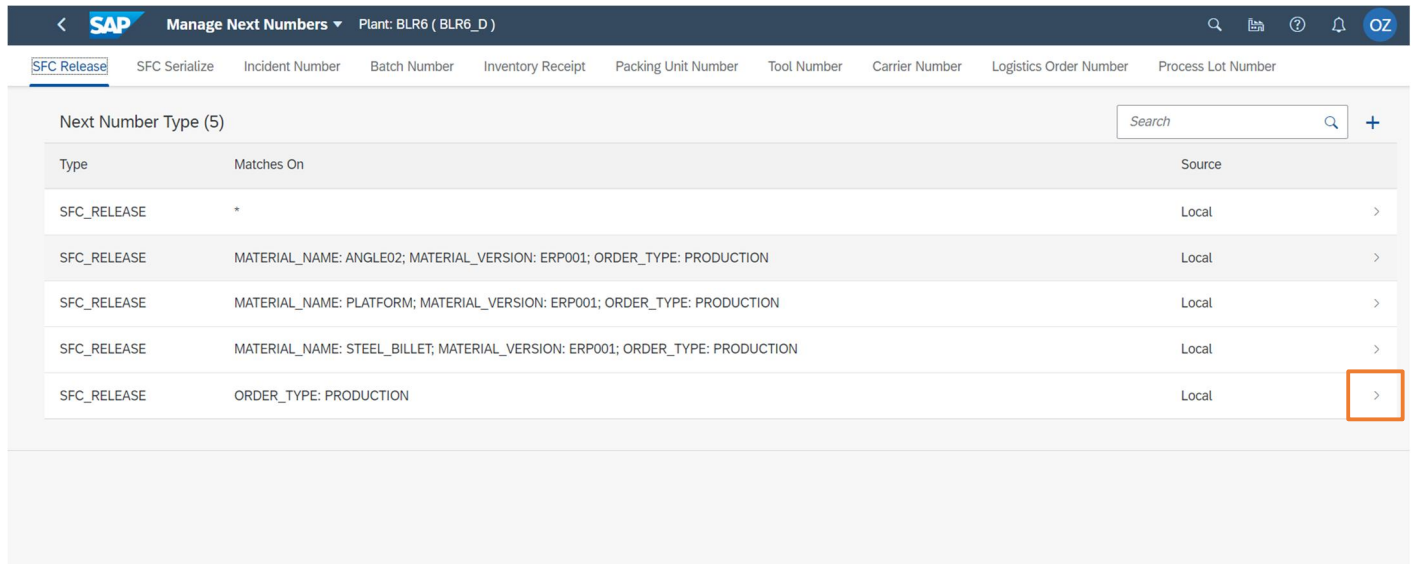# Requirement

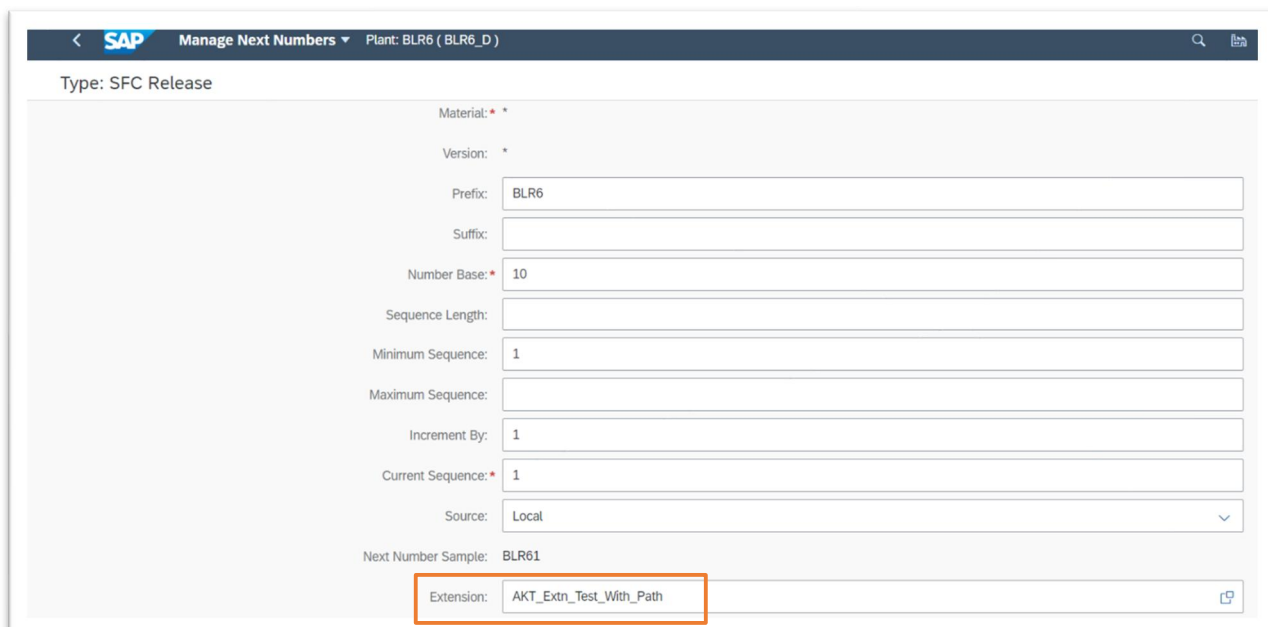Pass "Extension Parameters" to In-App Extension

