



**INTERNATIONAL STANDARD ISO/IEC 9075-4:2008**  
**TECHNICAL CORRIGENDUM 1**

Published 2010-06-01

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION  
INTERNATIONAL ELECTROTECHNICAL COMMISSION • МЕЖДУНАРОДНАЯ ЭЛЕКТРОТЕХНИЧЕСКАЯ КОМИССИЯ • COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

## **Information technology — Database languages — SQL —**

### **Part 4: Persistent Stored Modules (SQL/PSM)**

#### **TECHNICAL CORRIGENDUM 1**

*Technologies de l'information — Langages de base de données — SQL —*

*Partie 4: Modules stockés persistants (SQL/PSM)*

*RECTIFICATIF TECHNIQUE 1*

Technical Corrigendum 1 to ISO/IEC 9075-4:2008 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 32, *Data management and interchange*.

#### **Statement of purpose for rationale**

A statement indicating the rationale for each change to ISO/IEC 9075-4:2008 is included. This is to inform the users of ISO/IEC 9075-4:2008 why it was judged necessary to change the original wording. In many cases, the reason is editorial or to clarify the wording; in some cases, it is to correct an error or an omission in the original wording.

#### **Notes on numbering**

Where this Technical Corrigendum introduces new Syntax, Access, General, and Conformance Rules, the new rules have been numbered as follows:

Rules inserted between, for example, Rules 7) and 8) are numbered 7.1), 7.2), etc. [or 7)a.1), 7)a.2), etc.]. Those inserted before Rule 1) are numbered 0.1), 0.2), etc.

Where this Technical Corrigendum introduces new subclauses, the new subclauses have been numbered as follows:

Subclauses inserted between, for example, 4.3.2 and 4.3.3 are numbered 4.3.2a, 4.3.2b, etc. Those inserted before, for example, 4.3.1 are numbered 4.3.0, 4.3.0a, etc.

**ICS 35.060**

**Ref. No. ISO/IEC 9075-4:2008/Cor.1:2010(E)**

© ISO/IEC 2010 – All rights reserved

Published in Switzerland

## Contents

	Page
<b>6 Scalar expressions</b> .....	<b>1</b>
6.1 <value specification> and <target specification> .....	1
<b>8 Additional common elements</b> .....	<b>1</b>
8.1 <routine invocation>.....	1
<b>9 Schema definition and manipulation</b> .....	<b>2</b>
9.9 <drop table constraint definition>.....	2
<b>10 Access control</b> .....	<b>2</b>
10.3 <revoke statement>.....	2
<b>12 Data manipulation</b> .....	<b>3</b>
12.3 <fetch statement>.....	3
<b>14 Control statements</b> .....	<b>3</b>
14.6 <case statement>.....	3
<b>15 Dynamic SQL</b> .....	<b>4</b>
15.1 <prepare statement>.....	4

# Information technology — Database languages — SQL —

Part 4:

## Persistent Stored Modules (SQL/PSM)

TECHNICAL CORRIGENDUM 1

### 6 Scalar expressions

#### 6.1 <value specification> and <target specification>

1. *Rationale: Use the correct syntax element.*

Replace General Rule 2) with:

- 2) Replace GR 15) A <simple target specification> specifies a target that is a host parameter, an output SQL parameter, a column of a new transition variable, a host variable, or an SQL variable, according to whether the <simple target specification> is a <host parameter name>, an <SQL parameter reference>, a <column reference>, or an <embedded variable name>, or an <SQL variable reference>, respectively.

NOTE 5 — A <simple target specification> can never be assigned the null value.

### 8 Additional common elements

#### 8.1 <routine invocation>

1. *Rationale: Local temporary tables instantiated by an SQL-server module should not be visible to an external routine.*

Add the following General Rule:

- 1.1) Insert after GR 5)d)ii)1) Remove from RSC the identities of all instances of created local temporary tables that are referenced in <SQL-server module definition>s and all instances of declared local temporary tables that are defined by <temporary table definition>s that are contained in <SQL-server module definition>s.

## 9 Schema definition and manipulation

### 9.9 <drop table constraint definition>

1. *Rationale: Fix problems with contradictions between some symbol definitions and their usage and the use of undefined symbols.*

Replace General Rule 1) with:

- 1) **Replace GR 2)** Let *R* be any SQL-invoked routine whose routine descriptor contains the <constraint name> of *TC* in the <SQL routine body> or any SQL-invoked routine that is dependent on *TC*.

Case:

- a) If *R* is included in an SQL-server module *M*, then let *MN* be the <SQL-server module name> of *M*. The following <drop module statement> is effectively executed without further Access Rule checking once for every *M*:

```
DROP MODULE MN CASCADE
```

- b) Otherwise, let *SN* be the specific name of *R*. The following <drop routine statement> is effectively executed without further Access Rule checking for every *R*:

```
DROP SPECIFIC ROUTINE SN CASCADE
```

## 10 Access control

### 10.3 <revoke statement>

1. *Rationale: Handle dependencies of triggers and generated columns on SQL-server modules.*

Add the following General Rules:

- 3.1) **Insert after GR 19)g)** EXECUTE privilege on every SQL-server module that includes one or more SQL-invoked routines that are among the subject routines of any <routine invocation>, <method invocation>, <static method invocation>, or <method reference> that is contained in any <search condition> of *TR*.

- 3.2) **Insert after GR 19)h)** EXECUTE privilege on every SQL-server module that includes one or more SQL-invoked routines that are among the subject routines of any <routine invocation>, <method invocation>, <static method invocation>, or <method reference> that is contained in the <triggered SQL statement> of *TR*.

- 4.1) **Insert after GR 22)c)** *CD* has a generation expression *GE* and the revoke destruction action would result in *AI* no longer having in its applicable privileges EXECUTE privilege on any SQL-server