



This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SPRING AI

GENERATIVE ARTIFICIAL INTELLIGENCE CON JAVA

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Corso avanzato per Venis S.p.A, Venezia, Italia

Novembre 2025

Note

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PARTE 2 - APPROCCIO DOCUMENT TO VECTOR STORE

Note

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[illegible]

```
...
<dependency>
  <groupId>org.springframework.ai</groupId>
  <artifactId>spring-ai-tika-document-reader</artifactId>
</dependency>
...
```

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Configurazione applicativo

```

spring:
  ...
  profiles:
    active: rag-document-to-vector-store
  autoconfigure:
    ...

```

Note

Note area with horizontal lines for writing.

```
demo:
  rag:
    prompt:
      system:
        ita: classpath:templates/get-rag-hr-data-system-ita-prompt.st
        eng: classpath:templates/get-rag-hr-data-system-eng-prompt.st
      user:
        ita:
        eng:
    vectorstore:
      qdrant:
        collection-name:
          ollama: vector_store_dtvvs_ollama
          gemini: vector_store_dtvvs_gemini
```

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Sei un assistente utile che risponde a domande sulle politiche di risorse umane dell'azienda Venis SpA ai suoi dipendenti.
Dato il contesto nella sezione DOCUMENTI e senza conoscenze pregresse, rispondi alla domanda del dipendente.
Se la risposta non si trova nella sezione DOCUMENTI, rispondi che non puoi rispondere alla domanda.

You are an helpful assistant, answering questions about Venis SpA policies to it's employees.
Given the context in the DOCUMENTS section and no prior knowledge, answer the employee's question.
If the answer is not in the DOCUMENTS section, then reply that you cannot answer to the question.

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```
package it.venis.ai.spring.demo.rag;

...

@Component
@Profile("rag-document-to-vector-store")
public class DocumentDataLoader {

    private final VectorStore geminiVectorStore;
    private final VectorStore ollamaVectorStore;

    public DocumentDataLoader(@Qualifier("geminiVectorStore") VectorStore geminiVectorStore,
                              @Qualifier("ollamaVectorStore") VectorStore ollamaVectorStore) {
        this.geminiVectorStore = geminiVectorStore;
        this.ollamaVectorStore = ollamaVectorStore;
    }

    @Value("classpath:Venis_HR_Policies_ENG.pdf")
    Resource venisHREngDocument;

    @Value("classpath:Venis_Politiche_HR_ITA.pdf")
    Resource venisHRItaDocument;

    ...
}
```

[illegible]

```
...
@PostConstruct
public void loadVenisHREngDocumentIntoVectorStore() {

    SearchRequest searchRequest = SearchRequest.builder()
        .query("Check")
        .similarityThresholdAll()
        .build();

    List<Document> similarDocs = geminiVectorStore.similaritySearch(searchRequest);

    if (similarDocs.size() == 0) {
        TikaDocumentReader tikaDocumentReader = new TikaDocumentReader(venisHREngDocument);

        List<Document> docs = tikaDocumentReader.get();

        TextSplitter textSplitter = TokenTextSplitter.builder()
            .withChunkSize(100)
            .withMaxNumChunks(400)
            .withKeepSeparator(true)
            .build();

        this.geminiVectorStore.add(textSplitter.split(docs));
    }
}
...
```

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```

...
@PostConstruct
public void loadVenisHRItaDocumentIntoVectorStore() {

    SearchRequest searchRequest = SearchRequest.builder()
        .query("Check")
        .similarityThresholdAll()
        .build();

    List<Document> similarDocs = ollamaVectorStore.similaritySearch(searchRequest);

    if (similarDocs.size() == 0) {
        TikaDocumentReader tikaDocumentReader = new TikaDocumentReader(venisHRItaDocument);

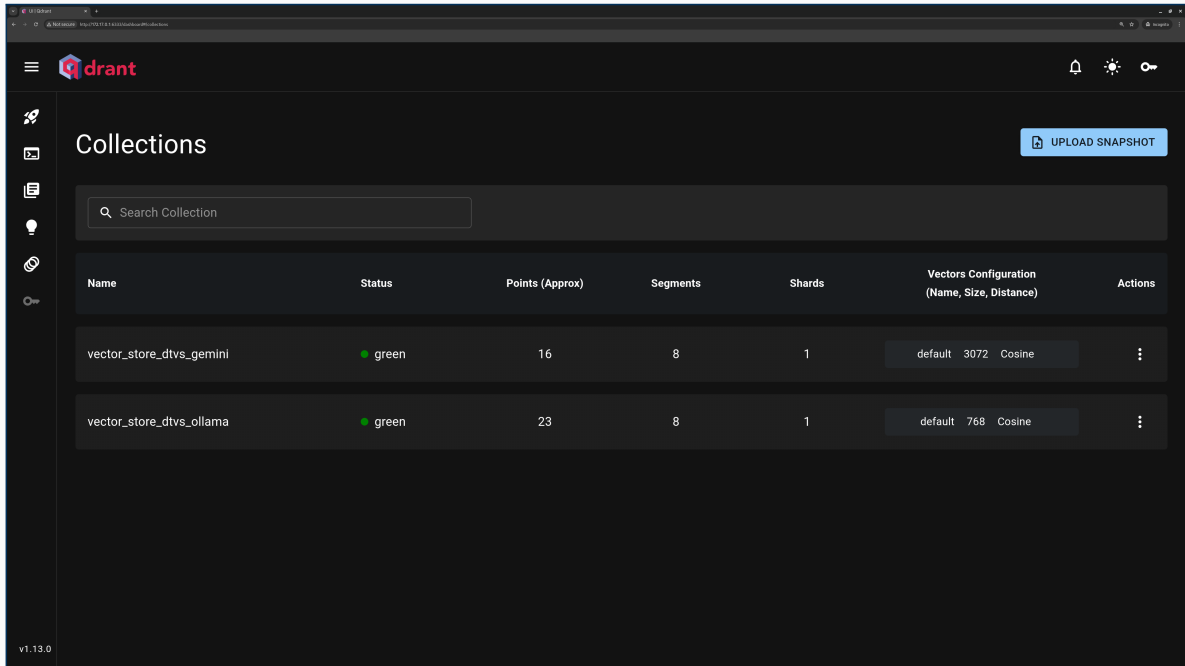
        List<Document> docs = tikaDocumentReader.get();

        TextSplitter textSplitter = TokenTextSplitter.builder()
            .withChunkSize(100)
            .withMaxNumChunks(400)
            .withKeepSeparator(false)
            .build();

        this.ollamaVectorStore.add(textSplitter.split(docs));
    }
}
}

```

[illegible]

[illegible]

Branch:

8-spring-ai-gemini-ollama-rag-document-to-vector-store

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