



Installing NComputing L-series Terminal Services for Linux on openSUSE 10.2

Prepared by:

NComputing

TID 110.120 -2c Revision 1.0

Created: March 25, 2009

Copyright NComputing® 2009

Please read the disclaimer located at the bottom of this document

How to use this document

- This document describes how to install NComputing L-series TS-L for openSUSE 10.2.

Contents:

Overview – NComputing L-series TS-L (Terminal Services for Linux) for openSUSE 10.2 Package installation, and Uninstall procedure

Prerequisites:

Linux derivative: openSUSE 10.2 pre-installed
NComputing L130 or L230 device(s)

Procedure:

The following files are required to complete the installation:

1. Installation files: utma-<version number>.rpm
2. importkey.sh

Note: An Internet connection must be available on the host system in order to load additional packages which may be required for proper function of this TS-L product. (missing dependencies must be downloaded from the openSUSE package repository).

Installation:

1. Log into your PC as “**root**” user
2. Click “**Computer**” in the Taskbar and select the “**File Browser**”
3. Locate the installation files and copy these to your desktop.
4. Press “**Alt+F2**” to open the “**Run Application**” window and enter “**gnome-terminal**” (Figure 1)

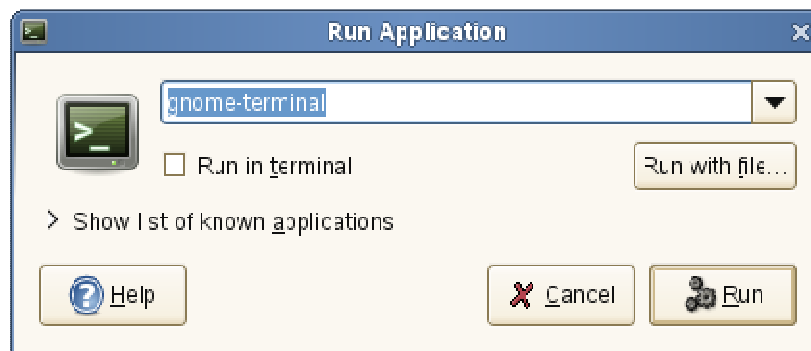


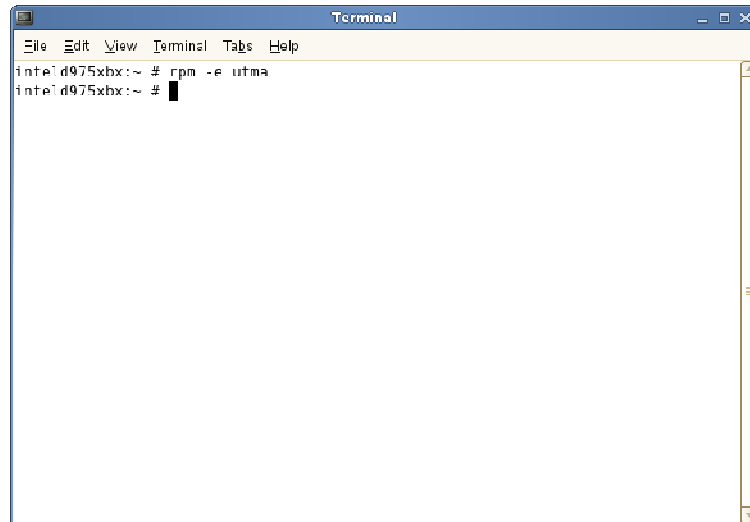
Figure 1

5. IF YOU HAVE A PREVIOUS VERSION OF “NComputing L-series Terminal Services for Linux” INSTALLED ON THIS SYSTEM, YOU MUST FIRST USE THE “**rpm -e utma**” COMMAND TO UNINSTALL THE OLD VERSION PRIOR TO INSTALLING THE NEW CODE.

To remove Terminal Services for Linux, enter the following command in the in the “Terminal command window”

rpm -e utma

Press enter after entering the command



NComputing Terminal Services for Linux should now be removed.

