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

## **javax.swing.plaf.synth**

Class SynthLookAndFeel

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [javax.swing.LookAndFeel](http://docs.google.com/javax/swing/LookAndFeel.html)  
 [javax.swing.plaf.basic.BasicLookAndFeel](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html)  
 **javax.swing.plaf.synth.SynthLookAndFeel**

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

public class **SynthLookAndFeel**extends [BasicLookAndFeel](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html)

SynthLookAndFeel provides the basis for creating a customized look and feel. SynthLookAndFeel does not directly provide a look, all painting is delegated. You need to either provide a configuration file, by way of the [load(java.io.InputStream, java.lang.Class)](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#load(java.io.InputStream,%20java.lang.Class)) method, or provide your own [SynthStyleFactory](http://docs.google.com/javax/swing/plaf/synth/SynthStyleFactory.html) to [setStyleFactory(javax.swing.plaf.synth.SynthStyleFactory)](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#setStyleFactory(javax.swing.plaf.synth.SynthStyleFactory)). Refer to the [package summary](http://docs.google.com/package-summary.html) for an example of loading a file, and [SynthStyleFactory](http://docs.google.com/javax/swing/plaf/synth/SynthStyleFactory.html) for an example of providing your own SynthStyleFactory to setStyleFactory.

**Warning:** This class implements [Serializable](http://docs.google.com/java/io/Serializable.html) as a side effect of it extending [BasicLookAndFeel](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html). It is not intended to be serialized. An attempt to serialize it will result in [NotSerializableException](http://docs.google.com/java/io/NotSerializableException.html).

**Since:** 1.5

| **Constructor Summary** | |
| --- | --- |
| [**SynthLookAndFeel**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#SynthLookAndFeel())()            Creates a SynthLookAndFeel. |

| **Method Summary** | |
| --- | --- |
| static [ComponentUI](http://docs.google.com/javax/swing/plaf/ComponentUI.html) | [**createUI**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#createUI(javax.swing.JComponent))([JComponent](http://docs.google.com/javax/swing/JComponent.html) c)            Creates the Synth look and feel ComponentUI for the passed in JComponent. |
| [UIDefaults](http://docs.google.com/javax/swing/UIDefaults.html) | [**getDefaults**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#getDefaults())()            Returns the defaults for this SynthLookAndFeel. |
| [String](http://docs.google.com/java/lang/String.html) | [**getDescription**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#getDescription())()            Returns a textual description of SynthLookAndFeel. |
| [String](http://docs.google.com/java/lang/String.html) | [**getID**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#getID())()            Return a string that identifies this look and feel. |
| [String](http://docs.google.com/java/lang/String.html) | [**getName**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#getName())()            Return a short string that identifies this look and feel. |
| static [Region](http://docs.google.com/javax/swing/plaf/synth/Region.html) | [**getRegion**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#getRegion(javax.swing.JComponent))([JComponent](http://docs.google.com/javax/swing/JComponent.html) c)            Returns the Region for the JComponent c. |
| static [SynthStyle](http://docs.google.com/javax/swing/plaf/synth/SynthStyle.html) | [**getStyle**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#getStyle(javax.swing.JComponent,%20javax.swing.plaf.synth.Region))([JComponent](http://docs.google.com/javax/swing/JComponent.html) c, [Region](http://docs.google.com/javax/swing/plaf/synth/Region.html) region)            Gets a SynthStyle for the specified region of the specified component. |
| static [SynthStyleFactory](http://docs.google.com/javax/swing/plaf/synth/SynthStyleFactory.html) | [**getStyleFactory**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#getStyleFactory())()            Returns the current SynthStyleFactory. |
| void | [**initialize**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#initialize())()            Called by UIManager when this look and feel is installed. |
| boolean | [**isNativeLookAndFeel**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#isNativeLookAndFeel())()            Returns false, SynthLookAndFeel is not a native look and feel. |
| boolean | [**isSupportedLookAndFeel**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#isSupportedLookAndFeel())()            Returns true, SynthLookAndFeel is always supported. |
| void | [**load**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#load(java.io.InputStream,%20java.lang.Class))([InputStream](http://docs.google.com/java/io/InputStream.html) input, [Class](http://docs.google.com/java/lang/Class.html)<?> resourceBase)            Loads the set of SynthStyles that will be used by this SynthLookAndFeel. |
| void | [**load**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#load(java.net.URL))([URL](http://docs.google.com/java/net/URL.html) url)            Loads the set of SynthStyles that will be used by this SynthLookAndFeel. |
| static void | [**setStyleFactory**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#setStyleFactory(javax.swing.plaf.synth.SynthStyleFactory))([SynthStyleFactory](http://docs.google.com/javax/swing/plaf/synth/SynthStyleFactory.html) cache)            Sets the SynthStyleFactory that the UI classes provided by synth will use to obtain a SynthStyle. |
| boolean | [**shouldUpdateStyleOnAncestorChanged**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#shouldUpdateStyleOnAncestorChanged())()            Returns whether or not the UIs should update their SynthStyles from the SynthStyleFactory when the ancestor of the JComponent changes. |
| void | [**uninitialize**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#uninitialize())()            Called by UIManager when this look and feel is uninstalled. |
| static void | [**updateStyles**](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#updateStyles(java.awt.Component))([Component](http://docs.google.com/java/awt/Component.html) c)            Updates the style associated with c, and all its children. |

