

SPOF

SPOF: Single Point of Failure

An SPOF is a single part of a system, which, if it fails, takes down the entire system.

In Hadoop, the [NameNode](#) is a SPOF. DNS may also be SPOF, unless you have failover. The network may be a SPOF, depending on its redundancy, as can be the room's power supply.

People can be SPOFs too. If only one person knows the database admin password, you can be sure they are on vacation when the password is needed. If only one developer understands how the mission-critical [MapReduce](#) algorithm works, they are the SPOF.

There is always a SPOF. Even when you think you have anticipated and eliminated every SPOF, there is one out there, waiting. How you find it? You wait.