Next number generation functionality can be extended with In-App Extensions. In-App Extension should be created and registered in the DMC Service Registry which enables the extension point in the DMC application. When DMC generates the next number, the extension is executed at the extension point, if configured in the Manage Next Number application. Once the execution of the extension is complete the application continues normal execution.

Manage Next Number application supports the following next number types. All types can be extended with In-App Extension.

"Details" screen allows extension configuration registered in the Service Registry application. Extension configured to be triggered during next number generation. These extensions are synchronous in nature.

Generate next number functionality was extended to pass extension parameters for each of the next number type scenarios.

Extension parameters are:

- PLANT
- MATERIAL_NAME

- MATERIAL_VERSION
- MATERIAL_GROUP
- PRIORITY à include if available
- ORDER_NAME à include if available
- ORDER_TYPE à include if available
- SFC à include if available

JSON request was extended with name-value pairs in extensionParameters property, values passed to the extension when the next number generation functionality is triggered.

```
{
 .........
  "extensionParameters":{
    "PLANT":"KYMA",
    "MATERIAL_NAME":"MATERIAL1",
    "MATERIAL_VERSION":"A",
    "ORDER_NAME":"KYMA_ORDER1",
    "ORDER_TYPE":"PRODUCTION",
    "PRIORITY":"500",
    "MATERIAL_GROUP":"KYMA_GROUP"
  }
  ....
}
```
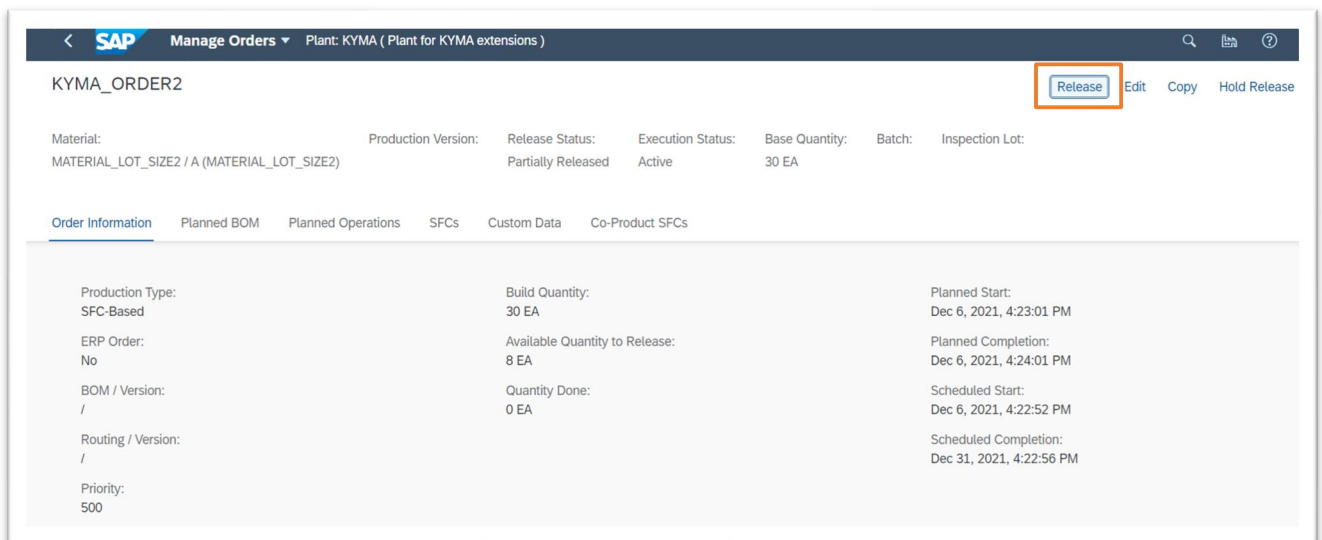
This document will guide through the available next number types to show what "Extension Parameters" were passed to the extension when the next number generation functionality is triggered.

