

Service Definition Document for Axiell Collection Management System

Product Overview

Axiell Collections

A comprehensive application for the cataloguing and management of multi-discipline collections. Some examples of the data our clients currently manage include art collections (paintings, prints, sculpture and 3-D objects, photography, textiles, digital objects), cultural collections (Ethnology, Anthropology, Archaeology, Science and Technology, Numismatics), Archives, Film Archives (compliant with FIAF international film standard EN 15907), Library Collections and more. Organisations can manage both physical and digital collections side by side.

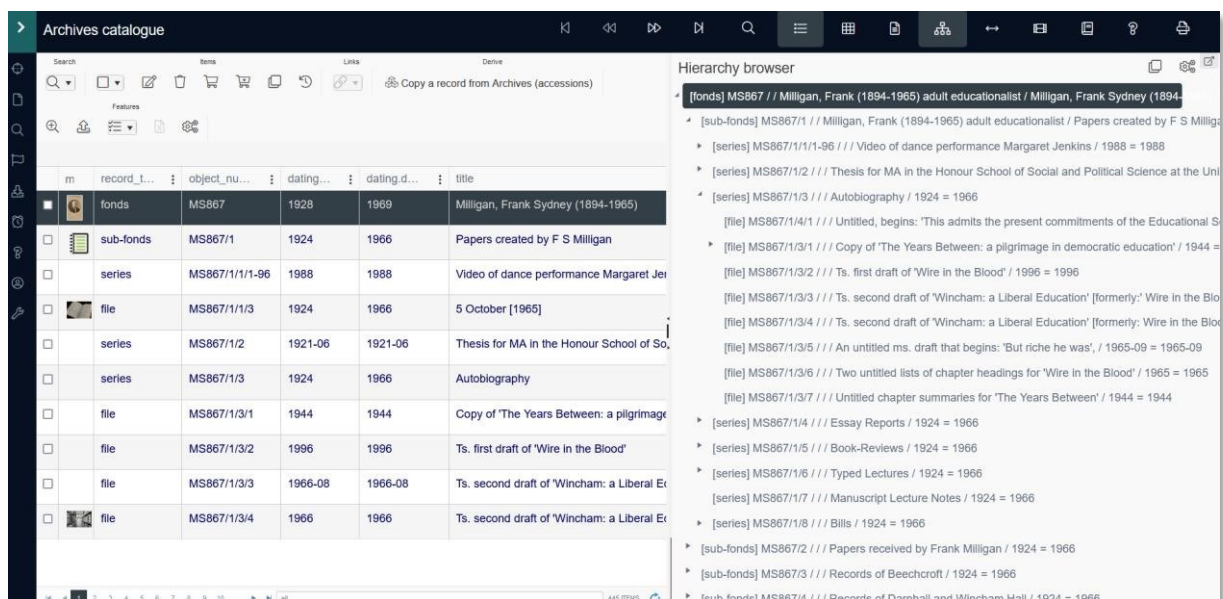
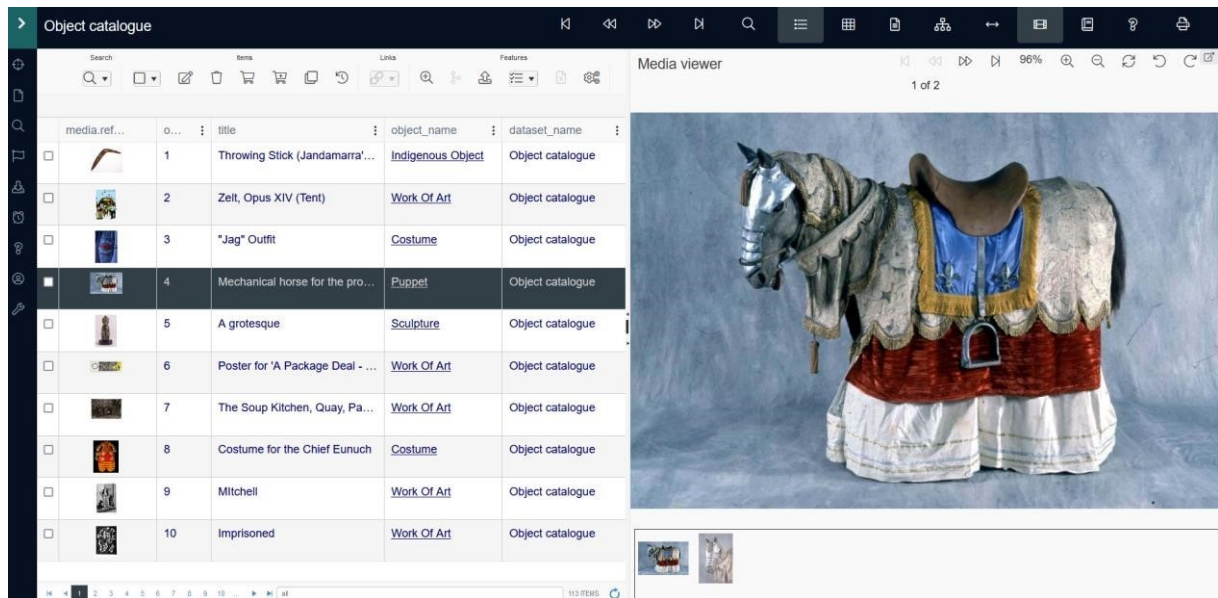
Axiell Collections contains modules for recording data relating to specific collections or disciplines, with context sensitive screens, data entry forms, fields, searching and reporting options to fit the type of collection being catalogued. The Axiell Collections Management system contains an Objects module for cataloguing museum objects in line with SPECTRUM, Archives module for cataloguing to international archive standards (e.g. ISAD(G)) and Library module for cataloguing to international library standards.

