

## Collaborative Management Environment (CME)

### Managing heterogeneous information

DOE funds a vast amount of scientific research in a very broad range of areas. It is not surprising that each of its national laboratories follows independent research management processes tailored to the expertise of that laboratory. Information resulting from these management processes, however, is in different formats and at different levels of granularity that, in turn, makes the overall management of DOE-funded research a difficult challenge.

Two key challenges presented themselves in the development of this system. First, due to the distributed, heterogeneous, and sensitive nature of the proposal data, it is preferred that control of the data remains with the originating laboratories. Second, due to the lack of motivation for the laboratories to invest in the construction and maintenance of traditional enterprise information systems, it is necessary to investigate a low-cost, distributed information management system.

We developed the Collaborative Management Environment (CME) to meet this challenge. We pioneered work using the eXtensible Markup Language (XML) as a cost-efficient alternative for acquiring, storing, querying, and publishing heterogeneous and distributed enterprise information. We show long before XML was in common use, that it can provide a distributed data management system alternative with significant presentation and query capabilities.

#### Original Document

U. S. DEPARTMENT OF ENERGY  
FIELD WORK PROPOSAL

**PROGRAM:**  
Budget Element Number: 25000000123456789

**TYPE:** FIELD WORK **STATUS:** PENDING APPROVAL

**PROPOSAL NUMBER:** ERAT2095 **RELEASE DATE:** 2013-09-09

**PROJECT TITLE:** Collaborative Management Environment

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The Collaborative Management Environment (CME) is a joint research project between the Oak Ridge National Laboratory (ORNL) and the Los Alamos National Laboratory (LANL). This is funded by the U.S. Department of Energy (DOE). CME is designed to support -

#### XML tagged Document

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    <title>Collaborative Management Environment</title>
    <pi>Michael Moniz</pi>
    <organization>Oak Ridge National Laboratory</organization>
    <contractor>Oak Ridge National Laboratory</contractor>
    <phone>865-574-0834</phone>
    <fax>865-574-0834</fax>
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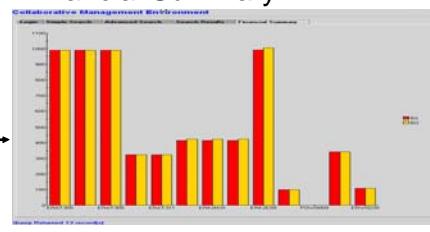
#### Field level query

Collaborative Management Environment

Log In	Simple Search	Advanced Search	Search Results	Financial Summary
			View FWP principal-investigator-name ERAT2095 Hill, Donald L. ERAT2095 Modzelewski, Peter K. ERAT2111 Modzelewski, Peter K. ERAT2111 Lyon, James F. ERAT2111 Volden, Eric ERAT2111 Wright, Michael C. ERAT2111 Hutton, Linda J. <b>ERAT2095</b> Potok, Thomas E. ERAT2111 Lewis, Michael R. POVW0230 MILLER, JEFFERY H. POVW0230 Allen, Steve L. POVW0230 Westbrook, Charles	wolf_coco-site ORNL Confinement Collaborations ORNL Confinement Collaborations ORNL Stellarator Collaborations ORNL Stellarator Collaborations Materials MicroCharacterization Collaboratory Pro... Materials MicroCharacterization Collaboratory Pro... Materials MicroCharacterization Collaboratory Pro... Collaborative Management Environment Computational Science Collaborations with HBCUs Selection and Implementation of Collaborative Mid... NSTX Collaboration Dense Combustion Collaboratory Project

Query Returned 13 record(s)

#### Financial Summary



DOE was so impressed with our efforts that Dr. Ernest Moniz, Under Secretary of Energy, approves the Portfolio Management Environment (PME) on our CME project. The estimated 5-year implementation cost of the PME system is \$17 million total investment, and the expected annual savings is approximately \$39 million.

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