About EarthTime Plug-in

EarthTime Plug-In for Netscape Navigator 2.0 brings you time information at a glance for cities around the world.

You specify eight cities, and EarthTime displays their clocks, with current time and date. Symbols identify your Home clock and the Local clock where you currently are.   Another symbol lets you know when daylight saving time is in effect. A colorful world map lets you see where the sun is rising and setting, and follow the seasonal changes.

Other features include:

▪   Essential facts about each of the 400+ cities in the EarthTime database, including useful information such as local language and currency, city and country telephone codes, and more.   Some of this information can be updated.
▪   Centering function lets you can center the map around a city of your choice, and display its name even if it is not included in the EarthTime database.
▪   Internet Time Synchronizer updates your computer's system clock to the exact time using any of the Internet time servers.
▪   A powerful conversion tool lets you convert among the standard units of measure, and among units of physics, electronics, and other sciences.
▪   Time differences display shows a time comparison table for any two cities when you drag and drop one clock on another.
▪   Clocks can be rearranged by dragging-and-dropping.

EarthTime Settings

The Settings dialog box appears the first time you start EarthTime.

EarthTime displays clocks for eight different cities.   Choose the cities you want in this dialog box. You can easily change your selections later.   **NOTE:** you must complete the selection of these cities before EarthTime can run.

Dialog Box Options

Country
Normally set to All Countries, so all cities in the EarthTime database appear. To narrow down the city list, choose a country from the drop-down list. Only cities from that country will appear in the City list.

City
Click in the City field and type the first few characters of a city to find it. Then click the city name and click one of the right arrows to move it to the Local City, Home City, or Other Cities list.   If necessary, you can select a city in the Other Cities list and click the left arrow to make room in the list for a new city of your choice.

Local City (my current location)
The Local City is normally the same as your Home City. When you travel, you change the Local City to your current location. When you do, your computer's system time is reset to match the Local City time, and the Windows Time Zone dialog box opens so you can specify the Time Zone. A person icon appears next to the Local City.

Home City (my home location)
The Home City is where you live.   A home icon appears next to the Home City.

Six/Seven other cities of interest to me
Select the remaining cities whose clocks you want displayed in EarthTime. If your Home City and Local City are the same, you can choose seven others; if they are different, you can choose six additional cities.

Select a Different City

The Select a Different City command changes the city in the indicated time panel.   Right-click the panel you want to change, and choose Select a Different City from the menu.

Dialog Box Options

Country
Sets the country from which to show cities in the City list below.

City
Sets the city to display in the City panel.

Facts about the City
Shows the Facts about the City dialog box.

Facts about the City

The Facts about the City command displays information about the selected city.   Right-click the city panel, and choose Facts about the City from the menu.   The information includes:

- City
- Country
- Country Phone Code
- City Phone Code
- Language
- Currency
- Population
- Latitude and Longitude
- Time zone
- Sun, moon, and other almanac information.

You can change the **Date** setting to see the sunrise, moon, and other information for the current city for any date you select.   For example, if you want to know when daylight saving time starts in Sydney, Australia, in 1997, choose Sydney, open the Facts About dialog box and change the year in the Date field to 97.

Modify City Information

The Modify City Information dialog box lets you change some of the information stored about each city in the EarthTime database. This feature lets you update certain parameters that might change from time to time.

Right-click a city and choose Modify City Information to open this dialog box.

Dialog Box Options

Phone Code
You can change the Area Code and Country Code for any city.

Standard Time
Set the standard time difference from Greenwich Mean Time. For example, the East Coast of the U.S. (Eastern Standard Time) is 5 hours earlier than GMT.

Daylight Saving Time
You can change how daylight saving time is determined for a city. Specify the dates when it starts and ends, or the means of determining it (such as: "Begins at 2 a.m. on the 1st Sunday of April").

Miscellaneous
Change values as desired for primary language, currency, and population of the city.

Make (city) the Map Center

The Make (city) the Map Center command lets you shift the map to the left or right to center the current clock.   Right-click a city panel and choose Make (city) the Map Center.

