| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ProgressMonitor.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/javax/swing/PopupFactory.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/ProgressMonitor.AccessibleProgressMonitor.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/ProgressMonitor.html)    [**NO FRAMES**](http://docs.google.com/ProgressMonitor.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#3znysh7) | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: [FIELD](#4d34og8) | [CONSTR](#17dp8vu) | [METHOD](#26in1rg) |

## **javax.swing**

Class ProgressMonitor

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.swing.ProgressMonitor**

**All Implemented Interfaces:** [Accessible](http://docs.google.com/javax/accessibility/Accessible.html)

public class **ProgressMonitor**extends [Object](http://docs.google.com/java/lang/Object.html)implements [Accessible](http://docs.google.com/javax/accessibility/Accessible.html)

A class to monitor the progress of some operation. If it looks like the operation will take a while, a progress dialog will be popped up. When the ProgressMonitor is created it is given a numeric range and a descriptive string. As the operation progresses, call the setProgress method to indicate how far along the [min,max] range the operation is. Initially, there is no ProgressDialog. After the first millisToDecideToPopup milliseconds (default 500) the progress monitor will predict how long the operation will take. If it is longer than millisToPopup (default 2000, 2 seconds) a ProgressDialog will be popped up.

From time to time, when the Dialog box is visible, the progress bar will be updated when setProgress is called. setProgress won't always update the progress bar, it will only be done if the amount of progress is visibly significant.

For further documentation and examples see [How to Monitor Progress](http://java.sun.com/docs/books/tutorial/uiswing/components/progress.html), a section in *The Java Tutorial.*

**See Also:**[ProgressMonitorInputStream](http://docs.google.com/javax/swing/ProgressMonitorInputStream.html)

| **Nested Class Summary** | |
| --- | --- |
| protected  class | [**ProgressMonitor.AccessibleProgressMonitor**](http://docs.google.com/javax/swing/ProgressMonitor.AccessibleProgressMonitor.html)            AccessibleProgressMonitor implements accessibility support for the ProgressMonitor class. |

| **Field Summary** | |
| --- | --- |
| protected  [AccessibleContext](http://docs.google.com/javax/accessibility/AccessibleContext.html) | [**accessibleContext**](http://docs.google.com/javax/swing/ProgressMonitor.html#accessibleContext)            The AccessibleContext for the ProgressMonitor |

| **Constructor Summary** | |
| --- | --- |
| [**ProgressMonitor**](http://docs.google.com/javax/swing/ProgressMonitor.html#ProgressMonitor(java.awt.Component,%20java.lang.Object,%20java.lang.String,%20int,%20int))([Component](http://docs.google.com/java/awt/Component.html) parentComponent, [Object](http://docs.google.com/java/lang/Object.html) message, [String](http://docs.google.com/java/lang/String.html) note, int min, int max)            Constructs a graphic object that shows progress, typically by filling in a rectangular bar as the process nears completion. |

