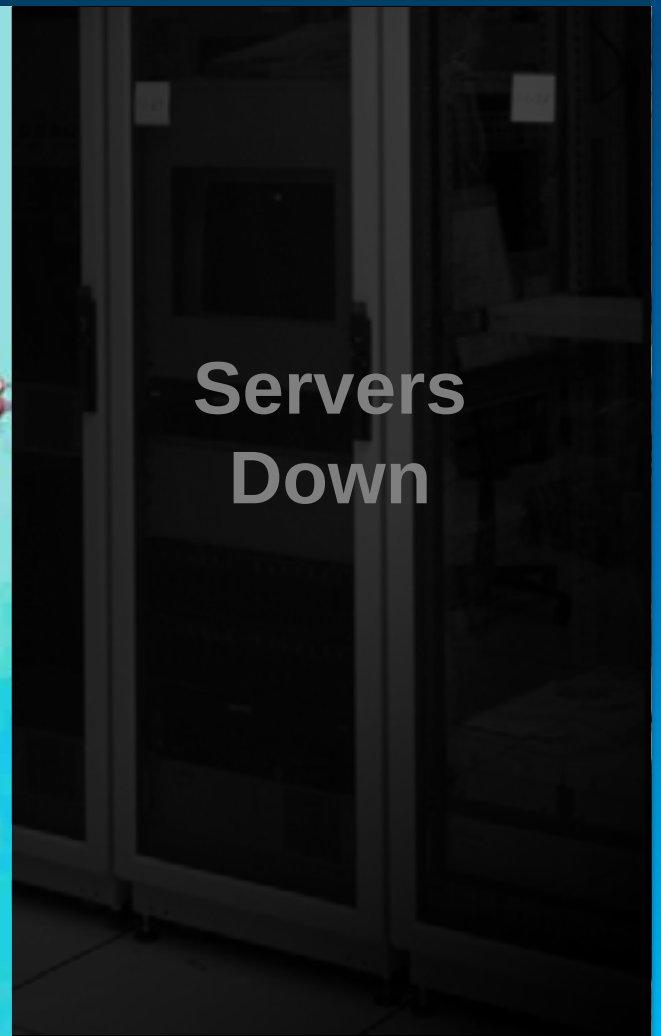
High-Availability ArcGIS for Server and Application Architecture in Amazon

David McGuire

Demo Theater

Cloud Formation Demo

Crisis

Thursday	Friday	Saturday
		

Traditional Trouble Shooting

- Reboot Servers?
- Spread Services Across Local Machines?
- Order New Equipment?

