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**Information technology — Database  
languages — SQL multimedia and  
application packages —**

**Part 1:  
Framework**

**iTeh STANDARD PREVIEW**

*Technologies de l'information — Langages de bases de données —  
Multimédia SQL et paquets d'application —*

*Partie 1: Cadre général*

ISO/IEC 13249-1:2000

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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO/IEC 13249 may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

International Standard ISO/IEC 13249-1 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 32, *Data management and interchange*.

ISO/IEC 13249 consists of the following parts, under the general title *Information technology — Database languages — SQL multimedia and application packages*:

- Part 1: Framework
- Part 2: Full-Text
- Part 3: Spatial
- Part 5: Still Image

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Parts other than this part specify requirements, and all are dependent on various parts of ISO/IEC 9075 and also on this part of ISO/IEC 13249.

Annex A of this part of ISO/IEC 13249 is for information only.

## Introduction

The organization of this part of ISO/IEC 13249 is as follows:

- a) Clause 1, "Scope", specifies the scope of this part of ISO/IEC 13249.
- b) Clause 2, "Normative references", identifies additional standards that, through reference in ISO/IEC 13249, constitute provisions of this part of ISO/IEC 13249, and hence to all parts of ISO/IEC 13249.
- c) Clause 3, "Terms and definitions", specifies terms and definitions used in ISO/IEC 13249.
- d) Clause 4, "Concepts", describes the concepts used in ISO/IEC 13249.
- e) Clause 5, "Parts of ISO/IEC 13249", summarises the content of each of the parts of ISO/IEC 13249.
- f) Clause 6, "Notation and conventions used in other parts", defines the notation and conventions used in other parts of ISO/IEC 13249.
- g) Clause 7, "Implementation requirements", describes the requirements relating to the implementation of ISO/IEC 13249.
- h) Clause 8, "Conformance", specifies the conformance requirements for all or some of the parts of ISO/IEC 13249.
- i) Annex A is an informative Annex. It describes the formal procedures for maintenance and interpretation of ISO/IEC 13249.

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# Information technology — Database languages — SQL multimedia and application packages —

## Part 1: Framework

### 1 Scope

ISO/IEC 13249 defines a number of packages of generic data types common to various kinds of data used in multimedia and other subject areas, to enable that data to be stored and manipulated in an SQL database. Each package is defined as a part of ISO/IEC 13249.

This part of ISO/IEC 13249 defines those concepts, notations and conventions that are common to two or more other parts of ISO/IEC 13249. In particular it describes the way ISO/IEC 9075 is used in other parts to define the user-defined types and their behaviour appropriate to each subject area.

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### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 13249. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO/IEC 13249 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO/IEC 9075-1:1999, *Information technology — Database languages — SQL — Part 1: Framework (SQL/Framework)*.

ISO/IEC 9075-2:1999, *Information technology — Database languages — SQL — Part 2: Foundation (SQL/Foundation)*.

ISO/IEC 9075-4:1999, *Information technology — Database languages — SQL — Part 4: Persistent Stored Modules (SQL/PSM)*.

### 3 Terms and definitions

#### 3.1 Definitions taken from ISO/IEC 9075

The following terms defined in ISO/IEC 9075 are used either in this part of ISO/IEC 13249 or in other parts of ISO/IEC 13249.

- a) assignment
- b) attribute
- c) cardinality
- d) column

## ISO/IEC 13249-1:2000(E)

- e) compilation unit
- f) constructor function
- g) data type
- h) declared type
- i) descriptor
- j) external routine
- k) identifier
- l) implementation-defined
- m) implementation-dependent
- n) instance (of a value)
- o) interface (of a structured type)
- p) mutator function
- q) null value
- r) observer function
- s) row
- t) sequence
- u) signature (of an SQL-invoked routine)
- v) SQL-environment
- w) SQL-implementation
- x) SQL-invoked routine
- y) SQL routine
- z) subtype
- aa) supertype
- bb) table
- cc) type-preserving function
- dd) user-defined type
- ee) white space

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### 3.2 Definitions provided in this part of ISO/IEC 13249

For the purposes of this part of ISO/IEC 13249, the following definitions apply.



**3.2.1****generic data type**

a generic data type is a kind of data not already defined in ISO/IEC 9075 that is used in a wider context than a single enterprise and for which there are advantages in standardizing the way it is represented

**3.2.2****meta-variable**

a meta-variable is a variable which is used to define implementation-dependent or implementation-defined constants

**3.2.3****multimedia**

multimedia is any kind of data other than conventional data, examples being graphic, audio and visual data

**3.3 Definitions provided in other parts of ISO/IEC 13249**

The terms and associated definitions relating to the subject areas of ISO/IEC 13249 are provided by the part of ISO/IEC 13249 that defines the user-defined types for that subject area.

**4 Concepts****4.1 Concepts taken from ISO/IEC 9075**

The following concepts defined in ISO/IEC 9075 are used either in this part of ISO/IEC 13249 or in other parts of ISO/IEC 13249.

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- a) array
- b) base table
- c) character set
- d) distinct type
- e) exception condition
- f) false
- g) function invocation
- h) host language
- i) method
- j) ordering function
- k) predefined data type
- l) privilege
- m) source type
- n) SQL-data
- o) SQL-statement
- p) structured type

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