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Ceph : Linux

: <https://www.ibm.com/developerworks/library/l-ceph/>

"Ceph"

"Ceph" (Cephalopods) "Sammy" UCSC (Ceph). 가 가 . Ceph Sage Weil UCSC(University of California, Santa Cruz) 2010 3 Linux (2.6.34) Ceph Ceph 가 가 .

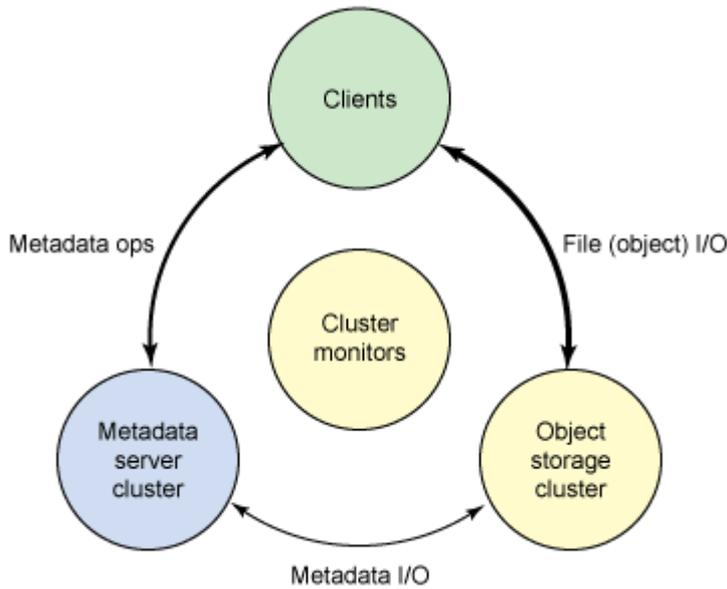
Ceph

Ceph 가 .

- 가 (IOPS[input/output operations per second])
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Ceph

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(“Metadata I/O”)

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POSIX

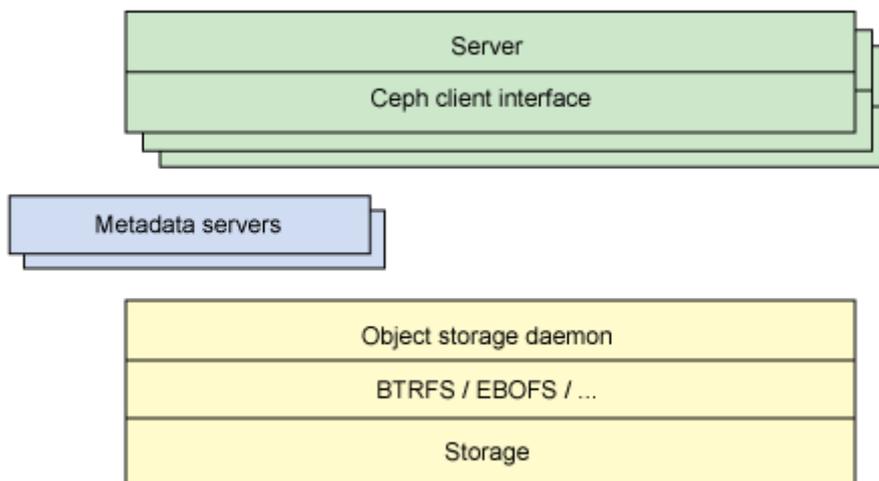
2

Ceph

tree-based Object File System]

RADOS(Reliable Autonomic Distributed Object Storage)