Relational authority (thesauri, persons and institutions) data can be recorded and linked to catalogue records, enabling full authoritative control over how the collections are described and accessed. A dedicated locations dataset enables the comprehensive recording of locations and containers information and the tracking of item movement. Common collections management functions including loans, exhibitions, conservation and transport can be recorded in dedicated modules and linked to records within the relevant catalogues.

Axiell Collections is accessed via a low bandwidth web browser user interface. The solution is designed to be device and platform independent, the only requirement for daily use being a browser with support for HTML5. The user interface gives users the power to personalise the system to match their preferred way of working. This includes the selection and positioning of fields in various parts of the system, for example in search forms and the result set list. Personalised settings are saved for the user's next session. Different widgets are built into the module, including a result set list, record editor, media viewer, hierarchy browser, related records viewer and field-based help; all of which can be turned on and off and resized by the user. Widgets can be undocked from the main screen and opened in a new window, to facilitate working on multiple screens at the same time. With its clear design and customisable layout options, Axiell Collections is ideal for providing access to all users.

The media viewer enables attached images and audio-visual files to be viewed, in either a docked or undocked view. Images can be zoomed and rotated on the screen for optimised viewing. Audio-visual files can be played in the built-in media player, either within the widget or a full screen view.





Axiell Flow

Axiell Flow is a workflow automation tool designed to ensure efficiency and consistency around work with the collection, whether users are at their desks or on the move. Personalized task queues and data entry forms guide users through work that is specific to their area of expertise. Select or create workflows that serve your institution

Based on museum and archive procedural and data standards, leverage workflow templates for activities such as data entry, loans, transport and more, or build tailored workflows based on your existing internal processes.

Simplify task management with workflow automation

Improve task management and allow staff to focus on their area of expertise. When a task needs to be completed, Axiell Flow notifies the appropriate individual and guides the user through data entry forms for quick and easy completion of assigned tasks. Forms are tailored to the task at hand to minimize distractions and enhance focus.

Streamline cross-departmental collaboration

Automate the smooth transfer of tasks between departments and groups using workflows that ensure critical procedures are followed efficiently and consistently.

