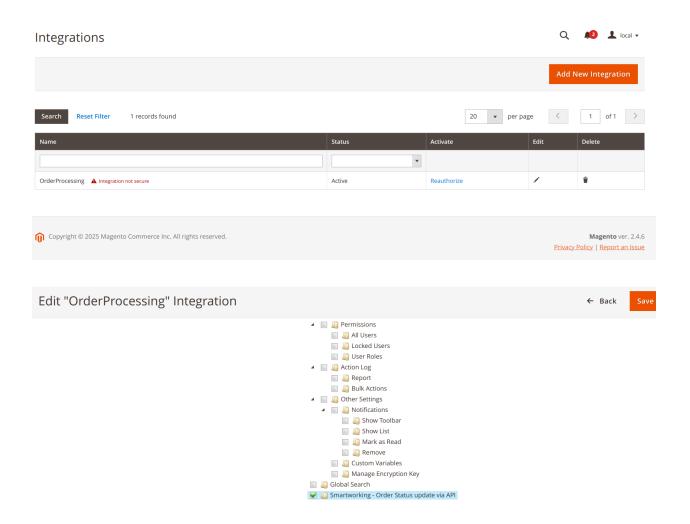
Custom Magento2 Module for Order processing status via API

1. Installation

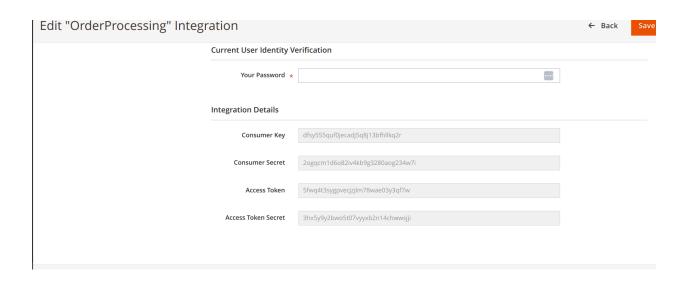
- 1. Unzip the Module inside app/code
- 2. Run php bin/magento setup: upgrade, php bin/magento s:d:c
- 3. Make sure the Module is enabled

2. Token Generation

Generate Auth Key from Admin
 Goto System >> Integration >> Create new Integration >> select "Smartworking Order Status update via API"



5. Use Access Token as Bearer Auth in Postman



3. Optimization

- API is designed and developed considering that different systems will be accessing the order status update functionality for single and multiple order updates
- b. The order will be processed based on the parameter in the API request (synchronous: true/false), For bulk updates, synchronous should be passed as False.
- c. When synchronous is false, orders are processed in the background through the Queue process

4. Caching

Magento's default file based caching is implemented

5. Update Order status with synchronous = false

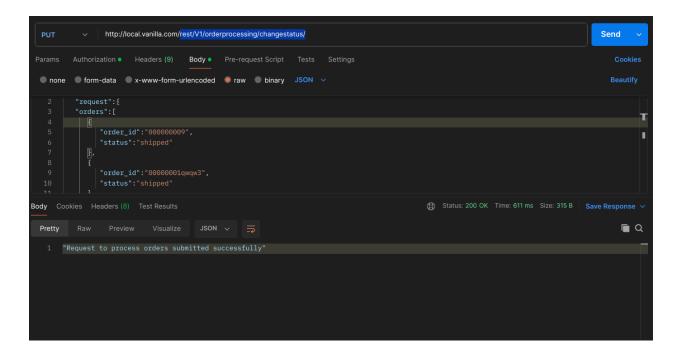
URL: rest/V1/orderprocessing/changestatus/

TYPE: PUT

REQUEST:

```
{
    "request":{
    "orders":[
        {
             "order_id":"000000009",
             "status":"shipped"
        },
        {
             "order_id":"00000001qwqw3",
             "status":"shipped"
        }
    ],
    "synchronous" : false
    }
}
```

RESPONSE: "Request to process orders submitted successfully"



