

TOSHIBA

DIGITAL PLAIN PAPER COPIER
**OPERATOR'S MANUAL
FOR PRINTER FUNCTION**

NETWORK PRINTER BOARD GA-1040
USER'S GUIDE FOR UNIX FILTER

 **e-STUDIO45/35/28**

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Introduction

This manual describes how to install the user software for the TOSHIBA GA-1040 Network Printer Board, set up printing, and manage print jobs from a Unix client. For information about setting up network servers and clients to use the GA-1040, see Administrator's Guide. For general information on using the copier, your computer, your application software, or your network, see the manuals that accompany those products.

The GA-1040 Printer Driver consists of a Unix filter (CORE) driver and the `rcutil` configuration program:

- The CORE driver translates print commands and drives printing on UNIX and Linux platforms.
- The `rcutil` configuration program provides a visual interface to the driver, for graphical access to print properties specified in the PostScript Printer Description (PPD) file.

It also comes with the `install` installation script that is used to install and un-install print queues. The `install` installation script first checks the system for Motif support before running the `setup` installation program.

This manual contains information on:

- Pre-installation and system requirements
- Installation and un-installation process
- `rcutil` Property tabs
- Using the `rcutil` configuration program to save print settings
- Print command reference
- Printing from the command line and from applications
- Error and status messages

Guidelines

This manual uses the following rules for the use of symbols and font style in this document.

bold	Verana font – means a title or an important concept
<code>bold</code>	Courier New font – means a program name, program variable, a directory or path name, or a constant value,
Solaris	"Solaris", from here on, refers to both SunOS and Solaris.

Pre-installation

System Requirements

English versions of the following operating systems are supported for use with the GA-1040 Printer Driver:

- Sun Solaris 2.4 or later (SPARCstation)
- Sun Solaris 8 (Intel)
- HP-UX 10.0 or later
- IBM AIX 4.0 or later
- Red Hat Linux 6.0 or later

The following system programs are needed for successful installation.

UNIX/LINUX System	System Tools	
HP-UX	/usr/bin/nslookup /usr/sbin/lpshut /usr/sbin/lpsched	/usr/lib/lpadmin /usr/bin/enable /usr/lib/accept
Sun Solaris (SPARC/Intel)	/usr/sbin/nslookup /usr/lib/lpshut /usr/lib/lpsched /usr/bin/lpstat	/usr/lib/lpadmin /usr/bin/enable /usr/lib/accept
IBM AIX	/usr/bin/host /usr/sbin/piomisc_base /usr/bin/lpstat	/usr/bin/enable mkque mkquedev
Red Hat Linux	/usr/bin/host	/etc/rc.d/init.d/lpd or /etc/init.d/lpd

* If the utility is not in the specified path, the named utility must be found in the system search path and can be run on the command line.

Motif Support

The `rcutil` configuration program ships in two versions: Motif 1.2 and Motif 2.1. Motif 2.1 supports combo box, spin box, and notebooks for property pages. For systems with Motif 1.2 support, the Unix driver is shipped with Motif 1.2 option menus and custom property pages.

The following packages are available:

Motif 2.1

System	Requirement	Details
Solaris	Motif 2.1 libraries: libXm	Needed to be installed in target system.
AIX	Motif 2.1 libraries: libXm	Needed to be installed in target system.
Linux	None	No library is needed. Motif 2.1 libraries are linked statically.

There is no Motif 2.1 support for the HP-UX driver.

Motif 1.2

System	Requirement	Details
HP-UX	Motif 1.2 libraries: libXm	Needed to be installed in target system.
Solaris	Motif 1.2 libraries: libXm	Needed to be installed in target system.
AIX	Motif 1.2 libraries: libXm	Needed to be installed in target system.
Linux	None	No library is needed. Motif 2.1 libraries are linked statically.

To determine which version of Motif is installed in your Unix or Linux system, do the following system checks.

Check if the following files exist:

- /usr/include/Xm/ComboBox.h
- /usr/include/Xm/Notebook.h
- /usr/include/Xm/SpinB.h

If you have these files, you have Motif 2.1 installed in your system.

If not, check if the /usr/include/Xm sub-directory exists. If so, you have Motif 1.2 installed.

If Motif is not installed on HP-UX, SunOS/Solaris, or IBM AIX systems, the driver may not be installed or run correctly. You would need to install Motif first before being able to install the Unix driver. For more information, please refer to the ***install Installation Script*** section.

Obtaining the Installation Package

The package is shipped as one compressed file: toshiba1.2.tar.Z or toshiba2.1.tar.Z

To uncompress the file, use `uncompress <Zfile>`

Then use `tar` to restore the files: `tar -xvf <tarfile>`

Installed Files

Platform	Installation Destination Path
HP-UX	/usr/local/tsbprn
Sun Solaris (SPARC)	/etc/lp/interfaces/tsbprn
Sun Solaris (Intel)	/usr/local/tsbprn
IBM AIX	/usr/local/tsbprn
Red Hat Linux	/usr/local/tsbprn

The driver and user interface files are placed in /usr/local/tsbprn folder, except on Solaris systems. In most Solaris systems, the /usr/local directory is a mounted NFS remote system and it is write-protected. Because of this, the drivers are installed in /etc/lp/interfaces/tsbprn, by default.

The driver cannot be installed on systems that have write-protection turned on for the `/usr/local` folder. The driver installation destination directory is fixed for each platform to the location specified in the table above.

This is currently not configurable as there is no concept of registry in Unix systems where settings can be saved at installation time and that could be retrieved later by the driver at run-time.

If the installation directory does not exist, or cannot be created, the `setup` installation program will display error messages and terminate.

The following files are included in the Unix Driver package:

Common Files	Description
GA1040ReleaseNotes.pdf	Release Notes
GA1040.pdf	This documentation and manual.
RELEASE.NUMBER	This file contains the release number.
EFTPSxx	CORE UNIX driver program that interprets and renders printed output. "xx" specifies the release number.
rcutil	Driver utility providing graphical access to print features and settings.
Rcutil	Resource file that sets characteristics of the graphical interface.
F533Readme.txt	Driver readme file, displayed as online help in the rcutil Help dialog. This file can be customized for a particular environment.
toshibaps.ppd	GA-1040 PPD configuration file.
pdtype	Utility program that checks the type of input file, whether text file, PostScript file, PCL5 or PCL6 file.
f533.man	CORE Driver manual pages.
rcutil.man	Interface manual pages.
install	Installation script that checks for Motif support before launching the setup installation program.
setup	Installation/un-installation program for CORE driver and rcutil configuration program.
Setup.txt	Installation program readme file, displayed as online help in the setup Help dialog box. This file can be edited or customized for a particular environment.
Setup	Resource file that sets characteristics of the graphical interface for the installation program.

AIX Additional Files	Description
bafilter-ps	Back-end program required for installation on AIX systems.
passthru.ins	Installation script for the pass-through filter.

HP-UX Files	Description
modelscri	Server installation model script.
remote.scri	Client installation model script.

Solaris Additional Files	Description
modelscri	Server installation model script.
ver5.7	Solaris 5.7 installation requirements.
ver5.8	Solaris 5.8 installation requirements.

Linux Additional Files	Description
shfilter.scr	<p>Middle script filter for Linux server installations used to parse parameters received from lp and passed to the CORE filter.</p> <p>The Linux installer assumes that the Korn shell exists in /bin. If Korn (ksh) does not exist in /bin, the /usr/local/tsbprn-ps/shfilter-ps.tos file must be modified to the existing shell in /bin. If Borne Again (bash) shell is available, edit the first line in shfilter-ps.tos file, replace #!/bin/ksh with #!/bin/bash.</p>
shfilter.cnt	Middle script filter for Linux client systems that passes the input file from the client to the server print queue.

setup Installation Program

Depending on your network environment, distribution of clients, and planned print configuration, you may run only server installations of the Unix driver, or both client and server installations.

Pre-Installation Procedures

Before running server or client install program, review the following points:

- Log in as the superuser (root) of the system to ensure that all files are installed to their correct location. Only `root` is allowed to perform installation procedures.
- The installation program can be executed from the current folder, or from a local copy of the installation folder. We recommend making a local copy of the installation folder. It is important to run it where it is located. For one, it uses the `setup` resource file for defining its Motif-based user interface.
- If a print queue would be re-installed, uninstall it first before re-installing to ensure that the driver is updated correctly. The `setup` installation program provides the capability to un-install print queues.
- The `rcut11` interface was developed using Motif 1.2, Motif 2.1 and C programming language. Except for Linux systems, it is required that the Motif 2.1 or Motif 1.2 libraries be installed on the system where the `setup` installation program will be used and where `rcut11` will be installed. For safety, use the `install` script utility for installing as it performs initialization checks before launching the `setup` installation program.
- To launch the `setup` installation program in GUI mode, the **DISPLAY** environment variable must be set. The user must manually set this on the command line. For example, type "**DISPLAY = host:0.0**" on the command line. `host` is the name of the terminal where `setup` would be launched. It can also be the IP address of the said terminal. After assigning value to **DISPLAY**, export the environment variable by typing `export DISPLAY` on the command line. If `setup` cannot still launch in GUI mode, you may need to add the terminal in the **hosts** file, done by typing `xhost host` on the command line. Please coordinate with your system administrator on how to configure your system for running programs with GUI.
- If **DISPLAY** is not set, the `setup` installation program will run in Text mode. The installation program detects the system capability for graphics and can run in either Text or GUI mode.
- Man pages must be updated to customize it to your need. Currently the man-pages contains a place-holder for the contact info for troubleshooting. You can update this with a correct contact info. NOTE: Do not modify application names such as "EFTPS35" as the installation program automatically parses it.
- Update text files that are used by the driver as Help files for further customization. These files are the `Setup.txt` and `F533Readme.txt`

install Installation Script

The `install` script is the installation utility and is the secure way for installing or un-installing the Unix driver. It performs initial system checks before actually launching the `setup` installation program. Its major role is to check if Motif library is installed in the target system. This is provided for convenience to avoid unexpected

system errors when launching the `setup` installation program directly on systems without Motif support.

The `install` installation script will show an error message if it cannot find the Motif library in the system, except for Linux, where the driver is built to run even on systems without Motif support. If you are sure that you have Motif installed in the system, you can use the `setup` installation program directly.

The `install` installation script assumes pre-defined libraries for determining whether the systems supports Motif or not.

The script checks if the libraries below exist in their specified locations:

Platform	Library location
HP-UX	/usr/lib/libXm.2
Sun Solaris (SPARC)	/usr/lib/libXm.so.4
Sun Solaris (Intel)	/usr/lib/libXm.so.4
IBM AIX	/usr/lib/libXm.a
Red Hat Linux	None

If not, the script will show an appropriate message.

