

Android Disconnect Reasons

Disconnect Cause

Describes the cause of a disconnected call. This always includes a code describing the generic cause of the disconnect. Optionally, it may include a label and/or description to display to the user. It is the responsibility of the [ConnectionService](#) to provide localized versions of the label and description. It also may contain a reason for the disconnect, which is intended for logging and not for display to the user.

Summary

Constants

int [ANSWERED_ELSEWHERE](#)

Disconnected because the user did not locally answer the incoming call, but it was answered on another device where the call was ringing.

int [BUSY](#)

Disconnected because the other party was busy.

int [CALL_PULLED](#)

Disconnected because the call was pulled from the current device to another device.

int [CANCELED](#)

Disconnected because it has been canceled.

int [CONNECTION_MANAGER_NOT_SUPPORTED](#)

Disconnected because the connection manager did not support the call.

int [ERROR](#)

Disconnected because there was an error, such as a problem with the network.

int [LOCAL](#)

Disconnected because of a local user-initiated action, such as hanging up.

int [MISSED](#)

Disconnected because there was no response to an incoming call.

int [OTHER](#)

Disconnected for reason not described by other disconnect codes.

int [REJECTED](#)

Disconnected because the user rejected an incoming call.

int [REMOTE](#)

Disconnected because of a remote user-initiated action, such as the other party hanging up up.

int [RESTRICTED](#)

Disconnected because of a restriction on placing the call, such as dialing in airplane mode.

int [UNKNOWN](#)

Disconnected because of an unknown or unspecified reason.

Inherited constants

From interface [android.os.Parcelable](#)

Fields

public static final [Creator](#)<[DisconnectCause](#)>

[CREATOR](#)

Public constructors

[DisconnectCause](#)(int code)

Creates a new DisconnectCause.

[DisconnectCause](#)(int code, [String](#) reason)

Creates a new DisconnectCause.

[DisconnectCause](#)(int code, [CharSequence](#) label, [CharSequence](#) description, [String](#) reason)

Creates a new DisconnectCause.

[DisconnectCause](#)(int code, [CharSequence](#) label, [CharSequence](#) description, [String](#) reason, int toneToPlay)

Creates a new DisconnectCause.

Public methods

int [describeContents](#)()

Describe the kinds of special objects contained in this Parcelable instance's marshaled representation.

boolean [equals](#)([Object](#) o)

Indicates whether some other object is "equal to" this one.

int [getCode\(\)](#)

Returns the code for the reason for this disconnect.

[CharSequence](#) [getDescription\(\)](#)

Returns a description which explains the reason for the disconnect cause and is for display in the user interface.

[CharSequence](#) [getLabel\(\)](#)

Returns a short label which explains the reason for the disconnect cause and is for display in the user interface.

[String](#) [getReason\(\)](#)

Returns an explanation of the reason for the disconnect.

int [getTone\(\)](#)

Returns the tone to play when disconnected.

int [hashCode\(\)](#)

Returns a hash code value for the object.

[String](#) [toString\(\)](#)

Returns a string representation of the object.

void [writeToParcel\(Parcel destination, int flags\)](#)

Flatten this object in to a Parcel.

Inherited methods

From class [java.lang.Object](#)

Constants

ANSWERED_ELSEWHERE

Added in [API level 25](#)

```
public static final int ANSWERED_ELSEWHERE
```

Disconnected because the user did not locally answer the incoming call, but it was answered on another device where the call was ringing.

Constant Value: 11 (0x0000000b)

BUSY

Added in [API level 23](#)

```
public static final int BUSY
```

Disconnected because the other party was busy.

Constant Value: 7 (0x00000007)

CALL_PULLED

Added in [API level 25](#)

```
public static final int CALL_PULLED
```

Disconnected because the call was pulled from the current device to another device.

Constant Value: 12 (0x0000000c)

CANCELED

Added in [API level 23](#)

```
public static final int CANCELED
```

Disconnected because it has been canceled.

