CREATING SPOT INSTANCE IN AIX FOR RECOVERY

What is Spot instance?

The Shared product Object Tree (SPOT) is a fundamental resource in the NIM environment. It is required to install or initialize all types of machine configurations.

A SPOT provides a /usr file system for diskless and dataless clients, as well as the network boot support for all clients.Everything that a machine requires in a /usr file system, such as the AIX® kernel, executable commands, libraries, and applications are included in the SPOT.

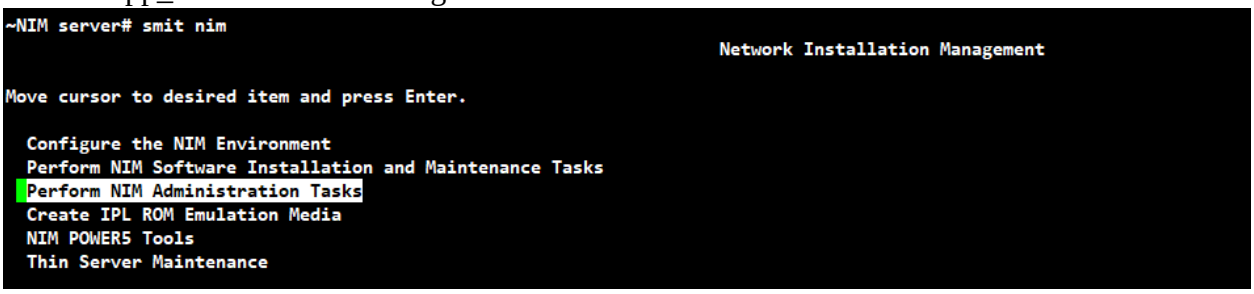
Machine-unique information or user data is usually stored in the other file systems. A SPOT can be located on any standalone machine within the NIM environment, including the master. The SPOT is created, controlled, and maintained from the master, even though the SPOT can be located on another system.

What are the sources of creating spot instance?

- ISO images (Use the same server type of affected server ISO or download it from IBM Entitled System Support)
- MKSYSB backup (Use the same server type of affected server)

Use ISO image as lpp_source to create a spot instance:

1. Download the similar version of base ISO image from IBM Entitled System Support
2. Save the image in NIM server.
3. Command to create lpp_source:
   # nim -o define -t lpp_source -a server=master -a location=<location of storing lpp_source> -a source=<location of ISO image> -a packages=all <lpp_sourcename>
4. Create a lpp_source from the image.



Select “Perform NIM Administration Tasks” and Enter.

