

AutoClock - Version 1.3.1

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• What is AutoClock?

AutoClock is an application and a system extension that keeps your Macintosh's clock right. As a matter of fact, this clock has the tendency to deviate from the standard time every day, which can accumulate to minutes or dozens of minutes after one year.

The **AutoClock** application allows you to:

- set the clock by calling a time server in Washington D.C., if you have a modem,
- set the clock manually from an accurate source (for exemple a vocal time server),
- display a logbook of every clock changes that occurs on your Macintosh, whether they are done with **AutoClock**, or with another application (the **General** control panel, or the **Clock** desk accessroy for example),
- compute the mean clock deviation of the Macintosh's clock for a 24-hour period, using data recorded in the logbook,
- display the date and time in almost any country of the world.

The system extension **AutoClock Extension** can:

- periodically open the **AutoClock** application according to your schedule, to perform an automatic clock adjustment by calling the time server, without any user intervention,
- keep the Macintosh's clock continually right, by adjusting it using the computed mean clock deviation,
- detect any clock changes done by any other programs, and record them in the application's logbook.

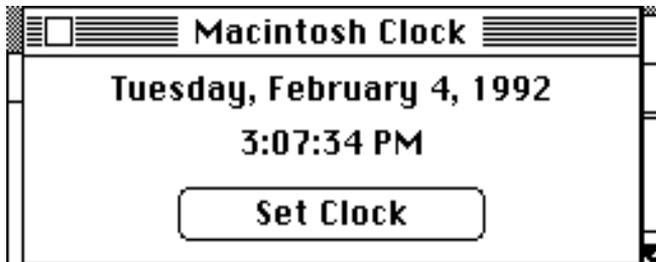
• Compatibility

The **AutoClock** application and **AutoClock Extension** work on any Macintosh, with system 6.0.5 or later, including system 7.0. **AutoClock** is 32-bit clean, and has balloon help if used with System 7.0.

To set clock by calling the time server, **AutoClock** needs 1200-bps Hayes compatible modem (Bell 212A standard). Extra serial ports compatible with the Communication Toolbox are recognized.

