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Print service providers are always hungry for new ways to enhance productivity and reduce downtime. Increasingly, software utilities that are combined with strategic hardware investments are key to unlocking better performance from your printing environment.

One piece of technology that offers significant benefits in terms of the performance and reliability of your printing infrastructure is software that allows you to combine a number of printers into a single virtual printer or cluster.

This technology is currently underused, but we can expect it to become more popular as its benefits are better understood. The software allows a number of printers or multifunction products (MFPs) to be managed as though they are a single device.

When you send a big print job to the cluster, the software intelligently splits the workload between the different printers so that it is carried out between four or five machines at the same time. The immediate benefit is a dramatic reduction in the print time that can benefit any large operation printing thousands of pages a day.

You can create several clusters of printers and configure them individually, giving you the flexibility to set them up to handle different kinds of job. You can put different types of printers or even printers with different finishing options together, and configure the software to send jobs to the machine in a cluster that is best suited to do it.

You could set the system up so that it will send the job to the fastest printer in the cluster. You can even put colour and monochrome devices in the same cluster. When you send a job with monochrome and colour pages to the cluster, it will split them appropriately among the machines that make up the virtual printer. The queued jobs are managed right through to the finishing process and you receive an email alert telling you which printers have your printouts.

The benefits of this software can be enormous. Rather than allowing some machines to sit idle while others have long printing queues to crunch through, you can evenly balance the workload among the printers on your network.

Should one of the machines break down or run out of toner in the middle of a print job, the remaining printing can be reassigned to another machine in the cluster. Peak times become less of a strain because your whole infrastructure can be fine-tuned to manage your print jobs with the maximum efficiency.

Any commercial print shop or large corporate printing environment will inevitably get to a point where its existing fleet is struggling to meet demand. Before looking to invest in new hardware, it is a good idea to look at ways of revamping workflow and using software tools to do more with what one already has in place.

Often, simply by using the right tools to manage print jobs more effectively, one can experience a significant productivity boost using much of the infrastructure that is already in place in your print room.