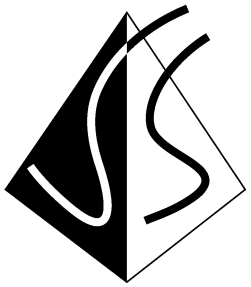
BlackMagic
USER'S GUIDE



SERENDIPITY
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BlackMagic User's Guide Version 2.2
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CONTENTS

INTRODUCTION

About this guide

This users guide provides information for the installation configuration and operation of BlackMagic (version 2.1 & above) digital proofing software.

Conventions for instruction steps

The instructional procedures consist of main steps and detailed sub-steps.

The main steps have numbered headings in bold type, and the detailed sub-steps are sequenced using lower case letters.

As shown in the sample below, the sub-steps contain a variety of type styles and these are explained in the table following.

This structure lets you scan the main steps, referring to the detailed sub-steps when necessary. A summary of the main steps appears at the beginning of all procedures and for clarity, sub- steps have only one event per line.

SAMPLE:

2 Create a Macintosh accessible volume

c In the *Open* field
type: `winfile`
press <enter>
click OK
File Manager screen is displayed

CONVENTION	MEANING	EXAMPLE
Italicised	A name to look for on the screen	*File Manager*
`Courier`	Literal text to type in	`Winfile`
<keyname>	A key on the keyboard to press	<enter>
↵	Press the Return or Enter key	↵
Small italic	A note applying to a step	*This is a step note*

Type style conventions used in instructions

Overview

BlackMagic

BlackMagic is a digital proofing system that takes a totally new approach to digital proofing

Instead of receiving pages to be proofed as postscript data, BlackMagic uses the bitmap files (ripped data) produced by the imagesetter / platesetter RIP as the data to produce a proof. This ensures data integrity on the proof. Any problems that can occur in the final film or plate, will also be reproduced on a proof from the BlackMagic system.

Problems identified by BlackMagic include:

- Font substitution
- High resolution / low resolution image substitution
- Ripping problems
- Trapping problems
- Text re-flow problems
- RGB images in document
- Fit problems

In addition to identifying the above problems, BlackMagic produces check or contract proofs (depending on the proofers colour fidelity) which can be given to customers instead of conventional chemical proofs. These BlackMagic proofs save both labour and materials and also provide a faster turn-around time for customer proofs and validation of the correctness of a page.

BlackMagic can also proof jobs containing special colours. This is particularly useful for the packaging industry. There is no need to convert specials to process colours just for proofing. BlackMagic automatically handles special colours and provides an on-board database of colours, which the user can extend as required.

BlackMagic also provides a built-in level 2 Postscript RIP (BlackMagic Pro and Bureau only) that can be used for pre-flight checking of pages directly from the Macintosh, Windows and UNIX desktop without needing to send the job to the imagesetter / platesetter RIP first. Note the difference in terminology. Other manufacturers call this type of proof a digital proof. We refer to it as a pre-flight check proof, since the Imagesetter/Platesetter RIP has not yet ripped the job.

A *true digital proof* is one produced from the actual bitmap files generated by the Imagesetter/Platesetter RIP. This is similar to chemical proof, which is produced by using the film itself. A pre-flight proof is generated from Postscript data re-ripped at a different resolution by the RIP driving the digital proofer.

BlackMagic provides a range of colour controls to produce the highest fidelity colour on any proofer. It supports industry standard ICC profiles to allow matching any printing process as well as LUT (lookup tables) to provide unsurpassed colour control. It also provides automatic colour replacement of plates. This is ideal for automatically producing blue-line proofs to check trapping and other packaging related problems.

Nesting (paper optimisation) is included with BlackMagic. Nesting allows the printing of many small pages on large format printers without wasting paper. BlackMagic automatically places pages side by side in the optimal configuration to maximise print area and conserve paper.

Functional overview

Before describing the philosophy behind the operation of BlackMagic a few terms need to be defined.

Output Device: An output device is a physical printer, proofer or plotter. The term output device is used rather than printer, so as to distinguish it from a printer configuration within BlackMagic (see below).

Destination: A destination within BlackMagic is a configuration item that informs BlackMagic about the physical connection of an output device to the BlackMagic host computer. It allows BlackMagic to send information to output device using a variety of networking protocols and operating system services. Destinations can be used to send to remote output devices attached to other computers, output device with print server boxes attached to them, as well as to any output device on the Internet. The possibilities are unlimited.

Printer: A printer defines the capabilities of an attached output device. BlackMagic uses this to determine the characteristics of that device and to present the user with appropriate options when configuring Pagesetups. The printer also defines the queue used by BlackMagic to schedule jobs for output on that device. A printer together with a destination fully describes the attached printer and allows BlackMagic to determine how jobs should be processed and sent to it.

Pagesetup: A pagesetup defines various settings required for processing pages. These settings include colour management, screening, scaling, rotation, de-screening quality as well as how other users on the network will print to BlackMagic using this pagesetup.
Pagesetups are attached to specific printer definitions. An unlimited number of Pagesetups can be created for a particular printer allowing the user to configure different Pagesetups for different printing conditions like for example different printing stock, different printing processes to match, different output resolution.

RIPS

A RIP defines an imagesetter or platesetter RIP that BlackMagic should poll for jobs. Settings like the type of RIP, job directory and polling interval are defined here.
Once a RIP is configured and the polling is turned on, BlackMagic will present the user with a list of already ripped jobs in the RipMonitor window. These jobs can then, either manually or automatically, be queued for proofing to one of the already configured Pagesetups. Jobs processed from a configured RIP provide a *true digital proof* from the dots produced by the imagesetter / platesetter RIP.

Data Flow through BlackMagic system

The following diagram illustrates how data permeates through the BlackMagic system from the input stage (data reception) all the way to he output stage (printing).

Job processing (nesting off)

Input	Data is received using one of the configured network protocols ("publish as" in the pagesetup). In the case of a polled RIP data is spooled (copied to local disk) using FTP (file transfer protocol) or is flagged as received, if local polling was configured.
⇩	
PageSetup	Settings are extracted from the appropriate pagesetup including any printer custom settings and passed to the server along with the job.
⇩	
Imaging Server	The job is processed for the target printer using all the settings passed along from the previous stage. This includes colour correction, screening, rotation, scaling, de-screening and colour replacement.
⇩	
Printer	The job is added to the printer's queue awaiting output. Once it becomes the active job it is passed to the destination for sending to the printer.
⇩	
Destination	The raw data describing the job in the printer's native language is sent to the device using the configured destination driver. In the case of a local print queue, the data is passed to the operating system printer / queue for sending to the printer.
⇩	
Printer	The job is placed back in the printer queue and flagged as done. It is available for re-printing without the need to reprocess.

Job Processing (nesting on)

Input	Data is received using one of the configured network protocols ("publish as" in the pagesetup). In the case of a polled RIP data is spooled (copied to local disk) using FTP (file transfer protocol) or is flagged as received, if local polling was configured.
⇩	
PageSetup	Settings are extracted from the appropriate pagesetup including any printer custom settings and passed to the server along with the job.
⇩	
Imaging Server	The job is processed for the target printer using all the settings passed along from the previous stage. This includes colour correction, screening, rotation, scaling, de-screening and colour replacement.
⇩	
Printer	The job is added to the printer's nesting queue.
⇩	
Nesting server	All jobs in the nesting queue are used to create a nested job. If the created nest meets the nesting criteria as configured in the printer control panel, then the nested job is passed along to the printer queue, otherwise it is placed back into the nesting queue. A nesting check is performed every 3 minutes by the system.
⇩	
Printer	The job is added to the printer's queue awaiting output. Once it becomes the active job it is passed to the destination for sending to the printer.
⇩	
Destination	The raw data describing the job in the printer's native language is sent to the device using the configured destination driver. In the case of a local print queue, the data is passed to the operating system printer / queue for sending to the printer.
⇩	
Printer	The job is placed back in the printer queue and flagged as done. It is available for re-printing without the need to reprocess.

INSTALLATION & START UP

Installation Prerequisites

The hardware components listed below are the minimum requirements to utilise your BlackMagic software to its fullest potential. Your local dealer will be able to advise you further, regarding new hardware technology that has emerged since the time of writing that will increase the performance of your proofing system.

Installation prerequisites for Windows NT workstation

Hardware Requirements

- **CPU and Motherboard**
  For Intel based systems: Dual CPU Pentium II 400Mhz with 100Mhz Bus
  For Alpha based systems: Alpha 21164 Processor 600Mhz or Better
- **Video card**
  24bit card with driver for NT installed, configured for a minimum of 65535 colours.
- **Memory**
  256Mb
- **Disk Storage:**
  200Mb Free for Installation. 6Gb free For BlackMagic operation.
- **Network card**
  100BaseT card, with NT driver installed.
- **A Quad CD-ROM drive or better**
- **Colour monitor**
  Capable of 1152x864x70Hz non-interlaced resolution.
- **Microsoft compatible serial or PS/2 Compatible mouse**
- **Extended (101 key) keyboard**

Software Requirements

- Windows NT workstation installed Including the following NT components :
  - Windows networking installed
  - TCP/IP protocol installed
  - AppleTalk protocol installed
  - Microsoft TCP/IP print services

Installation prerequisites for Windows NT server

Hardware Requirements

Same as Windows NT workstation See Above.

Software Requirements

- Windows NT Server Including the following NT components :
  - Windows networking installed
  - TCP/IP protocol installed
  - AppleTalk protocol installed
  - Microsoft TCP/IP print services

Installation prerequisites for SGI

- **SGI/IRIX Workstation**
  O2 R1000 or better, e.g. Octane, Origin etc.
- **192-256MB of RAM**
- CD-ROM **drive**
  That can be on the network, not necessarily physically on the machine.
- **IRIX operating system release 6.3 or above**
- Adobe Acrobat Reader
  This must be on the $PATH.
- **TAR**
  A UNIX archiving utility that is present in a standard IRIX installation.
- **SGI standard make**
  This must be the make binary that comes with the system, for example GNU make will not work.
- **Software Manager v3.1 or above**
  The installation has been tested with V3.1. If you have problems with your version of Software Manager contact your Silicon Graphics distributor for an upgrade.
- **About 150Mb of free disk space in /usr/people filesystem for installation.**
  4 GB of hard disk space is required for operation due to the large sizes of files

Installation prerequisites for Sun

- **SUN/Solaris Workstation**
  UltraSPARC 2 250Mhz or better.
- **256MB of RAM**
- **CD-ROM drive**
  That can be on the network, not necessarily physically on the machine.
- **Solaris operating system release 2.5.1 or above**
- **CDE (Common Desktop Environment) Installed and running.**
- **Adobe Acrobat Reader**
  This must be on the $PATH.
- **About 150Mb of free disk space in /export/home filesystem for installation.**
  4 GB of hard disk space is required for operation due to the large sizes of files

Installation prerequisites for Linux

- **CPU and Motherboard**
  Dual CPU Pentium II 400Mhz with 100Mhz Bus
- **Video card**
  24bit video card
- **Memory**
  128Mb
- **Disk Storage**
  1x2Gb IDE Hard disk 1x9Gb Hard disk with an Adaptec SCSI controller
- **Network card**
  100BaseT
- **A Quad speed IDE (ATAPI) CD-ROM drive or better**
- **Colour monitor**
  Capable of 1152x864x70Hz non-interlaced resolution.
- **Microsoft compatible serial or PS/2 Compatible mouse**
- **Extended (101 key) keyboard**

Installation Procedures

Installation of Server & Client on Windows NT

Installation of Server & Client on Windows NT

Running the main installation script starts up the Windows installation wizard. Simply follow the instructions to complete the installation.

1. Install the dongle driver
2. Run the main installation script
3. Install the server components
4. Install the Java runtime environment components

1 Install the dongle driver

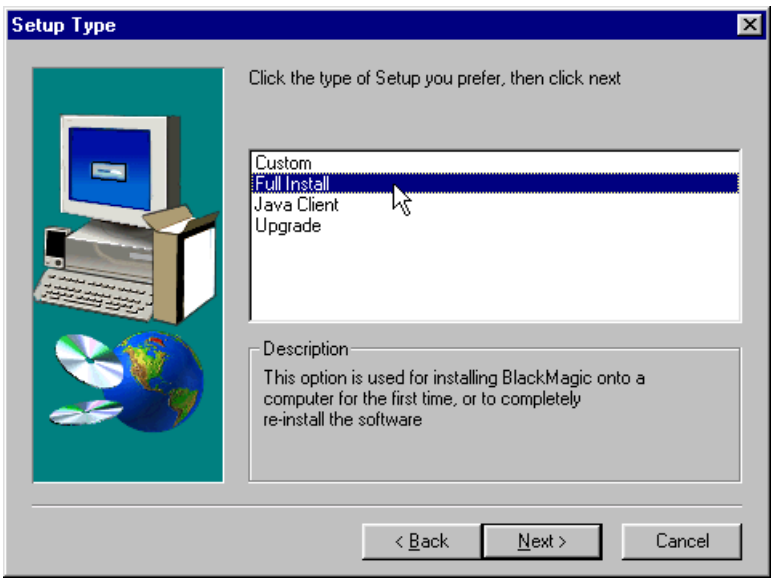
Insert the software CD in your CD-ROM drive
Open the dongle folder
Double-click on the *Setup.exe* program to run the installation script
This will automatically install the correct dongle driver for your platform

2 Run the main installation script

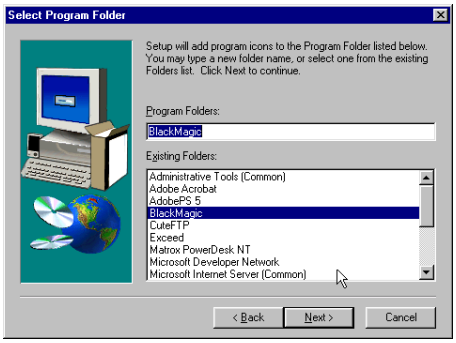
Insert the software CD in your CD-ROM drive
Open the *I386* folder for Intel systems or the *Alpha* folder for Alpha systems
Double-click on the *Setup.exe* program to run the installation script

3 Install the server components

Unless you have specific installation requirements, the default *Full Install* is appropriate. Follow the installation wizard instructions.

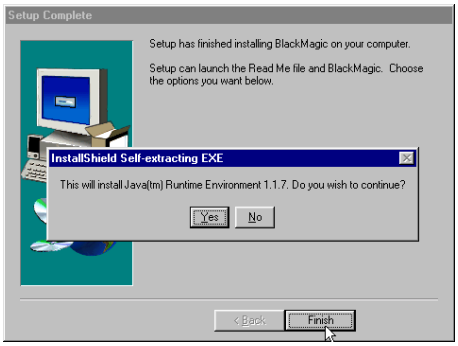


Server installation, all options selected.



Task bar options

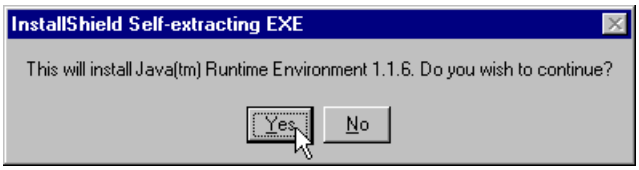
A prompt appears when the server components have been installed.



Click on the “Finish” button and proceed onto the Java runtime installation.

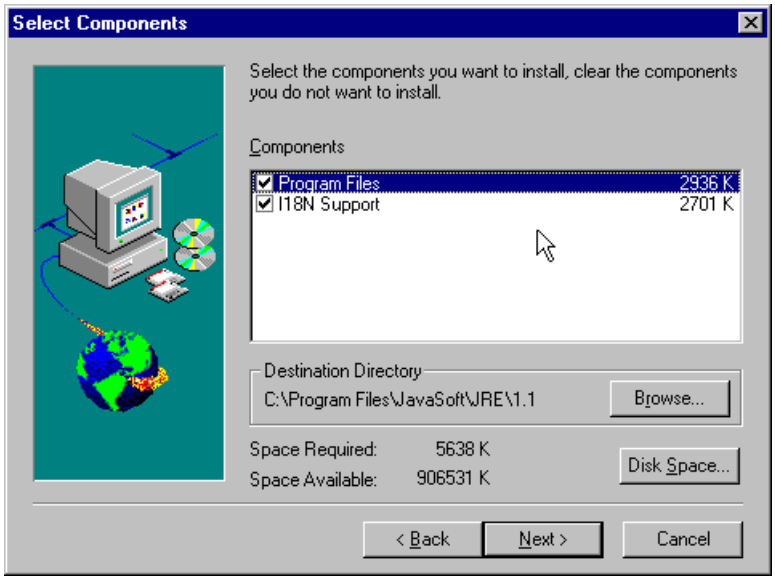
4 Install the Java runtime environment components

After the server software has been installed, a prompt appears advising that you are about to start installing the Java runtime environment.



At the prompt window
click OK

Unless you have specific installation requirements, the default options are appropriate. Follow the installation wizard instructions.



Java installation components

You will be prompted when the Java runtime environment has been installed.

4 Now the software needs to be licensed. Refer to *Licensing*

Java user interface client installation

Java user interface client installation

This procedure must be performed for each Windows NT or Windows 95-98 computer on which you intend to run the Java user interface.

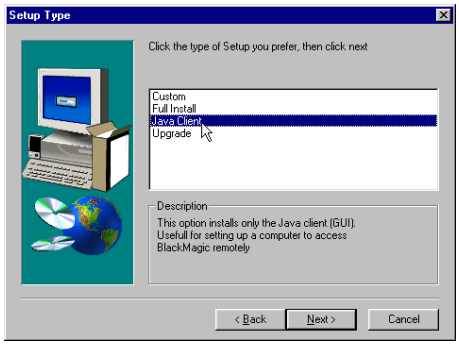
This installation involves the following steps:
1. Run the main installation script
2. Install the Java user interface client components
3. Install the Java runtime environment components

1 Run the main installation script

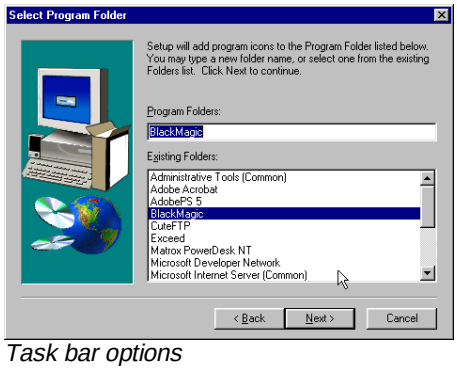
Insert the software CD in your CD-ROM drive
Open the *I386* folder for Intel systems or the *Alpha* folder for Alpha systems
Double-click on the *Setup.exe* program to run the installation script

2 Install the Java user interface client components

Follow the installation wizard steps to the step where you are required to select which components to install.
Make sure you only select *Java Client*

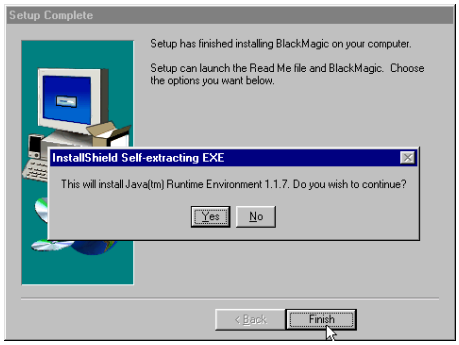


Selecting only the Java Client installation option



Task bar options

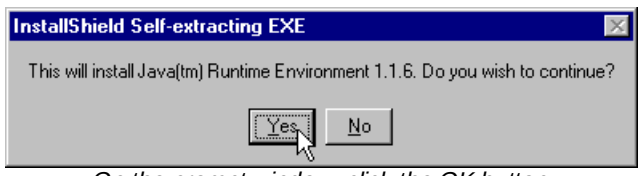
A prompt appears when the user interface components have been installed.



Click on the “Finish” button and proceed onto the Java runtime installation.

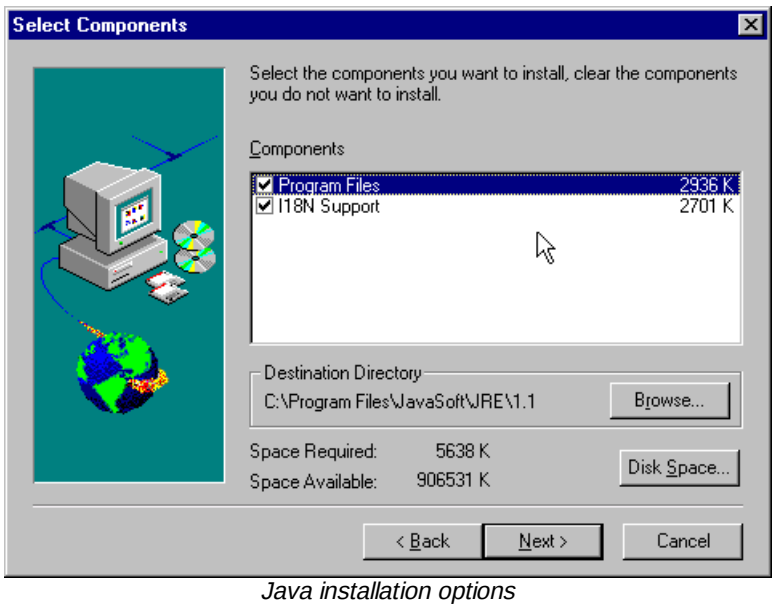
3 Install the Java runtime environment components

Once the user interface programs have been installed, the system will prompt you that you are about the start installing the Java runtime environment components.



On the prompt window, click the OK button.

Unless you have specific installation requirements, the default options are appropriate. Follow the installation wizard instructions.



Java installation options

You will be prompted when the Java runtime environment has been installed.

Installation procedures SGI/IRIX

This section describes how to install BlackMagic on a Silicon Graphics system. It is assumed that you can operate a CD-ROM drive. If necessary, consult the relevant sections of the IRIX on-line books on how to handle the CD-ROM drive.

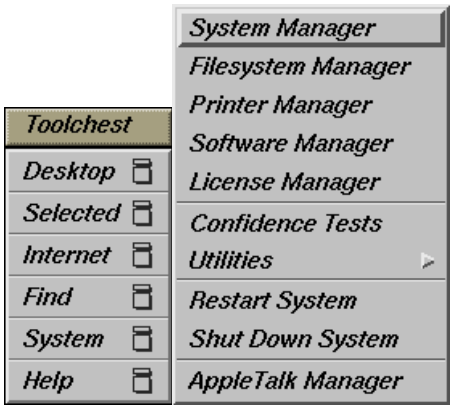
Before installing

- **Make sure there is no user named bmagic on the destination machine.**
  The installation will fail if a bmagic user exists.
- **If you do not have a CDROM drive but one exists on the network.**
  If the destination machine does not have a CDROM, and a remote installation source needs to be prepared, consult the SGI Admin on-line book *Software Installation and Licensing*. This on-line book explains the normal software installation procedure and contains a section for trouble shooting.
- **Make sure no other applications are currently using the CDROM drive with the installation CD.**
  Stop any programs that could need access to the CD-ROM drive, e.g. the CD player or other media tools.

Installing on SGI using the Software Manager

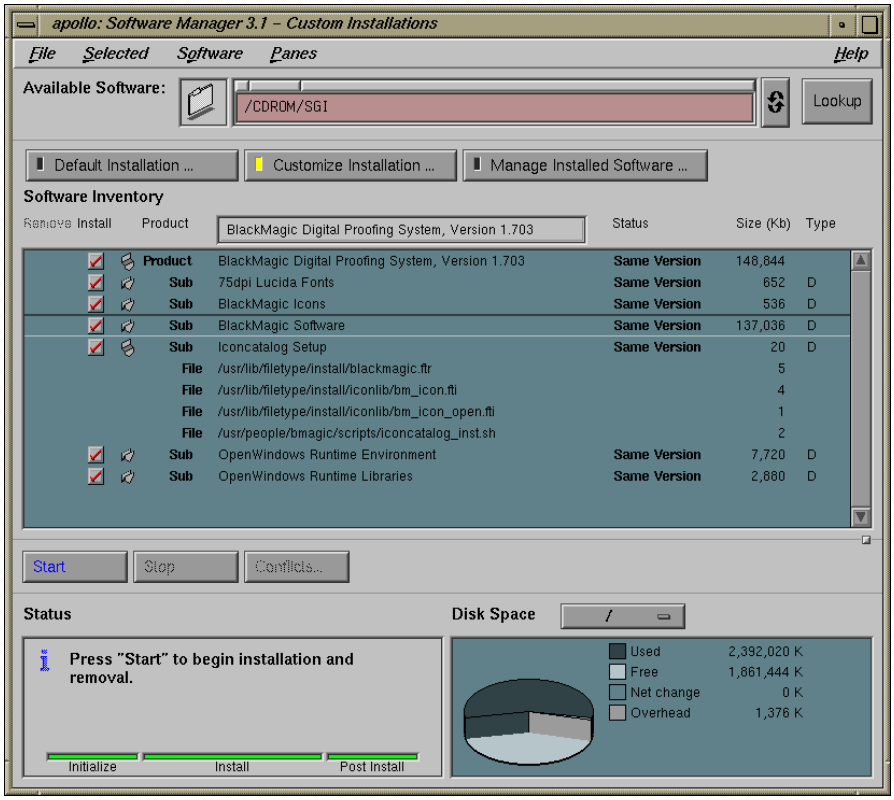
This procedure involves logging in, identifying the source and location of the software for Software Manager, and starting the load with the Software Manager.

a Login as the root user
type password and press <enter>.
select *Toolchest->System->Software Manager* menu item
Screen shows *Software Manager* window



b In the text field *Available Software*
type `/CDROM/SGI`
This tells the Software Manager to find the software distribution on the CDROM drive, in a directory called SGI.

/CDROM is the mount point for the CDROM drive. If you have setup a different mount point for your CDROM drive, then replace the /CDROM component with the path of your mountpoint. So it should read:
{mountpoint}/SGI



c Press the <*Lookup*> button
This will start looking for the installation scripts in /CDROM/SGI
If Software Manager successfully finds the software distribution it will highlight the Default Installation button and the status the status section should read:
"Press Start to begin automatic installation"

d Press the *Start* button
This is on the lower left section of the window.
screen shows a dialogue box advising successful installation
press *OK* to dismiss dialogue box

e Select menu item *File->Exit* to quit Software Manager

f BlackMagic will now need to be licensed. Refer to the *licensing* section below.
☺

Removing the package from SGI using the software manager

This procedure involves logging in, opening Software Manager, selecting the software to be removed, starting the removal and exiting the program.

a Login and open Software Manager
Refer to step a in the Installing procedure above.

b Click on the *Manage Installed Software* button.

main list shows a list of software already installed on your system

c From the list of software already installed on your system
locate the *BlackMagic Digital Proofing System*
click on the check box on the left of the entry
A red tick should have appeared inside the box in the Remove column, indicating that the entry is selected and it will be removed.
ensure that no other entries in the list are selected.
If you have selected any other software it will also be removed. Make sure the only entry bearing a red tick is:
- *BlackMagic Digital Proofing System*

d Press the *Start* button to remove the selected package
Upon successful removal, the user bmagic should have been removed from your system. The home directories should also have been removed, along with other files installed in the system by BlackMagic (icons, libraries etc).

☺

Installation procedures - Sun

Installing on Solaris systems

Installing the Solaris version of BlackMagic involves the following steps:
1 Install BlackMagic software
2 License BlackMagic

1 Install BlackMagic Software

a Insert the BlackMagic CD into your Sun CD-ROM drive
insure you have at least Solaris version 2.5.1 with CDE installed and running.
or BlackMagic will not work correctly
login as root
type `cd /cdrom/cdrom/SPARC`↵
`pkgadd -d SSbmagic.pkg`↵

follow the online instructions
If you get an error during installation it means that your sparc ran out of space in /var/tmp and /var/spool/pkg. BlackMagic requires about 200Mb free disk space in those partitions to install. If it fails ask your system administrator to use soft links to point those directories to another partition which has more space available

2 License BlackMagic

b BlackMagic Now needs to be licensed. Refer to *Licensing*.

☺

Installation procedure - Linux

You do not need to refer to this section if you have purchased BlackMagic as a turnkey system from your dealer as the software is already installed.

The BlackMagic software consists of:
- an installation boot floppy and
- CD-ROM containing all software, manuals, drivers and support files.

The installation procedure for Linux involves:

- Inserting the installation floppy disk and CD
- Partitioning the hard disk drives
  this is automatic unless the hard disks were previously partitioned. A procedure for manual partitioning is included in the installation procedure.
- Configuring your graphics card
- Configuring your network card
- Configuring your input devices, i.e. mouse & keyboard
- Licensing the software (see *Licensing*)

The licensing procedure involves generating your software registration key and faxing it to your dealer for an authorisation key. You then use this authorisation key to enable the application for the options you have purchased.

Installation on Linux

Installing BlackMagic on a Linux system

This procedure involves inserting the BlackMagic floppy disk and CD-ROM and rebooting your PC.

If you are performing an installation on a blank system, the installation program will automatically:
- partition the hard drives
- format the hard drives
- install the operating system
- install the software program

You will then configure your system for networking, display, and input devices.

If an existing system is detected, you will be presented with upgrade options (described later in this section.).

NOTE
Please note that the installation procedure automatically and correctly partitions the drives. Rarely, however, automatic partition could fail where drives are already partitioned. If that happens you will need to: reset your system, skip step **c** and perform step 1a instead.

1 Start the BlackMagic installation

a Insert the installation floppy into your floppy drive
insert the CD-ROM into the attached CD-ROM drive

b Reboot your computer
screen shows a welcome message
Please double check that you have all the displayed hardware before proceeding.
press <enter> to continue
After a minute or so the installation program will load and try to locate your CD-ROM drive.
screen shows a second welcome message
If this welcome screen is not displayed, please check that you do indeed have an IDE CD-ROM drive and that it is plugged in correctly. If you are having problems please contact your hardware supplier for assistance

c At the second welcome screen
press <enter>to continue
If an existing system is detected, you will be given a choice of action as described in the section titled "Upgrade".
If the automatic partitioning fails:
- *reset your system*
- *perform steps **a** and **b***
- *skip step **c** (this step)*
- *now perform step 1a instead.*

Refer to *Linux Configuration or Upgrading Linux*, in the following sections to complete the installation.

1a Perform a manual partition (if required)

IMPORTANT
In most cases the installation program will automatically partition both the system disk and the data disk without any problems. However, if the automatic partitioning fails, restart the installation and select manual partitioning as described below.

a At the welcome screen (after steps **a** and **b**)
type `MANUAL` (instead of just pressing enter)
press <enter>
Refer to the section titled Manually Partitioning the Hard disks for further instructions.
After manually partitioning the system, the installation program will automatically:
- *format the hard drives*
- *install the operating system*
- *install the software program*

Refer to the section titled *Linux Configuration* to complete the software installation.

Upgrading Linux

At the end of step 1 in the above procedure, the installation program will scan the disk. If an existing installation is detected you are given the option of upgrading the existing system rather than a complete reinstall - which would erase the disk. The software configurations (queues, destinations etc) kept in the case of an upgrade, depends on the versions being upgraded from and to. As a minimum, all the licensing information, colour profiles, and customer's special colour sets will always be kept. Refer to the release notes before upgrading.

You will be presented with the following upgrade options:

```
Select Action

1. Reconfigure System (No Software Upgrade)
2. Upgrade BlackMagic But Retain Old BlackMagic(login as oldbm)
3. Upgrade BlackMagic
4. COMPLETE REINSTALL (reformats disk All Existing Settings lost)
5. Abort Install And Reboot System

**NOTE: 2. is Recommended Upgrade Option for Already Established Live
   Sites

Selection:
```

Linux upgrade options

Upgrade option 1- Reconfigure

No actual software is changed but you can change the hardware configurations such as video card, display depth, network card, IP addresses, keyboard and mouse.

Refer to the section titled *Linux configuration* to complete the software reconfiguration.

Upgrade option 2 - Upgrade and Keep Old Tree

This is the recommended upgrade option. The following action takes place:

- the original tree is moved from */home/BlackMagic* to */home/BlackMagic.old*
- the new software and operating system is loaded from the CDROM
- all licensing information, colour correction curves and special colour sets are always copied across to the new tree
- if the old configuration files (queues, destinations etc) are compatible with the upgrade components, they are also copied across otherwise new one are installed
- the old software will be accessible if you login as oldbm

Refer to the section titled *Linux configuration* to complete upgrading the software.

Upgrade option 3 - Upgrade

This is similar to *Upgrade and Keep Old Tree* except:

- */home/BlackMagic.old* is *not* kept, and the old software is removed
- any previous settings that are compatible will be maintained

Refer to the section titled *Linux configuration* to complete upgrading the software.

Upgrade option 4 - Complete Reinstall

Everything will be erased. The installation program will:

- partition the hard drives
- format the hard drives
- install the operating system
- install the software program

Refer to the section titled: *Linux Configuration*, to complete reinstalling the software.

NOTE 1
Upgrading can actually be slower than a complete reinstall, because as a result of the operating system upgrade every new operating system file that is to be loaded from the CD is first removed from the current installation. This can take longer than partitioning the disk and creating a new file system.

NOTE 2
If upgrading fails midstream or is interrupted, a complete reinstall should be done. Keep in mind that before any upgrade program starts copying files, it will first make a copy of the old program files and settings in */home/BlackMagic.old* These files are not removed until the upgrade completes successfully. They can be copied to a safe location and used as a reference to reconfigure the newly reinstalled system.

Linux configuration

The configuration subsections take you through:

- Configuring Networking
  This includes hardware, IP address and other network settings

- Configuring Display
  Graphics hardware selection and display depth

- Configuring Input devices
  Mouse type, keyboard type and language/layout.

Installing on Linux - configuring networking

You will be presented with a screen menu similar to the one below:

```
Configuring network
Please select your network card
1. NE2000 compatible PCI BUS card
2. NE2000 compatible ISA BUS card
3. 3Com 3c59X or 3c9XX card (NOT Recommended)
4. Intel Pro 10/100 (Recommended)
5. DEC 2XXXX Tulip Based Card (Recommended)
6. HP 100BaseT card

Selection:
```

a Select the appropriate card

Selecting option "NE2000 ISA Bus card" will further prompt you for the IO Address, and interrupt settings. These are either hard set by jumpers on the card, or can be soft configured by booting with the configuration floppy supplied with the card by the manufacturer.

screen shows a prompt for the TCP/IP configuration parameters

These include the following:

- *IP Address*
- *Net Mask*
- *Network Address*
- *Broadcast Address*
- *Gateway Address*

NOTE

If you are unsure of the TCP/IP configuration parameters, consult your system administrator or simply accept the defaults. You can set or change the TCP/IP parameters after the installation. The procedure for this is given in the *Connectivity and System Configuration* chapter.

Installing on Linux - configuring display

a Screen shows a menu, similar to the following:

```
Configuring Display
Please select your Video Card Type
1. Matrox Millennium (Recommended)
2. Diamond Stealth 64 VRAM or any S3 Video Card
3. S3 Virge chipset Video Card
4. Other (Cirrus logic, Trident etc.)

Selection:
```

b At the above screen
select the appropriate card
screen shows the following options for display depth

```
Configuring Display Depth
Please select the depth of the display
1. 8 bit / 256 colours (1 Mb VRAM Required)
2. 24 bit / 16.7M colours (4 Mb VRAM Required)

Selection:
```

c from the screen shown above
Select the appropriate depth

IMPORTANT
24bit-display depth requires at least 4Mb of VRAM. Selecting 24bit with less than 4Mb will not work.

Installing on Linux - configuring input devices

a Screen shows a screen menu similar to the one below:

```
Configuring Keyboard Model
Please select your Keyboard Model
1  Generic 101-key PC
2  Generic 102-key (Intl) PC
3  Dell 101-key PC
4  Everex STEPnote
5  Keytronic FlexPro
6  Microsoft Natural
7  Northgate OmniKey 101
8  Winbook Model XP5
9  Japanese 106-key

Selection:
```

b Select the appropriate keyboard option.

If you are unsure, option 1 will work in most cases.

Screen shows a screen menu similar to the one below:

```
Configuring Keyboard Layout/Language
Please select your Keyboard Layout
1  U.S. English          2     U.S.  ISO9995-3
3  Belgian               4     Bulgarian
5  Canadian              6     Czechoslovakian
7  German                8     Swiss German
9  Danish                10    Spanish
11 Finnish               12    French
13 Swiss French          14    United Kingdom
15 Italian               16    Japanese
17 Norwegian             18    Polish
19 Portugese             20    Russian
21 Swedish               22    Thai

Selection:
```

c Select the appropriate keyboard language/layout option.

If you are unsure, option 1 will work in most cases.

Screen shows a screen menu similar to the one below:

```
Configuring Mouse
Please select your Mouse Type
1. Microsoft Compatible Serial Mouse
2. PS/2 Mouse

Selection:
```

d At the above screen
selects the appropriate mouse type.

Completing the Linux installation

Installing on Linux - completing

The installation program will display all the choices you have made and ask for confirmation before proceeding with the installation/upgrade. Below is a typical feedback screen:

```
NETWORK CARD:       Intel Pro 10/100
  IP Address:       192.9.200.4
  Netmask:          255.255.255.0
  Network  Address: 192.9.200.0
  Brodcast Address: 192.9.200.255
  Gateway  Address:
VIDEO CARD:         Matrox Millennium
  Video Depth:      24
KEYBOARD MODEL:     Generic 101-key PC
KEYBOARD LANGUAGE:  U.S. English
MOUSE:              PS/2

Press Y To Finish Installation N To Reconfigure:
```

a From the screen shown above

You can proceed with the installation or reconfigure. If you choose to reconfigure, the installation program will take you through all the menus again starting from the Networking.

either type Y and press <enter> to proceed with the installation
or type N and press <enter> to reconfigure
Screen shows text below

On successful completion, the installation program will display the following feedback screen: The software Installation is now complete.

```
Installation is now complete
Please follow the registration instructions in the installation guide
to enable your system
Please remove all floppies from the drives and press
enter to restart the system
```

b Press <enter>

to reboot the newly installed system from the hard disk.

Screen shows login screen

c At the login screen
type the username and password:

type `bmagic` for the username
and press <enter> then press <enter> for the password

d If this is a new installation then the software needs to be licensed. Refer to the licensing section below.

Manually partitioning the hard disks

Manually partitioning the hard disk

The manual partitioning process involves the following steps:
1 Select the partitioning program to use
2 Select the drive to be partitioned
3 Perform one of the sub-procedures following

1 Select the partitioning program to use

a from the screen shown below
select the partitioning program to use

As stated in the menu cfdisk has a better user interface but is not as fault tolerant as fdisk. Note that it does not produce incorrect results, it just sometimes fails to run on a large disk that has been previously partitioned with Windows or OS/2. Always try cfdisk first and if it fails use fdisk.

```
Manual Partitioning Selected
Select Action

1. Partition Using cfdisk (better user interface)
2. Partition Using fdisk  (more fault tolerant)
3. Finish Partitioning

Selection:
```

2 Select the drive to be partitioned

b from the screen shown below
select which physical drive you want to partition:

Normally you would only need to partition /dev/hda as your system disk and /dev/sda as your data disk. Note that if the system detects the SCSI disk /dev/sda then it will attempt to use it and if it has not been partitioned properly the install will fail. If, however, there is no SCSI disk (SCSI is recommended for BlackMagic) then the installation program will just install a single disk system.

```
Selection: Select Device To Partition With cfdisk.
(Usually hda or sda):

1. First  IDE  Drive (hda)
2. Second IDE  Drive (hdb)
3. Third  IDE  Drive (hdc)
4. Fourth IDE  Drive (hdd)
5. First  SCSI Drive (sda)
6. Second SCSI Drive (sdb)
7. Third  SCSI Drive (sdc)
8. Fourth SCSI Drive (sdd)

Selection:
```

c from the screen shown below
press <enter> to continue
press <enter> to partition /dev/sda

The screen below describes the required partitions, their sizes and attributes for a successful installation. Do not deviate from these requirements.

```
NOTE 1: For the boot disk you need 2 partitions:

 Partition #           Size              Type            Bootable
 ------------------------------------------------------------------------
   -
   1            (total size - 70Meg)    linux (83)          yes
   2                 ~70Meg            linux swap (82)      no

NOTE 2: For the data disk make one Non-bootable linux (83)
partition of the same size as total available space
```

4 Perform one of the procedures below

For example if you are partitioning the system drive with *cfdisk* then refer to the section title *Partitioning the system disk with cfdisk*.

Normally, you will carry out steps 1-4 for the system drive; the installation program will then take you back to step 1. From there, carry out steps 1-4 again to partition the data disk. When finished with the data disk simply select option 3 in step 1 to complete the partitioning.

Partitioning the Linux system disk with cfdisk

Partitioning the system disk with cfdisk involves the following steps:

1 Delete all existing partitions
2 Create the system partition
3 Set attributes for the system partition
4 Create the swap partition
5 Set attributes for the swap partition
6 Write the partitioning information to the system disk
7 Quit *cfdisk*

1 Delete all existing partitions

a Select any previously defined partition
Use the up-down arrow keys
Select [Delete] command
Use the left-right arrow keys
Press <enter> to delete the selected partition

Repeat the above steps to delete any remaining partitions until there is only one line in the partitions list that is of *FS type: Free Space*

2 Creating the system partition

b Select [New] command
Use the left-right arrow keys
Press <enter> to create a new partition
Select [Primary]
Use the left-right arrow keys
Press <enter>
Screen shows prompt for partition size

c At the prompt for partition size
enter the total available disk space less 70 MB and press <enter>
Select *Beginning*
Use the left-right arrow keys. This will be the position of the partition in Free Space
Press <enter>

3 Set attributes for the system partition

d Select [Bootable]
press <enter>
Use the left-right arrow keys. Make sure that Boot is displayed in the Flags column for the new partition.
select [Type]
Use the left-right arrow keys
press <enter>
type 83 to select filesystem type Linux
press <enter>

4 Create the swap partition

e select the *Free Space* entry
use the up-down arrow keys
select the [New] command
use the left-right arrow keys
press <enter>
a new partition is created
select [Primary]
use the left-right arrow keys
press <enter>
screen shows a prompt for the size of the partition
the suggested size is correct (about 70MB)
press <enter>

5 Set attributes for the swap partition

f select the [Type] command
Use the left-right arrow keys
press <enter>
type *82* to select *filesystem type : Linux Swap*
press <enter>

6 Write the partitioning information to the system disk

g Select the [Write] command
Use the left-right arrow keys to
Press <enter>

The partitioning information should have now been written onto the system disk correctly.

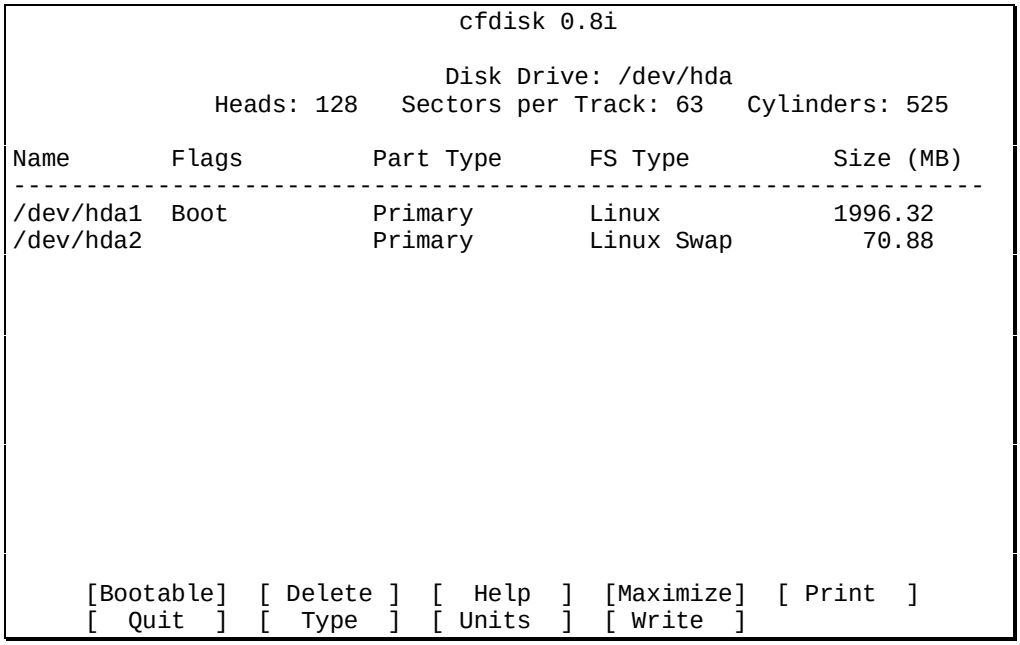
7 Quit cfdisk

h Select the [Quit] command
use the left-right arrow keys to
Press <enter>
to quit cfdisk

Below is a sample cfdisk screen displayed when all the needed partitions for the system disk have been created and there is no more space to be partitioned (so the New command is not displayed).

In cfdisk screens, the arrow left/right buttons move the cursor between available commands and arrow up/down button selects the active partition you are currently editing.

The sample screen shows how a 2GB disk would be partitioned.



Partitioning the Linux data disk with cfdisk

Partitioning the data disk with cfdisk involves the following steps:

1 Delete all existing partitions
2 Create the system partition
3 Set attributes for the system partition
4 Write the partitioning information to the system disk
5 Quit *cfdisk*

1 Delete all existing partitions

a Select any previously defined partition
Use the up-down arrow keys
Select the [Delete] command
Use the left-right arrow keys
press <enter> to delete the selected partition

Repeat the above steps to delete any remaining partitions until there is only one line in the partitions list that is of *FS type: Free Space*

2 Create the data partition

b Select the [New] command
Use the left-right arrow keys
press <enter> to create a new partition
Select [Primary]
Use the left-right arrow keys
press <enter>
Screen shows prompt for partition size

c At the prompt for partition size
press <enter>
the suggested size - all the Free Space - is correct
press <enter>

3 Set attributes for the data partition

d Select [Type]
Use the left-right arrow keys
press <enter>
type 83 to select file system type Linux
press <enter>

4 Write the partitioning information to the system disk

e select the [Write] command
Use the left-right arrow keys to
press <enter>

The partitioning information should have now been written onto the system disk correctly.

5 Quit cfdisk

f Select the [Quit] command
use the left-right arrow keys
press <enter>
to quit cfdisk

Partitioning the Linux system disk with fdisk

Partitioning the system disk with fdisk involves the following steps

1 Delete all existing partitions
2 Create the system partition
3 Set the attributes for the system partition
4 Create the swap partition
5 Set the swap partition attributes
6 Write the partition information to the drive

1 Delete all existing partitions

a Type d and press <enter>
this is the delete command
type 1 and press <enter>
this is the partition number
There can only be 4 partitions and you need to delete all of them so you need to repeat another three times for the remaining partitions:
type d press <enter>
type 2 press <enter>
type d press <enter>
type 3 press <enter>
type d press <enter>
type 4 press <enter>

2 Create the system partition

fdisk is an awkward program to use and setting the size of the partitions exactly can be difficult. However, if you follow the instructions carefully you should not have any problem calculating the size of the system partition:

b Type p and press <enter>.
This command gives you the drive's total capacity in the following format: (numbers have been substituted for letters)

```
Disk /dev/hda1 : H heads, S sectors, C cylinders
Units = cylinders of X*B bytes
```

Where:
D is the drive you are partitioning
H is the number of heads of the drive
S is the number of sectors of the drive
C is the total number of cylinders
*X*B is the size in bytes of each cylinder*

To determine the size of the system partition in cylinders, perform the following calculations:
Z = (73400320) divided by (X times B)
required number = C minus Z

Then round the *required number* up to the nearest integer and write it down.

c Type n and press <enter>
this is the New command
type p and press <enter>
for type Primary
type 1 and press <enter>
for first partition

type 1 and press <enter>
to select the first cylinder of the partition to be at the beginning of the drive
screen shows prompt for the last cylinder
type the required number *and press <enter>*
as it was calculated and rounded up, in step 1.

3 Set the attributes for the system partition

d Type a and press <enter>
this toggles the bootable flag
type 1 and press <enter>
this selects partition 1 to be altered
type p and press <enter>
this displays all the currently set partitions. Make sure that there is an asterisk (*) displayed in the Boot column for the new partition.

e Type t and press <enter>
this will set the partition system ID
type 1 and press <enter>
this selects partition 1 to be altered
type 83 and press <enter>
to select filesystem type : Linux

4 Creating the swap partition

f Type n and press <enter>
this is the New command
type p and press <enter>
for type Primary
type 2 and press <enter>
for second partition
screen shows prompt as follows (numbers have been substituted by letters)

First Cylinder (BBB-LLL):

g Type BBB and press <enter>
screen shows prompt as follows (letters have been substituted for numbers)

Last Cylinder etc..etc..etc (BBB-LLL):

h Type LLL
press <enter>

NOTE
BBB is the beginning cylinder of the remaining free space and LLL is the last cylinder of the free space.

5 Set the swap partition attributes

i Type t and press <enter>
this will set the partition system ID
type 2 and press <enter>
this selects partition 2 to be altered
type 82 and press <enter>
to select filesystem type : Linux Swap

6 Write the partition information to the drive

j
this is the write command and it records the partition information you defined on the drive.
fdisk automatically exits as soon as the writing of the partition table is complete

Partitioning the Linux data disk with fdisk

Partitioning the Data Disk with fdisk involves the following steps:
1 Create the data partition
2 Set attributes for the data partition
3 Write the partition to the drive

1 Create the data partition

a Type n and press <enter>
this is the New command
type p and press <enter>
for type Primary
type 1 and press <enter>
for first partition
screen shows prompt as follows (letters have been substituted for numbers)

First Cylinder (BBB-LLL):

b Type BBB and press <enter>
screen shows prompt as follows (letters have been substituted for numbers)

Last Cylinder etc..etc..etc (BBB-LLL):

c Type LLL and press <enter>

NOTE
BBB is the beginning cylinder of the remaining free space and LLL is the last cylinder of the free space.

2 Set attributes for the data partition

d Type t and press <enter>
this will set the partition system ID
type 1 and press <enter>
this selects partition 1 to be altered
type 83 and press <enter>
to select filesystem type : Linux

3 Write the partition to the drive

e Type w and press <enter>
this is the write command and it records the partition information you defined on the drive.

fdisk automatically exits as soon as the writing of the partition table is complete

Starting BlackMagic

Starting the BlackMagic server on Windows NT

a Login either as administrator or as a user with administrator permissions

b Double click on the BlackMagic server icon:

Starting the BlackMagic Java client on Windows NT

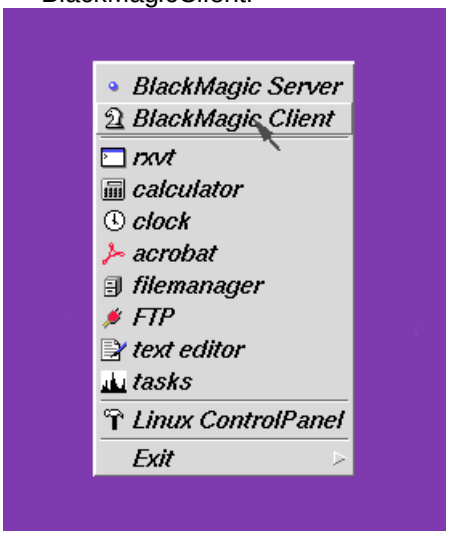
a When logged in Double click on the BlackMagic server icon:

Starting the BlackMagic server on a Linux system

a On Linux Systems simply login as user: bmagic and the server will be launched automatically.

