

# Cloudvisor AI Agent - One-Click Deployment Guide


Deploy a complete Bedrock RAG agent in your AWS account in under 10 minutes.

## Quick Deploy (Recommended)

### Step 1: Deploy OpenSearch Infrastructure

Click this link to deploy the OpenSearch Serverless collection and index:


**[Deploy OpenSearch Stack →](#)**

-  Check "I acknowledge that AWS CloudFormation might create IAM resources"
- Click **Create stack**
- Wait 3-5 minutes for completion

### Step 2: Deploy Main Application

Click this link to deploy the agent application:

**[Deploy Agent Stack →](#)**

-  Check "I acknowledge that AWS CloudFormation might create IAM resources"
- Click **Create stack**
- Wait 5-10 minutes for completion

## What Gets Deployed

### OpenSearch Stack

- OpenSearch Serverless collection (vector store)
- Vector index with 1024-dimension embeddings

- IAM roles for Bedrock Knowledge Base access
- Security policies (encryption, network, data access)

## Main Application Stack

- **Frontend:** CloudFront + S3 hosted UI
- **Backend:** API Gateway + Lambda functions
- **AI:** Bedrock Knowledge Base + Amazon Nova Lite model
- **Storage:** S3 buckets for documents and UI assets
- **Security:** IAM roles with least privilege access

## Getting Started

### 1. Get your agent URL:

- Go to CloudFormation → `cloudvisor-chatbot` stack → Outputs tab
- Copy the `CloudFrontURL` value

### 2. Upload documents:

- Option A: Use the upload button in the agent UI
- Option B: Upload directly to the S3 documents bucket

### 3. Sync Knowledge Base:

- Click "Rebuild Knowledge Base" in the UI
- Wait 2-3 minutes for processing

### 4. Start chatting:

- Ask questions about your documents
- The AI will only answer based on your uploaded content

## Troubleshooting

### Model Access Issues

If you get "model not available" errors:

1. Go to Bedrock console → Model access
2. Request access to "Amazon Nova Lite"
3. Wait for approval (usually instant)

## Upload Issues

If file uploads fail:

1. Check S3 bucket CORS configuration
2. Try uploading directly to S3 console
3. Use "Rebuild Knowledge Base" after manual upload

## Chat Not Working

1. Verify Knowledge Base has documents synced
2. Check Lambda logs in CloudWatch
3. Ensure Nova Lite model access is granted



## Cleanup

### Option 1: AWS Console (Recommended)

#### Step 1: Delete Main Application Stack

1. Go to CloudFormation Console
2. Select `cloudvisor-chatbot` stack
3. Click **Delete**
4. Click **Delete stack** to confirm
5. Wait 5-10 minutes for deletion to complete

#### Step 2: Delete OpenSearch Stack

1. In CloudFormation console, select `cloudvisor-opensearch` stack
2. Click **Delete**
3. Click **Delete stack** to confirm

4. Wait 3-5 minutes for deletion to complete

### Step 3: Verify Cleanup (Optional)

1. Check S3 console - buckets should be deleted
2. Check Bedrock console - Knowledge Base should be removed
3. Check OpenSearch Serverless - collection should be deleted

### Option 2: AWS CLI

```
# Delete main stack first
aws cloudformation delete-stack --stack-name cloudvisor-chatbot --region eu-central-1

# Wait for completion, then delete OpenSearch stack
aws cloudformation delete-stack --stack-name cloudvisor-opensearch --region eu-central-1
```

### Important Notes

- **Delete main stack FIRST** - it depends on OpenSearch resources
- **S3 buckets** are automatically emptied and deleted by CloudFormation
- **All data will be permanently lost** - download any important documents first
- **Costs stop immediately** once resources are deleted

### Support

For issues or questions:

- Check AWS CloudFormation console for deployment errors
- Review CloudWatch logs for runtime issues
- Contact Cloudvisor support for assistance

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 **Ready to deploy? Click the links above to get started!**