You do NOT need to reboot before installing the new version of Terminal Services for Linux

6. In the “Terminal command window”, enter the following commands at the prompt (pressing enter after each command) (Figure 2):

- **cd Desktop/**
- **chmod u+x importkey.sh**
- **./importkey.sh**

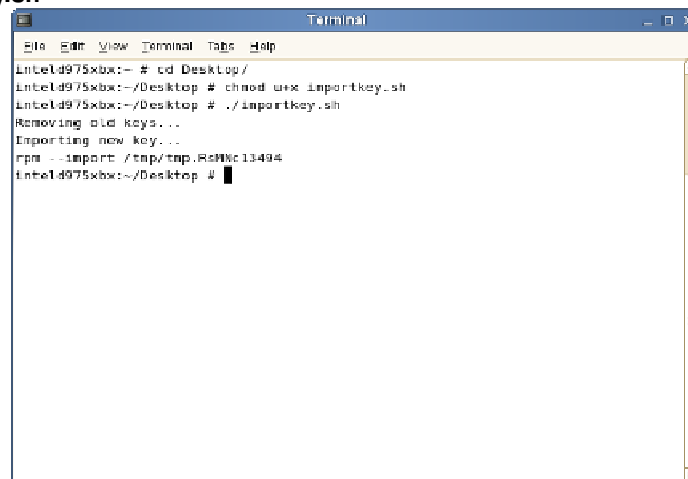


Figure 2

7. The following message will appear indicating the successful import of the required key:

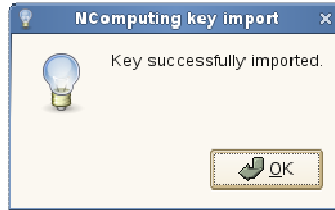
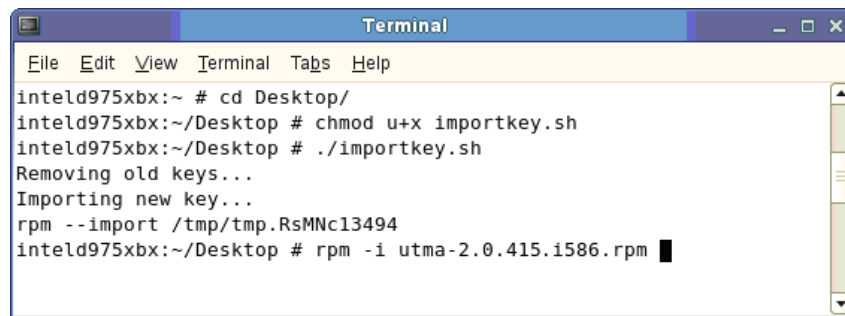


Figure 3

8. Press the "OK" button and return to the open terminal window.
9. This NComputing package for openSUSE will be installed via the RPM package installation procedure, please enter the following command to begin the installation:
- **rpm -i utma-"version number".i586.rpm** (e.g. rpm -i utma-2.0.xxx.i586.rpm)

A terminal window titled "Terminal" showing the following commands and output:

```
intel975xbx:~ # cd Desktop/  
intel975xbx:~/Desktop # chmod u+x importkey.sh  
intel975xbx:~/Desktop # ./importkey.sh  
Removing old keys...  
Importing new key...  
rpm --import /tmp/tmp.RsMnc13494  
intel975xbx:~/Desktop # rpm -i utma-2.0.415.i586.rpm
```

Figure 4

10. Please read the "End User License Agreement (EULA)" You can scroll up and down with the "Arrow-Keys".

Press the "Enter" key to accept and continue.

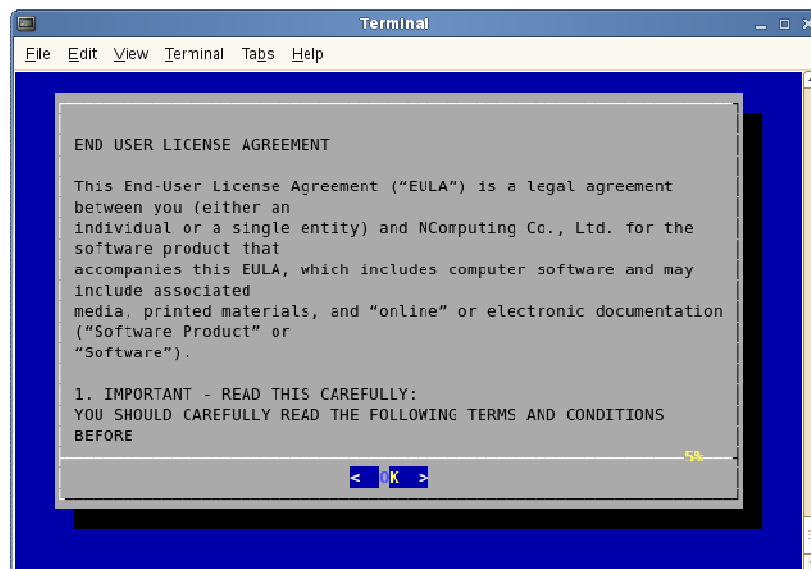


Figure 5

11. The following screen prompts you accept the “**EULA**”. Select “**Yes**” to accept and continue. If you do not agree to the terms of the “**EULA**”, select “**No**” and the setup will abort and exit.

