

# 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.

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

## Enabling FIPS-Compliant Mode for the OpenPGP Module

	<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><b>=Hash Algorithms=</b></p> <p>SHA1</p> <p>SHA256</p> <p>SHA384</p> <p>SHA512</p> <p>SHA224</p>	<p><b>=Hash Algorithms=</b></p> <p>SHA1</p> <p>MD5</p> <p>SHA256</p> <p>SHA384</p> <p>SHA512</p> <p>SHA224</p> <p>RIPEND160</p>
<p><b>=Asymmetric Algorithms=</b></p> <p>RSA (512-bit ~ 4096-bit key)</p> <p>DSA (512-bit ~ 4096-bit key, Sign-Only)</p>	<p><b>=Asymmetric Algorithms=</b></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><b>=Compression Algorithms=</b></p> <p>zip (RFC1951)</p> <p>zlib (RFC1950)</p> <p>bzip2 (BZ2)</p> <p>none</p>	<p><b>=Compression Algorithms=</b></p> <p>zip (RFC1951)</p> <p>zlib (RFC1950)</p> <p>bzip2 (BZ2)</p> <p>none</p>

```
.telerik-reTable-3 { border-collapse: collapse; border: solid 0px; font-family: Tahoma; }
.telerik-reTable-3 tr.telerik-reTableHeaderRow-3 { margin: 10px; padding: 10px; color: #3a4663; text-align: left; font-size: 10pt; font-style: normal; font-family: Verdana; text-transform: capitalize; font-weight: normal; border-spacing: 10px; vertical-align: top;
```

## Enabling FIPS-Compliant Mode for the OpenPGP Module

```
background-color: #C4D1E3; } .telerik-reTable-3 td.telerik-reTableHeaderFirstCol-3 {  
padding: 0in 5.4pt 0in 5.4pt; color: #3a4663; line-height: 14pt; } .telerik-reTable-3  
td.telerik-reTableHeaderLastCol-3 { padding: 0in 5.4pt 0in 5.4pt; color: #3a4663;  
line-height: 14pt; } .telerik-reTable-3 td.telerik-reTableHeaderOddCol-3 { padding: 0in  
5.4pt 0in 5.4pt; color: #3a4663; line-height: 14pt; } .telerik-reTable-3  
td.telerik-reTableHeaderEvenCol-3 { padding: 0in 5.4pt 0in 5.4pt; color: #3a4663;  
line-height: 14pt; } .telerik-reTable-3 tr.telerik-reTableOddRow-3 { color: #666666;  
vertical-align: top; font-size: 10pt; } .telerik-reTable-3 tr.telerik-reTableEvenRow-3 { color:  
#666666; vertical-align: top; font-size: 10pt; } .telerik-reTable-3  
td.telerik-reTableFirstCol-3 { padding: 0in 5.4pt 0in 5.4pt; background-color: #E7EBF7; }  
.telerik-reTable-3 td.telerik-reTableLastCol-3 { padding: 0in 5.4pt 0in 5.4pt;  
background-color: #E7EBF7; } .telerik-reTable-3 td.telerik-reTableOddCol-3 { padding: 0in  
5.4pt 0in 5.4pt; background-color: #F7F3F7; } .telerik-reTable-3  
td.telerik-reTableEvenCol-3 { padding: 0in 5.4pt 0in 5.4pt; background-color: #E7EBF7; }  
.telerik-reTable-3 tr.telerik-reTableFooterRow-3 { background-color: #C4D1E3; color:  
#3a4663; font-weight: normal; font-size: 10pt; font-family: Verdana; line-height: 11pt; }  
.telerik-reTable-3 td.telerik-reTableFooterFirstCol-3 { padding: 0in 5.4pt 0in 5.4pt;  
text-align: left; } .telerik-reTable-3 td.telerik-reTableFooterLastCol-3 { padding: 0in 5.4pt  
0in 5.4pt; text-align: left; } .telerik-reTable-3 td.telerik-reTableFooterOddCol-3 { padding:  
0in 5.4pt 0in 5.4pt; text-align: left; } .telerik-reTable-3 td.telerik-reTableFooterEvenCol-3 {  
padding: 0in 5.4pt 0in 5.4pt; text-align: left; }
```

GlobalSCAPE Knowledge Base

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