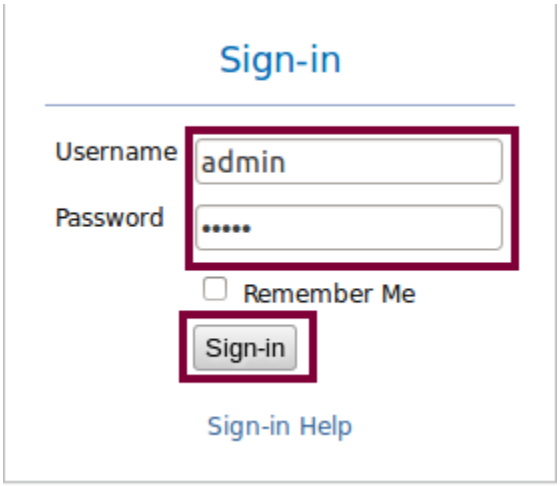
Following tutorial will guide you through basic configurations of Wihidum CEP in a step by step process.

Create Agent Broker

Before creating the bucket to filter stock quotes it is essential to have a Carbon broker. Since In this example we are going to use agent Broker, it is needed to create a broker with type agent. To do that

1. Start CEP Server.
2. Login as admin.

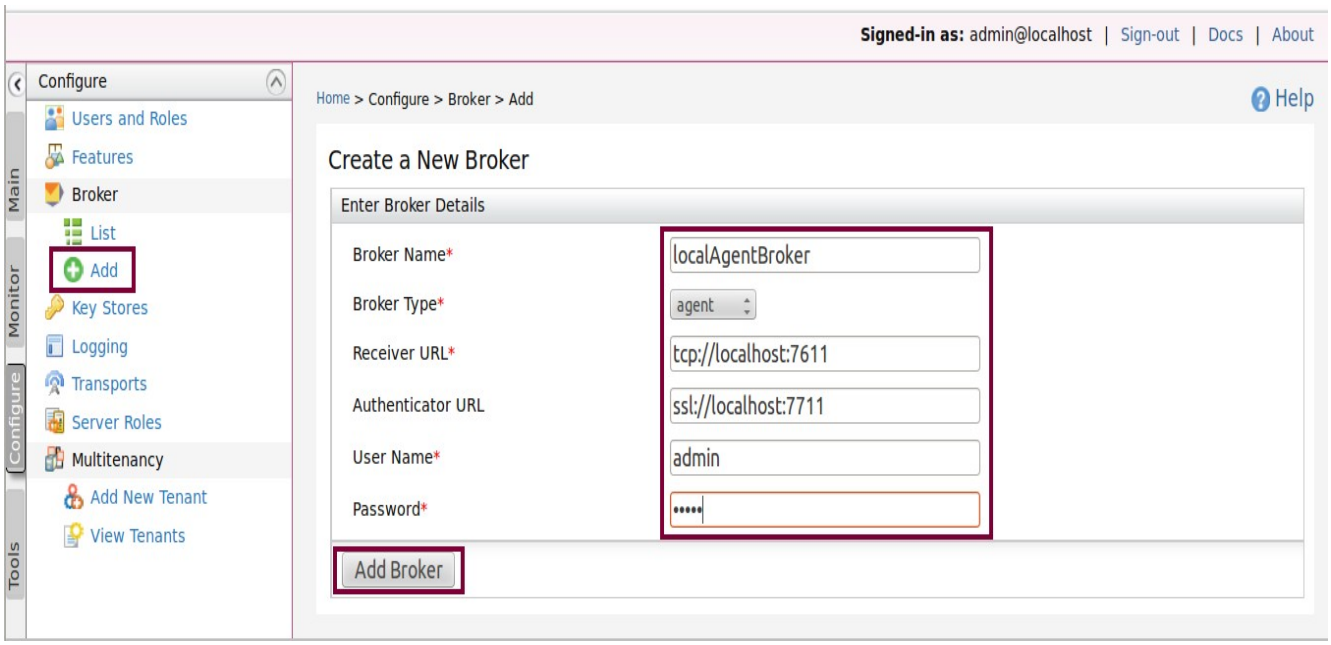


1. In the Configure menu you can find a Menu item called "Broker" and under that you can see sub menu 'Add' and click on that.
2. You will get a page with header "Create a New Broker" and you need to enter following details in that form to create a agent broker.