Note   You can also center any location you point to on the map.   Move the mouse pointer to the location you want to center, and right-click. Click the Center Map Here choice. The pointer location is centered in the window.

Choose as Local Clock

The Choose as Local Clock command sets another city as your Local Clock city.   Right-click the city panel where you are currently located, and click Choose as Local Clock from the menu.

This option updates your computer's system clock to reflect the Local City time when you travel to another time zone. You can keep a different city set as your Home Clock city.

After you change the Local City, the Windows Date/Time dialog box opens so you set the time zone. Click the Time Zone tab, and click on the map where your new Local City is located.   Note that some of the time zone bands on the map contain local variations; for example, clicking on Arizona on the map selects Arizona time, which is different from Mountain Standard Time in not recognizing daylight saving time.

A person icon appears on the Local Clock. When daylight saving time is in effect for a city, a diamond
 appears on its clock.

Choose as Home Clock

The Choose as Home Clock command sets another city as your Home Clock city. This city is set when you install. Changing this city changes the Home Clock city displayed in the Time Difference dialog box.

A home icon appears on the Home Clock. When daylight saving time is in effect for a city, a diamond
 appears on its clock.

Clock Setup

The Clock Setup command displays a dialog box where you can set name, color, and time options for the selected city.   Right-click a city panel and choose Clock Setup from the menu to use this feature.

Dialog Box Options

Naming

You can display the city/country name supplied by EarthTime, or type a different name that you want displayed.   This lets you display your city if it is not in the database.   **Note:** the Facts about the City will still refer to the city in the database, not the city whose name you type in the Alternate Name box.

Colors

Select the Text and Background color for the selected city panel. Once you choose the colors, you can click Apply Colors to All Clocks to use the colors for all clocks.

Display Seconds

Check the box if you want to see seconds for the selected city. Uncheck it to show only hour and minute.

Time Difference

The Time Difference command shows the time difference between two cities. Right-click a city and choose Time Difference to see the time difference between it and the Local Clock city.

Note To see the Time Difference for any two of your eight displayed cities, drag from the clock numerals of one city to the clock numerals of the other.

Dialog Box Options

City 1

By default, shows the selected city. You can change this city by clicking the Browse Cities button. (Changing the city in this dialog box does not change the city displayed in EarthTime.)

City 2

By default, shows your Local Clock city. You can change this city by clicking the Browse Cities button. (Changing the city in this dialog box does not change the city designated as your Local Clock city in EarthTime.)

Difference

Displays the time difference between City 1 and City 2.

Comparison

Shows a graphical hour-by-hour comparison between the two cities of every hour of the day.

Switch Cities

Switches City 1 and City 2 in the Comparison.

Conversions

The Conversions command lets you convert between English and metric measurement, or between numerous other units of standard or scientific measurement.

To open the Conversions window, right-click a city panel and choose Conversions.

Dialog Box Options

Categories
Specify the category of units you want to convert, such as length, area, capacitance, weight, mass, luminance, or other category.

From
In the Value box, type the number you want to convert.

Specify the Unit you are converting from by selecting it from the drop-down list.

To
In the Unit box, specify the unit you are converting to.

Read the converted quantity in the Value box.

Precision
You can set the number of significant digits in the Precision box.   Type a number between 4 and 12, or use the arrows to change the number.

Conversion example

To convert 75 square kilometers to acres,

1. Choose Area as the Category.
2. Type 75 in the Value box.
3. Select square kilometers as the From unit.
4. Select acres as the To unit.
5. Read the answer: 75 square kilometers = 18532.8 acres. This result has a precision of 6 significant digits.

Rearranging Cities

You can change the order of cities in EarthTime using drag-and-drop.

To switch the position of two cities, drag the city name from one of the displayed cities to another.

Note Dragging from one clock's time display (rather than the city name) to another opens the <u>Time Difference</u> dialog box, where you can view the time difference between the two cities.