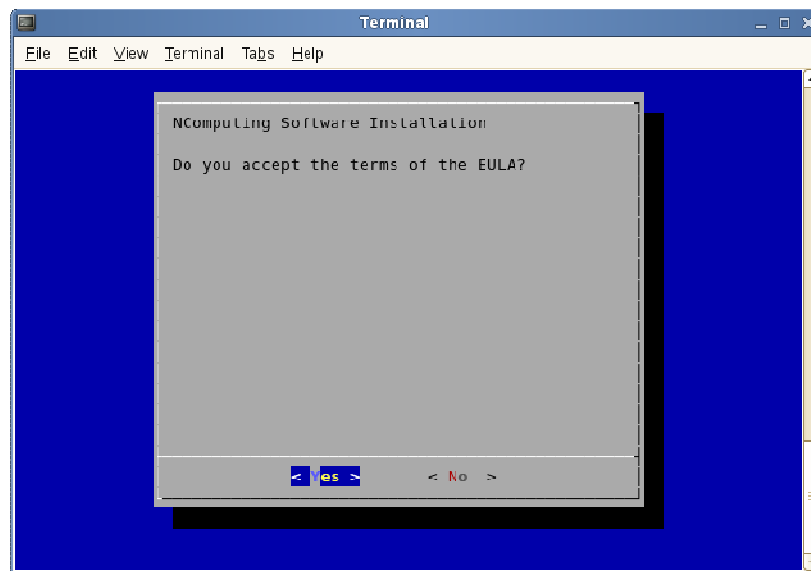


Figure 6

12. The following screen displays the “**Terms of use statement**”, please read through and press “**Enter**” to continue. You can scroll up and down using the “**Arrow-Keys**”.

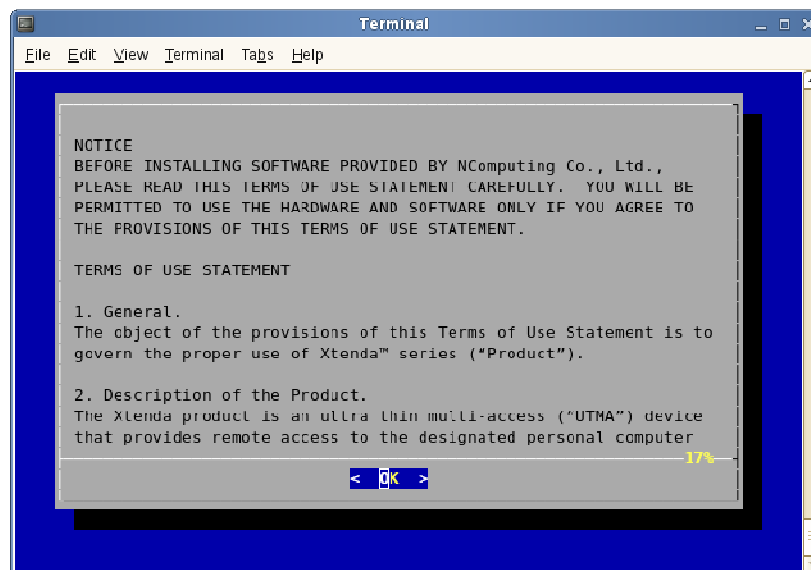


Figure 7

13. The following screen will prompt you to accept the “**Terms of use statement**”. Select “**Yes**” to accept and continue. If you do not agree to the “Terms of use statement”, select “**No**” and the setup will abort and exit.