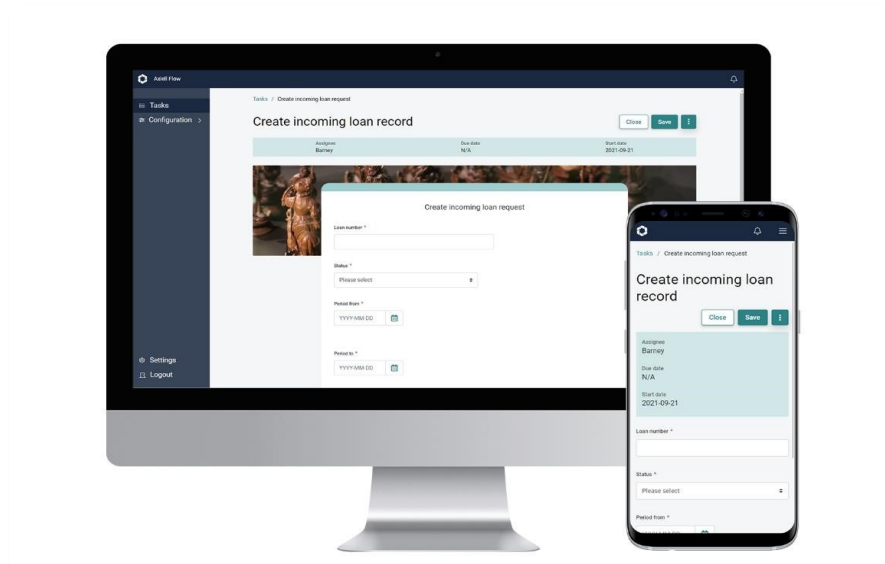
Reduce human error, improve quality of data in your CMS

Data entry forms ensure that key information is always captured at each stage of the workflow. Formatting rules protect data integrity. Entered data can be sent to other users for approval and validation.

Simplify the user experience and increase accessibility of your system

Axiell Flow's simple, permissions-based interface restricts access to sensitive data and streamlines the user experience, opening the CMS to a wide range of contributors without risk to data integrity. Staff and volunteers can view and complete workflow tasks at any time on any device – whether they are on site or working remotely.

Workflows can be set up for a wide range of activities, from simple 2-step procedures to large processes that cross multiple departments. Axiell Flow's library of workflow templates support all types of institutions. These can be customized, or new ones can be built from scratch, to support institution-specific needs.



Axiell Internet Server

The Axiell Internet Server is a powerful add-on to Axiell Collections, providing a user-friendly, responsive web interface for interacting with your collections.

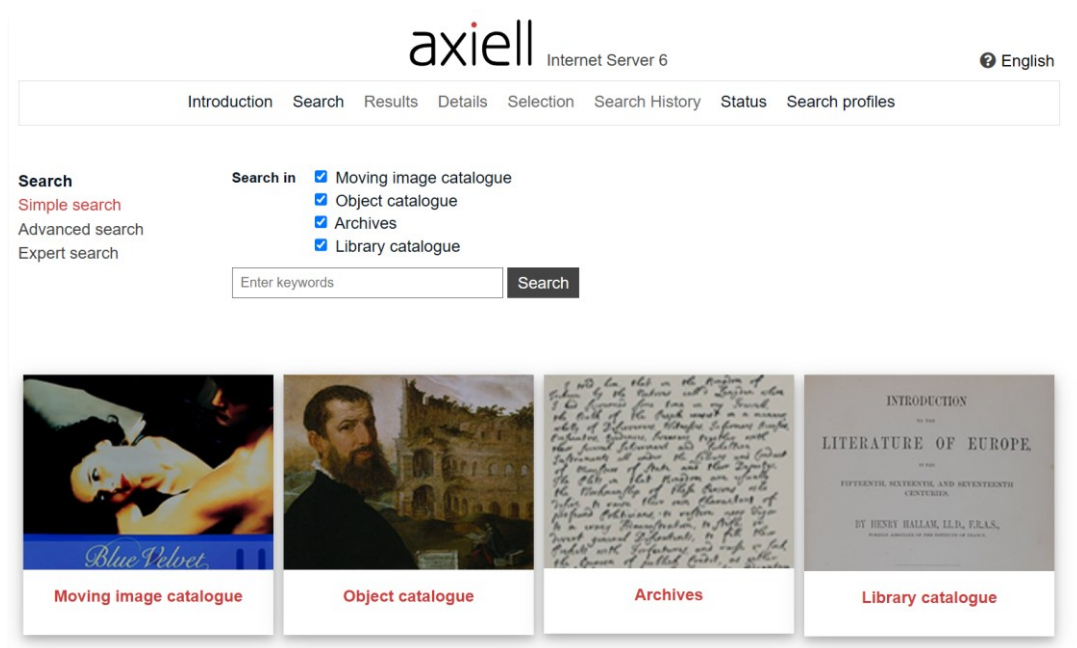
The Internet Server offers a set of search and results display screens to provide internet and/or intranet users with a simple method to search any data within the system (as defined by the customer). The website is highly configurable, including full control over the records and fields made available for search and display and the user interface, where graphical design elements are realised through Cascading Style Sheets. The catalogue can readily integrate with your organisation's website and is compatible with all modern web browsers.