Starting the BlackMagic Java client on a Linux system

a Once logged in press the right hand mouse button whilst the cursor is NOT on in any of the windows. This will display a popup menu, now select BlackMagicClient.



Starting the BlackMagic server On a Sun/Solaris System

a Login as a valid user

b Start a shell and type in the following commands:
xhost +↵
/export/home/bmagic/bin/bmagic↵

Starting the BlackMagic Java client on a Sun/Solaris System

a Login as a valid user

b Start a shell and type in the following commands:
xhost +↵
/export/home/bmagic/bin/ssclient↵

Starting the BlackMagic server on an SGI/IRIX System

a Login as a valid user.

b Either start a shell and type in the following command line:
/usr/people/bmagic/bin/bmagic
Or from the Icon Catalogue
click BlackMagic tab
double click on the BlackMagic Server icon

Starting the BlackMagic Java client on an SGI/IRIX System

a Login as a valid user.

b Either start a shell and type in the following command line:
/usr/people/bmagic/bin/ssclient
Or from the Icon Catalogue
click BlackMagic tab
double click on the BlackMagic Client icon

Licensing BlackMagic

The following section applies to the Sparc Solaris and SGI Irix versions only. All other versions use a dongle for licensing, so the only requirement for those versions is that the dongle driver is correctly installed and that the dongle is plugged in to the parallel port. See the appropriate installation section for details on installing the dongle driver.

Following installation, the software must be licensed before it can be used. As described below, a registration key is generated when you enter your details in the Registration Number window. This Registration number is to be sent to Serendipity Software or your BlackMagic dealer and is used to generate an Authorisation key, which enables the options you have purchased.

Licensing BlackMagic involves the following steps

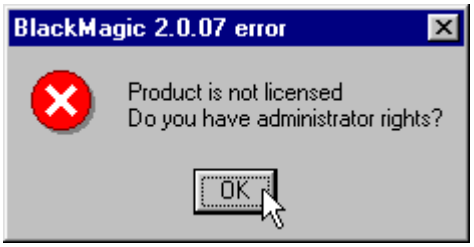
1. Launch BlackMagic server
2. Generate your Registration Number
3. Enable the software with the Authorisation Key

1 Launch BlackMagic Server

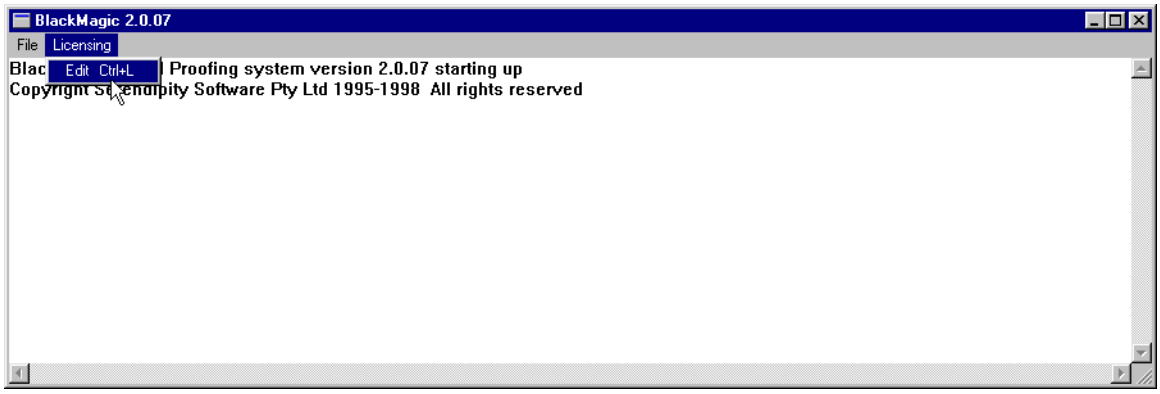
See *Starting BlackMagic* above.

2 Generate your Registration Number

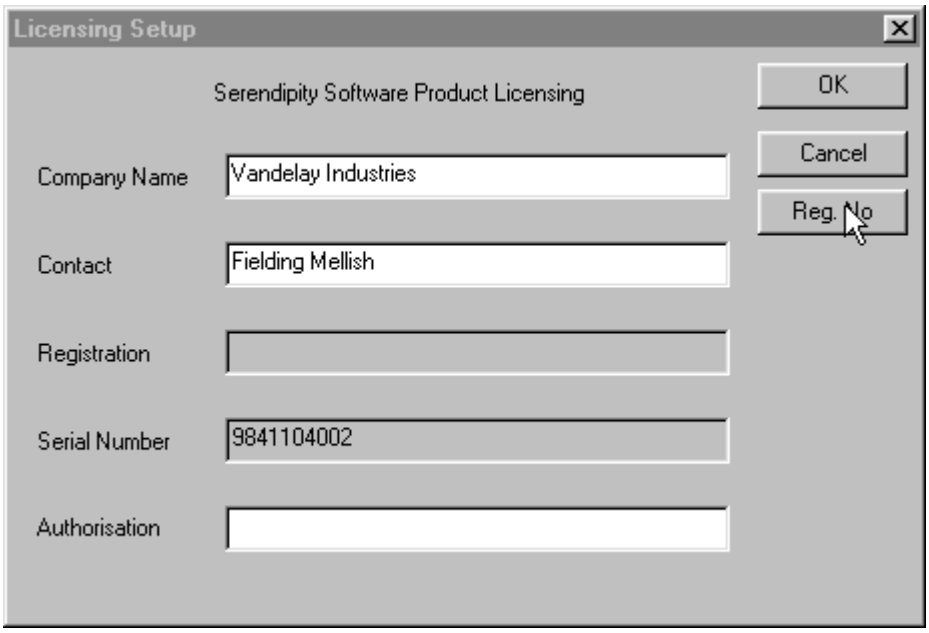
a When an unlicensed server is started the following popup is displayed:



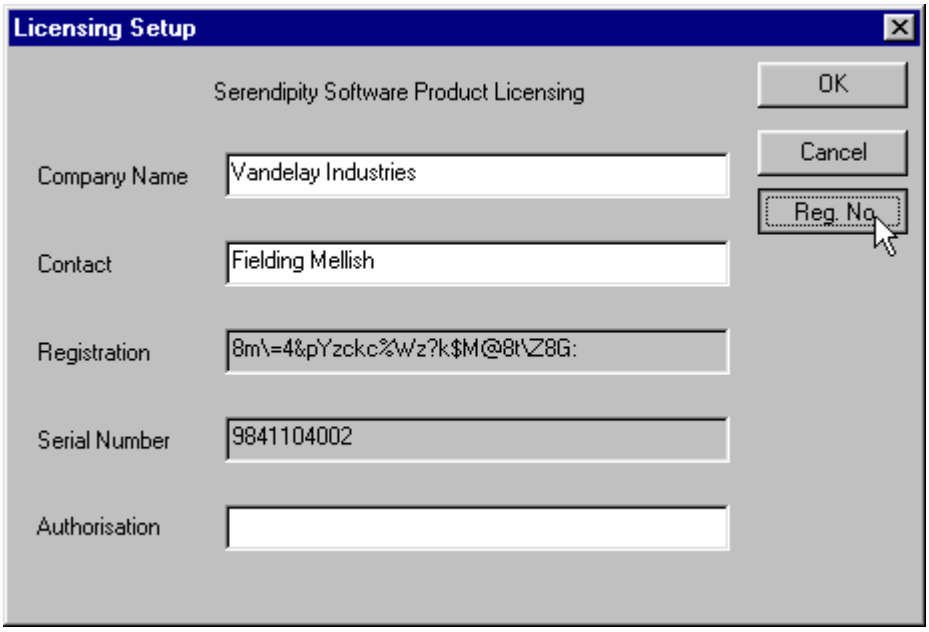
b Click on the OK button, the BlackMagic server window will be displayed. Select the license menu item



c The licensing window appears



Click on the *Company Name* text field
type in your company's name and press <TAB>
click on the *Contact Name* text field
type in your name and press <TAB>
click on the *Reg. No.* button



Record the Registration Number

Note this down exactly as shown in the Registration field. Upper-lower case is important

d Fax the Registration Number to your dealer or Serendipity Software.

Include the following details when with registration number:

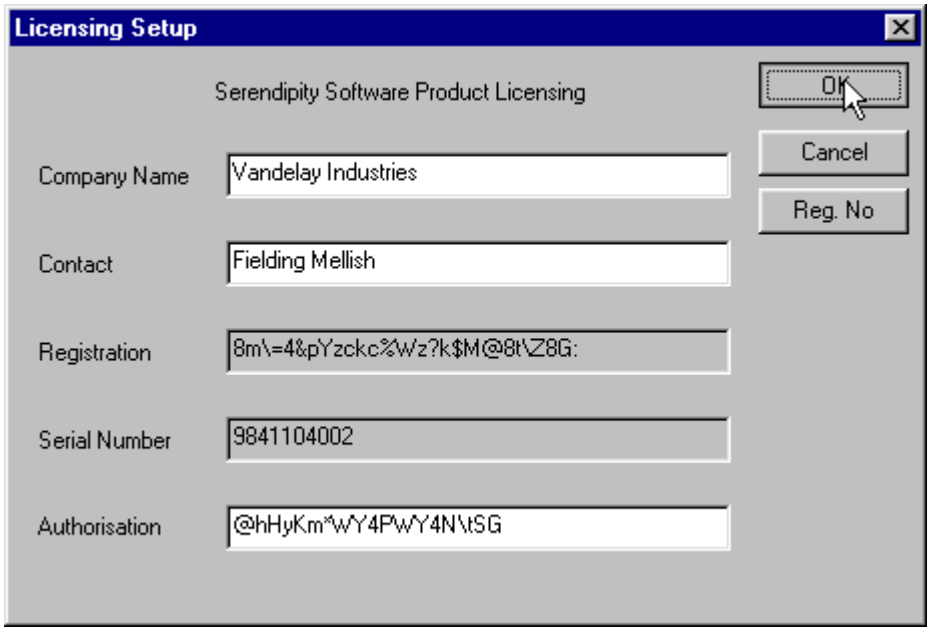
- *contact name*
- *name of the company*
- *street address*
- *phone number*
- *fax number*
- *dealer company*

You will receive your registration sheet via return fax, which will allow you to enable your software options. Once you receive your registration number sheet with the Authorisation Key from your dealer, you are ready to enable the software.

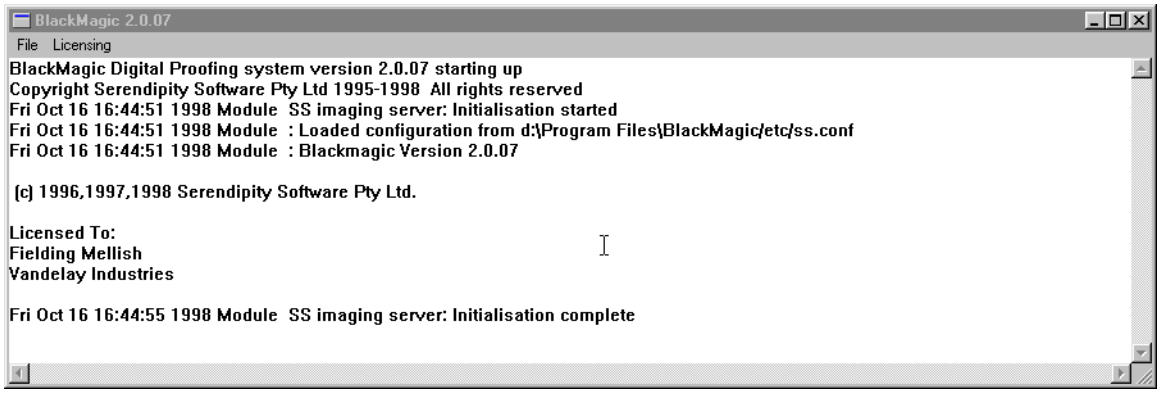
3 Enable the software with the Authorisation key

e If the BlackMagic server is not started, then start the server and open the licensing form as described in sections 1 and 2 above.

f Enter the Authorisation key in the Authorisation field and click the OK button.



g If the Authorisation Key is correctly entered then the Licensing Setup window will disappear and The BlackMagic server will start running.



4 Save the license

The license is stored in the BlackMagic database. Refer to the procedure *Backing up the BlackMagic Database on UNIX*, or *Backing up the BlackMagic database on NT* as appropriate, under: *Saving & Restoring Settings*

☺

CONNECTIVITY & SYSTEM CONFIGURATION

Saving & Restoring Settings

WARNING:

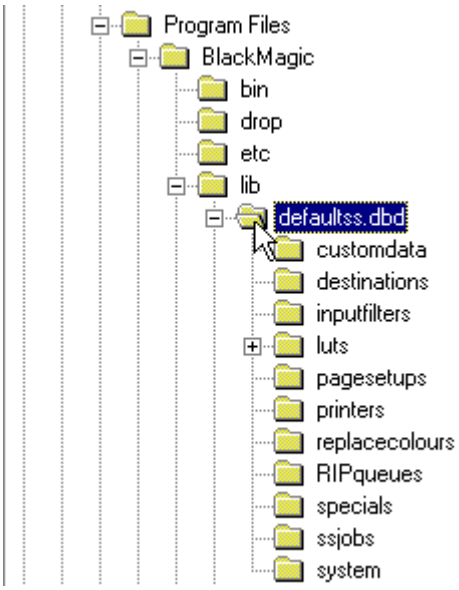
All the stored are stored in the BlackMagic database. The BlackMagic database folder, and all files and folders within it should *never* be modified manually while the BlackMagic server is running.

The following procedures for backing up and restoring the settings must be followed explicitly as stated below. A corrupt or incorrect database folder can stop the BlackMagic server from running and might need re licensing and a complete reconfiguration of all BlackMagic settings.

All the BlackMagic settings that are configured within BlackMagic are stored in a centralised database folder. These settings include

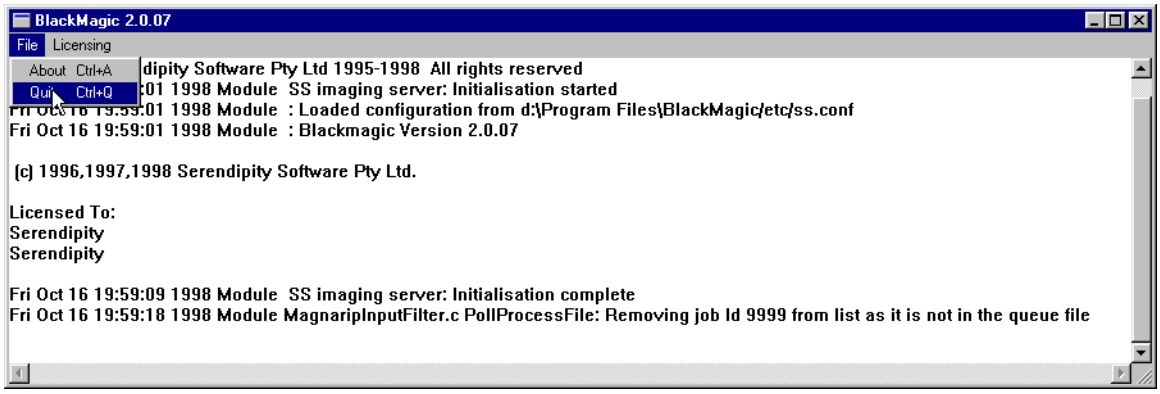
- Licensing Information
- Printer definitions
- Pagesetups
- Colour Correction Curves (however not externally generated ICC profiles)
- Special Colours
- Replacement Colours

The path of the database relative to the BlackMagic installation directory is .../lib/defaultss.dbd, as illustrated for an NT installation of BlackMagic below:



Backing up The BlackMagic database on NT

1 Stop the BlackMagic Server.



2 Use explorer to backup the defaultss.dbd folder to desired location.

3 Restart the BlackMagic Server

Restoring the BlackMagic database on NT

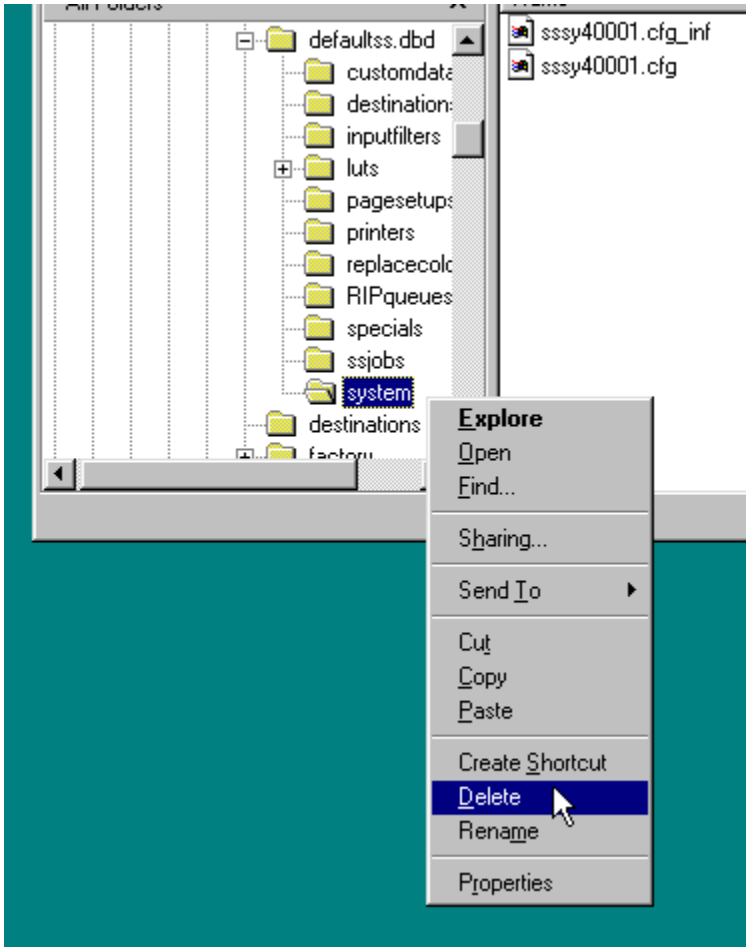
IMPORTANT

With the exception of restoring licensing information. The restoration of the database is an all or nothing process. You must replace *all* files and folders or nothing at all.

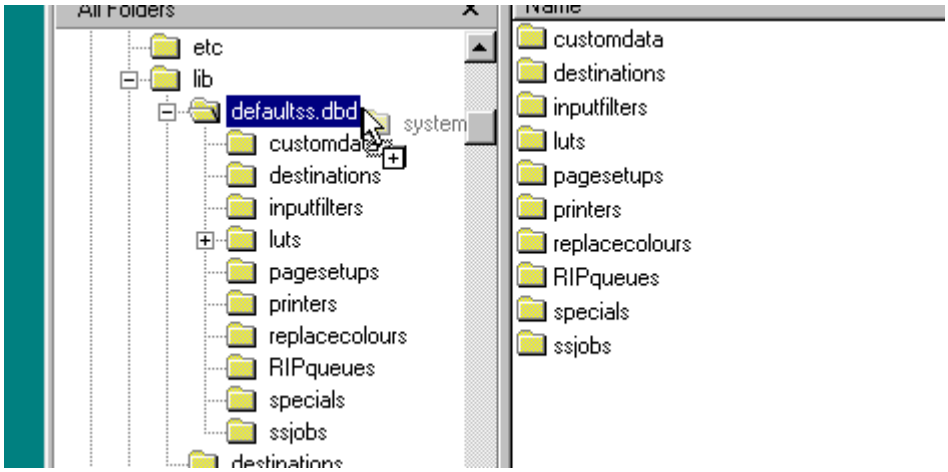
1 Stop the BlackMagic Server.
2 Select and Remove the defaultss.dbd folder
3 Copy the backed up defaultss.dbd folder to the location of the just deleted defaultss.dbd folder.
4 Restart the BlackMagic Server

Restoring BlackMagic licensing information on NT

1 Stop the BlackMagic Server.
2 Select and Remove the defaultss.dbd/system folder



3 Copy the backed up defaultss.dbd/system folder to the location of the just deleted defaultss.dbd/system folder.



4 Restart the BlackMagic Server

☺

Backing up the BlackMagic database on UNIX

The following procedure describes how to backup the BlackMagic database to a floppy disk using the UNIX TAR utility. It is by no means the only way of backing up the database but an example.

1 **Stop the BlackMagic server**
2 **Open a UNIX shell**
3 **Change directory to BlackMagic Home**

   a For Linux BlackMagic: `cd /home/BlackMagic`
   For Sparc/Solaris BlackMagic: `cd /export/home/BlackMagic`
   For SGI/IRIX BlackMagic: `cd /usr/people/BlackMagic`

4 **Backup onto floppy using the UNIX tar command**

```
tar cvfp /dev/fd0 lib/defaultss.dbd lib/defaultss.dbh
```

5 **Write protect the floppy and store in a safe place**
6 **Restart The BlackMagic server**

Restoring the BlackMagic database on UNIX

The following procedure describes how to restore the BlackMagic database from a floppy disk using the UNIX TAR utility. It is by no means the only way of backing up the database but an example.

1 **Stop the BlackMagic server**
2 **Open a UNIX shell**
3 **Change directory to BlackMagic Home**

   a For Linux BlackMagic this is:
   cd /home/BlackMagic
   b For Sparc/Solaris BlackMagic this is:
   cd /export/home/BlackMagic
   c For SGI/IRIX BlackMagic this is:
   cd /usr/people/BlackMagic

4 **Remove the existing database using the following command:**

```
rm –rf lib/defaultss.dbd
```

5 **Restore from floppy using the UNIX tar command**

```
tar xvfp /dev/fd0
```

6 **Restart The BlackMagic server**

Restoring the BlackMagic license on UNIX

The following procedure describes how to restore the BlackMagic database from a floppy disk using the UNIX TAR utility. It is by no means the only way of backing up the database but an example.

7 Stop the BlackMagic server
8 Open a UNIX shell
9 Change directory to BlackMagic Home

a For Linux BlackMagic: `cd /home/BlackMagic`
b For Sparc/Solaris BlackMagic: `cd /export/home/BlackMagic`
c For SGI/IRIX BlackMagic: `cd /usr/people/BlackMagic`

10 Remove the existing database using the following command

```
rm –rf lib/defaultss.dbd/system
```

11 Restore from floppy using the UNIX tar command

```
tar xvfp /dev/fd0 lib/defaultss.dbd/system
```

12 Restart The BlackMagic server

☺

Common Connectivity Notes

The topics in this section apply to installations of BlackMagic on both Windows NT, and all UNIX systems.

Time / Date setting when printing from Windows Computers

Users must ensure that the *same date and time* are set on *both* the Windows computers and the host computer running BlackMagic.

The drop folders rely on the file timestamp. A new file that appears in the drop folder will not be processed by BlackMagic until the size is stable, and the timestamp is several seconds older the current time/date on the BlackMagic computer.

When Windows NT and Windows 95 systems copy files into the published drop folder, they explicitly timestamp the file using the clock of the sending computer. If the clock on this computer is ahead of the clock on the BlackMagic computer, then the file in the drop folder will not start imaging, until the clock on the BlackMagic computer catches up the with the clock of the sending computer.

This problem does not arise when sending to a drop folder from a Mac or UNIX computer as in these cases, the BlackMagic computer sets the creation date on the file.

Connectivity NT-BlackMagic

The topics in this section apply to installations of BlackMagic on NT systems only.

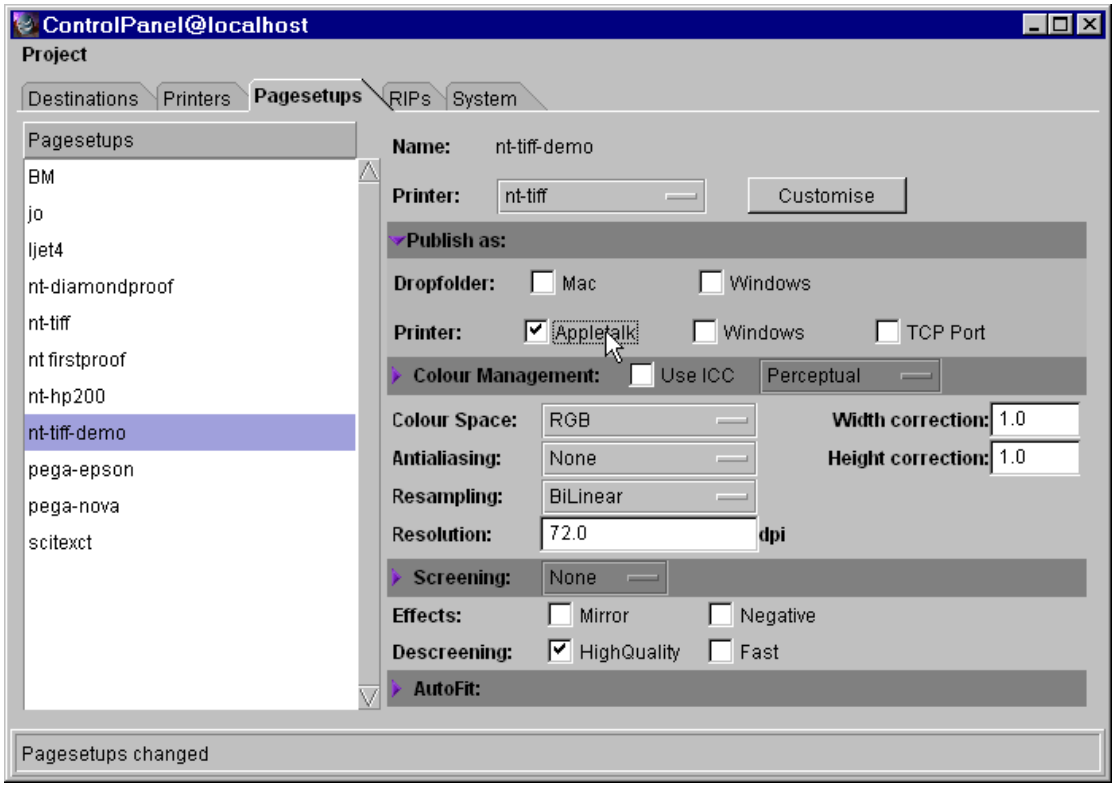
Publishing pagesetups under Windows NT

Publishing Pagesetups for AppleTalk Printer under NT.

The pagesetups are published on the AppleTalk network and appear in the chooser of the Macintosh as a Laserwriter printer. The user can then attach the MegaRIP PPD and print using this PPD. The MegaRIP.ppd file from the drivers/mac directory of the CD goes into Macintosh HD:System Folder:Extensions:Printer Descriptions.

Publishing pagesetups under Windows NT for AppleTalk printer.

This procedure involves the following steps
1 Publish the pagesetup as AppleTalk printer
2 Attach the MegaRIP PPD

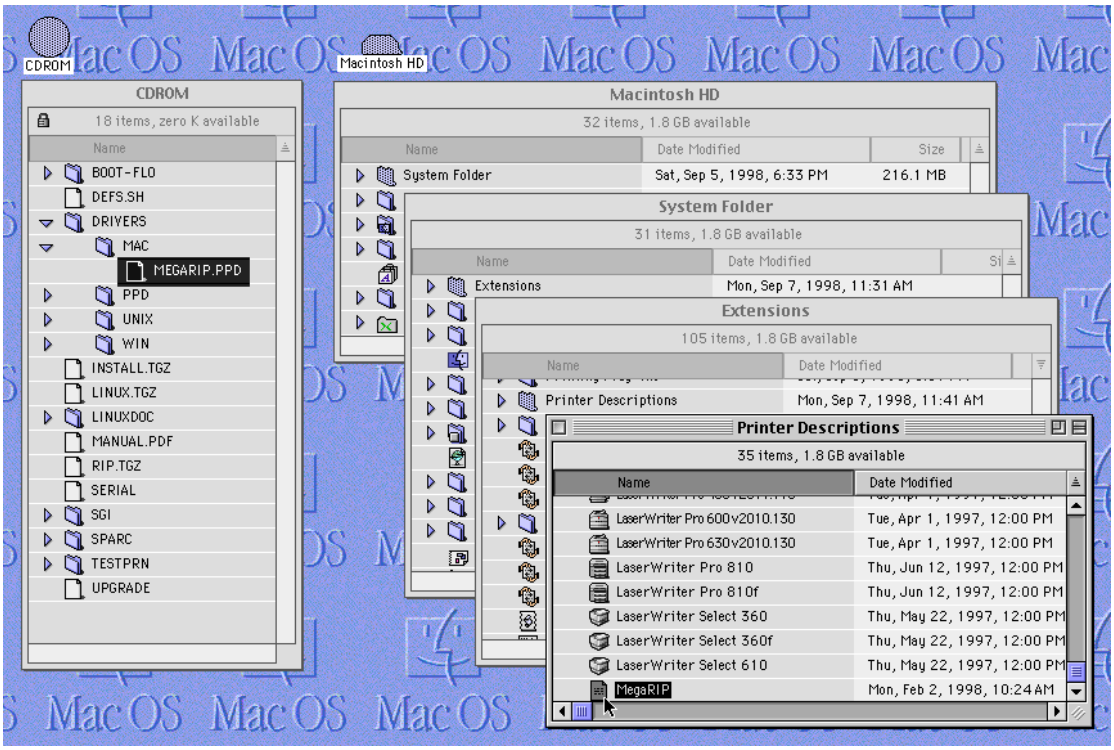


1 Publish the pagesetup as an AppleTalk printer

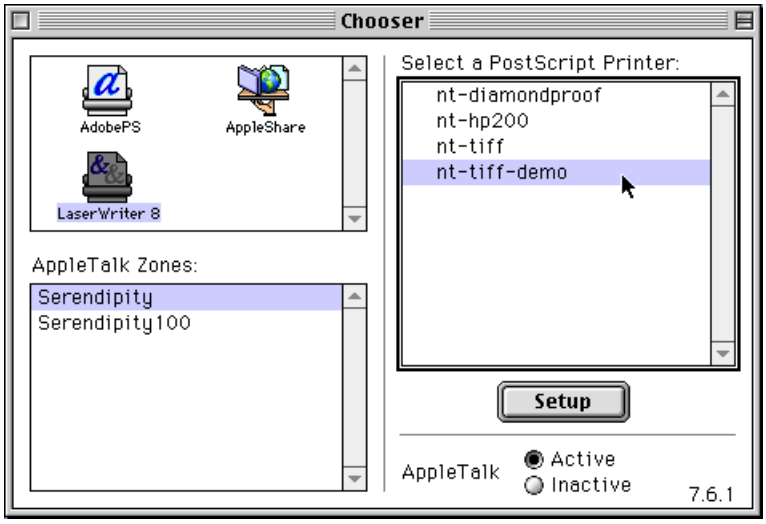
a Go to the *ControlPanel/pagesetups* tab
In the *pagesetups* list
select the required pagesetup (e.g. nt tiff demo)
expand the *Publish as* section by clicking on the purple marker
In the *Publish as*: fields
Check the *Printer: AppleTalk* check box
Save changes using *Project menu ⇨ save*

2 Attach the MegaRIP PPD

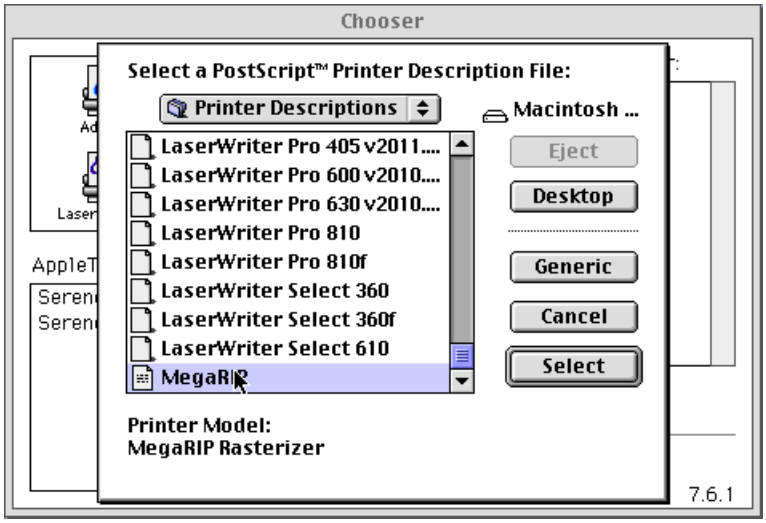
b From BlackMagic CD ROM, *drivers/mac* directory
copy the *MegaRIP PPD* into Macintosh HD:System Folder:*Extensions:Printer Descriptions*



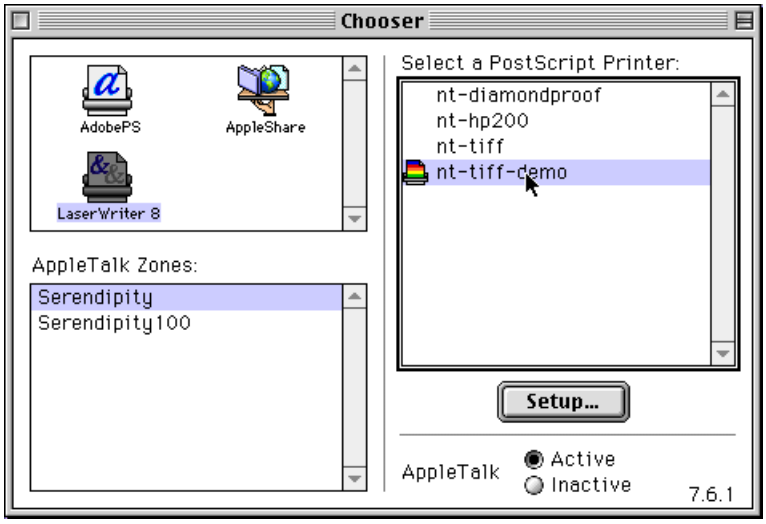
c Go to the *Chooser*
select a printer with the pagesetup name (e.g. *nt-tiff-demo*)
click on the *setup* button



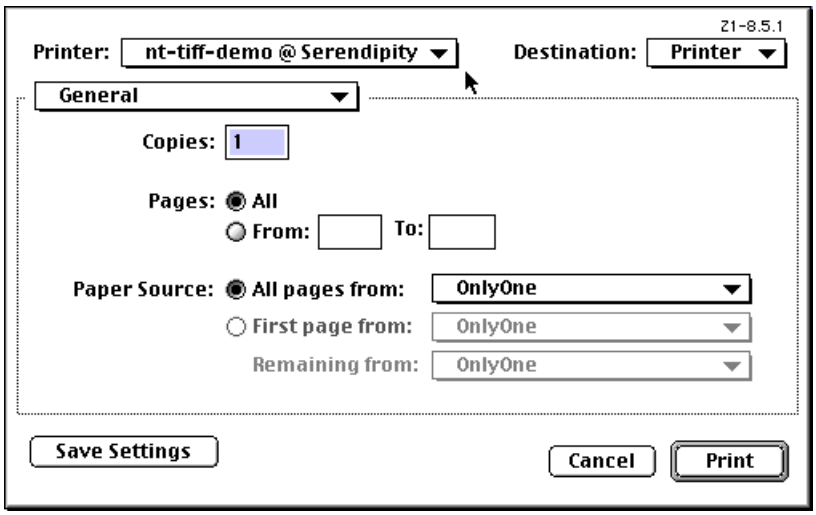
d From the list of available PPDs
Select *MegaRIP*
Click the *select* button



Note the colour icon next to the pagesetup name in the *Chooser*.
This shows that the pagesetup is ready to receive jobs from Macintosh applications.



In this print screen generated from PhotoShop, note that the pagesetup is accessible as an available printer



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Publishing pagesetups for Windows printer under NT

Windows publishes the pagesetup as a Windows named pipe which can then be accessed by users on the Windows Network. It actually publishes a network name called \\hostname\pipe\pagesetup name

To access this pagesetup users add a printer on their computer using the MegaRIP printer driver from the CD. First, install the printer as a local printer, say attached to lpt1, then go to the properties window for the new printer via the printers control panel. Select the ports tab and then click on add port. When prompted for what kind of port, select local port and in the name field enter \\hostname\pipe\pagesetupname as mentioned above.

Windows will now make this the port it uses when printing to this printer and any jobs sent to this printer will end up in The BlackMagic image queue. Avoid putting spaces in the pagesetup names as this could cause problems with Windows.

So if you have a SS server running on “pegasus” and you have created a pagesetup called “bm-tiff” which has the Windows Printer publish bit enabled, you would then use \\pegasus\pipe\bm-tiff as the port name when creating the local port.

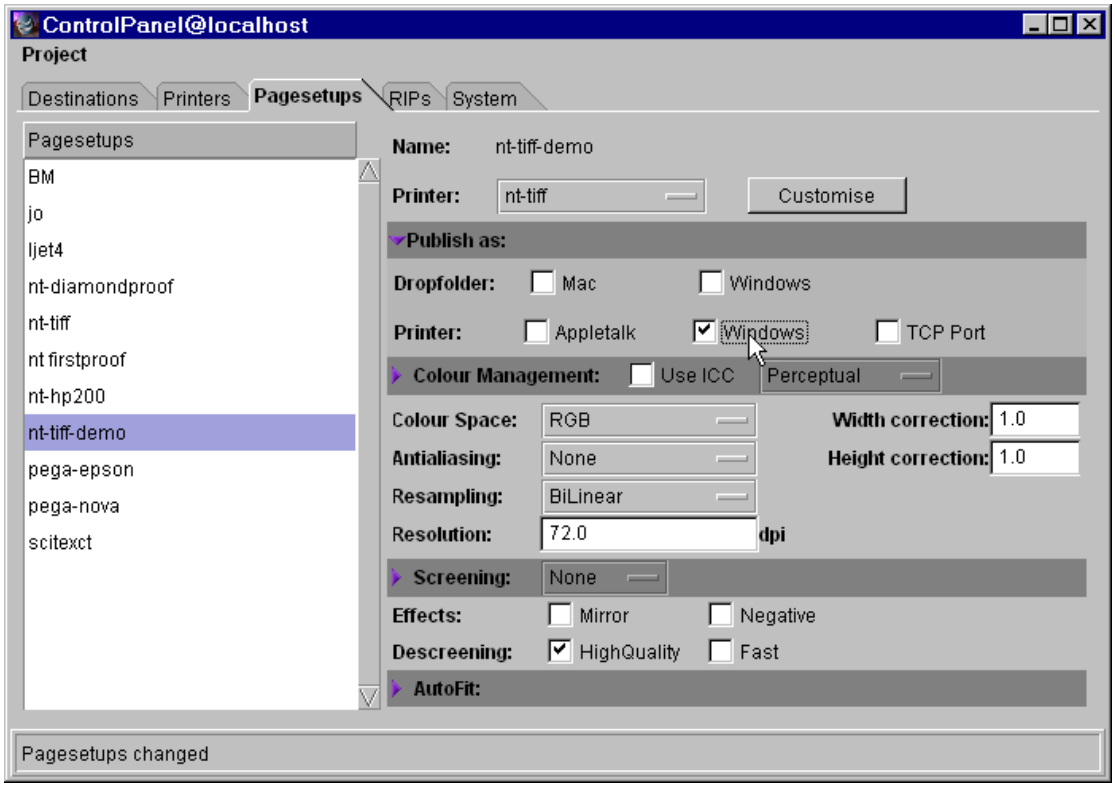
Another thing to note is that if you were adding a printer to the same computer on which BlackMagic is installed, you would then use \\.\pipe\bm-tiff as the name. This tells Windows that the named pipe is on the same machine as the printer and helps Windows to do some internal optimisations. The full name will still work but this seems to be better.

Publishing pagesetups for Windows printer under NT

This procedure involves the following steps
1 Select the pagesetup file to publish as printer
2 Install printer driver from installation CD (using the Printer wizard)

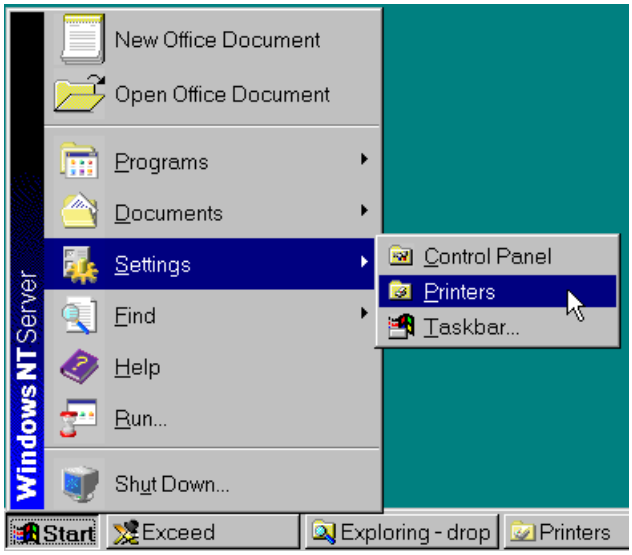
1 Select the pagesetup file to publish as printer

a In BlackMagic
go to the *ControlPanel/pagesetups* tab
In the *pagesetups* list
select the required pagesetup (e.g. *nt tiff demo*)
expand the *Publish as* section by clicking on the purple marker
In the *Publish as*: fields
check the *Printer: Windows* check box
Save changes using *Project menu ⇨ save*

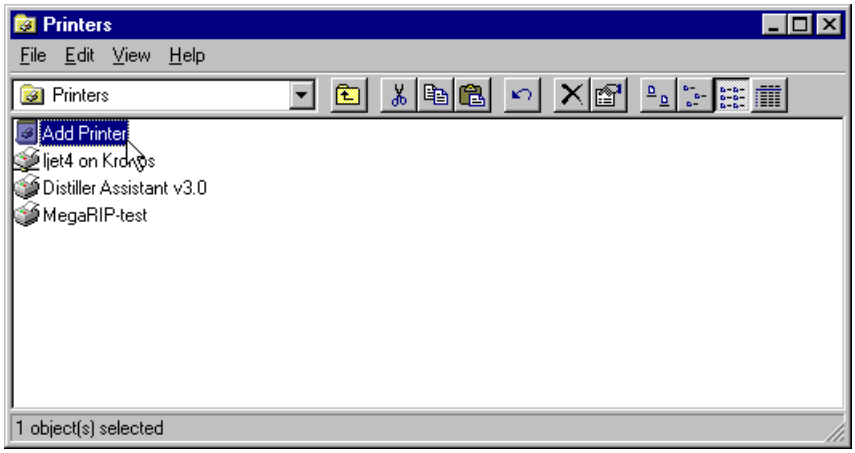


2 Install the printer driver from the installation CD

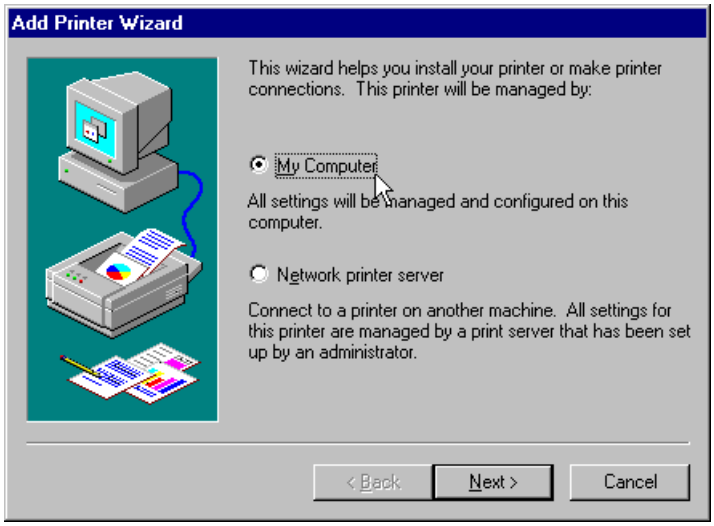
b On the Windows computer from the start button menu select *Settings, Printers*



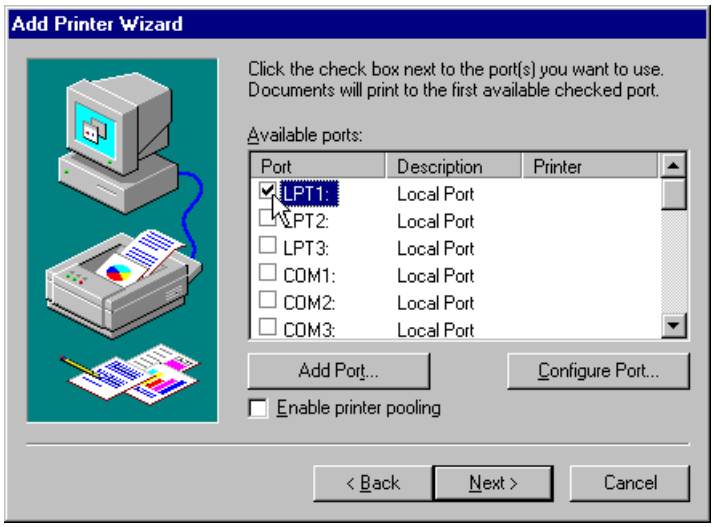
c The *Printers* screen is displayed
Click on *Add printer*



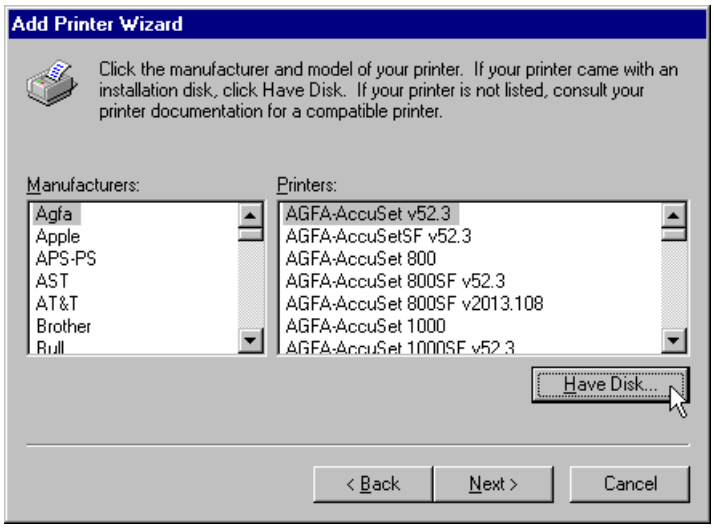
The *Add Printer Wizard* starts



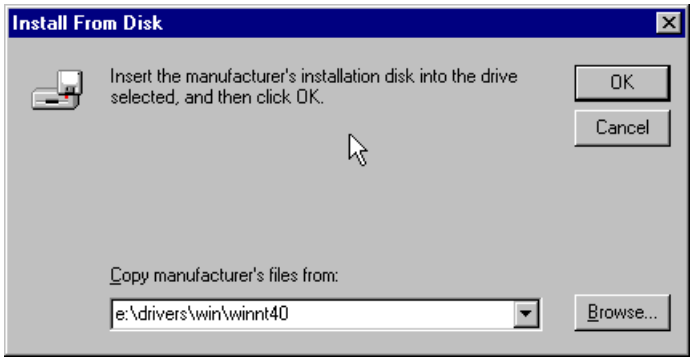
d Select *My Computer*
click *Next* button for next Wizard screen



e Check the *LPT1*:check box
click *Next* button for next Wizard screen

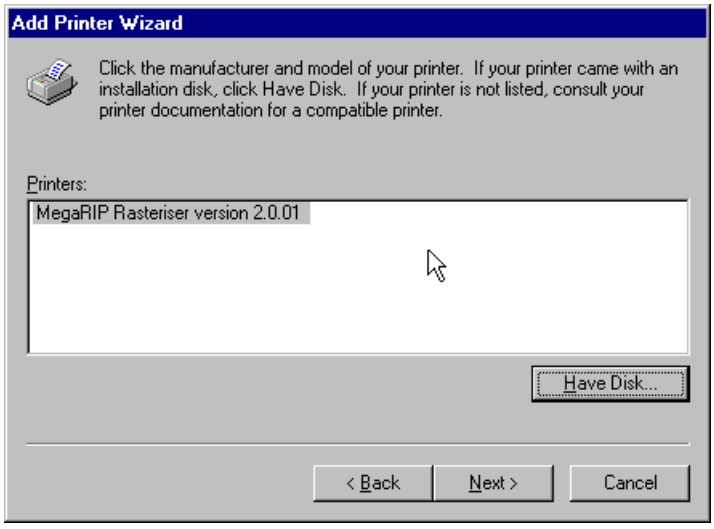


f Insert the BlackMagic Installation CD into drive
click the *Have Disk* button
Install from Disk screen is displayed

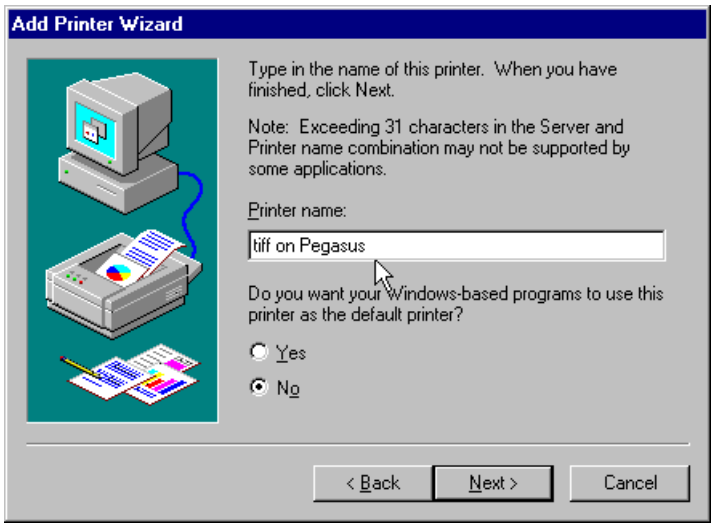


g From the BlackMagic installation CD directory *drivers**win*.
select the directory corresponding to your computer's operating system
click OK

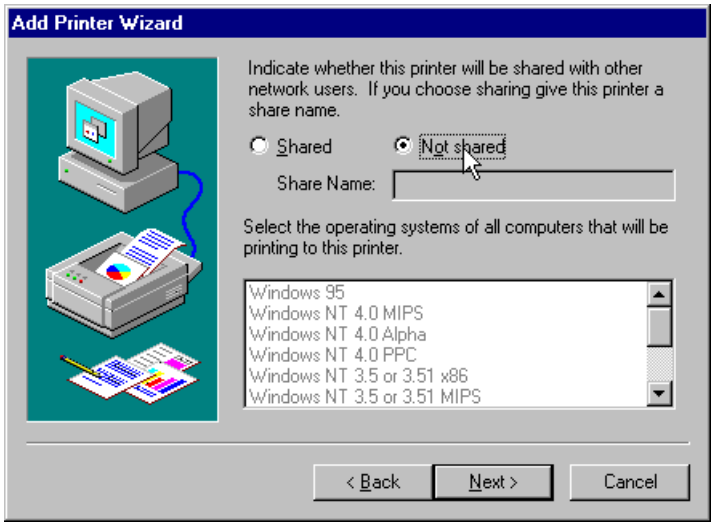
Available printer drivers in that directory are displayed



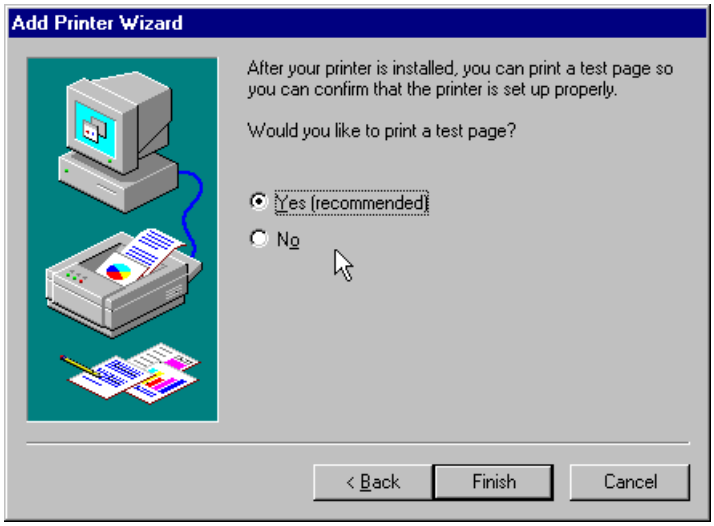
h Click on the MegaRIP driver
Click the *Next* button for the next Wizard screen



i In the *Printer Name* field,
type in the pagesetup name
This is the name that pagesetup will display as a printer on your desktop
Click on the *Next* button for the next wizard screen

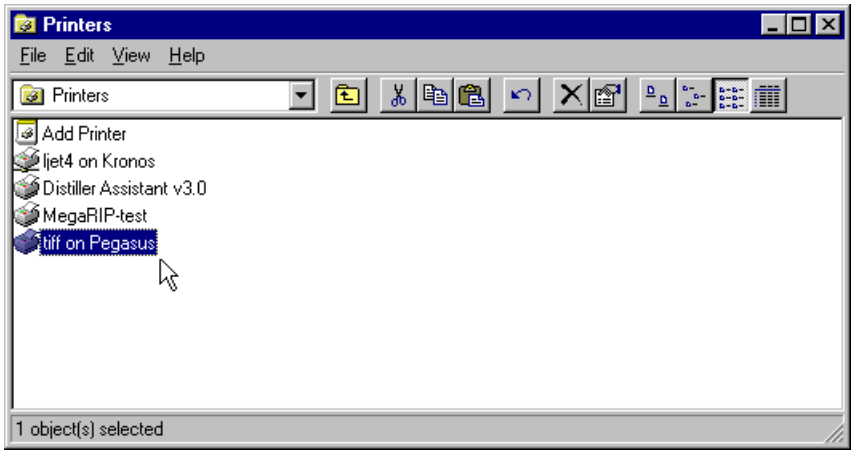


j Select the desired sharing option
click on the *Next* button for the next Wizard screen



k Click on the *Finish* button to close the Wizard.

