System.Globalization.DateTimeFormatInfo Class

[ILASM]
```
.class public sealed serializable DateTimeFormatInfo
extends System.Object implements System.ICloneable,
System.IFormatProvider
```

[C#]
```
public sealed class DateTimeFormatInfo: ICloneable,
IFormatProvider
```

Assembly Info:

- *Name:* mscorlib
- *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00]
- *Version:* 1.0.x.x
- *Attributes:*
    - CLSCompliantAttribute(true)

Implements:

- **System.ICloneable**
- **System.IFormatProvider**

Summary

Defines culture-specific formats and patterns for **System.DateTime** values.

Inherits From: System.Object

Library: BCL

Thread Safety: This type is safe for multithreaded operations.

Description

System.DateTime values are formatted by the **System.DateTime.ParseExact** and **System.DateTime.ToString** methods according to standard or custom patterns stored in the properties of a **System.Globalization.DateTimeFormatInfo** instance. The standard patterns can be accessed and modified through the associated **System.Globalization.DateTimeFormatInfo** properties. [*Note:* The format patterns and properties of a read-only **System.Globalization.DateTimeFormatInfo** instance cannot be changed. To determine whether a

System.Globalization.DateTimeFormatInfo instance is read-only, use the **System.Globalization.DateTimeFormatInfo.IsReadOnly** property.]

Date and time format patterns are specified using strings called *format specifiers*. A string is interpreted as standard format specifier if it contains exactly one standard format specifier character. If the string contains a single character and that character is not one of the standard format specifiers, an exception is thrown. If the string contains two or more characters, even if the extra characters are white spaces, the string is interpreted as a custom format specifier. Format specifiers and format patterns are case-sensitive; for example, 'g' and 'G' represent different patterns.

The following table shows the standard format specifiers and the associated format pattern defined for the invariant culture. The exact pattern produced by a format specifier is influenced by culture-specific date and/or time settings on the current system; computers with different date and time settings might display different patterns. The asterisk at the end of a format pattern indicates that the preceding character may be repeated without changing the meaning of the pattern. For example, the pattern "HH*" indicates that the strings "HH", "HHH", "HHHH", and "HHHHH" produce the same result when used with **System.DateTime.ParseExact** and **System.DateTime.ToString** methods.

Format Specifier	**Format Pattern**	**Description**
d	MM/dd/yyyy	The full date in numeric format (**System.Globalization.DateTimeFormatInfo.ShortDatePatte**
D	dddd*, MMMM* dd, yyyy	The full date including the day of the week and the name of the (**System.Globalization.DateTimeFormatInfo.LongDatePatte**
f	dddd*, MMMM* dd, yyyy HH*:mm*	The full date and time, including the day of the week and the na the month (**System.Globalization.DateTimeFormatInfo.LongDatePatte** combined with **System.Globalization.DateTimeFormatInfo.ShortTimePatte**
F	dddd*, MMMM* dd, yyyy HH*:mm*:ss*	The full date and time, including the seconds (**System.Globalization.DateTimeFormatInfo.FullDateTimeP** equivalent to **System.Globalization.DateTimeFormatInfo.LongDatePatter** combined with **System.Globalization.DateTimeFormatInfo.LongTimePatte**
g	MM/dd/yyyy HH*:mm*	A general date pattern including the short time form (**System.Globalization.DateTimeFormatInfo.ShortDatePatte** combined with **System.Globalization.DateTimeFormatInfo.ShortTimePatte**
G	MM/dd/yyyy HH*:mm*:ss*	A general date pattern including the long time form (**System.Globalization.DateTimeFormatInfo.ShortDatePatte**

		combined with **System.Globalization.DateTimeFormatInfo.LongTimePatter**
m, M	MMMM* dd	The full name of the month and the date (**System.Globalization.DateTimeFormatInfo.MonthDayPatte**
t	HH*:mm*	The time in short format (**System.Globalization.DateTimeFormatInfo.ShortTimePatt**
T	HH*:mm*:ss*	The time in long format (**System.Globalization.DateTimeFormatInfo.LongTimePatte**
U	dddd*, MMMM* dd, yyyy HH*:mm*:ss*	The full date and time, including the seconds, in the Gregorian ca (**System.Globalization.DateTimeFormatInfo.FullDateTimePa**
y, Y	YYYY MMMM*	The full name of the month and the year in four-digit format (**System.Globalization.DateTimeFormatInfo.YearMonthPatt**

The following table lists custom format specifiers that can be combined to construct custom patterns. If the custom pattern contains white space characters, characters enclosed in single or double quotation marks, or characters not defined in the following table, these characters are considered literals and are included in the output string unchanged. [*Note:* See the **System.String** class for the list of white space characters.]

