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This known issue was originally created by **Welco** and has been verified by Forum Nokia.

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<b>Platform</b>	Series 40 3rd Edition, FP1, Nokia 6212 NFC, Series 40 6th Edition	<b>Devices</b>	Series 40 3rd Edition, FP1, Nokia 6212 NFC, Series 40 6th Edition SDK emulators
<b>Category</b>	Java ME	<b>Subcategory</b>	SDK

**Keywords (APIs, classes, methods, functions):** System.out, System.err

## Overview

`System.out.println(String)` and `System.err.println(String)` with String containing the '%' character produce incorrect output and may crash the emulator in Series 40 SDKs.

## Description

Calling `System.out.println(String)` and `System.err.println(String)` with Strings including the '%' character may crash the Series 40 SDK emulator.

In addition to the print methods, text Strings with %20 are not correctly written to the standard output.

The following test String is an example URL with escaped spaces:

```
"/Global/Charts/Metal/Copper/Fundamental%20COPPER%20Fig1.gif"
```

For the affected Series 40 SDKs, the output from `System.out.println` and `System.err.println` is:

```
/Global/Charts/Metal/Copper/Fundamental          OPPEr          6292852g1.gif
```

For comparison, in S60 the result with the test SDKs (S60 5th Edition, v1.0 or the Nokia N97 SDK) is:

```
/Global/Charts/Metal/Copper/Fundamental%20COPPER%20Fig1.gif
```

## How to reproduce

1. Implement the following code snippet:

```
import javax.microedition.midlet.*;
import javax.microedition.lcdui.*;

public class SimpleFormTest extends MIDlet {

    Display d;
    Form f;

    public void startApp() {

        d=Display.getDisplay(this);
        f=new Form("New form");

        System.err.println("Here%someline"); // This crashes the affected SDKs

        // System.out.println("/Global/Charts/Metal/Copper/Fundamental%20COPPER%20Fig1.gif");

        //The System.out above reproduces incorrect output result

        d.setCurrent(f);

    }

    public void pauseApp() {
    }

    public void destroyApp(boolean unconditional) {
    }
}
```

2. Run the test MIDlet in the Series 40 SDK emulator. The emulator crashes in the affected SDKs. Run the test MIDlet in an S60 SDK emulator for comparison.

3. To test the incorrect output with '%20', replace the line

`System.err.println("Here%someline");` with

`System.err.println("/Global/Charts/Metal/Copper/Fundamental%20COPPER%20Fig1.gif`

by removing the comment marks.

4. Run the test MIDlet in the Series 40 SDK emulator. For the affected SDKs, the output result (for example, printed out in the output pane in Netbeans IDE) will be as described in the 'Description' regarding text Strings with %20. Run the test MIDlet in S60 SDK emulators for comparison.

In addition, steps 3 and 4 can be reproduced by using the following byte array:

```
byte[] test = {0x2F, 0x47, 0x6C, 0x6F, 0x62, 0x61, 0x6C, 0x2F, 0x43, 0x68,
    0x61, 0x72, 0x74, 0x73, 0x2F, 0x4D, 0x65, 0x74, 0x61, 0x6C, 0x2F, 0x43, 0x6F,
    0x70, 0x70, 0x65, 0x72, 0x2F, 0x46, 0x75, 0x6E, 0x64, 0x61, 0x6D, 0x65, 0x6E,
    0x74, 0x61, 0x6C, 0x25, 0x32, 0x30, 0x43, 0x4F, 0x50, 0x50, 0x45, 0x52, 0x25,
    0x32, 0x30, 0x46, 0x69, 0x67, 0x31, 0x2E, 0x67, 0x69, 0x66};
System.out.println("no charset: "+new String(test));
try
```

```

{
    System.out.println("ISO      : "+new String(test, "ISO-8859-1"));
    System.out.println("UTF      : "+new String(test, "utf-8"));
} catch (UnsupportedEncodingException e)
{
}
}

```

### Output for the affected SDKs:

```

no charset: /Global/Charts/Metal/Copper/Fundamental          OPPER          6294100g1
ISO       : /Global/Charts/Metal/Copper/Fundamental          OPPER          6292852g1
UTF       : /Global/Charts/Metal/Copper/Fundamental          OPPER          6291304g1

```

### Output for S60 SDKs:

```

no charset: /Global/Charts/Metal/Copper/Fundamental%20COPPER%20Fig1.gif
ISO       : /Global/Charts/Metal/Copper/Fundamental%20COPPER%20Fig1.gif
UTF       : /Global/Charts/Metal/Copper/Fundamental%20COPPER%20Fig1.gif

```

## Solution

For the affected SDKs, avoid using % and %20 in calls to `System.out` and `System.err` printing methods.