

# User guide

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May 2009

# Swf2Jar 2.2



Sony Ericsson

# Preface

## Sony Ericsson Developer World

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For more information about these professional services, go to the Sony Ericsson Developer World Web site.

## About Swf2Jar 2.2

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Swf2Jar 2.2 is an application for packaging a Flash™ file (.swf) into a Java MIDlet .jar file. The application supports setting Jad properties for the MIDlet, as well as signing the MIDlet. After packaging, the MIDlet can be transferred to a phone. When running the MIDlet on the phone, the packaged Flash content is automatically played.

**Note:** The Flash file (.swf) will be visible on the phone screen while the MIDlet is running only if the phone supports Project Capuchin.

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# Swf2Jar 2.2

## Installation

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**Note:** Swf2Jar 2.2 requires Java™ Runtime Environment (JRE) version 1.5 or higher. It can be downloaded from <http://java.sun.com/j2se>.

If the installation program finds a suitable JRE, a batch file (swf2jar.bat) is created in the installation directory, usually C:\Program Files\Sony Ericsson\Swf2Jar\.

After installation, double-click swf2jar.bat to run the application.

## Running the application

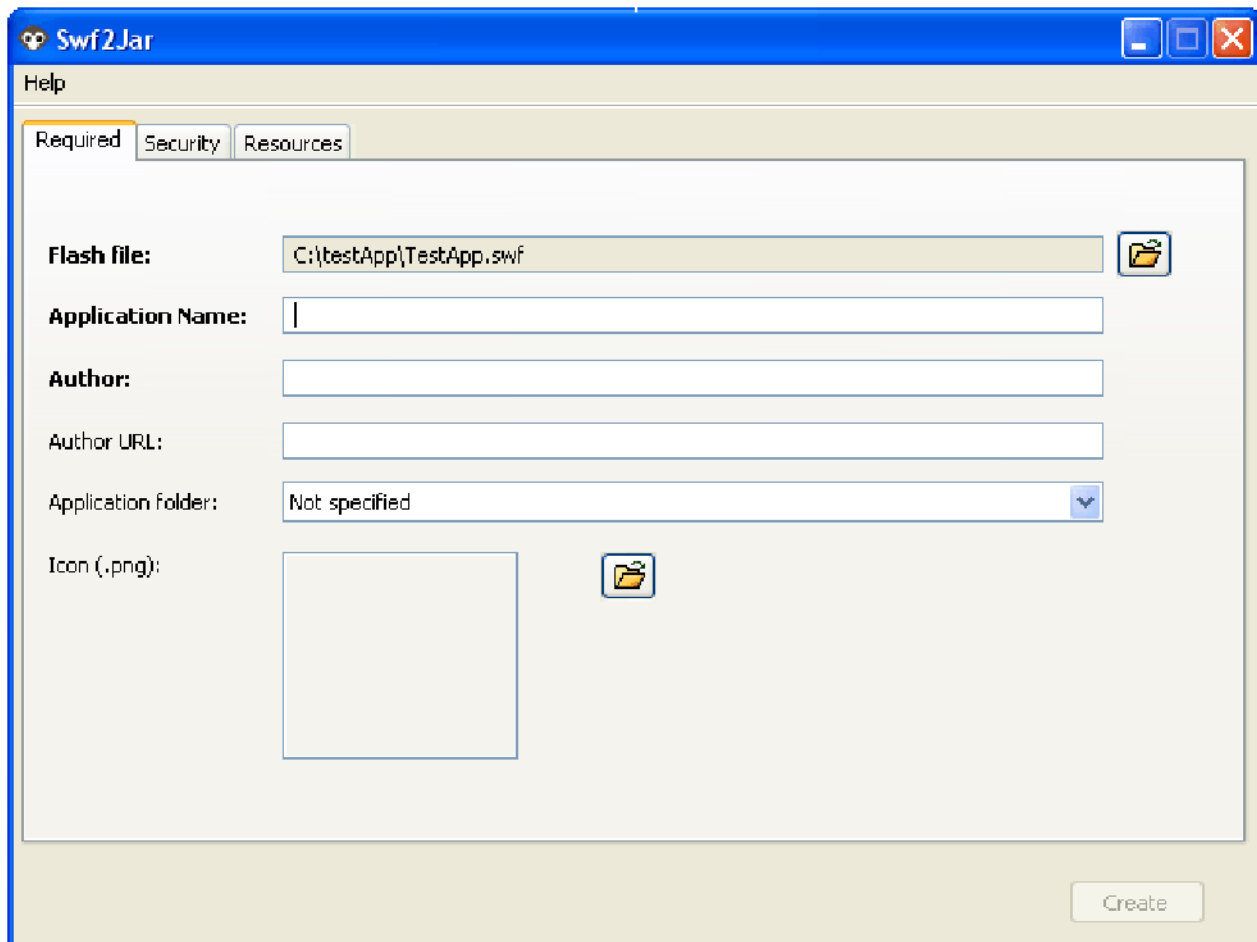
---

The application window consists of three tabs:

- Required
- Security
- Resources

Only some fields in the *Required* tab must be filled in to create a MIDlet, all fields in the *Security* and *Resources* tabs are optional.

## The Required tab



The following information must be specified:

- *Flash file*: The .swf file to be included in the MIDlet application. Click the Folder icon to the right and browse to the Flash file to include.
- *Application name*: Name of the jar and jad file. This name is shown in the phone in list of installed applications.
- *Author*: Name of the author of the application.

When all required fields have been filled with information, the *Create* button is enabled.

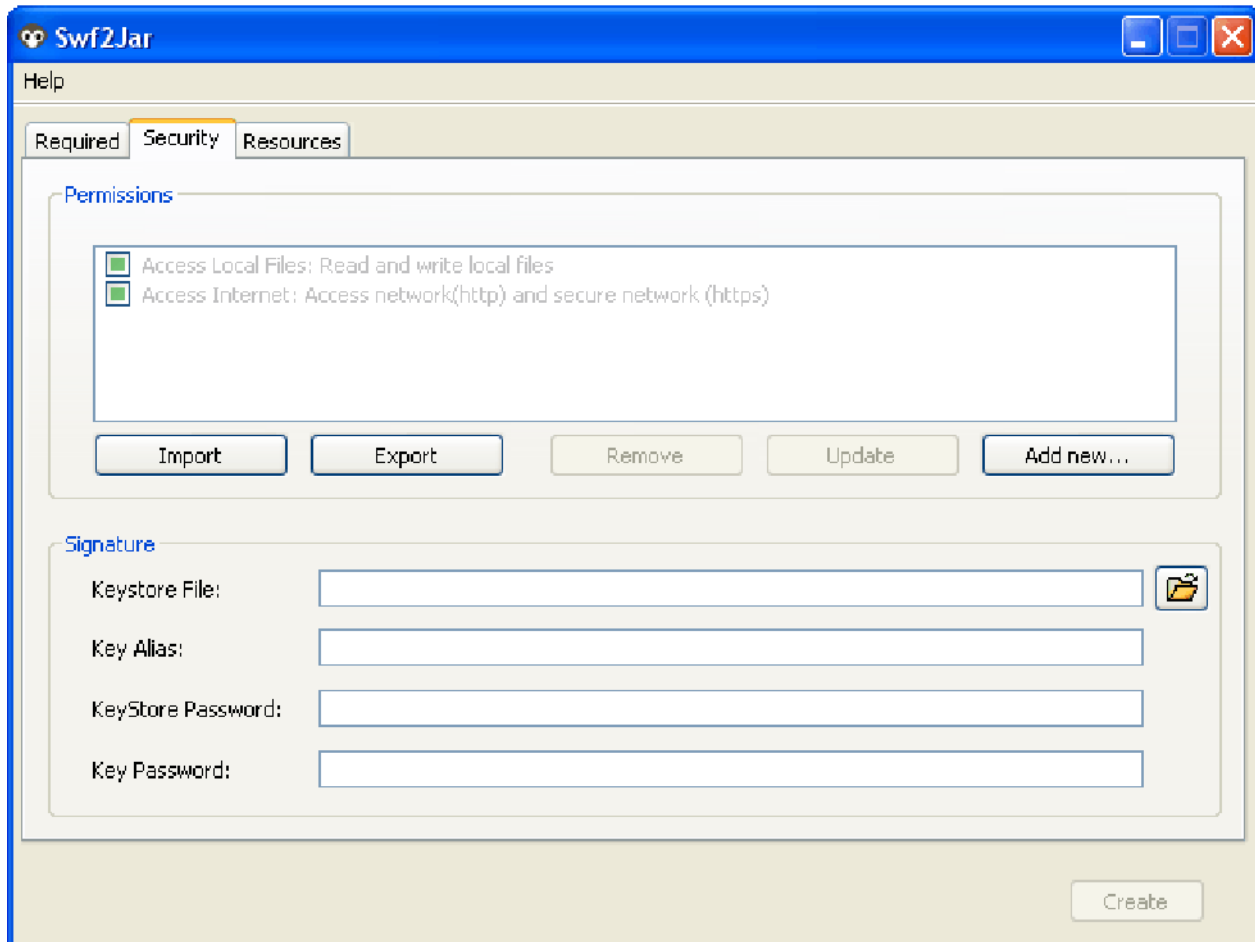
The following information is optional:

- *Author URL*.
- *Application folder*: Sets the directory where the application will be installed. It is possible to install it in Applications or Games folder.

- *Icon*: The icon of the application, which is shown in the phone, file format .png or .gif. To select the icon, click the folder icon to the right and browse to the icon file. It is also possible to “drag and drop” the Image file into the icon area.

When all required fields in this tab have been filled with information, the *Create* button is enabled.

## The Security tab



The information in this tab is optional. Here it is possible to set permissions and sign the application. The tab contains two groups, *Permissions* and *Signature*.

### Permissions

In this area, needed permissions for the application are specified.

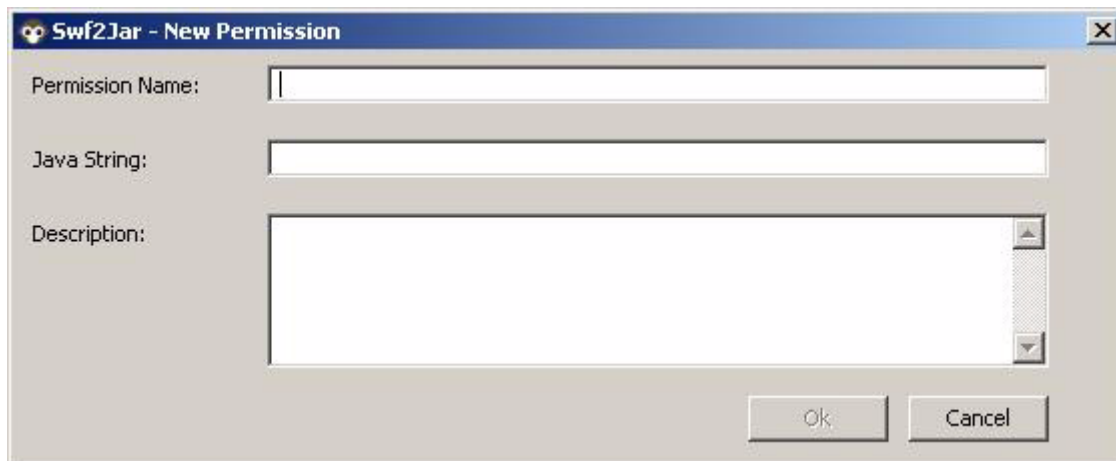
Two permissions are pre-defined:

- *Access Local Files*: Adds permissions to read and write local files.
- *Access Network*: Support for HTTP and HTTPS connections.

If the CapuchinKit is used integrated with Flash, it is possible to have other pre-defined permissions related to the services that are used in the application. These permissions are set as default, and cannot be updated, removed or unchecked.

### Adding a new permission

New permissions can be added if needed. Click the *Add New...* button and enter information in the dialog that opens.



