Cloud platform Amazon

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Course:
Grid, Clusters and Cloud
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St. Petersburg, Russia
02.06.2015

Amazon WS?

- Amazon Web Services (AWS) provides on-demand computing resources and services in the cloud, with pay-as-you-go pricing

  - Run a server on AWS that you can log on to, configure, secure, and you pay only for what you use

How is using AWS?

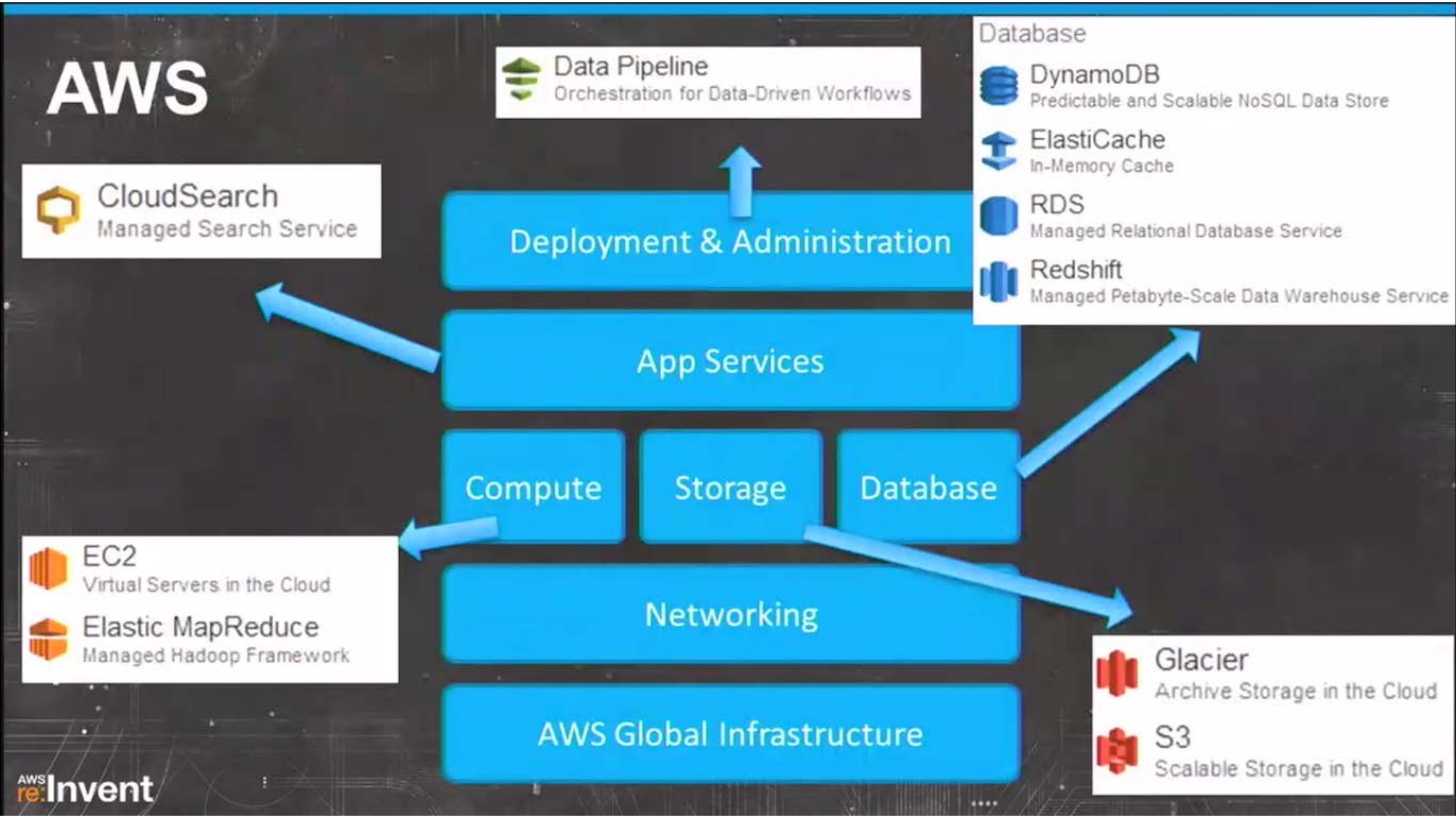
What can you do with AWS?

