

## **Revision Notes for Tradex**

Apr 18, 2021

**NOTE: If you're upgrading from a previous version, you will probably have to trash the Tradex Preferences file in the System Folder, or you will get a message stating that "Tradex is corrupted."**

### **1.0**

Original version

#### **1.0.1 10 January 1994**

- Better identification of Macintosh model and colour capabilities.
- Import and export (Save, Load and Merge) of tab-separated files with proper dates to enable import/export of Excel data files.
- Recalculation of min/max values on closing of data update window.

#### **1.0.2 28 April 1994**

- Colour icons.
- Minor changes to be compatible with the Recoder application.

#### **1.0.3 16 May 1994**

- Removed various "features" that were potentially causing problems on some Macs. These features were internal and do not affect the application as far as the user is concerned.
- Tradex now stores the preferences file in the Preferences folder under System 7. For some reason this seemed to

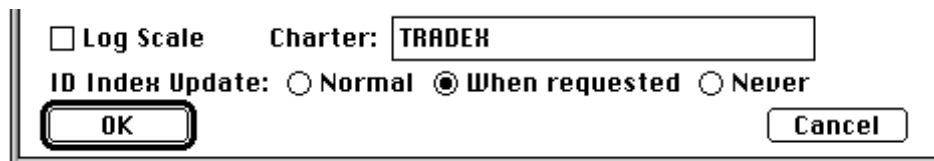
worry and/or confuse a number of users.

#### 1.0.4 21 June 1994

- Some internal changes to try and alleviate user-experienced bugs. Still problems with System 7 file management. Unfortunately the solution is a **major** fix, which I can't do right now!
- Bug with printing data window (only one page would print) fixed.

#### 1.0.5 6 July 1994

- By popular demand, the Preferences dialog (**Preferences...** in the **File** menu) now has an option to suppress ID Index updates. The options appear at the bottom of the dialog:



The **Normal** option behaves as in previous versions (i.e. changes to files or a new day will cause an update. The **When Requested** option will only do an update if the **Update ID Index** item in the **History** menu is checked. The **Never**

option will suppress all attempts to update the index. If no ID Index file exists, Tradex will rebuild it regardless of which option is selected.

**Note:** If you create new history files, update their parameters (especially the ID#), or mess around with the history file folders in the Finder, you could run into problems if you have the **When Requested** or **Never** options selected. You have been warned!

- Cancelling the **Load Data** or **Merge Data** operations no longer cause a bomb.

### **1.0.6 3 August 1994**

- Some internal changes to try and alleviate user-experienced bugs.
- Trivial cosmetic changes.

### **1.0.7 11 August 1994**

- Changed to enable CR, LF or CR/LF at end of lines in update files. This should not affect most users, unless they're constructing their own update files.
- Removed the bug that causes Tradex to die or hang up when run the second time on a new computer without an ID# Index file having been created the first time. This is probably the cause of a lot of problems that first-time users have experienced. Unfortunately it only showed up when debugging was off, so I had problems tracking it down before. If Tradex didn't work on one of your Macs before, try it again - you might just be lucky!

### **1.0.8 12 August 1994**

- Fixed the volume selector problem. You should now be able to select the volume for thumbnails, portfolio updates,

etc. (if you have more than one volume mounted)

- The thumbnails problem where the entire stock was not being displayed, even though *All* was selected in Preferences has now been fixed.

### **1.0.9 27 August 1994**

- A bug was fixed that prevented Tradex running on Macs without Color QuickDraw (caused an “unimplemented trap” error). Such older machines include Mac Plus, Mac SE, etc.

### **1.1.0 12 September 1994**

- A bug was fixed that prevented the user from viewing and manipulating non-daily (e.g. weekly) data. The problem involved an incorrect calculation of dates, and might cause other (as yet un-noticed) problems to go away as well. Note that you can't have version 1.0.10, so I had to increment the minor version number.

### **1.1.1 15 September 1994**

- Bug fixed that caused last point of some thumbnail charts to be drawn off scale.
- Bug fixed that caused strange values to be displayed on thumbnail charts if the history file contained no data.
- Minor changes to improve the display of large numbers.