Any catalogue data can be made available on the website, per customer requirements. This includes digital assets managed in the Axiell Collections system which can be provided for view and download where desirable. Images can be automatically applied with a watermark when being displayed on the website to restrict unauthorised use.

In order to showcase records, a number of tiles are configurable on the start page to highlight certain areas of the collections, e.g. online exhibitions, records by subject, creator or any other parameters defined by the customer.

On the same page a simple search option is provided, with a google style search across the catalogue. Where multiple catalogues are managed (e.g. Museum, Archive and Library), a tick box option provide users with a choice of which areas they want to search. There are also advanced and expert search options available, where multiple fields can be searched at once for more detailed searching.

Once a search has taken place, the results can be viewed in either a list or gallery view. At this point a number of refine facets are available for the user to narrow down the results. Or they can select a record to view the full record display.

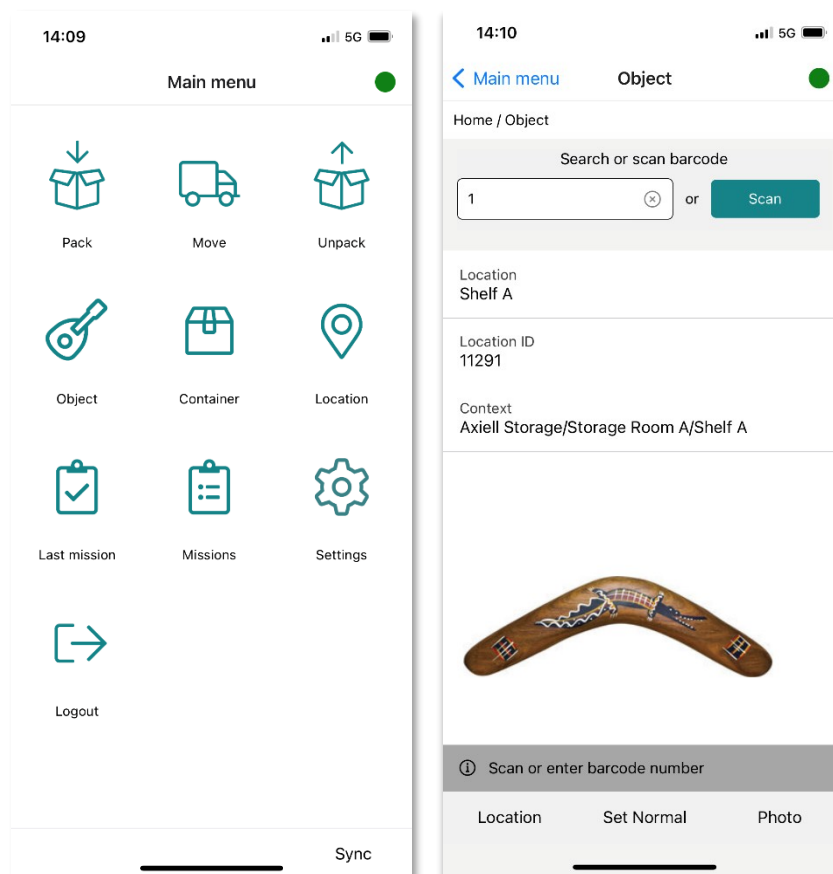


Axiell Move

Axiell Move is designed for managing location movements and packing in Axiell Collections via an app for iOS and Android devices. Axiell Move supports the following functions: Identifying objects,

locations and packages; recording the packaging of object, either individually or in groups; recording the movements of objects or packaged objects; recording condition checks of objects. Axiell Move is designed to work with a barcoding sleeve to scan barcodes managed in Axiell Collections. The device's camera can also be used to scan these, or barcodes can be entered manually via the on-screen keyboard. Axiell Move can be used offline with any changes synchronised with Axiell Collections.