If you think Motif is installed in the system, you can also try running `setup` installation program directly on the command line: `./setup`

- If it fails (crashes), please take note of any error message you get from the system and send it to us. This would help us update the install script to reflect whatever library or file the setup installation program may require to run successfully in your system.
- BUT if setup runs and shows the user interface, that could mean that it has found the Motif library somewhere in your system, meaning, you have a different location than /usr/lib for the Motif library. In this case, you can modify the `install` script to reflect this library path. You can contact us if you like us to do this update for you – just inform us the correct library path for your target system.

Syntax

```
./install [-uh] [[q:]<queue>] [s:<server>] [p:<portvalue>]  
          [t:<insttype>] [g:<guitype>] [cdepth:<dval>]
```

To run `setup` directly, use "setup" in the same syntax, as:

```
./setup [-uh] [[q:]<queue>] [s:<server>] [p:<portvalue>] [t:<insttype>]  
          [g:<guitype>] [cdepth:<dval>]
```

If no parameter is specified, this launches the `setup` installation program in graphical install mode.

Parameters that are enclosed in square brackets are optional.

- h** Prints the usage guide. If no other parameter is specified, the program will terminate. Otherwise, it will launch the installation program either in graphical or text mode, depending on value of the "g" parameter.
- u** Uninstalls the specified <queue>
- [q:]<queue>** The name of the local print queue to be set up or uninstalled. **q:** is optional. Any parameter without the tag is assumed to be a print queue name. Only the last <queue>, if there's more than one specified in the parameter, will be used.
- s:<server>** The destination network printer server.
- p:<portvalue>** The printer port in <server>. <portvalue> is the name of the printer port. This is **print** by default.
- t:<instttype>** Identifies the type of action on the print queue(s).
In Install mode, this implies installing of a server or client print queue. <instttype> can be either **server** (default) or **client**.
In Un-install mode, if <instttype> is **all**, this un-installs all print queues. All other values would un-install <queue>, if it is specified. This is not **all** (not set and not used) by default.
- g:<guitype>** Tells whether to run in Graphical-mode or Text-mode. <guitype> can be either **yes** (GUI, default) or **no** (Text).
- cdepth:<dval>** <dval> is for depth value. Specifies the color depth to use to be able to formulate the background color when running in GUI mode. <dval> can be **no** or any numeric value. Non-digit values are treated as **no**. **no** tells the program to use system default colors for displaying the user interface.

This **cdepth** parameter is **relevant ONLY** if the Background color setting is removed or commented out in the **setup** resource file. This is unused if Background color setting is in the resource file.

The parameters can be specified in any order. In text mode, if a <queue> or <server> is not specified in the command line parameter, the program will prompt for it.

Example Usage:

```
./install q:pshakuba s:hakuba p:direct
```

where **pshakuba** is the desired print queue name, **hakuba** is the network target printer, and **direct** is the Fiery direct port in the **hakuba** printer. This opens the **setup** installation program in **server** install type and **GUI** mode.

```
./install pshakuba
```

will open the **setup** installation program in **server** install type and **print** Fiery port. This opens in **GUI** mode. The **Network Printer** field will be empty waiting for user to specify a target printer.

```
./install pshakuba s:hakuba g:no
```

will run the **setup** installation program in **Text** mode. The **pshakuba** is the desired print queue name. **hakuba** is the network target printer. It will ask if the default **print** Fiery port will be used. And if not, it will prompt for a new value.

`./install -u t:all g:no`
runs the `setup` installation program in un-install and text mode to un-install **all** print queues.

`./install pshakuba s:hakuba p:direct cdepth:8`
Runs in GUI mode and initialize the print queue, destination printer and port fields in the user interface. If Background color setting is removed from the `setup` resource file, this will use the 8-bit color depth parameter to choose the background color for the user interface.

Notes on X_QueryColors

In some systems with limited color support, an X_QueryColors runtime error may occur. A message may be something like:

```
X error of failed request: BadValue(integer parameter out of range for operation
Major opcode of failed request: 91(X_QueryColors)
Value in failed request: 0x806a92
Serial number of failed request:141
Current Serial number in output stream:141
```

The value of failed request and serial numbers may differ. This is a known problem in Solaris 8 for Intel platform and will be fixed in a future update. If this occurs, perform the installation by running the installation program in Text mode.

GUI Mode

The following buttons allows user to interactively control the installation and un-installation process.

- **Install button**
This button starts the installation process. This button is disabled until all required fields are filled in.
- **Delete button**
This button deletes *selected* print queue in the list of installed print queues. If there is no print queue available, this button is disabled.
- **Uninstall All button**
This button deletes *all* print queues in the list of installed print queues. If there is no print queue available, this button is disabled.
- **Exit button**
This button terminates the installation program.
- **Help button**
This shows the instructions on how to use the `setup` installation program. The text displayed is taken from the **Setup.txt** file that is included in the package.

Setup resource file

The `setup` resource file contains the settings that define the `setup` installation program Motif-based user interface. This file is needed to be in the same location as the `setup` installation program itself. Putting it in a separate location could cause unexpected errors when running the installation program.

The Background color is set through this resource file. If the Background setting is removed from or not set in the resource file, the installation program is also capable of detecting which background color to use in two ways. First, it uses the utility `xdpyinfo` to detect the supported color depths in the system and adjusts the background color accordingly. Second, The "`depth:#`" parameter may also be specified in the command line. `#` is any numeric number used to detect the supported color depth in the system. Some possible values are 1, 2, 4, 6, 8, 12, 16, 24 and 32.

Introduction Tab

The Introduction tab shows information about the `setup` installation program.

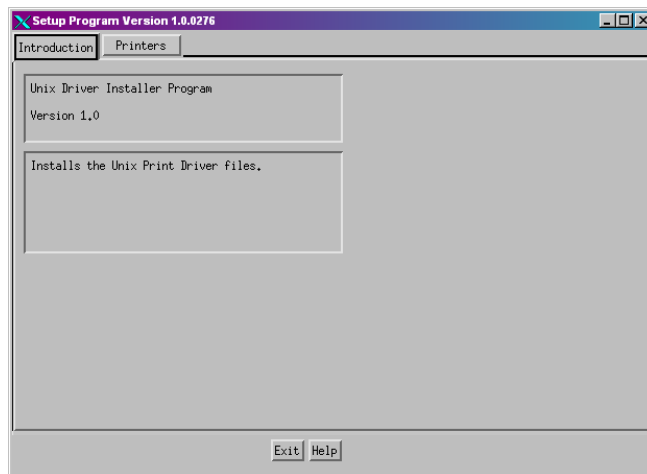


Figure 1 Introduction tab

General Tab

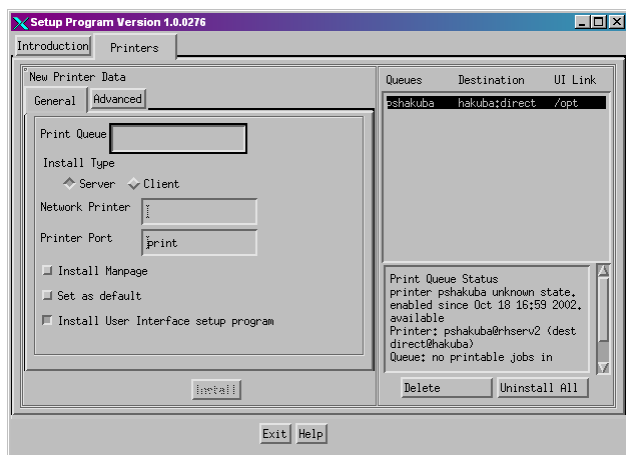


Figure 2 General Tab (Server Install)

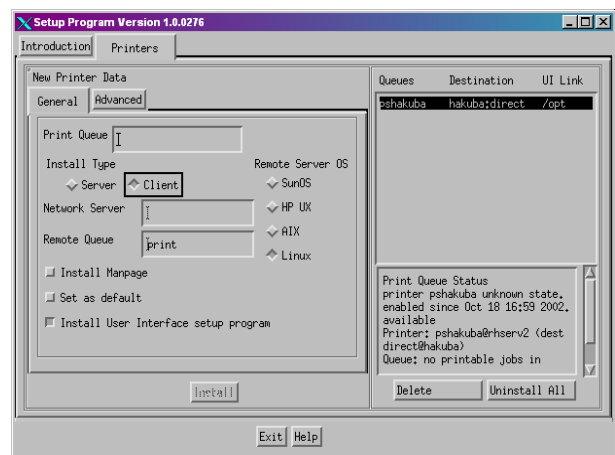


Figure 3 General Tab (Client Install)

- **Print Queue**
 - This is the name of the print queue to be created and associated with the Unix filter.
- **Install Type**
 - The print queue can be a `server` (default) or `client` print queue.
- **Network Printer/Network Server**
 - On `server` install type, **Network Printer** is the name of the remote printer device where the print jobs will be sent to.
 - On `client` install type, **Network Server** is the name of the remote UNIX/Linux server where the print jobs will be sent to.

- **Printer Port/Remote Queue**
 - On **server** install type, **Printer Port** is the Fiery printer port on the remote printer device.
 - On **client** install type, **Remote Queue** is the server-type print queue on the **UNIX/Linux Network Server**.
 - This is **print**, by default.
- **Remote Server OS**
 - Shown on client type installation, this specifies the type of operating system in the remote **Network Server**. This is needed in an HP-UX installation for enabling the client print queue.
- **Install Manpage**
 - This enables/disables installation of the documentation man pages. This also enables/disables the manpage path fields in the Advanced tab.
- **Set as default**
 - This enables/disables making the print queue the default print queue.
- **Install User Interface setup program**
 - This enables/disables installation of the **rcuti1** configuration program. NOTE: The user may opt not to install the **rcuti1** on systems without graphics capability, for instance, if Motif is not supported.

Advanced Tab

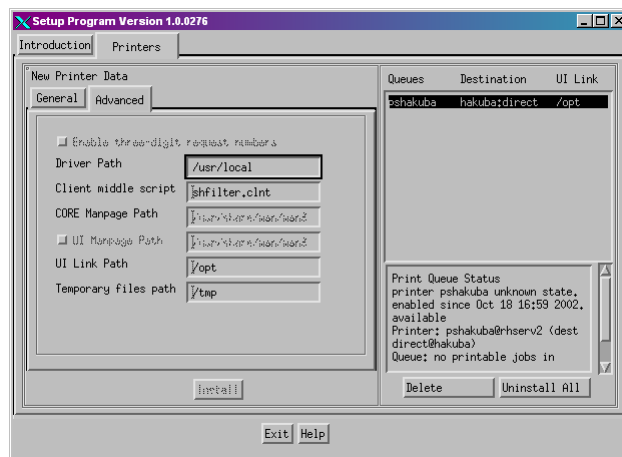


Figure 4 Advanced tab

- **Enable three-digit request number**
 - This is for **HP-UX client type** installation only: This specifies whether to use or not use the **lpadmin** option **-ob3** when creating the client print queue in the HP-UX system. We have observed that sometimes, **-ob3** is required to enable printing in a newly installed print queue. You may want to try the **on** or **off** case to check which setting enables printing, If you still can't print, please inform us.
 - Please refer to the manpage of **lpadmin** for the use of **-ob3** option.
- **Driver Path**
 - For HPUX, Solaris, and AIX, a model script or backend script is installed on the system on the directory specified by the **Driver Path**. This location may be different from the default location for the driver files, which is **/usr/local/tsbprn**, or **/etc/lp/interfaces/tsbprn** in Solaris. If the

system requires the scripts to be in a different location, specify the new location in this field.