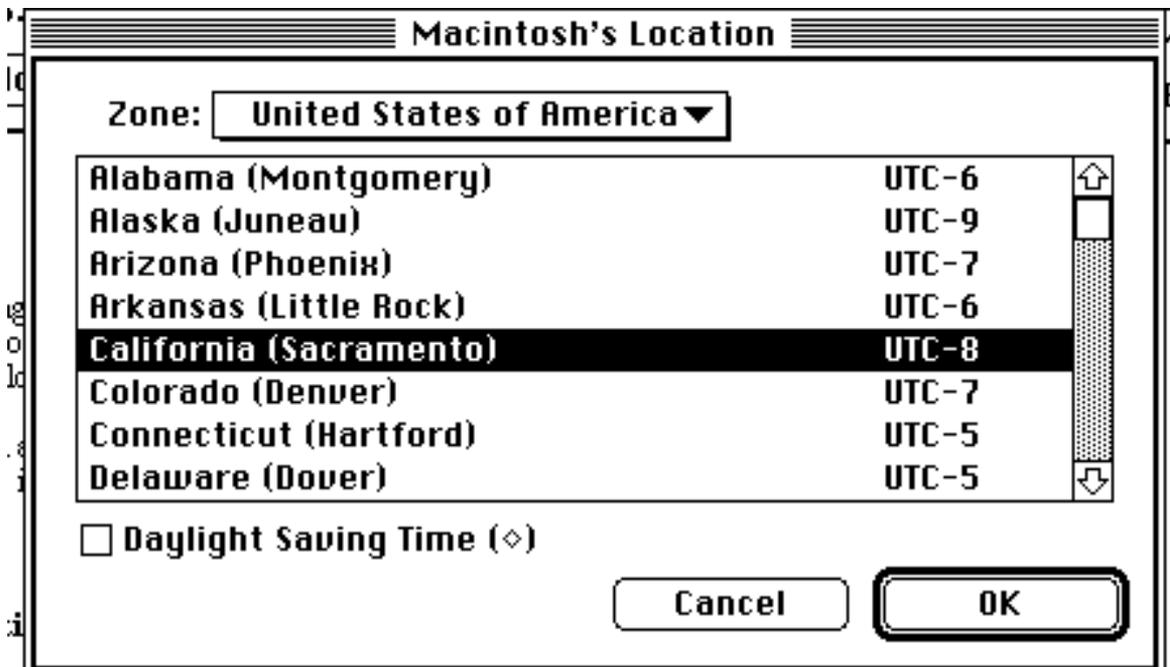
• Installation

1. Copy the **AutoClock** application anywhere on your disk.
2. Drag the **AutoClock Extension** file in your system folder. If you are using System 7.0, the Finder will place it in the extension folder of your system folder.
3. Restart your Macintosh.



After opening the **AutoClock** application, a window shows the current date and time of your Macintosh. Before your first connection, check the informations in the **Macintosh's Location** and **Communication Settings** dialog boxes, as explained in the following sections.

The Macintosh's Location dialog box

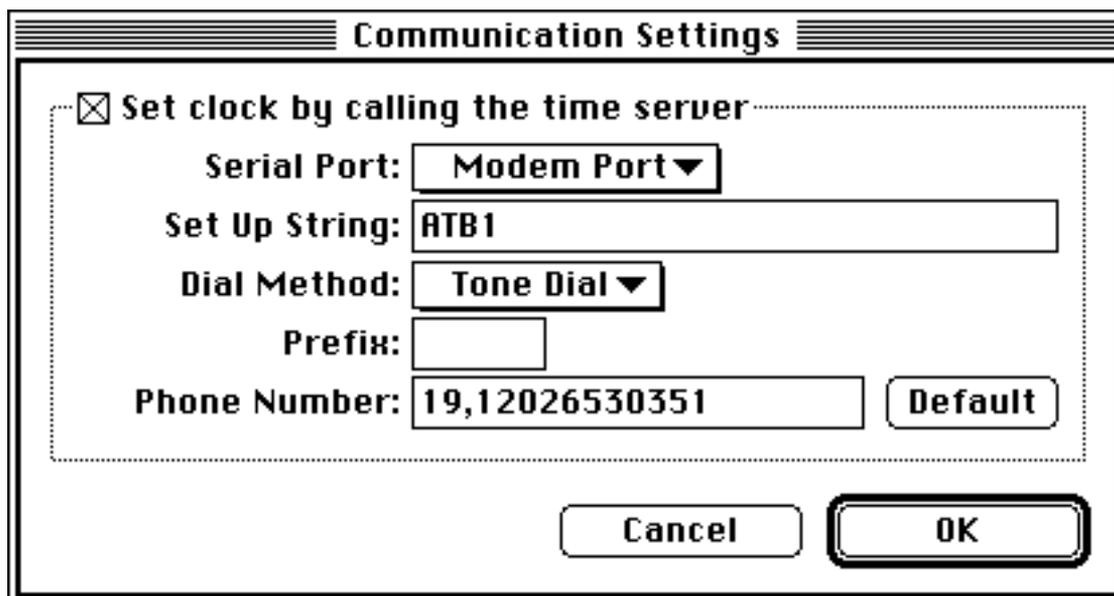


1. Open the **Macintosh's Location** dialog box by choosing **Macintosh's Location...** in the **AutoClock** menu.
2. Use the pop-up menu to choose the world region you are in.
3. Then select your state or country in the list below the menu.
4. Check the **Daylight Saving Time** box if necessary.
5. Click **OK**.

If you changed the state of the **Daylight Saving Time** box, **AutoClock** will ask if you want to reflect the change in the Macintosh's clock, by adding or subtracting one hour.

Changes are automatically recorded in the **AutoClock Preferences** file in your system folder, or in the preference folder if you are using System 7.0.

