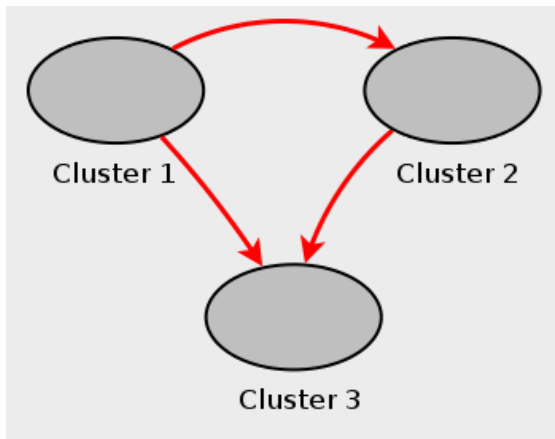**Figure 23.38 NDB Cluster Multi-Master Replication With 3 Sources**



In other words, data replicates from Cluster 1 to Cluster 3 through 2 different routes: directly, and by way of Cluster 2.

Not all MySQL servers taking part in multi-source replication must act as both source and replica, and a given NDB Cluster might use different SQL nodes for different replication channels. Such a case is shown here:

**Figure 23.39 NDB Cluster Multi-Source Replication, With MySQL Servers**
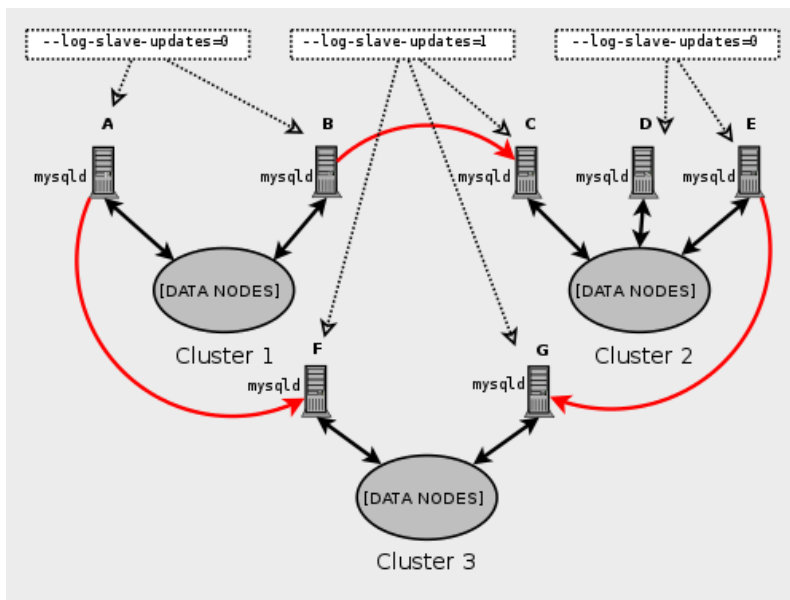


MySQL servers acting as replicas must be run with the `log_slave_updates` system variable enabled. Which `mysqld` processes require this option is also shown in the preceding diagram.

> **Note**
>
> Using the `log_slave_updates` system variable has no effect on servers not being run as replicas.

The need for failover arises when one of the replicating clusters goes down. In this example, we consider the case where Cluster 1 is lost to service, and so Cluster 3 loses 2 sources of updates from Cluster 1. Because replication between NDB Clusters is asynchronous, there is no guarantee that Cluster 3's updates