



State of Elasticsearch's Java Clients

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Github: [@nik9000](https://github.com/nik9000)

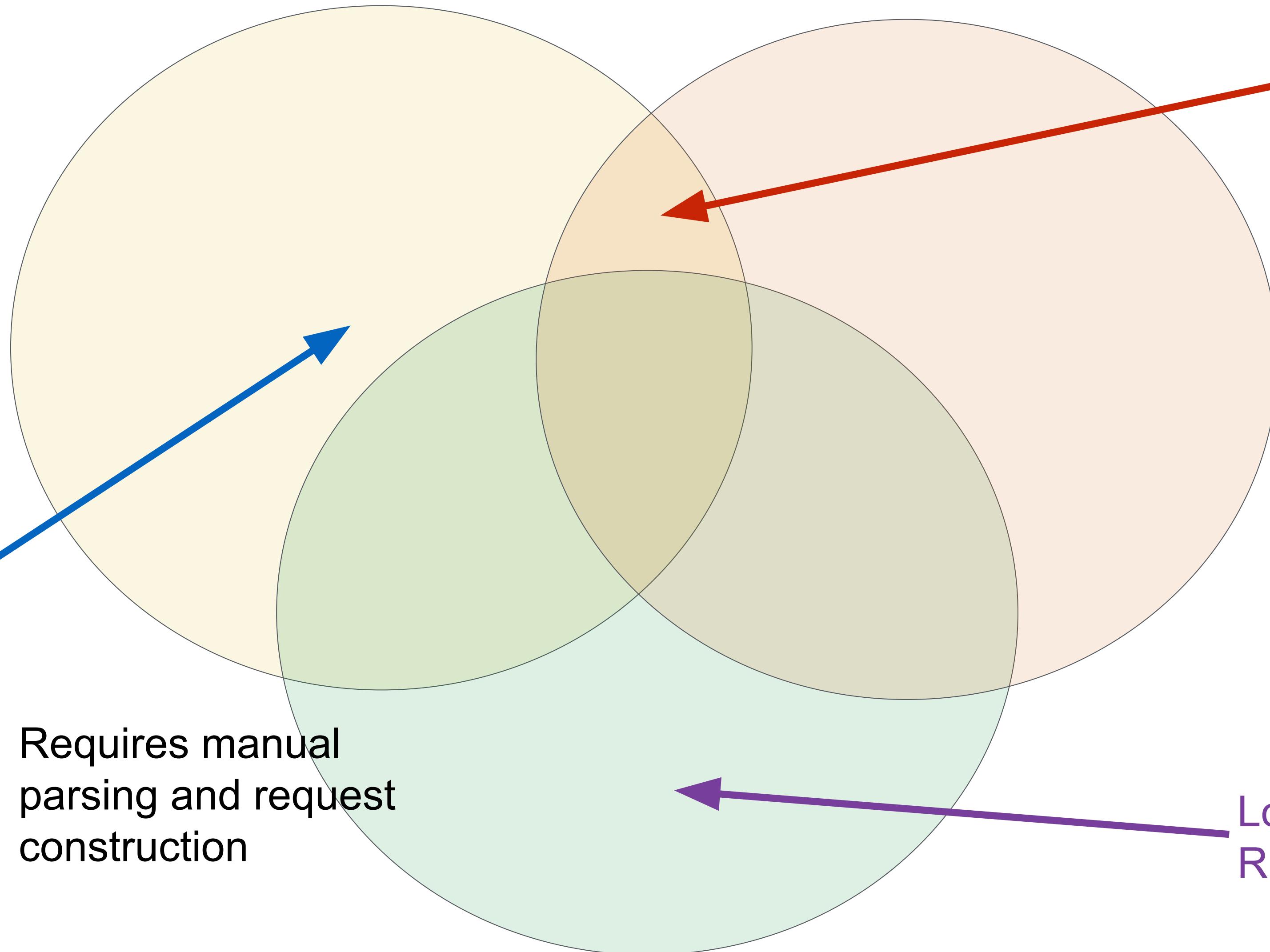
All Java Clients

Right now

Depends on
Elasticsearch and
Its Dependencies
(Log4J2, Netty,
Lucene, Jackson)

