| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/DateFormatSymbols.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/text/DateFormat.Field.html)   [**NEXT CLASS**](http://docs.google.com/java/text/DecimalFormat.html) | [**FRAMES**](http://docs.google.com/index.html?java/text/DateFormatSymbols.html)    [**NO FRAMES**](http://docs.google.com/DateFormatSymbols.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#2s8eyo1) |

## **java.text**

Class DateFormatSymbols

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **java.text.DateFormatSymbols**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html), [Cloneable](http://docs.google.com/java/lang/Cloneable.html)

public class **DateFormatSymbols**extends [Object](http://docs.google.com/java/lang/Object.html)implements [Serializable](http://docs.google.com/java/io/Serializable.html), [Cloneable](http://docs.google.com/java/lang/Cloneable.html)

DateFormatSymbols is a public class for encapsulating localizable date-time formatting data, such as the names of the months, the names of the days of the week, and the time zone data. DateFormat and SimpleDateFormat both use DateFormatSymbols to encapsulate this information.

Typically you shouldn't use DateFormatSymbols directly. Rather, you are encouraged to create a date-time formatter with the DateFormat class's factory methods: getTimeInstance, getDateInstance, or getDateTimeInstance. These methods automatically create a DateFormatSymbols for the formatter so that you don't have to. After the formatter is created, you may modify its format pattern using the setPattern method. For more information about creating formatters using DateFormat's factory methods, see [DateFormat](http://docs.google.com/java/text/DateFormat.html).

If you decide to create a date-time formatter with a specific format pattern for a specific locale, you can do so with:

new SimpleDateFormat(aPattern, DateFormatSymbols.getInstance(aLocale)).

DateFormatSymbols objects are cloneable. When you obtain a DateFormatSymbols object, feel free to modify the date-time formatting data. For instance, you can replace the localized date-time format pattern characters with the ones that you feel easy to remember. Or you can change the representative cities to your favorite ones.

New DateFormatSymbols subclasses may be added to support SimpleDateFormat for date-time formatting for additional locales.

**See Also:**[DateFormat](http://docs.google.com/java/text/DateFormat.html), [SimpleDateFormat](http://docs.google.com/java/text/SimpleDateFormat.html), [SimpleTimeZone](http://docs.google.com/java/util/SimpleTimeZone.html), [Serialized Form](http://docs.google.com/serialized-form.html#java.text.DateFormatSymbols)

| **Constructor Summary** | |
| --- | --- |
| [**DateFormatSymbols**](http://docs.google.com/java/text/DateFormatSymbols.html#DateFormatSymbols())()            Construct a DateFormatSymbols object by loading format data from resources for the default locale. |
| [**DateFormatSymbols**](http://docs.google.com/java/text/DateFormatSymbols.html#DateFormatSymbols(java.util.Locale))([Locale](http://docs.google.com/java/util/Locale.html) locale)            Construct a DateFormatSymbols object by loading format data from resources for the given locale. |

