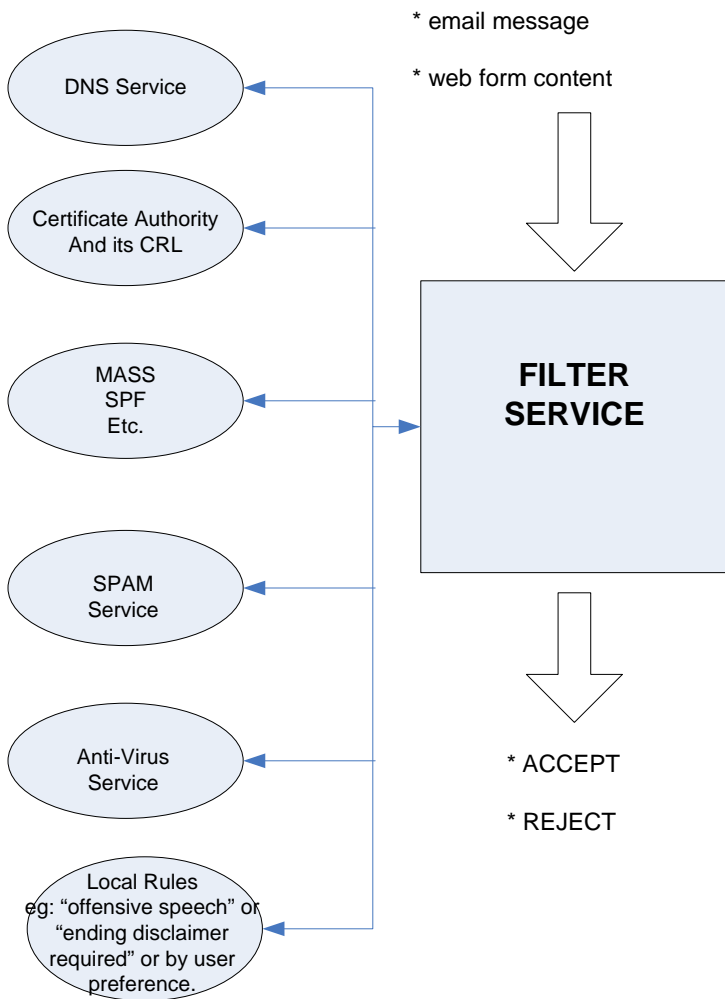
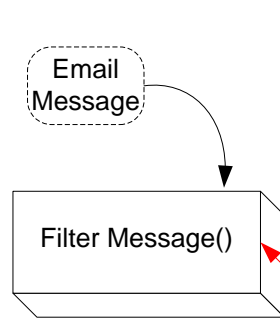


FILTER SERVICE API

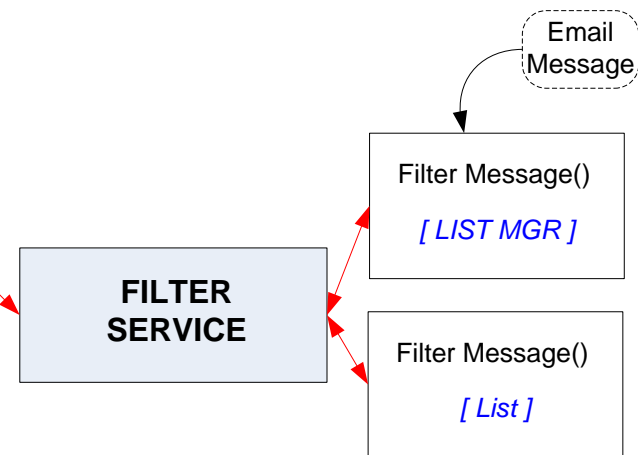
Filtering involves pre-processing messages on their way into the Mailing List Service. Messages may be rejected (eg: mail determined to contain a virus) while other messages may be tagged (eg. Spam) but not rejected. Filtering may occur by pre-processing – by services inserted in front of the Mailing List service. The Mailing List itself may also perform filtering, and this function may occur on behalf of the service, a specific list, or a specific user. We note that filtering is very similar to Authorization, with an emphasis on determining “is there legitimately originated, non-harmful content in this message”.



