

DevonWay CAS: Contractor Assurance System for the DOE Complex

Contents

DevonWay CAS Overview		3
	Benefits	3
	Quality Standards	3
	Security	3
	Regulatory Integration	3
	Procedural Integration	4
	Process Integration	4
	DOE Use and Integration	4
	External System Integration & Record Retention	4
Features		5
	Rapid Replacement of Homegrown or Outdated Systems	5
	DevonWay Reporting, Business Intelligence & Notifications	5
	Mobile Support	5
	Universal Trending	5
	Cloud Independence	5
K	ey Components	6
	Assessments & Audits	6
	Issues Management	6
R	elated Activities	8
	Regulatory Screening	8
	Nonconformance Reporting	8
	Other Related Applications	9
Ν	fore Information	. 9

DevonWay CAS Overview

DevonWay CAS is the recognized market leader in software products for Contractor Assurance Systems (CAS, or iCAS, for integrated Contractor Assurance System) within the Department of Energy (DOE) Complex. DevonWay CAS is the only SaaS, commercial-off-the-shelf (COTS) software that meets the oversight compliance needs of the DOE, its prime contractors, and their subcontractors.

DevonWay CAS advances site adherence to DOE oversight policy contained in DOE O 226.1B and reduces costs of maintaining multiple legacy systems. It supports regulatory, quality, security, and process changes that vary by site, by mission, or by organization within a site.

DevonWay CAS provides a single point of entry for all Quality and CAS-related work activities, thus reducing the number of systems that employees are required to use and providing a clearinghouse for all CAS data for easy reporting.

Benefits

DevonWay CAS reduces risks of DOE non-compliance while reducing the costs associating with maintaining multiple systems, gathering siloed data for reporting, and training on new systems.

- Mobile capabilities enable use from field to office, online and off.
- Rapid deployment replaces outdated systems 100% implementation project success.
- Meets site-specific requirements with configurable screens and workflows.
- Single point of entry reduces need for user training.
- Reporting and notifications are self-service.

Quality Standards

DevonWay CAS meets site-adopted quality standards, including NQA-1, ISO 9001. On all projects, DevonWay combines the experience of its own ISO 9001:2015 certification with that gained over 15 years of implementing quality management software in high-reliability industries including government, energy, nuclear waste management, biotech, weapons, and more.

Security

DevonWay CAS provides secure access and visibility to the DOE, prime contractors, and subcontractors through a unified database that makes data visible only to authorized users on a user basis and/or role basis at the record level, with full support for OUO (official use only) and UCNI (unclassified nuclear information) record types.

Regulatory Integration

DevonWay CAS fulfills the requirements for Federal Regulations and DOE Directives for each site and is configured (without code) to meet all applicable regulations and directives. For example, not all sites within the complex may be subject to 10 CFR 830 or Nuclear Quality Assurance requirements, but all are

likely subject to 10 CFR 851 or DOE Order 414.1D. Unneeded DevonWay CAS functionality can be removed to simplify the user experience.

Procedural Integration

DevonWay CAS integrates with existing procedures to minimize change control and personnel training. Different sites and other organizations using the same DevonWay CAS database can have their own procedures.

Process Integration

DevonWay CAS provides seamless integration of multiple CAS- and QA-related processes required by DOE O 226.1B and allows contractors to consolidate them into a single user interface and database. Integrating CAS and related processes reduces costs, speeds adoption, and increases transparency within the organization and to the DOE.

Specifically, DevonWay CAS integrates the required CAS and QA activities of Issues Management, Assessments, Observations, Lessons Learned, and QA Audits. For example, a QA Audit may reveal a finding that should be documented and resolved. During the audit, an issue is automatically created within DevonWay CAS and is linked to the source audit. Information from the audit is carried to the condition and the two items are linked. This provides valuable context and preserves the relationship of the two activities within the database.

DOE Use and Integration

For sites where DOE or other regulators use the same system, DevonWay CAS allows DOE users access to input issues directly. For sites where DOE uses separate system from those of its contractors, DevonWay CAS can automatically link to DOE's issues management and other databases. This allows regulators to input Issues into DevonWay CAS and track issue progress. Integration is optional but recommended to increase transparency and improve compliance with the DOE.

External System Integration & Record Retention

To achieve its fullest benefits, DevonWay CAS supports integration to closely related systems.

Examples include databases for human resources, records retention, and work requests. These integrations ensure proper records retention, timely service response, ease of use, and automatic updates of people and departments for accurate reporting and workflow routing.

Single Sign On enables one-click secure access to the system and eliminates the need for users to remember and maintain an extra set of login credentials, which additionally encourages use.