| **Method Summary** | |
| --- | --- |
| void | [**close**](http://docs.google.com/javax/swing/ProgressMonitor.html#close())()            Indicate that the operation is complete. |
| [AccessibleContext](http://docs.google.com/javax/accessibility/AccessibleContext.html) | [**getAccessibleContext**](http://docs.google.com/javax/swing/ProgressMonitor.html#getAccessibleContext())()            Gets the AccessibleContext for the ProgressMonitor |
| int | [**getMaximum**](http://docs.google.com/javax/swing/ProgressMonitor.html#getMaximum())()            Returns the maximum value -- the higher end of the progress value. |
| int | [**getMillisToDecideToPopup**](http://docs.google.com/javax/swing/ProgressMonitor.html#getMillisToDecideToPopup())()            Returns the amount of time this object waits before deciding whether or not to popup a progress monitor. |
| int | [**getMillisToPopup**](http://docs.google.com/javax/swing/ProgressMonitor.html#getMillisToPopup())()            Returns the amount of time it will take for the popup to appear. |
| int | [**getMinimum**](http://docs.google.com/javax/swing/ProgressMonitor.html#getMinimum())()            Returns the minimum value -- the lower end of the progress value. |
| [String](http://docs.google.com/java/lang/String.html) | [**getNote**](http://docs.google.com/javax/swing/ProgressMonitor.html#getNote())()            Specifies the additional note that is displayed along with the progress message. |
| boolean | [**isCanceled**](http://docs.google.com/javax/swing/ProgressMonitor.html#isCanceled())()            Returns true if the user hits the Cancel button in the progress dialog. |
| void | [**setMaximum**](http://docs.google.com/javax/swing/ProgressMonitor.html#setMaximum(int))(int m)            Specifies the maximum value. |
| void | [**setMillisToDecideToPopup**](http://docs.google.com/javax/swing/ProgressMonitor.html#setMillisToDecideToPopup(int))(int millisToDecideToPopup)            Specifies the amount of time to wait before deciding whether or not to popup a progress monitor. |
| void | [**setMillisToPopup**](http://docs.google.com/javax/swing/ProgressMonitor.html#setMillisToPopup(int))(int millisToPopup)            Specifies the amount of time it will take for the popup to appear. |
| void | [**setMinimum**](http://docs.google.com/javax/swing/ProgressMonitor.html#setMinimum(int))(int m)            Specifies the minimum value. |
| void | [**setNote**](http://docs.google.com/javax/swing/ProgressMonitor.html#setNote(java.lang.String))([String](http://docs.google.com/java/lang/String.html) note)            Specifies the additional note that is displayed along with the progress message. |
| void | [**setProgress**](http://docs.google.com/javax/swing/ProgressMonitor.html#setProgress(int))(int nv)            Indicate the progress of the operation being monitored. |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [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)) |

| **Field Detail** |
| --- |

### accessibleContext

protected [AccessibleContext](http://docs.google.com/javax/accessibility/AccessibleContext.html) **accessibleContext**

The AccessibleContext for the ProgressMonitor

**Since:** 1.5

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

### ProgressMonitor

public **ProgressMonitor**([Component](http://docs.google.com/java/awt/Component.html) parentComponent,  
 [Object](http://docs.google.com/java/lang/Object.html) message,  
 [String](http://docs.google.com/java/lang/String.html) note,  
 int min,  
 int max)

Constructs a graphic object that shows progress, typically by filling in a rectangular bar as the process nears completion.

**Parameters:**parentComponent - the parent component for the dialog boxmessage - a descriptive message that will be shown to the user to indicate what operation is being monitored. This does not change as the operation progresses. See the message parameters to methods in [JOptionPane.message](http://docs.google.com/javax/swing/JOptionPane.html#message) for the range of values.note - a short note describing the state of the operation. As the operation progresses, you can call setNote to change the note displayed. This is used, for example, in operations that iterate through a list of files to show the name of the file being processes. If note is initially null, there will be no note line in the dialog box and setNote will be ineffectivemin - the lower bound of the rangemax - the upper bound of the range**See Also:**[JDialog](http://docs.google.com/javax/swing/JDialog.html), [JOptionPane](http://docs.google.com/javax/swing/JOptionPane.html)

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

### setProgress

public void **setProgress**(int nv)

Indicate the progress of the operation being monitored. If the specified value is >= the maximum, the progress monitor is closed.

**Parameters:**nv - an int specifying the current value, between the maximum and minimum specified for this component**See Also:**[setMinimum(int)](http://docs.google.com/javax/swing/ProgressMonitor.html#setMinimum(int)), [setMaximum(int)](http://docs.google.com/javax/swing/ProgressMonitor.html#setMaximum(int)), [close()](http://docs.google.com/javax/swing/ProgressMonitor.html#close())

### close

public void **close**()

Indicate that the operation is complete. This happens automatically when the value set by setProgress is >= max, but it may be called earlier if the operation ends early.