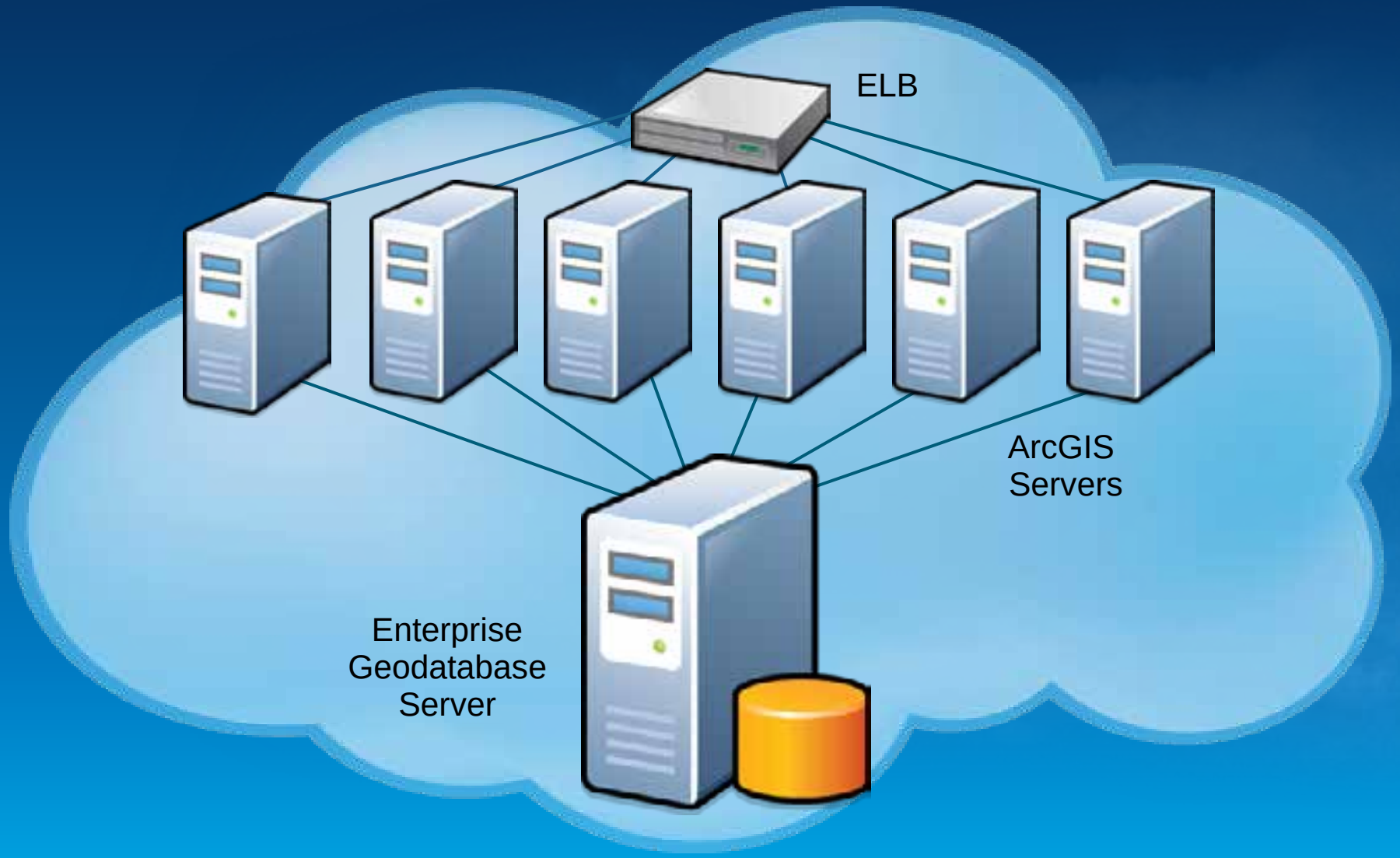
Panic!

