



**UNIVERSITY OF UTAH**

STUDENT COMPUTING LABS

# Network Time

Options for Updating Mac OS X

by Richard Glaser



# New Time Servers

- New Time Server(s)
  - Campus Servers
    - [time-a.utah.edu](http://time-a.utah.edu)
    - [time-b.utah.edu](http://time-b.utah.edu)
  - DNS Round Robin
    - [time.utah.edu](http://time.utah.edu)
  - Old servers time service off on Feb 11
    - [ns.utah.edu](http://ns.utah.edu)
    - [fiber.utah.edu](http://fiber.utah.edu)



# Why use campus service?

- Accurate time on client
- Better Support & Troubleshooting
  - Will be used with other centralized services
  - Easier to correlate issues
    - Log Files
    - Bandwidth Usage
    - Interface Statistics
    - Loss of Connectivity
    - Dropped Packets



# Setting Network Time

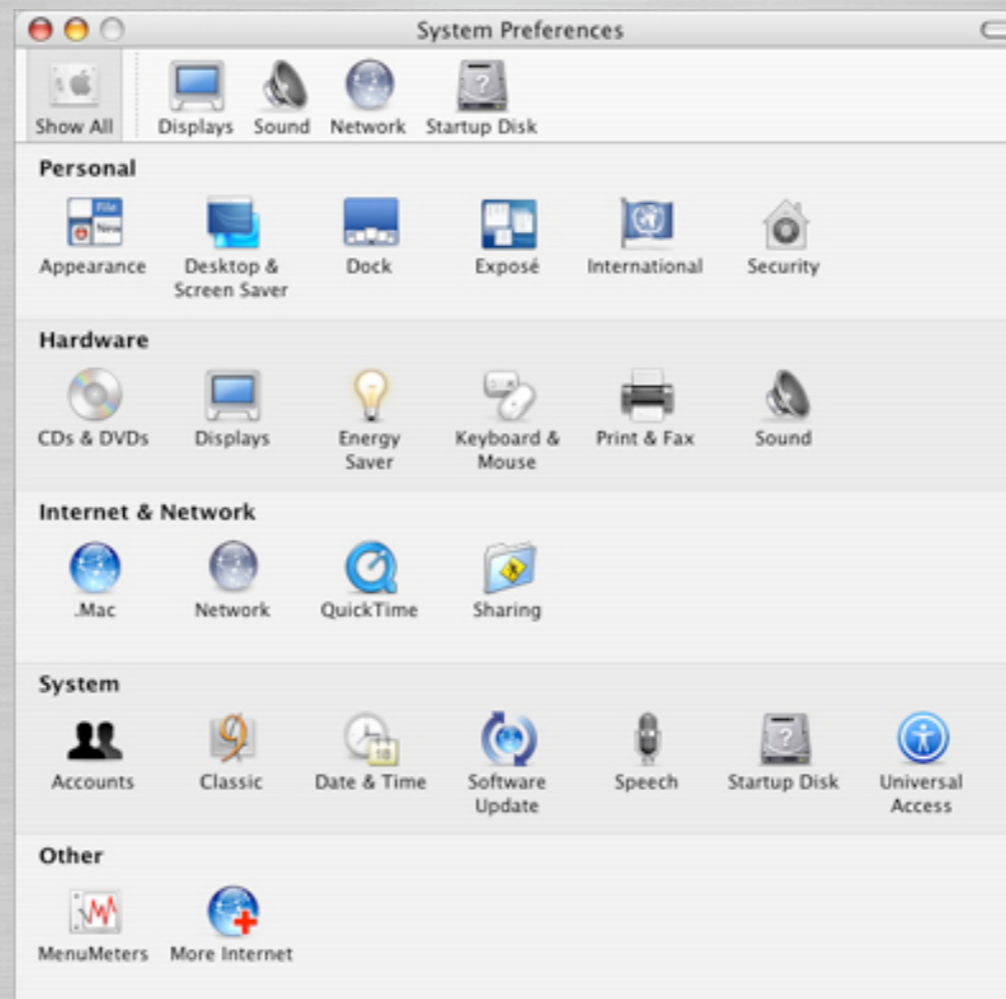
- System Preferences
- Apple Remote Desktop 2.x
- Directly edit ntp.conf
- Script
- Etc.