DOMAIN MODEL INTERACTION

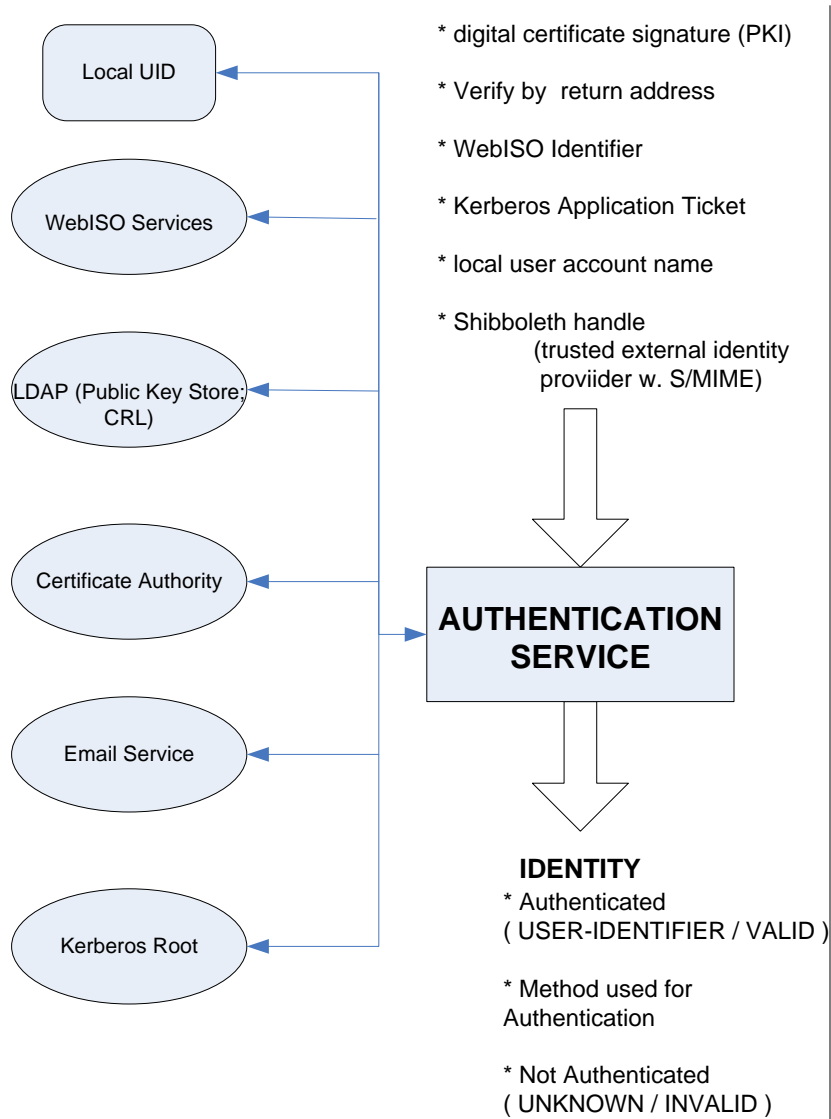


OBJECT MODEL INTERACTION



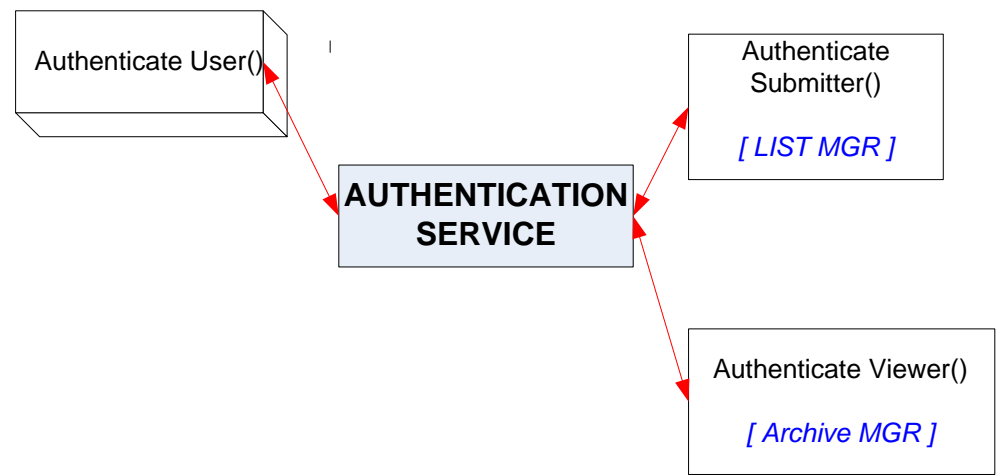
AUTHENTICATION SERVICE API

Authentication results in a user's identity. A generalized authentication service results in an identifier that may be application-specific; system-specific; or globally unique. Optionally, the method used for authentication may be provided.



