

# Blackmagic

rip once

output many



**Blackmagic** is a complete colour management system, designed to produce **precision colour-matched proofs** from a huge gamut of hi-res bitmap and postscript CTP RIPs, composite and separated postscript files.

Suited to even the most demanding print and press environments, Blackmagic is made to **plug into and play** alongside your existing workflow. Proofs are processed **using the same post-RIP data that goes to press**, maintaining data integrity and accuracy.

Blackmagic input filters are able to read the native file format, directory structure, plate assembly and imposition data of **all major manufacturer proprietary RIPs**.



Real Dot Technology

Integrated **RDT (Real Dot Technology)** ensures **proofs retain their original halftone screening**, while features including press ICC matching, dot gain compensation, unlimited spot colours and **colour verification** guarantee proofing fidelity.

Access to advanced features like **paper profiling**, colour replacement and digital blue line, combined with the flexibility to output to a vast array of large format inkjet printers means **maximum productivity** with virtually unlimited proofing options.

In the press room or the studio, on your network or working remotely - Blackmagic instantly creates **contract proofs** from any RIP, on any printer, with **no changes to your current workflow**.



## Serendipity Software and RDT

Established in 1994, Serendipity Software is a leading provider of digital proofing solutions for the print and prepress industries. Invented by Serendipity in 1996, **RDT (Real Dot Technology)** made Blackmagic the first software capable of **delivering proofs containing exactly the same dot structure** as source imagesetter/platesetter RIP files.

RDT remains an integral part of all Serendipity proofing packages and is the most popular feature of the software.

## Load Balancing

If your site has multiple printers, Blackmagic can keep all of them **printing continuously and efficiently**.

The Server continually tracks the number of jobs assigned to each output device, their total print area, progress status and print time.

Using load balancing, print queues can be grouped and incoming jobs **automatically allocated to the printer** able to print them first.

The same function can also assign a job to be **output simultaneously by all printers**, without the need to resubmit.

Node	Imaging	Rendering
SALAK	19532 GOLF TEXT.job...012 (IMPOSITION 12)	19532 GOLF TEXT.job Page 008 (IMPOSITION 08)
SALAK	19532 GOLF TEXT.job...013 (IMPOSITION 13)	19532 GOLF TEXT.job Page 007 (IMPOSITION 07)
SALAK	19532 GOLF TEXT.job...015 (IMPOSITION 15)	19532 GOLF TEXT.job Page 009 (IMPOSITION 09)
SALAK	19532 GOLF TEXT.job...004 (IMPOSITION 04)	19532 GOLF TEXT.job Page 006 (IMPOSITION 06)
localhost	19532 GOLF TEXT.job...002 (IMPOSITION 02)	19532 GOLF TEXT.job P...(IMPOSITION 02) Page 5
localhost	19532 GOLF TEXT.job...003 (IMPOSITION 03)	19532 GOLF TEXT.job P...(IMPOSITION 02) Page 4

## Unlimited Printers

Blackmagic supports all major brands of large format printers used for CTP proofing. Printer drivers are licensed on a per manufacturer basis. A driver suite of choice comes included with Blackmagic and allows **output to any supported printer model** made by the selected manufacturer. Extra printer licenses are available separately. In addition, Blackmagic can **run as many local or remote printers** as are available on your network. This means if your business, like many others, uses a single brand of proofer, the software will install ready to run a room full of printers.

QueueStatus

Imaging: 19532 GOLF TEXT.job Page 012 (IMPOSITION 12)

Done: 100% Elapsed: 00:22:07

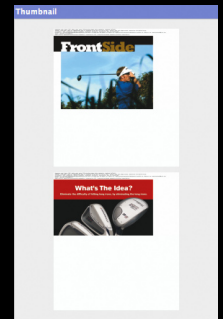
Rendering: 19532 GOLF TEXT.job Page 008 (IMPOSITION 08)

Done: 86% Elapsed: 00:29:03

QueueStatus

Epson 7900: 19532 GOLF TEXT.job (IMPOSITION) Page 15

Output: 66%



## Clustering

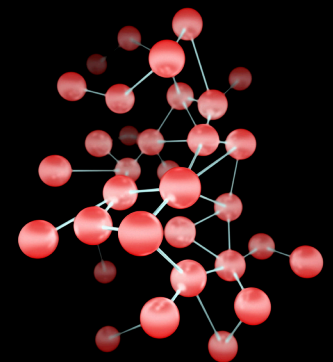
**Multicore processing** isn't the only feature of Blackmagic able to **speed up your proofing workflow**.

