| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ParameterMetaData.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/NClob.html)   [**NEXT CLASS**](http://docs.google.com/java/sql/PreparedStatement.html) | [**FRAMES**](http://docs.google.com/index.html?java/sql/ParameterMetaData.html)    [**NO FRAMES**](http://docs.google.com/ParameterMetaData.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | CONSTR | [METHOD](#2et92p0) | DETAIL: [FIELD](#3dy6vkm) | CONSTR | [METHOD](#35nkun2) |

## **java.sql**

Interface ParameterMetaData

**All Superinterfaces:** [Wrapper](http://docs.google.com/java/sql/Wrapper.html)

public interface **ParameterMetaData**extends [Wrapper](http://docs.google.com/java/sql/Wrapper.html)

An object that can be used to get information about the types and properties for each parameter marker in a PreparedStatement object. For some queries and driver implementations, the data that would be returned by a ParameterMetaData object may not be available until the PreparedStatement has been executed.

Some driver implementations may not be able to provide information about the types and properties for each parameter marker in a CallableStatement object.

**Since:** 1.4

| **Field Summary** | |
| --- | --- |
| static int | [**parameterModeIn**](http://docs.google.com/java/sql/ParameterMetaData.html#parameterModeIn)            The constant indicating that the parameter's mode is IN. |
| static int | [**parameterModeInOut**](http://docs.google.com/java/sql/ParameterMetaData.html#parameterModeInOut)            The constant indicating that the parameter's mode is INOUT. |
| static int | [**parameterModeOut**](http://docs.google.com/java/sql/ParameterMetaData.html#parameterModeOut)            The constant indicating that the parameter's mode is OUT. |
| static int | [**parameterModeUnknown**](http://docs.google.com/java/sql/ParameterMetaData.html#parameterModeUnknown)            The constant indicating that the mode of the parameter is unknown. |
| static int | [**parameterNoNulls**](http://docs.google.com/java/sql/ParameterMetaData.html#parameterNoNulls)            The constant indicating that a parameter will not allow NULL values. |
| static int | [**parameterNullable**](http://docs.google.com/java/sql/ParameterMetaData.html#parameterNullable)            The constant indicating that a parameter will allow NULL values. |
| static int | [**parameterNullableUnknown**](http://docs.google.com/java/sql/ParameterMetaData.html#parameterNullableUnknown)            The constant indicating that the nullability of a parameter is unknown. |

| **Method Summary** | |
| --- | --- |
| [String](http://docs.google.com/java/lang/String.html) | [**getParameterClassName**](http://docs.google.com/java/sql/ParameterMetaData.html#getParameterClassName(int))(int param)            Retrieves the fully-qualified name of the Java class whose instances should be passed to the method PreparedStatement.setObject. |
| int | [**getParameterCount**](http://docs.google.com/java/sql/ParameterMetaData.html#getParameterCount())()            Retrieves the number of parameters in the PreparedStatement object for which this ParameterMetaData object contains information. |
| int | [**getParameterMode**](http://docs.google.com/java/sql/ParameterMetaData.html#getParameterMode(int))(int param)            Retrieves the designated parameter's mode. |
| int | [**getParameterType**](http://docs.google.com/java/sql/ParameterMetaData.html#getParameterType(int))(int param)            Retrieves the designated parameter's SQL type. |
| [String](http://docs.google.com/java/lang/String.html) | [**getParameterTypeName**](http://docs.google.com/java/sql/ParameterMetaData.html#getParameterTypeName(int))(int param)            Retrieves the designated parameter's database-specific type name. |
| int | [**getPrecision**](http://docs.google.com/java/sql/ParameterMetaData.html#getPrecision(int))(int param)            Retrieves the designated parameter's specified column size. |
| int | [**getScale**](http://docs.google.com/java/sql/ParameterMetaData.html#getScale(int))(int param)            Retrieves the designated parameter's number of digits to right of the decimal point. |
| int | [**isNullable**](http://docs.google.com/java/sql/ParameterMetaData.html#isNullable(int))(int param)            Retrieves whether null values are allowed in the designated parameter. |
| boolean | [**isSigned**](http://docs.google.com/java/sql/ParameterMetaData.html#isSigned(int))(int param)            Retrieves whether values for the designated parameter can be signed numbers. |

| **Methods inherited from interface java.sql.**[**Wrapper**](http://docs.google.com/java/sql/Wrapper.html) |
| --- |
| [isWrapperFor](http://docs.google.com/java/sql/Wrapper.html#isWrapperFor(java.lang.Class)), [unwrap](http://docs.google.com/java/sql/Wrapper.html#unwrap(java.lang.Class)) |

| **Field Detail** |
| --- |

### parameterNoNulls

static final int **parameterNoNulls**

The constant indicating that a parameter will not allow NULL values.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.sql.ParameterMetaData.parameterNoNulls)

