

X11 forwarding for sudo users

Can't start X11 applications after "su" or "su -" to another user

To get access to the X client applications such as system-config-date, xclock, vncviewer we need to export the DISPLAY settings of a remote host to the local server. This is commonly done using below commands.

```
# ssh root@remotehost
```

```
remotehost# export DISPLAY=x.x.x.x:y.y
```

Where x.x.x.x:y.y - is the display settings of the system from which you connected to the remote host.

You can also use the -X option with ssh to directly export the DISPLAY on the remote host.

```
# ssh -X root@remotehost
```

But now if you try to switch to another user on the remote system and export the display again, you would get an error - "Error: Can't open display:".

```
# ssh -X root@remotehost
```

```
# su - [username]
```

```
# export DISPLAY=x.x.x.x:y.y
```

```
# xclock
```

```
Error: Can't open display: x.x.x.x:y.y
```

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Just setting the DISPLAY is not enough. X authentication is based on cookies, so it's necessary to set the cookie used by the user that initiated the connection. The following procedure allows a sudo user to use the ssh based X11 tunnel:

1. Connect the remote host using the -X option with ssh.

```
# ssh -X root@remote-host
```

2. Now list the cookie set for the current user.

```
# xauth list $DISPLAY
node01.thegeekdiary.com/unix:10 MIT-MAGIC-COOKIE-1 dacbc5765ec54a1d7115a172147866aa
# echo $DSIPLAY
localhost:10.0
```

3. Switch to another user account using sudo. Add the cookie from the command output above to the sudo user.

```
# sudo su - [user]
# xauth add node01.thegeekdiary.com/unix:10 MIT-MAGIC-COOKIE-1 dacbc5765ec54a1d7115a172147866aa
```

4. Export the display from step 2 again for the sudo user. Try the command xclock to verify if the x client applications are working as expected.

```
# export DISPLAY=localhost:10.0
# xclock
```

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