MySQL NDB Cluster 26.10 Release Notes

Abstract

This document contains release notes for the changes in each release of MySQL NDB Cluster that uses version 26.10 of the NDB (NDBCLUSTER) storage engine.

Each NDB Cluster 26.10 release is based on a mainline MySQL Server release and a particular version of the NDB storage engine, as shown in the version string returned by executing SELECT VERSION() in the mysql client, or by executing the ndb_mgm client SHOW or STATUS command; for more information, see MySQL NDB Cluster 26.10.

For general information about features added in NDB Cluster 26.10, see What is New in MySQL NDB Cluster 26.10. For a complete list of all bug fixes and feature changes in MySQL NDB Cluster, please refer to the changelog section for each individual NDB Cluster release.

For additional MySQL 26.10 documentation, see the MySQL 26.10 Reference Manual, which includes an overview of features added in MySQL 26.10 that are not specific to NDB Cluster (What Is New in MySQL 26.10), and discussion of upgrade issues that you may encounter for upgrades from MySQL 9.7 to MySQL 26.10 (Changes in MySQL 26.10). For a complete list of all bug fixes and feature changes made in MySQL 26.10 that are not specific to NDB, see MySQL 26.10 Release Notes.

Updates to these notes occur as new product features are added, so that everybody can follow the development process. If a recent version is listed here that you cannot find on the download page (https://dev.mysql.com/downloads/), the version has not yet been released.

The documentation included in source and binary distributions may not be fully up to date with respect to release note entries because integration of the documentation occurs at release build time. For the most up-to-date release notes, please refer to the online documentation instead.

For legal information, see the Legal Notices.

For help with using MySQL, please visit the MySQL Forums, where you can discuss your issues with other MySQL users.

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Changes in MySQL NDB Cluster 26.10.0 (2026-10-22)

MySQL NDB Cluster 26.10 is a new Innovation release of NDB Cluster, based on MySQL Server 26.7 and including features in version 26.10 of the `NDB` storage engine, as well as fixing recently discovered bugs in previous NDB Cluster releases.

Obtaining MySQL NDB Cluster 26.10. NDB Cluster 26.10 source code and binaries can be obtained from https://dev.mysql.com/downloads/cluster/.

For an overview of major changes made in NDB Cluster 26.10, see What is New in MySQL NDB Cluster 26.10.

This release also incorporates all bug fixes and changes made in previous NDB Cluster releases, as well as all bug fixes and feature changes which were added in mainline MySQL 9 through MySQL 26.7.0 (see Changes in MySQL NDB Cluster 26.7.0 (2026-07-30)).

- Functionality Added or Changed
- Bugs Fixed

Functionality Added or Changed

- `ndb_restore` now supports `--log-parallelism=N` to control concurrent backup log-event application independently of `--parallelism`, which continues to control DATA row application. The default value, 0, inherits `--parallelism`; valid values range from 0 through the number of backup parts multiplied by 1024 and may be higher or lower than `--parallelism`. Operations on the same row remain serialized. Temporary LOG restore errors now use retry accounting and geometric backoff aligned with DATA restore. (Bug #39930283)

- The `ndbinfo.transporter_activity` activity histograms now use fixed boundaries ranging from 100 milliseconds through 80 seconds instead of boundaries derived from each link's heartbeat

interval. This keeps histogram boundaries consistent across links with different heartbeat settings and permits meaningful histograms without heartbeating. (Bug #39538065)

- `HeartbeatIntervalDbApi` can now be overridden in individual API-node configuration sections, allowing `ndbmysql` and application SQL nodes to use different heartbeat intervals. Nodes without an override retain the global DB/default value. Data nodes track the effective interval for each API node and use it for `ndbinfo` reporting and late-heartbeat detection while remaining compatible with older `API_REGREQ` signals. (Bug #38703055)

