| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/StringMonitor.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/management/monitor/MonitorSettingException.html)   [**NEXT CLASS**](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html) | [**FRAMES**](http://docs.google.com/index.html?javax/management/monitor/StringMonitor.html)    [**NO FRAMES**](http://docs.google.com/StringMonitor.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: FIELD | [CONSTR](#3rdcrjn) | [METHOD](#lnxbz9) |

## **javax.management.monitor**

Class StringMonitor

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [javax.management.NotificationBroadcasterSupport](http://docs.google.com/javax/management/NotificationBroadcasterSupport.html)  
 [javax.management.monitor.Monitor](http://docs.google.com/javax/management/monitor/Monitor.html)  
 **javax.management.monitor.StringMonitor**

**All Implemented Interfaces:** [MBeanRegistration](http://docs.google.com/javax/management/MBeanRegistration.html), [MonitorMBean](http://docs.google.com/javax/management/monitor/MonitorMBean.html), [StringMonitorMBean](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html), [NotificationBroadcaster](http://docs.google.com/javax/management/NotificationBroadcaster.html), [NotificationEmitter](http://docs.google.com/javax/management/NotificationEmitter.html)

public class **StringMonitor**extends [Monitor](http://docs.google.com/javax/management/monitor/Monitor.html)implements [StringMonitorMBean](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html)

Defines a monitor MBean designed to observe the values of a string attribute.

A string monitor sends notifications as follows:

* if the attribute value matches the string to compare value, a [match notification](http://docs.google.com/javax/management/monitor/MonitorNotification.html#STRING_TO_COMPARE_VALUE_MATCHED) is sent. The notify match flag must be set to true.  
  Subsequent matchings of the string to compare values do not cause further notifications unless the attribute value differs from the string to compare value.
* if the attribute value differs from the string to compare value, a [differ notification](http://docs.google.com/javax/management/monitor/MonitorNotification.html#STRING_TO_COMPARE_VALUE_DIFFERED) is sent. The notify differ flag must be set to true.  
  Subsequent differences from the string to compare value do not cause further notifications unless the attribute value matches the string to compare value.

**Since:** 1.5

| **Field Summary** | |
| --- | --- |

| **Fields inherited from class javax.management.monitor.**[**Monitor**](http://docs.google.com/javax/management/monitor/Monitor.html) |
| --- |
| [alreadyNotified](http://docs.google.com/javax/management/monitor/Monitor.html#alreadyNotified), [alreadyNotifieds](http://docs.google.com/javax/management/monitor/Monitor.html#alreadyNotifieds), [capacityIncrement](http://docs.google.com/javax/management/monitor/Monitor.html#capacityIncrement), [dbgTag](http://docs.google.com/javax/management/monitor/Monitor.html#dbgTag), [elementCount](http://docs.google.com/javax/management/monitor/Monitor.html#elementCount), [OBSERVED\_ATTRIBUTE\_ERROR\_NOTIFIED](http://docs.google.com/javax/management/monitor/Monitor.html#OBSERVED_ATTRIBUTE_ERROR_NOTIFIED), [OBSERVED\_ATTRIBUTE\_TYPE\_ERROR\_NOTIFIED](http://docs.google.com/javax/management/monitor/Monitor.html#OBSERVED_ATTRIBUTE_TYPE_ERROR_NOTIFIED), [OBSERVED\_OBJECT\_ERROR\_NOTIFIED](http://docs.google.com/javax/management/monitor/Monitor.html#OBSERVED_OBJECT_ERROR_NOTIFIED), [RESET\_FLAGS\_ALREADY\_NOTIFIED](http://docs.google.com/javax/management/monitor/Monitor.html#RESET_FLAGS_ALREADY_NOTIFIED), [RUNTIME\_ERROR\_NOTIFIED](http://docs.google.com/javax/management/monitor/Monitor.html#RUNTIME_ERROR_NOTIFIED), [server](http://docs.google.com/javax/management/monitor/Monitor.html#server) |

