NetLS — Installing Nodelock and Floating Licenses

Special Notices

Information in this document is correct to the best of our knowledge at the time of this writing. Please send feedback by fax to "AIXServ Information" at (512) 823-4009.

Please use this information with care. IBM will not be responsible for damages of any kind resulting from its use. The use of this information is the sole responsibility of the customer and depends on the customer's ability to evaluate and integrate this information into the customer's operational environment.

About this Document

This document applies to AIX releases 3.2.5 and greater. It describes how to install a NetLS nodelock license and how to install a NetLS server and floating licenses.

A nodelock license is one that is only good for that node (machine). It does not require the use of the network, NCS, or NetLS server.

Floating licenses are parcelled out by a server and are available to any of the machines that are in the same cell as the server machine.

Installing a Nodelock License

To install a nodelock license, use the following steps to add the nodelock license to the nodelock file on your machine.

The nodelock license will look something like:

```
| 5ce6f0617216.02.81.23.85.e3.00.00.00 89pbxmywy8qh9mdu97u8yb586naa "50" "3.3"
```

The nodelock file is: /usr/lib/netls/conf/nodelock

Steps

1. If it does not already exist, create the directory "/usr/lib/netls/conf".
2. Edit (create if necessary) the file "nodelock".
3. Install the nodelock license by inserting it into the nodelock file on a single line. The nodelock license must be typed in (or cut and pasted) exactly as it appears in the printout/mailing/fax/etc. that it was delivered on.

4. Add a comment on the line above the license so that if necessary, you can identify the license in the future. Comment lines are identified by a "#" character in the first position.

Things to be aware of when installing a nodelock license:

- If you can cut and paste a license into the nodelock file with X-Windows, you can avoid most problems.
- Licenses are case sensitive.
- Letters are all lowercase.
- Do not confuse the number one (1) with the lowercase letter L (l).
- Do not mistake the number zero (0) for an uppercase letter O (O).
- Do not attempt to substitute a single quote for a double quote in the license.
- Licenses cannot be split by a carriage return.
- The nodelock file must have permissions set as 644 so everyone can read it. (Use the command "chmod 644 /usr/lib/netls/conf/nodelock".)
- The clock on your machine should be set to the correct date and time. Otherwise, the license may not be recognized as active.

The nodelock license that you receive should look similar to the following:

```
--------------------- N L S P A S S ---------------------

Vendor Password agkrmbnthcsc4
built as
   vendor name : Common
   vendor id   : 5ce6f0617216.02.81.23.85.e3.00.00.00
   target      : 1500910

Product Passwords built as
   name         : demo
   id           : 1926
   version      : 3.3
   license type : Node Locked

    Product password for 0x1500910 server : wkseneaansmw6u6wjmsjp65t6w
    built as
       start date         : 04/08/94
       annotation         : 50
       expiration         : 05/07/94
       target type        : IBM/AIX
       target             : 1500910
```

If the license that you received looks like the above, you would put the following line into your nodelock file:

```
| 5ce6f0617216.02.81.23.85.e3.00.00.00 wkseneaansmw6u6wjmsjp65t6w "50" "3.3"
```

Sample nodelock file:

```
# Test Product Version 3.3.  Valid 03/12/94 - 03/11/95
9ce6f0617216.02.81.23.85.e3.00.00.00 89pbxmywy8qh9mdu97u8yb586naa "" "3.3"

# Real Product Version 4.1.  Annotation: "abc".  Valid 04/08/94 - 06/01/94
90b82be84513.02.81.23.86.fb.00.00.00 26z8g3vnvdsn8b4u3n8bquspefmsnamj
                                                          "abc" "4.1"

# Common "demo" Product Version 3.3  Valid 04/08/94 - 05/07/94
5ce6f0617216.02.81.23.85.e3.00.00.00 wkseneaansmw6u6wjmsjp65t6w "" "3.3"
```

Installing a Floating License

The term "floating license" will be used to describe any license that is installed on an NetLS server. Some licenses of this type are concurrent-access, use-once, and compound licenses.

To install a floating license, perform the following steps:

1. Install the NetLS server from the install media.
2. Use the following steps to configure the server. For testing purposes, you should establish an "alternate cell" for your server. This will keep license requests for your test environment separate from license requests for other environments.
   a. Run the shell script "/usr/lib/netls/conf/netls_config".
   b. When prompted by the following questions, give the following answers:

      Q1. Do you want the "llbd" started automatically when the machine boots?

      A1. "y".

      Q2. Do you want "netlsd" started automatically when the machine boots?

      A2. "y".

