

Mammography - AI Processing API Documentation

CDAC Trivandrum

Overview

The Mammo AI Processing API allows clients to upload mammography DICOM images for automated analysis.

The API performs the following steps:

- Accepts uploaded DICOM files.
- Authenticates the request using an encrypted token.
- Triggers AI-based mammography analysis.
- Returns the AI-processed DICOM file to the client.

Endpoints for URL (<http://117.250.248.200:3001>)

1. Mammo AI Processing

- Endpoint: `POST /api/mammo-ai-request`
- Description: Submits a DICOM file for AI analysis and returns the processed result.

2. Health Check

- Endpoint: `GET /api/mammo-ai-request/health-check`
- Description: Verifies the validity of the client's authentication token and the server's availability.

Authentication

This API requires an encrypted token to be sent in the Authorization header. The token is decrypted on the server for validity. If the token is missing, invalid, or expired, the request will be rejected.

- Format: `Authorization: Bearer <encrypted_token>`
- Token:
`re+QKPpywoqh7U7mIvZIWcxF/NC10Z0mAJxzzG4zus0vSdIsnHvLYu1wi3BH/4MSTP86uwEeNRcKopn3J6pGxHQ==`

Request Format:

Mammo AI Processing (POST)

The request body must be a multipart/form-data containing one or more .dcm DICOM files.

Name	Required	Type	Description
Authorization	Yes	string	Encrypted token in Bearer format.
Content-Type	Yes	multipart/form-data	Required for file upload.

Body (multipart/form-data)

Field Name	Required	Type	Description
files	Yes	file[]	One .dcm DICOM file.

cURL Example

```
curl --location --request POST 'http://117.250.248.200:3001/api/mammo-ai-service' \
--header 'Authorization;' \
--header 'Content-Type: multipart/form-data' \
--form
'files=@"C:\\Users\\cdach\\Downloads\\2.25.187701511694898328439834263814680821076\\DICOM\\FD1A53E6\\EDBAD3C0\\11C6755E.dcm"'
```

Output processed-mammo.dcm

Health Check (GET)

cURL Example

```
curl -X GET "http://117.250.248.200:3001/api/mammo-ai-request/health-check" \
-H "Authorization: Bearer <encrypted_token>"
```

Response Format

Success Responses

Mammo AI Processing (POST)

- Status Code: 200 OK
- Headers:
 - Content-Type: application/dicom
 - Content-Disposition: attachment; filename="dicom-file.dcm"
- Body: Binary DICOM file data (AI-processed).

Health Check (GET)

- Status Code: 200 OK
- Content-Type: application/json

Example Body:

```
{
  "status": "OK",
  "timestamp": "2025-08-12T09:25:43.511Z",
  "checks": {
```

```
"server": "OK"  
}  
}
```

Error Responses

HTTP Code	Message	Description
400	No file uploaded.	No files were found in the request.
400	Missing authentication token.	Authorization header is missing.
401	Invalid or expired token.	The provided token is invalid or has expired.
500	Mammo AI service failed to process the request.	The AI service did not return results.
500	Error handling DICOM upload or AI processing.	Any other unhandled server-side error.