| **Method Summary** | |
| --- | --- |
| [Object](http://docs.google.com/java/lang/Object.html) | [**clone**](http://docs.google.com/java/text/DateFormatSymbols.html#clone())()            Overrides Cloneable |
| boolean | [**equals**](http://docs.google.com/java/text/DateFormatSymbols.html#equals(java.lang.Object))([Object](http://docs.google.com/java/lang/Object.html) obj)            Override equals |
| [String](http://docs.google.com/java/lang/String.html)[] | [**getAmPmStrings**](http://docs.google.com/java/text/DateFormatSymbols.html#getAmPmStrings())()            Gets ampm strings. |
| static [Locale](http://docs.google.com/java/util/Locale.html)[] | [**getAvailableLocales**](http://docs.google.com/java/text/DateFormatSymbols.html#getAvailableLocales())()            Returns an array of all locales for which the getInstance methods of this class can return localized instances. |
| [String](http://docs.google.com/java/lang/String.html)[] | [**getEras**](http://docs.google.com/java/text/DateFormatSymbols.html#getEras())()            Gets era strings. |
| static [DateFormatSymbols](http://docs.google.com/java/text/DateFormatSymbols.html) | [**getInstance**](http://docs.google.com/java/text/DateFormatSymbols.html#getInstance())()            Gets the DateFormatSymbols instance for the default locale. |
| static [DateFormatSymbols](http://docs.google.com/java/text/DateFormatSymbols.html) | [**getInstance**](http://docs.google.com/java/text/DateFormatSymbols.html#getInstance(java.util.Locale))([Locale](http://docs.google.com/java/util/Locale.html) locale)            Gets the DateFormatSymbols instance for the specified locale. |
| [String](http://docs.google.com/java/lang/String.html) | [**getLocalPatternChars**](http://docs.google.com/java/text/DateFormatSymbols.html#getLocalPatternChars())()            Gets localized date-time pattern characters. |
| [String](http://docs.google.com/java/lang/String.html)[] | [**getMonths**](http://docs.google.com/java/text/DateFormatSymbols.html#getMonths())()            Gets month strings. |
| [String](http://docs.google.com/java/lang/String.html)[] | [**getShortMonths**](http://docs.google.com/java/text/DateFormatSymbols.html#getShortMonths())()            Gets short month strings. |
| [String](http://docs.google.com/java/lang/String.html)[] | [**getShortWeekdays**](http://docs.google.com/java/text/DateFormatSymbols.html#getShortWeekdays())()            Gets short weekday strings. |
| [String](http://docs.google.com/java/lang/String.html)[] | [**getWeekdays**](http://docs.google.com/java/text/DateFormatSymbols.html#getWeekdays())()            Gets weekday strings. |
| [String](http://docs.google.com/java/lang/String.html)[][] | [**getZoneStrings**](http://docs.google.com/java/text/DateFormatSymbols.html#getZoneStrings())()            Gets time zone strings. |
| int | [**hashCode**](http://docs.google.com/java/text/DateFormatSymbols.html#hashCode())()            Override hashCode. |
| void | [**setAmPmStrings**](http://docs.google.com/java/text/DateFormatSymbols.html#setAmPmStrings(java.lang.String%5B%5D))([String](http://docs.google.com/java/lang/String.html)[] newAmpms)            Sets ampm strings. |
| void | [**setEras**](http://docs.google.com/java/text/DateFormatSymbols.html#setEras(java.lang.String%5B%5D))([String](http://docs.google.com/java/lang/String.html)[] newEras)            Sets era strings. |
| void | [**setLocalPatternChars**](http://docs.google.com/java/text/DateFormatSymbols.html#setLocalPatternChars(java.lang.String))([String](http://docs.google.com/java/lang/String.html) newLocalPatternChars)            Sets localized date-time pattern characters. |
| void | [**setMonths**](http://docs.google.com/java/text/DateFormatSymbols.html#setMonths(java.lang.String%5B%5D))([String](http://docs.google.com/java/lang/String.html)[] newMonths)            Sets month strings. |
| void | [**setShortMonths**](http://docs.google.com/java/text/DateFormatSymbols.html#setShortMonths(java.lang.String%5B%5D))([String](http://docs.google.com/java/lang/String.html)[] newShortMonths)            Sets short month strings. |
| void | [**setShortWeekdays**](http://docs.google.com/java/text/DateFormatSymbols.html#setShortWeekdays(java.lang.String%5B%5D))([String](http://docs.google.com/java/lang/String.html)[] newShortWeekdays)            Sets short weekday strings. |
| void | [**setWeekdays**](http://docs.google.com/java/text/DateFormatSymbols.html#setWeekdays(java.lang.String%5B%5D))([String](http://docs.google.com/java/lang/String.html)[] newWeekdays)            Sets weekday strings. |
| void | [**setZoneStrings**](http://docs.google.com/java/text/DateFormatSymbols.html#setZoneStrings(java.lang.String%5B%5D%5B%5D))([String](http://docs.google.com/java/lang/String.html)[][] newZoneStrings)            Sets time zone strings. |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [toString](http://docs.google.com/java/lang/Object.html#toString()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Constructor Detail** |
| --- |