| **Constructor Summary** | |
| --- | --- |
| [**StringMonitor**](http://docs.google.com/javax/management/monitor/StringMonitor.html#StringMonitor())()            Default constructor. |

| **Method Summary** | |
| --- | --- |
| [String](http://docs.google.com/java/lang/String.html) | [**getDerivedGauge**](http://docs.google.com/javax/management/monitor/StringMonitor.html#getDerivedGauge())()  **Deprecated.** *As of JMX 1.2, replaced by* [*getDerivedGauge(ObjectName)*](http://docs.google.com/javax/management/monitor/StringMonitor.html#getDerivedGauge(javax.management.ObjectName)) |
| [String](http://docs.google.com/java/lang/String.html) | [**getDerivedGauge**](http://docs.google.com/javax/management/monitor/StringMonitor.html#getDerivedGauge(javax.management.ObjectName))([ObjectName](http://docs.google.com/javax/management/ObjectName.html) object)            Gets the derived gauge of the specified object, if this object is contained in the set of observed MBeans, or null otherwise. |
| long | [**getDerivedGaugeTimeStamp**](http://docs.google.com/javax/management/monitor/StringMonitor.html#getDerivedGaugeTimeStamp())()  **Deprecated.** *As of JMX 1.2, replaced by* [*getDerivedGaugeTimeStamp(ObjectName)*](http://docs.google.com/javax/management/monitor/StringMonitor.html#getDerivedGaugeTimeStamp(javax.management.ObjectName)) |
| long | [**getDerivedGaugeTimeStamp**](http://docs.google.com/javax/management/monitor/StringMonitor.html#getDerivedGaugeTimeStamp(javax.management.ObjectName))([ObjectName](http://docs.google.com/javax/management/ObjectName.html) object)            Gets the derived gauge timestamp of the specified object, if this object is contained in the set of observed MBeans, or 0 otherwise. |
| [MBeanNotificationInfo](http://docs.google.com/javax/management/MBeanNotificationInfo.html)[] | [**getNotificationInfo**](http://docs.google.com/javax/management/monitor/StringMonitor.html#getNotificationInfo())()            Returns a NotificationInfo object containing the name of the Java class of the notification and the notification types sent by the string monitor. |
| boolean | [**getNotifyDiffer**](http://docs.google.com/javax/management/monitor/StringMonitor.html#getNotifyDiffer())()            Gets the differing notification's on/off switch value common to all observed MBeans. |
| boolean | [**getNotifyMatch**](http://docs.google.com/javax/management/monitor/StringMonitor.html#getNotifyMatch())()            Gets the matching notification's on/off switch value common to all observed MBeans. |
| [String](http://docs.google.com/java/lang/String.html) | [**getStringToCompare**](http://docs.google.com/javax/management/monitor/StringMonitor.html#getStringToCompare())()            Gets the string to compare with the observed attribute common to all observed MBeans. |
| void | [**setNotifyDiffer**](http://docs.google.com/javax/management/monitor/StringMonitor.html#setNotifyDiffer(boolean))(boolean value)            Sets the differing notification's on/off switch value common to all observed MBeans. |
| void | [**setNotifyMatch**](http://docs.google.com/javax/management/monitor/StringMonitor.html#setNotifyMatch(boolean))(boolean value)            Sets the matching notification's on/off switch value common to all observed MBeans. |
| void | [**setStringToCompare**](http://docs.google.com/javax/management/monitor/StringMonitor.html#setStringToCompare(java.lang.String))([String](http://docs.google.com/java/lang/String.html) value)            Sets the string to compare with the observed attribute common to all observed MBeans. |
| void | [**start**](http://docs.google.com/javax/management/monitor/StringMonitor.html#start())()            Starts the string monitor. |
| void | [**stop**](http://docs.google.com/javax/management/monitor/StringMonitor.html#stop())()            Stops the string monitor. |

