Advanced users can also edit/create the Sequence File directly

Multiple Datastreams

If your workspace uses several data streams – check the “Multiple Datastreams” check box in the Sequence Editor, so that BTSeqMgr will use the “Symbol Lookup” in the toolbar to change ALL symbols for all datastreams at once.

Usually BTSeqMgr will use the Symbol field in the regular format box to change the symbol on each step. Currently charts with multiple datastreams but different symbols are not (yet) supported.

Show Sequence Steps

To view the steps of your current Sequence – click on the Steps button.

BTSeqMgr will combine the symbols and timeframes specified (and skip any symbols in your skip list) and generate a spreadsheet(ShowCmd.csv) with the steps listed:

	A	B	C	D	E	F
1	Script	M:/srcpss/Apps/StockData/TS/BTSeqMgr/DJ30.bts				
2						
3	SeqNbr	Symbol	Optimizati	Interval	Duration	EndDate
4	1	AA	OptSet	Daily	2 Years	2/1/2008
5	2	AA	OptSet	Intra/60	6 Months	2/1/2008
6	3	AIG	OptSet	Daily	2 Years	2/1/2008
7	4	AIG	OptSet	Intra/60	6 Months	2/1/2008
8	5	AXP	OptSet	Daily	2 Years	2/1/2008
9	6	AXP	OptSet	Intra/60	6 Months	2/1/2008

Skipping problem Symbols

In some cases some symbols might not be currently loadable, but appear in various index lists.

BTSeqMgr allows you to build a list of those “problem symbols” in a simple text file which each symbol to be skipped line by line.

Click the “Skip” button to view/edit this list.

C:\Program Files\Backtesting Automation Sequence Manager (BTSeqMgr)\Skip.txt

Then use the “Show Sequence Steps” function to verify that these symbol(s) are skipped

Before actually running the sequence.

Result Files created for each Step

AS BTSeqMgr is processing your sequence, BTSeqMgr generates small spreadsheet files for each results in the new sequence base folder. For example the first sequence for DJ30 will be in:

C:\Program Files\TradeStation 8.3 (Build XXXX)\MyWork\BTSeqMgr\DJ30\SEQ_0001

Each step saves the result files into this sequence folder>

Example: Symbol=MSFT, Timeframe=Intraday 60 minutes will save the following files:

MSFT_Intra60.tsw	Tradestation workspace
MSFT_Intra60.MHT	Archive File with the Backtesting results of the best permutation
MSFT_Intra60.XLS	Spreadsheet File with the Backtesting statistic results (XLS format)
MSFT_Intra60.csv	Spreadsheet File with the Backtesting statistic results (CSV format)
MSFT_Intra60.posa	PSS Performance Analyzer file, for more details see : http://www.ProfSoftware.com/tsadd/perfana
MSFT_Intra60-Best.csv	Spreadsheet File with the top results

Performance Summary

At the end of each completed (or aborted) sequence BTSeqMgr will automatically create a summary showing the profit/loss and other results for each step:

Start	C:\Program Files\TradeStation 8.3 (Build 1419)\MyWork\BTSeqMgr\DJ30\SEQ_0036									
Symbol	Interval	Profit/Loss	ProfitFactor	Trades	FileName					
AA	Daily	4320	3.28	26	C:/Program Files/TradeStation 8.3 (Build 1419)/MyWork/BTSeqMgr/DJ30/SEQ_0036/AA_Daily.csv					
AA	Intraday60	3352	3.23	21	C:/Program Files/TradeStation 8.3 (Build 1419)/MyWork/BTSeqMgr/DJ30/SEQ_0036/AA_Intraday60.csv					
AIG	Daily	3857	11.93	15	C:/Program Files/TradeStation 8.3 (Build 1419)/MyWork/BTSeqMgr/DJ30/SEQ_0036/AIG_Daily.csv					
AIG	Intraday60	3969	3.65	23	C:/Program Files/TradeStation 8.3 (Build 1419)/MyWork/BTSeqMgr/DJ30/SEQ_0036/AIG_Intraday60.csv					
AXP	Daily	3133	6.22	14	C:/Program Files/TradeStation 8.3 (Build 1419)/MyWork/BTSeqMgr/DJ30/SEQ_0036/AXP_Daily.csv					
AXP	Intraday60	2190	2.46	17	C:/Program Files/TradeStation 8.3 (Build 1419)/MyWork/BTSeqMgr/DJ30/SEQ_0036/AXP_Intraday60.csv					
BA	Daily	2902	5.84	13	C:/Program Files/TradeStation 8.3 (Build 1419)/MyWork/BTSeqMgr/DJ30/SEQ_0036/BA_Daily.csv					
BA	Intraday60	2172	2.45	17	C:/Program Files/TradeStation 8.3 (Build 1419)/MyWork/BTSeqMgr/DJ30/SEQ_0036/BA_Intraday60.csv					

You might want to copy and consolidate your backtest result into other folders, or merge the results from several aborted sequence into ONE new folder. The "Performance Summary" function allows you to re-create this summary for any folder! Just click on the "Summary" button, select the folder to use for the summary...

License Manager

To register or check your license click on "**License Mgr**".

For current prices check the BTSeqMgr order page:

<http://www.profsoftware.com/tsadd/btseq/order.htm>

View Log

All actions from BTSeqMgr are traced into a log file, for diagnostics etc.

Each day a new logfile is created, for example Apr 15, 2008 is in:

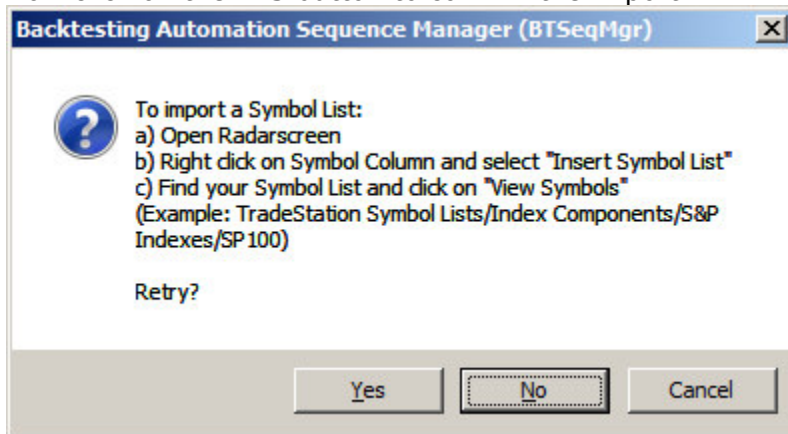
C:\Program Files\Backtesting Automation Sequence Manager (BTSeqMgr)\logs\20080415\btseqmgr.log

Here you can find details about errors and timing details etc.

