

INTERNATIONAL STANDARD

**ISO/IEC
9075-10**

First edition
2000-11-01

Information technology — Database languages — SQL —

Part 10: Object Language Bindings (SQL/OLB)

*Technologies de l'information — Langages de base de données — SQL —
iTeh STANDARD PREVIEW
Partie 10: Liaisons de langage objet (SQL/OLB)
(standards.iteh.ai)*

[ISO/IEC 9075-10:2000](https://standards.iteh.ai/catalog/standards/sist/33909a29-4c50-4fbf-9362-dca97aab0118/iso-iec-9075-10-2000)
<https://standards.iteh.ai/catalog/standards/sist/33909a29-4c50-4fbf-9362-dca97aab0118/iso-iec-9075-10-2000>



Reference number
ISO/IEC 9075-10:2000(E)

© ISO/IEC 2000

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO/IEC 9075-10:2000](#)

<https://standards.iteh.ai/catalog/standards/sist/33909a29-4c50-4fbf-9362-dca97aab0118/iso-iec-9075-10-2000>

© ISO/IEC 2000

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Contents

	Page
Foreword	xviii
Introduction	xix
1 Scope	1
2 Normative references	3
2.1 JTC 1 standards	3
2.2 Publicly-available specifications	3
iTeh STANDARD PREVIEW	
3 Definitions, notations, and conventions	5
3.1 Definitions	5
3.1.1 Definitions provided in Part 10	5
3.2 Notations	6
3.3 Conventions	6
3.3.1 Use of terms	6
3.3.1.1 Other terms	6
3.3.2 Relationships to other parts of ISO/IEC 9075	7
3.3.2.1 Clause, Subclause, and Table relationships	7
3.4 Object identifier for Database Language SQL	36
4 Concepts	37
4.1 Introduction	37
4.2 Embedded syntax	37
4.3 SQL constructs	38
4.4 Character strings	38
4.4.1 UNICODE support	38
4.4.2 Named character sets	39
4.5 Host variables	39
4.6 Host expressions	39
4.7 SQLJ clauses	40
4.8 Database connection context	40
4.9 Default connection context	40
4.10 Schema checking using exemplar schemas	41
4.11 Using multiple SQLJ contexts and connections	42
4.12 Dynamic SQL and JDBC/SQLJ Connection interoperability	42
4.12.1 Creating an SQLJ ConnectionContext from a JDBC connection	42

ISO/IEC 9075-10:2000(E)

4.12.2	Obtaining a JDBC connection from an SQLJ ConnectionContext	42
4.12.3	Connection sharing	42
4.12.4	Connection resource management	43
4.13	SQL execution control and status	43
4.14	Iterators	44
4.15	Input and output assignability	45
4.16	Calls to stored procedures and functions	54
4.17	Multiple JDBC ResultSet objects from stored procedure calls	55
4.17.1	Resource management with multiple results	55
4.18	JDBC/SQLJ ResultSet interoperability	55
4.18.1	Creating an SQLJ iterator from a JDBC ResultSet object	55
4.18.2	Obtaining a JDBC ResultSet object from an SQLJ iterator object	56
4.18.3	Obtaining a JDBC ResultSet object from an untyped iterator object	56
4.18.4	Iterator and JDBC ResultSet resource management	57
4.19	Multi-threading considerations	57
4.20	User-defined data types	57
4.21	Batch updates	58
4.21.1	Batchable statements and batch compatibility	58
4.21.2	Statement batching API	59
4.21.3	Execution status and update counts	60
4.21.4	Program semantics and exceptions	60
4.21.5	Batch cancellation and disabling	61
4.21.6	Specification of a batching limit	61
4.22	SQLJ language elements	62
4.22.1	<cursor name>	62
4.22.2	SQL schema, data, and transaction statements	63
4.22.3	<SQL dynamic statement>	63
4.22.4	<SQL connection statement>	63
4.22.5	<host variable definition>	63
4.22.6	<embedded exception declaration>	64
4.22.7	<SQL diagnostics statement>	64
4.22.8	Cursor declaration	64
4.22.9	Input parameters to SQL statements	65
4.22.10	Extracting column values from SQLJ iterators	65
4.22.11	<open statement> and cursors	65
5	Lexical elements	67
5.1	<SQL terminal character>	67
6	Scalar expressions	69
6.1	<value specification> and <target specification>	69
7	Additional common elements	71
7.1	<routine invocation>	71