**Clustering**, or distributed processing, is a method whereby **multiple computers are used to share processing** workload.

Cluster nodes\*, running on additional computers, can be **seamlessly added to the cluster** and are **managed centrally** via the Blackmagic Server.

Each node can be configured to process jobs for specific printers or auto-scheduled, ensuring faster nodes receive and process jobs before slower ones. Nodes can also be run across mixed Linux, Mac OS X or Windows platforms.

Blackmagic grows with your business. As production volume increases, so does your processing power.



\*dongles purchased separately

19532 GOLF TE... Rendering Render

19532 GOLF TE... Waiting to render Render

19532 GOLF TE... Imaging Image

19532 GOLF TE... Waiting to render Render

19532 GOLF TE... Waiting to render Render

19532 GOLF TE... Waiting to render Render

	4	5	6	7	8	9	10	11	12	13	14	15
	3%	4%	5%	10%	20%	25%	30%	40%	50%	60%	70%	75%
A	91.46 -5.44 -8.71	90.50 -7.89 -10.13	89.13 -10.06 -12.26	83.51 -18.31 -20.31	75.24 -30.03 -31.43	72.27 -34.49 -35.81	70.03 -38.20 -39.65	66.70 -43.38 -44.75	61.23 -45.04 -50.98	56.00 -42.59 -57.66	51.05 -37.30 -62.62	48.92 -33.36 -64.73
B	92.37 6.59 -5.38	91.59 8.21 -5.96	90.49 10.57 -7.01	85.87 19.69 -10.86	78.78 32.30 -16.09	76.11 36.90 -18.30	74.01 41.12 -20.24	70.84 50.23 -21.60	65.23 62.64 -21.87	59.30 72.66 -21.84	54.42 79.62 -18.23	52.46 81.53 -15.14
C	95.02 -2.55 9.70	94.94 -3.14 12.87	94.64 -3.90 17.47	93.79 -6.53 36.93	92.44 -8.93 69.28	91.94 -9.38 81.52	91.45 -9.36 90.30	90.68 -8.28 100.78	90.14 -7.42 105.65	89.82 -6.13 107.52	89.40 -4.74 108.81	89.31 -4.27 109.44
D	92.30 -0.47 -1.38	91.56 -0.53 -1.05	90.42 -0.57 -0.66	85.95 -0.50 1.57	77.04 -0.25 3.49	73.04 -0.72 4.61	69.06 -0.57 5.90	60.89 -0.23 7.62	50.93 -0.12 8.82	40.35 -0.05 9.89	28.87 0.08 10.27	23.46 0.19 10.07
E	92.42 6.00 2.80	91.65 7.46 4.23	90.53 9.74 6.28	85.83 18.87 15.11	78.65 33.65 32.67	75.86 39.62 41.42	73.35 44.22 49.44	69.65 54.52 63.86	67.28 57.45 77.99	65.98 57.45 87.08	64.68 59.51 93.67	64.22 60.06 95.64
F	93.82 -5.85 -1.72	93.43 -7.20 -1.49	92.82 -9.17 -1.12	90.28 -17.05 0.31	86.53 -28.99 2.64	85.41 -34.08 3.76	84.59 -38.84 5.06	83.54 -47.04 8.95	81.69 -53.74 13.29	79.29 -58.60 13.95	77.63 -64.18 14.36	76.91 -67.86 16.09

## Total Printer Control

Blackmagic uses a **paper profiling system** that individually characterises proofing media based on colour space, output resolution, printer ink set and paper being used for proofing.

Users can assess and select what dots will be fired by the print head for each ink channel, choose from a number of **intelligent ink limiting** algorithms and linearise the printer based on a **customisable set of gradation curve points**.

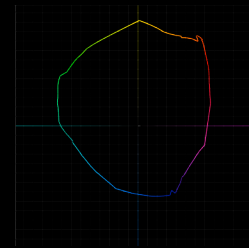
Paper profiling **maximises the gamut** available to the printer, allowing the accurate reproduction of process CMYK and spot colours.



## Multicolour Support

Blackmagic features full **multicolour support** and can proof any multicolour printing process be it hexachrome, heptachrome or any custom process.

Support for **unlimited spot colours** means precise proofing for any job, regardless of the complexity.



## CMS and Spot Colour Handling

Blackmagic is built on a full 16-bit engine. The colour management system is **ICC v4.2 compliant** and is adept at reproducing spot colours within the gamut of CMYK proofers.