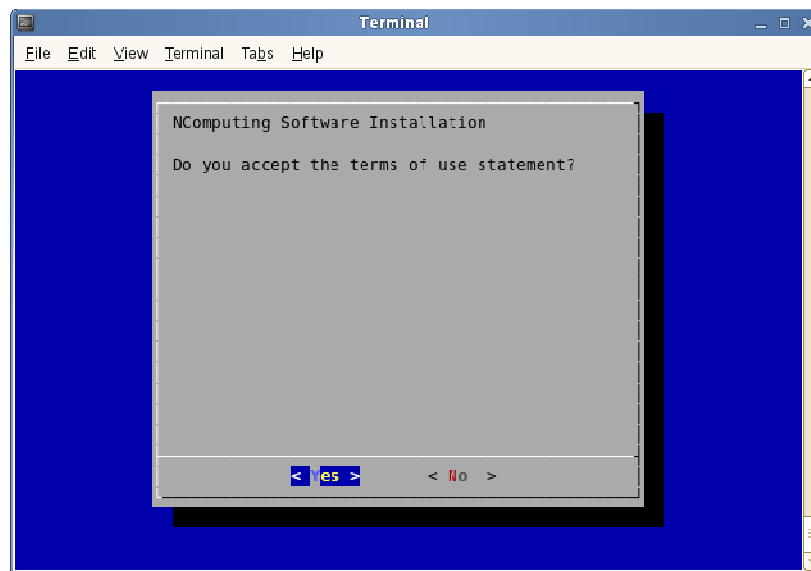


Figure 8

14. After verifying the following screen, press “**Enter**” to restart your host PC.

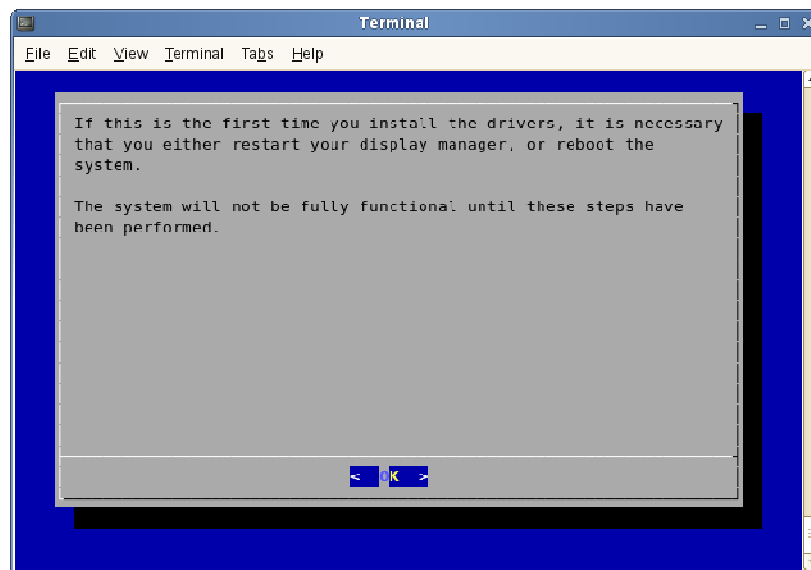


Figure 9

Please note:

If the following informational error message appears, no corrective action is required, simply confirm with **“Enter”**.

**“/opt/gnome/sbin/gdm-safe-restart: line3: gdmflexiserver: command not found
Can't find the PID file in the configuration file, going to try: /var/run/gdm.pid”**

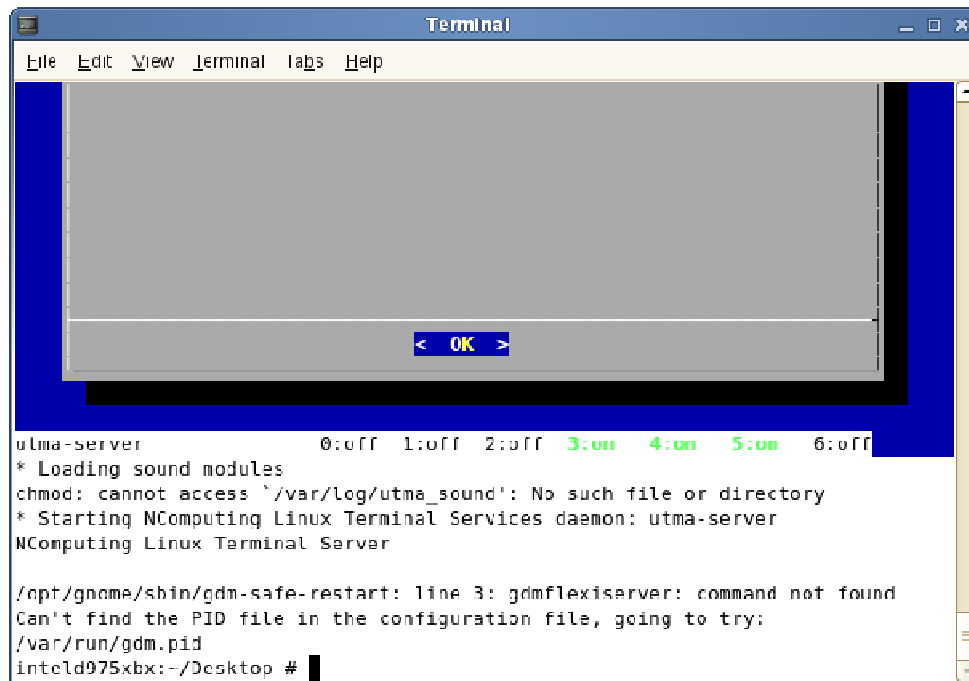


Figure 10

If you get the message above, please reboot your system to complete this portion of the installation.

