



**Kaspersky®  
Endpoint  
Security**

# PCI DSS v3.2 Mapping

PCI DSS 3.2 regulates many technical security requirements and settings for systems operating with credit card data. Sub-points 1.4, 2.4a, 3.4.1, 5.1, 5.1.1, 5.2, 5.3, 6.1, 6.2 of PCI DSS v3.2 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.

## 1.4

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### PCI DSS REQUIREMENTS:

Install personal firewall software or equivalent functionality on any portable computing devices that connect to the Internet when outside the network, and which are also used to access the CDE. Firewall (or equivalent) configurations include:

- Specific configuration settings are defined.
- Personal firewall (or equivalent functionality) is actively running.
- Personal firewall (or equivalent functionality) is not alterable by users of the portable computing devices.

### TESTING PROCEDURES:

**1.4.a** Examine policies and configuration standards to verify:

- Personal firewall software or equivalent functionality is required for all portable computing devices that connect to the Internet when outside the network, and which are also used to access the CDE.
- Specific configuration settings are defined for personal firewall (or equivalent functionality).
- Personal firewall (or equivalent functionality) is configured to actively run.
- Personal firewall (or equivalent functionality) is configured to not be alterable by users of the portable computing devices.

**1.4.b** Inspect a sample of company devices to verify that:

- Personal firewall (or equivalent functionality) is installed and configured per the organization's specific configuration settings.
- Personal firewall (or equivalent functionality) is actively running.
- Personal firewall (or equivalent functionality) is not alterable by users of the portable computing devices.

### GUIDANCE:

Portable computing devices that are allowed to connect to the Internet from outside the corporate firewall are more vulnerable to Internet-based threats. Use of firewall functionality (e.g., personal firewall software or hardware) helps to protect devices from Internet-based attacks, which could use the device to gain access the organization's systems and data once the device is re-connected to the network.

The specific firewall configuration settings are determined by the organization.

## 2.4a

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### PCI DSS REQUIREMENTS

Maintain an inventory of system components that are in scope for PCI DSS.

### TESTING PROCEDURES

**2.4.a** Examine system inventory to verify that a list of hardware and software components is maintained and includes a description of function/use for each.

### GUIDANCE

Maintaining a current list of all system components will enable an organization to accurately and efficiently define the scope of their environment for implementing PCI DSS controls. Without an inventory, some system components could be forgotten, and be inadvertently excluded from the organization's configuration standards.

## 3.4.1

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### PCI DSS REQUIREMENTS

If disk encryption is used (rather than file- or column-level database encryption), logical access must be managed separately and independently of native operating system authentication and access control mechanisms (for example, by not using local user account databases or general network login credentials). Decryption keys must not be associated with user accounts.

### TESTING PROCEDURES

**3.4.1.a** If disk encryption is used, inspect the configuration and observe the authentication process to verify that logical access to encrypted file systems is implemented via a mechanism that is separate from the native operating system's authentication mechanism (for example, not using local user account databases or general network login credentials).

**3.4.1.b** Observe processes and interview personnel to verify that cryptographic keys are stored securely (for example, stored on removable media that is adequately protected with strong access controls).

**3.4.1.c** Examine the configurations and observe the processes to verify that cardholder data on removable media is encrypted wherever stored.

### GUIDANCE

The intent of this requirement is to address the acceptability of disk-level encryption for rendering cardholder data unreadable. Disk-level encryption encrypts the entire disk/partition on a computer and automatically decrypts the information when an authorized user requests it. Many disk-encryption solutions intercept operating system read/write operations and carry out the appropriate cryptographic transformations without any special action by the user other than supplying a password or pass phrase upon system startup or at the beginning of a session. Based on these characteristics of disk-level encryption, to be compliant with this requirement, the method cannot:

- Use the same user account authenticator as the operating system, or
- Use a decryption key that is associated with or derived from the system's local user account database or general network login credentials.

Full disk encryption helps to protect data in the event of physical loss of a disk and therefore may be appropriate for portable devices that store cardholder data.

## 5.1

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<b>PCI DSS REQUIREMENTS:</b>	Deploy antivirus software on all systems commonly affected by malicious software (particularly personal computers and servers).
<b>TESTING PROCEDURES:</b>	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.
<b>GUIDANCE:</b>	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

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<b>PCI DSS REQUIREMENTS:</b>	Ensure that antivirus programs are capable of detecting, removing, and protecting against all known types of malicious software.
<b>TESTING PROCEDURES:</b>	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.
<b>GUIDANCE:</b>	It is important to protect against ALL types and forms of malicious software.