- Bug fixed that caused the maxima and minima to be incorrectly computed when a stock split was performed, causing some problems with displaying thumbnail charts.
- Note: You can check (and repair) bad maxima and minima by loading the “offending” history data and performing a **Check Data** function (**History** menu) and scrolling to the last window. This function has been changed to do the repairs automatically.

### 1.1.2 20 September 1994

- Voice output changed to the latest Text-To-Speech manager. The original MacInTalk (which was somewhat flakey) will no longer function and will be ignored, the new Speech Manager with MacinTalk 2 and/or MacinTalk Pro will. I realise that most of you either didn't know or didn't care about this feature (in the About Tradex window), but I had one user who sat and listened to the latest downloaded stock prices while he was eating breakfast!
- Fixed a problem that caused moving averages to be computed with all “unknown” data after an “unknown” data point in the original data.
- Fixed a problem that was causing inaccuracies in the Thumbnails window.
- A small amount of reorganisation in the Preferences dialog (**Preferences...** in the **File** menu) .
- A new Preferences item has been added to enable more accurate Thumbnails to be drawn. The **Accurate** check box will plot the thumbnails on a linear time scale and gaps will be left where no data is available. If the check box is left unchecked then the data points are compressed and the gaps are omitted (as before). Note however that

the “accurate” method is more computationally intensive and the Thumbnails window takes longer to be drawn. Warning: the “accurate” method *might* be a bit flakey on weekly data.

### **1.1.3 4 October 1994**

- What I didn't mention in the 1.1.2 changes, was that I had made a change so that instead of deleting the preferences if I made a small change to the format, Tradex would preserve the old preferences. Unfortunately (because I never had a chance to test properly) I didn't take into account the users that are either (a) new or (b) make a habit of trashing their preferences each time I post an update. This doesn't work any more, because of a bug! This version fixes that problem. For those of you experiencing problems (e.g. bombs when you try and compute a moving average, etc.), this version will make you smile again. For those who noticed nothing, upgrade anyway. Sorry for the inconvenience.

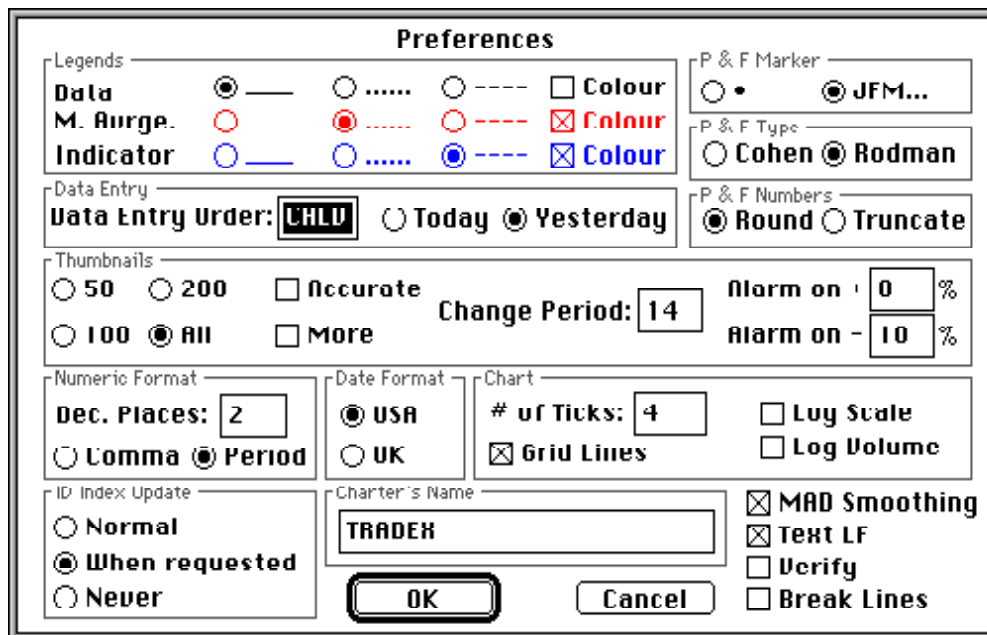
### **1.1.4 4 November 1994**

- Load/Merge history data can now handle data with a decimal comma (e.g. 56,6) as well as a decimal point (e.g. 56.6).