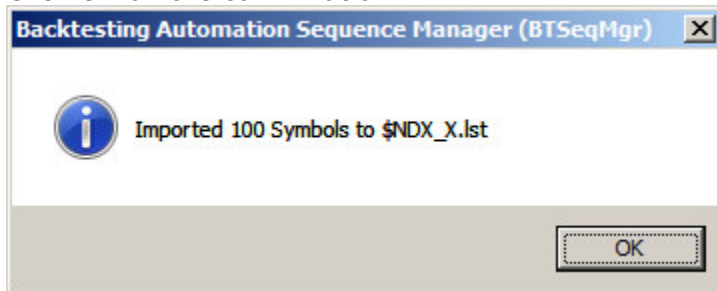
Importing a Symbol List from Tradestation

BTSeqMgr allows you to also import an entire symbol list from Tradestation:

- a) Open the "Sequence Editor"
- b) Click on the "Add Symbol List" button
- c) Select (Import from Trade Station)
- d) Open Radarscreen or Quote Screen in Tradestaion
- e) Select "Insert" and "Insert Symbol List" from the menu
- f) Navigate to the Symbol List you want to import
- g) Click on the "View" button to actually load the symbols
- h) Now click on the YES button to confirm the import:



- i) Click OK on the confirmation:



- j) Now a new Symbol list file has been created and is available with the List Name as the filename – i.e. NADSDAQ 100 (\$NDX.X) is saved into "C:\Program Files\Backtesting Automation Sequence Manager (BTSeqMgr)\\$NDX_X.lst"

Running Backtesting Optimizations with BTSeqMgr

Starting a Backtesting Sequence

Running a backtesting optimization sequence involves the following steps:

- a) Login to TradeStation
- b) Open the BTSeqMgr
Start/Programs/Backtesting Automation Sequence Manager (BTSeqMgr)/BTSeqMgr
- c) Select your pre-defined sequence definition from the pull-down list in the top left
(Example: SP100)
- d) Click on the big green START button and confirm starting the sequence
- e) If you continue from a previously aborted sequence, BTSeqMgr
will prompt you if you want to continue at the aborted step – or start from the beginning again
(You can also edit the "Abort=" marker in the sequence definition file manually: EDIT/EDIT)

Backtesting Sequence Details

When you start a backtesting sequence - BTSeqMgr will perform the following steps for you:

Preparation

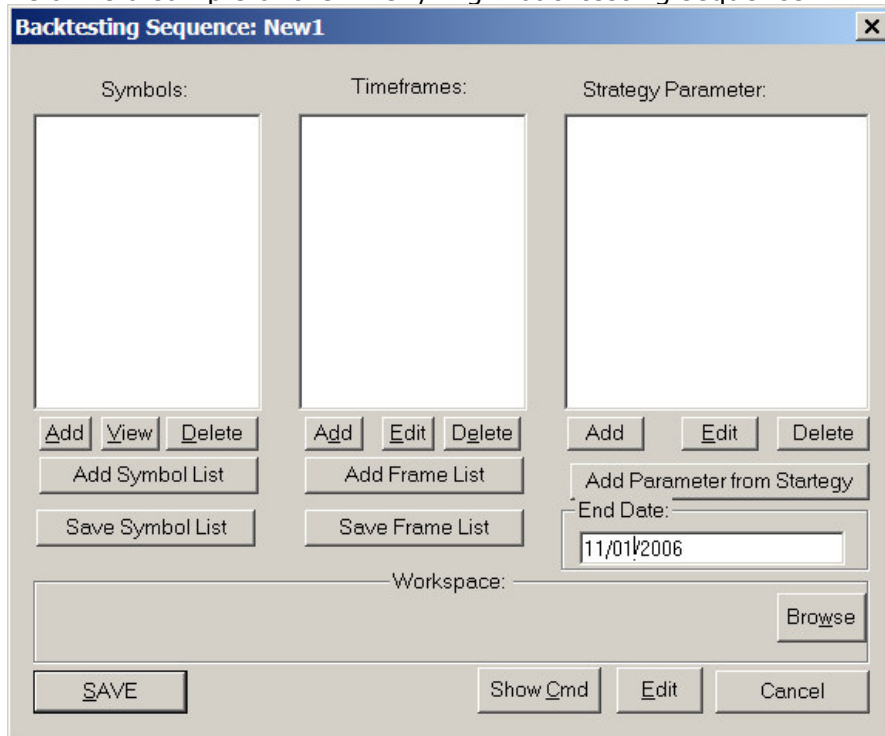
- 1) Create a new folder for this backtesting sequence in:
C:\Program Files\TradeStation 8.1 (Build XXXX)\MyWork\BTSeqMgr\SSSSS\SEQ_0001
XXXX = the current Tradestation version you are using
SSSSS = the name of the sequence you are running (Example SP100)
C:\Program Files\TradeStation 8.1 (Build 2826)\MyWork\BTSeqMgr\SP100\SEQ_0001
Each run will create a new folder (SEQ_0001, SEQ_0002 ...)
- 2) Copy the assigned workspace and sequence definition to this folder
- 3) Open the initial workspace in Tradestation
- 4) Wait for the initial workspace chart to load

Executing the sequence step (symbol/timeframe)

- 5) Read the first/next symbol and timeframe to be executed from the sequence definition
- 6) Open the "Format Symbol" box and imprint the symbol, timeframe and date range or bar count
- 7) Wait for the modified workspace chart to load with the new symbol/timeframe/date range
- 8) If a fresh download is initiated – wait for the download to complete (tick data can take some time)
- 9) When the chart data has loaded - open the "Format Startegy" box
- 10) Open the "Format Stratgy Inputs" box and enter the strategy input parameters
as defined in the sequence definition (either a range or a specific value)
- 11) Close the "Format Startegy" box and start the Optimization
- 12) Wait for the optimization to complete
- 13) When the optimization has completed
save the Strategy Performance Reports (MHT,XLS,CSV file) and modified workspace (TSW file) to:
C:\Program Files\TradeStation 8.1 (Build XXXX)\MyWork\BTSeqMgr\SSSSS\SEQ_0001
- 14) This completes the first step (Symbol/Timeframe) in the backtesting sequence
- 15) BTSeqMgr will then continue with the next step (Symbol/Timeframe) until
BTSeqMgr has reached the last step in the sequence – or you click on the STOP button to abort.

