计 算 机 网 络

## 实

## 验

## 报

## 告

**域名服务器DNS**

1. **题目要求**

了解域名服务。

掌握Internet中的层次型命名机制。

掌握Windows 2000 Server下DNS服务器的配置方法。

1. **开发环境**

操作系统：Mac OS

机器规格信息：

CPU型号:Intel 酷睿i7 6820HQ

CPU主频率:2.7GHz

核心／线程数:四核心／八线程

RAM大小:16GB

操作系统位数（32/64）:64

1. **过程**

在终端中进行以下操作：

*# Update your homebrew installation*

**brew** up

*# Install dnsmasq*

**brew** install dnsmasq

*# Copy the default configuration file.*

**cp** $(**brew** list dnsmasq **|** **grep** /dnsmasq.conf.example$) /usr/local/etc/dnsmasq.conf

*# Copy the daemon configuration file into place.*

**sudo** cp $(**brew** list dnsmasq **|** **grep** /homebrew.mxcl.dnsmasq.plist$) /Library/LaunchDaemons/

*# Start Dnsmasq automatically.*

**sudo** launchctl load /Library/LaunchDaemons/homebrew.mxcl.dnsmasq.plist

address=/dev/127.0.0.1

**sudo** launchctl stop homebrew.mxcl.dnsmasq

**sudo** launchctl start homebrew.mxcl.dnsmasq

**dig** testing.testing.one.two.three.dev @127.0.0.1

**sudo** mkdir -p /etc/resolver

**man** 5 resolver

**sudo** tee /etc/resolver/dev **>**/dev/null <<EOF

nameserver 127.0.0.1

EOF

*# Make sure you haven't broken your DNS.*

**ping** -c 1 www.google.com

*# Check that .dev names work*

**ping** -c 1 this.is.a.test.dev

**ping** -c 1 iam.the.walrus.dev

输出：

; <<>> DiG 9.8.3-P1 <<>> testing.testing.one.two.three.dev @127.0.0.1

;; global options: +cmd

;; Got answer:

;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 37286

;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 5, ADDITIONAL: 10

;; QUESTION SECTION:

;testing.testing.one.two.three.dev. IN A

;; ANSWER SECTION:

testing.testing.one.two.three.dev. 300 IN A 127.0.53.53

;; AUTHORITY SECTION:

dev. 146855 IN NS ns-tld1.charlestonroadregistry.com.

dev. 146855 IN NS ns-tld4.charlestonroadregistry.com.

dev. 146855 IN NS ns-tld5.charlestonroadregistry.com.

dev. 146855 IN NS ns-tld2.charlestonroadregistry.com.

dev. 146855 IN NS ns-tld3.charlestonroadregistry.com.

;; ADDITIONAL SECTION:

ns-tld4.charlestonroadregistry.com. 3325 IN A 216.239.38.105

ns-tld4.charlestonroadregistry.com. 3325 IN AAAA 2001:4860:4802:38::69

ns-tld2.charlestonroadregistry.com. 3325 IN A 216.239.34.105

ns-tld2.charlestonroadregistry.com. 3325 IN AAAA 2001:4860:4802:34::69

ns-tld5.charlestonroadregistry.com. 3325 IN A 216.239.60.105

ns-tld5.charlestonroadregistry.com. 3325 IN AAAA 2001:4860:4805::69

ns-tld3.charlestonroadregistry.com. 3325 IN A 216.239.36.105

ns-tld3.charlestonroadregistry.com. 3325 IN AAAA 2001:4860:4802:36::69

ns-tld1.charlestonroadregistry.com. 3325 IN A 216.239.32.105

ns-tld1.charlestonroadregistry.com. 3325 IN AAAA 2001:4860:4802:32::69

;; Query time: 114 msec

;; SERVER: 127.0.0.1#53(127.0.0.1)

;; WHEN: Mon May 22 20:17:49 2017

;; MSG SIZE rcvd: 423













