

Reporting Modernization with Elixir Repertoire



Introduction

In a world increasingly driven by data, the ability to produce reliable, timely, and actionable reports remains fundamental. Reports are not just files; they are the daily language of decision-making, compliance, communication, and public accountability. From policy briefs and financial statements to medical dashboards and citizen notices, reporting tools form the backbone of many public and enterprise systems.

For over two decades, Elixir Repertoire has been at the heart of mission-critical reporting across the globe. It has supported multi-lingual document generation in the Middle East, citizen correspondence systems in Asia, and internal dashboards for government agencies, banks, and hospitals. Some of these deployments have operated uninterrupted for more than 15 years, proof of Repertoire's reliability and of the vital role reporting plays in sustaining institutional trust.

Today, expectations surrounding reporting have grown. Users want more than static outputs, they expect interactive dashboards, real-time access, cloud integration, and cross-platform delivery. Many organizations still rely on trusted solutions such as SAP® Crystal Reports®, which have served them well for decades. These tools were created in a time before APIs, smartphones, and distributed data architectures, and while still valuable, organizations increasingly need platforms that extend into today's dynamic requirements.

This use case explores how organizations can modernize their reporting infrastructure by evolving from Crystal Reports® to Elixir Repertoire.

The Challenges

SAP® Crystal Reports® set the gold standard for enterprise reporting and has served organizations reliably for decades. However, with support for Crystal Reports® 2016 already ended and Crystal Reports® 2020 approaching its end-of-life in 2026 (SAP® Crystal Reports®, n.d.), many organizations are beginning to plan their next steps. As technology landscapes evolve, continued reliance on earlier-generation tools can introduce challenges such as:

1. Security and Maintenance Risks

Once a product reaches end-of-life, updates become limited. For industries such as government, healthcare, and finance, this introduces compliance and cybersecurity considerations.

2. Fit with Modern Infrastructure

Crystal Reports® was designed primarily for on-premises use. While it can still integrate into hybrid setups, doing so often requires additional middleware or custom development. Native support for cloud platforms, APIs, and microservices is limited.

3. Support for Real-Time and Emerging Data Sources

Modern reporting often requires integration with real-time streams, IoT data, and NoSQL databases. Crystal can connect with some of these, but typically through additional workarounds.

4. Scalability Considerations

Scaling Crystal to meet today's distributed, high-demand environments may involve infrastructure investments or optimization efforts.

5. User Experience Expectations

Users now expect browser-based, mobile-friendly, and interactive reports. Crystal continues to excel in producing highly formatted outputs but was not designed for modern UX expectations.

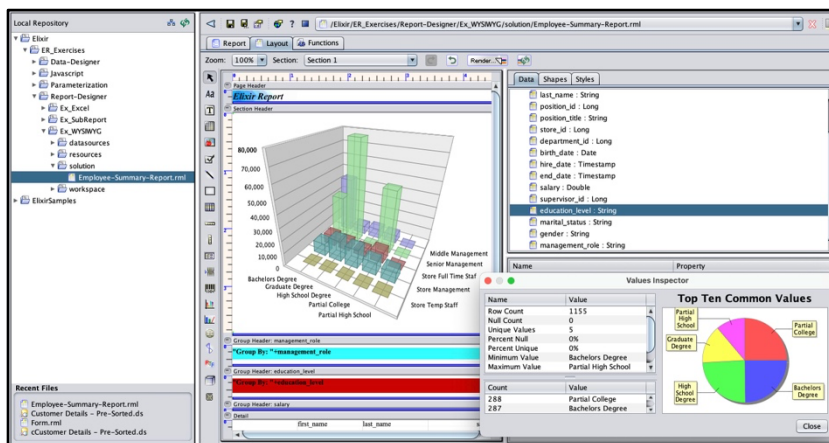
6. Total Cost of Ownership

Maintenance, integration work, and a shrinking pool of experienced Crystal developers can contribute to higher long-term costs.

The Elixir Repertoire Approach

Elixir Repertoire provides a forward-looking platform for organizations ready to evolve beyond Crystal Reports®. Rather than a replacement in the strict sense, it is best seen as the next step, honouring Crystal's legacy while extending capabilities into today's data-driven world.

