

# BackupDataInputStream

```
public class BackupDataInputStream
extends InputStream (https://developer.android.com/reference/java/io/InputStream.html)

java.lang.Object (https://developer.android.com/reference/java/lang/Object.html)
↳ java.io.InputStream (https://developer.android.com/reference/java/io/InputStream.html)
    ↳ android.app.backup.BackupDataInputStream
```

added in API level 8  
(https://developer.android.com/guide/topics/manifest/uses-sdk-element.html#ApiLevels)  
Summary: Methods (#pubmethods) | Inherited Methods (#inhmethods) | [Expand All] (#)

Provides an `InputStream` (https://developer.android.com/reference/java/io/InputStream.html)-like interface for accessing an entity's data during a restore operation. Used by `BackupHelper` (https://developer.android.com/reference/android/app/backup/BackupHelper.html) classes within the `BackupAgentHelper` (https://developer.android.com/reference/android/app/backup/BackupAgentHelper.html) mechanism.

When `BackupHelper.restoreEntity()` (https://developer.android.com/reference/android/app/backup/BackupHelper.html#restoreEntity(android.app.backup.BackupDataInputStream)) is called, the current entity's header has already been read from the underlying `BackupDataInput` (https://developer.android.com/reference/android/app/backup/BackupDataInput.html). The entity's key string and total data size are available through this class's `getKey()` (https://developer.android.com/reference/android/app/backup/BackupDataInputStream.html#getKey()) and `size()` (https://developer.android.com/reference/android/app/backup/BackupDataInputStream.html#size()) methods, respectively.

**Note:** The caller should take care not to seek or close the underlying data source, nor read more than `size()` (https://developer.android.com/reference/android/app/backup/BackupDataInputStream.html#size()) bytes from the stream.

See also:

`BackupAgentHelper` (https://developer.android.com/reference/android/app/backup/BackupAgentHelper.html)

`BackupHelper` (https://developer.android.com/reference/android/app/backup/BackupHelper.html)

## Summary

Public methods	
<b>String</b> (https://developer.android.com/reference/java/lang/String.html)	<b>getKey</b> (https://developer.android.com/reference/android/app/backup/BackupDataInputStream.html#getKey()) Report the key string associated with this entity within the backup data set.
<b>int</b>	<b>read</b> (https://developer.android.com/reference/android/app/backup/BackupDataInputStream.html#read()) Read one byte of entity data from the stream, returning it as an integer value.
<b>int</b>	<b>read</b> (https://developer.android.com/reference/android/app/backup/BackupDataInputStream.html#read(byte[],int,int))(byte[] b, int offset, int size) Read up to <code>size</code> bytes of data into a byte array, beginning at position <code>offset</code> within the array.
<b>int</b>	<b>read</b> (https://developer.android.com/reference/android/app/backup/BackupDataInputStream.html#read(byte[]))(byte[] b) Read enough entity data into a byte array to fill the array.
<b>int</b>	<b>size</b> (https://developer.android.com/reference/android/app/backup/BackupDataInputStream.html#size()) Report the total number of bytes of data available for the current entity.

Inherited methods	
▼ (#)From class <b>java.io.InputStream</b> (https://developer.android.com/reference/java/io/InputStream.html)	
▼ (#)From class <b>java.lang.Object</b> (https://developer.android.com/reference/java/lang/Object.html)	
▼ (#)From interface <b>java.io.Closeable</b> (https://developer.android.com/reference/java/io/Closeable.html)	
▼ (#)From interface <b>java.lang.AutoCloseable</b> (https://developer.android.com/reference/java/lang/AutoCloseable.html)	

# Public methods

## getKey

added in API level 8 (<https://developer.android.com/guide/topics/manifest/uses-sdk-element.html#ApiLevels>)

String (<https://developer.android.com/reference/java/lang/String.html>) getKey ()

Report the key string associated with this entity within the backup data set.

Returns	
<b>String</b>  ( <a href="https://developer.android.com/reference/java/lang/String.html">https://developer.android.com/reference/java/lang/String.html</a> )	The key string for this entity, equivalent to calling <b>getKey()</b>  ( <a href="https://developer.android.com/reference/android/app/backup/BackupDataInput.html#getKey()">https://developer.android.com/reference/android/app/backup/BackupDataInput.html#getKey()</a> ) on the underlying <b>BackupDataInput</b> ( <a href="https://developer.android.com/reference/android/app/backup/BackupDataInput.html">https://developer.android.com/reference/android/app/backup/BackupDataInput.html</a> ).

## read

added in API level 8 (<https://developer.android.com/guide/topics/manifest/uses-sdk-element.html#ApiLevels>)

int read ()

Read one byte of entity data from the stream, returning it as an integer value. If more than **size()** ([https://developer.android.com/reference/android/app/backup/BackupDataInputStream.html#size\(\)](https://developer.android.com/reference/android/app/backup/BackupDataInputStream.html#size())) bytes of data are read from the stream, the output of this method is undefined.

Returns	
<b>int</b>	The byte read, or undefined if the end of the stream has been reached.

Throws	
<b>IOException</b> ( <a href="https://developer.android.com/reference/java/io/IOException.html">https://developer.android.com/reference/java/io/IOException.html</a> )	

## read

added in API level 8 (<https://developer.android.com/guide/topics/manifest/uses-sdk-element.html#ApiLevels>)

int read (byte[] b,  
          int offset,  
          int size)

Read up to **size** bytes of data into a byte array, beginning at position **offset** within the array.

Parameters	
<b>b</b>	<b>byte:</b> Byte array into which the data will be read
<b>offset</b>	<b>int:</b> The data will be stored in <b>b</b> beginning at this index within the array.
<b>size</b>	<b>int:</b> The number of bytes to read in this operation. If insufficient data exists within the entity to fulfill this request, only as much data will be read as is available.

Returns	
<b>int</b>	The number of bytes of data read, or zero if all of the entity's data has already been read.

Throws	
<b>IOException</b> ( <a href="https://developer.android.com/reference/java/io/IOException.html">https://developer.android.com/reference/java/io/IOException.html</a> )	

## read

added in API level 8 (<https://developer.android.com/guide/topics/manifest/uses-sdk-element.html#ApiLevels>)

```
int read (byte[] b)
```

Read enough entity data into a byte array to fill the array.

Parameters	
<b>b</b>	<b>byte:</b> Byte array to fill with data from the stream. If the stream does not have sufficient data to fill the array, then the contents of the remainder of the array will be undefined.
Returns	
<b>int</b>	The number of bytes of data read, or zero if all of the entity's data has already been read.
Throws	
<b>IOException</b> ( <a href="https://developer.android.com/reference/java/io/IOException.html">https://developer.android.com/reference/java/io/IOException.html</a> )	

## size

added in API level 8 (<https://developer.android.com/guide/topics/manifest/uses-sdk-element.html#ApiLevels>)

```
int size ()
```

Report the total number of bytes of data available for the current entity.

Returns	
<b>int</b>	The number of data bytes available, equivalent to calling <code>getDataSize()</code> ( <a href="https://developer.android.com/reference/android/app/backup/BackupDataInput.html#getDataSize()">https://developer.android.com/reference/android/app/backup/BackupDataInput.html#getDataSize()</a> ) on the underlying <code>BackupDataInput</code> ( <a href="https://developer.android.com/reference/android/app/backup/BackupDataInput.html">https://developer.android.com/reference/android/app/backup/BackupDataInput.html</a> ).

