

AWS Cloud Practical

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1. SSE-KMS encryption for object in S3

- **SSE-S3** → AWS encrypts, no extra control
- **SSE-KMS** → AWS encrypts and IAM/KMS decides who can decrypt

The screenshot shows the AWS S3 'Upload' interface. At the top, the navigation path is 'Amazon S3 > Buckets > s3-dmos-bucket > Upload'. Below this, the 'Upload' section has a note: 'Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDKs or Amazon S3 REST API. [Learn more](#)'.

In the 'Files and folders' section, there is a dashed box for dragging files and a link to 'Add files' or 'Add folder'. A table lists one file: '3.jpg' (image/jpeg, 259.2 KB). There are 'Remove', 'Add files', and 'Add folder' buttons.

The 'Destination' section shows 's3://s3-dmos-bucket'. It includes a 'Destination details' panel with a note: 'Bucket settings that impact new objects stored in the specified destination.'

- While uploading the object into S3 bucket enable the SSE-KMS option in the Server-side encryption as shown below.
- Choose AWS managed key (aws/s3)

Server-side encryption [Info](#)

Server-side encryption protects data at rest.

Server-side encryption **Don't specify an encryption key**

The bucket settings for default encryption are used to encrypt objects when storing them in Amazon S3.

 Specify an encryption key

The specified encryption key is used to encrypt objects before storing them in Amazon S3.

Encryption settings [Info](#) Use bucket settings for default encryption Override bucket settings for default encryption**Encryption type** [Info](#)

Secure your objects with two separate layers of encryption. For details on pricing, see DSSE-KMS pricing on the Storage tab of the [Amazon S3 pricing page](#).

 Server-side encryption with Amazon S3 managed keys (SSE-S3) Server-side encryption with AWS Key Management Service keys (SSE-KMS) (SSE-KMS) Dual-layer server-side encryption with AWS Key Management Service keys (DSSE-KMS)**AWS KMS key** [Info](#) Choose from your AWS KMS keys Enter AWS KMS key ARN**Available AWS KMS keys**

arn:aws:kms:eu-north-1:787169320097:key/d64cb4f4-383a-4c9d-94...



[Create a KMS key](#)

**Bucket Key**

Using an S3 Bucket Key for SSE-KMS reduces encryption costs by lowering calls to AWS KMS. S3 Bucket Keys aren't supported for DSSE-KMS. [Learn more](#)

 Disable Enable**Server-side encryption settings** [Info](#)[Edit](#)

Server-side encryption protects data at rest.

Encryption type [Info](#)

Server-side encryption with AWS Key Management Service keys (SSE-KMS)

Encryption key ARN

arn:aws:kms:eu-north-1:787169320097:key/d64cb4f4-383a-4c9d-943b-b334b14757a0 [Edit](#)

Bucket Key

When KMS encryption is used to encrypt new objects in this bucket, the bucket key reduces encryption costs by lowering calls to AWS KMS. [Learn more](#)

Enabled

- In SSE-KMS, objects are encrypted using AWS Key Management Service. Access to the encrypted object depends on IAM permissions to use the KMS key, providing finer access control.