



Elasticsearch Query Language

ES|QL

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Developer | Evangelist

slides & demo



A brief history of Elasticsearch's analytical capabilities





ES|QL

- Language
- Engine
- Visualization

ES|QL

in action

<https://github.com/dadoonet/esql-demo>

slides & demo



Ways to consume ES | QL results

RESULT DATA PROJECTIONS

Each language client will offer a selection of projections relevant to that language ecosystem.

Object / Dict
For mapping domain objects within a client application

Cursor
For incremental consumption of results, with implicit pagination

DataFrame
For data science and analytics; integration with frameworks like Pandas

Bring your own
Custom projections built atop raw server output

Text
Human-readable format ideal for interactive work, CLIs, etc

CSV
Raw CSV data to load directly into spreadsheets and ETL processes

JSON
Structured response containing metadata and data in a 2D value array

Apache Arrow
Dataframe IPC format

Users can consume raw data directly from the server output in one of several formats.

Object API

<https://github.com/dadoonet/elasticsearch-java-client-demo>

```
String query = """
    FROM persons
    | WHERE name == "David"
    | KEEP name
    | LIMIT 1
    """;

Iterable<Person> persons = client.esql()
    .query(ObjectsEsqlAdapter.of(Person.class), query);
for (Person person : persons) {
    assertNull(person.getId());
    assertNotNull(person.getName());
}
```

ResultSet JDBC API

<https://github.com/dadoonet/elasticsearch-java-client-demo>

```
String query = ""
    FROM persons
    | WHERE name == "David"
    | KEEP name
    | LIMIT 1
    """;

try (ResultSet resultSet = client.esql()
    .query(ResultSetEsqAdapter.INSTANCE, query)) {
    assertTrue(resultSet.next());
    assertEquals("David", resultSet.getString(1));
}
```



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