PHP TRAINING
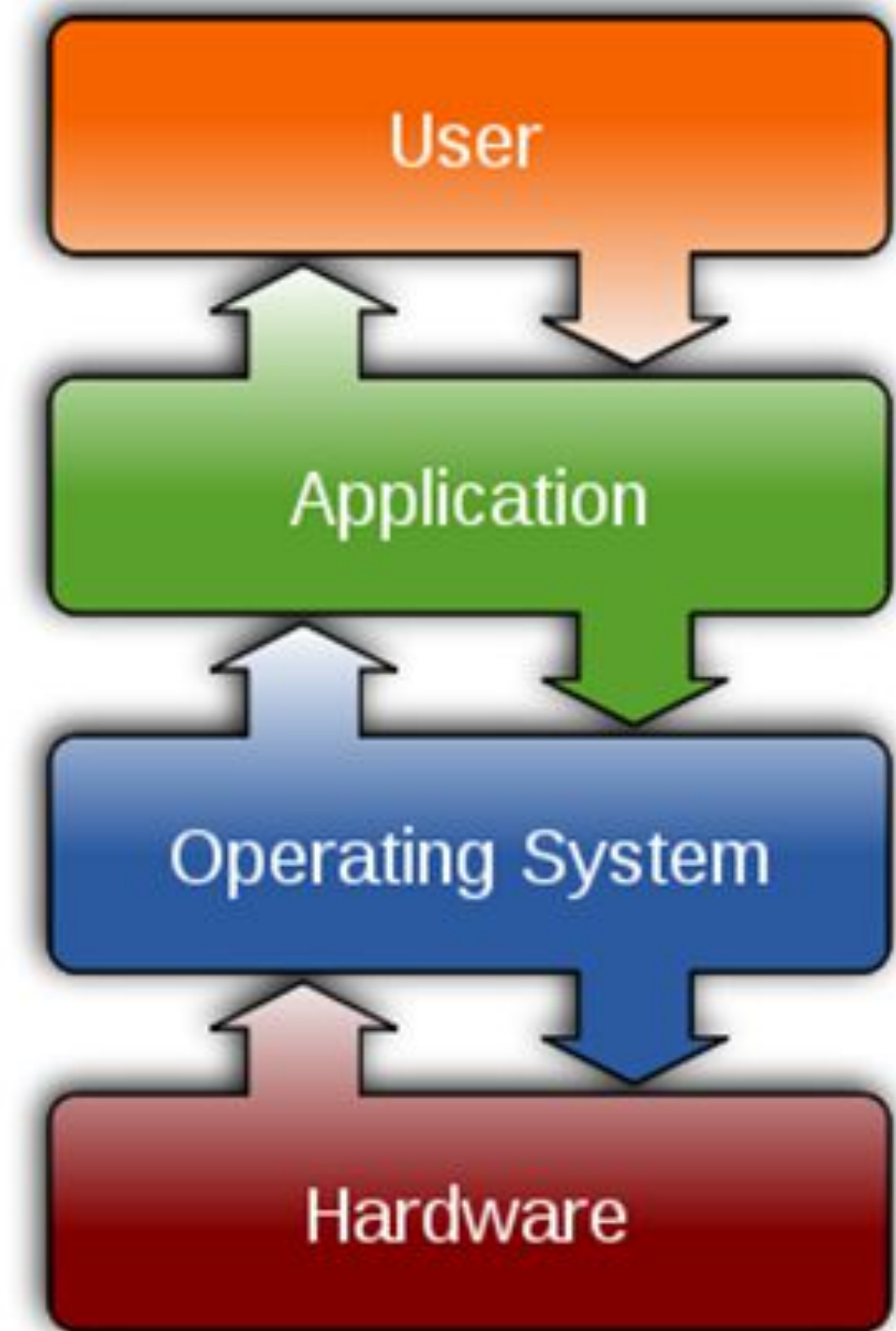
Trainer: Vien Le Mai

EASIER
LINUX

CONTENT

WHAT IS OPERATING SYSTEM

SYSTEM SOFTWARE

- Manages computer hardware, software resource
- Provides common services for computer programs
- Interfacer between user and hardware

A COLLECTION OF PROGRAMS

- Kernel
- Utilities
- Device drivers
- Language translators

Linux and UNIX

- Linux is an open-source clone of UNIX, the most secure and mature operating system.
- The major difference between Linux and UNIX is that UNIX is trademarked to The Open Group, while Linux is Open-source.
- All command line tools work the same on both.
- Over 90% of the supercomputers in the world run Linux. And the 10 fastest run Linux.
- Linux is the leading operating system on Servers
- Linux is free and popular distributions (distros) are Ubuntu, Fedora/Red Hat, OpenSUSE, Mandriva, Mint, ArchLinux, Slackware...

