Interacting with IBM MQ by Making REST API calls

Leverage IBM MQ's Messaging REST API to retrieve and publish messages

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2

Table of Contents

Introduction

This document explores the utilization of IBM MQ's Messaging REST API for efficient message management. It details the functionalities of the API, enabling retrieval of messages from queues and publishing messages to designated topics. This approach empowers applications to interact with IBM MQ using a lightweight and widely adopted communication protocol - REST (Representational State Transfer).

The document outlines the steps involved in making REST API calls, including authentication and message formatting considerations. By leveraging the Messaging REST API, applications gain flexibility and interoperability when integrating with IBM MQ messaging infrastructure.

Web Administration Feature

The web administration feature for IBM MQ, known as the IBM MQ Console or MQ web UI, was introduced in IBM MQ 9.1.0.
You can use the administrative REST API to administer IBM MQ objects, such as queue managers and queues.

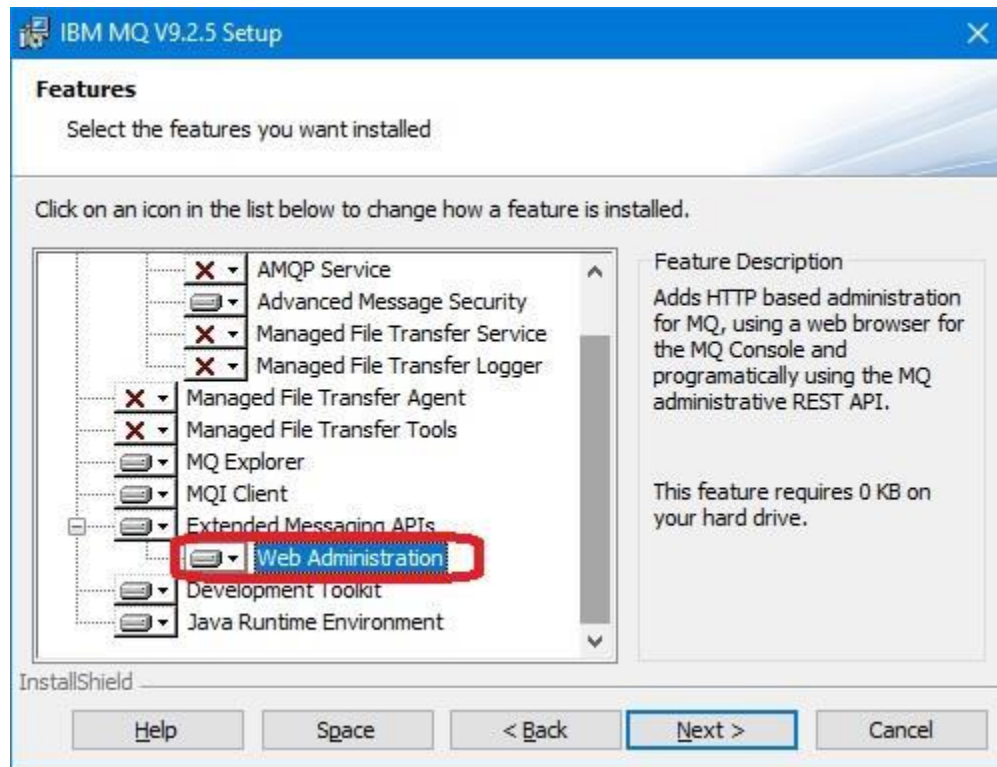Following link redirects you to get the glance over the web console for IBM MQ.
https://www.ibm.com/docs/en/ibm-mq/9.1?topic=console-quick-tour-new-web

Pre-Requisites

- IBM MQ 9.1.x
- Postman Testing Tool

Setup IBM MQ WEB Console

Step 1:
Enable webadministration feature while Installing IBM MQ v9.1.0 or later version.

Step 2:

In Windows :

Copy the basic_registry.xml file from the MQ_INSTALLATION_PATH\web\mq\samp\configuration directory to MQ_DATA_PATH\web\installations\installationName\servers\mweb.

Note :