Bugs Fixed

- During an NDB redo-log file change, a metadata-page write could incorrectly mark a buffered GCI completion record as flushed. If subsequent redo activity stopped, the record could remain buffered, preventing the GCP save protocol from advancing. (Bug #39966600)
- NDB data nodes consumed approximately 4100 unnecessary bytes for every LQH fragment record because a debug-only lock array remained present in runtime builds. The array is no longer included, reducing data-node memory consumption. (Bug #39899970)
- Fixed an issue relating to NDB management-server logging controls. (Bug #39832141)
- `ndb_restore` could remain running indefinitely after a permanent error or exhausted retries while concurrently applying backup log records, without a success or failure result. Restore threads now signal failure, allowing the process to exit promptly. Errors were returned similar to the following:

```
Redo log part ... problem started : Low space
Redo log part ... problem started : Next file not open on time
Gci record write is waiting for the redo log file to be changed
```

  (Bug #39672125)

- `ndb_restore` could abort when restoring an old-format compressed NDB backup containing at least 4 GB of uncompressed data because the truncated size in the AZ31 header did not match the full decompressed byte count. The consistency check now compares the low 32 bits for these files. Errors were returned similar to the following:

```
2026-06-25 16:32:13 Warning: All data was not read, can not check file consistency.
Data read 12616794112 of 4026859520 bytes.
storage/ndb/tools/restore/Restore.cpp:1430: require((!m_xfile.is_open())) failed
Aborted
```

  The `ndbxfrm` utility also adds the `--keep-file` option and a warning for size-check inconsistencies. (Bug #39658762)

- On multithreaded `ndbmtd` configurations where `DIH` and `TC` or `SPJ` ran on different threads, node failure could cause new work to be sent to the failed node before it was marked unavailable. This could result in unanswered signals, timeouts, lingering transaction state, or assertion failures. Node-failure processing now completes the local availability updates before notifying upper-layer blocks. (Bug #39574448)
- Large transactions that repeatedly updated the same row, particularly when ordered indexes were present, could require enough commit or rollback cleanup to exceed the watchdog threshold and restart a data node. The new `MaxRowVersionsPerTransaction` data-node parameter limits the number of versions of one row that a transaction may prepare. The default value is 1000, and the valid range is 3 through 16383. Changing `MaxRowVersionsPerTransaction` requires a data-node restart.

  Reaching the limit returns `NDB error 927` before the watchdog-prone cleanup path:

```
NDB error 927: Too many row versions in one transaction (increase MaxRowVersionsPerTransaction)
```

(Bug #39559817)

- During NDB upgrades, restarting SQL pods could intermittently fail to obtain an NDB node ID, causing repeated pod restarts or `mysqld` shutdown. The temporary node-ID allocation condition is now retried instead of being treated as a permanent failure. Errors were returned similar to the following:

```
[ERROR] [MY-010865] [NDB] Failed to initialize connection(s)
[ERROR] [MY-010865] [NDB] Failed to initialize ndbcluster, aborting!
```

(Bug #37355499)

- During a rolling restart or data-node failure, transaction coordinator takeover could crash the master data node while rolling forward a transaction from an older global checkpoint after a newer checkpoint had opened. Errors were returned similar to the following:

```
Error: 2341
Error data: Can not find global checkpoint record for commit.
```

Takeover can now reopen the missing older checkpoint record and recover the transaction without crashing the master data node. (Bug #36907359)

Changes in MySQL NDB Cluster 26.7.1 (2026-08-18)

MySQL NDB Cluster 26.7.1 is a new Innovation release of NDB Cluster, based on MySQL Server 26.7 and including features in version 26.7 of the `NDB` storage engine, as well as fixing recently discovered bugs in previous NDB Cluster releases.

Obtaining MySQL NDB Cluster 26.7. NDB Cluster 26.7 source code and binaries can be obtained from https://dev.mysql.com/downloads/cluster/.

For an overview of major changes made in NDB Cluster 26.7, see What is New in MySQL NDB Cluster 26.10.

