

Making Mobile Devices Safe and Productive for the Enterprise —Cisco's CIUS as Proof Point for Lexmark's Mobile Solutions

Joshua Greenbaum
Principal, Enterprise Applications Consulting

Summer, 2011

THE MOBILE TABLET CHALLENGE: ENABLING PRINT PRODUCTIVITY IN A MANAGEABLE, SECURE MANNER

Managing the workflow of documents in the enterprise has always been a challenge, but the advent of mobile devices such as smart phones and tablets has greatly added to that concern. Not only does mobility mean that enterprises are now tasked with deploying all the same applications and services to physically disconnected employees, but this seamless connectivity must also be applied within the context of enterprise class service, management, support, and security. To do otherwise would turn the mobile device opportunity into a management and security nightmare.

The complexity of deploying mobile devices such as tablets touches both IT and line of business management, and does so in different but highly related ways. The line of business is interested in deploying mobile devices such as tablets as a way to improve employee productivity and add value to existing business processes — such as field service, sales, and business intelligence — by tapping into the collaboration, high-definition video, and mobile support offered by the nascent tablet market. Meanwhile, IT needs to manage these new devices — both in terms of usage and security — at the same levels of service with which it manages any other device in the enterprise.

Lexmark's Mobile Print Application for Cisco's new Cius tablet — an enterprise-only device that Cisco is marketing as a business tablet — will highlight how these converging needs can be readily served when the app is released in Fall, 2011. By marrying a business-only device with an enterprise mobile print solution, Cisco and Lexmark have shown how enterprise-class functionality and services can be applied to a mobile device market that has been more focused on consumer requirements and less attuned to the more stringent management and security requirements of the enterprise.

Enterprise Applications Consulting was commissioned by Lexmark to review the company's mobile print strategy for supporting the Cius. EAC found a well-designed strategy that leverages Lexmark's established market leadership in enterprise printing solutions. Cisco can utilize Lexmark's email-based push and pull printing solution — Print Release — and make it available for users of the Android-based Cius, among other mobile devices. EAC believes this

agreement is an excellent example of how new print-origination devices, such as the Cius tablet, can be easily grafted on to an existing enterprise printing solution.

Key to this marriage of Lexmark and Cisco – even in its earliest phases – is the provision of enterprise-class services to the mobility market. This is especially true for those existing Lexmark customers who have implemented Lexmark's current e-mail based mobile print release solution, which is deployed on thousands of devices serving hundreds of thousands of users across large commercial, public sector, and education accounts – as well as any company looking to manage its mobile devices without sacrificing security and manageability. The new Lexmark Mobile Print Application provides a seamless way in which businesses can deploy the Cius and provide mobile printing services without jeopardizing security or adding an excessive management burden.

While the initial Lexmark Mobile Print Application provides a subset of Lexmark's full print management capabilities, it's reasonable to expect that the full weight of Lexmark's mobile print solutions, as well as its larger content management solutions (the company bought content management provider Perceptive Software last year), could be brought to bear for the Cius and other Android devices. For the moment, however, Lexmark is quiet on any next steps beyond this initial application.

This value of Lexmark's Mobile Print Application, in combination with the Cius, was highlighted by one of Lexmark's existing Print Release customers, CBTS, a technology solution provider based in Cincinnati, Ohio. CBTS acknowledged the potential value of this offering in the original press release announcing the availability of Print Release for the Cius:

"There is clearly an enormous surge in mobile devices and 'road warriors' at CBTS and throughout global enterprises in general. Lexmark is well positioned to support this growing requirement," said Christi Cornette, Vice President of Marketing, CBTS. "This trend will continue to drive the need for mobile printing solutions that support the output requirements of sophisticated business users who are on the go and who will need to securely print their business documents."

THE LEXMARK PRINT RELEASE ADVANTAGE

A key element of Lexmark's enterprise strategy can be found in its Print Release capability, which is a core offering in the Lexmark Solutions Platform. Print Release allows a user to send a print job to a print server, which then stores the print job until it is released by the user for printing at any authorized multi-function printer (MFP) with access to the print server. In networks where Lexmark's current e-mail based mobile print release solution is implemented, enterprises are able to connect their mobile devices to their multi-function printers in a way that adds value to both sets of devices – as well as to the business processes that require these devices to work well together.

