Xstation 160 Setup Procedure

Special Notices

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Note: The information in this document has **not** been verified for AIX 4.1.

About This Document

This document details 4 sample Xstation configuration scenarios for System Administrators.

Setting Up Xstations

Before proceeding, please review the following:

1. Check inventory:

   ```
   Mouse
   Keyboard
   System unit (power cord)
   Display (cable and power cord)
   ```

2. Turn off the power switch.
3. connect the keyboard and mouse.
4. connect the network cables.
5. Turn off the display power switch.
6. connect the display cables.
7. connect the power cable to the system unit.
8. plug in the power cables into electrical outlets.
9. turn On the power switch to the display and then the Xstation.
10. At the initial boot screen, determine the Xstation's hardware address

and give this to your System Administrator.

11. Now the Xstation can be configured on the network.

AIX Boot Host, No Gateway, x_st_mgrd Login

1. Add Xstation's IPaddress and name to /etc/hosts. Such as:

```
129.35.147.173    xstation1
129.35.147.93     configserver1  # boot host
```

2. Invoke SMIT:

```
smitty x_config
```

3. Fill in as follows:

```
*****************************************************************
Define an Xstation Network Type
*****************************************************************
Type or select values in entry fields.
Press Enter AFTER making all desired changes
                              [Entry Fields]
* Xstation Network TYPE Name      [x_st_mgr.network1]
* NETWORK Type                   [ethernet]
* SERVER PORT Number              [9000]
                  ---> x_st_mgrd port number is in /etc/services.
                  9000 is smit default.
* HOME Directory                 [etc/x_st_mgr]
* BOOTFILE                       [X160serv]
* DOMAIN Name Server             []
* GATEWAY                        []
  Subnet MASK                    []
*****************************************************************
                        Add an Xstation
*****************************************************************
                        Add an Xstation 160
*****************************************************************
Type or select value in entry fields.
Press Enter AFTER making all desired changes.
                           [Entry Fields]
* Xstation NAME              [xstation1]
* Xstation Network TYPE      [x_st_mgr.network1]
* Hardware ADDRESS           [XXXXXXXXXXXX]
                           ---> get from initial boot screen                    creen
*****************************************************************
```

4. Verify the following on the boot host:
   - Appropriate network is up.
   - x_st_mgrd is running.

- inetd is running(tftpd, bootpd configured in /etc/inetd.conf)
- nfsd is running (/etc/x_st_mgr, /usr/lib/X11 in /etc/exports)
- If /etc/tftpaccess.ctl is present (secure tftp)
- /etc/x_st_mgr,/usr/lib/X11 and /usr/lpp/x_st_mgr are set to "allow"
- Any manual editing to /etc/bootptab file is correct
- Default fonts in place:

```
/usr/lib/X11/fonts
/usr/lib/X11/fonts/misc
/usr/lib/X11/fonts/75dpi
/usr/lib/X11/fonts/100dpi
```

- Any manual editing to IPaddress file is correct. (See ip.template in /etc/x_st_mgr/xs160/cfg)

5. Make sure the Xstation is at factory defaults.
   a. Go to main menu of local configuration (Do this by pressing CTRL,Alt, then Backspace at the initial boot screen)
   b. Select "Restore Defaults", "Save Changes", and "Reboot".

AIX Boot Host, Gateway Passes Bootp Requests, x_st_mgrd Login

1. Add Xstation's IPaddress and name to /etc/hosts. Such as:

```
129.35.147.173    xstation1
129.35.147.93     configserver1  # boot host
129.35.147.100    gateway1
```

2. Use SMIT to perform the following:

```
smit x_config
```

```
*****************************************************************
Define an Xstation Network Type
*****************************************************************
Type or select values in entry fields.
Press Enter AFTER making all desired changes
                              [Entry Fields]
* Xstation Network TYPE Name      [x_st_mgr.network1]
* NETWORK Type                    [ethernet]
* SERVER PORT Number               [9000]
            ---> x_st_mgrd port number is in /etc/services.
                 9000 is smit default.
* HOME Directory                  [/etc/x_st_mgr]
* BOOTFILE                        [X160serv]
* DOMAIN Name Server               []
* GATEWAY                         [129.35.147.100]
  Subnet MASK                     [255.255.240.0]
*****************************************************************
                    Add an Xstation
*****************************************************************
                    Add an Xstation 160
*****************************************************************
Type or select value in entry fields.
Press Enter AFTER making all desired changes.
                                 [Entry Fields]
* Xstation NAME                   [xstation1]
* Xstation Network TYPE           [x_st_mgr.network1]
* Hardware ADDRESS                 [XXXXXXXXXXXX]
                           ---> get from initial boot screen
*****************************************************************
```

3. Verify the following on the boot host:
   - Appropriate network is up.
   - x_st_mgrd is running.
   - inetd is running(tftpd, bootpd configured in /etc/inetd.conf)
   - nfsd is running (/etc/x_st_mgr, /usr/lib/X11 in /etc/exports)
   - If /etc/tftpaccess.ctl is present (secure tftp) /etc/x_st_mgr,/usr/lib/X11 and /usr/lpp/x_st_mgr are set to "allow".
   - Any manual editing to /etc/bootptab file is correct
   - Default fonts in place:

     ```
     /usr/lib/X11/fonts
     /usr/lib/X11/fonts/misc
     /usr/lib/X11/fonts/75dpi
     /usr/lib/X11/fonts/100dpi
     ```

