
Quick User's Guide to NX 3 Plotting



A new NX plotting system is being delivered with NX 3, which replaces Unigraphics legacy plotting (PQMGR). The new NX plotting system is based on the Basic Print Solution (BPS) software by SDI (www.sdicgm.com). For more detailed information on the NX plotting system, including Printer Administration, refer to the NX Online Help. Please note that legacy plotting (PQMGR) is not supported in NX 3 and later. While running NX 3, you cannot access **OR** use the existing Unigraphics Plot Server service and queues previously defined in PQMGR.

To plot in NX, you first must define printer(s) in printer group(s) using **File® Utilities® Printer Administration**. After defining the printer group(s) and taking the necessary steps to tell NX of your printer group(s), you can direct plots to a particular printer by selecting the group and the printer via **File® Plot**. A system may have just one single printer group or multiple printer groups defined. A system administrator can define printers in a single printer group or multiple printer groups to be shared by all NX users.



While printer group(s) is shareable, printer definitions are platform specific. If you have both Windows and UNIX workstations, you must create separate printer group(s) with UNIX and Windows-specific printer definitions.

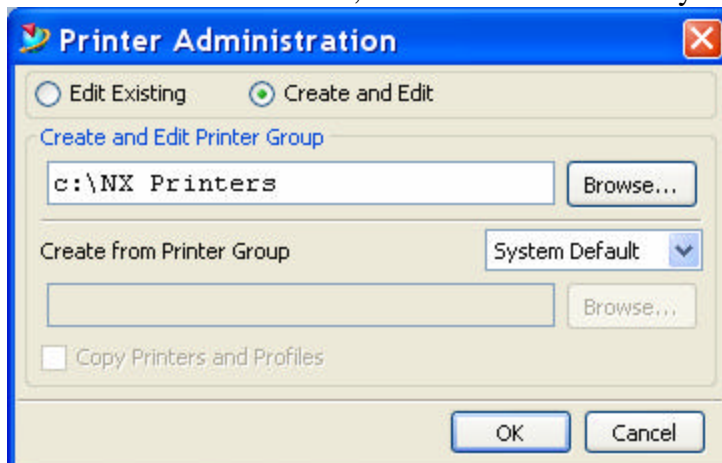
This document provides steps to configure NX plotting using either a single printer group or multiple printer groups.

Configuring NX Plotting Using a Single Printer Group



This is the simplest configuration for NX plotting where NX is installed on the local computer with one or more printers defined.

1. Log in as the Administrator user (or root on UNIX).
2. Start NX 3.
3. Click **File® Utilities® Printer Administration**.
4. Select the **Create and Edit** radio button.
5. Enter a name to a non-existing directory where the printer group and associated files will be created. Printer Administration will create this directory for you. You can also click **Browse**, and enter a new directory name.



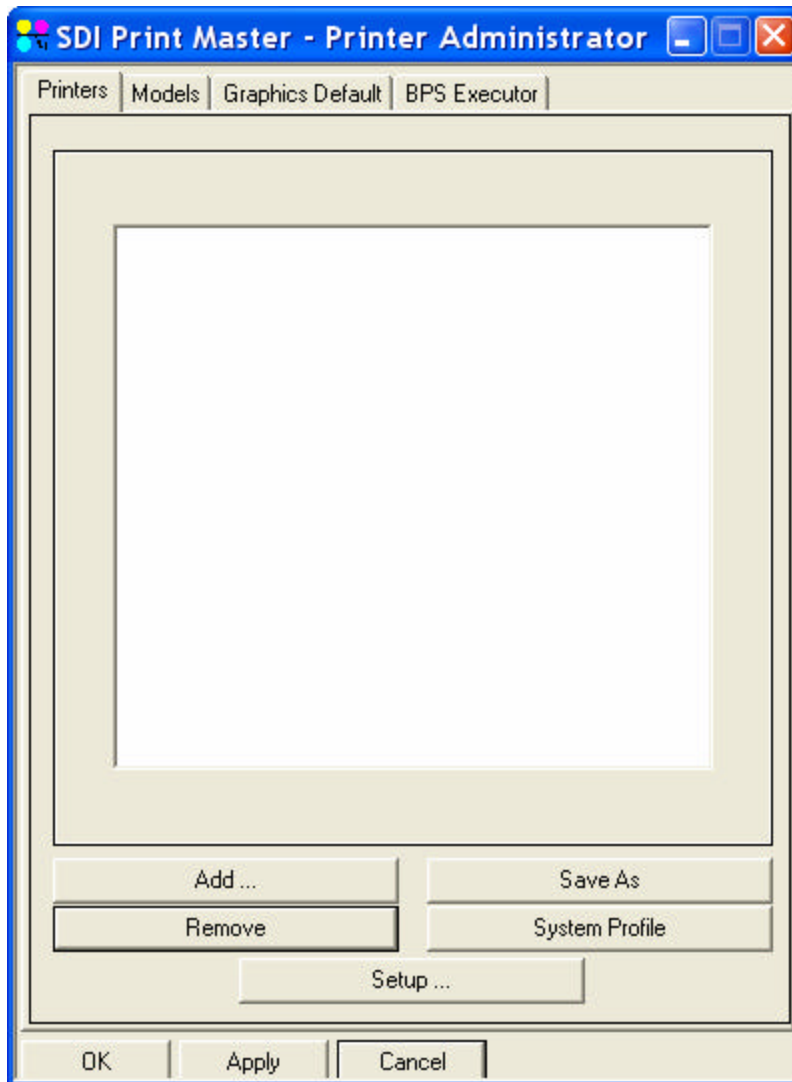
Printer Administration will create the printer directory. By default, System Default is selected in the **Create from Printer Group** drop-down menu. This will copy the NX default (without any printers defined) printer group to the new printer group directory “C:\NX Printers”.