Format Pattern	**Description**	**Exam**
d	The day of the month as a value in the range 1-31, inclusive. Single-digit days do not have a leading zero.	1 22
dd	The day of the month as a value in the range 1-31, inclusive. Single-digit days have a leading zero.	01 22
ddd	The abbreviated name of the day of the week, as defined in **System.Globalization.DateTimeFormatInfo.AbbreviatedDayNames**.	Mon
dddd*	The full name of the day of the week, as defined in **System.Globalization.DateTimeFormatInfo.DayNames**.	Monda
M	The numeric month as a value in the range 1-12, inclusive. Single-digit months do not have a leading zero.	2 11
MM	The numeric month as a value in the range 1-12, inclusive. Single-digit months have a leading zero.	02 11
MMM	The abbreviated name of the month, as defined in	Feb

	System.Globalization.DateTimeFormatInfo.AbbreviatedMonthNames.	
MMMM*	The full name of the month, as defined in **System.Globalization.DateTimeFormatInfo.MonthNames**.	Febru
y	The year without the century (two-digit). If the value is less than 10, the year is displayed with no leading zero.	0 3
yy	The year without the century (two-digit). If the year without the century is less than 10, the year is displayed with a leading zero.	00 03
yyyy	The year including the century in four digits.	2000 2003
g*	The name of a period or era (such as "A.D." or "B.C."). This pattern is ignored if the date to be formatted does not have an associated period or era string.	A.D.
h	The hour within a 12-hour range as a value in the range 1-12, inclusive. Single-digit hours do not have a leading zero. [*Note:* The value represents whole hours passed since either midnight (12) or noon (12). To distinguish between values occurring before and after noon, include the "t" or "tt*" custom format specifier.]	3 11
hh*	The hour within a 12-hour range as a value in the range 1-12, inclusive. Single-digit hours have a leading zero. [*Note:* The value represents whole hours passed since either midnight (12) or noon (12). To distinguish between values occurring before and after noon, include the "t" or "tt*" custom format specifier.]	03 11
H	The hour as a value in the range 0-23, inclusive. Single-digit hours do not have a leading zero. [*Note:* The value represents whole hours passed since midnight.]	3 13
HH*	The hour as a value in the range 0 and 23, inclusive. Single-digit hours have a leading zero. [*Note:* The value represents whole hours passed since midnight.]	03 13
m	The minute as a value in the range 0-59, inclusive. Single-digit minutes do not have a leading zero. [*Note:* The value represents whole minutes passed since the last hour.]	5 15
mm*	The minute as a value in the range 0-59, inclusive. Single-digit minutes have a leading zero. [*Note:* The value represents whole minutes passed since the last hour.]	05 15
s	The second as a value in the range 0-59, inclusive. Single-digit seconds do not have a leading zero. [*Note:* The value represents whole seconds passed since the last minute.]	1 30