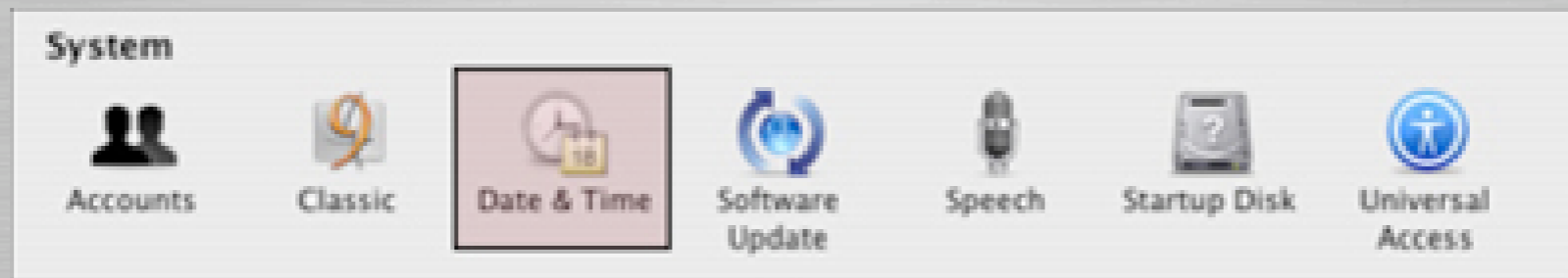
# System Preferences

## Open System Preferences



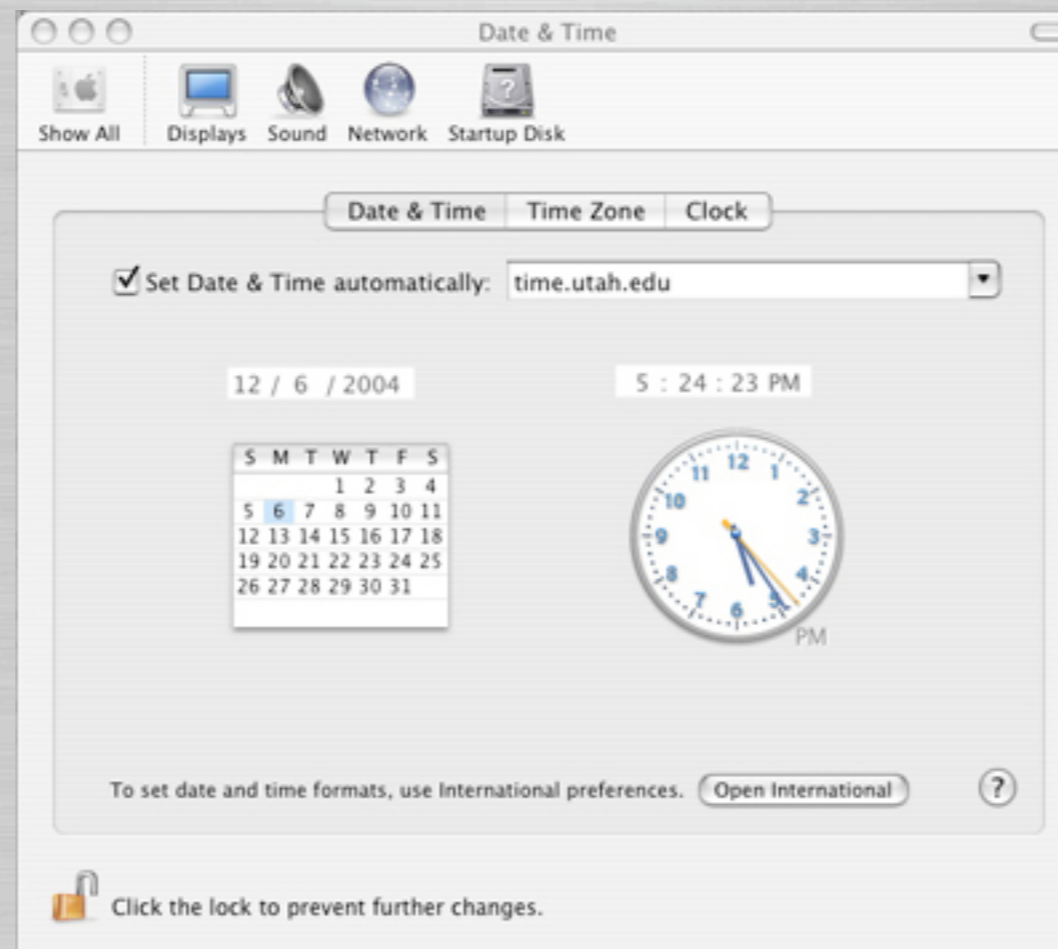
# System Preferences

- Select “Date & Time” icon...



