# The l3docstrip package
# Code extraction and manipulation

The LaTeX3 Project*

Released 2019-11-07

## 1 Extending **DocStrip**

The l3docstrip module adds LaTeX3 extensions to the DocStrip program for extracting code from `.dtx`. As such, this documentation should be read along with that for DocStrip.

## 2 Internal functions and variables

An important consideration for LaTeX3 development is separating out public and internal functions. Functions and variables which are private to one module should not be used or modified by any other module. As TeX does not have any formal namespacing system, this requires a convention for indicating which functions in a code-level module are public and which are private.

Using l3docstrip allows internal functions to be indicated using a "two part" system. Within the `.dtx` file, internal functions may be indicated using `@@` in place of the module name, for example

```
\cs_new_protected:Npn \@@_some_function:nn #1#2
  {
    % Some code here
  }
\tl_new:N \l_@@_internal_tl
```

To extract the code using l3docstrip, the "guard" concept used by DocStrip is extended by introduction of the syntax `%<@@=⟨module⟩>`. The ⟨module⟩ name then replaces the `@@` when the code is extracted, so that

```
%<*package>
%<@@=foo>
\cs_new_protected:Npn \@@_some_function:nn #1#2
    {
      % Some code here
    }
\tl_new:N \l_@@_internal_tl
%</package>
```

---

is extracted as

```
\cs_new_protected:Npn \__foo_some_function:nn #1#2
  {
    % Some code here
  }
\tl_new:N \l__foo_internal_tl
```

where the `__` indicates that the functions and variables are internal to the `foo` module.

Use `@@@@` to obtain `@@` in the output (`@@@@@` to get `@@@`). For longer pieces of code the replacement can be completely suppressed by giving an empty module name, namely using the syntax `%<@@=>`.