

# THE BEST RESOURCE FOR DATA SECURITY & DATA COMPRESSION

PKWARE Software Developer Kits (SDKs) have been the developer's choice for over 20 years. The PKWARE SDK product family combines data security and data compression tools to enable the development of applications that provide secure and efficient file transfer and storage.

Built on the ZIP file format, PKWARE provides developers the ability to leverage platform interoperability through the use of one of the most widely used file formats in the world. Applications developed with PKWARE's SDKs are compatible with the full line of PKWARE products - Windows desktop and server, UNIX® and Linux® server, i5/OS® midrange, and z/OS® mainframe.

## THE ORIGINAL ZIP

As the inventor and continuing innovator of the ZIP standard, PKWARE, Inc. is a global technology leader known around the world as the expert in data compression. PKWARE invented the ZIP file format in 1989 and has been extending its compression capabilities to make it the most interoperable, scalable utility available.

With the launch of SecureZIP in 2005, PKWARE successfully entered the data security marketplace, combining ZIP compression and strong encryption to deliver a data-centric security solution. Today, SecureZIP and PKZIP SDKs are used by thousands of developers worldwide.

## UNPRECEDENTED POWER

With direct access to the SDK libraries via a robust interface, developers can create low overhead applications built for speed. And because it's available in C/C++, .NET, or Java, developers can integrate compression, zipping, and/or encryption capabilities using many different development tools.

Professional technical support and a complete online documentation system provide quick and easy answers to potential integration questions.

## FLEXIBLE SECURITY CHOICES

A broad variety of security features enable developers to select the passphrase or digital certificate method that best serves their needs. Supported encryption methods include: AES (256-, 192-, and 128-bit), 3DES (168- and 112-bit), DES (56-bit), RC4 (168-,

64-, and 40-bit), and RC2 (168-, 64-, and 40-bit). Decryption options include: AES (256-, 192-, and 128-bit), 3DES (168- and 112-bit), DES (56-bit), RC2 (128-, 60-, and 40-bit), and RC4 (128-, 60-, and 40-bit).

Additionally, digital signature support using X.509 digital certificates is available to ensure authenticity and data integrity.

## PKWARE SOFTWARE DEVELOPER KITS PRODUCT FAMILY

- Data Compression Library: PKWARE's traditional library enables basic data compression when ZIP file format is not required.
- PKZIP Toolkit for Windows: Provides powerful data compression for creating archives in the industry-standard ZIP format.
- SecureZIP Toolkit for Windows and Java: Combines data compression and data security to secure files with passphrases or X.509 digital certificates.

## DATA COMPRESSION LIBRARY

The PKWARE data compression library (DCL) for Windows provides a high-speed interface for compressing and decompressing data files within applications, when ZIP archiving is not required. DCL compression generally reduces typical data file sizes by 50% or more, while reducing some types of ASCII and database files by as much as 90%.

## FEATURES AND BENEFITS

### Enhanced Security Capabilities

Encryption & authentication capabilities, including AES and 3DES passphrase- or certificate-based encryption, as well as digital signature support for data integrity.\*

### Additional Flexibility & Efficiency

PKWARE SDKs offer specialized enhancements to enable flexibility and efficiency for applications.

### Ensure Sensitive Information

#### Remains Secure

Filename encryption to ensure no sensitive information is exposed without the appropriate passphrase or digital certificate.\*

### Automatic Retrieval & Application of Digital Certificates

Support for LDAP-compliant interfaces allows for automatic retrieval and application of digital certificates for encryption.\*

### Ensure Deleted Files are not Recoverable

Shred files using DOD 5220 standard, providing an additional layer of configurability to ensure deleted files are not recoverable. §

### Uses FIPS validated libraries\*

\* Feature available in SecureZIP Toolkit for Windows & Java

§ Feature not available in SecureZIP Toolkit for Java

PKWARE's well-known DCL has been available for over two decades with the traditional DCL implode compression algorithm. The Windows DCL includes support for the DEFLATE and DEFLATE64 algorithms. There are no limits to the types of data that can be processed with the PKWARE DCL algorithms, allowing compression and decompression to and from memory, media, serial ports, or any other device that an application can address.