LINUX IS AN OPEN-SOURCE CLONE OF UNIX

USER AND GROUP

USER

- A person who can access to the system
- Has username and password
- 2 kinds of user: root and regular user
- Home folder: /home/{username}
- User is identified by UID

GROUP

- A group has one or many users
- A user belongs to one or many groups
- Whenever a user is created, a group is created also
- Group is identified by GID

COMMON COMMANDS

- useradd [option] <username>
- usermod [option] <username>
- userdel [option] <username>
- groupadd <groupname>
- groupdel <groupname>
- id <option> <username>
- groups <username>

PERMISSION

3 KINDS OF ACTORS

- Owner
- Group owner
- Other users

3 KINDS OF PERMISSION

- Read -r -4
- Write -w -2
- Execute -x -1

DEMO

6

DEFAULT ALIAS

```
.  #current directory

..  #parent directory

~ #home directory

/ #root directory

!! #the last history command
```

```
$ git add .

$ cd ..

$ cd ~/.ssh

$ cd /

$ cat /etc/php.ini

$ sudo !!
```

COMMON COMMANDS

DEMO

SSH

SSH (SECURE SHELL)

- Is a cryptographic network protocol for operating network services securely

- The best known example application is for remote login to computer systems by users.

- Common applications include remote command-line login and remote command execution

SSH AUTHENTICATION

- Used public-private and password to authenticate

- Keys is store in .ssh directory

- If public key is stored in ~/.ssh/ authorized_keys then no need password

- Default key: id_rsa and id_rsa.pub

SSH

SSH CONFIG

~/.ssh/config

TRANSFER FILE USING SSH

DOWNLOAD

scp root@1.2.3.4:/root/file.txt ~/Desktop

UPLOAD

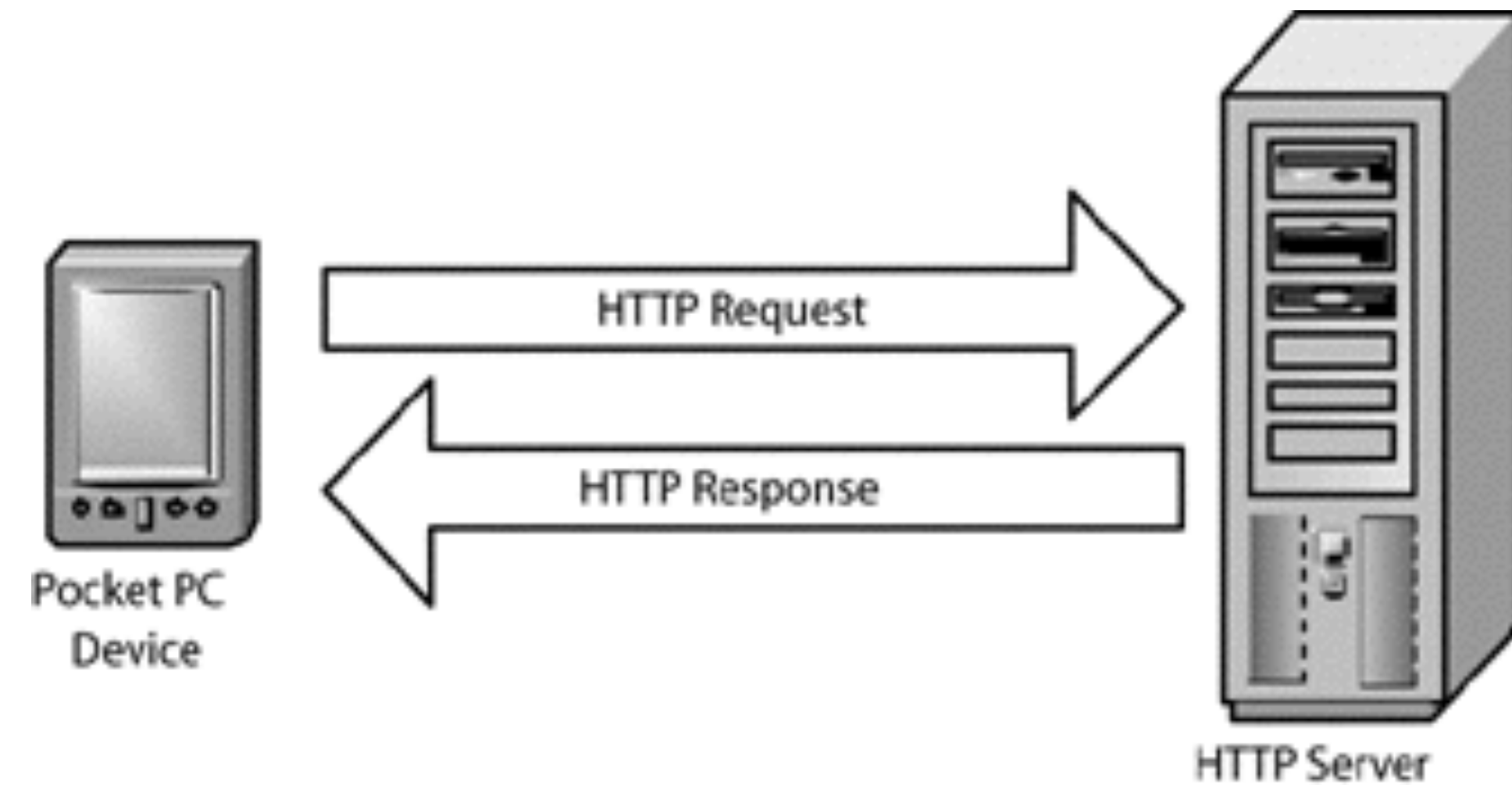*scp ~/Desktop/file.txt root@1.2.3.4:/var/www*

HTTP: HYPER TEXT TRANSFER PROTOCOL

- Hypertext Transfer Protocol is an application protocol used for data communication.