Location changes may be the result of change requests as part of a workflow. These can be prepared for Axiell Move in Missions. Missions are lists of items/containers that need to be picked and moved to a specific destination. Missions can be organised by location to enhance the efficiency of the picking route. The user loads a mission and then picks the items/containers listed in the mission by scanning their barcodes or by sliding the item in the list in the app. This will update the current location in the database to the designated destination location in real-time.



Axiell API

The seamless flow of data and assets between the CMS, Public Interface and other digital platforms is provided by the Axiell API. The Axiell API is the bridge to integrate Axiell software with other systems, making it a truly open system. The Axiell API is also used by Axiell modules as the link between the user interface and the database.

The API includes various ways to search any part of the database as well as edit any part of the database while fully respecting the access rights configuration. This means that external systems will only have the type of access that is granted to them. Access can be granted or restricted to e.g. individual records, fields and sections of the database. The API can be configured on any part of the system. Features include comprehensive search functions, using and creating persistent sets (saved searches/sets), creating/editing records in the database, multimedia functions (image handling functions).

The API supports standards for exchange of data such as OAI-PMH and SRU/SRW. Data can be automatically represented in other standard data formats such as SPECTRUM, EAD, MARCXML, Dublin Core, EAC, LIDO, SKOS and other RDF and Linked Open Data standards. Any custom data format can also be configured. Transformation can easily be configured using XSLT style sheets which can be automatically or optionally linked to an API call. The API can be used for both harvesting protocols as well as live real-time access.

The Axiell API is available in multiple ways including RESTFUL web services, jQuery and DLL's.

Hosting and Infrastructure

As part of our standard hosting solution, we provide a robust and secure Azure-based infrastructure designed to meet the needs of enterprise-grade applications and services. This offering ensures high availability, scalability, and security, while remaining cost-effective and adaptable to future growth.

Core Infrastructure Components

- **Customer-dedicated Virtual Machines**
Each customer is provisioned with their own dedicated virtual machine(s) within Azure.
- **Web Application Firewall (WAF)**
Our standard offering includes Azure's Web Application Firewall to protect against common threats such as SQL injection, cross-site scripting, and other OWASP top 10 vulnerabilities. This ensures secure access to web-facing applications.
- **Azure Proxy Services**
Azure Application Gateway and Azure Front Door are used to provide secure proxy services, load balancing, and global content delivery, enhancing performance and security.
- **Azure Entra ID Authentication**
We provide Azure Entra ID for secure identity management and authentication.
- **Optional Single Sign-On (SSO)** integration is available to streamline user access across services and applications.
- Supports integration with existing identity providers and federated authentication models.
- **SQL Server Hosting**
Our SQL Server is hosted on a multi-tenant cloud architecture. Each customer's database is logically isolated, sharing physical infrastructure but separated through:
 - Transparent Data Encryption (TDE)

- Role-Based Access Control (RBAC)
- Strict tenant isolation policies enforced by Azure

While physical separation is not provided by default, it is available as an optional upgrade for customers requiring dedicated infrastructure.

Backup & Disaster Recovery Solutions

Beside our standard 3-month daily backup, that is included in the service, we also offer a range of options tailored to customer needs and budgets:

- **Geo-Redundant Backups**
Standard backups are stored in a separate Azure region to ensure data durability and availability in case of regional outages.
- **Hot Swap Solutions**
For mission-critical applications, we offer hot swap failover environments in alternate regions, enabling near-instant recovery and minimal downtime.

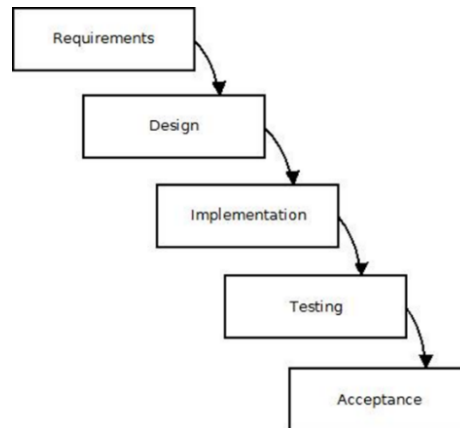
Implementation Services and Support

Where project management services have been ordered we will create a formal project plan with associated milestones, deliverables, dates etc. The below information outlines generally how we manage a project. Elements may not be relevant to each project, depending on what has been ordered.

