Highlights

- ZFS on Linux works reliable and as good as on Solaris

- Huge performance increase with ZFS observed compared to xfs/ext4

  – Especially for parallel read/write access

- Real data protection by using block level checksums

- Compression can be used with WLCG data on typical storage systems and without performance reduction

- Large reductions in rebuild times of degrated systems possible

- Possibility to build systems with 3 redundancy disks (raidz3, similar to raid7)

  – important with increasing disk sizes that make raid6 unusable

Highlights

- Cost reductions possible

    – No need for hardware raid controllers

    – Systems build on ZFS can be upgraded by software updates and not through expensive hardware controllers

    – Compression saves disk space

    – Using raidz3 instead of multiple raid6 uses less disks for redundancy and hot spares in total but increases overall data protection