Idaho National Laboratory is one of the U.S. Department of Energy’s 17 national laboratories. With roughly 4,000 scientists, engineers, and support personnel, the lab is also one of Idaho’s largest employers. At INL’s three primary facility areas – the Advanced Test Reactor Complex, Materials and Fuels Complex, and Research and Education Campus – researchers perform work in support of DOE’s mission to “discover the solutions to power and secure America’s future.”

As the nation’s leading center of nuclear energy research and development, INL operates an environment that values quality as a top priority. A key element of this is accurate, timely Contractor Assurance System (CAS) information for reporting issues and tracking corrective actions.
INL’s legacy CAS system hadn’t been meeting the lab’s needs for quite some time, largely because hundreds of stand-alone computer applications, databases, spreadsheets, etc., were spread across the lab’s many Mission Centers (business units) throughout the vast facility. Critical data stored in the lab’s individual, unconnected silos was redundant, out of date, and out of sync. The system was not intuitive, was difficult to pull and share information from, and wasn’t easy to modify to keep up with the lab’s constantly changing needs.

Monthly performance monitoring based on internal and external expectations and regulations had revealed the system’s deficiencies—which leadership reluctantly tolerated. Part of the reason for that was, as a dedicated research facility, INL is not primarily in the business of software development and had neither the desire nor resources to address the issue in-house. Lab leaders agreed to move forward with DevonWay on the recommendation of an internal colleague who had experienced the benefits of the solution at another facility.

**CHALLENGES**

**The need to eliminate duplication and streamline processes**

Specifically, INL needed help consolidating and integrating a significant portion of its existing processes into a single, enterprise-wide solution throughout every organization in the lab. Ultimately, lab leaders needed access to analyses and trends across facilities to streamline reporting and to increase transparency throughout the organization.

Other objectives the lab wanted to achieve with its new solutions were to:

- Improve communications
- Gain visibility of all open actions
- Eliminate backlogs
- Use resources more effectively
- Cut costs
- Improve data and information accuracy
- Maintain compliance with DOE-mandated CAS requirements
SOLUTION

A collaborative, easy-to-use, easy-to-integrate, and easy-to-configure system

INL initially deployed DevonWay’s Corrective & Preventive Actions (CAPA) solution, consisting of a suite of the following products:

- Issues Management
- Non-Conformance Reporting
- Request for Services
- Regulatory Screening
- Management Observations
- General Actions

The lab then incorporated these modules to eliminate stand-alone applications throughout the facility while creating a single point of entry:

- Maintenance Work Requests
- Lessons Learned
- Suggestions
- Audits and Assessments
- Inspections
- Action and Commitment Tracking
- Initial Notification Reports
- Safety Flashes
- Spill Notifications

Internally, INL refers to the complete solution suite as "LabWay." All DevonWay applications in LabWay natively integrate with each other and were configured to meet the needs of individual business units. And because the DevonWay interface is cleaner and more intuitive than other software solutions, lab users had an easy time learning the system.

Further, with clear assignments and due dates, management gained the tool it needed to accurately communicate expectations. Ad hoc reports and trigger-based notifications, both based on an in-memory search engine, now ensure that process owners can retrieve and share the real-time insights they need. Perhaps most importantly, managers are able to modify their reports without involving IT.
INL officials achieved immediate benefits resulting from the DevonWay solution—and they continue to see value in its implementation. For example:

1. A higher percentage of employees are using the CAS system, the result of its ease of use. And because the solution is entirely web-based, shortcuts available on the lab’s intranet facilitate rapid entry into various functions.
2. General line workers have experienced significant time savings compared to the legacy system when it comes to reporting issues, and CAS administrators have not only saved time by not having to repeat tasks—they are now spending more time analyzing the information that LabWay gives them.
3. Administrators are spending less time generating reports as they rely on the notification functionality available to all users, enabling reports to be automatically sent to them on their defined schedules.
4. Management engagement in performing workplace observations has increased.
5. Having a single point of entry for all issues has increased user engagement and reduced duplication.
6. All users are better able to stay aware of assigned tasks and their deadlines.
7. The number of overdue corrective actions and the average age of conditions has been reduced.
8. Managers are more aware of pending negative trends because they have increased visibility into possible issues.
9. The Audits and Assessments system has enabled the lab to meet its DOE-mandated CAS requirements.
10. All work processes have been simplified and are mirrored with application workflows—which has reduced confusion while tracking work completion.
11. Managers have greater visibility into work and resource utilization across the lab.
Having coped with outdated, stand-alone, difficult-to-manage systems for too long, Idaho National Laboratory needed a comprehensive, cohesive, collaborative system that reduced workplace inefficiencies and facilitated compliance with internal and Department of Energy regulations. On the recommendation of a lab executive who had worked with DevonWay before, INL incorporated a suite of easy-to-implement and easy-to-use solutions designed to solve its many challenges.

The benefits were immediate and numerous, compelling the lab to continue its digital transformation with DevonWay. As a true and trusted partner, DevonWay has continued to expand its solution set to continue to meet changing needs.

The success of the DevonWay implementation was noticed on a national level: It was awarded Project of the Year at the 2014 National Laboratories Information Technology (NLIT) Summit.

Moving forward, the lab anticipates incorporating more proactive measures to address problems before they become significant events. Another priority for INL is to allow users to initiate observations and issues using mobile devices, eliminating the need for users to be at their desks to perform those tasks.

"Partnering with DevonWay was the right choice for our complex structure and variable interface needs. We have yet to find a workflow that DevonWay couldn’t model."

— Chris Hott, Director of Laboratory Performance, Idaho National Lab