

# Private AI Document Intelligence Server with Docling by Optick

## Customer User Instructions for AWS Marketplace

Ubuntu 26.04 LTS | Docker Compose | Docling Serve | Optick Converter | Optional S3 Output

### Overview

This AMI provides a private document intelligence server for converting business documents into AI ready Markdown, structured Docling output, and RAG ready chunks inside your own AWS account. It includes a branded Optick Converter for simple browser based uploads, the advanced Docling Web UI, API documentation, password protected web access, helper commands, and optional S3 output using your EC2 IAM role.

### Important access note

Connect to your instance using your Amazon private key and the **ubuntu** user. The default operating system user name is ubuntu.

```
ssh -i YOUR_KEY.pem ubuntu@PUBLIC_IP
```

**Note:** If the web page does not appear immediately after first launch, wait about one minute and refresh the browser while services finish starting.

### Recommended AWS launch settings

Item	Recommended value	Purpose
Minimum instance size	t3.large	Small tests and light documents
General use	t3.xlarge or m6i.large	Common business document processing
Heavier OCR or larger files	m6i.xlarge or larger	Large PDFs, scanned documents, and heavier workloads
Root volume	60 GB gp3 minimum	Stores application images, uploads, outputs, and logs
Inbound port 22	TCP 22 from your IP	SSH access
Inbound port 80	TCP 80 from allowed users or 0.0.0.0/0	Web landing page, Optick Converter, Docling UI, and API docs

### First use after launching the instance

1. Launch the AMI from AWS Marketplace.
2. Open TCP port 80 in the security group so you can access the web interface.
3. SSH to the instance using the ubuntu user and your Amazon private key.
4. Read the generated first login file for your instance specific URLs and web password.
5. Open the landing page in your browser.

```
cat /home/ubuntu/FIRST_LOGIN.txt
```

## optick-docling-url

### Main browser URLs

URL	Use
http://PUBLIC_IP/	Optick landing page and getting started page
http://PUBLIC_IP/optick/	Primary Optick Converter for upload, conversion, download, and optional S3 export
http://PUBLIC_IP/docling/ui/	Advanced Docling Web UI with additional conversion options
http://PUBLIC_IP/docling/docs	API documentation for application integration
http://PUBLIC_IP/docling/scalar	Alternate Scalar API documentation view
http://PUBLIC_IP/health	Health check endpoint

### Web login

The first boot process creates a unique web username and password for each new instance. Find it in the first login file.

**cat /home/ubuntu/FIRST\_LOGIN.txt**

Default username: **optickadmin**

The password is randomly generated on first boot. Do not reuse the password from any previous instance.

**optick-docling-reset-password**

### Using the Optick Converter

1. Open `http://PUBLIC_IP/optick/` in your browser.
2. Log in using the credentials from `/home/ubuntu/FIRST_LOGIN.txt`.
3. Choose a document from your computer.
4. Select an output mode.
5. Click Process Document.
6. Review the preview and download the generated output.

### Available output modes

Mode	Best use
Convert to Markdown or Docling JSON	Best first choice for most PDF, DOCX, and business document conversion workflows
Hybrid RAG chunks JSON	Useful for semantic search, vector databases, chatbots, AI agents, and RAG pipelines
Hierarchical RAG chunks JSON	Useful when preserving document structure, headings, and sections matters

### Optional S3 output setup

This AMI does not store AWS access keys. To export generated outputs to S3, attach an EC2 IAM role to the instance with permission to write to the target S3 bucket. After the IAM role is attached, configure the bucket name and prefix on the server.