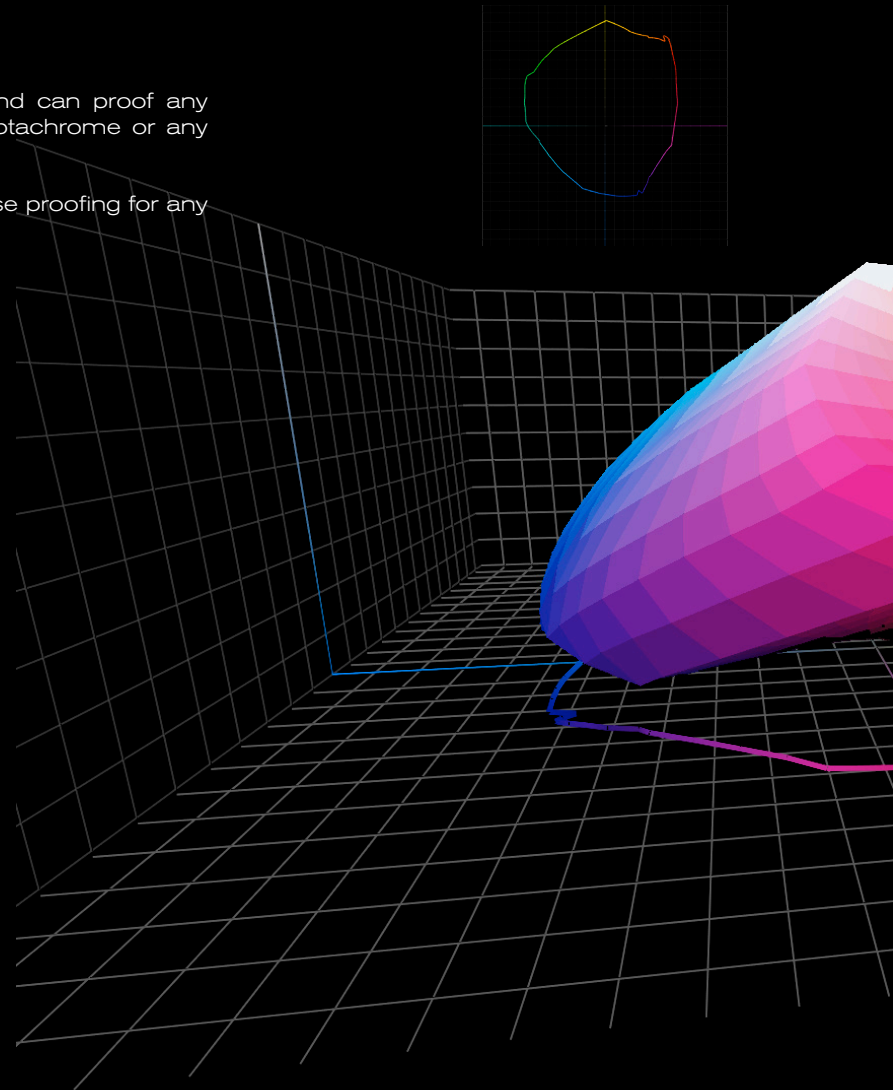
**Unlimited spot colours** can be easily imported or created, assigned a paint mode (overprint, knockout, primer, transparent, opaque), a tint level within each mode and a unique dot gain curve.

Special colours are handled in an L\*a\*b\* colour space for maximum accuracy. **Advanced spot merging** algorithms simulate how the spot will react with spot and process press inks, making true spot colour proofing a reality.

## Why 16-bit?

Because 16-bit processing provides **over 250 times the colour depth of 8-bit** processing, giving the engine **finer colour control** and allows it to calculate the differences between black and white with greater accuracy.

The result is more **precise image reproduction**, smoother transitions into shadows and highlights, and the elimination of visual banding in gradients and vignettes. This **improved render quality** aids in identifying plate artifacts, allowing them to be corrected before jobs are sent to press.





## Future Proof

The print industry is in a state of constant evolution. New standards and technologies emerge to replace the old.

Blackmagic's **adaptive colour management system** uses a device independent profile connection space and is **screening independent**. It processes files containing, halftone, stochastic, hybrid, or any other screen type.

This ensures the ability to proof data using any current or future screening and colour standards.

## Colour Verification

Digital proofing is about **colour fidelity**. As the print industry moves towards accepted press standards, the ability to accurately **reproduce and verify colour output** has never been more important.

