

## Version 1.0 Beta 1

# Upgrading by Hand

This page describes the changes that the **upgrade** script makes to Alpha 3 applets to convert them to the new applet API. Most applets require additional hand tweaking to make them work under the new API. See [Making Changes by Hand](#) in the [Converting Applets](#) document for information on the nature of the additional changes.

Here are the simple changes that **upgrade** makes:

OLD	NEW
import oak.	import java.
import awt.	import java.awt.
import net.www.html.	import java.net.
import browser.	(delete the line)
browser.Applet	java.applet.Applet
class ... extends Applet	public class ... extends java.applet.Applet
void mouseDown(	boolean mouseDown(java.awt.Event evt,
void mouseUp(	boolean mouseUp(java.awt.Event evt,
void mouseMove(	boolean mouseMove(java.awt.Event evt,
void mouseDrag(	boolean mouseDrag(java.awt.Event evt,
void mouseExit(	boolean mouseExit(java.awt.Event evt,
void mouseEnter(	boolean mouseEnter(java.awt.Event evt,
void keyDown(	boolean keyDown(java.awt.Event evt,
bgColor	getBackground()
.setForeground(	.setColor(
play(	play(getCodeBase(),
getImage(	getImage(getCodeBase(),
getAttribute(	getParameter(
documentURL	getDocumentBase()
appletURL	getCodeBase()
getFont(	new java.awt.Font(
getColor(	new java.awt.Color(
awt.Color	java.awt.Color
.appendChar(	.append(
width	size().width
height	size().height
getFocus()	requestFocus()
nowMillis	currentTimeMillis
paint3DRect([fill=false]	draw3DRect(
paint3DRect([fill=true]	fill3DRect(
drawImage(...)	drawImage(..., this)

The **upgrade** utility also makes these changes:

- Wraps calls to `Thread.sleep()` in a try/catch:

```
try {  
    Thread.sleep(100);  
} catch (InterruptedException e){  
}
```

- Since floating point constants are now **double**, by default, add a "f" to the end of every such constant, so that it's the **float** the code expects:

```
1.0f
```