

## Addressing Insider Threats, Cyber Attacks & Data Security

### Securing your ATM Systems

According to the Global ATM Market and Forecasts to 2017, the number of ATMs worldwide is forecasted to reach 3.5 million by 2017. With the fast growth and use of ATMs comes a dramatic increase in ATM attacks and fraud. Not only have the attacks grown in prevalence, but also in sophistication. From brute force attacks to exploiting an ATM's operating system with viruses, thieves strive to attack ATMs in a variety of ways.

To anticipate and combat the threat of ATM crimes, banks can enhance existing security measures to protect against three categories of attacks:

1. ATM fraud
2. ATM physical attacks and
3. ATM software and network attacks

#### ATM fraud

The most common types of ATM fraud include card skimming, card trapping, PIN compromise, transaction reversal and deposit fraud. The industry has watched with increasing alarm the rising statistics on ATM skimming fraud:

- \* more than \$2 billion in losses (and rising) at ATMs around the world; with
- \* 33 percent of all fraud incidents linked to skimming crime; and
- \* 98 percent of all losses resulting from skimming crime<sup>1</sup>.

Even after the United States migrates to EMV, they will remain vulnerable to skimming because payment cards, whether it includes a chip or not, will continue to be issued with magnetic stripes allowing for backward compatibility on terminals that have not been upgraded to read the new cards. Getting rid of the magnetic strip completely can radically resolve the card skimming fraud on ATMs however that will take time. In addition to ensuring your ATMs are EMV ready and have built-in anti-skimming. Security cameras should also be considered. While you may not be able to stop the crime in progress it is an indispensable tool to deter fraud and vandalism as well as give law enforcement the help they need to arrest the criminals.

#### Physical prevention and awareness

ATMs have an inherent vulnerability that is exacerbated at times due to proximity in heavily populated or remote areas. Banks can reduce their risks by utilizing an alarm for the top half of the ATM that will alert personnel when compromised. Other methods include appropriate lighting and consumer awareness mirrors. With emerging crime trends such as 'shoulder surfing', where thieves approach ATMs and re-enter the victims pin to withdraw money before the system can log them out, mirrors can be beneficial. Full face mirrors can provide a full view of the back and sides helping a consumer deter any suspicious movements.

#### Software and network

While some institutions have been putting off system updates to Windows 7 because the process could be expensive, this increases the risks of malware being used to infect the machines or hack into the ATM's internal data networks to steal account information. Firewalls can help protect files being transferred to the machines from external sources. Effective password management with changing passwords can also control who has access to the network and when. And, hardening of the PC core and USB ports can be a good way to keep your OS and application protected.

ATMs will always be vulnerable to attack, but a partnership with an ATM provider who provides a comprehensive security protocol can help ease potential security headaches and reduce organizational risk.

<sup>1</sup> ATM Marketplace, <http://www.atmmarketplace.com/articles/atm-card-skimming-in-2015-crime-waves-countermeasures-and-case-studies/>



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**Dean Theodore** is vice president of ATM operations for Cummins Allison. A 25-year veteran in the ATM industry, Dean has held a variety of leadership positions at NCR and Diebold in the areas of engineering, manufacturing, supply chain management, product and software quality, operations and sales management. His in-depth knowledge of ATMs has been instrumental in consulting with financial institutions in their ATM decision making process. Cummins Allison is the leading innovator and provider of check, currency and coin handling solutions, as well as full-function ATMs. Our world-class sales and service network includes hundreds of local representatives in more than 50 offices in North America, 6 wholly-owned subsidiaries and is represented in more than 70 countries around the world.

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