

# GetTimeZoneInformation Quick Info Overview Group

The **GetTimeZoneInformation** function retrieves the current time-zone parameters. These parameters control the translations between Coordinated Universal Time (UTC) and local time.

```
DWORD GetTimeZoneInformation(  
    LPTIME_ZONE_INFORMATION lpTimeZoneInformation // address of time-zone settings  
);
```

## Parameters

*lpTimeZoneInformation*

Points to a [TIME\\_ZONE\\_INFORMATION](#) structure to receive the current time-zone parameters.

## Return Values

If the function succeeds, the return value is one of the following values:

Value	Meaning
TIME_ZONE_ID_UNKNOWN	The operating system cannot determine the current time zone. This is usually because a previous call to the <a href="#">SetTimeZoneInformation</a> function supplied only the bias (and no transition dates).
TIME_ZONE_ID_STANDARD	The operating system is operating in the range covered by the <b>StandardDate</b> member of the structure pointed to by the <i>lpTimeZoneInformation</i> parameter.
TIME_ZONE_ID_DAYLIGHT	The operating system is operating in the range covered by the <b>DaylightDate</b> member of the structure pointed to by the <i>lpTimeZoneInformation</i> parameter.

If the function fails, the return value is 0xFFFFFFFF. To get extended error information, call [GetLastError](#).

## Remarks

All translations between UTC time and local time are based on the following formula:

$$\text{UTC} = \text{local time} + \text{bias}$$

The bias is the difference, in minutes, between UTC time and local time.

## See Also

[SetTimeZoneInformation](#), [TIME\\_ZONE\\_INFORMATION](#)

# TIME\_ZONE\_INFORMATION Quick Info Overview Group

The **TIME\_ZONE\_INFORMATION** structure specifies information specific to the time zone.

```
typedef struct _TIME_ZONE_INFORMATION { // tzi
    LONG        Bias;
    WCHAR       StandardName[ 32 ];
    SYSTEMTIME  StandardDate;
    LONG        StandardBias;
    WCHAR       DaylightName[ 32 ];
    SYSTEMTIME  DaylightDate;
    LONG        DaylightBias;
} TIME_ZONE_INFORMATION;
```

## Members

### Bias

Specifies the current bias, in minutes, for local time translation on this computer. The bias is the difference, in minutes, between Coordinated Universal Time (UTC) and local time. All translations between UTC and local time are based on the following formula:

$$\text{UTC} = \text{local time} + \text{bias}$$

This member is required.

### StandardName

Specifies a null-terminated string associated with standard time on this operating system. For example, this parameter could contain "EST" to indicate Eastern Standard Time. This string is not used by the operating system, so anything stored there by using the **SetTimeZoneInformation** function is returned unchanged by the **GetTimeZoneInformation** function. This string can be empty.

### StandardDate

Specifies a **SYSTEMTIME** structure that contains a date and UTC when the transition from daylight time to standard time occurs on this operating system. If this date is not specified, the **wMonth** member in the **SYSTEMTIME** structure must be zero. If this date is specified, the **DaylightDate** value in the **TIME\_ZONE\_INFORMATION** structure must also be specified. Local time translations done during the standard-time range are relative to the supplied **StandardBias** value.

This member supports two date formats. Absolute format specifies an exact date and time when standard time begins. In this form, the **wYear**, **wMonth**, **wDay**, **wHour**, **wMinute**, **wSecond**, and **wMilliseconds** members of the **SYSTEMTIME** structure are used to specify an exact date.

Day-in-month format is specified by setting the **wYear** member to zero, setting the **wDayOfWeek** member to an appropriate weekday, and using a **wDay** value in the range 1 through 5 to select the correct day in the month. Using this notation, the first Sunday in April can be specified, as can the last Thursday in October (5 is equal to "the last").

### StandardBias

Specifies a bias value to be used during local time translations that occur during standard time. This member is ignored if a value for the **StandardDate** member is not supplied.

This value is added to the value of the **Bias** member to form the bias used during standard time. In most time zones, the value of this member is zero.

### DaylightName

Specifies a null-terminated string associated with daylight time on this operating system. For example, this parameter could contain "PDT" to indicate Pacific Daylight Time. This string is not used by the operating system, so anything stored there by using the **SetTimeZoneInformation** function is returned unchanged by the **GetTimeZoneInformation** function. This string can be empty.

### DaylightDate

Specifies a **SYSTEMTIME** structure that contains a date and UTC when the transition from

standard time to daylight time occurs on this operating system. If this date is not specified, the **wMonth** member in the **SYSTEMTIME** structure must be zero. If this date is specified, the **StandardDate** value in the **TIME\_ZONE\_INFORMATION** structure must also be specified. Local time translations during the daylight-time range are relative to the supplied **DaylightBias** value. This member supports the absolute and day-in-month time formats described for the **StandardDate** member.

#### **DaylightBias**

Specifies a bias value to be used during local time translations that occur during daylight time. This member is ignored if a value for the **DaylightDate** member is not supplied.

This value is added to the value of the **Bias** member to form the bias used during daylight time. In most time zones, the value of this member is  $-60$ .

See Also

[GetTimeZoneInformation](#), [SetTimeZoneInformation](#), [SYSTEMTIME](#)