

NIST HANDBOOK 150-17 Annex F CHECKLIST

DHS Identity and Privilege Credential Management Testing

Instructions to the Assessor: This checklist addresses specific accreditation requirements prescribed in NIST Handbook 150-17, *Cryptographic and Security Testing*, for the DHS Identity and Privilege Credential Management Testing test methods. It is used in conjunction with the NIST Handbook 150-17 Checklist, which covers the requirements in clauses 4 and 5 of the program handbook.

Place an "X" beside any of the following items that represent a nonconformity. Place a "C" beside each item on which you are commenting for other reasons. Record the item number and your nonconformity explanation and/or comments on the appropriate comment sheet(s). Write "OK" beside all other items you observed or verified as compliant at the laboratory.

Note: The numbering of the checklist items correlates to the numbering scheme in NIST Handbook 150-17, Annex F, Section F.5.

F.5 Additional technical requirements for accreditation

F.5.2 Additional personnel requirements

- F.5.2.1 The laboratory shall demonstrate, in addition to the technical expertise required by each test method as described below, that their personnel has basic knowledge of cryptographic and security practice for information systems and that the laboratory is aware of the governing standards and publications, especially the ones listed in this handbook.

- F.5.2.2 The laboratory's personnel shall have experience, training, or familiarity in:
 - a) cryptography – symmetric versus asymmetric algorithms and uses;
 - b) cryptography – encryption protocols and implementations;
 - c) key generation and digital certificate encoding;
 - d) key management techniques and concepts;
 - e) cryptographic self-test techniques;
 - f) the families of cryptographic algorithms;
 - g) FIPS-approved and NIST-recommended security functions (FIPS 140-2 or successors);
 - h) cryptography – Public Key Infrastructure (PKI);
 - i) TWIC® and PIV Reader Authentication Modes;
 - j) access control models;
 - k) privilege management;
 - l) smart cards;

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- m) smart card readers (contact and contactless; portable and non-portable);
 - n) fingerprint readers;
 - o) Application Protocol Data Unit (APDU);
 - p) Basic Encoding Rules (BER);
 - q) biometric authentication techniques;
 - r) biometric enrollment, quality measure, and authentication techniques;
 - s) biometric testing;
 - t) concepts of the operational PIV systems;
 - u) contact and contactless interface standards;
 - v) Physical Access Control System (PACS) registration systems;
 - w) biometric device installation, integration, and operation;
 - x) Personal Identifiable Information (PII) data protection and management;
 - y) data review, reduction and analysis;
 - z) statistical analysis methodologies; and
 - aa) the TWIC® reader testing tools and their operation.

E.5.3 Additional accomodation and environmental conditions

- The laboratory shall have appropriate areas, including ventilation and safety, for the use of test methods using chemical solvents and heating/cooling apparatus.

E.5.5 Additional equipment requirements

- The laboratory shall meet the following minimum hardware, software, and operating system requirements for any platform on which the testing tools required for DHSIPCM testing will run:

a) Hardware:

- 1) at least 1 USB and 1 serial port available on the Windows XP¹ test computer;
- 2) one or more sets of testing cards provided by the DHSIPCM Program Management Office (PMO); and
- 3) Contact/Contactless Smart Card Reader, Magstripe Reader.

b) Software:

- 1) testing tool provided by the DHSIPCM PMO.

