

OpenDS

Directory Server

Expected Typical Synchronization Deployments

Version 0.1
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Overview

This document describes typical deployment topologies of the synchronization feature of OpenDS. It does not cover all the topologies that can be used with synchronization but simply the topologies that were envisioned at the time this feature was developed.

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Feedback

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Acknowledgements

The general format of this document was based on the documentation template used by OpenOffice.org.

Modifications and Updates

<i>Date</i>	<i>Description of Change</i>
July 20 th 2006	Initial draft

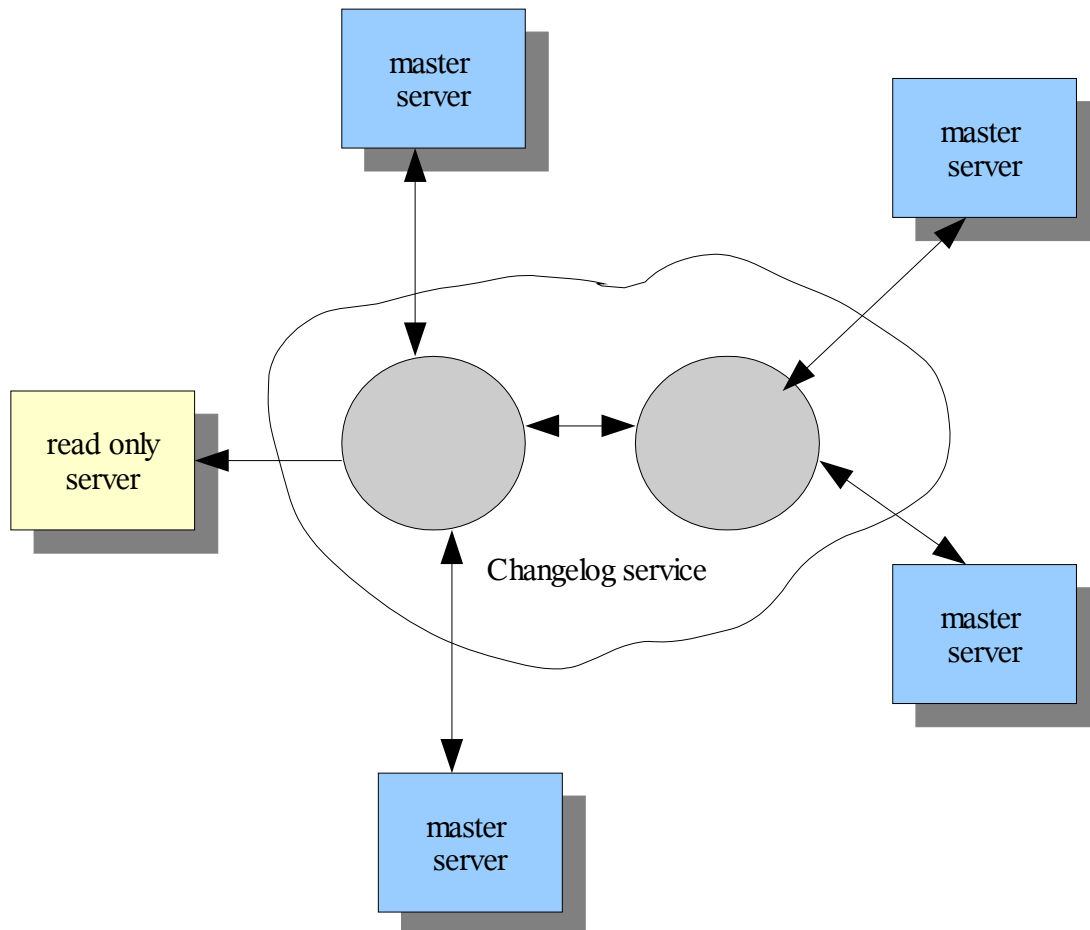
Single data center

When a single data center is used, it is necessary to have two changelog server instances to provide high availability in case of a failure of one of the changelog server. It is typically not necessary to add more changelog servers instances unless more than one failure must be tolerated or the necessary number of Directory Servers is very large.

The number of Directory Servers should be chosen depending on the maximum number of read operations that the Directory Service must provide.

Adding more Directory Servers does not help scaling the maximum number of update operations. Read-only server should only be used when there is a specific need.

