

TMUX Guide

Introduction

TMUX (Terminal Multiplexer) is a powerful terminal management tool that allows you to run and manage multiple terminal sessions from a single window. It is particularly useful for developers and system administrators who need to manage multiple tasks simultaneously.

Installation

To install TMUX on your system, use the following commands based on your operating system:

- **Ubuntu/Debian:**

```
sudo apt-get update  
sudo apt-get install tmux
```

- **CentOS/RHEL:**

```
sudo yum install tmux
```

- **macOS (using Homebrew):**

```
brew install tmux
```

Basic Usage

Starting a TMUX Session

To start a new TMUX session:

```
tmux
```

To start a session with a specific name:

```
tmux new -s session_name
```

Detaching and Attaching to Sessions

To detach from the current TMUX session and return to the regular terminal:

```
Ctrl+b d
```

To list all active TMUX sessions:

```
tmux ls
```

To attach to a specific session:

```
tmux attach -t session_name
```

To attach to the last session you were working on:

```
tmux a
```

Creating and Managing Windows

To create a new window within a session:

```
Ctrl+b c
```

To switch between windows:

```
Ctrl+b n # Next window  
Ctrl+b p # Previous window  
Ctrl+b <window_number> # Switch to a specific window by number
```

To rename the current window:

```
Ctrl+b ,
```

Creating and Managing Panes

To split the current window horizontally:

```
Ctrl+b "
```

To split the current window vertically:

```
Ctrl+b %
```

To navigate between panes:

```
Ctrl+b arrow_key # Use arrow keys to navigate
```

To resize panes:

```
Ctrl+b :resize-pane -D # Resize down  
Ctrl+b :resize-pane -U # Resize up  
Ctrl+b :resize-pane -L # Resize left  
Ctrl+b :resize-pane -R # Resize right
```

Synchronizing Panes

To send the same command to multiple panes simultaneously:

1. Enter command mode:

```
Ctrl+b :
```

2. Type:

```
setw synchronize-panes on
```

To turn off synchronization:

```
setw synchronize-panes off
```

Copy Mode

To enter copy mode:

```
Ctrl+b [
```

To scroll up and down:

```
Up/Down arrow keys or PgUp/PgDn
```

To start selecting text:

```
Space
```

To copy the selected text:

```
Enter
```

To paste the copied text:

```
Ctrl+b ]
```

Customizing TMUX

TMUX can be customized via the `.tmux.conf` file located in your home directory. Here are some common customizations:

- **Set prefix key to Ctrl+a:**

```
set -g prefix C-a  
unbind C-b  
bind C-a send-prefix
```

- **Enable mouse support:**

```
set -g mouse on
```

- **Change status bar color:**

```
set -g status-bg colour235  
set -g status-fg colour136
```

Useful Commands

- **Kill a specific window:**

```
Ctrl+b &
```

- **Kill a specific pane:**

```
Ctrl+b x
```

- **Kill a TMUX session:**

```
tmux kill-session -t session_name
```

Conclusion

TMUX is an incredibly versatile tool that can greatly enhance your productivity by allowing you to manage multiple terminal sessions efficiently. With this guide, you should be able to get started with TMUX and use its basic features. As you become more comfortable with TMUX, you can explore its extensive customization options to tailor it to your workflow.