The Communication Settings dialog box



1. Open the **Communication Settings** dialog box by choosing **Communication Settings...** in the **AutoClock** menu.
2. If you are using a 1200-bps modem (Bell 212A standard), uncheck the **Set clock by calling the time server** box. Otherwise:
 - a. Check the **Set clock by calling the time server** box.
 - b. Change the current settings if necessary for your specific configuration. If you are unsure about what these options mean, don't change them. Their default settings should work in most cases.
 - c. The **Set Up String** field must contain the initialisation string required by your modem for establishing a 1200-bps connection, or any specific Hayes commands required by your modem. Usually, you will leave this field empty. If the connection can't be established, you probably have to enter Hayes commands (in the form ATB1X4 for example) to correctly configure your modem. Check your modem manual.
 - d. Some phone lines are not direct, and you usually have to dial one or more number before being able to dial a normal phone number. If this is the case for your installation, enter these numbers in the **Prefix** field.
 - e. The **Phone Number** field must contain the phone number of the U.S. Naval Observatory server, which is **12026530351**. Click the **Default** button to set it. If you live in Washington D.C., this is a local call, and you need to get rid of **1202**. If you live outside U.S.A., you need to insert an international prefix for joining U.S.A. followed by **2026530351**.
3. Click **OK**.

Changes are automatically recorded in the **AutoClock Preferences** file in your system folder, or in the preference folder if you are using System 7.0.

• How to set the clock?

Setting the clock by calling the time server

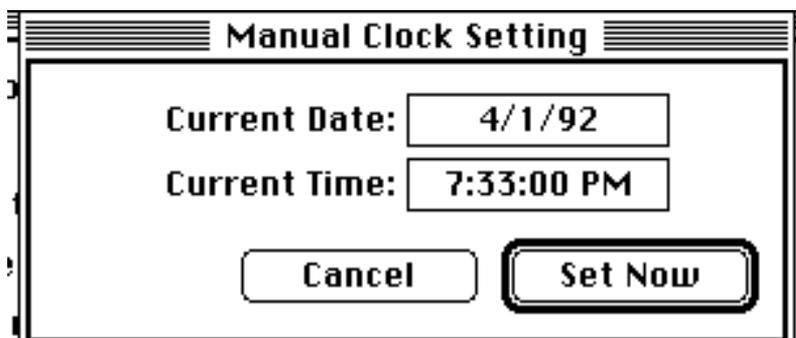
If you have a 1200-bps modem using the Bell 212A standard, and if you set settings correctly in the **Communication Settings** dialog box, you can set the Macintosh's clock by calling the time server of the Naval Observatory of Washington D.C. This phone call lasts only a few seconds.



1. To initiate the connection, click the **Set Clock** button, or choose **Set Clock** in the **AutoClock** menu.
2. From there, the entire procedure is automatic: modem configuration, number dialing, reception of time data, and hanging up. If the operation is successful, it is recorded in the logbook.
3. If the line is busy, try again later.
4. If the connection has failed, make sure the modem is on and correctly connected to your Macintosh. Check that the phone number is correct for your location. You may also have to change the modem settings. In this case, check your modem manual, and try different settings. Also check that you are not running any other communication program at the same time; it may interfere badly with **AutoClock** operations.

Setting the clock manually

Whether you have a modem or not, you can also set the clock manually, using an accurate time source, for example a voice time server, the radio, or your watch. The advantages of using **AutoClock** instead of the **Clock** desk accessory or the **General** control panel for this task, is that **AutoClock** automatically records these changes and uses them to compute the mean clock deviation, and continually adjust the clock based on this deviation.



1. Choose **Set Clock Manually...** in the **AutoClock** menu, or, if you have deactivated the settings in the **Communication Settings** dialog box, click on the **Set Clock** button.
2. Type the current date and time, plus a few seconds, in the corresponding fields.
3. When the entered time is arrived, click very quickly the **Set Now** button. The clock is changed, and the operation is recorded in the logbook.

• Automatic clock adjustment

AutoClock can keep the Macintosh's clock right automatically, without any user intervention. First, you can schedule periodic and automatic time server clock settings. **AutoClock Extension** will take care of opening the **AutoClock** application when scheduled, whether you are present or not, if you Macintosh is on. Then, using the computed mean clock deviation, **AutoClock Extension** can continually adjust the clock, to keep it always right.

Automatic Clock Adjustment

Adjustment by Time Server

Call time server automatically
 every **weeks** , the **Wednesday**
 at

If failed, try again
 times, every **minutes.**

Continuous Adjustment

Adjust clock continuously using the computed mean clock deviation

- Choose **Automatic Clock Adjustment...** in the **AutoClock** menu to display the above dialog.

