Translation of XACML into RIF
(Work in Progress)

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XACML & RIF

• **RIF Working Group** envisions a generic platform for the exchange of rules among different parties in a machine processable way.

• XACML most widely deployed access control language.
XACML & RIF (Cont.)

PCA : Policy Combining Algorithm
RCA : Rule Combining Algorithm
XACML & RIF (Cont.)

Ref: RIF Working Group Specs.
RIF-BLD corresponds to the language of definite Horn rules with equality and a standard first-order semantics

Match (?T, ?R) :- And(
    Inc(?T.Subject req:Subject)
    Inc (?T.Resource req:Resource)
    Inc (?T.Action req:Action)
    Inc (?T.Environment req:Environment)
)
Deny-overrides
Permit-overrides
First-Applicable
Ordered-permit-overrides
Ordered-deny-overrides
Only-one-applicable

First-Applicable

We have to traverse all policy and make sure that there is only one policy applicable.