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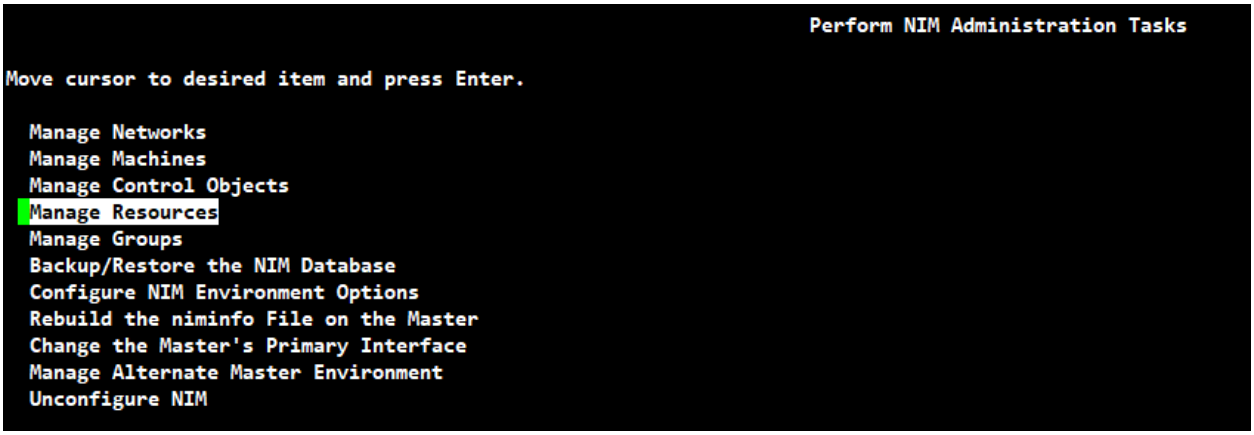
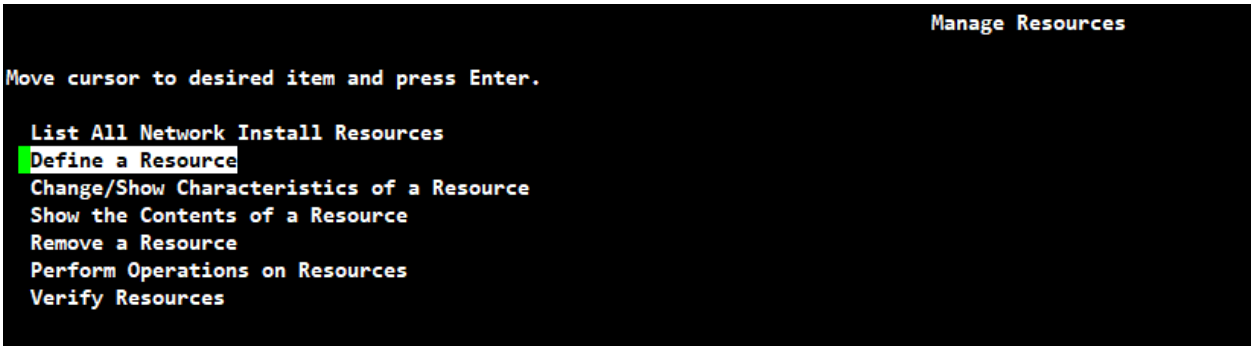
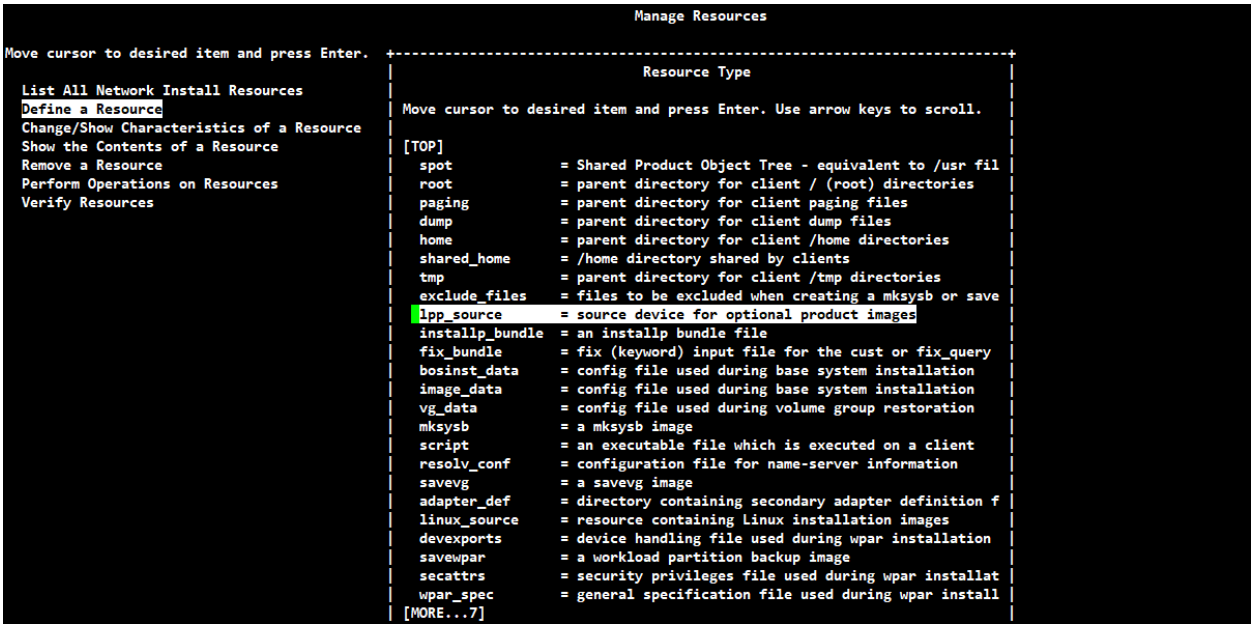


Select **"Manage Resources"** and Enter.



Select **"Define a Resource"** and Enter.



Select **"lpp_source = source device for optional product images"** and Enter.