An Enterprise Applications Consulting Report Brief

The Lexmark/Cisco engagement extends this core functionality to the Cius, treating the tablet as just another device that can access Lexmark Print Release-enabled printers. Underlining the relatively simple addition of the Cius to the enterprise is a number of specific benefits that don't necessarily accrue with other enterprise print management solutions.

The main benefit comes from the seamlessness with which the Cius can become a print origination device in an existing Lexmark Print Release environment, without burdening either the IT department or the end users. In fact, once an email address to be used by Cius users for sending their print jobs has been created, the IT side is largely done. The existing Lexmark customer needs to add no new enterprise software, servers, or complex administrative processes.

From the user standpoint, the simplicity of deployment is even greater, especially if that user is already familiar with Print Release. The Cius user simply directs the print job to the pre-defined email address using the Cius' email function, goes to any MFP printer, authenticates his or her identity using a badge or PIN code, and then selects the job to be printed at that specific station.

The simplicity of Print Release from an IT management and end-user standpoint hides the robustness that allows the Cius to function at a very high level of enterprise-class management and security. The use of email push functionality to originate the print job leverages the email system as the first line of security: A print request sent from an unauthorized device is blocked by the Print Release system, which is linked to the internal email service for authenticating access to the enterprise printer network.

Authentication at the MFP provides a second key security layer: no print job actually gets executed until an authorized user is physically standing at the printer, and is able to verify his or her identity with a badge or PIN. This ensures that sensitive print jobs don't end up sitting in a printer outbox in a non-secured area waiting to be picked up.

Print Release also provides Cius users with the option to cancel any print job that has become out of date or simply unnecessary. As Lexmark's research shows that one of out every six print jobs sent to the print queue are never actually printed, this feature helps lower overall printing costs and contributes to a company's sustainability profile.

While the use of Print Release by Cius users can take place with minimal IT intervention, basing Cius support on Print Release and the Lexmark Solutions Platform provides IT and business management with the same analytical tools for managing emerging mobile device use that are already in place for managing PC and laptop-based printer use.

These tools include comprehensive analytics for managing print quantities and authorizations, and allow print jobs to be tied to specific cost centers and projects. By directing all print jobs through the Lexmark Solutions Platform server, companies that deploy the Cius can manage

mobile devices that might otherwise be outside the management and cost accounting of the enterprise.

This means that if in the future Lexmark extends the Print Release capability to the Cius – which would entail adding direct print support from inside the Lexmark Mobile Print Application without the requirement to email print jobs – the IT burden would consist merely of deploying a Lexmark app to each Cius to allow direct printing from the device. Once the app is deployed, the user-based authentication in Print Release means that IT's management job is done: the app handles the user-based authentication and allows a print function from directly within the Android app.

BUT WAIT, THERE'S MORE...

While there's no official word, it's pretty safe to assume that Lexmark's Perceptive Software capabilities will at some point be brought to bear for the Cius and its users. This broader content management capability is a natural for mobile devices like the Cius, which, especially in the enterprise, are being called on more and more to be part of a business process workflow that includes using a tablet or smart phone to input data, fill out a form, or take action based on a report or dashboard. Making the Cius or any other mobile device part of a more comprehensive content management requirement in an end-to-end business process would go a long way towards leveraging the value of mobility and content management, as well as the business process itself, in new and important ways.

CONCLUSION: THE MOBILE ENTERPRISE BECOMES ENTERPRISE-READY

Incorporating mobile tablets into the enterprise has been a challenge to IT and line of business management. The mobility of these devices is only the starting point for the challenge. The rapidity with which lines of business are eager to adopt these new devices has posed a set of headaches for IT managers who need to carefully manage the security and cost-effectiveness of tablets as they proliferate across the enterprise and become increasingly essential to key business processes and users.

The engagement between Cisco and Lexmark highlights how the rapid uptake in the use of tablets in the enterprise can take place without sacrificing enterprise-class service and security. The ease with which the Cius can become *just another* print origination device in the Lexmark Solutions Platform world – and therefore tap into all the inherent management and security support in that solution – is a textbook case of how the needs of IT and the line of business can converge in a way that leverages the best of both stakeholders' requirements without sacrificing any of the capabilities of the Cius. The result is a rare win/win for IT and the line of business.