| **Methods inherited from class javax.management.monitor.**[**Monitor**](http://docs.google.com/javax/management/monitor/Monitor.html) |
| --- |
| [addObservedObject](http://docs.google.com/javax/management/monitor/Monitor.html#addObservedObject(javax.management.ObjectName)), [containsObservedObject](http://docs.google.com/javax/management/monitor/Monitor.html#containsObservedObject(javax.management.ObjectName)), [getGranularityPeriod](http://docs.google.com/javax/management/monitor/Monitor.html#getGranularityPeriod()), [getObservedAttribute](http://docs.google.com/javax/management/monitor/Monitor.html#getObservedAttribute()), [getObservedObject](http://docs.google.com/javax/management/monitor/Monitor.html#getObservedObject()), [getObservedObjects](http://docs.google.com/javax/management/monitor/Monitor.html#getObservedObjects()), [isActive](http://docs.google.com/javax/management/monitor/Monitor.html#isActive()), [postDeregister](http://docs.google.com/javax/management/monitor/Monitor.html#postDeregister()), [postRegister](http://docs.google.com/javax/management/monitor/Monitor.html#postRegister(java.lang.Boolean)), [preDeregister](http://docs.google.com/javax/management/monitor/Monitor.html#preDeregister()), [preRegister](http://docs.google.com/javax/management/monitor/Monitor.html#preRegister(javax.management.MBeanServer,%20javax.management.ObjectName)), [removeObservedObject](http://docs.google.com/javax/management/monitor/Monitor.html#removeObservedObject(javax.management.ObjectName)), [setGranularityPeriod](http://docs.google.com/javax/management/monitor/Monitor.html#setGranularityPeriod(long)), [setObservedAttribute](http://docs.google.com/javax/management/monitor/Monitor.html#setObservedAttribute(java.lang.String)), [setObservedObject](http://docs.google.com/javax/management/monitor/Monitor.html#setObservedObject(javax.management.ObjectName)) |

| **Methods inherited from class javax.management.**[**NotificationBroadcasterSupport**](http://docs.google.com/javax/management/NotificationBroadcasterSupport.html) |
| --- |
| [addNotificationListener](http://docs.google.com/javax/management/NotificationBroadcasterSupport.html#addNotificationListener(javax.management.NotificationListener,%20javax.management.NotificationFilter,%20java.lang.Object)), [handleNotification](http://docs.google.com/javax/management/NotificationBroadcasterSupport.html#handleNotification(javax.management.NotificationListener,%20javax.management.Notification,%20java.lang.Object)), [removeNotificationListener](http://docs.google.com/javax/management/NotificationBroadcasterSupport.html#removeNotificationListener(javax.management.NotificationListener)), [removeNotificationListener](http://docs.google.com/javax/management/NotificationBroadcasterSupport.html#removeNotificationListener(javax.management.NotificationListener,%20javax.management.NotificationFilter,%20java.lang.Object)), [sendNotification](http://docs.google.com/javax/management/NotificationBroadcasterSupport.html#sendNotification(javax.management.Notification)) |

| **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)) |

| **Methods inherited from interface javax.management.monitor.**[**MonitorMBean**](http://docs.google.com/javax/management/monitor/MonitorMBean.html) |
| --- |
| [addObservedObject](http://docs.google.com/javax/management/monitor/MonitorMBean.html#addObservedObject(javax.management.ObjectName)), [containsObservedObject](http://docs.google.com/javax/management/monitor/MonitorMBean.html#containsObservedObject(javax.management.ObjectName)), [getGranularityPeriod](http://docs.google.com/javax/management/monitor/MonitorMBean.html#getGranularityPeriod()), [getObservedAttribute](http://docs.google.com/javax/management/monitor/MonitorMBean.html#getObservedAttribute()), [getObservedObject](http://docs.google.com/javax/management/monitor/MonitorMBean.html#getObservedObject()), [getObservedObjects](http://docs.google.com/javax/management/monitor/MonitorMBean.html#getObservedObjects()), [isActive](http://docs.google.com/javax/management/monitor/MonitorMBean.html#isActive()), [removeObservedObject](http://docs.google.com/javax/management/monitor/MonitorMBean.html#removeObservedObject(javax.management.ObjectName)), [setGranularityPeriod](http://docs.google.com/javax/management/monitor/MonitorMBean.html#setGranularityPeriod(long)), [setObservedAttribute](http://docs.google.com/javax/management/monitor/MonitorMBean.html#setObservedAttribute(java.lang.String)), [setObservedObject](http://docs.google.com/javax/management/monitor/MonitorMBean.html#setObservedObject(javax.management.ObjectName)) |