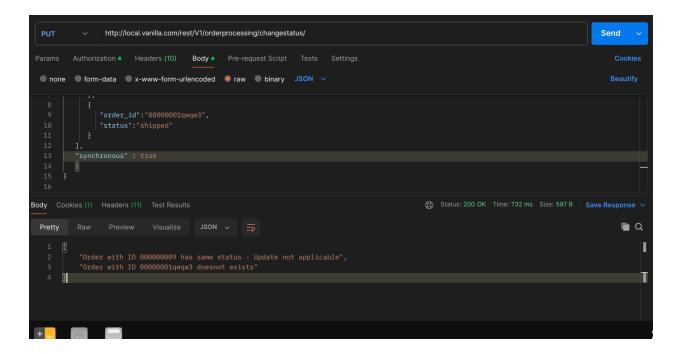
6. Update Order status with synchronous = true

```
RESPONSE :

[

"Order with ID 000000009 has same status - Update not applicable",

"Order with ID 00000001qwqw3 doesnot exists"
]
```



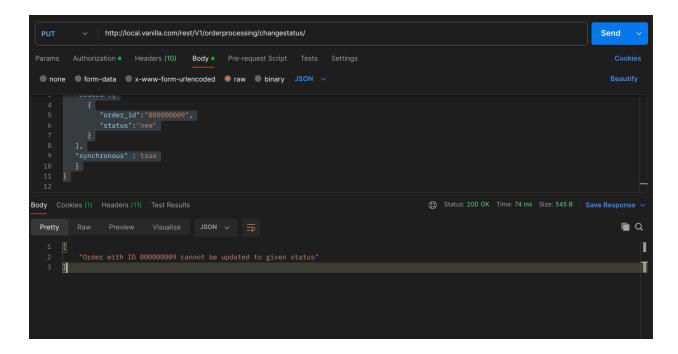
7. Order update when status Transition is not possible

REQUEST

```
{
  "request":{
  "orders":[
      {
            "order_id":"000000009",
            "status":"new"
      }
    ],
    "synchronous": true
  }
}
```

Response:

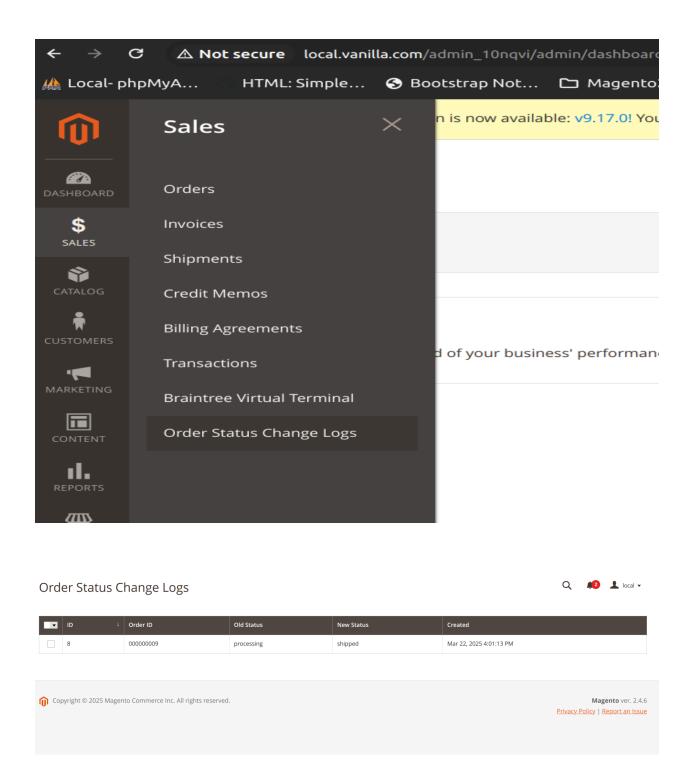
```
[
"Order with ID 000000009 cannot be updated to given status"
]
```