6. Click **OK**.



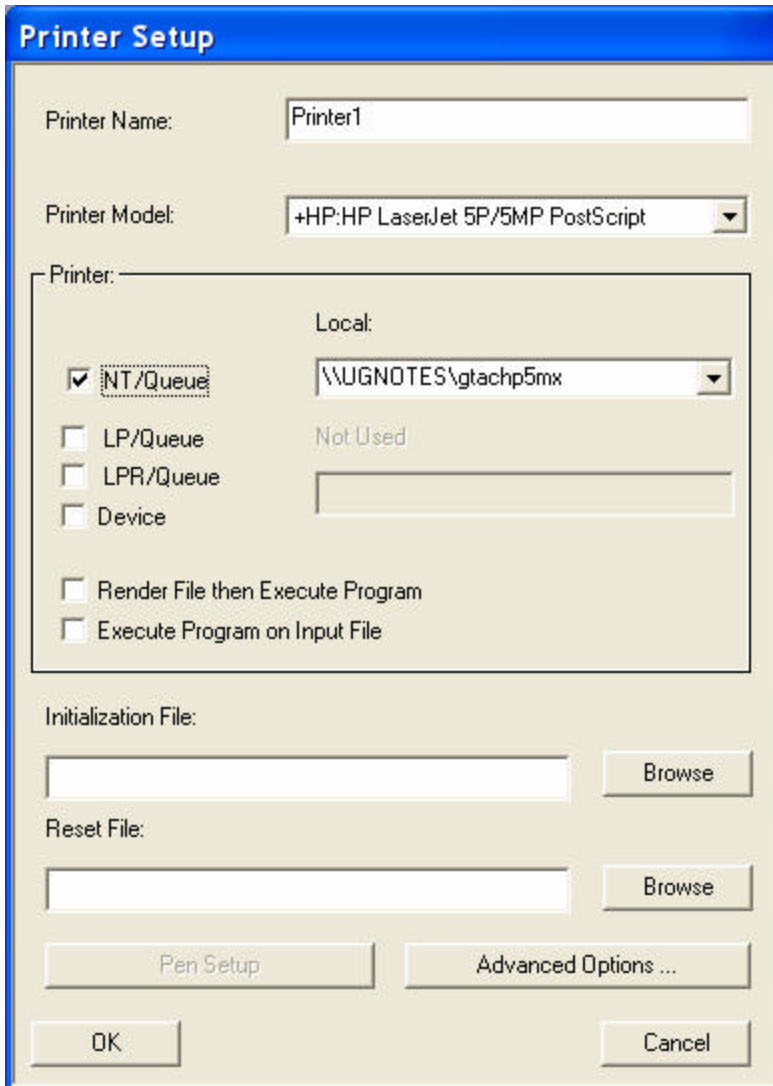
Do not put a “space” in the directory name on UNIX platforms. An acceptable example of a directory name is “/usr/nx_printers”

7. The Printer Administration is now ready to add printers.



To add a printer:

- a) Click **Add**.
- b) Type a description for the printer into the Printer Name field.
- c) Select your printer model from the **Printer Model** drop-down list.



