



CASE STUDY

ARMOURY AND OPERATIONAL EQUIPMENT TRACKING



Major Australian Police Service

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Armoury and Operational Equipment

Helmet

Ballistic Vests and Plates

Body-Worn Cameras

Communications

Equipment Carriers

Specialist Assets

Firearms and Armoury

Assets

PPE

Taser





Major Australian Police Service - Case Study

The Organisation

This major Australian police service has 21,000 sworn officers deployed across 400 police stations and specialist divisions. Rostered on one of three daily shifts, an estimated 16,500 officers are issued with their firearm and operational equipment every day at the beginning of each shift. Their equipment is then returned at the end of their shift.

The Problems

Police forces around the world face an ever-present threat to officer safety and need to incorporate technology to replace manual, inefficient, error-prone pen and paper practices. It's also important to integrate disparate systems to improve technology investment returns and to best inform field force members. Some of the problems needing to be addressed included the following:

- No controlled and centralised view and control of critical assets including firearms and other operational equipment.
- Inconsistent approach to firearm and operational equipment issue/return practices.
- Lack of identification and credential checking, and a lack of real-time impairment checking of officers giving rise to a risk of issuing firearms to at-risk people.
- No means to manage the firearms maintenance rotations to meet compliances.
- No efficient audit procedures to cover accountability of all armoury assets across the state to achieve bi-annual attestation requirements.
- Inefficient, stand-alone daily manual audits at each station.

Compromised governance and a lack of compliance was the outcome. A lack of streamlined, electronic processes limit the available time for effective policing and hampers the ability to analyse and leverage historical data. Not having the means to properly manage firearms issue process putting officers at risk of self-harm.

The Solution

Hardcat won the competitive tender to implement their tier-one enterprise system "Hardcat Lebosì® Enterprise Law Enforcement Solution" and to configure the system to control the issue of firearms to police officers across the entire state, as well as managing the governance and risk associated with operational assets.

To enable accurate and streamlined processes, the Zebra DS8178 barcode scanners were recommended and deployed to every police station as part of the solution. The DS8178 scanners were tested and selected to provide the most efficient way to scan 1D, 2D, QR as well as laser-etched barcodes used on the firearms.

The system was integrated into the existing HR application to easily issue and return operational equipment through barcode scan and identify officer qualifications and impairments during the process, saving time and creating diligence around the responsible issue of firearms.

The solution provides a single source of truth and governance around the management of critical operational assets.

The Result

The Hardcat system introduced responsible issuing of firearms and reduced the risk of self-harm by officers. Lowering time for the issue and return process, and daily audits. This major Australian police service have never seen a tier-one project go live so quickly and effectively. The secondary benefit has been the reduction in operational costs and an estimated annual savings of \$10+ million. Reduced administration costs will put more police back in action, as well as allowing for the hiring of an additional 140+ officers.





Problems Solved - Case Study

Before Hardcat Lebosi - Law Enforcement solution there was a lack of a central data repository for assets, which made it difficult to track the life-cycle of a piece of equipment to support such as:

- On-boarding
- Responsible and careful issuing of firearms for officer safety
- Distribution and receipt at the requested location
- Ensuring equipment issued is maintained and defect free
- Maintenance
- Disposal and replacement
- Accurate counts of firearms, operational safety equipment and other items
- Bi-annual state-wide firearms audits
- Proactive budget management and planning for assets end of life and replacement
- Meeting compliance and safety obligations of all Operational Safety Training and Tactics (OSTT) equipment

This major Australian police service had many different manual paper base and automated electronic systems in place to record and track operational safety equipment.

There were various levels of sophistication, from purpose-built 'off the shelf' asset management systems, to custom in-house health systems. This means that there was no centralised data to be able to view assets at the enterprise level, which reveals several problems:

- Unable to ensure that only members with OSTT certification can have access to firearms.
- Unable to efficiently perform bi-Annual fire arms audits.
- Unable to control enterprise-wide software licencing and costs.
- Unable to backup and restore all police asset information for business continuity if a catastrophe occurs.
- Unable to consistently view the asset current location and assigned members.
- Issuing of possible unmaintained assets in poor condition – safety hazard Inability to have organisational view of assets, defects, misuse, exceptions, missing or overdue assets.
- Inability to make informed procurement decisions.
- Inconsistent asset management processes and solutions – lack of governance and control.