   Broker Name : localAgentBroker

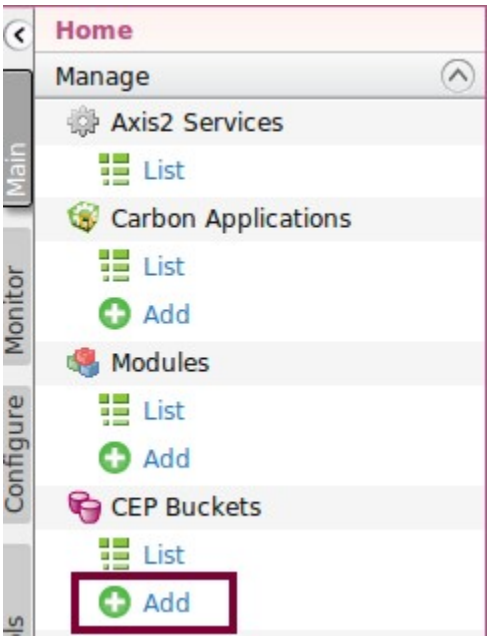
   ```
   Type              : agent
   URL               : tcp://localhost:7611
   Authenticator URL : ssl://localhost:7711
   User Name         : admin
   Password          : admin
   ```

3. Finally click on Add Broker button and you will get the added broker to the list of available brokers.



Create Bucket with Wihidum

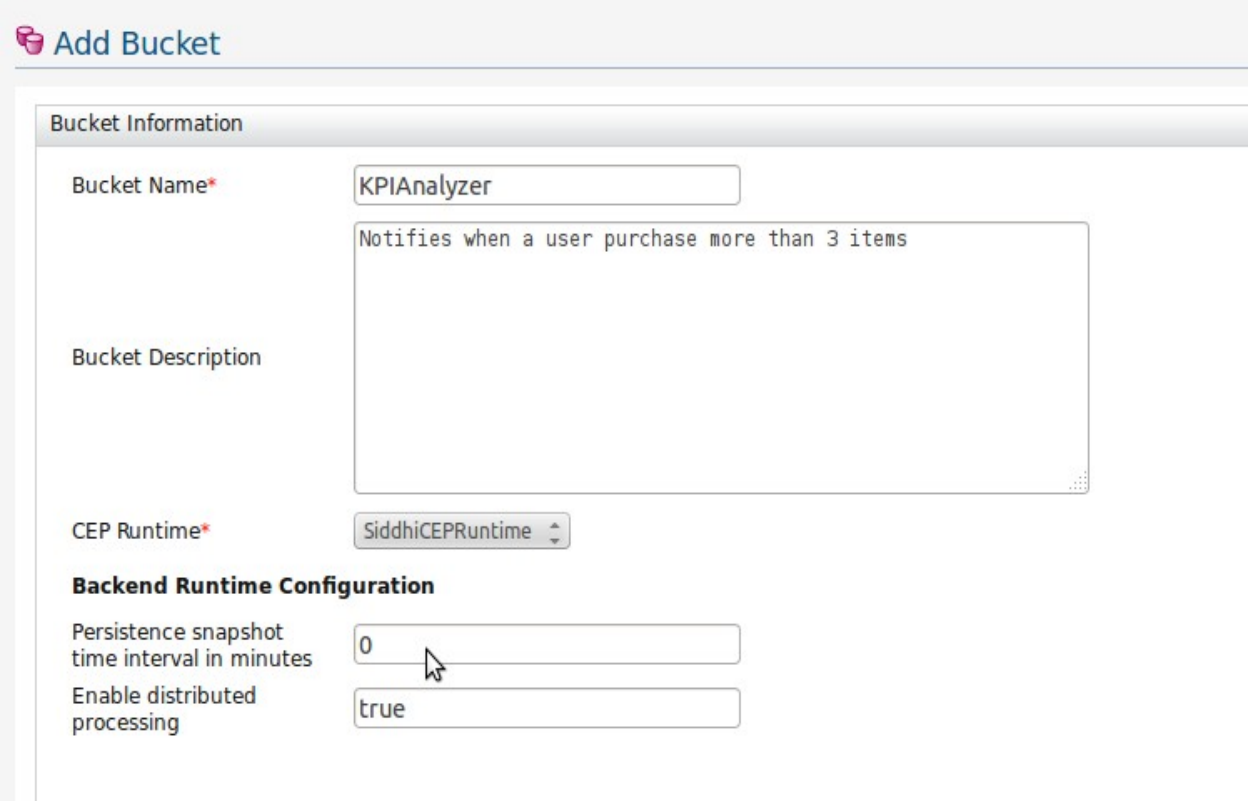
To create a bucket use Add menu item under CEP Buckets in the Main menu. Bucket creation form has three major sections. Basic information, Input and query and loadbalancer. How to fill those sections is described below.



