Australian Standard™

Information technology—Database languages—SQL

Part 14: XML-Related Specifications (SQL/XML)

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

Part 14: XML-Related Specifications (SQL/XML)

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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 9075-14:2003, *Information technology—Database languages—SQL*—Part 14*: XML-Related Specifications (SQL/XML)*.

The objective of this Standard is to provide database designers, administrators and developers with definitions of the ways in which database language SQL can be used with XML.

This Standard is Part 14 of AS 9075, *Information technology—Database languages—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)
Part 14: XML-Related Specifications (SQL/XML) (this Standard)

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)
9075-11	Part 11: Information and Definition Schemas (SQL/Schemas)	9075.11	Part 11: Information and Definition Schemas (SQL/Schemas)

Only referenced documents that have been adopted as Australian or Australian/New Zealand Standards have been listed.

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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 related to this part of ISO/IEC 9075.

5) Clause 5, “Lexical elements”, defines the lexical elements of the language.

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

7) Clause 7, “Query expressions”, defines the elements of the language that produce rows and tables of data.

8) Clause 8, “Predicates”, defines the predicates of the language.

9) Clause 9, “Mappings”, defines the ways in which certain SQL information can be mapped into XML and certain XML information can be mapped into SQL.

10) Clause 10, “Additional common rules”, specifies the rules for assignments that retrieve data from or store data into SQL-data, and formation rules for set operations.

11) Clause 11, “Additional common elements”, defines additional language elements that are used in various parts of the language.

12) Clause 12, “Schema definition and manipulation”, defines facilities for creating and managing a schema.

13) Clause 13, “SQL-client modules”, defines SQL-client modules and externally-invoked procedures.

14) Clause 14, “Data manipulation”, defines the data manipulation statements.

15) Clause 15, “Control statements”, defines the SQL-control statements.

16) Clause 16, “Session management”, defines the SQL-session management statements.

17) Clause 17, “Dynamic SQL”, defines the SQL dynamic statements.

18) Clause 18, “Embedded SQL”, defines the host language embeddings.

19) Clause 19, “Diagnostics management”, defines the diagnostics management facilities.

20) Clause 20, “Information Schema”, defines viewed tables that contain schema information.

21) Clause 21, “Definition Schema”, defines base tables on which the viewed tables containing schema information depend.

22) Clause 22, “The SQL/XML XML Schema”, defines the content of an XML namespace that is used when SQL and XML are utilized together.

23) Clause 23, “Status codes”, defines values that identify the status of the execution of SQL-statements and the mechanisms by which those values are returned.

24) Clause 24, “Conformance”, specifies the way in which conformance to this part of ISO/IEC 9075 may be claimed.

25) Annex A, “SQL Conformance Summary”, is an informative Annex. It summarizes the conformance requirements of the SQL language.

26) Annex B, “Implementation-defined elements”, is an informative Annex. It lists those features for which 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.

27) Annex C, “Implementation-dependent elements”, is an informative Annex. It lists those features for which 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.

28) Annex D, “Incompatibilities with ISO/IEC 9075:1999”, is an informative Annex. It lists incompatibilities with the previous version of ISO/IEC 9075.

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

In the text of this part of ISO/IEC 9075, Clauses begin a new odd-numbered page. Any resulting blank space is not significant.

AUSTRALIAN STANDARD

Information technology — Database languages — SQL —

Part 14:
XML-Related Specifications (SQL/XML)

1 Scope

This part of ISO/IEC 9075 defines ways in which Database Language SQL can be used in conjunction with XML.