

ONE

Asset Integrity Management Software



Offshore • Subsea • Onshore

Integrity management for all components and infrastructure.

ONE - past, present and future efficiency

ONE - Asset Integrity Management Software

Enables engineers with exactly what they need to do, on a daily basis: **make decisions**.

ONE provides each client with a single source of knowledge and fact. **Standardised and centralised**, without reverting to spreadsheets or legacy systems.

By reducing the number of systems used to **track anomalies and components**, ONE enables increased visibility and accountability within organisations.

ONE's functionality continues to be specified by **oil & gas experts**, Integrity Engineers and consultants from around the world, developed by IQ Integrity into the **new standard** for Asset Integrity Management Software.



Trusted to support multi-discipline asset integrity on worldwide Offshore, Onshore, Subsea and Pipeline assets

Feature Modules

Anomaly / Defect Management

Track anomalies throughout their life cycle, from the point they are discovered, managing all repair and mitigation tasks, to final close out on any asset and component type.

Workpacks / Mobile Workforce

Create workpacks and send to your workforce in a choice of PDF or Mobile Device tasks. Works with any compatible device, including intrinsically safe hardware.

Risk Based Assessment (RBA)

Transparently generate RBA's and calculated inspection frequencies; on any component or other system element.

Component Asset Register

Dynamically adjusts to suit your evolving asset register requirements. Record any information for any component, at a level that suits your organisation.

Performance Standards

Complete Performance Standard module functionality, including change management. May be linked to Components and barrier management.

Reporting and KPIs

Centralised Performance Management, allowing reporting on a per Asset or Field level, from component status through to individual task tracking.

Key Benefits

ONE sets the new standard for Asset Integrity Management Software.



Efficiency

Streamlined and comprehensive standard workflows, to enable informed decisions and reduce user errors.



Accountability

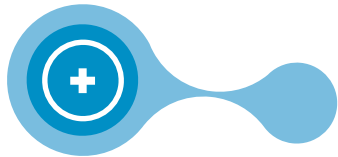
Full transparency on all user generated actions and data changes throughout the application.



Cost Reduction

Reduce multiple handling of data, saving time and money while maintaining the integrity of each asset.

ANOMALY / DEFECT



Anomaly Details

Easily search and associate a component to the anomaly. Add information including leak state, priority, location and damage mechanism.



Testing Information

Record and trend testing and inspection information for multiple points and features for each anomaly.



GPS Location

Using either Latitude/Longitude or Easting/Northing, store multiple GPS information for each Anomaly. Overlay components and anomaly data on combined heatmaps.



Documents / Pictures / Videos

Upload documents, pictures and videos for each anomaly. User defined file categorisation allows for easy finding of key information, from a central source.



Integrity Recommendation

From initial anomaly discovery, through mitigation and to close out, authoritative recommendation and updates are recorded by key personnel on each anomaly.

In 2009, we asked the **North Sea integrity management community** what the requirements were to manage their multiple common repair registers and remove the historic problems; which were predominately centered around spreadsheets. We applied our software engineering knowledge and created the first **standardised anomaly management system**.

Defects includes our **industry standard anomaly creation wizard** to ensure the information you need is captured from the initial reporting of the issue.

Supporting **documents, images and video clips** can be stored within each anomaly. Users add recommendations, assessments and review

comments directly to each anomaly record. All changes to the anomaly details, status or completion timeline, **require a justification comment**, which is stored in each anomaly's individual history log.

Providing a **fully transparent and comprehensive history** log helps ONE users manage anomalies appropriately and to a safe conclusion, which also assists during HSE and compliance audits. A range of **remediation and mitigation task types** may be added to each anomaly, to detail the work which the assessment driven outcome requires.

An **extensive range of live and historic anomaly reports** have been developed based on client

users requests - to visually represent the status, parameters and monthly trends of all anomaly types.

This reduces the time to **collate key management information**, in some cases from days and hours, to a click of a button.

Our clients still tell us that there is no other anomaly management system for oil & gas operators, that offers a fraction of the benefits which ONE provides for them.

ONE has **completely revolutionised our clients anomaly management**: reverting back to spreadsheets is not an option.

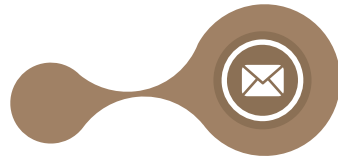
“The implementation of ONE has significantly increased the visibility and control of anomalies, therefore reducing the overall risk profile of our assets.”

