

## digestIT™ 2004 for Windows 98, ME, 2000, and XP

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digestIT 2004 is the latest version of the digestIT series of message digest applications. It keeps the same right-click interface and multiple-file support from digestIT 2003 while adding a brand new feature: digest verification. The same application that many have come to know has gotten better and it will continue to improve in the future as new message digests are added.

### Message Digests

A message digest is a number derived from a string of data. The data is broken up into blocks of a certain size and run through an algorithm until a final result is calculated. The larger the file, the longer it takes to calculate the checksum.

Message digests come in handy because they allow for the verification of a file. If a single bit inside a file changes, the message digest will typically show a drastic change. This allows you to check that the download was successful and that you have the file the server says should be available. This is very important with security applications and update patches for operating systems.

There are many message digest algorithms available, ranging from the simple CRC-32 (32-bit cyclic redundancy check) to the various types of SHA (Secure Hash Algorithm) digest algorithms. The most popular is the 128-bit MD5 algorithm, written by Ron Rivest. SHA comes in several varieties, starting with the 160-bit SHA-1 and moving to the 512-bit SHA-512 (as defined in FIPS 180-2).

### Features

- Integration into Windows interface to provide an easy-to-use right-click interface
- Multiple file support when calculating message digests
- Ability to save the digest list to a file or copy to the clipboard
- Ability to verify a single file against a known message digest value
- Support for MD5 and SHA-1 message digest algorithms

### Requirements

- Windows 98/ME, Windows 2000, or Windows XP
- Administrator privileges required for Windows 2000 and Windows XP

As of this version, Windows 95 and Windows NT 4.0 are no longer supported. This application may work on those operating systems, but that cannot be guaranteed.

### Using digestIT 2004

Using digestIT is very simple and straightforward. After the program is installed, simply right-click on a file and select the "digestIT 2004" menu option. On the side menu, select to either calculate the MD5 or SHA-1 checksum or verify an MD5 or SHA-1 checksum.

If you are calculating a checksum, the results will be displayed in a window and you will have the option of saving it to a file or copying it to the clipboard. You can also highlight what you want and copy that using the standard keyboard shortcuts.

If you are verifying a checksum, digestIT will ask you for the checksum to verify against. It will first check the checksum to make sure that it is all hexadecimal and of the proper length. You can only verify one file at a time. It will calculate the checksum for the file and tell you whether it matches or not.

### Legal Information

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### **Development Information**

This product was developed under Windows 98 Second Edition using Visual C++ 6.0 Professional Edition, Service Pack 5. The MD5 library was written by Colin Plumb and is public domain. The SHA-1 library was written by the author of this product and is available upon request.

### **Contact Information**

If you have any questions, comments, or concerns regarding digestIT, please feel free to contact the author at [ken\\_ballard@hotmail.com](mailto:ken_ballard@hotmail.com). If you have any feature suggestions, feel free to contact the author.

Donations are gladly accepted and will help fund future development of digestIT. For information on how to make a donation, see the product's home page at <http://www.geocities.com/ballarke/Applications/digestIT2004/>