

Event Stream Management API: RISC Profile

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Use Cases

- Enrolling in events for a given subject (Implicit RPs)
- Un-enrolling in events for a given subject
- Selecting desired events
- Configuring delivery methods
- Monitoring stream availability

Authorization

- Bearer tokens via HTTP Authorization header
- No user interaction (e.g. OAuth 2.0 Client Credentials grant)

Subject Types

Email

```
{  
  "type": "http://schemas.openid.net/secevent/risc/subject-type/email",  
  "email": "user@example.com",  
  "email_verified": false  
}
```

Phone

```
{  
  "type": "http://schemas.openid.net/secevent/risc/subject-type/phone",  
  "phone": "+1 206-555-1212",  
  "phone_verified": true  
}
```

Issuer / Subject

```
{  
  "type": "http://schemas.openid.net/secevent/risc/subject-type/iss-sub",  
  "iss": "https://id.example.com/",  
  "sub": "example.user.id.1234"  
}
```

Subject Types: In SETs

Email

```
{
  "typ": "application/jwt+set",
  "iss": "https://id.example.com/",
  "jti": "example.set.id.1234",
  "txn": "example.txn.1234",
  "risc_subject": {
    "type": "http://schemas.openid.net/secevent/risc/subject-type/email",
    "email": "user@example.com",
    "email_verified": false
  },
  "events": {
    "https://schemas.openid.net/events/risc/account-locked": {
      "reason": "compromise"
    }
  }
}
```

Subject Types: In SETs

Phone

```
{
  "typ": "application/jwt+set",
  "iss": "https://id.example.com/",
  "jti": "example.set.id.1234",
  "txn": "example.txn.1234",
  "risc_subject": {
    "type": "http://schemas.openid.net/secevent/risc/subject-type/phone",
    "phone": "+1 206-555-1212",
    "phone_verified": true
  },
  "events": {
    "https://schemas.openid.net/events/risc/account-locked": {
      "reason": "compromise"
    }
  }
}
```

Subject Types: In SETs

Issuer and Subject

```
{
  "typ": "application/jwt+set",
  "iss": "https://id.example.com/",
  "jti": "example.set.id.1234",
  "txn": "example.txn.1234",
  "risc_subject": {
    "type": "http://schemas.openid.net/secevent/risc/subject-type/iss-sub",
    "iss": "https://id.example.com/",
    "sub": "example.user.id.1234"
  },
  "events": {
    "https://schemas.openid.net/events/risc/account-locked": {
      "reason": "compromise"
    }
  }
}
```

Subject Types: Add / Remove Requests

Email

```
POST /stream/example.stream.1234/add_subject HTTP/1.1
```

```
Host: api.example.com
```

```
Authorization: Bearer ZXhhbXBsZSBiZWZyZXIgdG9rZW4K
```

```
Accept: application/json
```

```
Content-Type: application/json
```

```
Content-Length: 163
```

```
{  
  "risc_subject": {  
    "type": "http://schemas.openid.net/secevent/risc/subject-type/email",  
    "email": "user@example.com",  
    "email_verified": false  
  }  
}
```


Subject Types: Add / Remove Requests

Phone

```
POST /stream/example.stream.1234/add_subject HTTP/1.1
```

```
Host: api.example.com
```

```
Authorization: Bearer ZXhhbXBsZSBiZWZyZXIgdG9rZW4K
```

```
Accept: application/json
```

```
Content-Type: application/json
```

```
Content-Length: 161
```

```
{  
  "risc_subject": {  
    "type": "http://schemas.openid.net/secevent/risc/subject-type/phone",  
    "phone": "+1 206-555-1212",  
    "phone_verified": true  
  }  
}
```

Subject Types: Add / Remove Requests

Issuer and Subject

```
POST /stream/example.stream.1234/add_subject HTTP/1.1
Host: api.example.com
Authorization: Bearer ZXhhbXBsZSBiZWZyZXIgdG9rZW4K
Accept: application/json
Content-Type: application/json
Content-Length: 176
```

```
{
  "risc_subject": {
    "type": "http://schemas.openid.net/secevent/risc/subject-type/iss-sub",
    "iss": "https://id.example.com/",
    "sub": "example.user.id.1234"
  }
}
```

Discovery

- Event Stream capabilities: event types, delivery method(s), etc.
- Configuration management API endpoint discovery

Discovery

- ~~Event Stream capabilities: event types, delivery method(s), etc.~~
- Configuration management API endpoint discovery
- Who is authoritative for an identifier?

Subject Type-specific Discovery?

- OIDC defines discovery off issuer/subject, email address
- Mobile Connect provides discovery for mobile phone numbers

Questions?

- <http://openid.net/wg/risc/>