# **Ad-Flow SCTE-35 Automated Insertion**

# **Deployment QuickStart Guide**

This guide will help you quickly deploy Ad-Flow to test video ad-break detection using the AWS CloudFormation service. This will deploy the container with default options (input is RTP, at port 5004).

### Prerequisites

- An AWS account with permissions to:
  - Create CloudFormation stacks
  - Create EC2 instances
  - Create ECS clusters
  - Create IAM roles
- A VPC with a public subnet
- An EC2 key pair (for SSH access if needed)
- Download the two CloudFormation templates for Ad-Flow: <u>https://alcflow-config.s3.us-east-2.amazonaws.com/1.0/CloudFormation/ecsClusterTemplate-adFlow.json</u> <u>https://alcflow-config.s3.us-east-2.amazonaws.com/1.0/CloudFormation/ecsTaskTemplate-adFlow.json</u>

# **Deployment Steps**

### **Step 1: Deploy the Cluster Template**

1. Log into the AWS Console and navigate to CloudFormation

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2. Click "Create stack" and select "With new resources (standard)"

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- 3. On the "Create stack" page:
  - Select "Upload a template file"
  - Click "Choose file" and select the ecsClusterTemplate-adFlow.json file
  - Click "Next"



- 4. Enter stack details:
  - Stack name: adflow-cluster (or your preferred name)
  - Parameters:
    - KeyName: Select your EC2 key pair
    - ECSClusterName: Leave as default (adflow)
    - InstanceType: Leave as default (t4g.medium)
    - VpcId: Select your VPC
    - SubnetId: Select a public subnet
  - Click "Next"

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- 5. On the "Configure stack options" page:
  - Leave all settings at their defaults
  - Click "Next"
- 6. Review the configuration:
  - Check the acknowledgment for IAM resource creation
  - Click "Create stack"
- 7. Wait for the stack creation to complete (approximately 5 minutes)
  - The status will change to "CREATE\_COMPLETE" when finished

### **Step 2: Deploy the Task Template**

- 1. In CloudFormation, click "Create stack" again
- 2. On the "Create stack" page:
  - Select "Upload a template file"
  - Click "Choose file" and select the ecsTaskTemplate-adFlow.json file
  - Click "Next"
- 3. Enter stack details:
  - Stack name: adflow-task (or your preferred name)
  - Parameters:
    - ECSClusterName: Enter the same name used in Step 1 (adflow)
  - Click "Next"
- 4. On the "Configure stack options" page:
  - Leave all settings at their defaults
  - Click "Next"
- 5. Review and create:
  - Check the acknowledgment for IAM resource creation
  - Click "Create stack"
- 6. Wait for the stack creation to complete (approximately 5 minutes)

### Step 3: Access Grafana Dashboard

- 1. Find your instance's public address (Elastic IP):
  - Go to EC2 service in AWS Console
  - Select the instance named "ECS Instance adflow"
  - Copy the "Elastic IP addresses [public IP]" value



#### 2. Access Grafana:

- Open your browser
- Navigate to https://[Public IPv4 DNS]:3000
- Accept the security warning about the self-signed certificate
- Log in with:
  - Username: admin
  - Password: admin
- Change the password when prompted

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- 3. View the Ad-Flow dashboard:
  - Click on "Dashboards" in the left menu
  - Select "Capture Metrics Dashboard"

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### **Testing Your Deployment**

### **Option 1: Using the Test Stream AMI**

- 1. Deploy the "RTP/SRT Streamer for Ad-Flow" AMI:
  - Search for "RTP/SRT Streamer for Ad-Flow" in AWS Marketplace
  - Follow the AMI's documentation for setup
  - Configure it to stream to your Ad-Flow instance's IP address on port 5004

### **Option 2: Using Your Own RTP Source**

Configure your RTP source to stream to:

- Destination: Your Ad-Flow instance's Elastic IP
- Port: 5004
- Protocol: UDP/RTP

# **Verifying Operation**

- 1. In the Grafana dashboard, check:
  - Input transfer rate (should show data flowing)
  - Ad break detection count
  - Stream health metrics
- 2. Common issues:
  - No data in dashboard: Check security group allows UDP port 5004
  - Can't access Grafana: Verify port 3000 is allowed in security group
  - Certificate warning: Expected with self-signed certificate

# **Next Steps**

Once you've verified ad break detection is working:

- 1. Review the full documentation for production deployment options
- 2. Configure output streaming to your video encoder

# Support

For issues or questions:

- Check CloudWatch logs for errors
- Review the full documentation
- Contact AWS Marketplace support, or Alchemy-Flow support