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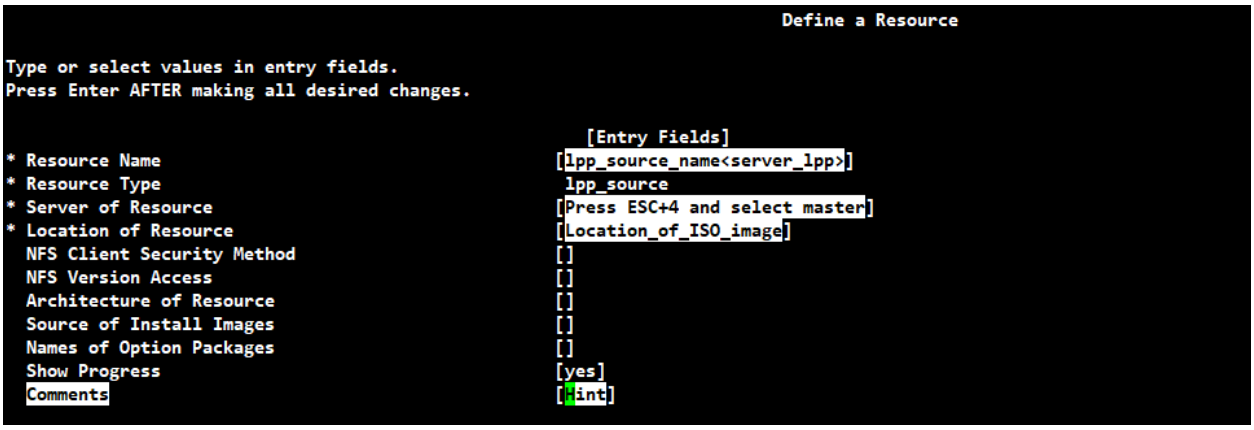
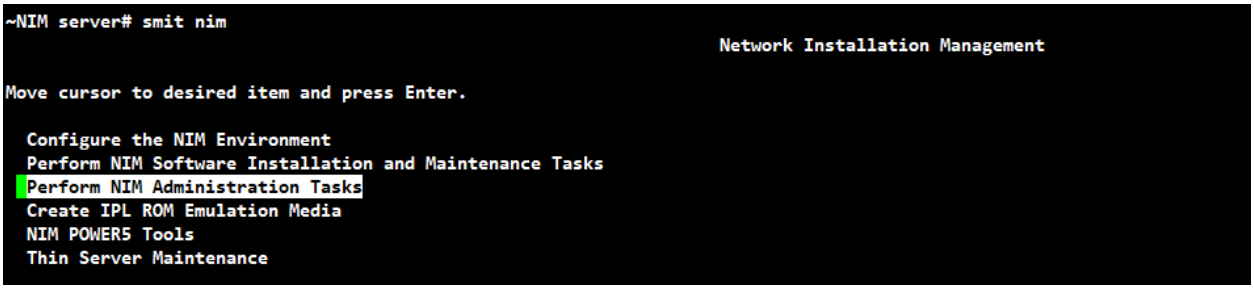


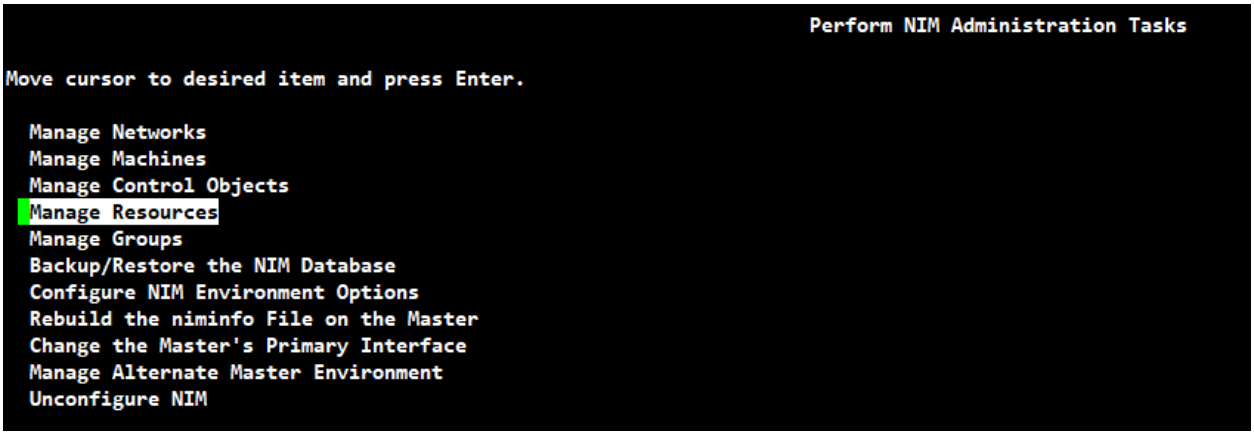
Fill the form with appropriate details and hit enter.

5. Verify the created lpp resource
    a. **lsnim -c resources**
    b. **lsnim -l <created resource name>**
6. Create spot instance by using created lpp_source.

