

**NAME**

setarch - change reported architecture in new program environment and set personality flags

**SYNOPSIS**

```
setarch arch [options] [program [arguments]]
```

```
setarch --list|-h|-V
```

**DESCRIPTION**

**setarch** currently only affects the output of **uname -m**. For example, on an AMD64 system, running 'setarch i386 program' will cause 'program' to see *i686* instead of *x86\_64* as the machine type. It also allows to set various personality options. The default **program** is `/bin/sh`.

**OPTIONS**

**--list** List the architectures that can be set.

**--uname-2.6**

Causes the program to see a kernel version number beginning with 2.6.

**-v, --verbose**

Be verbose.

**-3, --3gb**

Specifies that processes should use a maximum of 3GB of address space on systems where it is supported (ADDR\_LIMIT\_3GB).

**--4gb** Ignored (for backward compatibility only).

**-B, --32bit**

Turns on ADDR\_LIMIT\_32BIT.

**-F, --fdpic-funcptrs**

Userspace function pointers point to descriptors (turns on FDPIC\_FUNCPTRS).

**-I, --short-inode**

Turns on SHORT\_INODE.

**-L, --addr-compat-layout**

Changes the way virtual memory is allocated (turns on the ADDR\_COMPAT\_LAYOUT).

**-R, --addr-no-randomize**

Disables randomization of the virtual address space (turns on ADDR\_NO\_RANDOMIZE).

**-S, --whole-seconds**

Turns on WHOLE\_SECONDS.

**-T, --sticky-timeouts**

Turns on STICKY\_TIMEOUTS.

**-X, --read-implies-exec**

Turns on READ\_IMPLIES\_EXEC.

**-Z, --mmap-page-zero**

Turns on MMAP\_PAGE\_ZERO.

**-V, --version**

Display version information and exit.

**-h, --help**

Display help text and exit.

**EXAMPLES**

```
setarch ppc32 rpmbuild --target=ppc --rebuild foo.src.rpm
```

```
setarch ppc32 -v -vL3 rpmbuild --target=ppc --rebuild bar.src.rpm
```

```
setarch ppc32 --32bit rpmbuild --target=ppc --rebuild foo.src.rpm
```

**AUTHOR**

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**AVAILABILITY**

The setarch command is part of the util-linux package and is available from [Linux Kernel Archive](#).