Adjustment by Time Server

1. Check the **Call time server automatically** box to activate this function.
2. Type the number of periods and choose their type (days, weeks or months) as appropriate. For weeks, also choose the day of the week. For months, type the day of the month.
3. Type the time at which you want the connection to occur.
4. For many reasons, the scheduled connection may fail. Check the **If failed, try again** box if you want **AutoClock** to

try again the connection. Type the maximum number of retries, and the number of minutes between each retry.
5. Click OK.

At the scheduled time, **AutoClock** will automatically be opened (unless it is already open), and will initiate the connection. After the connection is finished, it will automatically quit (unless it was already open). If it failed and if you asked it to retry, it will start again after the specified period of time.

If the Macintosh is off at the scheduled time, the connection will take place the next time the Macintosh is started.

To avoid possible problems, it's best to schedule the connection at a time when your Macintosh will not be doing time/memory consuming tasks. Also remember that if another communication program is opened at the specified time, the connection will probably fail.

Every successful connection is recorded in the logbook window. It also shows the date and time of the next scheduled clock setting connection.

Continuous Adjustment

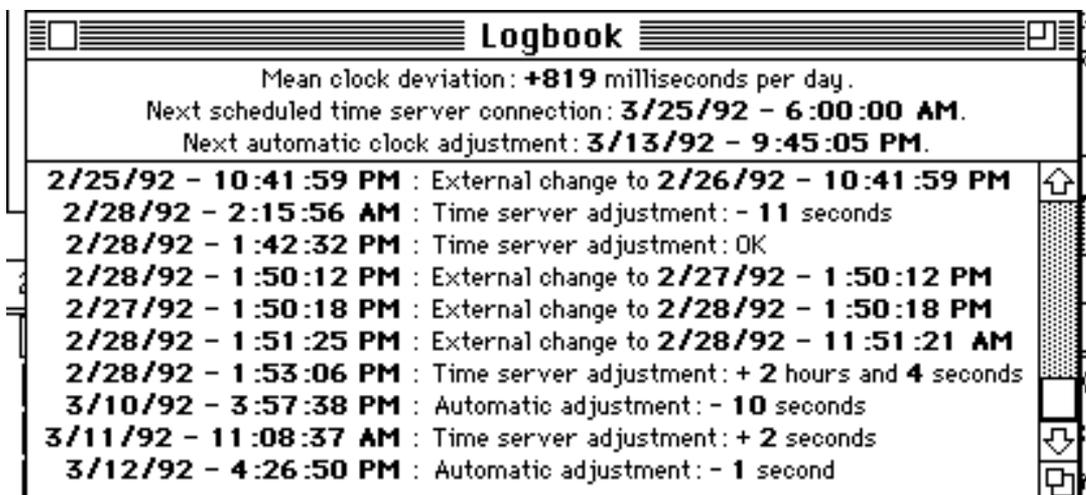
- Check the **Adjust clock continually using the computed mean deviation** box to activate this function.

Using this mean deviation, **AutoClock** will automatically adjust the clock by one second steps. When starting up the Macintosh, **AutoClock** will make up for lost adjustments that have been missed when the Macintosh was off.

Every adjustment is recorded in the logbook window. It also shows the date and time of the next adjustment.

• The Logbook

All clock setting is recorded in the logbook. To display it, choose **Logbook** in the **AutoClock** menu.



This window records and displays every clock settings, continuous adjustment, daylight saving changes, and every

external change to the Macintosh's clock (for example by the **Clock** desk accessory, or the **General** control panel).

Using these informations, **AutoClock** computes and displays the mean clock deviation, used to adjust it continuously, provided that there is at least two successful clock settings. To achieve a good precision with the mean deviation and automatic clock adjustment, the interval between the first and last clock settings must be wide enough.

The date and time of the next connection and next adjustment are also shown, if these options are active.