Transition to the Cloud

amazon web services™

Deployment

1 hr 15 mins	To Stage
30 mins	To Generate An AMI
15 mins	To Deploy Live Servers


ELB
ArcGIS
Servers
Enterprise
Geodatabase
Server

Handle Traffic

What We Learned

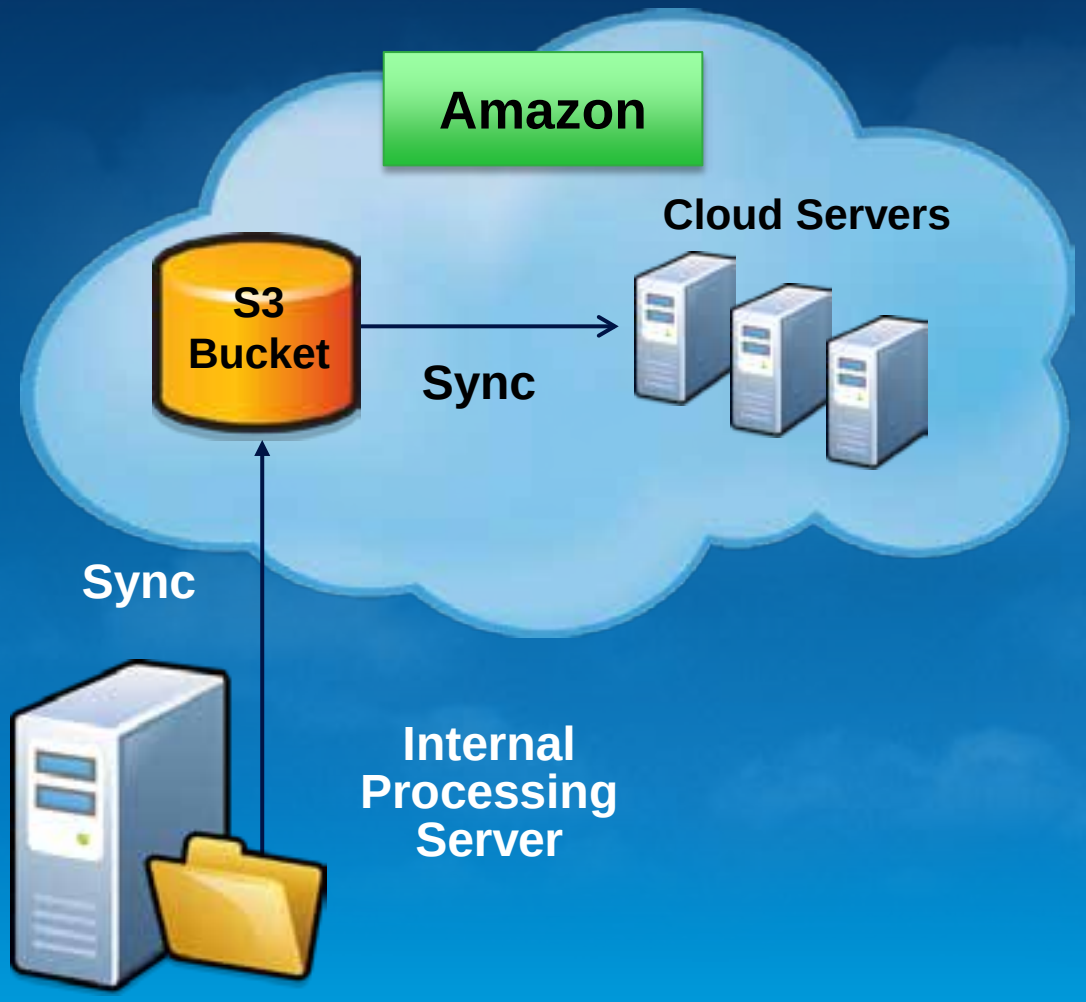
Start in the Cloud	**Avoid internal, static machines**
Design for the Cloud	**Architecture should be cloud focused**
Plan Ahead	**Avoid emergencies**