Defining the new Backtesting Sequence

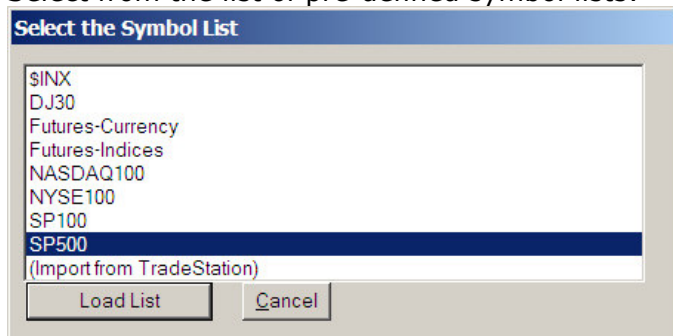
Below is a sample of the new/virgin backtesting sequence:



Backtesting sequence definitions are saved in a simple text file in:
C:\Program Files\Backtesting Automation Sequence Manager (BTSeqMgr)\XXX.bts

Step1 - Adding Symbols

Click on the symbol "Add" button - and enter the new symbol.
You can also add a pre-defined symbol list - click on "Add Symbol List".
Select from the list of pre-defined symbol lists:



You can easily create your own symbol list - click on "Save Symbol List".
You can also manually create a Symbol List, a simple text file with one symbol per line:
C:\Program Files\Backtesting Automation Sequence Manager (BTSeqMgr)\XXX.lst
You can also import a symbol list from Tradestation - select (Import from Tradestation).

To delete a symbol - click on symbol delete.
To view a symbol list - click on the list and click on symbol View
To save the current symbol list - click on "Save Symbol List"

Step2 - Adding Timeframes

Click on the timeframe "Add" button - and enter the timeframe - here are some examples:

Intra/10	10 Minute - Intraday
Intra/15 10000 Bars	15 Minute - Intraday - loading 10,000 bars of data
Intra/20 6 Months	15 Minute - Intraday - loading 6 month of data
Intra/30 2 Years	30 Minute - Intraday - loading 2 years of data
Intra/60 1/1/2005	60 Minute - Intraday - loading from beginning date 1/1/2005
Tick /30	30 Tick Intraday
Tick/~20 6 Months	20 Bars per day - loading 6 months of data The avg daily tick volume is determined by the BtSeqMgr.ini setting: [TickDailyVolume] @ES=47000
Volume/200 2 Weeks	200 Share Volume Bars - loading 2 weeks from the end date
Daily 3 years	Daily data - loading 3 years of data
Weekly 3 years	Weekly data - loading 3 years of data
Monthly 4 years	Monthly data - loading 4 years of data

You can also load a pre-defined timeframe list - click on "Add Frame List",

They are stored in: C:\Program Files\Backtesting Automation Sequence Manager (BTSeqMgr)\XX.frm

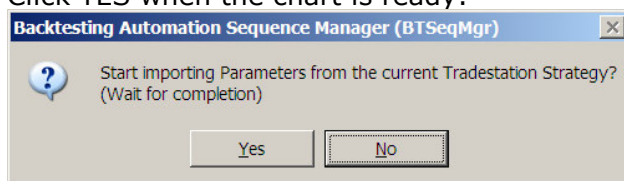
The end date is defined in a separate field - and defaults to today's date.

To save the current timeframe list - click on "Save Frame List"

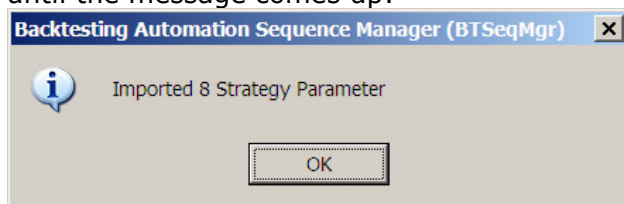
Step3 - Adding Strategy Parameters

First is is best to initiate the list of parameters for your strategy,

- Open Tradestation and only open the workspace with your strategy
- Click on "Add Parameter from Strategy"
- Click YES when the chart is ready:



- Wait for a few seconds while BTSeqMgr is loading the parameters, until the message comes up:



- The strategy parameters are loaded into the "Strategy Parameter" list
- Click on any of the parameters and click on EDIT
- Then enter the range (Seq/Name|Min|Max|Incr) Example: 1/RSILength|6|30|2

Step4 - Define Workspace and EndDate

Click on the BROWSE button and navigate to the workspace and chart with uses your strategy. The selected workspace will be displayed at the bottom.

Also modify the End Date - if you don't want to use the today's date.

Step5 - Save Backtesting Definition

Click on the SAVE button and save all your new changes.

Direct Editing

You can also click on EDIT and modify the backtesting sequence files (bts) directly.
In this case DO NOT click on SAVE – to avoid overwriting your changes.

BTSeqMgr Configuration Settings

Below is a list of all the available BTSeqMgr Configuration settings you can adjust.