## PKZIP TOOLKIT FOR WINDOWS

The PKZIP Toolkit for Windows includes the capabilities of the DCL and adds the ability to create different types of data file archives, including ZIP archives, as well as extracting data from a large selection of archive types. The PKZIP Toolkit also exposes many of the advanced archive management functions previously only available with PKWARE's end-user applications. In addition to ZIP archives, the PKZIP Toolkit can create BZIP2 and GZIP compressed file archives, as well as TAR, UUENCODE, and XXENCODE archives. Extraction capabilities include all these types, as well as CAB, BinHex, ARJ, LZH, and RAR archives. Additionally, ZIP files created with the PKZIP Toolkit can be extracted on any PKWARE supported platform.

## SECUREZIP TOOLKIT FOR WINDOWS

The SecureZIP Toolkit for Windows includes all the data compression capabilities of the PKZIP Toolkit as well as advanced ZIP archive management and strong data security functionality. The SecureZIP Toolkit allows Windows applications to leverage Microsoft's Crypto API, which is included in all major versions of Windows operating systems, as well as security capabilities that enable applications to encrypt files using a wide range of industry and government standard symmetric key algorithms including 3DES and AES. The SecureZIP Toolkit utilizes validated cryptographic modules for protecting data when run in FIPS mode.

Files can be encrypted using either passphrases or X.509 digital certificates. Digital signature capabilities are also available to help ensure file authenticity, integrity, and to support non-repudiation. Support for LDAP-compliant interfaces allows for the automatic location and retrieval of X.509 digital certificates for data encryption. Developers can also create self-extracting ZIP files with the SecureZIP Toolkit, allowing users to automatically decompress and extract files. Enterprise edition supports the OpenPGP encryption format and allows adding digital timestamps to .ZIP files.

## SECUREZIP TOOLKIT FOR JAVA

The SecureZIP Toolkit for Java includes advanced ZIP archive management & strong data security functionality. The SecureZIP Toolkit for Java allows applications on multiple platforms to encrypt files using a wide range of industry and government standard symmetric key algorithms including 3DES and AES. Files can be encrypted using passphrases, X.509-compliant digital certificates, or OpenPGP keys, providing the flexibility to work within different security environments. Digital signature capabilities are also available to help ensure file authenticity, integrity, and to support non-repudiation. Additionally, support for LDAP-compliant interfaces allows for the automatic location and retrieval of X.509 certificates for data encryption. The SecureZIP Toolkit utilizes validated cryptographic modules for protecting data when run in FIPS mode.

## ABOUT PKWARE, INC.

The PKWARE Solution is the only complete system for reducing, moving, storing and securing data across the extended enterprise, both internally and externally, from mainframes to servers to desktops and into the cloud. Used by more than 30,000 corporate entities and over 200 government agencies, PKWARE is the industry standard for portability, ensuring data security and cross-platform computing. PKWARE, a privately held company, is based in Milwaukee, WI with additional offices in New York and the United Kingdom.

**For additional information and resources, please visit our website:**  
[www.pkware.com](http://www.pkware.com)

**To speak with a PKWARE Specialist in the U.S., call:** 414-221-0135

**To speak with a PKWARE Specialist outside the U.S., visit:**

<http://comm.pkware.com/software-developer-product-inquiry.html>

## SYSTEM REQUIREMENTS

### PKZIP/SECUREZIP TOOLKIT

Windows XP SP3, Vista, Windows 7, Windows 8, Windows Server 2003, Windows Server 2008, Windows Server 2012; Microsoft Visual Studio 2010 or higher

256 MB RAM (on Windows XP)  
512 MB RAM (on Vista and higher)

50 MB of free HD space

The PKWARE SDK runs on all major Windows platforms and requires minimal system resources.

### PKWARE DCL

Windows XP SP3 or higher recommended

64 MB RAM

5 MB of free HD space

Visual Studio 2005 or higher recommended

### SecureZIP Toolkit for Java

JVM 6 or higher