Features

Rapid Replacement of Homegrown or Outdated Systems

DevonWay reduces the cost and disruption of replacing homegrown and other outdated systems. DevonWay CAS saves each site vast amounts of time and financial resources while providing the "right fit" for each site and organization. DevonWay's agile, no-code platform enables quick configuration of layouts, business rules, and workflows without coding.

DevonWay can migrate data from legacy systems or databases to support historical reporting. And 100% of DevonWay implementation projects have gone into production since our founding in 2005.

DevonWay Reporting, Business Intelligence & Notifications

Built-in reporting and Business Intelligence make it simple for users to access the data they're authorized to view, create their own reports and notifications, trend the data, and perform meaningful analyses. For higher-level site-wide analysis, datasets can also be extracted to enable external reporting and BI systems to combine CAS/QA data with other site data.

Mobile Support

DevonWay CAS has strong support for capturing information while away from a computer, including:

- Native apps for all three major mobile operating systems (iOS, Android, and Windows)
- The ability to use the mobile app both online and offline
- Deployment through the public app stores or an IT-managed Mobile Device Management (MDM) infrastructure

Universal Trending

All discrete data captured in the system (trend codes, departments, significance levels, etc.) can be displayed on trend charts whose underlying profiles support statistical process control rules, heat maps, and outlier identification. The profiles are configurable by process owners, and resulting trend charts can be saved, exported, and shared with other users. The trend charts support full drill-down to help users uncover the underlying data.

Cloud Independence

DevonWay products are not tied to a particular Cloud. Customers choose to have DevonWay host and manage their application in our SSAE 16 Type II datacenter, or they can run DevonWay products onpremise or in a their private or hybrid Cloud.

Key Components

Assessments & Audits

DevonWay CAS Assessments provide a simple way to plan and schedule regularly conducted assessments, QA audits, surveillances, readiness assessments, and management observations. Since findings or areas for improvement are often identified by these activities, Assessments are linked directly to Issues Management. This provides ease of use for the lead assessor/auditor and preserves important relational information within the assessment activity and the finding.

Assessments within DevonWay CAS are linked to their applicable requirements and provide a simple interface for the assessor to enter results for each line of inquiry within the assessment. Assessments are digital and are linked directly to their requirements, the issues they revealed, and the full results set of the activity. This creates superior reportability in easy-to-understand formats that can be easily shared with the DOE to show the value and results of CAS assessment activities.

Examples of Regulations and DOE Orders Met by DevonWay CAS: Assessments and Audits

Code of Federal Regulations

10 CFR 830 - Nuclear Safety Management

10 CFR 851 - Worker Safety and Health Program

DOE Directives, Delegations and Requirements

DOE O 226.1B - Implementation of DOE Oversight Policy

DOE O 227.1A - Independent Oversight Program

Nuclear Quality Assurance Requirements

NQA-1-2008 and 1a-2009 - Requirement 16, Corrective Actions

NQA-1-2008 and 1a-2009 - Requirement 18, Audits

NQA-1-2008 and 1a-2009 - Requirement 2, Quality Assurance Program

DevonWay CAS Assessments includes built-to-spec planning and final reports. The planning report and final report include the site logo, a site-defined layout, and required information for manager approval. Reports are displayed on-screen to managers for quick and easy approval of the assessment plan and final reports. The approved final report becomes the retained document.

Issues Management

Issues Management is central to CAS, and all other DevonWay CAS apps integrate directly with Issues Management. Issues follow a workflow that ends in issue resolution. Issues can be identified by site employees, the DOE, or during other CAS activities (audits, assessments, etc.). I identified during other CAS activities are automatically linked to the identifying activity.

Examples of Regulations and DOE Orders for Issues Management

Code of Federal Regulations

10 CFR 830 - Nuclear Safety Management

10 CFR 851 - Worker Safety and Health Program

48 CFR 970.5223.1 - Integration of Environment, Safety and Health into Work Planning and Execution

DOE Directives, Delegations and Requirements

DOE O 151.1C - Comprehensive Emergency Management System

DOE O 225.1B - Accident Investigations

DOE O 226.1B - Implementation of DOE Oversight Policy

DOE O 227.1A - Independent Oversight Program

DOE O 232.2A - Occurrence Reporting and Processing of Operations Information

DOE O 422.1 - Conduct of Operations

Nuclear Quality Assurance Requirements

NQA-1-2008 and 1a-2009 - Requirement 15, Control of Nonconforming Items

NQA-1-2008 and 1a-2009 - Requirement 16, Corrective Actions

NQA-1-2008 and 1a-2009 - Requirement 18, Audits

Other

DOE-STD-1045-93 (CH 1) - Guide to Good Practices for Notifications and Investigation of Abnormal Events

Issues Management captures all types and categories of issues through a single point of entry and their workflow through to resolution. Examples include issues relating to safety, conduct of operations, oversight policy, investigation of abnormal events, and more. Corrective actions are created and assigned to the appropriate teams or individuals for resolution, with due date extension requests being routed back to the issue owner for extension approval.