Timer & Sequence Control Settings

Name	Default	Description
BTSeqMgrMinimize	YES	Minimizes BTSeqMgr window to capture the chart. In multu monitor setups – you can set to NO and move the BTSeqMgr window to a different monitor than the TradeStation chart monitor
WaitForOpt	5	Seconds to wait to re-check if the optimization has completed
WaitStartOpt	10	Seconds to wait one time when the optimization just started
ChartWaitForDownLoad	6	Seconds to wait for the a chart data download to complete
ChartWaitForLoad	6	Seconds to wait for the a chart data download to complete
ChartLoadConfirm	3	Number of Chart Load Confirmations before the Strategy Parameters are applied
SeqRetry	3	Number of Retries of a failed command (only when a non fatal error occured)
MultiScriptStopError	YES	In Multi Script Mode - stop(YES) or continue(NO) on Script Error
UseSaveAs	NO	Use Save As instead of plain Save - to save workspaces after the optimization completes
SaveWS	YES	Saves the TradeStation Wrokspaces (TSW File) after each Optimization
SaveOPT	YES	Save the TradeStation Optimization/Performance Report(s) after each Optimization Run
SaveOptMode	0	Save the TradeStation Optimization Results 0=Save All: Performance(MHT + XLS) + Optimization(CSV) 1=Performance File (MHT) only 2=Performance Excel File (XLS) only 3=Optimization Report (CSV) only
ClosePrevWS	YES	Close any previous Workspace(s)

System Settings

Name	Default	Description
ScriptDefaultBars	20000	If no duration or start date is specified - define here the default number of bars
ChartMinColors	8	Minimum Colors to expect in a loaded Chart
ChartOffsetY	30	Upper Chart Margin (30 pixels from the top) for chart color check
ChartOffsetX	0	Left Chart Margin (0 pixels from the left) for chart color check
StayOnTop	YES	Show BTSeqMgr on top of all other windows (minimize to hide)
EDITOR	NOTEPAD	Editor to be used
ShowMgr	NO	Show BTSeqMgr while running
ImportAlert	NO	First Time Welcome and Logic Import
TrackPS	NO	Track additional diagnostic information
DirectCfgEdit	NO	Allow direct Configuration File Edit (BTSeqMgr.ini)
FmtCmdWait	500	Wait (in mSec) for Commands
FmtOKWait	500	Wait (in mSec) after Format Symbol OK Click to load the chart data
FmtNextSymWait	2000	Wait (in mSec) after Symbol+TimeFrame has completed
FmtWaitLoadWaitSec	1800	Max wait for data to load (0=infinite, 1800=30 mintes)
FmtTZExchange	YES	Time zone is set to Exchange (NO=Local) in Format Chart Window
FmtApplyRange	YES	Setting for Apply time-based Range setting to all data series
RefreshWS	1	Carefull - settings above 1 may cause the Time zone error Reuse current workspace X number of times (Default=1 Close/ReOpen Init Workspace each time)
SeqSimulateDur	0	Switches on the simulation mode, specify number of seconds to wait between steps (0=Default)
DataDrive	C	Data Drive to check if we still have enough space (C=Default)
DataDriveMinFree	0.5	Minimum space free on Data Drive (in GB) (0.5GB = Default)
SaveChartImage	NO	Switch to save the chart images Watch out – for diagnostics only - can consume large space
SaveOnCloseWS	NO	On Workspace Refresh - save current changes (Default=NO)
SaveChartImage	NO	Switch to save the chart images on each chart load check

Diamond Backetsting Manager (BTWFMgr) Settings

These settings apply only when you use the BTWFMgr in conjunction with BTSeqMgr:
for details see: <http://www.ProfSoftware.com/bt>

Name	Default	Description
AUTOSTART	1	Enable the automatic conversion of backtesting data when the TradeStation optimization has completed (set to 1) (To disable - set to 0)
AUTOEXIT	0	Enable the automatic exit after conversions (set to 1) (To disable - set to 0)
AUTOWFO	1	Enable the automatic WalkForward Optimization after the data is converted/loaded (set to 1) (To disable - set to 0)
DRIVE	C:	Designate the main drive (with colon!) were all BTWFMgr data resides, Before you change this parameter copy ALL C:\BTWFMgr data to the new location

Sequence Definition File

BTSeqMgr uses a "Sequence Definition File" to store all details about each sequence.

Example sequence file (DJ30):

C:\Program Files\Backtesting Automation Sequence Manager (BTSeqMgr)\ DJ30.bts
contains:

```
Workspace=C:\Program Files\Backtesting Automation Sequence Manager
(BTSeqMgr)\RSISample.tsw
Symbols=List:DJ30,
EndDate=2/1/2008
MultiData=NO
```

```
Template=
Daily|2 Years
Intra/60|6 Months
```

```
OptSet=
1/RSILength|6|30|2
2/OverSold|30|50|4
3/OverBought|50|80|4
5/LossAmt|300
6/GainAmt|300
8/BTWFEExport|0
```

```
;
; Aborted at 4/14/2008 14:10:54
Abort=3=AIG|OptSet|Daily|2 Years|2/1/2008|
```

The following syntax is used for the "Sequence Definition File":

<i>Workspace=</i>	Points to the filename with the "seed" strategy workspace
<i>Symbols=</i>	Lists all symbols to be used in the sequence (See more advanced options below)
<i>EndDate=</i>	The ending date to be used in all the date ranges when loading the data
<i>Multidata=</i>	Switch to enable special multidata chart load (default single data Format Symbol style)
<i>Template=</i>	After this marker the time frames to be used in the sequence are shown: (See "Step2 - Adding Timeframes" for formatting details)
<i>OptSet=</i>	After this marker the strategy input parameter to be in the sequence are shown: {Row}/{Name} Min Max Step or {Row}/{Name} Value The rows not defined just use the default from the "seed" workspace. Note that matching the row numbers with the Format Strategy window is essential, so that BTSeqMgr is setting the correct strategy input parameters!
<i>Abort=</i>	Abort marker with the Step number (3) and additional optional parameter (This appears only when you aborted the sequence)
<i>;</i>	All lines starting with the semicolon are skipped and can be used as comments

How to define different Timeframes/Inputs for each Symbol

In some instances you might want to define different timeframes and/or strategy input parameter optimization sets. BTSeqMgr allows you to specify for each step:

- Define the various timeframes (Template, Template2, Template3...)
- Define the various Optimization Sets (OptSet, OptSet 2, OptSet 3...)
- List the steps in the Symbols Line: Symbol/Timeframe/OptSet

In the example step sequence (Sample3.bts) below:

Symbols=MSFT/Template2/OptSet2, INTC/Template2/OptSet, YHOO/Template/OptSet2, EBAY

The following steps are being generated:

Script	M:/srcpss/Apps/StockData/TS/BTSeqMgr/Sample3.bts				
SeqNbr	Symbol	Optimizati	Interval	Duration	EndDate
1	MSFT	OptSet2	Intra/10	5000 Bars	2/1/2008
2	MSFT	OptSet2	Tick/200	2 Month	12/31/2007
3	INTC	OptSet	Intra/10	5000 Bars	2/1/2008
4	INTC	OptSet	Tick/200	2 Month	12/31/2007
5	YHOO	OptSet2	Daily	2Years	2/1/2008
6	YHOO	OptSet2	Intra/5	5000 Bars	2/1/2008
7	YHOO	OptSet2	Intra/15	200Days	2/1/2008
8	YHOO	OptSet2	Intra/30	400	2/1/2008
9	YHOO	OptSet2	Tick/50	1000 Bars	2/1/2008
10	YHOO	OptSet2	Tick/100	20	2/1/2008
11	EBAY	OptSet	Daily	2Years	2/1/2008
12	EBAY	OptSet	Intra/5	5000 Bars	2/1/2008
13	EBAY	OptSet	Intra/15	200Days	2/1/2008
14	EBAY	OptSet	Intra/30	400	2/1/2008
15	EBAY	OptSet	Tick/50	1000 Bars	2/1/2008
16	EBAY	OptSet	Tick/100	20	2/1/2008

As you can see MSFT is using Template2 for the timeframes and Optset2 for the inputs,
 then INTC is using also Template2 for the timeframes but Optset for the inputs
 then YHOO is using also Template for the timeframes but Optset2 for the inputs
 then EBAY is using the default Template for the timeframes and default Optset for the inputs.

Note that when you define just the symbol, then BTSeqMgr will use the default timeframe definition (always the lines following "Template=") and the default strategy optimization input set definition (always the lines following "OptSet=").

Below is the actual Sequence Definition File:

```

;===== SAMPLE RSI BACKTESTING AUTOMATION SEQUENCE FILE =====
; Showing multi TimeFrame Templates (Template,Template2) and
; Showing multi Optimization Parameter sets (OptSet,OptSet2)
; (Comment lines start with semicolon)
Workspace=C:\Program Files\Backtesting Automation Sequence Manager
(BTSeqMgr)\RSISample.tsw
Symbols=MSFT/Template2/OptSet2, INTC/Template2/OptSet, YHOO/Template/OptSet2, EBAY
EndDate=2/1/2008

Template=
Daily/2Years
Intra/5/5000 Bars
Intra/15/200Days
Intra/30/400
Tick/50/1000 Bars
Tick/100/20

Template2=
Intra/10
Tick/200/2 Month/12/31/2007

OptSet2=
1/RSILength/14/20/1
2/OverSold/30/50/4
3/OverBought/50/80/4
5/LossAmt/100/300/50
6/GainAmt/100/300/50

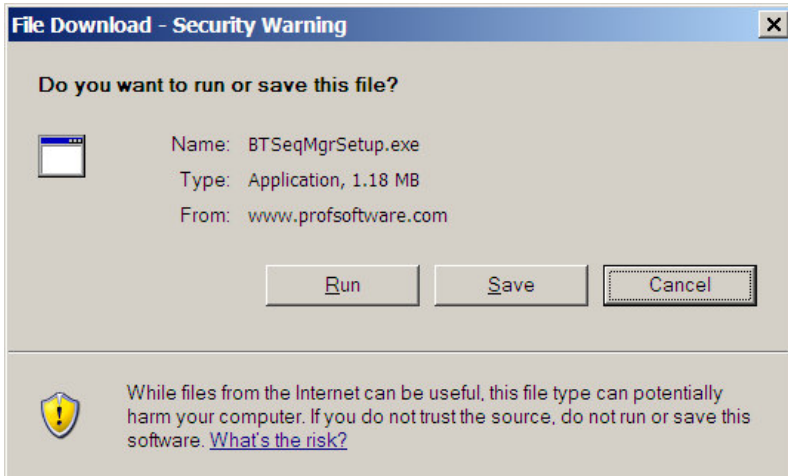
OptSet=
1/RSILength/6/30/2
2/OverSold/30/50/4
3/OverBought/50/80/4
5/LossAmt/200
6/GainAmt/200

```

Installation

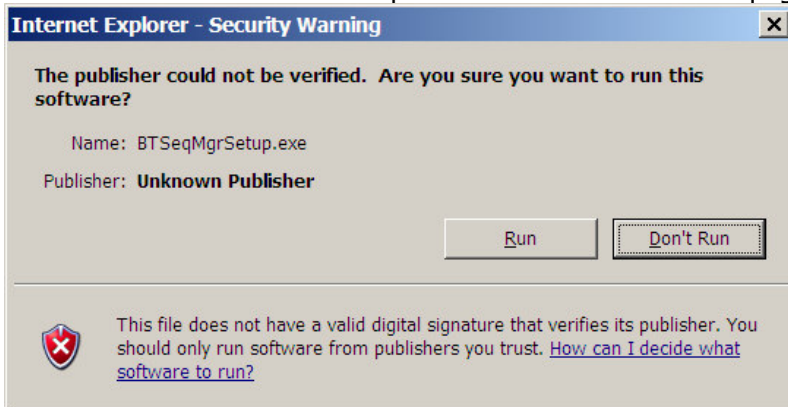
- a) Login to TradeStation and close all workspaces
- b) download the current free trial copy from:
<http://www.ProfSoftware.com/tsadd/btseq/dl.htm>