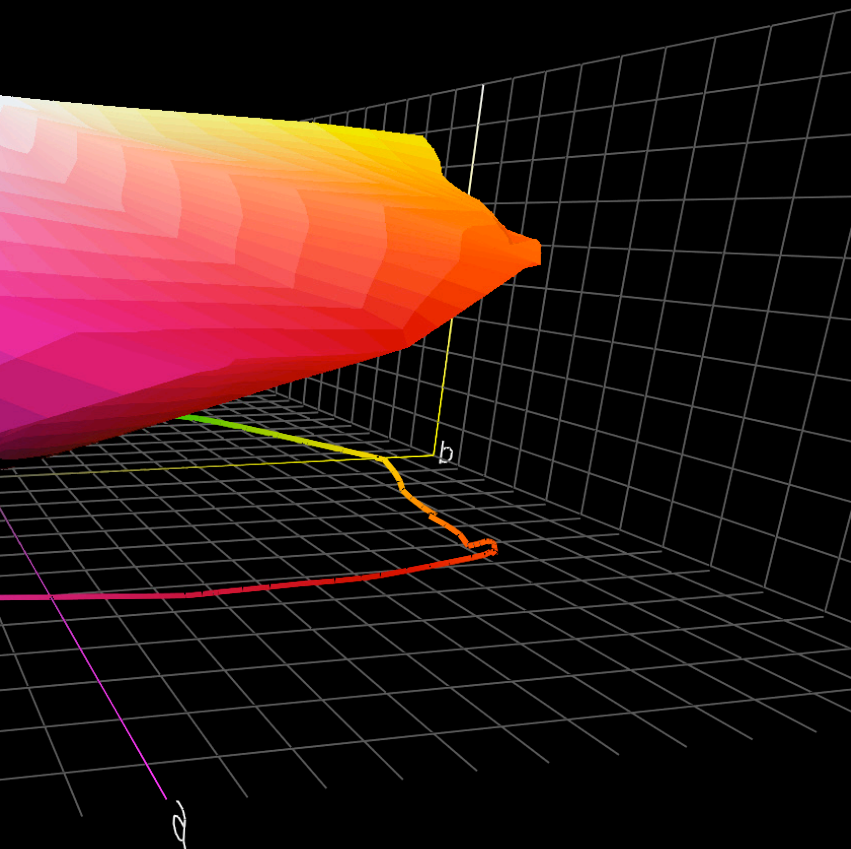
Blackmagic features a system for creating colour verification charts generated from **press ICC profiles** or imported from text or **CGATS** files.

Users can **define the number of patches** making up the chart; process colour, paper and grey balance **patch types**; and set maximum, average and standard  $\Delta e$  (CIE76, CIE94 or CIE2000),  $\Delta H$  and  $\Delta C$  tolerances.

Charts can be **printed individually or attached to jobs**, and are auto-formatted to be read by a Spectrophotometer chosen from a wide array of supported instruments.

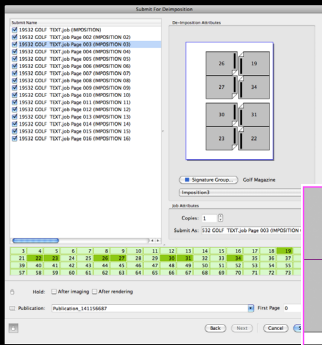


Results are compared to the target **press standard values**, shown on screen in a detailed or a summary report, and the tested print given a pass or fail. Summaries can be saved with media within Blackmagic and printed to a label and attached to jobs.



## De-Imposition

A built-in **de-imposition engine** allows imposed press files to be virtually cut and proofed at published size, as singles, 2UPs; or duplexed using any supported printer.



Users can **custom build signature groups**, or **import them from jobs directly** in a number of industry formats such as Dynastrip, Preps and JDF.

The user interface features the ability to multi-select individual signatures within a group, allowing mass-changes to parameters such as plate offset or page size - invaluable when working with large publications.



## Nesting

Print queues can be set to **collect, intelligently arrange and auto-rotate incoming jobs** to best use the space on your proofing media and **minimise paper waste**.

**Nesting** can be configured according to percentage of sheet coverage, number of jobs, minimum or maximum media length, idle wait time or be initiated manually at any time.



Blackmagic is leading edge proofing software, built on cutting edge code. What does that mean for the user?

### One word - **Speed**

Blackmagic has the fastest clocked image and render times of any comparable product on the market. Integral **multi-core CPU support** allows multiple jobs to be processed simultaneously and **multi-threading** keeps all CPU cores at work - even on single jobs. The result - proofing output as fast as your printers can print.



