Use Cases for the W3C RIF WG

A Contribution of REWERSE

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REWERSE, http://rewerse.net

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Use Cases

Three kinds of rules are needed

- ► normative rules (or structural rules or integrity constraints)
- ► deductive rules (or constructive rules or data views)
- ► reactive rules (or Event-Condition-Action rules or active rules)

REWERSE proposes 6 use cases bearing evidence of the above given statement.

Negotiation – Automated trust establishment for eCommerce

Alice would like to buy online a new device at an eShop.

Automated trust establishment between Alice's and eShop's systems

- ▶ policies for every credential and every service can be codified
- ▶ Alice's and eShop's policies describe who they trust and for what purposes
- ▶ the notion of policies refers to access control policies, privacy policies, business rules, etc.
- ▶ export the policies in a format that can be understood by the other parties engaged in the negotiation

Negotiation – Automated trust establishment for eCommerce

When Alice wants to buy such a device, eShop logs the requests and discloses a policy:

- ▶ A gold card holder is given a 10 percent discount on any purchase.
- ▶ An eShop employee gets 20 percent discount on devices of this type.
- ▶ Any other buyer must provide to the shop credit card information together with delivery information.
- ▶ Furthermore, the credit cards accepted are VISA and MasterCard.

For the case that credit card information is disclosed by a buyer, eShop has the following rules:

- ▶ deny purchase request if the client is in the eShop 'client black list';
- ▶ deny purchase request if the client's credit card is revoked.

Negotiation – Automated trust establishment for eCommerce

Once Alice's negotiation system receives the eShop's policy, it checks Alice's credentials that are available and whether some subset of these credentials fulfill the policy.

▶ Alice's policy states that she is not willing to disclose her credit card to everyone.

Alice's system asks eShop to provide a proof of its membership to the Better Business Bureau, Alice's most trusted source of information on online shops.

eShop has such a credential and its policy is to release it to any potential purchaser. Hence, it does so to Alice's negotiation system on its request.

Negotiation – Automated trust establishment for eCommerce

Alice's negotiation system is now ready to disclose her credit card information to eShop.

eShop checks that Alice is not in its client black list, then confirms the purchase transaction, generates an email notification to the Alice giving information about the purchase, and notifies eShops's delivery department.

The other REWERSE use cases

... are interesting too :)...especially the last one, which is about reactive
behaviour...