Printer Setup

Printer Name:

Printer Model:

Printer:

NT/Queue Local:

LP/Queue Not Used

LPR/Queue

Device

Render File then Execute Program

Execute Program on Input File

Initialization File:

Reset File:

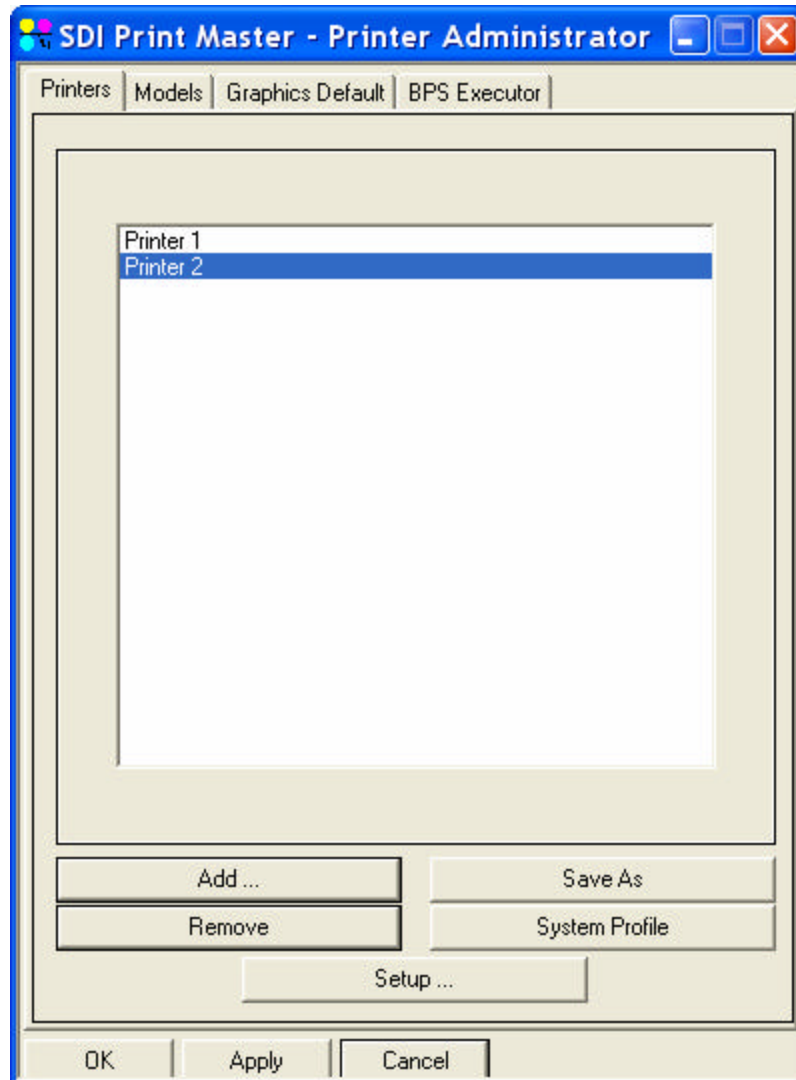


If the appropriate model for your printer is not listed in the Models tab of the Printer Administrator dialog, use the Models tab to define a model before adding the printer. “*GEN: Generic HPGL/2*” and “*HP: HP Postscript Multi-Bin Generic*“, are two generic models that can be use to add HPGL/2 or Postscript printers.

- d) On Windows, click the **NT/Queue** checkbox and select the appropriate local printer from the corresponding drop-down list. You can also select **LPR/Queue** and enter the UNC name for a remote printer.

On HP-UX and Solaris systems, click the **LPR/Queue** checkbox and type in the printer queue name.

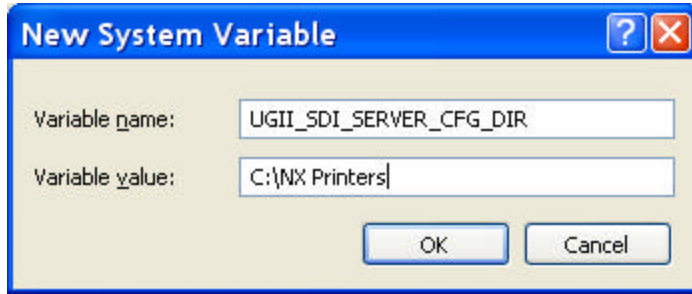
- e) Click **OK** to add the printer.



You can add multiple printers using the same steps.

8. Exit out of NX.
9. Define a new system environment variable to identify the printer group for NX. The environment variable `UGII_SDI_SERVER_CFG_DIR` defines the path of the single printer group directory you defined above.

To set this variable, on Windows systems, click **Start® ControlPanel® System® Advanced® Environment Variables**. In System Variables (bottom half), click **New**, enter the following:



Click **OK** to add the variable.

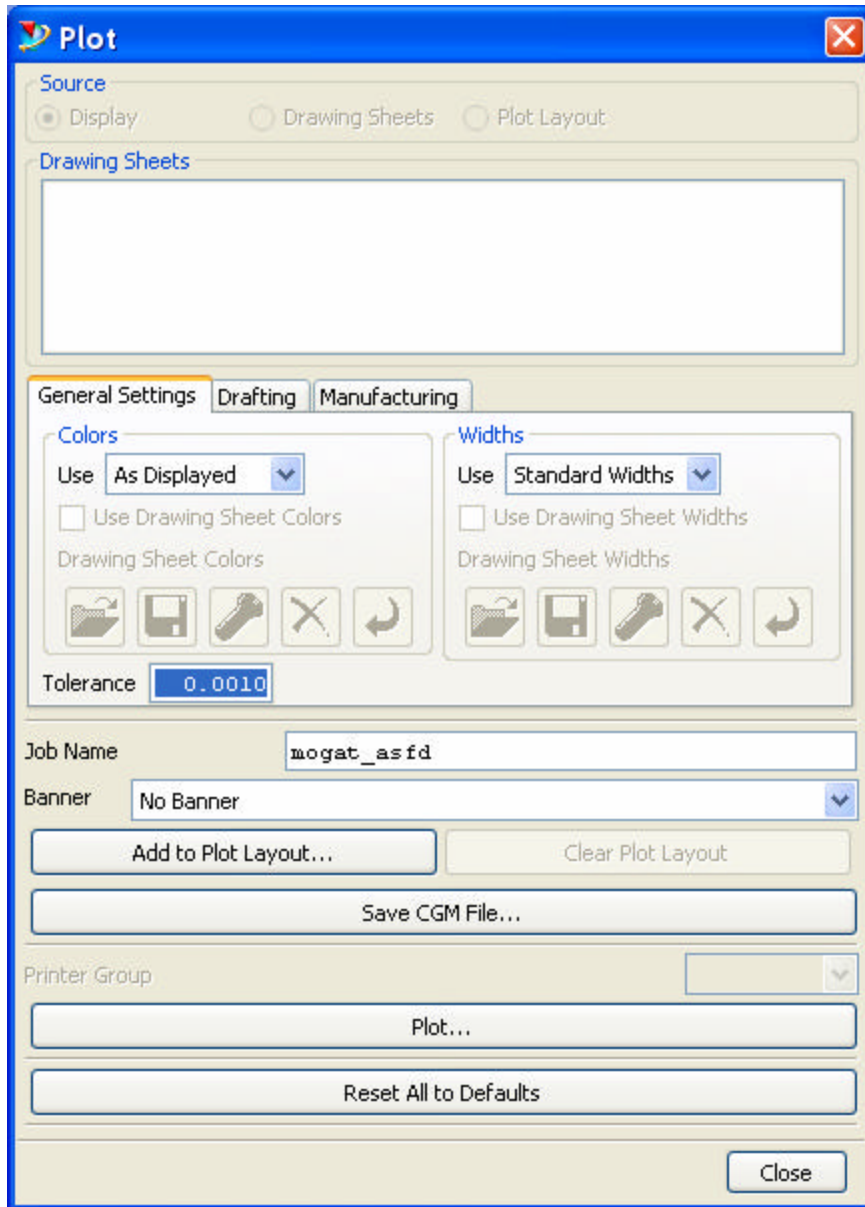
On Unix systems, this environment variable, **UGII_SDI_SERVER_CFG_DIR**, should be set in the **/etc/profile**, in the appropriate global C shell login script (i.e., **/etc/csh.login** {HP} or **/etc/.login** {Sun} and, for CDE in **/etc/dt/config/Xsession.d/xsession.ugs** {HP & IBM} or **/usr/dt/config/Xsession.d/xsession.ugs** {Sun}).