Constant Value: 4 (0x00000004)

CONNECTION_MANAGER_NOT_SUPPORTED

Added in [API level 23](#)

```
public static final int CONNECTION_MANAGER_NOT_SUPPORTED
```

Disconnected because the connection manager did not support the call. The call will be tried again without a connection manager. See [PhoneAccount#CAPABILITY_CONNECTION_MANAGER](#).

Constant Value: 10 (0x0000000a)

ERROR

Added in [API level 23](#)

```
public static final int ERROR
```

Disconnected because there was an error, such as a problem with the network.

Constant Value: 1 (0x00000001)

LOCAL

Added in [API level 23](#)

```
public static final int LOCAL
```

Disconnected because of a local user-initiated action, such as hanging up.

Constant Value: 2 (0x00000002)

MISSED

Added in [API level 23](#)

```
public static final int MISSED
```

Disconnected because there was no response to an incoming call.

Constant Value: 5 (0x00000005)

OTHER

Added in [API level 23](#)

public static final int OTHER

Disconnected for reason not described by other disconnect codes.

Constant Value: 9 (0x00000009)

REJECTED

Added in [API level 23](#)

public static final int REJECTED

Disconnected because the user rejected an incoming call.

Constant Value: 6 (0x00000006)

REMOTE

Added in [API level 23](#)

public static final int REMOTE

Disconnected because of a remote user-initiated action, such as the other party hanging up up.

Constant Value: 3 (0x00000003)

RESTRICTED

Added in [API level 23](#)

public static final int RESTRICTED

Disconnected because of a restriction on placing the call, such as dialing in airplane mode.

Constant Value: 8 (0x00000008)

UNKNOWN

Added in [API level 23](#)

public static final int UNKNOWN

Disconnected because of an unknown or unspecified reason.

Constant Value: 0 (0x00000000)

Fields

CREATOR

Added in [API level 23](#)

```
public static final Creator<DisconnectCause> CREATOR
```

Public constructors

DisconnectCause

Added in [API level 23](#)

```
public DisconnectCause (int code)
```

Creates a new DisconnectCause.

Parameters

code int: The code for the disconnect cause.

DisconnectCause

Added in [API level 23](#)

```
public DisconnectCause (int code,  
                        String reason)
```

Creates a new DisconnectCause.

[CharSequence](#) description,

[String](#) reason,

int toneToPlay)

Creates a new DisconnectCause.

Parameters

code int: The code for the disconnect cause.

label CharSequence: The localized label to show to the user to explain the disconnect.

description CharSequence: The localized description to show to the user to explain the disconnect.

reason String: The reason for the disconnect.

toneToPlay int: The tone to play on disconnect, as defined in [ToneGenerator](#).

Public methods

describeContents

Added in [API level 23](#)

```
public int describeContents ()
```

Describe the kinds of special objects contained in this Parcelable instance's marshaled representation. For example, if the object will include a file descriptor in the output of [writeToParcel\(android.os.Parcel, int\)](#), the return value of this method must include the [CONTENTS_FILE_DESCRIPTOR](#) bit.

Returns

int a bitmask indicating the set of special object types marshaled by this Parcelable object instance. Value is either 0 or [CONTENTS_FILE_DESCRIPTOR](#)

equals

Added in [API level 23](#)

```
public boolean equals (Object o)
```

Indicates whether some other object is "equal to" this one.

The equals method implements an equivalence relation on non-null object references:

It is reflexive: for any non-null reference value x, x.equals(x) should return true.

It is symmetric: for any non-null reference values x and y, x.equals(y) should return true if and only if y.equals(x) returns true.

It is transitive: for any non-null reference values x, y, and z, if x.equals(y) returns true and y.equals(z) returns true, then x.equals(z) should return true.

It is consistent: for any non-null reference values x and y, multiple invocations of x.equals(y) consistently return true or consistently return false, provided no information used in equals comparisons on the objects is modified.

For any non-null reference value x, x.equals(null) should return false.

The equals method for class Object implements the most discriminating possible equivalence relation on objects; that is, for any non-null reference values x and y, this method returns true if and only if x and y refer to the same object (x == y has the value true).

