#### Cloud Cover An Unauthorized Biography of EC2

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#### Elastic

- dynamic provisioning of virtualized machines

#### Compute

- little units of computation+memory+disk+network

#### Cloud

- location-agnostic, outsourced infrastructure management

### The Good

### On-demand computing

#### Web service

# As flexible as a real datacenter

## Much simpler than a real datacenter

# Cost directly scales with utility

#### Best firewall you ever saw

#### Your IT department == Clown shoes

### Game-changer

### The Bac

# As flexible as a real datacenter

# More expensive than dedicated VPS (per-box)

#### Must build applications to scale from start

# Off-cloud testing isn't really possible today

### Elastic? Yes Instant? No

### Ah, yes... the hidden limit

## ne Ugy

### No persistent disk\*

(\*) This is being worked on as we speak

#### First-write penalty

Everyone ends up logging in as root

# Difficult to secure from inside attack

### Rockin' the lock-in\*

(\*) This, too, is <u>being worked on as we speak</u>

#### Annoying transient failures\*

(\*) Here's a script to grab the SSH keys that's resilient to the above: <u>http://gist.github.com/3494</u>

### What works well?

EC2 + SQS = Win

Independently scalable components (Amazon-style) Hadoop

Trick: think of an EC2 instance as a UNIX process

### What doesn't?







### Basically: databasebacked applications

### Data warehousing

#### EC2 Instance Data



### EC2 == EPIC WIN...

## ...but you have to think different

#### Thanks for not snoring!

# Oh yeah: larges are the best value