The pagesetup on BlackMagic now appears as a printer on your computer and you can print to it from your applications.



l Open up the Windows printer control panel, right click on the printer you just installed and select properties. Click on the ports tab, then add port. Select local port as the type of port to add and in the name field put in \\hostname\pipe\pagesetup-name where hostname is the computer BlackMagic is installed on and pagesetup-name is the pagesetup on BlackMagic you wish this printer to send jobs to.

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Publishing pagesetups as AppleTalk dropfolder under NT.

The following procedure uses the AppleTalk services provided with NT server and therefore assumes that NT server is installed. It will not work with NT workstation, as it has no AppleTalk services. As far as BlackMagic is concerned all this does is make it look in drop/pagesetup-name for incoming files. Getting the file there relies on AppleTalk services.

Windows cannot publish an AppleTalk folder via a programming API so the procedure is as follows. Go the start menu and select run. In the open field enter winfile and press enter. Go to the macfile menu and select create volume. Put in an appropriate name (i.e. BlackMagic drop folders). In the path field enter c:\Program Files\BlackMagic\drop. If BlackMagic has been installed in a different location then change the path name to reflect this. Make sure you create a volume with full read/write permissions otherwise no one will be able to save files there. Once this is done Macintosh users can open the drop folder using the AppleShare item in the chooser and place files there. In the drop folder that gets mounted, there will be a folder for each pagesetup that has the drop folder publish property selected.

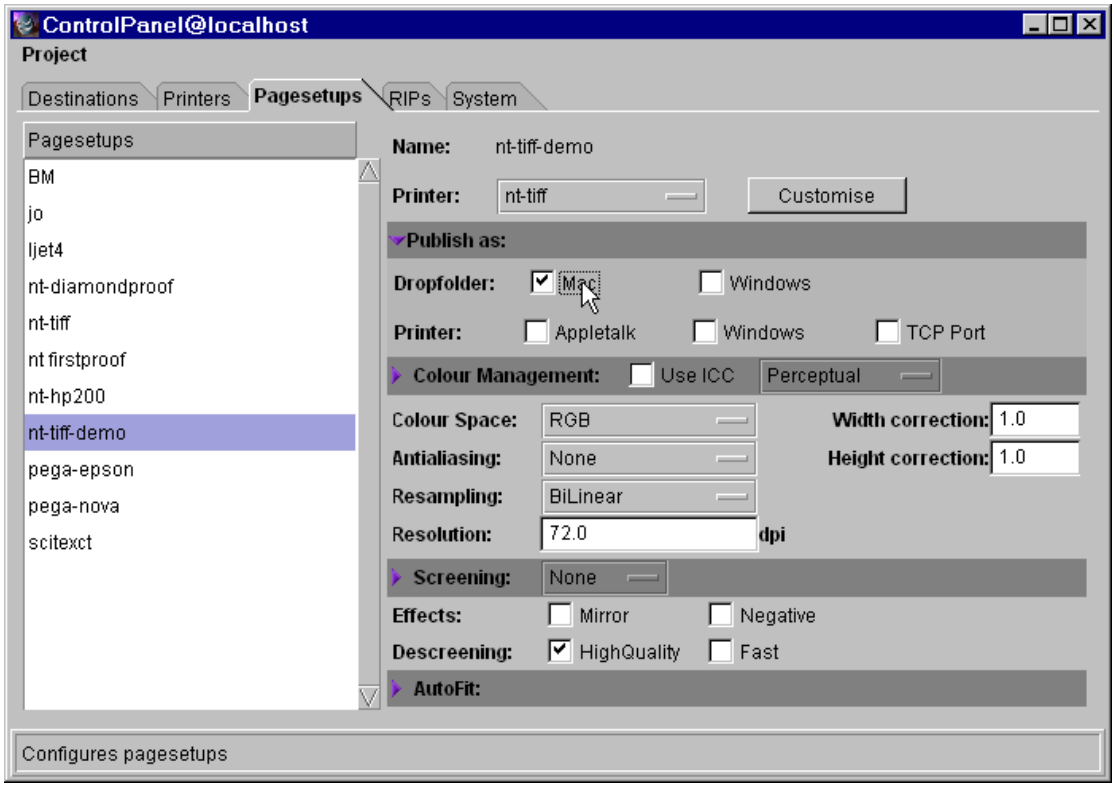
Files should be saved into the folder showing the name of the pagesetup the job is to use. Once the file is saved, BlackMagic will then place them in the imaging queue. The publishing procedure only needs to be done once as all pagesetup dropfolders will appear under the published dropfolder.

Publishing pagesetups as AppleTalk dropfolder under NT.

This procedure involves the following steps:
1 Select the pagesetup as a dropfolder in BlackMagic
2 Create a Mac accessible volume on the sending computer
3 Name the volume, set the path and permissions

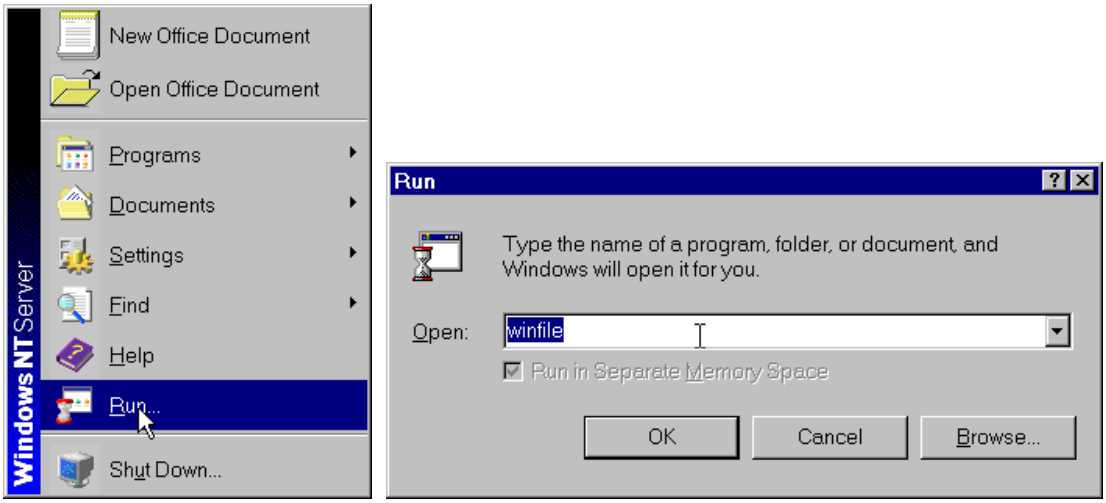
1 Select the pagesetup as a dropfolder

a In BlackMagic
go to the *ControlPanel/Pagesetups* tab
In the *Pagesetups* list
select the required pagesetup (e.g. *nt tiff demo*)
expand the *Publish as* section by clicking on the purple marker
In the *Publish as*: fields
check the *Printer: DropFolder* check box
Save changes using *Project menu ⇨ save*

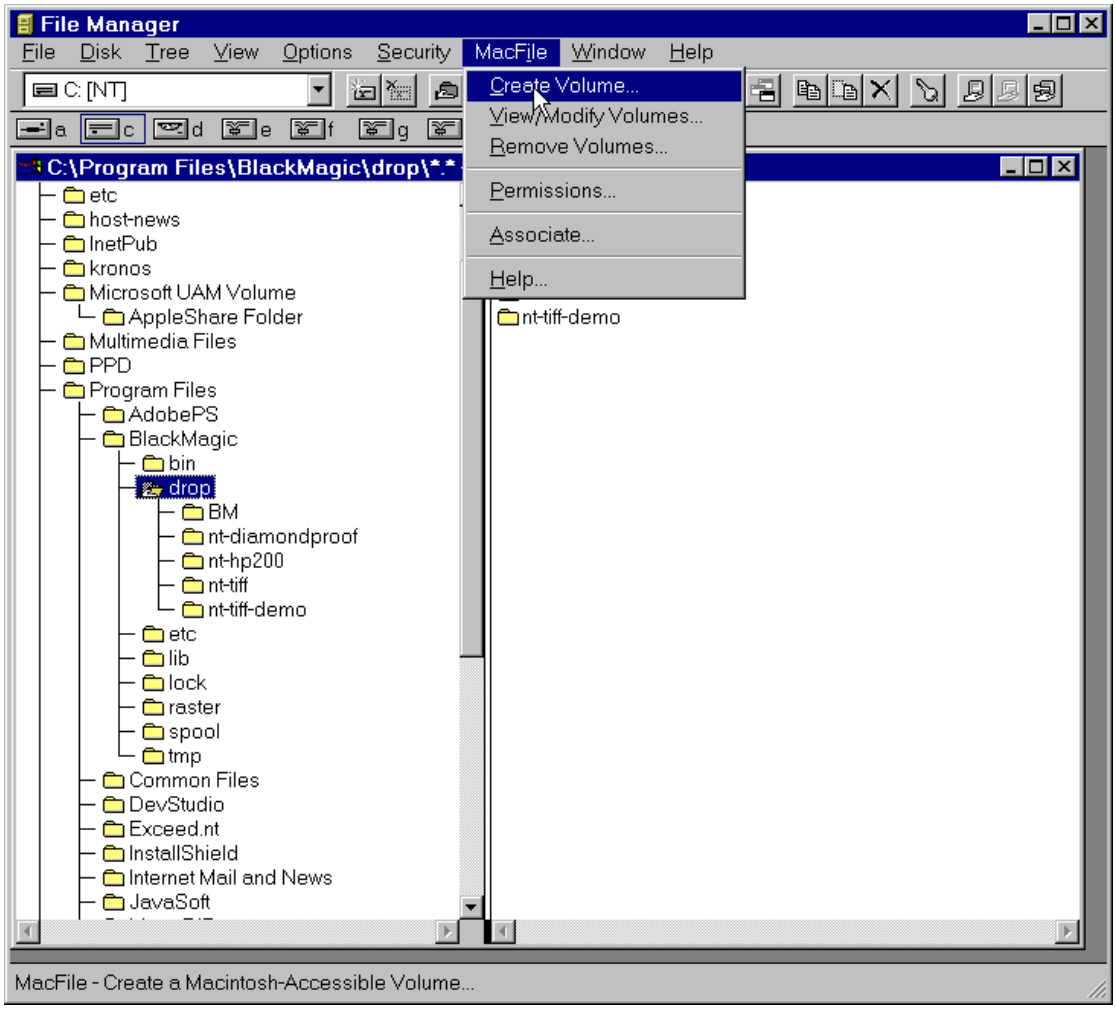


2 Create a Mac accessible volume

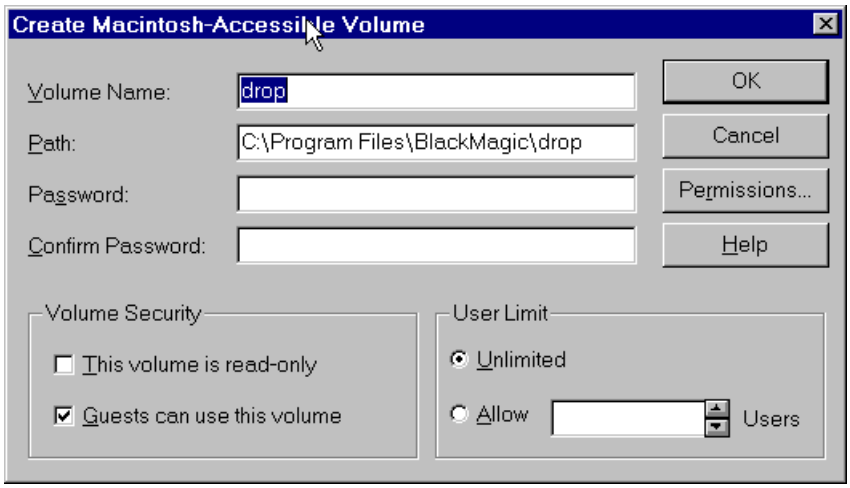
b On the computer from which you will be printing
Go to the start menu and select run.



c In the *Open* field
type: `winfile`↵
click OK
File Manager screen is displayed



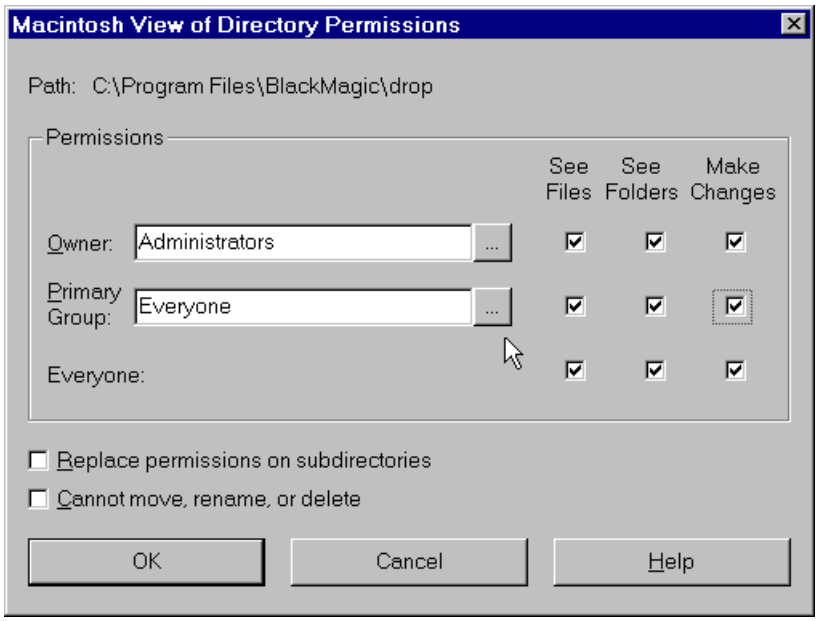
d Go to the *macfile* menu
select *Create Volume*
Create Macintosh Accessible Volume screen is displayed



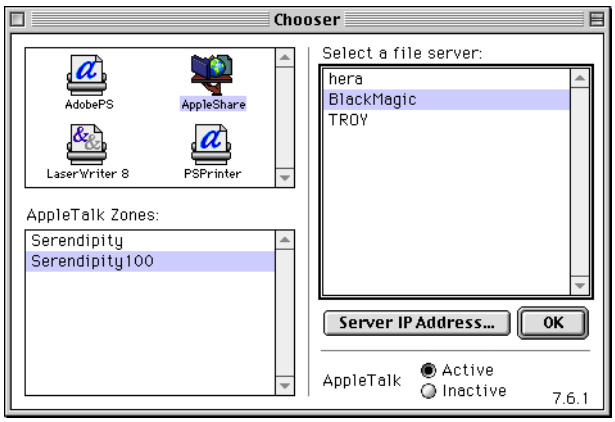
3 Name the volume and set the path and permissions

e In the *Volume Name* field
type in an appropriate name (e.g.: `BlackMagic drop folders`).
In the *Path* field
- type in `c:\Program Files\BlackMagic\drop`

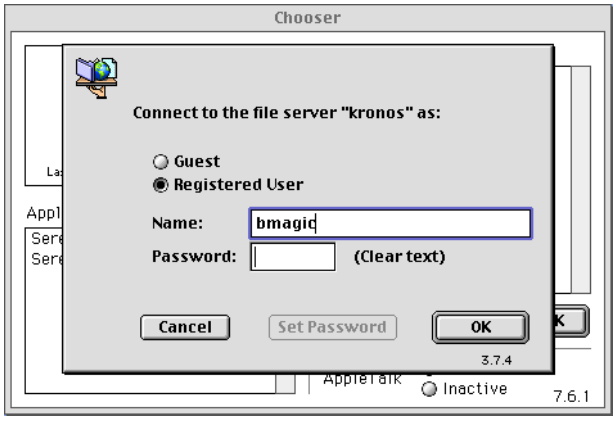
Click on the *Permissions* button
Macintosh *View of Directory Permissions* screen is displayed

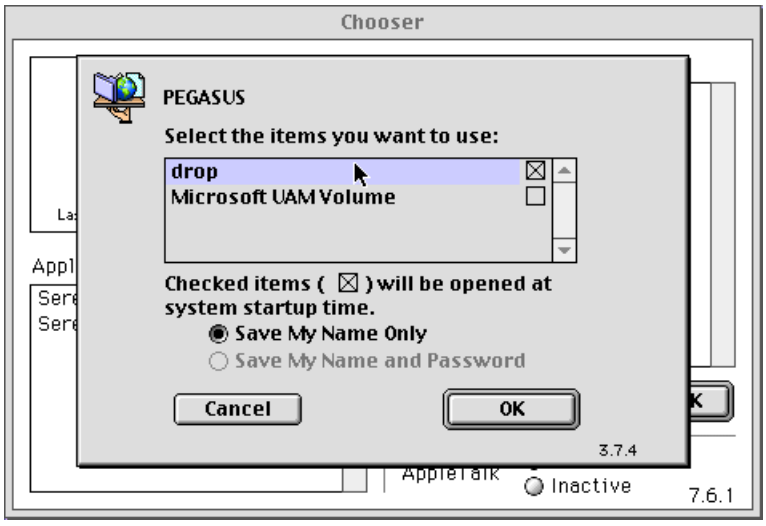


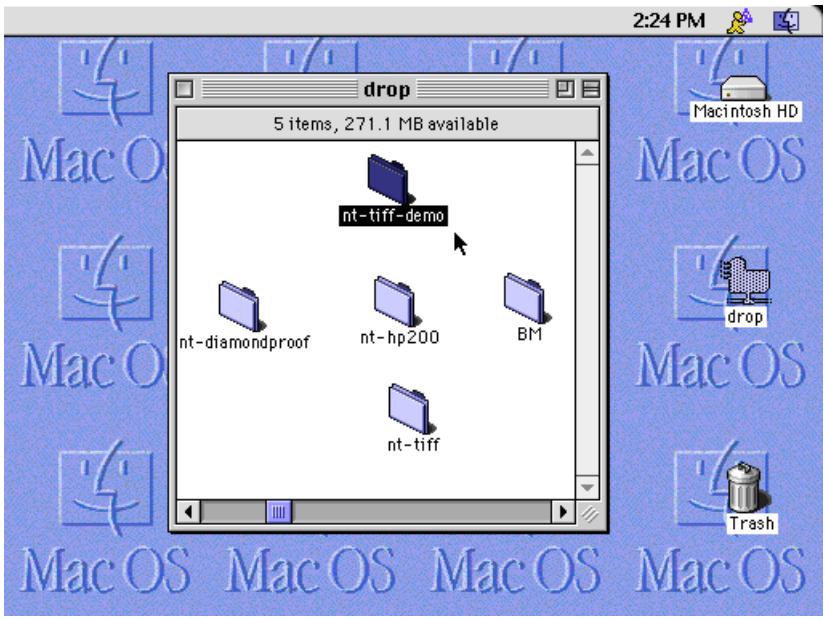
f Check the check boxes for: *See files*, *See folders*, *Make Changes* for <u>all users</u>
Make sure you create the volume with full read/write permissions otherwise no one will be able to save files there.



Macintosh users can now open the drop folder using the AppleShare item in the chooser and place files in there. In the drop folder that gets mounted there, will be a folder for each pagesetup that has the drop folder publish property selected.


Chooser
Connect to the file server "kronos" as:
Guest
Registered User
Name: bmagic
Password:
(Clear text)
Cancel
Set Password
OK
3.7.4
AppleTalk
Inactive
7.6.1


Chooser
PEGASUS
Select the items you want to use:
drop
Microsoft UAM Volume
Checked items (☒) will be opened at system startup time.
Save My Name Only
Save My Name and Password
Cancel
OK
3.7.4
AppleTalk
Inactive
7.6.1


2:24 PM
drop
5 items, 271.1 MB available
nt-tiff-demo
nt-diamondproof
nt-hp200
BM
nt-tiff
Macintosh HD
drop
Trash
Mac OS

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Publishing pagesetups as Windows dropfolder under NT

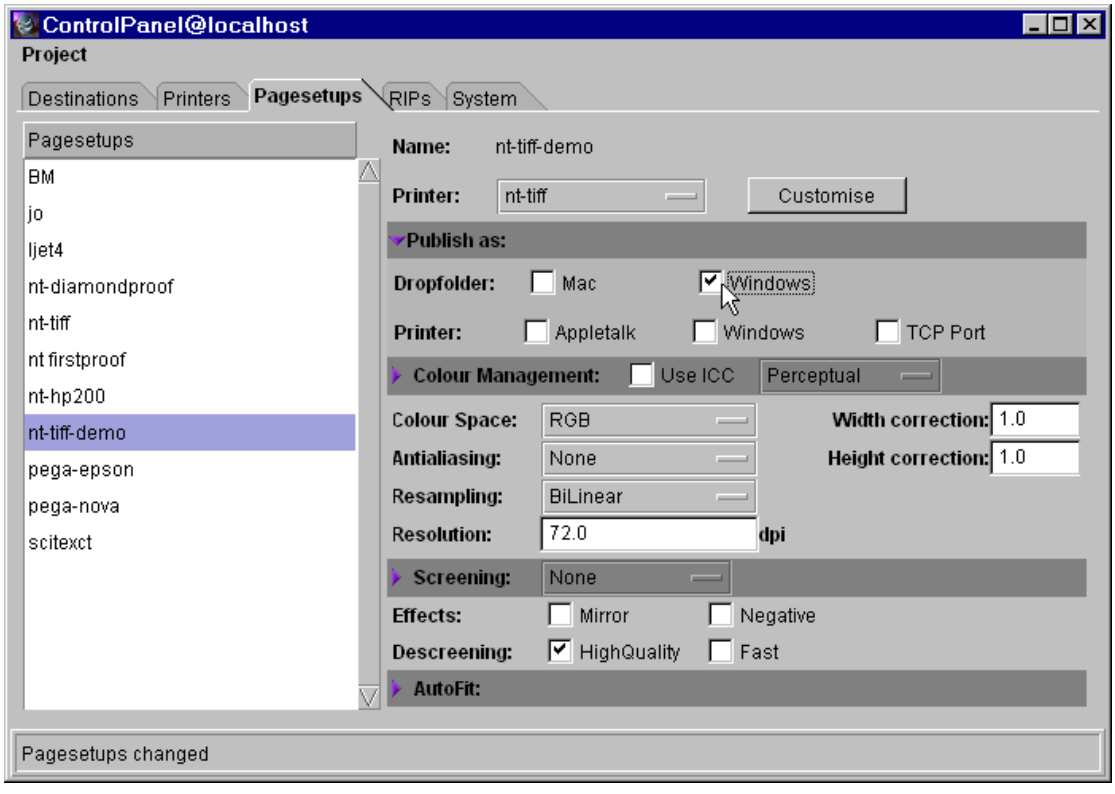
As there is no way of getting Windows to publish a directory via a programming API, user intervention is required to create a share for the drop folder. To do this, first run Windows explorer using the start bar. Find the drop directory in the BlackMagic installation directory (typically “c:\Program Files\BlackMagic”. If the software is installed in a different directory then go to the appropriate directory). In the Explorer file list, right click on the directory called drop and select sharing. Enable the share as button and, in the name field, put in an appropriate name e.g. “BM dropfolders”. Make sure everyone has full permissions in this directory and click OK. Users will then be able to access this directory via the network neighborhood and place files in it to be processed by BlackMagic. The publishing procedure only needs to be done once as all pagesetup dropfolders will appear under the published dropfolder.

Publishing pagesetups as Windows dropfolder under NT

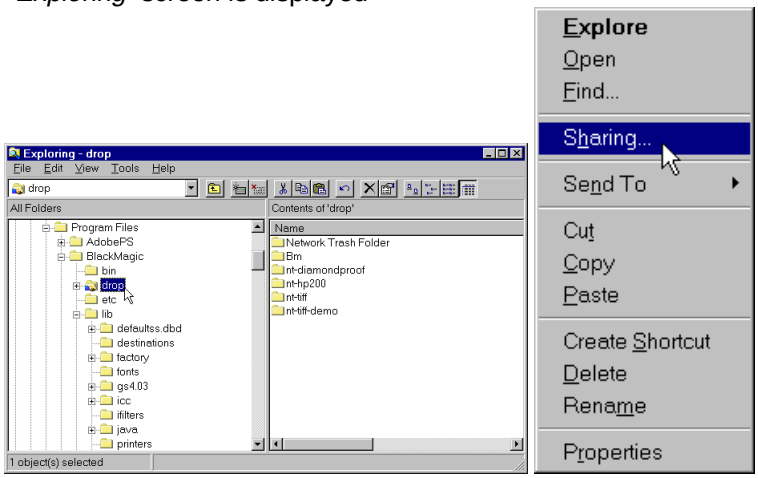
This procedure involves the following steps
1 Open the drop directory in the BlackMagic installation directory
2 Enable sharing of the drop folder
3 Assign permissions

1 Open the drop directory in the BlackMagic installation directory

a In BlackMagic
go to the *ControlPanel/Pagesetups* tab
In the *Pagesetups* list
select the required pagesetup (e.g. nt tiff demo)
expand the *Publish as* section by clicking on the purple marker
In the *Publish as*: fields
check the *Windows* DropFolder check box
Save changes using *Project menu ⇨ save*



b Run Windows explorer using the start bar
Exploring screen is displayed



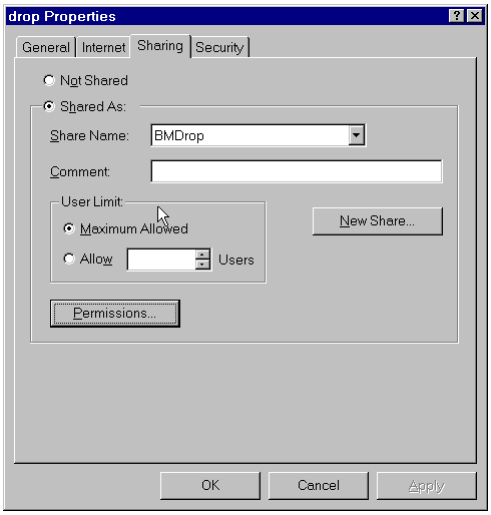
..

2 Enable sharing of the drop folder

c In the BlackMagic installation directory
click on the *drop* directory

This is typically "c:\Program Files\BlackMagic" . If the software is installed in a different directory then go to the appropriate directory.

In the *Explorer* folder list right-click on the folder called *drop*
select *Sharing*
screen *Drop Properties* is displayed.



3 Assign permissions

d Enable the *Shared As* button
In the *Share Name* field
type an appropriate name (e.g. `BM dropfolders`).
assign full permissions to all users in this directory
click ok.

Users will then be able to access this directory via the network neighborhood and place files in it, which will then be processed by BlackMagic. The publishing procedure only needs to be done once as all pagesetup dropfolders will appear under the published dropfolder

☺

Interfacing BlackMagic to NT services

NT has many networking options for drives and printers so it makes sense to use them in conjunction with BlackMagic.

Using NT network volumes for polling

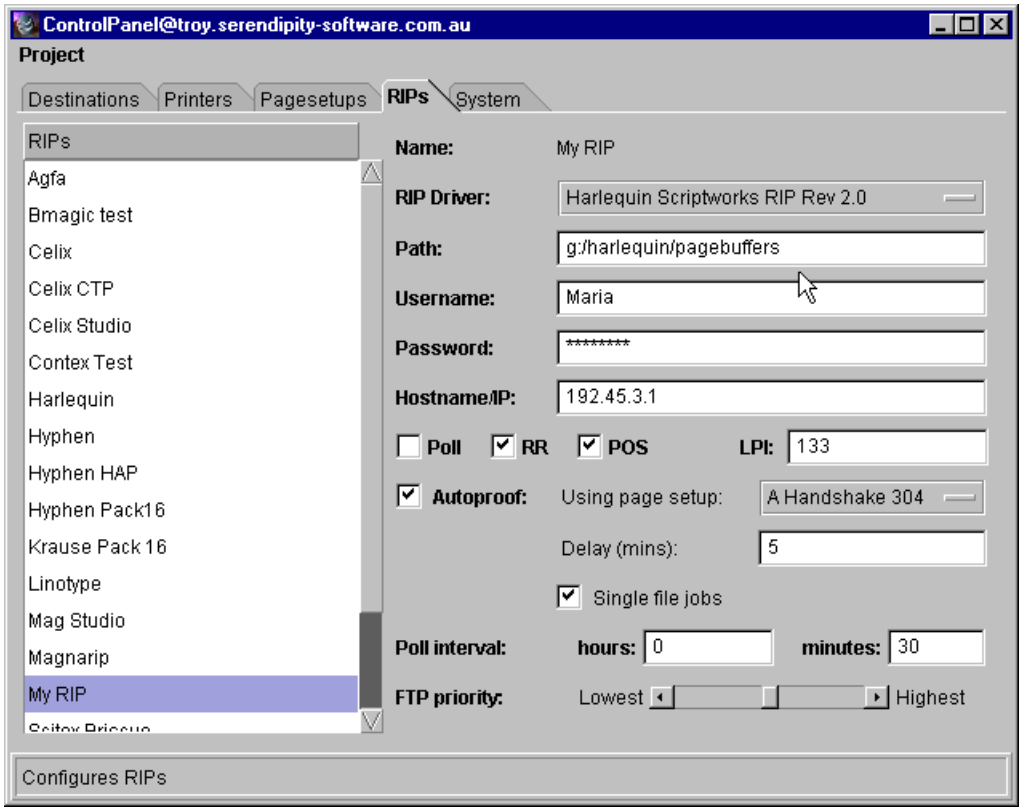
Network drives are useful for BlackMagic and polling of RIPs. This is straightforward to use. It only requires that the drive be mounted permanently using Windows explorer, BlackMagic will then poll the RIP using the mounted volume. In the RIP configuration screen you would use localhost as the TCP/IP address and in the path / stripe path you would enter the network volume name followed by any required subdirectories. BlackMagic expects paths to have / in them instead of \ as Windows normally requires so if you wanted to access g:\harlequin\pagebuffers you would enter g:/harlequin/pagebuffers in the appropriate path / stripe path text item.

Using NT network volumes for polling

This procedure involves the following steps
1 Enter localhost as the TCP/IP address
2 Enter the network volume name and subdirectories in the path

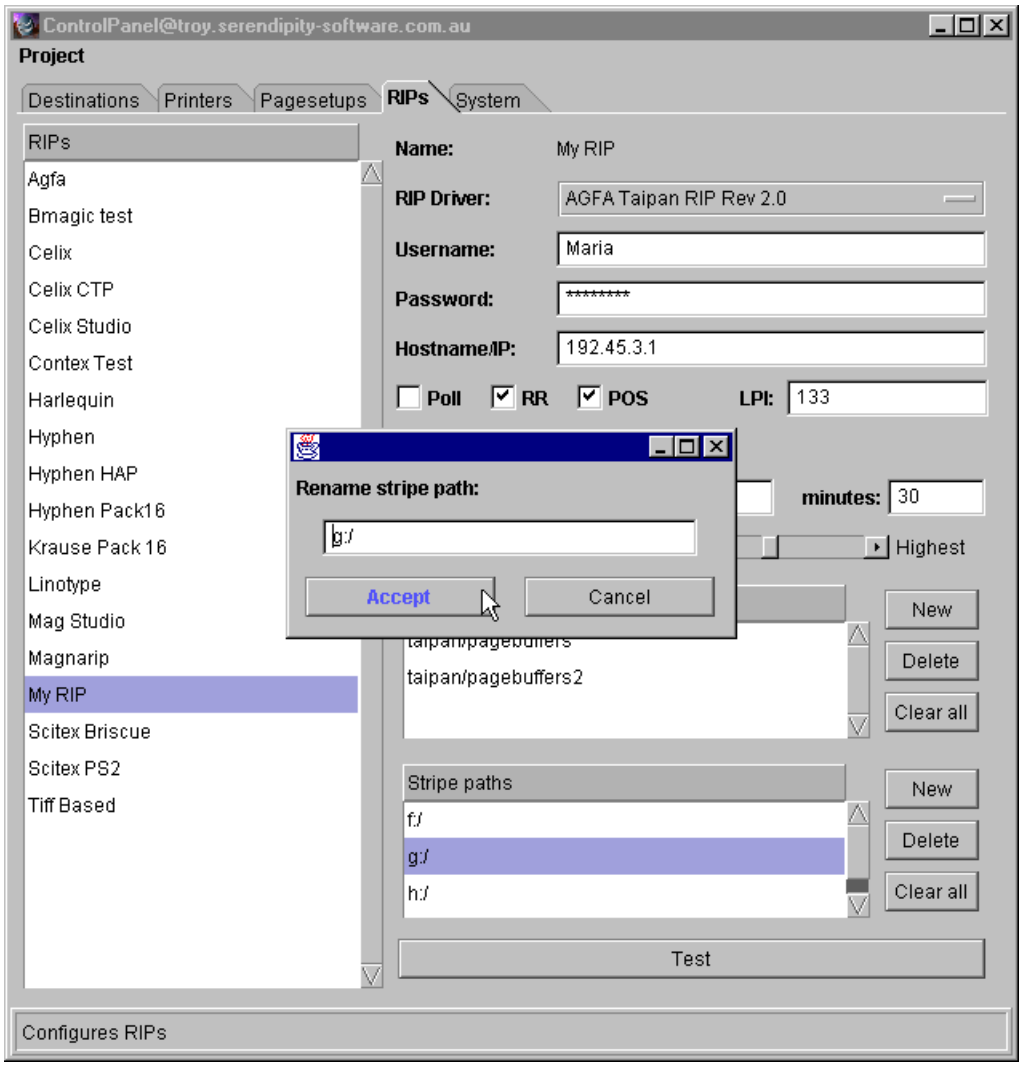
1 Enter localhost as the TCP/IP address

a On BlackMagic
In the *RIP* configuration tab
type in `localhost` as the TCP/IP address



2 Enter the network volume name and subdirectories in the path

b In the path / stripe path
enter the network volume name followed by any required subdirectories.
BlackMagic expects paths to have / in them instead of \ as Windows normally requires, so if you wanted to access g:\harlequin\pagebuffers you would enter g:/harlequin/pagebuffers in the appropriate path / stripe path text item.

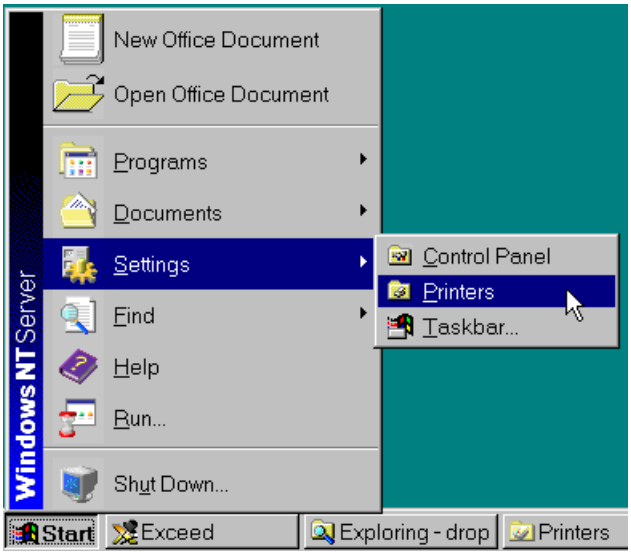


☺

Using NT printers as destinations

A *printer* in Windows is referred to as a *local print queue* in BlackMagic. This can initially cause some confusion.

Printers are added and administered in Windows using the printers control panel. The printer control panel is accessible via the Start Bar ⇨ Settings ⇨ Printers.

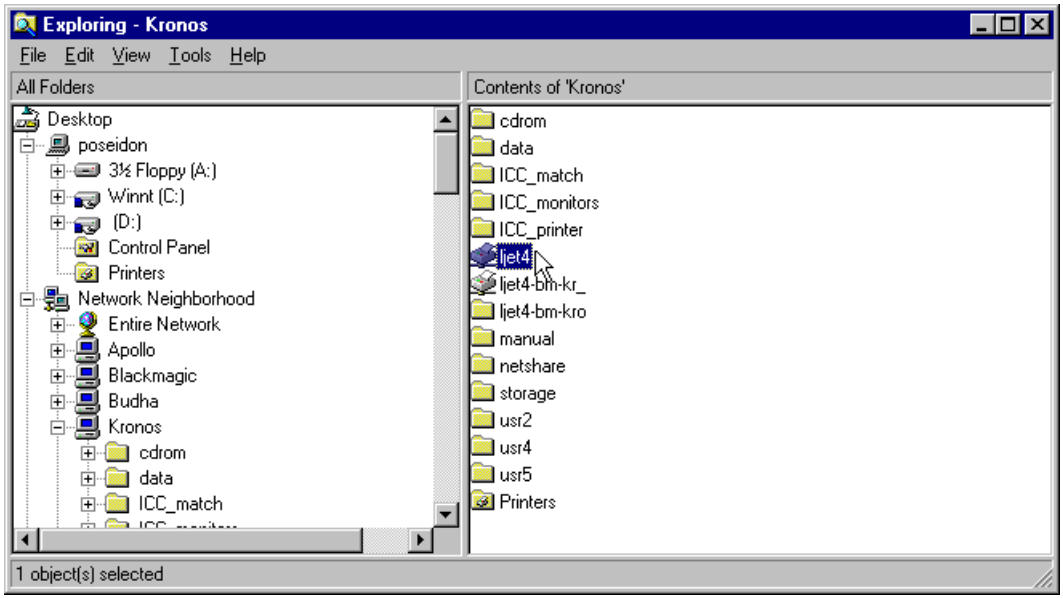


Two types of printers can be created: a network printer and a local printer.

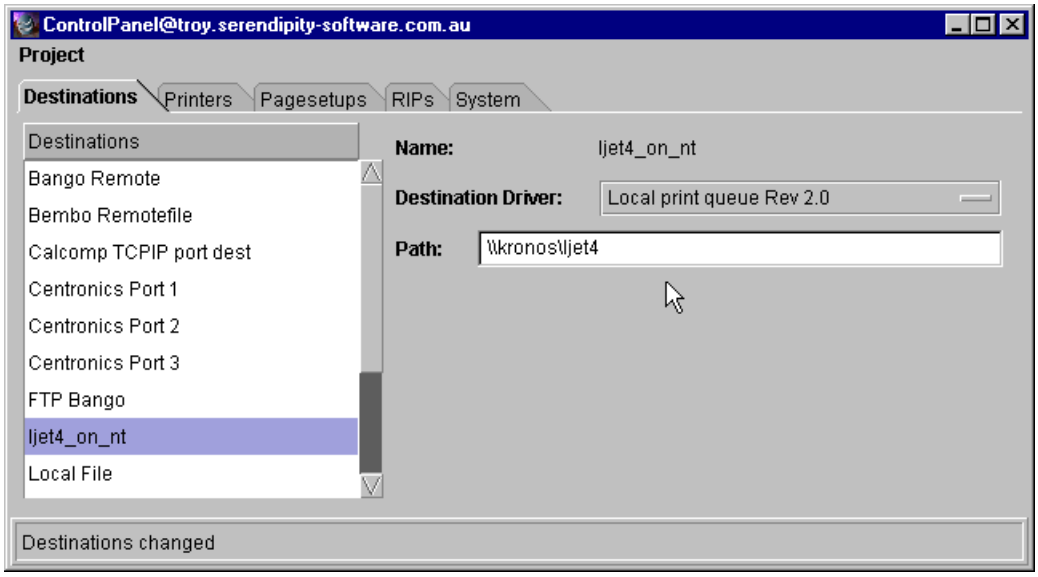
A network printer is a printer that resides on some other computer or has a network interface. A local printer is directly attached to the computer currently being configuring. Network and local printers need to be treated slightly differently by BlackMagic

Network printers as destinations (NT)

a Go to the network neighborhood
find the printer you wish to have BlackMagic print to.
Note down the name of the host it resides on and the name of the printer



Hosts have an icon of a computer next to them while printers have an icon of a printer next to them. Also visible in the network neighborhood are network drives, which have an icon of a folder next to them. If you cannot find the required printer in the network neighborhood then it probably is not on the network or Windows does not have the correct network protocols and services installed to access that printer. Check the printer's documentation for instructions on how to make it visible on the network.



b Go to BlackMagic control panel
create a destination of type local print queue
In the path text item type `\\hostname\printername`

where hostname is the name of the computer you noted down previously and printername is the name of the printer you noted down.

Save the destination.

You can now attach this destination to any printer configured in BlackMagic and have it print to it over the network using Windows network transport.

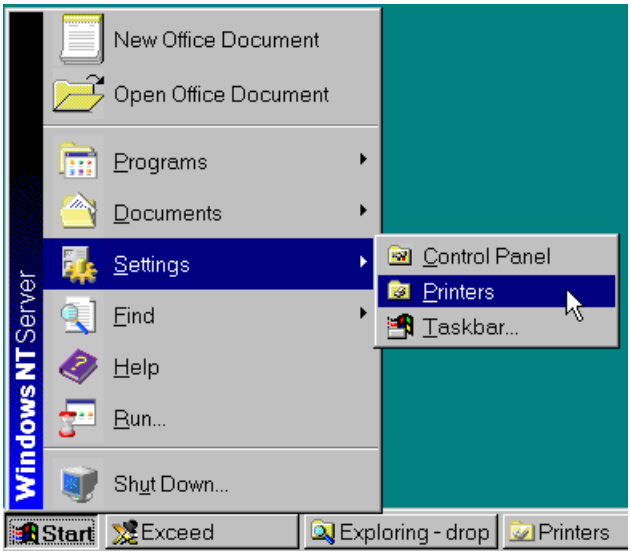
☺

Local printers as destinations (Windows NT)

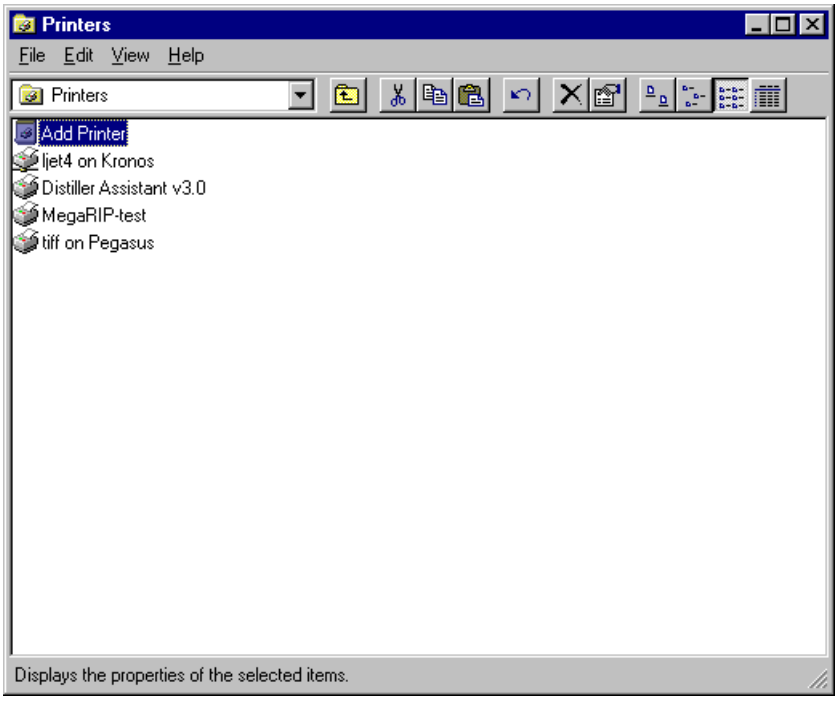
If the printer is attached to the local computer or is on the network in a way that can be accessed via a port driver in Windows. Ports are added to Windows using the server properties menu item in the printers control panel. Port drivers available in Windows NT are typically AppleTalk print services (for AppleTalk printers), local port (for named pipes and network printers etc), lpr port (for UNIX print queues) and so on. lpr port only appears if Microsoft TCP/IP printing services are installed.

To have BlackMagic access a printer which falls into this category go to the Windows printer control panel and add a printer.

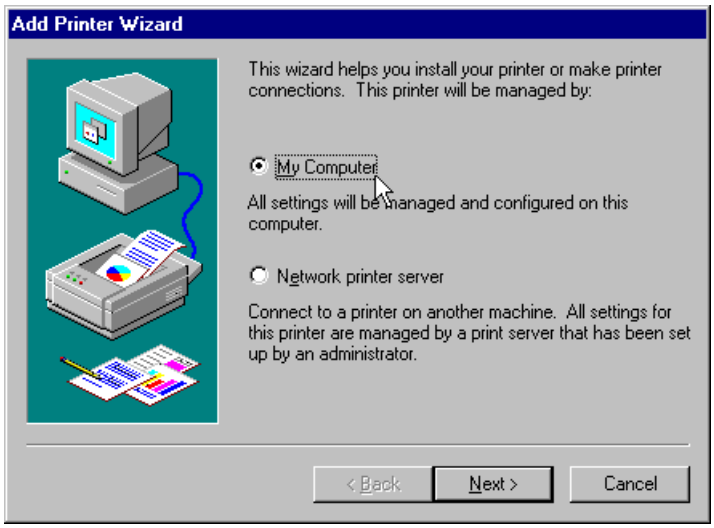
a At the *Start* bar
select Settings ⇨Printers



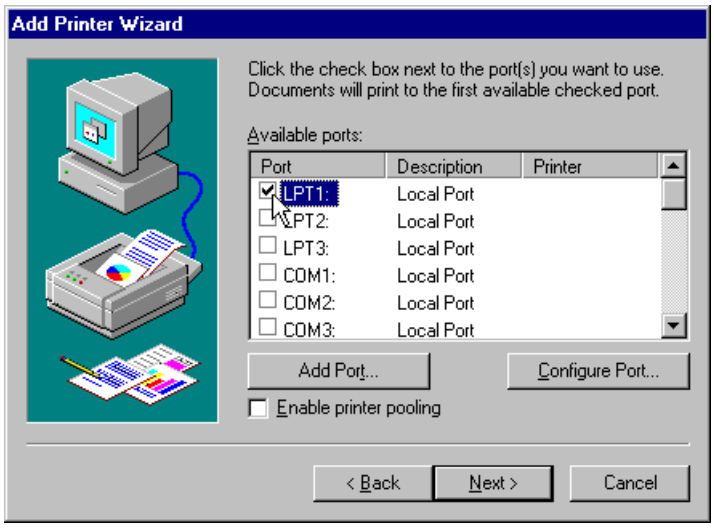
Select *Add printer*



The Add Printer Wizard starts



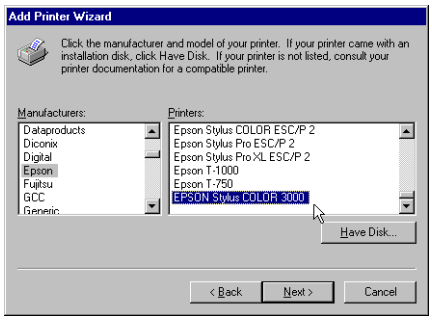
b Select *My Computer*
click *Next*



c Select the parallel port LPT1:
prompted for a port appears

either pick one of the predefined ports in Windows or click "Add Port" to create a new one to use.

Click *Next*.

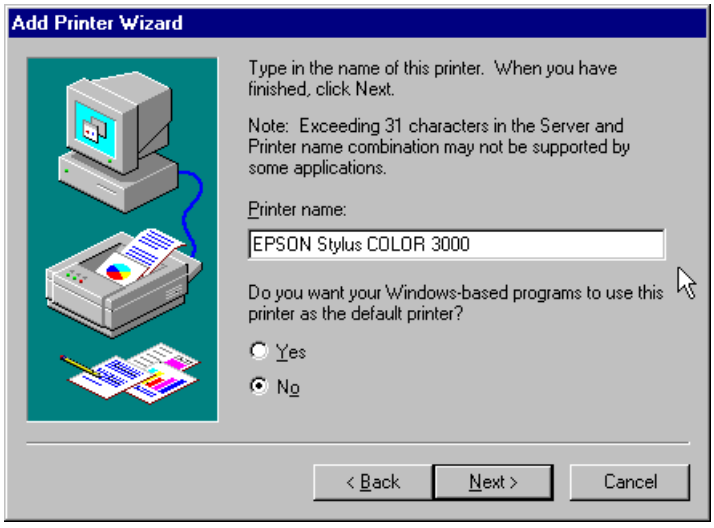


d Select a printer (e.g. an EPSON printer)

Pick a printer driver to use. Any printer driver will do as BlackMagic submits raw data into the queue bypassing the

printer driver. It is however a good idea to install the MegaRIP printer driver which comes with the BlackMagic CDROM.

Click *Next*.

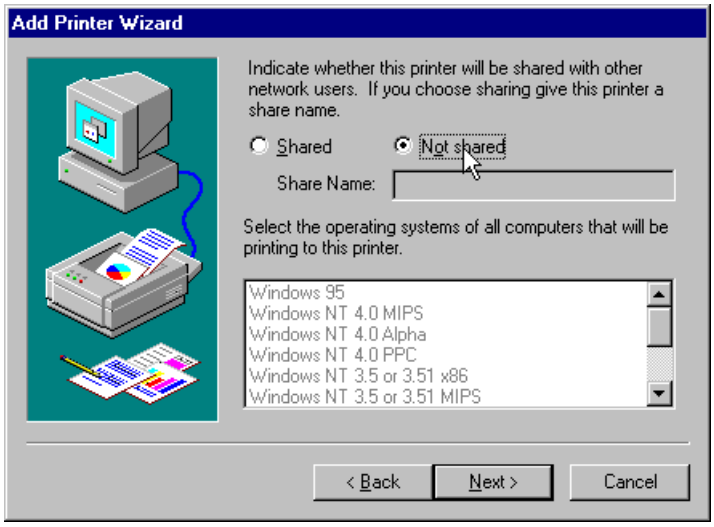


e Name the local printer

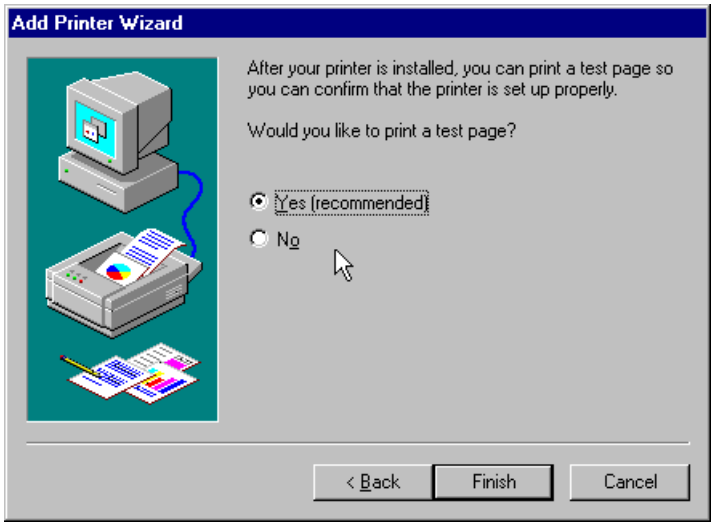
Put in the name you wish the printer to be known as by Windows. Avoid using spaces in the name as this will make it less confusing later. You can however, use spaces if you wish.

Click *Next*

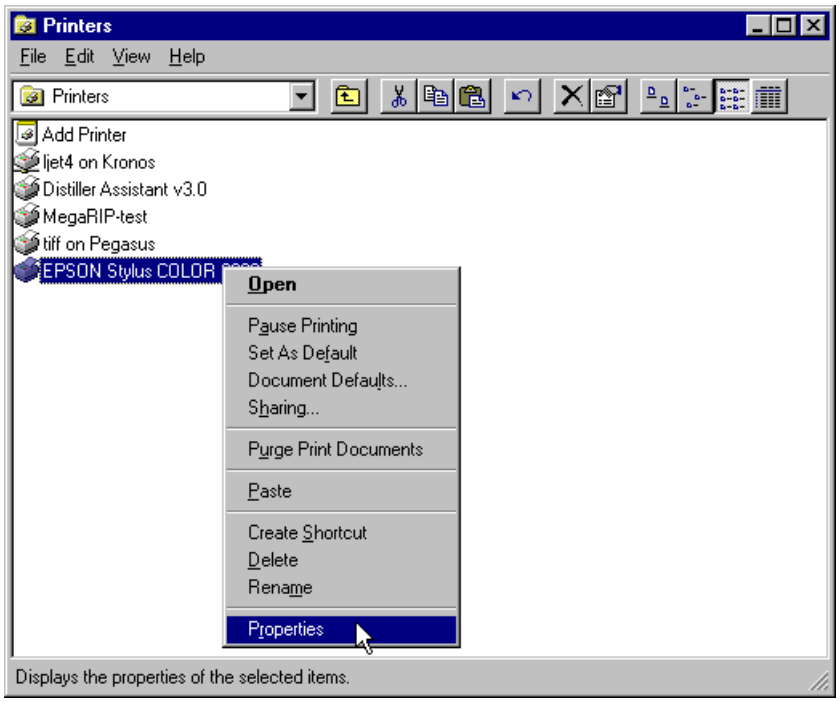
You should now have a Windows printer which will send data to your locally attached printer.



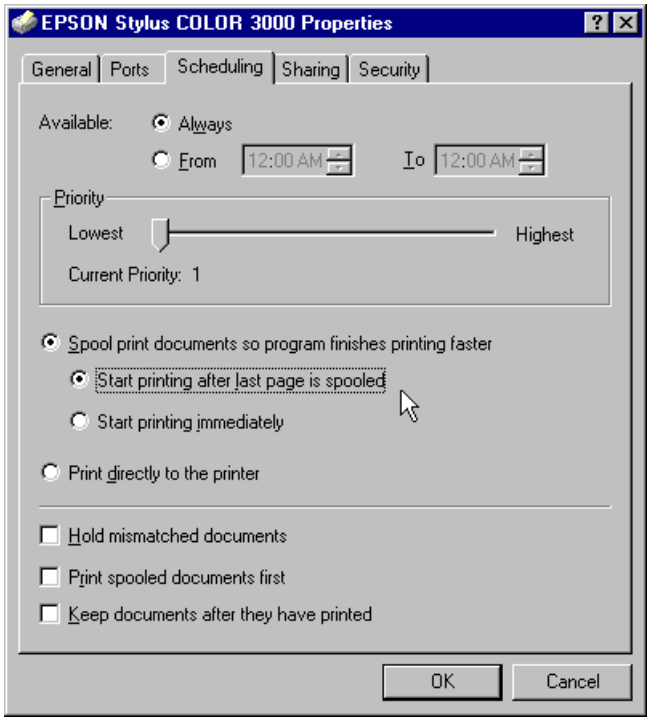
f Select a desired sharing option



g Click *Yes* to send a test page



h Change the local printer's properties from the printers settings window
Right click on the newly created printer and select Properties.



I Set the *Start printing after the last page is spooled* option.
In the printer properties window
click on scheduling and
turn on spooling
turn on “print after last page is received”.

This will speed up the delivery of the data from BlackMagic to the Windows printer and hence free-up BlackMagic quicker so it can get on with more processing.

j Go to the BlackMagic destination control panel and
create a new destination of type “local print queue”.
In the path text item
type in the name of the Windows printer you just created.
Save the destination.

Connectivity UNIX-BlackMagic

The topics in this section apply to installations of BlackMagic on UNIX systems only.

BlackMagic systems interface with AppleTalk, Windows and UNIX networks. The following sections describe how to print from machines connected to these networks.

BlackMagic can receive data from the network in the following ways:

- as a printer to which you can print in the usual way after installing the MegaRIP printer driver onto your system
- using drop folders into which you can place any file that the system understands, i.e. Postscript, EPS, TIFF, Scitex CT etc.

The following topics are covered in this section:

- Printing from Macintosh computers using the AppleTalk protocol
  - using the Chooser
  - using drop folders
- Printing from Windows computers using the Microsoft Networking protocol
  - using Windows printing
  - using drop folders
  - using Windows 95 or Windows NT 4.0
- Printing from UNIX systems
  - using LPD
  - using drop folders, UNIX NFS
  - using TCP/IP ports

Printing from Macintosh computers using the AppleTalk protocol

Printing from Macintosh using the chooser

The following procedure describes how to interface to your BlackMagic system using the Apple Networking protocol known as Apple EtherTalk.

The first procedure describes how to talk to the system as a Laserwriter postscript printer. For every queue that you configure on your system, BlackMagic will publish a Laserwriter printer on your Apple network having the same name that you entered in the Nickname field when you configured the queue.

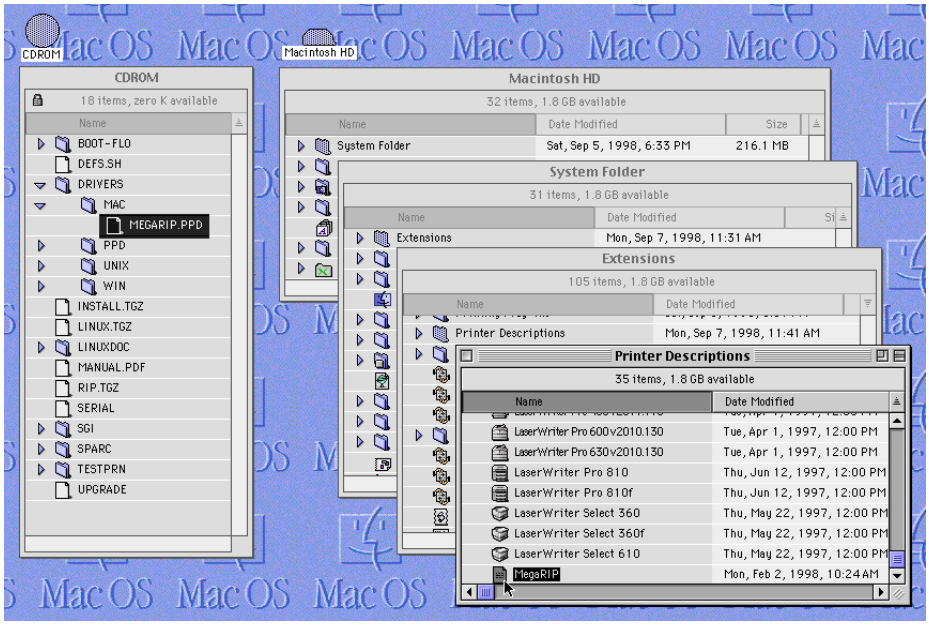
Configuring the Macintosh to print to the BlackMagic system as a Laserwriter postscript printer

This involves the following steps:
1 Install the file "MegaRIP.ppd" from the BlackMagic CD.
2 Assign the PPD to each queue published as a printer

1 Install the file "MegaRIP.ppd" from the BlackMagic System CD

a Insert the BlackMagic CD into your Macintosh CD-ROM drive

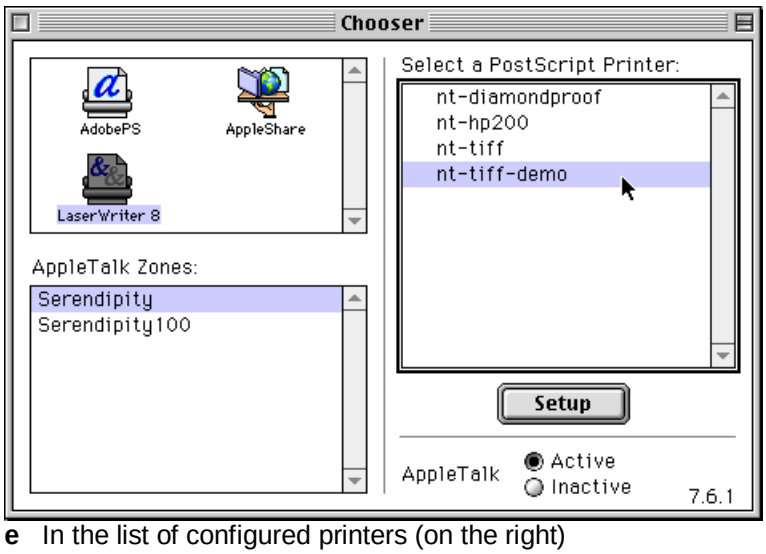
b Drag the file *MegaRIP.ppd*
from the Drivers folder in the CD
to the Printer Descriptions folder on your Macintosh



c Eject the BlackMagic CD from the CD drive

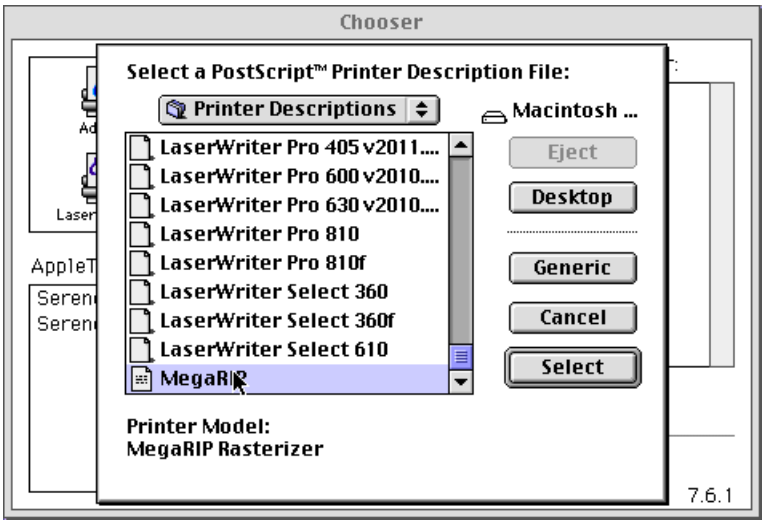
2 Assign the PPD to each queue published as a printer

d From the *Chooser* window
select *LaserWriter8* or later



e In the list of configured printers (on the right)
double click on each printer in turn

This is done so that Chooser can select the appropriate PPD (Printer Description File) for each printer.



You are now ready to print from any application on your Macintosh. If you are using QuarkXPress or PageMaker, make sure you select the MegaRIP as your printer type in the Page Setup and Print dialog boxes.

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Printing from Macintosh using dropfolders

This procedure describes how to send jobs to BlackMagic using published drop folders. Using drop folders can double the speed of spooling jobs as there is no intermediate spool file. It is therefore preferable to using the Chooser (as in the previous procedure). Using drop folders also allows you to send Postscript, TIFF, EPS and Scitex CT files for processing and output.

Configuring the Macintosh to print to the BlackMagic system using dropfolders

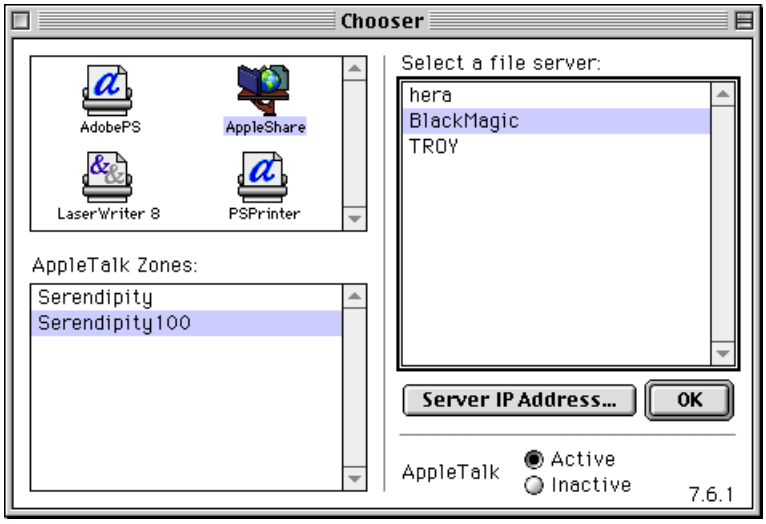
This procedure involves the following steps:

1 Select the printer whose drop folder you wish to mount
2 Print to the drop folder

1 Select the printer whose drop folder you wish to mount

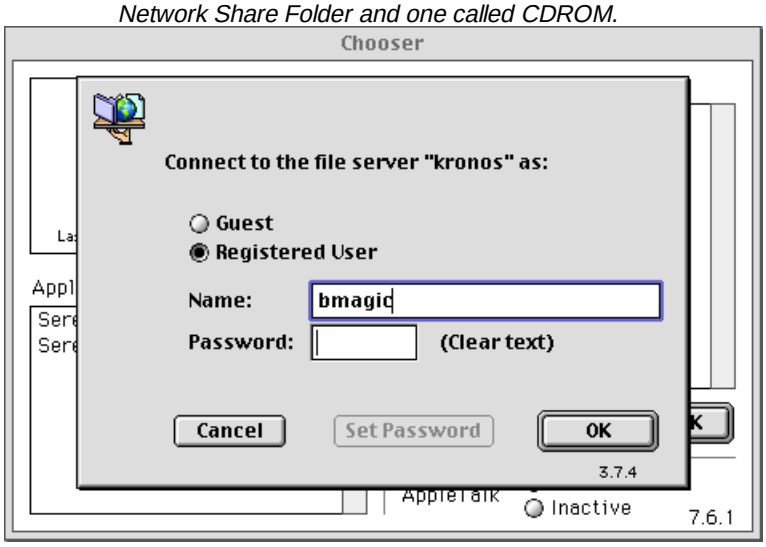
a Perform the previous procedure steps a to e above.

b At the *Chooser*
click on the *AppleShare* icon
double click on the BlackMagic entry
screen shows a prompt for user name
type in your system's user name and password (`bmagic`)
Case is important, so enter the user name exactly as shown above according to *the system you have.*



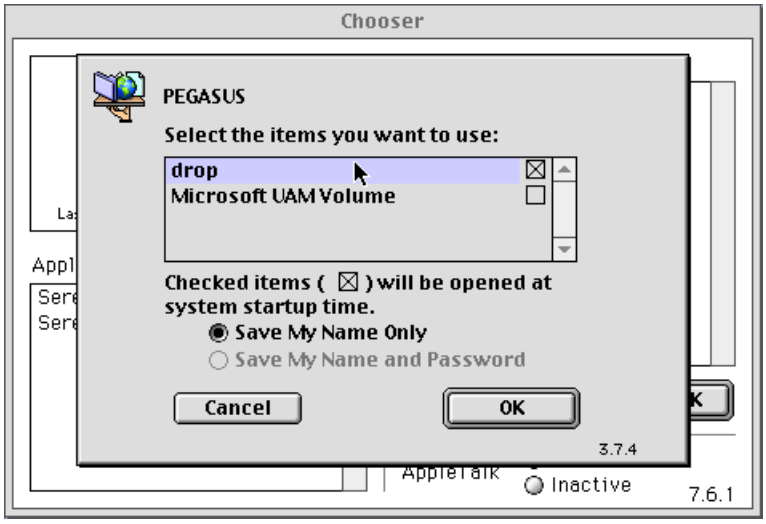
c At the *Password* field
enter a password (if your administrator has set one)
screen shows list of available folders

There will be one entry for each Output Queue you have configured to publish it self as well as two folders, one called Network Share Folder and one called CDROM.



d At the list of available folders
double click on the name of the output queue whose drop folder you wish to mount

An icon will appear on the desktop bearing the name of the pagesetup as you defined it with the ControlPanel application on your BlackMagic.

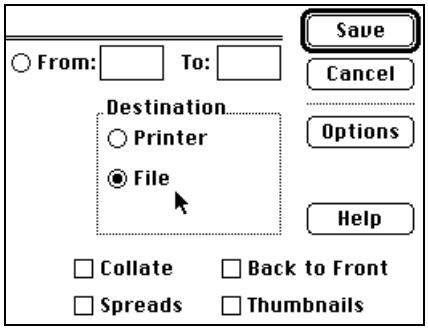


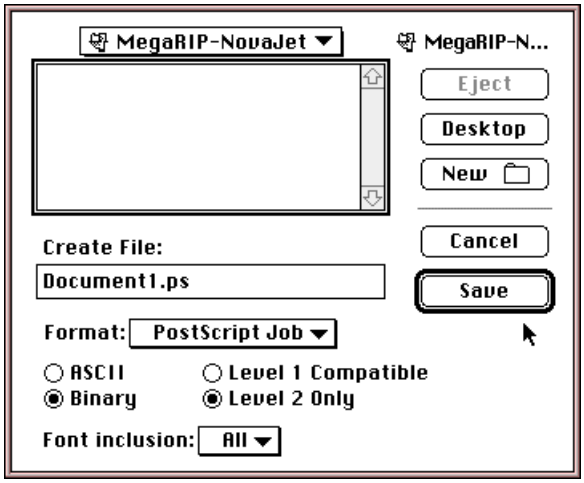
2 Print to the drop folder

e In the *Print Dialogue* box
select *File Destination* or *Print to File*
select the newly mounted folder as the destination directory
select the options:

- Postscript level 2
- binary data
- include all fonts

click on the *Print* button





The screen grabs show the process from QuarkXPress. Your Macintosh will now save the job into the drop folder and BlackMagic will proceed to process it. You may also

drag or save any files that are Postscript, EPS, TIFF or Scitex CT into the drop folder and BlackMagic will automatically process them.

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Printing from Windows computers using the Microsoft networking protocol

This section describes how to interface to your BlackMagic system using the Microsoft Windows Networking protocol. This is used by Windows for Workgroups, Windows 95 and Window NT (both workstation and server). Microsoft Windows 3.1 is not supported.

Before you can use BlackMagic with your Microsoft system you will need to install the TCP/IP protocol onto your computer. If you have Windows for Workgroups you will need to obtain the TCP/IP software from Microsoft. This is also available from their FTP site on the Internet at FTP.Microsoft.com or alternatively from their web page

http://www.microsoft.com

Windows 95 and Windows NT come with TCP/IP built in so all you will have to do is install it by using the network control panel.

On Linux systems BlackMagic is supplied with a default TCP/IP address of 192.9.200.4 so a good starting point would be to set up your first computer with an address of 192.9.200.1 and then use 192.9.200.2, 192.9.200.3, 192.9.200.5 and so forth for all remaining computers on your network. If you already have TCP/IP installed and have allocated different TCP/IP address you will need to re-configure BlackMagic to an address which fits into your network. See the appropriate section which appears elsewhere in this manual for instructions on how to do this.

Using Windows Printing

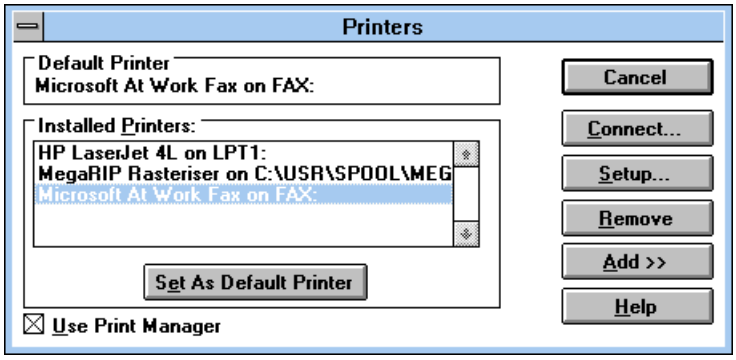
Firstly we will describe how to use the standard windows printing subsystem to send jobs to BlackMagic. For every pagesetup that you have configured on the system, BlackMagic will publish a Windows network printer with the same name.
If you have Windows for Workgroups or Window NT 3.51 or earlier follow these steps to configure your computer for printing to BlackMagic.

Configuring Windows for Workgroups and Win NT 3.51 to print to the BlackMagic system

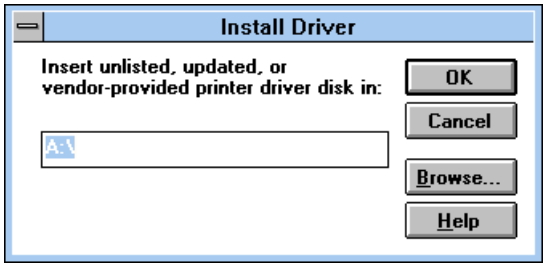
This procedure involves the following steps
1 Install the appropriate driver from the drivers directory from the BlackMagic CD
2 Select the printer you wish to use

1 Install the appropriate driver from the drivers directory from the BlackMagic CD

a Insert the BlackMagic CD into your CD ROM drive
launch to the *Printers* control panel
click the *Add* button
screen shows the *Install Driver* dialogue window



b At the *Install Driver* dialogue window
click on the *Browse* button
select your CD-ROM drive path
select the *drivers/windows/win3.1* directory on the CD-ROM
click *OK* to dismiss *Install Driver* dialogue



2 Select the printer you wish to use

c At the *Printers* control panel
click the *MegaRIP* entry
click on the *Connect* button
click on the *Network* button
double click on the MegaRIP entry

d From the *Shared Printers* window
select the printer you wish to use
click OK

You can now use the newly installed printer driver to print to your BlackMagic from any application.

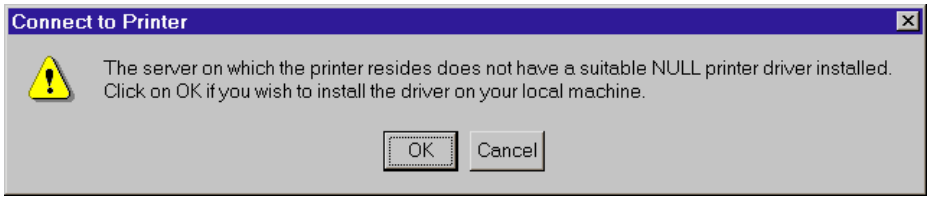
Configuring Windows 95 or Windows NT 4.0

Configuring Windows 95 or NT 4.0 to print to the BlackMagic system

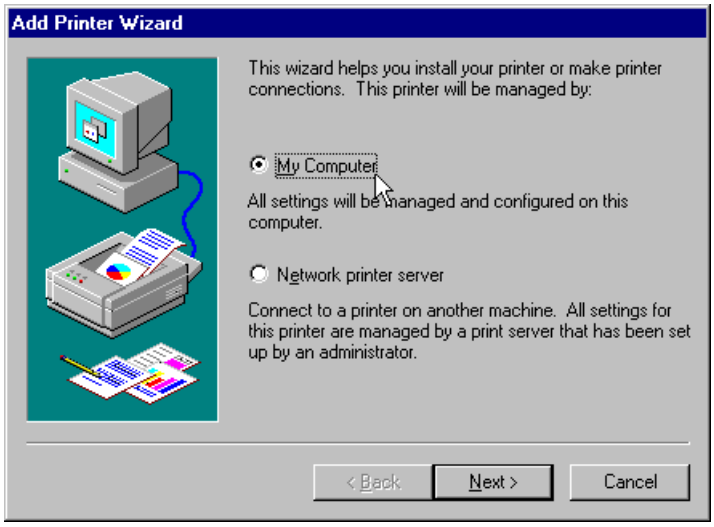
This procedure involves loading the printer driver from the BlackMagic System CD

1 Load the printer driver from the BlackMagic System CD

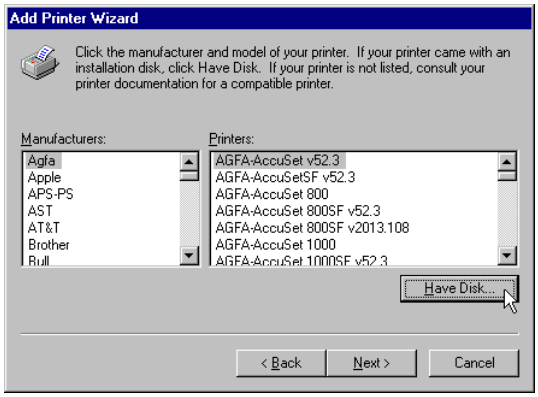
a From the Desktop
double click on the *Network Neighborhood* icon
double click on the BlackMagic icon
double click on the printer for which you wish to install a driver
screen shows a dialogue about a NULL driver
click OK to proceed with installing the driver



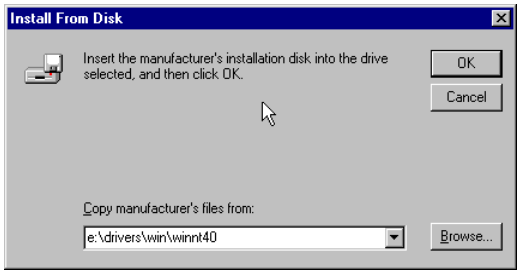
b Screen shows the *Add Printer* window



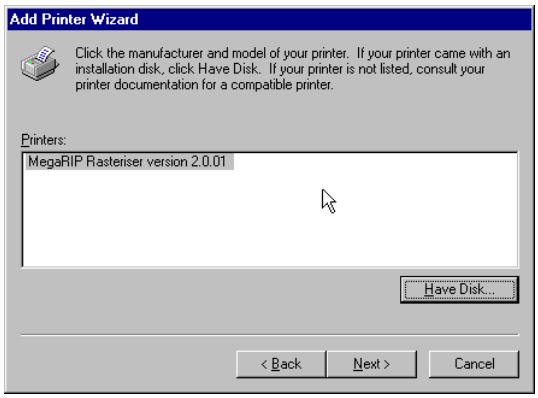
Insert the BlackMagic CD into your CD-ROM drive
click the *Have Disk* button



screen shows a dialogue window
click the *Browse* button



select your CD ROM drive
select the *drivers/win* directory
select the directory with the appropriate version of Windows (i.e. 95,NT3.51,NT4.0 etc)
click OK



c Insert any disks or CDs requested by Windows

You can now use the newly installed printer driver for printing from any application. ☺

Sending jobs to the BlackMagic system from Windows using dropfolders

The following procedure shows how to send jobs to the BlackMagic for processing by means of the published drop folders. Drop Folders allow you to send TIFF, EPS and Scitex CT files for processing by BlackMagic in addition to Postscript files.

Configuring Windows to print to the BlackMagic system using dropfolders

This procedure involves installing the printer driver and mapping the drop folders to a drive:

a Follow the procedure above to install the printer driver

b Run the *FileManager* or *Explorer(file management not internet)* application
either select *Connect to Network Drive* (FileManager)
or select menu item *Tools⇨Map Network Drive* (Explorer)
double click on BlackMagic
double click on *drop* which appears as a shared volume
select a drive letter to map it to
click OK

In the drive you just mapped using the FileManager you will find a few directories named after the Pagesetups they represent on your BlackMagic system. For example copying a file into a directory named “Novajet_on_MR” will direct the system to process that file using the settings for pagesetup “Novajet_on_BM.

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Printing from UNIX systems

NOTE
This section only applies to Linux version of BlackMagic

This section describes how to interface your UNIX system to the BlackMagic system using the TCP/IP, NFS and LPD protocols.

Sending jobs from other hosts using LPD

LPD is the UNIX line printer daemon which is used by most BSD compliant systems for processing printing requests on a UNIX system. The behavior of LPD is normally governed by the */etc/printcap* file.

As default the BlackMagic system comes unconfigured for UNIX printing. You will need to follow the steps below to configure your system for printing from other hosts.

Configuring a UNIX machine to print to the BlackMagic system using LPD

This procedure involves the following steps:
1. Login as root on your BlackMagic Computer
2. Add the receiving queue to the /etc/printcap file
3. Modify the *rip1* script supplied
4. Setup other queues
5. Configure your UNIX hosts for printing to a remote UNIX(LPD) print queue

1 Login as root on your BlackMagic Computer

a At the login prompt
type in the password shipped with the system: `rasteriser`

2 Add the receiving queue to the /etc/printcap file

b From a command shell
type `cd /etc`↵
type `vi printcap`↵
this will load the printcap file into the vi text editor for editing
screen shows the vi editor with the *printcap* file loaded

c At the last line of the *printcap* file
append the following

```
rip1|Definition for Queue 1:\
:lp=/dev/null:\
:sd=/var/spool/lpd/rip1:\
:lf=/var/log/lpd-errs:\
:if=/usr/local/bin/rip1:\
:mx#0:\
:sh:\
:sf:\
:sb:
```

save the changes and quit *vi*

3 Modify the *rip1* script supplied

d From the command shell
type `cd /var/spool/lpd` ↵
type `mkdir rip1` ↵
type `cd/usr/local/bin` ↵
type `vi rip1` ↵
screen shows the vi editor with the script *rip1* loaded

add the following lines to the *rip1* script;

```
#!/bin/sh
# Script for printing to queue 1 of BlackMagic
cat | /home/BlackMagic/bin/TcpipFilter -q1 -hlocalhost
exit 0
```

Save the changes and quit *vi*
type `chmod 755 rip1` ↵
type `lpc start rip1` ↵

e For any remote machines you wish to allow to print to the BlackMagic System add their IP addresses in the */etc /hosts.equiv* file

4 Setup other queues and UNIX hosts

f For any other queues you wish to configure
repeat steps a to g above

You will need to change all occurrences of rip1 with say rip2 and the -q1 parameter, for TcpipFilter, to say -q2 if you were configuring for queue number 2. It tells the TcpipFilter program which queue you wish to print to.

5 Configure your UNIX hosts for printing to a remote UNIX(LPD) print queue

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Sending jobs to the BlackMagic using dropfolders, UNIX NFS

The following procedure describes how to send jobs to the BlackMagic for processing by means of the published drop folders. Drop Folders allow you to send TIFF, EPS and Scitex CT files for processing by BlackMagic in addition to Postscript files.

Using drop folders, UNIX NFS

This procedure involves the following steps:
1. Create anonymous user on the BlackMagic System
2. Reboot the system
3. Mount the drop folder on your UNIX workstation
4. Send a test file to the drop folder

1 Create anonymous user on the BlackMagic System

a On the BlackMagic system
edit `/etc/exports`
add the following line:

```
/home/BlackMagic/drop *(rw, no_root_squash,anonuid=510,anongid=104)
```

2 Reboot the system

b Open a shell
become superuser (type `su` in a shell and enter root password when prompted)
open a shell and type `/sbin/init 6`

3 Mount the drop folder on your UNIX workstation

c In the fstab of vfstab file of your workstation
add the following line

BlackMagic:/home/BlackMagic/drop /BlackMagic-drop nfs
raize=8192,waize=8192

4 Send a test file to the drop folder

d From a command shell
copy a compatible file to the required pagesetup drop folder by typing:

cp filename BlackMagic-drop/<pagesetup drop folder>□
filename is the Postscript, EPS, TIFF, Scitex CT or plotfile you wish to print
If you wish to submit it to a different pagesetup, just copy the file to the appropriate directory.
Replace <pagesetup drop folder> with the appropriate drop folder name.

☺

Sending jobs using TCP/IP ports

In addition to all the above methods BlackMagic listens to user defined TCP/IP port numbers for incoming jobs. When a connection is made on that port the system spools all the data and then submits it to the appropriate pagesetup for processing. The user can define a TCP/IP port for a pagesetup, from that pagesetup's publishing options.

Source code on the software CD in the *drivers/unix* directory contains some code for sending jobs to BlackMagic systems from other UNIX hosts.

Linux specific notes

Linux specific migration notes

NOTE
The topics in this section contain some notes regarding the migration to version 2.0.xx of BlackMagic *only*, on a Linux system.

Remote Print Queues

Remote print queues are no longer available in the new version for Linux. They were usually used for printing to Epson printers only. The following method for creating a destination replaces the "remote queue" destination procedure.

Remote Print Queues

a Open a shell and become superuser by typing in `su` and entering the password (`rasteriser`).

b Create a shell script called /etc/sendepson by typing in `vi /etc/sendepson` in the rxvt shell.

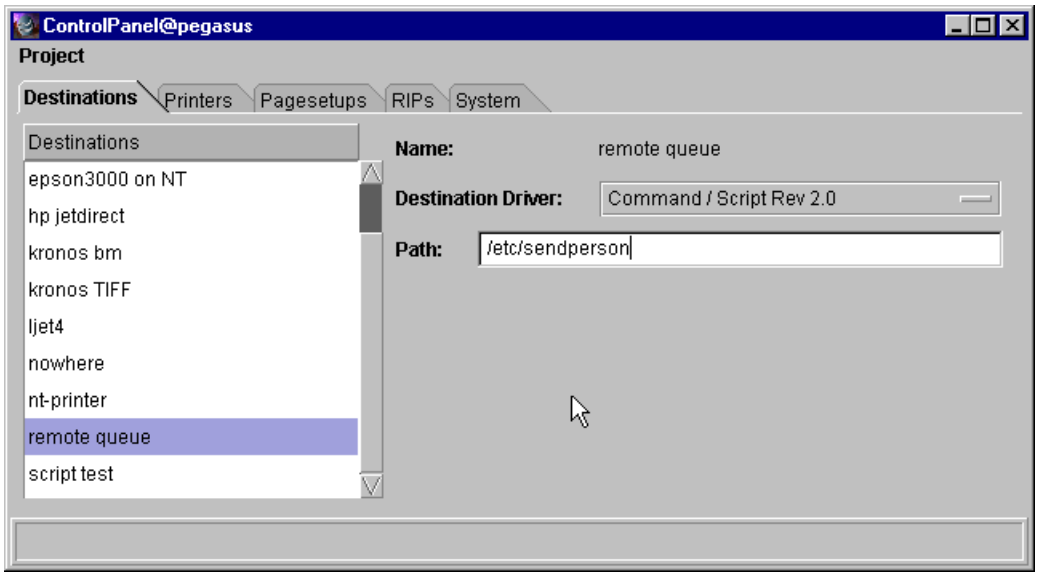
c Add the following lines to the file and save it

```
#!bin/sh

#Shell script for sending to a remote unix queue from MegaRIP/BlackMagic

/usr/local/bin/rlpr -H<hostname> -P<printername> $1
exit 0

#end of script
```

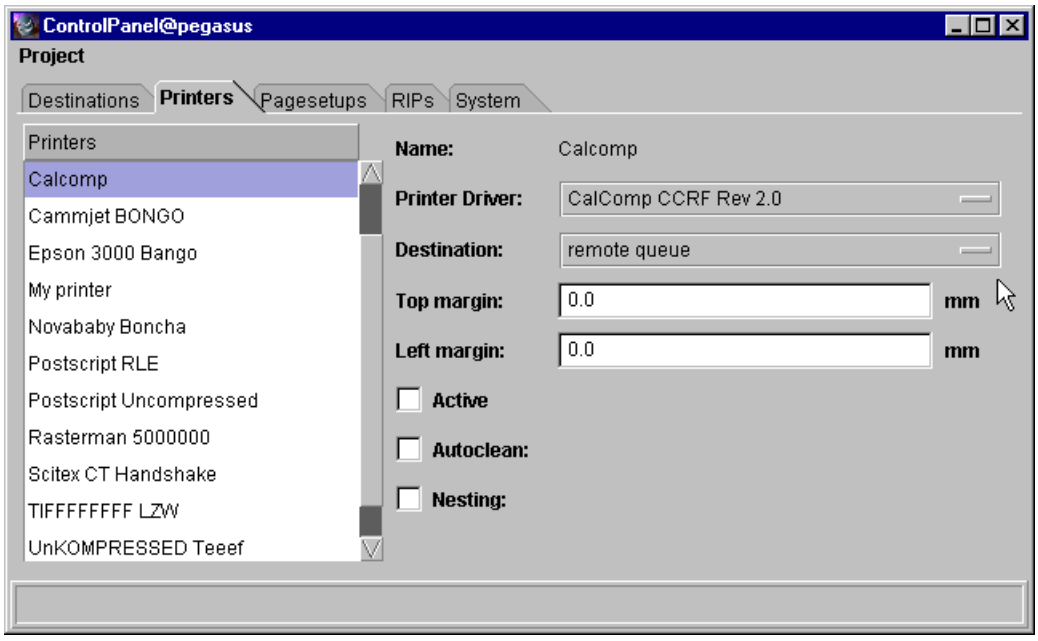
d In the script above hostname is the TCP/IP address of the host the printer resides on and printername is the name of the printer. There is no space between the H and hostname or the P and printername. These can be got from the old destination configuration from the path and IP address field. If there was no name entered in the path field in the previous version then just enter any name after the –P (for example epson) since this kind of remote queue will work with any name entered.

e Now type in `chmod 755 /etc/sendepson` to give execute permission to the script

f Create a new destination of type command/script and in the path text field enter `/etc/sendepson`



Use a script to print to remote destination



Assign the destination to a printer

You should now be able to print using this destination with the same result as the “remote queue” destination in the previous version of BlackMagic.

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Centronics Ports

In software versions prior to BlackMagic version 2.0.xx, centronics ports were accessed via local print queues. Port1 was used for centronics port 1, port2 was used for centronics port2 and port 3 was used for centronics port 3.

In this version a better alternative exists and should be used. Create a destination of type local device. In the path text field type in /dev/lp1, /dev/lp2 or /dev/lp0 depending on which port you wish to print to. The table below shows which /dev name to use depending on which local queue you were using in the previous version.

Local queue name (old version)	Device Name (new version)
port1	/dev/lp1
port2	/dev/lp2
port3	/dev/lp0

After you have saved the destination, you can use it to print to the required centronics ports.

Configuring the TCP/IP address

The following procedure describes how to configure the system's TCP/IP address using system tools. You need to carry out this configuration so that the rest of the machines in your network can see BlackMagic and use the postscript, TIFF, Scitex CT capabilities and its drop folders. We recommend that you call in your system administrator to so this.

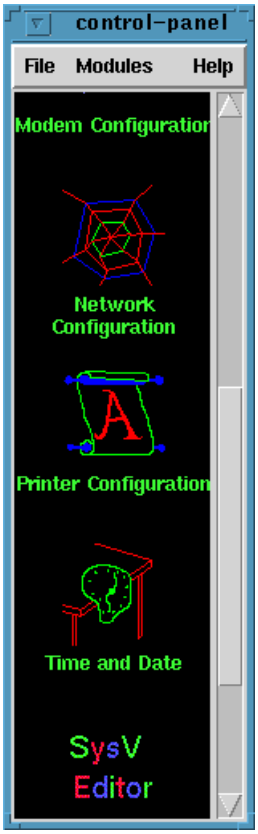
Configuring the BlackMagic system for remote proofing using TCP/IP address

This procedure involves the following steps:
1 Login as root
2 Enter the new IP address
3 Enter new Host IP address
4 Reboot the system

1 Login as root

a From the *Desktop* pop-up menu
select *Exit/Logout*
screen shows the login screen

b At the login screen
type user name `root`
type password `rasteriser`
screen shows the root user desktop
In UNIX the root user is the system administrator and no restrictions apply.

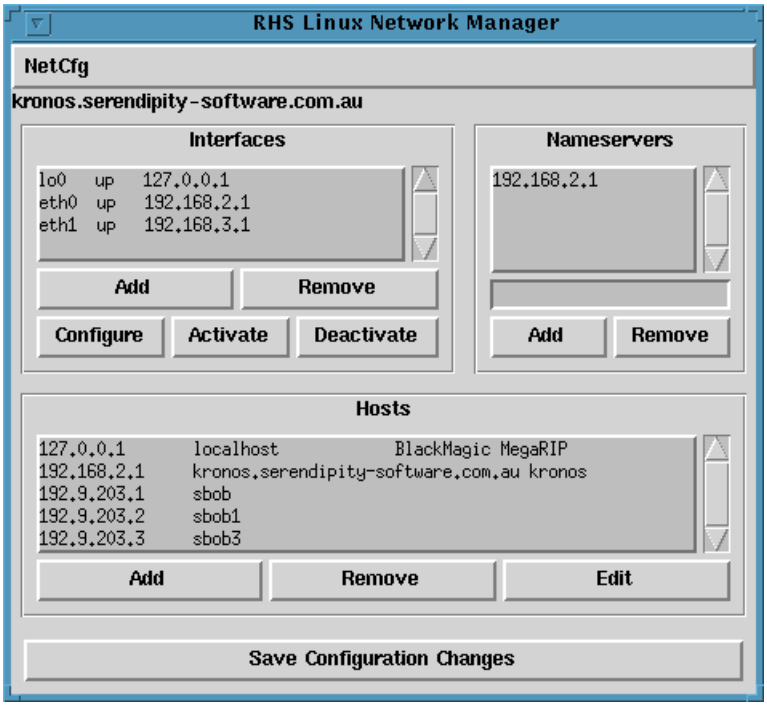


2 Enter the new IP address

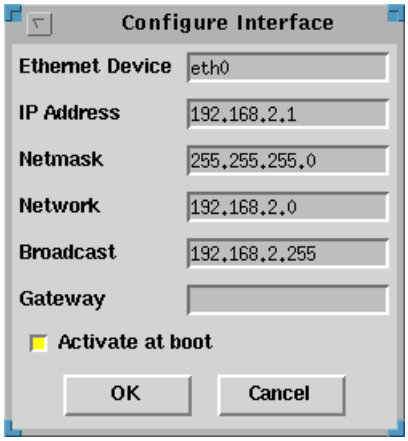
c In the *Control Panel* window
scroll for *Network Configuration* icon

This control panel features important system utilities. Be careful not to run anything else. If you inadvertently do, select the Exit or Quit option of that utility without performing any changes.

double click on the *Network Configuration* icon
screen shows *Network Manager*



d In the *Network Manager - Interfaces* list
click on entry *eth0*
screen shows *eth0* highlighted
click on the *Configure* button below the list
screen shows the *Configure Interface* dialogue window
enter the new values i.e. new IP address
click OK
click *Save Configuration Changes* button



3 Enter new Host IP address

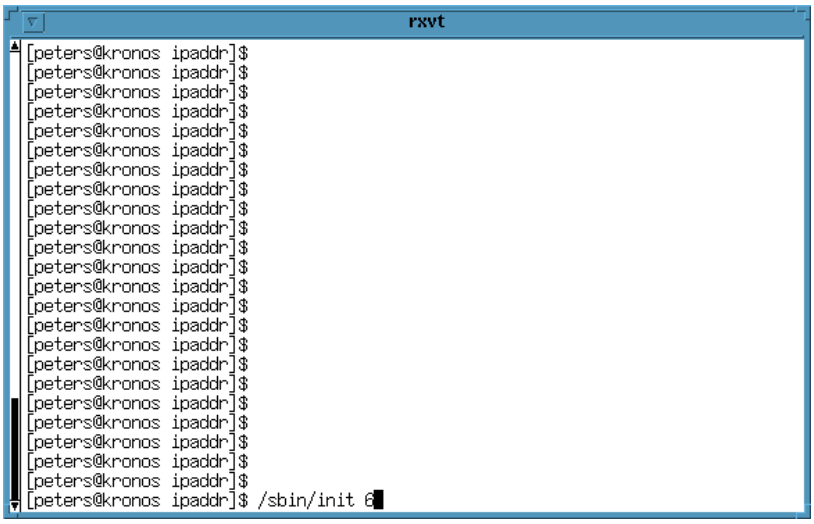
e In the *Hosts* list
click on `entry BlackMagic.serindipity-software.com.au`
click on *Edit* button
screen *shows Edit Host* window

f In *the Edit Host* window
change the IP address to the new IP address
click OK
click *Save Configuration Changes* button

4 Reboot the system

g At the desktop
press the right mouse button
screen shows a shell window
type `/sbin/init/ 6`
press <enter>

The system will now restart and the new IP address will become effective as soon as the system boots up



BlackMagic RIP Polling

Polling configuration

Some polling terms

A short description is provided for the following terms which are used throughout this section.

Hostrip: This is the <Imagesetter/Platesetter RIP that BlackMagic polls and whose Ripjobs will be proofed using BlackMagic.

Ripjob: A job that was sent to the Hostrip - ripped to dots and is ready to be sent to the Imagesetter or Platesetter.

Poll Period: This is the interval in minutes that BlackMagic will attempt to poll a RIP that has been configured for polling in the BlackMagic “RIP Control Panel”. By default this is set to 1 minute.

Stable Ripjob: A Stable Ripjob is a job on the host Imagesetter RIP system that BlackMagic considers as having finished ripping. The criteria used to decide whether a job is stable, is a job whose size has not changed within 2 poll periods. As a result of this, when BlackMagic polling is first activated from the control panel (on default settings) it takes about 2 minutes for any jobs to register in the RIP Monitor.

Polling scenarios

There are three scenarios for polling a *hostrip*

1. Polling Local Disk
2. Polling Remotely Mounted Disk
3. Polling Remote Host Using FTP
4. Polling Using the Serendipity Remote agent

Scenario1 - Polling local disk

In this scenario BlackMagic Is Installed on the same computer the *hostrip*. The polling is local and during the spooling no files are copied across but simply used as they sit on the drive. The IP Address is set to localhost or 127.0.0.1

Advantages:

- No second computer needed for BlackMagic
- No need to set up FTP polling on *hostrip* computer.
- Ripjobs are already there and will not need to be spooled across the network which will speed up the proofing process

Disadvantages:

BlackMagic is resource intensive and typically, so is the *hostrip* when proofing and ripping at the same time. Unless the host computer is powerful it is likely to have a detrimental affect on both processes. More importantly this might on some systems cause the imaging of the film to fail. This should not happen on a solid multitasking

environment like Solaris running on Sun Sparc platforms, but tends to happen more often than not on NT Systems

Conclusion
If ripping and proofing are to be performed concurrently, there is the possibility of significant degradation of the *hostrip* computer's performance and Imaging. Hence, this polling scenario is *not recommended* unless extensive commissioning tests are done after installation to insure the *hostrip* performance and film production are not degraded.

Scenario 2 - Polling remotely mounted disk

BlackMagic is installed on a different physical computer. However, the drives that have the *Ripjob*s are mounted on the BlackMagic computer using one of these methods:

NFS for a "UNIX BlackMagic"
Drive or directory sharing between NT Systems for an "NT BlackMagic"

Make sure the IP Address in the RIP configuration is set to localhost or 127.0.0.1. BlackMagic will see those drives as if they are on the same computer.

Advantages:
- No need to setup FTP on *hostrip* computer
- No Delay for spooling, jobs will start Imaging immediately of the remotely mounted/shared disk
- Constant FTP polling on some *hostrip*s with large amounts of Ripjobs seems to generally be detrimental to overall OS performance. Again, on systems where the *hostrip* is installed in a UNIX environment this is generally no problem. It can be a problem for a *hostrip* that is installed on an NT system. NT is the increasingly common *hostrip* operating system. Remotely polling will circumvent these problems.

Disadvantages:
- Often depending on size of RIP files, and the performance of the BlackMagic system the overall imaging can be much slower particularly with NFS mounted volumes. This should be benchmarked on an installation by installation basis, as this effect can vary quite significantly depending on many local factors like load, network speed, CPU power etc.
- The polling setup is dependent on OS settings on the BlackMagic computer, so (particularly with shared drives) if the hardware configuration is changed on the BlackMagic computer, polling might stop working and need to be reconfigured. This however is a minor consideration as your system administrator should be able to easily control this.

Conclusion
"NT BlackMagic" polling a *hostrip* on an NT system is often the best scenario for polling, as shared drives work very quickly and reliably.

Scenario 3 - polling remote host using FTP

This is the most common form of polling used in BlackMagic. BlackMagic is installed on a different computer as the *hostrip*, and uses the FTP protocol to poll the *hostrip* across the network.

Advantages:
- This method of polling once configured will always work on all *hostrip*s.
- FTP is usually the quickest way to transfer large files across the network so results in the quickest throughput for proofing.

Disadvantages:
- When Polling NT and MAC based *hostrip*s it is often necessary to configure TCP/IP as well as install and configure and FTP server on the *hostrip*.
- Constant FTP polling on some *hostrip*s with large amounts of *Ripjob*s can be detrimental to overall OS performance. Again, on systems where the *hostrip* is installed in a UNIX environment this is generally not a problem. It can be a problem for a *hostrip* that is installed on an NT system that is under stress.

Scenario 4 - polling remote host using the remote agent (recommended)

This is the most common efficient way of polling a rip. The Remote Agent is installed on the *hostrip*, and BlackMagic uses it to quickly poll the *hostrip* across the network. Remote agents work on Windows NT (DEC alpha and intel), Solaris 2.5.1 or above, Irix 6.3 or above and Linux 2.0.27 and above

Advantages:
- This method of polling once configured will always work on all *hostrip*s. The agent does the majority of the polling for BlackMagic so it puts the least stress on the hostrip.
- No special ftp server has to be installed and configured on the *hostrip*.
- Requires no configuration as BlackMagic configures the agent automatically each time it needs to use it
- Speeds up polling and file transfer especially for Windows NT based RIPs

Disadvantages:
- Requires administrator access on the *hostrip* to install the remote agent. Once it is installed though administrator access is no longer required as the service automatically restarts itself each time the *hostrip* is rebooted.

General notes regarding polling configuration

Refer to the Control Panel RIP Configuration Reference for the configuration form.

Local and FTP polling

- If an IP address of 127.0.0.1 or localhost is used, then *local* polling (not using FTP) is being configured. The first 2 Scenarios described in the previous section fall into this category of *local* polling.
- A Username and Password are always required for FTP polling, but are neither needed nor used when *local* polling is configured.

