| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/SQLException.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/sql/SQLDataException.html)   [**NEXT CLASS**](http://docs.google.com/java/sql/SQLFeatureNotSupportedException.html) | [**FRAMES**](http://docs.google.com/index.html?java/sql/SQLException.html)    [**NO FRAMES**](http://docs.google.com/SQLException.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | [METHOD](#44sinio) |

## **java.sql**

Class SQLException

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.lang.Throwable](http://docs.google.com/java/lang/Throwable.html)  
 [java.lang.Exception](http://docs.google.com/java/lang/Exception.html)  
 **java.sql.SQLException**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html), [Iterable](http://docs.google.com/java/lang/Iterable.html)<[Throwable](http://docs.google.com/java/lang/Throwable.html)> **Direct Known Subclasses:** [BatchUpdateException](http://docs.google.com/java/sql/BatchUpdateException.html), [RowSetWarning](http://docs.google.com/javax/sql/rowset/RowSetWarning.html), [SerialException](http://docs.google.com/javax/sql/rowset/serial/SerialException.html), [SQLClientInfoException](http://docs.google.com/java/sql/SQLClientInfoException.html), [SQLNonTransientException](http://docs.google.com/java/sql/SQLNonTransientException.html), [SQLRecoverableException](http://docs.google.com/java/sql/SQLRecoverableException.html), [SQLTransientException](http://docs.google.com/java/sql/SQLTransientException.html), [SQLWarning](http://docs.google.com/java/sql/SQLWarning.html), [SyncFactoryException](http://docs.google.com/javax/sql/rowset/spi/SyncFactoryException.html), [SyncProviderException](http://docs.google.com/javax/sql/rowset/spi/SyncProviderException.html)

public class **SQLException**extends [Exception](http://docs.google.com/java/lang/Exception.html)implements [Iterable](http://docs.google.com/java/lang/Iterable.html)<[Throwable](http://docs.google.com/java/lang/Throwable.html)>

An exception that provides information on a database access error or other errors.

Each SQLException provides several kinds of information:

* a string describing the error. This is used as the Java Exception message, available via the method getMesasge.
* a "SQLstate" string, which follows either the XOPEN SQLstate conventions or the SQL:2003 conventions. The values of the SQLState string are described in the appropriate spec. The DatabaseMetaData method getSQLStateType can be used to discover whether the driver returns the XOPEN type or the SQL:2003 type.
* an integer error code that is specific to each vendor. Normally this will be the actual error code returned by the underlying database.
* a chain to a next Exception. This can be used to provide additional error information.
* the causal relationship, if any for this SQLException.

**See Also:**[Serialized Form](http://docs.google.com/serialized-form.html#java.sql.SQLException)

| **Constructor Summary** | |
| --- | --- |
| [**SQLException**](http://docs.google.com/java/sql/SQLException.html#SQLException())()            Constructs a SQLException object. |
| [**SQLException**](http://docs.google.com/java/sql/SQLException.html#SQLException(java.lang.String))([String](http://docs.google.com/java/lang/String.html) reason)            Constructs a SQLException object with a given reason. |
| [**SQLException**](http://docs.google.com/java/sql/SQLException.html#SQLException(java.lang.String,%20java.lang.String))([String](http://docs.google.com/java/lang/String.html) reason, [String](http://docs.google.com/java/lang/String.html) SQLState)            Constructs a SQLException object with a given reason and SQLState. |
| [**SQLException**](http://docs.google.com/java/sql/SQLException.html#SQLException(java.lang.String,%20java.lang.String,%20int))([String](http://docs.google.com/java/lang/String.html) reason, [String](http://docs.google.com/java/lang/String.html) SQLState, int vendorCode)            Constructs a SQLException object with a given reason, SQLState and vendorCode. |
| [**SQLException**](http://docs.google.com/java/sql/SQLException.html#SQLException(java.lang.String,%20java.lang.String,%20int,%20java.lang.Throwable))([String](http://docs.google.com/java/lang/String.html) reason, [String](http://docs.google.com/java/lang/String.html) sqlState, int vendorCode, [Throwable](http://docs.google.com/java/lang/Throwable.html) cause)            Constructs a SQLException object with a given reason, SQLState, vendorCode and cause. |
| [**SQLException**](http://docs.google.com/java/sql/SQLException.html#SQLException(java.lang.String,%20java.lang.String,%20java.lang.Throwable))([String](http://docs.google.com/java/lang/String.html) reason, [String](http://docs.google.com/java/lang/String.html) sqlState, [Throwable](http://docs.google.com/java/lang/Throwable.html) cause)            Constructs a SQLException object with a given reason, SQLState and cause. |
| [**SQLException**](http://docs.google.com/java/sql/SQLException.html#SQLException(java.lang.String,%20java.lang.Throwable))([String](http://docs.google.com/java/lang/String.html) reason, [Throwable](http://docs.google.com/java/lang/Throwable.html) cause)            Constructs a SQLException object with a given reason and cause. |
| [**SQLException**](http://docs.google.com/java/sql/SQLException.html#SQLException(java.lang.Throwable))([Throwable](http://docs.google.com/java/lang/Throwable.html) cause)            Constructs a SQLException object with a given cause. |