- Request:
  - Header
  - Body
  - Method: Get/Post
- Response
  - Status code
  - Header
  - Body

Pocket PC Device → HTTP Request → HTTP Server

HTTP Server → HTTP Response → Pocket PC Device

HTTP ON CHROME DEBUG TOOL

× Headers Preview **Response** Cookies Timing

▼ **General**

Request URL: http://asiantech.vn/en/index
Request Method: GET
Status Code: ● 200 OK
Remote Address: 125.212.207.102:80

▼ **Response Headers**   view source

Cache-Control: no-cache
Connection: close
Content-Type: text/html; charset=UTF-8
Date: Wed, 22 Feb 2017 04:00:57 GMT
Server: Apache
Set-Cookie: XSRF-TOKEN=eyJpdiI6IlhBM2Z1QUdSZjF4UmpDUGphOEJURVE9PSIsInZhbHVlIjoiWWFrc09wb0FVS0JETFJQUXhNZE8rcUphQ1BWcVFZcFJucHpma2hJelA4SWY3MDdOYis4MytRem9SZjdjRTlzWW9zeGNOdzBzUkxDVHc1YWplQ016Q1E9PSIsIm1hYyI6IjA2NmViN2EyNGVmOGQyYzM0YTU3YzU5ODM3Yjg0MDIyMzAyY2IxNWMwZTVhOWZjMzgwYjg0MmE2ZDQ2Njk3NDcifQ%3D%3D; expires=Wed, 22-Feb-2017 06:00:57 GMT; Max-Age=7200; path=/
Set-Cookie: laravel_session=eyJpdiI6Imx4SUFpd0VGNWk2N3Ewb1hGT2hCK2c9PSIsInZhbHVlIjoibWdGVzdDRlduVlRSOG1uUktEY2tMZ2NiRWo5MlZtVFQ5eGGswMGwzcHR2bHdKeTJtd0JZWG1XQ0lWeFF5a2a0lhcDRrZZHhmYktDdUZwUXNyR1dzY0ZBUFE9PSIsIm1hYyI6IjZkNDRmNTNlNDc1MmU0ODE5NjhiYjk3NThlNjEwN2RhNzQ0MzQ3YmUwYzQxZmJkNzcyOTJhMjk5YTc3ZGFkZGYifQ%3D%3D; expires=Wed, 22-Feb-2017 06:00:57 GMT; Max-Age=7200; path=/; httponly
Transfer-Encoding: chunked
X-Powered-By: PHP/5.6.13

▼ **Request Headers**   view source

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
Accept-Encoding: gzip, deflate, sdch
Accept-Language: en-US,en;q=0.8
Cache-Control: max-age=0
Connection: keep-alive
Cookie: XSRF-TOKEN=eyJpdiI6InVhSzFKM0pRNVlkazJZZMTFvZm9sQmc9PSIsInZhbHVlIjoiTEM5YndRNk1DM1ZTYlAyM0ZCQ2VDQ1RMWnE4QzF1TFBPd1phQUtvUmRlamN2NDhXamh3bW9oVVddSYmNNNTh4aGFoTWtLcENNDWFZHZ1U3YlJDY1JUeUE9PSIsIm1hYyI6ImRmMTgwNmFlMTMwMzk5ODc0MTlhZWRjNzYxOTc4OWRmZTEzYThlODc3ZGYyYjA0ZjA3Y2ZiMzVmYzRhOTc2ZTcifQ%3D%3D; laravel_session=eyJpdiI6ImxwclRGNWQ0RVwvaVZMWHVHHTitmaElRPT0iLCJ2YWx1ZSI6IncwUHVQbWlocjY5cDFuNno1Q1lVeTJUc2ZLZFNBTkxaYWU2Q1JvR0F1c293UVQzZmk0QkhqQ2Q3NVFoMjNndE1RU2ZlWE1kbmt6S1p1c2lrUFVCCeWhRPT0iLCJtYWMiOiI2OWYxOTTdiODljNDdmN2Q3ZmJmYjQ3NTdhOTg2NzRmMDRiM2Q1NTgwMjk3M2JkMDIyMDNlZGU3MmI5NGQwMjg3In%3D
Host: asiantech.vn

THANK YOU

DROP PICTURE HERE