From the Wizard's Hat

MacSysAdmin 2010
Charles Edge

Automated Binding

Environment Variables

- printenv
- $HOME
- $GROUPS
- $USER
- $HOSTNAME
- $LANG

scutil --get HostName

vs. $HOSTNAME

OpenLDAP

- dsconfigldap -f -a openldap.krypted.com -c $HOSTNAME -u diradmin -p PASSWORD -v
- sleep 30
- dscl /Search -create / SearchPolicy CSPSearchPath
- dscl /Search -append / CSPSearchPath /LDAPv3/openldap.krypted.com

Active Directory

```
dsconfigad -a $HOSTNAME -u arek -p apple -
ou
"ou=Macs,ou=Computers,dc=KRYPTED,dc=C
OM" -domain KRYPTED.com

sleep 30

dsconfigad -lu arek -lp apple -groups
"KRYPTED\domain admins" -mobile enable -
mobileconfirm disable
```

Don’t Forget About CSPSearchPath

- dscl /Search -create / SearchPolicy CSPSearchPath
- dscl /Search -append / CSPSearchPath “/Active Directory/KRYPTED.com”

Create Packages from CLI Part Deux

- packagemaker --doc /My/project.pmdoc --version 2.0 --title 'Duncan May Laugh At You'
- Be careful not to change items from faux root
- Permissions

