



INTERNATIONAL STANDARD ISO/IEC 13249-5:2001
TECHNICAL CORRIGENDUM 1

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

Part 5: Still Image

TECHNICAL CORRIGENDUM 1

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

Partie 5: Image fixe

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO/IEC 13249-5:2001 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 32, *Data management and interchange*.

Statement of purpose of rationale:

A statement indicating the rationale for each change to ISO/IEC 13249-5:2001(E) is included. This is to inform the users of that standard as to the reason 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 Corrigendum introduces new Definitional Rules and Descriptions, 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 Corrigendum introduces new Subclauses, the new subclauses have been numbered as follows:

Subclauses inserted between, for example, Subclause 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.

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Global changes

1. *Rationale: Align function names to use consistent naming conventions.*

Globally replace all the functions names listed as "Old Function Names" in the following table with corresponding function names listed as "New Functions Name".

Old Function Name	New Function Name
SI_getThumbnail	SI_getThmbnl
SI_fndAverageColor	SI_findAvgClr
SI_mkAverageColor	SI_mkAvgClr
SI_ScoreByAvgClr	SI_ScoreByAvgClr
SI_findColorHstgrm	SI_findClrHstgr
SI_mkColorHistogr	SI_mkClrHstgr
SI_arrayClrHstgrm	SI_arrayClrHstgr
SI_appendClrHstgrm	SI_appendClrHstgr
SI_findPositColor	SI_findPstnlClr
SI_ScoreByPositClr	SI_ScoreByPstnlClr
SI_mkFeatureList	SI_mkFtrList
SI_setAvgClrFtrW	SI_setAvgClrFtr
SI_setClrHstgrFtrW	SI_setClrHstgrFtr
SI_setPstnlClrFtrW	SI_setPstnlClrFtr
SI_setTextureFtrW	SI_setTextureFtr
SI_mkRGBColor	SI_mkRGBClr

3.1.2 Definitions provided in Part 5

1. *Rational: The term "most significant color" was missing in the list of defined terms.*

Add the following definition:

3.1.2.7a

most significant color

a color with the highest frequency in a color histogram

4.1 Introduction

1. *Rationale: Remove requirement for supported formats to be able to derive features from images with that format.*

Replace the sentence directly before NOTE 4 with:

An image format is a format supported by an implementation (for short: a supported format) if the implementation is able to derive the inherent image characteristics from the raw image.

4.7 The Still Image Information Schema

1. *Rationale: Extend SI_VALUES view.*

Replace the fifth item, which describes the view SI_VALUES, in the item list with:

- a view SI_VALUES that lists implementation-defined meta-variable and their values.

5.1.2 SI_StillImage Methods

1. *Rationale: Correct the description of the condition when the exception condition is raised.*

In the Description section, replace Description 3) b) with:

- b) Both of the following are False:
 - i) *explicitFormat* indicates a supported image format, and *explicitFormat* is equivalent to the format derived from *content*.
 - ii) *explicitFormat* indicates an unsupported image format, and the image format derived from *content* is the null value (i.e. no supported image format can be derived from *content*).

5.1.5 SI_Thumbnail Methods

1. *Rationale: Correct syntax errors in the Definition.*

In the Definition, replace the definition for the method *SI_Thumbnail(INTEGER, INTEGER)* with:

```
CREATE METHOD SI_Thumbnail
  (height INTEGER,
   width INTEGER)
RETURNS SI_StillImage
FOR SI_StillImage
BEGIN
  DECLARE InvalidInput CONDITION FOR SQLSTATE '2FF12';

  IF height > SELF.SI_height OR
     width > SELF.SI_width OR
     NOT SI_supportedThumbnail(SELF.SI_format) = 1 THEN
    SIGNAL InvalidInput
      SET MESSAGE_TEXT =
        'illegal specification for thumbnail generation';
  END IF;
  RETURN SI_deriveThumbnail(SELF, height, width);
END
```

5.1.12 Functions not intended for Public Use

1. Rationale: Correct a syntax error in the Definition.

Replace the definition of the function *SI_supportedThumbnail* with:

```
CREATE FUNCTION SI_supportedThumbnail
  (sourceFormat CHARACTER VARYING(SI_MaxFormatLength))
  RETURNS INTEGER
  LANGUAGE SQL
  DETERMINISTIC
  CONTAINS SQL
  CALLED ON NULL INPUT
  RETURN
    CASE
      WHEN EXISTS (
        SELECT *
          FROM SI_INFORMTN_SCHEMA.SI_THUMBNAIL_FORMATS
         WHERE TRIM(BOTH ' ' FROM SI_FORMAT) =
              TRIM(BOTH ' ' FROM sourceFormat)
        ) THEN 1
      ELSE 0
    END
```

2. Rationale: Correct minor errors in the Description section.

Replace Description 8) with:

- 8) The function *SI_deriveThumbnail*(*SI_StillImage*, *INTEGER*, *INTEGER*):
- This function takes the following input parameters:
 - an *SI_StillImage* value *image*,
 - an *INTEGER* value *height*,
 - an *INTEGER* value *width*.
 - This function derives and returns a thumbnail of its parameter *image*. If a thumbnail cannot be derived from *image* then the result *ret* is the null value. Otherwise, *ret* returns a thumbnail with the specified *height* and *width*. The format of the thumbnail *ret.SI_format* is the same as the format of the still image *image*.

3. Rationale: Correct minor errors in the Description section.

Replace Description 9) with:

- 9) The function *SI_supportedThumbnail*(*CHARACTER VARYING*):
- This function takes the following input parameter:
 - a *CHARACTER VARYING* value *sourceFormat*.
 - If the view *SI_THUMBNAIL_FORMATS* of the information schema *SI_INFORMTN_SCHEMA* contains a row whose *SI_FORMAT* column value is equivalent to *sourceFormat*, then the result of this function is 1 (one); i.e. a thumbnail can be derived from an image whose format indication equals *sourceFormat*. Otherwise, the result is 0 (zero); i.e. a thumbnail cannot be derived from an image whose format indication equals *sourceFormat*.

6.2.3 SI_Append Method

1. Rationale: Correct parameter name in the Definition.

Replace the Definition with:

```
CREATE METHOD SI_Append
  (color SI_Color,
```