



FIREARM LIFE CYCLE TRACKING



**FireCycle is a secure, web-based, firearms data management solution that allows police forces and government agencies to track the life of a firearm from its manufacture to its eventual destruction.**

**The FireCycle solution from Arquebus can also operate in conjunction with a national legal test-fire programme to manage civilian and service firearms effectively - capturing and reporting essential data that can be accessed in quick-time.**

#### WHY USE FIRECYCLE?

Understanding what firearms are within national, regional and local boundaries is an essential element of national security, policy development and policing. This is where the FireCycle system from Arquebus provides the Commercially Off The Shelf (COTS) solution for the management of legally held firearms.

Designed and developed as a secure web-based solution, FireCycle is a highly deployable firearms data management solution that allows critical information to be captured and managed across a range of policing and governmental organisations.

By supporting the creation and management of comprehensive firearms data records, FireCycle acts as the conduit by which policing, and government organisations, manage firearms from their entry into circulation to their eventual destruction. Regardless if these firearms are held by individuals, or by a state institution.

In managing firearms inventories, whatever their location, firearms-related information must be recorded, modified and maintained in both an accurate and comprehensive manner. Failure to ensure firearms data is entered correctly and comprehensively maintained often leads to flawed data, inaccurate reporting and the abuse of firearms records that could lead to the illegal diversion of firearms or a loss of control measures.

To support this critical area of information management, FireCycle has been engineered to avoid data entry mistakes and poor record-keeping. Uniformity and data quality are supported by the utilisation of the powerful Firearm Reference Table, developed by the Royal Canadian Mounted Police.

FireCycle can be utilised in three distinct areas of firearms lifecycle management, namely:

- The registration of civilian firearms;
- The life cycle management of service firearm inventories (e.g. police forces, armed forces, security companies);
- The management of lost and stolen firearms.

#### REGISTRATION OF CIVILIAN FIREARMS

Civilian firearms registration builds a comprehensive picture of who owns firearms, how many firearms they own, along with what type of firearm/s they have in their possession.

As firearms go through many phases of movement throughout their lifecycle, from import, purchase, resale, theft, loss, transfer and destruction - FireCycle provides an integrated data management solution to comprehensively record all relevant data associated with these events.

In doing so, FireCycle builds an accurate and comprehensive picture of firearms and their status. The FireCycle solution from Arquebus also provides complete data management tools that use inbuilt reporting features. An integrated mapping function also allows for the visualisation of registered firearms in any given location, as well as supporting data export.

The system can also compliment test-fire programmes by linking legal test fire data from the Integrated Ballistics Identification System (IBIS®) to FireCycle. This unique integration ensures that ballistics data captured in IBIS forms an inherent part of the information management process for civilian firearms.

#### MANAGEMENT OF SERVICE FIREARM INVENTORIES

Police and military firearms inventories are historically difficult to manage and update, as records are often recorded manually using paper-based systems. FireCycle delivers a simple to use, systematic inventory management solution that allows firearms to be assigned to individuals, units or organisations. Recording the movement of a large number of firearms to a unit or organisation is also possible. This bulk movement capability considerably increases the efficiency of updating future transfer records after the firearm is initially registered into FireCycle.

Test fire programmes linked to service firearms are also accommodated via the unique integration of IBIS® and FireCycle. This function acts as a powerful tool in managing inventories, particularly in relation to stolen firearms, as well as recording operational losses.

## WHAT ARE THE MAIN FIRECYCLE FEATURES?

- Complimentary platform to support a nationwide firearms registration programme for civilian and service firearms. FireCycle is also designed to work in collaboration with IBIS® in the delivery of legal test-fire programmes;
- Identify firearms correctly at the time of data entry using the Firearms Reference Table (FRT) library. The FRT is a digital database of over 21,000 firearm makes and models that allow users to add local content;
- Store information about the physical characteristics of firearms, such as manufacturer, make, model, and serial number;
- Maintain a history of transactions for each stolen, lost, seized, or recovered firearm (from manufacture to destruction) and add notes to records;
- Use geo-mapping to display events, entities, and weapons (lost, stolen, and licensed);
- Configure customised map areas to create regions, such as criminal gang territories and jurisdiction lines;
- Use the powerful search tools to query the firearm database for items such as manufacturer, make, model, calibre, and serial number;
- Use the included templates, or work with the integrated report builder tool, to write and display reports to suit the organisation's needs.

## MANAGEMENT OF LOST AND STOLEN FIREARMS

FireCycle improves the capability of law enforcement organisations and public safety agencies to collect, search, share, and verify information related to stolen, lost and seized firearms. In turn, this allows these organisations to identify illegal arms trafficking flows, along with areas of unlawful diversion by utilising information generated by FireCycle to investigate firearms related crime.

