🏠   WiX managed SDK   WixToolset.Dtf.Compression.Zip namespace   CrcStream Class

CrcStream Class

Wraps a source stream and calcaluates a CRC over all bytes that are read or written.

Methods

Method	Description
Close()	Closes the underlying stream.
Flush()	Flushes the source stream.
Read(buffer, offset, count)	Reads a sequence of bytes from the source stream and advances the position within the stream by the number of bytes read.
Seek(offset, origin)	Sets the position within the source stream.
SetLength(value)	Sets the length of the source stream.
Write(buffer, offset, count)	Writes a sequence of bytes to the source stream and advances the current position within this stream by the number of bytes written.

Properties

Property	Description
CanRead	Gets a value indicating whether the source stream supports reading.
CanSeek	Gets a value indicating whether the source stream supports seeking.
CanWrite	Gets a value indicating whether the source stream supports writing.
Crc	Gets the current CRC over all bytes that have been read or written since this instance was created.
Length	Gets the length of the source stream.
Position	Gets or sets the position of the source stream.
Source	Gets the underlying stream that this stream reads from or writes to.

Remarks

The CRC algorithm matches that used in the standard ZIP file format. `WixToolset.Dtf.Compression.Zip.dll` version `4.0.2+644ed0118bae1aa885bb6cc906dc6c0b904de4d9`

Close() Method

Closes the underlying stream.

Declaration

```
public void Close()
```

Flush() Method

Flushes the source stream.

Declaration

```
public void Flush()
```

Read(buffer, offset, count) Method

Reads a sequence of bytes from the source stream and advances the position within the stream by the number of bytes read.

Declaration

```
public int Read(
    System.Byte[] buffer,
    int offset,
```

```
    int count
)
```

Parameters

Parameter	Type	Description
buffer	System.Byte[]	An array of bytes. When this method returns, the buffer contains the specified byte array with the values between offset and (offset + count - 1) replaced by the bytes read from the current source.
offset	int	The zero-based byte offset in buffer at which to begin storing the data read from the current stream.
count	int	The maximum number of bytes to be read from the current stream.

Return value

`int` The total number of bytes read into the buffer. This can be less than the number of bytes requested if that many bytes are not currently available, or zero (0) if the end of the stream has been reached.

Seek(offset, origin) Method

Sets the position within the source stream.

Declaration

```
public System.Int64 Seek(
    System.Int64 offset,
    System.IO.SeekOrigin origin
)
```

Parameters

Parameter	Type	Description
offset	System.Int64	A byte offset relative to the origin parameter.
origin	System.IO.SeekOrigin	A value of type SeekOrigin indicating the reference point used to obtain the new position.

Return value

`System.Int64` The new position within the source stream.

Remarks

Note the CRC is only calculated over bytes that are actually read or written, so any bytes skipped by seeking will not contribute to the CRC.

SetLength(value) Method

Sets the length of the source stream.

Declaration

```
public void SetLength(
    System.Int64 value
)
```

Parameters

Parameter	Type	Description
value	System.Int64	The desired length of the stream in bytes.

Write(buffer, offset, count) Method

Writes a sequence of bytes to the source stream and advances the current position within this stream by the number of bytes written.

Declaration

```
public void Write(
```

```
    System.Byte[] buffer,
    int offset,
    int count
)
```

Parameters

Parameter	Type	Description
buffer	System.Byte[]	An array of bytes. This method copies count bytes from buffer to the current stream.
offset	int	The zero-based byte offset in buffer at which to begin copying bytes to the current stream.
count	int	The number of bytes to be written to the current stream.

CanRead Property

Gets a value indicating whether the source stream supports reading.

Declaration

```
public bool CanRead { get; set; }
```

CanSeek Property

Gets a value indicating whether the source stream supports seeking.

Declaration

```
public bool CanSeek { get; set; }
```

CanWrite Property

Gets a value indicating whether the source stream supports writing.

Declaration

```
public bool CanWrite { get; set; }
```

Crc Property

Gets the current CRC over all bytes that have been read or written since this instance was created.

Declaration

```
public System.UInt32 Crc { get; set; }
```

Gets the length of the source stream.

Declaration

```
public System.Int64 Length { get; set; }
```

Position Property

Gets or sets the position of the source stream.

Declaration

```
public System.Int64 Position { get; set; }
```

Source Property

Gets the underlying stream that this stream reads from or writes to.

Declaration

```csharp
public System.IO.Stream Source { get; set; }
```