### DateFormatSymbols

public **DateFormatSymbols**()

Construct a DateFormatSymbols object by loading format data from resources for the default locale. This constructor can only construct instances for the locales supported by the Java runtime environment, not for those supported by installed [DateFormatSymbolsProvider](http://docs.google.com/java/text/spi/DateFormatSymbolsProvider.html) implementations. For full locale coverage, use the [getInstance](http://docs.google.com/java/text/DateFormatSymbols.html#getInstance(java.util.Locale)) method.

**Throws:** [MissingResourceException](http://docs.google.com/java/util/MissingResourceException.html) - if the resources for the default locale cannot be found or cannot be loaded.**See Also:**[getInstance()](http://docs.google.com/java/text/DateFormatSymbols.html#getInstance())

### DateFormatSymbols

public **DateFormatSymbols**([Locale](http://docs.google.com/java/util/Locale.html) locale)

Construct a DateFormatSymbols object by loading format data from resources for the given locale. This constructor can only construct instances for the locales supported by the Java runtime environment, not for those supported by installed [DateFormatSymbolsProvider](http://docs.google.com/java/text/spi/DateFormatSymbolsProvider.html) implementations. For full locale coverage, use the [getInstance](http://docs.google.com/java/text/DateFormatSymbols.html#getInstance(java.util.Locale)) method.

**Throws:** [MissingResourceException](http://docs.google.com/java/util/MissingResourceException.html) - if the resources for the specified locale cannot be found or cannot be loaded.**See Also:**[getInstance(Locale)](http://docs.google.com/java/text/DateFormatSymbols.html#getInstance(java.util.Locale))

| **Method Detail** |
| --- |

### getAvailableLocales

public static [Locale](http://docs.google.com/java/util/Locale.html)[] **getAvailableLocales**()

Returns an array of all locales for which the getInstance methods of this class can return localized instances. The returned array represents the union of locales supported by the Java runtime and by installed [DateFormatSymbolsProvider](http://docs.google.com/java/text/spi/DateFormatSymbolsProvider.html) implementations. It must contain at least a Locale instance equal to [Locale.US](http://docs.google.com/java/util/Locale.html#US).

**Returns:**An array of locales for which localized DateFormatSymbols instances are available.**Since:** 1.6

### getInstance

public static final [DateFormatSymbols](http://docs.google.com/java/text/DateFormatSymbols.html) **getInstance**()

Gets the DateFormatSymbols instance for the default locale. This method provides access to DateFormatSymbols instances for locales supported by the Java runtime itself as well as for those supported by installed [DateFormatSymbolsProvider](http://docs.google.com/java/text/spi/DateFormatSymbolsProvider.html) implementations.

**Returns:**a DateFormatSymbols instance.**Since:** 1.6

### getInstance

public static final [DateFormatSymbols](http://docs.google.com/java/text/DateFormatSymbols.html) **getInstance**([Locale](http://docs.google.com/java/util/Locale.html) locale)

Gets the DateFormatSymbols instance for the specified locale. This method provides access to DateFormatSymbols instances for locales supported by the Java runtime itself as well as for those supported by installed [DateFormatSymbolsProvider](http://docs.google.com/java/text/spi/DateFormatSymbolsProvider.html) implementations.

**Parameters:**locale - the given locale. **Returns:**a DateFormatSymbols instance. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if locale is null**Since:** 1.6

### getEras

public [String](http://docs.google.com/java/lang/String.html)[] **getEras**()

Gets era strings. For example: "AD" and "BC".

