
ORDImage Object Type

Oracle *interMedia* describes the ORDImage object type, which supports the storage, management, and manipulation of image data and the ORDImageSignature object type, which supports content-based retrieval (image matching).

This object type is defined as follows:

```
CREATE OR REPLACE TYPE ORDImage
AS OBJECT
(
  -----
  -- TYPE ATTRIBUTES
  -----
  source          ORDSOURCE,
  height          INTEGER,
  width           INTEGER,
  contentLength   INTEGER,
  fileFormat      VARCHAR2(4000),
  contentFormat   VARCHAR2(4000),
  compressionFormat VARCHAR2(4000),
  mimeType        VARCHAR2(4000),

  -----
  -- METHOD DECLARATION
  -----
  -- CONSTRUCTORS
  --
  STATIC FUNCTION init( ) RETURN ORDImage,
  STATIC FUNCTION init(srcType      IN VARCHAR2,
                       srcLocation IN VARCHAR2,
                       srcName      IN VARCHAR2) RETURN ORDImage,

  -- Methods associated with copy operations
  MEMBER PROCEDURE copy(dest IN OUT ORDImage),

  -- Methods associated with image process operations
  MEMBER PROCEDURE process(command IN VARCHAR2),

  MEMBER PROCEDURE processCopy(command IN      VARCHAR2,
                               dest    IN OUT ORDImage),

  -- Methods associated with image property set and check operations
```

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MEMBER PROCEDURE setProperties,

MEMBER PROCEDURE setProperties(description IN VARCHAR2),

MEMBER FUNCTION checkProperties RETURN BOOLEAN,

-- Methods associated with image attributes accessors
MEMBER FUNCTION getHeight RETURN INTEGER,
PRAGMA RESTRICT_REFERENCES(getHeight, WNDS, WNPS, RNDS, RNPS),

MEMBER FUNCTION getWidth RETURN INTEGER,
PRAGMA RESTRICT_REFERENCES(getWidth, WNDS, WNPS, RNDS, RNPS),

MEMBER FUNCTION getContentLength RETURN INTEGER,
PRAGMA RESTRICT_REFERENCES(getContentLength, WNDS, WNPS, RNDS, RNPS),

MEMBER FUNCTION getFileFormat RETURN VARCHAR2,
PRAGMA RESTRICT_REFERENCES(getFileFormat, WNDS, WNPS, RNDS, RNPS),

MEMBER FUNCTION getContentFormat RETURN VARCHAR2,
PRAGMA RESTRICT_REFERENCES(getContentFormat, WNDS, WNPS, RNDS, RNPS),

MEMBER FUNCTION getCompressionFormat RETURN VARCHAR2,
PRAGMA RESTRICT_REFERENCES(getCompressionFormat, WNDS, WNPS, RNDS, RNPS),

-- Methods associated with the local attribute
MEMBER PROCEDURE setLocal,
MEMBER PROCEDURE clearLocal,
MEMBER FUNCTION isLocal RETURN BOOLEAN,
PRAGMA RESTRICT_REFERENCES(isLocal, WNDS, WNPS, RNDS, RNPS),

-- Methods associated with the date attribute
MEMBER FUNCTION getUpdateTime RETURN DATE,
PRAGMA RESTRICT_REFERENCES(getUpdateTime, WNDS, WNPS, RNDS, RNPS),
MEMBER PROCEDURE setUpdateTime(current_time DATE),

-- Methods associated with the mimeType attribute
MEMBER FUNCTION getMimeType RETURN VARCHAR2,
PRAGMA RESTRICT_REFERENCES(getMimeType, WNDS, WNPS, RNDS, RNPS),
MEMBER PROCEDURE setMimeType(mime IN VARCHAR2),

-- Methods associated with the source attribute
MEMBER FUNCTION processSourceCommand(
                                ctx          IN OUT RAW,
                                cmd          IN VARCHAR2,
```

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arguments IN VARCHAR2,
result      OUT RAW)

RETURN RAW,
MEMBER FUNCTION getContent RETURN BLOB,
PRAGMA RESTRICT_REFERENCES (getContent, WNDS, WNPS, RNDS, RNPS),

MEMBER FUNCTION getBFILE RETURN BFILE,
PRAGMA RESTRICT_REFERENCES (getBFILE, WNDS, WNPS, RNDS, RNPS),

MEMBER PROCEDURE deleteContent,

MEMBER PROCEDURE setSource(source_type      IN VARCHAR2,
                           source_location IN VARCHAR2,
                           source_name      IN VARCHAR2),
MEMBER FUNCTION getSource RETURN VARCHAR2,
PRAGMA RESTRICT_REFERENCES (getSource, WNDS, WNPS, RNDS, RNPS),

MEMBER FUNCTION getSourceType RETURN VARCHAR2,
PRAGMA RESTRICT_REFERENCES (getSourceType, WNDS, WNPS, RNDS, RNPS),

MEMBER FUNCTION getSourceLocation RETURN VARCHAR2,
PRAGMA RESTRICT_REFERENCES (getSourceLocation, WNDS, WNPS, RNDS, RNPS),

MEMBER FUNCTION getSourceName RETURN VARCHAR2,
PRAGMA RESTRICT_REFERENCES (getSourceName, WNDS, WNPS, RNDS, RNPS),

MEMBER PROCEDURE import(ctx IN OUT RAW),
MEMBER PROCEDURE importFrom(ctx      IN OUT RAW,
                             source_type IN VARCHAR2,
                             source_location IN VARCHAR2,
                             source_name IN VARCHAR2),
MEMBER PROCEDURE export(ctx      IN OUT RAW,
                        source_type IN VARCHAR2,
                        source_location IN VARCHAR2,
                        source_name IN VARCHAR2),

-- Methods associated with file operations on the source
MEMBER FUNCTION openSource(userArg IN RAW, ctx OUT RAW) RETURN INTEGER,
MEMBER FUNCTION closeSource(ctx IN OUT RAW) RETURN INTEGER,
MEMBER FUNCTION trimSource(ctx      IN OUT RAW,
                           newlen IN INTEGER) RETURN INTEGER,
MEMBER PROCEDURE readFromSource(
                           ctx      IN OUT RAW,
                           startPos IN INTEGER,
                           numBytes IN OUT INTEGER,

```

```

                                buffer    OUT RAW),
MEMBER PROCEDURE writeToSource(
                                ctx        IN OUT RAW,
                                startPos IN INTEGER,
                                numBytes IN OUT INTEGER,
                                buffer    IN RAW),
);

```

where:

- source: the source of the stored image data.
- height: the height of the image in pixels.
- width: the width of the image in pixels.
- contentLength: the size of the image file on disk, in bytes.
- fileFormat: the file type or format in which the image data is stored (TIFF, JIFF, and so forth).
- contentFormat: the type of image (monochrome and so forth).
- compressionFormat: the compression algorithm used on the image data.
- mimeType: the MIME type information.