Kevin Young, Asset Integrity Team Leader for BG-Group



Tasks

Create unlimited independent tasks, and sub-tasks, per anomaly. Each task can be assigned against key departments, groups or individuals, with their own completion dates and priority.



Send Notification

Email the relevant user group for the asset / anomaly, keeping them updated on the progress of the anomaly at any stage.



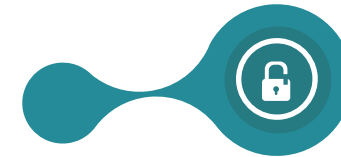
Assessment / Review

All staff – onshore and offshore, can assess and review the anomaly at any time, providing advice and updates where appropriate.



Completion

As each task is independent, these can be marked as completed during the lifecycle of the anomaly. Once all tasks are complete, the anomaly may be closed by authorised users.



Close Out

Closing the anomaly indicates all the tasks and supporting work have been completed. All Open and Closed anomalies are searchable.

Additional Features:

- Use on any asset type: Offshore, Onshore, Subsea & Pipelines
- Use with any equipment types, including Pressure Containment; Structural; Mechanical; Pipeline
- Industry standard workflows and customisable actions
- Wizard based anomaly creation workflow
- Single solution for all anomaly types including Fabric Maintenance; Engineering replacements and repairs; Temporary Repairs.
- Stores ongoing assessments, recommendations and comments

- Capture authoritative reviews and sign offs
- Calculate and record risk and/or priority per anomaly
- Integrates with ONE’s Component Asset Register
- Over 30 live and historic trend reports
- Import legacy repair register data and documents
- Recognised best practice solution by the UKCS Step Change in Safety organisation
- Exceeds requirements of UK HSE-OSD KP4

Module Benefits:

- Central source of anomaly management, analysis and reporting
- Drives standardised anomaly data input from discovery to closeout
- Visibility of all anomalies on multiple assets in a single window
- Maintains a live Temporary Repair register
- Improved risk perception and visibility
- View open & closed records by dates, system, location and a range of search parameters
- Apply remedial and mitigation task types
- Track & trace progress by task type, assigned action party and due dates
- Knowledge overview benefits from day ONE
- Fast implementation and rapid efficiency improvement
- Minimal training required, standard users require less than an hour on average.
- Readily adopted, accepted and relied upon by personnel at all levels and job roles.
- Large reduction in administration time and upkeep of anomaly information
- Cost reduction by using up to date information for informed decisions

COMPONENT ASSET REGISTER

ONE's Component Asset Register is the backbone for all integrity modules.

Each Asset - which is a physical site - has its own **independent component asset register**. Standard templates and terminology ensure common references and reporting across the entire organisation.

This module is a highly functional replacement for the many spreadsheets which may be in use by integrity engineers **onshore and offshore** to assist with their daily work.

ONE may also be used to replace complex older systems which may not provide the **ease of operation** and flexibility built into ONE.

After consulting with many asset integrity professionals, regarding their ideal Component Register, they requested a **modern and flexible alternative** to their legacy systems.

Key to the module is a system of rapidly **configurable attributes** and equipment templating, **defined by each client**.

This enables large or small changes **without any time delay**.

ONE's Component Asset Register was built to enable key functions foremost, **reducing complexity** and simplifying operations.

When delivering ONE, the Component Asset register is implemented and configured to **meet your company requirements** at every level.



Additional Features:

- Standard solution for all component registers
- Use on any asset type: Offshore, Onshore, Subsea & Pipelines
- Use with any equipment types, including Pressure Containment; Structural; Mechanical; Pipeline
- Easily customisable content structure and terminology
- Store fixed and updateable attribute details for any equipment type
- Links to anomalies on each component
- Add one-off or repeating maintenance, inspection and other task types
- GPS references to overlay with built in map views
- Condition monitoring storage attributes
- Links to Systems, Performance Standards, fluid types and all other asset definitions
- Links to Risk Based Assessment module
- Import components and all data from external sources