(Extent EBOFS[B-



Ceph

Ceph

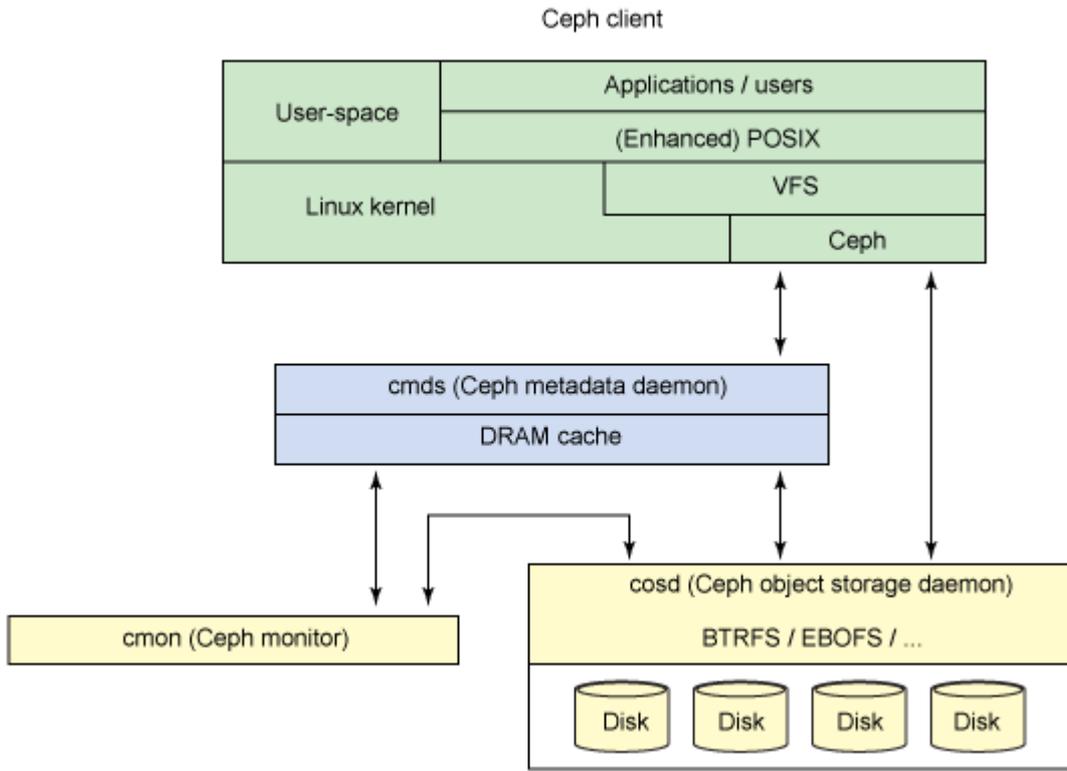
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Ceph

Linux VFS(Virtual File system Switch)

Ceph 가 (Ceph

가 I/O . Ceph (

가 가 Ceph (inode

(INO)가 ID . ID(OID)가 (PGID)

OID 가 (ONO) 가

CRUSH(Controlled Replication Under Scalable Hashing)
 . PGID

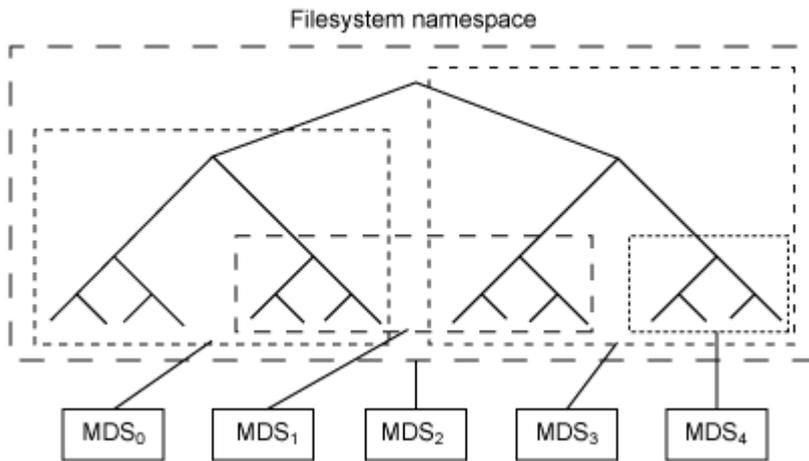
Ceph

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Ceph

Ceph



inode, (inode Ceph inode I/O

Ceph

Ceph

가 가 가 가 가 가 Paxos

Ceph

가 Ceph

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(Ceph EBOFS

