#### Route 53:

- The solution for DNS needs
- Domain Name System system that translates human-readable URLs to IP addresses
- Rout53 is core to letting users interact with services in AWS
- Route 53 health checks Sets regular checks for given URL path

#### Summary:

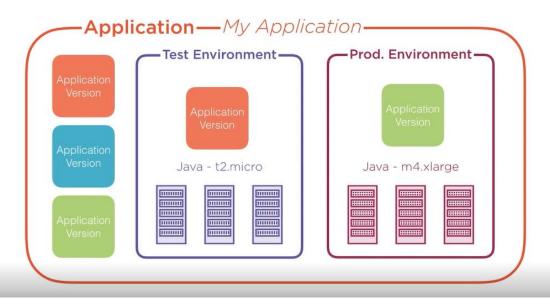
- 1. EC2 for computing
- 2. S3 for storage
- 3. RDS for databases
- 4. Route53 for URLs

### **Enhancing Your App with AWS Databases and Application Services**

### Elastic Beanstalk:

- The solution for your application needs
- Deploying app with ELB
  - 1. Easy deployment with various tools
  - 2. Set it and forget its configuration
  - 3. Aggregated monitoring and logging

# Elastic Beanstalk Structure

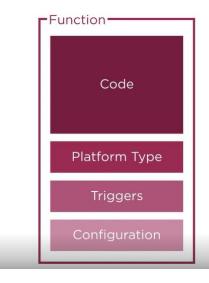


- Application versions are stored in S3
- Each application has a limit of 1000 versions
- Elastic beanstalk pricing Free. You pay for EC2 instances, load balancers and S3 seperately.

#### Lambda:

- The solution for your code execution needs
- Executes code
- No server management required
- Only pay when your code is running

# Lambda Structure



- Lambda is good for small, irregular tasks

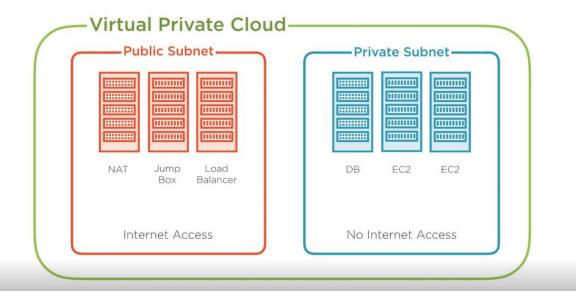
### DynamoDB:

- The solution for NoSQL needs
- Unlimited, elastic storage
- No hardware choices
- Pay only for what you use
- Provisioned throughput capacity = number of read/write units per second
- Read 4kb/unit
- Write 1kb/unit

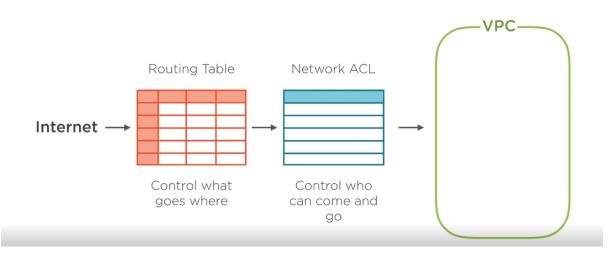
### Virtual Private Cloud:

- The solution for your networking needs
- Security groups secure single instance
- VPC secure group of instances
- VPC features:
  - 1. Configure VPC routing tables
  - 2. Use NAT gateways for outbound traffic
  - 3. Internal IP address allocation

# Virtual Private Cloud Structure



# Virtual Private Cloud Security



- Basic VPC configuration is free

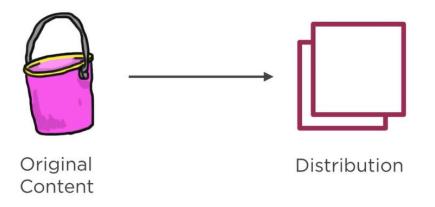
#### Cloudwatch:

- The solution for your monitoring needs
- Cloudwatch key functionality
  - 1. Monitoring resources
  - 2. Acting on alerts
- Cloudwatch alarms
- Alarm + Metric = Action : SMS notification / Autoscale EC2 instances

### Cloudfront:

- The solution for your CDN needs
- Cloudfront easily works with S3, Route 53, EC2, Load balancer

# CloudFront Structure



- Cloudfront configuration options:
  - 1. SSL certificates
  - 2. Allow http methods
  - 3. Edge locations