      Q3. (You *might* be asked this question) There exists an initialized database already for the glbd. Do you wish to use that database when starting the "glbd" daemon?

      A3. "n".

(You will be shown a listing of all the cells that your machine can identify. If you are setting up your machine in a new alternate cell, none of this information is relevant to you. If you intend to join an alternate cell that has already been established, note the cell number when it is displayed on the screen. Please note that the cell numbers may be assigned differently each time netls_config is run.)

Q4. You have four options:

1) Continue with installation without choosing a Cell_Name.
2) Use the default for the system Cell Name.
3) Create a new alternate cell for the system Cell Name.
4) Choose an existing alternate cell for the system Cell Name.

WARNING: If you choose option 1 (continuing the install without choosing a Cell Name) then NetLS will not function. If you do not understand the above options, choose option 1 to continue and consult your system administrator or the documentation Managing NCS Software

A4. Please indicate your choice (1, 2, 3, or 4):

- Choose "1" if you do not know what configuration you want and just want to quit. You will have to re-run netls_config later.
- Choose "2" only if your site administrator tells you it is OK or if you are on a stand-alone machine.
- Choose "3" if you are going to run your server in a brand new alternate cell.
- Choose "4" if you are going to join your server to a cell that has already been established. You will then be prompted for the number of the alternate cell you want to join. Enter that number now.

c. You are done with the netls_config script. It has created a secondary shell script called "/usr/lib/netls/conf/netls_first_time".

d. Run the "netls_first_time" script. This will start the daemons needed for serving license requests. This script only needs to be run once.

After the first time, the daemons can simply be started with the startsrc command. They must be started in the correct order (llbd, then glbd, then netlsd). The exact commands are:

```
startsrc -s llbd
startsrc -s glbd
startsrc -s netlsd
```

e. If at some point you have to reconfigure your server for a different cell, stop the llbd, glbd, and netlsd daemons and then re-run the netls_config script, followed by the netls_first_time script.

To stop the daemons manually, use the stopsrc command. The daemons must be stopped in the reverse order that they were started. The exact commands are:

```
stopsrc -s netlsd
stopsrc -s glbd
stopsrc -s llbd
```

3. Now that your license server is up and running, install your floating licenses. You can do this with either the command line or the graphical user interface provided by Gradient Technologies. In both cases, the data entered must be EXACTLY the same as it appears on the printout/fax/e-mail on which the license was delivered. Cutting and pasting in X-Windows is the easiest way to avoid problems.

   The floating license that you receive should look similar to the following:

```
-------------------- N L S P A S S --------------------


Vendor Password agkrmbnthcsc4
built as
   vendor name : Common
   vendor id   : 5ce6f0617216.02.81.23.85.e3.00.00.00
   target      : 1500910
ls_admin -a -v "Common" 5ce6f0617216.02.81.23.85.e3.00.00.00 agkrmbnthcsc4


Product Passwords built as
   name         : demo
   id           : 1926
   version      : 3.3
   license type : Concurrent Access

    Product password for 0x1500910 server : s8yewwjtbfh68jf4wewbvuf3jiaaa
    built as
       start date         : 04/08/94
       duration           : 90
       expiration         : 07/06/94
       number             : 1
       target type        : IBM/AIX
       target             : 1500910
ls_admin -a -p "Common" "demo" s8yewwjtbfh68jf4wewbvuf3jiaaa "3.3"
```

- To install licenses from the command line:

  Type at the command line (or cut and paste to the command line) the two lines from the license you received that start with "ls_admin" (your path must include "/usr/lib/netls/bin"). The first line adds the vendor to your license database. The second line adds the specific product licenses for that vendor in your license database. Once the first line has been entered (in other words, once a vendor has been added) it does not have to be entered again for other product licenses provided by the same vendor. In this example, the two lines would be:

```
ls_admin -a -v "Common" 5ce6f0617216.02.81.23.85.e3.00.00.00 agkrmbnthcsc4
ls_admin -a -p "Common" "demo" s8yewwjtbfh68jf4wewbvuf3jiaaa "3.3"
```

