Sysprof

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Contents

1 Article purpose

This article provides the basic information needed to start using the Linux kernel tool: **sysprof**[1].

2 Introduction

The following table provides a brief description of the tool, as well as its availability depending on the software packages:

: this tool is either present (ready to use or to be activated), or can be integrated and activated on the software package.

: this tool is not present and cannot be integrated, or it is present but cannot be activated on the software package.

Tool			STM32MPU Embedded Software distribution			STM32MPU Embedded Software distribution for Android™		
Name	Category	Purpose	Starter Package	Developer Package	Distribution Package	Starter Package	Developer Package	Distribution Package
		sysprof [1] is a statistical, system-wide profiler for Linux. It						

sysprof	Monitoring tools	helps in finding the functions in which a program spends most of its time. **sysprof** proposes a user interface available directly on the board display screen.	✓	✓	✓	✗	✗	✗

3 Installing the trace and debug tool on your target board

3.1 Using STM32MPU Embedded Software distribution

sysprof is installed by default and ready to be used with all STM32MPU Embedded Software Packages.

```
Board $> which sysprof
/usr/bin/sysprof
```

sysprof is integrated in weston image distribution through openembedded-core package: *openembedded-core/meta/recipes-core/packagegroups/packagegroup-core-tools-profile.bb*.

```
PROFILE_TOOLS_X = "${@bb.utils.contains('DISTRO_FEATURES', 'x11', 'sysprof', , d)}"
...
RRECOMMENDS_${PN} = "\
```

```
    ${PERF} \
    trace-cmd \
    blktrace \
    ${PROFILE_TOOLS_X} \
    ${PROFILE_TOOLS_SYSTEMD} \
    "
```