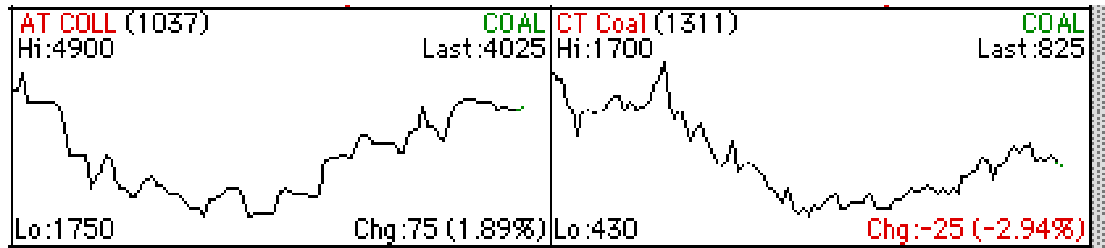
### **1.1.5 19 November 1994**

- **Happy Note:** Tradex has now been tried out on a PowerMac and appears to show no problems on that platform, although it's not PowerMac-native yet. It also appears to work under System 7.5, and is apparently significantly faster - especially on those annoying ID Index updates. Thanks to the users who reported these findings.

- A fair amount of "cosmetic" tidying of various dialog boxes has been done. This makes them somewhat less ugly, but doesn't change their functionality (except where noted in other Version 1.1.5 changes below). I am not currently planning to update the manual with screen shots of the new dialogs - it should be fairly obvious what has been done.
- An addition has been made to allow you to inspect the changes in close price on the thumbnail charts. The **Preferences** dialog has been rearranged and changed to allow this:

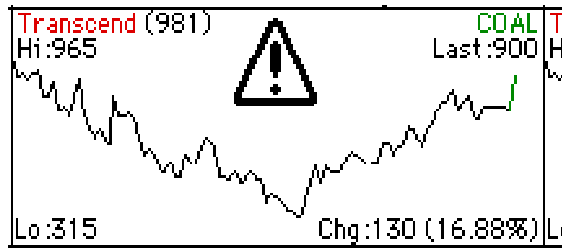


The thumbnails **Change Period** is the period over which the change is to be monitored (in this case 14 working days - for daily data). Tradex computes the difference between the latest close price and the close price 14 days ago (in this case) and displays that absolute difference on the thumbnail chart, together with the relative difference (as a percentage):

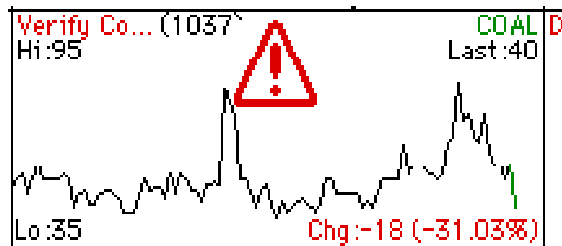


The change is displayed in red if the change is negative. The **Alarm on +** value can be set to a percentage value (in the above case: 8%). When the relative change exceeds this value, the thumbnail chart is "stamped" with a black alert icon:





Similarly the **Alarm on** - value will cause an "alarm" when the change falls below the value (in the above case: -10%), and the thumbnail chart is "stamped" with a red alert icon:



The alerts can be individually turned off by setting the values to zero.