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

### StringMonitor

public **StringMonitor**()

Default constructor.

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

### start

public void **start**()

Starts the string monitor.

**Specified by:**[start](http://docs.google.com/javax/management/monitor/MonitorMBean.html#start()) in interface [MonitorMBean](http://docs.google.com/javax/management/monitor/MonitorMBean.html)**Specified by:**[start](http://docs.google.com/javax/management/monitor/Monitor.html#start()) in class [Monitor](http://docs.google.com/javax/management/monitor/Monitor.html)

### stop

public void **stop**()

Stops the string monitor.

**Specified by:**[stop](http://docs.google.com/javax/management/monitor/MonitorMBean.html#stop()) in interface [MonitorMBean](http://docs.google.com/javax/management/monitor/MonitorMBean.html)**Specified by:**[stop](http://docs.google.com/javax/management/monitor/Monitor.html#stop()) in class [Monitor](http://docs.google.com/javax/management/monitor/Monitor.html)

### getDerivedGauge

public [String](http://docs.google.com/java/lang/String.html) **getDerivedGauge**([ObjectName](http://docs.google.com/javax/management/ObjectName.html) object)

Gets the derived gauge of the specified object, if this object is contained in the set of observed MBeans, or null otherwise.

**Specified by:**[getDerivedGauge](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html#getDerivedGauge(javax.management.ObjectName)) in interface [StringMonitorMBean](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html) **Parameters:**object - the name of the MBean whose derived gauge is required. **Returns:**The derived gauge of the specified object.

### getDerivedGaugeTimeStamp

public long **getDerivedGaugeTimeStamp**([ObjectName](http://docs.google.com/javax/management/ObjectName.html) object)

Gets the derived gauge timestamp of the specified object, if this object is contained in the set of observed MBeans, or 0 otherwise.

**Specified by:**[getDerivedGaugeTimeStamp](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html#getDerivedGaugeTimeStamp(javax.management.ObjectName)) in interface [StringMonitorMBean](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html) **Parameters:**object - the name of the object whose derived gauge timestamp is to be returned. **Returns:**The derived gauge timestamp of the specified object.

### getDerivedGauge

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

**Deprecated.** *As of JMX 1.2, replaced by* [*getDerivedGauge(ObjectName)*](http://docs.google.com/javax/management/monitor/StringMonitor.html#getDerivedGauge(javax.management.ObjectName))

Returns the derived gauge of the first object in the set of observed MBeans.

**Specified by:**[getDerivedGauge](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html#getDerivedGauge()) in interface [StringMonitorMBean](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html) **Returns:**The derived gauge.

### getDerivedGaugeTimeStamp

[@Deprecated](http://docs.google.com/java/lang/Deprecated.html)  
public long **getDerivedGaugeTimeStamp**()

**Deprecated.** *As of JMX 1.2, replaced by* [*getDerivedGaugeTimeStamp(ObjectName)*](http://docs.google.com/javax/management/monitor/StringMonitor.html#getDerivedGaugeTimeStamp(javax.management.ObjectName))

Gets the derived gauge timestamp of the first object in the set of observed MBeans.

**Specified by:**[getDerivedGaugeTimeStamp](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html#getDerivedGaugeTimeStamp()) in interface [StringMonitorMBean](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html) **Returns:**The derived gauge timestamp.

### getStringToCompare

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

Gets the string to compare with the observed attribute common to all observed MBeans.

