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DBMS_RESCONFIG

The `DBMS_RESCONFIG` package provides an interface to operate on the resource configuration list, and to retrieve listener information for a resource.

This chapter contains the following topics:

- Overview
- Summary of DBMS_RESCONFIG Subprograms

> ✎ **See Also:**
>
> *Oracle XML DB Developer's Guide* for more information about "Resource Configuration".

DBMS_RESCONFIG Overview

The `DBMS_RESCONFIG` package contains functions and procedures to manage the resource configuration lists of individual resources and the repository.

Summary of DBMS_RESCONFIG Subprograms

This table lists and briefly describes the `DBMS_RESCONFIG` package subprograms.

Table 163-1   DBMS_RESCONFIG Package Subprograms

Subprogram	Description
ADDREPOSITORYRESCONFIG Procedure	Inserts the resource configuration specified by absolute path at the given position of the repository's configuration list
ADDRESCONFIG Procedure	Inserts the resource configuration specified by the absolute path at the given position in the target resource's configuration list
APPENDRESCONFIG Procedure	Appends the resource configuration specified by rcpath to the target resource's configuration list if it is not already included in the list
DELETEREPOSITORYRESCONFIG Procedure	Removes the configuration at the given position in the repository's configuration list.
DELETERESCONFIG Procedures	Removes the configuration at the given position in the target resource's configuration list. I
GETLISTENERS Function	Returns the list of listeners applicable for a given resource
GETREPOSITORYRESCONFIG Function	Returns the resource configuration at the specified position of the repository's configuration list

Table 163-1   (Cont.) DBMS_RESCONFIG Package Subprograms

Subprogram	Description
GETREPOSITORYRESCONFIGPATHS Function	Returns a list of resource configuration paths defined for the repository
GETRESCONFIG Function	Returns the resource configuration at the specified position of the target resource's configuration list
GETRESCONFIGPATHS Function	Returns a list of resource configuration paths defined in the target resource's configuration list
PATCHREPOSITORYRESCONFIGLIST Procedure	Removes invalid references from the repository resource configuration list, and makes the repository available

ADDREPOSITORYRESCONFIG Procedure

This procedure inserts the resource configuration specified by absolute path of the resource configuration at the specified position of the repository's configuration list. It shifts the element currently at that position (if any) and any subsequent elements to the right.

Syntax

```
DBMS_RESCONFIG.ADDREPOSITORYRESCONFIG(
   rcpath     IN   VARCHAR2,
   pos        IN   PLS_INTEGER := NULL);
```

Parameters

Table 163-2   ADDREPOSITORYRESCONFIG Function Parameters

Parameter	Description
rcpath	Absolute path of the resource configuration to be inserted. An exception is raised if rcpath already exists in the target's configuration list.
pos	Index at which the new configuration is to be inserted. If this parameter is not specified then the new configuration is appended to the end of the list. An exception is raised if the index is out of range (pos < 0 or pos > the size of the target resource's configuration list).

Usage Notes

*   An error is raised if the document referenced by rcpath is not based on XDBResConfig.xsd schema.

*   Users must have XDBADMIN role and READ privilege on the resource configuration to be inserted; otherwise, an error is returned.

ADDRESCONFIG Procedure

This procedure inserts the resource configuration specified by the absolute path of the resource configuration at the given position in the target resource's configuration list. It shifts the element currently at that position (if any) and any subsequent elements to the right.

Syntax

```
DBMS_RESCONFIG.ADDRESCONFIG(
   respath    IN   VARCHAR2,
   rcpath     IN   VARCHAR2,
   pos        IN   PLS_INTEGER := NULL);
```

Parameters

Table 163-3   ADDRESCONFIG Function Parameters

Parameter	Description
respath	Absolute path of the target resource
rcpath	Absolute path of the resource configuration to be inserted. An exception is raised if rcpath already exists in the target's configuration list.
pos	Index at which the new configuration is to be inserted. If this parameter is not specified then the new configuration is appended to the end of the list. An exception is raised if the index is out of range (pos < 0 or pos > the size of the target resource's configuration list).

Usage Notes

- An error is raised if the document referenced by `rcpath` is not based on `XDBResConfig.xsd` schema.

- Users must have `WRITE-CONFIG` privilege on the target resource and read privilege on the resource configuration to be inserted; otherwise, an error is returned.

APPENDRESCONFIG Procedure

This procedure appends the resource configuration specified by rcpath to the target resource's configuration list if it is not already included in the list.

Syntax

```
DBMS_RESCONFIG.ADDRESCONFIG(
   respath       IN   VARCHAR2,
   rcpath        IN   VARCHAR2,
   appendOption  IN   PLS_INTEGER);
```

Parameters

Table 163-4   ADDRESCONFIG Function Parameters

Parameter	Description
respath	Absolute path of the target resource

Table 163-4   (Cont.) ADDRESCONFIG Function Parameters

Parameter	Description
rcpath	Absolute path of the resource configuration to be appended at the end of the target's configuration list. If rcpath already exists in the list then nothing is appended.
appendOption	Either APPEND_RESOURCE or APPEND_RECURSIVE. If APPEND_RESOURCE is specified then only the target resource is affected. If APPEND_RECURSIVE is specified then the target resource and all its descendents will be affected.

Usage Notes

• An error is raised if the document referenced by rcpath is not based on XDBResConfig.xsd schema.

• Users must have WRITE-CONFIG privilege on all affected resources and required read privilege on the resource configuration to be inserted; otherwise, an error is returned.