Accolades about Hardcat

- “We have never seen a tier one solution go live with so few impairments”.
- “The training solution created by Hardcat is best of breed and will be adopted by this major Australian police service Police”.
- “Hardcat have been fantastic to deal with in the roll-out of the solution as well as the flexibility in data collection of the weapons and essential equipment”.
- “We would be extremely happy as well as proud to be a reference site for the Hardcat solution”.
- “We can use this platform to support our initiatives moving forward”.

What this major Australian police service say about Hardcat

- Enterprise capability of the platform can be used to deliver other functions for the business. Example; portable and attractive items register, equipment audits, proof of installation, warranty information etc.
- Simple user expansion allows a progressive roll-out to grow the user base, by simply adding users and controlling access to the asset information via domain control.
- The scalability of the system has been designed to scale across the enterprise and features a rich browser-based interface.
- Consistency, control and visibility, the system will have common data structures and product names with complete visibility where necessary and discrete views at the unit level.
- Highly configurable, the ability to include additional equipment attributes and to report inform escalate on specific triggers.





Benefits via Efficiencies

- Reduced time to perform an equipment audit by 80%.
- Reduced time to perform issue and return by 90%.
- Reduced time to produce equipment usage reporting by 80%.
- Flexibility to configure additional asset and product types in no time – no need for different systems.
- Complements existing solutions with up to date data through integration with any 3rd party software.
- An 'off the shelf' product with no hidden costs and is good value for money Reduced time to produce compliance and attestation reports.

Location, Status and Condition of Equipment

Without an enterprise system that provides centralised data equipment, including firearms disbursed across the state, there was limited visibility of the location of equipment.

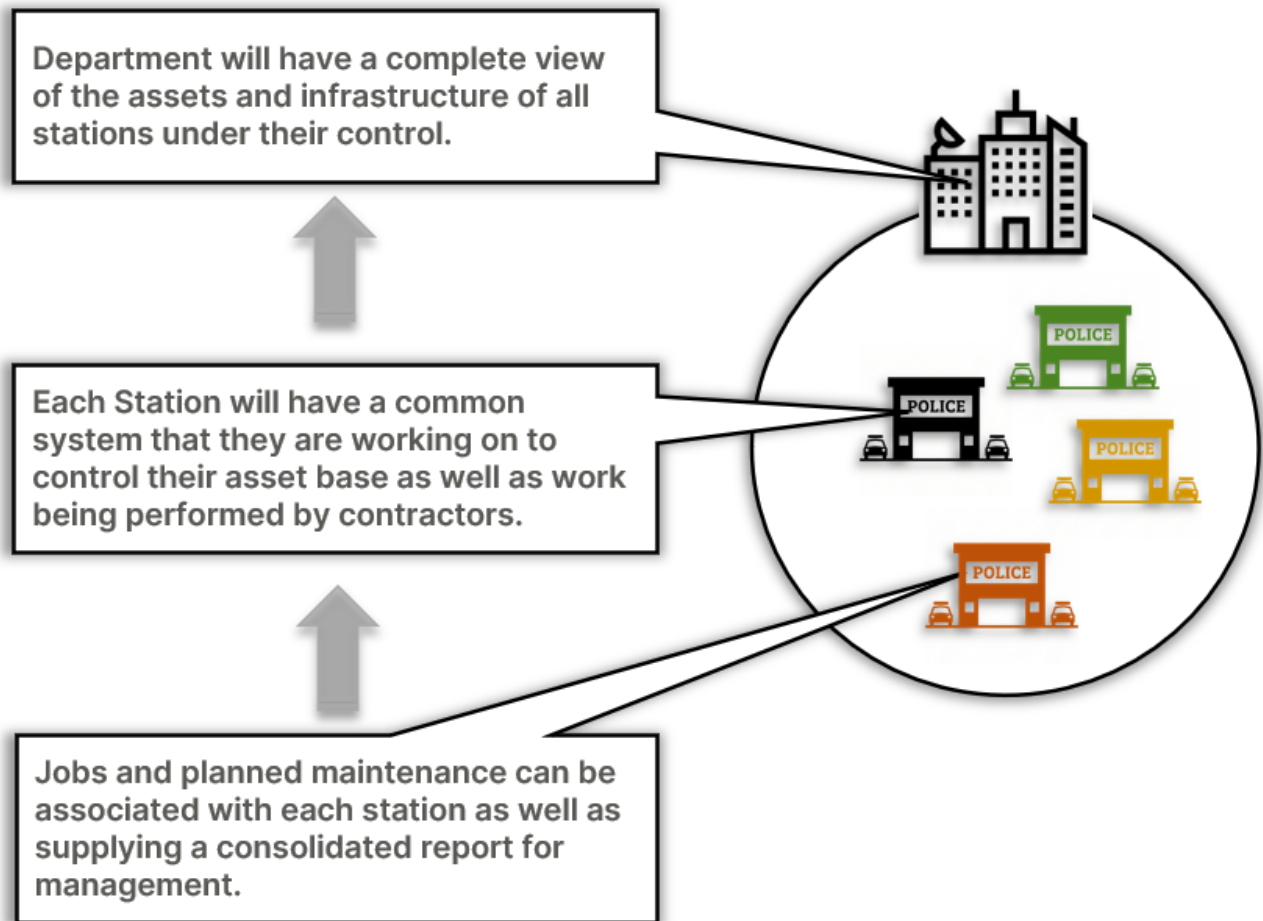
There is a need to identify:

- Location of equipment items.
- Item status and condition.
- Availability for allocation and use (availability based on status and condition).

This is exemplified with the current accepted practice of equipment and firearm returns where a member can return their equipment to a location other than a member gazetted work unit.



Hardcat Lebosi allows those with access rights to view the assets across the complete enterprise. Stations can be optimised via asset transfer when required.





Fleet and Equipment Management

Hardcat's equipment management solution has been selected by many emergency service organisations due to its flexibility, ease of use and most importantly certainty when it matters.

Having worked with emergency service organisations for over 20 years, Hardcat knows what is required.





Savings with Hardcat

Activity	Hours saved per year per station	Number of stations	Total hours saved per year
Audit time reduced	75	400	30,000
Transfer equipment between stations	20	400	8,000
Reduced training time	20	400	8,000
Reduced IT support costs	10	400	4,000
Reduced current annual maintenance	10	400	4,000
Reduced purchasing	10	400	4,000
Staff movement between stations	20	400	8,000
Personnel leaving the organisation	20	400	8,000
Reduced time looking for assets	100	400	40,000
Issue and return loaned equipment	225	400	90,000
TOTAL HOURS SAVED PER YEAR	510		204,000

These are indicative savings based on average time taken for manual processes vs time taken in the Hardcat Lebosi solution against such transactions.

Put simply, Hardcat Lebosi reduced administration time and puts more police on the streets. The savings could cater for 100 plus new police recruits.



"we supply what you need"

A mix of RFID tags and barcode labels can be used to tag equipment, depending on the equipment surface and material suited to its environment and conditions.

Equipment tags are made to withstand harsh environments and conditions.

Fixed Readers



RFD 8500 RFID 1/2D Scanner



MC3390R Long-Range UHF RFID Reader Barcode Scanners



DS8178 1/2D Barcode Scanners



UHF RFID Hard Tag



Laser Etched 2D Barcode



Hardcat Lebosi is a best in class law enforcement tracking and information management system providing law enforcement organisations unrivalled transparency on firearms, tools and equipment.

Hardcat Lebosi has the capability to manage and track at a granular level IT and any other type of assets, owned, leased or managed, due to ease of configuration which allows expansion to any department and any asset type, with ease.

Hardcat Lebosi's granular detail and tracking capability compliments any ERP, service or any other 3rd party software, providing accuracy of the status and whereabouts of every individual asset – source of truth.

Not only can you track any asset type, but also ensure they are safe and maintained to meet your compliance requirements.

Keep assets in the right hands

Maintain accountability for a wide range of firearms and equipment, so that you can be certain at all times about who has what and where, with a complete audit trail of all movements and history of transfer of custodianship.

Audit Trail

Maintain accountability for a wide range of firearms and equipment, so that you can be certain at all times about who has what and where, with a complete audit trail of all movements and history of transfer of custodianship.