**Returns:**the era strings.

### setEras

public void **setEras**([String](http://docs.google.com/java/lang/String.html)[] newEras)

Sets era strings. For example: "AD" and "BC".

**Parameters:**newEras - the new era strings.

### getMonths

public [String](http://docs.google.com/java/lang/String.html)[] **getMonths**()

Gets month strings. For example: "January", "February", etc.

**Returns:**the month strings.

### setMonths

public void **setMonths**([String](http://docs.google.com/java/lang/String.html)[] newMonths)

Sets month strings. For example: "January", "February", etc.

**Parameters:**newMonths - the new month strings.

### getShortMonths

public [String](http://docs.google.com/java/lang/String.html)[] **getShortMonths**()

Gets short month strings. For example: "Jan", "Feb", etc.

**Returns:**the short month strings.

### setShortMonths

public void **setShortMonths**([String](http://docs.google.com/java/lang/String.html)[] newShortMonths)

Sets short month strings. For example: "Jan", "Feb", etc.

**Parameters:**newShortMonths - the new short month strings.

### getWeekdays

public [String](http://docs.google.com/java/lang/String.html)[] **getWeekdays**()

Gets weekday strings. For example: "Sunday", "Monday", etc.

**Returns:**the weekday strings. Use Calendar.SUNDAY, Calendar.MONDAY, etc. to index the result array.

### setWeekdays

public void **setWeekdays**([String](http://docs.google.com/java/lang/String.html)[] newWeekdays)

Sets weekday strings. For example: "Sunday", "Monday", etc.

**Parameters:**newWeekdays - the new weekday strings. The array should be indexed by Calendar.SUNDAY, Calendar.MONDAY, etc.

### getShortWeekdays

public [String](http://docs.google.com/java/lang/String.html)[] **getShortWeekdays**()

Gets short weekday strings. For example: "Sun", "Mon", etc.

**Returns:**the short weekday strings. Use Calendar.SUNDAY, Calendar.MONDAY, etc. to index the result array.

### setShortWeekdays

public void **setShortWeekdays**([String](http://docs.google.com/java/lang/String.html)[] newShortWeekdays)

Sets short weekday strings. For example: "Sun", "Mon", etc.

**Parameters:**newShortWeekdays - the new short weekday strings. The array should be indexed by Calendar.SUNDAY, Calendar.MONDAY, etc.

### getAmPmStrings

public [String](http://docs.google.com/java/lang/String.html)[] **getAmPmStrings**()

Gets ampm strings. For example: "AM" and "PM".

**Returns:**the ampm strings.

### setAmPmStrings

public void **setAmPmStrings**([String](http://docs.google.com/java/lang/String.html)[] newAmpms)

Sets ampm strings. For example: "AM" and "PM".

**Parameters:**newAmpms - the new ampm strings.

### getZoneStrings

public [String](http://docs.google.com/java/lang/String.html)[][] **getZoneStrings**()

Gets time zone strings. Use of this method is discouraged; use [TimeZone.getDisplayName()](http://docs.google.com/java/util/TimeZone.html#getDisplayName()) instead.

The value returned is a two-dimensional array of strings of size *n* by *m*, where *m* is at least 5. Each of the *n* rows is an entry containing the localized names for a single TimeZone. Each such row contains (with i ranging from 0..*n*-1):

* zoneStrings[i][0] - time zone ID
* zoneStrings[i][1] - long name of zone in standard time
* zoneStrings[i][2] - short name of zone in standard time
* zoneStrings[i][3] - long name of zone in daylight saving time
* zoneStrings[i][4] - short name of zone in daylight saving time

The zone ID is *not* localized; it's one of the valid IDs of the [TimeZone](http://docs.google.com/java/util/TimeZone.html) class that are not [custom IDs](http://docs.google.com/util/TimeZone.html#CustomID). All other entries are localized names. If a zone does not implement daylight saving time, the daylight saving time names should not be used.