Paths and stripepaths

- *Never* specify any path or stripepath containing a \, always use /'s, even when polling NT systems. For example G:\ is incorrect, and G:/ is correct.
- With all RIP types a Path and/or a Stripepath will have to be specified. These are used by BlackMagic to find the ripped files that are to be proofed.
- When polling, BlackMagic will always descend into subdirectories of the specified paths and stripepaths
- The description of how BlackMagic uses the Paths and Stripepaths to poll will be given as a series of examples:

STRIPEPATHS Specified	PATHS Specified	Directories that will be polled
	/PageBuffers	/PageBuffers
/	PageBuffers	/PageBuffers
	/data/Volumes/150rr /data/Volumes/175rr /data1/Volumes/150wr	/data/Volumes/150rr /data/Volumes/175rr /data1/Volumes/150wr
/e /f	raster raster1	/e/raster /e/raster1 /f/raster /f/raster1

- Note for each specific RIP type, a different combination of Stripepaths and/or Paths required and the RIP form changes to reflect this. The details of what exactly is required and displayed for each specific RIP type that BlackMagic supports is described in RIP specific settings section below.

Other Settings

- For certain RIP types that can store the dots as Positive/Negative and Wrong Reading /Right Reading, but who do not store information as to how each job was done it is necessary for you to specify the POS/NEG and MIRROR settings so the jobs will proof correctly. The details of what exactly is required and displayed for each specific RIP type that BlackMagic supports is described in RIP specific settings section below.
- Poll interval specifies the interval between polls in minutes. The Default of 0 sets it to 1 minute. This feature can be used if for some reason no active polling is required and the manual polling feature of the RIP Monitor can then be used, to ensure the *ripjob*s that are displayed are up to date.
- At the highest FTP Priority, when a job is being proofed, it will be copied via FTP as quickly as the network allows. This high rate of transfer might degrade the performance of the *hostrip*, and the priority can be reduced. Reducing the FTP priority will obviously slow down the *ripjob* being copied across and hence proofing. Note than when LOCAL polling is being used the FTP priority setting has no affect.

Autoproofing and related settings

See Autoproofing section below.

Autoproofing

The mechanics of Autoproofing

The following is a description of the polling activity that takes place when BlackMagic polls the RIP prior to Autoproof. This determines which jobs will be Autoproofed.

- When a new job first appears on a RIP being polled, BlackMagic will monitor the job to determine when it has become a stable ripjob.
- A new job is considered to be to be a stable ripjob when its size does not change in about 2 BlackMagic poll periods.
- Once a ripjob becomes a stable ripjob, it will be displayed in the RipMonitor. If Autoproofing is selected and the Autoproofing criteria is met, the stable ripjob will then be submitted to the selected BlackMagic Pagesetup for automatic proofing.

Single file checkbox

Selecting the *Single file* checkbox allows jobs with less than four plates to be Autoproofed.

BlackMagic defaults to *Single file* checkbox *not selected*, so only jobs with *more* than four plates will be Autoproofed.

The default Autoproofing in BlackMagic uses the number of files in a job as an indication of a job's status. Most RIPs store a single plate in a single file. Unless this checkbox is selected, BlackMagic assumes that a job is incomplete if there are less than four files.

You might select the checkbox to Autoproof jobs with only 1 plate if, for example, you want to Autoproof Black Plate only jobs, or for certain RIPs that have the ability to store more that 1 plate per file.

Autoproof delay setting

Different RIPs have different methods of writing the output plate. Certain RIPs will RIP to a completely different file and then copy the plate into appropriate location once the ripping process is complete.

As a result of this, for a large and complex job a single plate can take longer than 2 *poll periods* to finish being ripped by the *hostrip.* BlackMagic will then incorrectly think this is a *stable ripjob* and submit it to be proofed. This can be compensated for normal CMYK (4 plate) jobs by unchecking the "*single file*" checkbox. However for jobs with specials this might not help.

If the *Autoproof delay* is non zero, After BlackMagic decides that the *stable ripjob* is ready for *Autoproofing*, it will then wait another *Autoproof delay* minutes before submitting to proof to insure all the plates have been ripped by the *hostrip.*

By setting a large *Autoproof delay* (greater than the time taken for the hostrip to RIP 1 plate of a large and complex job). You can guarantee no incomplete jobs are submitted for proofing, however this will delay all jobs by that amount before they will be submitted for Autoproofing.

Autoproofing limitations

The Autoproofing feature is subject to the following limitations:

- Jobs that have unknown special colours in them obviously need user intervention and cannot be Autoproofed
- If single plates from a job are sent to the RIP and later the Virtual Press is used to stitch these jobs, then Autoproofing is not useful
- Quite often, very large jobs can attempt to proof before they have been completely ripped by the hostrip. This can be avoided by using the single file check box, and the Autoproof Delay setting (see above)
- Contex systems are interactive and not suitable for Autoproofing.

RIP specific configuration information

Agfa Taipan

- RIP stores screened plates
- The Right Reading & Positive/Negative fields must be selected such that the plates will be proofed correctly
- RIP can stripe data across different disks. This means stripepaths and paths must be used to correctly configure the polling. Here are two examples:

  Example 1:
  Polling Local Taipan that stores plates on the G: and F: disks in the directory \raster
  Specify 1 Path: raster
  Specify 2 Stripepaths F:/ and G:/

  Example 2:
  FTP used to poll a Remote Taipan that stores plates on F: & G: disks in the \raster directory.
  Specify 1 Path: raster
  Specify 2 Stripepaths /f and /g
  Also On the NT machine that the Agfa Taipan RIP is on, the FTP server must have 2 aliases configured
  Alias: /f for the F: disk
  Alias /g for the G: disk

  See Section Below on Configuring FTP servers on NT 4 for full details, on how to achieve this.

- Setting up the FTP Server on the NT machine hosting the AGFA RIP. Refer to steps g to i in the procedure: *Installing FTP for Windows NT 4.0 (or later) Server* later in this chapter. The following replaces step i in that procedure

  i At the FTP service properties window, click on the *Directories* tag
  for every drive that will have striped data
  click on the *add* button
  In the directory text field
  enter the drive name
  check the *Virtual directory* button
  In the *Alias* text field
  enter a slash (/) followed by drive name (lower case)
  In the above example drive F would be entered as /f
  Check the *Read* box
  press OK
  screen shows new drivers in the list box
  When all drives are entered for the above example, the list would appear as follows

DIRECTORY	ALIAS
C:	<home>
F:	/f
G:	/g

The Agfa NT machine can now be polled using BlackMagic once configured.

Contex PrePress

- The Contex system Stores contone and linework files
- The user chooses where to store their work files as a result multiple paths can be specified where BlackMagic polls for jobs to proof.
- Autoproofing is not useful with Contex Systems, as the proofed files are usually the users work files that are being constantly changed and saved by the user.

Crosfield Celix

- RIP stores screened plates
- The Right Reading & Positive/Negative fields need not be selected since the Celix RIP stores this information. It must however be noted, that if a user sends a job negative from say Quark to a positive queue on the Celix, then BlackMagic will assume it is a positive. The proof will be incorrect unless a BlackMagic pagesetup is configured to proof Negative, and is used for these types of jobs.
- The Celix always stores the plates in the same location, and so a path need not be specified, however it can and does stripe data onto different disks. These are normally mounted as /disk1, /disk2 /disk3 etc. So to successfully configure a Celix RIP all you have to do is set the Stripepaths to /disk1 /disk2 etc. 2 examples are given below:

  Only 1 data disk. Specify 1 Stripepath:
  /disk1

  3 data disks. Specify 3 Stripepaths:
  /disk1
  /disk2
  /disk3

By default the Celix RIP does not truncate any of the logfiles in **`/var/adm.`** This means that after a certain amount of polling from BlackMagic, the root partition will fill up and the workstation will crash. To stop the logfiles growing too large, an entry in the Crontab is needed to trim them at regular intervals.

Instructions for Crontab modification on Celix Sun Workstation

1 Start up a terminal window
a Select *Terminal window* from the Desktop pop-up menu

2 Become root user
b type in `su`
press <enter>
prompt appears for password
type in the appropriate root password for your site.
The default root password is `magnadot`

3 Set The Editor For crontab
c Type `EDITOR=vi`
press <enter>
type `export EDITOR`
press <enter>

4 Edit The Crontab File
d Type `crontab -e`

press <enter>
move to the last character, of the last line
using the cursor keys
press the <a> key
press <enter>
to go to a new line
Type in the following lines:

```
00 06 * * * cp /dev/null /var/adm/messages
01 06 * * * cp /dev/null /var/adm/utmp
02 06 * * * cp /dev/null /var/adm/utmpx
03 06 * * * cp /dev/null /var/adm/wtmp
04 06 * * * cp /dev/null /var/adm/wtmpx
```

press the `<escape>` key
type `:wq` to save the file and exit the editor.

If there were no errors, the new crontab file has been installed successfully, and the Sparc should now automatically clean the above logfiles every morning from 6:00 am to 6:04 am. If there were errors then go back and check all the lines you added to the crontab file.

Crosfield Celix CTP

- This is just a Crosfield Celix with the sense of the wrong reading reversed, if all jobs are coming out mirrored when using a Crosfield Celix RIP type, then select Celix CTP instead and vice versa.
- The previously stated requirements for the Celix RIP also apply to Celix CTP. See description of Celix RIP above for further details.

Crosfield Studio Expose For Celix

- Crosfield Studio Expose is used to proof Studio Expose jobs that are sent to a Crosfield Celix RIP.
- The previously stated requirements for the Celix RIP also apply to Celix Studio Expose. See description of Celix RIP above for further details.

Crosfield Magnarip

- RIP stores unscreened text and graphics files
- The Magnarip Always stores the plates in the same location, and so a Path need not be specified, however it can and does stripe data onto different disks. These are normally mounted as /disk1, /disk2 /disk3 etc. So to successfully configure a Magnarip all you have to do is set the Stripepaths to /disk1 /disk2 etc. 2 examples are given below:

- Only 1 data disk. Specify 1 Stripepath:
  /disk1
- data disks. Specify 3 Stripepaths:
  /disk1
  /disk2
  /disk3

- The Magnarip systems interpret the postscript file twice: once to generate the text (LW) files and once to generate the graphics (CT) files. If the second pass to generate the graphic files takes more than 2 *poll periods* to produce the graphics file, then it is possible BlackMagic will assume that the job is stable and proceed to Autoproof without the graphics files. The *Autoproof delay* (see above) setting can be used to ensure jobs Autoproof correctly, if Autoproofing is required.

By default the Magnarip does not truncate any of the logfiles in **`/var/adm.`** This means that after a certain amount of polling from BlackMagic, the root partition will fill

up and the workstation will crash. To stop the logfiles growing too large, an entry in the Crontab is needed to trim them at regular intervals.

Instructions for Crontab modification on Magnarip Sun Workstation

1 Start up a terminal window

a Select *Terminal window* from the Desktop pop-up menu

2 Become root user

b type in `su`
press <enter>
prompt appears for password
type in the appropriate root password for your site.
The default root password is `magnadot`

3 Set The Editor For crontab

c Type `EDITOR=vi`
press <enter>
type `export EDITOR`
press <enter>

4 Edit The Crontab File

d Type `crontab -e`
press <enter>
move to the last character, of the last line
using the cursor keys
press the <a> key
press <enter>
to go to a new line
Type in the following lines:

```
00 06 * * * cp /dev/null /var/adm/messages
01 06 * * * cp /dev/null /var/adm/utmp
02 06 * * * cp /dev/null /var/adm/utmpx
03 06 * * * cp /dev/null /var/adm/wtmp
04 06 * * * cp /dev/null /var/adm/wtmpx
```

press the `<escape>` key
type `:wq` to save the file and exit the editor.

If there were no errors, the new crontab file has been installed successfully, and the Sparc should now automatically clean the above logfiles every morning from 6:00 am to 6:04 am. If there were errors then go back and check all the lines you added to the crontab file.

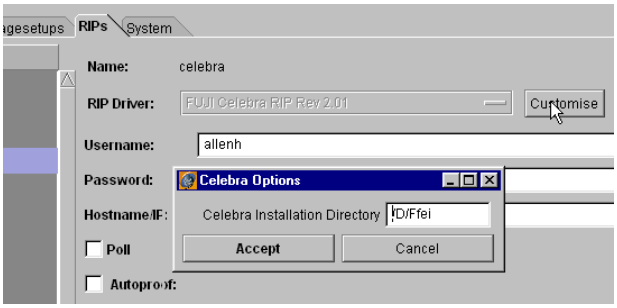
Crosfield Studio Expose For Magnarip

- Crosfield Studio Expose is used to proof Studio Expose jobs that are sent to a Crosfield Magnarip.
- The previously stated requirements for the Magnarip also apply to Magnarip Studio Expose. See description of Magnarip above for further details.

Fuji Celebra And Studio Expose For Celebra

- RIP stores screened plates
- The Celebra is flexible as to where jobs can be stored So Multiple Stripepaths and Paths can be configured for the RIP.
- The Celebra stores job information in an internal database that is located within the Celebra Installation Directory. BlackMagic uses these to get job and plate

information. For Celebra polling to operate correctly, as will as specifying paths and stripe paths you need to also specify the **Celebra Installation Directory** this is done by using the customise button as illustrated below for and installation in /D/Ffei.



- **Note:** often the installation directory for the Celebra is on a different physical drive to where the plates are stored. If BlackMagic is polling via ftp, then to be able to poll both drives using ftp, aliases need to be created when configuring the NT ftp server on the Celebra machine. See section for **Agfa Taipan** configuration above on instructions how to do this

Harlequin Scriptworks

- RIP stores screened plates
- The Right Reading & Positive/Negative fields must be selected such that the plates will be proofed correctly
- The Harlequin always stores all the ripped plates in one directory called PageBuffers. To configure a Harlequin for polling you only need specify one Path which points to the PageBuffers
- When The Harlequin is ripping jobs it rips each plate to a temporary file and once the plate is complete it renames this file to the correct PGB filename. Quite often for very large jobs, if the plate takes too long to RIP than BlackMagic can incorrectly assume the job is complete and display it in the QueueManager. This is normally not a problem. Once the plate has finished ripping it will appear as part of the job, however if Autoproofing is selected then incomplete jobs (with plates missing) might be submitted for proofing. This can be avoided by using the single file check box, and the Autoproof Delay setting (see above)

Krause Tiff Based RIP

- RIP stores screened plates
- The Right Reading & Positive/Negative fields must be selected such that the plates will be proofed correctly
- Multiple Stripepaths and Paths can be configured for the RIP.

Linotype Hell Delta

- The Delta RIP stores Unscreened plates.
- Multiple Paths can be configured for the RIP.

Pack 16 Based Generic RIP

- RIP stores screened plates
- The Right Reading & Positive/Negative fields must be selected such that the plates will be proofed correctly
- Multiple Paths can be configured for the RIP.

Scitex Brisque

- The Scitex Brisque stores Contone and Linework Files

- The RIP is quite flexible, and can store jobs in multiple directories and disks, however all the plates belonging to the same job are always stored in the same tree. Multiple Paths can be configured for the RIP.
- Autoproofing needs some thought when configuring for the Scitex RIPs.
    - If the jobs being Autoproofed are *separated*, (only 1 plate per file). Then the *"single file jobs*" check box must be unselected.
    - If the jobs being Autoproofed are *unseparated* (only 1 LW and or CT file), then "*single file jobs*" check box must be selected.
    - This implies if you want to *Autoproof* both types of jobs then you have to separate them into different directories and configure 2 separate BlackMagic RIPs to poll and *Autoproof* them. Furthermore if any preseparated single plate jobs are sent to the directory where "*single file jobs*" check box has been selected, then they will be incorrectly submitted for *Autoproofing*.

Scitex PS/2

- The Scitex PS/2 stores Contone and Linework Files
- The RIP is quite flexible, and can store jobs in multiple directories and disks, however all the plates belonging to the same job are always stored in the same tree. Multiple Paths can be configured for the RIP.
- Autoproofing needs some thought when configuring for the Scitex RIPs.
    - If the jobs being Autoproofed are *separated*, (only 1 plate per file). Then the *"single file jobs*" check box must be unselected.
    - If the jobs being Autoproofed are *unseparated* (only 1 LW And/ Or CT file), then "*single file jobs*" check box must be selected.
    - This implies if you want to *Autoproof* both types of jobs then you have to separate them into different directories and configure 2 separate BlackMagic RIPs to poll and *Autoproof* them. Furthermore if any preseparated single plate jobs are sent to the directory where "*single file jobs*" check box has been selected, then they will be incorrectly submitted for *Autoproofing*.

Tiff Based Generic RIP

- RIP stores screened plates
- The Right Reading & Positive/Negative fields must be selected such that the plates will be proofed correctly
- Multiple Paths can be configured for the RIP.

Configuring FTP servers

This section contains detailed instructions on configuring FTP servers for various platforms. BlackMagic uses the FTP protocol to poll RIPs a FTP server must be installed on the RIP before BlackMagic can proof any jobs from it. UNIX systems come with a FTP server pre-installed so you can skip over this section if you have a UNIX based RIP. Windows and Macintosh platforms do not have one installed so you will need to install one before you can proof any jobs through BlackMagic.

Installing and configuring Windows NT3.51 server

The server version of Windows NT provides an FTP daemon as standard and it is just a matter of installing it. If you have the workstation version then you need to obtain Microsoft's Internet server from their web site at:

http://www.microsoft.com.

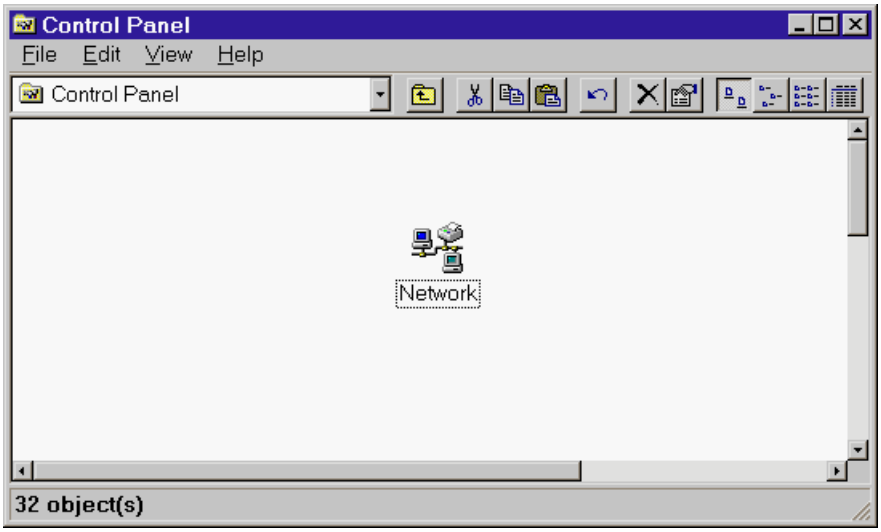
Follow the steps below to install and configure the server itself.

Installing and configuring FTP servers on your Win NT 3.51 RIP

This procedure involves the following steps:
1 Install FTP server on NT
2 Add new user bmagic
3 Grant FTP access for user bmagic
4 Test FTP access for user bmagic
5 Create and configure a new RIP

1 Install FTP server on NT

a In Windows NT
login as administrator
double click *Control Panel* icon
double click *Network* icon
double click *Add Software*
screen shows list of available software



b At list of available software
select the *TCP/IP and related components* entry
screen shows: prompt for which components you wish to install
click *FTP server*
click *Simple TCP/IP Services*
click *Connectivity Utilities*
click *Continue*
click *OK – Close*

2 Granting FTP access for user bmagic

The *FTP server window* opens automatically

c In the FTP control panel
ensure *Allow anonymous* box is checked
ensure *Allow only anonymous users* box is *not* checked

d In *Username* field
type `bmagic`

e In *Password* field
enter a password

f In *Home Directory* field
enter the job directory.
click OK

3 Setting TCP/IP Address

g At prompt for a TCP/IP address
enter appropriate values for your network
Contact your network administrator if you are unsure of these values

h At prompt for reboot
select *Yes*
System will reboot

4 Add new user: bmagic

i login in as administrator

j In *Administrative Tools* program group
select *User Manager for Domains* tool
select *Add new user*

k In the *Username* field
type `bmagic`

l In the *Password* field
enter the password selected in step **e** above
select the 'password never expires' option
click on *Profile* button

m In *Home Directory* box
enter the path where your RIP stores its ripped files
For example if you have a Harlequin RIP the pagebuffer files might be stored in e:\SW\\Pagebuffers. Consult your RIP's documentation for the proper directory path.
click OK
click on *Add* button
select menu item *File⇨ Quit*

4 Testing FTP access for user bmagic

n Open a (DOS) command prompt
type `ftp localhost`
press <enter>
screen shows prompt for user name
type `bmagic`
screen shows prompt for password
enter password created in step f above
type `dir`
press <enter>
verify that you are able to see all ripped files

5 Create and configure a new RIP

From the *ControlPanel ⇨ RIPs tab*

create a new RIP
select a RIP driver
set the *Path* field to the path entered in step g above

For example if you selected E:\SW\PageBuffers as the home directory then you should type /SW/PageBuffers in the Job Path field
If your RIP supports multiple paths, you will need to add the path using the Add button next to the Paths list

set the *Username* field to `bmagic`
set the *Password* field to the password created in step e above
set the *IP Address* field to the TCP/IP address of your Windows NT RIP
click on the *Test* button

BlackMagic should pop up a dialogue box advising that polling was successful. If not, check all the steps above for errors.

set the rest of the options to suit
save the RIP configuration

Installing and configuring Windows NT 4.0 (or later) server

This version of Windows ships with Microsoft's Internet Information Server which also contains an FTP server. If you do not already have it installed you will need to install it. Follow the steps below to install the TCP/IP protocol and the FTP server on your computer

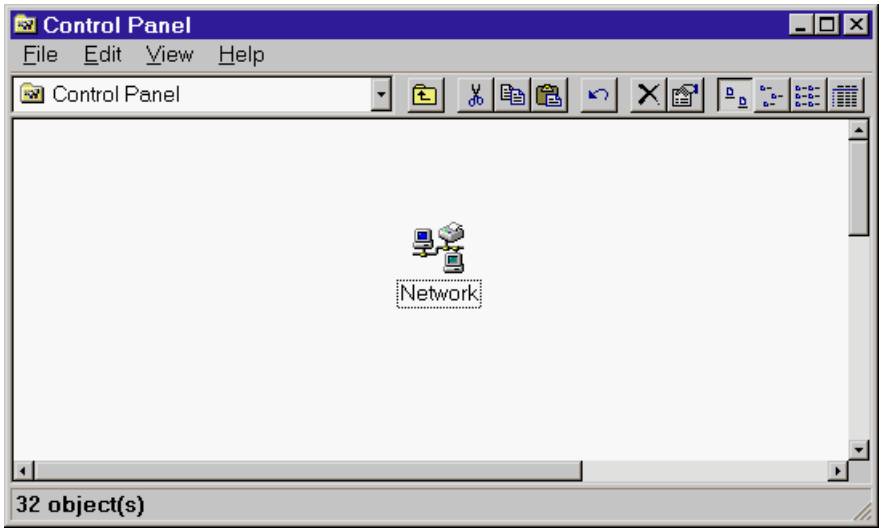
Installing and configuring FTP servers on your Win NT 4.0 (or later)
RIP

This procedure involves the following steps:
1 Load Software
2 Add new user bmagic
3 Testing FTP access for user bmagic
4 Create and configure a new RIP

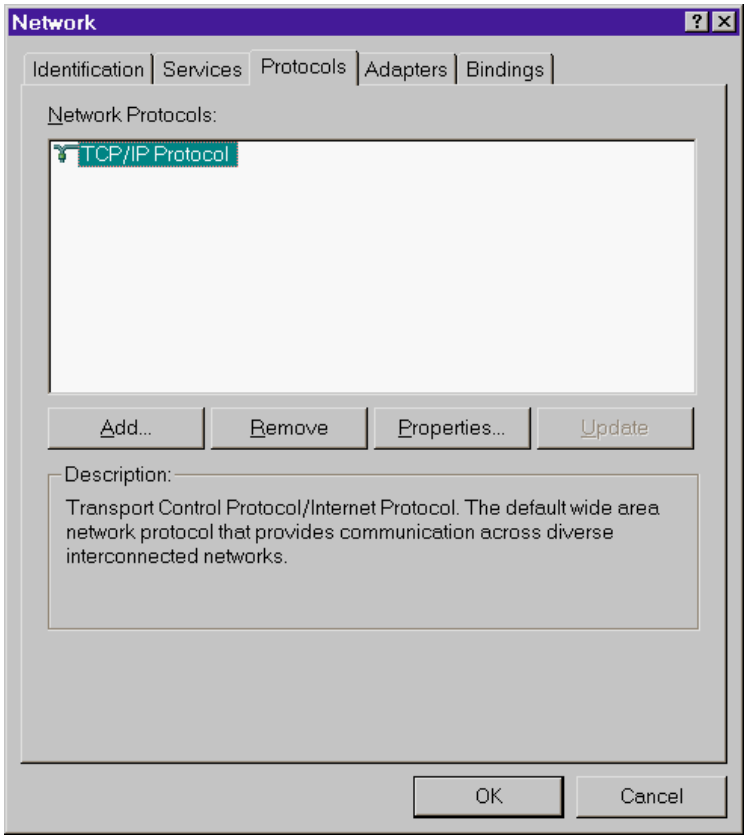
1 Load Software

a In Windows NT
login as administrator

b From *Start* button
select *Settings⇨Control Panel*
double click *Network* icon



c click *Protocols* tag
verify that TCP/IP is installed
If installed go to step e below. If not installed continue as follows
click *Add* button
screen shows list

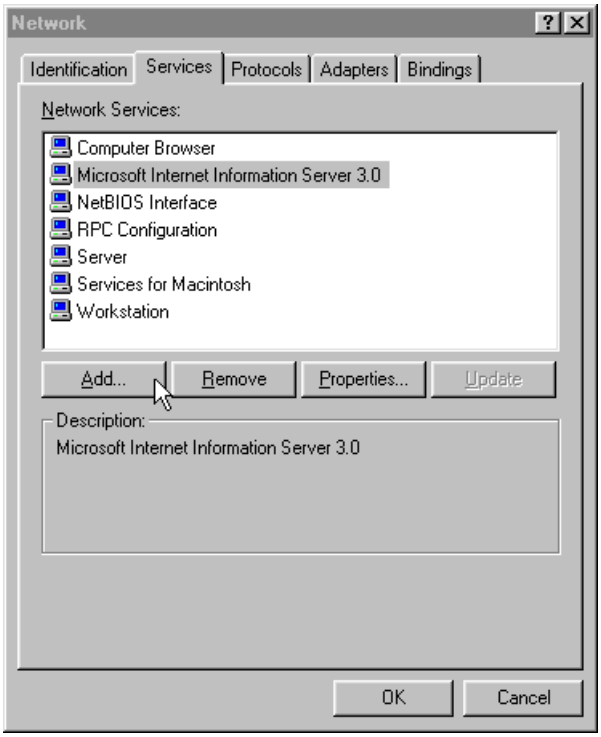


d In the list
select *TCP/IP* entry
follow on-screen instructions to enter TCP/IP address for your network
Contact your network administrator if you are unsure of these values
close *Network Control Panel*
screen shows prompt to reboot
select *Yes*
System will reboot

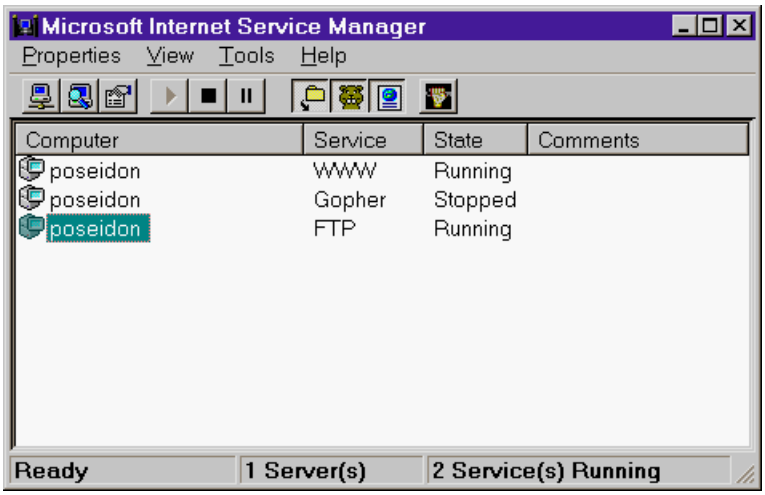
2 Add new user bmagic and install FTP server

e login in as administrator

f From the *Start* button
select *Settings*⇨*Control Panel*
double click the *Network* icon
click the *Services* tag
verify that *Microsoft Internet Information Server* is installed
If it is not installed, click on the Add button and select the Microsoft Peer Web Server entry from the list that comes up and follow the on-screen instructions to complete the installation.
wait for installation to complete
click OK

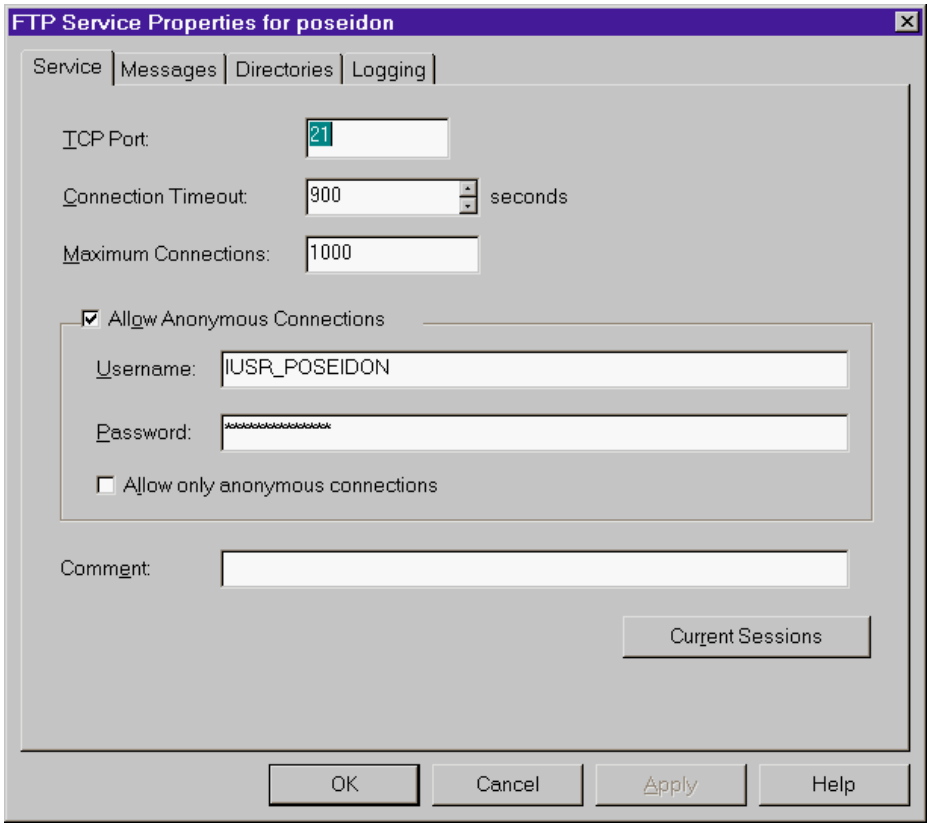


g From the *Start* button
select *Programs*
select *Microsoft Internet Server*
select *Internet Server Manager*
double click on *FTP service*

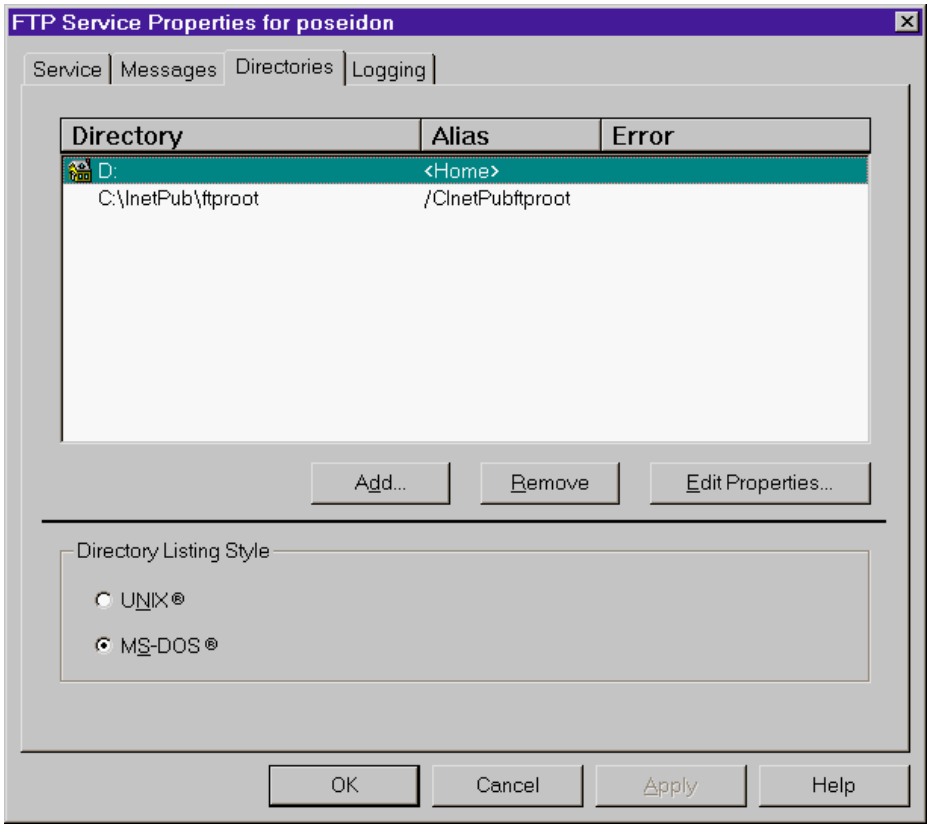


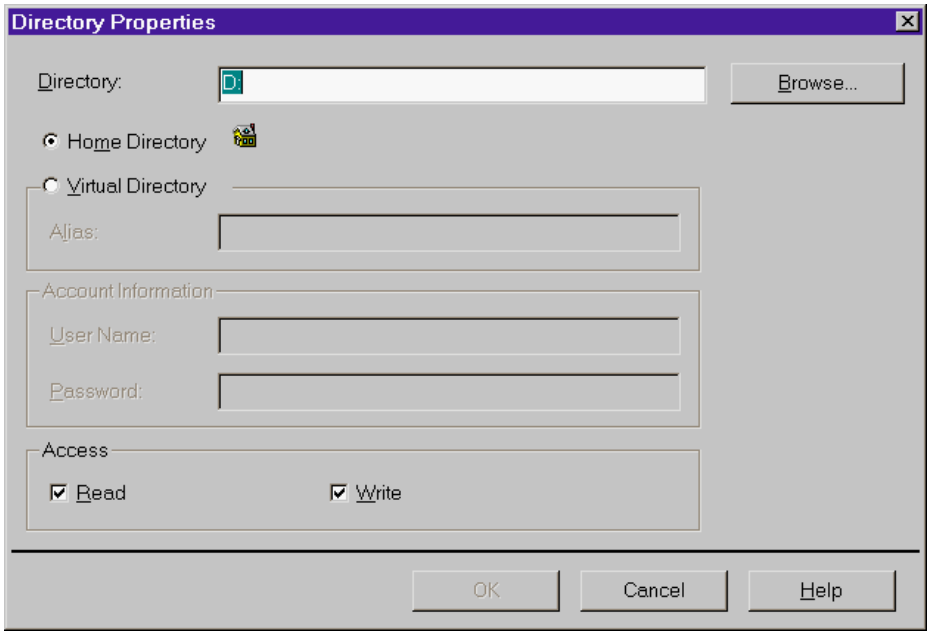
h At the *FTP Service Properties* window - *Service* tag
ensure that *Allow anonymous connections* tick box is checked
ensure that *Allow only anonymous connections* tick box is *not* checked
click on the *Directories* tag
click on the *alias Home* directory if it appears
verify that the *Read & Write* Access tick boxes are checked (ON)

If there is not a directory of alias Home, click on Add and set the type to Home Directory then double click on it and set where it points to by editing the Directory Properties window. Verify that the Read & Write access boxes are checked (ON)

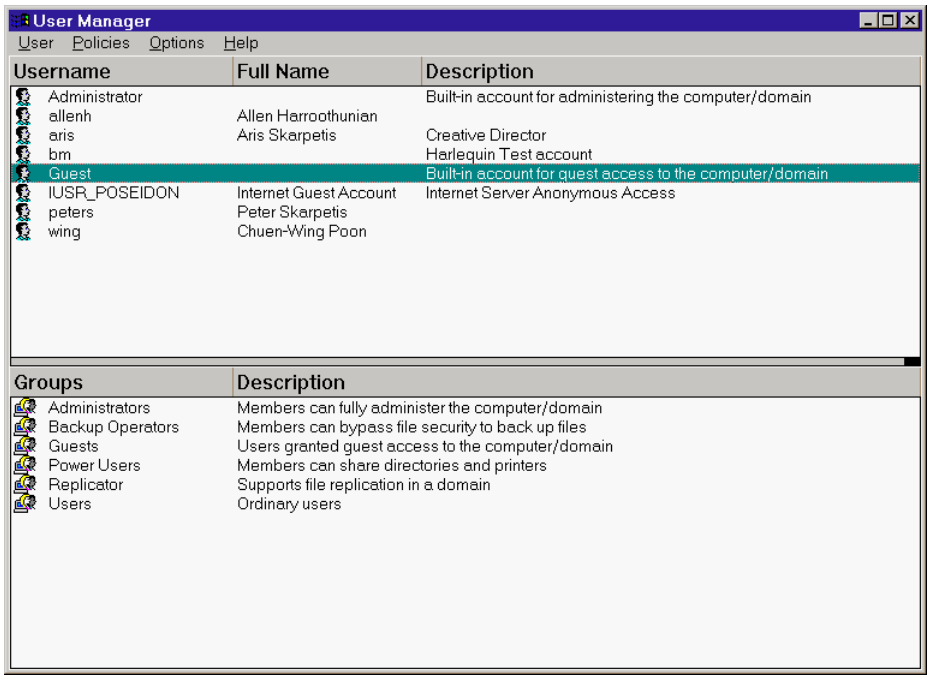


i *At Directory Properties* window *Directory* text field
enter the name of the drive on which your ripped files reside
For example if your ripped files were stored in D:\PageBuffers you would enter D:
click OK





j From the *Start* button
select *Programs*
select *Administrative Tools*
select *User Manager*
select the menu item *User - New User*



k In the *Username* field
type `bmagic`

l In the *Password* field
enter a suitable password

select "*Password never expires*" option
click on `Profile` button

m In the *Home Directory* field
enter the path where your RIP stores its ripped files
For example if you have a Harlequin RIP the pagebuffer files might be stored in e:\SW\\Pagebuffers. Consult your RIP's documentation for the proper directory path
click OK to dismiss Profile window
click OK to dismiss New User window
select *User - Exit* to dismiss User Manager window

3 Testing FTP access for user bmagic

n Open a (DOS) command prompt
type `ftp localhost`
press <enter>
screen shows prompt for user name
type `bmagic`
screen shows prompt for password
enter password created in step l above
type `dir`
press <enter>
verify that you are able to see all the files and directories that you previously specified
These are the files on the drive you specified as the home directory in step i above

5 Create and configure a new RIP

o From the *ControlPanel ⇨ RIPs tab*
create a new RIP
select a RIP driver
set the *Path* field to the path entered in step m above
For example if you selected E:\SW\PageBuffers as the home directory then you should type /SW/PageBuffers in the Job Path field
If your RIP supports multiple paths, you will need to add the path using the Add button next to the Paths list
set the *Username* field to `bmagic`
set the *Password* field to the password created in step L above
set the *IP Address* field to the TCP/IP address of your Windows NT RIP
click on the *Test* button
BlackMagic should pop up a dialogue box advising that polling was successful. If not, check all the steps above for errors.
set the rest of the options to suit
save the RIP configuration

☺

Installing and configuring Apple Macintosh server

The Macintosh does not ship with any FTP server but it does ship with TCP/IP support. Before proceeding further make sure that

- TCP/IP is installed and configured properly

- You have at least System 7.5.5 and Open Transport 1.1.2.
- If not contact your local Apple dealer for and upgrade.

Once your system has been upgraded and configured you will need to get a copy of "Netpresenz" the Macintosh FTP server. This is a shareware program and it can be downloaded from the Internet at the address given below.

http://redback.cs.uwa.edu.au/PeterLewis/WWW/netpresenz/index.html

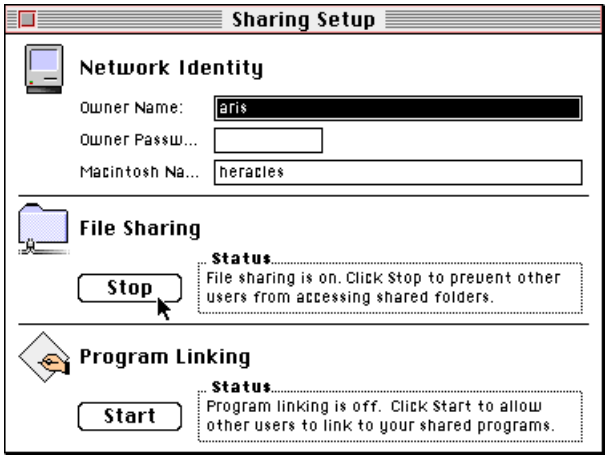
Unpack the Netpresenz distribution into some folder on your Macintosh and verify that it actually runs by double clicking on the Netpresenz icon. If it *failed to run* it means that either TCP/IP is not installed properly or your system software is too old. Rectify the problem and try again. Once Netpresenz can run properly follow the step by step instructions outlined below to configure it for use with BlackMagic.

Installing and configuring FTP servers on your Macintosh RIP

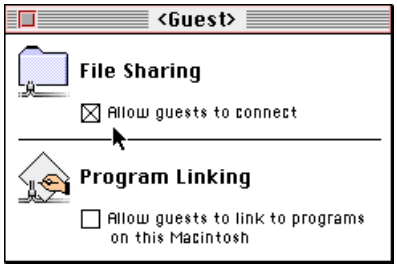
This procedure involves the following steps
1 Enable sharing on the disk containing the ripped files
2 Set up the Netpresenz FTP server
3 Create and configure a new RIP

1 Enable sharing on the disk containing the ripped files

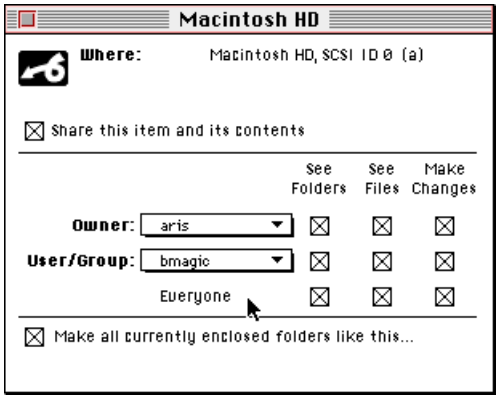
a Run the *FileSharing* control panel
enable file sharing
close the panel



b Run the *Users&Groups* control panel
double click on the *Guests* icon
select *Sharing* from the choice menu
tick *the Allow guests to connect* tick box
This allows BlackMagic to read jobs from your Mac based RIP
close both panels



c click on the hard disk where your ripped files are installed
Usually called Macintosh HD
select *File ⇨ Sharing* menu item
tick the *Share this item and all its contents* tick box
for *Everyone* select *Read&Write* from the choice menu
See illustration below
close the window (if prompted select OK)



2 Set up the Netpresenz FTP server

d Double click on the *Netpresenz Setup* icon
If prompted for SVIC select the NO option and ignore any messages about the internet Config control panel not being available. It is not required for proper operation of Netpresenz
click on *FTP Setup*
ensure *Owner* has full access
ensure *Users* have full access
ensure *Guests* have full access
click *Save*
click *FTP Users*
ensure that user *Anonymous* has login directory */Macintosh HD*
click *Save*
click *Security*
uncheck *Log to File* box (OFF)
check the *Allow Get* box (ON)
check *Allow put* box (ON)
click *Save*
click *Summary* button
ensure no errors are reported
select menu item *File ⇨Quit*
Double click the *Netpresenz* icon
If it fails to launch or gives some error, review all the previous steps.

3 Create and configure a new RIP

e From the *ControlPanel* ⇨ *RIPs* tab
create a new RIP
select a RIP driver
set the Path field to the path where your ripped files are stored
For example if your ripped files are stored on Macintosh HD/Harlequin RIP/SW/PageBuffers you would enter /Macintosh HD/Harlequin RIP/SW/PageBuffers in the BlackMagic Job Path field. Make sure you type any spaces that appear in the folder names. Without these the polling will not work
If your RIP supports multiple paths, you will need to add the path using the Add button next to the Paths list
set the *Username* field to anonymous
set the *Password* field to something like bmagic@mycompany.com
set the *IP Address* field to the TCP/IP address of your Macintosh
click on the *Test* button
BlackMagic should pop up a dialogue box advising that polling was successful. If not, check all the steps above for mistakes. Most failures are caused by Guests not being allowed to connect, or File Sharing has not been turned on or there was some error condition reported in step d. Rectify the problem and try again.
Set the rest of the options to suit
save the RIP configuration

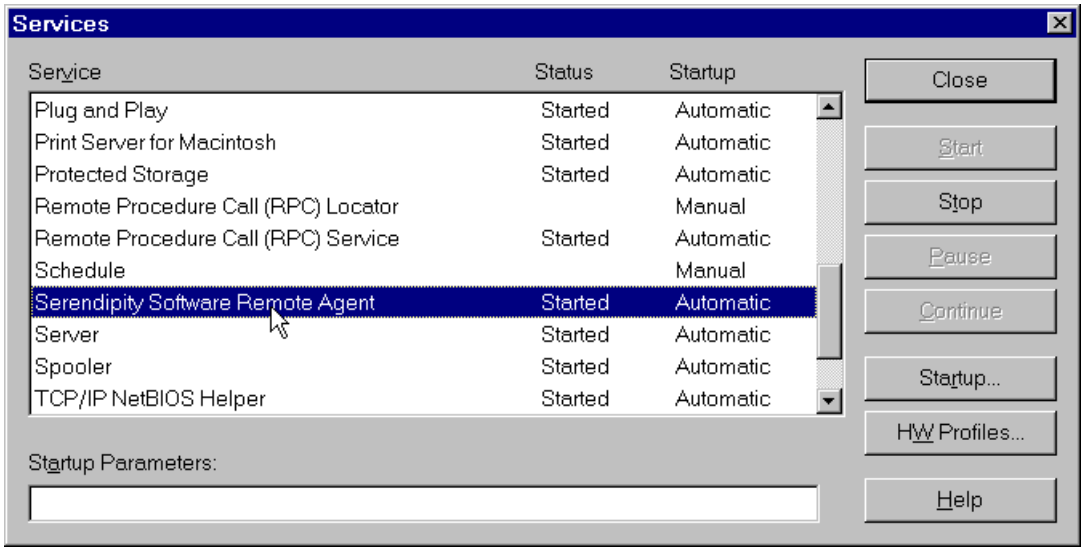
You are now ready to proof files from your Macintosh based RIP.

Installing the Serendipity Remote Agent

This section contains detailed instructions on installing the remote agent on various platforms. BlackMagic uses the remote agent to poll RIPs. A Remote agent must be installed on the RIP before BlackMagic can proof any jobs from it.

Installing the agent on Windows NT

1. Insert the BlackMagic cdrom into the RIP computer
2. Using NT explorer open up the CD and go to the agent folder
3. For DEC Alpha platforms open up the alpha folder and for intel platforms open up the i386 folder
4. Double click on setup.exe to launch the installation program and follow the onscreen prompts to install the remote agent
5. Once installed double click on the services item in the windows control panel and verify that the remote agent service is installed and running
6. Once installed and running the file BlackMagic.log in the selected installation directory can be checked for any errors that might occur during the remote agent's operation



Installing the agent on Sun Solaris

This installation section assumes some basic knowledge of UNIX system administration

1. Insert the BlackMagic cdrom into the RIP computer and mount it
2. Create a directory somewhere on the computer for the agent to be installed e.g. /usr/local/agent. We will assume you are installing in /usr/local/agent for the rest of this section.
3. Copy the files from the agent/solaris directory on the CD to the folder you created in step 2 above
4. Copy the file libSSlib.so from the agent/solaris directory of the CD to /usr/lib
5. Add an entry to one of the system startup files to automatically launch the agent at boot up i.e. add /usr/local/agent/bmagent to one of the scripts files in /etc/init.d
6. Start the agent manually to make sure it works by typing /usr/local/agent/bmagent and then checking the file /usr/local/agent/BlackMagic.log for any critical errors.
7. If all goes well in step 6 reboot the computer to verify that the agent restarts properly at boot time

Installing the agent on Silicon Graphics IRIX

This installation section assumes some basic knowledge of UNIX system administration

1. Insert the BlackMagic cdrom into the RIP computer and mount it
2. Create a directory somewhere on the computer for the agent to be installed e.g. /usr/local/agent. We will assume you are installing in /usr/local/agent for the rest of this section.
3. Copy the files from the agent/irix directory on the CD to the folder you created in step 2 above
4. Copy the file libSSlib.so from the agent/irix directory of the CD to /usr/lib32
5. Add an entry to one of the system startup files to automatically launch the agent at boot up i.e. add /usr/local/agent/bmagent to one of the scripts files in /etc/init.d
6. Start the agent manually to make sure it works by typing /usr/local/agent/bmagent and then checking the file /usr/local/agent/BlackMagic.log for any critical errors.
7. If all goes well in step 6 reboot the computer to verify that the agent restarts properly at boot time

Installing the agent on an Intel 386 Linux System

This installation section assumes some basic knowledge of UNIX system administration

8. Insert the BlackMagic cdrom into the RIP computer and mount it
9. Create a directory somewhere on the computer for the agent to be installed e.g. /usr/local/agent. We will assume you are installing in /usr/local/agent for the rest of this section.
10. Copy the files from the agent/linux directory on the CD to the folder you created in step 2 above
11. Copy the file libSSlib.so from the agent/linux directory of the CD to /usr/lib
12. Add an entry to /etc/rc.d/rc.local to automatically launch the agent at boot up i.e. add the line /usr/local/agent/bmagent
13. Type in /sbin/ldconfig to rebuild the dynamic library cache
14. Start the agent manually to make sure it works by typing /usr/local/agent/bmagent and then checking the file /usr/local/agent/BlackMagic.log for any critical errors.
15. If all goes well in step 7 reboot the computer to verify that the agent restarts properly at boot time

Interfacing the BlackMagic System to Output Devices

NOTE
The topics in this section apply to installations of BlackMagic on both Windows NT, and all UNIX systems.

NOTE
For installations of BlackMagic on Windows NT, there is an additional method of interfacing to output devices, by using the Windows NT Printing subsystem. This is described above in the section titled *Windows NT Connectivity*.

Configuring BlackMagic to interface to printers involves the following steps:

1. Create or configure a Destination.
   This tells the system how to physically talk to the device be it over the network or directly via a local interface.
2. Create or configure a Printer.
   Here you specify which printer driver to use, printer queue options, destination etc.
3. Configure or create a Pagesetup.
   Resolution, screening, printer and so forth.

Configuration procedure for interfacing with AppleTalk postscript printers

This type of printer has a Postscript interpreter (RIP) built-in as well as a network card which implements the AppleTalk printer protocol (PAP). Examples of such printers are the 3M Rainbow, Tektronix Phaser, Iris, Kodak Approval. These of course are not the only printers that fall into this category. Any printer having a RIP and PAP protocol can be interfaced to with the following step by step instructions.