Next Number Types:

- SFC Release

Next Number functionality generates a new identifier when Shop Order is released.

"Extension Parameters" passed to extension.

Extension Parameter	Comments
PLANT	Plant name
MATERIAL_NAME	Material name
MATERIAL_VERSION	Material version

MATERIAL_GROUP	Material Group name
ORDER_NAME	Order name
PRIORITY	Order priority
ORDER_TYPE	Order type

JSON request example passed to extension with "extensionParameters" property:

```
{
  "sequence":{
    "minimumValue":"1",
    "increment":"1",
    "currentValue":"10",
    "base":10
  },
  "extension":"538d8bba-2919-4866-8709-a2d7964a6c59",
  "extensionParameters":{
    "PLANT":"KYMA",
    "MATERIAL_NAME":"MATERIAL1",
    "MATERIAL_VERSION":"A",
    "ORDER_NAME":"KYMA_ORDER1",
    "ORDER_TYPE":"PRODUCTION",
    "PRIORITY":"500",
    "MATERIAL_GROUP":"KYMA_GROUP"
  },
  "identifiers":[
    "KYMA7",
    "KYMA8"
  ],
  "sourceSystem":"LOCAL",
  "pattern":{
    "prefix":"KYMA"
  },
  "propertyMatchers":[
    {
      "name":"ORDER_TYPE",
      "priority":30,
      "value":"PRODUCTION"
    }
  ],
  "eventName":"SFC_RELEASE",
  "targetBusinessObject":"SFC"
}
```

- SFC Serialize

Next Number functionality generates a new identifier for SFC Serialize, SFC Split, or SFC Relabel.

SFC to Relabel	**Save**	Generate	Close

Original SFC	New SFC
KYMA10	428

Pass "Extension Parameters" to extension.

Extension Parameter	Comments
PLANT	Plant name
MATERIAL_NAME	Material name
MATERIAL_VERSION	Material version
MATERIAL_GROUP	Material Group name
ORDER_NAME	Order name
PRIORITY	Order priority
ORDER_TYPE	Order type
SFC	Original SFC Name

JSON request example passed to extension with "extensionParameters" property:

```
{
  "sequence":{
    "minimumValue":"1",
    "increment":"1",
    "currentValue":"429",
    "base":10
  },
  "extension":"538d8bba-2919-4866-8709-a2d7964a6c59",
  "extensionParameters":{
    "PLANT":"KYMA",
    "SFC":"KYMA10",
    "MATERIAL_VERSION":"A",
    "MATERIAL_NAME":"MATERIAL1"
    "ORDER_NAME":"KYMA_ORDER1",
    "MATERIAL_GROUP":"KYMA_GROUP",
    "ORDER_TYPE":"PRODUCTION",
    "PRIORITY":"500"
  },
  "identifiers":[
    "428"
  ],
  "sourceSystem":"LOCAL",
  "pattern":{
  },
  "propertyMatchers":[
  ],
  "eventName":"SFC_SERIALIZE",
```

```
    "targetBusinessObject":"SFC"
}
```

· Incident Number

Next Number functionality generates a new identifier when Log NC with Incident Number generation in Automatic mode is enabled.

 "Extension Parameters" passed to extension.