Axiell projects of this scale are primarily run according to PRINCE2 methodology. From Axiell's side the project will be led by a PRINCE2 Qualified Project Manager.

Effective project management is an important component of any successful implementation of Axiell Collections. Moving from one collection management system to another is a significant undertaking. It involves significant change from your users as well as coordination of the client's staff, Axiell's development team, and possibly third-party IT contractors (e.g. where the client's IT operations are outsourced).

In general, project activities and deliverables will follow the Waterfall model for software development. Usually, phases have little overlap. For example, testing of a deliverable does not start until the implementation of that deliverable has been completed by the Axiell development team. In some cases, a more Agile approach to the project is possible, breaking the project up into smaller parts and work orders for each part, and if this approach makes sense based on the requirements, it may be considered by the Project Managers.



Quality Assurance Methodology

Axiell will work with the customer to ensure the agreed project milestones are achieved and that all deliverables meet the agreed success and quality acceptance criteria. Any corrective actions e.g., the allocation of additional resources to ‘pull back’ a slipping milestone, or reworking to resolve a failed UAT test will be discussed and agreed with the customer if the need for them arises.

As part of the continual quality assurance, formal project milestones sign-off certificates will be issued and will require sign-off from both parties. At agreed periods during the project there will be formal stage review gates to assess the project before commencing with the next stage.

Testing Methodology

Axiell are focused on delivering high quality services. It is imperative both customer and Axiell teams are aligned in their commitment to perform appropriate testing throughout the project life cycle. Axiell will work closely with the customer team to provide effective guidance during this key stage. All issues are recorded through the Axiell online project portal. Formal UAT sign-off will be required from both parties.

The process will involve both teams performing several agreed UAT tasks. A key component of the UAT phase will involve the customer confirming that data integrity is ok.

Completion and sign-off of the agreed user acceptance testing is required before the project stage can progress to completion.

Risk Management Methodology

The management of project risks and issues is taken seriously and is an underlying principle of Axiell’s project management processes. At key points in the project, risk assessments will be made and the outcome of these shared with the customer and project stakeholders.

The principles used in deriving and operating the processes include:

- Gain early visibility of risks and issues.
- Analyse risks and issues from a work stream and an overall project perspective using weekly reviews.
- Prioritise based on likely/actual impact on successful delivery of the project.

- Measure trends using key performance indicators, to allow management action as appropriate.

The Risk Log will be maintained by the Axiell project manager, and reviewed in the regular project meetings.

Issues will be raised with the project manager via the online portal, from individual work streams or during regular meetings. The issues log will be shared and will be reviewed at regular project implementation team meeting. The project manager will note owner and target dates for actions and will review as necessary to update progress. During all project review gate meetings progress against plan, risks and issues and associated contingency plans will be discussed and agreed between all parties.

Data Migration Methodology

Axiell has been working with museum, archive and library data for over 30 years. We have seen data evolve from physical material to digitised and born digital, and all stages in between. Over that period we have migrated many, many millions of records from a broad and diverse range of commercial, legacy and bespoke database applications into our Collections Management Systems. The data sources for these migrations include Oracle, MS SQL Server, MySQL, various other SQL databases, Access, Dbase, Excel, XML. This includes data from some of the largest collecting institutions in the world - from Natural History collections to Film Archives to National Libraries and Specialist Museums.

The data migration methodology Axiell employ typically includes the following steps:

1. Data migration plan / data mapping document

Any migration to Axiell Collections starts with the writing of a data migration plan / data mapping document. The data mapping process is a collaborative approach between Axiell and the client. The data mapping document is crucial, as it must become the source of truth throughout the entire migration process, therefore the mapping stage is treated very seriously within Axiell.

