

# Cloud Experience

How I Learned to Stop  
Worrying and Love Fanatical Support

**Aminie Elsberry**

California Secretary of State

[Aminie.Elsberry@sos.ca.gov](mailto:Aminie.Elsberry@sos.ca.gov)

# Cloud Experience

- ◎ Push into the Cloud ([vote.sos.ca.gov](http://vote.sos.ca.gov))
  - > 2008 Presidential Election (Prop. 8)
- ◎ First Steps
  - > Page Optimizations
  - > Server Optimizations
  - > Content Delivery Network (CDN)

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- ◉ Guided Heavily by the 14 Rules identified in **High Performance Web Sites**, written by Steve Souders



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- Rule 1: Make Fewer HTTP Requests
- Rule 2: Use a Content Delivery Network
- Rule 3: Add an Expires Header
- Rule 4: Gzip Components
- Rule 5: Put Stylesheets at the Top
- Rule 6: Put Scripts at the Bottom
- Rule 7: Avoid CSS Expressions

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- Rule 8: Make JavaScript and CSS External
- Rule 9: Reduce DNS Lookups
- Rule 10: Minify JavaScript
- Rule 11: Avoid Redirects
- Rule 12: Remove Duplicate Scripts
- Rule 13: Configure ETags
- Rule 14: Make Ajax Cacheable

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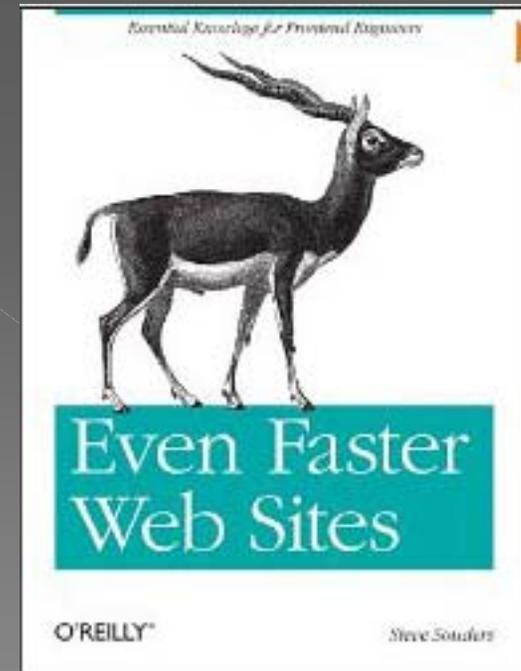
- ◉ Content Delivery Network Requirements
  - > Identified by "sos.ca.gov" domain
  - > 24-hour live support (phone)
  - > Manageable
  - > Affordable

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- What We Learned in Testing
  - > Changes to CSS, JavaScript, images needed 24 hours (or more) to update
  - > Could no longer fix CSS, JavaScript or images “on the fly”
  - > Required many teachable moments to users
  - > Change in update cycle

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- "All in" – June 2010 Primary Election
  - > Re-architected site entirely in the cloud
  - > Optimized Pages Even More



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- ◉ November 2010 General Election
- ◉ What we learned
  - > Our site has graduated out of the Bill Jones era, but our business users have not
  - > Scalable does not mean “unlimited”
  - > There are benefits and limitations of a shared environment
  - > External load testing is important (read: necessary)
  - > Vendor and SOS must speak the same language

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- ◉ Expanded our use of the CDN
  - › Added static content from more SOS websites
- ◉ Moving to a managed/hybrid environment for the “Vote” website
- ◉ Committed to External Testing

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## ◎ Summary

- › Know what your needs and the acceptable risk
- › Find the best fit based on needs/risk
- › Purchasing cloud services can be a challenge
- › Communicate with vendor via website, twitter, email, phone, all?
- › Get a name of level 2+ support for mission critical sites
- › Keep an open dialog with vendor for ongoing support needs (critical roll-out, high-traffic alert, etc.)

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- Questions?