8	Embedded SQL	73
8.1	<embedded SQL host program>	73
8.2	<embedded SQL Java program>	76
9	Binary portability	77
9.1	Components of binary portable applications	77
9.2	Naming runtime components	78
9.3	Binary portability requirements	78
9.4	Profile overview	79
9.5	Profile generation and naming	80
9.5.1	Example	81
9.6	SQLJ application packaging	81
9.6.1	Example	82
9.7	Profile customization overview	83
9.7.1	Profile customization process	83
9.7.2	Profile customization utilities	84
9.7.3	Profile customizer interface	84
9.8	Customization interface	84
9.8.1	Customization usage	85
9.8.2	Customization registration	86
9.9	EntryInfo overview	87
9.10	TypeInfo overview	89
9.11	SQLJ datatype properties	90
	ISO/IEC 9075-10:2000 https://standards.iteh.ai/catalog/standards/sist/33909a29-4c50-4fbf-9362-dca97aab0118/iso-iec-9075-10-2000	
10	SQLJ grammar constructs	93
10.1	Grammar notation	93
10.2	Keyword and SQL <token> case sensitivity rules	94
10.3	Commenting rules	94
10.4	SQLJ reserved names	94
10.4.1	Temporary variable names	94
10.4.2	Class and resource file names	95
10.4.2.1	Internal classes	95
10.4.2.2	Resource files and profiles	96
10.5	Clause structure	96
10.6	Common subelements	97
10.6.1	<modifiers>	97
10.6.2	<java class name>	97
10.6.3	<java id>	97
10.6.4	<java datatype>	98
10.6.5	<java constant expression>	98
10.6.6	<embedded Java expression>	98
10.6.7	<implements clause>	100
10.6.8	<declaration with clause>	100

11 <SQLJ specific clause> and contents	105
11.1 <SQLJ specific clause>	105
11.2 <connection declaration clause>	105
11.3 Generated connection class	106
11.4 <iterator declaration clause>	110
11.5 <positioned iterator>	111
11.6 Generated positioned iterator class	112
11.7 <named iterator>	114
11.8 Generated named iterator class	114
11.9 <executable clause>	116
11.10 <context clause>	121
11.11 <statement clause>	122
11.12 <delete statement: positioned>	123
11.13 <update statement: positioned>	124
11.14 <select statement: single row>	125
11.15 <fetch statement>	128
11.16 <assignment statement>	131
11.17 <commit statement>	133
11.18 <rollback statement>	133
11.19 <set transaction statement>	134
11.20 <call statement>	135
11.21 <assignment clause>	136
11.22 <query clause>	137
11.23 <function clause>	143
11.24 <iterator conversion clause>	145
12 Additional features	149
12.1 SQL blocks	149
12.2 sqlj . runtime . ExecutionContext	150
13 Package sqlj . runtime	151
13.1 SQLJ runtime interfaces	151
13.1.1 sqlj . runtime . ConnectionContext	151
13.1.1.1 Variables	152
13.1.1.1.1 CLOSE_CONNECTION	152
13.1.1.1.2 KEEP_CONNECTION	152
13.1.1.2 Methods	152
13.1.1.2.1 close ()	152
13.1.1.2.2 close (boolean)	153
13.1.1.2.3 getConnectedProfile (Object)	153
13.1.1.2.4 getConnection ()	154
13.1.1.2.5 getExecutionContext ()	154
13.1.1.2.6 isClosed ()	154
13.1.2 sqlj . runtime . ForUpdate	154
13.1.2.1 Methods	155
13.1.2.1.1 getCursorName ()	155

