

DBMS_XDB_VERSION

Oracle XML DB versioning interfaces are found in the `DBMS_XDB_VERSION` package. Functions and procedures of `DBMS_XDB_VERSION` help to create a VCR and manage the versions in the version history.



Note:

The Oracle XML DB Repository is deprecated with Oracle Database 23ai.

Oracle recommends that you replace any functionality used in XML DB Repository with alternative technologies. As a result of this deprecation, all XML DB Repository interfaces (for example Repository-specific Java classes `oracle.xdb.servlet`, `oracle.xdb.event`, and `oracle.xdb.spi`) are consequently deprecated as well.

This chapter contains the following topics:

- [Security Model](#)
- [Summary of DBMS_XDB_VERSION Subprograms](#)



See Also:

Oracle XML DB Developer's Guide

DBMS_XDB_VERSION Security Model

Owned by `XDB`, the `DBMS_XDB_VERSION` package must be created by `SYS` or `XDB`. The `EXECUTE` privilege is granted to `PUBLIC`. Subprograms in this package are executed using the privileges of the current user.

Summary of DBMS_XDB_VERSION Subprograms

This table lists the `DBMS_XDB_VERSION` subprograms and briefly describes them.

Table 229-1 *DBMS_XDB_VERSION Package Subprograms*

Method	Description
CHECKIN Function	Checks in a checked-out VCR and returns the resource id of the newly-created version
CHECKOUT Procedure	Checks out a VCR before updating or deleting it
GETCONTENTSBOBBYRESID Function	Obtain contents as a BLOB

Table 229-1 (Cont.) DBMS_XDB_VERSION Package Subprograms

Method	Description
GETCONTENTSLOBBYRESID Function	Obtain contents as a CLOB
GETCONTENTSXMLBYRESID Function	Obtain contents as an XMLType
GETPREDECESSORS Function	Retrieves the list of predecessors by path name
GETPREDSBYRESID Function	Retrieves the list of predecessors by resource id
GETRESOURCEBYRESID Function	Obtains the resource as an XMLType, given the resource object ID
GETSUCCESSORS Function	Retrieves the list of successors by path name
GETSUCCSBYRESID Function	Retrieves the list of successors by resource id
MAKEVERSIONED Function	Turns a regular resource whose path name is given into a version-controlled resource
UNCHECKOUT Function	Checks in a checked-out resource, returns the resource id of the version before the resource is checked out

CHECKIN Function

This function checks in a checked-out VCR and returns the resource id of the newly-created version.

Syntax

```
DBMS_XDB_VERSION.CHECKIN(  
    pathname VARCHAR2)  
RETURN DBMS_XDB.resid_type;
```

Parameters

Table 229-2 CHECKIN Function Parameters

Parameter	Description
pathname	The path name of the checked-out resource.

Usage Notes

This is not an auto-commit SQL operation. [CHECKIN Function](#) doesn't have to take the same path name that was passed to [CHECKOUT Procedure](#) operation. However, the [CHECKIN Function](#) path name and the [CHECKOUT Procedure](#) path name must be of the same resource for the operations to function correctly. If the resource has been renamed, the new name must be used to [CHECKIN Function](#) because the old name is either invalid or is currently bound with a different resource. Exception is raised if the path name does not exist. If the path name has been changed, the new path name must be used to [CHECKIN Function](#) the resource.

CHECKOUT Procedure

This procedure checks out a VCR before updating or deleting it.

Syntax

```
DBMS_XDB_VERSION.Checkout(  
    pathname    VARCHAR2);
```

Parameters

Table 229-3 CHECKOUT Procedure Parameters

Parameter	Description
pathname	The path name of the VCR to be checked out.

Usage Notes

This is not an auto-commit SQL operation. Two users of the same workspace cannot [CHECKOUT Procedure](#) the same VCR at the same time. If this happens, one user must rollback. As a result, it is good practice to commit the [CHECKOUT Procedure](#) operation before updating a resource and avoid loss of the update if the transaction is rolled back. An exception is raised if the given resource is not a VCR, if the VCR is already checked out, if the resource doesn't exist.

GETCONTENTSBLOBBYRESID Function

This function obtain contents as a BLOB.

Syntax

```
DBMS_XDB_VERSION.GETCONTENTSBLOBBYRESID(  
    resid      DBMS_XDB.resid_type)  
RETURN BLOB;
```

Parameters

Table 229-4 GETCONTENTSBLOBBYRESID Function Parameters

Parameter	Description
resid	The resource id.

GETCONTENTSCLOBBYRESID Function

This function obtains contents as a CLOB.

Syntax

```
DBMS_XDB_VERSION.GETCONTENTSCLOBBYRESID(  
    resid      DBMS_XDB.resid_type)  
RETURN CLOB;
```

Parameters

Table 229-5 GETCONTENTSCLOBYRESID Function Parameters

Parameter	Description
resid	The resource id.

