

# PROCESS MANAGEMENT

These commands are essential for managing and interacting with processes in a Linux environment. They provide control over the execution of programs, allowing users to monitor, pause, resume, and adjust the priority of processes as needed.

- **ps Command:**

**Purpose:**

Display information about active processes.

**Usage:**

ps [options]

**Examples:**

ps aux

**Notes:**

ps provides a snapshot of currently running processes.

Common options include aux (show all processes in a user-friendly format) and e (display information about other users' processes).

- **bg Command:**

**Purpose:**

Move a suspended process to the background.

**Usage:**

bg [job\_spec]

**Examples:**

bg %1

**Notes:**

Used with a job specifier (like %1), bg sends a process that was stopped or suspended to run in the background.

Useful when a process needs to continue running without occupying the terminal.

- **fg Command:**

**Purpose:**

Bring a background process to the foreground.

**Usage:**

fg [job\_spec]

**Examples:**

fg %1

**Notes:**

fg is used to resume a process that has been stopped or sent to the background.

The job specifier (e.g., %1) refers to the specific background job.

- **nice Command:**

**Purpose:**

Adjust the priority of a process.

**Usage:**

```
nice [OPTION] [COMMAND [ARG]...]
```

**Examples:**

```
nice -n 10 ./my_program
```

**Notes:**

nice allows you to run a command with a modified scheduling priority.

The priority level ranges from -20 (highest priority) to 19 (lowest priority), with the default being 0.