    # nim -o define -t spot -a server=master -a location=<location of spot files> -a source=<lppsource_name> <spot_name>



Select “Perform NIM Administration Tasks” and Enter



Select **“Manage Resources”** and Enter.

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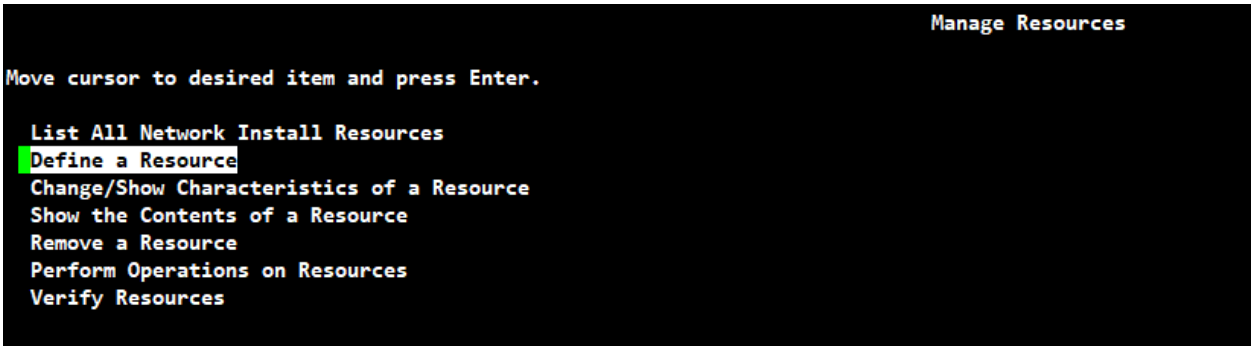
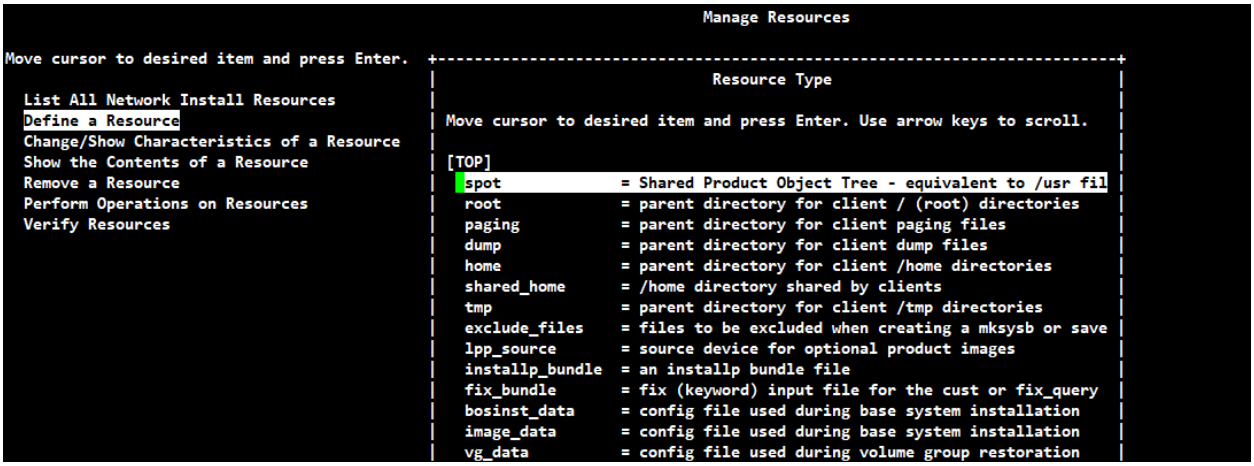
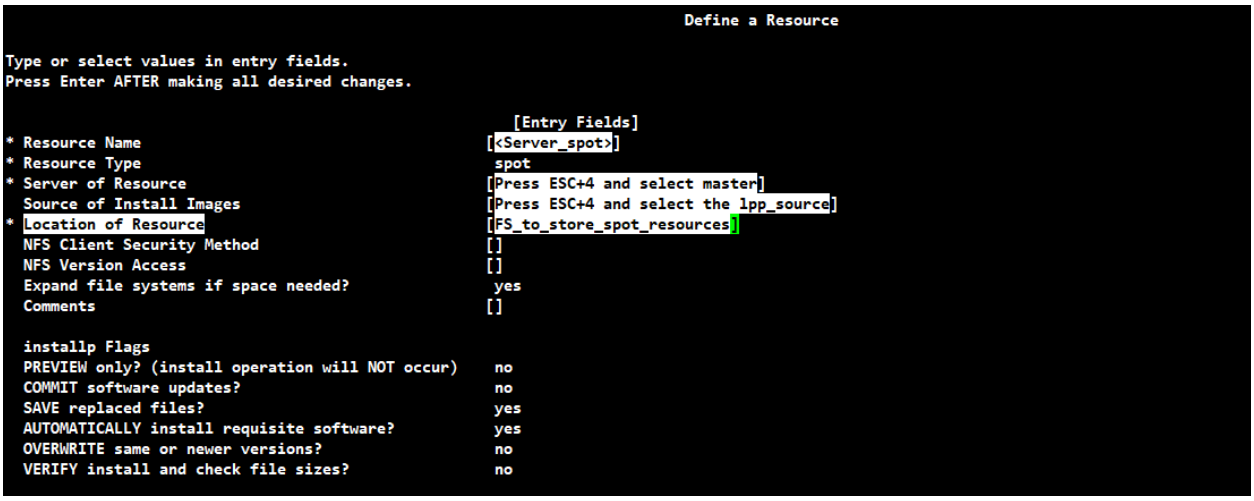