- To install licenses with the graphical user interface:
  a. Run the command "/usr/lib/netls/bin/ls_admin" with no flags.
  b. In the "Servers" display box, click on the server where you will install the license.
  c. In the "Operations" box, click on "Add Vendor..."
  d. In the pop-up window for "ADD VENDOR", click on the "Vendor Name" button. A window for "VENDOR NAME" will pop up. Enter the Vendor Name, and the click on the "OK" button. In the example above, the vendor name would be: Common
  e. A window should pop up for "Vendor ID". If it does not, then just click on the button in "ADD VENDOR" for "Vendor ID". Enter the vendor ID, and click on the "OK" button. In the example above, the vendor ID would be: 5ce6f0617216.02.81.23.85.e3.00.00.00
  f. A window should pop up for "Vendor Password". Enter the vendor password, and click on the "OK" button. In the example above, the vendor password would be: agkrmbnthcsc4
  g. Click on "done" in the "ADD VENDOR" window. Your vendor should be added.
  h. Now add the product license for the newly added vendor. Click on the "Vendor" button in the "Operate On" box.
  i. In the "Vendors" display box, click on the vendor whose product you will be adding.
  j. In the "Operations" box, click on the button for "Add Product".
  k. In the pop-up window for "ADD PRODUCT", click on the "Product Name" button. A window for "Product Name" will pop up. Enter the product name, and click on the "OK" button. In the example above, the product name would be: demo
  l. A window should pop up for "Product Version". Enter the product version, and click on the "OK" button. In the example above, the product version would be: 3.3
  m. A window should pop up for "License Annotation". If a license annotation was supplied with your license, enter it now, and click on the "OK" button. If no annotation was supplied, then leave the field blank, and just click on "OK". In the example above, no annotation was supplied.

n. A window should pop up for "License Password". Enter the license password, and click on the "OK" button. In the example above, the license password would be: s8yewwjtbfh68jf4wewbvuf3jiaaa

o. Click on "done" in the "ADD PRODUCT" window. Your license password should be added.

- To add a product for an already-added vendor:

  a. Click on the "Server" button in the "Operate On" box. Then click on the server to which you will add the license in the "Servers" display box.

  b. Click on the "Vendor" button in the "Operate On" box. Then click on the vendor for which you will add the product in the "Vendors" display box.

  c. Click on the "Add Product" button in the "Operations" box.

  d. Add the product information as you normally would.

- To add a license for an already-added product:

  a. Click on the "Server" button in the "Operate On" box. Then click on the server to which you will add the license in the "Servers" display box.

  b. Click on the "Vendor" button in the "Operate On" box. Then click on the vendor for which you will add the product in the "Vendors" display box.

  c. Click on the "Product" button in the "Operate On" box. Then click on the product for which you will add the license in the "Products" display box.

  d. Click on the "Add Licenses" button in the "Operations" box.

  e. An "ADD LICENSE" window will pop up.

     If your license has an annotation, click on the button for "license annotation" and specify the license annotation that was supplied.

     Add the license password by clicking on the "License Password" button in the "ADD LICENSE" window, and specify the license password that was supplied.

  f. Click on the "Done" button in the "ADD LICENSE" window when you have added the license information.

  g. Your license should be added.

4. If your server machine has the file "/etc/ncs/glb_obj.txt", then all users that need licenses from your server must copy that file to their client machines. The file simply contains the identifier for the alternate cell.

   Example /etc/ncs/glb_obj.txt file:

   ```
   90b82be849c7.02.81.23.86.fb.00.00.00
   ```

5. If a client machine is on a different subnet than your server machine, then the client machine must have the file "/etc/ncs/glb_site.txt". The contents of the file will identify the server machine. For example, if the server machine is "myserver.mynet.mycompany", then the glb_site.txt file will contain the line: ip:myserver.mnet.mycompany

   The glb_site.txt file can also specify the IP network address of the server machine. For example, if the IP address of the host machine is 111.22.333.444, then the glb_site.txt file will contain the line: ip:#111.22.333.444

   Example /etc/ncs/glb_site.txt file:

   ```
   ip:myserver.mynet.mycompany
   ip:#111.22.333.44
   ```

Reader's Comments

Please fax this form to (512) 823-4009, attention "AIXServ Information". You may also e-mail comments to: elizabet@austin.ibm.com. These comments should include the same customer information requested below.

Use this form to tell us what you think about this document. If you have found errors in it, or if you want to express your opinion about it (such as organization, subject matter, appearance) or make suggestions for improvement, this is the form to use.

If you need technical assistance, contact your local branch office, point of sale, or 1-800-CALL-AIX (for information about support offerings). These services may be billable. Faxes on a variety of subjects may be ordered free of charge from 1-800-IBM-4FAX. Outside the U.S. call 415-855-4329 using a fax machine phone.

When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way it believes appropriate without incurring any obligation to you.

Note: If you have a problem report or item number, supplying that number may help us determine why a procedure did or did not work in your specific situation.

Problem Report or Item #: Branch Office or Customer #:

Be sure to print your name and fax number below if you would like a reply:

Name: Fax Number:

END OF DOCUMENT (node.license.lng, 4FAX# 1400)