

Ifconfig

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Contents

1 Article purpose	1
2 Introduction	1
3 Installing the trace and debug tool on your target board	2
3.1 Using the STM32MPU Embedded Software distribution	2
3.2 Using the STM32MPU Embedded Software distribution for Android™	2
4 Getting started	2
4.1 List the available network interfaces	2
4.2 Disable the network interface	3
4.3 Enable the network interface if it is not already available	3
4.4 Assign a given IP address to a network interface	3
5 To go further	3
6 References	3

1 Article purpose

This article provides the basic information needed to start using the Linux® kernel tool: **ifconfig**^[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

ifconfig	Monitoring tools	<p>ifconfig^[1] is a system administration utility for network interface configuration.</p>				<div data-bbox="1034 539 1519 636" style="border: 1px solid red; padding: 2px;">  </div> <div data-bbox="443 779 555 900" style="border: 1px solid red; padding: 2px;">  </div> <div data-bbox="1098 786 1519 875" style="border: 1px solid red; padding: 2px;"> <p>ifconfig is deprecated and has been replaced by iproute2. A web page provides a comparison between the two.</p> </div>
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3 Installing the trace and debug tool on your target board

3.1 Using the STM32MPU Embedded Software distribution

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

It comes with the **busybox**:

```
Board $> which ifconfig | xargs ls -la
/sbin/ifconfig -> /bin/busybox.nosuid
```

3.2 Using the STM32MPU Embedded Software distribution for Android™



Coming soon

4 Getting started

Follow the sequence described below to get started with the ifconfig tool.

4.1 List the available network interfaces

```
Board $> ifconfig
```

```
eth0      Link encap:Ethernet  HWaddr 00:80:E1:42:43:65
          inet  addr:10.48.1.144  Bcast:10.48.3.255  Mask:255.255.252.0
          inet6 addr: fe80::280:e1ff:fe42:4365%lo/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
```

```

RX packets:181274 errors:0 dropped:14553 overruns:0 frame:0
TX packets:28583 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:23082127 (22.0 MiB) TX bytes:6438412 (6.1 MiB)
Interrupt:66 Base address:0x4000

lo    Link encap:Local Loopback
      inet addr:127.0.0.1 Mask:255.0.0.0
      inet6 addr: ::1%1/128 Scope:Host
      UP LOOPBACK RUNNING MTU:65536 Metric:1
      RX packets:202 errors:0 dropped:0 overruns:0 frame:0
      TX packets:202 errors:0 dropped:0 overruns:0 carrier:0
      collisions:0 txqueuelen:1000
      RX bytes:13454 (13.1 KiB) TX bytes:13454 (13.1 KiB)

```

4.2 Disable the network interface



Please make sure that no remote terminal is connected through this network (ssh), otherwise you will lost your shell connection.

- For example, proceed as follows for eth0

```
Board $> ifconfig eth0 down
```

4.3 Enable the network interface if it is not already available

- For example, proceed as follows for eth0

```
Board $> ifconfig eth0 up
```

4.4 Assign a given IP address to a network interface

- Proceed as follows to assign 10.48.1.324 address to eth0

```
Board $> ifconfig eth0 10.48.1.324
```

5 To go further

Refer to the man page^[1] for more details on command options.

6 References

1. ↑ ^{1.01.11.2} <https://linux.die.net/man/8/ifconfig>
2. ↑ https://tty1.net/blog/2010/ifconfig-ip-comparison_en.html

uniprocessor

Receive

Ifconfig

Transmit