

Annex C:
Approved SSP Management Techniques
for FIPS PUB 140-3,
*Security Requirements for
Cryptographic Modules*

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1. Introduction

Federal Information Processing Standards Publication (FIPS PUB) 140-3, Security Requirements for Cryptographic Modules, specifies the security requirements that are to be satisfied by the cryptographic module utilized within a security system protecting sensitive information within computer and telecommunications systems (including voice systems). The standard provides four increasing, qualitative levels of security: Level 1, Level 2, Level 3 and Level 4. These levels are intended to cover the wide range of potential applications and environments in which cryptographic modules may be employed. The security requirements cover eleven areas related to the secure design and implementation of the cryptographic module. These areas include the following:

1. Cryptographic Module Specification
2. Cryptographic Module Interfaces
3. Roles, Authentication and Services
4. Software/Firmware Security
5. Operating Environment
6. Physical Security
7. Physical Security - Non-Invasive Attacks
8. Sensitive Security Parameter Management
9. Self-Tests
10. Life-Cycle Assurance
11. Mitigation of Other Attacks

The Cryptographic Module Validation Program (CMVP - www.nist.gov/cmvp) validates cryptographic modules for conformance to FIPS PUB 140-3 and other cryptography based standards. The CMVP is a joint effort between NIST and the Communications Security Establishment Canada (CSEC - www.cse-cst.gc.ca). Modules validated as conforming to FIPS PUB 140-3 are accepted by the Federal agencies of both countries for the protection of sensitive information (United States) or Designated information (Canada).

Under the CMVP, vendors of cryptographic modules use independent, accredited testing laboratories to have their modules tested. Organizations wishing to have validations performed would contract with the laboratories for the required services.

2. Purpose

The purpose of this document is to provide a list of Approved SSP Management Techniques applicable to FIPS PUB 140-3.

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ANNEX C: APPROVED SSP MANAGEMENT TECHNIQUES

Annex C provides a list of Approved SSP Management Techniques applicable to FIPS PUB 140-3.

Symmetric Techniques

There are no Approved symmetric SSP Management techniques. Additional guidance can be found in *FIPS 140-3 Implementation Guidance*, Section 8.

Asymmetric Techniques

1. National Institute of Standards and Technology, [Recommendation for Pair-Wise Key Establishment Schemes Using Discrete Logarithm Cryptography \(Revised\)](#), Special Publication 800-56A, March, 2007.

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Document Revisions

Date	Change
03/02/2009	Initial Draft

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End of Document

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