| **Method Summary** | |
| --- | --- |
| int | [**getErrorCode**](http://docs.google.com/java/sql/SQLException.html#getErrorCode())()            Retrieves the vendor-specific exception code for this SQLException object. |
| [SQLException](http://docs.google.com/java/sql/SQLException.html) | [**getNextException**](http://docs.google.com/java/sql/SQLException.html#getNextException())()            Retrieves the exception chained to this SQLException object by setNextException(SQLException ex). |
| [String](http://docs.google.com/java/lang/String.html) | [**getSQLState**](http://docs.google.com/java/sql/SQLException.html#getSQLState())()            Retrieves the SQLState for this SQLException object. |
| [Iterator](http://docs.google.com/java/util/Iterator.html)<[Throwable](http://docs.google.com/java/lang/Throwable.html)> | [**iterator**](http://docs.google.com/java/sql/SQLException.html#iterator())()            Returns an iterator over the chained SQLExceptions. |
| void | [**setNextException**](http://docs.google.com/java/sql/SQLException.html#setNextException(java.sql.SQLException))([SQLException](http://docs.google.com/java/sql/SQLException.html) ex)            Adds an SQLException object to the end of the chain. |

| **Methods inherited from class java.lang.**[**Throwable**](http://docs.google.com/java/lang/Throwable.html) |
| --- |
| [fillInStackTrace](http://docs.google.com/java/lang/Throwable.html#fillInStackTrace()), [getCause](http://docs.google.com/java/lang/Throwable.html#getCause()), [getLocalizedMessage](http://docs.google.com/java/lang/Throwable.html#getLocalizedMessage()), [getMessage](http://docs.google.com/java/lang/Throwable.html#getMessage()), [getStackTrace](http://docs.google.com/java/lang/Throwable.html#getStackTrace()), [initCause](http://docs.google.com/java/lang/Throwable.html#initCause(java.lang.Throwable)), [printStackTrace](http://docs.google.com/java/lang/Throwable.html#printStackTrace()), [printStackTrace](http://docs.google.com/java/lang/Throwable.html#printStackTrace(java.io.PrintStream)), [printStackTrace](http://docs.google.com/java/lang/Throwable.html#printStackTrace(java.io.PrintWriter)), [setStackTrace](http://docs.google.com/java/lang/Throwable.html#setStackTrace(java.lang.StackTraceElement%5B%5D)), [toString](http://docs.google.com/java/lang/Throwable.html#toString()) |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Constructor Detail** |
| --- |

### SQLException

public **SQLException**([String](http://docs.google.com/java/lang/String.html) reason,  
 [String](http://docs.google.com/java/lang/String.html) SQLState,  
 int vendorCode)

Constructs a SQLException object with a given reason, SQLState and vendorCode. The cause is not initialized, and may subsequently be initialized by a call to the [Throwable.initCause(java.lang.Throwable)](http://docs.google.com/java/lang/Throwable.html#initCause(java.lang.Throwable)) method.

**Parameters:**reason - a description of the exceptionSQLState - an XOPEN or SQL:2003 code identifying the exceptionvendorCode - a database vendor-specific exception code

### SQLException

public **SQLException**([String](http://docs.google.com/java/lang/String.html) reason,  
 [String](http://docs.google.com/java/lang/String.html) SQLState)

Constructs a SQLException object with a given reason and SQLState. The cause is not initialized, and may subsequently be initialized by a call to the [Throwable.initCause(java.lang.Throwable)](http://docs.google.com/java/lang/Throwable.html#initCause(java.lang.Throwable)) method. The vendor code is initialized to 0.

**Parameters:**reason - a description of the exceptionSQLState - an XOPEN or SQL:2003 code identifying the exception

### SQLException

public **SQLException**([String](http://docs.google.com/java/lang/String.html) reason)

Constructs a SQLException object with a given reason. The SQLState is initialized to null and the vender code is initialized to 0. The cause is not initialized, and may subsequently be initialized by a call to the [Throwable.initCause(java.lang.Throwable)](http://docs.google.com/java/lang/Throwable.html#initCause(java.lang.Throwable)) method.