If [setZoneStrings](http://docs.google.com/java/text/DateFormatSymbols.html#setZoneStrings(java.lang.String%5B%5D%5B%5D)) has been called on this DateFormatSymbols instance, then the strings provided by that call are returned. Otherwise, the returned array contains names provided by the Java runtime and by installed [TimeZoneNameProvider](http://docs.google.com/java/util/spi/TimeZoneNameProvider.html) implementations.

**Returns:**the time zone strings.**See Also:**[setZoneStrings(String[][])](http://docs.google.com/java/text/DateFormatSymbols.html#setZoneStrings(java.lang.String%5B%5D%5B%5D))

### setZoneStrings

public void **setZoneStrings**([String](http://docs.google.com/java/lang/String.html)[][] newZoneStrings)

Sets time zone strings. The argument must be a two-dimensional array of strings of size *n* by *m*, where *m* is at least 5. Each of the *n* rows is an entry containing the localized names for a single TimeZone. Each such row contains (with i ranging from 0..*n*-1):

* zoneStrings[i][0] - time zone ID
* zoneStrings[i][1] - long name of zone in standard time
* zoneStrings[i][2] - short name of zone in standard time
* zoneStrings[i][3] - long name of zone in daylight saving time
* zoneStrings[i][4] - short name of zone in daylight saving time

The zone ID is *not* localized; it's one of the valid IDs of the [TimeZone](http://docs.google.com/java/util/TimeZone.html) class that are not [custom IDs](http://docs.google.com/util/TimeZone.html#CustomID). All other entries are localized names.

**Parameters:**newZoneStrings - the new time zone strings. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if the length of any row in newZoneStrings is less than 5 [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if newZoneStrings is null**See Also:**[getZoneStrings()](http://docs.google.com/java/text/DateFormatSymbols.html#getZoneStrings())

### getLocalPatternChars

public [String](http://docs.google.com/java/lang/String.html) **getLocalPatternChars**()

Gets localized date-time pattern characters. For example: 'u', 't', etc.

**Returns:**the localized date-time pattern characters.

### setLocalPatternChars

public void **setLocalPatternChars**([String](http://docs.google.com/java/lang/String.html) newLocalPatternChars)

Sets localized date-time pattern characters. For example: 'u', 't', etc.

**Parameters:**newLocalPatternChars - the new localized date-time pattern characters.

### clone

public [Object](http://docs.google.com/java/lang/Object.html) **clone**()

Overrides Cloneable

**Overrides:**[clone](http://docs.google.com/java/lang/Object.html#clone()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**a clone of this instance.**See Also:**[Cloneable](http://docs.google.com/java/lang/Cloneable.html)

### hashCode

public int **hashCode**()

Override hashCode. Generates a hash code for the DateFormatSymbols object.

**Overrides:**[hashCode](http://docs.google.com/java/lang/Object.html#hashCode()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**a hash code value for this object.**See Also:**[Object.equals(java.lang.Object)](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [Hashtable](http://docs.google.com/java/util/Hashtable.html)

### equals

public boolean **equals**([Object](http://docs.google.com/java/lang/Object.html) obj)

Override equals

**Overrides:**[equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)) in class [Object](http://docs.google.com/java/lang/Object.html) **Parameters:**obj - the reference object with which to compare. **Returns:**true if this object is the same as the obj argument; false otherwise.**See Also:**[Object.hashCode()](http://docs.google.com/java/lang/Object.html#hashCode()), [Hashtable](http://docs.google.com/java/util/Hashtable.html)

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/DateFormatSymbols.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/text/DateFormat.Field.html)   [**NEXT CLASS**](http://docs.google.com/java/text/DecimalFormat.html) | [**FRAMES**](http://docs.google.com/index.html?java/text/DateFormatSymbols.html)    [**NO FRAMES**](http://docs.google.com/DateFormatSymbols.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#2s8eyo1) |

[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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