FireCycle also enables administrators and policy makers to collect crime-gun data by generating the information required to fully and accurately understand the extent to which firearms are used in crimes.

## HOW DOES FIRECYCLE WORK?

Arquebus FireCycle facilitates the accurate and comprehensive management of firearms through an in-depth record keeping process, thus ensuring the efficient and effective management of firearm data. In doing so, FireCycle permits a streamlined workflow for tracking the life cycle record of authorised, stolen, and lost firearms.

Any stakeholder involved in the life of a firearm can access FireCycle using a web browser. Once logged on to the secure website, the authorised user-depending on their role-can submit, consult, or perform one or more of the following tasks:

- Record lawful transactions/purchases;
- Create and collect ownership information;
- Show the movement of firearms between individuals or organisations;
- Create accurate and consistent firearms data using the Firearms Reference Table;
- Record firearms as lost, stolen, seized or recovered;
- Record bulk movements of firearm stockpiles;
- Perform thorough searches by firearm, geographic region, or person/organisation;
- Display data, statistics, and reports.

## WHO CAN USE FIRECYCLE?

FireCycle can be accessed by hundreds of users, each with their own role and unique identifier. Typical organisations and agencies who can use FireCycle to generate a chain of possession include:

- Law enforcement agencies – Police, Border / Customs Agencies and Criminal Intelligence;
- Licensing or Registration Agencies;
- Armouries – Police, Military or Private Security;
- Ballistic Laboratories;
- National Information Organisations.

End-user access to FireCycle can be controlled based on organisation-specific, role-based configuration rules. Combined with standards-based security mechanisms (SSL protocol and data encryption) and auditable data trails, FireCycle enforces the highest levels of data security and information privacy across the entire platform.

Finally, FireCycle enables the use of a uniform standard of firearm terminology via the Firearm Reference Table, which is also deployed and used within INTERPOL.

## FIRECYCLE TECHNICAL FEATURES

FireCycle resides on a centralised host server that is connected to the Internet using a standard Ethernet connection. Information is entered and accessed via a secure web browser. Data either resides on the organisation's host server (hosted solution) or in the cloud (cloud solution).

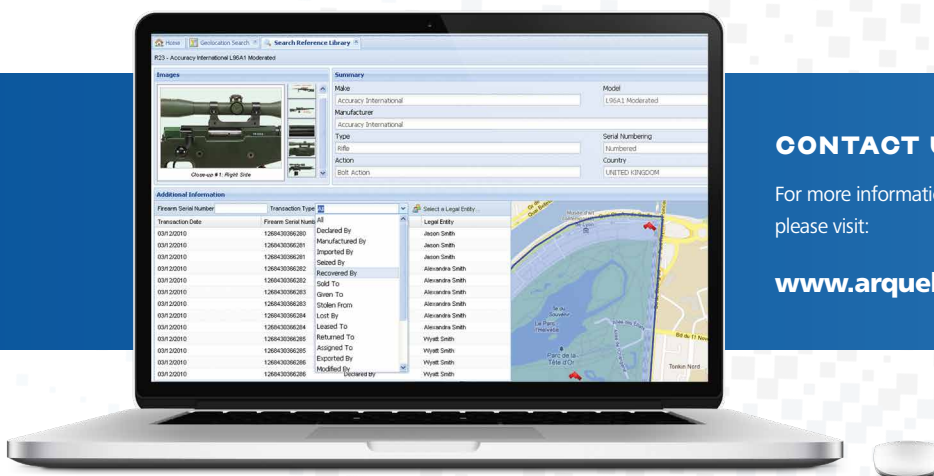
- Distributed as a virtual appliance containing a web server, an application server, a database, and a Microsoft® Windows® server that is easy to deploy and maintain by local IT departments;
- Available as a hosted or cloud-based solution;
- Manage user accounts via administrator and active directory integration;
- Compatible with Web browsers Microsoft® Internet Explorer® 7 (or later) and Mozilla® Firefox® 3 (or later);
- Ad hoc queries for pattern and trend analysis;
- Batch data entry and processing;
- Security features and generated audit trails;
- Supports up to 999 simultaneous users.

## HOW IS FIRECYCLE CONFIGURED?

FireCycle supports a full spectrum of default and configurable transactions, such as

- Production;
- Importation;
- Distribution;
- Sale;
- Loss;
- Theft;
- Return;
- Repair;
- Modification;
- Proofing;
- Destruction.

FireCycle is specifically structured to allow firearms to be associated to individuals or organisational entities, depending on their use. Their status once assigned to an entity can be updated via transactions to reflect the status of the firearm. The power to conduct certain transactions is based on user account privileges.



## CONTACT US

For more information about Arquebus Solutions, please visit:

[www.arquebus-solutions.co.uk/firecycle](http://www.arquebus-solutions.co.uk/firecycle)



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