

# **Distributed Security Architectures**

## **Third Quarter 2002 Progress Report**

**Covers work done Apr through June, 2002**

### **Personnel:**

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### **Akenti Server using SOAP protocol**

A version of the Akenti server using the gSOAP libraries over http was done. The SOAP versions of the Akenti check-access and reply messages were implemented and used successfully between a client and an Akenti server. This work is in anticipation of packaging the Akenti Server as a Grid Service.

### **Certificate Format and Generators**

Switched to V2 certificates defined by an XML schema rather than the former DTD. The new format required modifications to the Java library code and the C++ policy engine. As a result we refactored the Java code from the policy generators into library code that parallels the C++ classes and GUI classes that are just used by the generators. XML parsing and output was added to the C++ code in anticipation of going to pure XML format certificates.

### **Code Distribution**

Worked with a new team member at Argonne to explain and help set up Akenti policy files to be used in the next iteration of the job-manager and Akenti integration.

Consulted with developer's at Tech-X who are using Akenti to provide authorization for their CoDeveloper tool.

Worked with a researcher at University of Michigan to install the mod-akenti authorization module for the Apache Web server. As part of their Internet 2 projects they are experimenting with using Akenti authorization.

### **Collaboration with the Secure and Reliable Group Communication and Peer2Peer Information Sharing project**

The Secure Group Layer will be used to provide secure group communication for the newly funded Peer2Peer Information Sharing project. We continued to work on defining the policies that will be needed by this application.