DadyCloud DataFlow Architecture

Elasticsearch + kibana

Log Search

Logstash

Metric Domain

Logstash

DSO

Syslog

Trap

Collectd

K

A

F

K

A

Logstash

Fault Domain

zabbix

Fault Manage

Metric Manage

DSH

Task Console

Influxdb + Grafana

Instrument

Collector

Message bus

Consumer

Kafka Avro Schema:

{

"namespace": "com.dadycloud.sa",

"type": "record",

"name": "event",

"fields": [

     {"name": "timestamp", "type": "long"},

     {"name": "src",       "type": "string"},

     {"name": "host\_ip",   "type": "string"},

     {"name": "rawdata",   "type": "bytes"}

  ]

}

“Raw data” format:

{

“message” : …

“type”: …

  (Source Specific Fields)

}

Kafka Topic list:

    dms.event.syslog

    dms.event.trap

    dms.event.vm

    dms.metric.vm

dms.event.vm:

|  |  |  |
| --- | --- | --- |
| tenantId | string |  |
| tenantName | string |  |
| eventName | string |  |
| vmUUID | string |  |
| vmManagementIP | string |  |
| vmType | string |  |
| vmVNFList | array | [{“netIP”:,”vmType”:},…] |

dms.event.syslog:

|  |  |  |
| --- | --- | --- |
| priority | string |  |
| **f**acility | string |  |
| severity | string |  |
| severity\_label | string |  |
| facility\_label | string |  |

dms.event.trap:

TBD

dms.metric.vm:

TBD.

dms.event.zabix

|  |  |  |
| --- | --- | --- |
| eventName | string | AutoHealRequest,AutoScaleRequest |
| vmUUID | string |  |
| vmManagementIP | string |  |
| vmType | string |  |

|  |  |  |
| --- | --- | --- |
| eventName | string | MonitorCPE |
|  |  |  |
|  |  |  |
|  |  |  |

dms.event.rundeck

|  |  |  |
| --- | --- | --- |
| eventName | string | AutoHealUpdate,AutoScaleUpdate |
| vmUUID | string |  |
| vmManagementIP | string |  |
| vmType | string |  |

Collectd

Version: 5.5.0

<https://collectd.org/files/collectd-5.5.0.tar.gz>

User Case 1: Provisioning/Update/Remove vm

Kafka (dms.event.vm) -> DSH -> Generate new collectd configuration -> ansible execute

User Case 2: Service Maintenance

Portal -> DSH

Enable/disable monitoring

-> Ansible execute (Per Customer/ All)

User Case 3: Diagnostics (Optional)

Portal -> DSH

Ask DSO to create two vms

Validate

Generate collectd configure files

-> Ansible execute

Testing

-> Portal (Report test result)

-> DSO (remove the vm list)

User Case 4: Inventory Provisioning/Sync

DSH -> DSO(full sync) / DSO -> DSH (provisioning)