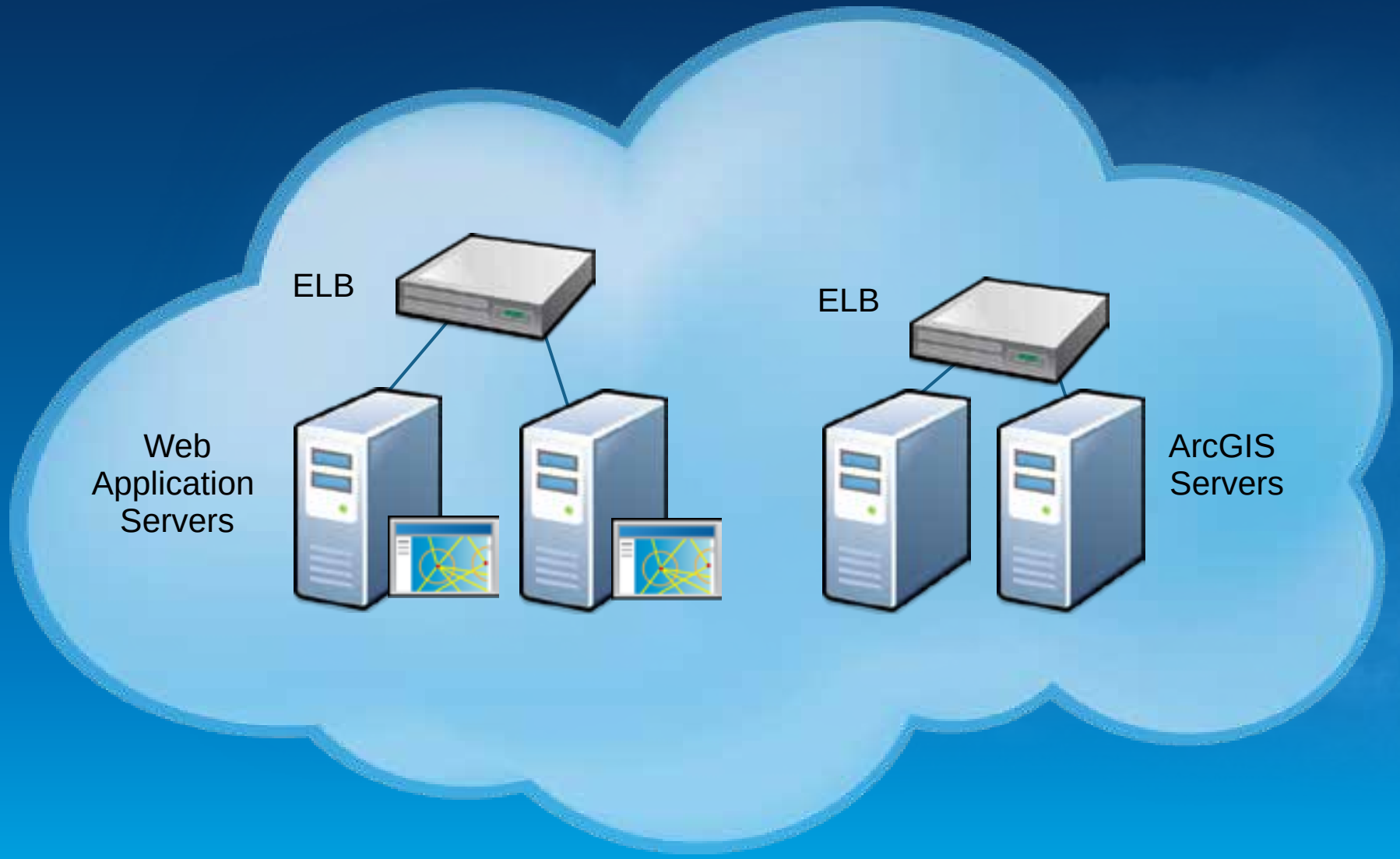
Aggregated Live Feeds…

Authoritative Content