Equipment Issue and Return

BEFORE HARDCAT



Annual cost \$4.5 Million
 90 Seconds per person
 16,500 officers = 138 hours per shift
 3 shifts per day = 414 hours per day
 Hours per year = 151,110
 Cost per hour = \$30

AFTER HARDCAT



Annual cost \$0.5 Million
 10 seconds per person
 16,500 officers = 15.3 hours per shift
 3 shifts per day = 45.8 hours per day
 Hours per year = 16,717
 Cost per hour = \$30

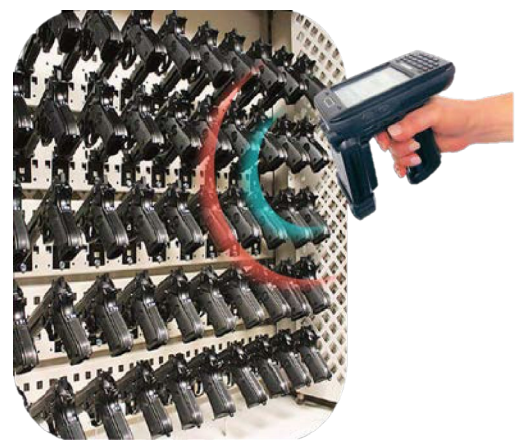
Equipment Audit

BEFORE HARDCAT



Annual cost \$1.5 Million
 30 seconds per firearm
 16,500 assets = 45.9 hours per shift
 3 shifts per day = 138 hours per day
 Hours per year = 50,370
 Cost per hour = \$30

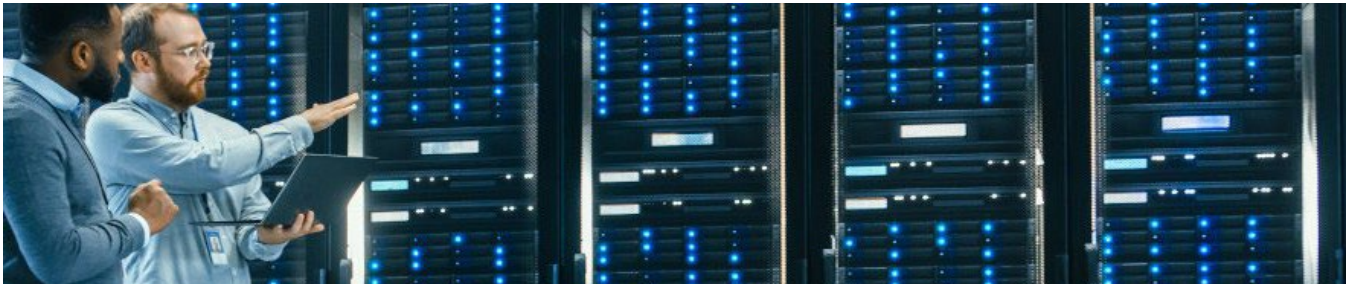
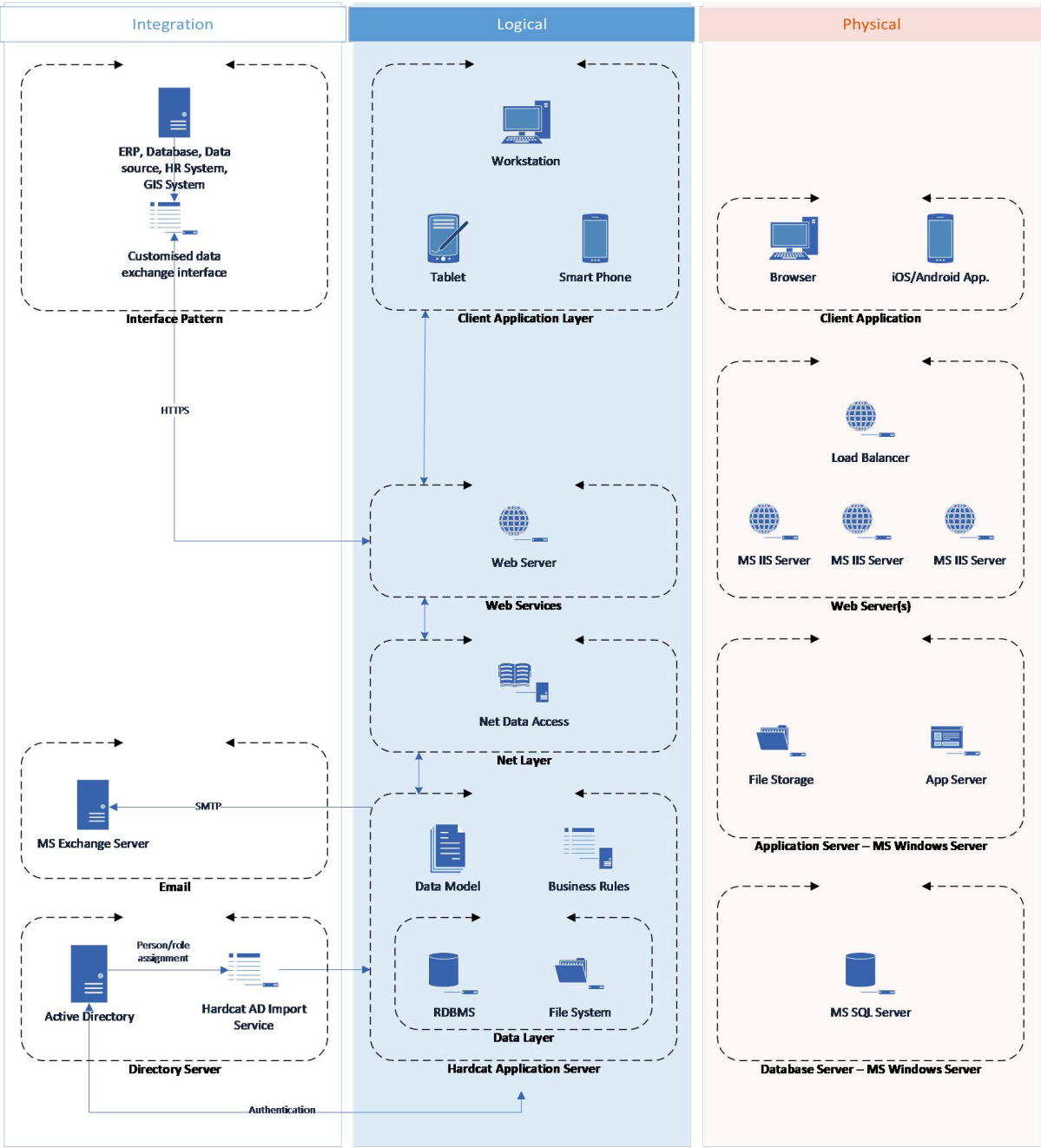
AFTER HARDCAT