### getMinimum

public int **getMinimum**()

Returns the minimum value -- the lower end of the progress value.

**Returns:**an int representing the minimum value**See Also:**[setMinimum(int)](http://docs.google.com/javax/swing/ProgressMonitor.html#setMinimum(int))

### setMinimum

public void **setMinimum**(int m)

Specifies the minimum value.

**Parameters:**m - an int specifying the minimum value**See Also:**[getMinimum()](http://docs.google.com/javax/swing/ProgressMonitor.html#getMinimum())

### getMaximum

public int **getMaximum**()

Returns the maximum value -- the higher end of the progress value.

**Returns:**an int representing the maximum value**See Also:**[setMaximum(int)](http://docs.google.com/javax/swing/ProgressMonitor.html#setMaximum(int))

### setMaximum

public void **setMaximum**(int m)

Specifies the maximum value.

**Parameters:**m - an int specifying the maximum value**See Also:**[getMaximum()](http://docs.google.com/javax/swing/ProgressMonitor.html#getMaximum())

### isCanceled

public boolean **isCanceled**()

Returns true if the user hits the Cancel button in the progress dialog.

### setMillisToDecideToPopup

public void **setMillisToDecideToPopup**(int millisToDecideToPopup)

Specifies the amount of time to wait before deciding whether or not to popup a progress monitor.

**Parameters:**millisToDecideToPopup - an int specifying the time to wait, in milliseconds**See Also:**[getMillisToDecideToPopup()](http://docs.google.com/javax/swing/ProgressMonitor.html#getMillisToDecideToPopup())

### getMillisToDecideToPopup

public int **getMillisToDecideToPopup**()

Returns the amount of time this object waits before deciding whether or not to popup a progress monitor.

**See Also:**[setMillisToDecideToPopup(int)](http://docs.google.com/javax/swing/ProgressMonitor.html#setMillisToDecideToPopup(int))

### setMillisToPopup

public void **setMillisToPopup**(int millisToPopup)

Specifies the amount of time it will take for the popup to appear. (If the predicted time remaining is less than this time, the popup won't be displayed.)

**Parameters:**millisToPopup - an int specifying the time in milliseconds**See Also:**[getMillisToPopup()](http://docs.google.com/javax/swing/ProgressMonitor.html#getMillisToPopup())

### getMillisToPopup

public int **getMillisToPopup**()

Returns the amount of time it will take for the popup to appear.

**See Also:**[setMillisToPopup(int)](http://docs.google.com/javax/swing/ProgressMonitor.html#setMillisToPopup(int))

### setNote

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

Specifies the additional note that is displayed along with the progress message. Used, for example, to show which file the is currently being copied during a multiple-file copy.

**Parameters:**note - a String specifying the note to display**See Also:**[getNote()](http://docs.google.com/javax/swing/ProgressMonitor.html#getNote())

### getNote

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

Specifies the additional note that is displayed along with the progress message.

**Returns:**a String specifying the note to display**See Also:**[setNote(java.lang.String)](http://docs.google.com/javax/swing/ProgressMonitor.html#setNote(java.lang.String))

### getAccessibleContext

public [AccessibleContext](http://docs.google.com/javax/accessibility/AccessibleContext.html) **getAccessibleContext**()

Gets the AccessibleContext for the ProgressMonitor

**Specified by:**[getAccessibleContext](http://docs.google.com/javax/accessibility/Accessible.html#getAccessibleContext()) in interface [Accessible](http://docs.google.com/javax/accessibility/Accessible.html) **Returns:**the AccessibleContext for the ProgressMonitor**Since:** 1.5

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ProgressMonitor.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/javax/swing/PopupFactory.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/ProgressMonitor.AccessibleProgressMonitor.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/ProgressMonitor.html)    [**NO FRAMES**](http://docs.google.com/ProgressMonitor.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#3znysh7) | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: [FIELD](#4d34og8) | [CONSTR](#17dp8vu) | [METHOD](#26in1rg) |

[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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