| **Methods inherited from class javax.swing.plaf.basic.**[**BasicLookAndFeel**](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html) |
| --- |
| [createAudioAction](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html#createAudioAction(java.lang.Object)), [getAudioActionMap](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html#getAudioActionMap()), [initClassDefaults](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html#initClassDefaults(javax.swing.UIDefaults)), [initComponentDefaults](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html#initComponentDefaults(javax.swing.UIDefaults)), [initSystemColorDefaults](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html#initSystemColorDefaults(javax.swing.UIDefaults)), [loadSystemColors](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html#loadSystemColors(javax.swing.UIDefaults,%20java.lang.String%5B%5D,%20boolean)), [playSound](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html#playSound(javax.swing.Action)) |

| **Methods inherited from class javax.swing.**[**LookAndFeel**](http://docs.google.com/javax/swing/LookAndFeel.html) |
| --- |
| [getDesktopPropertyValue](http://docs.google.com/javax/swing/LookAndFeel.html#getDesktopPropertyValue(java.lang.String,%20java.lang.Object)), [getDisabledIcon](http://docs.google.com/javax/swing/LookAndFeel.html#getDisabledIcon(javax.swing.JComponent,%20javax.swing.Icon)), [getDisabledSelectedIcon](http://docs.google.com/javax/swing/LookAndFeel.html#getDisabledSelectedIcon(javax.swing.JComponent,%20javax.swing.Icon)), [getLayoutStyle](http://docs.google.com/javax/swing/LookAndFeel.html#getLayoutStyle()), [getSupportsWindowDecorations](http://docs.google.com/javax/swing/LookAndFeel.html#getSupportsWindowDecorations()), [installBorder](http://docs.google.com/javax/swing/LookAndFeel.html#installBorder(javax.swing.JComponent,%20java.lang.String)), [installColors](http://docs.google.com/javax/swing/LookAndFeel.html#installColors(javax.swing.JComponent,%20java.lang.String,%20java.lang.String)), [installColorsAndFont](http://docs.google.com/javax/swing/LookAndFeel.html#installColorsAndFont(javax.swing.JComponent,%20java.lang.String,%20java.lang.String,%20java.lang.String)), [installProperty](http://docs.google.com/javax/swing/LookAndFeel.html#installProperty(javax.swing.JComponent,%20java.lang.String,%20java.lang.Object)), [loadKeyBindings](http://docs.google.com/javax/swing/LookAndFeel.html#loadKeyBindings(javax.swing.InputMap,%20java.lang.Object%5B%5D)), [makeComponentInputMap](http://docs.google.com/javax/swing/LookAndFeel.html#makeComponentInputMap(javax.swing.JComponent,%20java.lang.Object%5B%5D)), [makeIcon](http://docs.google.com/javax/swing/LookAndFeel.html#makeIcon(java.lang.Class,%20java.lang.String)), [makeInputMap](http://docs.google.com/javax/swing/LookAndFeel.html#makeInputMap(java.lang.Object%5B%5D)), [makeKeyBindings](http://docs.google.com/javax/swing/LookAndFeel.html#makeKeyBindings(java.lang.Object%5B%5D)), [provideErrorFeedback](http://docs.google.com/javax/swing/LookAndFeel.html#provideErrorFeedback(java.awt.Component)), [toString](http://docs.google.com/javax/swing/LookAndFeel.html#toString()), [uninstallBorder](http://docs.google.com/javax/swing/LookAndFeel.html#uninstallBorder(javax.swing.JComponent)) |

| **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()), [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** |
| --- |

### SynthLookAndFeel

public **SynthLookAndFeel**()

Creates a SynthLookAndFeel.

