IBM Boldly Enters the Mobile Device Management Marketspace with New Tivoli Endpoint Manager Module

Abstract

Expanding the scope of its endpoint management capabilities, IBM has announced the launch of a new Mobile Device Management automation platform supporting a number of smartphone and tablet platforms, including iOS and Android. The solution set greatly simplifies email, application, inventory, and configuration management while ensuring both data and device security. ENTERPRISE MANAGEMENT ASSOCIATES® (EMA™) analysts believe IBM's integration of mobile device management with its traditional desktop management capabilities enables a consolidated endpoint management experience that rises to meet emerging enterprise challenges.

IBM Releases Mobile Device Management Platform

On January 30, 2012, IBM formerly announced its new Mobile Device Management platform was scheduled for general release on March 16, 2012. The solution set, which had been in beta testing since September 2011 provides full-featured management automation support for mobile platforms including iOS, Android, Nokia Symbian, Windows Phone 7, and Windows Mobile.

The software-based platform is available as a standalone product, but can integrate directly with the IBM Tivoli Endpoint Manager (TEM) solution set. Leveraging the same centralized console as TEM (formerly known as BigFix), the mobile device management product set can be accessed from a common interface and utilizes the same data storage resources. By extending the desktop management capabilities of TEM to also support mobile devices, a simplified management process is enabled for all client endpoints across the support stack. For instance, a single reporting mechanism can be employed to achieve compliance objectives and administrators do not need to engage in "swivel chair management" to perform root cause analysis on environment failures. Further simplifying mobile device management is the inclusion of encapsulated automation processes known as "fixlets" in the TEM world. On the mobile device management platform, fixlets are available for a variety of administrative processes, including email configuration, password management, and security policy enforcement.

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The new Mobile Device Management platform will be marketed as a seventh module in the TEM product line, joining the existing product sets for Lifecycle Management, Security & Compliance, Patch Management, Software Use Analysis, Core Protection, and Power Management. Pricing details of the new Mobile Device Management solution have not been revealed at the time of this review.

Rising to Meet Emerging Mobile Management Requirements

Primary EMA research has determined that roughly 70% of U.S. enterprise workers today employ a mobile device (smartphones or tablets) for business purposes. This staggering influx of new devices that are relied on for business productivity has evolved a new set of challenges for organizations tasked with managing endpoint devices. At the top of the list of emerging mobile management

requirements (according to EMA research) is the need for data security, device security, and enabling email accessibility. These should be no surprise considering that email is the primary enterprise utilization of mobile devices and security is the greatest challenge. For the latter, consider that 60% of organizations polled in a recent EMA survey indicated that supported mobile devices were stolen and 70% reported supporting users that lost them. If any of those missing devices contained sensitive business information or had access to company assets, there could be serious financial, compliance, and business performance ramifications. Enabling workforce mobility requires the assurance that data is secured on enterprise servers, in transit to the endpoint, and on the mobile devices themselves.

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Beyond email management and security, mobile device management includes practices for supporting a broad range of enterprise requirements. This includes the remote configuration of the devices, asset inventory, and application management. Automated mobile management platforms greatly simplify these challenges by providing a centralized interface for initiating administrative processes to multiple endpoints. Simplified management processes translate into reduced administrator effort, improved endpoint performance, and increased user productivity. The IBM Tivoli Mobile Device Management platform has been specifically designed to meet these emerging challenges and ensure value is achieved in enterprise mobile investments.

Achieving Broad Mobile Platform Support and Functionality

Leveraging the core architecture of the TEM platform, IBM's new Mobile Device Management solution set has been introduced to resolve the most critical mobile device management challenges. A single TEM server can support greater than 250,000 devices (desktops, servers, or mobile devices – depending on which modules are adopted), achieving massive scalability that greatly increases cost-effectiveness. Also, the use of enterprise-grade APIs allows the platform to directly integrate with other management resources, such as service desks and CMDBs. Updates to the platform are achieved via a cloud-based content delivery model, eliminating the need for administrators to perform upgrades or other installations.