This document describes in detail how existing data sources should be migrated to Axiell Collections and the structure and architecture of the data sources. The plan defines how each field must be migrated, with the result of this a detailed field mapping. The field mapping includes information about the destination tables and fields in Axiell Collections. If new fields should be introduced/created, the properties of these new fields are stated. Any processing of the source data such as the splitting up of content into multiple fields or occurrences, or the reformatting of dates, is also described.

The data migration plan is the result of the clarification phase and requires the involvement of client staff that have in-depth knowledge of the source data. The data migration plan should be approved by the client before the migration scripts are configured. This process is usually done via multiple workshops. The workshops work particularly effectively as questions are answered immediately, and demonstrations of the system can be run so that the client can visualise where they expect their data to be within Axiell Collections, and the document becomes a source of truth between all parties.

2. Configuration of migration procedures

These procedures may include standardised import jobs as well as any scripting to aid the processing of data.

3. Evaluation migration

The actual migration of the data will be done in multiple iterations. The first iterations are evaluation runs of the migration procedures. The resulting evaluation version of the Axiell Collections database will be made available to the project team of the client for evaluation. After each evaluation period the client provides feedback on the data migration to Axiell. The evaluation process will use the approved data migration plan as the base for the evaluation and feedback. Alterations of the data migration plan may be processed per mutual agreement. These may impact the planning of the data migration and the overall implementation.

4. Processing feedback, fine tuning

Axiell receives the client's feedback after each evaluation iteration. The feedback will be processed to fine tune the migration procedures and to address any issues. The updated migration procedures will be used for the next iteration of the evaluation process.

5. Final migration

After the evaluation iterations a final migration will be executed. This final migration is planned closely to the final delivery of the Axiell Collections solution, so downtime will be kept to the absolute minimum. While during the evaluation phase of the migration the user can continue to work in the legacy system, for the final migration a new copy of the legacy database will be required. This marks the moment at which the legacy system must be made Read-Only. The final migration will be using this last current copy of the legacy database. After this final migration the Axiell Collections system will become available for the users as the new collections management system.



Application Configuration Methodology

The process of application configuration or development may vary slightly between projects, but the points below shows the basic approach Axiell take to deliver configuration services:

1. Consultancy with all relevant client staff to confirm, identify and agree scope of work
2. Create specification document as a result of the consultation
3. Assessment and approval of specification document by client
4. System configurations applied to standard software, according to specification
5. Installation of test software
6. Client testing of software

7. Axiell re-work any issues
8. Repeat 6 & 7 as necessary
9. Sign off and go live

There are a number of stages where the client plays an important role in the configuration process and it is important that this role is understood. Axiell will be available to provide advice to the client throughout the process. In the case of a large or complex project a day of user training may be scheduled to coincide with the delivery of the evaluation system to assist the client in their testing.

Training Methodology

Axiell has extensive experience training staff in both the user and administration sides of our software. The educational approach behind Axiell developed training courses stresses learning through doing. Our training courses involve a series of exercises which lead trainees through all the steps required and become progressively more involved. The rationale is not to test trainees, but to teach.

Axiell offer a comprehensive range of training courses to help clients get the most from their investment in software. Our courses offer a wide range of topics, everything from 'cleaning data' to 'tailoring the system to meet your needs' as well as specific beginner or advanced courses on specific products.

Axiell can also provide customized training tailored to your own application and data. This type of training is developed in close co-operation with you and our training department. For a full list of courses we currently offer, please see [Axiell Training Courses](#).

We can work with whatever meets the needs of the customer. We typically train up to 8-10 individuals per session (in our experience, more than 10 trainees results in an inefficient session with trainees failing to acquire the required knowledge).

Go-Live and Post Go-Live Methodology

Once the client has accepted the final data load and system configuration, they can communicate to their general user base that the new system is ready to use.

At the end of most project activities, Axiell project delivery staff involved with the project will handle most support issues that occur. As the project comes to a close, one of the final tasks is to formally transition responsibility for support to the Axiell support team.