- **Middle script/Client script**
 - This is for **Linux** installations only: This is the name to give the actual script installed on the system. By default, this is `shfilter-ps.tos` for server install type, and is `shfilter.cln` for client install type.
 - For server installation type, the label is Middle script.
 - For client installation type, the label changes to Client script.
- **CORE Manpage Path**
 - This specifies the system directory where the CORE filter manpage will be installed. This is disabled if the Install Manpage field is not checked in the General tab.
- **UI Manpage Path**
 - This specifies the system directory where the `rcut1` manpage will be installed. This is disabled if the Install Manpage field is not checked in the General tab.
- **UI Link Path**
 - The `setup` program also installs a symbolic link to the `rcut1` configuration program in the location specified in the **UI Link Path** field. This is `/opt` by default.
- **Temporary files path**
 - The `setup` installation program creates temporary files during installation. If `/tmp` is unavailable in the system, this field specifies an alternative location where temporary files can be created. This is `/tmp` by default. If you like the installation program to install the symbolic link in a different path, say `/bin` or `/usr/bin`, you can specify this new value in the **Temporary files path** field.
- **Pass Thru (reserved)**
 - This is only for **AIX** systems without support for the `reback` system utility:
 - If the bullet is selected, the user can type in a name on the text field. It will be used as the pass thru name.
 - If the bullet is not selected, the `setup` installation program will generate (detect) a pass thru name.
 - **NOTE:**
 - The pass-thru queues are required for sending filtered jobs from the print queue to the Fiery ports (print, direct, or hold).
 - This is only included as a fallback solution in AIX systems, which currently does not provide easy access to Fiery ports. If the current solution of using the `reback` utility fails, pass-thru queues will be created.

Printer List

- **Print Queue column**
 - This enumerates the print queues installed in the system and that are associated to the GA-1040 Print Driver.
- **Destination column**
 - This shows to which network server with Fiery printer port the print queue will send jobs to.
- **UI Link column**
 - This shows the path where the symbolic link to the `rcut1` configuration program associated to the print queue can be found.

Printer Status

This displays the status of the currently selected print queue in the Printer list.

Status Dialog

The `status` dialog shows messages describing the progress of the installation process.

The `Done` button closes the dialog after a successful installation or after an error occurs during installation. It is disabled during the install process.

If a fatal error occurs, the `setup` installation program terminates.

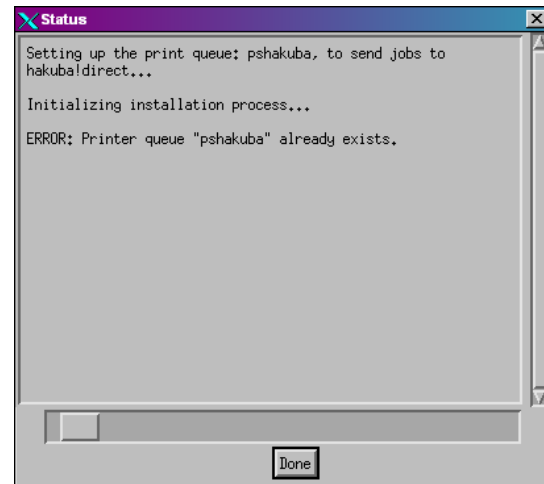


Figure 5 Status dialog

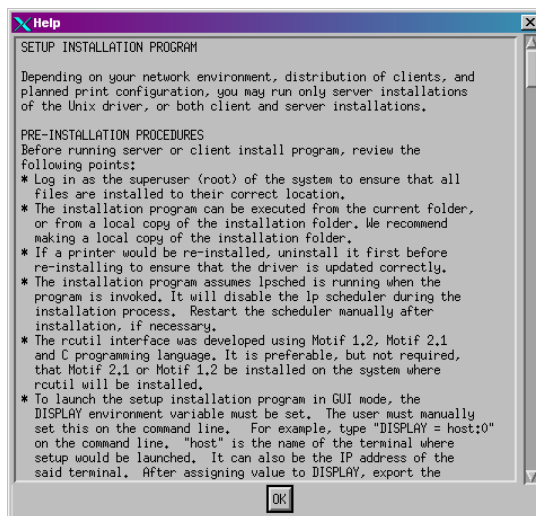


Figure 6 Help dialog

Help Dialog

The help button shows the help dialog, which describes the setup installation program. The text displayed in this dialog is taken from the `Setup.txt` that is shipped with the driver.

Text Mode

If the program fails to detect support for X-Windows in the Unix/Linux system, or if `g:no` is specified in the command line parameters, the program will run in Text mode.

Installation mode

```
Usage: ./install [[q:]<queue>] [s:<server>] [p:<portvalue>]
           [t:<insttype>] g:no
```

The `g:no` parameter launches the installation program in Text mode.

If `<queue>` and `<server>` is not specified, the installation program will prompt for them. If `<portvalue>` is not specified, the program will show the default, which is "print", and will ask if a different value will be used. If `<insttype>` is not specified, the default installed print queue type is "server".

The program will also prompt for other settings such as manpage path, middle script name, temporary files location, or UI Link path. Follow screen prompts to specify non-default settings.

Whenever a yes/no type question is asked, the upper-case letter identifies the default response. For example, **Y/N**, **N** is the default. You can just press the **Return** (or **Enter**) key to use the default setting.

After all information is specified, the program begins the install process. Status and error messages are shown to guide user through the install process.

Uninstallation mode

Usage: `./install -u [q:<queue>] [t:<instttype>] g:no`

The `g:no` parameter launches the program in Text mode.

If only `-u` is specified it will list down all installed print queues related to the driver, and let you choose which print queue to un-install.

If `<queue>` is specified, it will un-install the `<queue>` if it is installed in the system. If not, it will list down all installed print queues related to this driver.

If `t:all` is specified, it will un-install all related print queues, even if `<queue>` is specified.

If `<queue>` is not specified in the parameters, the program will list down installed print queues and will ask which print queue will be un-installed.

Post Installation Procedures

The `setup` installation program assumes `lp sched` is running when the program is invoked. It will disable the `lp` scheduler during the installation process. Restart the scheduler manually after installation, if necessary.

In GUI installation mode, a successfully set up print queue is added and selected in the setup `Printer List` field. In text installation mode, you can use `lpstat -v` (`-W` for AIX systems) to verify if the print queue has been successfully installed in the system. `lpstat` lists down the print queues available in the system.

Platform Specific Checks

Linux: Shell

For Linux systems, it is assumed that the Korn shell exists in `/bin`. If `Korn` (`ksh`) does not exist in `/bin`, the `/usr/local/tsbprn/shfilter-ps.tos` file must be modified to reflect the supported shell in the system. If, for example, Bourne Again (`bash`) shell is available, edit the first line in `shfilter-ps.tos` file, replacing `#!/bin/ksh` with `#!/bin/bash`.

SunOS: windex

For SunOS, installing the manpages may require an extra step: updating of the `windex` file. This file is an index of all manpages in a given main directory for manpages. Only those manpages with entries in the `windex` file will be available and

shown when the `man` command is used. If a manpage has no entry in the `windex` file, the said manpage may not be displayed using the `man` command. If `windex` exists in the main manpage directory, an entry for the manpage must be added into it. If it does not exist in the main manpage directory, all manpages within the subdirectories will be available to the `man` command.

If the `windex` file exists, the `setup` installation program updates it automatically each time the manpages are installed. The installation program makes a backup copy of the `windex` by renaming the file as `windex.orig`, done before updating the `windex` file. It is recommended that you save a copy of the `windex` file somewhere else so that it will not be lost as the `setup` installation program may update the `windex` file several times depending on how many print queues and manpages are being installed.

The `setup` installation program does not create a `windex` file if it is originally not found in the main manpage directory.

rcutil Property Tabs

The GA-1040 Printer Driver `rcutil` configuration program consists of four property tabs: Setup, Personality, Options, and About tabs.

Setup Tab

This tab contains the standard printer settings: paper size, paper source, destination tray, media type, orientation, duplex, and number of copies.

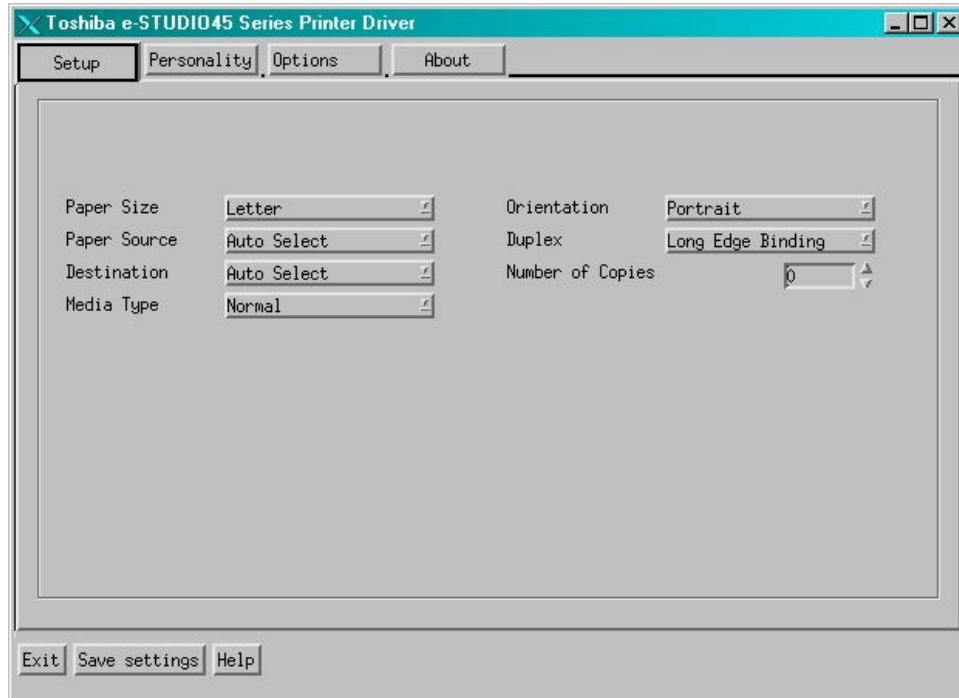


Figure 7 Setup Tab

Paper Size

The list of available paper sizes will be determined from the PPD associated with the driver. The user can select any one of the available sizes as well as specify a custom size, if `custom size` is one of the choices.