GETCONTENTSEXMLBYRESID Function

This function obtains contents as an XMLType.

Syntax

```
DBMS_XDB_VERSION.GETCONTENTSEXMLBYRESID(
    resid      DBMS_XDB.resid_type)
RETURN XMLType;
```

Parameters

Table 229-6 GETCONTENTSEXMLBYRESID Function Parameters

Parameter	Description
resid	The resource id.

Return Values

If the contents are not valid XML, returns NULL.

GETPREDECESSORS Function

This function retrieves the list of predecessors by the path name.

Syntax

```
DBMS_XDB_VERSION.GETPREDECESSORS (
    pathname      VARCHAR2)
RETURN resid_list_type;
```

Parameters

Table 229-7 GETPREDECESSORS Function Parameters

Parameter	Description
pathname	The path name of the resource.

Return Values

An exception is raised if `pathname` is illegal.

GETPREDSBYRESID Function

This function retrieves the list of predecessors by resource id.

Syntax

```
DBMS_XDB_VERSION.GETPREDSBYRESID(  
    resid      resid_type)  
RETURN resid_list_type;
```

Parameters

Table 229-8 GETPREDSBYRESID Function Parameters

Parameter	Description
resid	The resource id.

Usage Notes

Getting predecessors by `RESID` is more efficient than by `pathname`.

Exceptions

An exception is raised if the `RESID` is illegal.

GETRESOURCEBYRESID Function

This function obtains the resource as an `XMLType`, given the resource object ID. Because the system does not create a path name for versions, this function is useful for retrieving the resource using its resource id.

Syntax

```
DBMS_XDB_VERSION.GETRESOURCEBYRESID(  
    resid      resid_type)  
RETURN XMLType;
```

Parameters

Table 229-9 GETRESOURCEBYRESID Function Parameters

Parameter	Description
resid	The resource id.

GETSUCCESSORS Function

Given a version resource or a VCR, this function retrieves the list of the successors of the resource by the path name.

Syntax

```
DBMS_XDB_VERSION.GETSUCCESSORS(  
    pathname VARCHAR2)  
RETURN resid_list_type;
```

Parameters

Table 229-10 GETSUCCESSORS Function Parameters

Parameter	Description
pathname	The path name of the resource.

Usage Notes

Getting successors by `RESID` is more efficient than by `pathname`.

Exceptions

An exception is raised if the `pathname` is illegal.

GETSUCCSBYRESID Function

This function retrieves the list of the successors of the resource by resource id using version resource or VCR.

Syntax

```
DBMS_XDB_VERSION.GETSUCCSBYRESID(  
    resid    resid_type)  
    RETURN resid_list_type;
```

Parameters

Table 229-11 GETSUCCSBYRESID Function Parameters

Parameter	Description
resid	The resource id.

Usage Notes

Getting successors by `RESID` is more efficient than by `pathname`.

Exceptions

An exception is raised if the `pathname` is illegal.

MAKEVERSIONED Function

This function turns a regular resource whose path name is given into a version-controlled resource. This new resource is then put under version control. All other path names continue to refer to the original resource.

Syntax

```
DBMS_XDB_VERSION.MAKEVERSIONED(  
    pathname  VARCHAR2)  
    RETURN DBMS_XDB.resid_type;
```

Parameters

Table 229-12 MAKEVERSIONED Function Parameters

Parameter	Description
pathname	The path name of the resource to be put under version control.

Return Values

This function returns the resource ID of the first version, or root, of the VCR.

Usage Notes

If two or more path names are bound with the same resource, a copy of the resource is created, and the given path name is bound with the newly-created copy.

This is not an auto-commit SQL operation. An exception is raised if the resource doesn't exist.

- This call is legal for VCR, and neither exception nor warning is raised.
- This call is illegal for folder, version history, version resource, and ACL.
- No support for Schema-based resources is provided.

UNCHECKOUT Function

This function checks-in a checked-out resource and returns the resource id of the version before the resource is checked out.

Syntax

```
DBMS_XDB_VERSION.UNCHECKOUT(  
    pathname    VARCHAR2)  
RETURN DBMS_XDB.resid_type;
```

Parameters

Table 229-13 UNCHECKOUT Function Parameters

Parameter	Description
pathname	The path name of the checked-out resource.

Usage Notes

This is not an auto-commit SQL operation. The [UNCHECKOUT Function](#) does not have to take the same path name that was passed to the operation by the [CHECKOUT Procedure](#). However, the [UNCHECKOUT Function](#) path name and the [CHECKOUT Procedure](#) path name must be of the same resource for the operations to function correctly. If the resource has been renamed, the new name must be used to [UNCHECKOUT Function](#), because the old name is either invalid or is currently bound with a different resource. If the path name has been changed, the new path name must be used to [UNCHECKOUT Function](#) the resource.

Exceptions

An exception is raised if the path name doesn't exist.