



## WINDOWS 7 EXTENDED SUPPORT ENDS IN 2020. WHAT ARE THE OPTIONS FOR BANK ATM SYSTEMS? An Inflection Point for ATM Operators to Consider Migrating to Linux

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With the announcement by Microsoft that extended support for Windows 7 will end in 2020, bank automatic teller machine (ATM) operators and manufacturers have come to a market inflection point in the operation and maintenance of ATM systems. The business question is whether to upgrade their ATM operating systems to Microsoft Windows 10, understanding that in so doing they would incur a significant software migration cost and potential hardware migration requirement.



### WINDOWS 7 MIGRATION AND THE NEED FOR HARDWARE UPGRADE

A majority of ATMs currently in operation throughout the world use Microsoft Windows 7 or older versions of Windows operating systems in conjunction with older Intel® processors. With the upcoming end of support for Windows 7, ATM systems will need to be upgraded to a supported operating system to ensure compliance with PCI security standards. With recent major retail credit/payment card system breaches, the PCI security standards have new compliance requirements that include requiring a supported operating system. That is because any ATM system that remains on an unsupported proprietary operating system can be exposed to a variety of security threats that can affect ATM operation. In addition, many hardware platforms internal to current ATMs are too old to be supported by the more current Windows 10. As a result, a majority of ATM systems will require both an operating system migration and a computer platform upgrade. Due to technical differences associated with Windows 7 and Windows 10, the internal work to migrate ATM applications from Windows 7 to Windows 10 can take a team of software developers as much as a year and sometimes longer. These dynamics will make the migration a more expensive endeavor than simply obtaining Windows 10.

### SUPPLIER PRODUCT LIFECYCLE MISALIGNMENT AS HISTORY REPEATS ITSELF

This expensive upgrade of both operating system and hardware will likely continue to repeat in the future as Microsoft delivers another new series of Windows products, as was seen in the transition from Windows XP to Windows 7.

In this immediate market inflection point, ATM manufacturers may be best served by looking at the opportunity to break the cycle. This is the time for ATM operators and manufacturers to consider moving to an open source operating system, such as Wind River® Linux, so that software lifecycle schedules are not dictated by a single organization.

**OPEN SOURCE OPERATING SYSTEM OPTION: LINUX**

By upgrading the operating system from Windows 7 to an open source operating system such as Wind River Linux, an ATM operator can better manage their product lifecycle. Linux can be used and will support older hardware platforms in all of the functionality and security required by PCI standards. An ATM manufacturer has various Linux options to choose among, including the option to “roll their own.” This inherently allows the manufacturer to control their own product lifecycle plans and not be beholden to the lifecycle decisions of key suppliers. At Wind River, we highly recommend the value of using a third party to handle the support and maintenance of your open source Linux operating system. Instead of maintaining a software team over the many years of an ATM lifecycle, manufacturers can be well served to take advantage of the economies of scale that a third party like Wind River offers.

**WIND RIVER LINUX: MIGRATE FROM WINDOWS 7 TO THE LEADING OPEN SOURCE SYSTEM**

Wind River Linux is the market-trusted, Yocto Project Compatible open source baseline. It offers reliability and extra testing and validation, as well as with a commercial product subscription, a stream of support, maintenance, and security vulnerability protection services to system developers and operators. Additionally, Wind River provides risk mitigation assets designed to deliver quality and peace of mind.

For the productization and commercialization of any system solution, a commercial subscription of Wind River Linux delivers vital components such as software updates from development through post deployment, continuous security monitoring, and IP and export compliance artifacts.



Figure 1. Wind River Linux features

Additionally, Wind River Professional Services can provide development assistance and ongoing, long-term support, maintenance, and security services. The Wind River Professional Services team has significant experience in helping customers migrate from old operating systems, including Windows 7, to the latest version of Wind River Linux on a customer’s hardware platform of choice.

Learn more about Wind River Linux by visiting [www.windriver.com/products/linux](http://www.windriver.com/products/linux). Contact Wind River at 1-800-545-WIND or [salesinquiry@windriver.com](mailto:salesinquiry@windriver.com).