Interfacing to AppleTalk postscript printers

This procedure involves the following steps:
1 Create and configure an ApplePAP type destination
2 Create and configure a Postscript type printer
3 Create and configure a pagesetup

1 Create and configure an ApplePAP type destination

a From the *ControlPanel* ⇨ *Destinations* tab
create a new destination named something like: `Rainbow_via_PAP`
set *Destination Driver* to *Apple PAP*
click *Chooser* button
screen shows *Chooser* window

b In *Chooser* window
click on name of required printer - e.g.: *3M Rainbow Spooler*
click OK to dismiss the *Chooser* window
save the destination

2 Create and configure a Postscript type printer

c From the *ControlPanel* ⇨ *Printers* tab
create a new printer
enter printer name
set *Printer Driver* to *Postscript*
select the destination from a (step 1)
set the *Active* tick
save the printer

3 Create and configure a pagesetup

d From the *ControlPanel* ⇨ *Pagesetups tab*
create a new pagesetup
select the printer from c (step 2)
click on *Customise*
from the dialog that appears
select *Compression type RLE*
click on *Accept*
select a colour profile - Normally use *None*. (See below)
set *ColourSpace* to *CMYK*
set *Screening* to *None*
this should be the only available choice
set *Resolution (dpi)* to match your printer - normally *300.00*
set other items to suit
save the pagesetup

You may now use the Project ⇨ *Test Prints* menu item from the *ControlPanel* to send a test page to the newly created pagesetup

When BlackMagic creates Postscript files for printers it uses a 4 colour (CMYK) bitmap at the printer's nominated resolution. In other words the file contains no entities that require ripping. All processing would have been done by either your imagesetter / platesetter RIP or by BlackMagic's built in Postscript RIP. This ensures that no re-processing is performed by the printer's RIP apart from screening and colour correction.

Interfacing with Macintosh postscript front ends

This section covers printers which do not have Postscript but obtain Postscript capability by utilising a RIP which runs on an Apple Macintosh. These Macintosh based RIPs allow periodic polling of certain drop folders. When jobs arrive at one of these drop folders they are automatically processed by the RIP.

On BlackMagic there is a directory in */mnt/netshare(Linux version only)* which is published on all supported network protocols as a shared volume. It is this shared volume that is used for interfacing to this kind of printer. BlackMagic will put their ripped files into this shared folder and the RIP on the Macintosh will look in there for new jobs to process. On other platforms a different directory will need to be specified. This directory has to be visible from the Macintosh that has the postscript front end. For

example on Windows NT server you would use MacFile to make the chosen directory accessible by the Macintosh computer.

Printers that fall into this category are the Iris, 3M Rainbow etc.

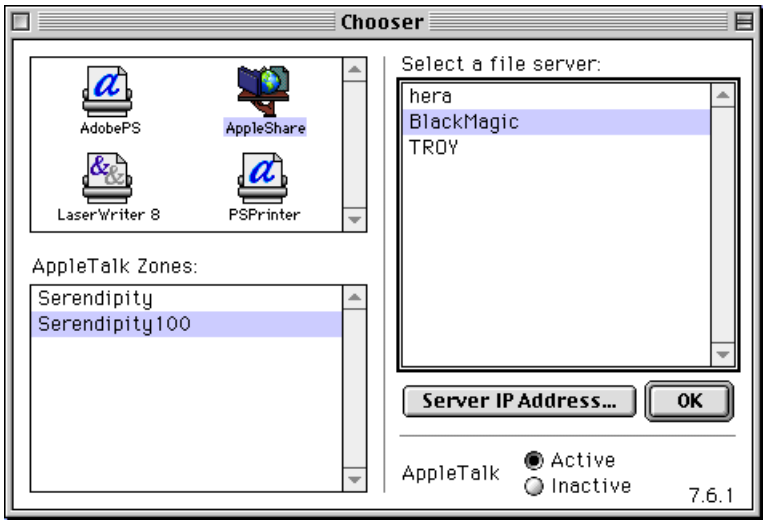
The following step by step instructions show how to configure BlackMagic to work with this type of device.

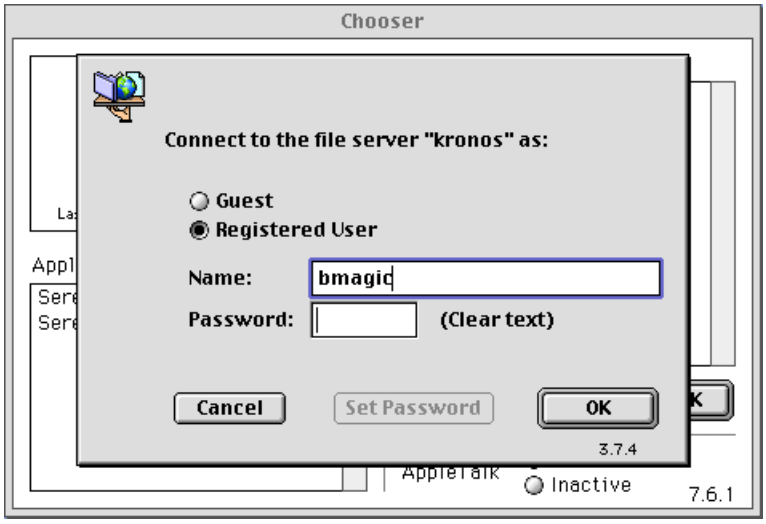
Interfacing to printers with Mac postscript front ends

This procedure involves the following steps
1. Mount the shared folder on your Macintosh
2. Create a new folder and configure the RIP to look onto this for new jobs
3. Create and configure a Local File destination
4. Create and configure a Postscript type printer
5. Create and configure a pagesetup
6. Print a Test Page

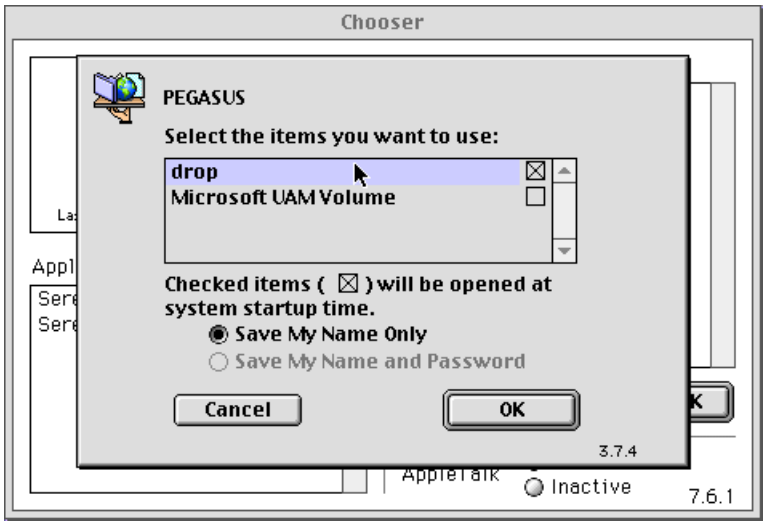
1 Mount the *Network Share Folder* on your Macintosh

a On the Mac on which the RIP resides
launch *Chooser*
click *AppleShare* icon
double click on the BlackMagic entry
Appears at right in Chooser window
screen shows: login prompts

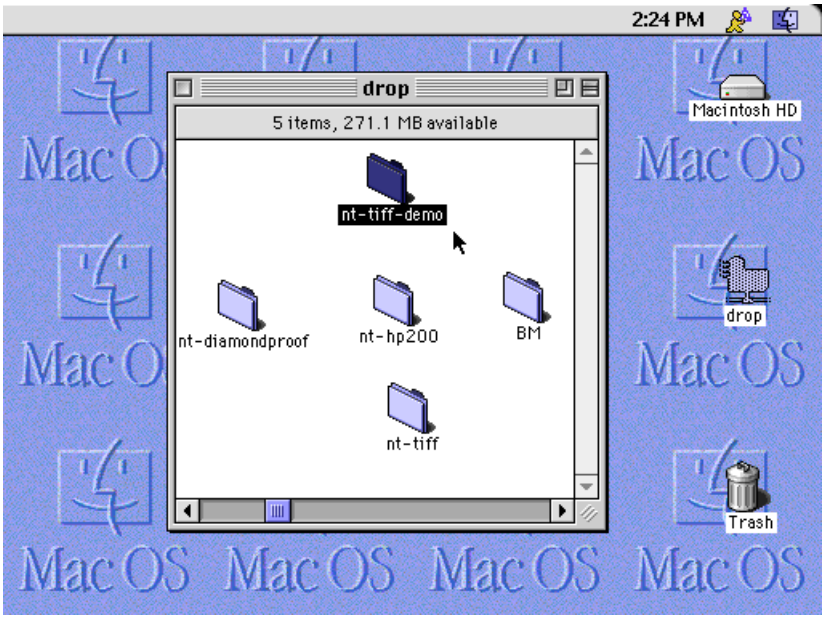




b In the *User* field
type: “`bmagic`" (Case sensitive)
enter password if set by administrator
click OK
screen shows a list of available folders



c At available folders
click on *Network Share* Folder or whatever the published directory is
click on box for *Network Share* Folder
for auto remount on Mac start up
click on *Save my Name and Password*
This is optional - for auto entry
click OK
screen shows: globe icon called Network Share Folder



2 Name the folder

d At *Network Share* folder
double click to open
screen shows: *Finder* menu
select *File - New Folder*
name the folder e.g.:: `Drop-to-3M`
Or use any name you wish. This will be the drop folder which the Macintosh RIP will be polling for jobs originating from BlackMagic. Make sure that the name contains no spaces or illegal characters.

3 Configure the RIP to look onto this folder for new jobs

e Consult your printer documentation for instructions

4 Create and configure a Local File type destination

f From *ControlPanel* ⇨ *Destinations* tab
create a new destination named something like: `FirstProof_DropFolder`
select *Destination Driver* ⇨ *Local File*
in the *Path* field type `in /mnt/netshare/XXXX`
(XXXX is above named folder, step d)
or the name of the directory which you shared previously
e.g. c:\macdrop

save the destination

5 Create and configure a Postscript type printer

g From the *ControlPanel* ⇨ *Printers* tab
create a new printer
enter printer name
set *Printer Driver* to *Postscript*
select the destination from step 4
set the *Active* tick
save the printer

6 Create and configure a pagesetup

h From the *ControlPanel* ⇨ *Pagesetups* tab
create a new pagesetup
The name you give for the new pagesetup, is the name the pagesetup will be called by your network
select the printer from step 5
click on *Customise*
from the dialog that appears
select *Compression type RLE*
click on *Accept*
select a colour profile (normally *None*)
This type of printer has its own calibration software and it should already have been calibrated. If not, you may create your own profile later and come back to this configuration window and select it.
set *ColourSpace* to *CMYK*
set Screening to *None*
this should be the only available choice
select resolution to match your printer
Normally 300dpi
set other items to suit
save the pagesetup

6 Print Test Page

i At QueueManager
select menu item Project ⇨Test Prints
etc

Interfacing with Dupont Digital Waterproof / Cromalin

This section describes how to interface BlackMagic to the Dupont Digital waterproof / Cromalin. The Dupont Digital waterproof uses a Sun workstation front end for interfacing to the printer and the network.

Since it supports TIFF the following procedure configures BlackMagic to produce TIFF files and send them to the Sun for processing.

Interfacing with Dupont Digital waterproof / Cromalin printers

This procedure involves the following steps:
1 Create and configure an FTP type destination
2 Create and configure a TIFF type printer
3 Create and configure a pagesetup

1 Create and configure an FTP type destination

a From *ControlPanel* ⇨ *Destinations tab*
create a new destination named something like: `DupontWaterProof`
select *Destination Driver* ⇨ *FTP*
set the *Hostname/IP* field to the name or address of the Sun workstation that drives the Dupont waterproof
type in the *Path* field: `/stork/gateways/import_dd`

set the *Username* and *Password* fields
Pick a valid username for the Sun workstation. Make sure the username has a password. FTP does not allow users without passwords to connect.
save the destination

2 Create and configure a TIFF type printer

b From the *ControlPanel* ⇨ *Printers* tab
create a new printer
enter printer name
set *Printer Driver* to *TIFF*
select the destination from step 1
set the *Active* tick
save the printer

3 Create and configure a pagesetup

c From the *ControlPanel* ⇨ *Pagesetups* tab
create a new pagesetup
The name you give for the new pagesetup, is the name the pagesetup will be called by your network
select the printer from step 2
click on *Customise*
from the dialog that appears
select *Compression type* LZW
click on *Accept*
select a colour profile (normally *None*)
This type of printer has its own calibration software and it should already have been calibrated. If not, you may create your own profile later and come back to this configuration window and select it.
set *ColourSpace* to *CMYK*
set Screening to None
this should be the only available choice
set resolution to 304.8dpi
save the pagesetup

☺

Interfacing with HP JetDirect cards or external HP JetDirect interfaces

This kind of interface can be found on most Hewlett Packard Printers. It is a multi-protocol device, which supports AppleTalk and TCP/IP among other protocols. The procedure below describes how to create a destination which allows you to interface BlackMagic to a printer which is equipped with one of these interfaces.

Interfacing to printers with HP JetDirect cards or external JetDirect interfaces

This procedure involves the following steps
1 Configure TCP/IP address of the HP JetDirect Interfaces
2 Create and configure a TCP/IP Port type destination

3 Using this destination

1 Configure TCP/IP address of the HP JetDirect Interface

a Consult the printer users guide for instructions

2 Create and configure a TCP/IP port type destination

b From *ControlPanel ⇨ Destinations tab*
create a new destination named something like: `HP1_via_JetDirect`
select *Destination Driver ⇨ TCP/IP Port*
set the *Hostname/IP* field to the address from step 1
set the *Port* field to *9100*
save the destination

3 Using this destination

c From *ControlPanel ⇨ Printers tab*
set all settings to match your printer
select the destination created in step b above

☺

Connecting to other network interfaces

In addition to the Hewlett Packard JetDirect network interfaces mentioned in the previous section, there are many other manufacturers who supply similar interfaces. All of these support printing via a TCP/IP port.

Once you have the port number (refer to the manufacturer's documentation) you can create a destination which allows you to interface BlackMagic to a printer equipped with one of these interfaces.

Network interfaces from CalComp and Milan use TCP/IP port number 2000 and the HP JetDirect interface uses TCP/IP port number 9100.

The following procedure is a step by step guide to creating a destination using TCP/IP ports.

Interfacing with other network interfaces using TCP/IP port

This procedure involves the following steps
1 Configure the TCP/IP address of the network interface
2 Task name
3 Using this destination

1 Configure the TCP/IP address of the network interface

a Consult the printer users guide for instructions

2 Create and configure an FTP type destination

b From *ControlPanel ⇨ Destinations* tab
create a new destination name something like: `HP1_via_JetDirect`
select *Destination Driver ⇨ TCP/IP Port*
set the *Hostname/IP* field to the address configured in step 1
set *the Port Number* field to 9100
save the destination

3 Using this destination

c You can print to this destination by attaching it to a printer of the appropriate type.

☺

Configuring remote proofing

This section describes how to configure your BlackMagic system for remote proofing to other BlackMagic systems.

Before you can remote proof you must have a WAN (Wide area network) or some ISDN connection from your office to the remote proofing destination site. A TCP/IP gateway which routes packets between your office and the remote site is also required. In the absence of a gateway an ISDN Manager application which can send files to a remote location will be adequate but will lack some automation. This is described later in this section.

When using remote proofing with BlackMagic, the master system is responsible for decoding and stitching all the ripped files together. It polls the RIP, processes the job and then uses ZIP data compression to create a contone file at some nominated resolution. The data is stored in BlackMagic's own proprietary format that only other MegaRIP and BlackMagic systems can understand. It contains all information required by the remote system to produce a printed proof. This file is then transmitted to the remote system for proofing. On receipt of the file, the remote system decompresses the file, colour corrects it, screens it and prints it.

Remote proofing on sites with TCP/IP gateways

Configuring the BlackMagic System for remote proofing using TCP/IP gateways

This procedure involves the following steps:
1. Enter TCP/IP addresses
2. Create and configure a TCP/IP Port type destination
3. Create and configure a BlackMagic Image type printer
4. Create and configure a pagesetup
5. Send a test page to the remote system

1 Enter TCP/IP addresses

a Obtain the TCP/IP address of the remote Black Magic system

b Obtain the TCP/IP address of the TCP/IP gateway

c Add the gateway address into the TCP/IP Configuration screen

Refer to Configuring the TCP/IP address section of this manual for instructions

d Reboot your BlackMagic system

2 Create and configure a TCP/IP port destination

e From *ControlPanel ⇨ Destinations* tab
create a new destination named something like: `Remote_BM_at_sitel`
select Destination *Driver ⇨ TCP/IP Port*
set the *Hostname/IP* field to the address configured in step a
set the *Port Number* field to the port number of the remote pagesetup
The port number is a publish attribute of the pagesetup. Each pagesetup that has the "Publish as ⇨ TCP/IP port", can be assigned a port number also.
save the destination

3 Create and configure a BlackMagic Image type printer

f From the *ControlPanel ⇨ Printers* tab
create a new printer
enter printer name
set *Printer Driver* to *BlackMagic Image*
select the destination from step 2
set the *Active* tick
save the printer

4 Create and configure a pagesetup

g From the *ControlPanel ⇨ Pagesetups* tab
create a new pagesetup
The name you give for the new pagesetup, is the name the pagesetup will be called by your network
select the printer from step 3
select a colour profile (normally None)
Normally with remote proofing you select None since the remote BlackMagic should already have been calibrated. If not you may create your own profile later and come back to this screen and select it.
set *ColourSpace* to *CMYK*
set Screening to *None*
set resolution to the required value
The higher the resolution the larger the file. 300.0 dpi is a good compromise between quality and file size.
save the pagesetup

5 Send a test page to the remote system

h From QueueManager
select File ⇨ TestPrints and submit a test print to the pagesetup created in step g above

Remote proofing using Macintosh ISDN manager

ISDN Manager applications for the Macintosh have gained in popularity. They allow transmission of large files to remote sites efficiently without the need for a fully configured WAN (wide are network).

In relation to remote proofing, however, ISDN Manager applications do pose some problems as there is no direct network path between BlackMagic and the remote BlackMagic system.

The following is a step by step guide for configuring BlackMagic and the Macintosh for remote proofing using ISDN Manager.

Configuring the BlackMagic System for remote proofing using Macintosh ISDN Manager

This procedure involves the following steps:
1 Mount the BlackMagic network share folder
2 Create a new folder in BlackMagic's network share folder
3 Create and configure a Local File type destination
4 Create and configure a BlackMagic type printer
5 Create and configure a pagesetup
6 Configure the remote site
7 Process jobs from the master BlackMagic

1 Mount the network share folder

a On the Macintosh with ISDN Manager
go to *Chooser*
click on *AppleShare* icon
double click *BlackMagic*
Appears at right in Chooser window
screen shows login prompts

b In the *User* field
type `BlackMagic` (case sensitive - type in as shown)
Leave Password blank
click OK
screen shows list of available folders

c At *available* folders
click on *Network Share* Folder
click on box for Network Share Folder
for auto remount on Mac start up
click on *Save my Name and Password* (Optional)
click OK
desktop shows a globe icon called *Network Share Folder*

2 Create a new folder in BlackMagic's network share folder

d Double click on the *Network Share* folder to open it
select *File ⇨ New Folder*
rename the folder e.g.: `RemoteDrop or DropToCompanyA`
Do not use spaces or illegal characters. This will be the folder in which the ISDN manager will be able to see jobs originating from BlackMagic.

3 Create and configure a Local File type destination

e From *ControlPanel ⇨ Destinations* tab
create a new destination named something like: `To Remote_via_ISDN_Manager`
select *Destination Driver ⇨ Local File*
set the *Path* field `to /mnt/netshare/XXXX`
Where XXXX is the name of the folder you created in step d above. For example if you called the folder drop1 you would enter /mnt/netshare/drop1 in the Path field
save the destination

4 Create and configure a BlackMagic Image type printer

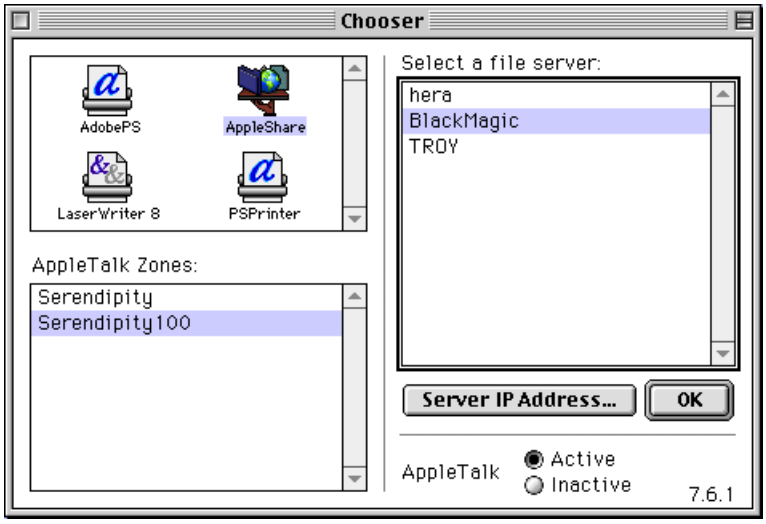
f From the *ControlPanel ⇨ Printers* tab
create a new printer
enter printer name
set *Printer Driver* to *BlackMagic Image*
select the destination from step 3
set the *Active* tick
save the printer

5 Create and configure a pagesetup

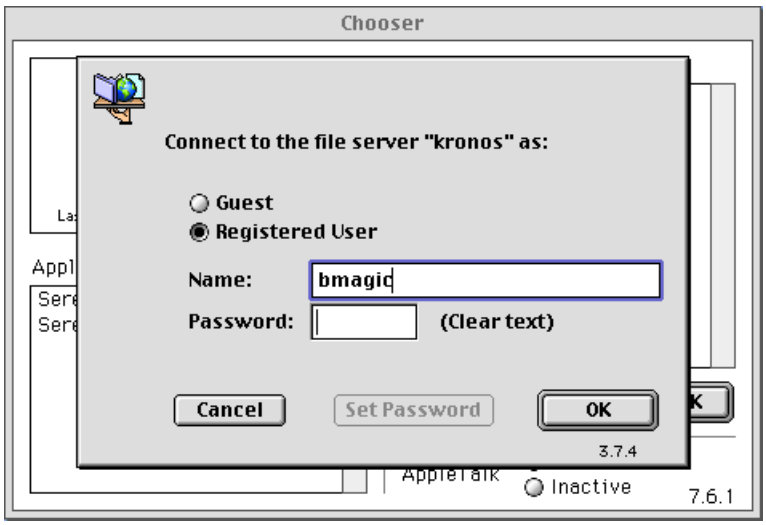
g From the *ControlPanel ⇨ Pagesetups* tab
create a new pagesetup
The name you give for the new pagesetup, is the name the pagesetup will be called by your network
select the printer from step 4
select a colour profile (normally *None*)
Normally with remote proofing you select None since the remote BlackMagic should already have been calibrated. If not you may create your own profile later and come back to this
set *ColourSpace* to *CMYK*
set Screening to *None*
set the resolution
save the pagesetup

6 Configure the remote site

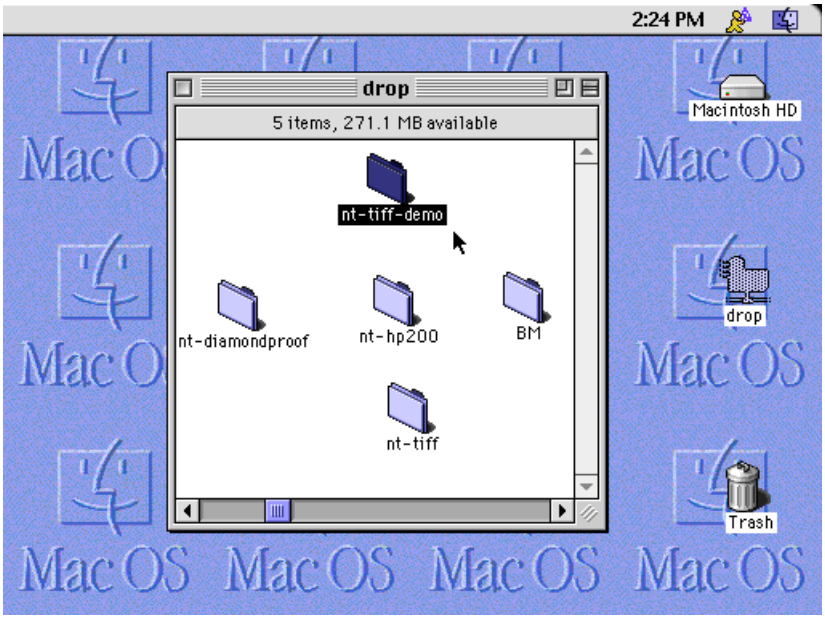
h On the Macintosh at the remote site on which ISDN Manager running
go to *Chooser*
click *AppleShare* icon
double click on *BlackMagic*
It appears in the right hand section of the window



screen shows prompt for username
type `bmagic for BlackMagic remote system`
Use upper and lower case as shown below.
Leave the Password blank
click OK



screen shows a list of available folders
There will be one entry for each pagesetup that you have configured to publish itself as a Macintosh folder.
double click on the name of the pagesetup whose drop folder you wish to mount
screen shows on the desktop a globe bearing the pagesetup name
This is the name of the pagesetup you created in step 5



7 Process jobs from the master BlackMagic

i Drop the jobs received by ISDN Manager onto the globe icon

Jobs received by the ISDN Manager from the master BlackMagic will be automatically processed by dropping the files on the globe icon. You may also configure ISDN Manager so that any files received from the master site are automatically placed in the BlackMagic drop folder

You can now send jobs to the remote system for proofing. Use the pagesetup (created in step 5 above) then use ISDN Manager on the Mac to send jobs from the folder (created in step d above) to the remote system. You can send the same file to all configured remote systems - simply repeat step 6 above to configure each remote system.

Note that although remote proofing can be achieved using ISDN Manager connections, this method lacks the automation provided by a full WAN (Wide Area Network) with a TCP/IP gateway.

REFERENCE

Conventions and Notes

This section contains notes and conventions as they apply to the BlackMagic the user interface.

In some windows this icon will appear at the bottom right. The window it appears on will update its contents every time it receives a broadcast from the imaging server. Sometimes this can be annoying especially when jobs are being re-prioritised or deleted. Click on the icon once to disable updating of the window contents.

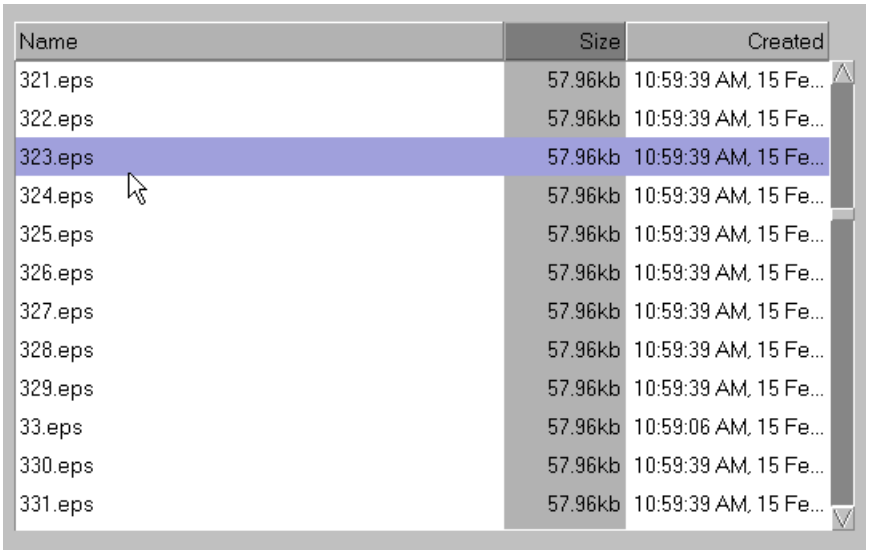
The icon will change to a  to reflect that window updating has been turned off.

In some windows this icon will appear at the bottom right. The window it appears on will not update its contents when it receives a broadcast from the imaging server. Click on the icon once to re-enable updating of the window contents.

The icon will change to a  to reflect that window updating has been turned on again.

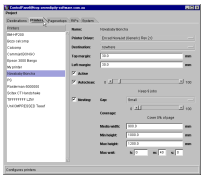
List searching feature

Shown below is a list box. A list box contains a collection of items normally sorted by name. Serendipity lists allowing jumping to a particular item quickly with the aid of the keyboard. To activate the quick search feature just click on one of the items in the list and then type the first couple of characters of the item you are looking for. The list will quickly jump to the first item whose name matches the characters you just typed. The list searching function is case sensitive which means that “The” is not the same as “the”. For example if you needed to jump to an item whose name starts with *Wer* you would click in the list and then type Wer on the keyboard. The list would jump to the first item starting with *Wer*

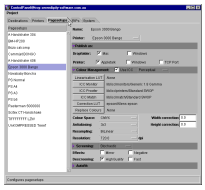


Control Panel

Destinations tab



Printers tab

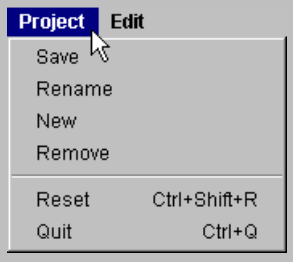


Pagesetups tab

RIPs tab

System tab

The Control Panel application allows you to create and modify configuration files. There is a tab for each type of configuration file. You can load a configuration by clicking on an entry in the loader list on the left. The title of the list changes according to the tab. The system tab has no list since there is only one system configuration file.



Project Menu

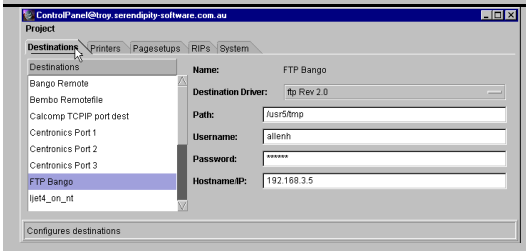
Stores and retrieves configurations from the database. The menu functions are modal.

Save	Saves the configuration you are editing. *Requestor: If you are editing a non-existent configuration, you will be asked to supply a new name.*
Rename	Renames the configuration you are editing. *Requestor: Enter the new name for the loaded configuration.*
New	Puts a new configuration in the database *Requestor: Enter the name for the new configuration.*
Remove	Removes the currently loaded configuration from the database. *Requestor: Confirm deletion*
Reset	Re-initialises the Control Panel *Shortcut: CTRL+SHIFT+R*
Quit	Quits the Control Panel. *Shortcut: CTRL+Q* *Requestor: confirm quit, but only if you have not saved your changes*

Tab strip

Click on the tab for the configuration you wish to edit. You can switch between tabs without saving your configurations.

For more detailed explanations of these tabs, refer to the appropriate section.



Destinations tab.

Once the engine generates proofer data, it needs to know where to send it. A destination configuration supplies this information. Destinations fall under the following general categories:

Physical device destination examples:

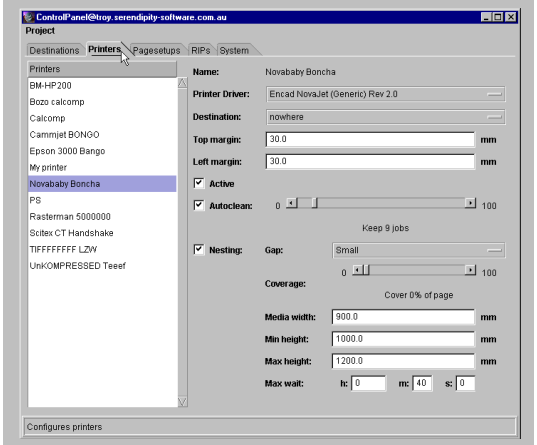
- parallel port where an output device is connected
- print server box connected to the output device

System managed resources:

- printing to an output device managed by the operating system's printing sub system.

Virtual device destination examples

- local directories for saving soft proofs



Printers

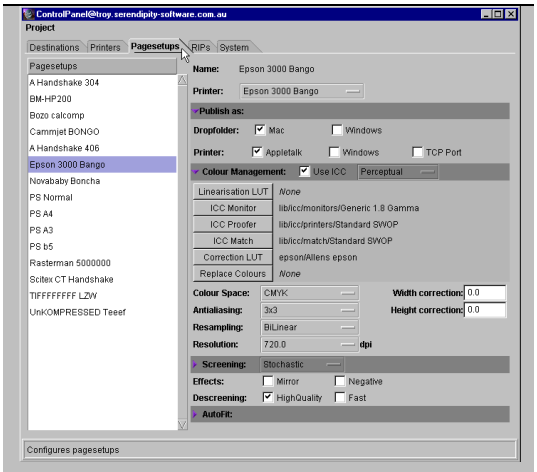
Having defined a destination, the operator must ensure that the proofer data is in the correct format for the output device. The printer configuration translates the proofer data produced by BlackMagic, to the format required by the output device. Output device formats fall into one of the following general categories:

- proprietary:
  Fuji Firstproof, Epson, NovaJet etc.

- Postscript:
  devices with internal Postscript interpreters.

- Industry standard graphics image:
  devices that accept TIFF or Scitex CT

Note that a printer describes the output device type. It is the destination, which you attach to a printer that describes how to reach that output device.



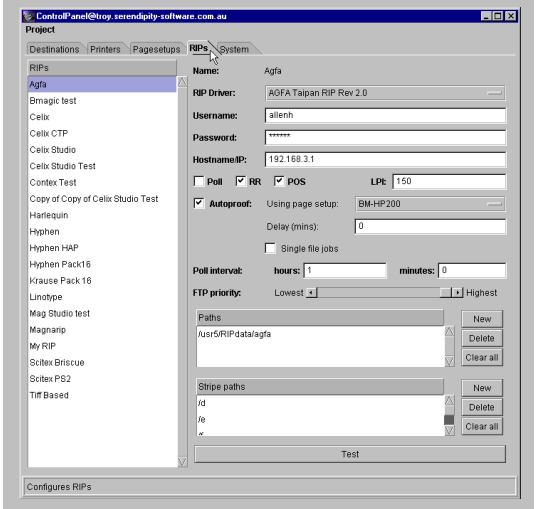
Pagesetups

You know how the output device is connected (destination) and what type it is (printer). However, output devices support many options and the BlackMagic engine even more. In order to be able to submit jobs, you need to specify all these options. These options include:

- Resolution
- Device colour space
- Device language options
- Processing effects
- Colour management options

…. Etc

A pagesetup is a set of presets. Every job you then submit to a pagesetup, will be processed and proofed subject to the presets you have defined.

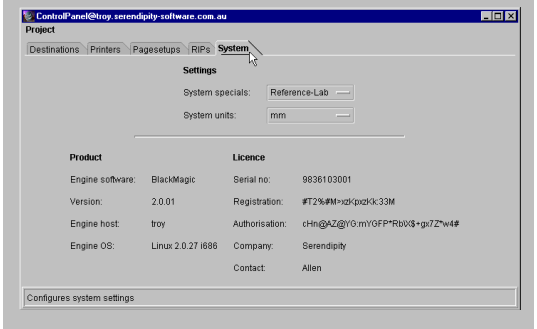


RIPs

You know what type of RIP you own and where it resides on the network. Before you can proof jobs from it you must configure BlackMagic with these details. Broadly, a RIP will be accessible by BlackMagic in one of these ways:

- over a network
- it runs on the same computer as BlackMagic
- it uses network shared disks to store its RIP data

Once BlackMagic knows where to find the RIP job files and what type they are, it lets you proof them manually or automatically using any previously defined pagesetup.

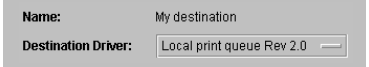


System

This tab is very simple and defines system wide settings such as units and colour replacement options.

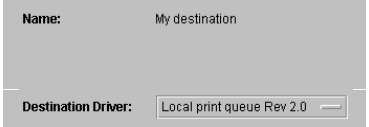
Destination editor

The fields appearing in the destination editor depend on the destination driver you are using.



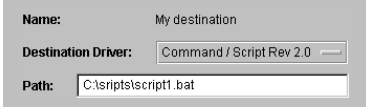
Common areas

These elements appear regardless of the destination driver in use.



Name of the destination configuration.
Blank: no destination has been loaded.

Chooses one of the available destination drivers
Reveals: the panel will change to show the parameters needed by the driver



Command / Script

The command or script executed when a processed job reaches the destination.

Path

The full file name of your script file or command program.
Script-command arguments: The file name of the proofer data file generated by the engine.

File Transfer Protocol (FTP)

FTP is used to send proofer data to using the ftp protocol to elsewhere on the network.

Path

Full path name of the remote directory

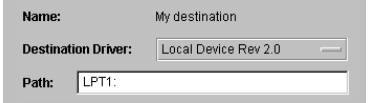
Username

Username to login to the remote host. This user must have read/write permissions for the remote directory.

Password

Password for the specified user to login on the remote host

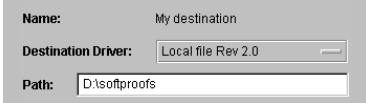
Hostname/IP	Network IP address of the remote host. If the remote host is registered with your name server, you can use the registered name. Otherwise you will need to supply the full IP address of the remote host.



Local Device

This is a local resource managed by the operating system of the BlackMagic host computer.
Windows NT examples of local device include COM1: for serial port one, LPT1: for parallel port one.
UNIX examples /dev/lp1 for parallel port and /dev/ttyS1 for a communications port.

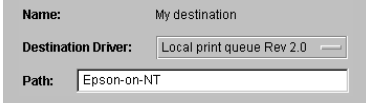
Path	The name your operating system has allocated for this device.



Local File

Used when saving proof image files on a directory on the BlackMagic host computer.

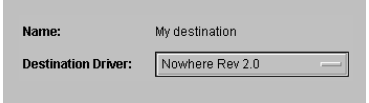
Path	Type the full path to the directory. The user that has launched BlackMagic must have read/write permissions to that directory.



Local Print Queues

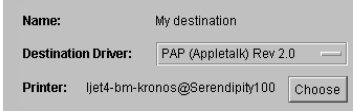
On Windows NT local print queues are created when you use the "Printers" control panel and add a printer to the system. On UNIX the procedure would depend on the flavour you are using.

Path	Name of the local print queue.



Nowhere

Data received by this destination will be discarded.



PAP (AppleTalk)

PAP sends proofer data to an output device on an AppleTalk network accessible by the BlackMagic host computer.

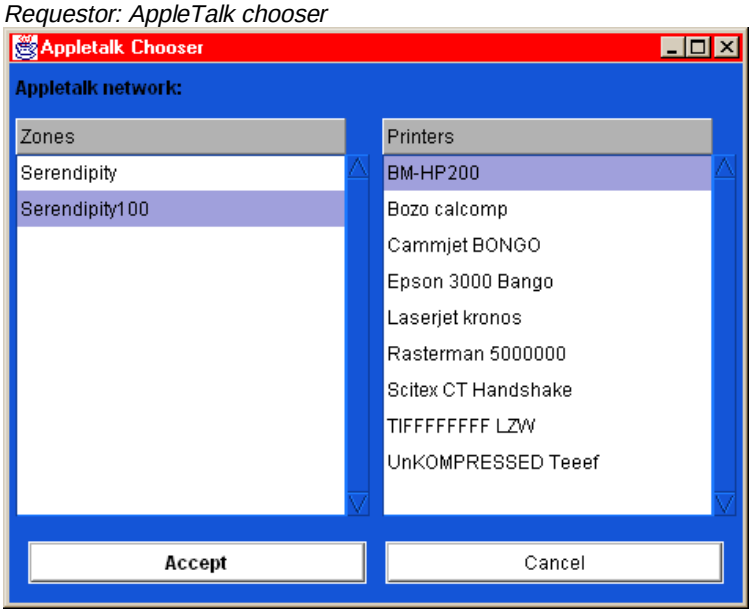
Printer

Displays the name of the AppleTalk printer in the format:

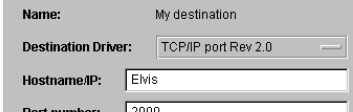
Printer_name@aplletalk_zone_name

Choose

Selects a different AppleTalk printer.
Requestor: AppleTalk chooser



The left hand list displays all the available zones. On selection of a zone, the available printers are displayed in the right hand list. Select one and click ACCEPT to dismiss the window. If you have not configured any AppleTalk zones, the zones list will contain the "" character.*



TCP/IP Port

Sends proofer data to an output device, for example a print server box, via a network connection. The print server box is defined as a destination using its TCP/IP address and port number.

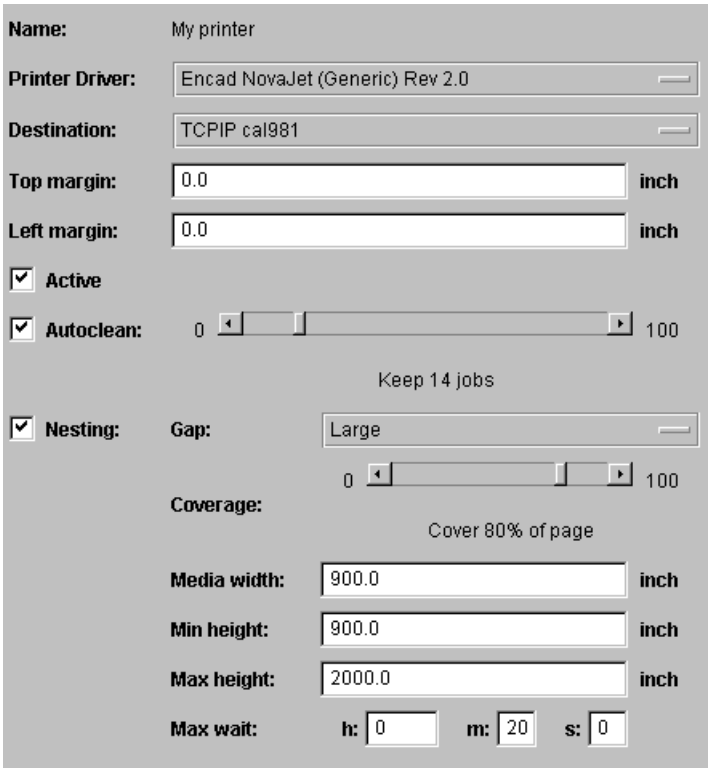
Hostname/IP

The Network IP address of the equipment that has the TCP/IP port. If your device is registered with your name server, you can use the name for that device. Otherwise you will need to supply the full IP address of the remote print server box.

Portnumber

Port number for the specified host address. Use 9100 for a HP Jet Direct print server and 2000 for a Milan FastPort. For other types of print servers consult the manufacturer's documentation.

Printer editor

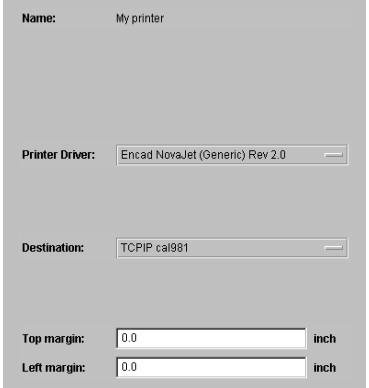


A printer primarily defines the following:

- the format to convert the engine generated proofer data to
- the destination to send the converted data to

Jobs submitted to a pagesetup, once processed, will have to wait in a queue to be converted and sent to a destination. Because of this, each printer configuration has a queue associated with it. See: ***QueueManager***

Elements



Displays the name of the printer file
No name: if no name is displayed, the printer in this configuration tab does not exist in the database. Use the "Save" or "New" project menu functions to save a printer with the displayed settings.

Selects the format of the final proofer data. Select your proofer's format from this menu.

Selects a predefined destination that will receive the converted proofer data generated by this printer.

Margins are measured from the top and left side of the page. These dimensions, define how much to shift the proofer data to the left and down.

Active

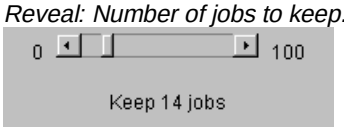
An inactive printer, produces no output:

- *ON (Active checked)*
  the printer converts each job received, and sends it to the destination.
- *OFF (Active not checked)*
  the printer will still convert the data but will not send it to the destination.

Autoclean:

Enables automatic deletion of completed proofer jobs. If Autoclean is not enabled, no jobs will be deleted and you will run out of disk space.

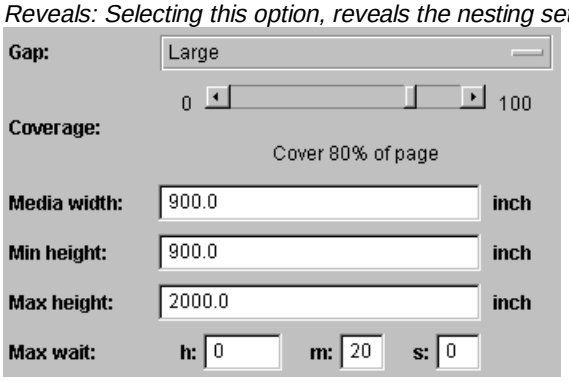
Reveal: Number of jobs to keep.



Nesting:

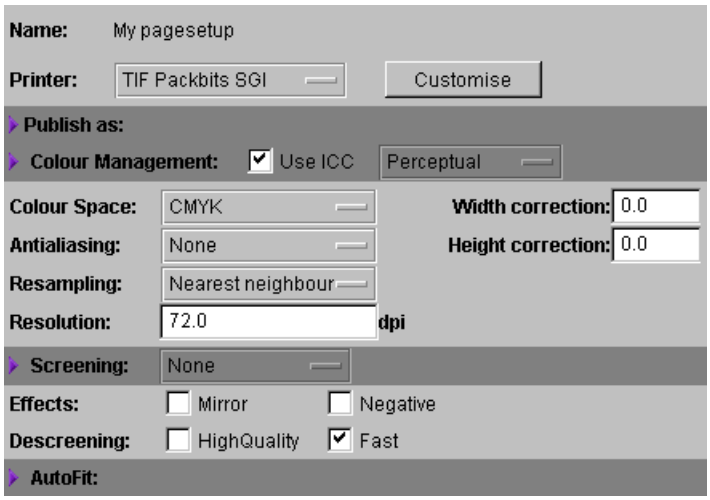
Enables the nesting of jobs. The printer will try to maximise the paper usage of your output device. Jobs will be collected and arranged (nested) on a single sheet. This sheet will not be printed until one the nesting conditions has been satisfied.

Reveals: Selecting this option, reveals the nesting settings



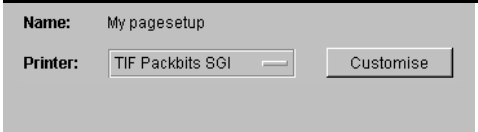
- *Gap*
  Amount of white space between each image, small or large
- *Coverage*
  How much area of the output sheet should be covered before the nesting job is output.
- *Media width*
  Width of the output sheet
- *Min/Max height*
  Height limits of the output sheet i.e. the minimum and maximum height a nested job must be before it is nested and output
- *Max wait*
  The maximum time the printer will wait for the nesting conditions to be satisfied before printing the sheet anyway.

Pagesetup editor

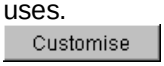


The pagesetup panel is used to configure job processing options.

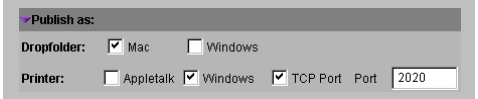
Elements



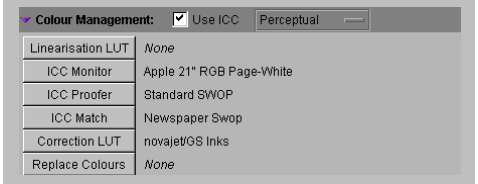
Displays the name of the pagesetup and the printer it uses.



Visible: If a proofer data format has customisable settings, this button will be visible. Otherwise the button is invisible
Requestor: Clicking on the "customise" button requestor will display the available options for that proofer data format.

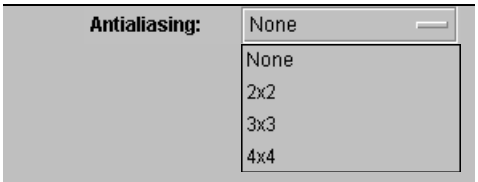


Publish folding panel
Defines how this pagesetup can be accessed from other computers on the network. For a more detailed explanation refer below.
Reveals: Click on the arrow to reveal the publish settings for this pagesetup.

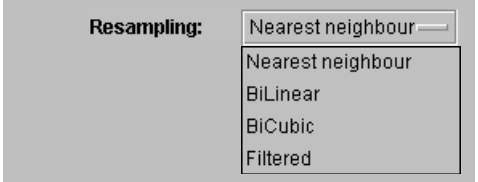


Colour Management folding panel
Defines colour management options for this pagesetup. For a more detailed explanation, refer below.
Reveals: Click on the arrow to reveal the colour management settings for this pagesetup.

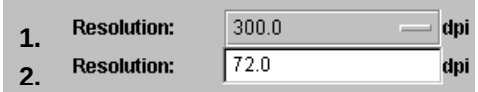
Selects output colour space. The printer you are sending to may be capable of accepting proofer data in one or more colour spaces. This menu contains the options available for that printer.



You would normally use antialiasing to produce smooth edged text and line art. “None” will not apply antialiasing. Higher values produce better smoothing results but place higher storage, memory and processing demands on the engine. This setting is useful for dye sublimation devices and soft proofs, i.e. continuous tone output.



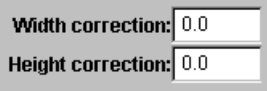
The resampling method is used whenever processing requires that pixels be added or removed from the image. This may be the result of changing the image dimensions and/or resolution. Filtered produces the best results, but takes more time. Nearest neighbour takes much less time with a compromise on the results. Bilinear yields the best compromise between speed and quality and is recommended.



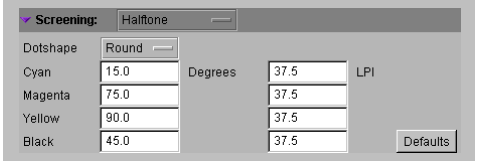
Resolution of the proofer data. Depending on the printer you are sending data to, the resolution setting is different:

1. Fixed resolution device
   A multiple choice menu containing the fixed resolutions is displayed. Physical printing devices are normally like this.

2. Variable resolution device
   A numeric field, in which you type the desired resolution within the supported range is displayed. E.g. When printing to TIFF or Scitex CT files.

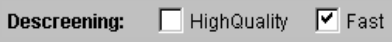


A factor by which the image dimensions are scaled. This can be used to correct for inaccuracies in the printer. Any value less than equal to 0 is interpreted as 1.0 i.e. no factor.

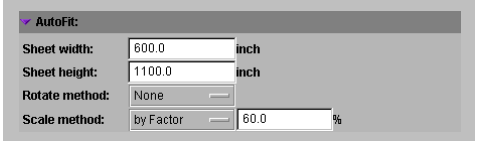


Screening folding panel
Defines screening processing options for this pagesetup. For a more detailed explanation refer below.
Reveals: Click on the arrow to reveal the screening settings for this pagesetup.

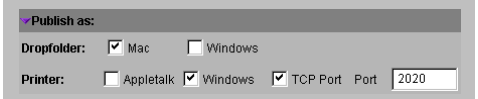
- Mirror: mirrors the proofer data (horizontal flip)
- Negative: inverts each colour plate (channel) in the job



- HighQuality: slower but maintains the dot shape when proofing to dye-sublimation devices
- Fast: faster, appropriate for inkjet type printers.



AutoFit folding panel
Defines automatic fitting options for this pagesetup. For a more detailed explanation refer below.
Reveals: Click on the arrow to reveal the AutoFit settings for this pagesetup.