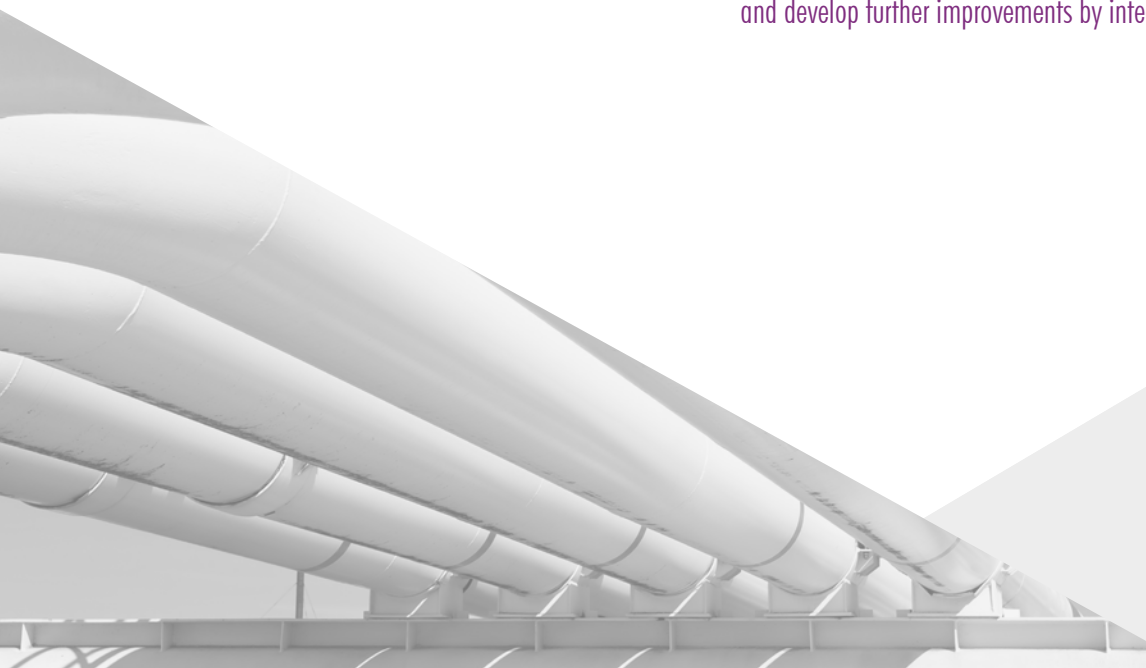
Module Benefits:

- Single point of reference for all components and related activity on all sites
- Live bi-directional link to anomaly records per component and sub components
- Automatically include component data within anomaly records
- Helps with maintaining production availability
- Enables a 'build as you need' approach, reducing implementation time
- Operating status history and dynamic dashboards
- Maintenance shift handover outputs and knowledge base
- Central P&ID register per site, linked to components
- Search for components by any combination of attribute values or ranges
- Reporting outputs by component and equipment type
- Easy to use, no complex user interface

“ONE gives us a simple but robust means of managing data, with a single repository accessible for all of our Assets. The efficiencies created with ONE, remove those inflexibilities and the pitfalls normally associated with a spreadsheet.

Importantly, the ONE system offers a cost effective tool and its structure enables the user to build their maintenance and integrity platform and develop further improvements by integrating other critical parts of the business to represent a clear image of plant and equipment health and risk. The opportunities are endless . . .”

Craig Reid, Mechanical Engineering Technical Authority, Apache North Sea



WORKPACK / MOBILE WORKFORCE

Efficiency is key to the inspection, verification and collection of data from assets and components.

To improve the overall quality of the information, the number of times data is manually handled must be reduced.

ONE enables the sending of any Task or Component related information request, to any compatible device, including intrinsically safe hardware.

ONE streamlines the entire process. Work templates are pre-created and used, to

ensure terminology and data gathered is consistent throughout the organisation.

From the initial task being sent to the Inspection or Maintenance Teams, through to the return of the results, ONE automatically processes all of this information, reducing manual data handling and achieving greater efficiency and cost reductions.

Module Benefits:

- Reduce errors from re-typing 3rd party data
- Dynamic updating of task completion
- Send and Receive live information in wifi-data zones
- Allows offline and remote location use

“ONE has changed the way we look at and manage our anomalies. The centralised system has many more advantages for our integrity process than was possible with our heritage systems.” Jim Saunderson, Mechanical TA for Apache North Sea

GEOSPATIAL MAPPING

All Components and Anomalies within ONE can optionally be assigned multiple GPS co-ordinates, allowing for the displaying of positional information including anomaly heatmaps and other client data.



RISK BASED ASSESSMENT

Each client manages their RBAs in a way that is unique to their workflow. ONE's flexible RBA module enables a mix of qualitative and quantitative methods.