About Internet Time Synchronizer
 Related topics

Internet Time Synchronizer precisely synchronizes your computer's system clock with Internet time servers, ensuring that your system time is accurate and reliable.

Internet Time Synchronizer works by monitoring your dial-up connections and setting the time once you are connected for any other purpose.   If you periodically connect to check your mail, it gets the correct time in the background.

Internet Time Synchronizer uses the integrated services of Windows 95 to connect to Internet and to get your time, time zone, and daylight saving time information. It's virtually foolproof to set-up and use.

If you have the Timex Datalink, you can set your watch from your computer, so it, too, is always accurate.

Some of the key features of Internet Time Synchronizer:

- Integrated with Windows 95 time zone and daylight saving time features. Requires no further settings.
- Does not call long distance time signal numbers. Gets the time over Internet.
- Does not make unnecessary connections to your Internet Service Provider.
- Integrated with built-in Dial-up Networking, so it uses your existing Dial-up Networking and TCP/IP settings, requiring no further settings.
- Fully compatible with MS Exchange.

Setting Up Internet Time Synchronizer

Right-click a city and choose Internet Time Synchronizer | Time Synchronizer Setup… to open the Setup dialog box.

Setup options

Click a subject below for information about it.

Direct TCP/IP connection

Dial-up Connection

Time Server

Synchronize Now

If Connected, synchronize System Time every __ minutes

Check for Internet connection every __ seconds

If not connected, Dial up and synchronize every __ hours

Results

If you have a direct network connection to the Internet, or if you want to use a local time server on your LAN, check this box. If this box is checked, some of the scheduling parameters are unavailable. Only the "If connected, synchronize every" parameter is available and meaningful.

If you use a modem, this is the connection you want Internet Time Synchronizer to monitor and use when connecting to Internet. Choose one of the connection choices from the list. You must have already created a Dial-up Network connection in Windows 95 before you can use Internet Time Synchronizer.

The name of the Internet time server you want to use. Click the arrow, and choose one from the list.

Click this button to manually start a connection and synchronize your computer's clock whenever you want. Internet Time Synchronizer dials in accordance with your selected Connection Type. If you are already connected, Internet Time Synchronizer just connects to the time server to get the time. If you want to choose among the time servers by testing them first, you may manually start a connection, and then try out your selected time servers by selecting them and clicking the Synchronize Now button.

Synchronizes the time at the interval you specify while you are connected.   When you first connect, Internet Time Synchronizer checks the time immediately, and thereafter at the interval specified here. Setting this value to 0 causes Internet Time Synchronizer to do a time correction only at the start of a session.

If you have a Dial-up Connection, checks at this interval to see if you are currently connected. If you want to piggyback Internet Time Synchronizer to a quick periodic operation like checking your mail, you should set this value to less than the time it takes your mailer to check your mail once the connection is established. This is typically less than 10 seconds.

If you have a Dial-up Connection but are not connected, Time Synchronizer connects automatically at this interval to reset your system clock. You can disable this feature by setting this value to 0.

The Results panel shows the amount of time correction your computer required the last time synchronization was performed.   If there was a problem connecting to the time server, the error message appears. When an error occurs, the Internet Time Synchronizer icon in the System Tray displays a red **X**. You can double-click the Internet Time Synchronizer icon to see what error has occurred.

Using Internet Time Synchronizer

Depending on how you have set up Internet Time Synchronizer, it can operate silently in the background, or you can have it synchronize your computer's system clock on command.

To request immediate synchronization, right-click a city and choose Internet Time Synchronizer | Synchronize Time Now. Or, if Background Synchronization is active, you can double-click the Time Synchronizer icon ▪ in the System Tray, to synchronize now.   If you open the Internet Time Synchronization dialog box and click Synchronize Now, you can see the results in the bottom panel.

To have Internet Time Synchronizer work automatically in the background, right-click a city and select Internet Time Synchronizer | Background Time Synchronization. Be sure the settings in the Setup dialog box allow synchronization to occur during an Internet session, for example when you are checking your mail.

