



SAGE

sage ¹ (sā)

n.

One venerated for experience, judgment, and wisdom.

adj. **sag-er, sag-est**

1. Having or exhibiting wisdom and calm judgment.

2. Proceeding from or marked by wisdom and calm judgment: *sage advice.*

Percipient **StorAGE** for Exascale Data Centric Computing

Sai Narasimhamurthy (Seagate)

Presented at the ETP4HPC Birds of a Feather Session
SC'17

Per-cip-i-ent (pr-sp-nt)

Adj.

Having the power of perceiving, especially perceiving keenly and readily.

n.

One that perceives.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 671500

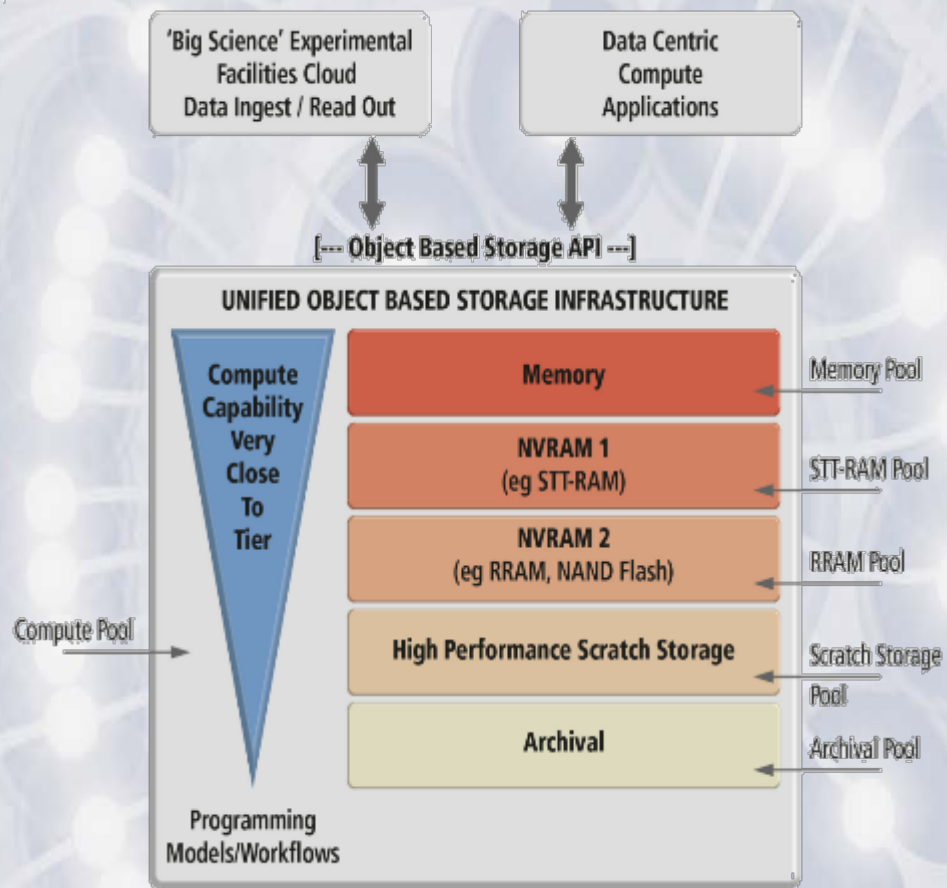




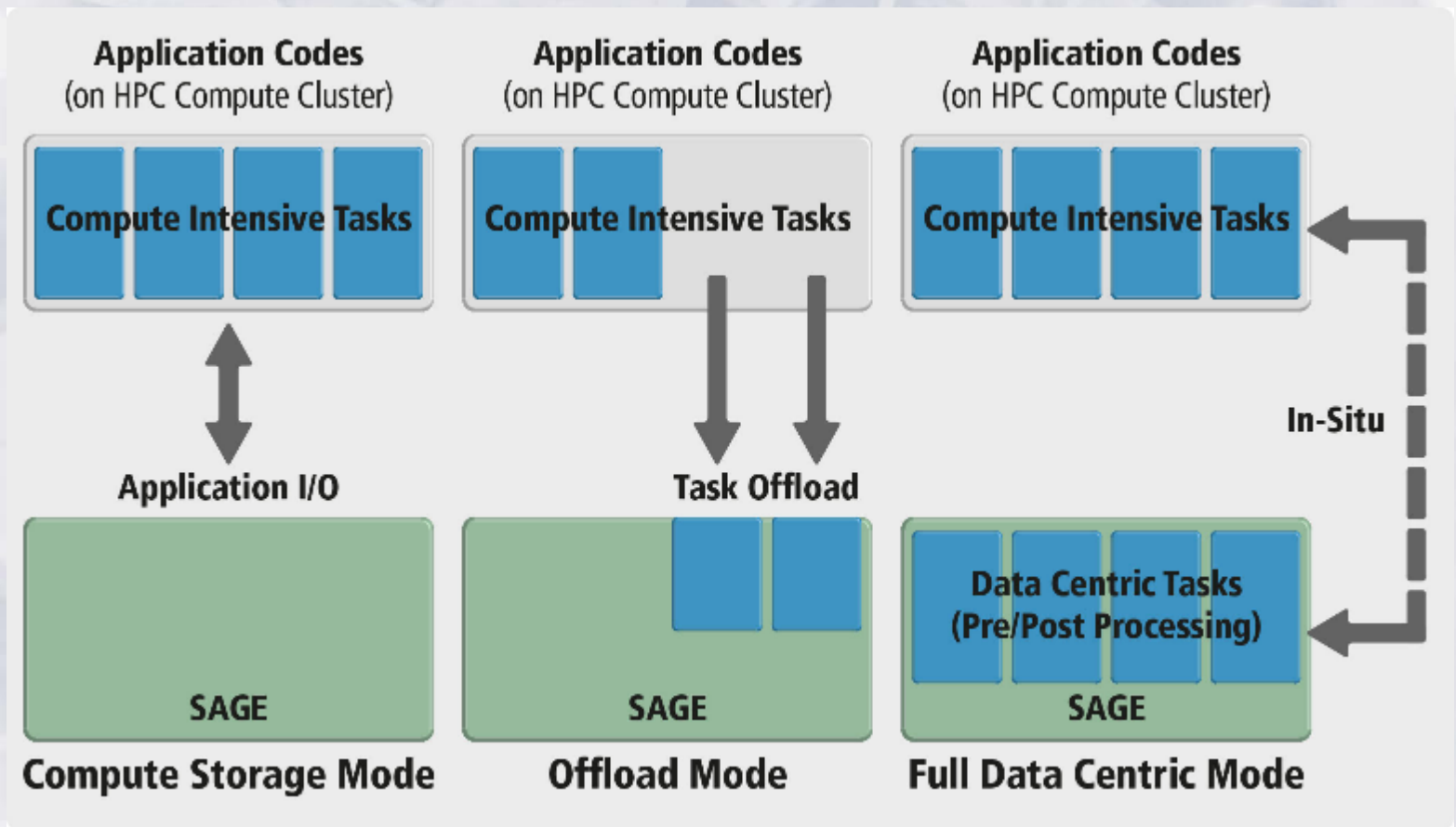
Need Exascale Data Centric Computing Systems
Big Data Extreme Computing (BDEC Systems)

SAGE Validates a BDEC System which can Ingest,
Store, Process and Manage extreme amounts of data

