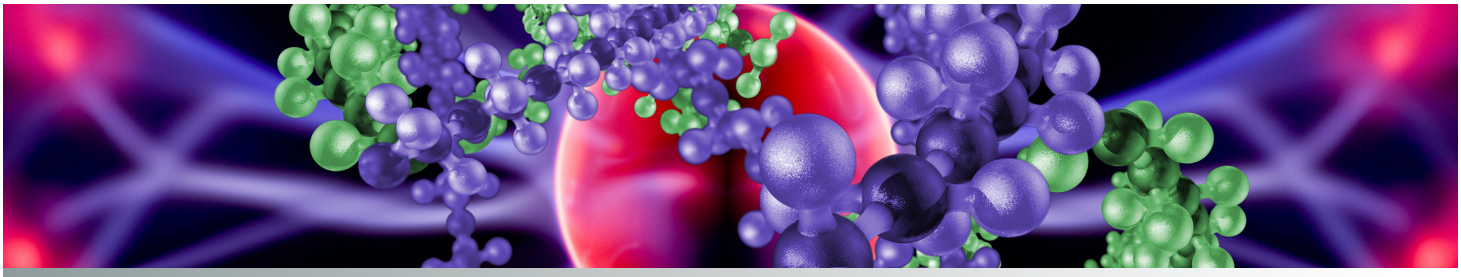
USB Architecture for Removable Media



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Technology Summary

While the convenience of USB devices and removable media increase business productivity, they also provide an attack vector for malicious software. To address this security vulnerability, some organizations have physically disabled USB ports or required that all devices be scanned at a common central location. These approaches sacrifice convenience for increased security. Most commercially available security products do not provide a complete solution to the problem. The USB Architecture for Removable Media (USB-ARM) provides the benefits of centralized scanning with the convenience of typical removable media. USB-ARM creates operating system drivers that sit between removable media and the user and applications. The drivers isolate the media and submit the contents to a virtual machine containing an entire scanning system. This scanning system then performs scans or other verification routines to ensure the media do not contain malware. Once cleared, the media are presented to the operating system, at which point they become available to users and applications. USB-ARM provides quick scanning, user transparency, flexibility, and scalability. With USB-ARM, users can have convenient access to media while organizational security goals are met.

Patents

Craig A. Shue, Logan M. Lamb, and Nathanael R. Paul. *Architecture for Removable Media USB-ARM,* U.S. Patent Application 61/425,423, filed December 21, 2010 (subdate December 14, 2011).

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