Repertoire offers a comprehensive reporting ecosystem, combining:



- A drag-and-drop Report Designer with scripting features

The screenshot displays the ETL engine interface. On the left, a 'Chains' pane shows a workflow with steps like 'Read API URL', 'JSON Reader', 'Chain Call G', 'Chain Call H', 'Date Extractor', 'Rename Field', 'Rename Field', 'Change Field Types', 'Decode Weekday', 'Chain Call I', 'Rename Field carpark_n...', 'Read API URL', 'JSON Reader', 'Chain Call G', 'Chain Call H', 'Date Extractor', 'Rename Field', 'Rename Field', 'Change Field Types', 'Decode Weekday', 'Chain Call I', 'Rename Field carpark_n...', 'Read API URL', 'JSON Reader', 'Chain Call G', 'Chain Call H', 'Date Extractor', 'Rename Field', 'Rename Field', 'Change Field Types', 'Decode Weekday', 'Chain Call I', 'Rename Field carpark_n...'. The main pane shows the 'Results' of the workflow, with columns for 'timestamp', 'update_datetime', 'total_lots', 'lot_type', 'lots_available', 'result', 'timestampYear', and 'timestampC'. The results table shows 8 rows of data.

timestamp	update_datetime	total_lots	lot_type	lots_available	result	timestampYear	timestampC
12/17/2024 6:00:33 PM	12/18/2024 1:59:28 AM	105	C	86	false	2024	4
12/17/2024 6:00:33 PM	12/18/2024 1:59:29 AM	583	C	220	false	2024	4
12/17/2024 6:00:33 PM	12/18/2024 1:59:28 AM	329	C	183	false	2024	4
12/17/2024 6:00:33 PM	12/18/2024 1:59:17 AM	97	C	34	false	2024	4
12/17/2024 6:00:33 PM	12/18/2024 1:59:29 AM	97	C	16	false	2024	4
12/17/2024 6:00:33 PM	12/18/2024 1:59:12 AM	176	C	44	false	2024	4
12/17/2024 6:00:33 PM	12/18/2024 1:59:25 AM	228	C	170	false	2024	4
12/17/2024 6:00:33 PM	12/1/2024 4:05:29 PM	289	C	288	false	2024	4

- A built-in ETL engine for data preparation and transformation

The screenshot displays the Report Portal interface. The top section shows the 'Master-Detail Report' configuration, including the path, priority, status, engine, and job type. The bottom section shows the 'Result' of the report, which is a PDF document titled 'Employee Report by Department'. The PDF content shows a table of employee data for Department 1, including columns for Employee ID, Employee Name, Hire Date, and Gender. The table lists 10 employees.

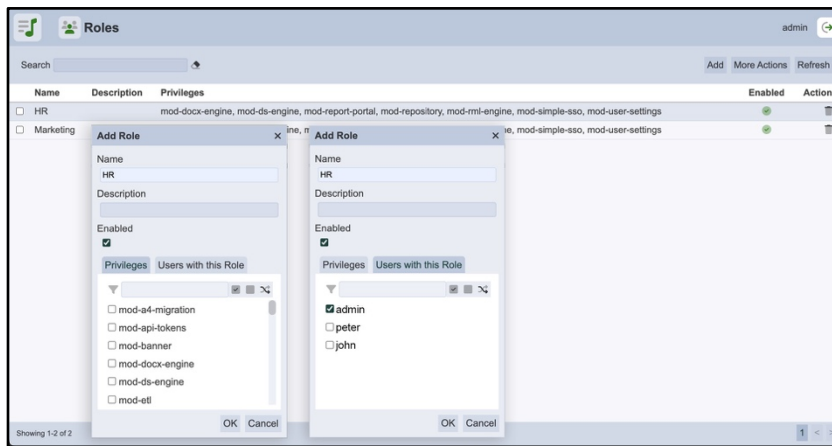
Employee ID	Employee Name	Hire Date	Gender
21	Robert Lewis	20-12-94	M
61	Dell Goss	29-01-95	F
82	Deborah Campbell	18-03-95	M
Total for Department 1: 3			
Employee ID	Employee Name	Hire Date	Gender
1	Sam Newman	10-12-94	F
25	Ella Cusley	24-12-94	F
81	Bobby Blanton	18-03-95	M
92	Shawn Whitney	01-03-95	M

