GNU Screen Cheatsheet

A quick reference guide to using GNU Screen, a terminal multiplexer. Learn how to manage multiple terminal sessions within a single window, detach and reattach sessions, and customize your screen environment.

Session Management

Starting a Screen Session

`screen` - Starts a new screen session.

Example:
```
screen
```

`screen -S session_name` - Starts a named screen session.

Example:
```
screen -S my_session
```

`screen -d -m command` - Starts a detached screen session, running `command`.

Example:
```
screen -d -m ./my_script.sh
```

Detaching and Reattaching

`Ctrl+a d`	Detach the current screen session. The session continues to run in the background.
`screen -r`	Reattach to a detached screen session. If multiple sessions are running, it attaches to the first available.
`screen -r session_name`	Reattach to a specific named screen session. **Example:** `screen -r my_session`
`screen -ls` or `screen -list`	List all active screen sessions. Provides session IDs or names for reattaching.

Ending a Screen Session

`exit` or `Ctrl+d` - Exit the current shell in the screen window. If this is the last window in the session, the session will terminate.

`Ctrl+a k` - Kill the current window within the screen session. Confirm the kill to terminate the window.

Window Management

Creating New Windows

`Ctrl+a c` - Create a new window within the current screen session. This opens a new shell prompt.

`Ctrl+a :screen command` - Create a new window and execute `command` in it. The window automatically closes after the command completes.
Example:
```
Ctrl+a :screen top
```

Switching Between Windows

`Ctrl+a n` or `Ctrl+a Ctrl+n`	Switch to the next window in the session.
`Ctrl+a p` or `Ctrl+a Ctrl+p`	Switch to the previous window in the session.
`Ctrl+a number`	Switch to a specific window by its number (0-9).
`Ctrl+a '`	Prompts for a window number or title to switch to.
`Ctrl+a Ctrl+a`	Toggles between the current and previous window.

Window Information

`Ctrl+a w` - Display a list of all windows in the current session, indicating the current window with an asterisk.

`Ctrl+a A` - Rename the current window. This is useful for quickly identifying different tasks running in each window.

`Ctrl+a t` - Display the current time and system load average in the current window.

Advanced Features

Screen Splitting

`Ctrl+a S`	Split the current window horizontally into two regions.
`Ctrl+a |`	Split the current window vertically into two regions.
`Ctrl+a tab`	Switch the input focus to the next region. (Note: May be `Ctrl+a Ctrl+i` on some systems).
`Ctrl+a Q`	Remove all regions except the current one.
`Ctrl+a X`	Kill the current region. Requires confirmation.

Copy and Paste

`Ctrl+a Esc` - Enter copy mode. Use arrow keys to move the cursor.

Press `Space` to begin selection, move the cursor to the end of the text you want to copy, and press `Space` again to complete the selection.

Press `Ctrl+a ]` - Paste the copied text into the current window.

Scrolling

`Ctrl+a [`	Enter scrollback mode. Use arrow keys, Page Up, Page Down, Home, and End to navigate the scrollback buffer.
`Esc`	Exit scrollback mode.

Configuration

Configuration File

Screen's configuration is managed through the `~/.screenrc` file. This file allows you to customize keybindings, startup behavior, and other settings.

Example:

```
# Set a default window name
startup_message off
dedicated_cpu on

#bindkey ^k kill

# Hardstatus setup
hardstatus alwayslastline
hardstatus string '%{wk} %?%-w%?%{r}(%{W}%n*%t%?)%{k}%+w %=%{g}
CPU:%l %{b} %H'
```

Common Configuration Options

`startup_message off`	Disable the startup message.
`vbell off`	Disable visual bell (flashing screen).
`bindkey key command`	Bind a key combination to a screen command. For example: `bindkey ^k kill #bind Ctrl+a k to kill the window`
`defscrollback size`	Sets the default scrollback buffer size for new windows. Example: `defscrollback 10000`
`caption always`	Always show caption line at the bottom of the screen.