Select **"Define a Resource"** and Enter.



Select **"spot = Shared Product Object Tree - equivalent to /usr fil"** and enter.



Fill the form with appropriate details and hit enter.

7. Verify the created spot
    a. **lsnim -c resources**
    b. **lsnim -l <created spot name>**

CREATING SPOT INSTANCE IN AIX FOR RECOVERY

Creating a mksysb resource in the client server:

1. Add the client server as machines in NIM server:

 # nim -o define -t standalone -a if1="<network name> <client name> 0" <client name>

Note: Verify the network settings should have proper network configuration

 # lsnim -l <network name>

Network_name:

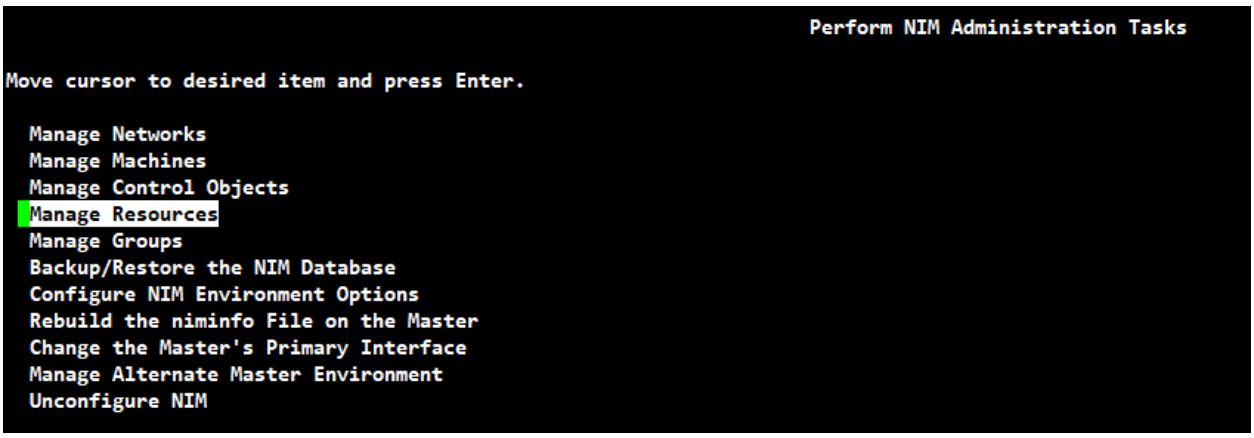
class = networks
type = ent
Nstate = ready for use
prev_state =
net_addr = **<client subnet first IP>**
snm = **<client subnet mask>**
routing1 = default **<client gateway IP address>**

2. Create a mksysb of similar version of affected server:
   a. **For AIX server:**
      i. **mksysb -i <backup dir/backup_file_name>**
      ii. Copy it to the NIM server
   b. **For VIO server:**
      i. **/usr/ios/cli/ioscli backupios -mksysb -file <mksysb_name> -nomedialib** (Run as padmin)
      ii. **backupios -mksysb -file <mksysb_file_name> -nomedialib** (Run as root)
      iii. Copy it to the NIM server
3. Create spot instance by using created mksysb.

