Push-Based SET Token Delivery Using HTTP

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SET Transmission Request

```
POST /Events HTTP/1.1
Host: recipient.example.com
Accept: application/json
Authorization: Bearer h480djs93hd8
Content-Type: application/secevent+jwt
... SET in request body...
```

Success Response

```
HTTP/1.1 202 Accepted
```

Failure Response

```
HTTP/1.1 400 Bad Request
Content-Type: application/json
  "err": "jwtAud",
  "description": "Invalid audience value."
```

Current Status

• 03 draft published 2018-10-18

- Implementations:
 - Google
 - Transmitter: Implemented
 - Receiver: In progress?
 - Amazon
 - Receiver: In progress
 - Transmitter: In progress

$01 \rightarrow 03$

• Rewrote abstract, introduction, protocol technical description.

Removed redundant, unnecessary text.

• Minor normative corrections.

Added IANA registry for error codes.

Push/Poll Duplication Reduction

- Definitions
 - Both reference 8417 and define Event Transmitter.

- Failure response structure
 - { "err": "...", "description": "..." }
- Security Considerations

Privacy Considerations

Poll → Push

Open Item: Error Codes

- Current list of errors are poorly differentiated.
 - If decryption produces garbage, is it a **json**, **jwtParse**, or **jwe** error?
 - Is an incomplete event payload **setParse** or **setData**?

- Mostly JWT errors, not SET errors
 - Syntax
 - JWE and JWS processing
 - JWT constraint validation

Error Codes: JWT vs. SET

json	jwtAud
jwtParse	jwtIss
jwtHdr	setType
jwtCrypto	setParse
jws	setData
jwe	dup

Revised Error Codes: JWT vs. SET

jwt-malformed	jws-key-invalid
jwt-header-invalid	jws-alg-invalid
jwt-expired	jws-error
iss-invalid	jws-mismatch
aud-invalid	avant micaina
auu-IIIvallu	event-missing
jwe-key-invalid	event-missing event-invalid

JWT Errors vs. SET Errors

Existing JWT error code definitions?

• Is this draft the right place to define them?

Is secevent the right WG?

Reopen the JOSE WG?