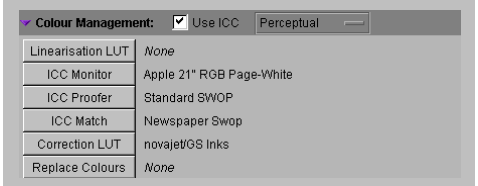
Publish folding panel

This allows other users with network access to the engine computer, to submit jobs from their desktop.

DropFolder.
Makes this pagesetup accessible as a network folder from the selected type of desktops. Saving jobs to that folder is equivalent to submitting to this pagesetup directly.

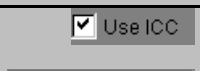
Printer.
Makes this pagesetup appear as a printer in the selected type of desktops. Submitting to that printer is equivalent to submitting to this pagesetup directly.

Port.
Makes this pagesetup accessible as port in the engine's IP address. Sending data to that port is equivalent to submitting to this pagesetup directly.
Reveals: Numeric field to type the port number assigned to this pagesetup.

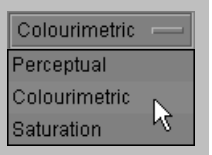


Colour Management folding panel

The engine has the ability to process jobs to very tight colour specifications. Colour processing utilises standard ICC profiles, LUT curves and replace colour sets. The labels next to the buttons, display the database file used for that option. If the name displays "*None*" in an italicised font, no file has been selected for that option.



Activates ICC transformations for the output device.



Selects ICC transformation type to be used when ICC transformations are activated.

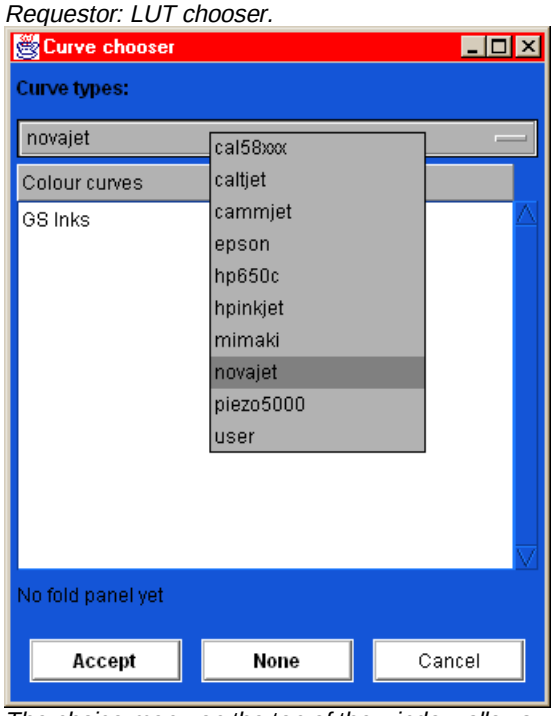
1. Perceptual: for jobs with contone images
2. Colourimetric: for jobs with flat specials that need to be accurately reproduced
3. Saturation: for jobs with business graphics

Note: Not all ICC profile generators generate all three. Refer to the documentation of the ICC Profiling software for more details.

Linearisation LUT

Selects a LUT that is used to calibrate the image after applying ICC profile transformations. A correctly set LUT will optimise the colour accuracy of the ICC profile transformations. This is used in conjunction with the “Correction LUT” described later in this section.

Requestor: LUT chooser.



The choice menu on the top of the window allows you to select the type of LUT you want to load. The list displays the available LUT for that type. Any button will dismiss the requestor:

- *ACCEPT uses the selected LUT*
- *NONE clears the LUT*
- *CANCEL will not alter the LUT settings of the pagesetup*

ICC Monitor

Selects an ICC profile that describes the colour characteristics of your monitor.
Requestor: ICC profile chooser, monitor listing (see ICC Match below).

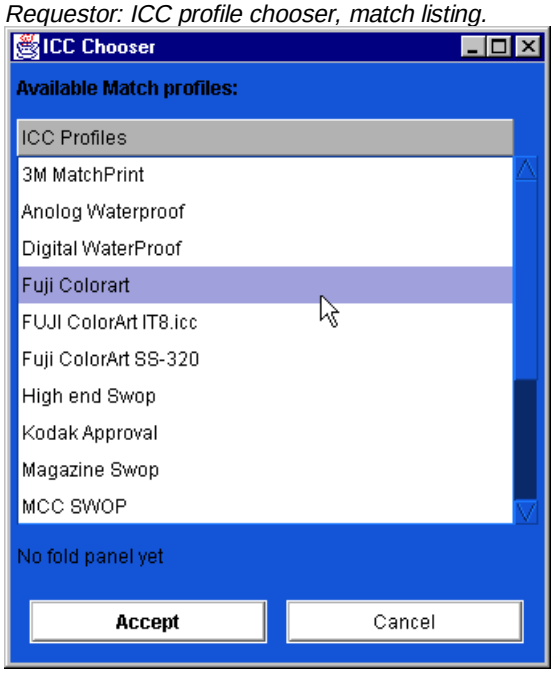
ICC Proofer

Selects an ICC profile that describes the colour characteristics of your proofing device.
Requestor: ICC profile chooser, proofer listing (see ICC Match below).
Hidden: If this button is hidden it means that ICC profile transformations are not activated.

ICC Match

Selects an ICC profile that describes the colour characteristics of the media you are trying to emulate, e.g. SWOP inks on newsprint, chemical proof.

Requestor: ICC profile chooser, match listing.



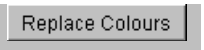
The list contains a listing of ICC profiles of a particular type. The type may be monitor, proofer or match. The buttons dismiss the requestor:

- *ACCEPT uses the selected ICC profile*
- *CANCEL will not alter the ICC settings of the pagesetup*

Correction LUT

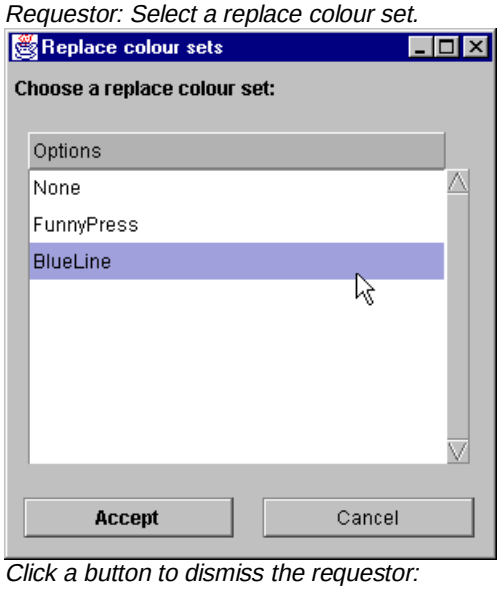
Selects a LUT that is used to calibrate the image after ICC profile transformations. This is used in conjunction with the “Linearisation LUT” mentioned previously. The two LUTs (Correction and Linearisation) are merged together to create the final LUT that is applied. Linearisation LUT is normally used for adjusting the density of each individual ink, while correction LUT is used for affecting gray balance.

Requestor: LUT chooser (see Linearisation LUT button)



Chooses the replace colours set.

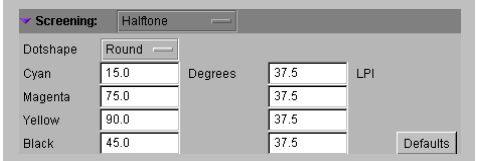
Requestor: Select a replace colour set.



Click a button to dismiss the requestor:

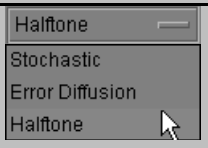
- *ACCEPT uses the selected replace colour set*
- *CANCEL will not affect the replace colour set of this pagesetup*

If you do not want your pagesetup to use colour replacement, select the first set, labeled "None", and click ACCEPT.



Screening folding panel

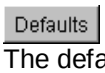
Various screening options are presented, depending on the printer you are using. Not all printers have the same output capabilities.



Determines how to screen the proofer data. The options available depend on the printer used.

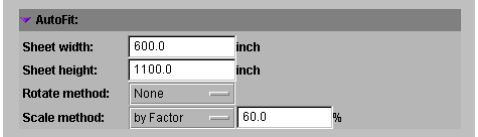
Numeric fields

If "Halftone" is available from the screening menu, you can edit the numeric fields. This modifies the screening applied for each colour. You can edit both the angle and the Lines-per-inch (LPI) values.



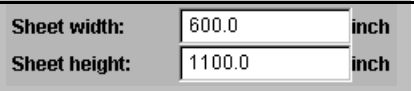
The defaults button will reset those settings to reasonable startup values.

Selects from a variety of dot shapes to use for the halftone screen.

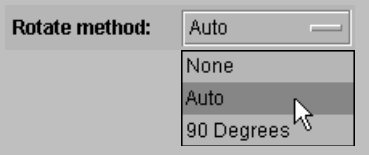


AutoFit folding panel

Settings that determine how the image will manipulated to fit in the print area of your output device.

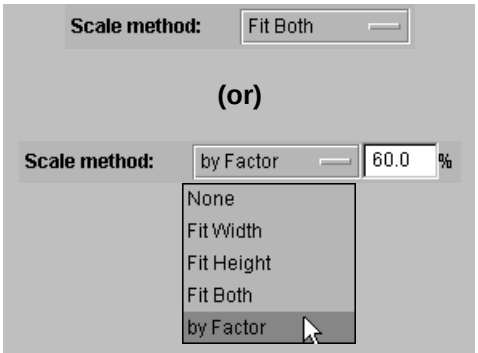


Defines the dimensions of the output sheet. This is used by the other settings to optimise output.



Options:

1. None
   Rotation off.
2. Auto
   If the proofer data is too wide for the output device, the image will be rotated to fit better in the output sheet. If the proofer data is both too wide and too high, it is not rotated
3. Degrees
   Always rotates by 90 or 180 degrees, regardless.



These settings will scale the image to fit the defined sheet size. The image aspect ratio will be maintained, i.e. the image will not be stretched in any way.
Options:

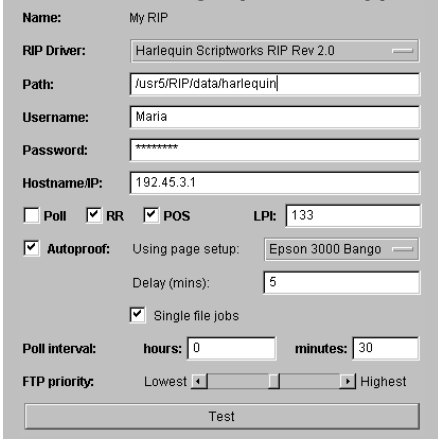
1. None
   Scaling off.
2. FitWidth
   If the job width is larger than the sheet width it shrinks the job so that it fits on the configured sheet width.
3. FitHeight
   If the job height is larger than the sheet height it shrinks the job so that it fits on the configured sheet height
4. FitBoth
   If the job does not fit on the configured sheet, it shrinks the job so that it fits on the configured sheet.
5. ByFactor
   Scales by a constant factor, ignoring sheet width
   Reveals: Numeric field for typing the scale percentage.
6. Tiles
   If a job is wider than the entered sheet width and/or height, splits the jobs into tiles which can later be joined up to re-create the entire job. Useful for printing really wide and tall jobs on smaller printers. Requires that a sheet width and height is entered in this panel otherwise tiling will never be applied.
   Reveals: Overlap for selecting by how much the tiles overlap.
7. Imposition
   Used for selecting a signature to be used for extracting single pages for proofing from an imposed job. See the reference section of the Signature Editor for instructions on how to create de-impose signatures. BlackMagic will look through the selected signature group for one that matches the dimensions of the job being processed. If a signature is found whose dimensions are within 1 inch of the job dimensions it will be used to de-impose the job, otherwise a fully imposed proof is produced.
   Reveals: Signature Group button, which allows selection of an existing signature group to be used for the de-imposition.

RIP Configuration editor

The main panel

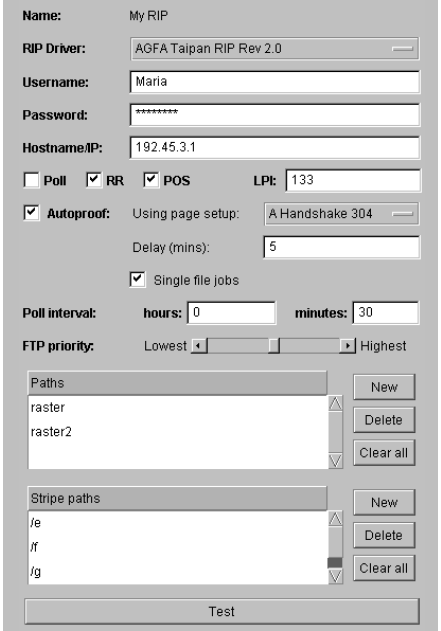
The RIP configuration panel, will look different depending on the type of RIP it defines.

Single path RIP types



Definition for a RIP of type: Harlequin. Note the path text field. This type of RIP only defines one path for the RIP data.

RIP types that support multiple paths and/or stripe paths



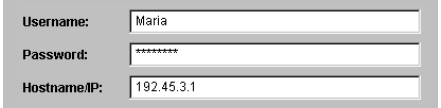
RIP definition for a RIP of type Agfa Taipan. Note the lists of multiple paths and of stripe paths. This type of RIP defines both multiple paths and stripe paths.

Elements

Name of the RIP configuration file in the database.
Blank name: If the file has not been saved yet

Type of RIP to be polled.
Reveals: If the RIP supports multiple paths or stripe paths, the appropriate lists will appear in place of the path text field.

Location of the rip data.
Hidden: Your RIP supports multiple paths, in which case you are presented with a paths list at the bottom of the panel instead.



Remote RIP connection details.
If the RIP and BlackMagic are running on the same physical computer, you only need supply the network name of the computer. Ticking the use agent button reveals the agent IP address field. In this mode only the agent TCP/IP address needs to be entered, as the username, password and hostname fields are not used. This option requires that a Serendipity Remote agent is installed on the RIP computer. See the installing the Remote Agent sections for installation instructions.

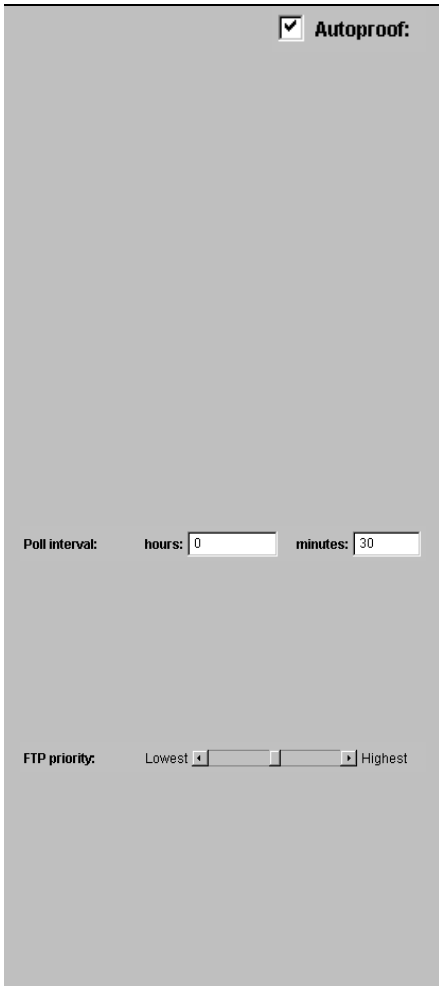
Poll
Tick this checkbox to monitor this RIP using the RipMonitor application.

Poll Statistics
Tick this checkbox and BlackMagic will print out messages in the server window, showing how long it takes for a poll of the RIP each time one is initiated.

RR
For proofing jobs generated as wrong reading images
Hidden: BlackMagic automatically determines this setting

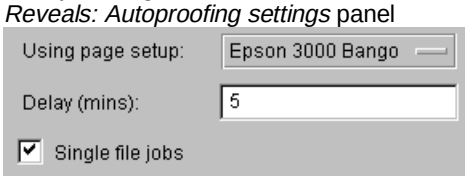
POS
For proofing jobs generated as negative images
Hidden: BlackMagic automatically determines this setting

LPI
Type in the number of lines per inch your jobs are screened at. This information assists the pagesetup Fast Descreening processing option.
Hidden: Either the RIP keeps data as continuous tone data or BlackMagic automatically determines this setting



Enables Autoproofing for this RIP. Refer to the section: Autoproofing.

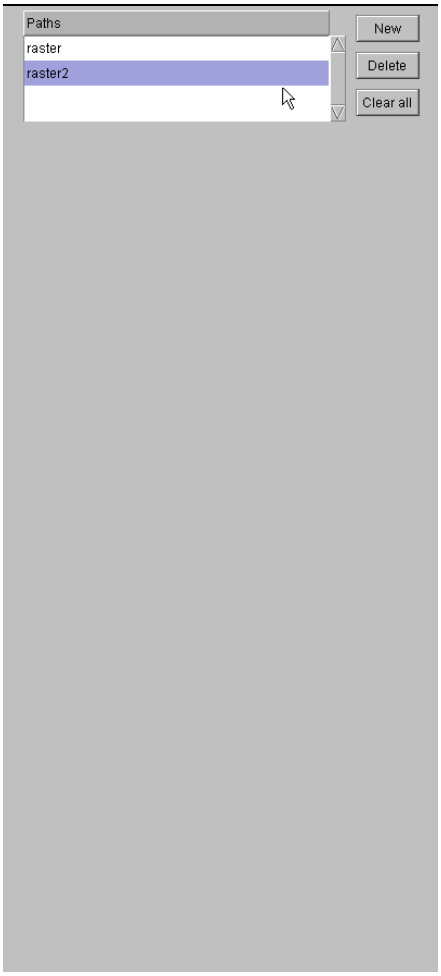
Reveals: Autoproofing settings panel



- *Choice menu – select one of the pre configured BlackMagic pagesetups*
- *Delay - Some RIPs may take too long to start generating the remaining plates making BlackMagic think the job is ready to proof. Use this setting to compensate for prematurely proofed jobs*
- *Single file jobs – will Autoproof jobs that consist of only a single file. Normally BlackMagic would not Autoproof such jobs.*

Sets how often BlackMagic polls your RIP looking for new jobs. If your RIP is busy and it contains many jobs, polling can be CPU intensive and take some time. Set this to the average time your RIP takes to process each job.

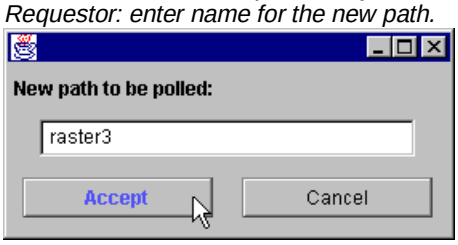
Sets the FTP spooling to a lower priority. Spooling jobs across the network and imaging are two tasks that compete for the CPU. Setting the spooling to a lower priority will make imaging jobs faster. It will also cause jobs to take slightly longer to spool from the RIP to BlackMagic's local disk.



Locations where BlackMagic looks for jobs when it polls your RIP. Refer to the section on Polling, in the subsection for your RIP.
Hidden: Your RIP does not support multiple paths

List actions:

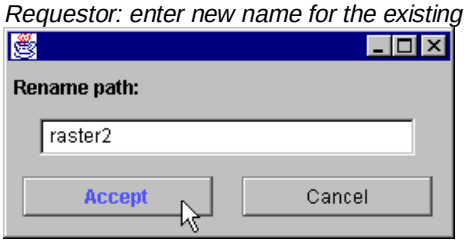
New - creates a new path entry
Requestor: enter name for the new path.

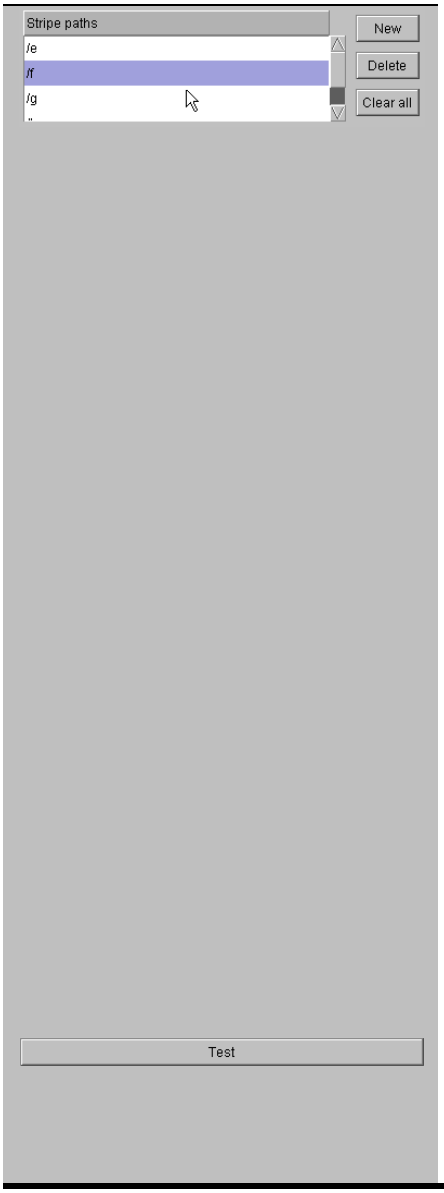


Delete - deletes the selected path entry

Clear all – removes all path entries

Double click – redefines an entry
Requestor: enter new name for the existing path

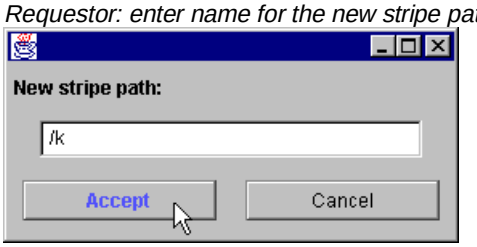




Locations where BlackMagic looks for jobs when it polls your RIP. Refer to the section on Polling in the subsection for your RIP.
Hidden: Your RIP does not stripe paths

Buttons:

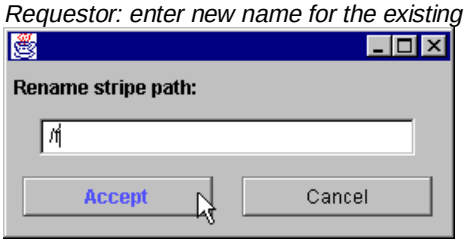
New - creates a new stripe path entry
Requestor: enter name for the new stripe path.



Deletes – deletes the selected stripe path entry

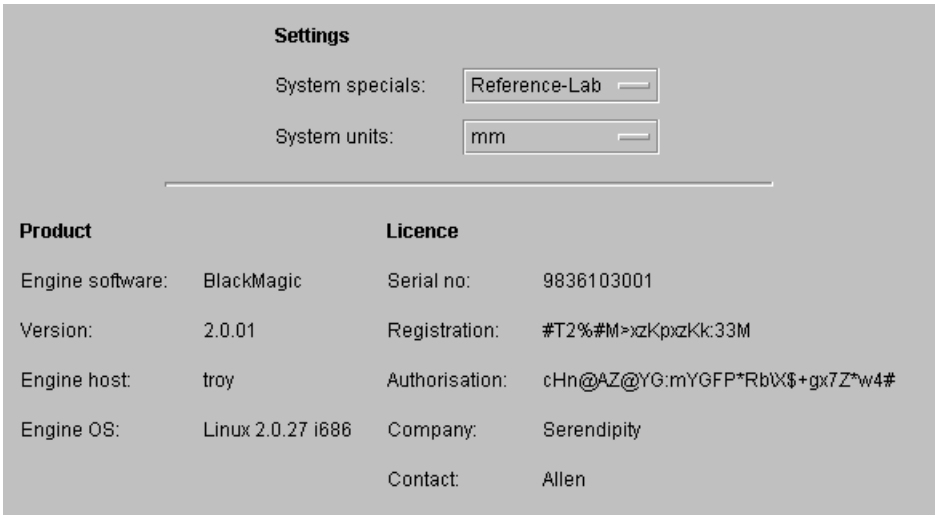
Clear all – removes all stripe path entries

Double click to redefine an entry
Requestor: enter new name for the existing stripe path



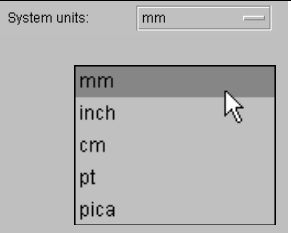
Performs a test-poll to test the connection details.
Requestor: If the test poll is not successful, a requestor will appear with information on the problem.

System Configuration

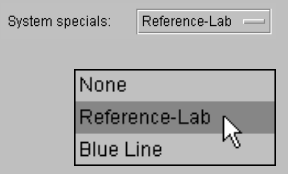


There is only one system file per engine. The control panel will not display a loader list when this tab is selected.

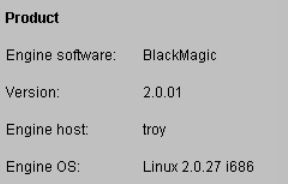
Elements



Units for display and user input.

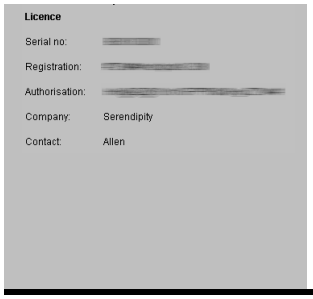


Set of specials to use when BlackMagic matches colours.



Product information:

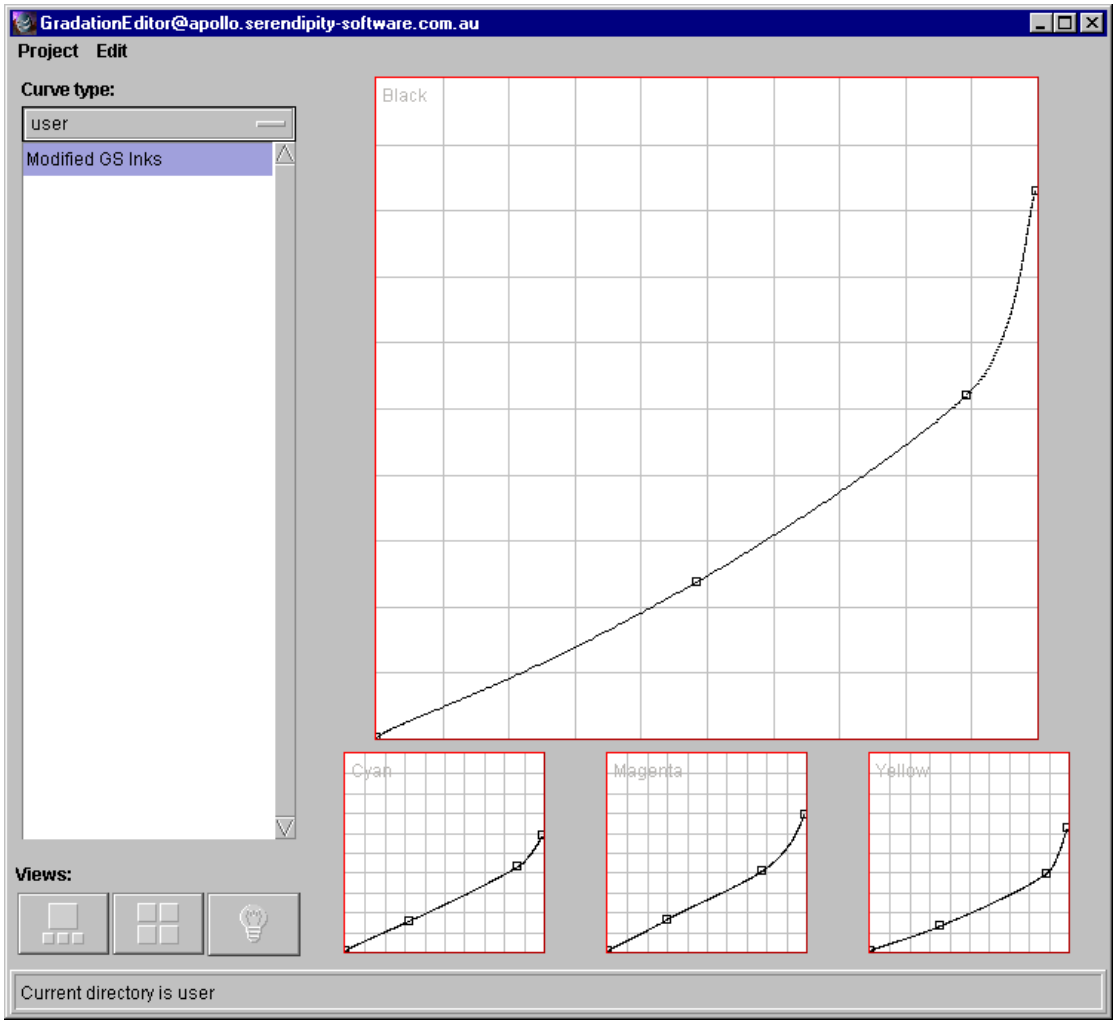
- Engine software - BlackMagic.
- Version - of the engine the Java GUI client is connected to.
- Engine host - name of the machine hosting the engine you are connected to.
- Engine OS - operating system on the engine host



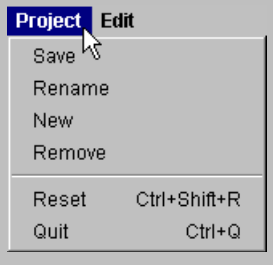
Licence details:

- Serial no – the server engine's serial number
- Registration - your registration.
- Authorisation - your authorisation key.
- Company - name of the company the engine is registered to
- Contact - company contact person who acquired the authorisation key

GradationEditor



The gradation editor allows you to create and modify colour correction curves (LUTs).

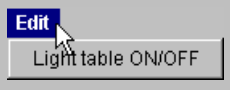


Project Menu

Stores and retrieves curves from the database.

Save	Saves the curve you are editing. *Requestor: If you are editing a non-existent curve, you will be asked to supply a new name.*
Rename	Renames the curve you are editing. *Requestor: Enter the new name for the loaded curve.*

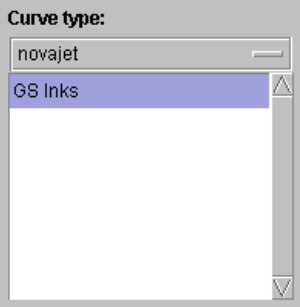
New	Puts a new curve in the database. *Requestor: Enter the name for the new curve.*
Remove	Removes the currently loaded curve from the database. *Requestor: Confirm deletion*
Reset	Re-initialises the Gradation Editor *Shortcut: CTRL+SHIFT+R*
Quit	Quits the Gradation Editor. *Shortcut: CTRL+Q* *Requestor: confirm quit, but only if you have not saved your changes*



Edit Menu

Duplicated in the toolbar.

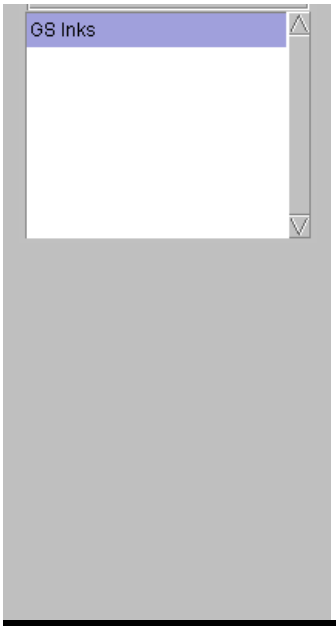
Light table ON/OFF	Toggles the light table display.



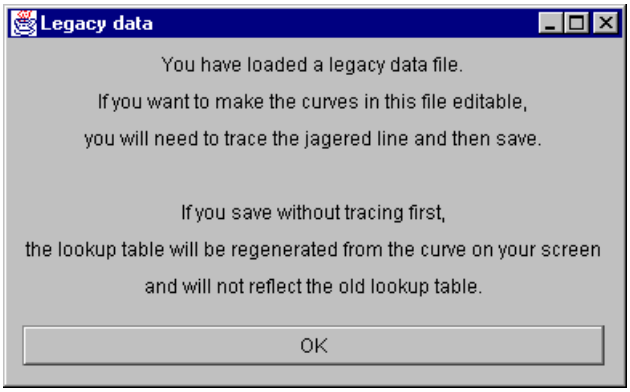
Loader

Selectively loads curves from the database.

Selects the type of curves to display in the list. There is an entry for each type of proofer. These are factory presets and you can only load (not modify) them. The user entry contains the curves you can modify.



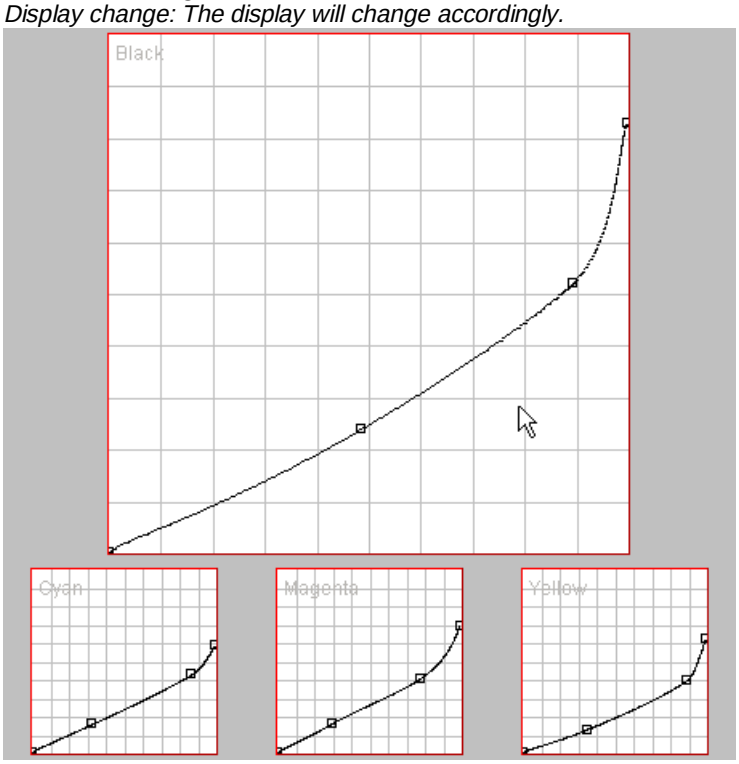
Displays the available curves of the selected type. Click on an entry to load the curve, click on the blank area of the list to close a curve.
Requestor: If you have not saved your curve you will be notified.
Requestor: If you are loading curves from an older version you will be notified. Follow the instructions in the requestor.



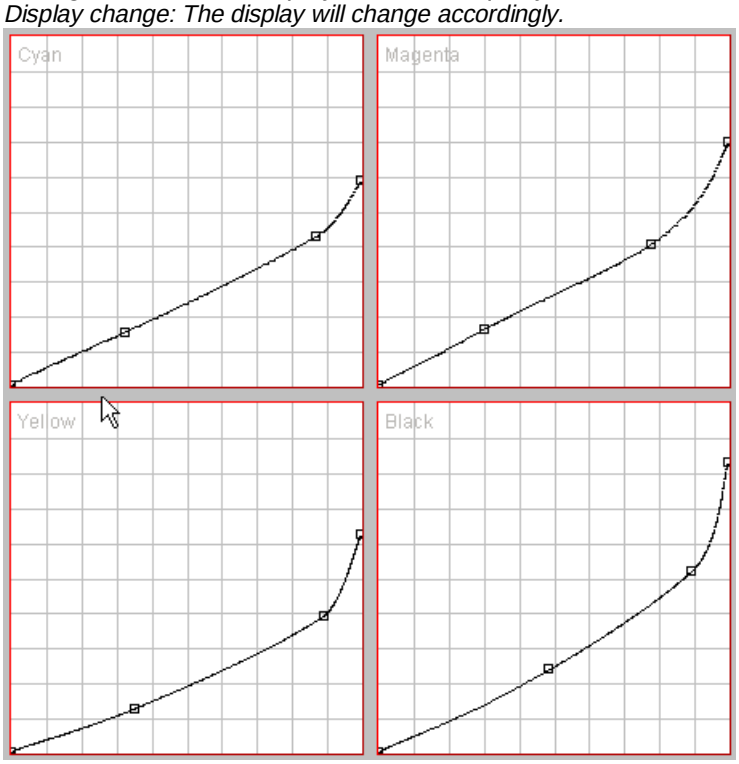
Views:

View options

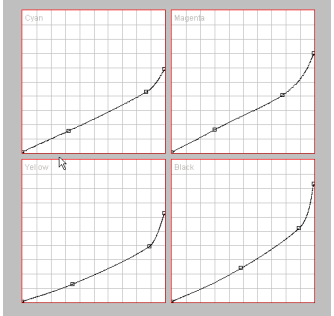
Selects one large view and other smaller views.
Display change: The display will change accordingly.



Changes the view to display all curves equally.
Display change: The display will change accordingly.



Displays a trace of the look-up table (LUT) this curve represents. The trace is in green.

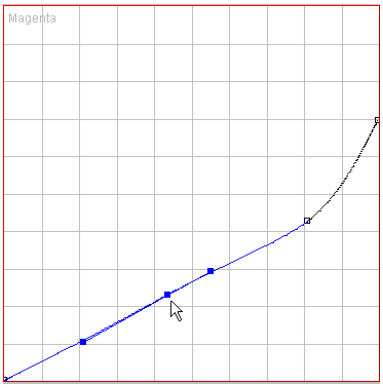


Curve editing grids.

Curves for cyan, magenta, yellow and black are shown on separate charts. A curve can be modified by adding control points and adjusting them.

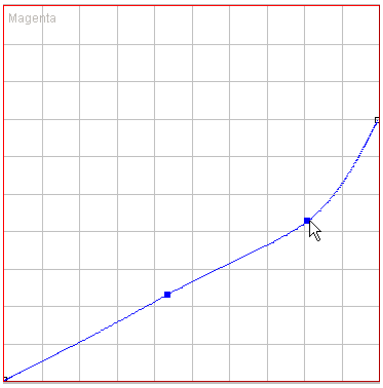
Selecting

Click in the proximity of a control point to select it. Selected points are rendered in blue. Clicking on a blanks area of the grid de-selects all points.



Single selection

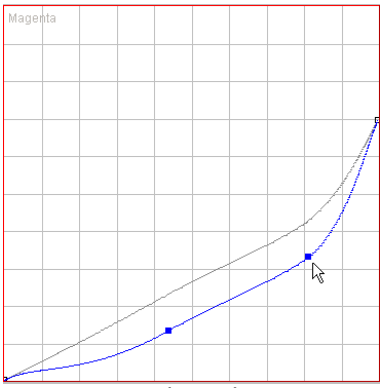
You can select multiple control points by holding down the SHIFT key and clicking on each point. When you multi-select, the tangent handles are hidden.



Multi selecting with the SHIFT key

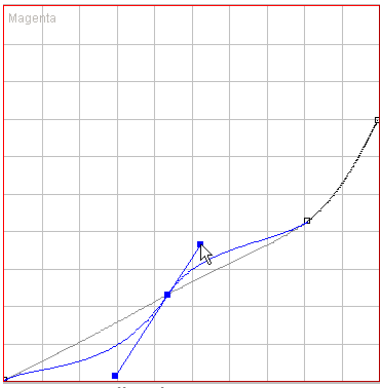
Adjusting

Having selected one or more points, you can move them by dragging them. You must use one of the selected points as a drag handle.



Moving points

If you have selected a single point, you can adjust the curvature. The tangent handles work the same way as in many popular illustration programs.

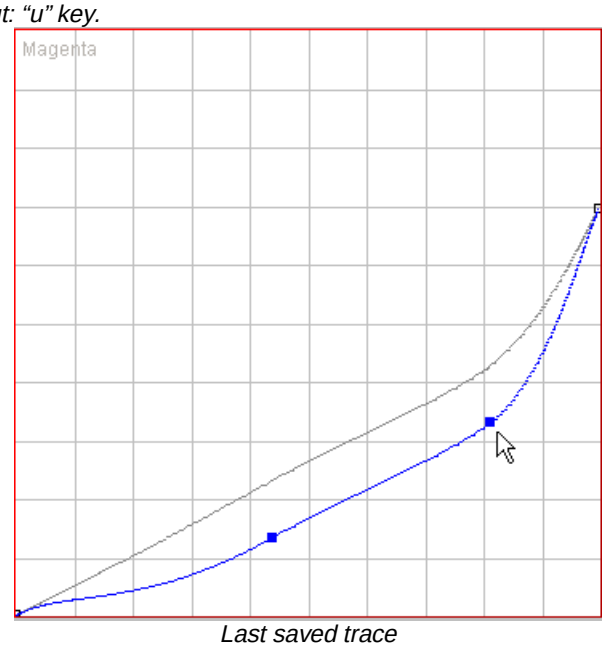


Adjusting a tangent

Using the trace curves

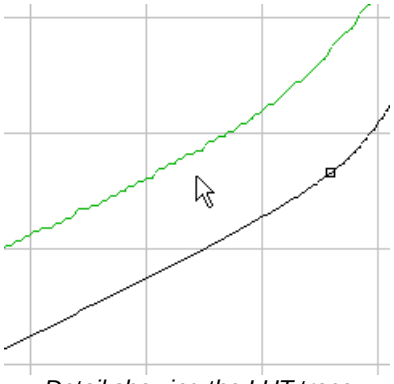
There are two trace curves to assist with curve creation:

Last saved trace
Refreshed each time you save. The trace is a faint grey line that displays the shape of the curve in the database. You can however, refresh this trace curve manually.
Shortcut: "u" key.



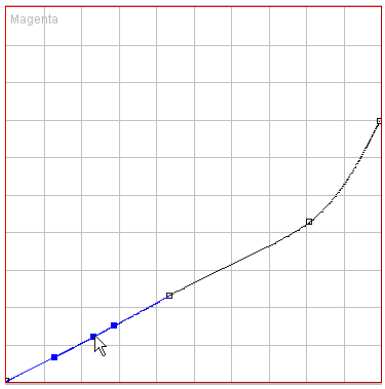
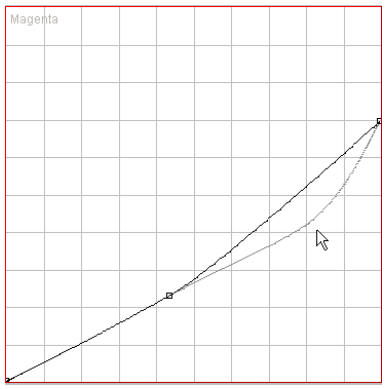
Last saved trace

LUT trace
Refreshed each time you save. LUT trace is a green line that appears stepped. This indicates how the curve was rasterised into an LUT.

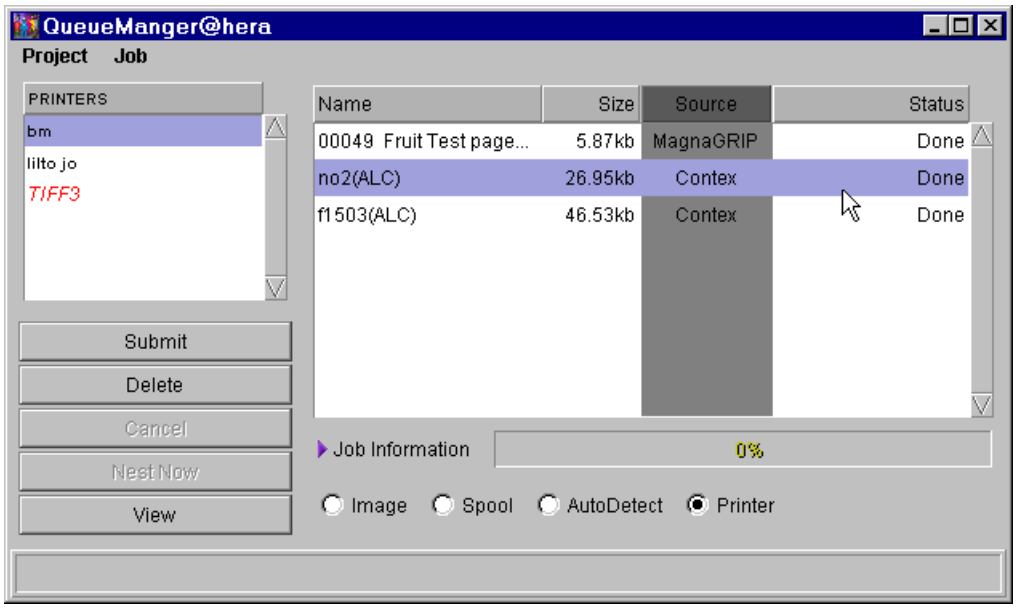


Detail showing the LUT trace

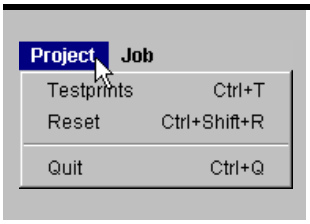
Menu item: Edit menu ⇨ Light table ON/OFF
Button: Light bulb.

Adding and removing control points	To add a point, click near a curve segment away from control points.	To remove points, select them and press the DELETE key.
	 *Adding a point near the start.*	 *Deleting a point near the end. Notice the trace curve*

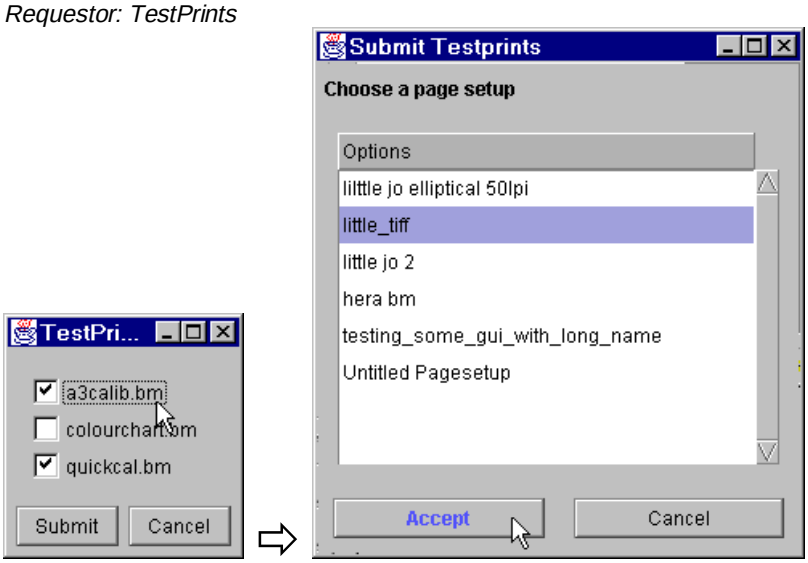
QueueManager

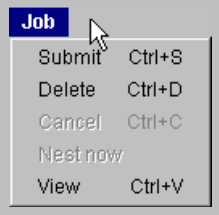


The QueueManager allows you to control the flow of jobs through the BlackMagic engine. Using QueueManager you can monitor the progress of a job through the engine. You can obtain information on specific jobs. You can re-submit jobs, cancel job processing and delete processed jobs You can also view any processed jobs on screen.



Project menu

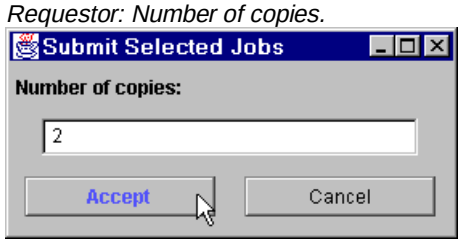
TestPrints	Allows test prints to be submitted. *Shortcut: CTRL+T* *Requestor: TestPrints*  *Select the desired test prints, then select a pagesetup to which you want them submitted.*
Reset	Refreshes the application with the latest information form the server. *Shortcut: CTRL+SHIFT+R*
Quit	Quits the QueueManager. *Shortcut: CTRL+Q*



Job menu

Affects selected jobs in the queue displayed. These functions are duplicated in the toolbar. Menu items are disabled or enabled according to the processing status of the first selected job in the list.

Submit Submits selected jobs for reprint.
Shortcut: CTRL+S
Requestor: Number of copies.



Delete Deletes selected jobs.
Shortcut: CTRL+D

Cancel Cancel operation on selected jobs.
Shortcut: CTRL+C

Nest now Forces selected jobs to be nested immediately

View The first selected job is displayed with Previewer.
Shortcut: CTRL+V
Application: The previewer application will appear.

Queue selection checkboxes

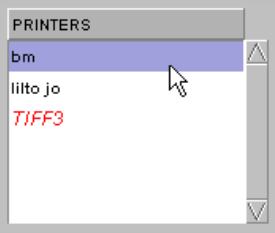
Click on a checkbox to list the jobs in the corresponding queue. Only one queue can be selected at any time.

Image — Lists jobs queuing for the imaging service.

Spool — Lists the jobs queuing for the spooling service.

AutoDetect — Lists the jobs waiting for the file type detection service. BlackMagic automatically determine what kind of job has been sent to it (TIFF / Scitex CT etc.). This queue performs this automatic file type detection.

Printer	Lists the jobs in the selected printer queue. *Reveals: The printer queues list*

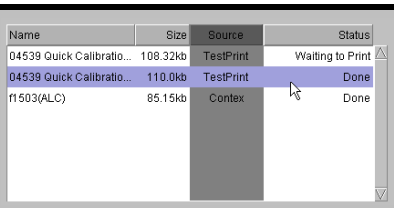


Printer queues list

Available printer queues.

Click

Lists the jobs queuing for the printing service.
Red entries: Inactive printer queues. These printer queues do not send jobs to their assigned destination.
Hidden: The printer queue checkbox is not selected.



Jobs list

Lists the jobs in the selected queue.

Columns

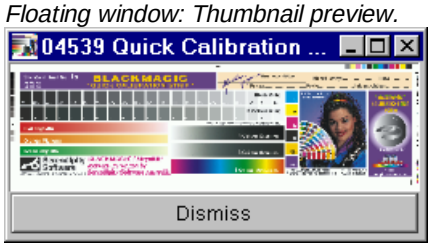
1. Name – name of the job
2. Size – depending on the queue you have selected. In the print queues it is the size of the print file. In all other queues, it is the size of the source file.
3. Source – Where the source file came from.
4. Status – What is the status of a job in the queue.

Single-click

Selects a job.

Double-click

Displays a small preview of the image. It only works when you double click on completed jobs in the print queues.
Floating window: Thumbnail preview.

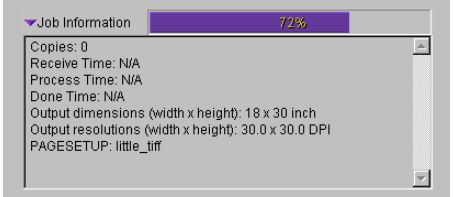


Multi-select

CTRL+click makes scattered selections
SHIFT+click selects ranges

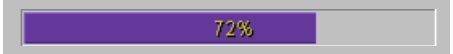
Drag-n-Drop

You can only Drag-n-Drop within the same QueueManager window. Jobs are processed in the order they appear in the list. Dragging a job higher, will increase its priority.

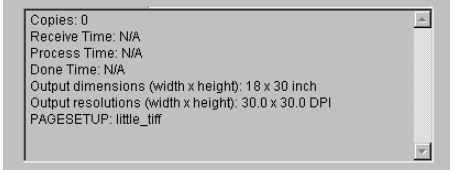


Information area

Displays more detailed information about the first selected job. The text area collapses or expands by clicking on the purple triangle.



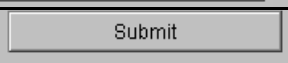
Progress bar shows progress of the first selected job.



