AS ISO/IEC 9075.13—2005

Australian Standard™

Information technology—Database languages—SQL

Part 13: SQL Routines and Types Using the Java™ Programming Language (SQL/JRT)

STANDARDS AUSTRALIA

This Australian Standard was prepared by Committee IT-027, Data Management and Interchange. It was approved on behalf of the Council of Standards Australia on 16 May 2005. This Standard was published on 16 June 2005.

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Information technology—Database languages—SQL

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PREFACE

This Standard was prepared by the Standards Australia Committee IT-027, Data Management and Interchange.

This Standard is identical with, and has been reproduced from ISO/IEC 9075-13:2003, *Information technology—Database languages—SQL*—Part 13: *SQL Routines and Types Using the Java™ Programming Language (SQL/JRT).*

The objective of this Standard is to provide database designers, administrators and developers with the specifics to invoke static methods written in the Java(tm) programming language as SQL invoked routines and to use classes defined in the Java programming language as SQL structured user-defined types.

This Standard is Part 13 of AS 9075, *Information technology—Database language—SQL*, which is published in parts as follows:

Part 1: Framework (SQL/Framework)
Part 2: Foundation (SQL/Foundation)
Part 3: Call-Level Interface (SQL/CLI)
Part 4: Persistent Stored Modules (SQL/PSM)
Part 5: Host Language Bindings (SQL/Bindings)
Part 9: Management of External Data (SQL/MED)
Part 10: Object Language Bindings (SQL/OLB)
Part 11: Information and Definition Schemas (SQL/Schemata)
Part 13: SQL Routines and Types Using the Java™ Programming Language (SQL/JRT) (this Standard)
Part 14: XML-Related Specifications (SQL/XML)

As this Standard is reproduced from an international standard, the following applies:

(a) Its number appears on the cover and title page while the international standard number appears only on the cover.

(b) In the source text 'this part of ISO/IEC 9075' should read 'this Australian Standard'.

(c) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		*Australian Standard*	
ISO/IEC		AS	
9075	Information technology—Database languages—SQL	9075	Information technology—Database languages—SQL
9075-1	Part 1: Framework (SQL/Framework)	9075.1	Part 1: Framework (SQL/Framework)
9075-2	Part 2: Foundation (SQL/Foundation)	9075.2	Part 2: Foundation (SQL/Foundation)
9075-10	Part 10: Object Language Bindings (SQL/OLB)	9075.10	Part 10: Object Language Bindings (SQL/OLB)
9075-11	Part 11: Information and Definition Schemas (SQL/Schemas)	9075.11	Part 11: Information and Definition Schemas (SQL/Schemas)

CONTENTS

Page

Page

Page

Page

TABLES

Page

INTRODUCTION

The organization of this part of ISO/IEC 9075 is as follows:

1) Clause 1, "Scope", specifies the scope of this part of ISO/IEC 9075.

2) Clause 2, "Normative references", identifies additional standards that, through reference in this part of ISO/IEC 9075, constitute provisions of this part of ISO/IEC 9075.

3) Clause 3, "Definitions, notations, and conventions", defines the notations and conventions used in this part of ISO/IEC 9075.

4) Clause 4, "Concepts", presents concepts used in the definition of Java routines and types.

5) Clause 5, "Lexical elements", defines a number of lexical elements used in the definition of Java routines and types.

6) Clause 6, "Scalar expressions", defines the elements of the language that produce scalar values.

7) Clause 7, "Predicates", defines the predicates of the language.

8) Clause 8, "Additional common elements", defines additional language elements that are used in various parts of the language.

9) Clause 9, "Schema definition and manipulation", defines the schema definition and manipulation statements associated with the definition of Java routines and types.

10) Clause 10, "Access control", defines facilities for controlling access to SQL-data.

11) Clause 11, "Built-in procedures", defines new built-in procedures used in the definition of Java routines and types.

12) Clause 12, "Java topics", defines the facilities supported by implementations of this part of ISO/IEC 9075 and the conventions used in deployment descriptor files.

13) Clause 13, "Information Schema", defines viewed tables that contain schema information.

14) Clause 14, "Definition Schema", defines base tables on which the viewed tables containing schema information depend.

15) Clause 15, "Status codes", defines SQLSTATE values related to Java routines and types.

16) Clause 16, "Conformance", defines the criteria for conformance to this part of ISO/IEC 9075.

17) Annex A, "SQL Conformance Summary", is an informative Annex. It summarizes the conformance requirements of the SQL language.

18) Annex B, "Implementation-defined elements", is an informative Annex. It lists those features for which the body of this part of ISO/IEC 9075 states that the syntax, the meaning, the returned results, the effect on SQL-data and/or schemas, or any other behavior is partly or wholly implementation-defined.

19) Annex C, "Implementation-dependent elements", is an informative Annex. It lists those features for which the body of this part of ISO/IEC 9075 states that the syntax, the meaning, the returned results, the effect on SQL-data and/or schemas, or any other behavior is partly or wholly implementation-dependent.

20) Annex D, “SQL feature taxonomy”, is an informative Annex. It identifies features of the SQL language specified in this part of ISO/IEC 9075 by a numeric identifier and a short descriptive name. This taxonomy is used to specify conformance and may be used to develop other profiles involving the SQL language.

21) Annex E, “Routines tutorial”, is an informative Annex. It provides a tutorial on using the features defined in this part of ISO/IEC 9075 for defining and using SQL-invoked routines based on Java static methods.

22) Annex F, “Types tutorial”, is an informative Annex. It provides a tutorial on using the features defined in this part of ISO/IEC 9075 for defining and using SQL structured types based on Java classes.

In the text of this part of ISO/IEC 9075, Clauses begin a new odd-numbered page, and in Clause 5, “Lexical elements”, through Clause 16, “Conformance”, Subclauses begin a new page. Any resulting blank space is not significant.

NOTES

AUSTRALIAN STANDARD

Information technology — Database languages — SQL —

Part 13:
SQL Routines and Types Using the Java™ Programming Language (SQL/JRT)

1 Scope

This part of International Standard ISO/IEC 9075 specifies the the ability to invoke static methods written in the Java™ programming language as SQL-invoked routines and to use classes defined in the Java programming language as SQL structured user-defined types. (Java is a registered trademark of Sun Microsystems, Inc.)