In addition to standard corrective actions, Issues Management also includes mechanisms to catch potential regulatory issues and nonconformances to mitigate and eliminate such occurrences. Issues Management can trigger regulatory screenings, nonconformance reports, operability reviews, work requests, and other specified actions. Each type of action within an issue is separate from the issue itself and follows a separate workflow to support timely issue resolution.

Related Activities

Regulatory Screening

Although regulatory screening is optional for DOE contractors, the practice supports CAS and increases the level of assurance contractors provide to the DOE. When an issue involves a potential regulatory noncompliance, DevonWay CAS automatically generates a Regulatory Screen to facilitate a deeper dive into the potential noncompliance, including rectification and mitigation against future issues.

Example of DOE Orders for Regulatory Screenings

DOE O 232.2A - Occurrence Reporting and Processing of Operations Information

Applicable Federal Codes, DOE Directives, and industry-specific requirements vary for each site within the DOE Complex. DevonWay CAS Regulatory Screens are modified to screen for site-specific regulations that are at risk of being compromised (or in an already compromised state). Regulatory screenings are identified from issues management and created automatically when the issue is flagged as a non-compliance to a written requirement.

Examples of Items Screened for in Regulatory Screenings

- 1. Price-Anderson Amendment Act (PAAA) noncompliance
- 2. Worker Safety and Health noncompliance
- 3. Nuclear Safety Noncompliance Tracking System (NTS) Reportability
- 4. Any other regulatory compliances the site is subject to

Nonconformance Reporting

When an issue involves uninstalled equipment or components that do not conform with requested specifications, Issues Management creates a Nonconformance Report. DevonWay CAS documents the occurrence and facilitates reviews and responses from managers, technical authorities, and quality engineers to determine whether the nonconformance is acceptable.

Examples of Regulations and DOE Orders for Nonconformance Reports

Nuclear Quality Assurance Requirements

NQA-1-2008 and 1a-2009 - Requirement 10, Inspection

NQA-1-2008 and 1a-2009 - Requirement 15, Control of Nonconforming Items

NQA-1-2008 and 1a-2009 - Requirement 7, Control of Purchased Items and Services

Other

DOE-STD-1073-2003 - Technical Standards Program

DOE-STD-1066-2012 - Fire Protection



Other Related Applications

DevonWay CAS can integrate with parallel activities in other DevonWay applications, including inspections, operability reviews, work requests, action tracking, and specialized communications. These apps support DevonWay CAS by feeding into it or by facilitating actions arising out of it.

Operability and Functionality Reviews - Created from Issues Management workflow

Reviews are triggered as part of issue resolution to help resolve issues that impact worker safety where structures, systems, or components are degraded or need to be modified. Engineers, operators, and other determine if the SSC is operable and what, if any, functional and compensatory measures are to be taken.

Work and Service Requests – Created from Issues Management or Assessment workflow, or two-way integration to external systems (such as Maximo, Asset Suite, etc.)

Requests are triggered as part of assessment completion or issue resolution. Maintenance Work Requests, Base Freight Work Requests, and Lock Shop Service Requests are easily generated and linked to the related issue or assessment. Integration with existing systems provides two-way updates between DevonWay CAS and the external system and a fast and simple employee user interface for addressing and resolving issues.

Inspections and Similar Activities - Generate linked issues and actions

Regular inspections, inventories, drill exercises, and similar activities are an important part of good operating procedure and a safety-conscious work environment. DevonWay CAS Inspections supports these activities and links to issues management for easy documentation and resolution of issues identified by these activities.

Action & Commitment Tracking - Generate linked actions

Action and Commitment Tracking is an easy way for managers and organizations to create, manage, track, and report on general actions and agendas. This is a management tool for important actions that may not rise to the level of "issues" that relate to safety, health, quality, or emergency management. Actions can be linked to issues or assessments.

Special Communications - Generate linked issues and actions, send customized & professional email notifications, flashes, bulletins

DevonWay CAS Communications are built for specialized scenarios, such as spill notifications, safety bulletins, operating experiences, and more. Communications are linked to issues management to automatically create an issue when the notification is sent or approved. Custom distributions can be built on-the-fly, or you can manage site-managed distributions.

More Information

Visit www.devonway.com for more information about DevonWay and to contact us.