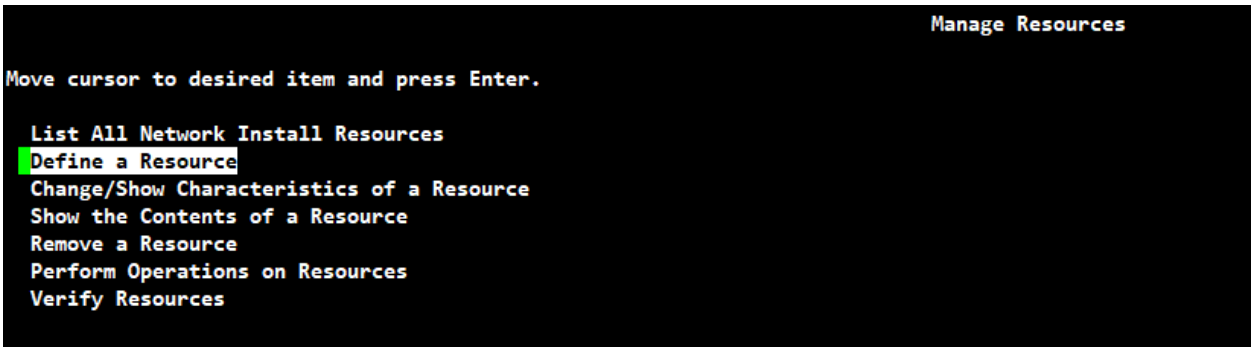
 # nim -o define -t spot -a source=<created_mksysb> -a server=master -a location=<location of spot files> <spot_name>

CREATING SPOT INSTANCE IN AIX FOR RECOVERY

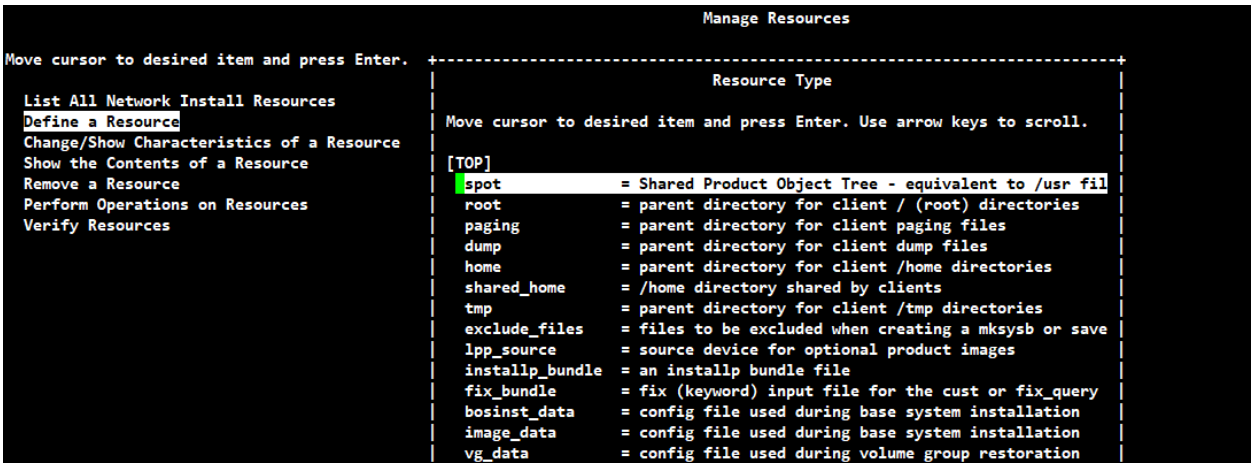
Select “Perform NIM Administration Tasks” and Enter



Select **“Manage Resources”** and Enter.



Select **“Define a Resource”** and Enter.



Select **“spot = Shared Product Object Tree - equivalent to /usr fil”** and enter.

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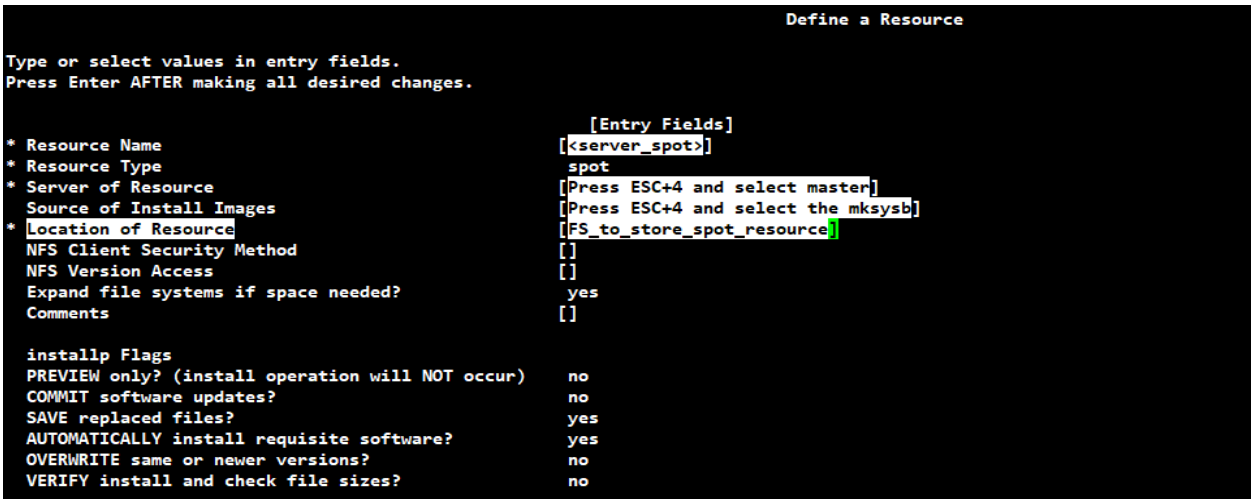