Extension Parameter	Comments
PLANT	Plant name
MATERIAL_NAME	Material name
MATERIAL_VERSION	Material version
MATERIAL_GROUP	Material Group name
ORDER_NAME	Order name
SFC	SFC Name
OPERATION	Operation name
RESOURCE	Resource name
ROUTING_NAME	Routing name
ROUTING_VERSION	Routing version
SFC_QUANTITY	SFC Quantity
SFC_STATUS_CODE	SFC Status Code
NC_CODE_REF	NC Code reference

JSON request example passed to extension with "extensionParameters" property:

```
{
  "sequence":{
    "minimumValue":"1",
    "increment":"1",
    "currentValue":"28",
    "base":10
  },
```
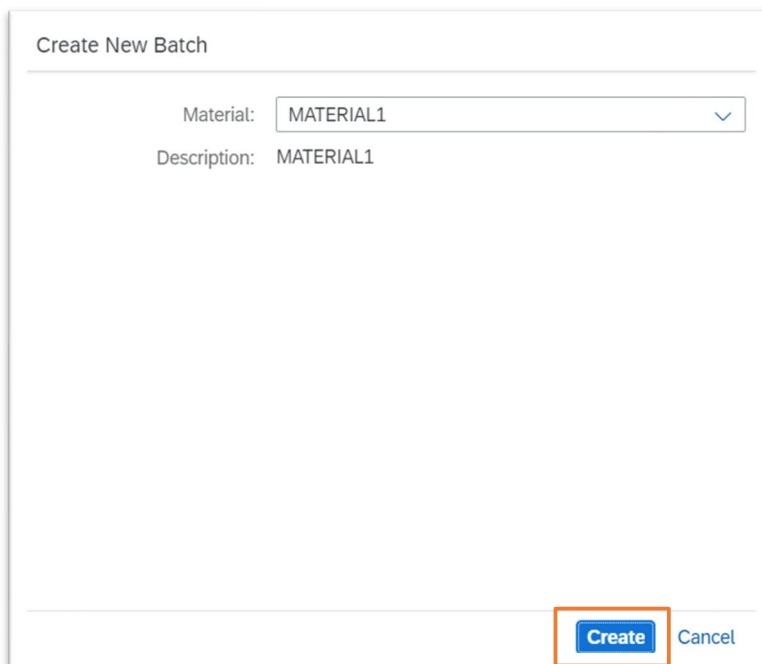
```
  "extension":"538d8bba-2919-4866-8709-a2d7964a6c59",
  "extensionParameters":{
    "PLANT":"KYMA",
    "NC_CODE_REF":"NCCodeBO:KYMA,NC1",
    "ORDER_NAME":"KYMA_ORDER2",
    "MATERIAL_GROUP":"KYMA_GROUP",
    "SFC_STATUS_CODE":"401",
    "ROUTING_NAME":"ROUTER1",
    "MATERIAL_VERSION":"A",
    "SFC":"418",
    "OPERATION":"OPER1",
    "SFC_QUANTITY":"1.000000",
    "ROUTING_VERSION":"A",
    "MATERIAL_NAME":"MATERIAL_LOT_SIZE2",
    "RESOURCE":"WC1"
  },
  "identifiers":[
    "IN27"
  ],
  "sourceSystem":"LOCAL",
  "pattern":{
    "prefix":"IN"
  },
  "propertyMatchers":[

  ],
  "eventName":"INCIDENT_NUMBER",
  "targetBusinessObject":"INCIDENT_NUMBER"
}
```

- Batch Number

  Next Number functionality generates a new identifier when creating a unique Batch Number in POD.

"Extension Parameters" passed to extension.

Extension Parameter	Comments
PLANT	Plant name
MATERIAL_NAME	Material name
MATERIAL_VERSION	Material version
MATERIAL_GROUP	Material Group name
ORDER_NAME	Order name
PRIORITY	Order priority
ORDER_TYPE	Order type
WORK_CENTER	Work Center name
ROUTING_NAME	Routing name
ROUTING_VERSION	Routing version
ROUTING	Routing steps

JSON request example passed to extension with "extensionParameters" property:

```
{
  "sequence":{
    "minimumValue":"100",
    "length":6,
    "increment":"1",
    "currentValue":"308",
    "base":10
  },
  "extension":"6ebf9fd4-b65a-4303-9c4d-3d8688b1d07c",
  "extensionParameters":{
    "ROUTING_NAME":"ROUTER1",
    "PLANT":"KYMA",
    "MATERIAL_VERSION":"A",
    "ORDER_NAME":"KYMA_ORDER1",
    "MATERIAL_GROUP":"KYMA_GROUP",

"ROUTING":"RouterStepBO:RouterBO:KYMA,ROUTER1,U,A,10;RouterStepBO:RouterBO:KYMA,ROUTER1,
U,A,20",
    "ROUTING_VERSION":"A",
    "ORDER_TYPE":"PRODUCTION",
    "PRIORITY":"500",
    "MATERIAL_NAME":"MATERIAL1",
    "SHOP_ORDER":"KYMA_ORDER1",
    "WORK_CENTER":"WC1"
  },
  "identifiers":[
    "000307"
  ],
  "sourceSystem":"LOCAL",
  "pattern":{
  },
  "propertyMatchers":[
  ],
  "eventName":"BATCH_NUMBER",
  "targetBusinessObject":"BATCH_NUMBER"
}
```

- Inventory Receipt

Next Number functionality generates a new identifier when adding floor stock receipt.

