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DBMS_PART

The `DBMS_PART` package provides an interface for maintenance and management operations on partitioned objects.

> **See Also:**
>
> - *Oracle Database Reference* for related views

This chapter contains the following topics:

- Security Model
- Operational Notes
- Summary of DBMS_PART Subprograms

DBMS_PART Security Model

`DBMS_PART` is an invoker's rights package, running with the privileges of the user.

DBMS_PART Operational Notes

The following operational notes apply to DBMS_PART.

- `DBMS_PART` ignores all the errors that it runs into during the cleanup process.
- To display the message `PL/SQL procedure executed successfully` requires at least one cleanup operation to be successful.

Summary of DBMS_PART Subprograms

This table briefly describes the subprograms of `DBMS_PART` package.

Table 144-1 DBMS_PART Package Subprograms

Subprogram	Description
CLEANUP_GIDX Procedure	Gathers the list of global indexes where optimized asynchronous index maintenance has taken place to clean up entries pointing to data segments that no longer exist
CLEANUP_GIDX_JOB Procedure	
CLEANUP_ONLINE_OP Procedure	Cleans up failed online move operations

CLEANUP_GIDX Procedure

As a consequence of prior partition maintenance operations with asynchronous global index maintenance, global indexes can contain entries pointing to data segments that no longer exist. These stale index rows will not cause any correctness issues or corruptions during any operation on the table or index, whether these are queries, DMLs, DDLs or analyze. This procedure will identify and cleanup these global indexes to ensure efficiency in terms of storage and performance.

Syntax

```
DBMS_PART.CLEANUP_GIDX (
   schema_name_in     IN   VARCHAR2 DEFAULT NULL,
   table_name_in      IN   VARCHAR2 DEFAULT NULL,
   parallel           IN   VARCHAR2 DEFAULT NULL,
   options            IN   VARCHAR2 DEFAULT NULL);
```

Parameters

Table 144-2 CLEANUP_GIDX Function Parameters

Parameter	Description
schema_name_in	Non-NULL processes only indexes on tables in the given schema
table_name_in	Non-NULL processes only indexes on the given table in the given schema (schema_name_in must be non-NULL if table_name_in is non-NULL)
parallel	The parallel degree to use for the ALTER INDEX DDLs.
options	The following options are supported: • CLEANUP_ORPHANS: implies that 'cleanup only' mechanism is used. • COALESCE: implies that 'coalesce cleanup' mechanism is used.

CLEANUP_GIDX_JOB Procedure

This procedure will identify and cleanup these global indexes to ensure efficiency in terms of storage and performance.

Syntax

```
DBMS_PART.CLEANUP_GIDX_JOB (
   parallel           IN   VARCHAR2 DEFAULT NULL,
   options            IN   VARCHAR2 DEFAULT NULL);
```

Parameters

Table 144-3 CLEANUP_GIDX_JOB Function Parameters

Parameter	Description
parallel	The parallel degree to use for the ALTER INDEX DDLs.
options	The following options are supported: • CLEANUP_ORPHANS: implies that 'cleanup only' mechanism is used. • COALESCE: implies that coalesce cleanup mechanism is used.

CLEANUP_ONLINE_OP Procedure

There are many possible points of failure when performing `ALTER TABLE ... MOVE PARTITION ... ONLINE` operations. This procedure pro-actively cleans up such failed online move operations instead of waiting for the background process (`SMON`) to do so.

Syntax

```
DBMS_PART.CLEANUP_ONLINE_OP (
   schema_name       IN   VARCHAR2 DEFAULT NULL,
   table_name        IN   VARCHAR2 DEFAULT NULL,
   partition_name    IN   VARCHAR2 DEFAULT NULL);
```

Parameters

Table 144-4 CLEANUP_ONLINE_OP Function Parameters

Parameter	Description
`schema_name`	Name of schema
`table_name`	Name of schema
`partition_name`	Name of partition

Usage Notes

- If `schema_name`, `table_name` and `partition_name` are specified, this cleans up the failed online move operation for the specified partition.
- If `schema_name` and `table_name` are specified, this cleans up all failed online move operations for all the partitions of the specified table.
- If only `schema_name` is specified, this cleans up all failed online move operations in the schema.
- If no arguments are provided, we cleans up all the failed online move operations in the system.
- All other cases raise `ORA-20000` to inform the user of invalid inputs as arguments.