

# Architecture proposal: Frontend (Kibana) integration into Monasca

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- Introduction
- Kibana 4
- Kibana and Monasca
- Proposal (basic architecture)

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- Log file management: High-priority requirement in Monasca
- Approach: Integrate ELK-stack with Monasca
- This document:
  - Focus on dashboard side, i.e. retrieval of log file information
- Writing of log file information: Handled in different document

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# Kibana 4

DKV

- New with Kibana 4: server component (node.js)
- This server component is mandatory (according to Elasticsearch)
- Tasks for this component:
  - Act as a proxy between Kibana client and Elasticsearch
  - Serverside handling that can't be done on the client
  - Authentication and authorization (future version)

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# Kibana: Data retrieval

**Kibana client**

Step 1: Send request to Kibana Srv:  
URL: `http://localhost::5601`  
query: „user:matthias“

Step 4: Return results to client:  
"hits" : [ { ... } ]

**Kibana Server**

Step 2: Send request to ElasticSearch  
URL: `http://localhost::9200`  
query: „user:matthias“

Step 3: Return results found:

```
"hits" : [ { "_index" : „Nike“,  
  "_source" : {  
    "user" : „matthias“,  
    „date" : "20014-11-15T14:12:33",  
    „shoe" : „Free V3“  
  } }  
  { "_index" : „Adidas“,  
    "_source" : {  
      "user" : „matthias“,  
      „date" : "20015-01-04T11:27:38",  
      „shoe" : „Energy Boost V3“  
    } }  
  ]
```

**Elastic Search**

# Kibana and Monasca

DKV

## ■ Requirements:

### ■ Authentication and Authorization:

Verify that the user is:

- a valid user in OpenStack
- allowed to access log data s/he's requesting

### ■ Multi-tenancy

• Approach to support multi-tenancy:

Multiple indices: 1 index/tenant

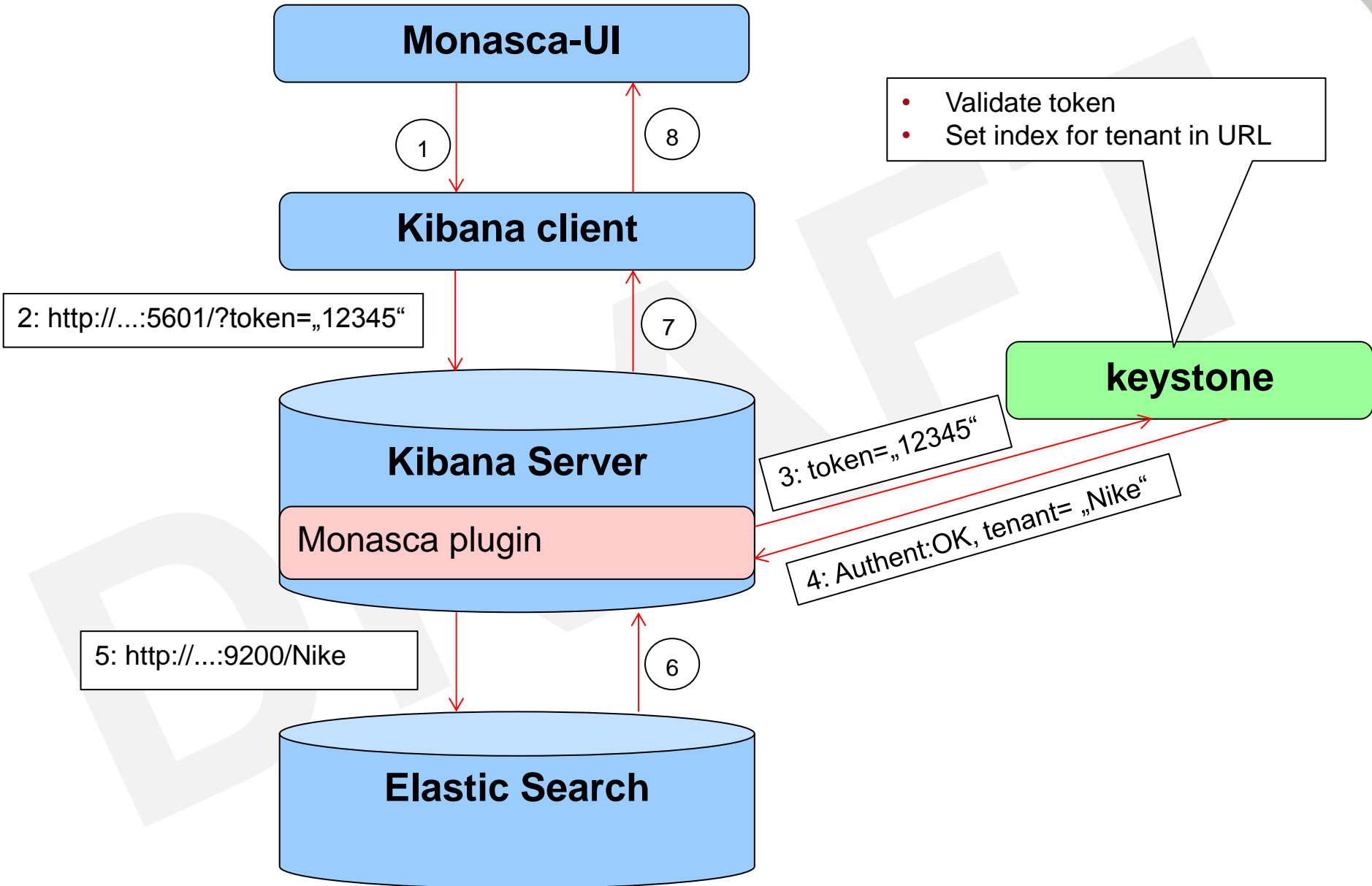
- Transparent for the user (sees only 1 index)



- Out-of-the-box: No security mechanisms built in to Kibana/ElasticSearch
- Authentication planned for Kibana 4
  - Planned for V4.2: Github issue 1559
  - No detailed information available yet
- Assumption:
  - Authentication will be provided as plugin
- Proposal: Handle authentication in Kibana 4 server

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# Authentication in Kibana Server



- Lightweight integration: No overhead
- All authentication/authorization is done through keystone
- API to access log file information: Elasticsearch/Kibana
- Elasticsearch not visible for access
- Dependancy on Kibana 4:
  - not yet released
  - Many features in later milestones:
    - Authentication
    - Request filtering
    - ...

- When authentication is available in Kibana 4:  
Implement plugin
- Until then:
  - Fork Kibana
  - Stay in sync with progress in Kibana

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