



## Oracle Blockchain Service (BCS) API Integration for BAT

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To integrate with the Oracle Blockchain service deployed for Nigerian Customs, the following RESTful API's are documented below.

On all calls, please set the “Content-Type” to “application/json”.

Please ensure the following fields below (including JSON Payload) are not hard coded into your application

```
"channel": "bankorderer",  
"chaincode": "licencenmaterials",
```

The “MaterialId” parameter will be provided by Customs. This is a unique ID representing a specific raw material.

#### Method: updateProductRegistry

Function	Description
updateProductRegistry	Adds raw material content for a given product. <b>Expected Fields</b> <b>RCNumber</b> int <b>ProductName</b> string <b>MaterialId</b> string <b>Quantity</b> int <b>Reason</b> string
Resource URL : <a href="http://localhost:3100/bcsgw/rest/v1/transaction/invoication">http://localhost:3100/bcsgw/rest/v1/transaction/invoication</a>	
args[rcNumber, productName, materialId, quantity, reason]	
JSON payload { "channel": "bankorderer", "chaincode": "licencenmaterials", "method": "updateProductRegistry", "args": ["1234", "Marlboro", "material2634", "-20", "batch 1001"], "chaincodeVer": "v1" }	

#### Method: readProductRegistry

Function	Description
readProductRegistry	Gets <b>current</b> quantity of raw material content in a given product. <b>Expected Fields</b> <b>RCNumber</b> int <b>ProductName</b> string

	<b>MaterialId</b> string
Resource URL: <a href="http://localhost:3100/bcsgw/rest/v1/transaction/query">http://localhost:3100/bcsgw/rest/v1/transaction/query</a>	
args[rcNumber, productName, materialId]	
<b>JSON payload</b> <pre>{   "channel": "bankorderer",   "chaincode": "licencenmaterials",   "method": "readProductRegistry",   "args": ["1234", "Marlboro", "material2634"],   "chaincodeVer": "v1" }</pre>	

#### Method: [getHistoryForProductRegistry](#)

Function	Description
getHistoryForProductRegistry	Gets <b>history</b> of quantity updates of raw material content in given a product. <b>Expected Fields</b> <b>RCNumber</b> int <b>ProductName</b> string <b>MaterialId</b> string
Resource URL: <a href="http://localhost:3100/bcsgw/rest/v1/transaction/query">http://localhost:3100/bcsgw/rest/v1/transaction/query</a>	
args[rcNumber, productName, materialId]	
<b>JSON Payload</b> <pre>{   "channel": "bankorderer",   "chaincode": "licencenmaterials",   "method": "getHistoryForProductRegistry",   "args": ["1234", "Marlboro", "material2634"],   "chaincodeVer": "v1" }</pre>	

#### Method: [addDefectiveProduct](#)

Function	Description
addDefectiveProduct	Adds raw material and its quantity to defective product register. <b>Expected Fields</b> <b>CompanyName</b> string <b>RCNumber</b> int <b>TIN</b> int <b>ProductName</b> string <b>MaterialId</b> string <b>Quantity</b> int <b>Reason</b> string
Resource URL: <a href="http://localhost:3100/bcsgw/rest/v1/transaction/invocation">http://localhost:3100/bcsgw/rest/v1/transaction/invocation</a>	
args[companyName, rcNumber, tin, productName, materialId, quantity, reason]	
<b>JSON Payload</b> <pre>{   "channel": "bankorderer",   "chaincode": "licencenmaterials",   "method": "addDefectiveProduct",   "args": ["British American Tobacco", "1234", "10101", "Marlboro", "material2634", "2000", "order 6172362"],   "chaincodeVer": "v1" }</pre>	

#### Method: [updateDefectiveProduct](#)

Function	Description
addDefectiveProduct	Updates raw material quantity to defective product register. <b>Expected Fields</b> <b>RCNumber</b> int <b>ProductName</b> string

	<b>MaterialId</b> string <b>Quantity</b> int <b>Reason</b> string
Resource URL: <a href="http://localhost:3100/bcsgw/rest/v1/transaction/invoication">http://localhost:3100/bcsgw/rest/v1/transaction/invoication</a>	
args[rcNumber, tin, productName, materialId, quantity, reason]	
<b>JSON Payload</b> <pre>{   "channel": "bankorderer",   "chaincode": "licencenmaterials",   "method": "updateDefectiveProduct",   "args": ["1234", "Marlboro", "material2634", "-100", "batch 1001"],   "chaincodeVer": "v1" }</pre>	

#### Method: readDefectiveProduct

Function	Description
readDefectiveProduct	Gets <b>current</b> quantity of specified raw material assigned to product in defective product register. <b>Expected Fields</b> <b>RCNumber</b> int <b>ProductName</b> string <b>MaterialId</b> string
Resource URL: <a href="http://localhost:3100/bcsgw/rest/v1/transaction/query">http://localhost:3100/bcsgw/rest/v1/transaction/query</a>	
args[rcNumber, productName, productName]	
<b>JSON Payload</b> <pre>{   "channel": "bankorderer",   "chaincode": "licencenmaterials",   "method": "readDefectiveProduct",   "args": ["1234", "Marlboro", "material2634"],   "chaincodeVer": "v1" }</pre>	

#### Method: getHistoryForDefectiveProduct

Function	Description
getHistoryForDefectiveProduct	Gets <b>history</b> of quantity updates of specified raw material assigned to product in defective product register. <b>Expected Fields</b> <b>RCNumber</b> int <b>ProductName</b> string <b>MaterialId</b> string
Resource URL: <a href="http://localhost:3100/bcsgw/rest/v1/transaction/query">http://localhost:3100/bcsgw/rest/v1/transaction/query</a>	
args[rcNumber, productName, materialId]	
<b>JSON Payload</b> <pre>{   "channel": "bankorderer",   "chaincode": "licencenmaterials",   "method": "getHistoryForDefectiveProduct",   "args": ["1234", "Marlboro", "material2634"],   "chaincodeVer": "v1" }</pre>	