15. Activating audio for new user sessions

Audio output on the installed station(s) will be only available if the user is a member of the **“Audio”** group.

You can add users to the **“Audio”** group as follows:

Open the **“Control Center”**, select **“System”** in the left menu bar and then **“YaST”** in the right menu.

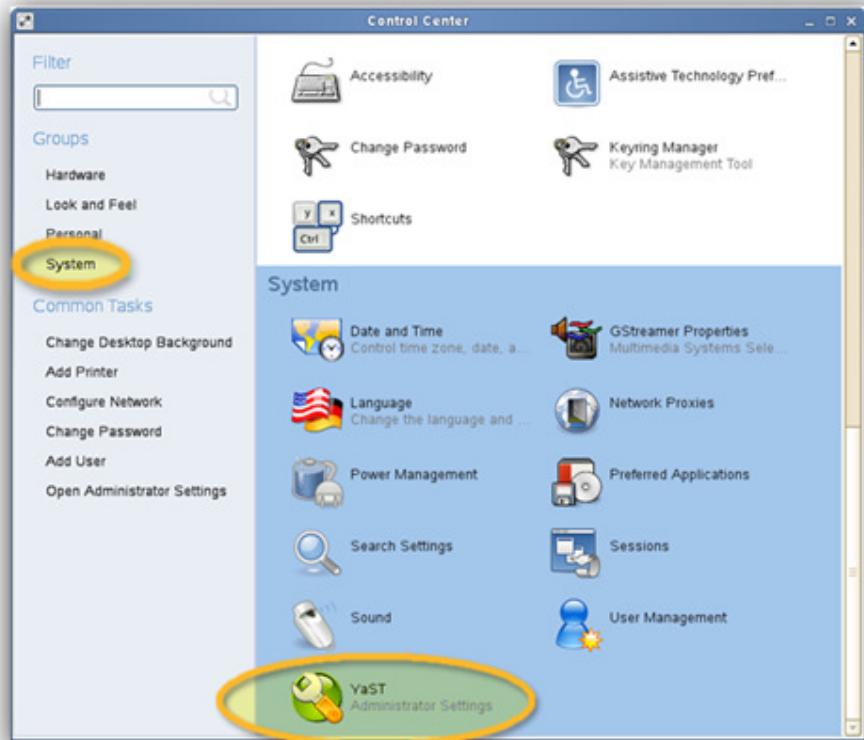


Figure 11

Please click on **“Security and Users”** and then **“User Management”**

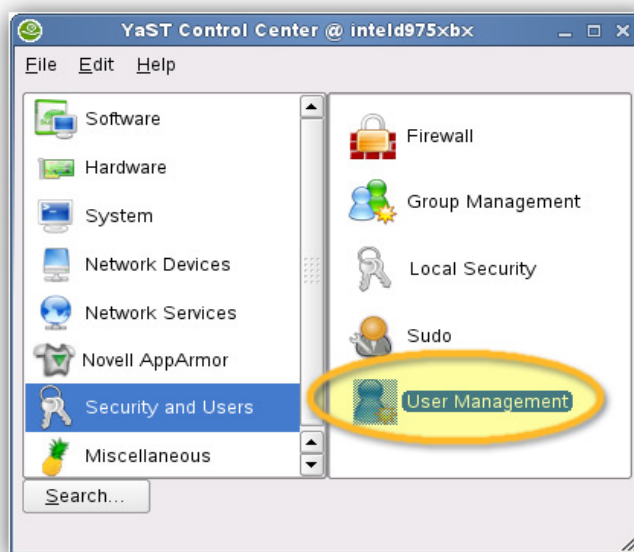


Figure 12

The following screen allows you to select users which should be in the “**Audio**” group.