The image shows a dialog box titled "Swf2Jar - New Permission". It contains three input fields: "Permission Name:" (a single-line text box), "Java String:" (a single-line text box), and "Description:" (a multi-line text box with a vertical scrollbar). At the bottom right, there are two buttons: "Ok" and "Cancel".

The following information is required for a new permission:

- *Permission Name*: A keyword that refers to the permission being granted (for example, "Access Internet").
- *Java String*: The full qualified path of the class to be inserted into the .jad file as a new permission (for example, "javax.microedition.io.Connector.http").

The *Description* field is optional and may contain any information clarifying what permission is being granted.

Once the required fields have been filled in, the *OK* button is enabled. After pressing *OK* and confirming, the new permission is inserted in the permissions list, in the format:

*Permission Name: Description*

The added permission can then be enabled/disabled using the checkbox.

### Import an XML file with permissions

It is also possible to import an XML file defining permissions. The structure of the XML defining permissions should be as follows:

```
<permissions>
  <permission>
    <name>Permission Name</name>
    <string>Java String to the permission </string>
    <description>Description of the permission </description>
  </permission>
</permissions>
```

The `<permission>` element can be repeated if more than one permission needs to be imported.



### Export an XML file with permissions

Permissions created by the user can be exported in an XML file. User created permissions are saved into an xml file. Pressing the *Export* button opens a dialog for selection of directory where the XML file will be saved.

### Updating a permission

A self-defined permission may be updated by selecting the permission in the list and click the *Update* button. A dialog opens, and the *Permission Name*, *Java String* and *Description* may be changed.

**Note:** It is not possible to update the values of the pre-defined permissions *Access Local Files* and *Access Network*

### Removing a permission

A self-defined permission may be removed from the list by selecting the permission, and click the *Remove* button.