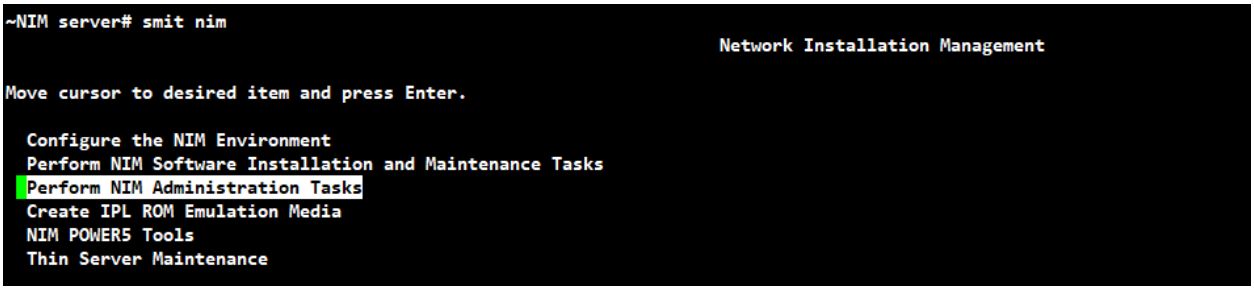
Fill the form with appropriate details and hit enter.

4. Verify the created spot
    a. **lsnim -c resources**
    b. **lsnim -l <created spot name>**

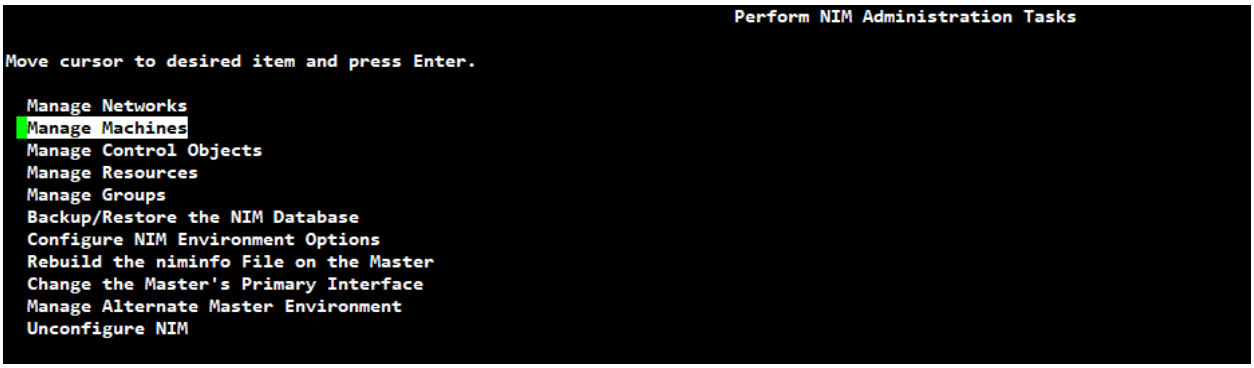
Allocate the spot instance to the affected server in NIM master server:

1. Allocate the created spot instance to affected server:
2. Command: **#nim -o maint_boot -a spot=<created spot name> <affected server name>**

OR



Select **“Perform NIM Administration tasks”** and Enter.



Select **“Manage Machines”** and Enter.