Section 1 : Basic Information

Use the following information to fill the basic information section as shown in the below screenshot.

```
Bucket Name (Name of the bucket)               : KPIAnalyzer
Description (Description about the bucket)     : Notifies when a user
purchase more than 3 items
Engine Provider(CEP Runtime engine to be used) : SiddhiCEPRuntime [Choose
from the drop down]

Persistence snapshot time interval in minutes  : 0
Enable distributed processing                  : true
```

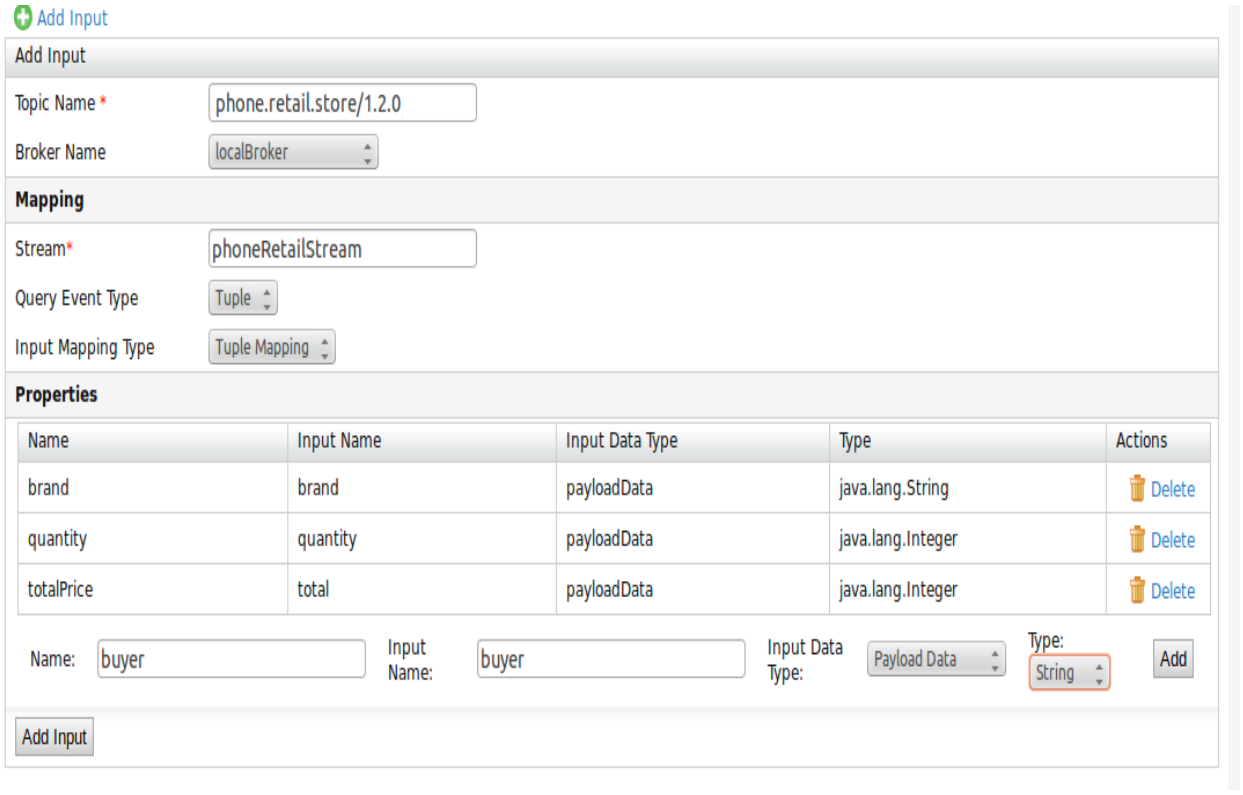


Section 2 : Inputs

This section is used to define the inputs CEP will receive. To add an input click on Add Input link and then use following details. Screen shot is provided below for your convenience.

```
Topic( topic to events be received): phone.retail.store/1.2.0
Broker Name (Broker to be used)    : localAgentBroker

Mapping

Stream (Name of the event stream) : phoneRetailStream
Query Event Type                  : Tuple
Input Mapping Type                : Tuple Mapping

Properties (these properties will be extracted from the received tuple event
and fed to the CEP engine)

Name            : brand
```

```
Input Name      : brand
Input Data Type : payload data
Type            : String

Name            : quantity
Input Name      : quantity
Input Data Type : payload data
Type            : Integer

Name            : totalPrice
Input Name      : totalPrice
Input Data Type : payload data
Type            : Integer

Name            : buyer
Input Name      : buyer
Input Data Type : payload data
Type            : String
```



