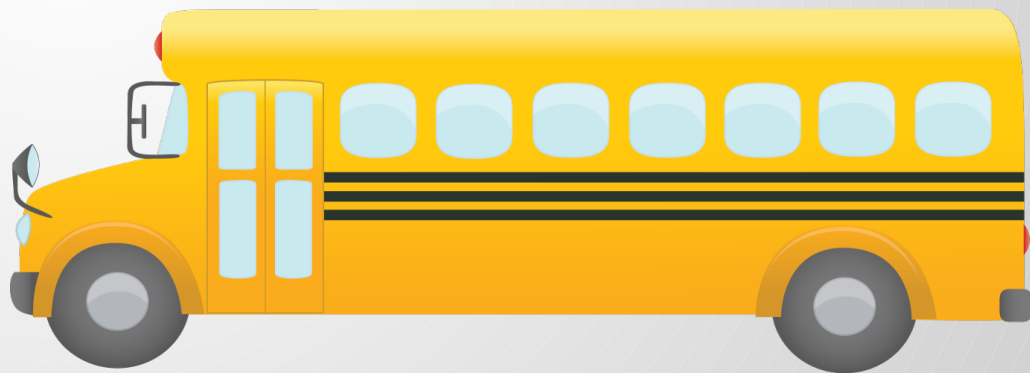# REA AWS Training – Day 2

Day 2: Let's get rolling

- Please `git pull` for any changes to the hands-on material

Day 2: Agenda

- CloudWatch

- Moar EC2-type things: Autoscaling, ELBs

- – BREAK –

- VPCs and Networking

- – LUNCH –

- Route53

- Application Services: SNS, SQS, SES

- – BREAK –

- Advanced CloudFormation

REA AWS Training

CloudWatch

CloudWatch

- can be used to
  - monitor metrics for AWS cloud resources and applications
  - collect and monitor log files
  - collect custom metrics
  - setup alarms

- examples:
  - EC2 instances: cpu, disk I/O, network I/O, status
    - can only see "outside" of the instance – custom metric for RAM, disk space
  - DynamoDB tables, RDS instances, Lambda

- application logs
  - line-oriented or json
  - filters, alarms, etc
  - agent-based (like splunk forwarder)

CloudWatch: Alarms

- Alarms based on
  - above, below, thresholds
  - sum, average, # samples, min, max of a metric
- Trigger various actions:
  - SNS topic notification
  - AutoScaling policy
  - EC2 action (recover/stop/terminate)

CloudWatch Log Alarms

- Allows you to generate alarms based on ingested logs
  - match patterns, event frequencies
- Examples:
  - CloudTrail → CloudWatch Logs
    - alert on "CreateVpcPeeringConnection"
  - Application logs → CloudWatch Logs
    - alert on >= 10 "500" HTTP responses in a 5-minute period

CloudWatch Hands-On

- Create stack using CloudFormation

- Investigate what metrics can be monitored

- Create an alarm and make it send you an email

- Cause the alarm to be triggered