**Parameters:**reason - a description of the exception

### SQLException

public **SQLException**()

Constructs a SQLException object. The reason, SQLState are initialized to null and the vendor code is initialized to 0. The cause is not initialized, and may subsequently be initialized by a call to the [Throwable.initCause(java.lang.Throwable)](http://docs.google.com/java/lang/Throwable.html#initCause(java.lang.Throwable)) method.

### SQLException

public **SQLException**([Throwable](http://docs.google.com/java/lang/Throwable.html) cause)

Constructs a SQLException object with a given cause. The SQLState is initialized to null and the vendor code is initialized to 0. The reason is initialized to null if cause==null or to cause.toString() if cause!=null.

**Parameters:**cause - the underlying reason for this SQLException (which is saved for later retrieval by the getCause() method); may be null indicating the cause is non-existent or unknown.**Since:** 1.6

### SQLException

public **SQLException**([String](http://docs.google.com/java/lang/String.html) reason,  
 [Throwable](http://docs.google.com/java/lang/Throwable.html) cause)

Constructs a SQLException object with a given reason and cause. The SQLState is initialized to null and the vendor code is initialized to 0.

**Parameters:**reason - a description of the exception.cause - the underlying reason for this SQLException (which is saved for later retrieval by the getCause() method); may be null indicating the cause is non-existent or unknown.**Since:** 1.6

### SQLException

public **SQLException**([String](http://docs.google.com/java/lang/String.html) reason,  
 [String](http://docs.google.com/java/lang/String.html) sqlState,  
 [Throwable](http://docs.google.com/java/lang/Throwable.html) cause)

Constructs a SQLException object with a given reason, SQLState and cause. The vendor code is initialized to 0.

**Parameters:**reason - a description of the exception.sqlState - an XOPEN or SQL:2003 code identifying the exceptioncause - the underlying reason for this SQLException (which is saved for later retrieval by the getCause() method); may be null indicating the cause is non-existent or unknown.**Since:** 1.6

### SQLException

public **SQLException**([String](http://docs.google.com/java/lang/String.html) reason,  
 [String](http://docs.google.com/java/lang/String.html) sqlState,  
 int vendorCode,  
 [Throwable](http://docs.google.com/java/lang/Throwable.html) cause)

Constructs a SQLException object with a given reason, SQLState, vendorCode and cause.

**Parameters:**reason - a description of the exceptionsqlState - an XOPEN or SQL:2003 code identifying the exceptionvendorCode - a database vendor-specific exception codecause - the underlying reason for this SQLException (which is saved for later retrieval by the getCause() method); may be null indicating the cause is non-existent or unknown.**Since:** 1.6

| **Method Detail** |
| --- |

### getSQLState

public [String](http://docs.google.com/java/lang/String.html) **getSQLState**()

Retrieves the SQLState for this SQLException object.

**Returns:**the SQLState value

### getErrorCode

public int **getErrorCode**()

Retrieves the vendor-specific exception code for this SQLException object.

**Returns:**the vendor's error code

### getNextException

public [SQLException](http://docs.google.com/java/sql/SQLException.html) **getNextException**()

Retrieves the exception chained to this SQLException object by setNextException(SQLException ex).

**Returns:**the next SQLException object in the chain; null if there are none**See Also:**[setNextException(java.sql.SQLException)](http://docs.google.com/java/sql/SQLException.html#setNextException(java.sql.SQLException))

### setNextException

public void **setNextException**([SQLException](http://docs.google.com/java/sql/SQLException.html) ex)

Adds an SQLException object to the end of the chain.

**Parameters:**ex - the new exception that will be added to the end of the SQLException chain**See Also:**[getNextException()](http://docs.google.com/java/sql/SQLException.html#getNextException())

### iterator

public [Iterator](http://docs.google.com/java/util/Iterator.html)<[Throwable](http://docs.google.com/java/lang/Throwable.html)> **iterator**()

Returns an iterator over the chained SQLExceptions. The iterator will be used to iterate over each SQLException and its underlying cause (if any).

**Specified by:**[iterator](http://docs.google.com/java/lang/Iterable.html#iterator()) in interface [Iterable](http://docs.google.com/java/lang/Iterable.html)<[Throwable](http://docs.google.com/java/lang/Throwable.html)> **Returns:**an iterator over the chained SQLExceptions and causes in the proper order**Since:** 1.6

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/SQLException.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/sql/SQLDataException.html)   [**NEXT CLASS**](http://docs.google.com/java/sql/SQLFeatureNotSupportedException.html) | [**FRAMES**](http://docs.google.com/index.html?java/sql/SQLException.html)    [**NO FRAMES**](http://docs.google.com/SQLException.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | [METHOD](#44sinio) |

[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

Copyright 2006 Sun Microsystems, Inc. All rights reserved. Use is subject to [license terms](http://docs.google.com/legal/license.html). Also see the [documentation redistribution policy](http://java.sun.com/docs/redist.html).