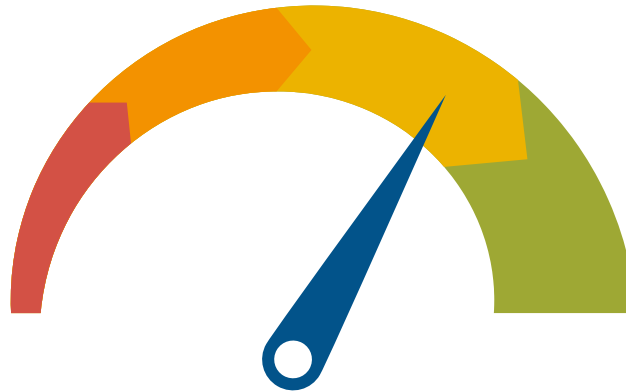
This module enables per **client methodology** to record your judgement, producing suggested **internal and external inspection** frequencies based upon the risk factors calculated from your inputs.

Used on corrosion circuits, pipework and pressure vessels, structural or **any other equipment type**.

Integrity threats are associated as templates to each component equipment type, to mirror your organisations process. Each **threat is ranked** by Susceptibility and Consequence, with required Mitigation recording.

The **risk is calculated** by using 'worst case' and output through copies of your internal and external risk matrix settings. This risk is then referred against your **integrity confidence** value to generate the inspection frequencies.

Supporting **documentation and images** may be stored inside each RBA. The RBA 'task' is then



set to be due for review according to the **agreed inspection frequency** due date.

Each RBA may be superseded to **enable history tracking** and review of previous decisions and documentation, without re-input of the default data each time.

ONE RBA is a completely configurable module, which is implemented to **suit your requirements**.

Features:

- Entire RBA analysis in a single wizard driven system
- Threat factor templates for any equipment type
- Link to condition state data on each component
- Uses your standard Probability, Consequence and Confidence levels
- Uses your risk and inspection matrices and gradings
- Outputs risk and frequency for internal and external inspections
- Supersede RBA's, re-use without starting from the beginning each time
- Upload documents and images to each RBA

Module Benefits:

- Simple and rapid risk assessment recording
- Easy to learn and use
- Works with any integrity model
- Minimal data setup required

PERFORMANCE STANDARDS

Complete Performance Standards module with Verification, Compliance and Change Management workflows.

Specifying performance expectations for components, infrastructure, roles or duties, is what makes Performance Standards a **key function** within an organisation.

Performance Standards are **comprehensively managed** in ONE as parent-child tree structures to any level, with **total control of content and details**.

Performance Standards may be **associated to any component or process**, with verification activities to monitor compliance. A **change management** module provides **complete transparency** over suggested changes to performance standards and final outcomes.

“Apache have added a performance standard aspect which allows real time updates to performance standards with TA and Tech Safety sign off.”

“The result is that the changes (agreed and proposed) to performance standards can be viewed in ‘real time’ and Apache have a record of all changes with the associated governance.”

Phil Rothnie, Verification Engineer, Apache North Sea Limited.

Features:

- Per site listing of Performance Standards and Associated Assurance Routines
- Parent-Child-Grandchild hierarchy with unlimited levels
- Allocate Performance Standards to Components & Anomalies
- Report on quantity of anomalies per Performance Standard
- Live performance standard documents, all text sections and print version
- Interface with Verification Management Module
- Change management Request & Review process

Module Benefits:

- Single source working version of Performance Standards
- Exports for document management systems
- View available to all authorised users, edit restricted to Admins
- Basis for live Verification system and action tracking
- Promotes SCE/SECE compliance

REPORTING / KPI

Listening to our clients requirements, has enabled ONE to become a powerful reporting tool.

Previously data gathering for integrity management reporting would take hours or days, particularly for annual reports.

With a simple click of a button, graphical reports can be generated,

detailing live and historic information.

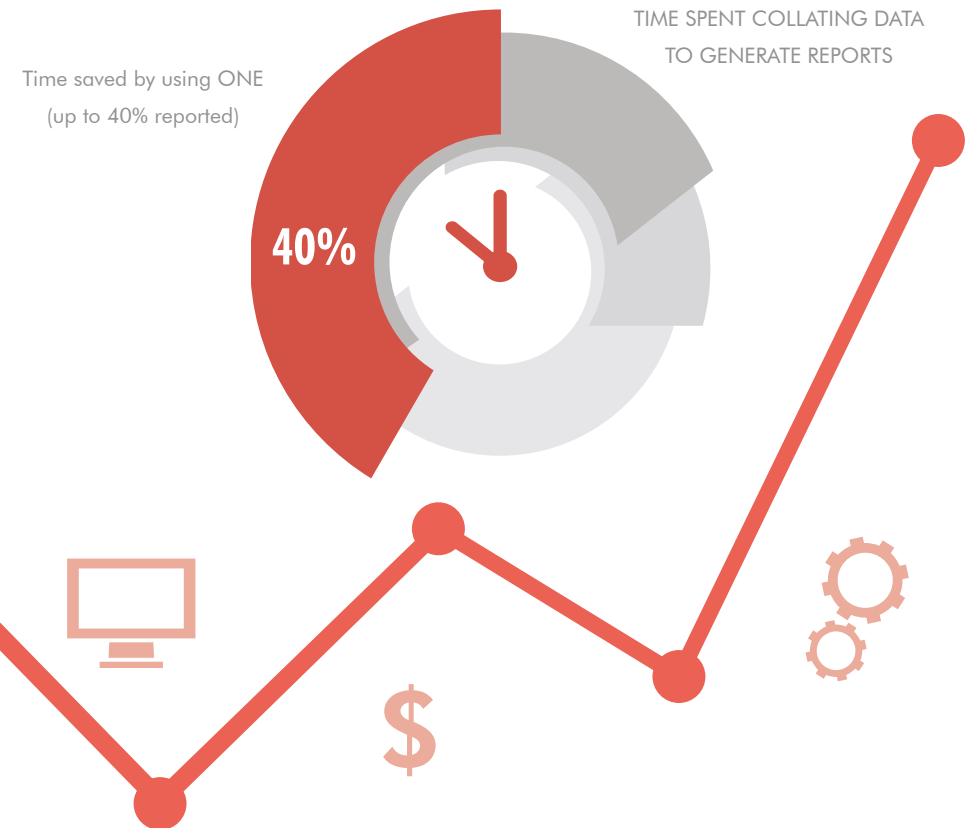
Each report can be exported as an image or PDF format, allowing it to be used to support other business information and KPI data.

All of the reports within ONE have been developed to meet specific Oil & Gas reporting requirements.

Key reports include:

- **Field Reports** - compare results across multiple Assets
- **Component** - open/closed anomalies per component
- **Location** - breakdown of each module, deck or asset
- **Discipline** - e.g. Mechanical; Pressure Containment; Structural
- **Action Party / Responsible Group** - task totals per group
- **Tasks** - e.g. Verification; Maintenance; Anomaly
- **System** - e.g. Containment; Deluge; Control Systems
- **Temporary Repairs** - e.g. Wraps and Clamps of all types
- **Leaks** - e.g. Yes / No; Major; Minor; Weep; Seep
- **Anomaly** - e.g. Open / Closed; damage mechanism;
- **Risk / Priority** - by client definable gradings and timeframes

“What is the cost of making decisions and planning based on out of date information?”



“ONE’s transparency and action tracking is absolutely total, the quality of information has increased significantly. It has cut about 40% off the administration time and we have an audit trail that makes compliance easier.”

Jim Saunderson, Mechanical TA for Apache North Sea



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FEATURE MODULES

- **Anomaly / Defect Management**
- **Component Asset Register**
- **Workpacks / Mobile Workforce**
- **Risk Based Assessment (RBA)**
- **Performance Standards**
- **Reporting and KPIs**

FEATURES

- Use on any asset type: Offshore, Onshore, Subsea & Pipelines
- Use with any equipment type: including Pressure Containment; Structural; Mechanical; Pipeline
- Adapts to your workflow and terminology
- Store documents, images and video clips
- Comprehensive reporting of live dynamic and historic trends
- Customisable user permissions and security profiles
- Designed by users approach for effective solutions to real issues
- Web based, secure and accessible anywhere at anytime
- Simple to use interface with powerful functions

BENEFITS

- Average 40% time saving plus efficiencies and cost reduction
- Instant access to your information: any time, any where
- Runs on any browser or tablet with an internet connection
- No local software or dedicated hardware to install or maintain
- Cost reduction through your increased knowledge efficiency
- Promotes information standards and higher quality data input
- Assists all audit & compliance through total information transparency
- Handheld device integration for tasks and inspections
- Works on low bandwidth connections
- Minimal training required

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