**Note:** It is not possible to delete the pre-defined permissions *Access Local Files* and *Access Network*.

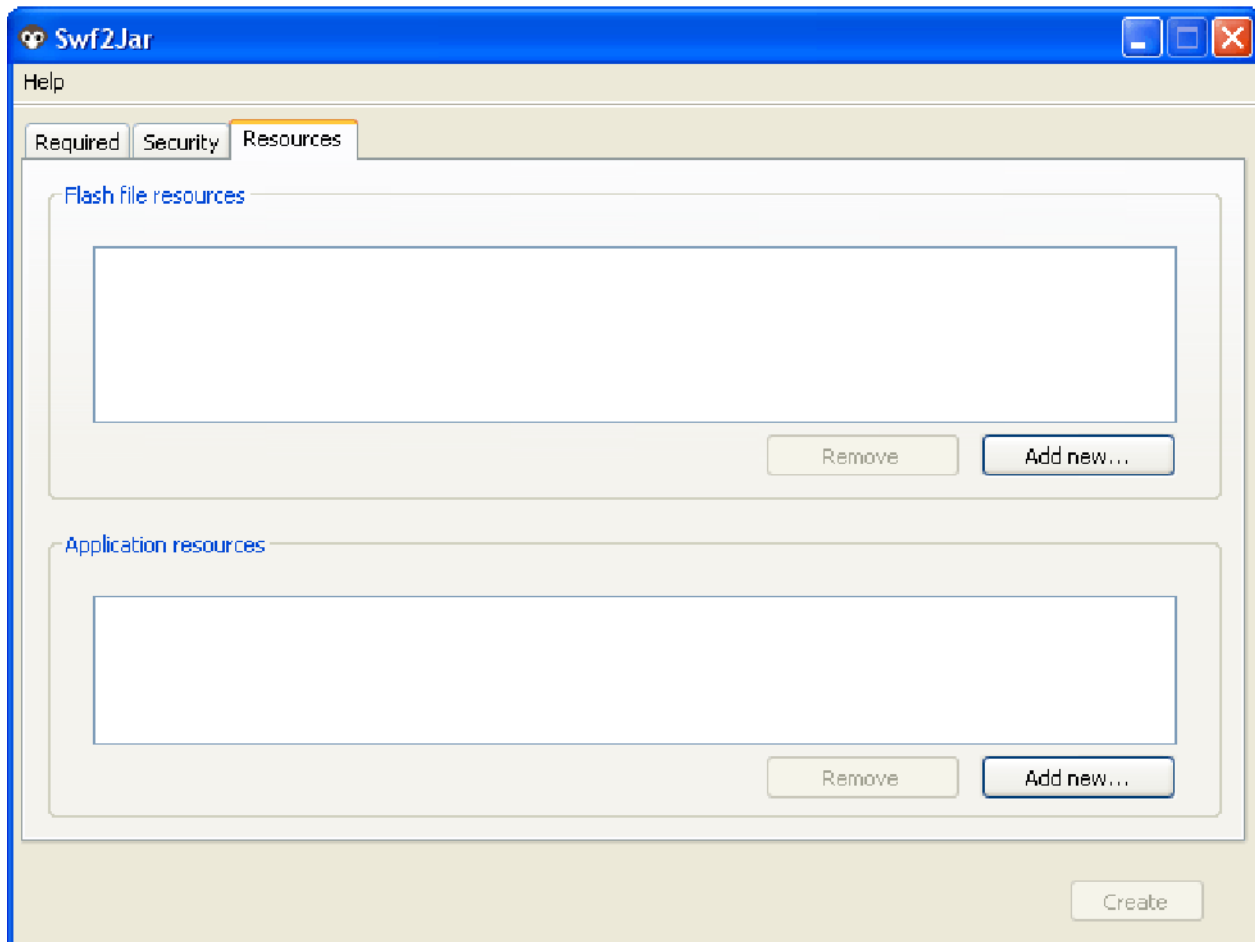
### Signing information

Information regarding signing of the application can be added here. The following information is required:

- *Keystore file:* Browse to the keystore file to used for signing.
- *Key Alias:* Specify the key alias you wish to use for signing.
- *Keystore password:* Type the password for the keystore.
- *Key password:* Type the password for the key.

## The Resources tab

In the *Resources* tab, two types of resources, *Flash file resources* and *application resources* can be added to the application.



### Flash File Resources

In this area Flash files or images that can be accessed by the Flash file can be added. Click *Add new...*, and select the files to add.

#### How to access a resource from the Flash file

To access a resource inside the Flash file:

1. In Adobe Flash CS3/CS4, select *Insert – New Symbol...* from the menu.
2. Select type "Movie Clip"
3. Insert the symbol in the Flash file.

4. In the *Properties* tab of the object, define its name as in the image below.



5. To access, for example, the image “sonyEricssonImg.jpg” from the Flash file, insert the line:

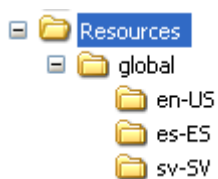
```
loadMovie("res://sonyEricssonImg.jpg", obj_Img);
```

## Application Resources

In this area, resources necessary for the application can be added, for example, necessary files for the internationalisation as follows.

Click the *Add New...* button in the *Application Resources* area to select a folder. After confirming the insertion, all contents of the selected folder is copied into the application.

Example:



If the folder “Resources” is selected, all its contents is copied into the application, including its subfolders “global”, “en-US”, “es-Es” and “sv-SV”.

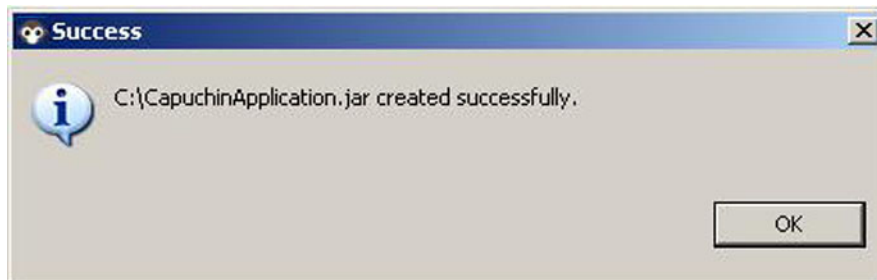
## Create the MIDlet Jar

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After specifying the needed information, click the *Create* button at the bottom of the window.

When asked where to put the resulting MIDlet jar and jad files, browse to the wanted destination and click *OK*.

A confirmation message is received:



The application is now ready to be transferred to the phone.