High Level
REST Client

Requires manual
parsing and request
construction



Transport
Client

Deeply connected to
Elasticsearch's
internal protocol

Low Level
REST Client

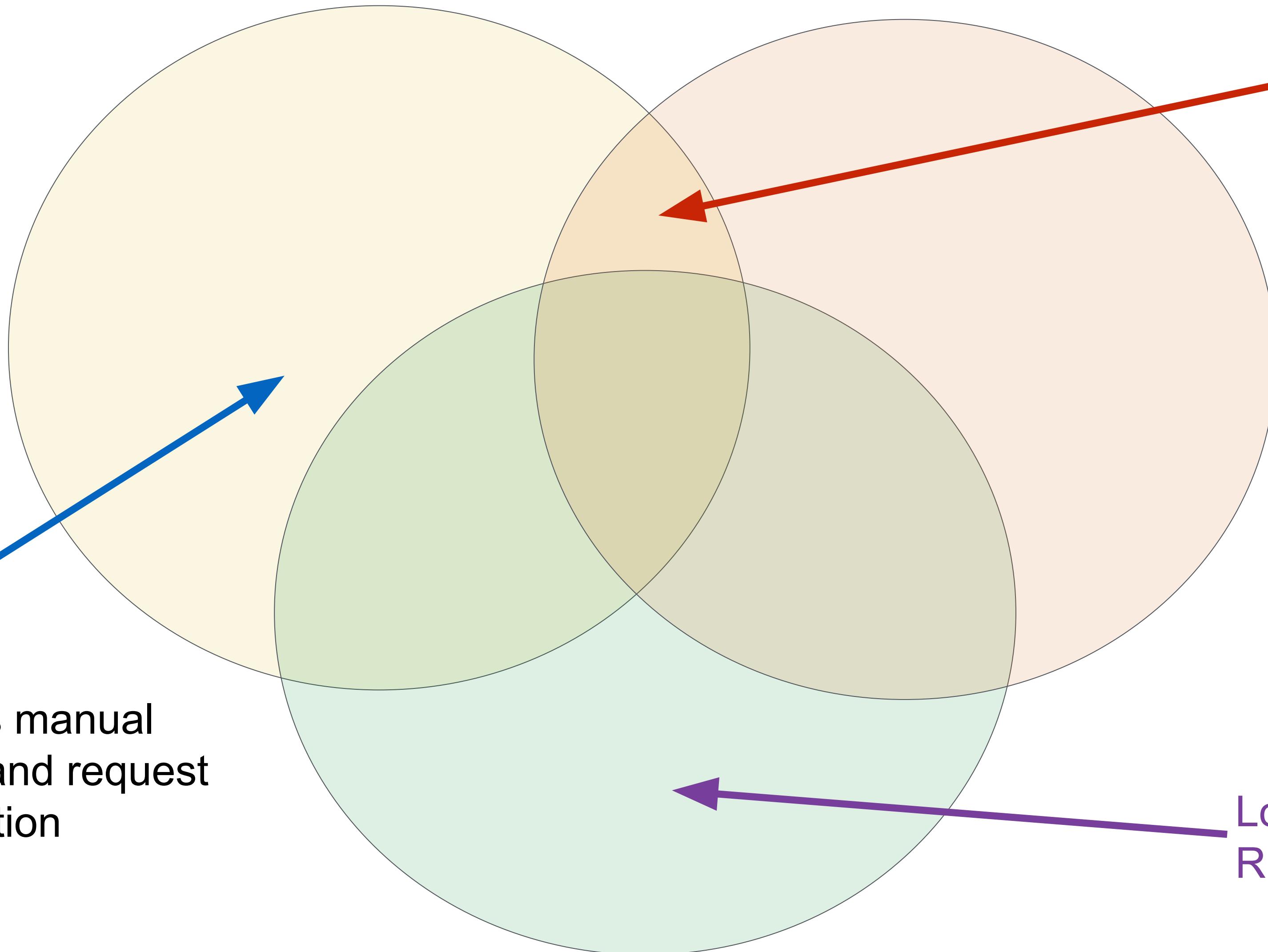
All Java Clients

Soon....

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(~~Log4J2~~, Netty,
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High Level REST Client Completeness

Work in progress

- Track at <https://github.com/elastic/elasticsearch/issues/27205>
- You can totally help. Please!
- Lots already done (17/42 Easy, 6/31 Medium, 2/14 Hard, 1/1 Very Hard) (Not including X-Pack APIs)
- Missing:
 - Reindex and friends
 - Flush index, update index settings, force merge, synced flush, clear cache
 - Lots of "cluster" APIs

High Level REST Client Completeness

Wild Speculation: Add APIs where they make sense

```
// Embed APIs where they make sense
// Add reindex to the top level with other document APIs
client.reindex(new ReindexRequest(...)

// Continue grouping other APIs where they make sense
client.cluster();           // Built in APIs grouped
client.searchTemplate();    // Some module APIs grouped
```

High Level REST Client Completeness

Wild Speculation: X-Pack APIs merged into main client

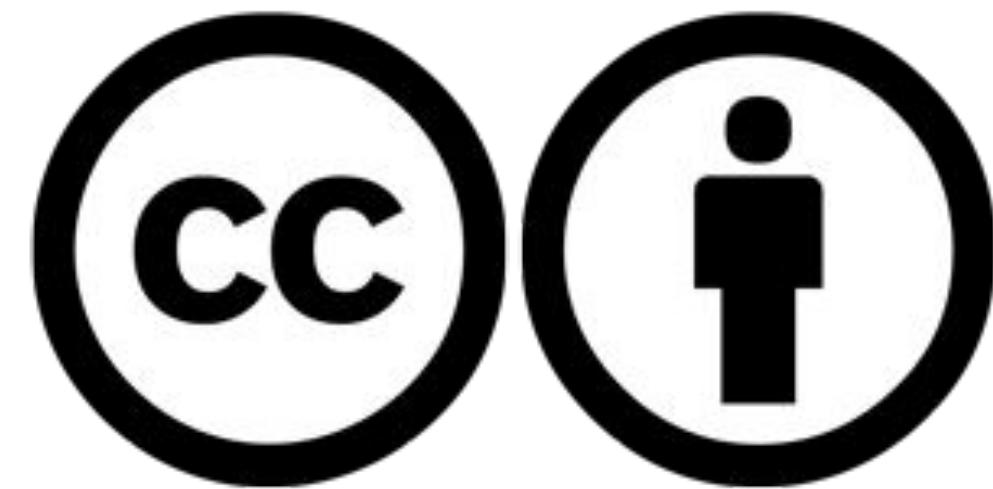
```
// Open source X-Pack's Request and Response objects
// Group all X-Pack APIs based on theme
client.watcher().putWatch(...)
client.security().putUser(...)
client.machineLearning().putJob(...)
client.graph().explore(...)
client.sql().execute(...)
```

High Level REST Client Completeness

Wild Speculation: Plugins

```
// Plugins wrap the high level client
new SomePluginClient(client);
// Or maybe they are built by it
client.plugin(SomePluginClient::new);
```

Please attribute Elastic with a link to elastic.co



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