For the returned SynthLookAndFeel to be useful you need to invoke load to specify the set of SynthStyles, or invoke setStyleFactory.

**See Also:**[load(java.io.InputStream, java.lang.Class)](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#load(java.io.InputStream,%20java.lang.Class)), [setStyleFactory(javax.swing.plaf.synth.SynthStyleFactory)](http://docs.google.com/javax/swing/plaf/synth/SynthLookAndFeel.html#setStyleFactory(javax.swing.plaf.synth.SynthStyleFactory))

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

### setStyleFactory

public static void **setStyleFactory**([SynthStyleFactory](http://docs.google.com/javax/swing/plaf/synth/SynthStyleFactory.html) cache)

Sets the SynthStyleFactory that the UI classes provided by synth will use to obtain a SynthStyle.

**Parameters:**cache - SynthStyleFactory the UIs should use.

### getStyleFactory

public static [SynthStyleFactory](http://docs.google.com/javax/swing/plaf/synth/SynthStyleFactory.html) **getStyleFactory**()

Returns the current SynthStyleFactory.

**Returns:**SynthStyleFactory

### getStyle

public static [SynthStyle](http://docs.google.com/javax/swing/plaf/synth/SynthStyle.html) **getStyle**([JComponent](http://docs.google.com/javax/swing/JComponent.html) c,  
 [Region](http://docs.google.com/javax/swing/plaf/synth/Region.html) region)

Gets a SynthStyle for the specified region of the specified component. This is not for general consumption, only custom UIs should call this method.

**Parameters:**c - JComponent to get the SynthStyle forregion - Identifies the region of the specified component **Returns:**SynthStyle to use.

### updateStyles

public static void **updateStyles**([Component](http://docs.google.com/java/awt/Component.html) c)

Updates the style associated with c, and all its children. This is a lighter version of SwingUtilities.updateComponentTreeUI.

**Parameters:**c - Component to update style for.

### getRegion

public static [Region](http://docs.google.com/javax/swing/plaf/synth/Region.html) **getRegion**([JComponent](http://docs.google.com/javax/swing/JComponent.html) c)

Returns the Region for the JComponent c.

**Parameters:**c - JComponent to fetch the Region for **Returns:**Region corresponding to c

### createUI

public static [ComponentUI](http://docs.google.com/javax/swing/plaf/ComponentUI.html) **createUI**([JComponent](http://docs.google.com/javax/swing/JComponent.html) c)

Creates the Synth look and feel ComponentUI for the passed in JComponent.

**Parameters:**c - JComponent to create the ComponentUI for **Returns:**ComponentUI to use for c

### load

public void **load**([InputStream](http://docs.google.com/java/io/InputStream.html) input,  
 [Class](http://docs.google.com/java/lang/Class.html)<?> resourceBase)  
 throws [ParseException](http://docs.google.com/java/text/ParseException.html)

Loads the set of SynthStyles that will be used by this SynthLookAndFeel. resourceBase is used to resolve any path based resources, for example an Image would be resolved by resourceBase.getResource(path). Refer to [Synth File Format](http://docs.google.com/doc-files/synthFileFormat.html) for more information.

**Parameters:**input - InputStream to load fromresourceBase - used to resolve any images or other resources **Throws:** [ParseException](http://docs.google.com/java/text/ParseException.html) - if there is an error in parsing [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if input or resourceBase is null

### load

public void **load**([URL](http://docs.google.com/java/net/URL.html) url)  
 throws [ParseException](http://docs.google.com/java/text/ParseException.html),  
 [IOException](http://docs.google.com/java/io/IOException.html)

Loads the set of SynthStyles that will be used by this SynthLookAndFeel. Path based resources are resolved relatively to the specified URL of the style. For example an Image would be resolved by new URL(synthFile, path). Refer to [Synth File Format](http://docs.google.com/doc-files/synthFileFormat.html) for more information.

**Parameters:**url - the URL to load the set of SynthStyle from **Throws:** [ParseException](http://docs.google.com/java/text/ParseException.html) - if there is an error in parsing [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if synthSet is null [IOException](http://docs.google.com/java/io/IOException.html) - if synthSet cannot be opened as an InputStream**Since:** 1.6

### initialize

public void **initialize**()

Called by UIManager when this look and feel is installed.