- The thumbnail **More** option in the Preferences dialog above, if set, allows more thumbnails to be displayed on the screen. Without this option set, on a typical 640 by 480 screen, 5 rows by 3 columns will be displayed. If the option is set, 6 rows by 5 columns will be displayed (together with smaller font sizes and lower resolution, of course).
- All the functions in the **Oscillators** sub menu of the **Operations** menu now have a Scale factor field. This is a simple multiplication factor on the final value to make the chart limits larger so that if your data has large values you don't get a "flat" line at zero. Of course, you can still use the Scale operation, but this built-in factor removes the need for an extra step.
- The **Moving Average** dialog now has a smoothing factor

selection (for exponential smoothing only) that allows the factor to be  $2/(n-1)$  (the previously used value),  $2/n$  (as used by Back Trak),  $2/(n+1)$  (as used by Compu Trac), or a value chosen by the user (0.01 - very smooth, 0.9 - not very smooth).  $n$  is the number of specified time periods. The formula used in exponential smoothing/moving averages is (for what it's worth):

$$x = (c - xp) * k + xp$$

where  $x$  is the next smoothed value,  $xp$  is the previous smoothed value,  $c$  is the current data value (e.g. close price) and  $k$  is the smoothing factor.

- The **Moving Average Convergence-Divergence** (MACD) indicator can now be calculated (**Moving Average** submenu of the **Operations** menu). A description of this indicator is given below. A dialog is presented that looks like this:

**Moving Average Convergence-Divergence**

Data Item		Result	
<input checked="" type="radio"/> Close	<input type="radio"/> Volume	<input checked="" type="radio"/> MACD	<input type="radio"/> M.A. #1
<input type="radio"/> High	<input type="radio"/> Low	<input type="radio"/> Signal	<input type="radio"/> M.A. #2

<table style="width: 100%;"> <tr> <td style="width: 50%;">M.A. #1:</td> <td style="width: 50%; text-align: center;">Period</td> </tr> <tr> <td></td> <td style="text-align: center;">Smoothing</td> </tr> <tr> <td></td> <td style="text-align: center;">0.75</td> </tr> <tr> <td>M.A. #2:</td> <td style="text-align: center;">12</td> </tr> <tr> <td></td> <td style="text-align: center;">0.15</td> </tr> <tr> <td>Signal:</td> <td style="text-align: center;">9</td> </tr> <tr> <td></td> <td style="text-align: center;">0.20</td> </tr> <tr> <td></td> <td style="text-align: center;"><input type="radio"/> Use</td> </tr> <tr> <td></td> <td style="text-align: center;"><input checked="" type="radio"/> Use</td> </tr> </table>	M.A. #1:	Period		Smoothing		0.75	M.A. #2:	12		0.15	Signal:	9		0.20		<input type="radio"/> Use		<input checked="" type="radio"/> Use	<input type="button" value="OK"/> <input type="button" value="Cancel"/>
M.A. #1:	Period																		
	Smoothing																		
	0.75																		
M.A. #2:	12																		
	0.15																		
Signal:	9																		
	0.20																		
	<input type="radio"/> Use																		
	<input checked="" type="radio"/> Use																		

The result is usually MACD (the "second oscillator" mentioned below), but you can choose to compute the other components as well. You can also choose whether you want to compute the exponential moving averages by specifying the period or by specifying the smoothing factor (which is basically  $2/(period+1)$ ), by selecting the relevant Use button.

### **The Moving Average Convergence-Divergence Trading Method**

*(partially extracted from The Encyclopedia of Technical Market Indicators, Robert W. Colby & Thomas A. Meyers, Dow Jones-Irwin 1988, Page 281)*

The Moving Average Convergence-Divergence Trading Method (MACDTM) is a price momentum indicator developed by Gerald Appel. It is an oscillator based on the point spread difference between two exponential moving averages (EMA) of the closing price - a slower, 26-week EMA (*MA#1*) with a smoothing constant of 0.075, and a faster 12-week EMA (*MA#2*) with a smoothing constant of 0.15. This difference itself is smoothed by an even faster 9-week EMA (*Signal*) with a smoothing constant of 0.2.

This called the Signal Line. Appel further calculates a second oscillator by subtracting from the first difference its own 0.2 EMA signal line (*MACD*).

The simplest possible MACDTM decision rule is: Buy when the second differential oscillator (*MACD*) is positive (above zero), and sell and sell short when the second differential oscillator (*MACD*) is negative (below zero).