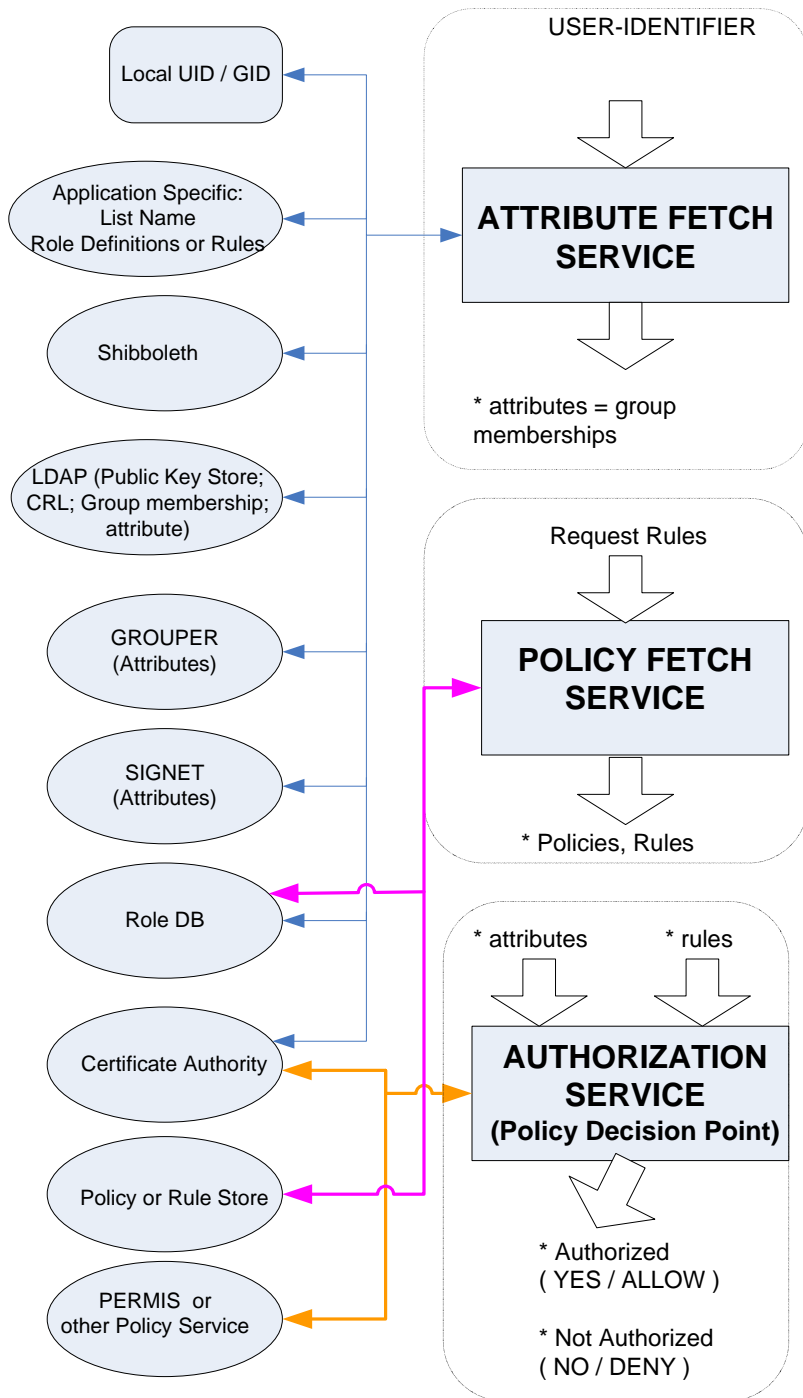
DOMAIN MODEL INTERACTION

OBJECT MODEL INTERACTION



AUTHORIZATION SERVICE API

Authorization uses a provided identifier to (a) collect attributes associated with that identifier (b) access rules appropriate to the policy decision point and apply rules to the attributes, resulting in a binary Allow/Disallow access decision. The application may be responsible for enforcing the decision provided.



DOMAIN MODEL INTERACTION

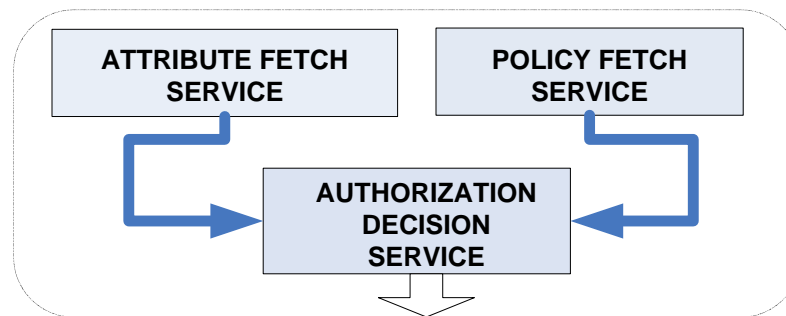


Note 1 – “Privilege” or “attribute” is a group membership or role; for example: “list member” or “list moderator”. The word “store” suggests access to some database, which may or may not be local. “Attribute Fetch Service” generalizes the information source..

Note 2 – Rules define policies associated with a specific attribute. For example, what actions are allowed for a list moderator? These rules may or may not be stored locally.