Keyword Name	Translation/Display Text
pagesize	Paper Size

Option Name	Translation/Display Text
letter	Letter
legal	Legal
ledger	Ledger
statement	Statement
a4	A4
a3	A3
b5	B5
b4	B4
a5	A5

Paper Source

The list of available input paper trays will be determined from the PPD associated with the driver. The user can select any one of the available trays.

Keyword Name	Translation/Display Text
papersource	Paper Source

Option Name	Translation/Display Text
auto	Auto Select
upper	Upper Cassette
lower	Lower Cassette
pfpu	Pedestal Upper Cassette
pfpl	Pedestal Lower Cassette
lcf	Large Capacity Feeder
manual	Bypass(Short Edge)
manualr	Bypass(Long Edge)

Destination

The list of available output trays will be determined from the PPD associated with the driver. The user can select any one of the available trays.

Keyword Name	Translation/Display Text
destination	Destination

Option Name	Translation/Display Text
auto	Auto Select
inner	Inner Tray
tray1	Tray 1
tray2	Tray 2

Media Type

The list of available media types will be determined from the PPD associated with the driver. The user can select any one of the available media types.

Keyword Name	Translation/Display Text
mediatype	Media Type

Option Name	Translation/Display Text
normal	Normal
transparency	Transparency
thick	Thick Paper

Orientation

The user can select Portrait, Landscape, Reverse Portrait, or Reverse Landscape.

Keyword Name	Translation/Display Text
orientation	Orientation

Option Name	Translation/Display Text
portrait	Portrait
landscape	Landscape
reverseportrait	Reverse Portrait
reverselandscape	Reverse Landscape

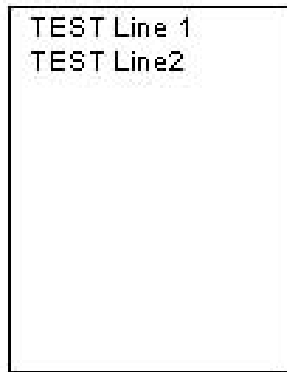


Figure 9 *Portrait*

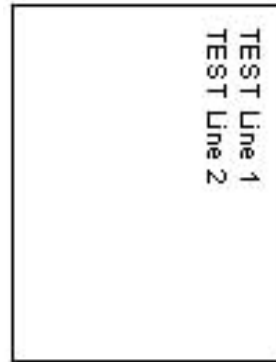


Figure 8 *Landscape*



Figure 10 *Reverse Portrait*

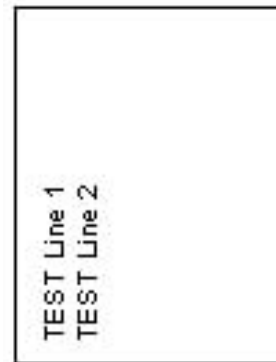


Figure 11 *Reverse Landscape*

Duplex

The user can select the output job to be Single (single-sided), Long (two-sided with long edge) binding, or Short (two-sided with short edge binding).

Keyword Name	Translation/Display Text
duplex	Duplex

Option Name	Translation/Display Text
single	None
long	Long Edge Binding
short	Short Edge Binding

Long Edge Binding

The pages are bound on the long side, regardless of orientation.

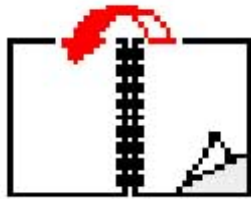


Figure 12 Portrait

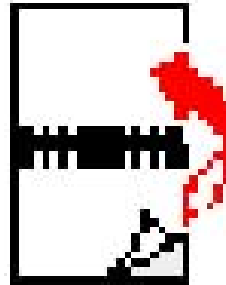


Figure 13 Landscape

Short Edge Binding

The pages are bound on the short side, regardless of orientation.



Figure 14 Portrait



Figure 15 Landscape

Number of Copies

The user can specify 1-999 copies.

Keyword Name	Translation/Display Text
copies	Number of Copies

Type	Range
Integer	1 – 999

Additional PPD-specified Property Tabs

The **Personality** and **Options** tabs are examples of PPD-specified property tabs. The settings in PPD tabs are detected from the PPD configuration file associated with the driver during installation.

Personality Tab

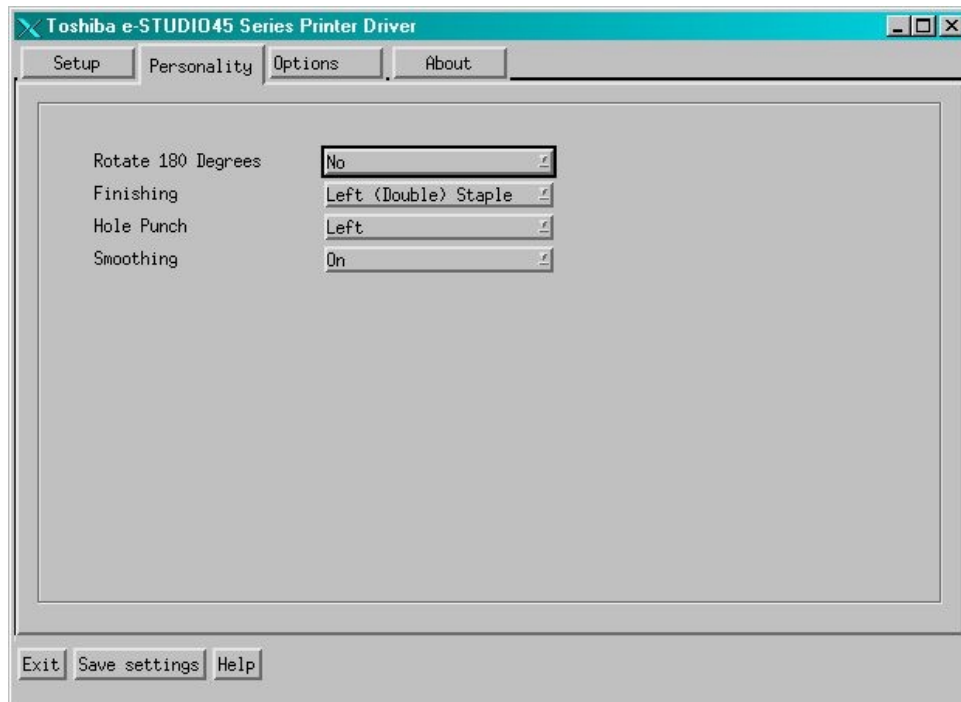


Figure 16 Personality tab

Rotate 180 Degrees

The user can enable or disable 180 degrees rotation.

Keyword Name	Translation/Display Text
userrotate180	Rotate 180 Degrees

Option Name	Translation/Display Text
0	No
1	Yes

Finishing

The user can specify to turn on collation and stapling.

Keyword Name	Translation/Display Text
finishing	Finishing

Option Name	Translation/Display Text
none	None
sort	Sort
group	Group
alternation	Alternation
stapleul	Upper Left Staple
stapleur	Upper Right Staple
staplel2	Left (Double) Staple
staplet2	Top (Double) Staple
saddle	Saddle Stich

Hole Punch

The **Hole Punch** setting is the selection for punch holes, whether turned off, or punched on the left or top of the page.

Keyword Name	Translation/Display Text
punch	Hole Punch

Option Name	Translation/Display Text
none	Off
left	Left
top	Top

Smoothing

The user can specify whether to turn on or off smoothing.

Keyword Name	Translation/Display Text
refine	Smoothing

Option Name	Translation/Display Text
off	Off
type1	On

Options Tab

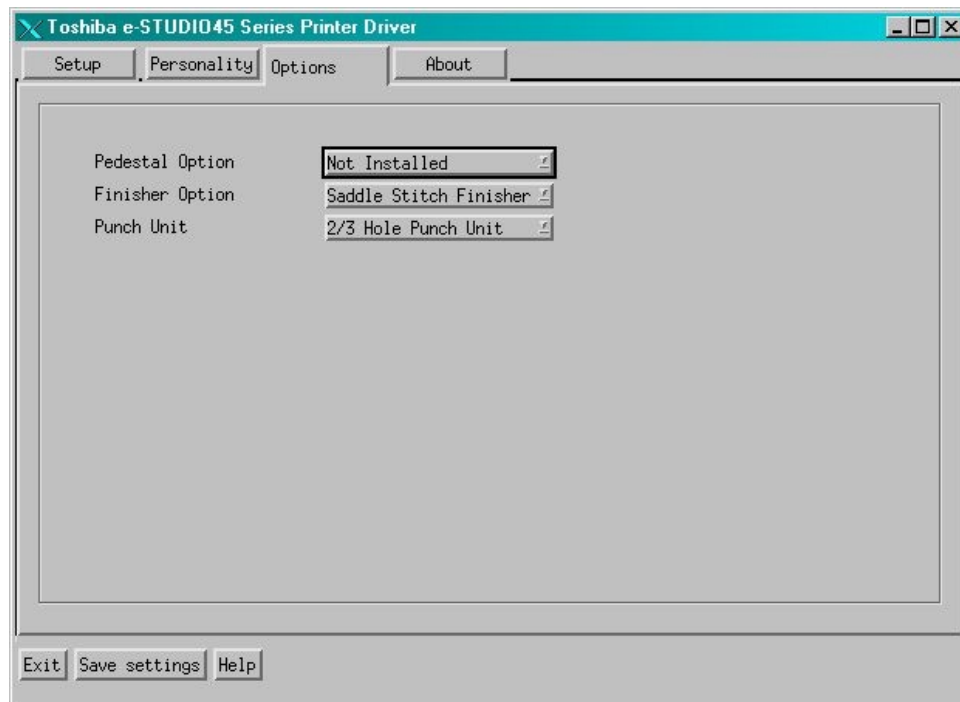


Figure 17 Options tab

Pedestal Option

This setting provides the choices for the installed pedestal devices.

Keyword Name	Translation/Display Text
pedestaloption	Pedestal Option

Option Name	Translation/Display Text
none	Not Installed
pedestal1	Pedestal 1
pedestal2	Pedestal 2
lcf	Large Capacity Feeder

Finisher Option

This setting provides the choices for the installed finishing devices.

Keyword Name	Translation/Display Text
finisher	Finisher Option

Option Name	Translation/Display Text
false	Not Installed
hangingfinisher	Hanging Finisher
finisher	Finisher
saddle	Saddle Stich Finisher

Punch Unit

This setting provides the choices for the installed punch unit devices.