User profiles can be edited one at a time, select the appropriate user and then click “**Edit**” to continue

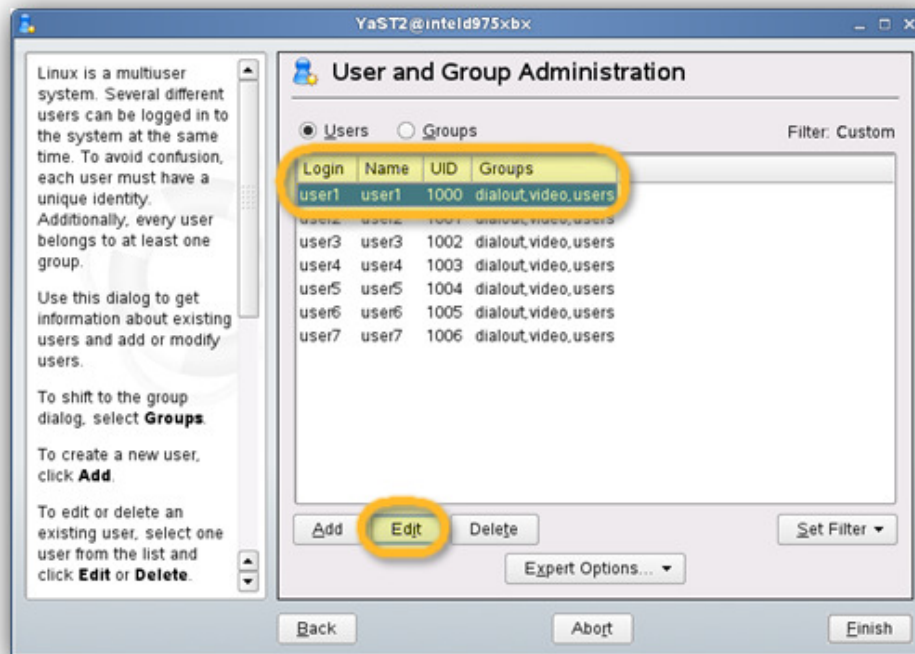


Figure 13

Select “**Details**”, insert a checkmark in the “**audio**” box and then select “**Accept**” to save the new settings.

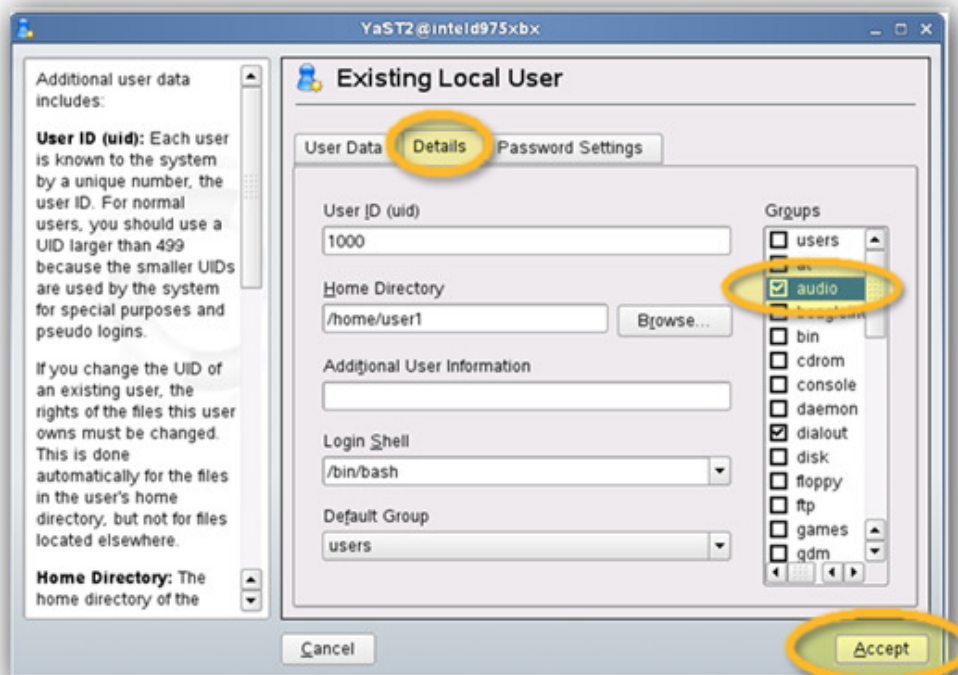


Figure 14

This following screen confirms that the user has been successfully added to the “Audio” group. Click “**Finish**” to continue

