

Master-Slave architectural pattern

Master/slave is a model of communication where one device or process has unidirectional control over one or more other devices. In some systems a master is selected from a group of eligible devices, with the other devices acting in the role of slaves.

Gliffy Macro Error

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In the context of motor control, the master/slave configuration is used for load sharing purposes when two identical motors connected to two different drives are coupled to a common load. One drive is defined as the master and is configured for running in the speed-control mode whereas the other defined as slave is configured for running in torque-control mode.

In case of Disaster Recovery, the master is always used for common operation, and slave is used as just a backup and ready to run when the master is in malfunction. The below case shows how to design master-slave server architecture in active-stand-by.

Gliffy Macro Error

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From above architecture, Master DB is always working, but Slave DB is not working and mirrored from Master DB. When the master is dead, the slave will be activated automatically/manually. To implement automatic switching, it can be easily implement by clone job or real-time monitoring tool.