transmogrifier.sourceforge.net

sabackup.sourceforge.net

Open Directory

Backup

http://techjournal.318.com/scripts/open-directory-auto-archiver/

iSCSI

http://krypted.com/mac-os-x/how-to-use-iscsi-on-mac-os-x/

Converting Monolithic Images to Packages

Converting Monolithic Images to Packages

Composer by JAMF

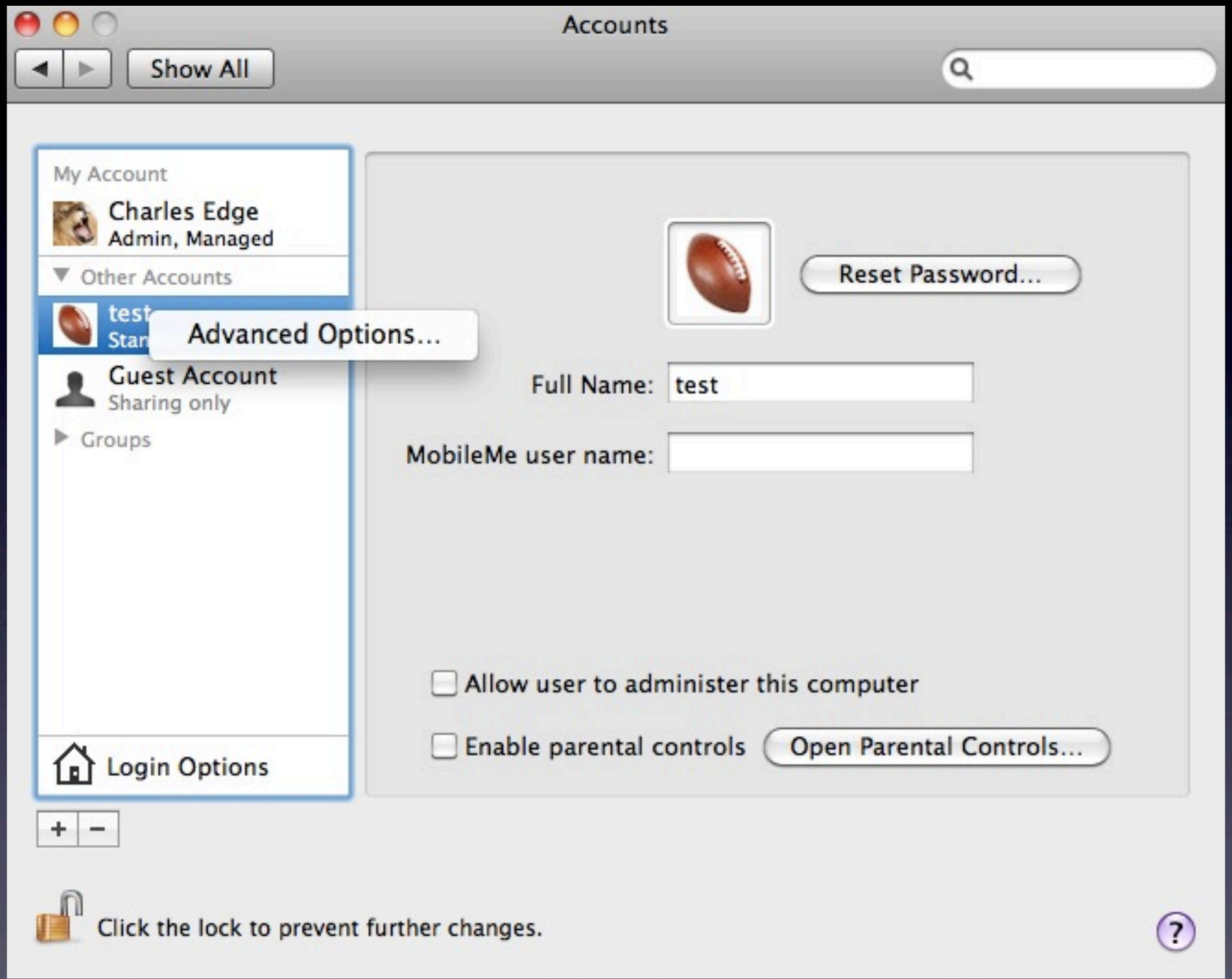
Integrating w/ Help Desk Software

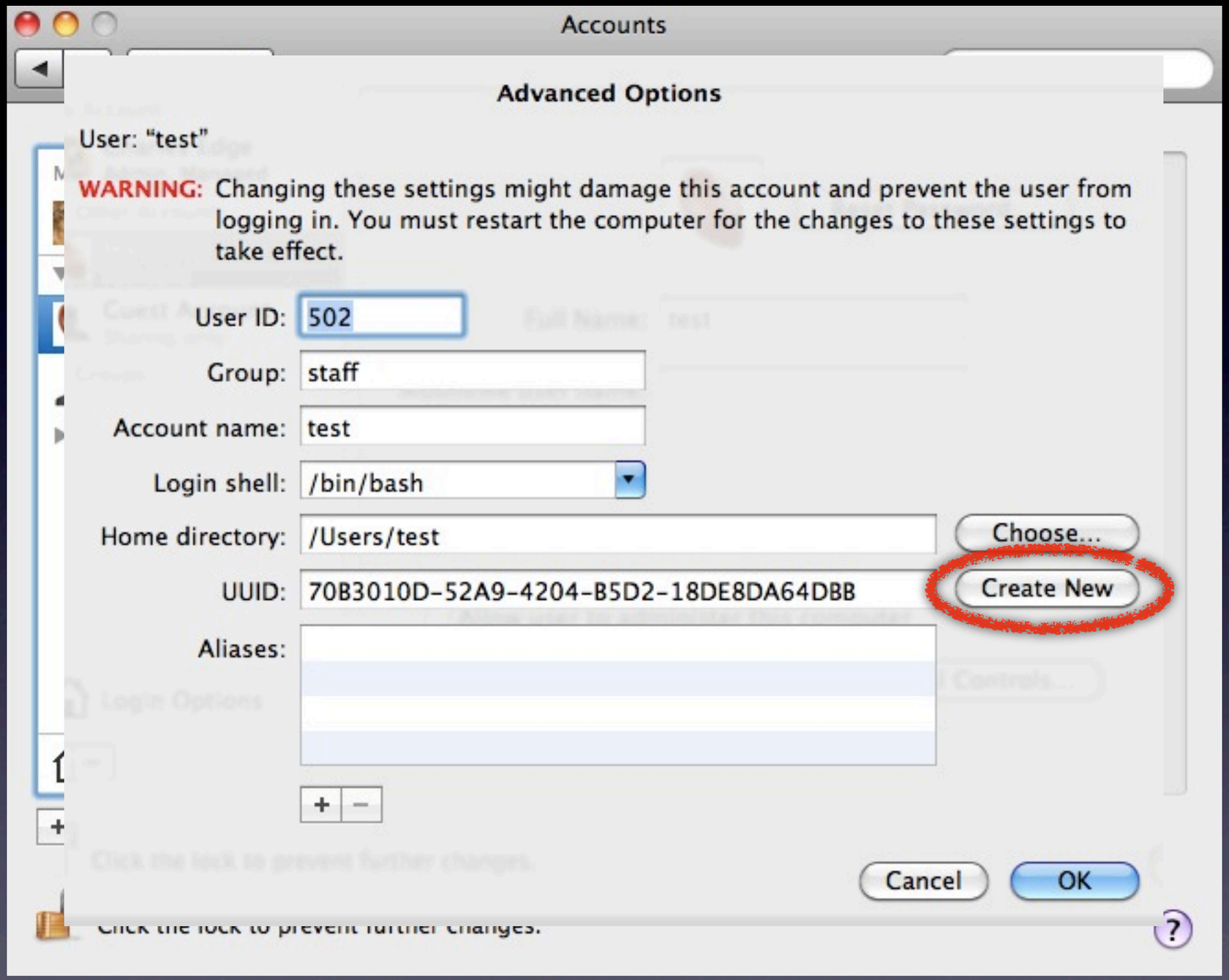
- Username and Password known?
- IP or hostname known?
- send shell command:
  - open vnc://USER:PASSWORD@HOSTNAME
- No ARD Required