- A web-based Self-Service Report Portal

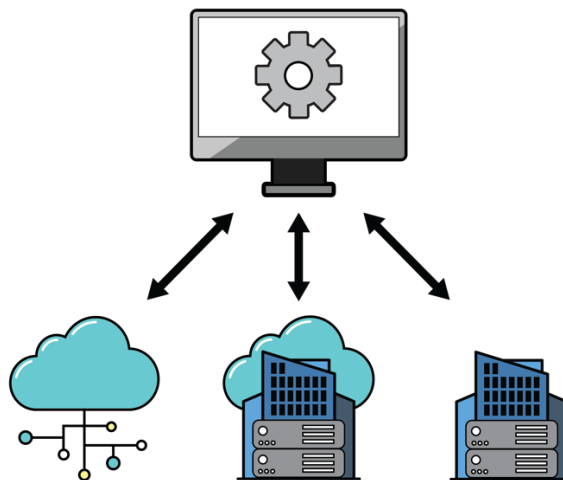
The screenshot displays the Scheduler interface. The top section shows a search bar and a 'Refresh' button. The main section shows a table of scheduled jobs, including columns for Name, Owner, Description, Enabled, In Progress, Last Run, Next Run, and Actions. The table lists 10 scheduled jobs. A 'Status Viewer' dialog is open, showing details for the '16 Run Trigger - Run Weekly' job, including its name, chain, parameters, and record count.

Name	Owner	Description	Enabled	In Progress	Last Run	Next Run	Actions
* 10 Trigger - Run Weekly - No Calendar	john	Pos scenario - Run Mon-Fri (working day) at 09:12am	Yes	Yes	2024-07-02 09:12:00	2024-11-28 09:12:00	ⓘ ⚙ ⚡
* 11 Trigger - Run Monthly - No Calendar	john	Pos scenario - Run monthly for Day 24 at 9am	Yes	Yes	2024-08-24 09:00:00	2024-12-24 09:00:00	ⓘ ⚙ ⚡
* 12 Trigger - Cron Expression - No Calendar	john	Pos scenario - Every day at 10 AM	Yes	Yes	2024-11-27 10:00:00	2024-11-28 10:00:00	ⓘ ⚙ ⚡
* 13 Run Trigger - Run Hourly, Same Cron Job	john	Neg scenario - Run hourly every 1hr 15mins, cron expr at 14:15 - Result: run at 14:15 only	Yes	Yes	2024-11-27 14:15:00	2024-11-28 14:15:00	ⓘ ⚙ ⚡
* 14 Run Trigger - Run Hourly, Same Cron Job	john	Neg scenario - Run hourly every 1hr 15mins, cron expr at 14:15	Yes	Yes	2024-03-27 14:37:48	2024-11-28 14:37:48	ⓘ ⚙ ⚡
* 15 Run Trigger - Control with Cron Expression	john	Pos scenario - Test data for AM-244	Yes	Yes	2024-07-03 01:00:00	2024-11-28 01:00:00	ⓘ ⚙ ⚡
* 16 Run Trigger - Run Weekly	john	Pos scenario - Test data for AM-307	Yes	Yes	2024-07-03 00:00:00	2024-11-28 00:00:00	ⓘ ⚙ ⚡
* 17 Run Trigger - Run Once Only	john	Pos scenario - Test data for AM-307	Yes	Yes	2024-07-01 00:00:00	2024-12-01 00:00:00	ⓘ ⚙ ⚡
* 18 Run Trigger - Run Monthly	john	Pos scenario - Test data for AM-307	Yes	Yes	2024-07-01 00:00:00	2024-12-01 00:00:00	ⓘ ⚙ ⚡

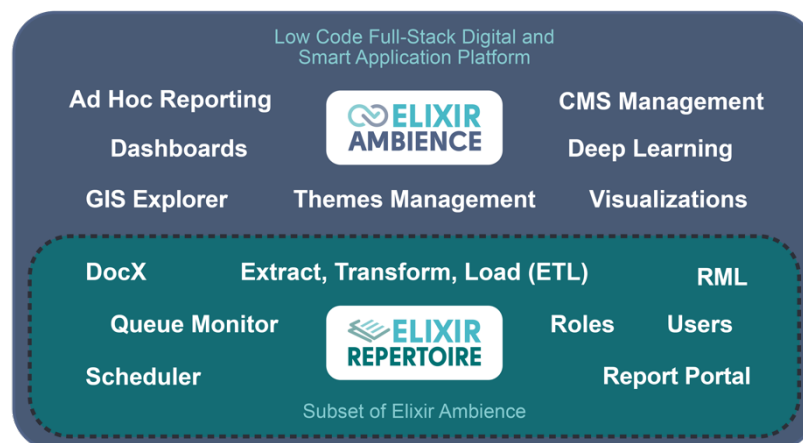
- A Scheduler and Queue Monitor for load management and automation