## Serendipity Blackmagic

Serendipity Blackmagic version 4.0 (Build 21008)  
Copyright Serendipity Software Pty Ltd 1994 - 2009 All rights reserved  
Built: Jul 21 2009 11:21:45  
NFR (not for resale) dongle detected  
Dongle serial no: 40d156c1 0aca

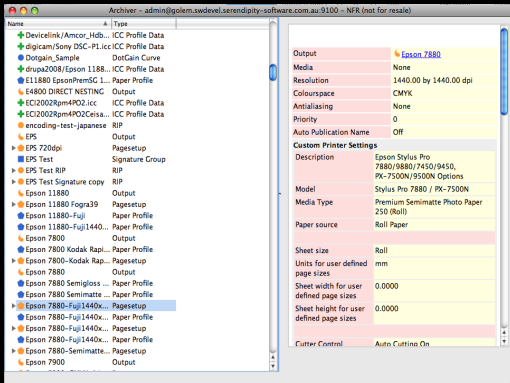
Listening for client connections on port 9100

Uptime: 00:00:14 Stop server Speed: 2166.02

Speed: 2166.02

## Archiving

The user configurations and calibrated setups within Blackmagic can be backed up using the **Archiver** utility.



Individual items or a complete system can be stored to **prevent data loss** in the event of a system failure, or copied for use on another Server or remote site.

The Archiver can be set to **automatically backup settings** on a regular basis.

## Multi-Platform

At Serendipity Software, we recognise there are as many computer, network and operating system solutions as there are workflows.

That's why Blackmagic Servers, Cluster Nodes and Clients are made to run on any combination of **Linux, Windows, or Intel-based Mac OS X** systems, straight out of the box.

## Account Management

Secure account management **prevents unauthorised access** to Blackmagic applications and functions.

Administrators can **create groups and user login accounts** with permissions tailored to specific roles within your environment.

The system allows remote users to **login securely** and can be configured to notify users of system critical events via email.



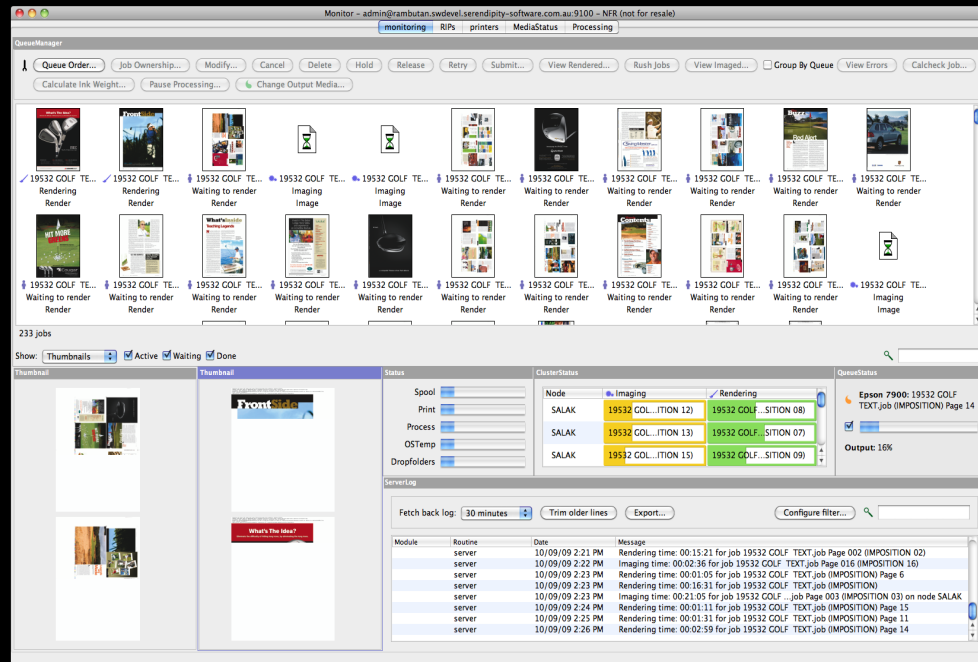
## Custom User Interface

Blackmagic's **user interface can be customised to suit your workflow.**

The **Monitor** application comprises of a series of management and information modules used to **track the progress of jobs** before, during, and after processing.

Modules can be added, positioned, sized and configured in one or more tabbed windows according to relevance or preference.

Layouts and settings are unique to each user and Client, but layouts can be **saved and copied to other Clients.**



**Serendipity**  
software