

KIP-404: Add Kafka Connect configuration parameter for disabling WADL output on OPTIONS request

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Status

Current state: *Discarded, reported as a bug by* [KAFKA-7759 - Getting issue details...](#) STATUS

Discussion thread: [here](#)

JIRA: [here](#)

Please keep the discussion on the mailing list rather than commenting on the wiki (wiki discussions get unwieldy fast).

Motivation

Kafka Connect provides a REST interface for managing connectors. Below is a list of supported documented endpoints:

Method	Path
GET	/connectors
POST	
GET	/connectors/{name}
GET	/connectors/{name}/config
PUT	
GET	/connectors/{name}/status
GET	/connectors/{name}/tasks
GET	/connectors/{name}/tasks/{taskid}/status
PUT	/connectors/{name}/pause
PUT	/connectors/{name}/resume
POST	/connectors/{name}/restart
POST	/connectors/{name}/tasks/{taskid}/restart
DELETE	/connectors/{name}
GET	/connector-plugins
PUT	/connector-plugins/{connector-type}/config/validate

In addition to above methods, OPTIONS method could be also used.

Response to OPTIONS request includes auto-generated WADL, e.g.:

```

curl -i -X OPTIONS http://localhost:8083/connectors/jdbc-sink
HTTP/1.1 200 OK
Date: Thu, 13 Dec 2018 02:15:30 GMT
Content-Type: application/vnd.sun.wadl+xml
Allow: HEAD,DELETE,GET,OPTIONS
Last-Modified: Wed, 12 Dec 2018 18:15:30 PST
Content-Length: 1153
Server: Jetty(9.4.12.v20180830)

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<application xmlns="http://wadl.dev.java.net/2009/02">
  <doc xmlns:jersey="http://jersey.java.net/" jersey:generatedBy="Jersey: 2.27 2018-04-10 07:34:57"/>
  <grammars>
    <include href="http://localhost:8083/application.wadl/xsd0.xsd">
      <doc title="Generated" xml:lang="en"/>
    </include>
  </grammars>
  <resources base="http://localhost:8083/">
    <resource path="connectors/jdbc-sink">
      <method id="getConnector" name="GET">
        <request>
          <param xmlns:xs="http://www.w3.org/2001/XMLSchema" name="forward" style="query" type="xs:
boolean"/>
        </request>
        <response>
          <representation mediaType="application/json"/>
        </response>
      </method>
      <method id="destroyConnector" name="DELETE">
        <request>
          <param xmlns:xs="http://www.w3.org/2001/XMLSchema" name="forward" style="query" type="xs:
boolean"/>
        </request>
      </method>
    </resource>
  </resources>
</application>

```

Having WADL is useful for code generation, applications modeling and visualizations, etc. At the same time, it might also be a security threat.

So users should have a way to disable exposing WADL via Connect REST endpoints.

Public Interfaces

Add a new Kafka Connect Distributed/Standalone worker configuration property to enable/disable exposure of WADL via Connect REST endpoints.

Proposed Changes

Add configuration parameter:

- *rest.wadl.enable* with the default value of 'true', and with the importance of 'low'.

Update *org.apache.kafka.connect.runtime.rest.RestServer* to respect the configuration property described above.

With *rest.wadl.enable=true*, response to OPTIONS method should have list of supported HTTP methods only, e.g.:

```
curl -i -X OPTIONS http://localhost:8083/connectors/jdbc-sink
HTTP/1.1 200 OK
Date: Thu, 13 Dec 2018 02:52:30 GMT
Content-Type: text/plain
Allow: HEAD,DELETE,GET,OPTIONS
Content-Length: 26
Server: Jetty(9.4.12.v20180830)

HEAD, DELETE, GET, OPTIONS
```

Test plan

Add more unit tests under *org.apache.kafka.connect.runtime.rest.RestServerTest*, asserting on response's Content-type.

Compatibility, Deprecation, and Migration Plan

Since the default value of the new configuration parameter is 'true', the change should be backward compatible, no action is required for upgrading from older versions.

Rejected Alternatives

1. Disable exposure of WADL without an option to keep exposing it. Some users might rely upon it.