Advanced mobile management capabilities have been achieved by IBM through the use of device access processes most appropriate to each device type. For instance, iOS-based devices connect to the management platform with the adoption of Apple's mobile device management APIs. For Android devices, IBM ported its existing TEM agent to the mobile operating environment. Email-based management for iOS, Android, Windows Phone, Windows Mobile and Symbian is also included for both Exchange (ActiveSync) and LotusTraveler (IBMSync). Other key features of the new product set include:

- **Mobile Device Configuration** – allows for the remote configuration of email, calendars, VPN, and Wi-Fi settings.
- **Jailbreak and Root Detection** – the jailbreaking or rooting of a mobile device is sometimes performed by end users to grant them privileged access to system resources, bypass security restrictions, and disable other imposed limitations. The IBM Mobile Device Management platform performs multiple checks to determine if a supported device has been rooted and may not be in compliance with business requirements.
- **Mobile Device Dashboard** – providing a centralized reporting mechanism for device inventory, asset identification, application management, security policies, and other mobile device-specific details.

- **Application Management** – including mobile application inventory as well as application white listing and black listing
- **Enterprise App Store** – provides a dedicated, easily accessible, and centralized repository for business approved applications.
- **Lock and Wipe** – performs selective wipe, full wipe, deny email access, remote lock and user notifications to prevent unauthorized access to mobile device data and resources.
- **Policy and Security Management** – password policies and device encryption harden mobile endpoint to prevent unauthorized use.
- **Mobile Tracking** – in the event a device is lost or stolen, the physical location of the device can be mapped for easy retrieval. This feature may also be used to identify employee locations as necessary in certain job functions. (To maintain user privacy, this feature should only be enabled where appropriate and with full user knowledge and consent.)

EMA Perspective

Although mobile device management practices very closely resemble endpoint management requirements for traditional desktops and laptops, the unique operating platforms, applications, device interface, and challenges of mobile devices make it impossible to utilize the exact same processes and automation resources designed for PC to also support mobile devices. This disparity directly led to the introduction of a number of point solutions designed to support very specific mobile device platforms and requirements, and many enterprises today employ separate management platform for administrating mobile and traditional PC endpoints. Utilizing multiple interfaces to manage different elements in a support stack, however, is inherently inefficient.

The obvious solution to this is to extend the capabilities of existing desktop management platforms to also support mobile devices. Unfortunately, this isn't as easy a proposition as it may seem on the surface. Since mobile devices employ separate operating environments that function on unique (and, in many ways, more limited) architectures, resources designed for administrating desktop systems need to be completely reengineered to function on mobile endpoints. Several desktop management solution vendors have managed to get around this particular problem by partnering with mobile point-solution vendors and establishing integration points to unify the management experience. Although this is not an ideal solution since the final product is still being delivered by two different companies with different marketing agendas and development paths, it has allowed for the relatively quick introduction of unified endpoint management platforms without the need to design the product from the ground up.

In providing a mobile platform that is truly built off its existing TEM architecture, IBM is establishing a long-term viability of the product set that could quickly set it apart from many of its competitors. Mobile device requirements are quickly evolving, and IBM's control over the development process will provide it with the agility to respond to changing customer needs for workforce mobility. For an initial release,v IBM's Mobile Device Management solution set boasts an impressive array of features and platform support that rival any competitor in the field. Nonetheless, there is still room for advancement of the solution (such as with the inclusion of support for BlackBerry devices), but it is well within IBM's capabilities to enhance the product to meet expanding customer requirements with the introduction of new platform agents, feature improvements, and integration points.

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No individual vendor has achieved the brass ring of providing a complete mobile management solution that provides full mobile platform and functional support while integrating directly with traditional desktop management solutions, but an increasing number of key vendors are reaching for it. This lull in waiting for existing solutions to advance and new ones to come to market provides IBM with an opportunity to dominate the space. To achieve this, IBM will need to go beyond its existing TEM customer base and attract new enterprise prospects with a combination of broad mobile support features and an aggressive pricing model. EMA believes IBM is well positioned to provide the former and encourages the vendor to go to market with competitive pricing that will establish the solution with a high value proposition that is accessible to more cost-constrained organizations. Broad adoption of the mobile platform will also extend opportunities for expanding the TEM market by providing a "jumping in" point for perspective customers. EMA offers congratulations to IBM for recognizing the importance of mobile device management in the evolving endpoint management market space and for laying the foundations for a solution set that will likely play a leading role in meeting enterprise requirements for increased workforce mobility.