SCIM Events Update

draft-ietf-scim-events-02

IETF 117, San Francisco
SCIM WG Meeting
July 26, 2023

Phil Hunt
Nancy Cam-Winget
Mike Kiser
Changes from Draft 01

• IANA Due to no registry for events, event URIs changed from:
  • urn:ietf:params:event:SCIM:... to urn:ietf:params:SCIM:event:...
  • Basically moved under the SCIM urn namespace of urn:ietf:params:SCIM

• Asynchronous Event Delivery with end-to-end example starting with SCIM Protocol Request

• Capability discovery
  • Does server support RFC7240 Prefer Async-Response
Async SCIM Request

PUT /Users/2819c223-7f76-453a-919d-413861904646
Host: scim.example.com
Prefer: respond-async
Content-Type: application/scim+json
Authorization: Bearer h480djs93hd8

{
    "schemas":["urn:ietf:params:scim:schemas:core:2.0:User"],
    "id":"2819c223-7f76-453a-919d-413861904646",
    "userName":"bjensen",
    "externalId":"bjensen",
    "name":{ "formatted":"Ms. Barbara J Jensen III" },
    "roles":[]
    "emails": [ { "value":"bjensen@example.com" } ]
}

Async SCIM Response

Responds with normal SCIM location

HTTP/1.1 202 Accepted
Set-txn: 734f0614e3274f288f93ac74119dcf78
Location:  
"/Users/2819c223-7f76-453a-919d-413861904646"

Responds with polling location

HTTP/1.1 202 Accepted
Set-txn: 734f0614e3274f288f93ac74119dcf78
Location:  
"https://signals.example.com/txn/734f0614e3274f288f93ac74119dcf78"
Event Response

```json
{
    "jti": "6164f3bbf6ff41a88dc94f18cb0620e8",
    "sub_id": {
        "format": "scim",
        "uri": "/Users/2819c223-7f76-453a-919d-413861904646"
    },
    "txn": "734f0614e3274f288f93ac74119dcf78",
    "events": {
        "urn:ietf:params:SCIM:event:misc:asyncResp": {
            "method": "PUT",
            "version": "W\"huJj29dMNgu3WXPD\"
        },
        "status": "200"
    },
    "iat": 1458505044,
    "iss": "https://scim.example.com",
    "aud": ["https://scim.example.com/Feeds/98d52461fa5bbc879593b7754"
    ]
}
```

The response that would have been given originally.
Discovery

• New ServiceProviderConfig attributes
  • asyncRequest
    • NONE – not supported (default, client preference will be ignored)
    • LONG – only occurs if request runs longer than a service provider set threshold (client must indicate preferred)
    • REQUEST – will be completed on request (client must indicate preferred)
  • eventUris
    • An array of event types supported by the server. May be other event types too
    • Informational only
Demo and Discussion

• I2scim.io - SCIM Server
  • Open source Java scim engine
  • RFC8935 Event PUSH (Publish)
  • RFC8936 Event Polling (Receive)

• I2goSignals - Security Signals Router
  • Publisher and Receiver implementations of RFC8935 (SET PUSH), RFC8936 (SET POLL)
  • Can handle multiple streams and support
    • Cluster Replication, Multi-hop inter-domain exchange
    • Router can take event from inbound stream and route to 1 or more outbound streams
  • Other
    • Stream recovery (reset to date or JTI)
    • Planned to be OpenID SSF Compliant
    • Implemented in Go 1.19
    • Planning to publish soon
Demo Scenario

Iss: cluster.scim.example.com
Aud: cluster.example.com, monitor.example.com, partner.scim.example.com

SCIM Server 1
SCIM Server 1c
SCIM Server 1b
SCIM Server 2

HOP 2 – SET PUSH

goSignals1

goSignals2

HOP 3 – SET POLL

Stream 2 - Polling

Aud: cluster.example.com
Aud: partner.scim.example.com
Aud: monitor.example.com

Tool

Poll monitor

signalsTool