`optick-docling-s3-config`

`optick-docling-s3-test`

`optick-docling-convert-sample-to-s3`

### Example least privilege IAM policy concept

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": ["s3:ListBucket"],
      "Resource": "arn:aws:s3:::YOUR_BUCKET_NAME"
    },
    {
      "Effect": "Allow",
      "Action": ["s3:PutObject", "s3:GetObject"],
      "Resource": "arn:aws:s3:::YOUR_BUCKET_NAME/optick-docling/*"
    }
  ]
}
```

**Note:** Replace YOUR\_BUCKET\_NAME with your actual bucket name. Customers are responsible for their IAM role, bucket policy, S3 permissions, and AWS usage charges.

### Helpful server commands

Command	Purpose
<code>optick-docling-url</code>	Show browser URLs for the current public IP
<code>optick-docling-status</code>	Show service status, health checks, Docker status, and disk usage
<code>optick-docling-test</code>	Run a quick local document conversion test
<code>optick-docling-logs</code>	Show Docling and Nginx logs
<code>optick-docling-restart</code>	Restart Docker services and Nginx
<code>optick-docling-reset-password</code>	Generate or display the web login password
<code>optick-docling-s3-config</code>	Configure S3 bucket and prefix
<code>optick-docling-s3-status</code>	Check IAM role, S3 config, and AWS identity availability
<code>optick-docling-s3-test</code>	Upload a small test file to S3
<code>optick-docling-convert-sample-to-s3</code>	Convert a sample file and upload the output to S3

### Advanced Docling UI and API use

Use the Advanced Docling Web UI when you need options such as OCR engine selection, force OCR, table mode, image export mode, pipeline type, formula enrichment, code enrichment, picture classification, and picture description.

Use the API docs for application integration, automation, or internal tools that need to call Docling Serve directly.

## Troubleshooting

Issue	Suggested action
Web page does not open immediately	Wait about one minute and refresh the browser. First boot starts Docker, Docling Serve, Optick UI, and Nginx.
Browser asks for credentials	Use the username and password in <code>/home/ubuntu/FIRST_LOGIN.txt</code> .
Forgot web password	SSH to the instance and run <code>optick-docling-reset-password</code> .
S3 upload fails with no credentials	Attach an EC2 IAM role with S3 permissions, then run <code>optick-docling-s3-status</code> .
S3 bucket not configured	Run <code>optick-docling-s3-config</code> and enter the bucket name and prefix.
Large file upload fails	Check available disk space, instance size, browser timeout, and security group or proxy settings.
Need service logs	Run <code>optick-docling-logs</code> .

## Learning and help resources

Resource	URL	Why it helps
Docling home	<a href="https://www.docling.ai/">https://www.docling.ai/</a>	Overview of Docling and its document processing capabilities.
Docling documentation	<a href="https://docling-project.github.io/docling/">https://docling-project.github.io/docling/</a>	Official Docling documentation for conversion, options, APIs, and concepts.
Docling examples	<a href="https://docling-project.github.io/docling/examples/">https://docling-project.github.io/docling/examples/</a>	Examples for conversion, chunking, RAG integrations, serialization, tables, figures, and advanced workflows.
Docling GitHub repository	<a href="https://github.com/docling-project/docling">https://github.com/docling-project/docling</a>	Main open source repository for Docling.
Docling Serve GitHub repository	<a href="https://github.com/docling-project/docling-serve">https://github.com/docling-project/docling-serve</a>	API service repository, deployment notes, container images, UI endpoint, and v1 API information.
Docling MCP repository	<a href="https://github.com/docling-project/docling-mcp">https://github.com/docling-project/docling-mcp</a>	Agentic document processing and Model Context Protocol integration.
AWS attach IAM role to EC2 instance	<a href="https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/attach-iam-role.html">https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/attach-iam-role.html</a>	AWS documentation for attaching, replacing, and detaching an IAM role on an EC2 instance.
AWS S3 identity based policy examples	<a href="https://docs.aws.amazon.com/AmazonS3/latest/userguide/example-policies-s3.html">https://docs.aws.amazon.com/AmazonS3/latest/userguide/example-policies-s3.html</a>	AWS examples for IAM policies that grant S3 access.
AWS CLI s3 cp command	<a href="https://docs.aws.amazon.com/cli/latest/reference/s3/cp.html">https://docs.aws.amazon.com/cli/latest/reference/s3/cp.html</a>	AWS CLI reference for copying files to and from S3.