

# Event Messaging

Fedora generates event messages when a resource is **created, updated or deleted**.

The messages are composed for headers and body.

## Message Headers

Header	Description	Values	Sample Value
org.fcrepo.jms.user	The Fedora user who made the change.		bypassAdmin
org.fcrepo.jms.eventID	A UUID associated with the event		urn:uuid:d0f9d030-8fac-474c-882c-0858a7f948ef
org.fcrepo.jms.identifier	The identifier portion of the URI of the changed resource		/test1234
org.fcrepo.jms.timestamp	Timestamp in epoch time (milliseconds since January 1st, 1970)		1519419333657
org.fcrepo.jms.baseURL	The base portion of the identifiers URI.		http://localhost:8080/rest
org.fcrepo.jms.resourceType	A comma separated list of URIs identifying the types that describe the resource that changed.		http://www.w3.org/ns/ldp#Container,http://fedora.info/definitions/v4/repository#Resource, http://fedora.info/definitions/v4/repository#Container,http://www.w3.org/ns/ldp#RDFSource
org.fcrepo.jms.eventType	A comma separated list of URIs identifying the event types that describe the resource that changed.	http://fedora.info/definitions/v4/event#ResourceCreation http://fedora.info/definitions/v4/event#ResourceModification http://fedora.info/definitions/v4/event#ResourceDeletion	http://fedora.info/definitions/v4/event#ResourceCreation, http://fedora.info/definitions/v4/event#ResourceModification
org.fcrepo.jms.userAgent	The type of client user agent that was used to effect the change to the resource.		Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/63.0.3239.132 Safari/537.36

## Message Body

The format of the body is [JSON-LD](#).

Below is an example of a message emitted on resource creation.

```
{
  "id": "http://localhost:8080/rest/test1234",
  "type": [
    "http://www.w3.org/ns/ldp#Container",
    "http://fedora.info/definitions/v4/repository#Resource",
    "http://fedora.info/definitions/v4/repository#Container",
    "http://www.w3.org/ns/ldp#RDFSource",
    "http://www.w3.org/ns/prov#Entity"],
  "isPartOf": "http://localhost:8080/rest",
  "wasGeneratedBy": {"type": ["http://fedora.info/definitions/v4/event#ResourceCreation",
    "http://fedora.info/definitions/v4/event#ResourceModification",
    "http://www.w3.org/ns/prov#Activity"],
    "identifier": "urn:uuid:d0f9d030-8fac-474c-882c-0858a7f948ef",
    "atTime": "2018-02-23T20:55:33.657Z"},
  "wasAttributedTo": [{"type": "http://www.w3.org/ns/prov#Person", "name": "bypassAdmin"},
    {"type": "http://www.w3.org/ns/prov#SoftwareAgent", "name": "Mozilla/5.0 (Macintosh; Intel
Mac OS X 10_10_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/63.0.3239.132 Safari/537.36"}],
  "@context": {"prov": "http://www.w3.org/ns/prov#",
    "foaf": "http://xmlns.com/foaf/0.1/",
    "dcterms": "http://purl.org/dc/terms/",
    "xsd": "http://www.w3.org/2001/XMLSchema#",
    "type": "@type",
    "id": "@id",
    "name": {"@id": "foaf:name", "@type": "xsd:string"},
    "identifier": {"@id": "dcterms:identifier", "@type": "@id"},
    "isPartOf": {"@id": "dcterms:isPartOf", "@type": "@id"},
    "atTime": {"@id": "prov:atTime", "@type": "xsd:dateDateTime"},
    "wasAttributedTo": {"@id": "prov:wasAttributedTo", "@type": "@id"},
    "wasGeneratedBy": {"@id": "prov:wasGeneratedBy", "@type": "@id"}
  }
}
```

Below is an example of a message emitted on resource update.

```
{
  ...
  "wasGeneratedBy": {"type": ["http://fedora.info/definitions/v4/event#ResourceModification", "http://www.w3.org/ns
/prov#Activity"],
    "identifier": "urn:uuid:d0f9d030-8fac-474c-882c-0858a7f948ef",
    "atTime": "2018-02-23T20:55:33.657Z"},
  ...
}
```

Below is an example of a message emitted on resource deletion.

```
{
  ...
  "wasGeneratedBy": {"type": ["http://fedora.info/definitions/v4/event#ResourceDeletion", "http://www.w3.org/ns
/prov#Activity"],
    "identifier": "urn:uuid:d0f9d030-8fac-474c-882c-0858a7f948ef",
    "atTime": "2018-02-23T20:55:33.657Z"},
  ...
}
```

See :

[How to Inspect Event Messages Generated by Fedora](#)