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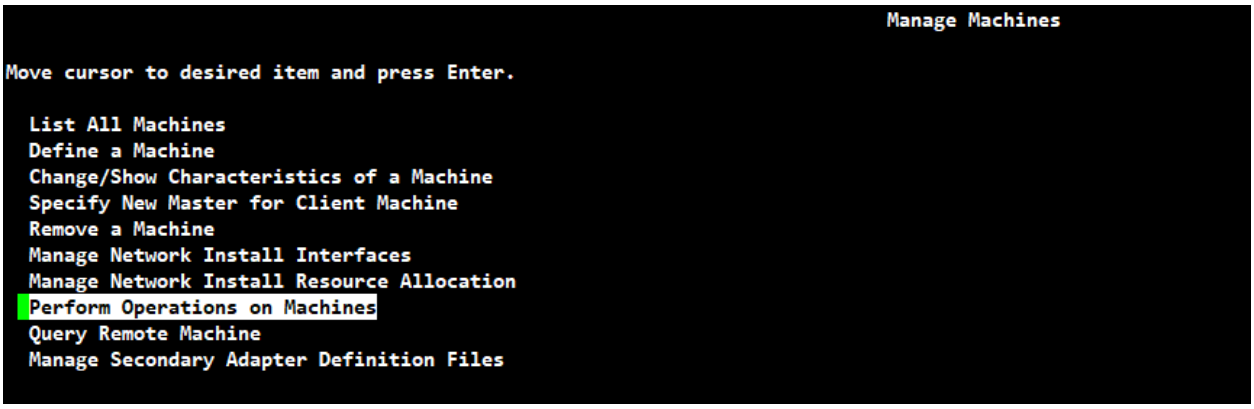
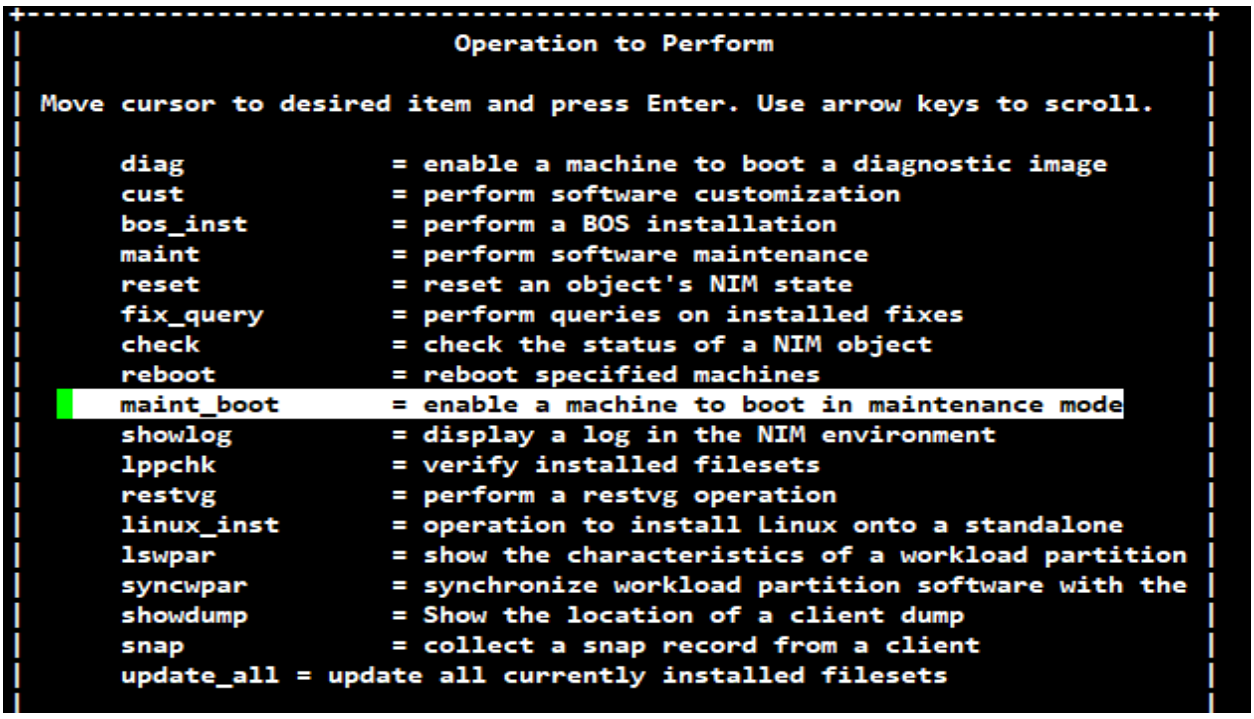


Select **"Perform Operations on Machines"** and Enter.

Select the affected server name and enter.



Select the **"maint_boot = enable a machine to boot in maintenance mode"** and enter.

Select the created spot resource and enter.

Reference Links:

Using NIM to boot into Maintenance Mode

Booting AIX into Maintenance Mode Using the HMC

NIM error warning messages