

# libmd5 Overview

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# 1 Library Overview

## Overview

libmd5 is a library that is used to generate a digest value using the MD5 Message-Digest Algorithm format as defined by RFC1321. It can be used to detect data corruption and prevent data tampering through the use of Keyed-Hashing for Message Authentication (HMAC).

## Files

The following files are required to use libmd5.

Filename	Description
libmd5.h	Header file
libSceMd5.a	Static link library file
libSceMd5_stub.a	Stub library file
libSceMd5_stub_weak.a	weak import stub library file
libmd5.suprx	PRX module file

## 2 Usage Procedure

### Basic Usage Procedure

#### (1) MD5 digest value computation (comprehensive method)

No specific initialization is required to use libmd5.

```
SceUChar8 digest[SCE_MD5_DIGEST_SIZE];  
  
sceMd5Digest(plaintext, length, digest);
```

You can compute the digest value simply by calling the `sceMd5Digest()` function, as shown above.

#### (2) MD5 digest computation (divided method)

You can compute the digest value for a large amount of data by breaking up the calculation of the hash value as shown below.

```
SceMd5Context ctx;  
SceUChar8 digest[SCE_MD5_DIGEST_SIZE];  
  
sceMd5BlockInit(&ctx);  
sceMd5BlockUpdate(&ctx, plain1, len1);  
sceMd5BlockUpdate(&ctx, plain2, len2);  
sceMd5BlockUpdate(&ctx, plain3, len3);  
:  
: Repeat an arbitrary number of times  
sceMd5BlockResult(&ctx, digest);
```

To use this method, first call the `sceMd5BlockInit()` function to initialize the `SceMd5Context` structure. Then, call the `sceMd5BlockUpdate()` function an arbitrary number of times. Finally, call the `sceMd5BlockResult()` function to compute the digest value.