Annual cost \$98,500
 2 seconds per firearm
 16,500 assets = 3 hours per shift
 3 shifts per day = 9 hours per day
 Hours per year = 3,285
 Cost per hour = \$30



The Architecture - Built to Perform

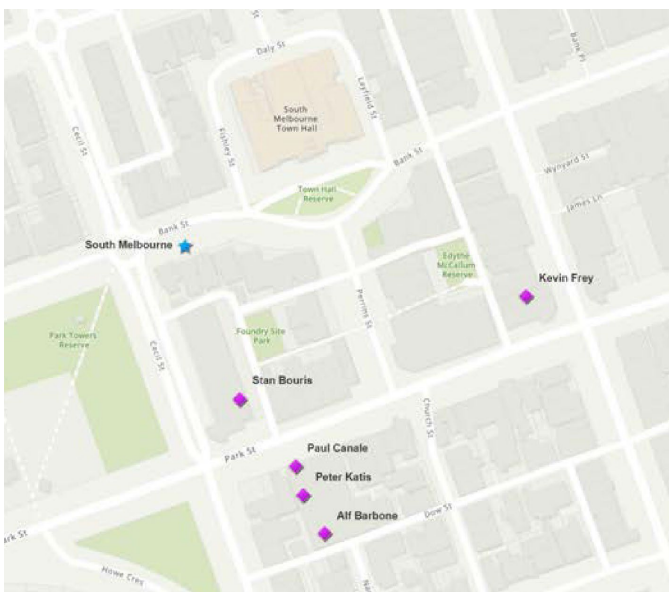


Hardcat Lebosi - Mapping

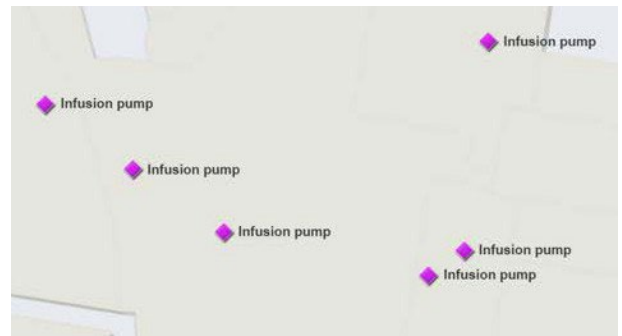
Hardcat Lebosi allows the incorporation of GPS co-ordinates for Assets, Locations and Jobs. All of these entities can be searched and exported, then imported into your current GIS system. The examples on this page were exported and then imported into ESRI.

