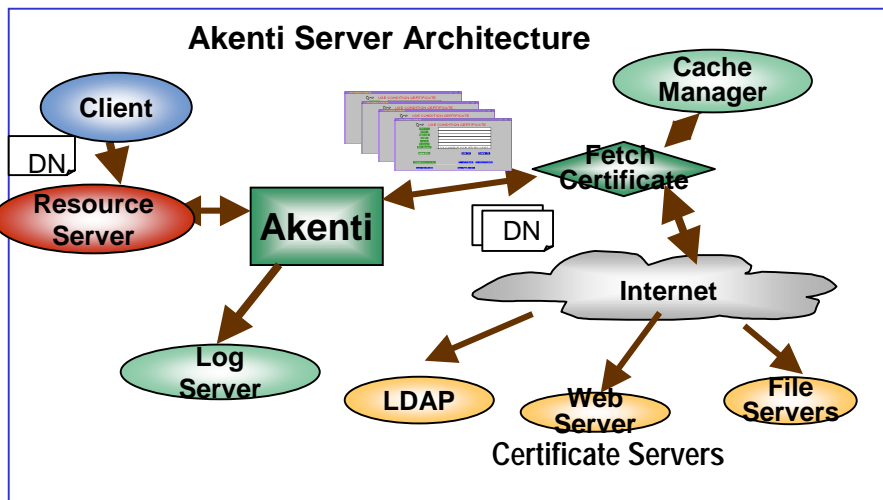




# Distributed Security Architectures



## The Novel Ideas

- Authorization to access distributed resources based on X.509 identity certificates and other signed certificates: Policy, Use-condition and Attribute certificates.
- Multiple stakeholders remotely controlling access to distributed resources.
- Authorization server easily called from a resource gatekeepers

## Impact and Connections

- IMPACT.
  - Provide an authorization service based on X.509 identity certificates, compatible with GSI/SSL connections, that can be easily used by distributed applications.
  - Resource stakeholders can flexibly set access policy on a per resource granularity
- CONNECTIONS:
  - Used by the National Fusion Collaboratory to provide authorization for their distributed applications
  - Run as a server on the DOE Science Grid to allow applications running there to use it.
  - Used in an SBIR project, CoDeveloper which facilitates multi-domain code development.

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 Funding Level: 3 FTEs

## Milestones/Dates/Status

- |  |        |
|--|--------|
| • Release Akenti 1.1   | DONE   |
| • libraries and standalone server  |        |
| • more flexible certificate formats  |        |
| • Recognize new style proxy X.509 certificates   | Yr -1  |
| • add code to verify certificate chains  |        |
| • Integration with GSI callouts  | Yr-2   |
| • allow Akenti authorization to replace grid-mapfile   |        |
| • Support for additional dynamic policies as required by Grid and collaboratory applications | Yr 2-3 |

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