

## Usecase in Apigee : XML to JSON and JSON to XML transformation

Converts messages from the extensible markup language (XML) format to JavaScript Object Notation (JSON) and vice versa.

It takes an XML-formatted response message as the source, and then creates a JSON-formatted message that is populated in the response Output Variable and vice versa.

### XML to JSON policy

This policy converts messages from the extensible markup language (XML) format to JavaScript Object Notation (JSON), giving you several options for controlling how messages are converted.

In a typical mediation scenario, a JSON to XML policy on the inbound request flow is often paired with an XML to JSON policy on the outbound response flow. By combining policies this way, a JSON API can be exposed for backend services that natively support only XML.

For scenarios where APIs are consumed by diverse client apps that may require either JSON or XML, the response format can be dynamically set by configuring JSON to XML and XML to JSON policies to execute conditionally.

#### Converting a response:

```
<XMLToJSON name="ConvertToJSON">
  <Options>
  </Options>
  <OutputVariable>response</OutputVariable>
  <Source>response</Source>
</XMLToJSON>
```

This configuration—which is the minimal configuration required to convert XML to JSON—takes an XML-formatted response message as the source, and then creates a JSON-formatted message that is populated in the response OutputVariable. Edge automatically uses the content of this variable as the message for next processing step.

## JSON to XML policy

This policy converts messages from the JavaScript Object Notation (JSON) format to extensible markup language (XML), giving you several options for controlling how messages are converted.

The policy is particularly useful if you want to transform messages using XSL. After converting a JSON payload to XML, use the XSL Transform policy with a custom style sheet to perform the transformation you need.

### Converting a request

```
<JSONToXML name="jsontoxml">
  <Source>request</Source>
  <OutputVariable>request</OutputVariable>
</JSONToXML>
```

### Step1:

**we need to select the policy which we are going to add.**

apigee Dashboard APIs Publish Analytics Admin Help

Dashboard / API Proxies / forecastrss\_yahoo\_sample

## forecastrss\_yahoo\_sample

Project Save Revision 1 New New Policy Attach Policy Tools Deployment

Navigator

- ▲ Policies
  - Basic Authentication 1
  - XML to JSON 1
  - XML to JSON 2
- ▲ Proxy Endpoints
  - default
    - All PreFlow
    - All PostFlow
- ▲ Target Endpoints
  - default
    - All PreFlow
    - All PostFlow
- ▲ Scripts

- Get OAuth v2.0 Info
- Set OAuth v2.0 Info
- Delete OAuth v2.0 Info
- OAuth v1.0a
- Get OAuth v1.0a Info
- Delete OAuth v1.0 Info
- Verify API Key
- Access Control
- Generate SAML Assertion
- Validate SAML Assertion
- MEDIATION
- JSON to XML
- XML to JSON
- Raise Fault
- XSL Transform
- SOAP Message Validation
- Assign Message

ow

```
coding="UTF-8" standalone="
e" continueOnError="false"
o JSON 2</DisplayName>

mat>
sponse</OutputVariable>
Source>
```

Deployed to Environment: test

**Step2:**

**After adding XML to JSON policy**

Navigator << Map: Endpoint default, Flow PostFlow

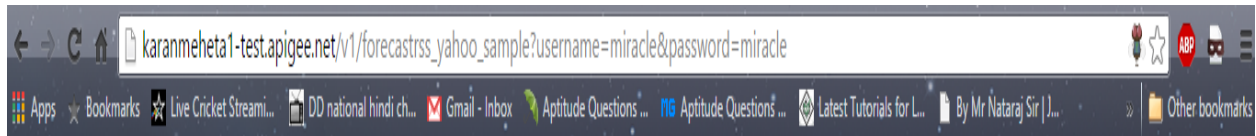
- ▲ Policies
  - Basic Authentication 1
  - XML to JSON 1
  - XML to JSON 2
- ▲ Proxy Endpoints
- ▲ default
  - All PreFlow
  - All PostFlow
- ▲ Target Endpoints
- ▲ default
  - All PreFlow
  - All PostFlow
- ▲ Scripts

