

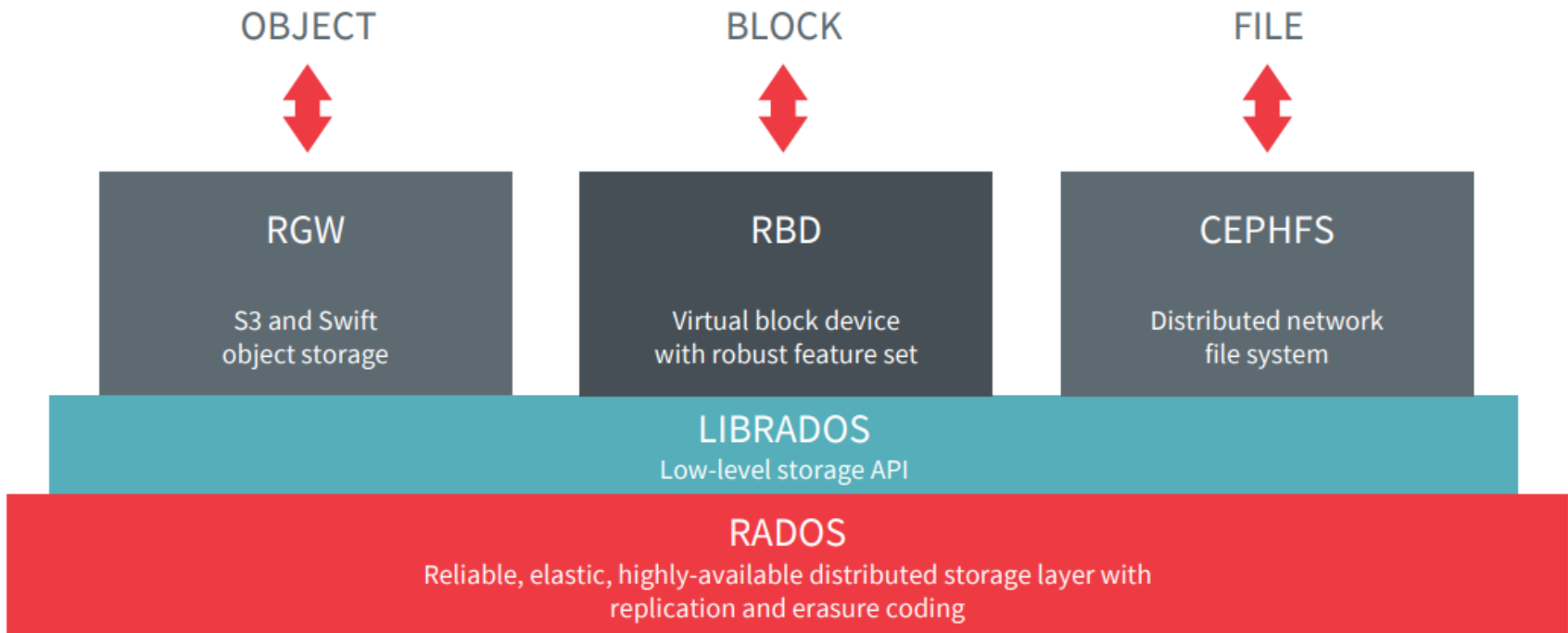




Ceph S3 Cloud Integration Tests

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What is Ceph



S3@CERN

HEALTHY

Write Throughput

8.6 MB/s

Read Throughput

108.2 MB/s

Cluster Capacity

2.539 PB

Available Capacity



Number of Objects

129.5 Mil

Alerts

0

Write IOPS

82.27 ops

Read IOPS

4.05K ops

Used Capacity

361 TB

Difference

24.90 K

Requests served

6952208

Data read

3.66 TB

Data written

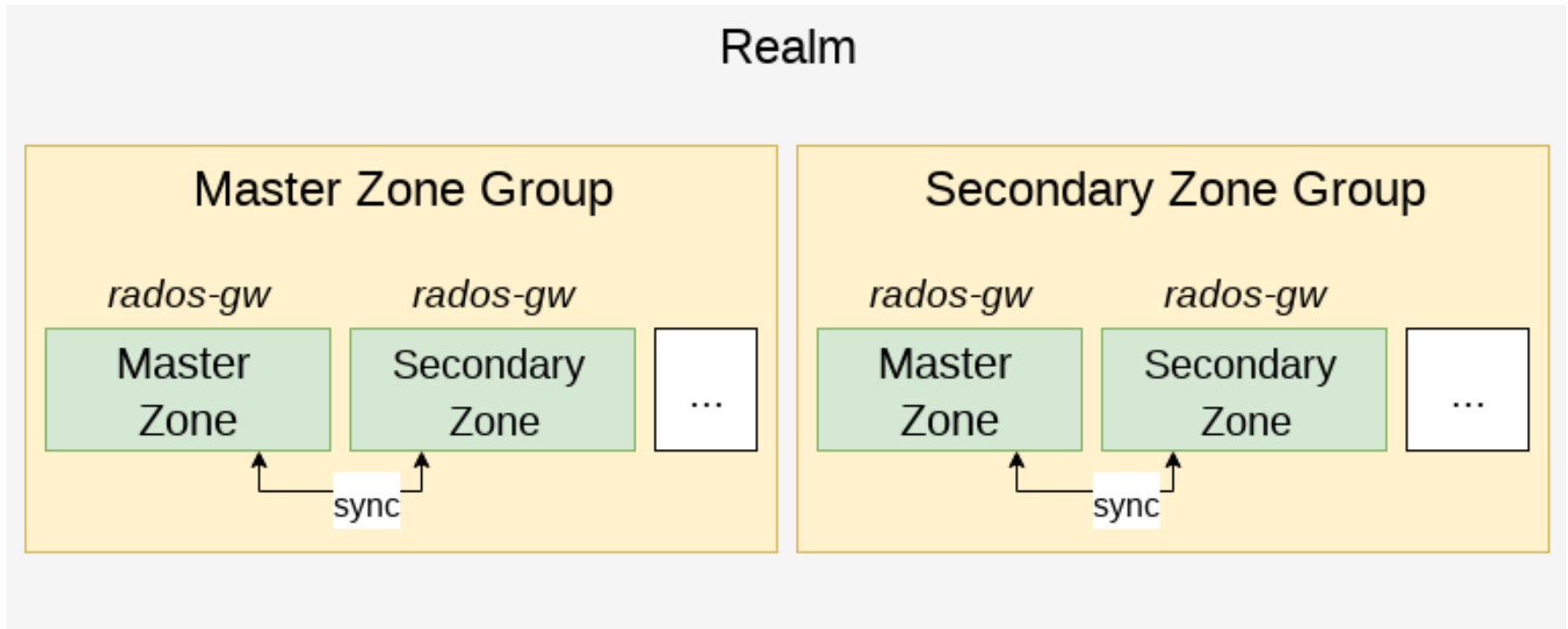
