

The problem with integer types

C defines integer types `int`, `long`, `short`, `char`, `signed` or `unsigned`.

These types raise numerous problems in portable code:

- They change size from one arch/cpu to another
- There is no integer type which does the size of a pointer

C99 Types

C99 defines portable fixed-size types:

`[u]intXX_t` where

- `u` means unsigned,
- `XX` is the size in bits. It can range from 8 to 64, and is power of 2.

Moreover, C99 defines:

- `[u]intptr_t`, which is the size of an address, thus can contain a pointer
- `[u]int_fastXX_t`, which are **at least** `XX` bits long, but may be larger if the larger implementation is cheaper

These types are available from the standard `stdint.h` header and `hexo/types.h` header.

See [?stdint.h wikipedia page](#) for details.

Legacy compiler types in MutekH

Using legacy integer types in MutekH's core code is not wanted.

Default settings in configuration of the build system makes the legacy types emit a warning, or even dont compile at all.

Sometimes, because you are using huge amounts of code that must be used without a complete rewrite, you may want to disable this limitation adding the following line in the build configuration file:

```
CONFIG_HEXO_INTTYPES_DEPRECATED undefined
```