MQ_INSTALLATION_PATH is C:\Program Files\IBM\MQ
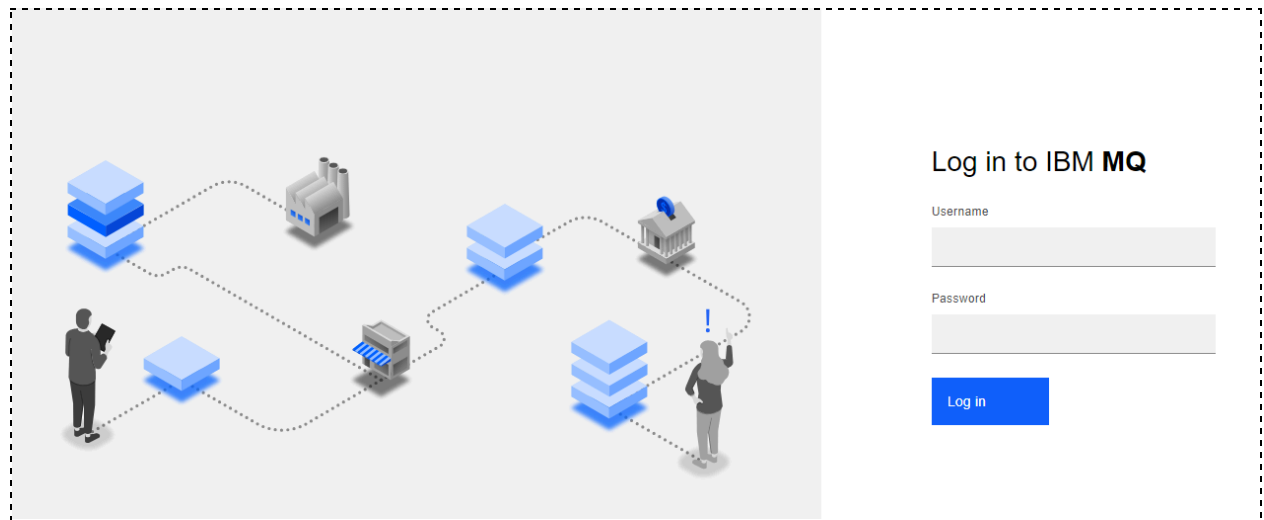MQ_DATA_PATH is C:\ProgramData\IBM\MQ

Step 3:

Start the mqweb server by issuing the following command that supports the REST API and IBM MQ Console.

```
strmqweb
```

Step 4 :

Open the web browser and open the following link to run the web console.
 https://localhost:9443/ibmmq/console/

Step 5:

Supply the values for username ,password and start exploring web console features.

Note :
The credentials can be configured by editing mqwebuser.xml file from
MQ_DATA_PATH\web\installations\installationName\servers\mweb PATH.

Send to/Retrieve Message from Queue Using PostMan

 With subsequent settings by MQ web console, now we can make the rest call over IBM MQ.
Following description gives you detailed clarity.

Use the Postman testing tool to Put a message into/ Get a Message from IBM MQ. But before doing this, ensure there is a defined Queue Manager and Queues availed in IBM MQ.

Open Postman toolkit and supply data as follows :

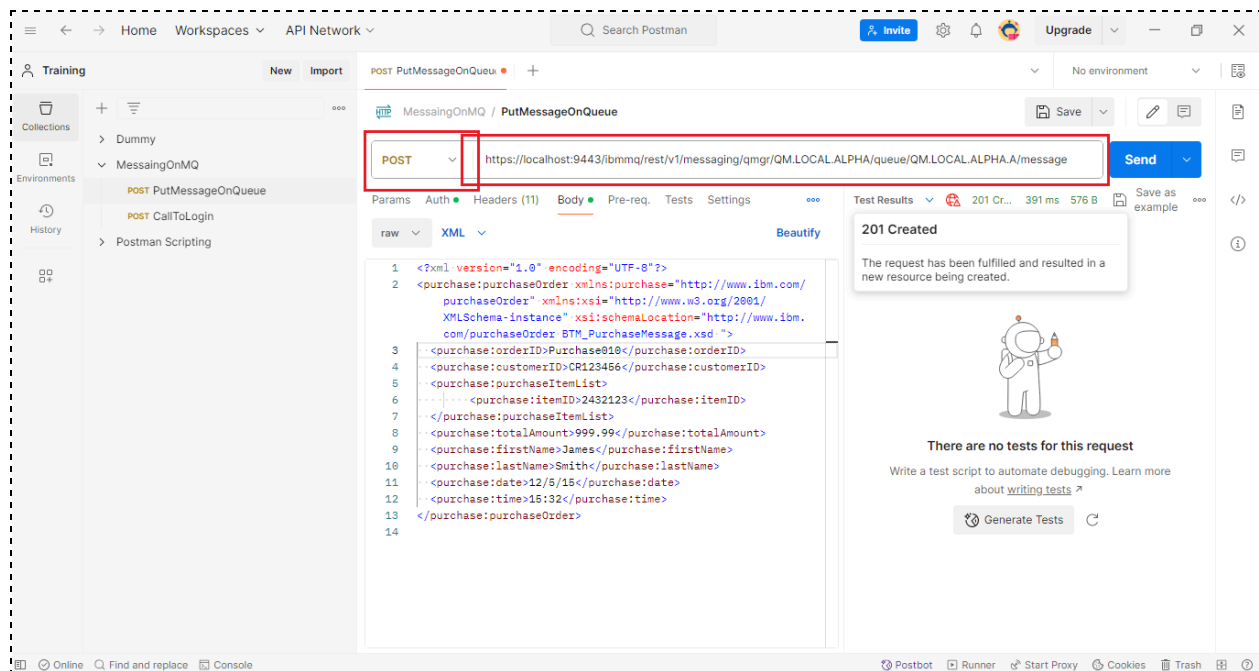Auth :

      Type: Basic

      Username : <username>

      Password : <password>

Method :

      Either GET/POST/DELETE

URL :

https://localhost:9443/ibmmq/rest/v1/messaging/qmgr/<QueueManagerName>/queue/<QueueName>/message

Basic Commands to manage Web Administrator Feature

Check Web Console Status

```
dspmqweb
```

Start Web Console

```
strmqweb
```

Stop Web Console

```
endmqweb
```

~Thank You~