1.634 TB

Interval: 24h



Backup

Multisite Object Gateway

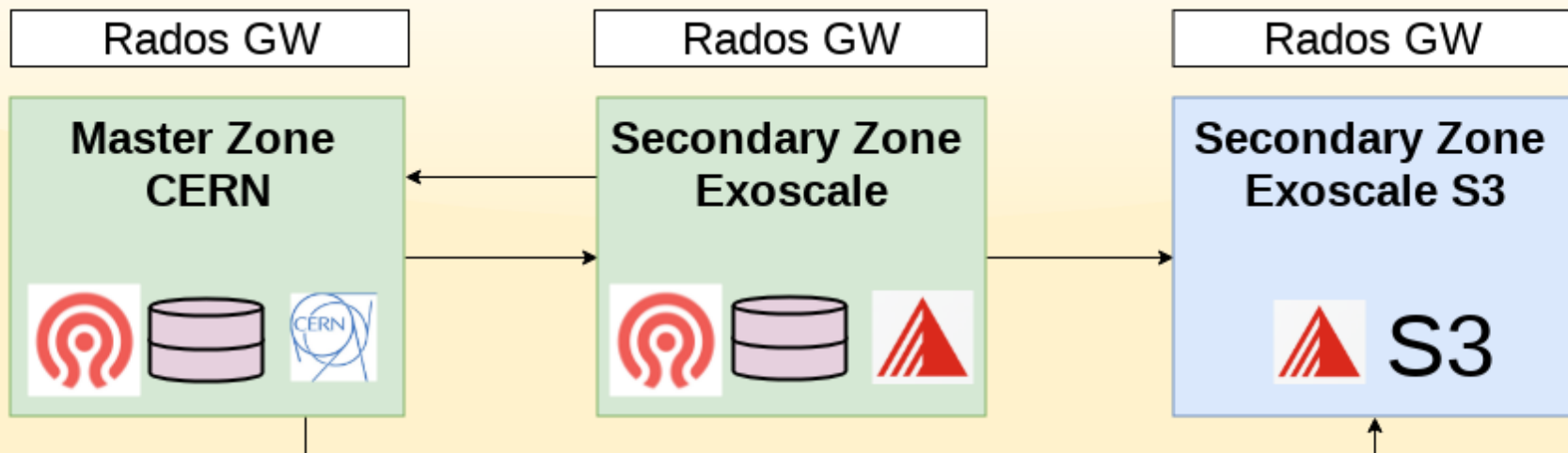


New in Ceph 13.2 *Mimic*: Cloud sync module

Configuration Tested

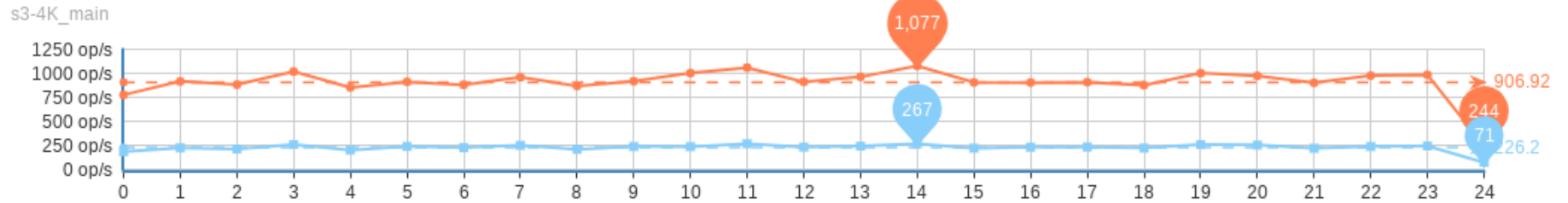
Realm "Earth"

Zonegroup "Ch" (Master)

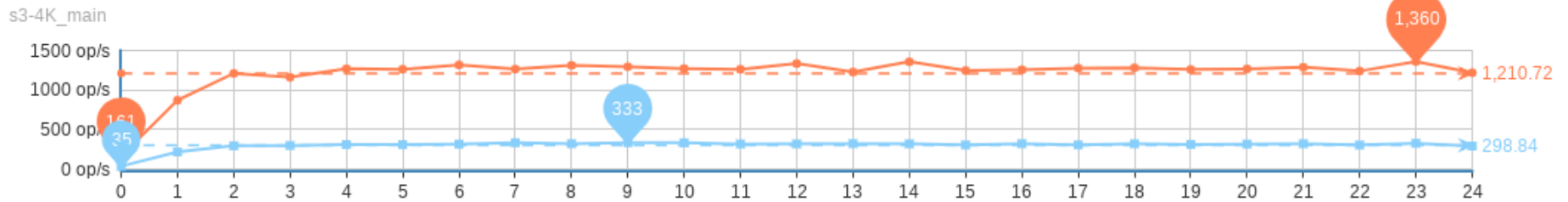


CERN S3 vs Exoscale S3

CERN throughput Graph



Exoscale throughput Graph



8 nodes, 128 workers, 100 containers, 1000 4K obj/c, mixed rw 80/20

Conclusion

- Multisite / Cloud sync, works!
- Allow more use cases
 - Offsite copy of data
 - Disaster Recovery
 - Backup
- Ceph Future

Future

- RGW as a gateway to a mesh of sites
 - With great on-site performance
- RGW may redirect or **proxy** to right zone
 - Single point of access for application
 - Proxying enables coherent local caching

- RGW may replicate at bucket granularity
 - Individual applications set durability needs
 - Enable granular application mobility

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www.cern.ch