DocOps.io AsciiDoctorJ Architecture Decision Record(ARD)

Steve D Roach

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1. What is it?

An Architectural Decision (AD) is a software design choice that addresses a functional or non-functional requirement that is architecturally significant. ADR

2. How to use?

```
[adr,test2,border=false] ① ② ③
----
include::123.adr[] ④
----
```

① adr - name of the extenstion

② test2 - name of the generated file

③ border → use shadowed border or not

④ file that contains the adr format

2.1. ADR Format

- Using colons as separators for the file layout.

```
Title:Arch decision Title ①
Date: November 24th, 2010 ②
Status: Proposed ③
Context: Setting the context here ④
Consequences: What are the consequences of the decision ⑤
Participants: Architect,Engineer ⑥
```

① Title for the record

② Date for the record

③ Status can be 1 of (Proposed, Accepted, Superseded, Deprecated, Rejected)

④ Context

⑤ Consequences

⑥ Participants (optional)

2.2. First Example

- Contents of 123.adr

```
Title:Use Solr for Structured Data Search
Date: November 24th, 2010
Status: Proposed
```

```
Context: There is a need of having an API exposed which can be used to search
structured data.
The Data currently resides in RDBMS, it is difficult to expose micro-service directly
querying out of RDBMS databases since the application runs out of the same
environment.
There are options like [[https://www.elastic.co ElasticSearch]] and Solr where data
can be replicated. These solutions provide out of the box capabilities
that can be leveraged by developers without needed to build RESTful or GraphQL type
APIs.
Decision:Use [[https://solr.apache.org/ Solr]] for data indexing. This use is because
Solr has high performance throughput with large volume of data.
Unstructured data can also be supported.
If this decision does not meet the need then additional PoC will be created.
Consequences:Data Needs to be replicated across the solr cloud instances.
This Solr cloud needs maintenance.
Near realtime data replication is required Additional Cost of maintaining the Solr
Cloud environment.
Participants:Roach,Rose,Duffy
```

2.3. Resulting ADR

Use Solr for Structured Data Search

Proposed	Accepted	Superseded	Deprecated	Rejected

Date: November 24th, 2010

Status

Proposed

Context

There is a need of having an API exposed which can be used to search structured data.

The Data currently resides in RDBMS, it is difficult to expose micro-service directly

querying out of RDBMS databases since the application runs out of the same environment.

There are options like and Solr where data can be replicated. These solutions provide out of the box capabilities

that can be leveraged by developers without needed to build RESTful or GraphQL type APIs.

Decision

Use for data indexing. This use is because Solr has high performance throughput with large volume of data.

Unstructured data can also be supported.

If this decision does not meet the need then additional PoC will be created.

Consequences

Data Needs to be replicated across the solr cloud instances.

This Solr cloud needs maintenance.

Near realtime data replication is required Additional Cost of maintaining the Solr Cloud environment.

Participants

Roach,Rose,Duffy

Figure. test3

2.3.1. New Window Test

Use Solr for Structured Data Search

Proposed	Accepted	Superseded	Deprecated	Rejected

Date: November 24th, 2010

Status

Accepted

Context

There is a need of having an API exposed which can be used to search structured data.

The Data currently resides in RDBMS, it is difficult to expose micro-service directly

querying out of RDBMS databases since the application runs out of the same environment.

There are options like and Solr where data can be replicated. These solutions provide out of the box capabilities

that can be leveraged by developers without needed to build RESTful or GraphQL type APIs.

Decision

Use for data indexing. This use is because Solr has high performance throughput with large volume of data.

Unstructured data can also be supported.

If this decision does not meet the need then additional PoC will be created.

Consequences

Data Needs to be replicated across the solr cloud instances.

This Solr cloud needs maintenance.

Near realtime data replication is required Additional Cost of maintaining the Solr Cloud environment.
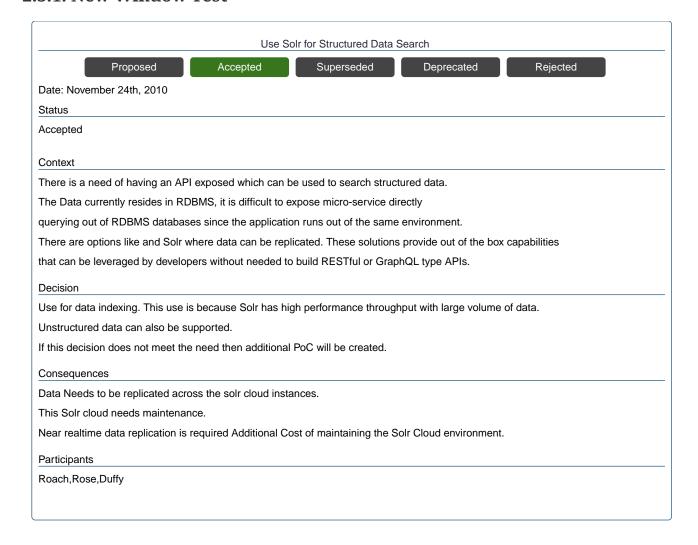
Participants

Roach,Rose,Duffy

Figure. test4

3. ADR Summary Example

Title	Status	Participants	Date
Use Solr for Structured Data Search	Proposed	Roach,Rose,Duffy	November 24th, 2010
server for http://127.0.0.1:8000/src/main/docs/456.adr does not exist. null			
server for http://127.0.0.1:8000/src/main/docs/123.adr does not exist. null			