Mero	Lustre	NFS	Others	Description	Reference
node	cluster		process (distributed		
client					
server					
message					
file					
file-set	file-set (planned)				
component object (cob) /	stripe object	component data file		metadata-enhanced storage object	https://docs.google.com/a/x
	import, export	session			
	ptlrpc connection	connection			
		channel			
	last rcvd	reply-cache			
reintegration stream	lsd client data	(session, slot) pair			
	client nid	client-owner		a client identifier stable across client restarts	
	client uuid	client-id			
fid	fid	file handle (roughly)	oid		
inode number	client inode number	fileid			
layout	LOVEA	layout			
	CMD	meta-data striping			
operation					
update					
node-id					
	mount	mount			
	node				
	cluster				
dependency of operations					
dependency of updates					
	DLM				
	grant				
user					
credentials					
capability					
	recovery				
	DLM lock		a lock (as opposed to a latch,	NOTE: it would be great to have separate terms for a "lock request"	
	lock enqueue				
	lock cancel				
	lock invalidation				
	blocking AST				
	completion AST				
	lock owner				
	busy lock (addref)				
back-pointer	(planned)	---		a file attribute recording a name and a parent directory of the file. In the current data-model, back-pointers are maintained as a part of object-index.	
epoch	epoch				
replay	replay				
resend	resend				
file version	inode version	change attribute			
	xid	sequence-id			
	MDS				
	MDT	NFS server			
	MGS			management server	
	OSS				
	OST	NFS server			
persistent (of an operation or an update)					
stable (of an operation or an update)					
	extent lock				
	---			whole-file lock given out by a meta-data server	
			escrow locking (data-bases community)	escrow lock on a file attribute	
	---	---			https://docs.google.com/a/h orizontalscale.com/Doc?doc id=0Aa9loGbR4emcZGhxY 2hqdmdfMTgwZjd0ejY5Z3c &hl=en
FOL	changelog (not really)	---	journal (local file systems), log (databases community)	File Operation Log: an ordered list of descriptions of executed operations maintained by a M0 back-end	
FOL record	---	---	record, entry		https://docs.google.com/a/h orizontalscale.com/Doc?doc id=0Aa9loGbR4emcZGhxY 2hqdmdfNjE1Y3Q5bXJ0ZG Q&hl=en
FOP	RPC	procedure, operation		File Operation Packet	
ADDB	---	---		Analysis and Diagnostics DataBase	
ADDB record	---	---			
		LAYOUTCOMMIT			
ATOM	SOM	(roughly)		ATtribute On Meta-data server	
basic file attributes			stat data (reiserfs)	file attributes required to perform a stat(2) call	
NRS	NRS	---		Network Request Scheduler	
orphan	orphan				
durability notification (of an operation or an update)	last committed				
		directory delegation			
		open delegation			
			consistent cut, consistent snapshot (distributed algorithms community)		
	epoch boundary, cut	---	meta-data cache		
	WBC				
meta-data intent	intent	compound (roughly)			
data intent	---				
	hash	readdir cookie			
cached IO					
nocache IO					
direct-IO					
fsync	fsync	fsync	fsync (POSIX)		
IO	IO	IO	IO	read or write calls	
transfer	IO, transfer (CLIO)		IO	network data transfer	
			IO	data transfer to or from persistent storage	
reintegration	reintegration		merging		https://docs.google.com/a/h orizontalscale.com/Doc?doc id=0Acg1g2G1AnTZGZwN WRna3ZfMTRoYmt0amtkc w&hl=en
	eviction	drop expired lease			
undo	undo		undo (data-bases community)		
redo	redo		redo (data-bases community)		
redo-tail	---	---	---		
storage application			plugin		
back-end					
cache pressure			memory pressure, working-set balancing, cache trimming (kernel VMs) VM writeout, laundromat, page stealing thread, pageout daemon (kernel VMs)		
cache pressure handler					
state machine	state machine (CLIO)	---	state machine		
snapshot			snapshot		
clone			clone (OSD-2)		
networking transport					
COW	---	---	COW in-place update (data-bases community, local file systems), home update	Copy-on-write	
fid home server	fid home server				
			(local) transaction transaction group transaction open transaction close transaction commit		
commit call-back	commit call-back	---	commit call-back		
	block number		block number, disk address		
data	data	data	data		
meta-data	meta-data	meta-data	meta-data data or meta-data		
operation error				semantic operation error: rename of a non-existent file, wrong permissions, memory allocation failure, etc. Guarantees: file system consistency is maintained. File system state is consistent with that reported to applications.	
failure				node, storage or network failure leading to recovery. Guarantees: consistency of visible file system state is maintained. File system state is eventually consistent with that reported to applications.	
catastrophe				node, storage or network failure breaking system model assumptions, for example, more failures than a given RAID mode can recover from, or a loss of all redundant copies of meta-data. Guarantees: consistency of visible file system state is maintained. Some state reported to applications can be no longer accessible. Clients holding no longer relevant state are (optionally?) evicted.	
system failure				violation of internal system invariants, or unrecoverable failure during recovery from some other failure. Guarantees: none.	
parity group			parity group (RAID literature)	a collection of data blocks (data units) sharing parity	
SNS	SNS (planned)		RAID5, network RAID	server network striping	
CSIM				Cluster sotrage system simulator, uses ADDB	
M0				ClusterStor Colibri Storage Software, aka Colibri, M0	
DS				Data Server node (can be proxy, cache, or final server)	
FDML				File Data Management Language	
C4				ClusterStor Colibri Control Center, backend management server plus BUI, based on Trinity	
extent				continuous subspace of linear namespace	
device				Terms with the word "device" will refer to notions associated with a single physical storage device.	
				a disk, flash card, raid array, memory or similar device note that some physical storage devices offer persistence, others do not. C4 is responsible	
physical storage device				for uniquely labeling a physical storage device	
attached storage device				a physical storage device attached to a M0 node	
metadata container				metadata store which is part of a storage device. A metadata store provides a variety of indexes	
data container				linear address space which is part of a storage device. The data stored in a data container can be accessed through the linear offset or through objects described in a metadata container.	
container				a data container or a meta-data container A Container Object stores other objects inside. A storage device can hold	https://docs.google.com/a/x yratex.com/Edit?docid=0AT g1HFjUZcaZZGNkNXg4cX pfMjAza3NxcTJkZG0 https://docs.google.com/a/x