



Contribution ID: 38

Type: **not specified**

## Data Protection Technologies: What comes after RAID?

*Tuesday, 24 April 2012 16:05 (30 minutes)*

Increasing data volumes and demand for access impose serious challenges for data storage infrastructures. Risk of data corruption increases over time, increase of disc size leads to an unacceptably long recovery time in usual RAID configurations.

Recently a new solution, erasure coding, has appeared in the Cloud. It is based on a mathematical construction and involves dividing the data into a large number of small segments which are then duplicated and spread over multiple locations and in some cases multiple IaaS providers. Erasure coding in combination with RAIN (Redundant Array

of Inexpensive Nodes) allows significantly reduce overhead ensuring data redundancy similar to RAID and possibility of recovery from storage nodes failures.

Several solutions implementing erasure coding are already available on the market.

### Summary

**Primary author:** Dr SAPUNENKO, Vladimir (INFN)

**Presenter:** Dr SAPUNENKO, Vladimir (INFN)

**Session Classification:** Storage

**Track Classification:** Storage & Filesystems