## 5.2

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<b>PCI DSS REQUIREMENTS:</b>	Ensure that all antivirus mechanisms are kept current, perform periodic scans, and generate audit logs which are retained per PCI DSS Requirement 10.7.
<b>TESTING PROCEDURES:</b>	<p><b>5.2.a</b> Examine policies and procedures to verify that antivirus software and definitions are required to be kept up to date.</p> <p><b>5.2.b</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.</p> <p><b>5.2.c</b> 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.</p> <p><b>5.2.d</b> 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.</p>
<b>GUIDANCE:</b>	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

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<b>PCI DSS REQUIREMENTS:</b>	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.
<b>TESTING PROCEDURES:</b>	<p><b>5.3.a</b> Examine antivirus configurations, including the master installation of the software and a sample of system components, to verify the antivirus software is actively running.</p> <p><b>5.3.b</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.</p> <p><b>5.3.c</b> 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.</p>
<b>GUIDANCE:</b>	<p>Anti-virus that continually runs and is unable to be altered will provide persistent security against malware.</p> <p>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.</p> <p>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.</p>

## 6.1

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<b>PCI DSS REQUIREMENTS:</b>	Establish a process to identify security vulnerabilities, using reputable outside sources for security vulnerability information, and assign a risk ranking (for example, as "high," "medium," or "low") to newly discovered security vulnerabilities.
<b>TESTING PROCEDURES:</b>	<p><b>6.1.a</b> Examine policies and procedures to verify that processes are defined for the following:</p> <ul style="list-style-type: none"><li>• To identify new security vulnerabilities</li><li>• To assign a risk ranking to vulnerabilities that includes identification of all "high risk" and "critical" vulnerabilities.</li><li>• To use reputable outside sources for security vulnerability information.</li></ul> <p><b>6.1.b</b> Interview responsible personnel and observe processes to verify that:</p> <ul style="list-style-type: none"><li>• New security vulnerabilities are identified.</li><li>• A risk ranking is assigned to vulnerabilities that includes identification of all "high risk" and "critical" vulnerabilities.</li><li>• Processes to identify new security vulnerabilities include using reputable outside sources for security vulnerability information.</li></ul>

<b>GUIDANCE:</b>	<p>The intent of this requirement is that organizations keep up to date with new vulnerabilities that may impact their environment.</p> <p>Sources for vulnerability information should be trustworthy and often include vendor websites, industry news groups, mailing list, or RSS feeds.</p> <p>Once an organization identifies a vulnerability that could affect their environment, the risk that the vulnerability poses must be evaluated and ranked. The organization must therefore have a method in place to evaluate vulnerabilities on an ongoing basis and assign risk rankings to those vulnerabilities. This is not achieved by an ASV scan or internal vulnerability scan, rather this requires a process to actively monitor industry sources for vulnerability information.</p> <p>Classifying the risks (for example, as "high," "medium," or "low") allows organizations to identify, prioritize, and address the highest risk items more quickly and reduce the likelihood that vulnerabilities posing the greatest risk will be exploited.</p>
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<b>PCI DSS REQUIREMENTS:</b>	<p>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</p> <p><b>Note:</b> Critical security patches should be identified according to the risk ranking process defined in Requirement 6.1.</p>
<b>TESTING PROCEDURES:</b>	<p><b>6.2.a</b> Examine policies and procedures related to security-patch installation to verify processes are defined for installation of applicable critical vendorsupplied 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).</p> <p><b>6.2.b</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 securitypatch list, to verify that applicable critical vendorsupplied 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).</p>
<b>GUIDANCE:</b>	<p>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.</p> <p>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.</p> <p>This requirement applies to applicable patches for all installed software.</p>

## OPTIMISED EFFICIENCY – INTEGRATED MANAGEMENT

Kaspersky Endpoint Security for Business provides your security teams with full visibility and control over every endpoint.

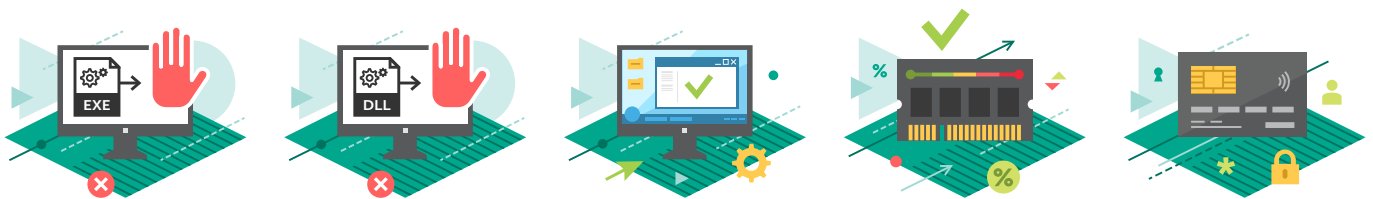
Infinitely scalable, the solution provides access to inventories, licensing, remote trouble-shooting and network controls, all accessible from one console – the Kaspersky Security Center.

## 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.



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