Tutorial

DEVELOPER WORLD THE FAST TRACK FROM MIND TO MARKET

March 2009

Streaming with Project Capuchin

for Adobe Flash Lite™ developers

Sony Ericsson

Preface

About this tutorial

This Project Capuchin tutorial illustrates how images stored in different locations can be accessed from within a Project Capuchin application.

Sony Ericsson Developer World

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Typographical conventions

In this document code examples are written in Courier font:

```
loadMovie("res:///icon1.png");
```

Trademarks and acknowledgements

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Contents

Introduction **5**

Tutorial **6**
Protocols 6
Access files as MIDlet resources 6
MidletResource example 6
Access files on the Internet 6
HttpResource example 7
Access files on internal memory or memory card in the phone 7
FileSystemResource example 7
Application signing 8

Introduction

This Project Capuchin tutorial provides an overview on how Capuchin applications can access images located either in the file system, a memory card, a MIDlet jar, or on the Internet. Images stored in different locations are accessed using different protocols, which are illustrated by three example files:

- MidletResource.fla: Gives an example of how to access images put in the MIDlet resources folder.
- HttpResource.fla: Shows how images on the Internet can be accessed.
- FileSystemResource.fla: Shows how images from the file system of the phone are loaded.

Tutorial

Protocols

The Project Capuchin API provides access to images as external files (file://), Internet resources (http://) and MIDlet resources (res://). File paths must be absolute paths, that is, the paths should point to the same location on the file system regardless of the current work directory. An absolute path usually starts with the root directory, for example, “c:/” for the root directory of the internal phone memory.

Access files as MIDlet resources

Capuchin applications can access files put in the MIDlet jar resources folder. This is done using the res:// protocol followed by the path to the resource within the MIDlet.

MidletResource example

The MidletResource.fla example shows how the res:// protocol is used to load images from the resources folder. The images icon1.png, icon2.png and icon3.png are placed in the resources folder. To load the icon1.png image the following code is used:

```
loadMovie("res:///icon1.png");
```

`res://` means that the image file is placed in the resources folder, and `/icon1.png` is the path to the image within that folder.

Access files on the Internet

To access files on the Internet, the http:// protocol is used.

HttpResource example

The HttpResource.fla example uses the http:// protocol to load images from the Internet. The images icon1.png, icon2.png and icon3.png are located at http://developer.sonyericsson.com/images/. The following code loads the icon1.png image into Flash:

```
loadMovie("http://developer.sonyericsson.com/images/icon1.png");
```

Access files on internal memory or memory card in the phone

To access image files residing in phone internal memory or on an inserted memory card, the file:// protocol is used. However, all folders are not accessible from Java applications due to restrictions in the underlying file manager API. The following folders, subfolders and files are accessible from Capuchin:

- `<file:///c:/>` (internal memory file root)
- `<file:///c:/other>`
- `<file:///c:/pictures/>`
- `<file:///c:/sounds/>`
- `<file:///c:/videos/>`
- `<file:///c:/camera/>`
- `<file:///e:/>` (memory card file root)
- `<file:///e:/dcim/>` (camera pictures folder on memory card).

Which folders are accessible may differ between phone models. For more details about accessible folders, see Developers guidelines - Java ME™ CLDC (MIDP 2), found at http://developer.sonyericsson.com/getDocument.do?docId=65067.

FileSystemResource example

The FileSystemResource.fla example shows how files residing in the pictures folder in the phone internal memory, are loaded with the file:// protocol. For example, the icon1.png image is loaded with:

```
loadMovie("file:///c:/pictures/icon1.png");
```

`file://` indicates that the file is to be found in the file system, and `/c:/pictures/` is the path to the images.

Application signing

Every time the application accesses the file system, the user gets a question whether to permit the access or not. In order to grant access to the file system without getting this question every time, the application needs to be signed. If the application is signed, the user will instead get a question with an extra option to approve the permission forever and never be asked again. For more information about MIDlet signing, see http://developer.sonyericsson.com/docs/DOC-1640.