

e-Research: Col-laboratories and Data Curation

Presenter:

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Background:

E-research is about much more than Grid computing. It is about the next step of evolution towards the information utility. In particular it is firstly about how to provide secure, dynamic col-laboratories - affordable global infrastructure for teams of knowledge workers who are collaborating usually only for a limited period to generate new intellectual property. This ranges from basic research in many different fields from genomics to climate change, to creative media teams producing a new movie, to teams of legal professionals and their clients, and to healthcare teams caring for an individual or dealing with an epidemic. Secondly, it is about managing the explosion of valuable and persistent information resources. For decades, the focus of computer science has been primarily on programming languages, instruction set architectures and algorithms. The scene is now shifting to include the management and curation of huge, global online collections of valuable data such as protein structures, environmental measurements, consumer behaviours and disease patterns. This raises essential issues including provenance, security, ownership and liability. One of the main objectives of current e-Research programs should be to explore these issues cooperatively with early adopters to better understand the size and scale of the measures necessary to deal with them as the information utility expands."