Keyword Name	Translation/Display Text
punchunit	Punch Unit

Option Name	Translation/Display Text
none	Not Installed
2hole	2 Hole Punch Unit
3hole	2/3 Hole Punch Unit
4holef	4 Hole Punch Unit (F)
4holes	4 Hole Punch Unit (S)

About Tab

The **About** tab displays the product name, version, copyright and patents information.

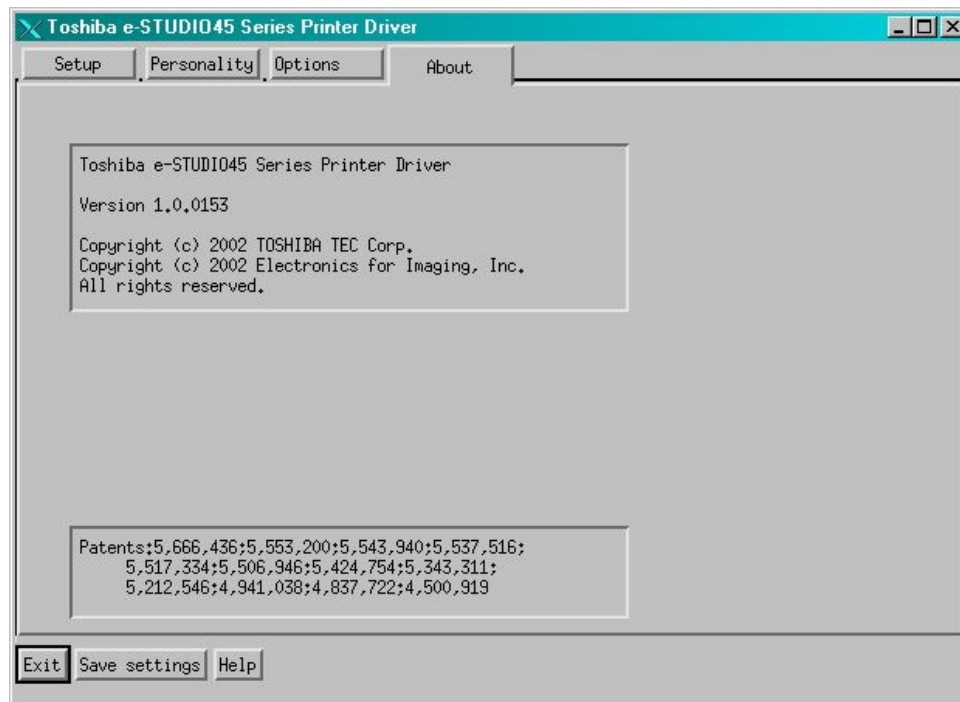


Figure 18 About Tab

Main Controls

- **Exit button**
Closes the `rcutil` configuration program.
- **Save settings button**
Stores the non-default settings to driver user defaults file (`.f533rc`).
The defaults are the settings from the PPD configuration file. Only the settings changed through that GUI would be saved to the user defaults file.
- **Help button**
Opens the Help dialog, describing how to use this `rcutil` configuration program.

Help Dialog

The Help dialog provides a description of the GA-1040 Printer Driver, including the features enabled in the driver.

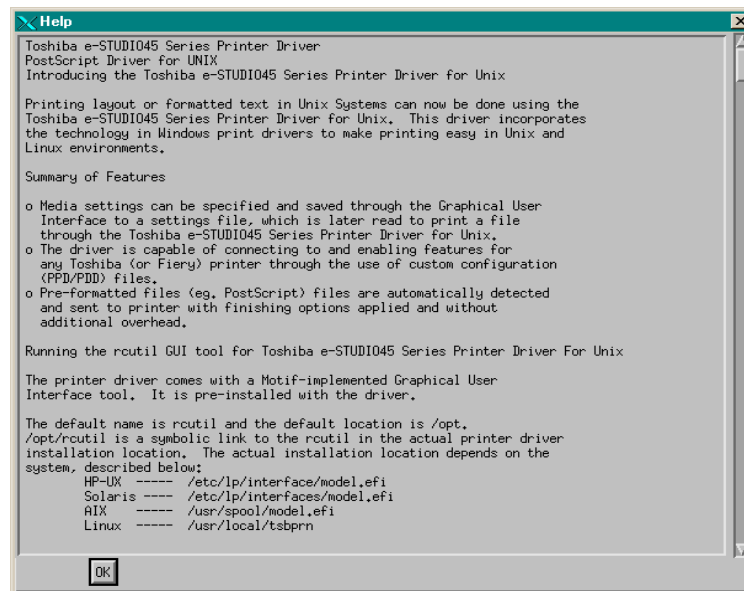


Figure 19 Help dialog

The `F533Readme.txt` file that is shipped with the driver contains the text displayed in the Help dialog. The said file can be edited for further customization.

The Help dialog also displays the list of keywords and options supported in the driver.

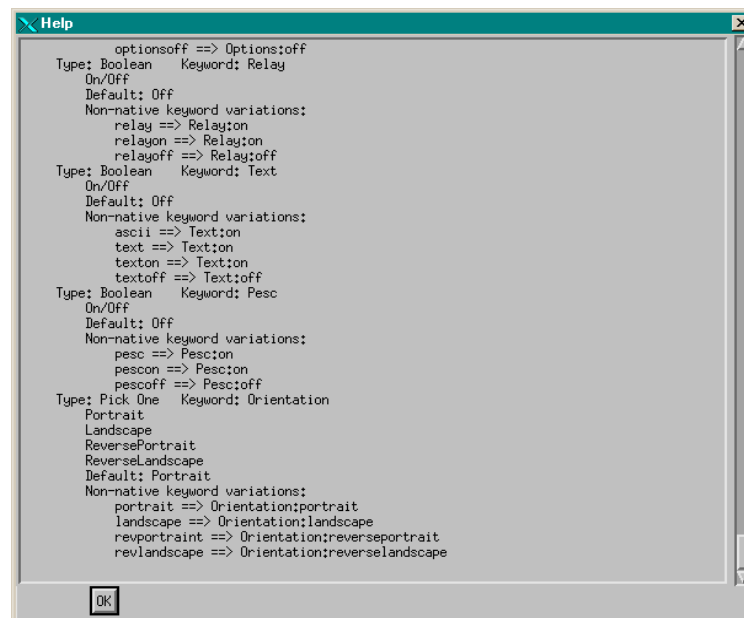


Figure 20 Bottom part of Help dialog

Localization

The buttons and settings fields in the user interface can be renamed by editing the `Rcut11` resource file. This file is found in `/usr/lib/X11/app-defaults`, except in Solaris where it is found in `/usr/openwin/lib/X11/app-defaults`.

Using rcutil

Running rcutil

To launch the GUI setup program, run `/opt/rcutil` on the command line.

```
$ /opt/rcutil <Return>
```

Note:

- The `rcutil` configuration program uses the same PPD configuration file as the CORE UNIX filter. It parses the PPD configuration file to display the settings in the GUI. If it cannot find the PPD configuration file, it will abort and the GUI will not display. Please coordinate with your System Administrator if you have this situation.
- The `/opt/rcutil` is a symbolic link to the actual file installed in the driver files path:

UNIX/LINUX System	Driver Files Location
HPUX	/usr/local/tsbprn
Solaris (SPARC)	/etc/lp/interfaces/tsbprn
Solaris (Intel)	/usr/local/tsbprn
AIX	/usr/local/tsbprn
Red Hat Linux	/usr/local/tsbprn

If your `/opt` subdirectory does not have the `rcutil` tool, you can still run it from the above locations. The `/opt` is the default location for the symbolic link where the `rcutil` program can be launched. During installation, this location can be specified to be a different location. Please note the `UI Link` path in the `setup` installation program Printer List.

The program displays the **Setup** tab at start-up. `rcutil` initially displays the default settings read from the PPD configuration file. The program then updates the GUI with the user defaults saved in the settings file (`.f533rc` in user's home directory), if it exists.

Note: The Motif libraries (libXm) may need to be installed in the system. `rcutil` requires Motif to be installed on the system for optimal operation.

Settings file

The `.f533rc` settings file contains keywords and settings that were saved through the `rcutil` configuration program. This file can also be created directly using a text editor. This file must be saved in the user's home directory.

The entries in the file is in the format: **keyword = option**, where **keyword** is the feature to be enabled or disabled, and the **option** is one of the choices configurable for that feature. The valid choices are either those defined in the configuration file or the standard options, which are features that are not defined in the configuration file but are supported in the driver. An example follows:

```
# System-Default Profile for rcutil
#
#-Number of characters per line is expected to be less than 256.
#-variables have to be in uppercase, values to be lowercase.
#
PageSize = Ledger
Destination = Inner
Orientation = Reverse Portrait
Duplex = Long
Finishing = StapleUL
Punch = Left
```

If this file exists in the user's home directory, it is parsed and the values are reflected in the `rcutil` GUI controls or widgets.

In this version of the driver, the settings file is unique in the user's home directory, named as `.f533rc`. The user may have installed the driver in different Unix or Linux systems, yet the user's home directory is the same. Therefore, all settings saved in one system will still be available in another system. In order to avoid confusion, the settings file may be deleted or its content deleted to allow the driver to reset to the default settings from the PPD configuration file.

The `rcutil` provides the capability to save settings to the settings file. It can be used to create the settings file. To do the actual printing, use the `lp` command to send the print documents to the printer.

During printing, the settings file is parsed and the values passed to the CORE UNIX filter to apply the features in the print out. The settings saved in the settings file will affect the actual print job.

Further, options can also be passed to the CORE UNIX filter through the `lp` command. Command line options takes precedence over the settings saved in the settings file.

The `rcutil` configuration program only saves the changed (or non-default) settings. Only the settings that differ from the PPD default settings are saved to the settings file. The PPD default settings are not saved. The CORE UNIX filter knows the default settings when it loads as it reads in the default settings from the PPD file. The CORE UNIX filter only needs to know the new (non-default) settings to apply to the print job. The settings file serves as a record of the settings that the user wants preserved for the next print job.

User Home Directory Access Restrictions

During printing, the `lpd` printing system through the `lp` system account must be able to access the `.f533rc` settings file. Being that the settings file is maintained in the user's home directory, the user's home directory itself must be accessible to `lp`. Otherwise, the Unix filter will fail to retrieve the saved settings and so no features will be applied on to the print job.

The user's home directory must have an "executable" attribute for users of type `others`. That is, the last attribute of the directory must show an `x`. It must be something like `dabcabcabx` where `a` can be `a` - or `r` for readable, `b` can be `-` or `w` for writable and `c` can be `a` - or `x` for executable. The last attribute is the `c` but is

required to be turned on. This would allow the `lp` system account to have access to the settings file stored in the user's home directory.

