

AllegroGraph v6.4 – Now Available

Release 6.4.0 is a major release with significant new features.

The most important and far-reaching change is support for **multi-master replication**.

AllegroGraph has long supported single-master replication, where several AllegroGraph instances share data in a repository, but only one of them can make changes (adding or deleting triples).

In multi-master replication, even though one instance is identified as the controlling instance, any instance can add or delete triples, with the remainder catching up with those changes while perhaps making other changes of their own. Single-master replication is still supported and is described in the Replication document. The new multi-master replication facility is described in Multi-master Replication.

AllegroGraph Multi-master Replication is a real-time transactionally consistent data replication solution. It allows businesses to move and synchronize their semantic data across the enterprise. This facilitates real-time reporting, load balancing, and disaster recovery.

Single repositories can be replicated as desired. The replicas each run in an AllegroGraph server. A single server can serve multiple replicas of the same repository (this is not typical for production work but might be common in testing). Note if there are multiple replicas in a single server, each replica must either be in a different catalog or must have a different name.

The collection of servers with replicas of a particular

repository is called a *replication cluster* (or just *cluster* below in this document). Each repository in the cluster is called an *instance*. One instance is designated as the *controlling instance*, which will be described in more details below.

Each instance in the cluster can add or delete triples and these additions and deletions are passed to all other instances in the cluster. How long it takes for instances to synchronize depends on factors external to AllegroGraph (such as network availability and speed and whether the other servers are even available) but given time and assuming all instances are accessible, after a period of no activity (no additions or deletions) all instances will become synchronized.