

Oregon Administrative Rules Database (OARD)

http://sos.oregon.gov/archives/Pages/oregon_administrative_rules.aspx

Category: Digital Government: Government to Business

Oregon Secretary of State – Archives Division

Project Initiated – April 2015

Project Completed – October 2017

**Mary Beth Herkert
State Archivist and Director/Archives Division
Oregon Secretary of State
503-378-5196
mary.e.herkert@oregon.gov**

Executive Summary

The Oregon Administrative Rules Database (OARD) Project has brought previously unavailable transparency to the State of Oregon's rulemaking process, while also delivering a historic level of accessibility to citizens, businesses, lawmakers, media and other stakeholders who need to access administrative rules.

By leveraging technology, OARD turned a time-consuming, manually-labor-intensive process into a rapid, streamlined publication. The resulting efficiency has freed up taxpayer-funded resources to perform the other important work of the State Archives.

OARD is written with solid application architecture and a robust relational database. The search engine enables the general public, state agencies and businesses affected by administrative rules with the ability to search across all of the administrative rules. In addition, searches can be run on filings, including notices of rulemaking actions, hearings, temporary rules, and minor corrections.

Finally, the publication of the Monthly Bulletin of rules is generated in minutes rather than days, while the Annual Compilation of rules is now completed in four hours versus four months. This rapid publication process ensures that all rulemaking actions are available to the public in a timely manner.

Description of Project

The Problem

The process for filing and publishing Oregon's Administrative Rules was unwieldy and relied on manual labor. Because of this, the cycle time for filing and publishing rules was long, while also being prone to human input error.

Oregon Administrative Rules are created by most State of Oregon government agencies and some boards and commissions, to implement and interpret their statutory authority. Agencies may adopt, amend, repeal or renumber rules, permanently or temporarily, for up to 180 days.

The process for doing this had been static for 15 years. Rules Coordinators for State of Oregon agencies wanting to make an administrative rule filing were required to fill out a form online. The form was deposited in a flat file database. The Rules Coordinator would have to attach a Microsoft Word document containing the text of the rulemaking action. The Administrative Rules Unit staff of the Secretary of State's Archives Division then had to enter additional information into that same flat file database; copy and paste text into a desktop publishing tool (QuarkXpress); create both a PDF and an HTML file; and publish the files to a website each month.

Because of this labor-intensive process, there was a 15th of the month deadline to allow the Administrative Rules Unit staff the time needed to create a Monthly Bulletin of rules, and post it to the web on or near the first of the following month. In the best-case scenario, there was a two-week lag time from submission through publication. Rulemaking actions filed on the 16th of the month weren't published for six weeks. This meant that state agencies, businesses, and the public had an extremely limited timeframe in which to comment on rulemaking actions, resulting in a lack of transparency in many cases.

Metrics indicated that the number of rulemaking actions were increasing monthly. The Archives Administrative Rules Unit staff of four, often had to log overtime to complete the processing for rulemaking actions to meet mandated deadlines. The resulting expense negatively impacted the Secretary of State's budget.

Production of the Annual Compilation of rules also presented serious challenges. Administrative rules filed after Nov. 15 weren't captured until the following year. So, a rule filed on Nov. 16, 2015 wasn't published in the "Compilation" until Jan. 1, 2017. Because of staff constraints and the drawbacks of an aging system, no ability to search across all of the rules, and the limited public transparency afforded by the existing system, the State Archivist approached the Secretary of State's Information Systems Division to come up with a 21st century solution: the Oregon Administrative Rules Database (OARD).

Barriers, Challenges, and Opportunities

As with any information technology project of this scope, there were challenges. The first was dealing with change. The staff of the Administrative Rules Unit, the Secretary of State's Archives Division personnel responsible for administrative rules,

were reluctant to move away from the existing system with its familiar processes. To help overcome this, the State Archivist hired an outside consultant to review the work and apply a “Lean” methodology. Once staff members were able to see that the existing process was antiquated, and unsustainable due to the increased volume of rulemaking actions, they were able to move on to the next step: Determine whether upgrading the current system was viable, or if building a new system was the right answer. The vendor that designed the existing system was asked to provide: an upgrade path that included the ability to search across all rules; a streamlined workflow that required less manual labor by Administrative Rules Unit staff; and a secure web interface. Because the vendor couldn’t provide the required information security component, the decision was made to pursue other options.

