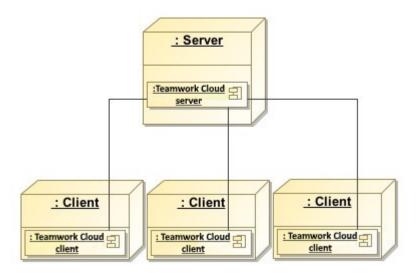
## System architecture and design

Magic Collaboration Studio is focused on the capability of creating highly scalable systems and collaborative modeling environments.

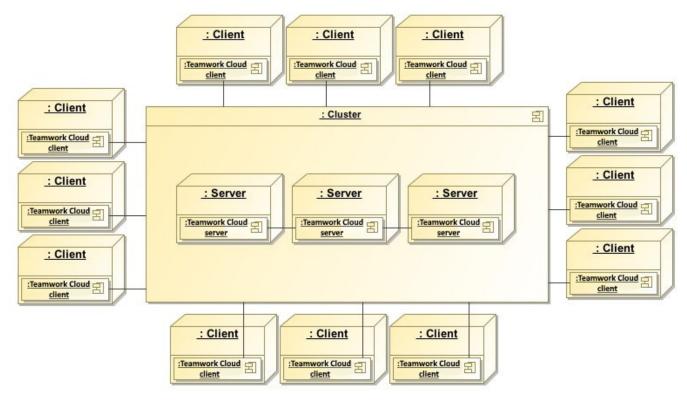
Scalability refers to the ability of Magic Collaboration Studio to support any number or type of internal or external users with larger volumes of data and applications. The purpose of scalability is to support potential growth of storage within the business without impacting performance. Magic Collaboration Studio is also dedicated to effectively integrate with MagicDraw by extending all of the capabilities of Teamwork Server to provide a collaborative modeling environment where multiple users across different platforms will be able to work on a model at the same time without concerns about data consistency and availability.

Magic Collaboration Studio is a model repository that is deployable as either a single-node server or multiple node servers (see the following figures).



A single-node server model repository.

A cluster is a group of servers working as a single consistent model repository. Clustering is transparent to the clients of the repository. Compared with single node-deployments, a cluster deployment has higher capacity, improved reliability, or both. A cluster can either use replication to increase reliability and enable failover, or it can simply increase the storage and processing capacity of the cluster.



A cluster node server model repository

A cluster consists of multiple servers connected through LAN, acting as a single repository. A server is a single computer which is part of a cluster and client is a computer running, for example, MagicDraw, that accesses data in a repository, but is not part of the cluster.