

Shell History and Autocompletion

What You Will Learn

- Shell History
- Exclamation Mark Syntax
- Autocompletion

Shell History

- Executed commands are added to the history.
- Shell history can be displayed and recalled.
- Shell history is stored in memory and on disk.
 - ~/.bash_history
 - ~/.history
 - ~/.histfile

history Command

`history` Displays the shell history.

`HISTSIZE` Controls the number of commands to retain in history.

`export HISTSIZE=1000`

! Syntax

!N Repeat command line number N.

!! Repeat the previous command line.

!string Repeat the most recent command starting with "string."

More ! Syntax

`! :N <Event> <Separator> <Word>`

`!` Represents a command line (or event).

`!` = The most recent command line.

`!` = `!!`

`:N` Represents a word on the command line.

0 = command, 1 = first argument, etc.

! Syntax Examples

```
$ head files.txt sorted_files.txt notes.txt
```

```
<Output from head command here>
```

```
$ !!
```

```
head files.txt sorted_files.txt notes.txt
```

```
<Output from head command here>
```

```
$ vi !:2
```

```
vi sorted_files.txt
```

```
<vi editor starts>
```

Even More ! Syntax

`!^` Represents the first argument.

`!^ = !:1`

`!$` Represents the last argument.

```
$ head files.txt sorted_files.txt notes.txt
```

`!^ = files.txt`

`!$ = notes.txt`

Searching Shell History

<code>Ctrl-r</code>	Reverse shell history search
<code>Enter</code>	Execute the command
<code>Arrows</code>	Change the command
<code>Ctrl-g</code>	Cancel the search

Tab Completion

- Tab autocompletion
 - Commands
 - Files, directories, paths
 - Environment Variables
 - Usernames (~)

Summary

- Shell History
- Exclamation Mark Syntax
- Autocompletion