The browser will show the download box:
Click on the RUN button

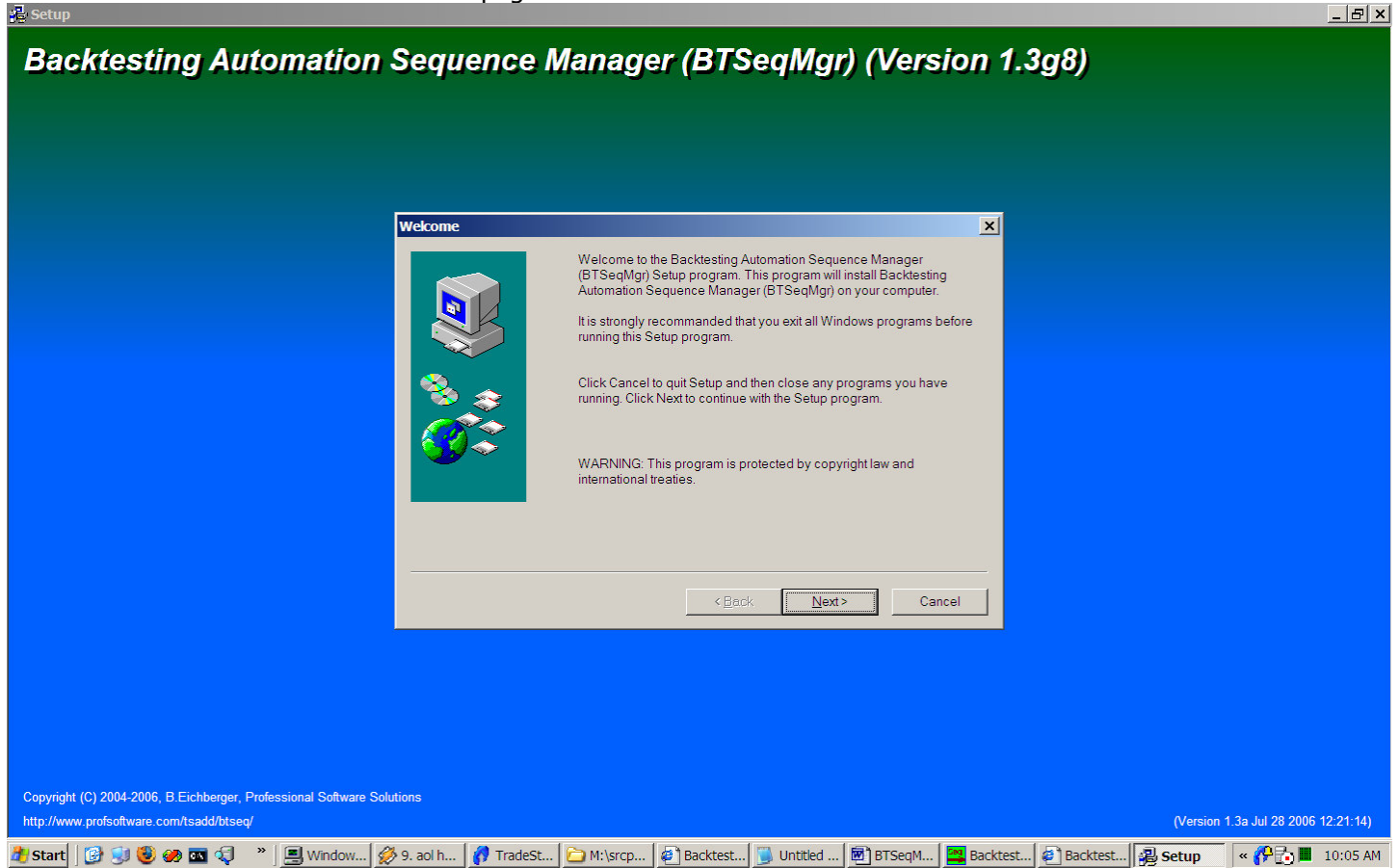


You will see the progress of the download ...

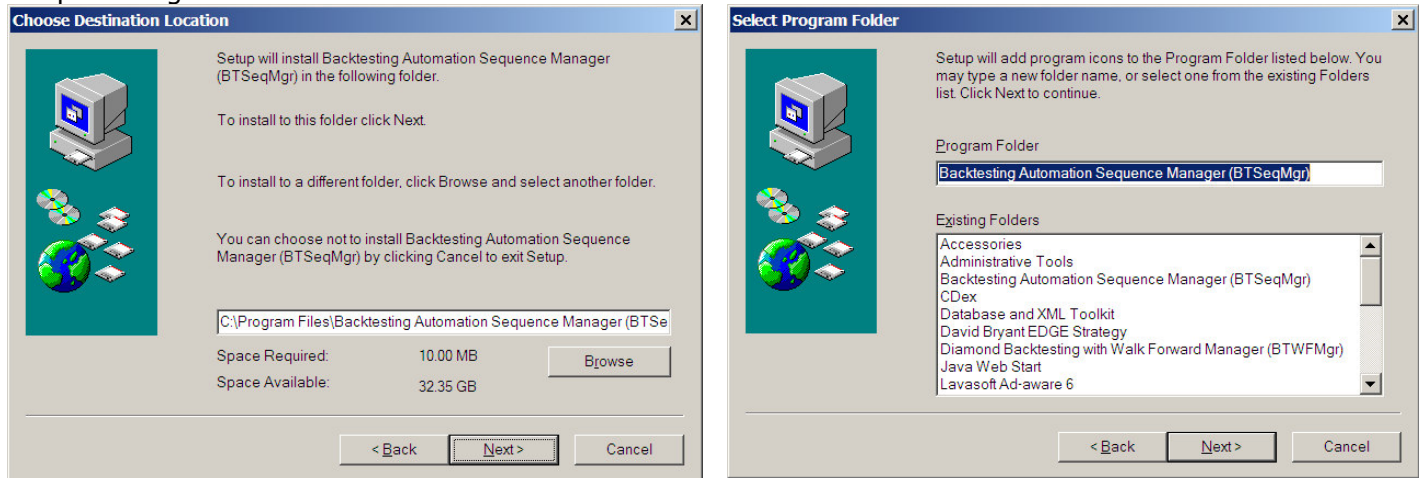
When the download has completed – confirm the BTSeqMgr installation: Click on the RUN button



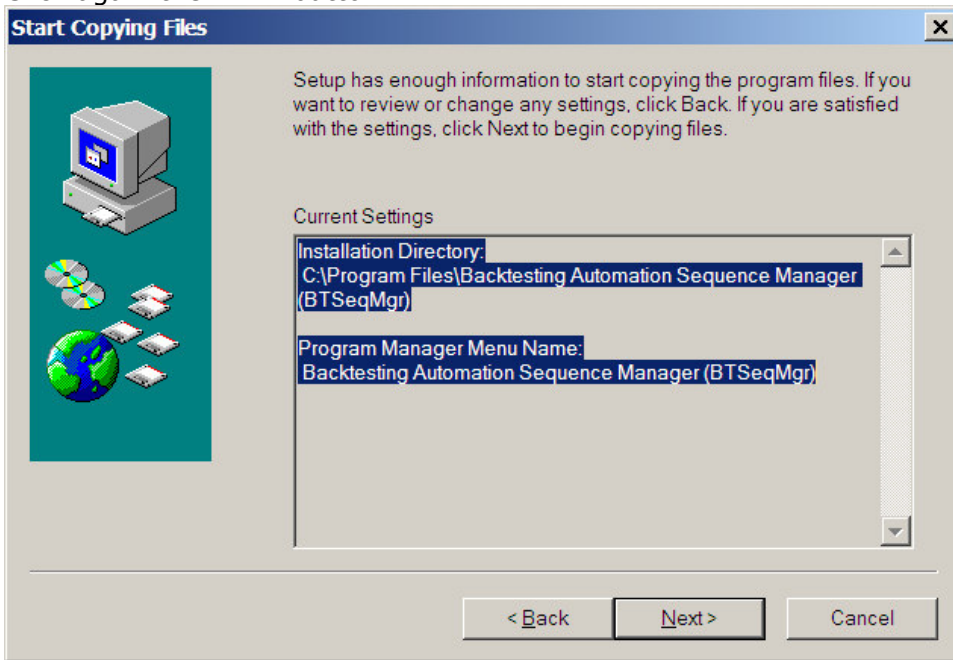
After a few seconds the actual BTSeqMgr installation will start: Click on the NEXT button



