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How to install and remove software using the APT command

APT stands for Advanced Package Tool — it’s a command-line utility used to install, update, upgrade, and remove software packages in Debian-based Linux distributions.

Installing Software with APT

1. Update the Package List

Before installing anything, it’s best to update our package list so APT knows about the latest available software versions. bash sudo apt update 2. Install a Package

Update package list

Command sudo apt update

Install package

Command sudo apt install

Remove package (keep config)

Command sudo apt remove

Remove package (delete config)

Command sudo apt purge

Remove unused packages

Command sudo apt autoremove

Upgrade system

Command sudo apt upgrade

How to create a shell script step by step including screenshots and how to run it. Try to be as detailed as possible.

1. Pick (or create) a file for script

bash vim example_script.sh 2) Add the shebang and script content

At the top of the file put a shebang so the system knows which shell to use:

#!/usr/bin/env bash

example_script.sh - demo of a shell script with args, functions, and simple logic

Usage:

./example_script.sh NAME TIMES

Example:

./example_script.sh Alice 3

set -euo pipefail IFS=$'\n\t'

--- helper functions ---

log() {

print a timestamped message to stdout

printf '%s %s\n' "$(date +'%Y-%m-%d %H:%M:%S')" "$*" }

usage() { cat <<EOF Usage: $0 NAME TIMES NAME - name to greet TIMES - how many times to print the greeting (positive integer) EOF }

--- parse args ---

if [["${1:-}" == "-h" || "${1:-}" == "--help"]]; then usage exit 0 fi

NAME="${1:-World}" TIMES="${2:-1}"

validate TIMES is a positive integer

if ! [["$TIMES" =~ ^[0-9]+$]] || ["$TIMES" -le 0]; then log "ERROR: TIMES must be a positive integer." usage exit 2 fi

--- main work ---

log "Starting greetings: NAME=$NAME TIMES=$TIMES" for ((i=1;i<=TIMES;i++)); do printf "Hello, %s! (greeting %d/%d)\n" "$NAME" "$i" "$TIMES" sleep 0.2 done log "Done."

3. Save the file and make it executable

From the terminal run: chmod +x example_script.sh You can verify it’s executable: ls -l example_script.sh

-rwxr-xr-x ... means executable

4. Run the script

Run with positional arguments (or let defaults apply): ./example_script.sh Alice 3