- Role-Based Access Control for secure data access



- Full flexibility for on-premises, cloud, or hybrid deployment



- Integration with the broader Elixir Ambience platform for dashboards, automation, and orchestration



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Comparing Elixir Repertoire and Crystal Reports®

- **Migration Path**

Crystal has been deeply embedded in organizations for decades. Recognizing this, Repertoire provides a structured, low-disruption pathway to modernize. Report logic and templates can be adapted using its designer, and data connections re-established through the ETL engine. By inventorying Crystal assets, mapping dependencies, and validating results, organizations can migrate at their own pace while minimizing disruption.

- **Data Connectivity & Real-Time Capabilities**

Crystal connects well to traditional databases and remains strong in SQL reporting. Repertoire extends this with native connectivity to a broader range of data sources including APIs, MQTT, NoSQL, and streaming data. For organizations moving toward IoT or event-driven architectures, this flexibility reduces reliance on custom workarounds.

- **Data Preparation and Transformation**

Crystal shines in formatting and structuring reports. Repertoire complements this by embedding a full ETL layer for data cleansing, enrichment, and transformation, reducing the need for external middleware and supporting faster preparation for real-time reporting.

- **Scalability**

Crystal's architecture was designed for centralized environments, and while it can scale, it often requires additional investment. Repertoire's distributed design supports horizontal scaling for large datasets and concurrent users, making it suitable for organizations facing rapid growth.

- **Deployment Flexibility**

Crystal remains well-suited for on-premises reporting needs. Repertoire adds cloud-native deployment, hybrid flexibility, and containerization options for organizations adopting modern IT strategies.

- **Extensibility & Productivity**

Crystal remains strong in producing structured, highly formatted reports. Repertoire expands on this with built-in scripting (JavaScript) and an open API layer, enabling advanced customization, integration with CI/CD pipelines, and automation of report workflows.

- **User Experience**

Crystal's desktop-oriented design continues to produce excellent fixed-format outputs. Repertoire builds on this by enabling browser-based interactivity, drill-down exploration, and mobile responsiveness for today's diverse user needs.

- **Security & Compliance**

Crystal has long supported secure enterprise reporting. Repertoire further incorporates role-based access, encryption, and audit features aligned with current security practices, especially important in regulated industries.

- **Platform Integration**

Crystal Reports® has been a trusted, standalone reporting tool. Elixir Repertoire, as part of the Elixir Ambience platform, integrates natively into dashboards, workflows, and analytics, positioning it as a foundation for broader digital transformation.

A Trusted Platform for the Future

Elixir Repertoire is trusted across industries and continents, from national-level agencies in the Middle East to hospital systems in Southeast Asia. It has remained stable and reliable through natural disasters, policy transitions, and global events, supporting mission-critical operations.

The transition from Crystal Reports® is not about replacing the past, it is about building on it. Crystal Reports® laid the foundation for decades of enterprise reporting success. Elixir Repertoire respects that legacy while extending it into a future of real-time data, cloud-native architectures, and interactive user experiences.

As organizations plan for the future of their reporting infrastructure, Elixir Repertoire offers a platform for progress. It is designed to be flexible enough to address current reporting needs and capable of enabling future growth.

The Next Step

If your organization is evaluating the next step in its reporting journey, now is the time to explore how Elixir Repertoire can support your transition. Speak with our team to assess your current Crystal Reports® environment, map out a tailored plan, and see how you can unlock new reporting capabilities without losing the stability and trust you've built over the years.

Visit www.elixirtech.com or contact us [HERE](#) to begin your modernization journey.

Reference:

SAP® Crystal Reports®. (n.d.). In *SAP® Help Portal*. Retrieved August 15, 2025, from https://help.sap.com/docs/SUPPORT_CONTENT/crystalreports/3354088411.html?locale=en-US