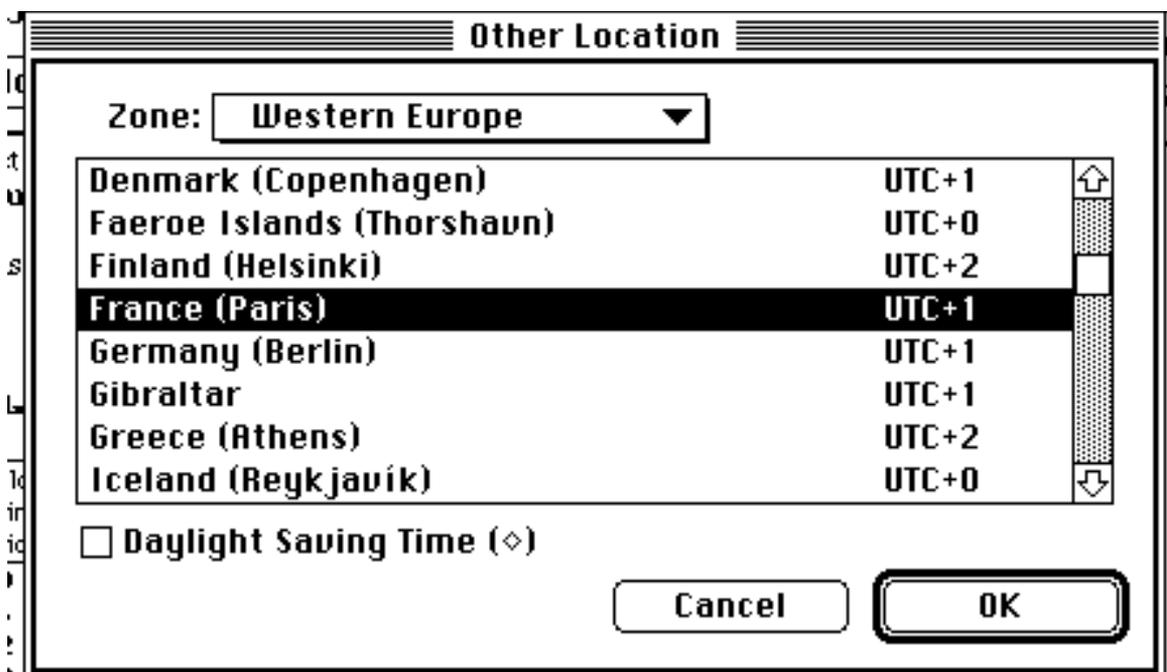
In some situations (clock battery change for example), it may be necessary to discard some or all entries in the logbok window:

- Choose **Reset Logbook** in the **Windows** menu to discard all data.
- Select lines to delete (using the **Shift** key to make multiple selections), and choose **Clear** in the **Edit** menu.

Note that this will change the mean clock deviation and the continuous adjustment of the clock.

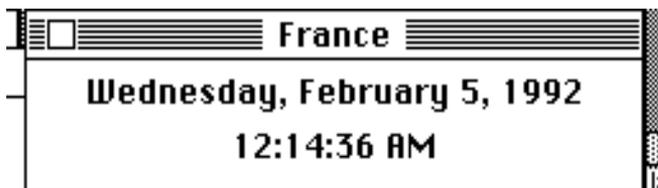
• Worldwide time

You can open any number of additional clock windows showing the time in the state or country of your choice.



1. Choose **Other Location...** in the **Windows** menu.
2. Use the pop-up menu to choose the world region you want.
3. Then select a state or country in the list below the menu.
4. Check the **Daylight Saving Time** box if necessary.
5. Click **OK**.

The ◇ symbol appears next to the window's name if daylight saving time has been activated.



The window and its position are automatically saved in the preference file. The next time you use **AutoClock**, every clock window will be opened at its previous position.

• How to contact me...

If you have problems using **AutoClock**, if you discover bugs, or if you simply want to tell me you like/dislike this software, you can write me at the following address:

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64200 Biarritz
FRANCE
Fax: **+33-59-24-63-26**

or by electronic mail at:

CalvaCom: **JPG11** or **jpg11@calvacom.fr**
CompuServe: **76667,3075** or **76667.3075@compuserve.com**

If you want a quick answer, please use my CalvaCom e-mail address (I check it daily) rather than my CompuServe address (I check it weekly).