13.1.3	sqlj . runtime . NamedIterator	155
13.1.4	sqlj . runtime . PositionedIterator	155
13.1.4.1	Methods	156
13.1.4.1.1	endFetch ()	156
13.1.5	sqlj . runtime . ResultSetIterator	156
13.1.5.1	Variables	156
13.1.5.1.1	ASENSITIVE	156
13.1.5.1.2	FETCH_FORWARD	157
13.1.5.1.3	FETCH_REVERSE	157
13.1.5.1.4	FETCH_UNKNOWN	157
13.1.5.1.5	INSENSITIVE	157
13.1.5.1.6	SENSITIVE	157
13.1.5.2	Methods	157
13.1.5.2.1	clearWarnings ()	157
13.1.5.2.2	close ()	158
13.1.5.2.3	getFetchSize ()	158
13.1.5.2.4	getResultSet ()	158
13.1.5.2.5	getRow ()	159
13.1.5.2.6	getSensitivity ()	159
13.1.5.2.7	getWarnings ()	159
13.1.5.2.8	isClosed ()	160
13.1.5.2.9	next ()	160
13.1.5.2.10	setFetchSize (int)	160
13.1.6	sqlj . runtime . Scrollable	162
13.1.6.1	Variables	162
13.1.6.2	Methods	162
13.1.6.2.1	absolute (int)	162
13.1.6.2.2	afterLast ()	162
13.1.6.2.3	beforeFirst ()	162
13.1.6.2.4	first ()	163
13.1.6.2.5	getFetchDirection ()	163
13.1.6.2.6	isAfterLast ()	163
13.1.6.2.7	isBeforeFirst ()	163
13.1.6.2.8	isFirst ()	164
13.1.6.2.9	isLast ()	164
13.1.6.2.10	last ()	164
13.1.6.2.11	previous ()	165
13.1.6.2.12	relative (int)	165
13.1.6.2.13	setFetchDirection (int)	165
13.2	SQLJ Runtime Classes	166
13.2.1	sqlj . runtime . AsciiStream	166
13.2.1.1	Constructors	166
13.2.1.1.1	AsciiStream (InputStream)	166
13.2.1.1.2	AsciiStream (InputStream, int)	166
13.2.2	sqlj . runtime . BinaryStream	167

ISO/IEC 9075-10:2000(E)

13.2.2.1	Constructors	167
13.2.2.1.1	BinaryStream (InputStream)	167
13.2.2.1.2	BinaryStream (InputStream, int)	167
13.2.3	sqlj . runtime . DefaultRuntime	168
13.2.3.1	Constructors	168
13.2.3.1.1	DefaultRuntime ()	168
13.2.3.2	Methods	168
13.2.3.2.1	getDefaultValue ()	168
13.2.3.2.2	getLoaderForClass (Class)	168
13.2.4	sqlj . runtime . ExecutionContext	169
13.2.4.1	Variables	169
13.2.4.1.1	ADD_BATCH_COUNT	169
13.2.4.1.2	AUTO_BATCH	169
13.2.4.1.3	EXEC_BATCH_COUNT	170
13.2.4.1.4	EXCEPTION_COUNT	170
13.2.4.1.5	NEW_BATCH_COUNT	170
13.2.4.1.6	QUERY_COUNT	170
13.2.4.1.7	UNLIMITED_BATCH	171
13.2.4.2	Constructors	171
13.2.4.2.1	ExecutionContext ()	171
13.2.4.3	Methods	171
13.2.4.3.1	cancel ()	171
13.2.4.3.2	execute ()	171
13.2.4.3.3	executeBatch ()	173
13.2.4.3.4	executeQuery ()	173
13.2.4.3.5	executeUpdate ()	174
13.2.4.3.6	getBatchLimit ()	175
13.2.4.3.7	getBatchUpdateCounts ()	175
13.2.4.3.8	getFetchDirection ()	175
13.2.4.3.9	getFetchSize ()	176
13.2.4.3.10	getMaxFieldSize ()	176
13.2.4.3.11	getMaxRows ()	176
13.2.4.3.12	getNextResultSet ()	177
13.2.4.3.13	getQueryTimeout ()	177
13.2.4.3.14	getUpdateCount ()	178
13.2.4.3.15	getWarnings ()	178
13.2.4.3.16	isBatching ()	178
13.2.4.3.17	registerStatement (ConnectionContext, Object, int)	179
13.2.4.3.18	releaseStatement ()	180
13.2.4.3.19	setBatching (boolean)	180
13.2.4.3.20	setBatchLimit (int)	181
13.2.4.3.21	setFetchDirection (int)	181
13.2.4.3.22	setFetchSize (int)	182
13.2.4.3.23	setMaxFieldSize (int)	182
13.2.4.3.24	setMaxRows (int)	182

