**Grid Account Management Architecture 2.0**

GAMA 2.0 is the newest version of the Grid Account Management Architecture software package developed at SDSC for simplifying Grid user account creation, credential management, authentication and authorization. GAMA 1, released in March of 2005, provided a portal-based system for users to request Grid accounts and for administrators to review account requests and trigger account and credential creation through a familiar web GUI. The GAMA portal components communicated via web services with a dedicated GAMA server machine that was easily installed using the Rocks build system and incorporated CACL Credential Authority (CA) software and a MyProxy credential repository. Building on the proven foundation of GAMA 1, we have significantly expanded the capabilities of the GAMA system in version 2.0. The GAMA server now uses a modular plug-in workflow system for performing tasks such as authentication and user account creation. This enables the GAMA administrator to configure a complex sequence of tasks that are carried out for each GAMA server function, and also enables easier integration with existing infrastructure components such as LDAP servers, SRB systems, and other resources. GAMA now supports multiple sites on a single GAMA server, with each site having a local site administrator with limited administrative rights on the GAMA server in order to manage users from their site only. Finally, GAMA now supports synchronization of cluster accounts, whereby the GAMA administrator specifies that a set of users should get accounts on a set of resources and the resources automatically poll the GAMA server and create accounts.

![Figure 1: GAMA 2.0 Components](image-url)