"Extension Parameters" passed to extension.

Extension Parameter	Comments
PLANT	Plant name
MATERIAL_NAME	Material name
MATERIAL_VERSION	Material version
MATERIAL_GROUP	Material Group name

JSON request example passed to extension with "extensionParameters" property:

```json
{
  "sequence":{
    "minimumValue":"1",
    "increment":"1",
    "currentValue":"142",
    "base":10
  },
  "extension":"538d8bba-2919-4866-8709-a2d7964a6c59",
  "extensionParameters":{
    "MATERIAL_NAME":"00000DG_ITEM2222",
    "PLANT":"DEV",
    "MATERIAL_VERSION":"A",
    "MATERIAL_GROUP":"KYMA_GROUP"
  },
  "identifiers":[
    "DEVIR14120220121"
  ],
  "sourceSystem":"LOCAL",
  "pattern":{
    "prefix":"{PLANT}IR",
    "suffix":"{DATE_TIME[YYYYMMDD]}"
```

```
    },
    "propertyMatchers":[

    ],
    "eventName":"INVENTORY_RECEIPT",
    "targetBusinessObject":"INVENTORY"
}
```

· Packing Unit Number

Next Number functionality generates a new identifier when generate a new packing unit number.

"Extension Parameters" passed to extension.

Extension Parameter	Comments
PLANT	Plant name
MATERIAL_NAME	Material name
MATERIAL_VERSION	Material version
MATERIAL_GROUP	Material Group name
CARRIER_ID	Carrier ID name
RESOURCE	Resource name
WORK_CENTER	Work Center name
PACKING_TYPE	Packing Type

JSON request example passed to extension with "extensionParameters" property:

```
{
  "sequence":{
    "minimumValue":"1",
    "increment":"1",
    "currentValue":"89",
    "base":10
  },
  "extension":"538d8bba-2919-4866-8709-a2d7964a6c59",
  "extensionParameters":{
    "PACKING_TYPE":"CONFORMANT",
    "PLANT":"SAP",
```
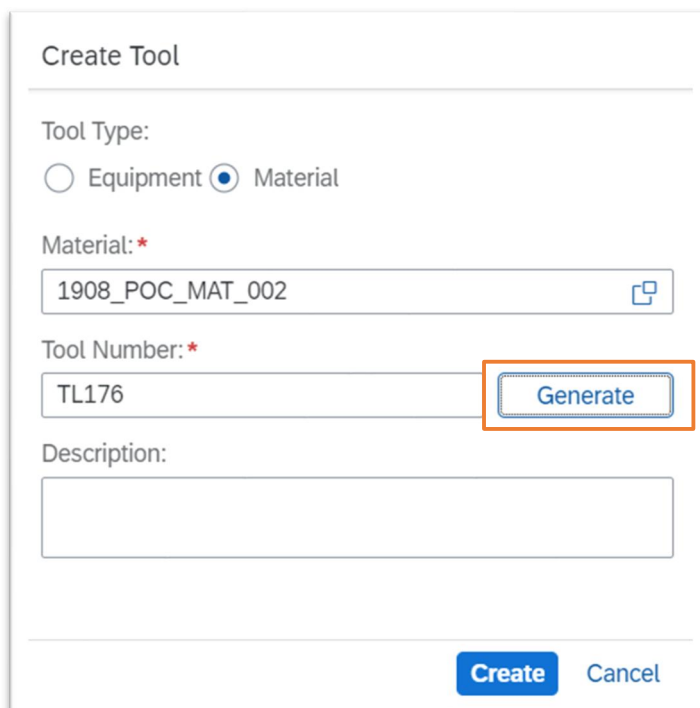
```
    "MATERIAL_VERSION":"ERP002",
    "MATERIAL_NAME":"DEV011647",
    "MATERIAL_GROUP":"KYMA_GROUP",
    "CARRIER_ID":"1",
    "RESOURCE":"-1566382594761-RES1"
  },
  "identifiers":[
    "CN88"
  ],
  "sourceSystem":"LOCAL",
  "pattern":{
    "prefix":"CN"
  },
  "propertyMatchers":[
  ],
  "eventName":"PACKING_UNIT_NUMBER",
  "targetBusinessObject":"PACKING_UNIT_NUMBER"
}
```

- Tool Number

  Next Number functionality generates a new identifier when generate a new tool number.