If you're having a problem printing in your system, check if the user's home directory satisfies the condition described above. Use `ls -l /home` if the user's home directory has executable access. If not, you can turn it on using `chmod o+x /home/userdirectory`.

Constraints

As settings are changed, the program checks if the selection violates some constraints specified in the PPD configuration file. The constraints are rules that tell when an option is valid when combined with other options. For example, Punch holes cannot be done if there is no puncher. An A3 paper size may not be allowed to come from Tray 3. Duplex may not be allowed on Transparency paper. These are only examples. To find out about what options can be combined with other options, you must check the PPD configuration file. A message will be shown when you select an option that violates a constraint:

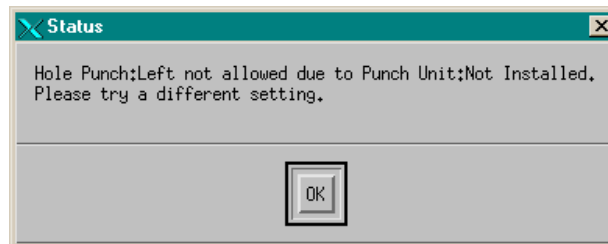


Figure 21 Constraint violation error

Saving settings

The **Save settings** button saves the changed (non-default) settings to the settings file. The program checks if the selected options are non-default (compared to values from configuration file). If so, they are saved. If all settings are default settings, the file will be empty and no settings will be saved.

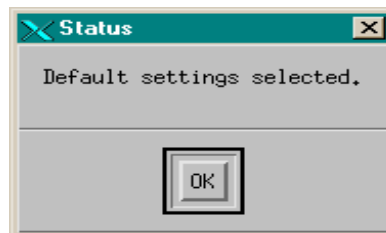


Figure 22 When no setting is saved

When a setting is saved, the following message is shown.

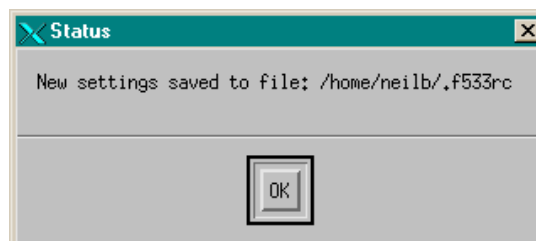
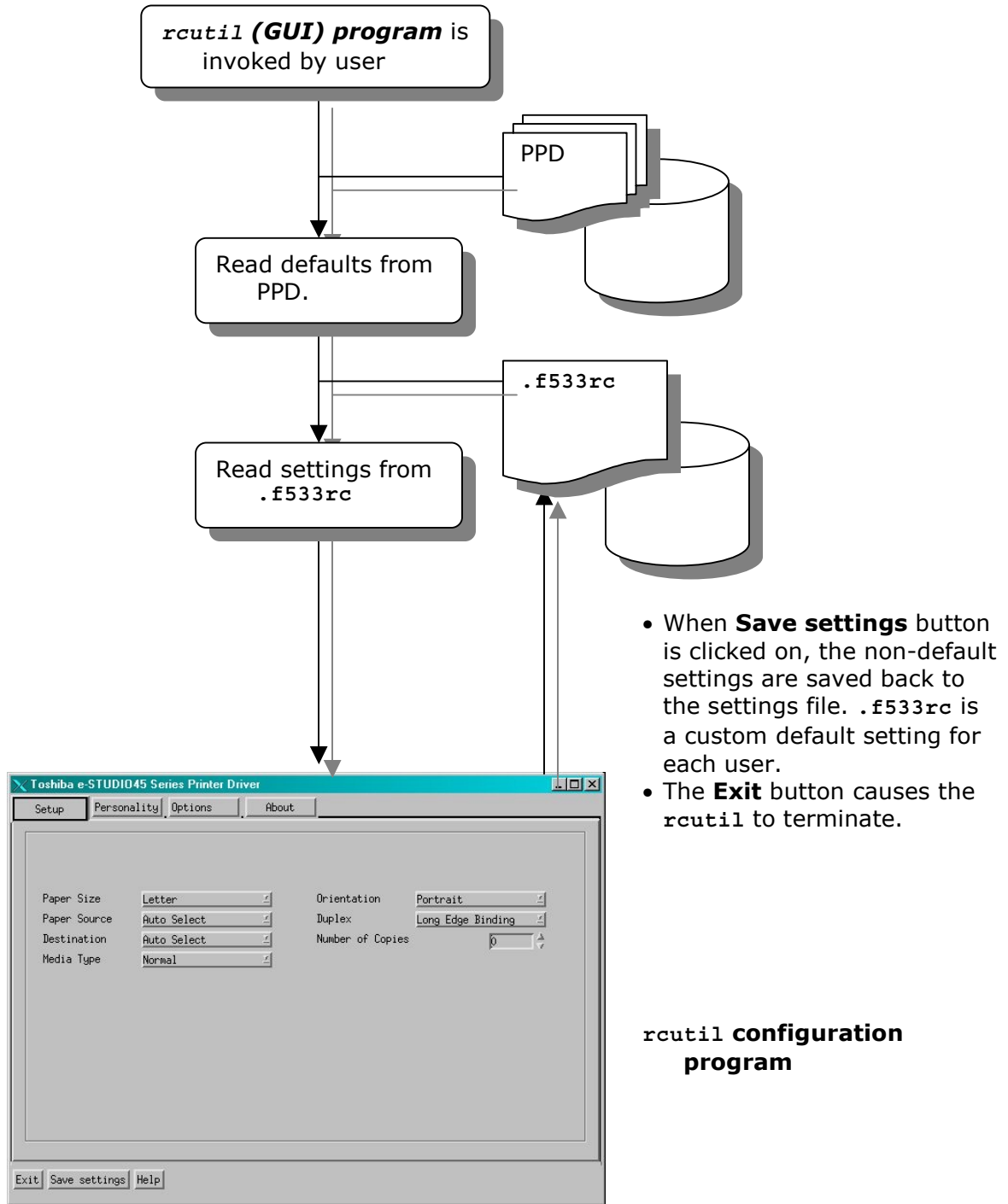


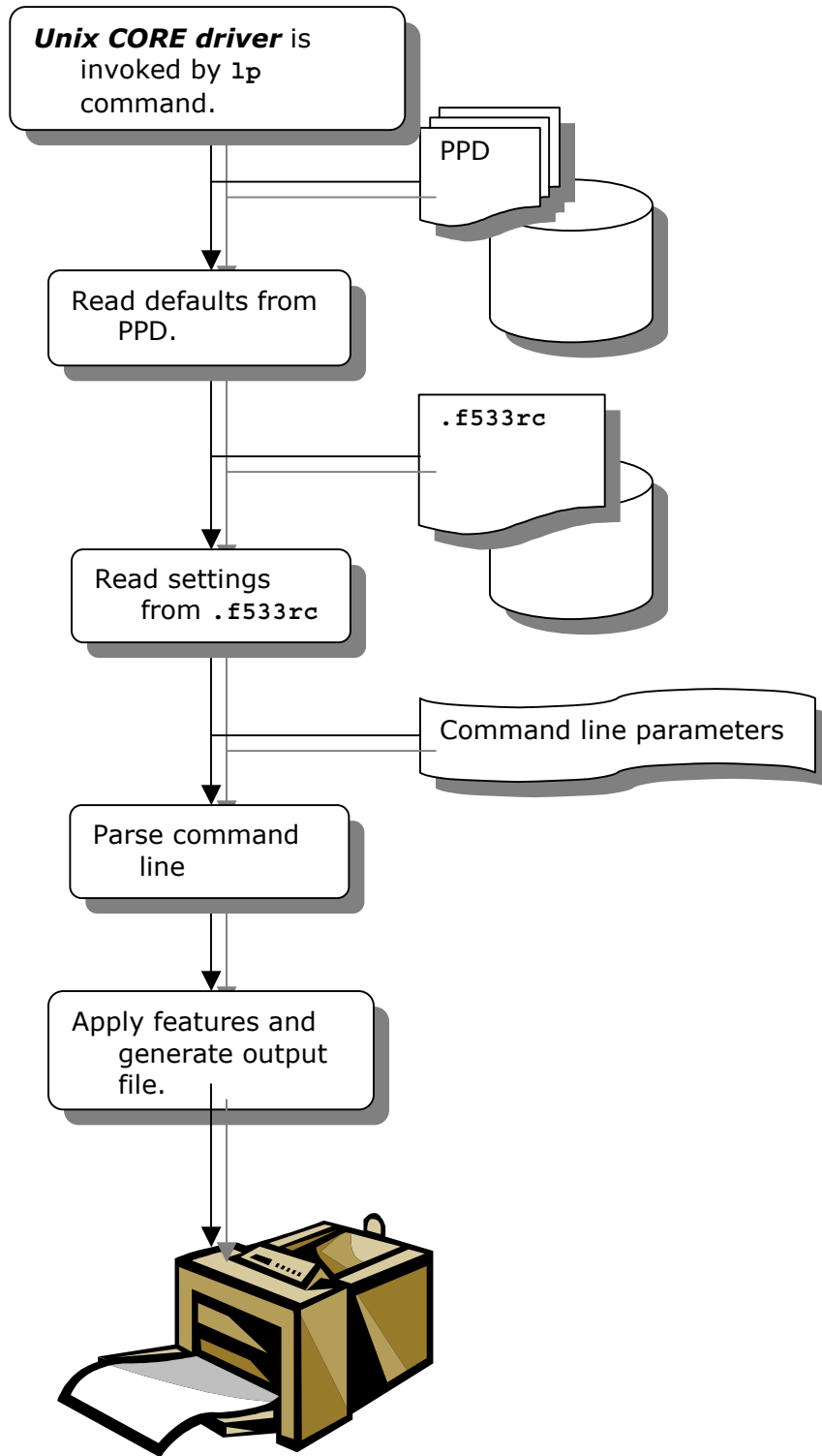
Figure 23 When any setting is saved

Illustrated Process and Data Flow

GUI Process



Unix CORE Driver Process



Printer Driver Details

This section describes in detail the features available in the GA-1040 Printer Driver.