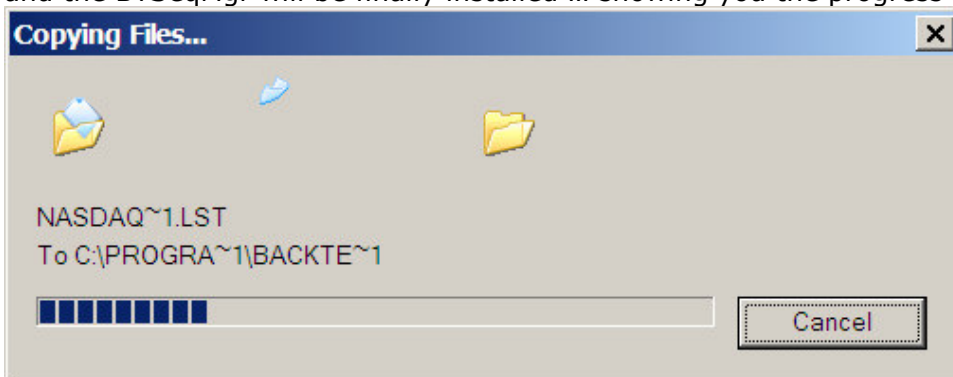
Keep clicking the NEXT button:



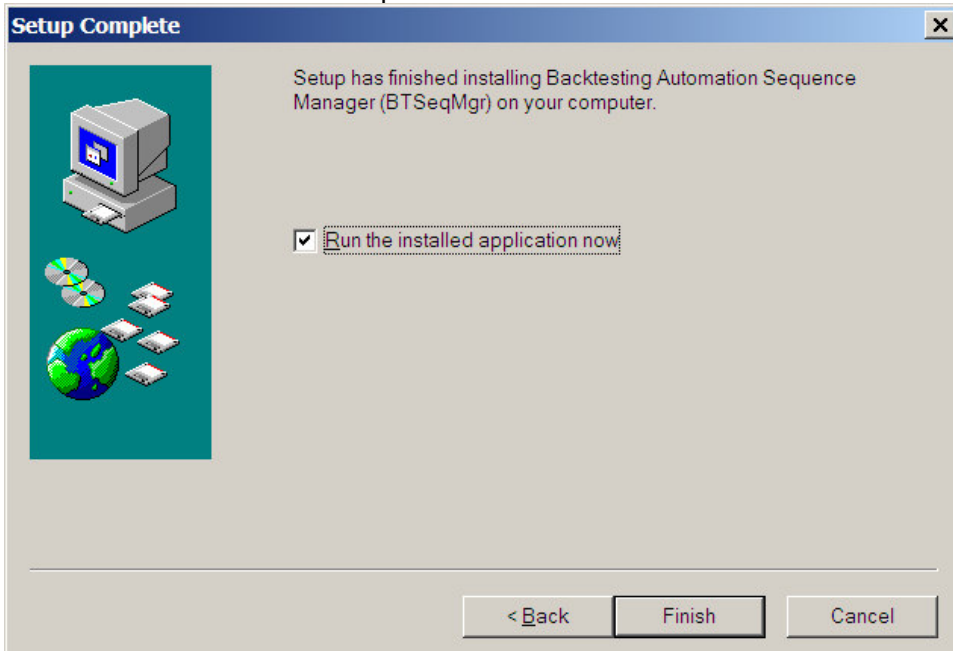
Click again the NEXT button



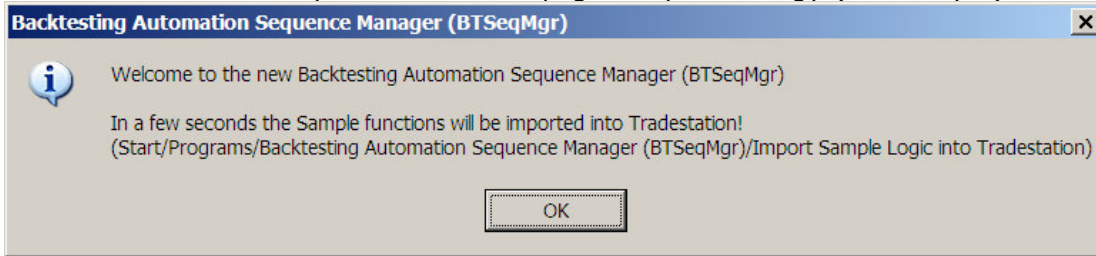
and the BTSeqMgr will be finally installed ... showing you the progress



