

relatively small cost to write performance. Beginning with NDB 8.0.19, 1 is the default for [READ_BACKUP](#), and the default for [ndb_read_backup](#) is [ON](#) (previously, read from any replica was disabled by default).

You can set [READ_BACKUP](#) for an existing table online, using an [ALTER TABLE](#) statement similar to one of those shown here:

```
ALTER TABLE ... ALGORITHM=INPLACE, COMMENT="NDB_TABLE=READ_BACKUP=1";  
ALTER TABLE ... ALGORITHM=INPLACE, COMMENT="NDB_TABLE=READ_BACKUP=0";
```

For more information about the [ALGORITHM](#) option for [ALTER TABLE](#), see [Section 23.5.11, “Online Operations with ALTER TABLE in NDB Cluster”](#).

[PARTITION_BALANCE](#): Provides additional control over assignment and placement of partitions. The following four schemes are supported:

1. [FOR_RP_BY_NODE](#): One partition per node.

Only one LDM on each node stores a primary partition. Each partition is stored in the same LDM (same ID) on all nodes.

2. [FOR_RA_BY_NODE](#): One partition per node group.

Each node stores a single partition, which can be either a primary replica or a backup replica. Each partition is stored in the same LDM on all nodes.

3. [FOR_RP_BY_LDM](#): One partition for each LDM on each node; the default.

This is the setting used if [READ_BACKUP](#) is set to 1.

4. [FOR_RA_BY_LDM](#): One partition per LDM in each node group.

These partitions can be primary or backup partitions.

5. [FOR_RA_BY_LDM_X_2](#): Two partitions per LDM in each node group.

These partitions can be primary or backup partitions.

6. [FOR_RA_BY_LDM_X_3](#): Three partitions per LDM in each node group.

These partitions can be primary or backup partitions.

7. [FOR_RA_BY_LDM_X_4](#): Four partitions per LDM in each node group.

These partitions can be primary or backup partitions.

[PARTITION_BALANCE](#) is the preferred interface for setting the number of partitions per table. Using [MAX_ROWS](#) to force the number of partitions is deprecated but continues to be supported for backward compatibility; it is subject to removal in a future release of MySQL NDB Cluster. (Bug #81759, Bug #23544301)

[FULLY_REPLICATED](#) controls whether the table is fully replicated, that is, whether each data node has a complete copy of the table. To enable full replication of the table, use [FULLY_REPLICATED=1](#).

This setting can also be controlled using the [ndb_fully_replicated](#) system variable. Setting it to [ON](#) enables the option by default for all new [NDB](#) tables; the default is [OFF](#). The [ndb_data_node_neighbour](#) system variable is also used for fully replicated tables, to ensure that when a fully replicated table is accessed, we access the data node which is local to this MySQL Server.