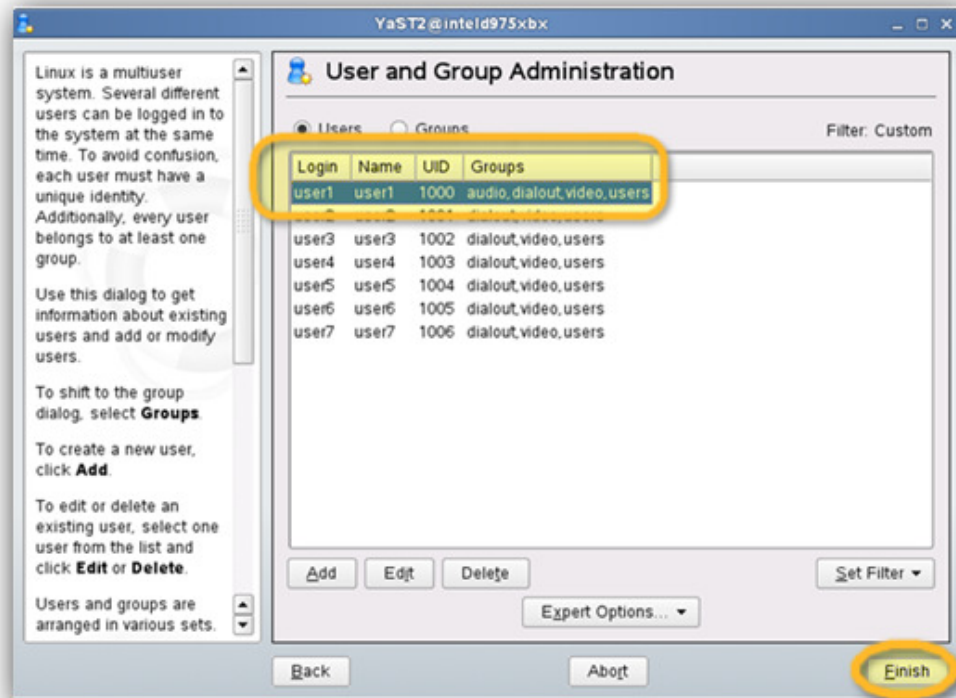


Figure 15

16. Testing the sound function

Test the sound function by running the following script from the command line:

Press “**Alt+F2**” to open the “**Run Application**” window and enter “**gnome-terminal**”
Enter the following command at the prompt

- `/usr/share/ncomputing/testaudio`

17. Setting Application Priorities

Application priorities: It is very important that the NComputing Terminal Services software be given a higher system priority than other applications. Our default setting should implement a higher setting but this should be double checked as default setting in FireFox and other common applications may have priority settings equal to that of NComputing's software and this can lead to performance issues as the number of terminals is expanded. The 'nice' and 'renice' applications are examples of tools that allow a user to change application priorities based on preference.

Insure the L130/L230 devices are configured to be “Linux TS Compatible”

Each L130/L230 device connecting to an openSUSE 10.2 system must have the “Linux TS Compatible” radio button checked for connection profiles pointing to systems running NComputing terminal services for Linux. (See Figure 16 below.)