# System Preferences

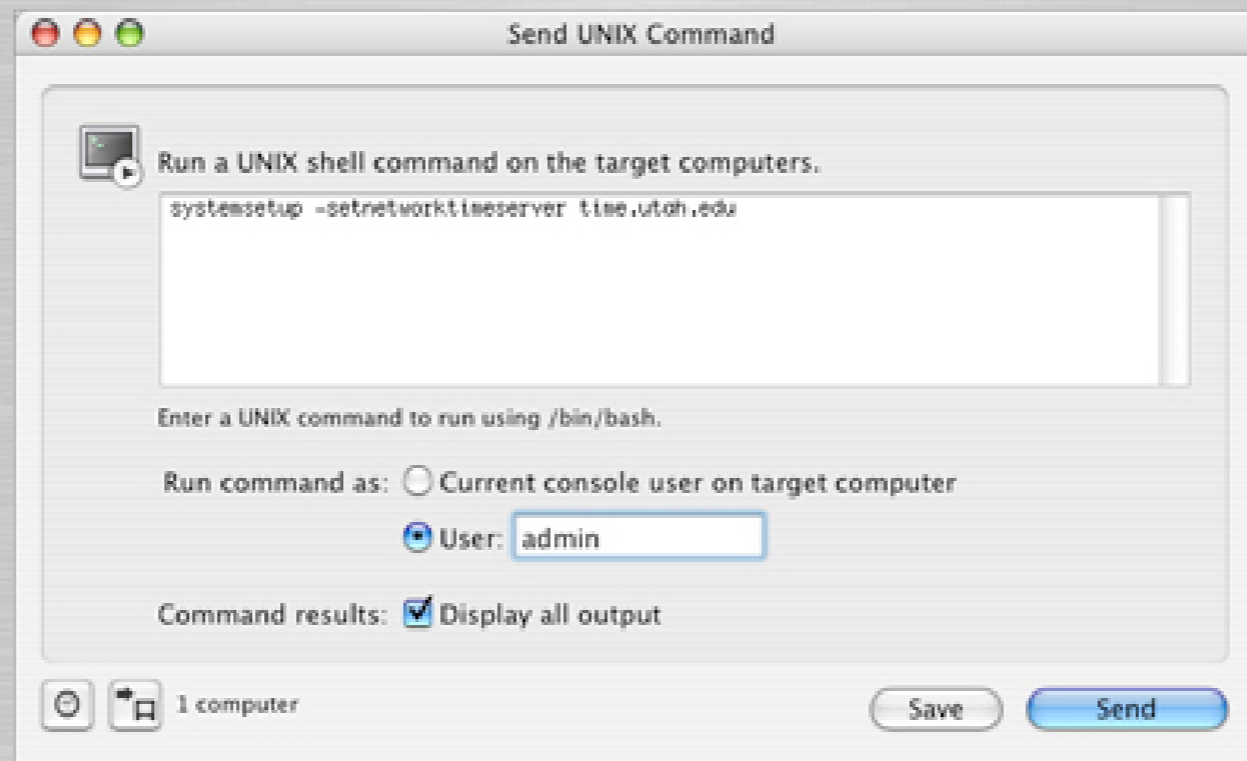
- Enter time.utah.edu...



# ARD 2.x

## ● Use Send Remote UNIX Command

`systemsetup -setnetworktimeserver time.scl.utah.edu`





# ARD 2.x

- Other useful commands...
  - Display whether network time is on or off  
`systemsetup -getusingnetworktime`
  - Set using network time to either <on> or <off>  
`systemsetup -setusingnetworktime <on off>`
  - Display network time server  
`systemsetup -getnetworktimeserver`