  "Extension Parameters" passed to extension.

Extension Parameter	Comments
PLANT	Plant name
MATERIAL_NAME	Material name
MATERIAL_VERSION	Material version
MATERIAL_GROUP	Material Group name

  JSON request example passed to extension with "extensionParameters" property:

  {

```
"sequence":{
  "minimumValue":"1",
  "increment":"1",
  "currentValue":"92",
  "base":10
},
"extension":"538d8bba-2919-4866-8709-a2d7964a6c59",
"extensionParameters":{
  "MATERIAL_NAME":"1908_POC_MAT_002",
  "PLANT":"DEV",
  "MATERIAL_VERSION":"A",
  "MATERIAL_GROUP":"KYMA_GROUP"
},
"identifiers":[
  "TL91"
],
"sourceSystem":"LOCAL",
"pattern":{
  "prefix":"TL"
},
"propertyMatchers":[
],
"eventName":"TOOL_NUMBER",
"targetBusinessObject":"TOOL_NUMBER"
}
```

- Carrier Number

  Next Number functionality generates a new identifier when creating a new Carrier ID with an empty Carrier ID value.

"Extension Parameters" passed to extension.

Extension Parameter	Comments
PLANT	Plant name
MATERIAL_NAME	Material name
MATERIAL_VERSION	Material version
MATERIAL_GROUP	Material Group name

JSON request example passed to extension with "extensionParameters" property:

```
{
  "sequence":{
    "minimumValue":"1",
    "increment":"1",
    "currentValue":"3",
    "base":10
  },
  "extension":"538d8bba-2919-4866-8709-a2d7964a6c59",
  "extensionParameters":{
    "PLANT":"KYMA",
    "MATERIAL_VERSION":"A",
    "MATERIAL_GROUP":"KYMA_GROUP",
    "MATERIAL_NAME":"CARRIER"
  },
  "identifiers":[
    "KYMACN2"
  ],
  "sourceSystem":"LOCAL",
  "pattern":{
    "prefix":"KYMACN"
  },
  "propertyMatchers":[
  ],
  "eventName":"CARRIER_NUMBER",
  "targetBusinessObject":"CARRIER_NUMBER"
}
```

· Logistic Order Number

Next Number functionality generates a new identifier when creating a new Logistic Order number.

"Extension Parameters" passed to extension.

Extension Parameter	Comments
PLANT	Plant name
REFERENCE_TYPE	SFC or PACKING_UNIT
REFERENCE_NUMBER	SFC name or Packing Unit name
PRIORITY	Logistic Order priority
DESTINATION_TYPE	RESOURCE or WORK_CENTER
DESTINATION_LOCATION	Resource name or Work Center name
SOURCE_TYPE	RESOURCE or WORK_CENTER
SOURCE_LOCATION	Resource name or Work Center name

JSON request example passed to extension with "extensionParameters" property:

```
{
  "sequence":{
    "minimumValue":"1",
    "increment":"1",
    "currentValue":"5",
    "base":10
  },
  "extension":"538d8bba-2919-4866-8709-a2d7964a6c59",
  "extensionParameters":{
    "PLANT":"KYMA",
    "DESTINATION_TYPE":"RESOURCE",
    "SOURCE_LOCATION":"DEFAULT",
    "SOURCE_TYPE":"RESOURCE",
    "REFERENCE_TYPE":"SFC",
    "REFERENCE_NUMBER":"KYMA1",
    "PRIORITY":"500",
    "DESTINATION_LOCATION":"WC1"
  },
  "identifiers":[
    "4"
  ],
  "sourceSystem":"LOCAL",
```

```
"pattern":{
},
"propertyMatchers":[
],
"eventName":"LOGISTICS_ORDER_NUMBER",
"targetBusinessObject":"LOGISTICS_ORDER_NUMBER"
}
```

- Process Lot Number

Process Lot functionality is not implemented yet. This section will be updated when it is done.