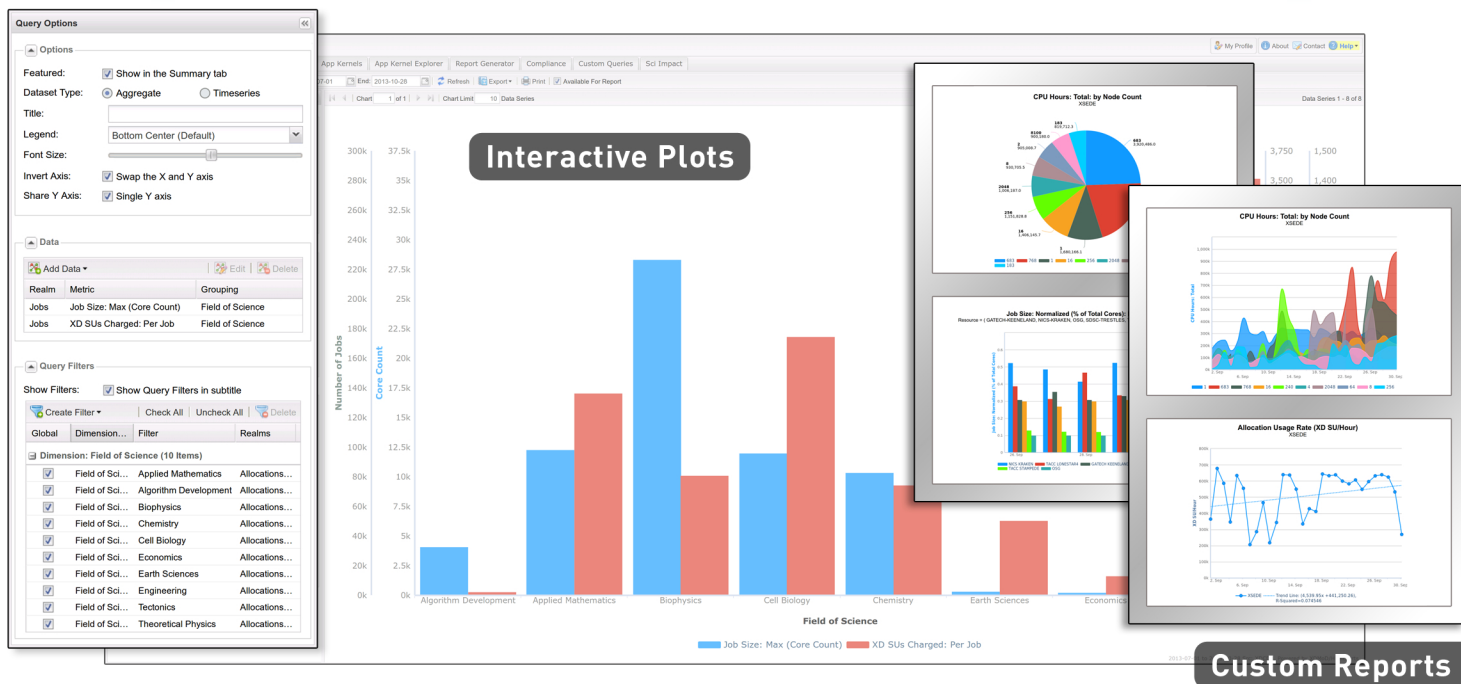


XDMoD

METRICS ON DEMAND



About XDMoD

XDMoD (XD Metrics on Demand) is an NSF-funded open source tool designed to facilitate the utilization of HPC infrastructure by providing end-users with a wide range of usage and performance metrics. Initially developed for XSEDE, a version is now available for academic & industrial HPC centers.

XDMoD provides an advanced web-based user interface for viewing historical job information as well as real-time scientific application profiling (via application kernels) to provide quality of service and performance metrics.

XDMoD uses a role-based scheme to present information in a format that is tailored to meet the specific needs of a user, principal investigator, service provider, or program officer. **XDMoD** displays information specific to the user as well as aggregated information over HPC resources.



<https://xdmod.ccr.buffalo.edu>

Key Features

Interactive charts provide users with context-sensitive drill-down capability to easily obtain more detailed information. The charts can be exported in a variety of formats.

The **Usage Explorer** allows you to conveniently construct and compare specific views of HPC usage and performance data. Filters and extensive display options provide great flexibility in analyzing metrics important to the user.

Application kernels measure the performance and quality of service of HPC infrastructure with respect to existing scientific applications (e.g. NWChem, Amber, etc.) from a user's perspective.

Custom reporting capabilities are provided through a **report generator** that allows users to generate reports in PDF and MS Word formats. Reports can be built on-demand or scheduled for periodic delivery.

XDMoD is written using the model-view-controller (MVC) design pattern. The user interface is implemented using JavaScript frameworks, including ExtJS and jQuery. The domain logic is accessed via an authenticated RESTful API built using the Zend Framework, PHP, and MySQL.

This work is sponsored by NSF under grant number OCI 1025159 for the development of technology audit service for XSEDE.



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