ss*	The second as a value in the range 0-59, inclusive. Single-digit seconds have a leading zero. [*Note:* The value represents whole seconds passed since the last minute.]	01 30
f	Displays fractional seconds represented in one digit.	1
ff	Displays fractional seconds represented in two digits.	01
fff	Displays fractional seconds represented in three digits.	001
ffff	Displays fractional seconds represented in four digits.	0001
fffff	Displays fractional seconds represented in five digits.	0000
ffffff	Displays fractional seconds represented in six digits.	0000
fffffff	Displays fractional seconds represented in seven digits.	0000
t	The first character of the AM/PM designator defined in the **System.Globalization.DateTimeFormatInfo** property **System.Globalization.DateTimeFormatInfo.AMDesignator** or **System.Globalization.DateTimeFormatInfo.PMDesignator**. [*Note:* If the total number of hours passed since midnight is less than 12, the A.M. designator is used; otherwise the P.M. designator is used.]	A P
tt*	The AM/PM designator defined in the **System.Globalization.DateTimeFormatInfo** property **System.Globalization.DateTimeFormatInfo.AMDesignator** or **System.Globalization.DateTimeFormatInfo.PMDesignator**. [*Note:* If the total number of hours passed since midnight is less than 12, the A.M. designator is used; otherwise the P.M. designator is used.]	AM PM
z	The time zone offset (hour only) from the universal time coordinate (UTC) time (Greenwich Mean Time) as a value in the range -12 to +13, inclusive. Single-digit hours do not have a leading zero. [*Note:* The value always includes a leading sign (zero is '+0'), indicating hours ahead of UTC time (+) or hours behind UTC time (-). The offset takes Daylight Savings Time into account.]	-8
zz	The time zone offset (hour only) from the UTC time (Greenwich Mean Time) as a value in the range -12 to +13, inclusive. Single-digit hours have a leading zero. [*Note:* The value always includes a leading sign (zero is '+0'), indicating hours ahead of UTC time (+) or hours behind UTC time (-). The offset takes Daylight Savings Time into account.]	-08
zzz*	The full time zone offset (hour and minutes) from the UTC time (Greenwich Mean Time) as a value in the range -12:00 to +13:00, inclusive. Single-digit hours and minutes have leading zeros. [*Note:* The value always includes a leading sign (zero is '+0'), indicating hours ahead of UTC time (+) or hours behind UTC time (-). The offset takes Daylight Savings Time into account.]	-08:0
:	The invariant culture time separator defined in **System.Globalization.DateTimeFormatInfo.TimeSeparator**.	:
/	The invariant culture date separator defined in the **System.Globalization.DateTimeFormatInfo.DateSeparator**.	/
%*c*	*c* represents a single custom format character. Produces the custom format pattern associated with the format character *c*. The %*c* specifier provides a mechanism for specifying a single custom format character and having it recognized as a custom specifier. This format is intended for characters that	"%y" produ a two year

	define both a custom and a standard format. Note that a format string containing exactly one such character will be interpreted as a standard format specifier unless prefaced with the %. [*Note:* For example, for the invariant culture, "%d" produces the single or double digit date, while "d" produces the date in "MM/dd/yyyy" format. Without the %, a format string containing one character would have to include leading or trailing white space to be interpreted as a custom specifier because custom formats are required to have two or more characters.]	witho leadir zero, not th "MMM yyyy" patter
\c	*c* represents any character predefined as part of a format specifier. Prevents the character from being interpreted as a format specifier (the character is treated as a literal). [*Note:* In programming languages where the backslash ('\\') character is used to specify control sequences such as newline (\\n), the backslash character is required to be specified twice. For example, in C#, "\\d" is coded as "\\\\d".]	"\\d" produ the chara 'd', ar not th day o montl
'*xx*' or "*xx*"	*xx* represents a string of characters of any length. The characters are treated as literals.	"'d'" produ the chara 'd', ar not th day o montl

DateTimeFormatInfo() Constructor

```
[ILASM]
public rtspecialname specialname instance void .ctor()

[C#]
public DateTimeFormatInfo()
```

Summary

Constructs and initializes a new instance of the **System.Globalization.DateTimeFormatInfo** class that is culture-independent (invariant).

Description

The new instance of **System.Globalization.DateTimeFormatInfo** is not read-only, and its properties can be modified with user-defined patterns.

DateTimeFormatInfo.Clone() Method

[ILASM]
```
.method public final hidebysig virtual object Clone()
```

[C#]
```
public object Clone()
```

Summary

Creates a copy of the current instance.

Return Value

A new **System.Globalization.DateTimeFormatInfo** instance with property values equal to the property values of the original **System.Globalization.DateTimeFormatInfo** instance.

Description

The **System.Globalization.DateTimeFormatInfo.Clone** method creates a new instance of the same type as the current instance, and then copies the contents of each of the current instance's non-static fields.

The new instance is not read-only, and its properties can be modified with user-defined patterns.

[*Note:* This method is implemented to support the **System.ICloneable** interface.]

DateTimeFormatInfo.GetAbbreviatedMonthName(System.Int32) Method

[ILASM]

```
.method public hidebysig instance string
GetAbbreviatedMonthName(int32 month)
```

[C#]

```
public string GetAbbreviatedMonthName(int month)
```

Summary

Gets the abbreviated name of the specified month based on the culture of the current thread.

Parameters

Parameter	Description
month	A **System.Int32** from 1 through 13 representing the month name to retrieve.