- Any manual editing to IPaddress file is correct. (See ip.template in /etc/x_st_mgr/xs160/cfg)

4. Make sure the Xstation is at factory defaults.

   a. Go to main menu of local c onfiguration (Do this by pressing CTRL, ALT, then Backspace at the initial boot screen)

   b. Select "Restore Defaults" and then "Save Changes".

   c. Go to Basic Configuration

      - Change Bootp to Direct
      - Add Terminal Internet Address
      - Add Gateway Internet Address
      - Add Subnet Mask
      - Add Configuration Server Internet Address

   d. Go to Main Menu

   e. Select "Save Changes" and then "Reboot"

AIX Boot Host, Gateway Does Not Pass Bootp

Requests, x_st_mgrd Login

1. Add Xstation's IPaddress and name to /etc/hosts. Such as:

```
129.35.147.173    xstation1
129.35.147.93     configserver1  #boot host
129.35.147.100    gateway1
```

2. Use the SMIT command:

```
smit x_config
```

```
*****************************************************************
Define an Xstation Network Type
*****************************************************************
Type or select values in entry fields.
Press Enter AFTER making all desired changes
                                [Entry Fields]
* Xstation Network TYPE Name      [x_st_mgr.network1]
* NETWORK Type                   [ethernet]
* SERVER PORT Number              [9000]
                    ---> x_st_mgrd port number is in /etc/services.
                    9000 is smit default.
* HOME Directory                 [/etc/x_st_mgr]
* BOOTFILE                       [X160serv]
* DOMAIN Name Server              []
* GATEWAY                        [129.35.147.100]
  Subnet MASK                    [255.255.240.0]
*****************************************************************
                  Add an Xstation
*****************************************************************
                  Add an Xstation 160
*****************************************************************
Type or select value in entry fields.
Press Enter AFTER making all desired changes.
                                [Entry Fields]
* Xstation NAME                  [xstation1]
* Xstation Network TYPE          [x_st_mgr.network1]
* Hardware ADDRESS               [XXXXXXXXXXXX]
                          ---> get from initial boot screen
*****************************************************************
```

3. Verify the following on the boot host:
   - Appropriate network is up.
   - x_st_mgrd is running.
   - inetd is running(tftpd, bootpd configured in /etc/inetd.conf)
   - nfsd is running (/etc/x_st_mgr, /usr/lib/X11 in /etc/exports)
   - If /etc/tftpaccess.ctl is present (secure tftp) /etc/x_st_mgr,/usr/lib/X11 and /usr/lpp/x_st_mgr are set to "allow"
   - Any manual editing to /etc/bootptab file is correct
   - Default fonts in place:

     ```
     /usr/lib/X11/fonts
     /usr/lib/X11/fonts/misc
     /usr/lib/X11/fonts/75dpi
     /usr/lib/X11/fonts/100dpi
     ```

- Any manual editing to IPaddress file is correct. (See ip.template in /etc/x_st_mgr/xs160/cfg)

4. Make sure the Xstation is at factory defaults.

   a. Go to main menu of local configuration (Do this by pressing CTRL, ALT, then Backspace at the initial boot screen)

   b. Select "Restore Defaults" and then "Save Changes".

   c. Go to Basic Configuration

      - Change Bootp to Disable
      - Add Terminal Internet Address
      - Add Gateway Internet Address
      - Add Subnet Mask
      - Add Configuration Server Internet Address

   d. Go to Main Menu

   e. Select "Save Changes" and then "Reboot"

Non-AIX Boot Host, No Bootp, Gateway, XDM Login

This can also be used for AIX Boot Host when the Xstation Manager LPP for the 160 is not installed on the AIX Boot Host.

1. Add Xstation's IPaddress and name to /etc/hosts. Such as:

```
129.35.147.173    xstation1
129.35.147.93     configserver1   # boot host
129.35.147.100    gateway1
129.35.147.101    xdmhost1
```

2. Verify the following on the boot host:

   - Appropriate network is up.
   - tftpd running(font paths & /etc/x_st_mgr are accessible if in secure tftp mode.)
   - nfsd is running(/etc/x_st_mgr,/usr/lib/X11 in /etc/exports)
   - xdm is running on appropriate host
   - Any manual editing to /etc/bootptab file is correct
   - Default fonts in place:

     ```
     /usr/lib/X11/fonts/misc
     /usr/lib/X11/fonts/75dpi
     /usr/lib/X11/fonts/100dpi
     ```

     All fonts.alias have following first line:

     ```
     FILE_NAMES_ALIASES
     ```

- Any manual editing to IPaddress File is correct. (See ip.template provided in /etc/x_st_mgr/160/cfg)

3. Step 3. Make sure the Xstation is at factory defaults.

   a. Go to Main Menu of Local Configuration (Do this by pressing CTRL, ALT, then Backspace at the initial boot screen)

   b. Select "Restore Defaults" and then "Save Changes".

   c. Go to Basic Configuration

      - Change Bootp to Disable
      - Add Terminal Internet Address
      - Add Gateway Internet Address
      - Add Subnet Mask
      - Add Configuration Server Internet Address
      - Change Login Server to XDM_Direct
      - Add Login Server Internet Address

   d. Go to Main Menu

   e. Select "Save Changes" and then "Reboot"

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