13.2.4.3.25	setQueryTimeout (int)	183
13.2.5	sqlj . runtime . RuntimeContext	183
13.2.5.1	Variables	183
13.2.5.1.1	DEFAULT_DATA_SOURCE	183
13.2.5.1.2	DEFAULT_RUNTIME	184
13.2.5.1.3	PROPERTY_KEY	184
13.2.5.2	Constructors	184
13.2.5.2.1	RuntimeContext ()	184
13.2.5.3	Methods	184
13.2.5.3.1	getDefauleConnection ()	184
13.2.5.3.2	getLoaderForClass (Class)	184
13.2.5.3.3	getRuntime ()	185
13.2.6	sqlj . runtime . StreamWrapper	185
13.2.6.1	Constructors	186
13.2.6.1.1	StreamWrapper (InputStream)	186
13.2.6.1.2	StreamWrapper (InputStream, int)	186
13.2.6.2	Methods	186
13.2.6.2.1	getInputStream ()	186
13.2.6.2.2	getLength ()	186
13.2.6.2.3	setLength (int)	187
13.2.7	sqlj . runtime . UnicodeStream	187
13.2.7.1	Constructors	187
13.2.7.1.1	UnicodeStream (InputStream)	187
13.2.7.1.2	UnicodeStream (InputStream, int)	188
13.2.8	sqlj . runtime . CharacterStream	188
13.2.8.1	Constructors	188
13.2.8.1.1	CharacterStream (Reader)	188
13.2.8.1.2	CharacterStream (Reader, int)	188
13.2.8.2	Methods	189
13.2.8.2.1	getReader ()	189
13.2.8.2.2	getLength ()	189
13.2.8.2.3	setLength (int)	189
13.2.9	sqlj . runtime . SQLNullException	189
13.2.9.1	Constructors	190
13.2.9.1.1	SQLNullException ()	190
14	Package sqlj . runtime . profile	191
14.1	SQLJ sqlj . runtime . profile Interfaces	191
14.1.1	sqlj . runtime . profile . BatchContext	191
14.1.1.1	Methods	191
14.1.1.1.1	clearBatch ()	191
14.1.1.1.2	executeBatch ()	191
14.1.1.1.3	setBatchLimit (int)	192
14.1.2	sqlj . runtime . profile . ConnectedProfile	192

ISO/IEC 9075-10:2000(E)

14.1.2.1	Methods	193
14.1.2.1.1	close ()	193
14.1.2.1.2	getConnection ()	193
14.1.2.1.3	getProfileData ()	194
14.1.2.1.4	getStatement (int, Map)	194
14.1.2.1.5	getStatement (int, BatchContext, Map)	194
14.1.3	sqlj . runtime . profile . Customization	195
14.1.3.1	Methods	196
14.1.3.1.1	acceptsConnection (Connection)	196
14.1.3.1.2	getProfile (Connection, Profile)	196
14.1.4	sqlj . runtime . profile . Loader	197
14.1.4.1	Methods	197
14.1.4.1.1	getResourceAsStream (String)	197
14.1.4.1.2	loadClass (String)	197
14.1.5	sqlj . runtime . profile . RTResultSet	198
14.1.5.1	Methods	201
14.1.5.1.1	clearWarnings ()	201
14.1.5.1.2	close ()	201
14.1.5.1.3	findColumn (String)	201
14.1.5.1.4	getAsciiStreamWrapper (int)	202
14.1.5.1.5	getBigDecimal (int)	203
14.1.5.1.6	getBinaryStreamWrapper (int)	203
14.1.5.1.7	getBlob (int)	204
14.1.5.1.8	getBooleanNotNull (int)	205
14.1.5.1.9	getBooleanWrapper (int)	206
14.1.5.1.10	getByteNotNull (int)	206
14.1.5.1.11	getBytes (int)	207
14.1.5.1.12	getByteWrapper (int)	208
14.1.5.1.13	getCharacterStreamWrapper (int)	208
14.1.5.1.14	getBlob (int)	209
14.1.5.1.15	getColumnCount ()	210
14.1.5.1.16	getCursorName ()	210
14.1.5.1.17	getDate (int)	211
14.1.5.1.18	getDoubleNotNull (int)	211
14.1.5.1.19	getDoubleWrapper (int)	212
14.1.5.1.20	getFloatNotNull (int)	213
14.1.5.1.21	getFloatWrapper (int)	214
14.1.5.1.22	getIntNotNull (int)	214
14.1.5.1.23	getIntWrapper (int)	215
14.1.5.1.24	getJDBCResultSet ()	216
14.1.5.1.25	getLongNotNull (int)	216
14.1.5.1.26	getLongWrapper (int)	217
14.1.5.1.27	getObject (int, Class)	218
14.1.5.1.28	getRef (int)	219
14.1.5.1.29	getShortNotNull (int)	219

