Archived:Oxygen - The Flash Lite Developers Kit

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We do not recommend Flash Lite development on current Nokia devices, and all Flash Lite articles on this wiki have been archived. Flash Lite has been removed from all Nokia Asha and recent Series 40 devices and has limited support on Symbian. Specific information for Nokia Belle is available in Flash Lite on Nokia Browser for Symbian. Specific information for OLD Series 40 and Symbian devices is available in the Flash Lite Developers Library.

Introduction

Oxygen - The Flash Lite Developers Toolkit is a set of free components and libraries for use in Flash Lite based applications. The Oxygen Toolkit includes debug tools as well as components to be used in applications.

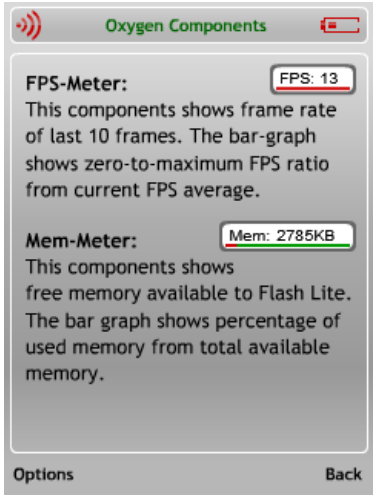

Figure 1. Oxygen Screenshot

All the components included in the toolkit are Drag'n Drop ready. Just drag the component from Oxygen Common Library onto Stage, and you can just test the SWF movie.

Current Oxygen Toolkit version:

- Oxygen Toolkit: Version 1.0
- Last update: 31-March-2008

About Components

In this initial release of the toolkit, following components are available:

- FPS-Meter v3 - Displays FPS (Frames Per Second) of last 10 frames.
- Mem-Meter v1 - Displays available free memory to Flash Lite application.
- Battery Meter v1 - Shows current battery level of mobile device.
- Signal Meter v1 - Shows current signal stregnth of mobile network.

The installation package will install two saparate libraries. One for Flash Lite 1.x (pre-ActionScript) and another for Flash Lite 2.x & 3.x (ActionScript 1/2).

FPS-Meter

FPS-Meter component is helpful for optimizing animations for mobile device playback. This is a new version of the FPS-Meter Component, which I released some time ago.

This version now also features a bar-graph just below the FPS value. This graph shows as full when when FPS is at its maximum value for current SWF movie. When any animation starts, the graph shows the percentage of the FPS that has dropped from its maximum value. It helps greatly in optimizing animations, as well as making decisions on when to use vector graphics or raster graphics.

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The component refreshes its value and graph on every 10th frame. The FPS-Meter component can also be used in regular Flash version 5 to version 8 SWF movies which use AS1 or AS2.

Mem-Meter

Memory Meter component is also a development time component. It shows free memory available to current Flash Lite movie. There is also a bar-graph just below the value, which shows percentage of used memory (in red) from total available memory (in green) to Flash Lite.

Using this component, developer can see how much memory its application is consuming. It also helps in determining when to unload any resources, before loading new resources into the Flash Lite application. It is also helpful to point-out "Out of memory" errors in Flash Lite applications.

The component refreshes its values every 1 second.

Battery Meter

The Battery Meter component shows current battery level. It is Drag'n Drop, ready to use component in any application. The developers can quickly include battery level meter into their Flash Lite applications without any code.

The component is made to be easily customizable to fit in any user interface style. The developers can easily change color of the component by applying Tint affect to it. The other way to customize it is directly edit the vector graphics of the component.

The component refreshes its value every 10 seconds.

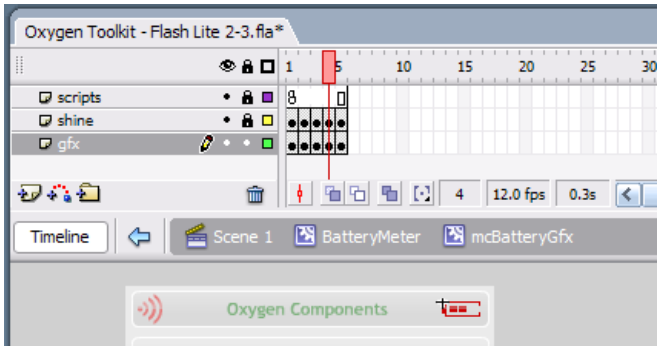

Figure 2. Editing component graphics

There are five keyframes on GFX layer. See Figure 2 for reference.

Below is the reference for each keyframe:

- Keyframe 1: Full preview of the graphics
- Keyframe 2: No value / Zero value
- Keyframe 3: Low
- Keyframe 4: Medium
- Keyframe 5: Full

You can just replace the graphics on each keyframe according to the reference to fully customize the component to fit in your application's design.

Signal Meter

The Signal Meter component shows current mobile network signal strength. It is also Drag'n Drop, ready to use component in any application. The developers can quickly include network signal strength meter into their Flash Lite applications without any code.

This component is also similar to Battery Meter component. It is also easy to customize, and uses same keyframe layout as Battery Meter.

Signal Meter refreshes its value every 10 seconds.

Download

The download includes full source code of all the components, including MXI source for making customized installable MXP package.

Download: media:Oxygen Toolkit v1.zip

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Installation

Included in the download, is the self installable MXP (Adobe Flash Extension). If you have Flash 8 or Flash CS3 and Adobe Extension Manager, you can just double-click the MXP file to install the Oxygen Toolkit.

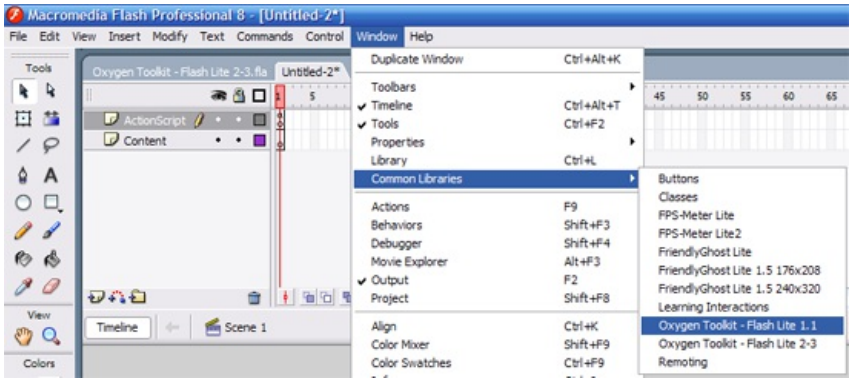

Figure 3. Accessing Oxygen Toolkit from Adobe Flash

After installation, you can access the Oxygen Toolkit directly in Adobe Flash.

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1. Create a new Flash Lite document.
2. Open Window->Common Libraries menu
3. And select Oxygen Toolkit for your target Flash Lite version.
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Just drag'n drop the required component on Stage, and test your Flash Lite movie. Its that simple!

About Author

Faisal Iqbal a.k.a. chall3ng3r, is mobile application developer having expertise in Adobe Flash, Adobe Flash Lite, Symbian S60, MS .Net and related technologies.

Find out more at www.orison.biz/blogs/chall3ng3r/

chall3ng3r 22:08, 31 March 2008 (EEST)

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