310
DBFS Content Interface Types

DBFS Content Interface Types are public types that support the `DBMS_DBFS_CONTENT` interface.

This chapter contains the following topics:

- Overview
- Security Model
- Data Structures

Related Topics

- DBMS_DBFS_CONTENT
  The `DBMS_DBFS_CONTENT` package provides an interface comprising a file system-like abstraction backed by one or more Store Providers.

DDBFS Content Interface Types Overview

The type definitions described in this chapter support the DBMS_DBFS_CONTENT interface in implementing metadata tables, packages, views, dependent application-side entities, and service-provider entities.

DBFS Content Interface Types Security Model

The user can access the content operational and administrative interfaces (packages, types, tables, and so on) with the `DBFS_ROLE`. This role can be granted to users as needed.

DBFS Content Interface Types —Data Structures

Types that support the DBMS_DBFS_CONTENT interface include both Object and Table types.

Object Types

- DBMS_DBFS_CONTENT_CONTEXT_T Object Type
- DBMS_DBFS_CONTENT_LIST_ITEM_T Object Type
- DBMS_DBFS_CONTENT_PROPERTY_T Object Type

Table Types

- DBMS_DBFS_CONTENT_LIST_ITEMS_T Table Type
- DBMS_DBFS_CONTENT_PROPERTIES_T Table Type
- DBMS_DBFS_CONTENT_RAW_T Table Type

DBMS_DBFS_CONTENT_CONTEXT_T Object Type

This type describes the execution context for the providers. It provides the user performing the operation with the Access Control List, the owner of the item(s), a timestamp for doing `asof` queries, and whether or not the item(s) are `read_only`. This type can be used both as input, in the case of path item creation functions, and output, in the case of path item query, or both.

Syntax

```
CREATE OR REPLACE TYPE dbms_dbfs_content_context_t
    AUTHID DEFINER
AS OBJECT (
    principal      VARCHAR2(32),
    acl            VARCHAR2(1024),
    owner          VARCHAR2(32),
    asof           TIMESTAMP,
    read_only      INTEGER);
```

Fields

Table 310-1   DBMS_DBFS_CONTENT_CONTEXT_T Fields

Field	Description
principal	File system user
acl	Access control list
owner	Path item owner
asof	Timestamp
read_only	Nonzero if the path item is read-only

DBMS_DBFS_CONTENT_LIST_ITEM_T Object Type

This type describes a type to assist in listing the contents of a directory.

Syntax

```
CREATE OR REPLACE TYPE dbms_dbfs_content_list_item_t
    AUTHID DEFINER
AS OBJECT (
    path           VARCHAR2(1024),
    item_name      VARCHAR2(256),
    item_type      INTEGER);
```

Fields

Table 310-2   DBMS_DBFS_CONTENT_LIST_ITEM_T Fields

Field	Description
path	Path to the path item
item_name	Name of the path item
item_type	Type of path item. (See Table 67-4

DBMS_DBFS_CONTENT_PROPERTY_T Object Type

This type describes a single (`name`, `value`, `typecode`) property tuple. All properties (standard, optional, and user-defined) are described using such tuples.

The type is used by both the client-facing interfaces and by store providers for the `DBMS_DBFS_CONTENT` interface.

Syntax

```
CREATE OR REPLACE TYPE dbms_dbfs_content_property_t
    AUTHID DEFINER
AS OBJECT (
    propname      VARCHAR2(32),
    propvalue     VARCHAR2(1024),
    typecode      INTEGER);
```

Fields

Table 310-3   DBMS_DBFS_CONTENT_PROPERTY_T Fields

Field	Description
prop_name	Name of property
prop_value	Value of property
typecode	Property type (See Constants in DBMS_TYPES)

DBMS_DBFS_CONTENT_LIST_ITEMS_T Table Type

This type is a variable-sized array of DBMS_DBFS_CONTENT_LIST_ITEM_T Object Type. It is used by both the client-facing interfaces and by store providers for the DBMS_DBFS_CONTENT interface.

Syntax

```
CREATE OR REPLACE TYPE dbms_dbfs_content_list_items_t AS
    TABLE OF dbms_dbfs_content_list_item_t;
```

Related Topics

• DBMS_DBFS_CONTENT_LIST_ITEM_T Object Type
  This type describes a type to assist in listing the contents of a directory.

• DBMS_DBFS_CONTENT
  The `DBMS_DBFS_CONTENT` package provides an interface comprising a file system-like abstraction backed by one or more Store Providers.

DBMS_DBFS_CONTENT_PROPERTIES_T Table Type

This type is a variable-sized array of property tuples of DBMS_DBFS_CONTENT_PROPERTY_T Object Type. It is used by both the client-facing interfaces and by store providers for the DBMS_DBFS_CONTENT interface.

Syntax

```
CREATE OR REPLACE TYPE dbms_dbfs_content_properties_t AS
    TABLE OF dbms_dbfs_content_property_t;
```

Related Topics

- DBMS_DBFS_CONTENT_PROPERTY_T Object Type
  This type describes a single (name, value, typecode) property tuple. All properties (standard, optional, and user-defined) are described using such tuples.

DBMS_DBFS_CONTENT_RAW_T Table Type

This type is an array of RAW. It is to enable RAW data transport for batch interfaces in the DBMS_DBFS_CONTENT interface.

Syntax

```
CREATE OR REPLACE TYPE dbms_dbfs_content_raw_t AS
    TABLE OF RAW(32767);
```

Related Topics

- DBMS_DBFS_CONTENT
  The DBMS_DBFS_CONTENT package provides an interface comprising a file system-like abstraction backed by one or more Store Providers.