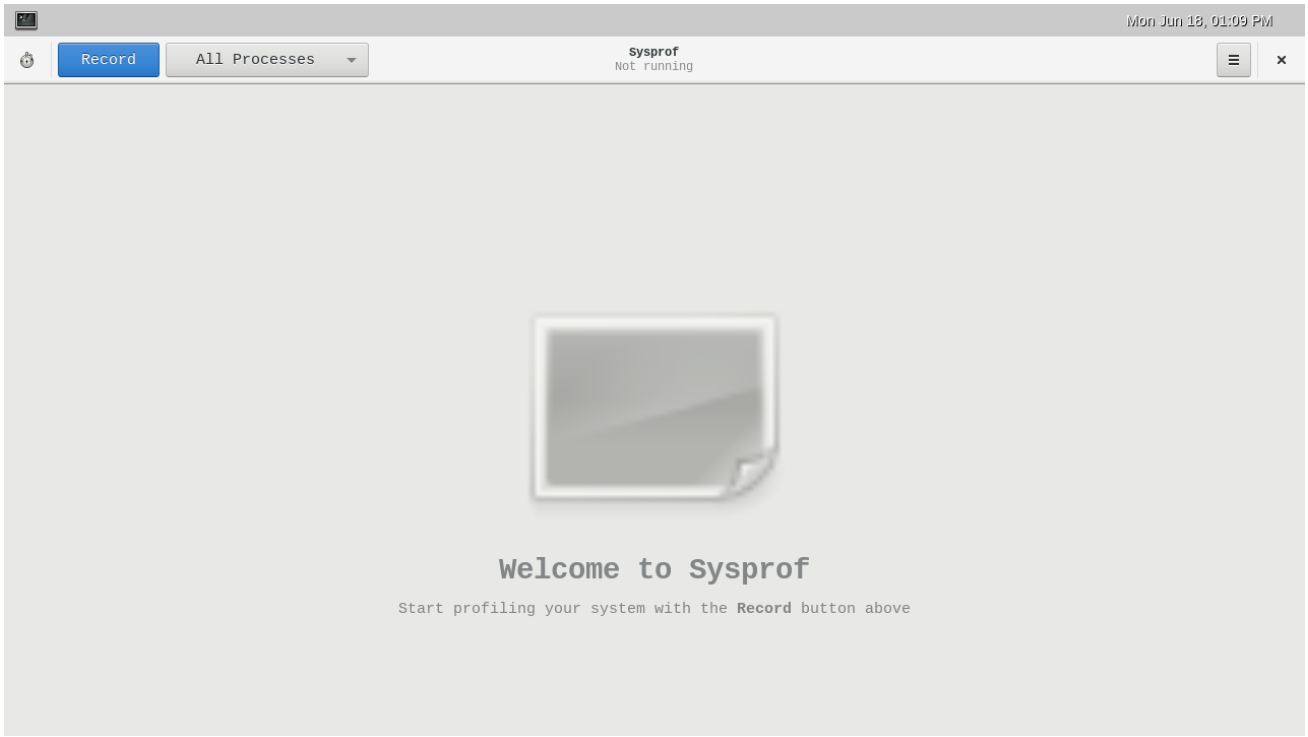
4 Getting started

sysprof is working only with screen resolution at least 700x1200, so it doesn't work on STM32MP15 discovery board

- Starting **sysprof** on the board:

```
Board $> sysprof
```

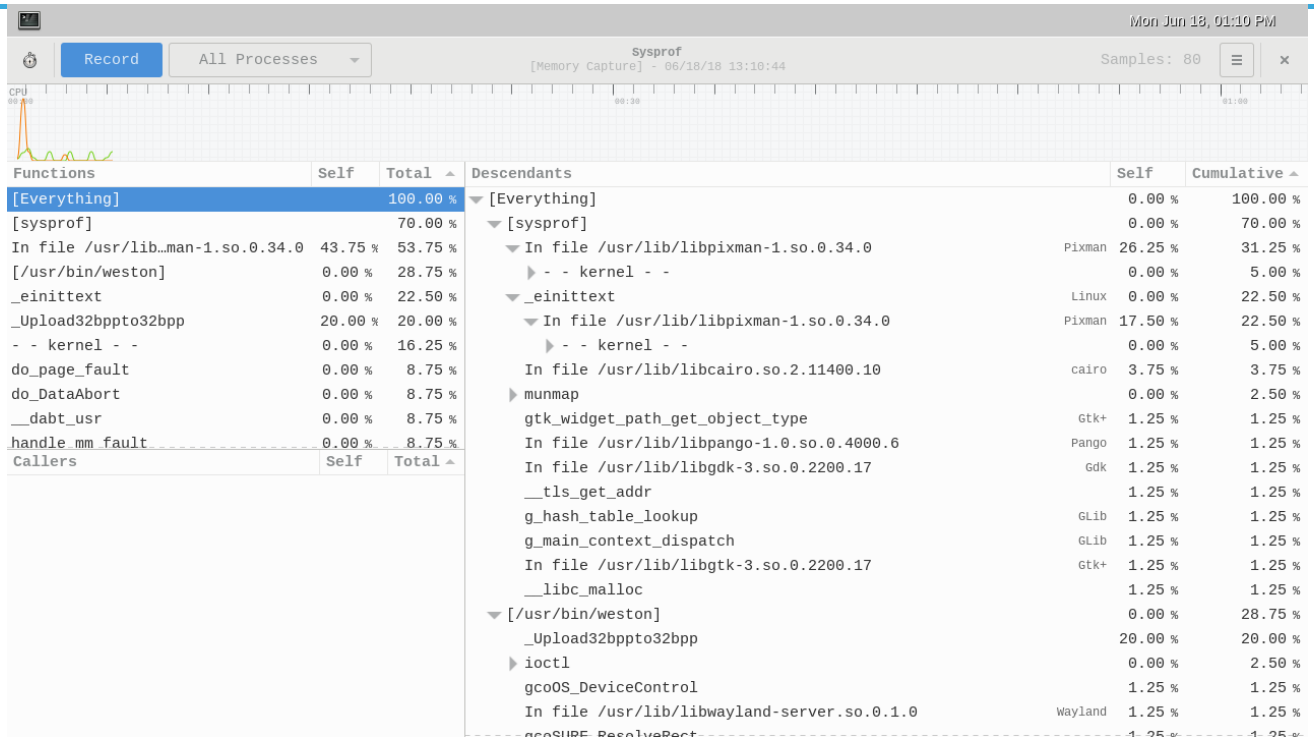
Sysprof proposes a User interface through the board X interface to the display. It might be more convenient to plug a mouse (and optionally a keyboard) to use the tool interface.