14.1.5.1.30	getShortWrapper (int)	220
14.1.5.1.31	getString (int)	221
14.1.5.1.32	getTime (int)	221
14.1.5.1.33	getTimestamp (int)	222
14.1.5.1.34	getUnicodeStreamWrapper (int)	223
14.1.5.1.35	getWarnings ()	224
14.1.5.1.36	isClosed ()	224
14.1.5.1.37	isValidRow ()	224
14.1.5.1.38	next ()	225
14.1.6	sqlj . runtime . profile . RTStatement	225
14.1.6.1	Methods	230
14.1.6.1.1	cancel ()	230
14.1.6.1.2	clearWarnings ()	230
14.1.6.1.3	execute ()	230
14.1.6.1.4	executeComplete ()	231
14.1.6.1.5	executeRTQuery ()	231
14.1.6.1.6	executeUpdate ()	231
14.1.6.1.7	getBatchContext ()	232
14.1.6.1.8	getBigDecimal (int)	233
14.1.6.1.9	getBlob (int)	233
14.1.6.1.10	getBooleanNoNull (int)	234
14.1.6.1.11	getBooleanWrapper (int)	235
14.1.6.1.12	getByteNoNull (int)	235
14.1.6.1.13	getBytes (int)	236
14.1.6.1.14	getByteWrapper (int)	237
14.1.6.1.15	getClob (int)	237
14.1.6.1.16	getDate (int)	238
14.1.6.1.17	getDoubleNoNull (int)	239
14.1.6.1.18	getDoubleWrapper (int)	239
14.1.6.1.19	getFloatNoNull (int)	240
14.1.6.1.20	getFloatWrapper (int)	241
14.1.6.1.21	getIntNoNull (int)	241
14.1.6.1.22	getIntWrapper (int)	242
14.1.6.1.23	getJDBCCallableStatement ()	243
14.1.6.1.24	getJDBCPreparedStatement ()	243
14.1.6.1.25	getLongNoNull (int)	243
14.1.6.1.26	getLongWrapper (int)	244
14.1.6.1.27	getMaxFieldSize ()	245
14.1.6.1.28	getMaxRows ()	245
14.1.6.1.29	getMoreResults ()	245
14.1.6.1.30	getObject (int, Class)	246
14.1.6.1.31	getQueryTimeout ()	247
14.1.6.1.32	getRef (int)	247
14.1.6.1.33	getResultSet ()	248
14.1.6.1.34	getShortNoNull (int)	248