SAGE Project Goal



“Percipient Storage” Overview

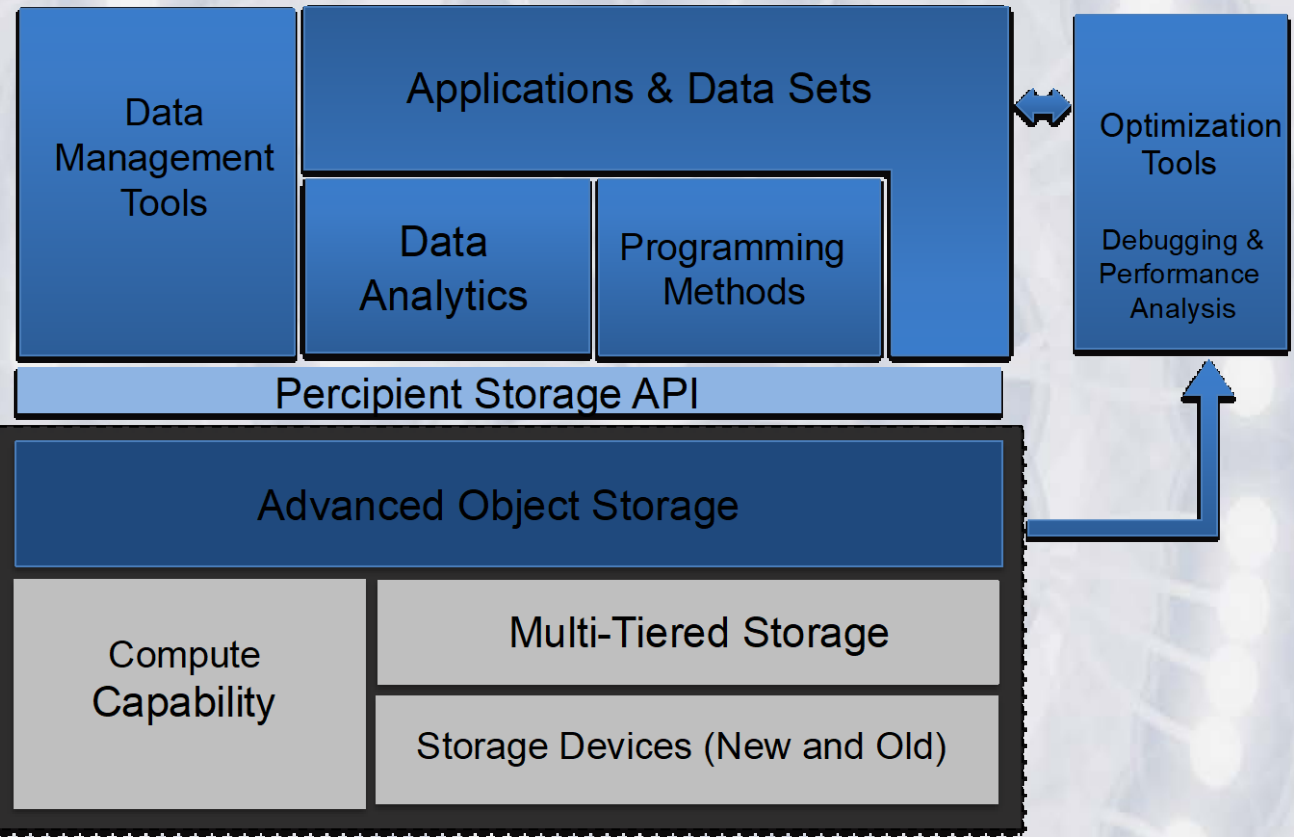


Percipient Storage Modes of Operation



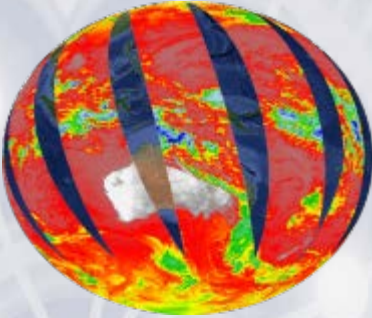
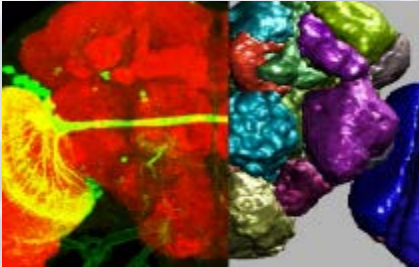
Percipient Storage: Research Areas

**SAGE Ecosystem
& Applications**



Percipient Storage Stack

Satellite Data Processing



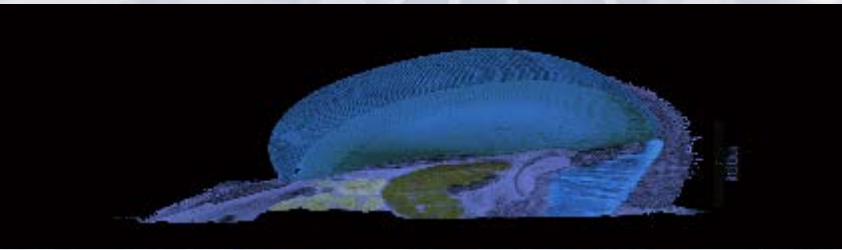
Space weather

Nuclear Fusion



Bio-informatics

Synchrotrons



Big Data Analytics

Use Cases



SAGE Prototype (Juelich)

