

# IETF 64 SIP WG

**Spam for Internet Telephony Prevention using  
Security Assertion Markup Language**

**Draft-schwartz-sipping-spit-saml-00.txt**

- **Draft relies on ...**
- SIP Identity Framework
- Security Assertion Markup Language (SAML)

- **Basic idea is ...**

- warrant certain security relevant attributes from one administrative domain to another
- allow destination domain or user to make intelligent filtering decisions when receiving voice calls

- **Security Attributes are ...**

- Information pertaining to a given call
- Composed of ‘Static’ and ‘Dynamic’ info
  - Static addresses nature of originating domain
  - Dynamic relating to call specific information
- Encoded using SAML attributes

## ● Sample Security Attributes

- IdentityStrength

- 0 – Unknown
- 1 – Free Service
- 2 – Paying service (e.g., billing address)
- 3 – Physical premises verified
- 4 – Cryptographic authentication of identity

- CostOfCall

- AuthenticationOfUser

- IdentityAssertion

- AuthenticationOfAccountOpening

- SPITSuspect

- $n$  calls per minute from one user
- Small % of dialed/answered calls
- Small % of repeat/distinct calls
- $n$  calls of the same length
- Calls to sequential destination numbers

- CallCenter

- AssertionStrength

***value is 0-9 increasing in threat***

## ● Using SAML to embed attributes

```
<saml:Assertion
    xmlns:saml="urn:oasis:names:tc:SAML:1.0:assertion"
    MajorVersion="1" MinorVersion="1"
    AssertionID="P1YaAz/tP6U/fsw/xA+jax5TPxQ="
    Issuer="mediator.com"
    IssueInstant="2005-03-12T17:15:32.753Z">
    <saml:Conditions
        NotBefore="2005-03-12T17:10:32.753Z"
        NotOnOrAfter="2005-03-12T17:20:32.753Z" />
    <saml:AttributeStatement>
        <saml:Subject>...</saml:Subject>
        <saml:Attribute
            AttributeName="IdentityStrength"
            AttributeNamespace="http://OriginationDomain.com">
            <saml:AttributeValue>1</saml:AttributeValue>
        ...
        </saml:Attribute>
    </saml:AttributeStatement>
</saml:Assertion>
```

# Thank You

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