FAME-PERMIS Project

- FAME-PERMIS is a collaboration between Universities of Manchester and Kent
- FAME-PERMIS stands for Flexible Authentication Middleware Extension to PERMIS
- PERMIS (Privilege and Role Management Infrastructure Standards):
  - Policy-based access control decision engine for user authorisation
  - Currently, decisions are made based upon:
    {Subject, Target, Action}
FAME-PERMIS Objectives

- Link the strength of authentication method used (Level of Assurance, LoA) with access control decision making provided by PERMIS
- Extend PERMIS to include LoA:
  - \{Subject, Target, Action, LoA\}
- Support wide range of authentication methods:
  - IP addresses, username-password pairs, certificates, smart cards, etc.
- Support Single Sign-On (SSO)
FAME-PERMIS Objectives – cont’d

- Support multi-factor authentication
  - Freedom to choose from several authentication methods
  - When user is away or does not have all the technology required for authentication (e.g. card reader or biometric device), he/she may choose different authentication method
  - Combine several authentication methods to gain higher LoA
FAME-PERMIS Objectives – cont’d

• Use JISC-adopted **Shibboleth** infrastructure to link FAME to PERMIS

• Shibboleth defines a set of protocols for secure passing of identity information between users’ home institutions and service providers (targets)

• Shibboleth relies on the home institution to establish the user’s identity, and on the resource provider to grant access to the user based on the information about the user (i.e. user’s attributes) released by the home institution
FAME-Shibboleth-PERMIS Link