For example, at the bottom of the **/etc/profile** file, add the two lines:

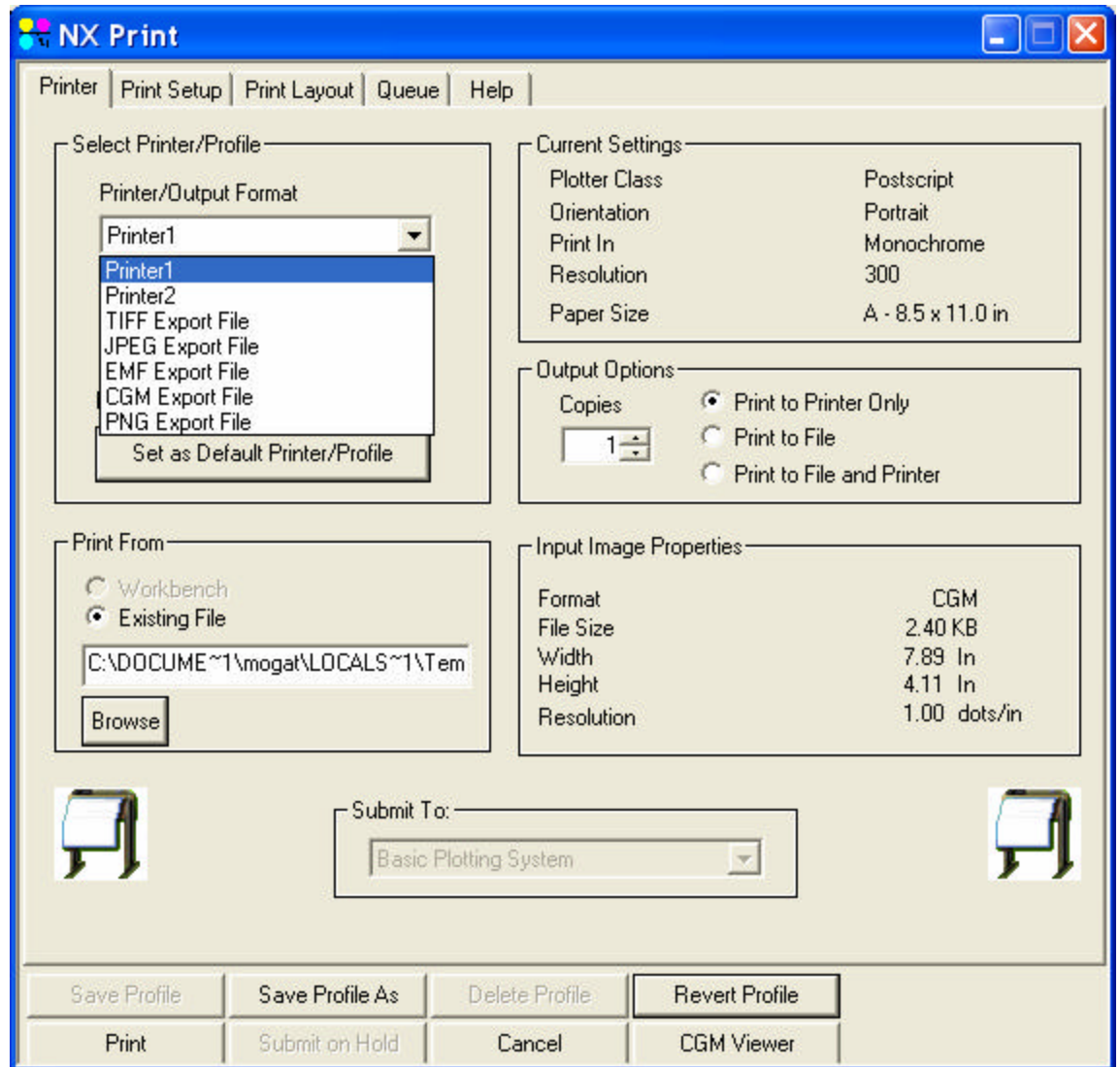
```
UGII_SDI_SERVER_CFG_DIR=/usr/nx_printers
export UGII_SDI_SERVER_CFG_DIR
```

10. You are now ready to plot in NX.

a) Start NX, open a file, click on **File® Plot**. The following Plot dialog comes up.



b) Click **Plot**. The following dialog box will appear:



Notice the new printers are now in the list of available printers. Select the appropriate printer and click **Print** to send the file to the printer.