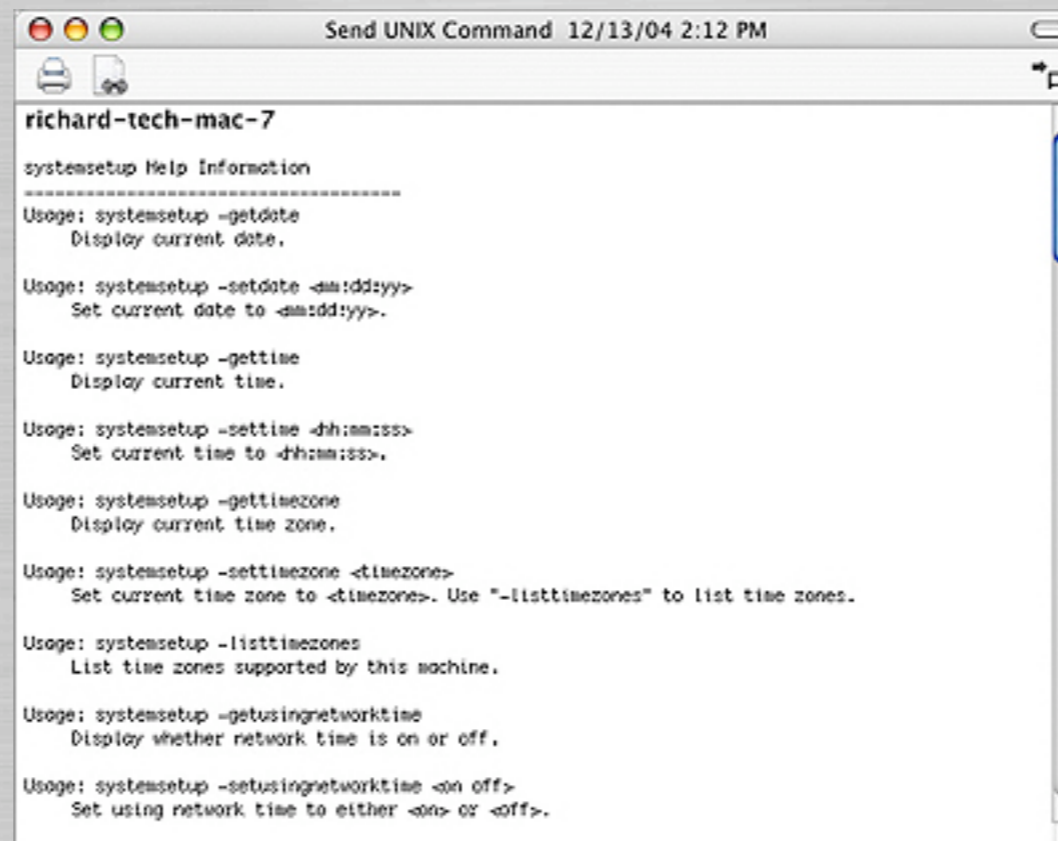
# ARD 2.x

## ● More useful commands...

- Display current time zone  
`systemsetup -gettimezone`
- Set current time zone to <timezone>  
`systemsetup -settimezone <timezone>`
- List time zones supported by this machine  
`systemsetup -listtimezones`

# ARD 2.x

- More info on `systemsetup`  
`systemsetup -help`



```
Send UNIX Command 12/13/04 2:12 PM
richard-tech-mac-7
systemsetup Help Information
-----
Usage: systemsetup -getdate
       Display current date.

Usage: systemsetup -setdate <mm:dd:yy>
       Set current date to <mm:dd:yy>.

Usage: systemsetup -gettime
       Display current time.

Usage: systemsetup -settime <hh:mm:ss>
       Set current time to <hh:mm:ss>.

Usage: systemsetup -gettimezone
       Display current time zone.

Usage: systemsetup -settimezone <timezone>
       Set current time zone to <timezone>. Use "-listtimezones" to list time zones.

Usage: systemsetup -listtimezones
       List time zones supported by this machine.

Usage: systemsetup -getusingnetworktime
       Display whether network time is on or off.

Usage: systemsetup -setusingnetworktime <on off>
       Set using network time to either <on> or <off>.
```





# Edit ntp.conf

- Use favorite text editor
- Edit /private/etc/ntp.conf
- Basic format:  
`server <timeserver> minpoll <#> maxpoll <#>`
- Example:  
`server time.utah.edu minpoll 12 maxpoll 17`
- Could use ARD or Radmind to distribute



# Script

- Could use a script
- Useful if you aren't managing clients
  - ARD 2.x
  - Radmind
- GUI Wrapper
  - More end-user friendly



# Script

```
#!/bin/sh
#
# script to enable time syncing on Mac OS X.

if [ `uname -s` != "Darwin" ]; then
    echo "error: script must only be run on Darwin systems"
    exit 1
fi

# set this to the NTP server hostname
TIMESERVER=time.utah.edu

# ntp.conf data
TIMECONFIG="$TIMESERVER minpoll 12 maxpoll 17"

# set proper values in NetInfo for ntpd (Mac OS X 10.0 and 10.1?)
niutil -create / /config/ntp
niutil -createprop / /config/ntp server $TIMECONFIG
niutil -resync /

# and set file data, just in case (Mac OS X 10.2?)
echo "server $TIMECONFIG" > /etc/ntp.conf

# enable timesyncing in startup preferences file
if grep ^TIMESYNC /etc/hostconfig >/dev/null; then
    perl -i -ple 's/-NO-/-YES-/ if /^TIMESYNC/' /etc/hostconfig
else
    echo "TIMESYNC=-YES-" >> /etc/hostconfig
fi
```



# Resources

- U of U - Netcom

<http://www.netcom.utah.edu/helpdesk/computerhelp/ntpconfig.html>

- U of U - Mac Mgrs

<http://www.macos.utah.edu/ntp/>



**UNIVERSITY OF UTAH**  
STUDENT COMPUTING LABS



# Questions & Answers

Any questions or answers?

