Highlights from a recent webcast on Print Management

KILL THE PRINT SERVER WITH CLOUD-BASED PRINTING

Printing is actually becoming more complex just as businesses need it to be easier, but a cloud-based approach can deliver a lot of advantages with few adverse effects.

If you've walked around just about any office lately, you'll notice that people still print documents. Despite all the methods we have now for storing and sharing information electronically, paper is still a necessity in most industries. For IT administrators challenged with both cutting costs and improving the user experience, managing printing can be a real hassle, particularly with users demanding print access from an increasing number of endpoints.

Part of the reason printing presents such a challenge to businesses of all sizes is that traditional print architectures come with some major drawbacks. For every advantage one setup presents, there is at least one disadvantage that offsets it. This situation has left admins in a bind as to how to structure their print environments. But just as it has for so many other functions, cloud-based technology is now coming to the rescue with a model that's both reliable and easy to manage and use.

Why Legacy Print Architectures Fall Short

Consider the three types of legacy print architectures now in existence: decentralized, centralized and direct IP printing.

Decentralized printing involves placing discrete print servers at every branch location a business has, as well as at company headquarters, and connecting them through a WAN. That's great for minimizing risk, as security is not a particular concern when servers run individually. It also keeps print traffic local and therefore relatively fast and reliable.

The problem with the decentralized approach is that it creates print server sprawl, which leads to difficulty managing multiple individual servers. Cost cutting is difficult in this scenario because company growth leads to the need for more servers, not fewer, and requires more people to manage and monitor those servers. Plus, users can have difficulty finding the right server, which can burden the help desk.

Centralized printing is essentially the opposite of decentralized printing, and it offers basically a mirror image of advantages and disadvantages. In the centralized model, the company uses a single print server, with endpoints networked to it through a WAN. With only one server to manage, control and configure, it is relatively easy for printer admins. In addition, users aren't confused by server choice.

The downside, though, is that traffic on the WAN can slow to a crawl, which hurts the user experience and once again brings the help desk into play. Plus, with all print traffic traveling over the WAN to just one server, this architecture sets up a single point of failure. If the print server or the WAN goes down, nobody prints until it's fixed.

Direct IP printing, the third legacy printing architecture, involves setting up an IP address for each printer and sending network traffic directly from a user's workstation to the printer. Direct IP improves on both decentralized and centralized print architectures by both localizing traffic for greater speed and eliminating a single point of failure. Direct IP can help eliminate print infrastructure and reduce capital expenses.

However, this method still has its faults. It is almost impossible to manage, with each individual printer requiring maintenance and monitoring. And it's not necessarily an easier setup for users, either. Many will not know how to connect to a printer using their workstation's IP address, and the help desk will have to assist them with finding drivers and other basics of installing printers. As a result, the help desk remains heavily engaged, and while equipment costs might fall with this model compared to the other two, support costs remain high.

Printing as a Service Comes with Risks

The cloud has brought about fundamental changes in the way

companies deploy and manage IT operations. In an era when just about anything can be delivered as a service, printing architectures can also benefit from a cloud-based approach that will enable companies to minimize the disadvantages that plague the three legacy printing models.

There is a surprisingly wide array of options for printing as a service, including pure-cloud plays offered by vendors such as Google, which take printing management away from companies completely and process all print traffic directly in the cloud. These models can be very cost effective, but they also leave potential security holes and tend to take both visibility and control away from print admins.

Some small-office home-office offerings similarly allow printing as a service, but they aren't really meant to, and don't, scale well. There are even models that send a print job to a web page, but scalability and security there are also obviously major concerns.

Direct IP Printing Moves to the Cloud

While legacy printing architectures and printing-as-a-service pure plays do offer some advantages, their drawbacks can be significant. But one model, PrinterCloud by PrinterLogic, combines the direct IP architecture with a cloud-based approach to boost the advantages of both legacy and service architectures and neutralize the drawbacks.

> "Cloud-based direct IP printing eliminates the disadvantages that plague other models."

PrinterCloud employs cloud-based direct IP printing. In this model, the cloud-based PrinterCloud solution offers central management of printer drivers via the Internet but pushes actual drivers to individual workstations. The workstations then interface directly with printers.

Cloud-based direct IP printing eliminates the disadvantages that plague other models. It does away with a single point of failure by pushing drivers to workstations. It provides a self-service printer installation portal with floorplan maps, which also helps simplify the user experience and relieve the burden on the help desk. If the Internet goes down, users can still print.

It keeps traffic local, with workstations communicating directly with printers, increasing speed and enhancing reliability. And it puts management capabilities squarely in the hands of print admins while at the same time greatly simplifying control and visibility by providing a single point of management. Admins can also monitor and control security.

Perhaps most critically, though, the cloud-based direct IP model completely eliminates print servers, offering the advantages of legacy direct IP printing without any of the legacy model's disadvantages. With cloud-based management and no new servers to buy as the company grows, scalability ceases to be a problem. And with localized traffic and drivers pushed down to users from the cloud, reliability and ease of the user experience become major benefits. As a result, support costs fall, and the number of help-desk calls declines.

The Cloud Ushers in a New Era in Printing

Of course, businesses should choose printing architectures based on their unique needs. There is no single architecture that is right for all businesses at all times. Some might benefit from pure-play printing as a service, while others might be able to make legacy architectures work.

But for companies looking to cut costs, ease management for admins and improve the user experience, cloud-based IP printing delivers a host of pros while eliminating virtually all the cons found in other printing architectures. And that's good news for companies that need to make printing easier and cheaper at the same time.