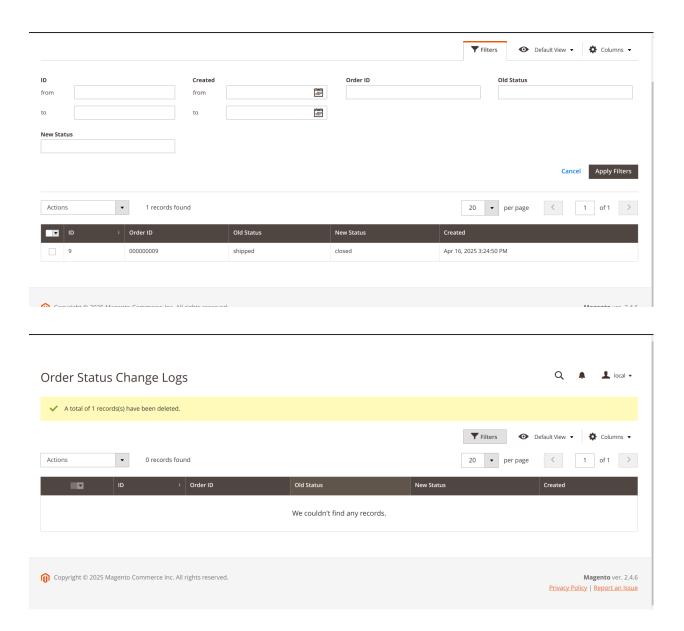
8. Order status logs

All the updates in the status for an order are logged in the database and can be viewed in the admin

Goto Sales >> Order Status Change Logs



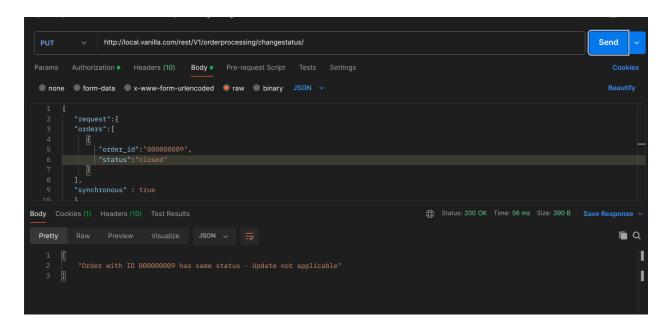
Order status change logs with mass action and filters



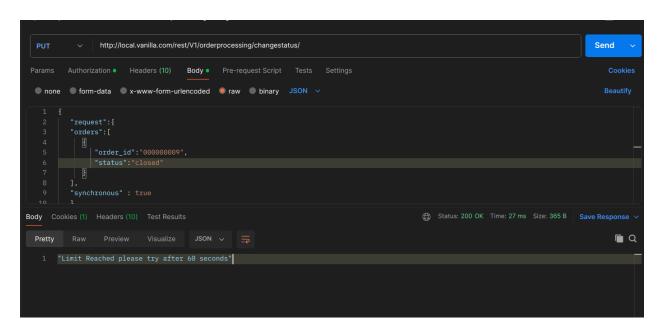
9. Rate Limiter

Added a Class to limit API calls per minute from a particular IP address. The solution is based on sessions and variables related to limit and usage can be modified in the code

1 Normal Request



2. Rate Limit reached



10. Unit Test

Unit test are located at app/code/Smartworking/CustomOrderProcessing/Test/Unit

To Test from CLI run: vendor/phpunit/phpunit/phpunit -c dev/tests/unit/phpunit.xml.dist app/code/Smartworking/CustomOrderProcessing/Test/Unit/Model/Api/OrderProcessingTest.php

```
maheshlalwant@EE-Maheshlalwant:/var/www/html/vanillus vendor/phpunit/phpunit/phpunit -c dev/tests/unit/phpunit.xml.dist app/code/Smartworking/CustomOrderProcessing/Test/Unit/Model/Agi/OrderProcessingTest.php
PHPUnit 9.6.21 by Sebastian Bergmann and contributors.

5 / 5 (100%)

Time: 00:00.017, Memory: 12.00 MB

3K (5 tests, 5 assertions)
maheshlalwanti:/var/www/html/vanillus [
```

- 11. Integration Test
- 1. Create an integration database

```
CREATE DATABASE magento integration tests;
```

2. Update Database configurations in file below

```
dev/tests/integration/etc/install-config-mysql.php
```

3. To avoid repeated installation of database, make below configurations

```
Update <const name="TESTS_CLEANUP" value="disabled"/>
In file
dev/tests/integration/phpunit.xml
```

4. Test from CLI: vendor/phpunit/phpunit/phpunit -c dev/tests/integration/phpunit.xml app/code/Smartworking/CustomOrderProcessing/Test/Integration/Model/Api/OrderProcessingTest.php