The censor Package

Tools for Producing Redacted Documents

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1 Introduction

The censor package allows a convenient redaction/censor capability to be employed, for those who need to protect restricted information, as well as for those who are forced to work in a more inefficient environment when dealing with restricted information.

Let us assume you have a document for internal use, containing some restricted (*i.e.*, private, sensitive, proprietary or classified) information. To give a very short (fictitious) example:

RESTRICTED SOURCE: ————————————————

```
The Liberty missile, with charge diameter (CD) of 80~mm,
revealed a penetration capability of 1.30 1.19, and
1.37~CD in three recent tests into armor steel.
```

RESTRICTED OUTPUT: ————————————————

The Liberty missile, with charge diameter (CD) of 80 mm, revealed a penetration capability of 1.30 1.19, and 1.37 CD in three recent tests into armor steel.

————————————————————————————

Censor/redaction capabilities are desirable to sanitize the information. This would accomplish two things: allow for wider distribution of the output and/or allow a less sensitive output to be stored locally with fewer storage controls.

There are two modes in which the censor package can be used: (i) when the source (.tex file) remains restricted/secure; and (ii) when the source (.tex file) is public/unsecure.

2   Mode I: Restricted/Secure Source (.tex file)

In this mode, you create the source in a restricted/secure environment, but would like to produce output that can be more widely distributed, or stored in a less restricted location. With the addition of \usepackage{censor} to your document preamble, the \censor command becomes accessible to block out key identifiers:

CENSORED RESTRICTED SOURCE: ⸻

```
The \censor{Liberty} missile, with charge diameter (CD) of
\censor{80}~mm, revealed a penetration capability of 1.30
1.19, and 1.37~CD in three recent tests into armor steel.
```

CENSORED NO-LONGER-RESTRICTED OUTPUT: ⸻

The ███████ missile, with charge diameter (CD) of █ mm, revealed a penetration capability of 1.30 1.19, and 1.37 CD in three recent tests into armor steel.

The censored version of the output is (presumably) less sensitive in its content, and my be stored in or distributed to a less sensitive environment (*e.g.*, as a hardcopy). The censored words are not part of the output document (hardcopy or electronic), even though the space allocated for the redaction is identical to the original word being redacted.

The document may also be printed out in its restricted (uncensored) form, merely with the addition of the \StopCensoring command at the beginning of the document:

UNCENSORED RESTRICTED SOURCE: ⸻

```
\StopCensoring

The \censor{Liberty} missile, with charge diameter (CD) of
\censor{80}~mm, revealed a penetration capability of 1.30
1.19, and 1.37~CD in three recent tests into armor steel.
```

UNCENSORED RESTRICTED OUTPUT: ⸻

The Liberty missile, with charge diameter (CD) of 80 mm, revealed a penetration capability of 1.30 1.19, and 1.37 CD in three recent tests into armor steel.

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3 Mode II: Public/Unsecure Source (.tex file)

This mode is envisioned for users who must bear a large level of inconvenience to work in a restricted/secure environment (generally meaning in a location physically removed from one's desk). Its use is envisioned to allow a large percentage of a document to be created in an public/unsecure environment, with only the restricted details being completed in a restricted/secure environment.

After including the `\usepackage{censor}` command in the document preamble, the `\censor*` command becomes accessible. The way this author envisions its use is as follows:

CENSORED UNRESTRICTED SOURCE: ────────────────

```
% KEYWORD IDENTIFIERS:
\def\Missile{\censor*{7}}
\def\Size{\censor*{2}}

The {\Missile} missile, with charge diameter (CD) of
{\Size}~mm, revealed a penetration capability of 1.30 1.19,
and 1.37~CD in three recent tests into armor steel.
```

CENSORED UNRESTRICTED OUTPUT: ────────────────

The ███████ missile, with charge diameter (CD) of █ mm, revealed a penetration capability of 1.30 1.19, and 1.37 CD in three recent tests into armor steel.