14.1.6.1.35	getShortWrapper (int)	249
14.1.6.1.36	getString (int)	250
14.1.6.1.37	getTime (int)	250
14.1.6.1.38	getTimestamp (int)	251
14.1.6.1.39	getUpdateCount ()	252
14.1.6.1.40	getWarnings ()	252
14.1.6.1.41	isBatchable ()	253
14.1.6.1.42	isBatchCompatible ()	253
14.1.6.1.43	setAsciiStreamWrapper (int, AsciiStream)	254
14.1.6.1.44	setBigDecimal (int, BigDecimal)	255
14.1.6.1.45	setBinaryStreamWrapper (int, BinaryStream)	255
14.1.6.1.46	setBlob (int, Blob)	256
14.1.6.1.47	setBoolean (int, boolean)	257
14.1.6.1.48	setBooleanWrapper (int, Boolean)	257
14.1.6.1.49	setByte (int, byte)	258
14.1.6.1.50	setBytes (int, byte)	258
14.1.6.1.51	setByteWrapper (int, Byte)	259
14.1.6.1.52	setCharacterStreamWrapper (int, CharacterStream)	260
14.1.6.1.53	setClob (int, Clob)	260
14.1.6.1.54	setDate (int, Date)	261
14.1.6.1.55	setDouble (int, double)	261
14.1.6.1.56	setDoubleWrapper (int, Double)	262
14.1.6.1.57	setFloat (int, float)	263
14.1.6.1.58	setFloatWrapper (int, Float)	263
14.1.6.1.59	setInt (int, int)	264
14.1.6.1.60	setIntWrapper (int, Integer)	264
14.1.6.1.61	setLong (int, long)	265
14.1.6.1.62	setLongWrapper (int, Long)	266
14.1.6.1.63	setMaxFieldSize (int)	266
14.1.6.1.64	setMaxRows (int)	267
14.1.6.1.65	setObject ()	267
14.1.6.1.66	setQueryTimeout (int)	268
14.1.6.1.67	setRef (int, Ref)	268
14.1.6.1.68	setShort (int, short)	269
14.1.6.1.69	setShortWrapper (int, Short)	269
14.1.6.1.70	setString (int, String)	270
14.1.6.1.71	setTime (int, Time)	271
14.1.6.1.72	setTimestamp (int, Timestamp)	271
14.1.6.1.73	setUnicodeStreamWrapper (int, UnicodeStream)	272
14.1.7	sqlj . runtime . profile . SerializedProfile	273
14.1.7.1	Methods	273
14.1.7.1.1	getProfileAsStream ()	273
14.2	SQLJ sqlj . runtime . profile Classes	274
14.2.1	sqlj . runtime . profile . DefaultLoader	274

14.2.1.1	Constructors	274
14.2.1.1.1	DefaultLoader (ClassLoader)	274
14.2.1.2	Methods	274
14.2.1.2.1	getResourceAsStream (String)	274
14.2.1.2.2	loadClass (String)	275
14.2.2	sqlj . runtime . profile . EntryInfo	275
14.2.2.1	Variables	275
14.2.2.1.1	BLOCK	275
14.2.2.1.2	CALL	276
14.2.2.1.3	CALLABLE_STATEMENT	276
14.2.2.1.4	COMMIT	276
14.2.2.1.5	EXECUTE	276
14.2.2.1.6	EXECUTE_QUERY	277
14.2.2.1.7	EXECUTE_UPDATE	277
14.2.2.1.8	ITERATOR_CONVERSION	277
14.2.2.1.9	NAMED_RESULT	277
14.2.2.1.10	NO_RESULT	278
14.2.2.1.11	OTHER	278
14.2.2.1.12	POSITIONED	278
14.2.2.1.13	POSITIONED_RESULT	279
14.2.2.1.14	PREPARED_STATEMENT	279
14.2.2.1.15	QUERY	279
14.2.2.1.16	QUERY_FOR_UPDATE	279
14.2.2.1.17	ROLLBACK	280
14.2.2.1.18	SET_TRANSACTION	280
14.2.2.1.19	SINGLE_ROW_QUERY	280
14.2.2.1.20	STATEMENT	280
14.2.2.1.21	UNTYPED_SELECT	281
14.2.2.1.22	VALUES	281
14.2.2.2	Constructors	281
14.2.2.2.1	EntryInfo ()	281
14.2.2.3	Methods	281
14.2.2.3.1	executeTypeToString (int)	281
14.2.2.3.2	getDescriptor ()	282
14.2.2.3.3	getExecuteType ()	282
14.2.2.3.4	getLineNumber ()	283
14.2.2.3.5	getParamCount ()	283
14.2.2.3.6	getParamInfo (int)	283
14.2.2.3.7	getResultSetCount ()	283
14.2.2.3.8	getResultSetInfo (int)	284
14.2.2.3.9	getResultSetName ()	284
14.2.2.3.10	getResultSetType ()	285
14.2.2.3.11	getRole ()	285
14.2.2.3.12	getSQLString ()	286
14.2.2.3.13	getStatementType ()	286

ISO/IEC 9075-10:2000(E)

