The OSiRIS Project: NSF CC*DNI:DIBBs Award #1541335

OSiRIS is a pilot project funded by the NSF to evaluate a software-defined storage infrastructure for our primary Michigan research universities. OSiRIS combines a number of innovative concepts, combining **Ceph**, **Software Defined Networking** and use of **Institutional Identity** to provide a distributed, multi-institutional storage infrastructure capable of supporting a broad range of science domains.

Open Storage Research Infrastructure
http://www.osris.org

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Project Technologies
- Ceph: Nautilus 14.2.6
- SDN: *UNIS, Flange, perfSONAR*
- Identity: *CoManage, Grouper*

Project Hardware (MSU,UM,WSU,VAI)
- COTS srvrs (50), 13.7 PiB
- High-capacity networks: 100G
- Servers with 4x25G or 2x100G
- Redund. Virtualization Hosts/Site

Project Goals
- Make data access and sharing easy
- Contain costs (COTS/open source)
- Easy to extend and replicate

Community Benefits
- Supports multiple domains; one system
- METAGOAL: *Enable scientists to collaboratively pursue their research goals without requiring significant infrastructure expertise.*