- **M1 (Sept 2015) – Project Start**
- **M3 – Draft System architecture**
- **M9 – Co-Design Inputs from Apps Complete**
- **M12 – Design of Key Software Components (1st Draft)**
- **M18 – Prototype system available (Juelich)**
- **M27 – Design of All Software Components (2nd Draft) – In Progress**
- **M18 – M28 – Prototype system testing in Juelich – In Progress**
- **M28 – M36 – Application use cases and performance tests of the SAGE Platform in Juelich**

Overall Project Timeline

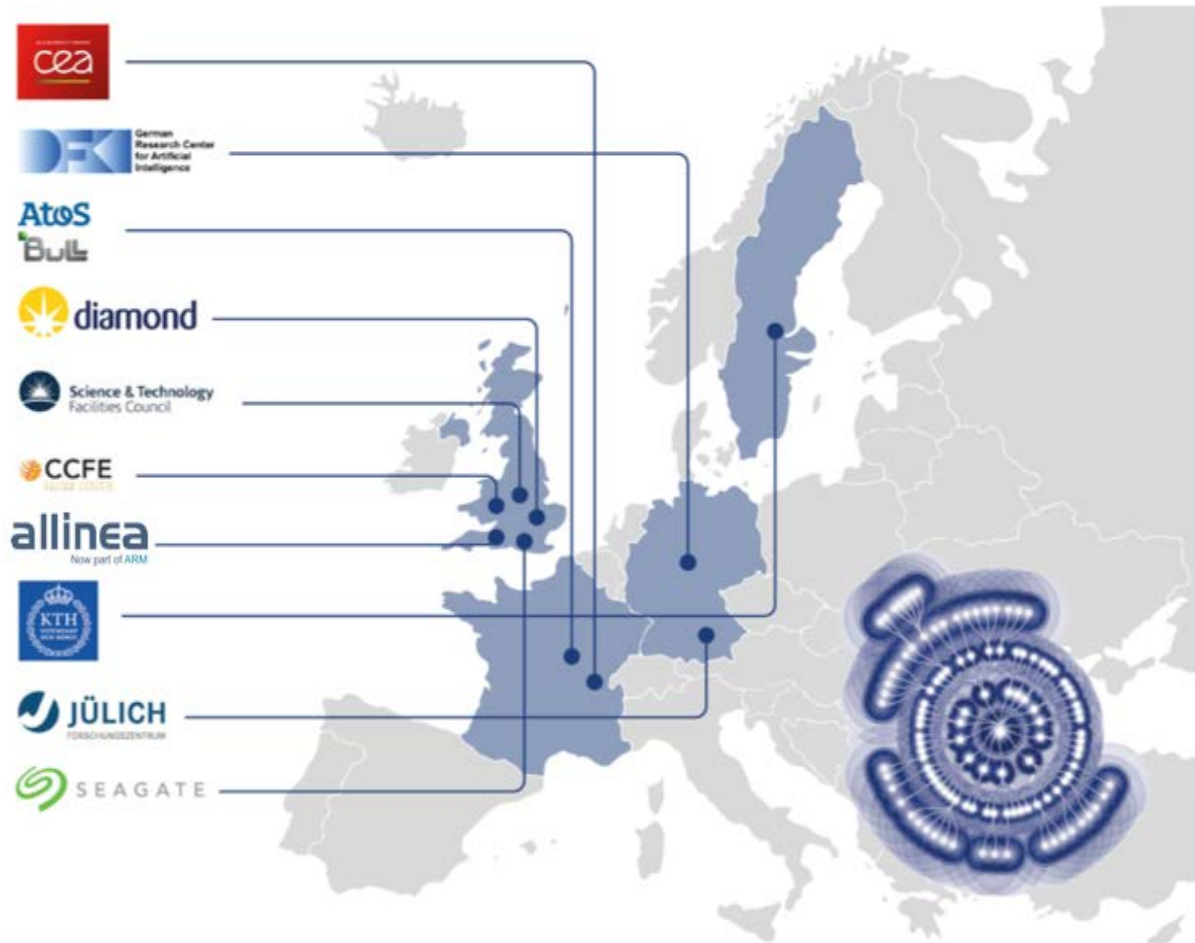
- Please visit Booth #1694 for a chat
- **We will be opening up the SAGE prototype to select external users in the coming few months**
 - **Please talk to us!**
 - **info@sagestorage.eu**
 - **Twitter: [@sagestorage](https://twitter.com/sagestorage)**
- Please visit www.sagestorage.eu and download the white paper

Additional Information





Coordinator: Seagate



SAGE Consortium Partners

