

A Secured Advanced Federated Environment to Support Collaborative Mission Development

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NASA programs and missions are widely dispersed among various NASA Centers and contractors. Collaborative mission development and operations requires access of data and resources across different organization's security boundaries. This paper discusses the challenges and security issues inherent in building complex cross-organizational collaborative projects for NASA. By applying the design principles of compartmentalization, organizational hierarchy and inter-organizational federation, the Secured Advanced Federated Environment (SAFE) is laying the foundation for a collaborative virtual infrastructure for the NASA community. An example on SAFE supports for STS-107 3-D Virtual Reconstruction effort will also be discussed.