To change Time Synchronizer options, right-click a city and choose Internet Time Synchronizer | Time Synchronizer Setup.

Frequently Asked Questions

Here are some frequently asked questions. Click the question to see the answer.

Question 1. What is the EarthTime Plug-in?

Question 2. What is the Home City?

Question 3. What is the Local City?

Question 4. Can the Home City and Local City be the same?

Question 5. How many cities can I display simultaneously on the EarthTime world clock?

Question 6. How do I set the initial Home and Local cities?

Question 7. What if my city is not in the EarthTime city database?

Question 8. What are the three icons that I see on some of the clocks?

Question 9. When I change my Local City, why doesn't the Windows Time Zone setting change automatically?

Question 10. Does Internet Time Synchronizer work under Windows NT 3.51?

Question 11. How does Internet Time Synchronizer set the system clock?

Question 12. Is there a world standard for daylight saving time?

Question 13. How do Windows 95 and Windows NT handle world time zones?

Answer to Question 1

EarthTime Plug-in is a special global clock and information program that works with Netscape Navigator. This product requires Netscape Navigator 2.0, and Windows 95 or Windows NT 3.51 or later.

Answer to Question 2

The Home City is your home base where you live or work.

Answer to Question 3

The Local City is where you are now located. If you are using EarthTime Plug-in on a laptop computer and you travel, you should change the Local City to the city where you happen to be.   EarthTime sets your system time to match the Local City time.   When you change Local City, the Windows Date/Time dialog box opens so you can select the correct time zone.

Answer to Question 4

Yes.   In fact, usually they will be the same, unless you are traveling with your computer.

Answer to Question 5
Eight.

Answer to Question 6

When you launch EarthTime for the first time, you see the EarthTime Settings dialog box, where you select a Home City, a Local City and six other cities to display on the world clock.   If the Home City and Local City are the same, you can choose seven other cities to display. EarthTime will not run unless this information has been provided.

Answer to Question 7

If your city is not yet in the database, you must choose the closest city to your location while making sure it is in the same time zone (you can change the name that is displayed for the city, if you want). You can also modify some other facts about the city, such as population, currency, telephone codes, daylight saving time rules, and so on.

Answer to Question 8

The House icon ▪ indicates the Home City, the Person icon

▪ indicates the Local City, the yellow Diamond
◆ indicates that daylight saving time is in effect in that city.

Answer to Question 9

EarthTime does not change the Windows Time Zone automatically, because Windows does not recognize all the time zones stored in the EarthTime database. The Windows Date/Time dialog box opens so you can change the Time Zone manually.

Answer to Question 10

No. Windows NT 3.51 does not include the software libraries required to run Internet Time Synchronizer.

Answer to Question 11

Internet Time Synchronizer uses the time protocol specified in RFC0868 (available from InterNIC) to obtain Universal Time (UTC) from Internet Time Servers. It then adjusts your system clock by offsetting UTC with your Windows time zone setting. This might cause problems for some users, such as those in Nepal and Australia (see Questions 12 and 13).

Answer to Question 12

No, there is no world standard for daylight saving time (DST).   Whether and how to observe DST is decided by governments — national, regional, or local. For example, Australians vote annually on whether or not to observe DST. (In 1996, the population of Perth decided not to observe DST). Furthermore, Australians pick a 3-day weekend where DST goes into effect (+1:00 hour) and another 3-day weekend where they revert back to Standard Time (-1:00 hour).   However, the Windows time zone registry does not permit modifications. EarthTime lets you change the DST information in the Modify City Information dialog box, to handle situations like Australia's.

Answer to Question 13

Windows 95 and Windows NT 3.51 keep the world time zone information in a database in the registry. This database does not include all the world's time zones. For example, Nepal, which is Greenwich Mean Time +5:45, is not part of the Windows time zone registry. Therefore, Windows users in Nepal cannot set their time zone to Nepal.   EarthTime has a separate time zone entry for Nepal that provides the correct time.