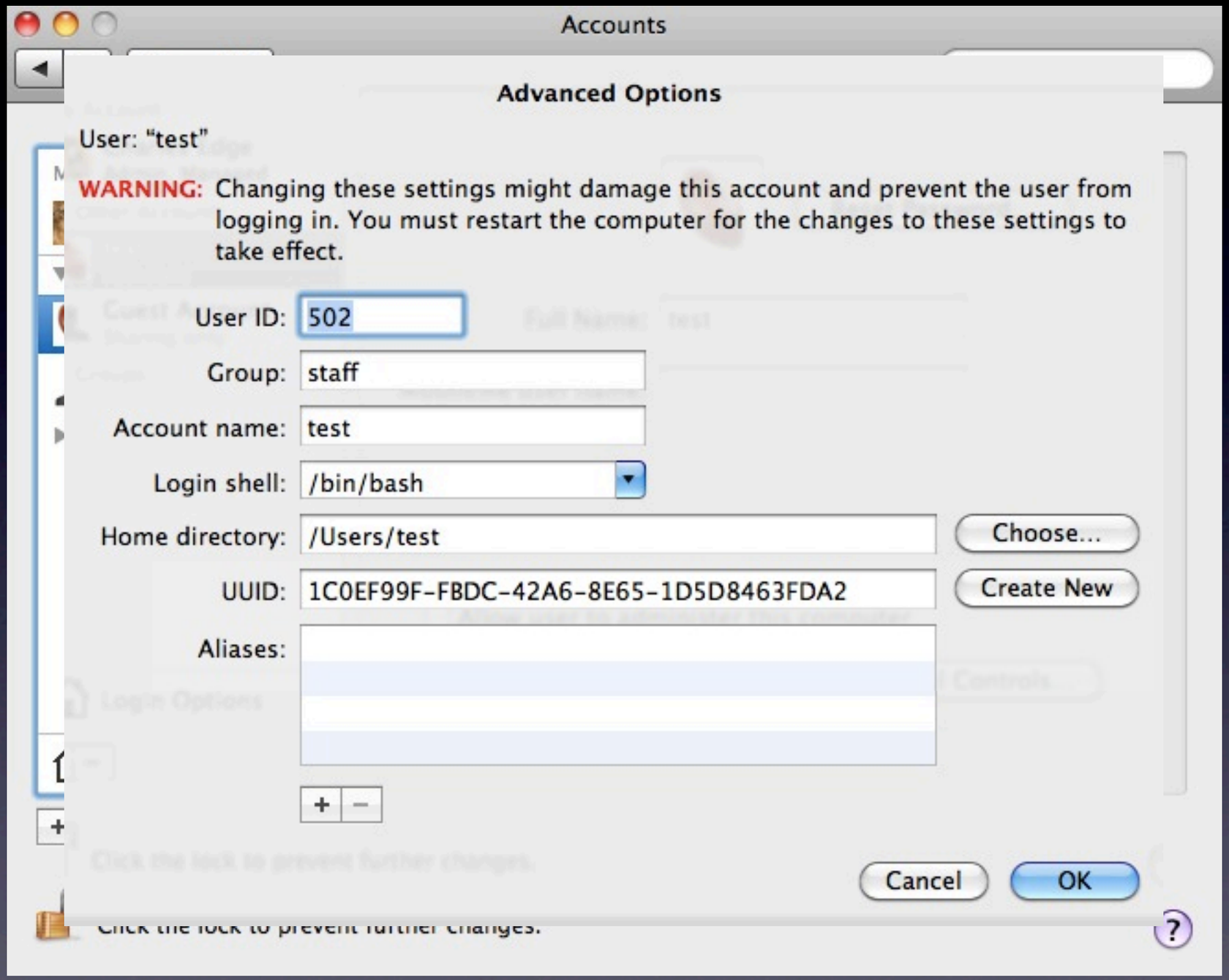
Scripting Excersizes

Can You Assume the GUID for a User is a Constant?

Password Swap


Accounts
Show All
My Account
Charles Edge
Admin, Managed
Other Accounts
test
Advanced Options...
Guest Account
Sharing only
Groups
Login Options
Reset Password...
Full Name:
test
MobileMe user name:
Allow user to administer this computer
Enable parental controls
Open Parental Controls...
Click the lock to prevent further changes.


Accounts
Advanced Options
User: "test"
WARNING: Changing these settings might damage this account and prevent the user from logging in. You must restart the computer for the changes to these settings to take effect.
User ID: 502
Group: staff
Account name: test
Login shell: /bin/bash
Home directory: /Users/test
Choose...
UUID: 70B3010D-52A9-4204-B5D2-18DE8DA64DBB
Create New
Aliases:
Cancel
OK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Group: staff
Account name: test
Login shell: /bin/bash
Home directory: /Users/test
Choose...
UUID: 1C0EF99F-FBDC-42A6-8E65-1D5D8463FDA2
Create New
Aliases:
Cancel
OK

Get Information from dscl w/out defaults

- Constrain for Certain Character Locations
  - dscl . read /Users/admin | grep GeneratedUID | cut -c 15-51
- Constrain for Certain Fields
  - dscl . read /Users/admin | grep GeneratedUID | awk '{print $2}'

Variable

```
GUID=$(dscl . read /Users/cedge | grep
GeneratedUID | awk '{print $2}')

curl http://www.krypted.com/Scripts/
password > /var/db/shadow/hash/$GUID

#echo $GUID
```

Mission:

Automated RSS Reader

Create An Array

```
cities=( losangeles dallas seattle portland
sandiego minneapolis)

for city in ${cities[@]}

do

echo $city

done
```

Using Curl To Read RSS

- Find the rss URL
- curl --silent "http://${city}.craigslist.org/search/cpg?query=Shelf&catAbbreviation=cpg&addThree=&format=rss"
- Constrain output

Constraining with Regex

- Find Subject Manually In Curl
- | grep "item rdf:about="
- | cut -c 18-100 | sed -e "s/\"//g" | sed -e "s/\>//g"
- >> /tmp/temp.txt

For Loop

- Build further loops
- Open in Safari
- Read All The Loops
- while read line; do open "$line"; done < /tmp/temp.txt

PubSub?

ATOM?

Finding Users and Groups

Find All of the Groups

```
for GROUP_NAME in `dscl . -list /Groups` ;
do
        echo "$GROUP_NAME"
done
```

And Users...

```
for USER_NAME in `dscl . -list /Users` ; do
echo "$USER_NAME"; done
```

Fix Home Folder Permissions

Fix Home Folder Permissions

```
for USERHOME in "$1"* ; do

declare USER_NAME="$($basename "$USERHOME")"

if [ -d "$USERHOME/Library" ] ; then

        $chown -R "$USER_NAME" "$USERHOME"

        cp -r /System/Library/User\ Template/English.lproj/* $USERHOME

fi
```

Polymorphism

Self Updating Scripts

```
#!/bin/bash
URL=”http://www.krypted.com/Scripts/randomsus.sh”
PATH=”/Scripts/randomsus.sh”
/usr/bin/curl $URL > $PATH
exit 0
```

Bringing Data In

Positional Parameters

- Some commands have their own:
  - installer
  - jamf
- Use $1, $2, $3, etc in scripts
- Run script w/ command:
  - echo $1

Input to Script

```
x=$1

while [ $x -lt 100000000 ]

do

open http://SOMEWEBSITE.COM/module.php?mod=network
\&op=makevirtualmachine\&uid=$x

sleep 3

automator /Users/cedge/Desktop/Click.workflow

sleep 3

killall Safari

x=`expr $x - 1`

done
```

Making Operators

Making Operators
Getopts

Getopts

```
while getopts Ci:ukvn:N: SWITCH ; do
        case $SWITCH in
                v ) export
LOGLEVEL="VERBOSE"  ;;
                C ) export
ENABLECOLOR="YES"  ;;
                u ) export GUI="ENABLED"  ;;
                N ) export
CLI_NAME_FORMAT="${OPTARG}"  ;;
                n ) export
CLI_CUSTOM_NAME="${OPTARG}"  ;;
                k ) export
KEEP_CURRENT_NAME='YES' ;;
                i ) export OVERRIDEIP="$
{OPTARG}"  ;
                [ "${#OVERRIDEIP}" -gt 0 ] ll
([[ "$OVERRIDEIP" = -* ]] &&
                die "GETOPTS" "IP addess not
specified"  1);;
    esac
done
```

GUI Wrapping My Pretties

- AppleScript
  - do shell script "asr -source" & space & posix_dmgfile & space & "-server /tmp/asr.plist" with administrator privileges
- .command
  - Save script w/ .command instead of .sh

Mobile Home Creation

VBS?