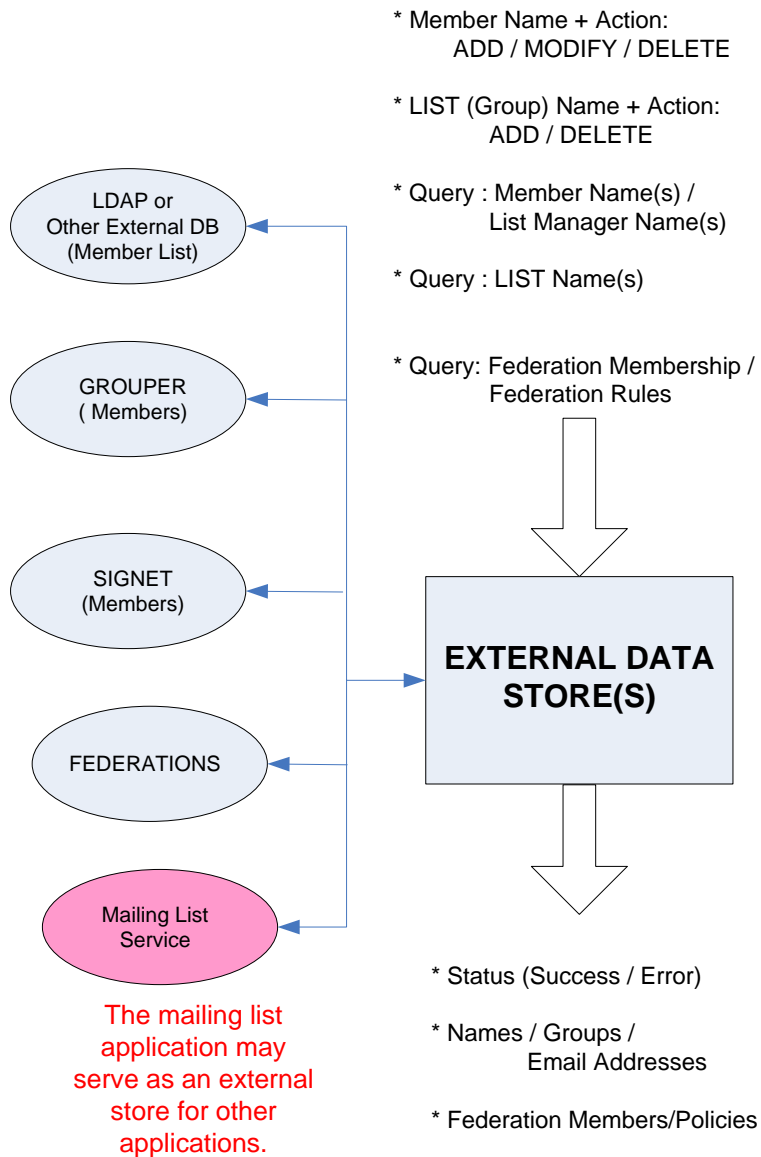


Note 3 – An authorization decision (allow/deny) may be made locally or by a remote service. This is referred to as the PDP (policy decision point). Implementation of the decision is referred to as the PEP (policy enforcement point).

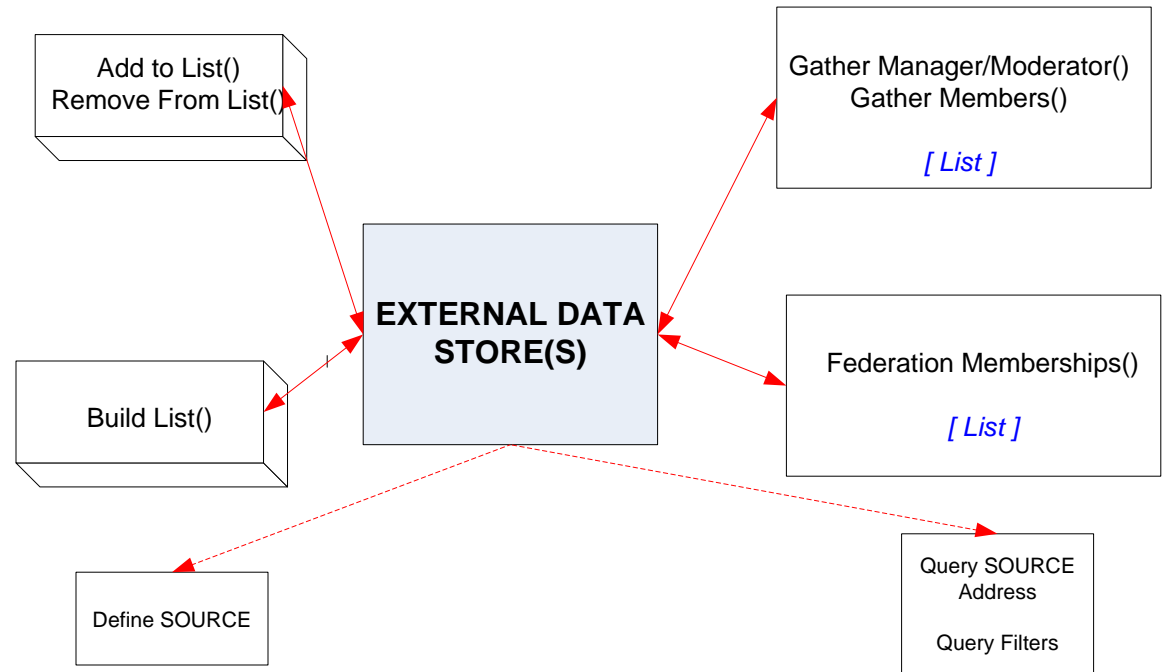


EXTERNAL DATA STORE

External data stores may exist in various types of databases. What we are emphasizing here is that (1) mailing list membership lists may be generated dynamically from some external source, and (2) the mailing list itself may be a data store accessed by other applications. Sympa, for example, offers a SOAP interface to its membership lists. We suggest here that the data source and query details are currently defined through configuration options; Web Services may provide a future generic interface.



DOMAIN MODEL INTERACTION



OBJECT MODEL INTERACTION