────────────────────

In this way, the source (.tex file) contains no restricted information, and may thus be prepared in an unrestricted environment. The argument to the `\censor*` command is a number representing the approximate width of the redaction (in ex's). Because the redaction width is only approximate, it is possible that the censored and uncensored originals might have differing text justification. In the text, the curly braces are placed around the keyword identifiers so as to produce the proper interaction with the surrounding whitespace and punctuation.

Because the source (.tex) file contains no restricted information, the use of `\StopCensoring` cannot (in and of itself) produce the restricted document. Rather it will produce the following:

UNCENSORED UNRESTRICTED OUTPUT: ⸺

The _____ missile, with charge diameter (CD) of __ mm, revealed a penetration capability of 1.30 1.19, and 1.37 CD in three recent tests into armor steel.

⸺

In order to produce the uncensored, restricted output, the unrestricted source file must be moved into the restricted/secure environment and be subject to a small amount of additional editing. Once in the restricted environment, the source (.tex file) may be edited such that the censored keyword identifiers are filled in with their restricted values, changing the `\censor*` commands to `\censor` commands, in the process. This and the addition of the `\StopCensoring` command to the file will produce the uncensored, restricted result:

UNCENSORED NO-LONGER-UNRESTRICTED SOURCE: ⸺

```
\StopCensoring
% KEYWORD IDENTIFIERS:
\def\Missile{\censor{Liberty}}}
\def\Size{\censor{80}}

The {\Missile} missile, with charge diameter (CD) of
{\Size}~mm, revealed a penetration capability of 1.30 1.19,
and 1.37~CD in three recent tests into armor steel.
```

UNCENSORED RESTRICTED OUTPUT: ⸺

The Liberty missile, with charge diameter (CD) of 80 mm, revealed a penetration capability of 1.30 1.19, and 1.37 CD in three recent tests into armor steel.

⸺

The only changes required of the document were at the very beginning, among the keyword identifiers. The primary text of the source document remained unaltered. Note also that the censored, unrestricted output may also be obtained from the no-longer-unrestricted source by removing the `\StopCensoring` command at the beginning of the file.

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4   Miscellany

Censoring may be dynamically turned on and off in a document with the use of the `\StopCensoring` and `\RestartCensoring` commands. In addition to these two commands, the `\censor` and `\censor*` commands constitute the totality of commands available in the censor package.

It is preferable not to apply `\censor` to whitespace, or text justification could be adversely affected. If one wished to censor a multi-word phrase, such as "Little Bo Peep," it is recommended to do it as follows:

```
\censor{Little} \censor{Bo} \censor{Peep}
```

If such a phrase is to be used repeatedly through a document, it is most convenient to place it as a keyword identifier:

```
\def\Name{\censor{Little} \censor{Bo} \censor{Peep}}
```

such that subsequent reference is done indirectly:

```
We examine the life of {\Name} in this report
```

The source code for censor is so short as to be included below:

```
\ProvidesPackage{censor}
[2009/12/07 v1.00
 Provides capability for redaction of sensitive information]

\usepackage{pbox}

\newcommand\censor{\@ifstar{\@cenlen}{\@cenword}}
  \newcommand\@cenlen[1]{\protect\rule[-.3ex]{#1 ex}{2.1ex}}
  \newcommand\@cenword[1]{%
             \protect\rule[-.3ex]{\widthofpbox{#1}}{2.1ex}}

\newcommand\un@censor{\@ifstar{\un@cenlen}{\un@cenword}}
  \newcommand\un@cenlen[1]{\protect\underline{\hspace{#1 ex}}}
  \newcommand\un@cenword[1]{#1}

\newcommand\StopCensoring{\let\censor\un@censor}
\newcommand\RestartCensoring{%
           \renewcommand\censor{\@ifstar{\@cenlen}{\@cenword}}}

\endinput
```