

EP-12 Improve Alert Engine

Status:

WIP

Goals

- Organize all alert metadata (policy/stream/alerts) and data with siteld.
- Support both application-provided and customized streams.
- Support to onboard customized alerting use case without programing.

Improvements

- ✓ EIP-12.1 [UI] Add site group/filter for policy definition and remove inputstreams column
- ✓ EIP-12.2 [UI] Reorganize alert metadata like policy/stream, etc. by siteld.
- ☐ EIP-12.3 [UI&Backend] Support customized stream.
 - **API:** POST /rest/metadata/streams/create

```
{
  "streamSource": {
    "properties": {
      "spout.kafkaBrokerZkQuorum": "localhost:2181",
      "spout.kafkaBrokerZkBasePath": "/brokers"
    },
    "topic": "DATA_STREAM_SANDBOX_TOPIC",
    "schemeCls": "org.apache.eagle.alert.engine.scheme.JsonScheme",
    "codec": {
      "timestampColumn": "timestamp"
    }
  },
  "streamDefinition": {
    "streamId": "DATA_STREAM_SANDBOX",
    "description": "A sample data stream",
    "validate": false,
    "timeseries": true,
    "siteId": "sandbox",
    "columns": [
      {
        "name": "timestamp",
        "type": "LONG",
        "defaultValue": null,
        "required": true
      },
      {
        "name": "value",
        "type": "DOUBLE",
        "defaultValue": null,
        "required": false
      }
    ]
  }
}
```

- **UI:**
 - Add "Create Stream" Button
 - Add "Stream Editor" Form with following fields
 - SiteId
 - StreamId
 - Description
 - Timeseries
 - Columns
 - Name
 - Type
 - DefaultValue
 - Required or not

- Description
- Source
 - Type: Kafka
 - Topic: "kafka_topic_name"
 - Schema: JSON
 - Timestamp Column
 - Timestamp Format
 - Zookeeper Quorum
 - Zookeeper Base Path
- EIP-12.4 [UI] Improve stream filter by siteId in policy editor page and auto fill siteId in metadata
 - Select current siteId -> streams by siteId -> define policy with siteId
- EIP-12.5 [BUG] Fix alert API call with startTime and endTime instead of alertId only.
- EIP-12.6 [UI] Add simple alerts statistics dashboard upon alert list in **Stacked Trend Chart**
- EIP-12.3 [Backend] Make sure alert engine instance dedicated per site