- Recording

Clicking on the top left **Record** button launches the recording. Recording is stopped by clicking on the top left **Stop** button (that replaces the record button).

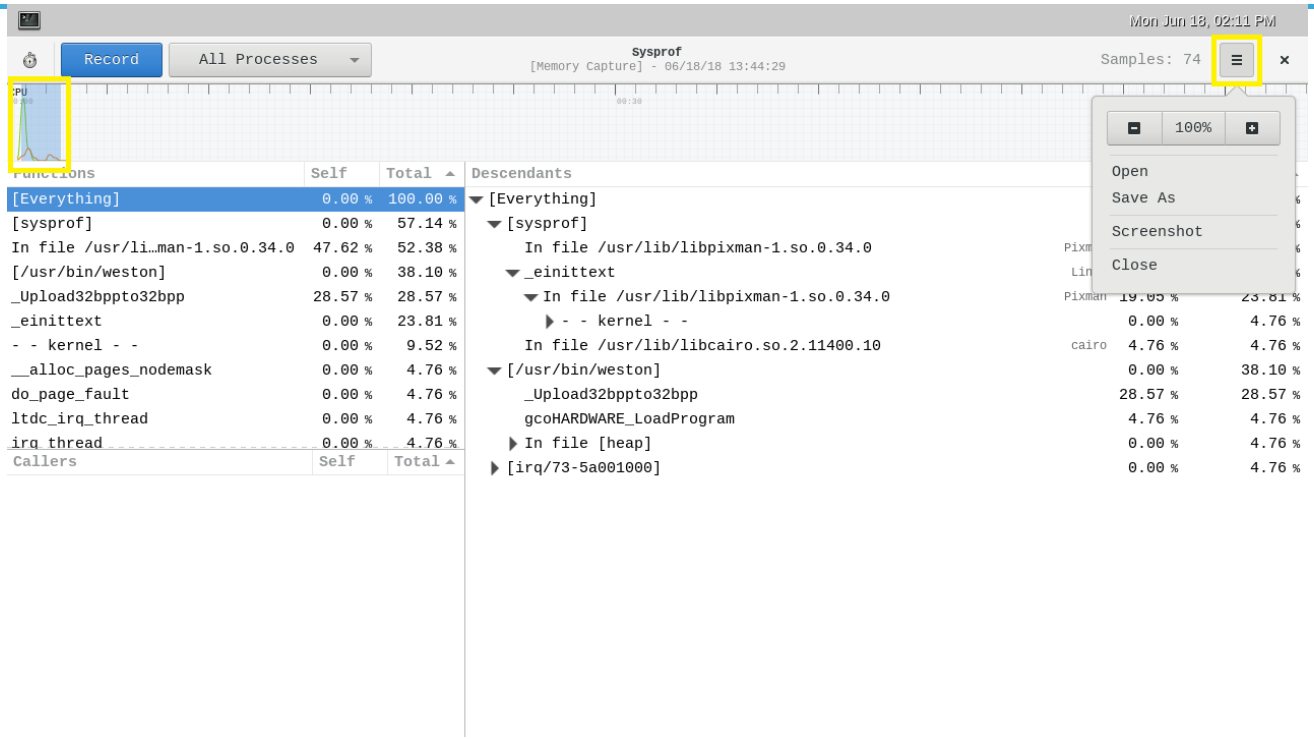
The following report is then available on the board display:



5 To go further

Several options are available to the user in order to filter the report, and then study the results:

- Possibility to browse on *Functions* list, *Descendants* list
- Possibility to select a certain period of the CPUs graph.
- Possibility to save traces, to make screen shots...



6 References

- [1.0](#) [1.1](#) http://www.sysprof.com/

- Useful external links

Document link	Document Type	Description
Sysprof from Gnome	Standard	Wiki page
Profiling using Sysprof	User manual	Linux.com