**Specified by:**[getStringToCompare](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html#getStringToCompare()) in interface [StringMonitorMBean](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html) **Returns:**The string value.**See Also:**[setStringToCompare(java.lang.String)](http://docs.google.com/javax/management/monitor/StringMonitor.html#setStringToCompare(java.lang.String))

### setStringToCompare

public void **setStringToCompare**([String](http://docs.google.com/java/lang/String.html) value)  
 throws [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html)

Sets the string to compare with the observed attribute common to all observed MBeans.

**Specified by:**[setStringToCompare](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html#setStringToCompare(java.lang.String)) in interface [StringMonitorMBean](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html) **Parameters:**value - The string value. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - The specified string to compare is null.**See Also:**[getStringToCompare()](http://docs.google.com/javax/management/monitor/StringMonitor.html#getStringToCompare())

### getNotifyMatch

public boolean **getNotifyMatch**()

Gets the matching notification's on/off switch value common to all observed MBeans.

**Specified by:**[getNotifyMatch](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html#getNotifyMatch()) in interface [StringMonitorMBean](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html) **Returns:**true if the string monitor notifies when matching the string to compare, false otherwise.**See Also:**[setNotifyMatch(boolean)](http://docs.google.com/javax/management/monitor/StringMonitor.html#setNotifyMatch(boolean))

### setNotifyMatch

public void **setNotifyMatch**(boolean value)

Sets the matching notification's on/off switch value common to all observed MBeans.

**Specified by:**[setNotifyMatch](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html#setNotifyMatch(boolean)) in interface [StringMonitorMBean](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html) **Parameters:**value - The matching notification's on/off switch value.**See Also:**[getNotifyMatch()](http://docs.google.com/javax/management/monitor/StringMonitor.html#getNotifyMatch())

### getNotifyDiffer

public boolean **getNotifyDiffer**()

Gets the differing notification's on/off switch value common to all observed MBeans.

**Specified by:**[getNotifyDiffer](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html#getNotifyDiffer()) in interface [StringMonitorMBean](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html) **Returns:**true if the string monitor notifies when differing from the string to compare, false otherwise.**See Also:**[setNotifyDiffer(boolean)](http://docs.google.com/javax/management/monitor/StringMonitor.html#setNotifyDiffer(boolean))

### setNotifyDiffer

public void **setNotifyDiffer**(boolean value)

Sets the differing notification's on/off switch value common to all observed MBeans.

**Specified by:**[setNotifyDiffer](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html#setNotifyDiffer(boolean)) in interface [StringMonitorMBean](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html) **Parameters:**value - The differing notification's on/off switch value.**See Also:**[getNotifyDiffer()](http://docs.google.com/javax/management/monitor/StringMonitor.html#getNotifyDiffer())

### getNotificationInfo

public [MBeanNotificationInfo](http://docs.google.com/javax/management/MBeanNotificationInfo.html)[] **getNotificationInfo**()

Returns a NotificationInfo object containing the name of the Java class of the notification and the notification types sent by the string monitor.

**Specified by:**[getNotificationInfo](http://docs.google.com/javax/management/NotificationBroadcaster.html#getNotificationInfo()) in interface [NotificationBroadcaster](http://docs.google.com/javax/management/NotificationBroadcaster.html)**Overrides:**[getNotificationInfo](http://docs.google.com/javax/management/NotificationBroadcasterSupport.html#getNotificationInfo()) in class [NotificationBroadcasterSupport](http://docs.google.com/javax/management/NotificationBroadcasterSupport.html) **Returns:**the array of possible notifications.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/StringMonitor.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/management/monitor/MonitorSettingException.html)   [**NEXT CLASS**](http://docs.google.com/javax/management/monitor/StringMonitorMBean.html) | [**FRAMES**](http://docs.google.com/index.html?javax/management/monitor/StringMonitor.html)    [**NO FRAMES**](http://docs.google.com/StringMonitor.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: FIELD | [CONSTR](#3rdcrjn) | [METHOD](#lnxbz9) |

[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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