- You can use AWS to make it easier to build and manage your websites and applications
  - Store public or private data, Host a static and dynamic websites, Process, analyze and compute business and scientific data, Handle peak load, etc

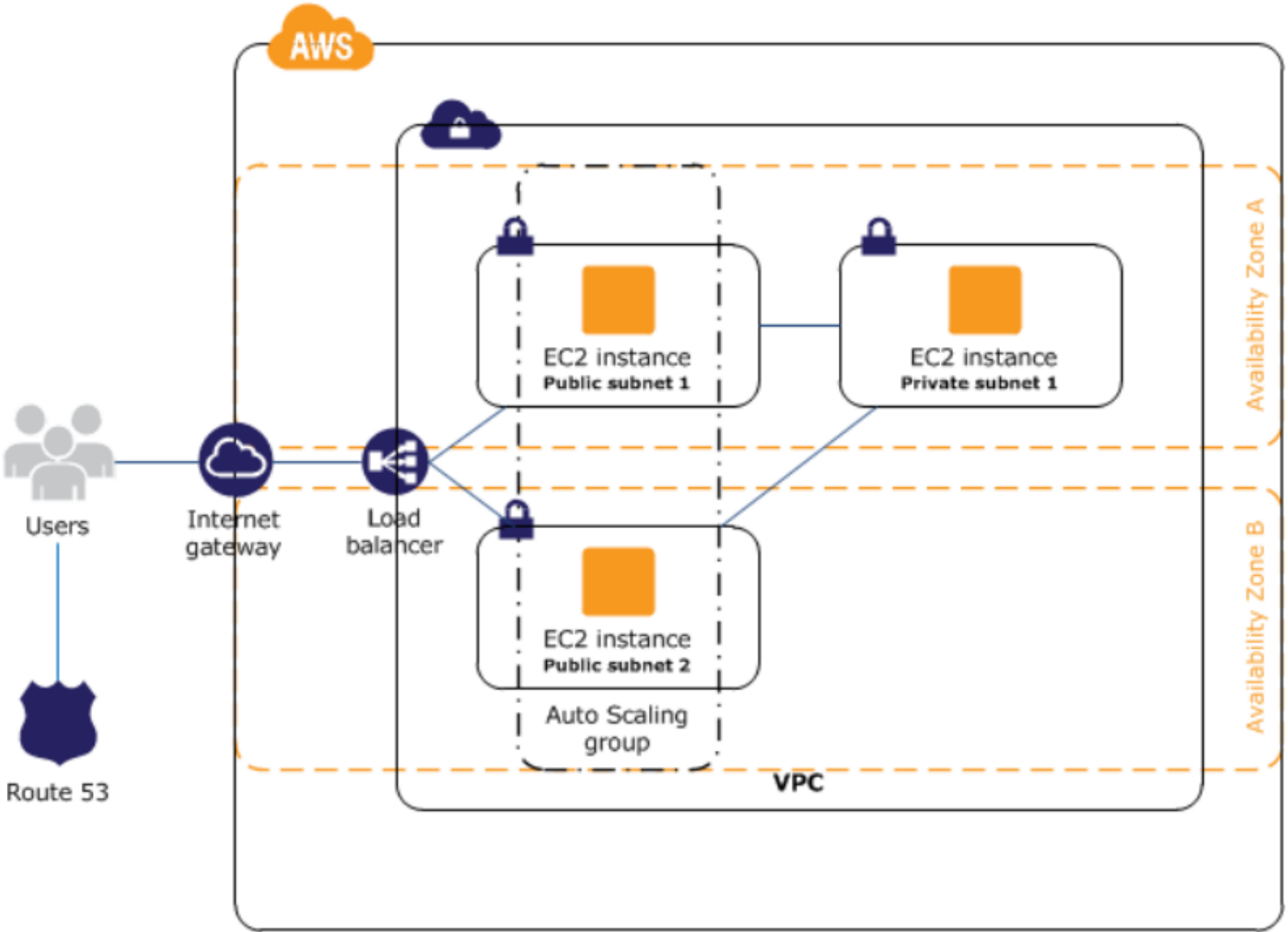
AWS Security

- The access to AWS network and data centers is strictly controlled, monitored, and audited
  - Apply ACL-type permissions on your data and can also use encryption of data at rest
  - Set up a virtual private cloud (VPC), logically isolated from other virtual networks in the AWS cloud
  - Set up a security group, which acts as a virtual firewall to control the inbound and outbound traffic for your virtual servers
  - Specify a key pair when you launch your virtual server, which is used to encrypt your login information

