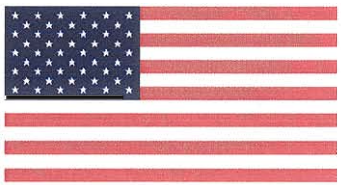
FIPS 140-2 Validation Certificate



The National Institute of Standards and Technology of the United States of America

The Communications Security Establishment of the Government of Canada

Certificate No. **812**

The National Institute of Standards and Technology, as the United States FIPS 140-2 Cryptographic Module Validation Authority; and the Communications Security Establishment, as the Canadian FIPS 140-2 Cryptographic Module Validation Authority; hereby validate the FIPS 140-2 testing results of the Cryptographic Module identified as:

RSA BSAFE® Crypto-J Software Module *by* RSA Security, Inc.

(When operated in FIPS mode)

in accordance with the Derived Test Requirements for FIPS 140-2, Security Requirements for Cryptographic Modules. FIPS 140-2 specifies the security requirements that are to be satisfied by a cryptographic module utilized within a security system protecting *Sensitive Information* (United States) or *Protected Information* (Canada) within computer and telecommunications systems (including voice systems).

Products which use the above identified cryptographic module may be labeled as complying with the requirements of FIPS 140-2 so long as the product, throughout its life cycle, continues to use the validated version of the cryptographic module as specified in this certificate. The validation report contains additional details concerning test results. No reliability test has been performed and no warranty of the products by both agencies is either expressed or implied.

This certificate includes details on the scope of conformance and validation authority signatures on the reverse.

FIPS 140-2 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 and 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 a cryptographic module. The scope of conformance achieved by the cryptographic modules as tested in the product identified as:

RSA BSAFE® Crypto-J Software Module *by* RSA Security, Inc.
(*Software Version: 3.6;* Software)

and tested by the Cryptographic Module Testing accredited laboratory: ***Atlan Laboratories, NVLAP Lab Code 200492-0***
CRYPTIK Version 6.0

is as follows:

Cryptographic Module Specification:	Level 1	*Cryptographic Module Ports and Interfaces:*	Level 1
Roles, Services, and Authentication:	Level 1	*Finite State Model:*	Level 1
Physical Security: *(Multi-Chip Standalone)*	Level 1	*Cryptographic Key Management:*	Level 1
EMI/EMC:	Level 1	*Self-Tests:*	Level 1
Design Assurance:	Level 1	*Mitigation of Other Attacks:*	Level 1
Operational Environment:	Level 1	*tested in the following configuration(s):*	32-bit x86 Intel Pentium 4 w/Windows XP SP2 with Sun JDK 1.5; 64-bit x86_64 Intel Pentium D w/ Windows XP SP2 with Sun JDK 1.5; 32-bit PowerPC w/ AIX 5L v5.3 with IBM JDK 1.5; 64-bit SPARC v9 w/ Solaris 10 with Sun JDK 1.5; 32-bit Itanium2 w/ HP-UX 11.23 with HP JDK 5.0; 64-bit Itanium2 w/ HP-UX 11.23 with HP JDK 5.0; 32-bit x86 Intel Pentium 4 w/ Red Hat Enterprise Linux AS 4.0 with Sun JDK 1.5; 64-bit x86_64 Intel Pentium D w/ Red Hat Enterprise Linux AS 4.0 with Sun JDK 1.5; 32-bit x86 Intel Pentium 4 w/ SUSE Linux Enterprise Server 9.0 with Sun JDK 1.5; 64-bit x86_64 AMD Opteron w/ SUSE Linux Enterprise Server 9.0 with Sun JDK 1.5; 64-bit PowerPC w/ AIX 5L v5.3 with IBM JDK 1.5; 32-bit SPARC v8+ w/ Solaris 10 with Sun JDK 1.5. (in single-user mode)

The following FIPS approved Cryptographic Algorithms are used: **AES (Cert. #487); DSA (Cert. #197); HMAC (Cert. #240); RNG (Cert. #264); RSA (Cert. #199); SHS (Cert. #553); Triple-DES (Cert. #497)**

The cryptographic module also contains the following non-FIPS approved algorithms: **DES; Diffie-Hellman (key agreement; key establishment methodology provides between 80 bits and 112 bits of encryption strength); DESX; MD2; MD5; RIPEMD 160; RNG (X9.31 and SHA1; non-compliant, MD5); RC2; RC4; RC5; PBE (SHA256, SHA384, SHA512); Raw RSA; RSA Keypair Generation MultiPrime; RSA (key wrapping; key establishment methodology provides between 80 bits and 150 bits of encryption strength); HMAC-MD5**

Overall Level Achieved: 1

Signed on behalf of the Government of the United States

Signature: William C Barker

Dated: August 7, 2007

Chief, Computer Security Division
National Institute of Standards and Technology

Signed on behalf of the Government of Canada

Signature: Luc Couturier

Dated: August 2, 2007

A/ Director, Industry Program Group
Communications Security Establishment