

# NSMutableData

Inherits From:	NSData : NSObject
Conforms To:	NSCoding NSCopying NSMutableCopying NSObject
Declared In:	foundation/NSData.h foundation/NSSerialization.h

## Allocating and Initializing a Mutable Data Object

+ (id) <b>allocWithZone:</b> (NSZone *) <i>zone</i>	Creates and returns an uninitialized mutable data object from <i>zone</i> .
+ (id) <b>dataWithCapacity:</b> (unsigned int) <i>numBytes</i>	Creates and returns a mutable data object, initially allocating enough memory to hold <i>numBytes</i> bytes.
+ (id) <b>dataWithLength:</b> (unsigned int) <i>length</i>	Creates and returns a mutable data object, giving it enough memory to hold <i>length</i> bytes. Fills the object with zeroes up to <i>length</i> .
- (id) <b>initWithCapacity:</b> (unsigned int) <i>capacity</i>	Initializes a newly allocated mutable data object, giving it enough memory to hold <i>capacity</i> bytes. Sets the length of the data object to 0.
- (id) <b>initWithLength:</b> (unsigned int) <i>length</i>	Initializes a newly allocated mutable data object, giving it enough memory to hold <i>length</i> bytes. Fills the object with zeroes up to <i>length</i> .

## Adjusting Capacity

- (void)**increaseLengthBy**:(unsigned int)*extraLength* Increases the length of a mutable data object by *extraLength* zero-filled bytes.
- (void)**setLength**:(unsigned int)*length* Extends or truncates the length of a mutable data object by *length* bytes. If the mutable data object is extended, the additional bytes are zero-filled.
- (void \*)**mutableBytes** Returns a pointer to the bytes in a mutable data object, enabling you to modify the bytes.

## Appending Data

- (void)**appendBytes**:(const void \*)*bytes*  
**length**:(unsigned int)*length* Appends *length* bytes to a mutable data object from the buffer *bytes*.
- (void)**appendData**:(NSData \*)*other* Appends the contents of the data object *other* to the receiver.

## Modifying Data

- (void)**replaceBytesInRange**:(NSRange)*aRange*  
**withBytes**:(const void \*)*bytes* Replaces the receiver's bytes located in *aRange* with *bytes*. *aRange* must specify a range within the receiver's data; otherwise, an NSRangeException error is raised.
- (void)**resetBytesInRange**:(NSRange)*aRange* Replaces the receiver's bytes located in *aRange* with zeros. If *aRange* isn't within the receiver's range of bytes, an NSRangeException error is raised.

## Serializing Data

- (void)**serializeAlignedBytesLength**:(unsigned int)*length*

- (void)**serializeDataAt:**(const void \*)*data*  
**ofObjCType:**(const char \*)*type*  
**context:**(id <NSObjCTypeSerializationCallback>)

- (void)**serializeInt:**(int)*value*  
- (void)**serializeInt:**(int)*value*  
**atIndex:**(unsigned int)*location*  
- (void)**serializeInts:**(int \*)*intBuffer*  
**count:**(unsigned int)*numInts*  
- (void)**serializeInts:**(int \*)*intBuffer*  
**count:**(unsigned int)*numInts*  
**atIndex:**(unsigned int)*location*

Prepares bytes for an **appendBytes:length:** invocation by serializing them. If the *length* of the bytes will cause extension past the page size, this method encodes header information, creating a hole so that all bytes in the data object are aligned on page boundaries.

Serializes whatever data element is referenced by *data*, interpreting it by the Objective C type specifier *type*.

*callback* If the data element is an object other than an instance of NSDictionary, NSArray, NSString, or NSData, further definition of the object can occur through a callback from object *callback*. All Objective C types are currently supported except **unions** and **void \***. Pointers refer to a single item.

Serializes the integer *value* by encoding it as a character representation.

Serializes the integer *value* by encoding it as a character representation and replaces the encoded value at the specified *location* in the data.

Serializes *numInts* count of integers in *intBuffer* by encoding each integer as a character representation.

Serializes *numInts* count of integers in *intBuffer* by encoding each integer, starting at the specified *location*, and replacing each corresponding integer encoding serially.