For clients subscribed to the annual maintenance and support services, Axiell provides unlimited telephone support, online support, and upgrades of the software as they are released. Axiell uses a ticketing system (Hornbill) for all project and post-implementation (support) related issues, alongside telephone and email. Our support services are provided by our Client Services team, which offers 1st and 2nd line support backed up by an extensive team of technical staff. Axiell suggest that the client assign a team of staff to be the first point of contact for any questions and issues related to the system or service (logging tickets in the client support system). This streamlines communication and prevents redundant reporting of issues and it will allow Axiell to respond more efficiently to any questions or issues.

Axiell software is subject to a continuous enhancement program driven by Axiell's clients and the company's own initiatives. Enhancements are released free of charge to all clients as part of their



support agreement. This ensures that Axiell software remains current even through a changing landscape and ever-evolving IT environments, thus preserving the investment in Axiell software.

Post Implementation Support

Our Service Desk team for UK clients (both first and second line) are based in our offices in Nottingham and Manchester. The Service Desk Team act as the gateway to Axiell's wider support service provision, which also includes Product Managers and Consultants, Network Engineers, Trainers and other specialists who between them offer all the skills needed to keep a collections management system running smoothly.

The Axiell Service desk may be contacted by telephone (0345 222 1511), by email (support-uk@axiell.com) or via the online Customer Service Portal (<https://customer.hornbill.com/axiell>). The support ticketing system used is Hornbill's 'Service Manager'. The Portal is always available and can be used by Axiell clients to access the following services at any time:

- Creating an Incident report
- Creating a Service Request
- Raising a question about the operation of the system
- Checking on progress or escalation of previously created Incidents or Service Requests
- Uploading supplementary information (e.g. screenshot, data file) to provide contextual information on an open ticket
- To check on the current operational status of hosted services, and news of any planned downtime, etc.
- Accessing the system manuals, documentation in the Portal 'FAQ' section.
- Current software release version and patch information

A webinar explaining how to use the Portal can be accessed here: <https://www.axiell.com/uk/axiell-customer-support-portal-introduction-webinar/>

The Axiell website includes a comprehensive support section with blog articles, news and details of upcoming events (both online and in-person), many of which are free to attend.

System Availability

The normal operating time for the service is 24 hours a day 365 days a year, with the exception of notified service windows. The Service Time (i.e. the time period when the service is guaranteed) is defined as 0900-1700 Mon-Fri., with the exception of public holidays. Axiell guarantees the service's availability at 98.5%.

Maintenance Window/Notice of Planned Downtime

From time to time Axiell will need to perform essential maintenance on the hosting server and/or infrastructure which will cause an interruption in service provision. Wherever possible, this work will be undertaken outside of normal opening hours given above.

We will endeavour to notify the customer at least 14 days in advance of any planned maintenance work. In the case of a need for emergency downtime to address an issue, the notice period may be shorter.



The ordering and invoicing process

When you are ready to order through G-Cloud contact the Axiell sales team on Sales.Admin@axiell.co.uk. We can then talk you through the process and assist you along the way. Once a contract has been signed, a purchase will need to be raised and sent to Axiell.

Invoicing will take place on an annual basis, unless requested otherwise. Before the invoice is sent Axiell reaches out to our customers with details of what will be invoiced for and requests a purchase order. Once the purchase order is received by email (or post), Axiell provides an invoice, with 30 days payment terms.

Termination of contract

If the customer wants to terminate the contract, after the initial term, Axiell require 3 months written notice by email or letter.

Exit Procedure

Upon termination of the contract, the Service Provider will agree with the Client on the best method of transferring the data and digital assets. If the Client will not continue working with Axiell Collections, the content of the Axiell Collections database can be made available in either tagged or XML format. The work involved is not included in the SLA. Based on the agreed specifications of the transfer of data, including data format and hardware/media to be used, a quotation will be made.

Upon termination of the Hosting Agreement, Axiell will agree with the Customer on the best method of transferring the data and digital assets. If the Customer will not continue working with Axiell, the content of the database can be made available in either tagged or XML format.

Unless otherwise agreed in writing, the work involved to extract and supply the data is not included in the SLA. Based on the agreed specifications of the transfer of data, including data format and media to be used, a quotation will be submitted.

Technical Requirements

As Axiell Collections is fully hosted by Axiell, the customer only needs to be concerned with the clients accessing the service via web browser. Up-to-date browser versions are recommended. Supported browsers: Edge, Chrome, Firefox and Safari.

