WHITE PAPER

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Kiosk Security Software to Lock Down Android devices and PC Kiosks

Stop attacks and help ensure a positive user experience by taking control of the kiosk.

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PROVISIO® software engineering

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Few things will damage customer engagement faster than a kiosk that's out of order. Who wants to walk up to an airport check-in kiosk to find that it's been redirected to another website?

Unfortunately, damage to kiosks by users is an all-too-real fact of life. According to the annual "Benchmark Survey of Kiosk Operators" by Kiosk Business magazine, vandalism was the second-most common cause of kiosk failure at 77 percent, behind keyboard failure at 84 percent; however, it's easy to assume that many keyboard failures were because of user damage as well. Kiosk failure had a strong impact on business according to 22 percent of the respondents, and 30 percent said it had a moderate impact.

At wayfinding or product look-up kiosks, customers expect the information to be at their fingertips. The person who may have caused the kiosk failure doesn't take the blame; the brand does.

Public access kiosk software protects the operating system against unwanted or malicious user manipulation. The software defines how the computer can be used, and access can be limited to certain websites, programs and folders. Various software providers may include a selection of customizable start-page templates, browser skins, on-screen keyboards, an Internet content filter, an intuitive configuration tool and many other features.

While in the past kiosks were most often PC-based, the proliferation of inexpensive tablets has led to the need to secure Android devices as well. The mobile device needs to be protected from abuse, whether intentional or not, by the self-service user.

If a kiosk gathers personal data, such as a name and email address to sign up for a loyalty program, that data is vulnerable and must be secured. After all, the next person to use the kiosk will be a complete stranger.

Sites for public access kiosk software

- Kiosk and Internet terminals
- Company access to Internet and Intranet
- Employee self-service
- Internet cafes
- Arcades/gambling stations
- Library PCs
- PCs in schools and colleges
- City information terminals
- Ticket kiosks
- Showcase advertising
- PCs at fairs and exhibitions
- Public Internet banking
- Customer PCs in retail locations

Locking the kiosk

Locking or limiting the function of a kiosk might seem extreme, but given the potential for security breaches, it's the reasonable approach to secure data and ensure an optimal user experience.

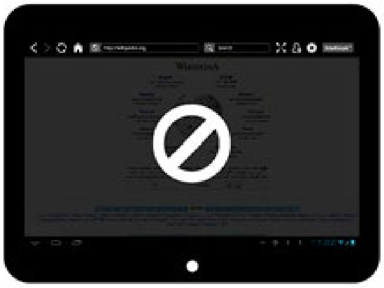
Without in any way inhibiting the functionality of a kiosk, the deployer needs to ensure the devices are set up so that miscreants are unable to tamper with their software. The balance between usability and imperviousness, then, becomes a challenge, though advances in remote monitoring and connectivity have helped.

Remote monitoring (dependent on consistent, speedy connectivity) is the ability of a deployer or a service provider to keep an eye from anywhere in the world on the what's happening at the kiosk. Most common is the understanding that the feature facilitates reboots when the kiosk hiccups or crashes and can help with preventive maintenance, such as alerting technicians that paper or other supplies are running low.

But while a down kiosk is doubtless a drag on customer experience and some revenue, the threat is nothing compared with the large-scale losses and public scorn that come from a data breach in a sensitive application. Not only can the business lose revenue immediately, the long-term damage may be utterly catastrophic, as many consumers face identity or cash loss, and perhaps myriad other customers or potential customers lose confidence in the brand.

Of course, the better case is that remote monitoring is never needed to intervene. Software features that prevent hackers from infiltrating the browser or other vulnerable access points are increasingly sophisticated and available.

Public access kiosk software solutions offer kiosk security, content management and remote management for PC and Android-based devices. This



technology allows kiosks to securely present web-based content (HTML, Flash, videos, etc.) and applications on public access terminals.

Managing Android kiosks

The cost of Windows-capable PCs and custom applications puts self-service kiosks out of reach for many businesses. But the availability of inexpensive Android-based devices means more companies are able to create engaging interactive experiences.

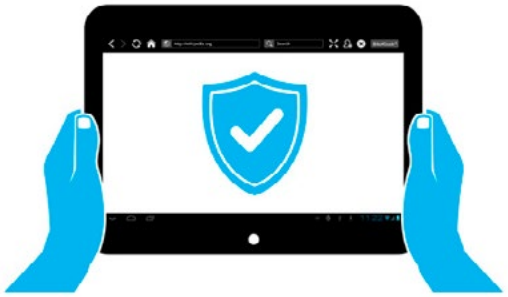
Android devices are easily adaptable to interactive kiosk use, with a broad base of developers available to create applications and content. However, locking down an Android-based device requires custom programming or dedicated software to allow it to run in single-application or kiosk mode to ensure a secure user experience.

Android kiosk software solutions are available that offer the same site security and management functions as the PC version. They facilitate the lockdown of Android devices for secure browsing as well as digital signage functionality backed up by remote monitoring. That provides much more functionality than a few lines of code that allows the device to run only one application.

Conclusion

In some ways, the spread of consumer-level devices into the kiosk and self-service space is a contributing factor to the security problem. Many users are comfortable with the devices, and a portion of the population understands enough about the operating system to cause problems, whether purposefully or not.

That is why it is vital to use kiosk software to lock down a kiosk to limit access to approved applications or websites. It will ensure a positive user experience, secure customer information and reduce maintenance and management costs.



About the sponsor:

PROVISIO is a market-leading software engineering company providing comprehensive turnkey products to secure, monitor and control computers and kiosks in a public environment. The company sells its software products in more than 50 countries through offices in the United States and Europe. Fortune 500 companies — including Verizon Wireless, OfficeMax, BMW and Citibank — have chosen PROVISIO's software solutions for individual projects on more than 1,000 machines per company.