AWS Developer: Getting Started

Similarities and differences between local development and AWS development:

Similar

Local Development & AWS Development

Application runs on OS/platform

Requires platform to be installed (eg .NET)

HTTP servers listens on ports

Connects to outside databases

Different

Local Development	AWS Development
Everything runs locally on same machine	One service = One responsibility
Files stored on server	Files served from S3
Database on same server as application	Database as a Service
Connections done manually	Connections done with AWS SDK

- The core of web of Amazon Web Services is EC2
- EC2 provides servers to your application that will be running
- EC2 forms bases of other services such RDS and Elastic beanstalk.

AWS tooling: Web Console

AWS Management console:

1. Configure and create resources
2. Each services has its own dashboard
3. Dashboards are similar to each other

4. AWS management console works best in a modern browser

AWS tooling: Command Line Interface (CLI):

1. Great for shell scripting
2. Feature complete with Console and SDKs
3. Interact with any service

AWS tooling: Software Developer Kit (SDK):

1. AWS access key gives access to SDKs and CLI

Configuring an AWS CLI:

Commands:

- Aws configure
- Aws ec2 describe-instances
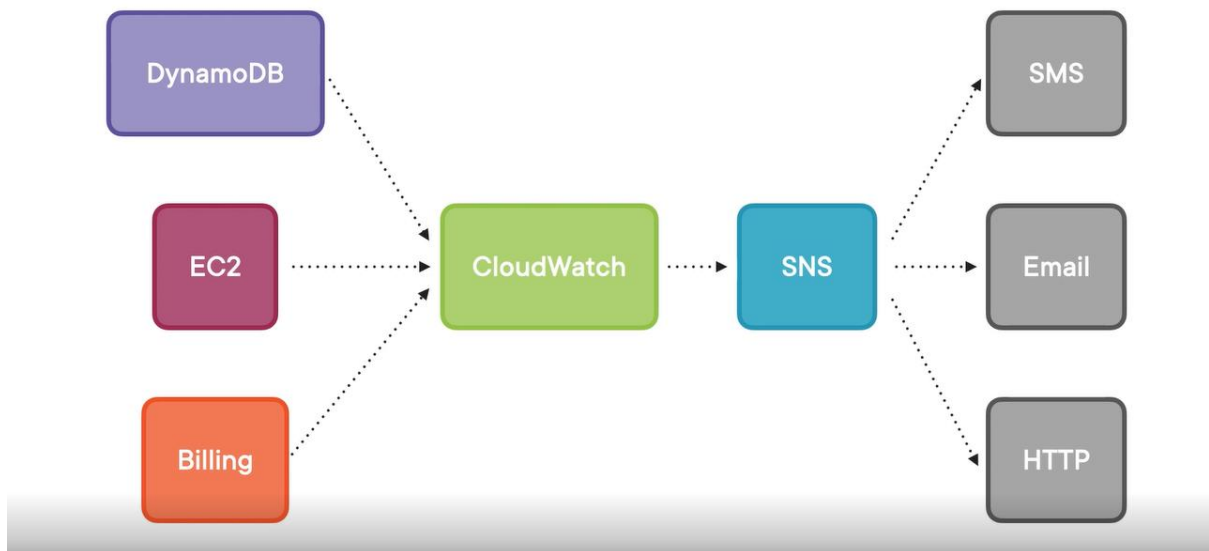
Sounding the alarm with IAM and CloudWatch:

- CloudWatch: Set alarms and notifications in response to events
- IAM: Simple user and access management

CloudWatch overview:

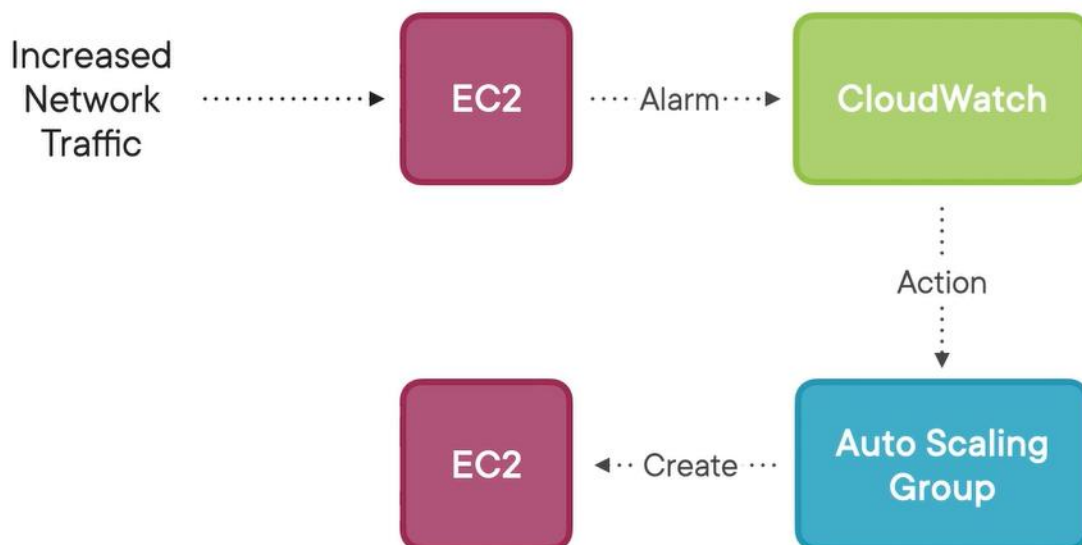- Service to set alarms based on service metric thresholds

CloudWatch Metric Examples

DynamoDB
Read/Write
Throughput

EC2
CPU
Usage

Estimated
Billing
Charges

CloudWatch alarm actions:

1. Send notifications via SNS
2. Trigger Auto scaling action
3. Trigger EC2 action

Simple Notification Service:

- Follows publish-subscribe pattern
- Topic is the main structure in SNS which will create ARN to send notifications.