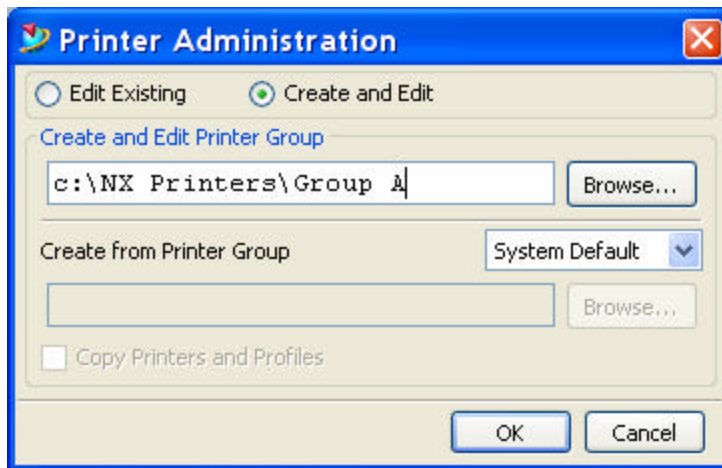
Configuring NX Plotting Using Multiple Printer Groups

System administrators or individual NX users may prefer to define printers in multiple printer groups. For example, printer group A could include printers shared by all users at the site, printer group B could include printers defined for only particular users at a certain location, and printer group C could include printers defined by a particular NX user who wants to print to the printer he uses most often. The following procedure lists the steps to configure NX Plotting to access multiple printer groups.

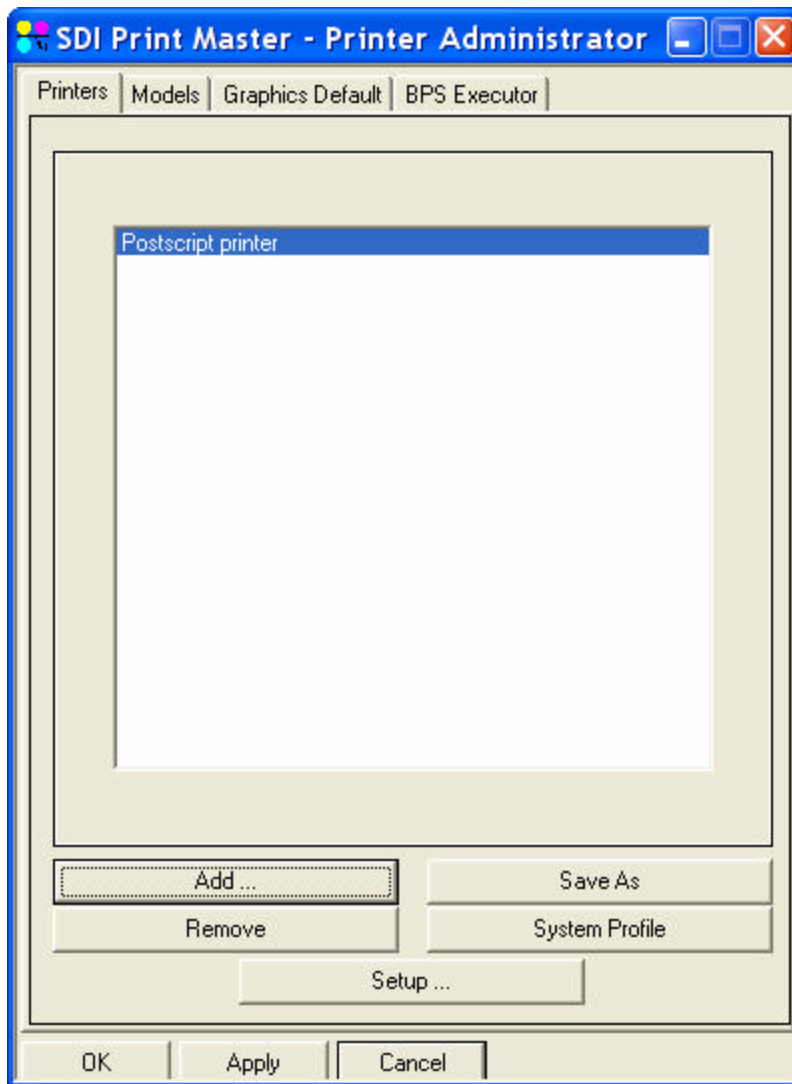
1. Log in as the Administrator user (or root on UNIX).
2. Start NX 3.
3. Click **File® Utilities® Printer Administration**. In this example, we will be creating 3 printer groups, Group A, Group B, and Group C in “C:\NX Printers” folder.



Do not put a “space” in the directory name on UNIX platforms. An example of an acceptable directory name is “/usr/nx_printers/groupa”



4. Continue to add Printers using Printer Administration as described in the Single Printer Group configuration above. You can add specific printers to be included in Group A.



We added a printer named “Postscript Printer” to printer Group A.

5. Add printer groups Group B and Group C, along with their respective printers, by going back to the **File® Utilities® Printer Administration** dialog using steps above. Once done adding Printer Groups and their respective printers, exit out of NX.

6. To access multiple printer groups, create a printer group list file to specify the printer groups of interest. NX reads this file to display an option menu of printer group directories in the **File® Plot** dialog. A template file named “printer_group_list_file.txt” is included in %UGII_BASE_DIR%\NXPLOT directory. It is recommended that you copy this template file to the printer group directory.
 - a) Go to Windows Explorer and browse to “C:\Program Files\UGS\NX 3.0\NXPLOT”. Copy the file “printer_group_list_file.txt” to “C:\NX Printers” directory.
On Unix, copy this file to “/usr/nx_printers” directory
 - b) Edit the file “C:\NX Printers\printer_group_list_file.txt” to add printer group entries.



The syntax of this file is very specific. Refer to the default template file for a detailed explanation. Printer group list files are platform specific so a printer group list file is needed for both UNIX and Windows platforms in a mixed environment.

```

GROUP_DIR C:\NX Printers\Group A           ← Printer group directory defined above
JOBS_DIR c:\temp\Group A
HOME_DIR c:\NX Printers\Group A
LABEL Group A Printers                    ← Printer group name displayed in File→Plot
!
GROUP_DIR C:\NX Printers\Group B
JOBS_DIR c:\temp\Group B
HOME_DIR c:\NX Printers\Group B
LABEL Group B Printers
!
GROUP_DIR C:\NX Printers\Group C
JOBS_DIR c:\temp\Group C
HOME_DIR c:\NX Printers\Group C
LABEL Group C Printers

```

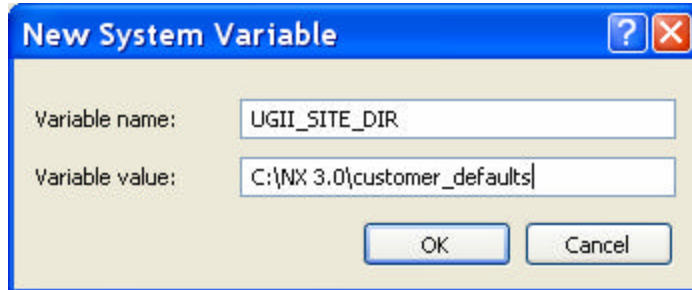
- c) Save the file.

7. Set a variable to define the customer default level. Customer defaults can be controlled at three levels: site, group, and user. For this example, we will be using a site level customer default.
 - a) Create a startup directory where you want to store the customer defaults file such as “C:\NX 3.0\customer_defaults\startup”
On Unix systems, you may create the directory “/usr/nx3.0/customer_defaults/startup”



The “startup” directory can be created in the path of your choice.

- b) Set a system variable UGII_SITE_DIR to point to customer defaults. The variable should point to the directory where the “startup” folder was created.
- c) Click **Start® Control Panel® System® Advanced® Environment Variables**
- d) In the System Variables, click **New**