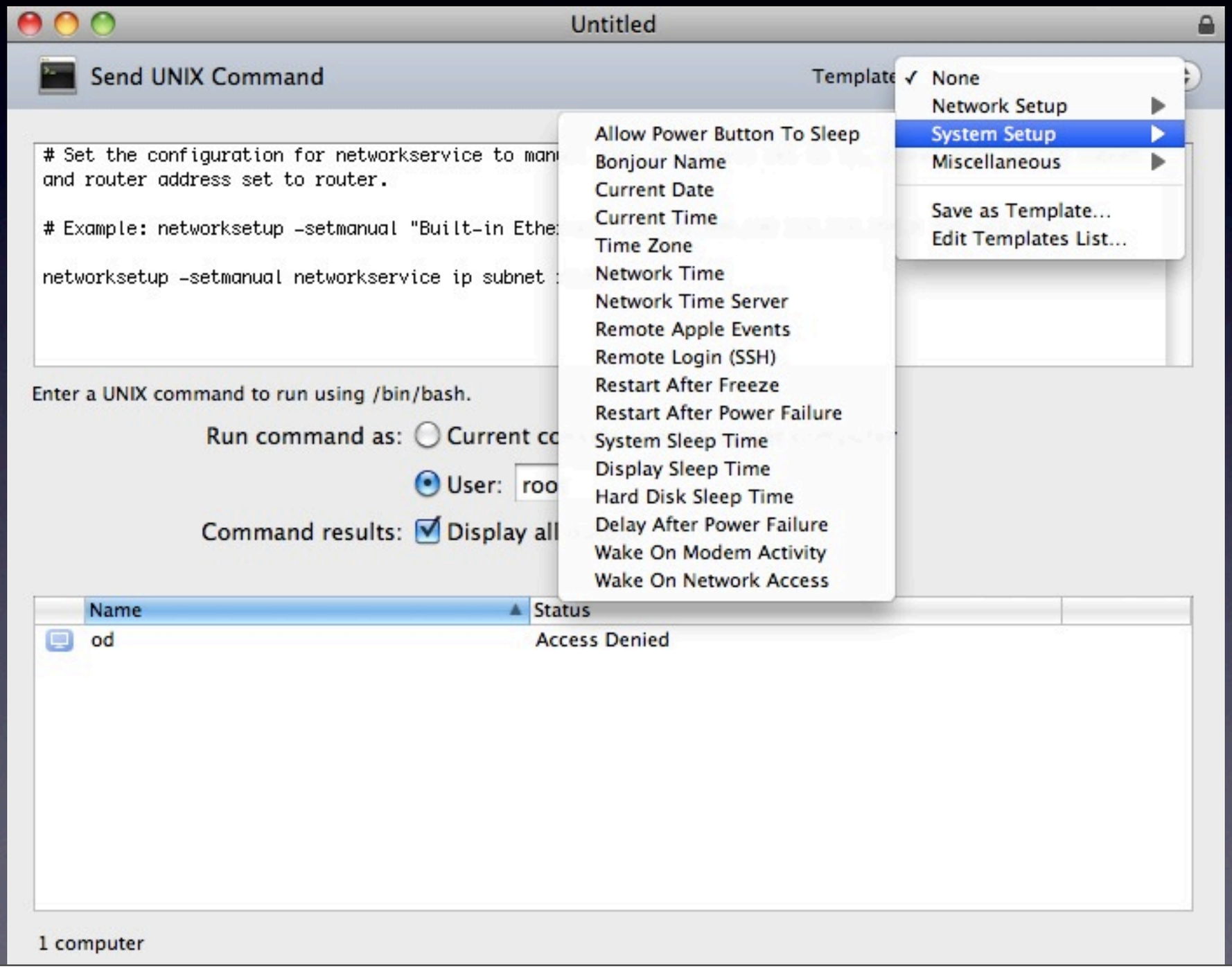
```
Set objFSO = CreateObject("Scripting.FileSystemObject")
Set objNetwork = CreateObject("WScript.Network")

Set colItems = GetObject _
    ("LDAP://ou=Users,dc=318,dc=com")
colItems.Filter = Array("User")

'On error resume next

For Each objItem in colItems
        strUser = objItem.sAMAccountName
        strDest = "\\afp03.318.com\homes\" & strUser
        Set objFSO = CREATEOBJECT("Scripting.FileSystemObject")
        IF Not objFSO.FolderExists(strDest) THEN
                Set objFolder = objFSO.CreateFolder(strDest)
                strDest = "\\afp03.318.com\homes\" & strUser
                Set objShell = CreateObject("Wscript.Shell")
                objShell.Run ("\\\\afp03.318.com\netlogon\\SetACL.exe -on """ & strDest & """ -ot file -actn ace " & "-ace ""n:AD\" &
strUser & ";p:full""")
                'cacls to be used in the future (instead of setacl.exe)
        ELSE
        END IF
Next
```

Regression Testing

Regression Testing

Eggplant from TestPlant

Find and Change

- Package Maker
  - diff --side-by-side <ORIGINAL> <NEW>
  - Change contents of file

ARD Templates