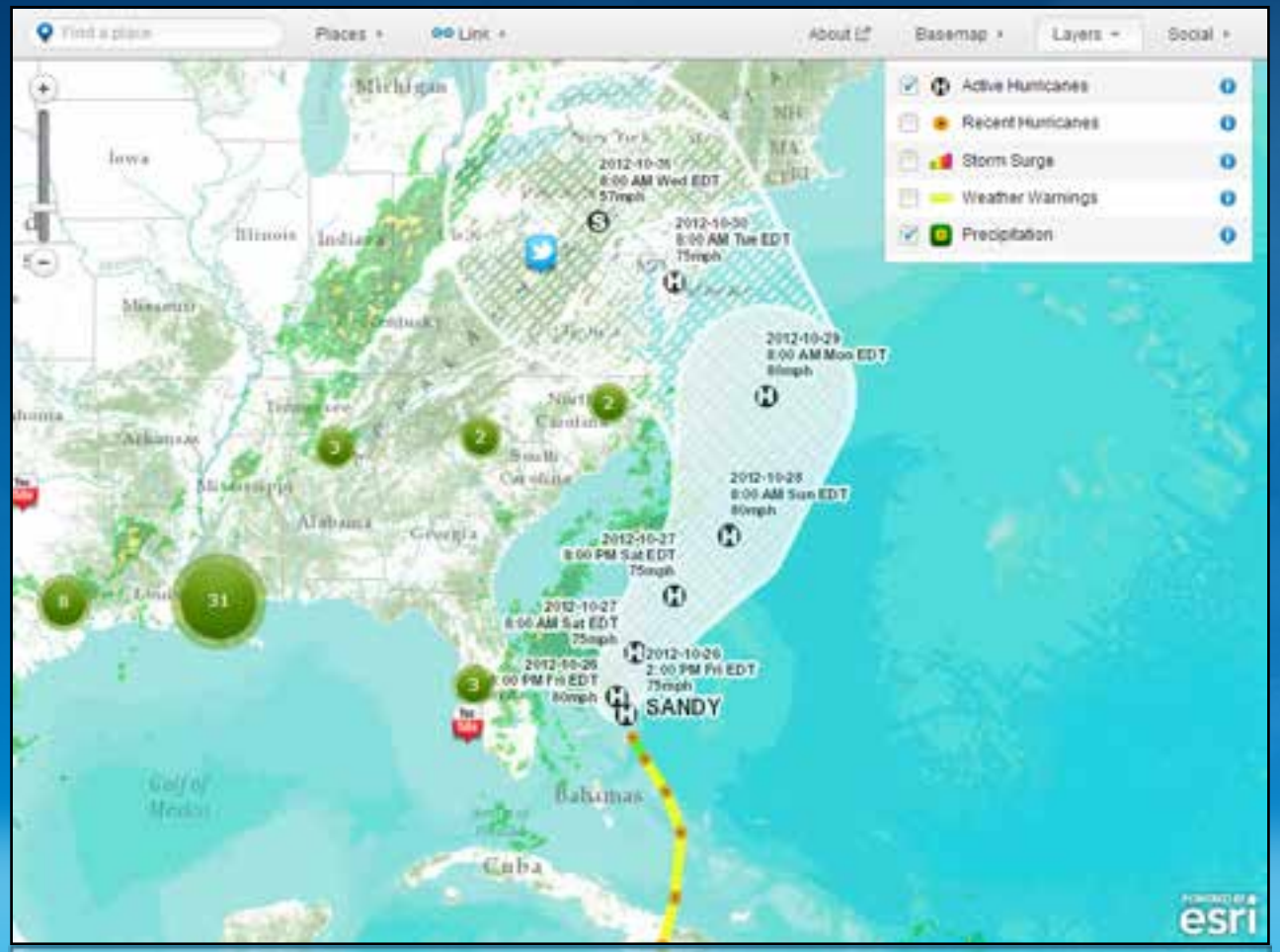
Frequently Changing Data

How Can I Deploy and Scale?


