

DEVOPS

ADVANCED

5 DAYS

# Frontend Content Delivery with Amazon CloudFront

Build a strong foundation in content delivery and frontend performance optimization using AWS CloudFront. Learn how to design secure, scalable CDN architectures, optimize caching and dynamic content delivery, monitor performance, and troubleshoot real world CloudFront workloads.

## Why CloudFront?

### Improved website performance

CloudFront uses a global network of edge locations to cache and deliver your website content. This reduces the latency experienced by users, resulting in faster page load times and an improved user experience.

### Global reach

CloudFront has an extensive network of edge locations distributed worldwide. This allows your content to be cached and delivered close to your users regardless of their geographic location.

### Scalability

CloudFront is highly scalable and can handle traffic spikes and high demand without any additional configuration or setup. Whether you have a small business or a large enterprise, CloudFront can scale seamlessly to accommodate your needs.

## What you'll be able to do

- ✓ Gain an in-depth understanding of AWS CloudFront and its functionalities
- ✓ Learn caching strategies, cache behaviours customization, and cache invalidation techniques to analyze and enhance frontend performance
- ✓ Scale CloudFront distributions to handle high-traffic scenarios and ensure seamless content delivery
- ✓ Implement security measures to protect content and prevent unauthorized access
- ✓ Effectively monitor CloudFront distributions, analyze logs for performance insights, and troubleshoot common CDN-related issues.
- ✓ Learn advanced techniques for dynamic content acceleration, integration with Lambda and building responsive web applications
- ✓ Acquire expertise in frontend delivery and CDN management to tackle complex challenges.

## Who this is for

- Web developers
- System administrators
- DevOps engineers

## Curriculum

### 01 CloudFront Foundations

- Apply cloudfront foundations with CloudFront in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

### 02 Advanced Configuration

- Apply advanced configuration with CloudFront in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
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### 03 Performance and Scalability

- Apply performance and scalability with CloudFront in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
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### 04 Securing Content

- Apply securing content with CloudFront in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

### 05 Monitoring and Delivery

- Apply monitoring and delivery with CloudFront in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
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### 06 Streaming and Dynamic Content

- Apply streaming and dynamic content with CloudFront in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
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## 07 Live Video Patterns

- Apply live video patterns with CloudFront in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

## 08 Advanced Delivery Strategies

- Apply advanced delivery strategies with CloudFront in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

## 09 Troubleshooting

- Apply troubleshooting with CloudFront in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
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## 10 Best Practices

- Apply best practices with CloudFront in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards