

Strict consistency

A read returns the most recently written value (what most programmers intuitively expect).



Sequential consistency

The result of any execution appears as some interleaving of the operations of the individual nodes when executed on a multithreaded sequential machine.



Processor consistency

Writes issued by each individual node are never seen out of order, but the order of writes from two different nodes can be observed differently.

Weak consistency

The programmer enforces consistency using synchronization operators guaranteed to be sequentially consistent.



Release consistency

Weak consistency with two types of synchronization operators: acquire and release. Each type of operator is guaranteed to be processor consistent.