**Overrides:**[initialize](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html#initialize()) in class [BasicLookAndFeel](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html) **See Also:**[LookAndFeel.uninitialize()](http://docs.google.com/javax/swing/LookAndFeel.html#uninitialize()), [UIManager.setLookAndFeel(javax.swing.LookAndFeel)](http://docs.google.com/javax/swing/UIManager.html#setLookAndFeel(javax.swing.LookAndFeel))

### uninitialize

public void **uninitialize**()

Called by UIManager when this look and feel is uninstalled.

**Overrides:**[uninitialize](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html#uninitialize()) in class [BasicLookAndFeel](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html) **See Also:**[LookAndFeel.initialize()](http://docs.google.com/javax/swing/LookAndFeel.html#initialize()), [UIManager.setLookAndFeel(javax.swing.LookAndFeel)](http://docs.google.com/javax/swing/UIManager.html#setLookAndFeel(javax.swing.LookAndFeel))

### getDefaults

public [UIDefaults](http://docs.google.com/javax/swing/UIDefaults.html) **getDefaults**()

Returns the defaults for this SynthLookAndFeel.

**Overrides:**[getDefaults](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html#getDefaults()) in class [BasicLookAndFeel](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html) **Returns:**Defaults table.**See Also:**[BasicLookAndFeel.initClassDefaults(javax.swing.UIDefaults)](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html#initClassDefaults(javax.swing.UIDefaults)), [BasicLookAndFeel.initSystemColorDefaults(javax.swing.UIDefaults)](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html#initSystemColorDefaults(javax.swing.UIDefaults)), [BasicLookAndFeel.initComponentDefaults(javax.swing.UIDefaults)](http://docs.google.com/javax/swing/plaf/basic/BasicLookAndFeel.html#initComponentDefaults(javax.swing.UIDefaults))

### isSupportedLookAndFeel

public boolean **isSupportedLookAndFeel**()

Returns true, SynthLookAndFeel is always supported.

**Specified by:**[isSupportedLookAndFeel](http://docs.google.com/javax/swing/LookAndFeel.html#isSupportedLookAndFeel()) in class [LookAndFeel](http://docs.google.com/javax/swing/LookAndFeel.html) **Returns:**true.**See Also:**[UIManager.setLookAndFeel(javax.swing.LookAndFeel)](http://docs.google.com/javax/swing/UIManager.html#setLookAndFeel(javax.swing.LookAndFeel))

### isNativeLookAndFeel

public boolean **isNativeLookAndFeel**()

Returns false, SynthLookAndFeel is not a native look and feel.

**Specified by:**[isNativeLookAndFeel](http://docs.google.com/javax/swing/LookAndFeel.html#isNativeLookAndFeel()) in class [LookAndFeel](http://docs.google.com/javax/swing/LookAndFeel.html) **Returns:**false

### getDescription

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

Returns a textual description of SynthLookAndFeel.

**Specified by:**[getDescription](http://docs.google.com/javax/swing/LookAndFeel.html#getDescription()) in class [LookAndFeel](http://docs.google.com/javax/swing/LookAndFeel.html) **Returns:**textual description of synth.

### getName

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

Return a short string that identifies this look and feel.

**Specified by:**[getName](http://docs.google.com/javax/swing/LookAndFeel.html#getName()) in class [LookAndFeel](http://docs.google.com/javax/swing/LookAndFeel.html) **Returns:**a short string identifying this look and feel.

### getID

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

Return a string that identifies this look and feel.

**Specified by:**[getID](http://docs.google.com/javax/swing/LookAndFeel.html#getID()) in class [LookAndFeel](http://docs.google.com/javax/swing/LookAndFeel.html) **Returns:**a short string identifying this look and feel.

### shouldUpdateStyleOnAncestorChanged

public boolean **shouldUpdateStyleOnAncestorChanged**()

Returns whether or not the UIs should update their SynthStyles from the SynthStyleFactory when the ancestor of the JComponent changes. A subclass that provided a SynthStyleFactory that based the return value from getStyle off the containment hierarchy would override this method to return true.

**Returns:**whether or not the UIs should update their SynthStyles from the SynthStyleFactory when the ancestor changed.

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

[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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