14.2.2.3.14	getTransactionDescriptor ()	286
14.2.2.3.15	isDefinedRole (int)	287
14.2.2.3.16	isValidDescriptor (Object, int)	287
14.2.2.3.17	isValidExecuteType (int)	287
14.2.2.3.18	isValidResultSetType (int)	288
14.2.2.3.19	isValidRole (int)	288
14.2.2.3.20	isValidStatementType (int)	289
14.2.2.3.21	resultSetTypeToString (int)	289
14.2.2.3.22	roleToString (int)	289
14.2.2.3.23	statementTypeToString (int)	290
14.2.2.3.24	validateObject ()	290
14.2.3	sqlj . runtime . profile . Profile	290
14.2.3.1	Constructors	291
14.2.3.1.1	Profile (Loader)	291
14.2.3.2	Methods	291
14.2.3.2.1	deregisterCustomization (Customization)	291
14.2.3.2.2	getConnectedProfile (Connection)	292
14.2.3.2.3	getContextName ()	292
14.2.3.2.4	getCustomizations ()	292
14.2.3.2.5	getJavaType (String)	293
14.2.3.2.6	getJavaType (TypeInfo)	293
14.2.3.2.7	getLoader ()	294
14.2.3.2.8	getProfileData ()	294
14.2.3.2.9	getProfileName ()	294
14.2.3.2.10	getTimestamp ()	294
14.2.3.2.11	instantiate (Loader, InputStream)	295
14.2.3.2.12	instantiate (Loader, String)	295
14.2.3.2.13	registerCustomization (Customization)	296
14.2.3.2.14	registerCustomization (Customization, Customization)	297
14.2.3.2.15	replaceCustomization (Customization, Customization)	297
14.2.4	sqlj . runtime . profile . ProfileData	298
14.2.4.1	Constructors	298
14.2.4.1.1	ProfileData ()	298
14.2.4.2	Methods	298
14.2.4.2.1	getEntryInfo (int)	298
14.2.4.2.2	getProfile ()	299
14.2.4.2.3	getSourceFile ()	299
14.2.4.2.4	size ()	299
14.2.5	sqlj . runtime . profile . SetTransactionDescriptor	299
14.2.5.1	Variables	299
14.2.5.1.1	READ_NONE	300
14.2.5.1.2	READ_ONLY	300
14.2.5.1.3	READ_WRITE	300
14.2.5.2	Constructors	300
14.2.5.2.1	SetTransactionDescriptor (int, int)	300

14.2.5.3	Methods	300
14.2.5.3.1	getAccessMode ()	301
14.2.5.3.2	getIsolationLevel ()	301
14.2.6	sqlj . runtime . profile . TypeInfo	301
14.2.6.1	Variables	302
14.2.6.1.1	IN	302
14.2.6.1.2	INOUT	302
14.2.6.1.3	OUT	302
14.2.6.2	Constructors	302
14.2.6.2.1	TypeInfo ()	302
14.2.6.3	Methods	302
14.2.6.3.1	getJavaTypeName ()	302
14.2.6.3.2	getMarkerIndex ()	303
14.2.6.3.3	getMode ()	303
14.2.6.3.4	getName ()	303
14.2.6.3.5	getSQLType ()	304
14.2.6.3.6	getSQLTypeName ()	305
14.2.6.3.7	isValidMode (int)	305
14.2.6.3.8	isValidSQLType (int)	305
14.2.6.3.9	modeToString (int)	306
14.2.6.3.10	SQLTypeToString (int)	306
14.2.6.3.11	validateObject ()	307
iTech STANDARD PREVIEW		
15	sqlj . runtime . profile . util . ProfileCustomizer	309
https://standards.itech.ai/catalog/standards/sist/33909a29-4c50-4fbf-9362-dca97aab0118/iso-iec-9075-10-2000		
15.1	Methods	311
15.1.1	acceptsConnection (Connection)	311
15.1.2	customize (Profile, Connection, ErrorLog)	311
16	Dynamic SQL	313
16.1	Description of SQL descriptor areas	313
16.2	<get descriptor statement>	314
16.3	<set descriptor statement>	315
16.4	<describe statement>	316
17	Call-Level Interface specifications	317
17.1	Implicit DESCRIBE USING clause	317
17.2	Description of CLI item descriptor areas	318
17.3	Other tables associated with CLI	319
18	Definition Schema	321
18.1	SQL_LANGUAGES base table	321
19	Status codes	323
19.1	SQLSTATE	323