

DocOps.io AsciiDoctorJ Architecture Decision Record(ARD)

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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 extension
- 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- ③ Status can be 1 of (Proposed, Accepted, Superseded, Deprecated, Rejected)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 [\[\[https://www.elastic.co Elasticsearch\]\]](https://www.elastic.co) 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 [\[\[https://solr.apache.org/ Solr\]\]](https://solr.apache.org/) 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Proposed	Accepted	Superseded	Deprecated	Rejected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

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			