# KASPERSKY EMBEDDED SYSTEMS SECURITY

PCI DSS v3.1 Mapping

PCI DSS 3.1 regulates many technical security requirements and settings for systems operating with credit card data. Sub-points 5.1, 5.1.1, 5.2, 5.3, 6.2 of PCI DSS v3.1 provide for the strict regulation of antivirus protection relating to any endpoint which is operating with Cardholder Details Data. It is common practice, though not an official rule, for Device Control + Application Control functions to be considered as also within the remit of the PCI DSS antivirus software audit.

# 5.1

## **PCI DSS Requirements:**

Deploy antivirus software on all systems commonly affected by malicious software (particularly personal computers and servers).

# **Testing Procedures:**

For a sample of system components including all operating system types commonly affected by malicious software, verify that antivirus software is deployed if applicable antivirus technology exists.

#### Guidance:

There is a constant stream of attacks using widely published exploits, often called "zero day" (an attack that exploits a previously unknown vulnerability), against otherwise secured systems. Without an antivirus solution that is updated regularly, these new forms of malicious software can attack systems, disable a network, or lead to compromise of data.

# 5.1.1

# **PCI DSS Requirements:**

Ensure that antivirus programs are capable of detecting, removing, and protecting against all known types of malicious software.

## **Testing Procedures:**

Review vendor documentation and examine antivirus configurations to verify that antivirus programs detect all known types of malicious software, remove all known types of malicious software, and protect against all known types of malicious software.

#### Guidance:

It is important to protect against ALL types and forms of malicious software.

# 5.2

# PCI DSS Requirements:

Ensure that all antivirus mechanisms are kept current, perform periodic scans, and generate audit logs which are retained per PCI DSS Requirement 10.7.

## **Testing Procedures:**

- **5.2.a** Examine policies and procedures to verify that antivirus software and definitions are required to be kept up to date.
- **5.2.b** Examine anti-virus configurations, including the master installation of the software to verify anti-virus mechanisms are configured to perform automatic updates, and to perform periodic scans.
- **5.2.c** Examine a sample of system components, including all operating system types commonly affected by malicious software, to verify that the antivirus software and definitions are current and periodic scans are performed.
- **5.2.d** Examine antivirus configurations, including the master installation of the software and a sample of system components, to verify that anti-virus software log generation is enabled, and logs are retained in accordance with PCI DSS Requirement 10.7.

#### Guidance:

Even the best antivirus solutions are limited in effectiveness if they are not maintained and kept current with the latest security updates, signature files, or malware protections.

Audit logs provide the ability to monitor virus and malware activity and antimalware reactions. Thus, it is imperative that antimalware solutions be configured to generate audit logs and that these logs be managed in accordance with Requirement 10.

# 5.3

## **PCI DSS Requirements:**

Ensure that antivirus mechanisms are actively running and cannot be disabled or altered by users, unless specifically authorized by management on a case-by-case basis for a limited time period.

## **Testing Procedures:**

- **5.3.a** Examine antivirus configurations, including the master installation of the software and a sample of system components, to verify the antivirus software is actively running.
- **5.3.b** Examine antivirus configurations, including the master installation of the software and a sample of system components, to verify that the antivirus software cannot be disabled or altered by users.
- **5.3.c** Interview responsible personnel and observe processes to verify that antivirus software cannot be disabled or altered by users, unless specifically authorized by management on a case-by-case basis for a limited time period.

## Guidance:

Anti-virus that continually runs and is unable to be altered will provide persistent security against malware.

Use of policy-based controls on all systems to ensure anti-malware protections cannot be altered or disabled will help prevent system weaknesses from being exploited by malicious software.

Additional security measures may also need to be implemented for the period of time during which anti-virus protection is not active—for example, disconnecting the unprotected system from the Internet while the antivirus protection is disabled, and running a full scan after it is re-enabled.

# 6.2

# **PCI DSS Requirements:**

Ensure that all system components and software are protected from known vulnerabilities by installing applicable vendor-supplied security patches. Install critical security patches within one month of release.

Note: Critical security patches should be identified according to the risk ranking process defined in Requirement 6.1.

## **Testing Procedures:**

- **6.2.a** Examine policies and procedures related to security-patch installation to verify processes are defined for installation of applicable critical vendor-supplied security patches within one month of release, installation of all applicable vendor-supplied security patches within an appropriate time frame (for example, within three months).
- **6.2.b** For a sample of system components and related software, compare the list of security patches installed on each system to the most recent vendor security-patch list, to verify that applicable critical vendor-supplied security patches are installed within one month of release and all applicable vendor-supplied security patches are installed within an appropriate time frame (for example, within three months).

## Guidance:

There is a constant stream of attacks using widely published exploits, often called "zero day" (an attack that exploits a previously unknown vulnerability), against otherwise secured systems. If the most recent patches are not implemented on critical systems as soon as possible, a malicious individual can use these exploits to attack or disable a system, or gain access to sensitive data.

Prioritizing patches for critical infrastructure ensures that high-priority systems and devices are protected from vulnerabilities as soon as possible after a patch is released. Consider prioritizing patch installations such that security patches for critical or at-risk systems are installed within 30 days, and other lower-risk patches are installed within 2-3 months.

This requirement applies to applicable patches for all installed software.



## **OPTIMISED EFFICIENCY - INTEGRATED MANAGEMENT**

Kaspersky Embedded Systems Security provides your security teams with full visibility and control over every endpoint.

Infinitely scalable, the solution provides access to inventories, licensing, remote trouble-shooting and network controls, all accessible from one console - the Kaspersky Security Center. Importantly for the isolated, segmented networks typical of ATM and POS installations, the security specialist can

of ATM and POS installations, the security specialist can manage all the agents in a local area network through any local console.

## MAINTENANCE AND SUPPORT

Operating in more than 200 countries, from 34 offices worldwide, our 24/7/365 commitment to global support is reflected in our Maintenance Service Agreement (MSA) support packages.

Our Professional Services teams are on standby to ensure that you derive maximum benefit from your Kaspersky lab security installation.

To learn more about securing your endpoints more effectively, please contact the Kaspersky Lab Enterprise Sales Team.

