**Scality RING**

**Introduction**

Scality RING is an open source, object-storage system. Each object is divided into smaller instances called stripes, each of 64MB .They all hold individual values that communicate with one another through the Scality network.

The RING uses Erasure coding technique, which is a technique used to eliminate redundancy in the program. Erasure coding also gives rise to something called Parity code, which is used to reconstruct lost data from nodes.

**Project Details**

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| Website |  |
| Open Source/Proprietory | Open source |
| License | Apache License |
| Github |  |
| Brief Description | Scality RING is an open source, object-storage system that uses multiple nodes to communicate with each other to store data efficiently. |

**Key Features**

1. Security: The RING provides high security through both TSL encryption and client side encryption.
2. Erasure Coding: It is a technique used to handle redundancy in program and gave give rise to something called Parity code that can be used to reconstruct lost data.
3. S3 Compatible: Scality RING is compatible with Amazon S3, this basically means that it can be used for many commonly used applications.
4. Highly Efficient: Scality RING uses nodes to communicate with one another. All the stripes are connected to the RING, so if one node stops functioning it does not affect the other nodes.

**Architecture**

1. RING: This is the core of Scality RING. It contains all the data and are connected by several other nodes that store data.
2. Nodes: They are divisions of the stripe. Each node communicates with other nodes through the network. If the one node stops functioning it does not affect the other nodes.
3. Connectors: They act as the medium of network between each node that share data between each other.
4. Stripes: They are divisions of the RING, each of 64MB they are further divided into nodes to solve data.