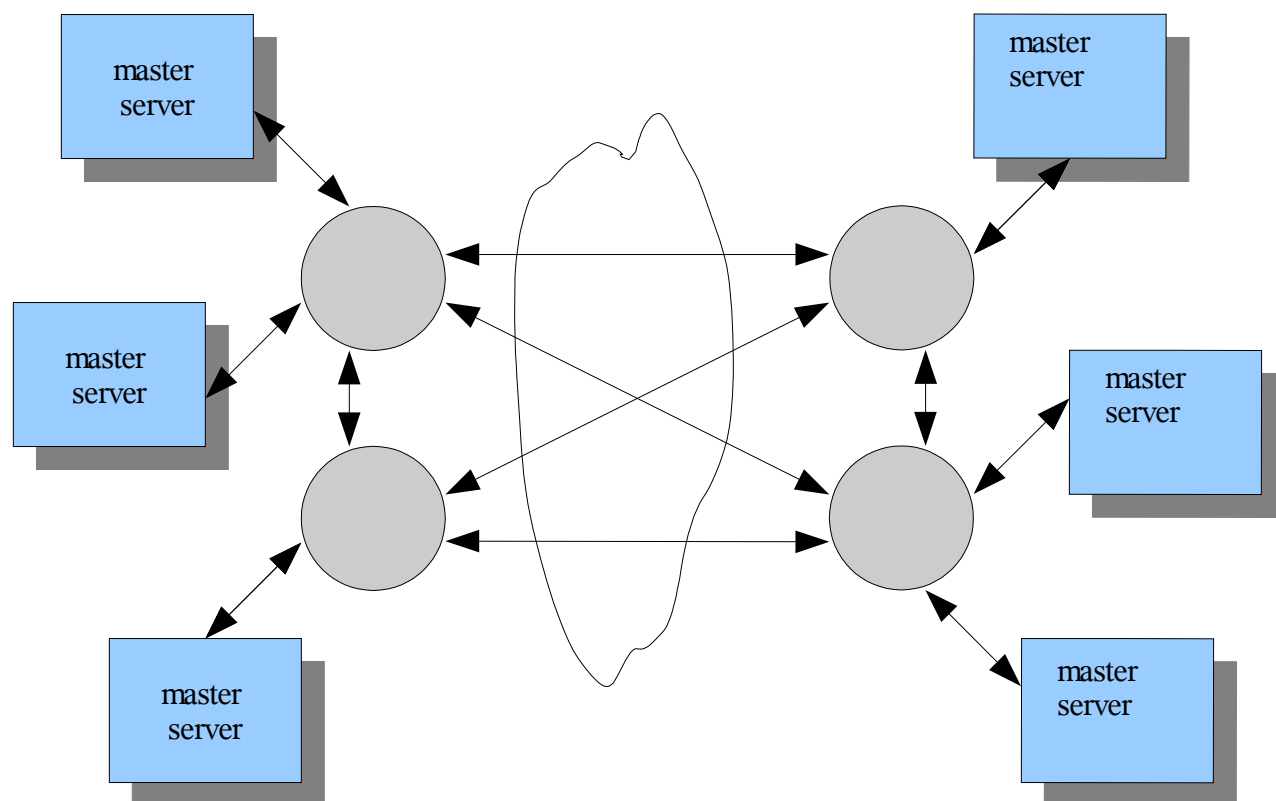
Applications should typically do their read and write on the same server so that they don't experience consistency problems.



Several data centers

When several data centers are used two changelog server should be used in each data center. The LDAP server normally connects to the local changelog server and will only access the changelog servers on the other data center if all the local copy have failed.

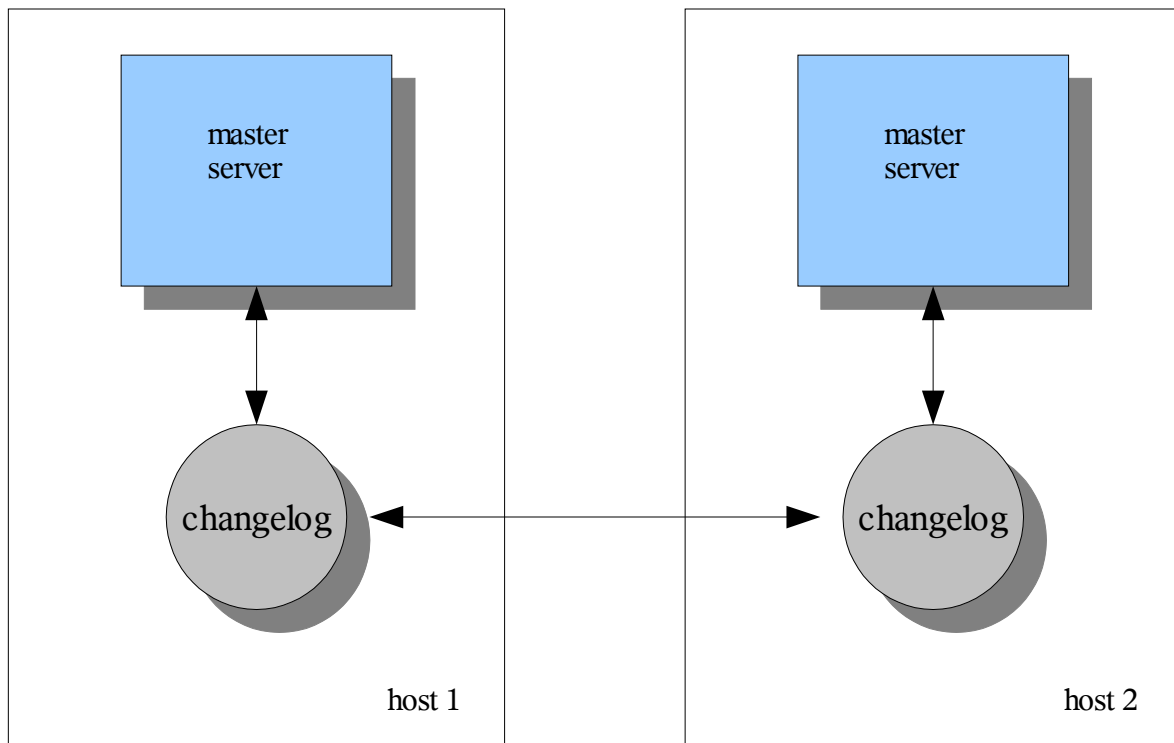
The application should always connect to local instances of the Directory Servers and should perform read and write operations on the same server.



Small deployments

For small deployments it is possible to use only two machines by running the changelog server and the Directory Server on the same machine

In order to further simplify administration it is possible to run both servers in a single process.



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