```
SELECT @LATEST_EPOCH:=MAX(epoch)
    FROM mysql.ndb_apply_status;
```

10. Find the latest binary log file (`@FIRST_FILE`) and position (`Position` column value) within this file that correspond to `@LATEST_EPOCH` in the `ndb_binlog_index` table:

```
SELECT Position, @FIRST_FILE:=File
    FROM mysql.ndb_binlog_index
    WHERE epoch > @LATEST_EPOCH ORDER BY epoch ASC LIMIT 1;
```

11. Using `mysqlbinlog`, replay the binary log events from the given file and position up to the point of the failure. (See Section 4.6.9, “mysqlbinlog — Utility for Processing Binary Log Files”.)

See also Section 7.5, “Point-in-Time (Incremental) Recovery”, for more information about the binary log, replication, and incremental recovery.

23.6.10 NDB Cluster Replication: Bidirectional and Circular Replication

It is possible to use NDB Cluster for bidirectional replication between two clusters, as well as for circular replication between any number of clusters.

Circular replication example. In the next few paragraphs we consider the example of a replication setup involving three NDB Clusters numbered 1, 2, and 3, in which Cluster 1 acts as the replication source for Cluster 2, Cluster 2 acts as the source for Cluster 3, and Cluster 3 acts as the source for Cluster 1. Each cluster has two SQL nodes, with SQL nodes A and B belonging to Cluster 1, SQL nodes C and D belonging to Cluster 2, and SQL nodes E and F belonging to Cluster 3.

Circular replication using these clusters is supported as long as the following conditions are met:

- The SQL nodes on all sources and replicas are the same.
- All SQL nodes acting as sources and replicas are started with the `log_slave_updates` system variable enabled.

This type of circular replication setup is shown in the following diagram: