

# **HARDCAT**

Delivering Asset Certainty



[www.hardcat.com](http://www.hardcat.com)

# Hardcat Lebosi Exhibit Management





## Overview

The purpose of the Hardcat Lebosi Exhibit Management Solution is to ensure efficient management of exhibits collected from crime scenes. This includes maintaining proper chain of custody, safe and secure storage of seized/gathered exhibits, and timely disposal in accordance with the law.

The various components of effective exhibits management include creation of a database for indexing, and the identification of items through tagging using technologies like barcoding, QR codes, and RFID tags. Additionally, they also include documentation processes, issuance and receipt of items, and disposal procedures.

The goal is to streamline and automate the management of exhibits, improve tracking and retrieval, and enhance security and accountability.

### **To ensure the integrity of exhibits, various processes and tools are used and these include:**

- **Chain of Custody:** Ensures that seized items are registered and recorded in the Hardcat Lebosi Exhibit Management Solution using the Hardcat Lebosi Mobile application to capture at scene of collection. Accurate and real time records establish continuous chain of custody – an essential element for court reporting and presentations. Throughout the exhibits life cycle, ensuring that chain of custody is maintained through traceability and accountability over the movements in and out of storage and other facilities or locations. The Hardcat Lebosi platform ensures chain of custody is maintained through to disposal.
- **Safety and Security:** The safety and security of seized articles are of utmost importance in maintaining the integrity of exhibits. Hardcat Lebosi Exhibit Management Solution ensures that access limits, regular monitoring and audits, are in place to safeguard the confiscated items. By implementing these measures, our system minimises the risk of tampering, theft, or damage to the exhibits, thereby preserving its integrity. Additionally, explosives, bio-hazard items and other high-risk exhibits are clearly identified in the system to protect those that are handling the exhibits.
- **Search and Audit Capabilities:** The Hardcat Lebosi Exhibit Management Solution uses powerful search capabilities that allow the user to slice and dice the data and quickly find the exhibits item they are looking for. Audit of the exhibits stored can be performed by means of smartphones and tablet reducing the time taken from days to mere hours and minutes.
- **Reporting:** Hardcat Lebosi Exhibit Management Solution is designed to supply reports on demand or automatically upon the occurrence of given events or a consolidated view of all items.



# Hardcat Lebosi Exhibit Management Solution



## Rapid deployment

Rapid deployment of a largely pre-configured solution framework, packaged to be suited for management of any exhibits item.

## CoTS solution

Commercial off the shelf solution capability i.e. standard preprepared reports, search criteria and dashboards relevant when dealing with exhibits.

## Intelligent exhibit data

Intelligence is derived from the exhibits data collected and retained in the system for better visibility and decision making.

## Reduce tampering and loss

Improve the management of tampering risk and loss of exhibits and meet compliance requirements through comprehensive chain of custody processes and reporting.

## Manage health and safety

Manage worker health and safety risk through warnings and indicators for people handling exhibits.

## Easy identification

Easy identification of exhibits ready for disposal and simplified disposal process and records.

## Collection at the scene

Collect data for exhibits items and photos at the scene using the Hardcat Lebosi Mobility application for ease and real-time capture of exhibits collection details.

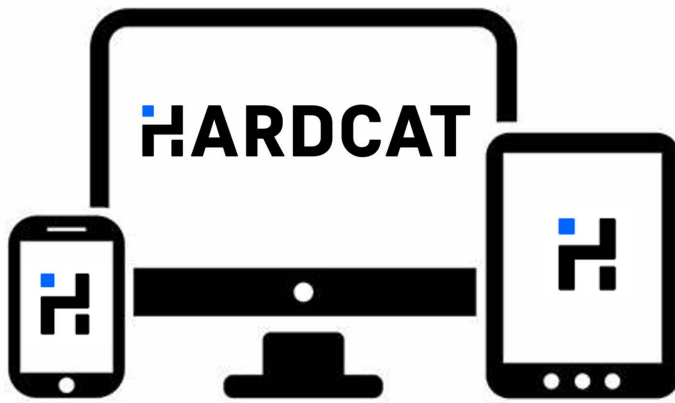
## Audits and movements

Auditing and tracking of exhibits movements to verify their existence and storage location.

## Interoperable

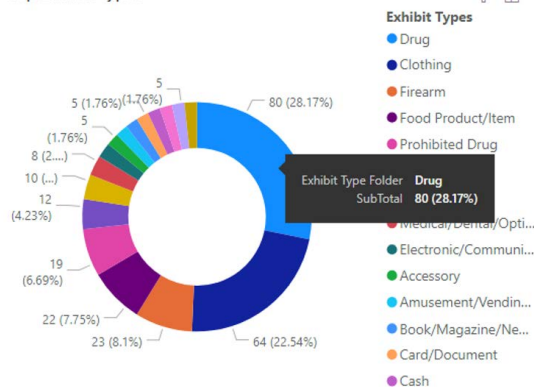
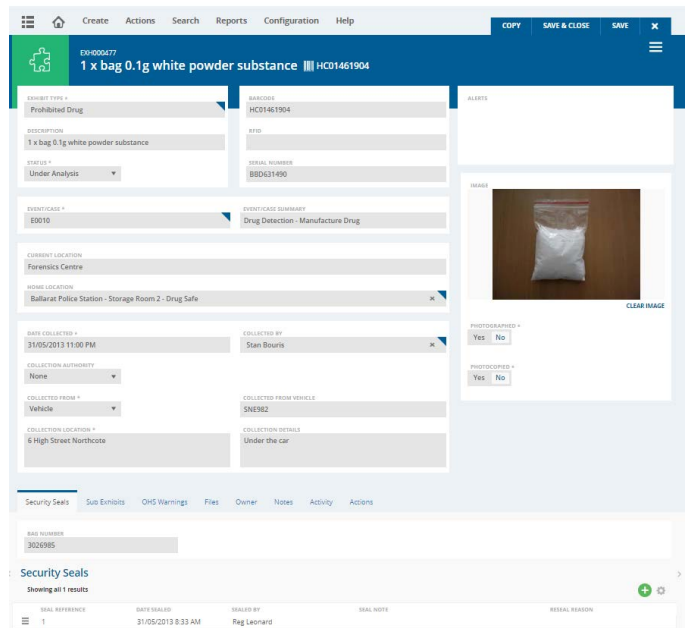
Interoperable through Hardcat APIs to case management and other third-party systems.

Hardcat Lebosi Exhibit Management Solution easily integrates with existing BI tools such as MS Power BI, Tableau, Yellowfin and more.



Using our intuitive dashboard, you can run all types of queries. Furthermore, you can set permissions on who can access what types of data.

Top Exhibit Types

**EXHIBIT TYPE** Prohibited Drug  
**DESCRIPTION** 1 x bag 0.1g white powder substance  
**STATUS** Under Analysis  
**EXHIBIT CODE** E9010  
**CURRENT LOCATION** Forensics Centre  
**HOUSE LOCATION** Ballarat Police Station - Storage Room 2 - Drug Safe  
**DATE COLLECTED** 31/05/2013 11:00 PM  
**COLLECTED BY** Stan Bouris  
**COLLECTION AUTHORITY** None  
**COLLECTED FROM** Vehicle  
**COLLECTION LOCATION** 6 High Street Northcote  
**COLLECTION DETAILS** Under the car  
**BARCODES** HCD1461904  
**RFID**  
**TOTAL NUMBER** BB06E1490  
**EXHIBIT CLASS COMMENT** Drug Detection - Manufacture Drug  
**PHOTOGRAPHS** Yes No  
**PHOTOCOPIES** Yes No  
**Security Seals** Showing all 1 results  

SEAL REFERENCE	DATE SHALAP	SHALAP BY	SEAL NOTE	RESEAL REASON
1	31/05/2013 9:33 AM	Rag Leonard		

## Estimated time to conduct a full property store audit

Work unit	Total item numbers	Estimated days to complete audits	
		One full audit	Four full audits
Crime Command Property Office	35 643	51	204
Logistics and Support Division	30 204	43	172
Sunshine (Uniform Unit)	10 445	15	60
Geelong (Uniform Unit)	8 769	13	52
St Kilda (Uniform Unit)	6 412	9	36

*Note:* Estimated days have been rounded.

*Source:* VAGO based on PaLM data as at February 2018.



# Presentation Layer

## Feature Rich User Interface

The Hardcat Lebosi Exhibit Management Solution exploits leading edge web browser technology for the feature rich user interface.

The resulting benefits include:

- Cross platform, cross browser portability
- Minimises network traffic
- Rich Internet Application technology
- Provides seamless mobility capability
- Simple, familiar, intuitive unmatched experience with high user satisfaction

## Information Reporting

The inbuilt reporter has the flexibility and power to create and publish any required reports.

Example reports are:

- Management
- Operational
- Chain of custody
- Detailed audit trails
- Complete visibility at every stage
- History reports
- Briefs



With Hardcat's exhibits Management analytics gain instant insights through sleek, interactive dashboards. Making it easier for users to see and act on data that is most important in their roles when they log on.

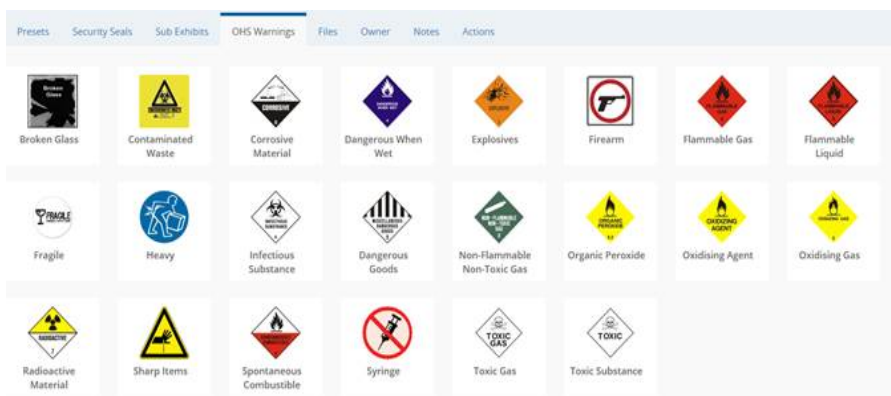
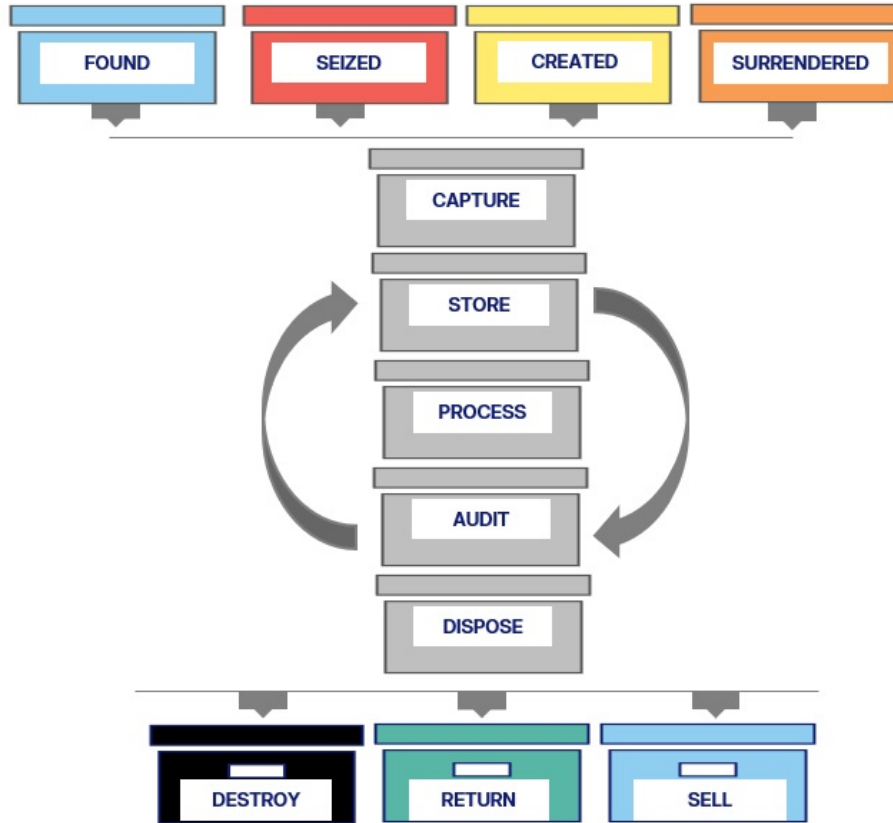
- Unlimited user-definable fields
- Clean, simple layout
- Clear, concise content on screens





# Procedures and Processes

An example of the process for managing seized property.



## Ensure safer handling and compliance

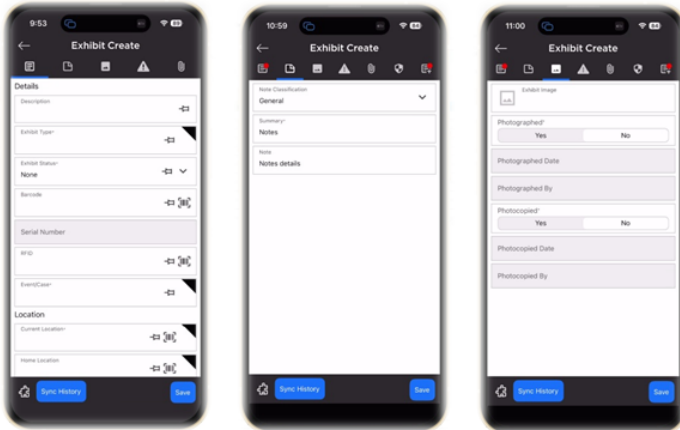
Hardcat's Exhibit Management Solution intelligently marks exhibit items carrying specific risks — from explosives to bio-hazards — keeping your team fully informed.



# Hardcat Lebosi Exhibit Management - Mobile App

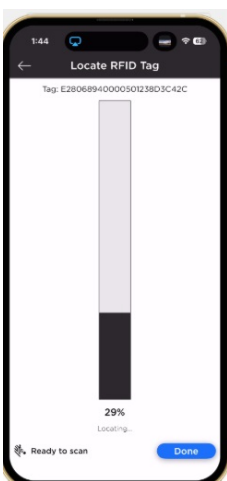
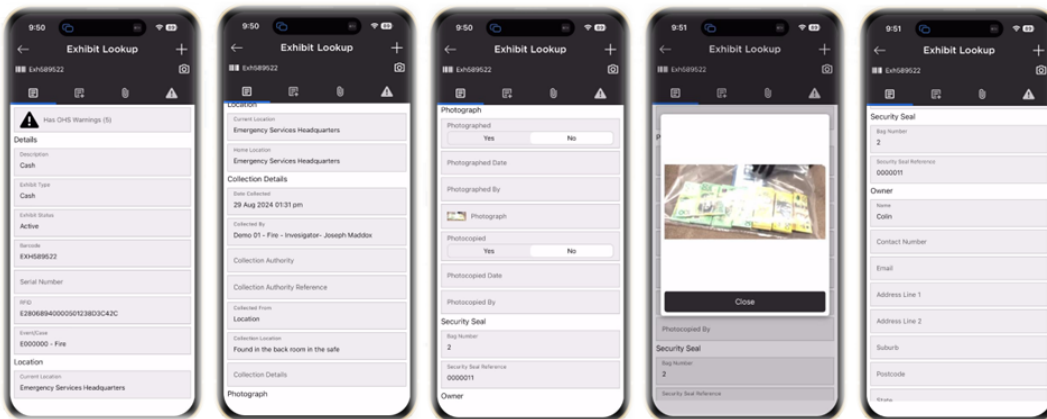
Hardcat Lebosi Mobile application provides the ability to create, look-up and audit exhibits in the field and update their details as required. Users can also view a photo of the exhibits if one has been captured, ensuring accurate identification. Additionally, any associated safety warnings are displayed prominently to alert users to potential hazards.

## Create/Capture Exhibits



- Enables quick and accurate exhibit capture and verification in the field.
- Improves safety by clearly highlighting warnings related to exhibits.
- Enhances operational efficiency by allowing real-time updates to exhibit details.
- Speeds up the process of locating missing exhibits.
- Reduces manual searching and improves operational efficiency.
- Enhances chain of custody.

## Exhibit Look Up



The Hardcat Lebosi Mobile application now includes an RFID-based exhibit location feature.

Users can locate exhibits in the field by scanning for RFID tags. The closer you get to the tag, the stronger the signal becomes, making it easier to pinpoint the exact item.

This functionality is especially useful when searching for specific exhibits in large or cluttered areas—simply sweep the RFID reader over the area until the signal strength indicates proximity to the target item.



## Finding Exhibits

Don't spend hours looking for exhibits. Use the Hardcat Lebosi Exhibit Management Solution RFID mobility application that acts like a Geiger counter getting louder as you get closer to the exhibits that you are looking for.

### Before Hardcat Search



**Annual Cost \$250,000**

30 minutes per search

10,000 searches

Hours per year = 5000

Cost per hour = \$50

### After Hardcat Search



**Annual Cost \$16,700**

2 minutes per search

10,000 searches

Hours per year = 334

Cost per hour = \$50

## Exhibits Audit

### Before Hardcat Audit



**Annual Cost \$333,000**

1 minute per item

100,000 items = 100,000 minutes

4 audits per year

Hours per year = 6666

Cost per hour = \$50

### After Hardcat Audit



**Annual Cost \$11,110**

2 seconds per item

100,000 items = 3,333 minutes

4 audits per year

Hours per year = 222

Cost per hour = \$50





# Evidence and Forensics Information Management System - EFIMS Case Study

In 2008, Hardcat was appointed by New South Wales (NSW) Police to create their Evidence and Forensics Information Management System (EFIMS). NSW Police is made up of 500 Police Stations, covers an area of more than 800,000 square kilometres and has 20,000 sworn officers. It is Australia's most populous state with a population of over 8.3 million.



## End-to-end management

### Events, cases, incidents, jobs and evidence

Success with the EFIMS system saw the project expanded so it could be integrated with the NSW Police Force's core, mainframe-based Computerised Operational Policing System (COPS); an operational database used to record victim, offender and incident information.

This meant that the EFIMS system supported complete transparency on cases, events and incidents in relation to all jobs and tasks that all officers performed in the field.

## Released to front-line duties

NSW Police practices have improved with the introduction of EFIMS and have released officers to front-line duties as well as saving money.

## All types of evidence

- Firearms
- Electronic records
- Paper documents
- Cash
- Clothing
- Drugs
- Firearms and ammunition items
- Bulky items such as motor vehicles, boats and vessels, such as jet skis.

## Comprehensive tracking

Operationally, EFIMS enabled the NSW Police to know the exact whereabouts and history of any piece of evidence gathered by any officer anywhere in the State of NSW Australia.

Providing a comprehensive tracking and information management solution that recorded every touch point on forensic evidence and investigative intelligence, the EFIMS solution facilitated a new era in best practice electronic information management for the NSW Police Force.

EFIMS ushered in new automated and fully auditable tracking processes. These processes dramatically reduced the amount of time police officers spent on maintaining manual evidence logs, or briefs, as each piece of new information was only ever entered once, joining a full audit trail of every entry and interaction.





# Benefits and Statistics of EFIMS

**NSW Police force reduces brief construction time to 60 seconds with EFIMS.**

## Benefits created by EFIMS

The significant reduction in administrative hours allowed more officers to be out in the community, focusing on the duties they're trained for.

80% of brief construction reduced to 60 seconds	FUNCTION	BEFORE	AFTER
	Check-In/Out Process	Up to 240 seconds	10 seconds
67% savings in auditing evidence items	Chain Of Custody Reports	Up to 5 hours	20 seconds
	Follow Up Forensic Analysis/Results	Up to 5 days	15 seconds
40% improvement in turnaround times	Generation Of Volume Crime Brief	Up to 7 days	60 seconds
	Crime Scene Response Notification	Up to 20 minutes	15 seconds
50% saving in job and evidence creation	Generation Of Reports For Parliament	Up to 6 months	25 minutes
	Modus Operandi Searching	Unquantifiable	15 minutes

### EFIMS STATISTICS

Go live year	2010
Access required	24/7
Level of importance	Tier 1
Number of users	20,000
Who specified the system	NSW Police
Who designed the system	Hardcat Pty Ltd
Exhibits entered daily	1072
Forensic analysis jobs per day	291
Forensic results per day	524
Crime scene attendance jobs per day	190
System uptime	99.99%
Year discontinued software	2025
Reason discontinued software	Microsoft ceased support of Silverlight

## EFIMS statistics

Since going live EFIMS has supplied previously impossible processing power as well as increased conviction rate due to chain of custody on all pieces of evidence.



## Awards and Accolades



### Hall of Fame Premier's Public Sector Awards

**NSW Police were awarded the 'Success Through Innovation Award' for Evidence and Forensics Information Management System (EFIMS) by the Premier of NSW.**



**EFIMS was written into NSW Law in 2012 as a crucial component of the NSW Police Force.**

*The use of forensic science to solve crime has become increasingly popular. Police around the world are spending more and more on the latest forensic technologies and, because of the influence of television dramas such as CSI, the public now expect that every criminal case will rely on forensic evidence to catch an offender.*

*DNA and fingerprints are the key forms of forensic evidence used to identify criminals. While fingerprints have been used in NSW for more than 100 years, DNA has only been available since 1989. The increasing demand for DNA analysis to help solve crimes has led to lengthy delays in getting samples processed. This problem exists in many jurisdictions. At least 350,000 DNA samples from murder and rape cases lie untested in police laboratories across the United States. And in NSW the number of cases in the DNA backlog has ranged from 3,500 cases to over 10,200 in the past five years. The backlog was around 6,400 cases on 30 November 2009 and is expected to be almost 7,400 cases by 30 June 2010.*

*The problem with delayed analysis is that while police wait for results, crimes remain unsolved and criminals remain at large. In an attempt to reduce delays, the approach to DNA analysis in NSW has been the subject of a number of reviews. These reviews have generally resulted in one-off funding to reduce the backlog. However, as soon as the money is spent, the backlog re-emerges.*

*This audit looks at both sides of the DNA issue. That is, what have Police done to manage demand for analysis as well as what has been done to increase capacity at the laboratory to cope with the increasing number of cases.*

*I believe this review will help improve the management of both fingerprint and DNA evidence and, in particular reduce delays in DNA analysis, to better serve both the interests of justice and the people of NSW.*

**Peter Achterstraat**  
**Auditor-General**

**EFIMS—developed by Melbourne-based Hardcat Pty Ltd—was the solution purchased by NSW Police to address DNA analysis backlogs, accelerate sample processing, and ensure a complete chain of custody.**

# HARDCAT

Delivering Asset Certainty

Hardcat solutions have been chosen by more than 2,000 of the world's most prestigious corporate and government bodies in 121 countries around the world.

Join our list of satisfied clients who have already performed your due diligence for you. No one else has our credentials or credibility when it comes to asset management solutions.

## Hardcat HQ

253 Park Street  
South Melbourne  
Victoria 3205  
Australia

p: +61 3 9695 5400

[sales@hardcat.com](mailto:sales@hardcat.com)

## Hardcat Africa

Building 2 Country  
Club Estate 21  
Woodlands Drive  
Woodmead  
Johannesburg 2191  
RSA

p: +61 3 9695 5400

[sales@hardcat.com](mailto:sales@hardcat.com)

## Hardcat UK/EU

Woking One Unit 6  
Albion House High  
Street Woking  
Surrey GU21 6BG  
UK

p: +44 1483 485 870

[sales@hardcat.com](mailto:sales@hardcat.com)

Visit our website for more details [www.hardcat.com](http://www.hardcat.com)