Standard Options

Feature	Keyword:Option	Non-native form	Description
Copies	copies:# Range 1 – 999	copies# where # is in the range 1 – 999	Sets number of copies.
Paper Size	pagesize:<param> letter ledger legal statement A3 A4 A5 B4 B5	letter ledger, tabloid, 11x17 legal statement A3 A4 A5 B4 B5	Sets the paper size. This command is defined in the configuration file.
Paper Source	papersource:<param> auto upper lower pfpu pfpl manual manualr lcf	tray1 tray2, upper, ub, ubin tray3, lower, lb, lbin pupper, puppercassette plower, plowercassette bypassS, manual, man, manualfeed bypassL lcf, largecapacityfeeder, feeder	Feed media from the specified tray. This command is defined in the configuration file. The preprocessor script file (script.c) must be modified when new trays are configured in the printer.
Destination	destination:<param> Auto inner tray1 tray2	bin3 - bin10 bin1, topbin bin2	Output pages to specified bin. By default, the bin2 option (face-down) is valid, bin1 is the Tray1 (face-down). Bin3 through bin10 are optional external output bins. This command is defined in the configuration file. When the option bins are installed (added in the configuration file, the preprocessor script file (script.c) must also be modified.
Media Type	mediatype:<param> normal transparency thick	mtypeplain, mtypenormal mtypetransparency mtypethick	Use the specified media type. This command is defined in the configuration file.
Orientation	orientation:<param> portrait landscape reverseportrait reverselandscape	portrait landscape revportrait revlandscape	Print in portrait, landscape, reverse portrait or reverse landscape mode.

Feature	Keyword:Option	Non-native form	Description
Duplex	duplex:<param> single long short	simplex duplex, double, vd, d hduplex, hd	For simplex, print single sided. If not specified, the printer's front panel sets the default to either simplex or duplex. For duplex and hduplex, print double sided with long-edge binding, short-edge binding. This command is defined in the configuration file.
Relay	relay:<param> on off	relay	CORE option only. This feature allows the CORE driver to print a formatted file with some PJI commands added in the print job header and footer. These PJI commands can be finishing options that will be applied to the page on the engine at print time.
Options list	options:<param> on off	options, optionson optionsoff	CORE option only. Lists all available options.
Language selection	language:<param> postscript	post, postscript	Force language to PostScript mode. Only the PDL for the specific build is valid. For example, if the driver is a PostScript build, post is the only valid parameter. To use PCL5, use the PCL5 Unix driver build. To use PCL6, use the PCL6 Unix driver build.
Text mode	text:<param> on off	text, texton, ascii textoff	CORE option only. In PostScript, print text, without interpreting it. In non-PostScript, add CR for each LF. This option allows the CORE driver to pass data to the printer without adding any extra commands.
Pesc mode	pesc:<param> on off	pesc, pescon pescoff	Same as Text Command.

PPD Options

Feature	Keyword:Option	Non-native form	Description
Rotate 180 Degrees	userrotate180:<param> 0 1	UserRotate1800 UserRotate1801	Sets User Rotate 180 Degrees On or Off.
Finishing	finishing:<param> none sort group alternation stapleul stapleur staplel2 staplet2 saddle	finishingnone finishingsort finishinggroup finishingalternation finishingstapleul finishingstapleur finishingstaplel2 finishingstaplet2 finishingsaddle	Specifies the finishing option. Needs a finishing device installed (under Options tab, or the Finisher keyword).
Hole Punch	punch:<param> none left top	punchnone punchleft punchtop	Selects the location of the hole punch. Needs a punch unit device installed (under Options tab, or the PunchUnit keyword).
Smoothing	refine:<param> off type1	refineoff refinetype1	Turns on or off the smoothing feature.
Pedestal Option	pedestalooption:<param> none pedestal1 pedestal2 lcf	pedestalooptionnone pedestalooptionpedestal1 pedestalooptionpedestal2 pedestalooptionlcf	Specifies which pedestal option is installed.
Finisher Option	finisher:<param> false hangingfinisher finisher saddle	finisherfalse finisherhangingfinisher finisherfinisher finishersaddle	Specifies which finishing device is installed.
Punch Unit	punchunit:<param> none 2hole 3hole 4holef 4holes	punchunitnone punchunit2hole punchunit3hole punchunit4holef punchunit4holes	Specifies which punch unit device is installed.

Printing

To send a job from the command-line, you can type the following on the command line:

```
lp -d <print_queue> -o option1 -o option2 ... -o optionn <file_to_print>
```

or

```
lp -d <print_queue> -o "option1 option2 ... optionn" <file_to_print>
```

Note: The second form of the command may not work on some systems. If this happens, use the first form.

The `option` can be in the *non-native* or *native* format. Native format means `keyword:option` while non-native means `keywordoption`. Some options can be specified as just `option`, for example, `A4` or `duplex`.

Methods of Printing

Through rcutil

- Run `rcutil`
- Make changes in the settings in the GUI
- Save settings (`.f533rc` will be updated in the user's home directory).
- Exit `rcutil`
- Use `lp` command to send the job:
 - `lp -d printqueue filename.prn`

Through the command line

- Pass the options through the `lp` command:
 - `lp -d printqueue -o keyword1:option -o keyword2:option filename.prn`
`keyword:option` is any pairing of a feature and one of its corresponding options. Example: `Punch:Left` or `PageSize:A4`

NOTE:

- The actual output using this method may be affected by any settings saved in the settings file (`.f533rc`).

Printing from Unix applications

Printing is possible directly from Unix/Linux applications. This section discusses printing from **Netscape Navigator** and **Adobe Acrobat Reader**.

Once the printer driver has been installed, print jobs can be sent to the print queue directly from Unix applications, or from command line. If the application being used has a print dialog, specify the `lp` command in the `Print Command` field and use the print queue to send the job to.

If the application has the capability to `print to file`, print the document to file and send the output file through `lp` command to the print queue.

These are better illustrated in the next sub-sections.

Printing in Netscape Navigator

Specify in the print command the print queue and the options that will be applied to the printout.

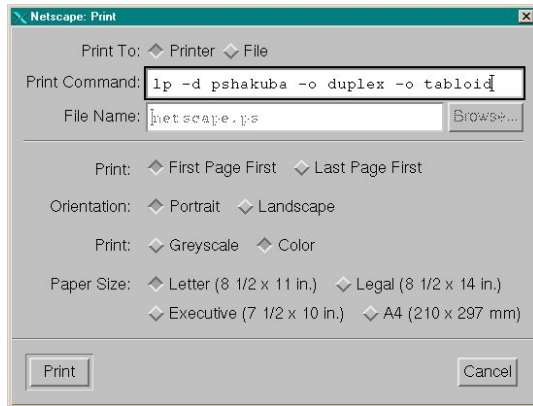


Figure 24 Print to Printer

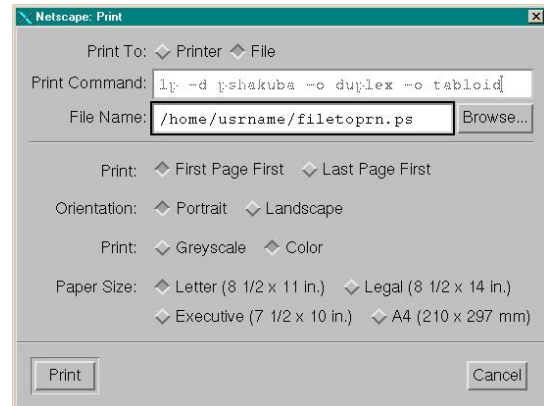


Figure 25 Print to File

Then click on **Print** button to start printing the file through **pshakuba** print queue. In Figure 23, the printout will be double-sided (long edge) and will use tabloid paper size.

In Figure 24, if printing to file, specify the destination file in the **File Name** field, then click the **Print** button. After the dialog finishes, use **lp** to send the printed file to the print queue, as in the following:

```
lp -d pshakuba -o duplex -o tabloid /home/username/filetoprn.ps
```

Duplexing and tabloid paper size will also then be applied to the print job.

Printing in Adobe Acrobat Reader

Specify in the print command the print queue and the options that will be applied to the printout.

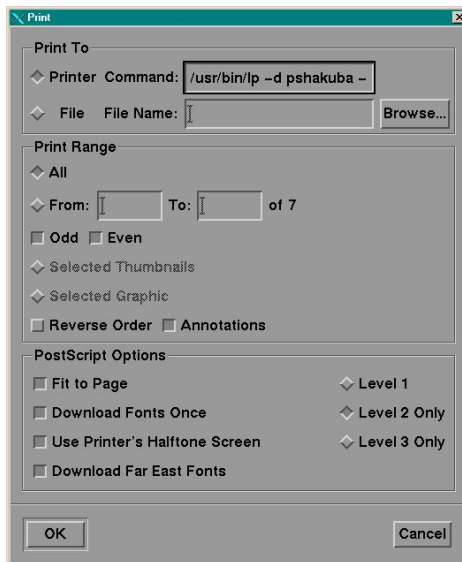


Figure 26 Acrobat Reader print dialog

If printing to file, as in the following figure:

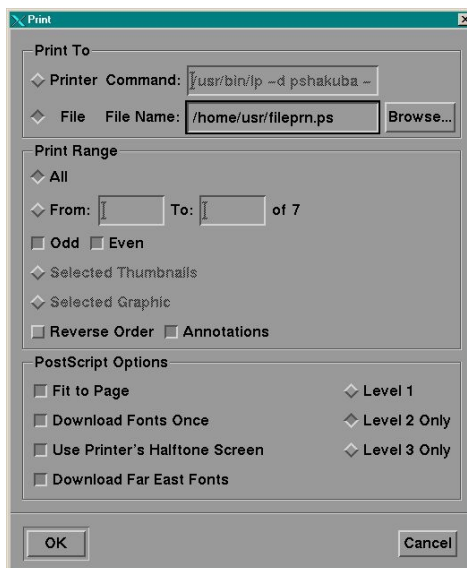


Figure 27 Printing to file

specify the destination file in the **File Name** field, then click the **Print** button. After the dialog finishes, use `lp` to send the printed file to the print queue, as in the following:

```
lp -d pshakuba -o duplex -o tabloid /home/usr/fileprn.ps
```

Messages

The following tables show the messages that the installation program and the rcutil configuration program may generate, with the possible causes why the messages are shown.

Installation Phase

These messages are shown during installation phase.

Error Messages

Message	Possible Cause
Please install the Motif library. The <library> is missing.	Shown by <code>install</code> script if it fails to detect the Motif <library> in the system.
FATAL ERROR: Cannot parse command line parameters due to lack of memory.	Failed to allocate memory for storing the command line parameter values.
ERROR: Cannot find the server named <servername> in the network.	<servername> cannot be detected using <code>nslookup</code> or <code>host</code> system utility programs..
ERROR: Cannot find the printer named <printername> in the network.	<printername> cannot be detected using <code>nslookup</code> or <code>host</code> system utility programs.
ERROR: Failed to detect platform info	Failed to allocate memory for detecting platform info.
ERROR: Failed to read new driver path	Prompt for driver path failed.
ERROR: Failed to initialize driver installation info.	Cannot allocate memory for DriverInfo data structure.
FATAL ERROR: Cannot allocate string buffer.	Failed to allocate memory for a string buffer.
ERROR: Failed to read new manpage path.	Prompt for CORE filter manpage path failed.
ERROR: Failed to read new manpage path	Prompt for <code>rcutil</code> manpage path failed.
ERROR: Failed to read new UI Link Path	Prompt for <code>rcutil</code> link path (eg. /opt) failed.
ERROR: Failed to read new temporary files path.	Prompt for the temporary files path failed.
Unknown choice. Please re-enter choice	When user selects an invalid value in the prompt for identifying the type of remote server OS.
ERROR: Failed to read new client middle script name.	Prompt for client middle script name failed.
ERROR: Failed to read new middle script name.	Prompt for middle script name failed.
ERROR: Failed to read new pass-thru name.	Prompt for pass-thru name failed.
ERROR: Failed to initialize driver installation info.	Failed to allocate memory for driver installation info, or failed to initialize manpage path names.
<code>setup</code> is not installer for <platform>. Please use the <platform> installer.	If <code>setup</code> is accidentally launched in an unsupported platform, for instances that the <code>setup</code> binary program may run in such platforms.
ERROR: Failed to detect user name	Failed to determine the name of the current logged on user using the <code>whoami</code> system utility.
ERROR: <username> is not authorized to install this printer driver.	The user that launched the <code>setup</code> installation program does not have

Message	Possible Cause
You must be 'root' (superuser) to install.	"superuser" access is needed to be able to install the printer driver.
ERROR: The default folder for manpage of <manpage> does not exist.	The manpage cannot be installed because the path for the manpage cannot be found or accessed.
ERROR: Printer queue <printqueue> already exists.	Print queue that is passed as parameter as print queue to be installed is already in the system.

Status and Prompt Messages

Message	Description
Un-install another queue? y/N	Asks whether to try to un-install other detected print queues. Default is No.
Print Queue Name:	Prompting for the print queue, as it is not specified in the command line parameter.
Select print queue to delete [choice(s): 1-n]	Ask for which detected print queue to un-install.
Validating <printqueue>	Status message when checking if print queue is not yet installed in the system.
Validating <destinationname>	Status message when checking if network printer or remote server exists in the system.
Destination server:	Prompt for name of network printer or remote server to associate the print queue that is to be installed.
Further setup customization:	Status message that implies more prompts to follow.
Default remote print queue: <remoteprintqueue>	Identifies the current default print queue.
Change destination print queue? y/N	Asks whether to specify another remote print queue or use default print queue. Default is No.
Specify a destination print queue? y/N	Asks whether to name a destination print queue or not. Default is No. This should never appear. This is added as a precautionary measure only if the default remote print queue was not detected.
Specify name of destination remote queue:	Prompts for name of new destination print queue.
Default network printer port:	Identifies the current default printer port.
Change destination printer port? y/N	Asks whether to specify another destination port or use default port. Default is No.
Specify a destination printer port? y/N	Asks whether to name a destination port or not. Default is No. This should never appear. This is added as a precautionary measure only if the default printer port was not detected.
Specify name of destination printer port:	Prompts for name of new destination printer port.
Install Manpages? y/N	Asks whether to install the manpages or not. Default is No.
Set as default? y/N	Asks whether to set the installed print queue as the system's default print

Message	Description
	queue. Default is No.
Install User Interface configuration program? Y/n	Asks whether to install the rcutil configuration program. Default is Yes.
Default driver path:	Identifies the current default driver path. The driver path is the system's directory for modelscript, middlescript, or backend program.
Change driver path? y/N	Asks whether to specify a different driver path. Default is No.
Specify a driver path? y/N	Asks whether to name a driver path or not. Default is No. This should never appear. This is added as a precautionary measure only if the default printer port was not detected.
Specify name of driver path:	Prompts for new driver path.
Default CORE filter manpage path:	Identifies the current default CORE filter manpage path.
Change CORE filter manpage path? y/N	Asks whether to specify a different CORE filter manpage path. Default is No.
Specify CORE filter manpage path? y/N	Asks whether to name a CORE filter manpage path or not. Default is No. This should never appear. This is added as a precautionary measure only if the default printer port was not detected.
Specify CORE filter manpage path:	Prompts for new CORE filter manpage path.
Default configuration program manpage path:	Identifies the current default configuration program manpage path.
Change configuration program manpage path? y/N	Asks whether to specify a different configuration program manpage path. Default is No.
Specify configuration program manpage path? y/N	Asks whether to name a configuration program manpage path or not. Default is No. This should never appear. This is added as a precautionary measure only if the default printer port was not detected.
Specify configuration program manpage path:	Prompts for new configuration program manpage path.
Default UI Link Path:	Identifies the current default UI Link Path.
Change UI Link Path? y/N	Asks whether to specify a different UI Link Path. Default is No.
Specify UI Link Path? y/N	Asks whether to name a UI Link Path or not. Default is No. This should never appear. This is added as a precautionary measure only if the default printer port was not detected.
Specify UI Link Path:	Prompts for new UI Link Path.
Default path for temporary files:	Identifies the current default path for temporary files.
Change path for temporary files? y/N	Asks whether to specify a different path for temporary files. Default is No.
Specify path for temporary files? y/N	Asks whether to name a path for temporary files or not. Default is No. This should

Message	Description
	never appear. This is added as a precautionary measure only if the default printer port was not detected.
Specify path for temporary files:	Prompts for new path for temporary files.
OS of remote server to connect to 1 – Sun SunOS/Solaris 2 – HP UX 3 – IBM AIX 4 – Red Hat Linux Default: <platformID>	Text-mode menu for specifying the remote server operating system.
Choose:	Prompts for the ID of the remote server OS (from the text-mode menu above).
Enable three-digit request numbers? y/N	Asks whether to enable 3-digit request numbers in HP-UX client installation types. The default can be a Yes or No depending on default value of the 3-digit request numbers flag.
Default client middle script:	Identifies the current default client middle script.
Change client middle script? y/N	Asks whether to specify a different client middle script. Default is No.
Specify client middle script? y/N	Asks whether to name a client middle script or not. Default is No. This should never appear. This is added as a precautionary measure only if the default printer port was not detected.
Specify client middle script:	Prompts for new client middle script.
Default middle script:	Identifies the current default middle script.
Change middle script? y/N	Asks whether to specify a different middle script. Default is No.
Specify middle script? y/N	Asks whether to name a middle script or not. Default is No. This should never appear. This is added as a precautionary measure only if the default printer port was not detected.
Specify middle script:	Prompts for new middle script.
Default pass-thru name:	Identifies the current default pass-thru name.
Use a different pass-thru name? y/N	Asks whether to name a pass-thru name or not. Default is No. This should never appear. This is added as a precautionary measure only if the default printer port was not detected.
Specify pass-thru name:	Prompts for new pass-thru name.
Installing the man pages.	Status message when starting to install the man pages.
EFTPS manpage already exists and will be updated.	Status message when installing over an existing CORE filter manpage.
rcutil manpage already exists and will be updated.	Status message when installing over an existing configuration program manpage.
Installing the EFTPS manpage.	Status message during actual install of CORE filter manpage.
Installing the rcutil manpage.	Status message during actual install of

Message	Description
	configuration program manpage.
To see supported CORE options, enter: man EFTPS	Tells users on how to view the CORE filter manpage.
To see GUI setup program manpage, enter: man rcutil	Tells users on how to view the configuration program manpage.

rcutil Configuration Program

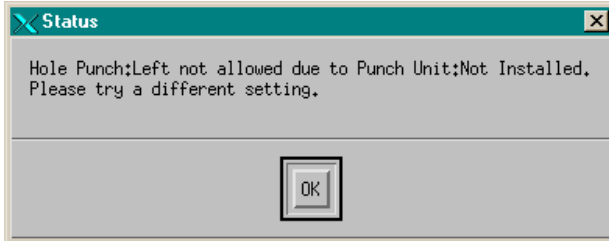


Figure 31 Constraint violation error message

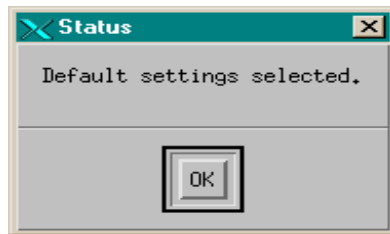


Figure 28 When no setting is saved

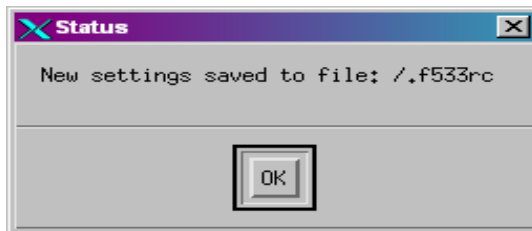


Figure 30 When any setting is saved

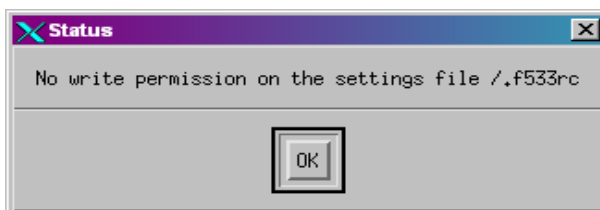


Figure 29 Error when `.f533rc` cannot be written on.

If `.f533rc` cannot be created, try adding executable permission for "other" users for the directory where it is being created. If it's in the / root directory, edit and create an empty `.f533rc` and then change its attribute so that "other" users has executable permission. Use `chmod o+w .f533rc` to do this.

CORE Driver

A banner page is automatically printed if there's an error in the print job.

```

User   : <username>
JobID  : <jobidnumber>
Title  : <doctitle>
Time   : DD MM D HH:MM:SS YYYY
Copies : 1
Options:
    <option1>
    <option2>
    ...
    <optionn>

[Error message]

```

Figure 32 Banner page template

The banner page contains the following header information.

Error type	Banner Page error message
Unrecognized non-native parameter	Cannot recognize option: <parameter>
Unrecognized native-format parameter (single word)	Invalid option: <parameter>
Unrecognized native-format parameter (with colon)	Invalid keyword or parameter: <keyword>:<option>
Constraint error	A conflict was detected between: <param1> and <param2> Please change either one of these settings.

For the unrecognized parameters, check for validity the non-native keyword or the native keyword and option pair. The options page can be printed using the `options:on` parameter or if running the `rcutil` configuration program, on the Help page.

A constraint error means that one of the listed parameters (either `param1` or `param2`) cannot be used with each other. To fix this error in next printing, one of the parameter's values must be changed.

If either `param1` or `param2` is not actually one of the parameters passed to `lp`, that means that the default setting for the parameter violates the constraint setting for the other parameter. To fix this, the parameter must be passed as one of the parameters to `lp` with the correct (non-default) setting.

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