DELETEREPOSITORYRESCONFIG Procedure

This procedure removes the configuration at the given position in the repository's configuration list. It shifts any subsequent elements to the left.

Syntax

```
DBMS_RESCONFIG.DELETEREPOSITORYRESCONFIG(
    pos          IN   PLS_INTEGER);
```

Parameters

Table 163-5   DELETEREPOSITORYRESCONFIG Function Parameters

Parameter	Description
pos	The index of the configuration to be removed. An exception is raised if the index is out of range (pos < 0 or pos >= the size of the target resource's configuration list).

Usage Notes

• Users must have XDBADMIN role to execute this.

• This statement is treated as if it is a DDL statement. This means the system will implicitly commit before and after this statement.

DELETERESCONFIG Procedures

This procedure removes the configuration at the given position in the target resource's configuration list. It shifts any subsequent elements to the left. Users can use the overloaded for recursive deletion.

Syntax

```
DBMS_RESCONFIG.DELETERESCONFIG(
    respath       IN   VARCHAR2,
    pos           IN   PLS_INTEGER);

DBMS_RESCONFIG.DELETERESCONFIG(
    respath       IN   VARCHAR2,
    rcpath        IN   VARCHAR2,
    deleteOption  IN   PLS_INTEGER);
```

Parameters

Table 163-6   DELETERESCONFIG Procedure Parameters

Parameter	Description
respath	Absolute path of the target resource
pos	The index of the configuration to be removed. An exception is raised if the index is out of range ($pos < 0$ or $pos >=$ the size of the target resource's configuration list).
rcpath	Absolute path of the resource configuration to be deleted if found in list.
deleteOption	Either DELETE_RESOURCE or DELETE_RECURSIVE. If DELETE_RESOURCE is specified then only the configuration list of the target resource is affected. If DELETE_RECURSIVE is specified then the configuration list of the target resource and all its descendents will be affected.

Usage Notes

Users must have WRITE-CONFIG privilege on the target resource to execute this.

GETLISTENERS Function

This function returns the list of listeners applicable for a given resource.

The value returned by this function is an XML document containing the <event-listeners> element of the XDBResconfig.xsd schema. It contains all the listeners applicable to the target resource, including repository-level listeners. From the returned XML document users can use the EXTRACT operator to retrieve the listeners defined for a specific event.

Syntax

```
DBMS_RESCONFIG.GETLISTENERS(
    path    IN   VARCHAR2)
 RETURN XMLTYPE;
```

Parameters

Table 163-7   GETLISTENERS Function Parameters

Parameter	Description
path	Absolute path of the target resource

Usage Notes

Users must have the required access privilege on all resource configurations referenced by the repository and the target resource; otherwise, an error is returned.

GETREPOSITORYRESCONFIG Function

This function returns the resource configuration at the specified position of the repository's configuration list.

Syntax

```
DBMS_RESCONFIG.GETREPOSITORYRESCONFIG(
   pos    IN   PLS_INTEGER)
 RETURN XMLTYPE;
```

Parameters

Table 163-8   GETREPOSITORYRESCONFIG Function Parameters

Parameter	Description
pos	Index of element to return. An exception is raised if the index is out of range (pos < 0 or pos >= the size of the repository's configuration list).

Usage Notes

Users must have the required read privilege on the requested resource configuration; otherwise, an error is returned.

GETREPOSITORYRESCONFIGPATHS Function

This function returns a list of resource configuration paths defined for the repository.

Syntax

```
DBMS_RESCONFIG.GETREPOSITORYRESCONFIGPATHS
 RETURN XDB$STRING_LIST_T;
```

Usage Notes

Users must be able to access all the referenced resource configurations; otherwise, an error is returned.

GETRESCONFIG Function

This function returns the resource configuration at the specified position of the target resource's configuration list.

Syntax

```
DBMS_RESCONFIG.GETRESCONFIG(
   respath IN VARCHAR2,
   pos IN PLS_INTEGER)
 RETURN XMLTYPE;
```

Parameters

Table 163-9   GETRESCONFIG Function Parameters

Parameter	Description
respath	Absolute path of the target resource
pos	Index of element to return. An exception is raised if the index is out of range (pos < 0 or pos >= the size of the target resource's configuration list).

Usage Notes

Users must have the required read privilege on the requested resource configuration; otherwise, an error is returned.

GETRESCONFIGPATHS Function

This function returns a list of resource configuration paths defined in the target resource's configuration list.

Syntax

```
DBMS_RESCONFIG.GETRESCONFIGPATHS(
   respath IN VARCHAR2)
 RETURN XDB$STRING_LIST_T;
```

Parameters

Table 163-10   GETRESCONFIGPATHS Function Parameters

Parameter	Description
respath	Absolute path of the target resource

Usage Notes

Users must be able to access all the referenced resource configurations; otherwise, an error is returned.

PATCHREPOSITORYRESCONFIGLIST Procedure

This procedure removes invalid references from the repository resource configuration list, and makes the repository available.

Under normal circumstances, deletion of a resource configuration resource cannot be performed if it is part of the repository resource configuration list. If, for some reason, the deletion of a resource configuration resource that is part of the repository resource configuration list succeeds, then any repository operation results in a 'dangling reference' error. This procedure removes those invalid references.

This procedure must be run as `SYS`.

Syntax

```
DBMS_RESCONFIG.PATCHREPOSITORYRESCONFIGLIST;
```