Section 3 : Queries

This section is used to define the queries which will run on inputs and define outputs. To add a query click on Add query link and use following information. Screen shot is provided below for your convenience.

```
Query Name (To identify the query) : KPIQuery

Expression : from phoneRetailStream[quantity > 3]
                        insert into highPurchaseStream
                        buyer, brand, quantity, totalPrice;

Query Deploying IP List

IP              : 192.168.1.2

Output(Define the output)

Topic           : high.purchase.buyers/1.5.0
Broker Name     : 192.168.1.2
Output Mapping : Tuple Mapping

Tuple Mapping

Meta Data

Name : buyer           value of : buyer       Type : String

Payload data

Name : brand           value of : brand      Type : String
Name : quantity        value of : quantity   Type : Integer
Name : purchasePrice   value of : totalPrice Type : Integer
```

Add query

Query

Query name* KPIQuery

Expression*

```
from phoneRetailStream[quantity > 3]
insert into highPurchaseStream
buyer, brand, quantity, totalPrice;
```

Query Deploying IP List

IP	Actions
192.168.1.2	Delete

IP* Add

Output

Topic* high.purchase.buyers/1.5.0

Broker Name 192.168.1.2

Output Mapping Tuple Mapping

Tuple Mapping

Meta Data

Name	Value Of	Type	Actions
buyer	buyer	java.lang.String	Delete

Name : Value Of : Type: String Add

Correlation Data

No Correlation Data properties Defined

Name : Value Of : Type: Integer Add

Payload Data

Name	Value Of	Type	Actions
brand	brand	java.lang.String	Delete
quantity	quantity	java.lang.Integer	Delete
totalPrice	totalPrice	java.lang.Integer	Delete

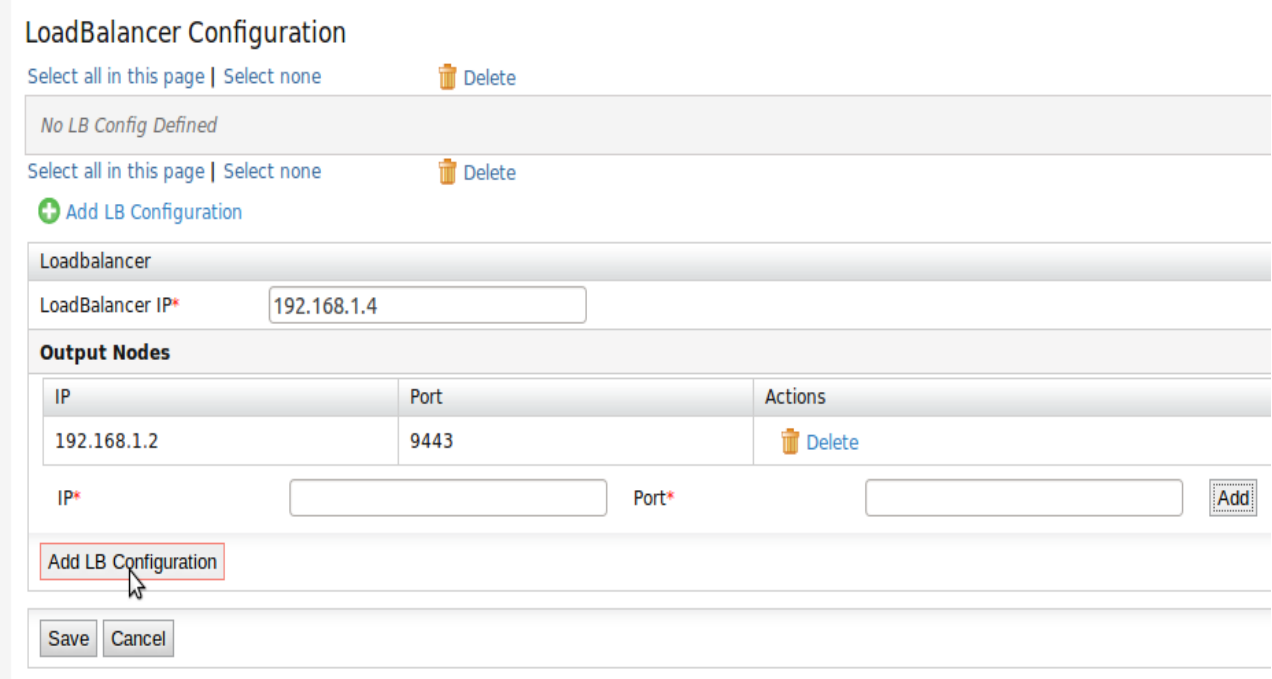
Name : Value Of : Type: Integer Add

Add Query

Section 3 : LoadBalancer configurations

This section is used to define load balancer configurations. To add a configuration click on Add LB Configuration link and use following information. Screen shot is provided below for your convenience.

```
LoadBalancer IP : 192.168.1.4

Output Nodes

IP              : 192.168.1.2          Port    : 9443
```



Using above instructions you can create and save a bucket.