### parameterNullable

static final int **parameterNullable**

The constant indicating that a parameter will allow NULL values.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.sql.ParameterMetaData.parameterNullable)

### parameterNullableUnknown

static final int **parameterNullableUnknown**

The constant indicating that the nullability of a parameter is unknown.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.sql.ParameterMetaData.parameterNullableUnknown)

### parameterModeUnknown

static final int **parameterModeUnknown**

The constant indicating that the mode of the parameter is unknown.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.sql.ParameterMetaData.parameterModeUnknown)

### parameterModeIn

static final int **parameterModeIn**

The constant indicating that the parameter's mode is IN.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.sql.ParameterMetaData.parameterModeIn)

### parameterModeInOut

static final int **parameterModeInOut**

The constant indicating that the parameter's mode is INOUT.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.sql.ParameterMetaData.parameterModeInOut)

### parameterModeOut

static final int **parameterModeOut**

The constant indicating that the parameter's mode is OUT.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.sql.ParameterMetaData.parameterModeOut)

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

### getParameterCount

int **getParameterCount**()  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Retrieves the number of parameters in the PreparedStatement object for which this ParameterMetaData object contains information.

**Returns:**the number of parameters **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs**Since:** 1.4

### isNullable

int **isNullable**(int param)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Retrieves whether null values are allowed in the designated parameter.

**Parameters:**param - the first parameter is 1, the second is 2, ... **Returns:**the nullability status of the given parameter; one of ParameterMetaData.parameterNoNulls, ParameterMetaData.parameterNullable, or ParameterMetaData.parameterNullableUnknown **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs**Since:** 1.4

### isSigned

boolean **isSigned**(int param)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Retrieves whether values for the designated parameter can be signed numbers.

**Parameters:**param - the first parameter is 1, the second is 2, ... **Returns:**true if so; false otherwise **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs**Since:** 1.4

### getPrecision

int **getPrecision**(int param)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Retrieves the designated parameter's specified column size.

The returned value represents the maximum column size for the given parameter. For numeric data, this is the maximum precision. For character data, this is the length in characters. For datetime datatypes, this is the length in characters of the String representation (assuming the maximum allowed precision of the fractional seconds component). For binary data, this is the length in bytes. For the ROWID datatype, this is the length in bytes. 0 is returned for data types where the column size is not applicable.

**Parameters:**param - the first parameter is 1, the second is 2, ... **Returns:**precision **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs**Since:** 1.4

### getScale

int **getScale**(int param)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Retrieves the designated parameter's number of digits to right of the decimal point. 0 is returned for data types where the scale is not applicable.

**Parameters:**param - the first parameter is 1, the second is 2, ... **Returns:**scale **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs**Since:** 1.4

### getParameterType

int **getParameterType**(int param)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Retrieves the designated parameter's SQL type.

**Parameters:**param - the first parameter is 1, the second is 2, ... **Returns:**SQL type from java.sql.Types **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs**Since:** 1.4 **See Also:**[Types](http://docs.google.com/java/sql/Types.html)

### getParameterTypeName

[String](http://docs.google.com/java/lang/String.html) **getParameterTypeName**(int param)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Retrieves the designated parameter's database-specific type name.

**Parameters:**param - the first parameter is 1, the second is 2, ... **Returns:**type the name used by the database. If the parameter type is a user-defined type, then a fully-qualified type name is returned. **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs**Since:** 1.4

### getParameterClassName

[String](http://docs.google.com/java/lang/String.html) **getParameterClassName**(int param)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Retrieves the fully-qualified name of the Java class whose instances should be passed to the method PreparedStatement.setObject.

**Parameters:**param - the first parameter is 1, the second is 2, ... **Returns:**the fully-qualified name of the class in the Java programming language that would be used by the method PreparedStatement.setObject to set the value in the specified parameter. This is the class name used for custom mapping. **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs**Since:** 1.4

### getParameterMode

int **getParameterMode**(int param)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Retrieves the designated parameter's mode.

**Parameters:**param - the first parameter is 1, the second is 2, ... **Returns:**mode of the parameter; one of ParameterMetaData.parameterModeIn, ParameterMetaData.parameterModeOut, or ParameterMetaData.parameterModeInOut ParameterMetaData.parameterModeUnknown. **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs**Since:** 1.4

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ParameterMetaData.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/NClob.html)   [**NEXT CLASS**](http://docs.google.com/java/sql/PreparedStatement.html) | [**FRAMES**](http://docs.google.com/index.html?java/sql/ParameterMetaData.html)    [**NO FRAMES**](http://docs.google.com/ParameterMetaData.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | CONSTR | [METHOD](#2et92p0) | DETAIL: [FIELD](#3dy6vkm) | CONSTR | [METHOD](#35nkun2) |

[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.

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