Return Value

A **System.String** containing the abbreviated name of the month represented by *month*. For cultures with 12-month calendars, the empty string is returned as the name of the 13th month.

Description

For the default (culture-invariant) **System.Globalization.DateTimeFormatInfo** instance, this method returns one of the following strings:

	Return Value
1	"Jan"
2	"Feb"
3	"Mar"
4	"Apr"
5	"May"
6	"Jun"
7	"Jul"
8	"Aug"
9	"Sep"

10	"Oct"
11	"Nov"
12	"Dec"
13	""

[*Note:* This method supports calendars with 13 months.]

Exceptions

Exception	**Condition**
System.ArgumentOutOfRangeException	*month* is less than 1 or greater than 13.

DateTimeFormatInfo.GetEra(System.String) Method

```
[ILASM]
.method public hidebysig instance int32 GetEra(string
eraName)

[C#]
public int GetEra(string eraName)
```

Summary

Gets a **System.Int32** representing the specified era.

Parameters

Parameter	Description
eraName	A **System.String** containing the name of the era.

Return Value

A **System.Int32** representing the era. If *eraName* is invalid, returns -1.

Description

The value specified for *eraName* is case-insensitive.

[*Note:* An era name is a culturally specific name for a period of time marked by distinctive character or reckoned from a fixed point or event. For example "A.D." and "B.C." are two eras of the Gregorian calendar.]

Exceptions

Exception	Condition
System.ArgumentNullException	*eraName* is a null reference.

DateTimeFormatInfo.GetEraName(System.Int32) Method

```
[ILASM]
.method public hidebysig instance string GetEraName(int32
era)

[C#]
public string GetEraName(int era)
```

Summary

Gets the **System.String** containing the name of the specified era.

Parameters

Parameter	Description
era	A **System.Int32** representing the era.

Return Value

A **System.String** containing the name of the era.

Description

[*Note:* An era name is a culturally specific name for a period of time marked by distinctive character or reckoned from a fixed point or event. For example "A.D." and "B.C." are two eras of the Gregorian calendar.]

Exceptions

Exception	Condition
System.ArgumentOutOfRangeException	*era* does not represent a valid era in calendar for the current thread.

DateTimeFormatInfo.GetFormat(System.Type) Method

```
[ILASM]
.method public final hidebysig virtual object
GetFormat(class System.Type formatType)

[C#]
public object GetFormat(Type formatType)
```

Summary

Returns an object of the specified type that provides **System.DateTime** formatting services.

Parameters

Parameter	Description
formatType	The **System.Type** of the formatting object to be returned.

Return Value

A formatting object of the specified **System.Type**. If no formatting object of the specified type is available, or *formatType* is a null reference, returns the formatting object for the current culture.

Description

[*Note:* This method is implemented to support the **System.IFormatProvider** interface.]

DateTimeFormatInfo.GetMonthName(System.Int32) Method

```
[ILASM]
.method public hidebysig instance string GetMonthName(int32
month)

[C#]
public string GetMonthName(int month)
```

Summary

Gets the full name of the specified month based on the culture of the current thread.

Parameters

Parameter	Description
month	A **System.Int32** from 1 through 13 representing the month name to retrieve.

Return Value

A **System.String** containing the full name of the month represented by *month*. For cultures with 12-month calendars the empty string is returned as the name of the 13th month.

Description

For the default (culture invariant) **System.Globalization.DateTimeFormatInfo** instance, this method returns one of the following strings:

	Return Value
1	"January"
2	"February"
3	"March"
4	"April"
5	"May"
6	"June"
7	"July"
8	"August"
9	"September"

10	"October"
11	"November"
12	"December"
13	""

[*Note:* This method supports calendars with 13 months.]

Exceptions

Exception	Condition
System.ArgumentOutOfRangeException	*month* is less than 1 or greater than 13.

DateTimeFormatInfo.ReadOnly(System.Globalization.DateTimeFormatInfo) Method

```
[ILASM]
.method public hidebysig static class
System.Globalization.DateTimeFormatInfo ReadOnly(class
System.Globalization.DateTimeFormatInfo dtfi)

[C#]
public static DateTimeFormatInfo
ReadOnly(DateTimeFormatInfo dtfi)
```

Summary

Returns a read-only copy of the specified instance of **System.Globalization.DateTimeFormatInfo**.

