



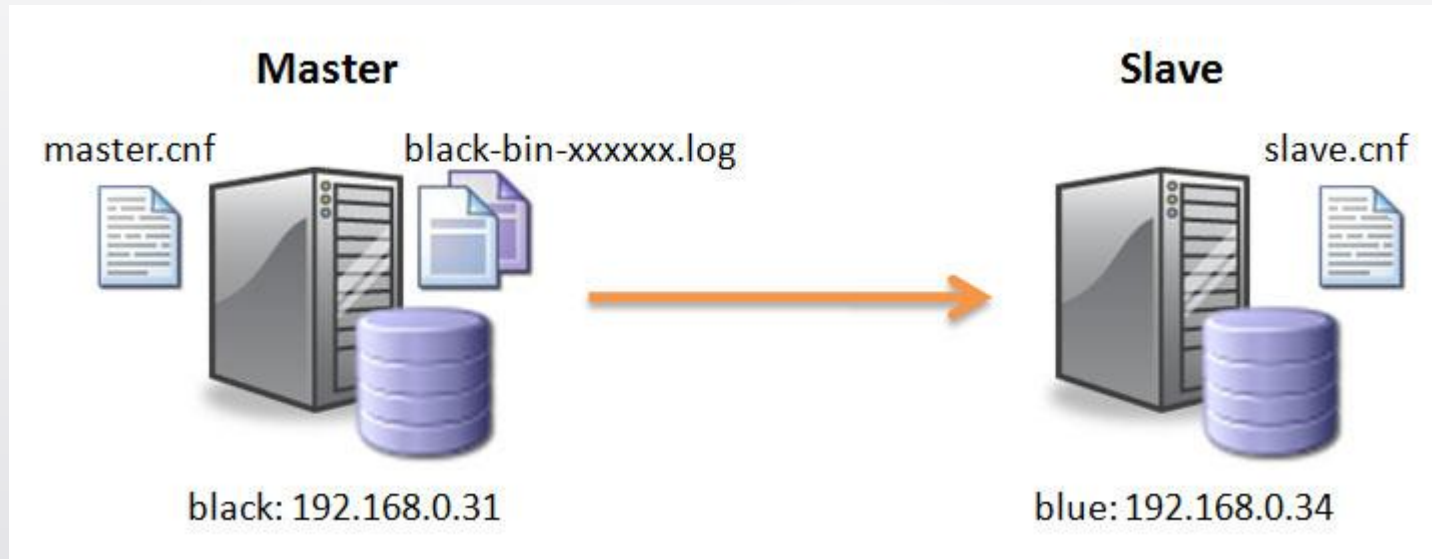
# **MySQL Replication and Its Advantages**



# Introduction

- Replication enables data from one MySQL database server (known as a source) to be copied to one or more MySQL database servers (known as replicas).
- Replication is asynchronous by default; replicas do not need to be connected permanently to receive updates from a source.
- Depending on the configuration, you can replicate all databases, selected databases, or even selected tables within a database.

# Design of MySQL Replication





# Advantages of Replication

- Scale-out solutions - spreading the load among multiple replicas to improve performance. In this environment, all writes and updates must take place on the source server. Reads, however, may take place on one or more replicas. This model can improve the performance of writes (since the source is dedicated to updates), while dramatically increasing read speed across an increasing number of replicas.
- Data security - because the replica can pause the replication process, it is possible to run backup services on the replica without corrupting the corresponding source data.
- Analytics - live data can be created on the source, while the analysis of the information can take place on the replica without affecting the performance of the source.
- Long-distance data distribution - you can use replication to create a local copy of data for a remote site to use, without permanent access to the source.