Code: XML-to-JSON-2

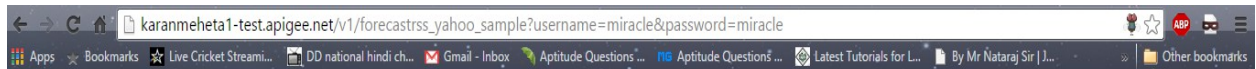
```
1 <?xml version="1.0" encoding="UTF-8" standalone="yes"?>
2 <XMLToJSON async="false" continueOnError="false" enabled="true" name="XML-to-JSON-2">
3   <DisplayName>XML to JSON 2</DisplayName>
4   <Properties/>
5   <Format>yahoo</Format>
6   <OutputVariable>response</OutputVariable>
7   <Source>response</Source>
8 </XMLToJSON>
9
```

### Step3:

**Final output, where the data is converted from XML to JSON in the browser**



```
{
  "rss": {
    "version": 2.0,
    "channel": {
      "title": "Yahoo! Weather - Blacknest, GB",
      "link": "http://us.rd.yahoo.com/dailynews/rss/weather/Blacknest_GB/*http://weather.yahoo.com/forecast/UKXX4776.f.html",
      "description": "Yahoo! Weather for Blacknest, GB",
      "language": "en-us",
      "lastBuildDate": "Wed, 02 Dec 2015 4:49 pm GMT",
      "ttl": 60,
      "location": {
        "city": "Blacknest",
        "region": "",
        "country": "United Kingdom"
      },
      "units": {
        "temperature": "F",
        "distance": "mi",
        "pressure": "in",
        "speed": "mph",
        "wind": {
          "chill": 54,
          "direction": 200,
          "speed": 18
        },
        "atmosphere": {
          "humidity": 82,
          "visibility": 6.21,
          "pressure": 30.18,
          "rising": 0
        },
        "astronomy": {
          "sunrise": "7:45 am",
          "sunset": "3:58 pm"
        },
        "image": {
          "title": "Yahoo! Weather",
          "width": 142,
          "height": 18,
          "link": "http://weather.yahoo.com",
          "url": "http://l.yimg.com/a/i/brand/purpleLogo/uh/us/news-wea.gif"
        },
        "item": {
          "title": "Conditions for Blacknest, GB at 4:49 pm GMT",
          "lat": 51.17,
          "long": -0.86,
          "link": "http://us.rd.yahoo.com/dailynews/rss/weather/Blacknest_GB/*http://weather.yahoo.com/forecast/UKXX4776.f.html",
          "pubDate": "Wed, 02 Dec 2015 4:49 pm GMT",
          "condition": {
            "text": "Mostly Cloudy",
            "code": 27,
            "temp": 54,
            "date": "Wed, 02 Dec 2015 4:49 pm GMT"
          },
          "description": "\n
```



This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<rss>
<version>2.0</version>
▼<channel>
  <title>Yahoo! Weather - Blacknest, GB</title>
  ▼<link>
    http://us.rd.yahoo.com/dailynews/rss/weather/Blacknest_GB/*http://weather.yahoo.com/forecast/UXXX4776_f.html
  </link>
  <description>Yahoo! Weather for Blacknest, GB</description>
  <language>en-us</language>
  <lastBuildDate>Wed, 02 Dec 2015 4:49 pm GMT</lastBuildDate>
  <ttl>60</ttl>
▼<location>
  <city>Blacknest</city>
  <region/>
  <country>United Kingdom</country>
</location>
▼<units>
  <temperature>F</temperature>
  <distance>mi</distance>
  <pressure>in</pressure>
  <speed>mph</speed>
</units>
▼<wind>
  <chill>54</chill>
  <direction>200</direction>
  <speed>18</speed>
</wind>
▼<atmosphere>
  <humidity>82</humidity>
  <visibility>6.21</visibility>
  <pressure>30.18</pressure>
  <rising>0</rising>
</atmosphere>
▼<astronomy>
  <sunrise>7:45 am</sunrise>
  <sunset>3:58 pm</sunset>
</astronomy>
▼<image>
  <title>Yahoo! Weather</title>
```