Parameters

Parameter	**Description**
dtfi	The **System.Globalization.DateTimeFormatInfo** to copy.

Return Value

A read-only instance of **System.Globalization.DateTimeFormatInfo** that is a copy of *dtfi*.

Description

[*Note:* Use a read-only **System.Globalization.DateTimeFormatInfo** copy to prevent modifications to the specified instance.]

Exceptions

Exception	**Condition**
System.ArgumentNullException	*dtfi* is a null reference.

DateTimeFormatInfo.AbbreviatedDayNames Property

```
[ILASM]
.property class System.String[] AbbreviatedDayNames {
public hidebysig specialname instance class System.String[]
get_AbbreviatedDayNames() public hidebysig specialname
instance void set_AbbreviatedDayNames(class System.String[]
value) }

[C#]
public string[] AbbreviatedDayNames { get; set; }
```

Summary

Gets or sets a one-dimensional array of type **System.String** containing the culture-specific abbreviated names of the days of the week.

Property Value

A one-dimensional array of type **System.String** containing the culture-specific abbreviated names of the days of the week.

Description

The array specified in a set operation is required to be one-dimensional and have exactly seven elements. The first element of the array is the abbreviated day name for Sunday, and the last element is the name for Saturday.

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.AbbreviatedDayNames** is a **System.String** array that contains "Sun", "Mon", "Tue", "Wed", "Thu", "Fri" and "Sat".

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.ArgumentException	The value specified for a set operation is not an array with exactly 7 elements.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.

DateTimeFormatInfo.AbbreviatedMonthNames Property

[ILASM]

```
.property class System.String[] AbbreviatedMonthNames {
public hidebysig specialname instance class System.String[]
get_AbbreviatedMonthNames() public hidebysig specialname
instance void set_AbbreviatedMonthNames(class
System.String[] value) }
```

[C#]

```
public string[] AbbreviatedMonthNames { get; set; }
```

Summary

Gets or sets a one-dimensional array of type **System.String** containing the culture-specific abbreviated names of the months.

Property Value

A one-dimensional array of type **System.String** containing the abbreviated names of the months. For cultures with 12-month calendars the 13th element of the array is an empty string.

Description

The **System.Array** specified in a set operation is required to be one-dimensional and have exactly 13 elements.

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.AbbreviatedMonthNames** is a **System.String** array that contains "Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul", "Aug", "Sep", "Oct", "Nov", "Dec" and "".

[*Note:* The array returned by this property has 13 elements to support calendars with 13 months.]

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.ArgumentException	The value specified for a set operation is not an array with exactly 13 elements.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.

DateTimeFormatInfo.AMDesignator Property

[ILASM]

```
.property string AMDesignator { public hidebysig
specialname instance string get_AMDesignator() public
hidebysig specialname instance void set_AMDesignator(string
value) }
```

[C#]

```
public string AMDesignator { get; set; }
```

Summary

Gets or sets the **System.String** culture-specific designator for hours that are "ante meridiem" (before noon).

Property Value

The **System.String** designator for hours that are before noon.

Description

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.AMDesignator** returns the **System.String** "AM".

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.

DateTimeFormatInfo.CurrentInfo Property

[ILASM]

```
.property class System.Globalization.DateTimeFormatInfo
CurrentInfo { public hidebysig static specialname class
System.Globalization.DateTimeFormatInfo get_CurrentInfo() }
```

[C#]

```
public static DateTimeFormatInfo CurrentInfo { get; }
```

Summary

Gets a read-only **System.Globalization.DateTimeFormatInfo** instance that formats values based on the current culture.

Property Value

A **System.Globalization.DateTimeFormatInfo** instance based on the culture of the current thread.

Description

This property is read-only.

DateTimeFormatInfo.DateSeparator Property

[ILASM]

```
.property string DateSeparator { public hidebysig
specialname instance string get_DateSeparator() public
hidebysig specialname instance void
set_DateSeparator(string value) }
```

[C#]

```
public string DateSeparator { get; set; }
```

Summary

Gets or sets the culture-specific **System.String** to use to separate the year, month, and day components of a date.

Property Value

The **System.String** to use to separate the year, month and day components of a date.

Description

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.DateSeparator** is "/".

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.