Amazon
Cloud Servers
S3
Bucket
Sync
Sync
Internal
Processing
Server

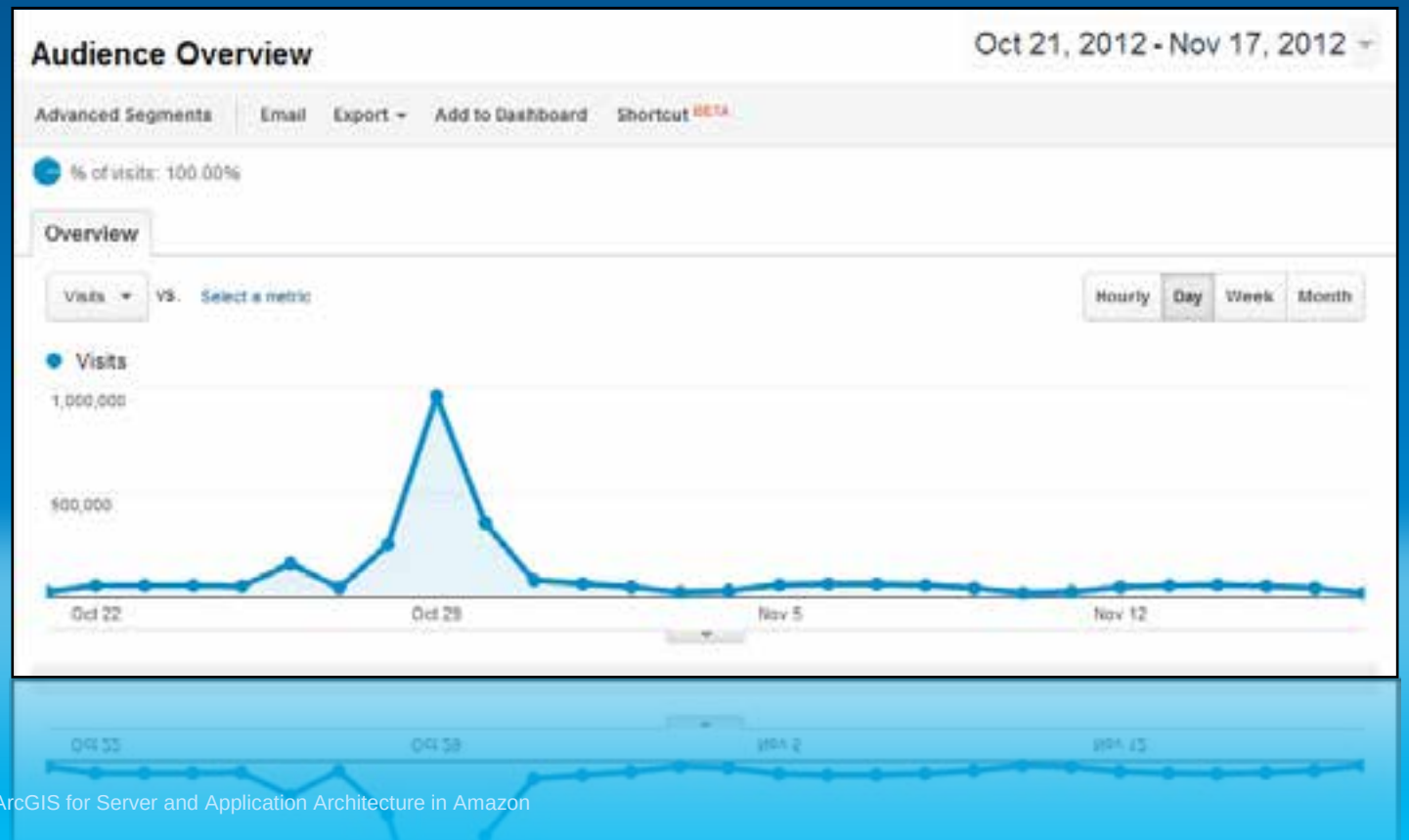

ELB
ELB
Web
Application
Servers
ArcGIS
Servers

Hurricane PIM



Hurricane PIM

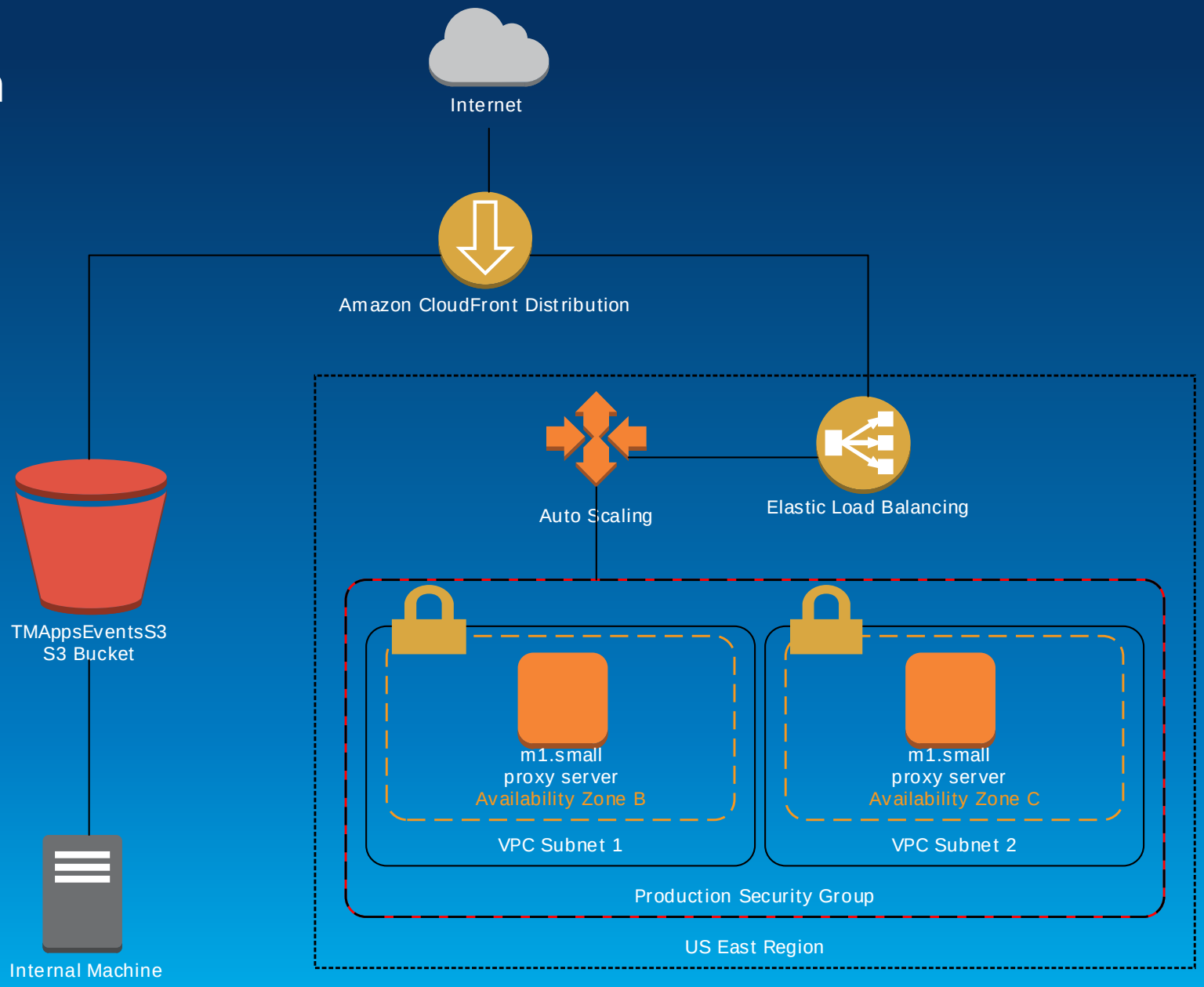
- Over 1 Million hits in 1 day on our web map
- Over 7 Million dynamic map requests in 1 day



Next Phase

Linux	**Linux instances are cheaper and boot faster**
Auto Scaling	**Avoid manual load management**
Cloud Front	**Take advantage of global content distribution**

Complication



Resources

- **Esri Sample Templates**
  - **http://esriurl.com/EsriAWSTemplate**
- **Amazon Sample Templates**
  - **http://esriurl.com/AWSTemplate**
- **Aggregated Live Feeds**
  - **http://esriurl.com/LiveFeeds**
    - **Make sure the “Show ArcGIS Desktop Content” box is checked**

Thank you…

- **Please fill out the session survey:**

Offering ID: 1408

Online – www.esri.com/ucsessionsurveys

Understanding our world.