

μ μ μ

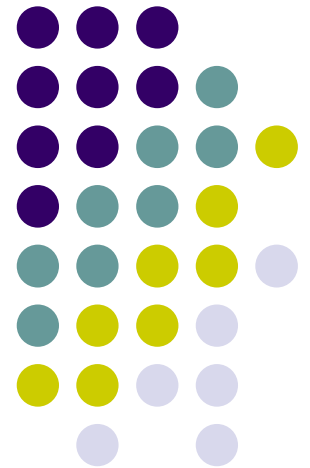
Apache  
Ubuntu Linux



μ μ

μ  
μ &

. μ





# A                      apache                      debian linux

- Configuration                      : /etc/apache2
- Document root: /var/www/
- SSL certificates: /etc/apache2/ssl
- Log files: /var/log/apache2



μ

# Virtual Host

- μ 1: μ

Virtual host  
Document Root

- μ 2: μ  
Virtual host

configuration

- μ 3:

site

Virtual host

- μ 4: Reload

apache

# Access control $\mu$

# .htaccess



- $\mu$  1: `.htaccess`
- $\mu$  2:  $\mu$  `.htaccess`  
 $\mu$
- $\mu$  3:  $\mu$  `login/password`  $\mu$
- $\mu$  4: `login/password`
- $\mu$  5: Reload `apache`



# μ Virtual host: μ 1

- home directory μ μ public\_html.  
site μ μ μ μ

`mkdir public_html`

`mkdir -p public_html/cnms1.com/{public,private,logs,cgi-bin,backup}`

- μ μ site:  
`nano public_html/cnms1.com/public/index.html`

μ  
(index.html)

Virtual host:

μ 1



```
<html>
  <head>
    <title>cnms1.com</title>
  </head>
  <body>
    <h1> Hello from first domain of Cnms Lab</h1>
  </body>
</html>
```

# μ Virtual host: μ 2 (apache2.conf)



- configuration Apache2 (apache2.conf):

`sudo nano /etc/apache2/apache2.conf`

```
NameVirtualHost *:80
```

```
<IfModule mod_ssl.c>
```

```
    NameVirtualHost *:443
```

```
</IfModule>
```

μ  
(default site)

Virtual host:

μ 2



- configuration default site:

`sudo nano /etc/apache2/sites-available/default`

```
<VirtualHost *:80>
```

```
    ServerAdmin webmaster@localhost
```

```
    DocumentRoot /var/www/
```



( μ Virtual host: μ 2 configuration )

- μ μ configuration apache  
virtual host:

`sudo nano /etc/apache2/sites-available/cnms1.com`



# μ Virtual host: μ 2 (configuration cnms1.com)



```
<VirtualHost *:80>
# Admin email, Server Name (domain name) and any aliases
ServerAdmin webmaster@cnms1.com
ServerName cnms1.com
ServerAlias www.cnms1.com
# Index file and Document Root (where the public files are located)
DirectoryIndex index.html
DocumentRoot /home/demo/public_html/cnms1.com/public
<Directory />
Options FollowSymLinks
AllowOverride None
</Directory>
# Custom log file locations
LogLevel warn
ErrorLog /home/demo/public_html/cnms1/logs/error.log
CustomLog /home/demo/public_html/cnms1/logs/access.log combined
</VirtualHost>
```



# configuration

- VirtualHost: IP address virtual host  
 $\mu$  virtual host
- ServerName: host name port virtual host
- ServerAdmin: e-mail virtual host  
 $\mu$   $\mu$
- DocumentRoot: file system  
 document root
- virtual host
- Directory: directive
- AllowOverride: directives  $\mu$   
 .htaccess
- ErrorLog:  $\mu$   $\mu$
- LogLevel warn: log file
- CustomLog
- ServerSignature: footer  $\mu$   
 server (  $\mu$   $\mu$  )

4 μ Virtual host: μ 3



- μ 3: μ site  
`sudo a2ensite cnms1.com`

μ site:  
`sudo a2dissite cnms1.com`

- μ 4: μ reload apache  
`sudo /etc/init.d/apache2 reload`

μ ASN.1

μ



μ

- μ μ apache server:  
`sudo nano /etc/apache2/apache2.conf`

`ServerName "cnms.com"`

- μ hosts  
`sudo nano /etc/hosts`

`127.0.0.1 localhost cnms1.com`

# Access control $\mu$

# .htaccess



:  $\mu$  1

- $\mu$  directive AllowOverride All .htaccess  
cnms1.com directive AllowOverride  
None All.
- AllowOverride  
configuration file  $\mu$   $\mu$   
«  $\mu$  » .htaccess .
- $\mu$   $\mu$   $\mu$  virtual host.  
apache

# Access control $\mu$

:  $\mu$  2

# .htaccess



- $\mu$  .htaccess  
cd /home/demo/public\_html/cnms1.com/public  
touch .htaccess  
sudo nano .htaccess

- .htaccess

AuthType Basic

AuthName "Password Required to enter this area"

AuthUserFile /home/demo/public\_html/cnms1.com/password/test-user.file

Require user test

# htaccess



- AuthType:  $\mu$
- AuthName:  $\mu$
- AuthUserFile:  
password
- Require user:  $\mu$



# Access control

# .htaccess



- `apache`  
`/home/demo/public_html/cnms1.com/public.`  
(username, password)  
username / password web location  
«Password Required to enter this area»  
password username web location  
`/home/demo/public_html/cnms1.com/password/test-user.file`  
username  
"test"

# Access control $\mu$

:  $\mu$  3

# .htaccess



- $\mu$   
password:  
mkdir password  
cd password

- $\mu$   
touch test-user.file

test-user.file:

# Access control $\mu$ .htaccess

$\mu$  4 5

- $\mu$  4:  $\mu$  password  
test  $\mu$   $\mu\mu$   
htpasswd:  
htpasswd test-user.file test

- $\mu$  5:  $\mu$  reload apache:  
sudo /etc/init.d/apache2 reload



# Access control μ

# .htaccess

:

μ



μ

μ

.htaccess



- μ
  - web server .htaccess
  - web server document root

GET

.htaccess

μ

- μ
  - μ

configuration