What is AES Encryption?

- WinZip
- WinZip Self-Extractor
- WinZip SafeMedia
- WinZip Enterprise

WinZip applications support 128- and 256-bit key AES encryption, which provides much greater cryptographic security than the traditional Zip 2.0 encryption method used in earlier versions of WinZip.

WinZip 12.0 introduced customizable password policies to configure password complexity requirements when using encryption in WinZip. Setting a minimum password length and a required mixture of letters, numbers, and/or characters are user defined options (see Password Policy). The options that can be specified are upper case letters, lower case letters, numerals, and symbols.

With **WinZip Enterprise**, System Administrators can customize the MSI installation of WinZip to set and lock down password policy requirements that meet their organization's needs for password complexity. Additionally, WinZip Enterprise can be deployed to take advantage of the Windows FIPS 140-2 validated cryptographic modules.
WinZip's advanced encryption (FIPS-197 certified) uses the Rijndael cryptographic algorithm which, in 2001, was specified by the National Institute of Standards and Technology (NIST) in Federal Information Processing Standards (FIPS) Publication 197 as the Advanced Encryption Standard (AES).

When properly implemented as a key component of an overall security protocol, AES permits a very high degree of cryptographic security, yet is fast and efficient in operation.

WinZip's AES encryption is just as easy to use as traditional Zip 2.0 encryption: all you have to do is select the encryption method and specify your password.

In addition to AES encryption technology, WinZip provides a number of usability enhancements that make it easier for you to use encryption. Most noticeably, you can easily encrypt the contents of an existing Zip file. If you are using version 14 or later, WinZip will recognize Intel-based computers with built-in AES encryption and use the available hardware support to make encryption operations two to three times faster.

Those to whom you send AES-encrypted Zip files will need a compatible Zip file utility to decrypt the files. The full specification for creating WinZip-compatible AES-encrypted Zip files is published in order to enable other Zip file utility vendors to provide support for the format.
