

Restrictions on Parallel DML (Doc ID 201978.1)

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Restrictions on Parallel DML

The following are the restrictions for parallel DML in 9i Release 1. It has changed for 9i Release 2. Please look into the Data Warehousing Guide Chapter Parallel Execution for the latest information.

- Update and delete operations are not parallelized on nonpartitioned tables.
- For parallel update operations, global unique indexes are not supported. All other indexes are fully maintained by parallel operations.
- A transaction can contain multiple parallel DML statements that modify different tables, but after a parallel DML statement modifies a table, no subsequent serial or parallel statement (DML or query) can access the same table again in that transaction.
 - This restriction also exists after a serial direct-path `INSERT` statement: no subsequent SQL statement (DML or query) can access the modified table during that transaction.
 - Queries that access the same table are allowed before a parallel DML or direct-path `INSERT` statement, but not after.
 - Any serial or parallel statements attempting to access a table that has already been modified by a parallel `UPDATE`, `DELETE`, or `MERGE`, or a direct-path `INSERT` during the same transaction are rejected with an error message.
- This restriction also exists after a serial direct-load `INSERT` statement: no subsequent SQL statement (DML or query) can access the modified table
- Queries that access the same table are allowed before a parallel DML or direct-load `INSERT` statement, but not after.
- `INSERT` during the same transaction are rejected with an error message.
- If initialization parameter `ROW_LOCKING = INTENT`, then inserts, updates, and deletes are not parallelized (regardless of the serializable mode).
- Triggers are not supported for parallel DML operations.
- Replication functionality is not supported for parallel DML.
- Parallel DML cannot occur in the presence of certain constraints: self-referential integrity, delete cascade, and deferred integrity. In addition, for direct-path `INSERT`, there is no support for any referential integrity.
- `INSERT` there is no support for any referential integrity.
- Parallel DML cannot occur on tables with object columns or LOB columns, or on index-organized tables.
- A transaction involved in a parallel DML operation cannot be or become a distributed transaction.
- Clustered tables are not supported.>

Violations will cause the statement to execute serially without warnings or error messages (except for the restriction on statements accessing the same table in a transaction, which can cause error messages). For example, an update will be serialized if it requires global unique index maintenance.

Integrity Restrictions:

DML Statement	Issued on Parent	Issued on Child	Self-Referential
INSERT	(Not applicable)	Not parallelized	Not parallelized
UPDATE No Action	Supported	Supported	Not parallelized
DELETE No Action	Supported	Supported	Not parallelized

DELETE Cascade	Not parallelized	(Not applicable)	Not parallelized
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