DateTimeFormatInfo.DayNames Property

```
[ILASM]
.property class System.String[] DayNames { public hidebysig
specialname instance class System.String[] get_DayNames()
public hidebysig specialname instance void
set_DayNames(class System.String[] value) }

[C#]
public string[] DayNames { get; set; }
```

Summary

Gets or sets a one-dimensional array of type **System.String** containing the culture-specific full names of the days of the week.

Property Value

A one-dimensional array of type **System.String** containing the full names of the days of the week.

Description

The array specified in a set operation is required to be one-dimensional and have exactly seven elements. The first element of the array is the abbreviated day name for Sunday, and the last element is the name for Saturday.

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.DayNames** is a **System.String** array that contains "Sunday", "Monday", "Tuesday", "Wednesday", "Thursday", "Friday" and "Saturday".

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.ArgumentException	The value specified for a set operation is not an array with exactly 7 elements.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.

DateTimeFormatInfo.FullDateTimePattern Property

```
[ILASM]
.property string FullDateTimePattern { public hidebysig
specialname instance string get_FullDateTimePattern()
public hidebysig specialname instance void
set_FullDateTimePattern(string value) }

[C#]
public string FullDateTimePattern { get; set; }
```

Summary

Gets or sets the format pattern for a long date and long time value.

Property Value

A **System.String** containing the format pattern for a long date and long time value.

Description

The **System.DateTime.ParseExact** and **System.DateTime.ToString** methods associate the format pattern returned by this property with the 'F' format character.

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.FullDateTimePattern** is "dddd, dd MMMM yyyy HH:mm:ss".

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.

DateTimeFormatInfo.InvariantInfo Property

```
[ILASM]
.property class System.Globalization.DateTimeFormatInfo
InvariantInfo { public hidebysig static specialname class
System.Globalization.DateTimeFormatInfo get_InvariantInfo()
}

[C#]
public static DateTimeFormatInfo InvariantInfo { get; }
```

Summary

Gets a culture invariant instance of **System.Globalization.DateTimeFormatInfo** that is read-only.

Property Value

A read-only **System.Globalization.DateTimeFormatInfo** instance.

Description

This property is read-only.

DateTimeFormatInfo.IsReadOnly Property

[ILASM]

```
.property bool IsReadOnly { public hidebysig specialname
instance bool get_IsReadOnly() }
```

[C#]

```
public bool IsReadOnly { get; }
```

Summary

Gets a **System.Boolean** value indicating whether the current **System.Globalization.DateTimeFormatInfo** instance is read-only.

Property Value

true if the **System.Globalization.DateTimeFormatInfo** is read-only; otherwise, **false**.

Description

This property is read-only.

DateTimeFormatInfo.LongDatePattern Property

[ILASM]

```
.property string LongDatePattern { public hidebysig
specialname instance string get_LongDatePattern() public
hidebysig specialname instance void
set_LongDatePattern(string value) }
```

[C#]

```
public string LongDatePattern { get; set; }
```

Summary

Gets or sets the format pattern for a long date value.

Property Value

A **System.String** containing the format pattern for a long date value.

Description

The **System.DateTime.ParseExact** and **System.DateTime.ToString** methods associate the format pattern returned by this property with the 'D' format character.

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.LongDatePattern** is "dddd, dd MMMM yyyy".

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.

DateTimeFormatInfo.LongTimePattern Property

[ILASM]

```
.property string LongTimePattern { public hidebysig
specialname instance string get_LongTimePattern() public
hidebysig specialname instance void
set_LongTimePattern(string value) }
```

[C#]

```
public string LongTimePattern { get; set; }
```

Summary

Gets or sets the format pattern for a long time value.

Property Value

A **System.String** containing the format pattern for a long time value.

Description

The **System.DateTime.ParseExact** and **System.DateTime.ToString** methods associate the format pattern returned by this property with the 'T' format character.

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.LongTimePattern** is "HH:mm:ss".

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.

DateTimeFormatInfo.MonthDayPattern Property

[ILASM]

```
.property string MonthDayPattern { public hidebysig
specialname instance string get_MonthDayPattern() public
hidebysig specialname instance void
set_MonthDayPattern(string value) }
```

[C#]

```
public string MonthDayPattern { get; set; }
```

Summary

Gets or sets the format pattern for a month and day value.

Property Value

A **System.String** containing the format pattern for a month and day value.

