

Enabling FIPS-Compliant Mode for the OpenPGP Module

THE INFORMATION IN THIS ARTICLE APPLIES TO:

- EFT version 7 and later

DISCUSSION

Some organizations require that file transfers are restricted to FIPS-compliant algorithms. The library used by our OpenPGP module is not restricted to only FIPS-compliant cryptography. However, you can add a registry setting to EFT to restricts the OpenPGP module to use only FIPS-compliant cryptography that is available in the library.

The registry setting described below, when present and the DWORD value is set to non-zero, will configure the OpenPGP library to use FIPS-compliant cryptography only.

To enable FIPS-compliant mode for the OpenPGP module

[HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\GlobalSCAPE Inc.\EFT Server 4.0\Config\]

DWORD: OpenPGPFIPSCompliantAlgorithmsOnly

- 0 = not FIPS only
- 1 = FIPS-compliant cryptography only
- Default when not specified = 0 (not FIPS-only cryptography)

The table below lists the algorithms available for each mode.

FIPS compliant mode	Non-FIPS mode
=Symmetric Encryption Algorithms= 3DES (192-bit key) AES256 (256-bit key) AES192 (192-bit key) AES128 (128-bit key)	=Symmetric Encryption Algorithms= 3DES (192-bit key) CAST5 (128-bit key) AES256 (256-bit key) AES192 (192-bit key)

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	<p>AES128 (128-bit key)</p> <p>BLOWFISH (128-bit key, 16 rounds)</p> <p>TWOFISH (256-bit key)</p> <p>IDEA (128-bit key)</p>
<p>=Hash Algorithms=</p> <p>SHA1</p> <p>SHA256</p> <p>SHA384</p> <p>SHA512</p> <p>SHA224</p>	<p>=Hash Algorithms=</p> <p>SHA1</p> <p>MD5</p> <p>SHA256</p> <p>SHA384</p> <p>SHA512</p> <p>SHA224</p> <p>RIPEND160</p>
<p>=Asymmetric Algorithms=</p> <p>RSA (512-bit ~ 4096-bit key)</p> <p>DSA (512-bit ~ 4096-bit key, Sign-Only)</p>	<p>=Asymmetric Algorithms=</p> <p>RSA (512-bit ~ 4096-bit key)</p> <p>DSA (512-bit ~ 4096-bit key, Sign-Only)</p> <p>Elgamal (512-bit ~ 4096-bit key, Encrypt-Only)</p>
<p>=Compression Algorithms=</p> <p>zip (RFC1951)</p> <p>zlib (RFC1950)</p> <p>bzip2 (BZ2)</p> <p>none</p>	<p>=Compression Algorithms=</p> <p>zip (RFC1951)</p> <p>zlib (RFC1950)</p> <p>bzip2 (BZ2)</p> <p>none</p>

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GlobalSCAPE Knowledge Base

<https://kb.globalscape.com/Knowledgebase/11172/Enabling-FIPSCompliant-Mode-...>