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In displaying the output-string, stopping at a binary-zero before the final null-terminator is a bug, in our assessment. The reason is that printf() does not do that on canonical systems, e.g., Ubuntu's terminal. Instead, the whole output-string is displayed, up to, but not including, the final null-terminator. Non-printable characters are not displayed (e.g., 0x00).

The following call to printf() uses the same arguments that were used above with S...PrintfHost():

```
char ca = 'a'; char cb = 'b'; char c0 = 0;
printf("12%c34%c56%c78", ca, cb, c0);
```

The output on a Ubuntu terminal is below. It displays the output-string's last two characters ("78"), whereas the SystemView app doesn't.

12a34b5678

The bug could be fixed by altering SystemView to display the output-string the same way printf() does on a Ubuntu terminal. An alternative fix is to update the SystemView *Users Guide* to specify that output-strings are not displayed after the first binary zero.

1.3.4 "%s" use incorrectly described in a SystemView forum post

• Bug: In Segger's forum on SystemView, there is a post on how to use "%s", but it is incorrect.

The post is here:

https://forum.segger.com/index.php/Thread/7832-SOLVED-SystemView-fail-to-print-s/?postID=28792

The post says S...PrintfHost() can use the "%s" format-placeholder if the following config-macro is specified. The config-macro is for the SystemView Target-Sources.

#define SEGGER SYSVIEW PRINTF IMPLICIT FORMAT 1

I'm pretty sure this config-macro doesn't result in the "%s" format-placeholders being processed:

- It didn't work when I tried it with the SystemView Target Sources versions 2.52h and 3.30.
- I looked at the related Target Sources source-code, and it appears that the "%s" format-placeholders are not formatted anywhere.
- I could not find any SystemView documentation on using that config-macro, e.g., it's not in the *User Guide*, nor is it described in the Target-Sources source-code.

Problem analysis:

The config-macro's default is 0, and it is defined in <code>SEGGER_SYSVIEW_ConfDefaults.h</code>. The default can be over-ridden by setting the config-macro to 1 in <code>SEGGER_SYSVIEW_Conf.h</code>.

The config-macro is referenced in the Target-Sources file SEGGER_SYSVIEW.c. It is used in these functions: VPrintHost() and VPrintTarget().

When S...PrintfHost() is called using "%s", it normally sends the arguments to the SystemView app. This processing is done by _VPrintHost(). Setting that config-macro to 1 causes the arguments to be formatted on the board instead. That processing is done by _VPrintTarget(). However, VPrintTarget() has no code for processing "%s".

2 SystemView Recorder: primary windows, and timestamps

This section describes the SystemView Recorder:

- The three primary windows: Events List, Terminal and Timeline.
- The timestamps used in those windows

The three primary windows are identified in the screenshot below.

