



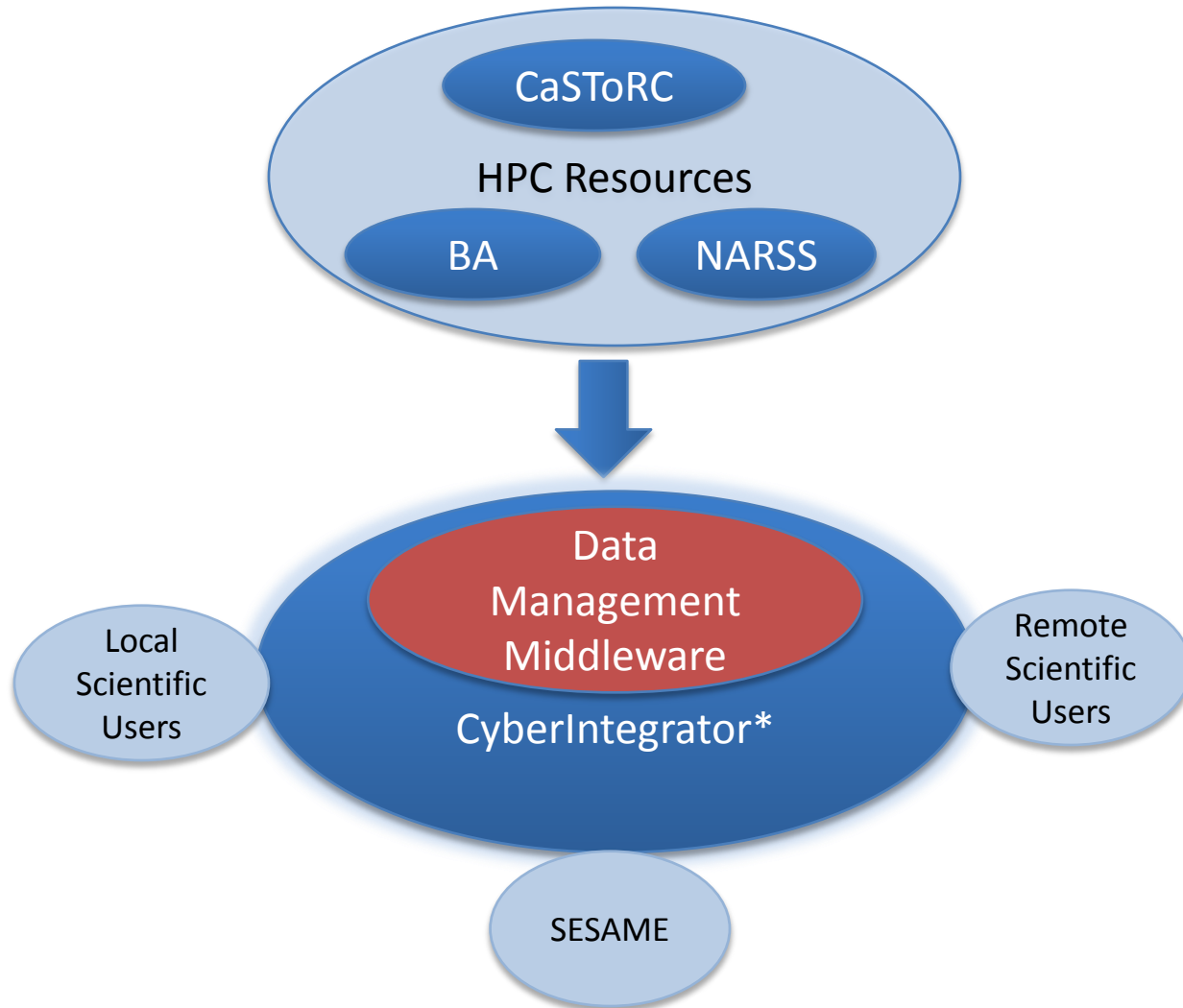
Linking Scientific Computing in Europe and the Eastern Mediterranean - Phase 2

- **A 48-month project funded by EU FP7 Research Infrastructure Program**
 - *Follow-up and Implementation of FP7 Support Action LinkSCEEM*
- **Main Goal**
 - *Develop a High Performance Computing (HPC) eco-system in the Eastern Mediterranean region by interlinking regional compute, data and visualization resources to form an integrated e-infrastructure.*
- **11 LinkSCEEM-2 Partners**
 - *The Cyprus Institute-CaSToRC (Coordinator), National Authority of Remote Sensing and Space Sciences-NARSS, Bibliotheca Alexandrina-BA, Juelich Supercomputing Center-JSC, National Center for Supercomputing Applications at University of Illinois at Urbana-Champaign-NCSA, Synchrotron-light for Experimental Science and Applications in the Middle East-SESAME, European Synchrotron Radiation Facility-ESRF, Max Planck Institute-MPI, Cyprus Research and Academic Network-CYNET, Jordanian Universities Network-JUNET, Inter University Computation Centre-IUCC.*

LinkSCEEM-2 Objectives

- **Optimally integrate computational resources contributed by HPC centers in the Eastern Mediterranean, while creating links with established lead HPC centers**
- **Create user support and training programs, and an active networking process to engage research communities and enable scientists in the region to utilize HPC**
- **Enable research of particular relevance to the region in climate science, cultural heritage and synchrotron applications**

Integration of Compute, Data and Visualization Resources



* System developed at NCSA

LinkSCEEM-2 Activities

■ Coordination Activities

– Networking of User Communities

- *Organization of user meetings, online tools for networking*

– Management of Access to Resources

- *Implement a peer review process for compute resources, data repositories and visualization systems*

– Training

- *Develop a tiered and adaptive HPC training program*

– Dissemination and Outreach

- *Create awareness through multiple dissemination activities and outreach programs*

LinkSCEEM-2 Activities (cont.)

■ Service Activities

– User Support

- *Tiered user support through help-desk, documentation and consulting*

– Network Connectivity

- *Improve regional network connectivity by upgrading the Cyprus-Jordan link*

– Integration of Resources

- *Implement software infrastructure linking regional hardware resources and software applications providing a unified access through an online scientific workflow application.*

■ Research Activities

– Cross-disciplinary Research

- *Optimization of parallel applications on HPC through implementation of commonly used software components including performance analysis tools*

– Research in Climate, Cultural Heritage, and Synchrotron Applications