

# Exemplo prático em Cloud

O código a seguir usa a AWS SDK para Java para interagir com a Amazon S3:

```
import com.amazonaws.AmazonServiceException;
import com.amazonaws.SdkClientException;
import com.amazonaws.auth.AWSStaticCredentialsProvider;
import com.amazonaws.auth.BasicAWSCredentials;
import com.amazonaws.client.builder.AwsClientBuilder;
import com.amazonaws.services.s3.AmazonS3;
import com.amazonaws.services.s3.AmazonS3ClientBuilder;
import com.amazonaws.services.s3.model.*;

import java.io.File;

public class AmazonS3Example {

    private static final String ACCESS_KEY = "your_access_key";
    private static final String SECRET_KEY = "your_secret_key";
    private static final String BUCKET_NAME = "your_bucket_name";
    private static final String REGION = "your_region"; // e.g., "us-east-1"

    public static void main(String[] args) {
        // Configurando as credenciais da AWS
        BasicAWSCredentials awsCredentials = new BasicAWSCredentials(ACCESS_KEY, SECRET_KEY);

        // Configurando o cliente do Amazon S3
        AmazonS3 s3Client = AmazonS3ClientBuilder.standard()
            .withEndpointConfiguration(new AwsClientBuilder.EndpointConfiguration("https://s3." + REGION + ".amazonaws.com", REGION))
            .withCredentials(new AWSStaticCredentialsProvider(awsCredentials))
            .build();

        // Enviando um arquivo para o Amazon S3
        uploadFile(s3Client, "example.txt", "path/to/local/file/example.txt");
    }
}
```

```
    // Listando objetos no bucket
    listObjects(s3Client);

    // Baixando um arquivo do Amazon S3
    downloadFile(s3Client, "example.txt", "path/to/local/file/downloaded_example.txt");

    // Excluindo um arquivo do Amazon S3
    deleteObject(s3Client, "example.txt");
}

private static void uploadFile(AmazonS3 s3Client, String keyName, String filePath) {
    try {
        PutObjectRequest request = new PutObjectRequest(BUCKET_NAME, keyName, new File(filePath));
        s3Client.putObject(request);
        System.out.println("Arquivo enviado com sucesso para o Amazon S3.");
    } catch (AmazonServiceException | SdkClientException e) {
        e.printStackTrace();
    }
}

private static void listObjects(AmazonS3 s3Client) {
    try {
        ObjectListing objectListing = s3Client.listObjects(BUCKET_NAME);
        System.out.println("Objetos no bucket " + BUCKET_NAME + ":");
        for (S3ObjectSummary objectSummary : objectListing.getObjectSummaries()) {
            System.out.println("- " + objectSummary.getKey() + " (Tamanho = " + objectSummary.getSize() + ")");
        }
    } catch (AmazonServiceException | SdkClientException e) {
        e.printStackTrace();
    }
}
```

```

private static void downloadFile(AmazonS3 s3Client, String keyName, String downloadFilePath) {
    try {
        S3Object object = s3Client.getObject(BUCKET_NAME, keyName);
        S3ObjectInputStream inputStream = object.getObjectContent();
        FileUtils.copyInputStreamToFile(inputStream, new File(downloadFilePath));
        System.out.println("Arquivo baixado com sucesso do Amazon S3.");
    } catch (AmazonServiceException | SdkClientException | IOException e) {
        e.printStackTrace();
    }
}

private static void deleteObject(AmazonS3 s3Client, String keyName) {
    try {
        s3Client.deleteObject(BUCKET_NAME, keyName);
        System.out.println("Arquivo excluído com sucesso do Amazon S3.");
    } catch (AmazonServiceException | SdkClientException e) {
        e.printStackTrace();
    }
}
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```

Código:

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        System.out.println("Arquivo excluído com sucesso do Amazon S3.");
    } catch (AmazonServiceException | SdkClientException e) {
        e.printStackTrace();
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