

Seeking Substantial Compliance via Rapid Application Development

# Department of Corrections Sex Offender Registry

# Introduction

- Once a Top 10 site in the United States, the State of Oklahoma's online Sex Offender Registry was no longer in "substantial compliance" with the Federal government. Not only was the public site missing modern functionality, it's issues had created a productivity issue and an administrative backlog. The need for a software application update was clear, and last year the State of Oklahoma embarked on plans to implement the necessary adaptations to the Oklahoma Sex Offender Registry website. The goal was to implement the necessary technologies to bring the State of Oklahoma into "substantial compliance" while hitting a tight federal grant deadline. A rapid software development platform would be at center stage.

# History

- Proof of Concept in late 90's built using rapid application development tool which proved the public and law enforcement could easily search and view an online registry database of all former and current incarcerated offenders.
- That development environment was matured to become a rapid application development framework.

# History

- The first Oklahoma Sex Offender Registry was developed in 2001 using this core technology and via federal funding.
- In the early to mid 2000's, Top Ten Reviews ranked State Sex Offender Registries and Oklahoma was #4 at one point.
- This was the first time local law enforcement entities (city, county, OSBI) were maintaining one database of labeled sex offenders in Oklahoma.

# History

- 10+ years ago, Oklahoma legislation was passed requiring one statewide sex offender registry. However, each municipality could also maintain their own database system for their jurisdiction.

# First Decade of 21<sup>st</sup> Century

- Random thoughts →
- Mapquest – 1st
- Google maps the world online
- Alerts for suspicious activity becomes commonplace (credit cards, banks, etc.)
- Annual modifications due to Federal and/or State legislation.
- Web browsers Internet Explorer and Firefox continue to evolve.

# From Top 10 to laggard

- Law Enforcement purchases new PC's ... system is not fully operable with new browsers.
- Law Enforcement staff no longer can submit edits.
- In 2006, the federal Adam Walsh Act was passed. All states must comply by the end of 2010.
- 2008 – 2010 | No awards made to Oklahoma via the COPS grant process.

# From Top 10 to laggard

- SVOR Unit Workload backlog
- Windows NT Server to Windows 2000 Server
- OSBI resorts to managing hundreds of spreadsheets based on full and daily registry extracts.
- Bottom line: NO SUBSTANTIAL UPKEEP INVESTMENT MADE DURING THIS DECADE.



## 2010 - 2011

- Federal initiative – SORT software solution
- \$100,000 grant for customizing & implementing SORT
- Gap and fit analysis performed
- Deemed approximately \$400,000 to modify and fit the State of Oklahoma

# Spring 2012

- Fed money of \$200,000 offered to get Oklahoma SORNA compliant via our own custom solution.
- Appears too good to be true ... after all these years.

# Dilemmas

- Dilemma – Funding expires August 31. Anticipated start date is May 1.
- Would prefer a Microsoft .NET solution even though Oracle experience is greater than Microsoft .NET experience.
- The Dept. of Corrections IT department prefers it be done in a traditional sense with .NET but believes there isn't enough time.

# Project Starts Late

- Procurement approval by I.T. takes longer than expected. See I.T. Consolidation legislation for further detail.
- I.T. concerned about data privacy of offenders and delays vendor access to database.
- Risk increases
  - Risk 1 – Phase 1 isn't finished by Aug 31.
  - Risk 2 – Money left on table by Aug 31.
- Decided Law Enforcement would not be able to add new data about an active offender living in the public.
- From a Project Mgt sense, there were a total of 2 Full-time resources and 3 part-time resources from LSG Solutions.
- PM, BA/Integration Tester, DBA

# Technical

- Plenty of reverse engineering of code / extraction of business rules.
- Surprises during extraction of business rules then and now ... primarily due to brain drain.
- Plenty of reusability due to predecessor and successor technology within Oracle for Rapid Application Development.
- Same database (conceptual & logical) migrated to Oracle 11gR2.
- Had to keep two systems going and in-sync with DIY batch scripts ran each day.

# Crunch Time

- Go Live Friday night August 31, 2012.
- Finished Law Enforcement mods mid August.
- Vendor decided mid August to fix any show stopper issues in September ... after funding depleted.
- High level of confidence
- Faster product development results in more time for testing.

# What makes it Rapid?

- Oracle Application Express
- Development via web browser only
- CSS & Graphics out of the box
- Security framework out of the box

Roles

User accounts

Password management & rules

Page, Region and Item level access ready to apply

# What makes it Rapid?

- Scalability – just as good as the Oracle database
- <http://apex.oracle.com>
- Built-in Validations & ready to apply
- Build C-R-U-D forms in minutes
- Out of the box user search functions
- Out of the box ready for power user report development



# Phase 1 Product

- Four search types for the public.
- An additional four for law enforcement staff
- GIS aspect using Google maps
- Public and Law enforcement can perform radius searches
- Public can map any offender with a valid address (once they find the offender via other search options)
- Community Notifications of Sex Offender movement
- Law Enforcement back online – can submit edits
- Applied the proper business rules!!!!

# Phase 1 Product

- <http://sors.doc.state.ok.us>