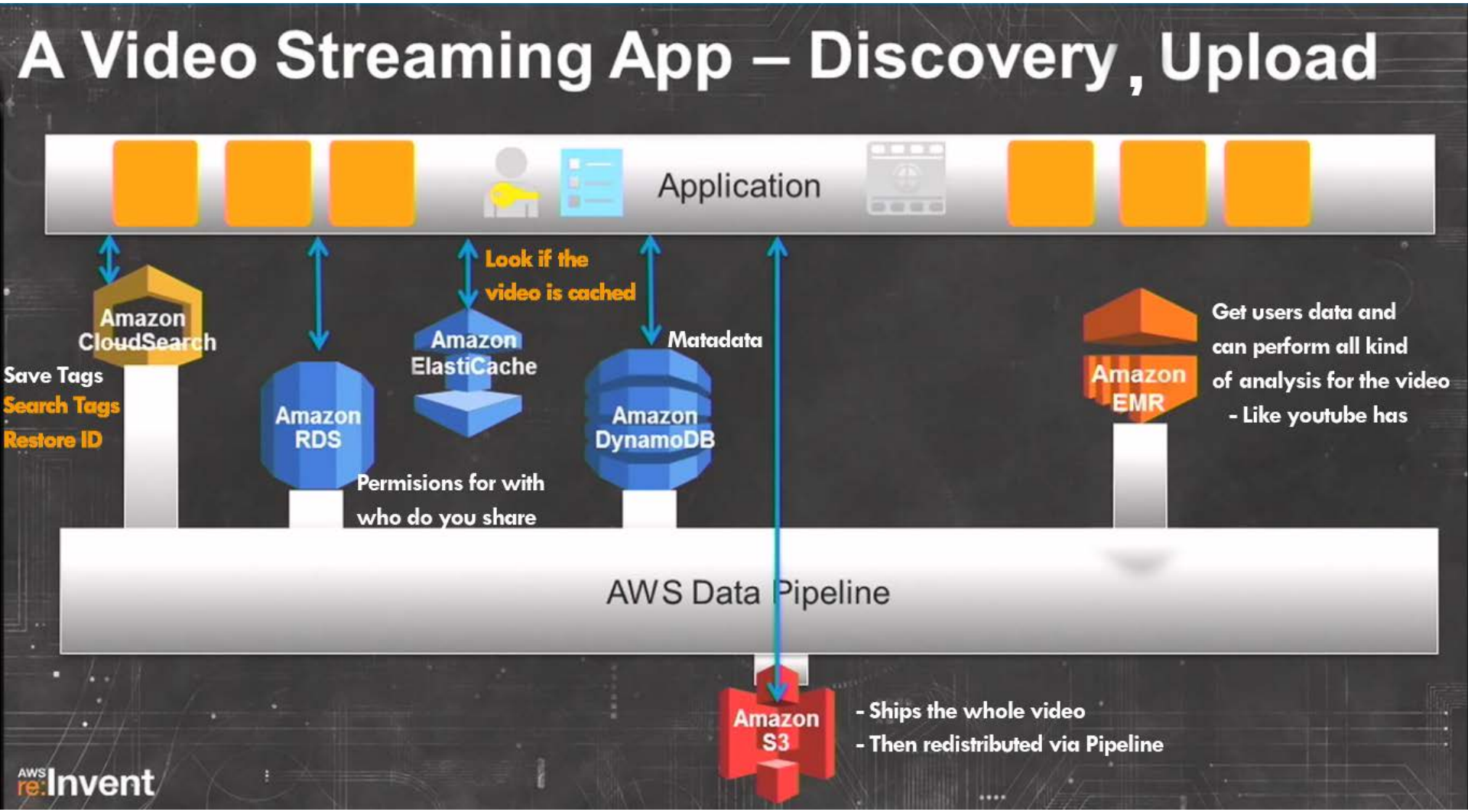
AWS Product categories



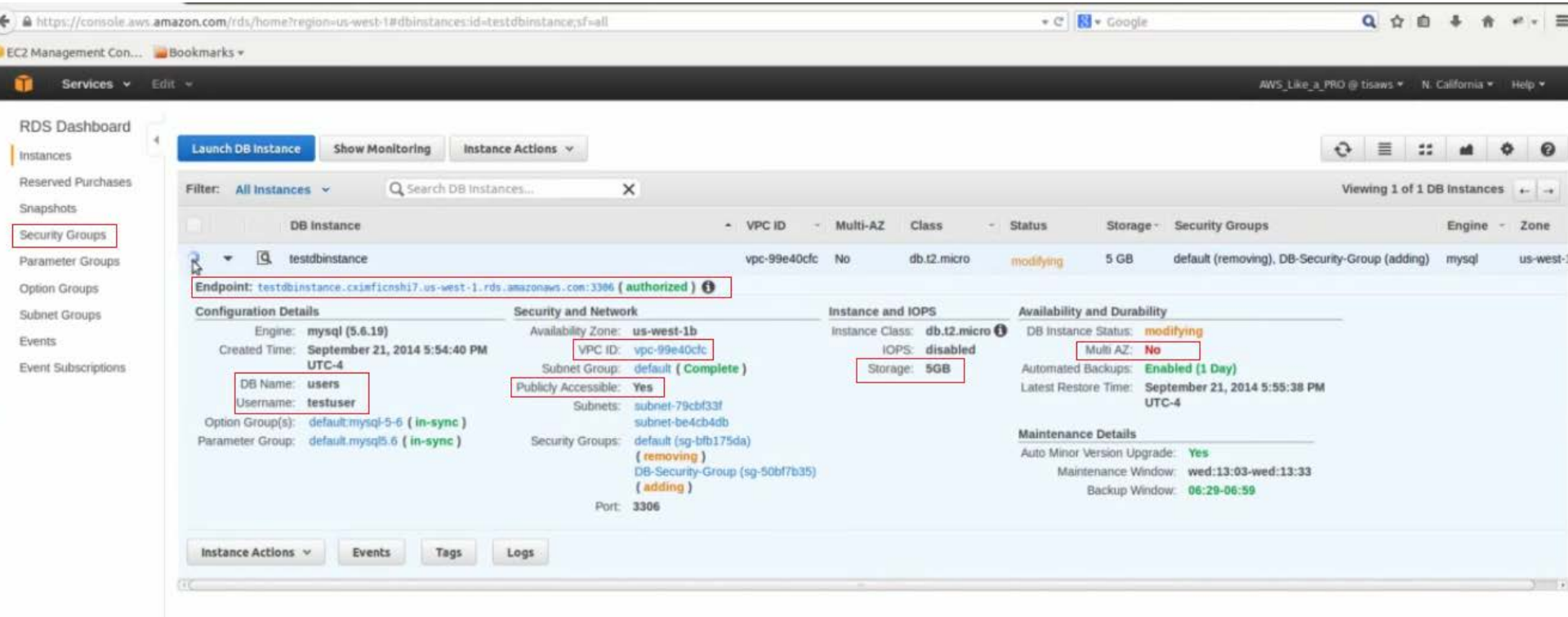
AWS Architecture



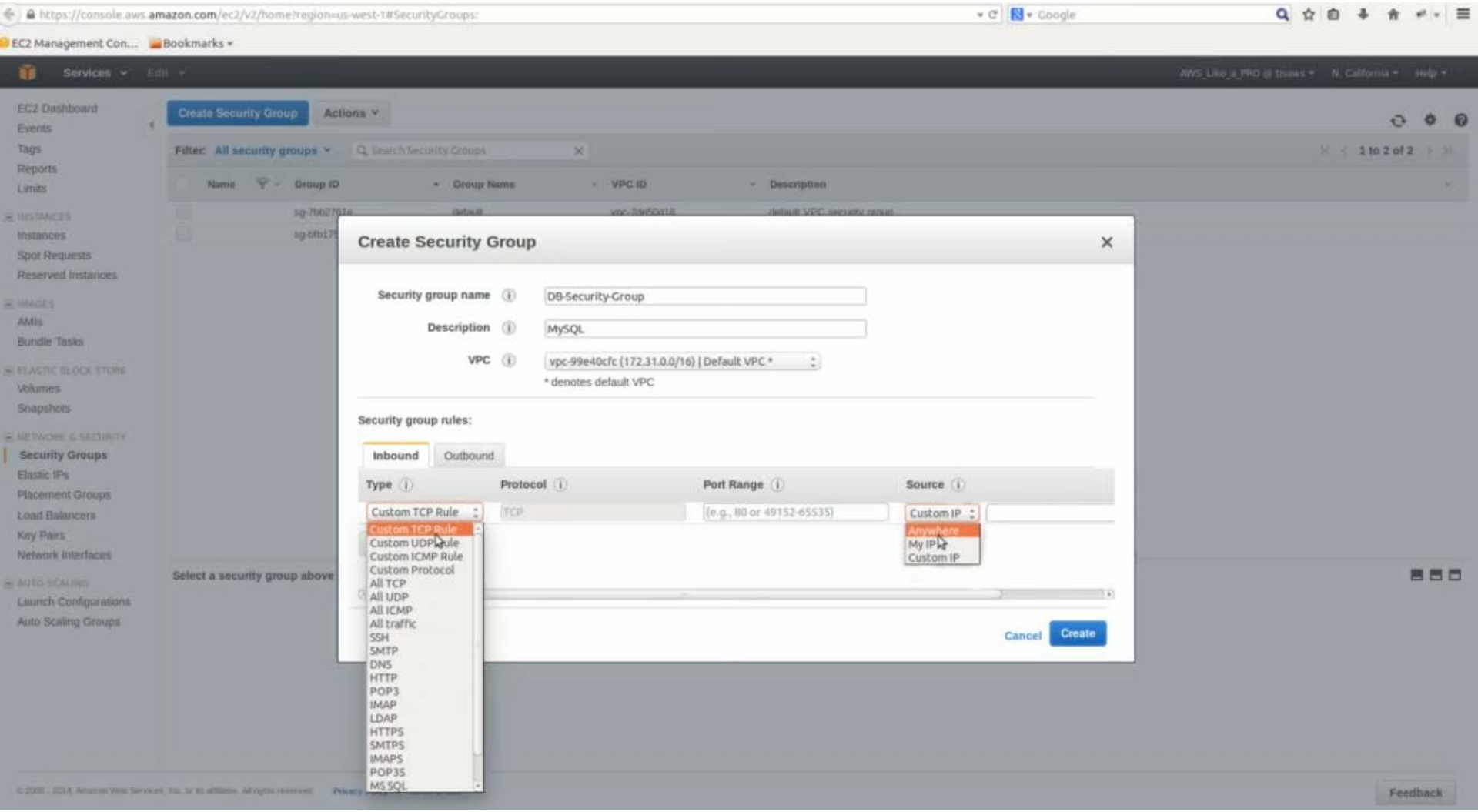
How it works?


A Video Streaming App – Discovery , Upload
Application
Look if the video is cached
Amazon CloudSearch
Save Tags
Search Tags
Restore ID
Amazon RDS
Amazon ElastiCache
Amazon DynamoDB
Matadata
Permisions for with who do you share
Amazon EMR
Get users data and can perform all kind of analysis for the video - Like youtube has
AWS Data Pipeline
Amazon S3
- Ships the whole video
- Then redistributed via Pipeline
aws re:Invent