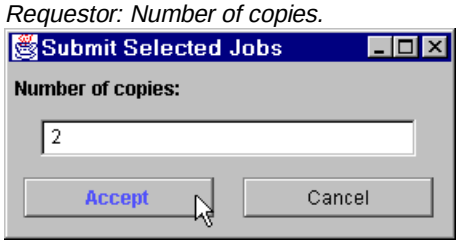
Displays information about the first selected job.

Toolbar

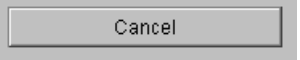
Affects selected jobs in the selected queue. These functions are duplicated in the "Job" menu. Buttons are disabled or enabled according to the processing status of the first selected job in the list.



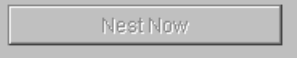
Submits selected jobs for reprint. A dialog will appear to prompt you for the number of copies desired. Enter the number and press OK.
Disabled: Disabled in all queues except for Print Requestor: Number of copies.



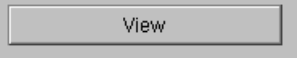
Deletes all selected completed jobs.



Stops selected jobs that are processing or waiting.

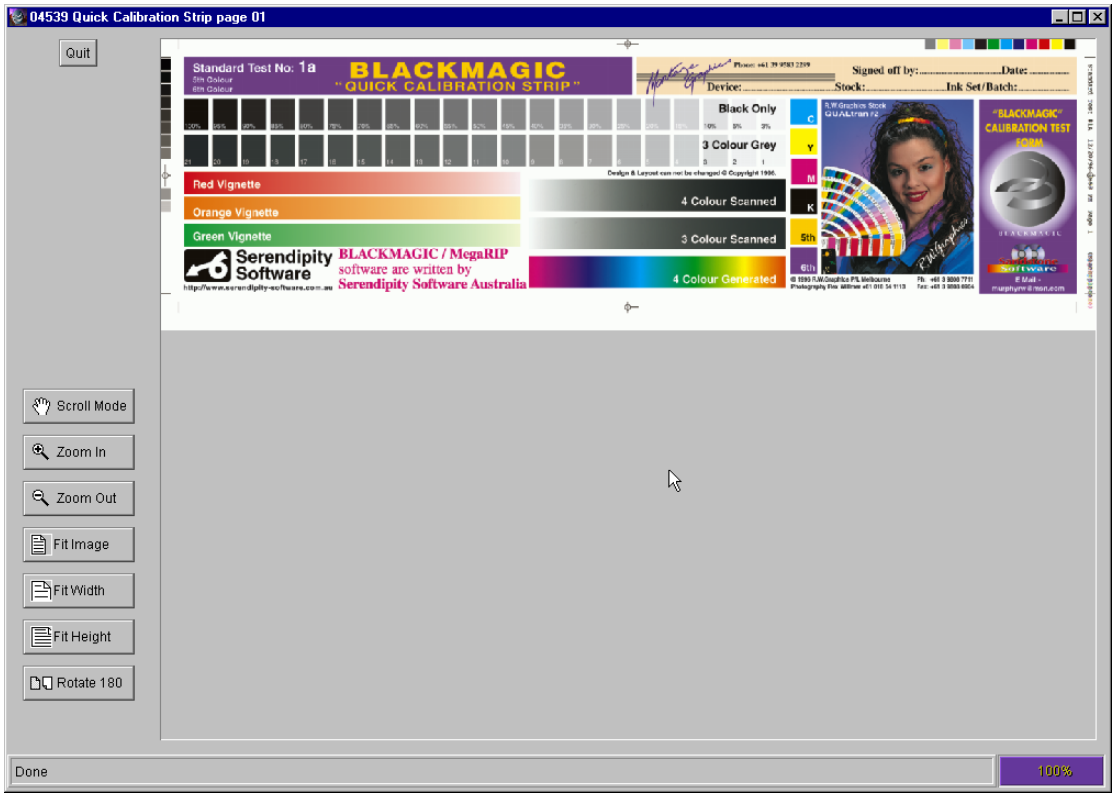


Forces selected jobs to be nested immediately



The first selected job is displayed with Previewer.

Previewer

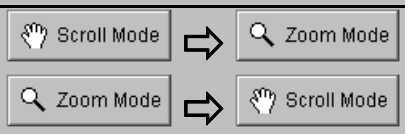


The previewer allows softproofing of processed jobs on the screen. The window is not resizable.

	General features
Quit	Quits the previewer.
100%	Shows how much of the preview image has been loaded in the previewer.

Toolbar

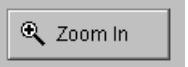
The buttons select display functions.



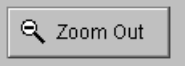
Click on the button to go into that mode. The button will then toggle to show you what mode you will go to next time you press it.

Scroll Mode
The cursor is a hand while in scroll mode. Drag the image to scroll to a different area of the image. The zoom factor does not change.
Shortcut: H (for hand)

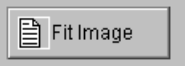
Zoom Mode
The cursor is an arrow while in zoom mode. Use the mouse to outline the area you wish to view.
Shortcut: A (for arrow)



Zooms into the image with center point unchanged. Zoom factor is increased by 1.
Shortcut: the "+" key



Zooms out with the same center point. Zoom factor is decreased by 1.
Shortcut: the "-" key



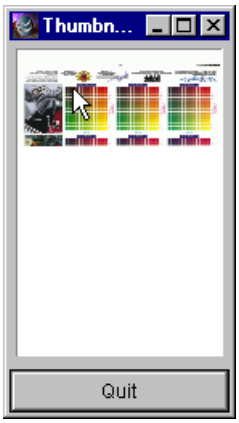
Fits the entire image in the view area.

The image is scaled to be as wide as the view area's width.

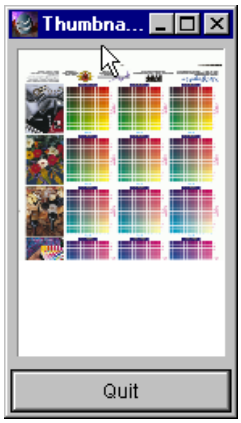
The image is scaled to be as tall as the view area's height.

Toggles between a rotated view (180 degrees) or a normal view of the image.

Thumbnail



30% imaging done



60% imaging done

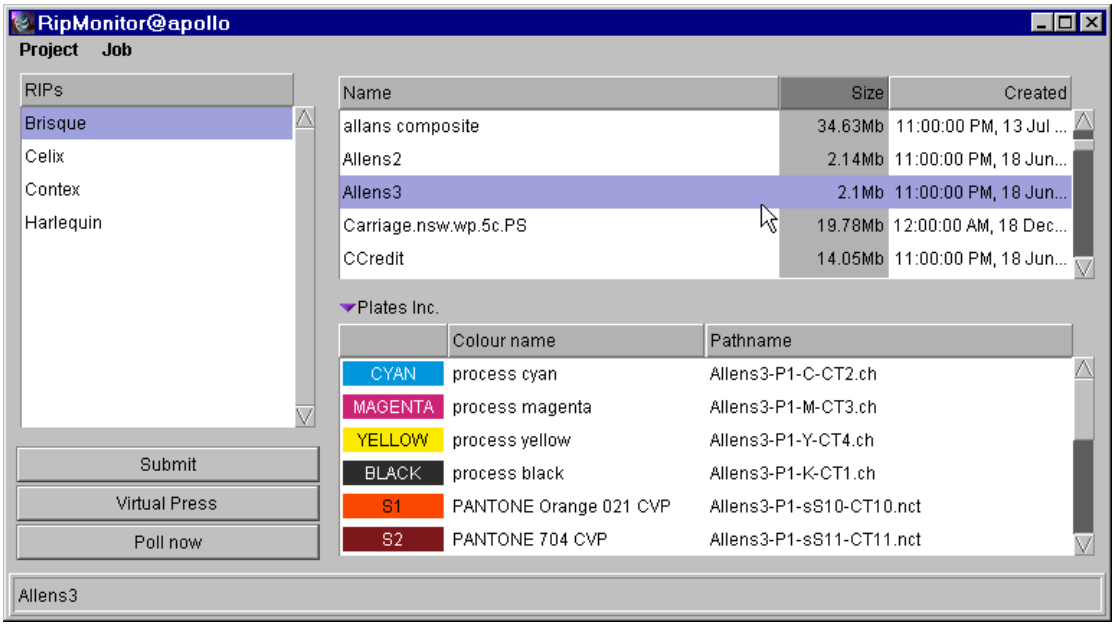
100% imaging finished

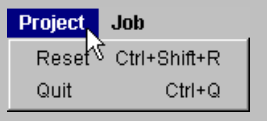
The thumbnail shows you what the engine is currently imaging. It displays a small preview image that is incrementally updated as the engine progresses imaging each job.

If you want to quit the thumbnail, just click its quit button.

RipMonitor

Use RipMonitor to provide input for the BlackMagic processing engine. Jobs on configured RIPs can be submitted as is, or assembled from separate plates, depending on the type of RIP.



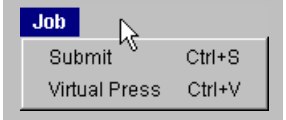


Project Menu

For refreshing and quitting the RipMonitor

Reset Refreshes the RipMonitor with the latest RIP configurations
Shortcut: CTRL+SHIFT+R

Quit Quits the RipMonitor
Shortcut: CTRL+Q

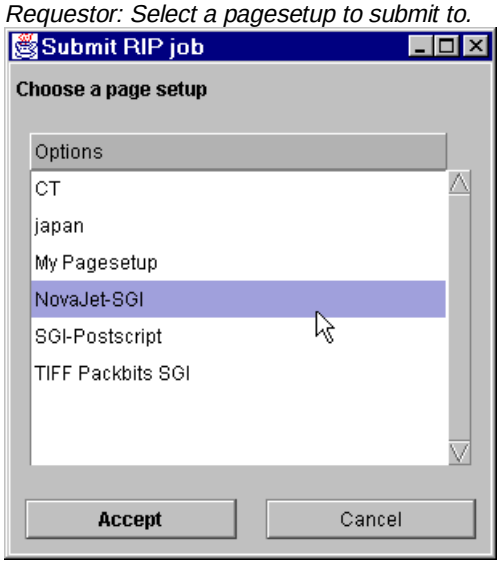


Job Menu

Manipulates selected jobs. The menu items are replicated in the tool bar.

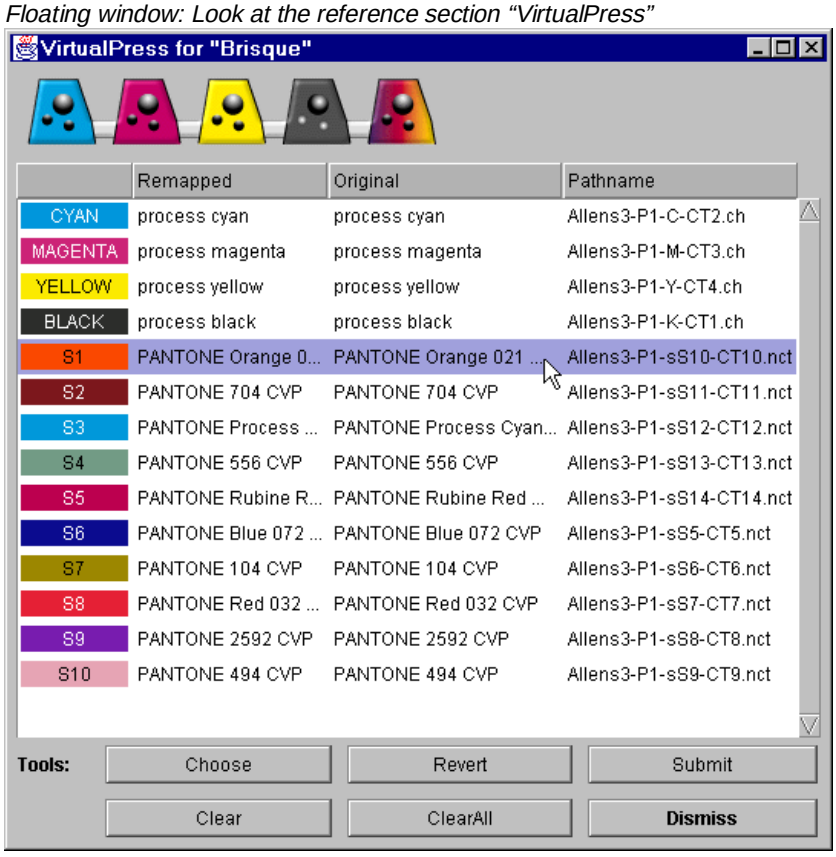
Submit

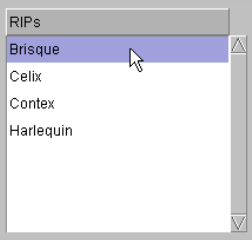
Submits the selected job.
Disabled: No job is selected
Shortcut: CTRL+S
Requestor: Select a pagesetup to submit to.



VirtualPress

Tool for assembling plates manually
Disabled: No RIP is selected.
Shortcut: CTRL+V
Floating window: Look at the reference section "VirtualPress"

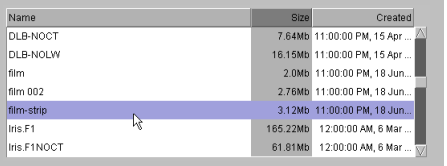




RIP List

RIPs that BlackMagic is polling.

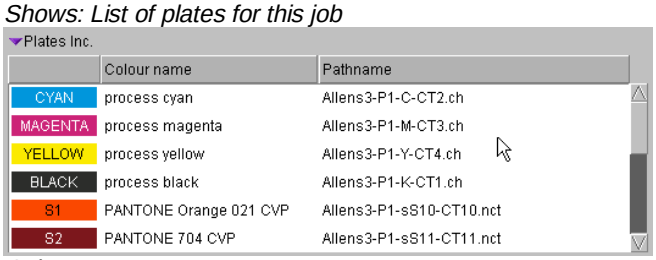
Click	Displays the jobs in this RIP in the jobs list.



Jobs List

Displays the jobs in the selected RIP from the RIP list.

Columns	1. Name - Job name 2. Size – Amount of rip data to spool for this job, for all plates 3. Created – Creation time of the job on the RIP
Single-click	Selects a job
Double-click	Expands the plate list. *Shows: List of plates for this job*

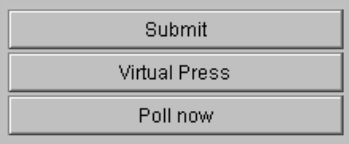


Columns:

1. *Plate ink colour and type*
2. *Ink name*
3. *File that contains the plate*

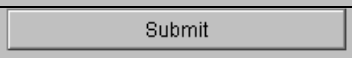
You can expand or collapse the plate list by clicking on the purple triangular toggle on the title.

Multi-select	The jobs list is single-select The plate is multi-select.
Drag	You can drag from both lists into the VirtualPress for manual job assembly: • Whole jobs from the job list • Single plates from the plate list

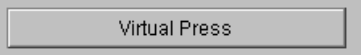


Tool bar

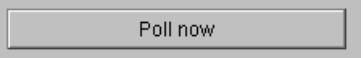
Functions that affect the RIPs and the jobs' list.



Submits the selected job.
Disabled: No job is selected
Requestor: Select a pagesetup to submit to.
Menu item: Edit menu ⇨ Submit

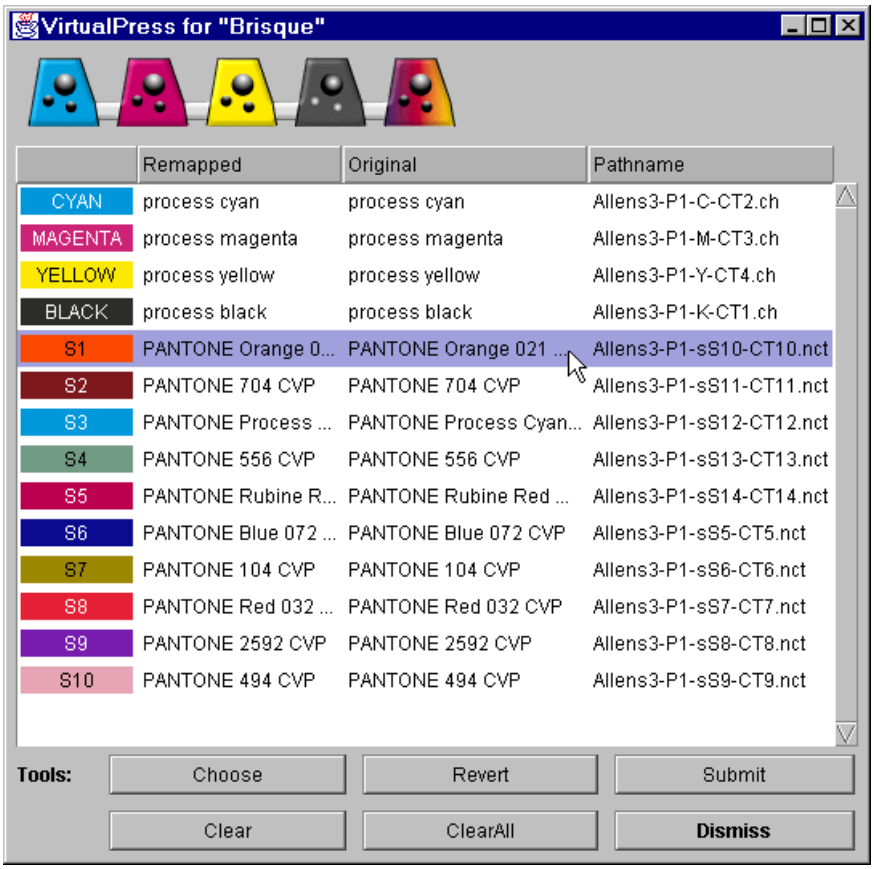


Tool for assembling plates manually
Disabled: No RIP is selected.
Floating window: Look at the reference section "VirtualPress"
Menu item: Edit menu ⇨ VirtualPress

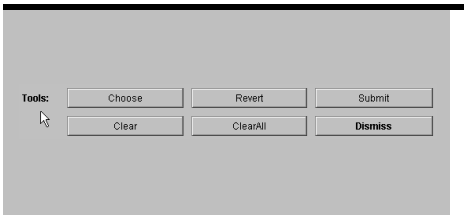


Polling is automatic and it happens periodically. Use this button to force a poll now. When the polling is finished, the jobs' list will be updated.
Hidden: If a manual poll has already been initiated.

VirtualPress



Think of the VirtualPress as a printing press that has the standard CMYK printing stations as well as unlimited special printing stations. You can put plates in any station from any job and you can switch plates between stations. You can also fill up any special station with any colour ink you want. Once all the stations have been set up, you can run a one-off digital print. In BlackMagic's terms, you can make a proof of the assembled plates stitched together.

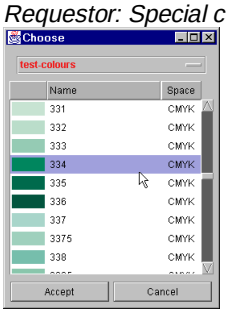


Toolbar

The buttons in the toolbar, will affect the selected plates in the list.

Choose

Chooses a new ink for the selected plate.
Disabled: If the selected plate is one of Cyan, Yellow, Magenta, Black, or if no plates are selected.
Requestor: Special colour chooser

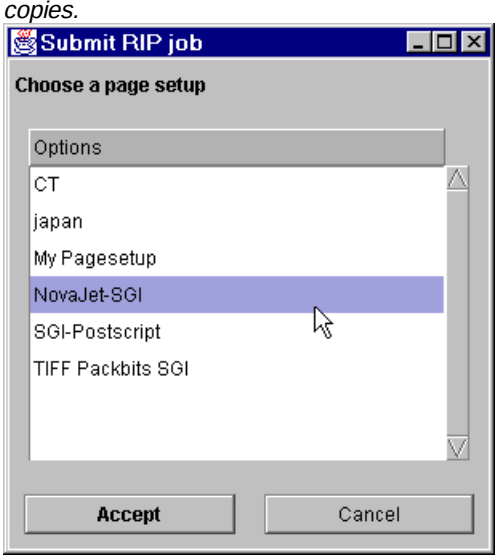


Revert

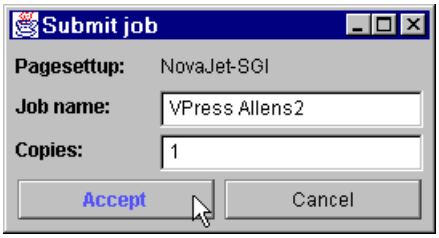
Reverts the special plate ink to its original ink. You can see what the original ink was in the third column.
Disabled: If the selected plate is one of Cyan, Yellow, Magenta, Black, or if no plates are selected.

Submit

Submits a new job that contains all the plates in your list.
Disabled: You have not defined inks for some of the plates
Italicized: If the job contains special plates that come from a remote Scitex PS/2 RIP and you have not specified inks for them. You do not need to do so since BlackMagic will determine the right special inks when the plates have been spooled across.
Requestors: First select a page setup and then the number of copies.



⇨



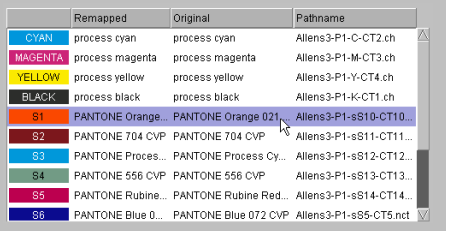
Clear

Removes the selected plate from the list.

ClearAll

Removes all plates from the list.

Dismiss	Dismisses the VirtualPress.



Job assemble list

Displays all the plates in the virtual printing stations.

Columns

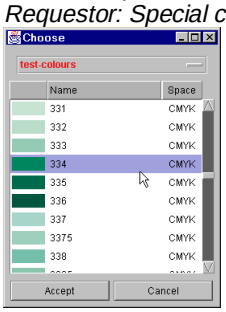
1. Ink colour and type of plate
2. Ink assigned to the plate
3. Ink of the plate originally
4. Job the plate came from

Single-click

Selects a plate.

Double-click

Selects a plate and chooses a new ink for it.
Requestor: Special colour chooser



Drag a plate

- On top of another plate will swap their positions.
- To the end of the list will make it the last special plate in the job.

Drop

You may drop multiple jobs or plates from a RipMonitor. The drop will only be accepted if the plates you are trying to drop:

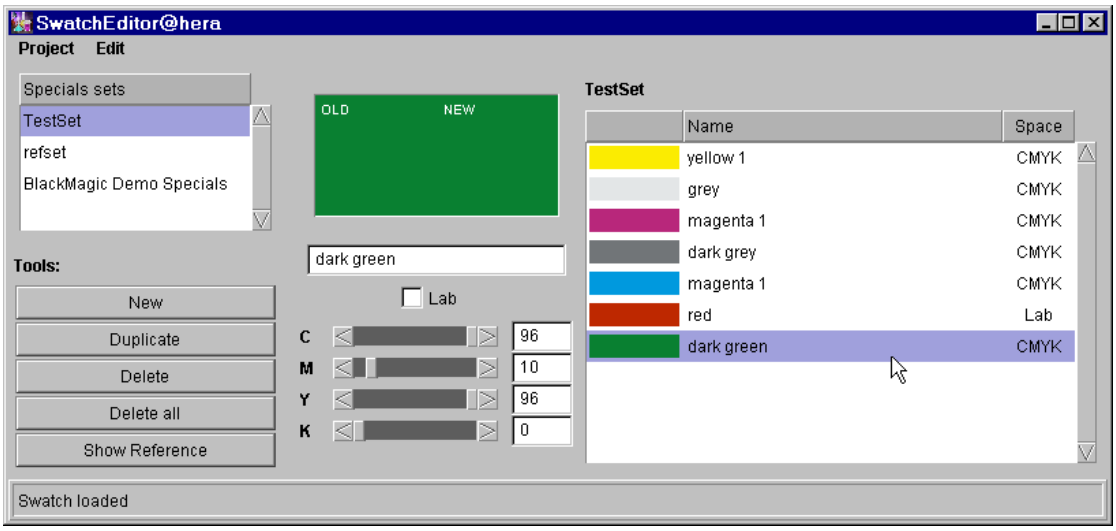
- Belong to the same RIP
- Do not already exist in the job assemble list

Printing Station Icons

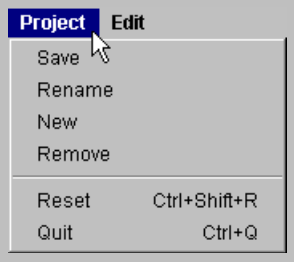
Graphical representation of the printing stations in the VirtualPress.

Drop	You may drop multiple jobs or plates from a RipMonitor. The drop will only be accepted if the plates you are trying to drop: • Belong to the same RIP • Do not already exist in the job assemble list Specifically if you drop a plate or a collection of plates on one of the printing station icons: • Cyan station – swaps the current plate in the cyan station with the cyan from what you are dropping • Magenta – similarly but for the magenta station • Yellow – similarly but for the magenta station • Black – similarly but for the magenta station • Special station – any plates you drop on the last station will be added as special plates

SwatchEditor



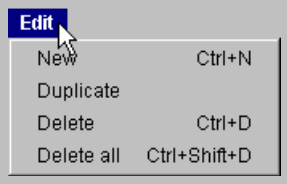
Use the SwatchEditor to create or modify sets of special colours. BlackMagic uses these to describe special ink colours.



Project Menu

Stores and retrieves special colour sets from the database.

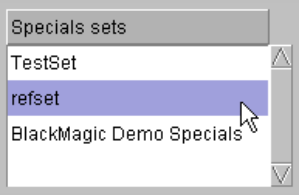
Save	Saves the set you are editing. *Requestor: If you are editing a non-existent set, you will be asked to supply a new name.*
Rename	Renames the set you are editing. *Requestor: Enter the new name for the loaded set.*
New	Puts a new set in the database that contains the specials in the colour list. If the colour list is empty so will be the new set. *Requestor: Enter the name for the new set.*
Remove	Removes the currently loaded set from the database. *Requestor: Confirm deletion*
Reset	Re-initialises the Swatch Editor *Shortcut: CTRL+SHIFT+R*
Quit	Quits the Swatch Editor. *Shortcut: CTRL+Q* *Requestor: confirm quit, but only if you have not saved your changes*



Edit Menu

Affects the selected specials in the colours list. Some of the functions are duplicated in the toolbar.

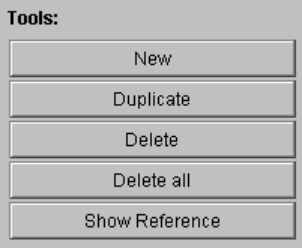
New	Creates a new special. The new colour is white. *Shortcut: CTRL+N*
Duplicate	Duplicates the selected specials.
Delete	Deletes the currently selected specials. *Shortcut: CTRL+D*
Delete all	Clears the colours list. *Shortcut: CTRL+SHIFT+D*



Specials sets list

Sets in the database available for editing.

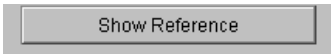
Click	Loads the selected set for editing.



Toolbar

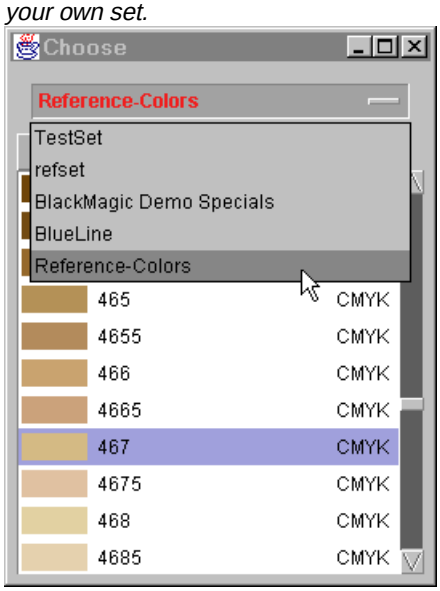
Affects the selected specials in the colours list. Some of the functions are duplicated in the Edit menu.

New	Creates a new special. The new colour is white. *Shortcut: CTRL+N* *Menu item: Edit⇨New*
Duplicate	Duplicates the selected specials. *Menu item: Edit⇨Duplicate*
Delete	Deletes the currently selected specials. *Shortcut: CTRL+D* *Menu item: Edit⇨Delete*
Delete all	Clears the colours list. *Shortcut: CTRL+SHIFT+D* *Menu item: Edit⇨Delete all*

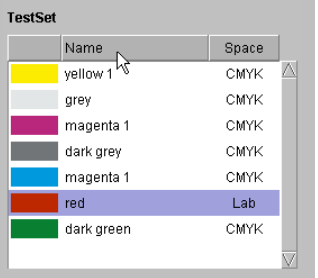


For displaying a reference colour set window.

Floating window: The built-in menu, lists all the available sets in the database, including system sets. Drag-n-drop colours from this window to your own set.



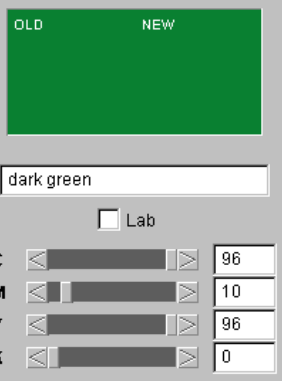
Once the reference window is up, the button changes label. If you click on the button now, it will hide the reference window.



Colours list

Displays the colours in a special set.

Columns	1. Colour preview box 2. Name 3. Colour space of the special, CMYK or Lab
Click	Selects a colour.
Multi-select	CTRL+click makes scattered selections SHIFT+click selects ranges
Drag-to	Re-order the colours in the set.
Drag-out	To other SwatchEditors or ReplaceEditors running.
Drop	From other SwatchEditors or ReplaceEditors running.



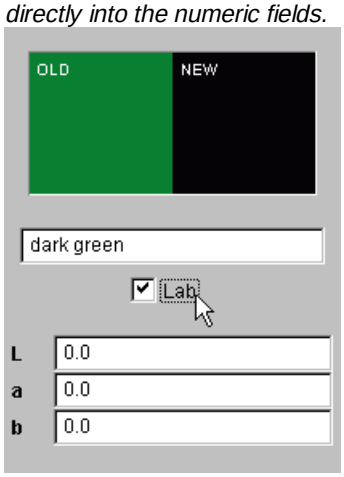
Modify section

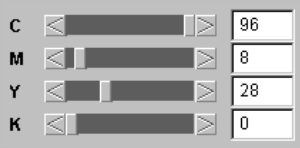
Allows you to modify the first colour selected in the colours list.

Colour preview box

Colour name.

Changes the colour space to Lab. You would normally use this mode to enter the Lab values as you read them from a measuring instrument.
Reveals: Lab input fields in place of CMYK sliders. Enter the values directly into the numeric fields.

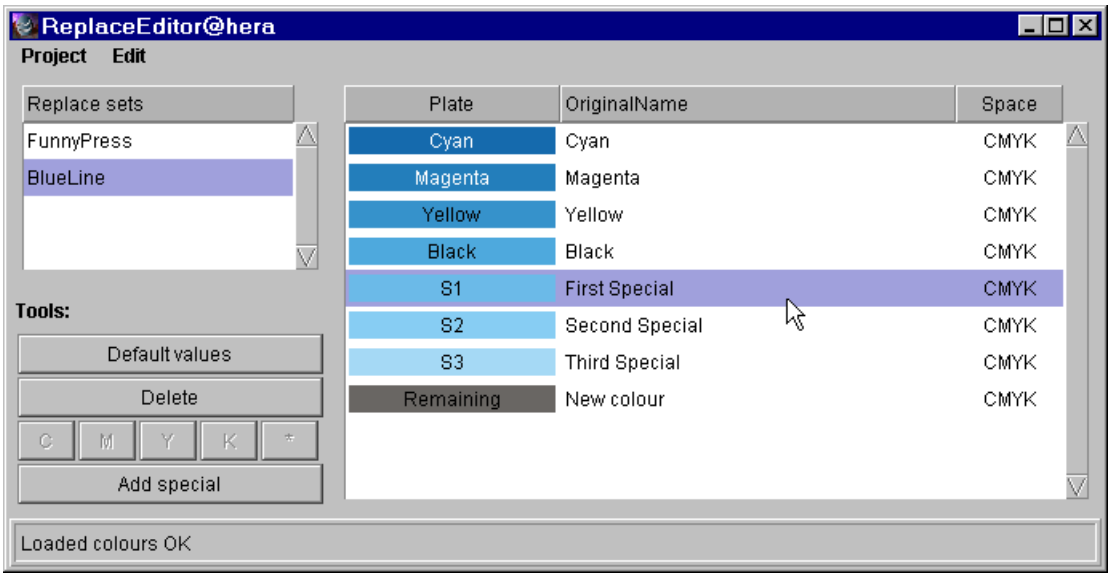




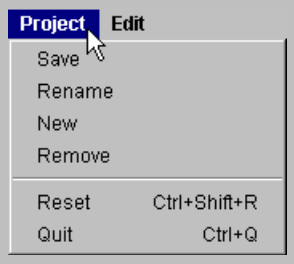
Use the sliders to change the CMYK percentages of the colour or type the values directly in the number fields. When you change CMYK values, the preview colour box changes to let you compare the new value against the old one.

Click on the OLD half to revert the special to the value it had when it was first selected. The new colour is also displayed in the colour list.

ReplaceEditor



The Replace Editor, allows you to create and modify replace colour sets. Replace colour sets are used to automatically modify the colour of plates as they are processed by the BlackMagic engine. They are typically used to automatically create digital blue line proofs.



Project Menu

Stores and retrieves replace colour sets from the database.

Save Saves the set you are editing.
Requestor: If you are editing a non-existent set, you will be asked to supply a new name.

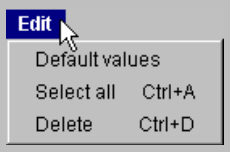
Rename Renames the set you are editing.
Requestor: Enter the new name for the loaded set.

New Puts a new set in the database that contains the replace colours in the colour list. If the colour list is empty so will be the new set.
Requestor: Enter the name for the new set.

Remove Removes the currently loaded set from the database.
Requestor: Confirm deletion

Reset Re-initialises the Replace Editor
Shortcut: CTRL+SHIFT+R

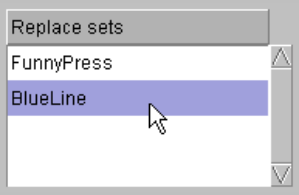
Quit	Quits the Replace Editor. *Shortcut: CTRL+Q* *Requestor: confirm quit, but only if you have not saved your changes*



Edit Menu

Affects the selected replace colours in the colours list. Some of the functions are duplicated in the toolbar.

Default values	This button will affect the inks of some of the selected replace colours. It will restore their ink of to the standard ink for that type of plate. E.g.: the cyan plate type replace colour, will be reassigned cyan ink.
Select all	Selects all the replace colours in the work list *Shortcut: CTRL+A*
Delete	Deletes the currently selected replace colours *Shortcut: CTRL+D*



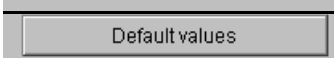
Replace sets list

Sets in the database available for editing.

Click	Clicking on the name of a replace colour set, loads its contents into the work list. Click on a blank area will close the set and clear the work list. *Requestor: confirm close, only if you have not saved your changes*

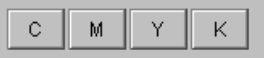
Toolbar

Affects the selected replace colours in the colours list. Some of the functions are duplicated in the Edit menu.



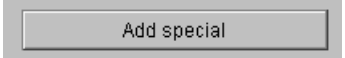
This button will restore the ink of the selected replace colours to the standard ink for that type of plate.
Menu item: Edit menu ⇨ Default values

Deletes the currently selected replace colours
Shortcut: CTRL+D
Menu item: Edit menu ⇨ Delete

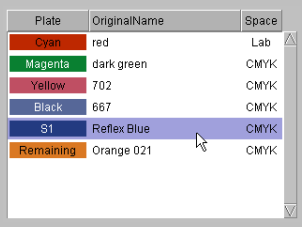


Redefine the type of the selected plates to be cyan, magenta yellow or black. If no replace colours are selected, then a replace colour of this plate type will be added to your work list.
Disabled: If replace colours of these types of plates already exist in your work list

Works the same way as C,M,Y,K buttons, but it has a special property. It will add a replace colour of plate type “remaining”. If you anticipate that you will be printing jobs with more plates than you have defined replace colours, then you need to add a "remaining” plate type replace colour. This replace colour is to replace the inks of all extra plates, with its own ink.
Disabled: If a replace colour of plate type “remaining” already exists in your list



Simply adds a replace colour of plate type “special”. The first occurrence of “special” replace colour will be called S1, the second S2 and so on. These will respectively replace the inks of the first, second etc special plates of your job.



Colours list

Displays the replace colours of the set you are working on.

Columns

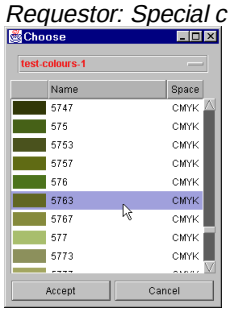
4. Colour preview box
5. Name of the special ink
6. Colour space of the special ink, CMYK or Lab

Single-click

Selects a replace colour.

Double-click

For selecting a replacement special ink.
Requestor: Special colour chooser.



Multi-select

CTRL+click makes scattered selections
SHIFT+click selects ranges

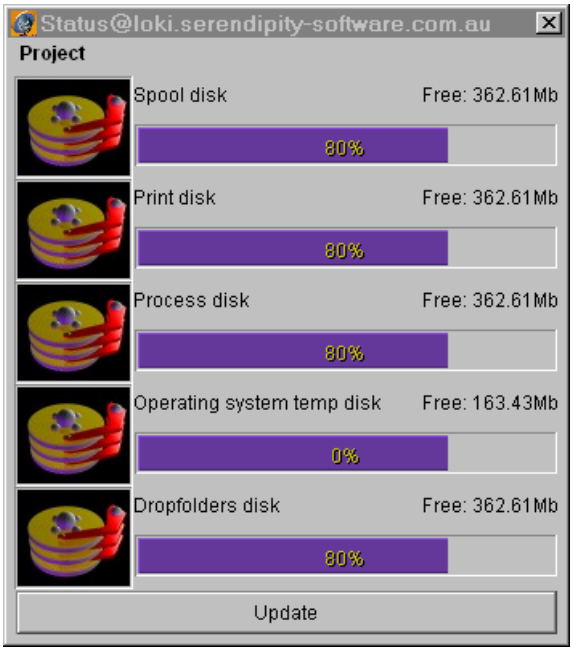
Drag

To re-order the order of replacement in the set.
Out to other SwatchEditors or ReplaceEditors running.

Drop	From other SwatchEditors or ReplaceEditors running.

Status

The Status window is used to monitor disk usage on the computer that BlackMagic is installed.

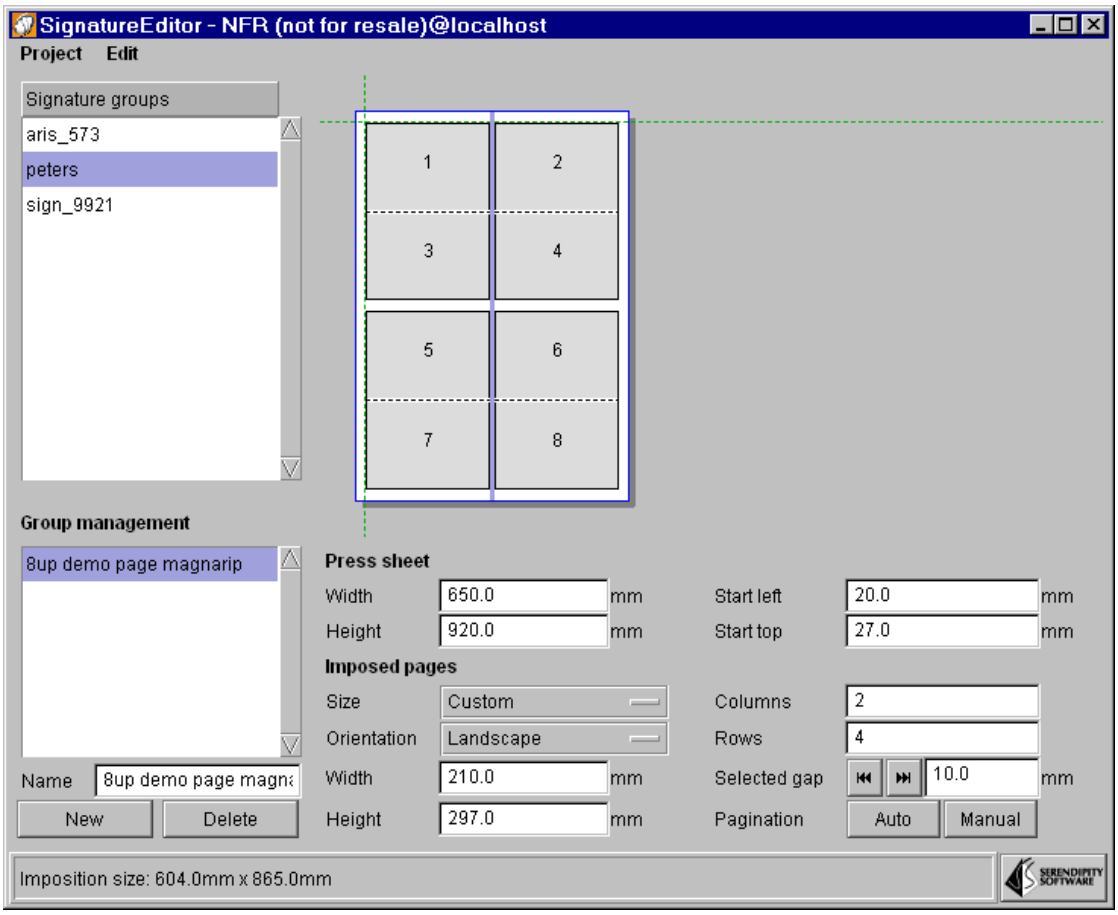


The following directories are monitored by the Status application

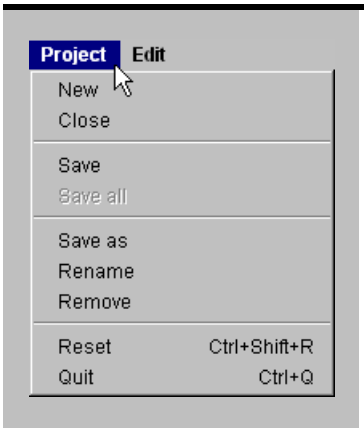
1. Spool disk. This is how much disk space is available for storing incoming jobs
2. Print disk. This is how much space is available for storing print files i.e. files produced by the ripping / imaging process that are to be sent to the printer for output.
3. Process disk. This is how much temporary disk is available to BlackMagic for storing temporary files. This is mainly used during rotation and nesting.
4. Operating system temp disk. This item is the temporary disk storage area dictated by the operating system. On Windows NT it is the value of the environment variable TEMP while on unix system it is /tmp. BlackMagic uses this for storing display lists (temporary files) while processing postscript and PDF files.

Dropfolders disk. This displays how much disk space is available for BlackMagic to receive jobs via the drop folder method.

Signature Editor



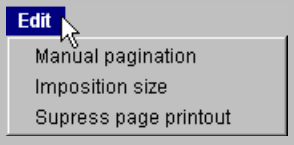
The Signature Editor is used for creating signature groups. BlackMagic can then use them to extract (de-impose) single pages from an imposed job.



Project Menu

Stores and retrieves signature groups from the database.

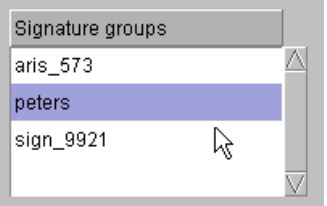
New	Puts a new group in the database that contains the signature definitions in the group management list. If the group management list is empty so will be the new group. *Requestor: Enter the name for the new group.*
Close	Renames the group you are editing. *Requestor: Enter the new name for the loaded group.*
Save	Saves the group you are editing. *Requestor: If you are editing a non-existent group, you will be asked to supply a new name.*
Save all	*N/A*
Save as	Saves a copy of the group you are editing under a different name. *Requestor: Enter the name for the copy..*
Rename	Renames the group you are editing. *Requestor: Enter the new name for the loaded group.*
Remove	Removes the currently loaded group from the database. *Requestor: Confirm deletion*
Reset	Re-initialises the Signature Editor *Shortcut: CTRL+SHIFT+R*
Quit	Quits the Signature Editor. *Shortcut: CTRL+Q* *Requestor: confirm quit, but only if you have not saved your changes*



Edit Menu

Affects the signature currently selected from the group management list.

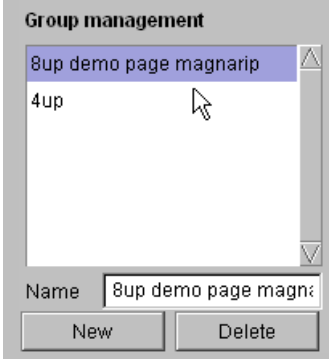
Manual pagination	Enables the manual assignment of page numbers. See the WorkArea table.
Imposition size	The overall imposition size is continuously calculated as you make modifications. This button allows you to enforce the calculations.
Suppress page printout	Allows you to select pages that you do not want printed. See the WorkArea table.



Signature groups list

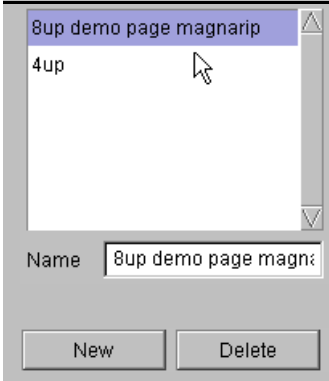
Groups in the database available for editing.

Click Clicking on the name of a signature group loads the signatures into the group management list. Click on a blank area will close the group and clear the group management list.
Requestor: confirm close, only if you have not saved your changes



Group Management

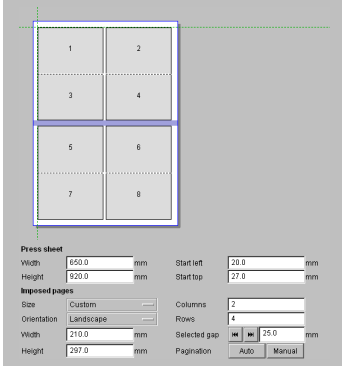
Edits the contents of a signature group.



Displays the signatures contained in the group. The signature you edit in the WorkArea, is the signature that you select from this list.

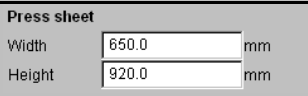
Displays the name of the active signature. Typing a different name in the textfield, renames the selected signature.

New creates a new signature within the group.
Delete removes the currently selected signature from the group.

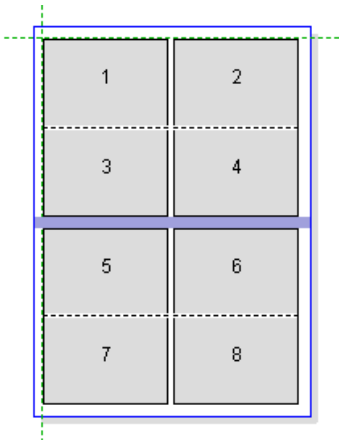


Work Area

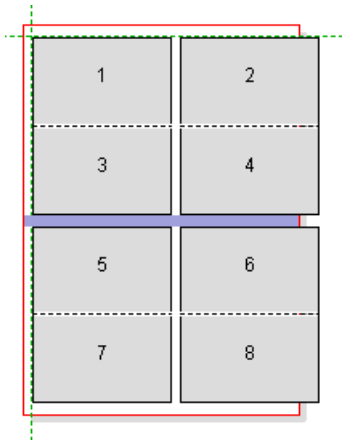
The top section displays the selected signature and allows for interactive selections. The bottom area controls the attributes of the signature.



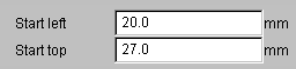
You can define the dimensions of the press sheet by typing them in. If the sheet dimensions you are using cannot fit the imposition, the sheet border will warn you by turning red.



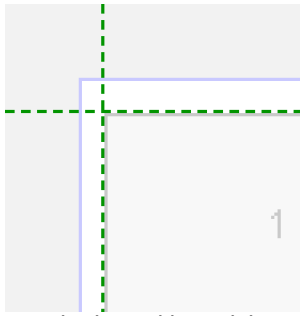
The sheet fits the imposition Correctly.



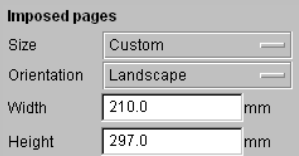
The imposition is too large



The horizontal and vertical green guides at the top left indicate the imposition's origin. You can re-define the origin by typing in its location relative to the press sheet in the numeric fields.

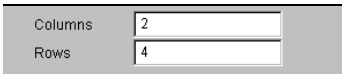


The imposition origin



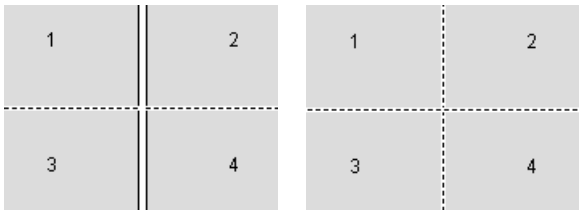
To alter the size of the imposed pages you simply select a size from the "Size" choice menu. If the size you are after is not listed, select the "Custom" option and type the desired values in the numeric fields that become visible.

"Orientation" will affect how the imposed pages are laid out.



Typing appropriate values in the “Columns” and “Rows” fields can modify the number of the imposed pages.

Typing a value in this numeric field will modify the dimensions of the selected gap.



When the gap value is zero the gap is drawn as a dashed line to indicate a two or more pages spread.

Gap selection

There are two ways to select a gap:
Clicking near the gap
Using the ⏮ (previous gap) and ⏭ (next gap) buttons to navigate through the available gaps.

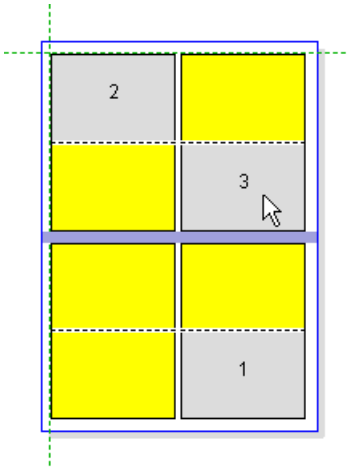
Repaginates the imposed pages. When the job is processed for proofing, it will be de-imposed and the pages will be output in the order you have numbered them.

Auto

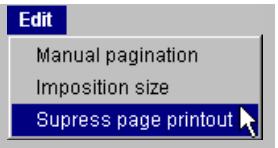
Re-assigns page numbers in a left-to-right and top-to-bottom order.

Manual *Edit ⇨ Manual pagination*

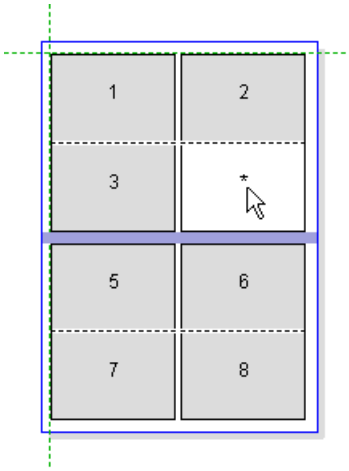
Allows you to assign page numbers manually. Once you select this function the pages will turn yellow. You the click on the pages in the order you want them numbered. As you sequentially click on the pages they are assigned a number.



The imposition in the middle of the pagination process.



The next page you click on will display an asterisk to indicate it is disabled. To turn a page back on, you have to re-paginate you imposition.



The imposition displaying one suppressed page.

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Version 2, June 1991

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