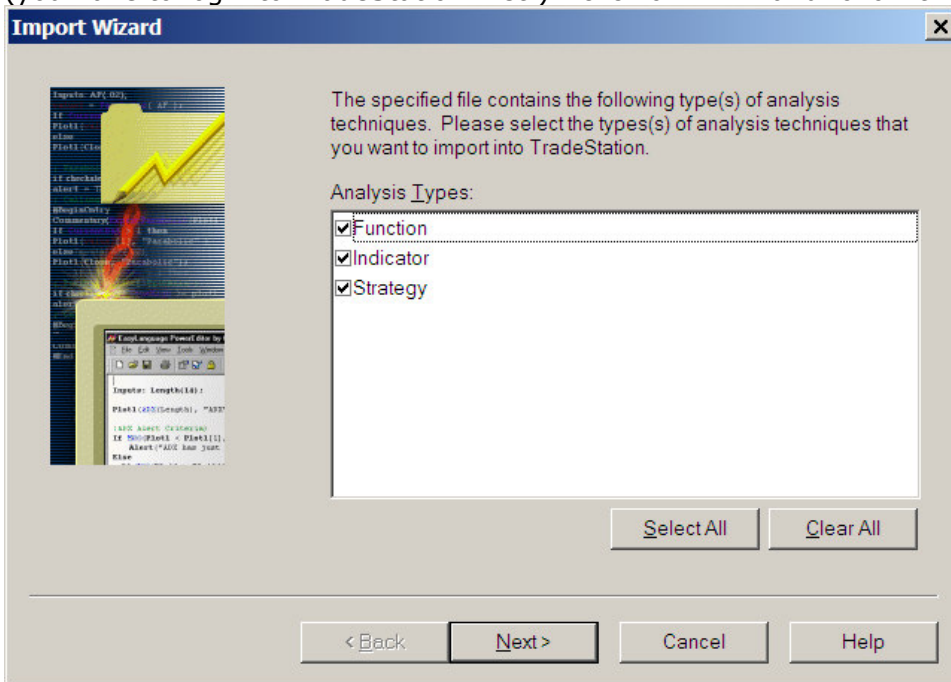
when the installation is completed – click on FINISH to start the BTWFMgr with the sample data



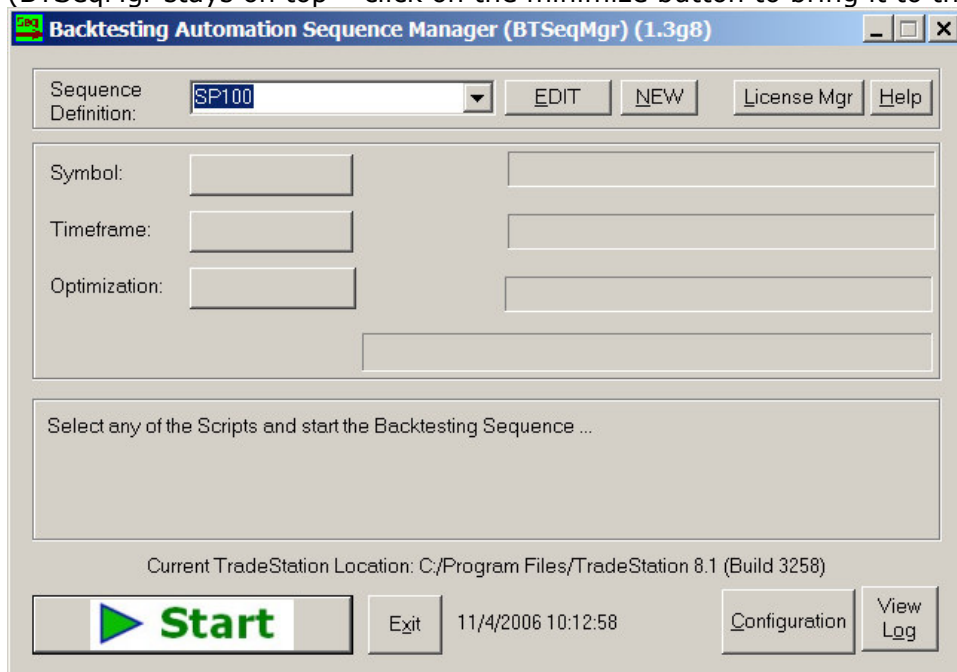
You will see the welcome message box (which appears only the first time you run BTSeqMgr) click OK to start the import of the BTSeqMgr sample strategy (RSISample) into TradeStation:



While you see the initial main BTSeqMgr window – TradeStation will start the Import Wizard; (you have to login to TradeStation first!) - click on NEXT and follow the instructions:



The installation is now complete - return to the main BTSeqMgr window.
(BTSeqMgr stays on top – click on the minimize button to bring it to the background)



Importing the Sample Workspace logic

It is important for the samples (DJ30 and SP100) to run successfully to import the sample workspace logic. This is usually done when you first open BTSeqMgr, but if you did not open TradeStation prior to starting up BTSeqMgr, you can also import the logic later (but BEFORE you run the DJ30 or SP100 sequences) for the sample workspace via:

Start/Programs/Backtesting Automation Sequence Manager (BTSeqMgr)/Import Sample Logic into TradeStation

To open the Sample workspace:

Start/Programs/Backtesting Automation Sequence Manager (BTSeqMgr)/ RSI Sample Workspace

Glossary

Entry Point	The point in time (i.e. a bar on the chart) where a new " <u>Position</u> " starts (buy/short)
Equity Curve	A graph showing the accumulated equity of a sequence of positions
Exit Point	The point in time (like a bar on the chart) where an existing " <u>Position</u> " ends (sell/cover)
Gross Profit/Loss	The raw profit or loss of a position before the commissions/fees are deducted
Net Profit/Loss	The actual profit or loss of a position after the fees/fees are deducted
Position	A buy/sell(Long Position) or short/cover(Short Position) pair; which results in a specific "gross profit/loss" (minus the commission/fees)
Strategy Entry Logic	Logic which determines when the strategy starts/reverses a position(buy/short)
Strategy Exit Logic	Logic which determines when the strategy is closing a position (sell/cover)
Strategy Input Graph	A chart showing the average " <u>Strategy Potential</u> " for each input value
Strategy Input Parameter	A list of variables which define the current actual values of parameters used in the strategy in calculations, conditions etc Example: <i>RSILength, OverSold, OverBought;</i>
Strategy Input Permutation	A specific combination of strategy input parameters <i>RSILength=14, OverSold=30, OverBought=70</i> in the search for the best performance - thousands if different permutations can be calculated – each producing a different result.
Strategy Potential	The average profit/loss of all entry points the strategy produced for a given permutation, symbol and timeframe – plotted with elapsed time from entry
Strategy Potential Graph	A chart showing how the " <u>Strategy Potential</u> " develops over time/bars
Trade Frequency Graph	A chart showing the number of trades(long/short/all) for each parameter
Trading Strategy	logical steps which produce "Entry Points"(Buy/Short) and "Exit points" (Sell/Cover or Reverse)

Apr 15th, 2008