This release also incorporates all bug fixes and changes made in previous NDB Cluster releases, as well as all bug fixes and feature changes which were added in mainline MySQL 9 through MySQL 26.7.0 (see Changes in MySQL NDB Cluster 26.7.0 (2026-07-30)).

Note

This release is a Critical Security Patch Update for the NDB Cluster docker image, only. See Oracle Critical Security Patch Update Advisory - August 2026 for more information.

Changes in MySQL NDB Cluster 26.7.0 (2026-07-30)

MySQL NDB Cluster 26.7.0 is a new Innovation release of NDB Cluster, based on MySQL Server 26.7 and including features in version 26.7 of the `NDB` storage engine, as well as fixing recently discovered bugs in previous NDB Cluster releases.

Obtaining MySQL NDB Cluster 26.7. NDB Cluster 26.7 source code and binaries can be obtained from https://dev.mysql.com/downloads/cluster/.

For an overview of major changes made in NDB Cluster 26.7, see What is New in MySQL NDB Cluster 26.10.

This release also incorporates all bug fixes and changes made in previous NDB Cluster releases, as well as all bug fixes and feature changes which were added in mainline MySQL 9 through MySQL 26.7.0 (see Changes in MySQL NDB Cluster 26.7.0 (2026-07-30)).

- Functionality Added or Changed
- Bugs Fixed

Functionality Added or Changed

- In cloud and service-mesh deployments, NDB Management Server could reject node ID allocation because the incoming connection's source address did not match the hostname configured for that node. The existing `--no-nodeid-checks` workaround disabled broader safety checks and could allow multiple nodes to use the same node ID.

  As of this release, a new option, `--skip-nodeid-address-check`, selectively disables hostname matching, allowing node ID allocation through proxies while retaining other node ID protections.

  `--no-nodeid-checks` is deprecated and acts as an alias for `--skip-nodeid-address-check`. (Bug #38899143)

- As of this release, log messages containing the node group ID are written at node startup and when the node group ID changes due to CREATE NODEGROUP or DROP NODEGROUP. (Bug #36379201)

Bugs Fixed

- **NDB Cluster APIs:** NDBAPI could misidentify a complete disconnection from all data nodes as a series of survivable individual node failures when disconnect notifications were delayed. A node could reconnect before all disconnects had been processed, leaving transactions stalled until protocol timeouts and event subscriptions waiting for events that would never arrive.

  NDBAPI now tracks node-failure completion consistently and delays reconnection attempts until failure handling is complete. This ensures complete cluster-side state loss is detected correctly and local transactions and event subscriptions are cleaned up and re-established as needed. (Bug #35959495)

- When a table or index scan was split across multiple fragments and nodes, some fragment-scan requests could remain queued for sending. If a data node failed at that point, cleanup handled requests already sent but could miss queued requests targeting the failed node, leading to an assertion failure. NDB now handles pending fragment-scan requests for failed nodes correctly, preventing the failure. (Bug #39555153)

- Backup-abort requests could be rejected if they arrived while backup shutdown processing was already underway, due to an overly restrictive internal state check. This could affect abort handling during concurrent backup-stop activity. The Backup block now accepts abort requests during the relevant stop-processing states. (Bug #39446861)

- When a filesystem was full or nearly full, an NDB data node could treat a partial file write as successful, risking file corruption. Partial writes are now handled as failures, including reporting unknown error 2813 when a failed file operation has no operating-system error code. (Bug #39436680)

- An assertion failure could happen on NDBAPI nodes if a newly added API node with a higher node ID connected before the existing API nodes were restarted. Their fixed-size subscription tracking bitmap was sized using the previous configuration and could not represent the new node.

  NDBAPI now allocates this tracking data for the maximum supported cluster node ID and safely rejects out-of-range subscription events with an error message. (Bug #38932493)

- It was possible for data nodes to stop unexpectedly if TDE was enabled. (Bug #38549404)

- Fixed an assertion which occurred when bulk inserts or deletes were occurring on a table, while nodes were restarting. (Bug #30702408)

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