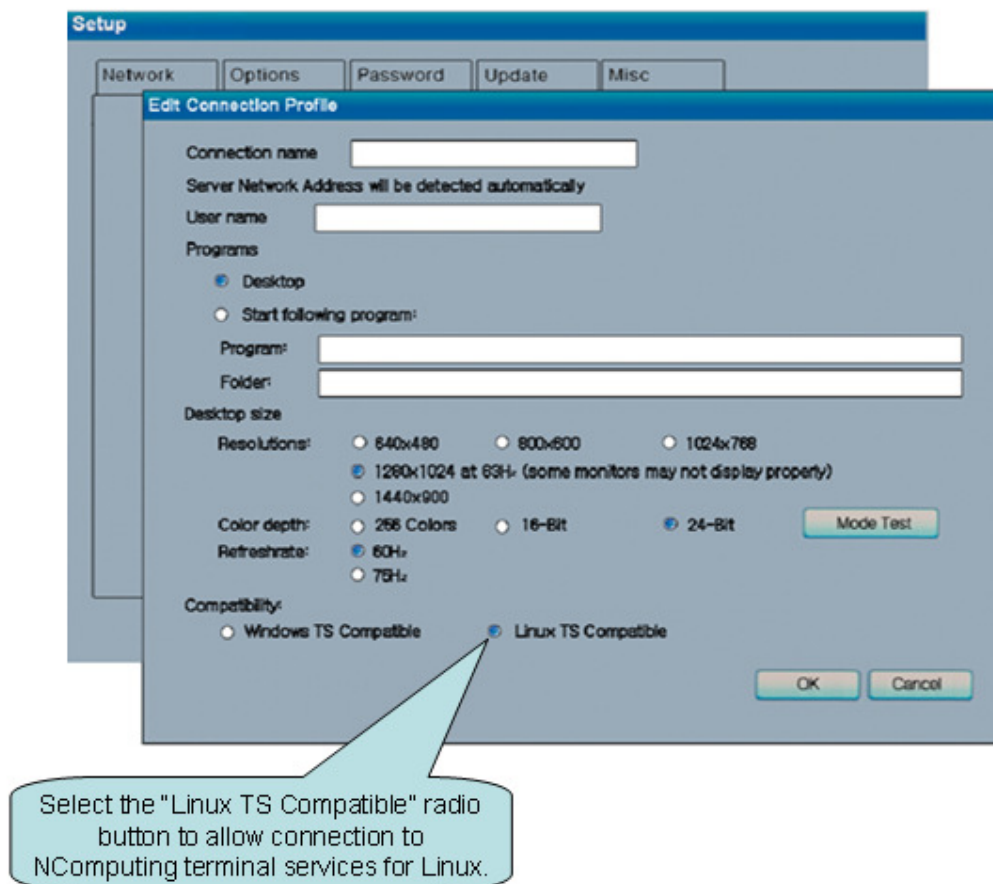


Figure 16

If the device's “Linux TS Compatible” option has not been set, users will receive a “Linux TS: Negotiation Error” message when attempting to connect to a Linux system.

How to uninstall NComputing L-series Terminal Services for Linux on openSUSE 10.2

Log in to your system as “root” user

Press “**Alt+F2**” to open the “**Run Application**” window and enter “**gnome-terminal**”

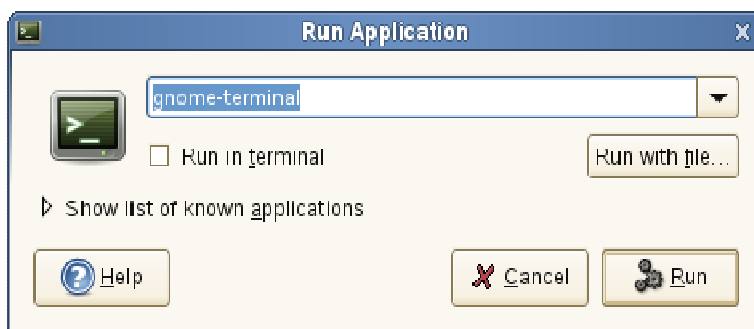


Figure 17

The “Terminal” command window will open. Enter the following command:

rpm -e utma

Press enter after the command

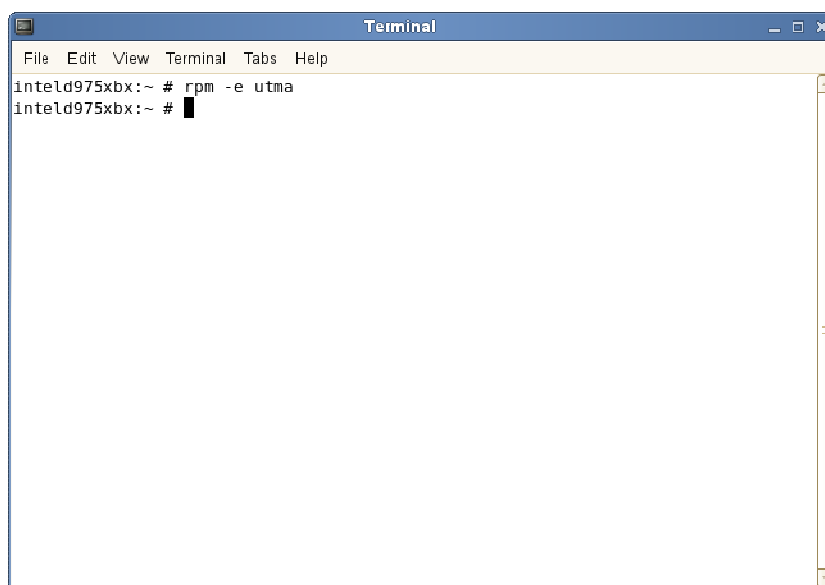


Figure 18

NComputing Terminal Services for Linux should now be removed.

TID 110-120-2c – March 25, 2009

© 2009, by NComputing Inc. All rights reserved. NComputing is a registered Trademark of NComputing Inc. –USA. No part of this document may be used or reproduced in any manner whatsoever without permission of NComputing.

Please visit www.ncomputing.com for additional information.

Disclaimer: Information contained in this document may have been obtained from internal testing or from a third party. This information is for informational purposes only. Information may be changed or updated without notice. NComputing reserves the right to make improvements and / or changes in the products, programs and/or specifications described herein anytime without notice. We acknowledge all trademarks. Microsoft and Windows are registered trademarks of Microsoft Corporation. All trademarks are the property of their respective owners.