

# TinyLine 2D Evaluation for Java

## Version 2.4

TinyLine 2D implements a mobile 2D graphics engine for J2ME platform (CLDC and CDC) and J2SE. TinyLine 2D handles basic shapes, paths, texts, outlined fonts and images in a uniform way. The TinyLine 2D provides access to powerful features such as transparency, path-based drawing, offscreen rendering, advanced color management, anti-aliased rendering.

### 1. TinyLine 2D Features

Feature	TinyLine 2D Evaluation
Fixed-point numbers	Yes
Affine transformations	Yes
Paths, basic shapes drawing	Yes
Hit tests for paths	Yes
Fill, stroke and dash	Yes
Solid color, pattern paints	Yes
Antialiasing	Yes
Opacity	Yes
Gradients (radial and linear)	Yes
Text drawing, outline fonts	Yes
Hit tests for texts	Yes
LTR, RTL and vertical text layouts	Yes
OEM Branding	No

### 2. Content

After downloading the `tinylinergreen24.zip` file, unzip it into some place on your hard disk. As a result you will have the following structure of the `tinylinetr24` directory:

<code>docs</code>	TinyLine 2D API specification
<code>tinylinetr24</code>	TinyLine 2D files for J2ME CLDC/MIDP2.0
<code>tinylinetr24_pp</code>	TinyLine 2D files for CDC/Personal Profile and J2SE
<code>tinylinetr24guide.pdf</code>	TinyLine 2D Programming Guide
<code>TINYLINE_DEVELOPER_LICENSE.TXT</code>	TinyLine License Agreement
<code>tinylinetr24_readme.pdf</code>	This file you are currently reading

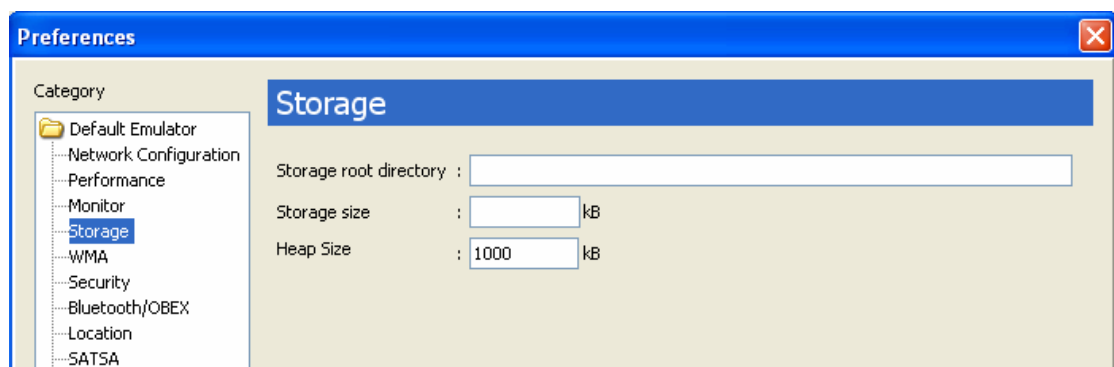
### 3. TinyLine 2D for CLDC/MIDP2.0

The `tinyline2dtry` subdirectory has the following content:

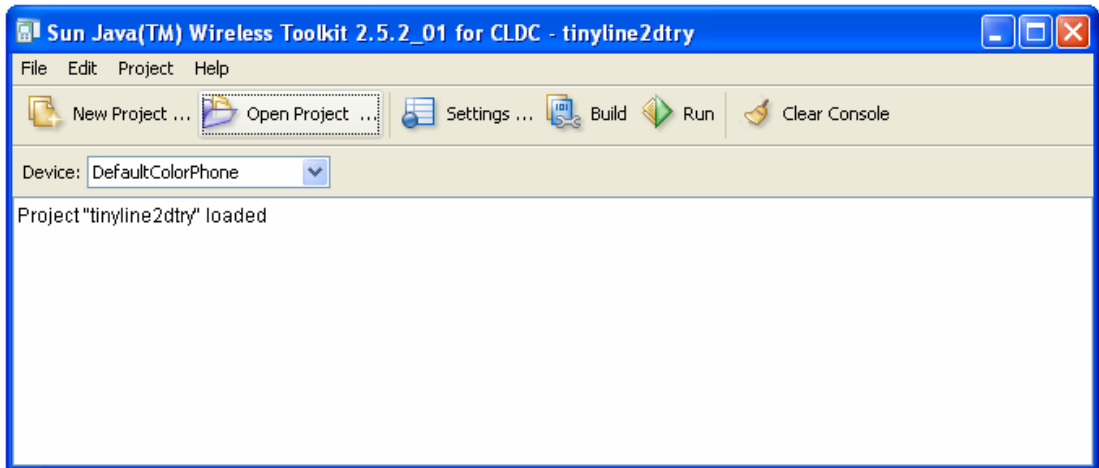
- `bin` This directory contains the TinyLine 2D CLDC/MIDP 2.0 files: `tinyline2dtry.jad`, `tinyline2dtry.jar`,
- `lib` This directory contains core classes (`tinyline2d.jar`) of the TinyLine 2D for CLDC 1.0.  
DO NOT UNZIP THIS FILE! It must remain zipped for the compiler and interpreter to access the class files within it properly. This file contains all of the the compiled `.class` files for the TinyLine 2D.
- `res` This directory contains a examples image files
- `src` This directory contains sources of the TinyLine 2D MIDP 2.0 examples.
- `tmplib` This directory contains PREVERIFIED core classes (`tinyline2d.jar`) of the TinyLine 2D for CLDC 1.0.