Description

The **System.DateTime.ParseExact** and **System.DateTime.ToString** methods associate the format pattern returned by this property with the 'm' and 'M' format characters.

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.MonthDayPattern** is "MMMM dd".

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.

DateTimeFormatInfo.MonthNames Property

[ILASM]

```
.property class System.String[] MonthNames { public
hidebysig specialname instance class System.String[]
get_MonthNames() public hidebysig specialname instance void
set_MonthNames(class System.String[] value) }
```

[C#]

```
public string[] MonthNames { get; set; }
```

Summary

Gets or sets a one-dimensional array of type **System.String** containing the culture-specific full names of the months.

Property Value

A one-dimensional array of type **System.String** containing the full names of the months. For cultures with 12-month calendars the 13th element of the array is an empty string.

Description

The array specified in a set operation is required be one-dimensional and have exactly 13 elements.

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.MonthNames** is a **System.String** array that contains "January", "February", "March", "April", "May", "June", "July", "August", "September", "October", "November", "December" and "".

[*Note:* The array returned by this property has 13 elements to support calendars with 13 months.]

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.ArgumentException	The value specified for a set operation is not an array with exactly 13 elements.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.

DateTimeFormatInfo.PMDesignator Property

[ILASM]

```
.property string PMDesignator { public hidebysig
specialname instance string get_PMDesignator() public
hidebysig specialname instance void set_PMDesignator(string
value) }
```

[C#]

```
public string PMDesignator { get; set; }
```

Summary

Gets or sets the culture-specific **System.String** designator for hours that are "post meridiem" (after noon).

Property Value

The **System.String** designator for hours that are after noon.

Description

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.PMDesignator** is "PM".

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.

DateTimeFormatInfo.ShortDatePattern Property

[ILASM]

```
.property string ShortDatePattern { public hidebysig
specialname instance string get_ShortDatePattern() public
hidebysig specialname instance void
set_ShortDatePattern(string value) }
```

[C#]

```
public string ShortDatePattern { get; set; }
```

Summary

Gets or sets the format pattern for a short date value.

Property Value

A **System.String** containing the format pattern for a short date value.

Description

The **System.DateTime.ParseExact** and **System.DateTime.ToString** methods associate the format pattern returned by this property with the 'd' format character.

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.ShortDatePattern** is "MM/dd/yyyy".

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.

DateTimeFormatInfo.ShortTimePattern Property

[ILASM]

```
.property string ShortTimePattern { public hidebysig
specialname instance string get_ShortTimePattern() public
hidebysig specialname instance void
set_ShortTimePattern(string value) }
```

[C#]

```
public string ShortTimePattern { get; set; }
```

Summary

Gets or sets the format pattern for a short time value.

Property Value

A **System.String** containing the format pattern for a short time value.

Description

The **System.DateTime.ParseExact** and **System.DateTime.ToString** methods associate the format pattern returned by this property with the 't' format character.

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.ShortTimePattern** is "HH:mm".

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.

DateTimeFormatInfo.TimeSeparator Property

[ILASM]

```
.property string TimeSeparator { public hidebysig
specialname instance string get_TimeSeparator() public
hidebysig specialname instance void
set_TimeSeparator(string value) }
```

[C#]

```
public string TimeSeparator { get; set; }
```

Summary

Gets or sets the culture-specific **System.String** to use to separate the components of time values (hour, minutes, seconds).

Property Value

The **System.String** to use to separate the components of time; that is, the hour, the minutes and the seconds.

Description

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.TimeSeparator** is ":".

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.

DateTimeFormatInfo.YearMonthPattern Property

```
[ILASM]
.property string YearMonthPattern { public hidebysig
specialname instance string get_YearMonthPattern() public
hidebysig specialname instance void
set_YearMonthPattern(string value) }

[C#]
public string YearMonthPattern { get; set; }
```

Summary

Gets or sets the format pattern for a year and month value.

Property Value

The format pattern for a year and month value.

Description

The **System.DateTime.ParseExact** and **System.DateTime.ToString** methods associate the format pattern returned by this property with the 'y' and 'Y' format character.

The property value of the culture invariant **System.Globalization.DateTimeFormatInfo.YearMonthPattern** is "yyyy MMMM".

Exceptions

Exception	Condition
System.ArgumentNullException	The value specified for a set operation is a null reference.
System.InvalidOperationException	The current instance is read-only and a set operation was attempted.