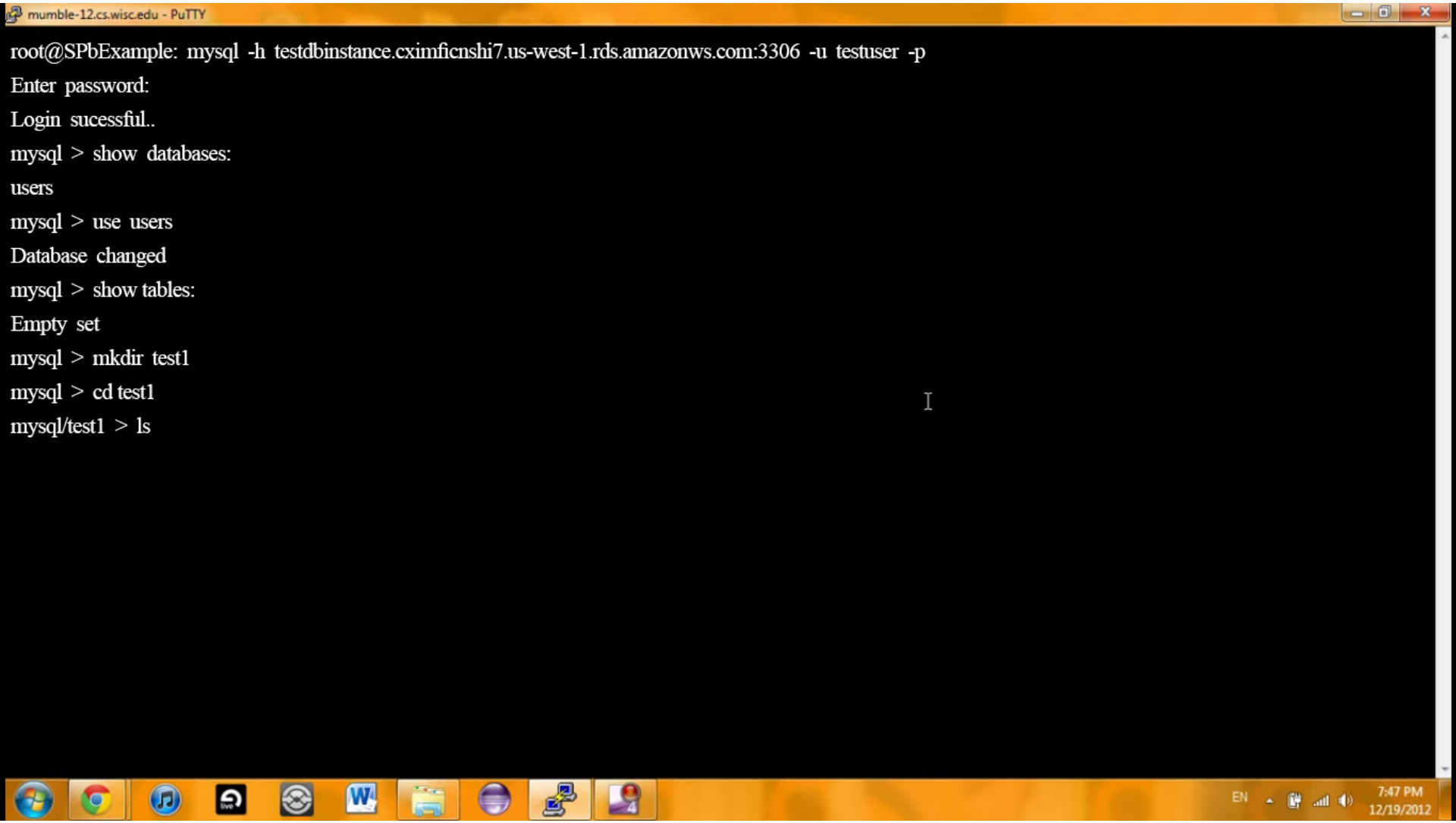
AWS deployment



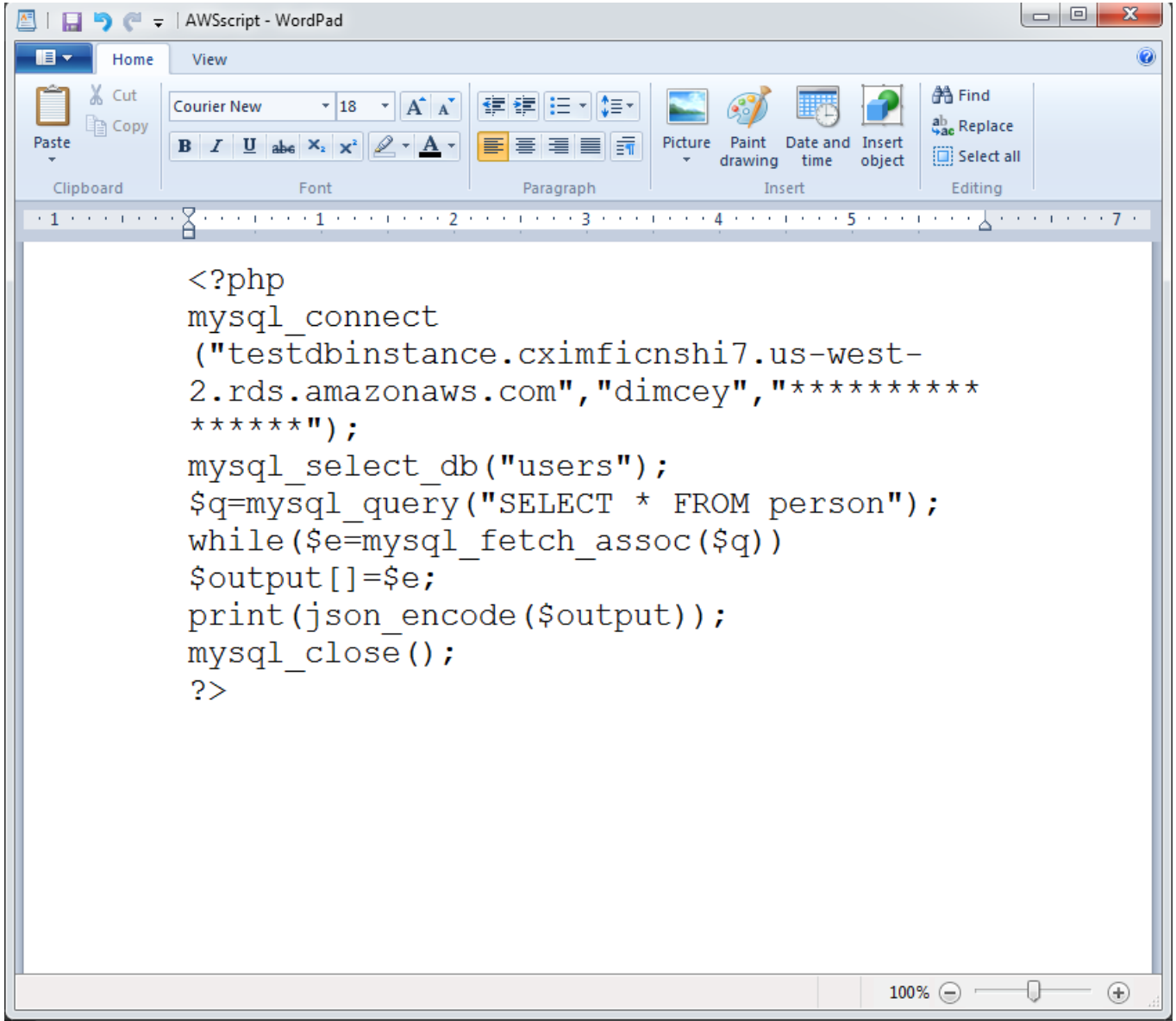
AWS deployment



AWS deployment



AWS deployment



Thank you!

AWS Product categories

AWS Primitive Compute and Storage

Compute Capabilities

- Many different EC2 instance types
  - General purpose
  - Compute optimized
  - Storage optimized
  - Memory optimized
- Host any major data storage technology
  - RDBMS
  - NoSQL
  - Cache

Raw Storage Options

- EC2 Instance store (ephemeral)
- Amazon Elastic Block Store (EBS)
  - Standard volume
    - 1 TB, ~100 IOPS per volume
  - Provisioned IOPS volume
    - 1 TB, up to 4000 IOPS per volume
  - Stripe multiple volumes for higher IOPS or storage

Primitives add flexibility, but also come with operational burden!