### Using the TinyLine 2D SDK on WTK2.5.2 or later

1. Copy the `tinyline2dtry` directory into the `C:\WTK2.5.2\app` directory or into your project directory.
2. Run the WTK2.5.2 KToolbar and set the heap size equal 1000K. By default it is very small and TinyLine 2D examples use the offscreen buffer (`TinyBuffer`).



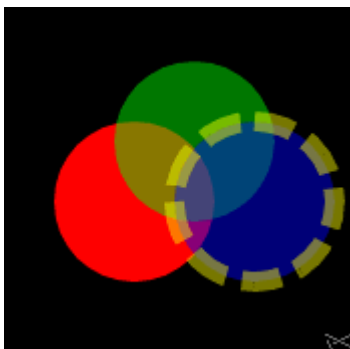
3. Open the `tinyline2dtry` project and select the `MediaControlSkin`



5. Press the Run button and Select the example application TinyLine 2D



7. Select “Colors” demo and press Enter



## Using the TinyLine 2D SDK on other development tools (IDE)

1. You should add the path to the `tinyline2dtry/lib/tinyline2d.jar` to the class path of your IDE.
2. Some IDEs require that the class library (in our case `tinyline2d.jar`) should be PREVERIFIED. The preverified version is located at `tinyline2dtry/tmplib/tinyline2d.jar`

## 4. TinyLine 2D for CDC/Personal Profile and J2SE

The `tinyline2dtry_pp` subdirectory has the following content:

`example` This directory contains the examples class files (`*.class`)

`src` This directory contains sources of the TinyLine 2D for CDC/Personal Profile and J2SE examples (`*.java`).

`lib/tinyline2dpp.jar`

This file contains core classes of the TinyLine 2D for CDC/Personal Profile and J2SE.

**DO NOT UNZIP THIS FILE!** It must remain zipped for the compiler and interpreter to access the class files within it properly. This file contains all of the the compiled `.class` files for the TinyLine 2D.

`*.html` Open these files in a Java enabled browser. These files contain examples applets.

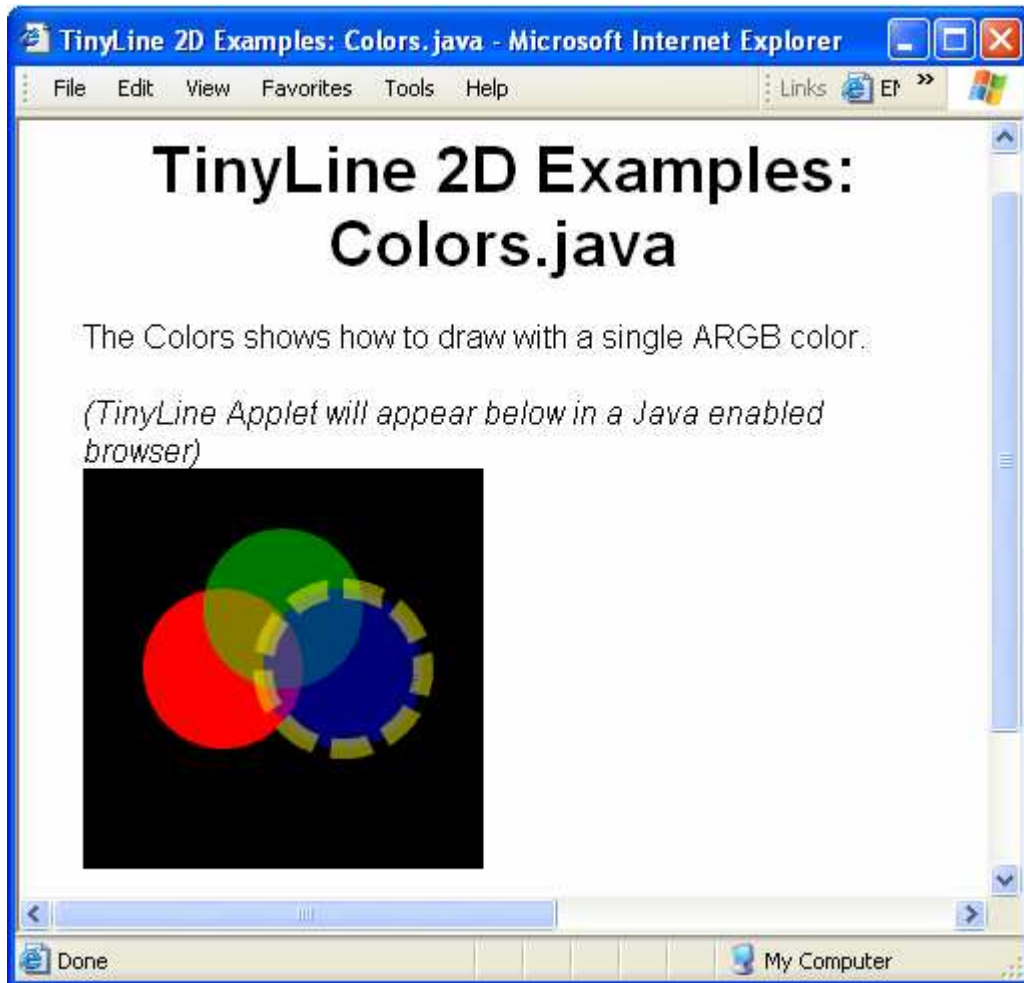
`run_pjee.bat`

This file is a batch file to run examples in the Personal Java Emulation Environment.

### Run TinyLine 2D SDK examples in a Web Browser

You can run the examples in any Java enabled browser. Just open the `index.html` file in the browser and click on links following to examples. Alternatively, you can open in a browser any `tiny2d_*.html` file to run a given example.

For example, you can open `tiny2d_colors.html` in your browser:



## Run TinyLine 2D SDK examples in the PersonalJava(TM) Emulation Environment 3.1

If you don't have you can download the PersonalJava(TM) Emulation Environment 3.1 from

<http://java.sun.com/products/personaljava/pj-emulation.html#pjee3.1>

PersonalJava(TM) Emulation Environment 3.1 User Guide

[http://java.sun.com/products/personaljava/pjee-userguide3\\_1.pdf](http://java.sun.com/products/personaljava/pjee-userguide3_1.pdf)

Edit the `run_pjee.bat` file to change the `PJEE_HOME` value – the home place where you have the PersonalJava(TM) Emulation Environment.

```
rem *****  
rem Set the PersonalJava(TM) Emulation Environment 3.1 home  
rem IMPORTATNT!!!  
rem YOU SHOULD CHANGES IT IF YOU HAVE A DIFFERENT LOCATION  
rem *****
```

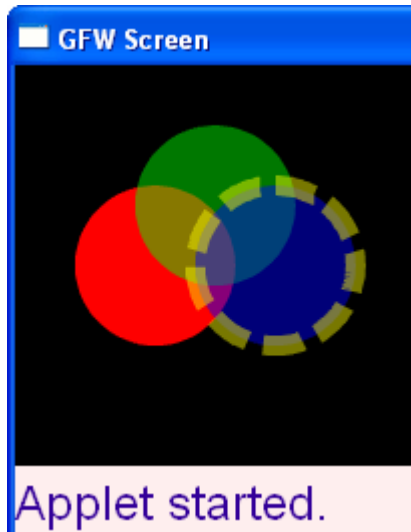
```
set PJEE_HOME = C:\pjee3.1
```

Make the `C:\tinyline2dtry24\tinyline2dtry_pp` directory your current working directory

```
cd C:\tinyline2dtry24\tinyline2dtry_pp
```

Run from the command line:

```
C:\tinyline2dtry24\tinyline2dtry_pp>run_pjee tiny2d_colors.html
```



## **6. More Info**

For more information on the TinyLine 2D, please see <http://www.tinyline.com>