The next challenge arose with utilizing the Secretary of State’s own Information Systems Division to design/build/test/launch a new system for Oregon Administrative Rules. In the past, projects for the business unit (Archives Division) by IT (Information Systems Division) had been bumpy, and so personal tensions existed between various key members of the two groups. To overcome this, individuals were selected from each Division who were committed to developing a complete and specific set of ground rules, to ensuring they could work together effectively. In some situations, key players simply “agreed to disagree.” The core project team spent nearly four months on Requirements elicitation. Many discussions centered on whether there was a process, because that was how it was always done or because it was actually necessary. For example, if we could use one numbering pattern for administrative rules, it would significantly simplify the work needed on the IT side. However, one of the largest state agencies, the Department of Revenue (DOR), had been permitted to use their own unique numbering system, and had been repeatedly assured that it wouldn’t change. By sitting down with representatives from the agency and explaining the OARD project’s approach, the advantages of a single numbering system became apparent, thus securing Revenue’s buy-in. In addition, by assuring them that their constituents would still be able to find their rules, Revenue agreed to change their numbering system to the standard pattern – and in the process became a major supporter of the new OARD system.

Issue or problem context

The State of Oregon has increasingly grown committed to ensuring transparency to citizens. Accessibility and usability of websites and online applications has become a priority, and government accountability is written into the mission statement of the Secretary of State’s office. Because of their status as law, Oregon Administrative Rules need to be accessible, and the process for creating, amending and repealing them should be transparent and accountable to the process outlined by Oregon statute. The OARD facilitates this process as rules are published in real time, allowing those affected by the rules ample opportunity to comment – but without permitting state agencies to circumvent the statutory process, thanks to safeguards built into the system. In addition, OARD is secure; unique, role-based logins are required to access the system, and its infrastructure conforms to current standards for information security.

By design, OARD makes all administrative rules and rulemaking actions accessible not only to the agency creating the rules but also to the constituencies affected by the rules.

Strategies considered: reasons for choice of solution

Going into the project, the original hope was to take the existing online application and make major enhancements. However, once it was determined that this approach couldn't meet the information security requirements for Secretary of State applications (apps), the team had to formulate a different approach: Create a new app using in-house resources, which allowed automating the entire rulemaking process from creation through publication to revision. The chosen solution ensured that the State Archives could meet security standards, and once requirements gathering was complete, meet the business needs as well.

Solution

The technical solution for the Oregon Administrative Rules Database (OARD) consists of a relational database (Oracle Database-Enterprise Edition) with a Java interface. The PL/SQL programming language is utilized to make calls from the "front end" to the "back end." The compelling reason for selecting this architecture was the need for a secure, robust repository to house decades of Oregon Administrative Rules data, in tandem with a high-performance way of accessing the information, and providing a user interface that's both usable and accessible.

Given the decision to develop the solution with Secretary of State resources, in-house expertise played a key factor. These are current technologies for which the agency has established expertise – not just in terms of application architecture, but also for information security; interface design, usability and accessibility; and the all-too-often neglected considerations of maintainability and technical longevity.

From a project perspective, a hybrid of Waterfall and Iterative methodologies were employed. Some 18 design, development and testing milestones were outlined, which were tied to product demonstrations presented to project team members, and internal stakeholders. The demos not only indicated steady progress in the development of the technical solution, but encouraged familiarity with its functionality and administration. Project activities were in accordance with the international standards set by the Project Management Institute, outlined in the "Project Management Book of Knowledge," and the *NASCIO State CIO Top Ten Priorities for 2018* of: Digital Government; and Consolidation/Optimization, and is a great example of a technical enhancements.

For OARD, there was one major and one minor cost center. Both were for information technology human resources. The internal cost for human resources – developer, data migration engineer-business analyst, database administrator, project manager, etc. – was \$507,000. The external cost was \$33,000, for one short-term full-time equivalent contractor to supplement the lone staff developer. The total project cost was \$540,000. Research indicates that this was a bargain, with the added value of building internal expertise to maintain the application over a projected 10 to 15 year operational lifespan.

Length of time in operation

The Oregon Administrative Rules Database (OARD) went live in October 2017, and no major issues have been reported or logged.

