

Bash Prompt Summary

What is the Bash Prompt?

- The bash prompt is a line of text in the terminal indicating the system is ready for commands.
- It typically shows:
 - **Username** (who you are)
 - **Hostname** (computer's name)
 - **Current working directory** (folder you're in)
- The prompt ends with a symbol:
 - `$` for a regular user
 - `#` for the root (privileged user)

Example:

- `username@hostname[~]$`
- `root@hostname[/root]#`
- The home directory is shown as a tilde `~`.

PS1 Variable

- The **PS1** environment variable controls the appearance of the bash prompt.
- You can customize it to show various information:
 - Username
 - Hostname
 - Current directory (full path or just name)
 - Date and time
 - IP address
 - Status of last command (success/failure)
- This customization helps during tasks like penetration testing by providing useful context directly in the prompt.

Common PS1 Special Characters

Character	Description	Example Output
<code>\u</code>	Current username	<code>user</code>
<code>\h</code>	Hostname (short)	<code>hostname</code>
<code>\H</code>	Full hostname	<code>hostname.domain.com</code>
<code>\w</code>	Full path of current directory	<code>/home/user/projects</code>
<code>\d</code>	Date (e.g., Mon Feb 6)	<code>Mon Feb 6</code>

Character	Description	Example Output
<code>\D{format}</code>	Date in custom format (e.g., %Y-%m-%d)	2025-07-23
<code>\t</code>	Current time (24-hour HH:MM:SS)	14:30:15
<code>\T</code>	Current time (12-hour HH:MM:SS)	02:30:15
<code>\@</code>	Current time (12-hour with AM/PM)	2:30 PM
<code>\j</code>	Number of jobs managed by shell	0
<code>\n</code>	Newline	<i>(creates a new line)</i>
<code>\r</code>	Carriage return	<i>(resets cursor to line start)</i>
<code>\s</code>	Name of the shell	bash

When PS1 Is Not Set

- The prompt may appear very simple:
 - `$` for normal users
 - `#` for root users
- This often happens when running shells remotely or via limited shells.

Additional Notes

- Bash prompt can be further enhanced with:
 - Colors
 - Fonts
 - Other visual settings
- Tools to create advanced prompts:
 - **bash-prompt-generator**
 - **powerline**

Summary

- The bash prompt gives important context in the terminal.
 - Customizing the PS1 variable helps tailor the prompt to your needs.
 - Including time, date, IP, or command status can improve workflow, especially in security testing.
 - The home directory is represented as `~`.
 - Root user prompt ends with `#`, regular users with `$`.
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