Note that it is generally necessary to override the hashCode method whenever this method is overridden, so as to maintain the general contract for the hashCode method, which states that equal objects must have equal hash codes.

Parameters

o Object: the reference object with which to compare.

Returns

boolean true if this object is the same as the obj argument; false otherwise.

getCode

Added in [API level 23](#)

```
public int getCode ()
```

Returns the code for the reason for this disconnect.

Returns

int The disconnect code.

getDescription

Added in [API level 23](#)

```
public CharSequence getDescription ()
```

Returns a description which explains the reason for the disconnect cause and is for display in the user interface. This optional text is generally a longer and more descriptive version of [getLabel\(\)](#), however it can exist even if [getLabel\(\)](#) is empty. The In-Call UI should display this relatively prominently; the traditional implementation displays this as an alert dialog. The [ConnectionService](#) is responsible for providing and localizing this message. If there is no string provided, returns null.

Returns

[CharSequence](#) The disconnect description.

getLabel

Added in [API level 23](#)

```
public CharSequence getLabel ()
```

Returns a short label which explains the reason for the disconnect cause and is for display in the user interface. If not null, it is expected that the In-Call UI should display this text where it would normally display the call state ("Dialing", "Disconnected") and is therefore expected to be relatively small. The [ConnectionService](#) is responsible for providing and localizing this label. If there is no string provided, returns null.

Returns

[CharSequence](#) The disconnect label.

getReason

Added in [API level 23](#)

```
public String getReason ()
```

Returns an explanation of the reason for the disconnect. This is not intended for display to the user and is used mainly for logging.

Returns

[String](#) The disconnect reason.

getTone

Added in [API level 23](#)

```
public int getTone ()
```

Returns the tone to play when disconnected.

Returns

int the tone as defined in [ToneGenerator](#) to play when disconnected.

hashCode

Added in [API level 23](#)

```
public int hashCode ()
```

Returns a hash code value for the object. This method is supported for the benefit of hash tables such as those provided by [HashMap](#).

The general contract of hashCode is:

Whenever it is invoked on the same object more than once during an execution of a Java application, the hashCode method must consistently return the same integer, provided no information used in equals comparisons on the object is modified. This integer need not remain consistent from one execution of an application to another execution of the same application.

If two objects are equal according to the equals(Object) method, then calling the hashCode method on each of the two objects must produce the same integer result.

It is not required that if two objects are unequal according to the [equals\(java.lang.Object\)](#) method, then calling the hashCode method on each of the two objects must produce distinct integer results. However, the programmer should be aware that producing distinct integer results for unequal objects may improve the performance of hash tables.

As much as is reasonably practical, the hashCode method defined by class Object does return distinct integers for distinct objects. (This is typically implemented by converting the internal address of the object into an integer, but this implementation technique is not required by the Java™ programming language.)

Returns

int a hash code value for this object.

toString

Added in [API level 23](#)

```
public String toString ()
```

Returns a string representation of the object. In general, the toString method returns a string that "textually represents" this object. The result should be a concise but informative representation that is easy for a person to read. It is recommended that all subclasses override this method.

The toString method for class Object returns a string consisting of the name of the class of which the object is an instance, the at-sign character '@', and the unsigned hexadecimal representation of the hash code of the object. In other words, this method returns a string equal to the value of:

```
getClass().getName() + '@' + Integer.toHexString(hashCode())
```

Returns

[String](#) a string representation of the object.s

writeToParcel

Added in [API level 23](#)

```
public void writeToParcel (Parcel destination,  
                           int flags)
```

Flatten this object in to a Parcel.

Parameters

destination Parcel: The Parcel in which the object should be written.

flags int: Additional flags about how the object should be written. May be 0 or [Parcelable.PARCELABLE_WRITE_RETURN_VALUE](#). Value is either 0 or a combination of [Parcelable.PARCELABLE_WRITE_RETURN_VALUE](#), and [android.os.Parcelable.PARCELABLE_ELIDE_DUPLICATES](#)