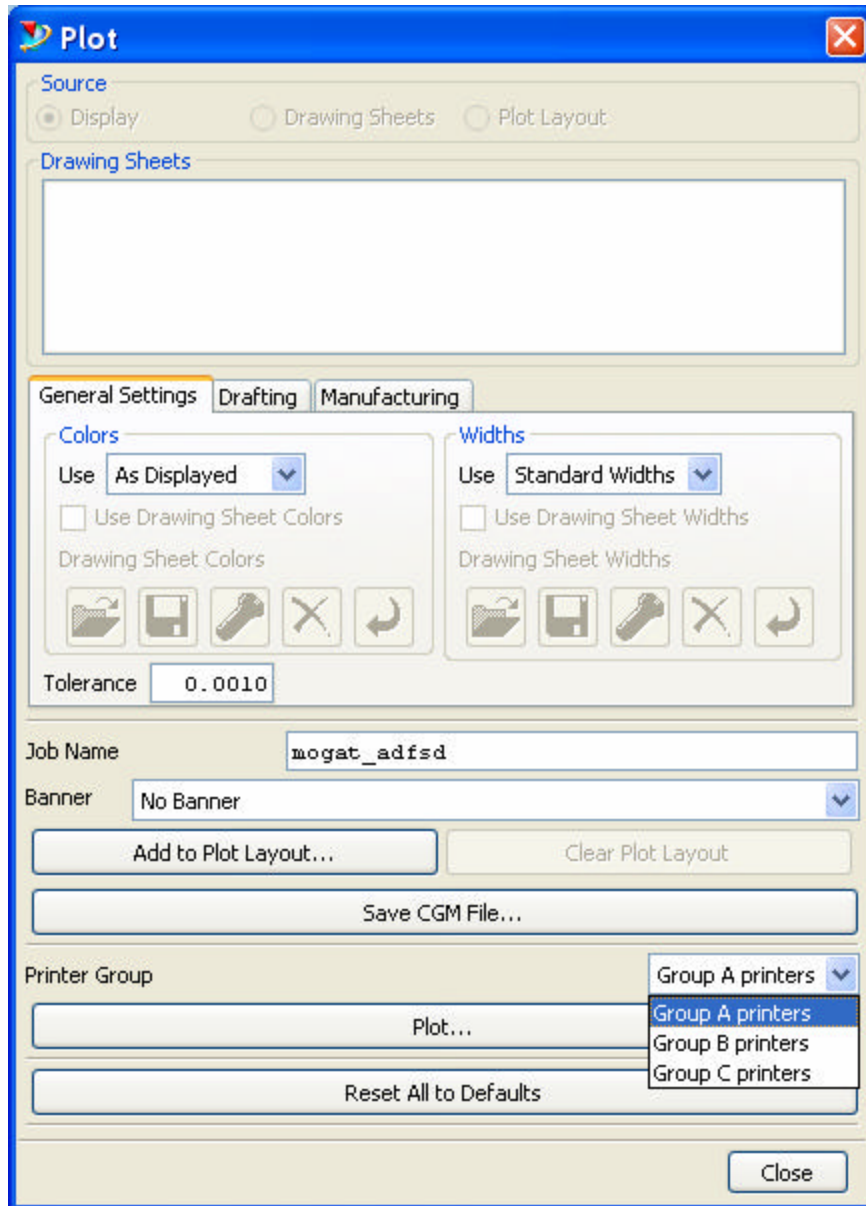
Click **OK** to create the variable.

On Unix systems, this environment variable, **UGII_SITE_DIR**, should be set in the **/etc/profile**, in the appropriate global C shell login script (i.e., **/etc/csh.login** {HP} or **/etc/.login** {Sun} and, for CDE in **/etc/dt/config/Xsession.d/xsession.ugs** {HP & IBM} or **/usr/dt/config/Xsession.d/xsession.ugs** {Sun}).

For example, at the bottom of the **/etc/profile** file, add the two lines:

```
UGII_SITE_DIR=/usr/nx3.0/customer_defaults
export UGII_SITE_DIR
```

8. Declare the printer group file to the customer’s default environment. To do this:
 - a) Start NX.
 - b) Click **File® Utilities® Customer Defaults** to define the printer group file. (Default level should be Site)
 - c) From the list on the left, select **Gateway® Plotting**. In the Printer Group List File, browse to “C:\NX Printers\printer_group_list_file.txt”
 - d) Click **Apply**. A site level customer defaults file will be saved as “C:\NX 3.0\customer_defaults\startup\nx3_site.dpv”. The defaults file now has a plotting default set which will point NX to the printer group list file.
 - e) Exit out of NX. Changes made to customer defaults will not take effect until your next NX session.
9. You are now ready to plot in NX.
 - a) Start NX, open a file, and select **File® Plot**.
 - b) The NX plotting system should now see the printers defined in the three printer groups you have just defined.



Please refer to NX Online Help for detail information on the NX plotting system, including Printer Administration. For more information on NX plotting, go to <http://support.ugs.com/> and click on **Documentation® NX**.