Baseline and changes in metrics

Legacy system

Time to produce:

- Monthly Bulletin of administrative rules – 10 to 20 business days by 4 full-time equivalent staff
- Annual Compilation of rules – 4 months by 4 FTEs

New Oregon Administrative Rules Database

Time to produce:

- Monthly Bulletin of administrative rules – 2 minutes by 1 FTE
- Annual Compilation of rules – 3 hours by 1 FTE

Number of rules, etc., migrated from legacy system:

- 231,000 rule versions
- 54,300 distinct rule histories
- 7,100 rules with histories in CLOB ([Character Large Object](#))
- 34,100 filings (notices, temporary rules, permanent rules)

Innovative characteristics

As a system, OARD is a unique and innovative solution among state governments.

Leverage and transferability

- Regarding leverage: The Secretary of State's office hopes that this example and resulting success of the Oregon Administrative Rules Database (OARD) will inspire the Oregon Legislature to adopt this solution, for the publication and management of the Oregon Revised Statutes.
- Regarding transferability: The State Archivist is evangelizing the OARD to other states to help manage the creation, publication and revision of their own administrative rules.
 - Regardless of whether an entity is with the State of Oregon or elsewhere, the Secretary of State's office is ready, willing, and able to share details as appropriate, of its solution, so that transferability can benefit all citizens.

Communication Plan

Because the Oregon Administrative Rules Database posed such a dramatic change to how the State of Oregon's rulemaking process was being managed, the project team realized that a proactive approach was necessary. Proactive with regard to communicating the change, but also with using client agencies to test OARD throughout development.

A comprehensive communication plan was prepared, including key messages targeting the major stakeholder groups: state agency directors, administrative Rules Writers and Rules Coordinators, and of course the general public. Using a modern email list management and communications tool (GovDelivery), messages were scheduled and transmitted ahead of various OARD Project milestones. Shortly before OARD launched, and in the early weeks of the application being "live," numerous training sessions were held for State of Oregon stakeholders responsible for creating and filing rules. Along with FAQs (Frequently Asked Questions), training materials in written and video form were published on the Secretary of State's website. Monthly town-hall-style meetings were held in which Rules Writers and Rules Coordinators convened to discuss issues

and share solutions. Legitimate issues that surfaced were immediately reported to the information technology staff for investigation, analysis, troubleshooting, and resolution.

Significance of the Project

The significance of the Oregon Administrative Rules Project is that for the first time in the history of the State of Oregon, administrative rules are created, verified, published and maintained in a single, secure database. In addition, the filing documentation and rules are fully searchable by agencies, businesses, and constituencies affected by the rules. This offers transparency in the rulemaking process and holds agencies accountable for the rules and actions. The ability of the Rule Writer to create rules in the database; the Rules Coordinator to then file the rules, the Archives Division staff to verify, publish and maintain the rules and rulemaking actions; and the public, businesses, and other stakeholders directly affected by the rules to access them immediately when published, has to the State Archivist's knowledge, never been done before in the administrative code arena.

The OARD Project has truly created a transparent and accessible government insofar as administrative rules are concerned. In addition, OARD marked a significant change from a manual process used for over 50 years, to a totally automated process, thus saving significant taxpayer-funded staff time and agency money. The level of access to these records is unmatched – even the Oregon Revised Statutes does not provide this level of accessibility.

Impact and Benefits of the Project

As stated above, the benefits of this project are many, including government transparency, accessibility, and accountability. In the six months the Oregon Administrative Rules Database has been in operation, the Archives Division-Administrative Rules Unit has seen the amount of time required to produce the Monthly Bulletin (compilation of notices of rulemaking actions and proposed rule text) go from a minimum of two weeks, to two minutes. Similarly, production of the Annual Compilation (all of the legally binding rules for a year) has gone from a minimum of four months to less than four hours. The cost savings alone are significant.

The database allows those who want to print the more than 19,000 pages to do so on demand, as they may choose to print one volume or all 20. Time spent previously by Archives Division staff in producing the printed version of the rules is now spent on other important work for the Secretary of State.

Overall, the most significant benefit of OARD is the ability it provides to the public, businesses, state agencies, and other stakeholders affected by potential rulemaking actions, to have access to the information as soon as it's filed, verified, and published – in less than 24 hours, in most cases – thereby providing all stakeholders with a greater opportunity to participate in their government.