Assets Mapping

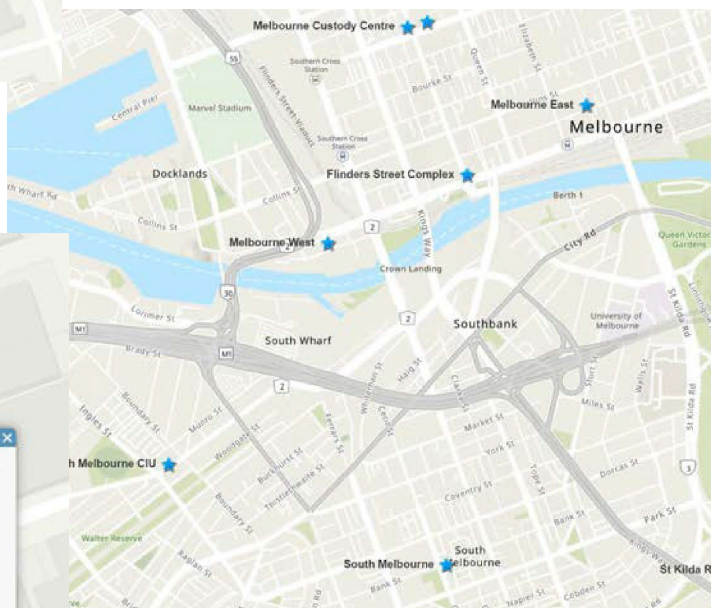
Assets (with assigned person labels) This enables tracking of people by tracking the traceable asset they are carrying.



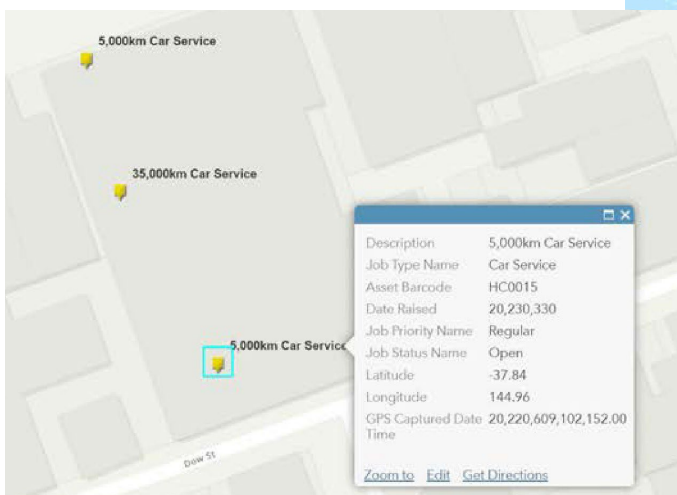
Assets (with asset description labels)



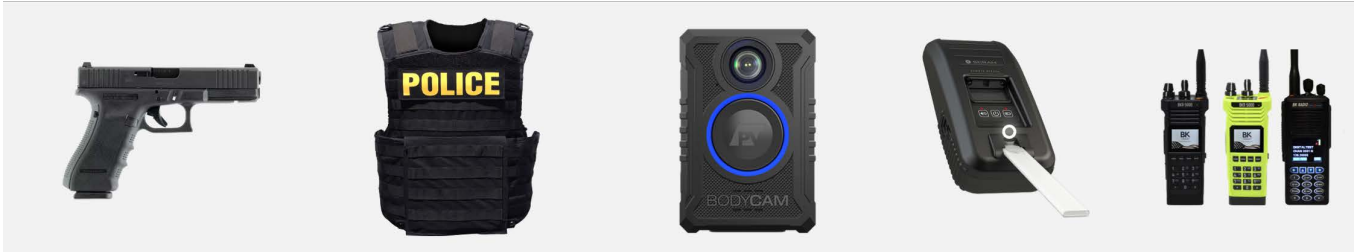
Stations Mapping



Jobs Mapping



Asset Types



FIREARMS

- Accessories
- Combination, Centre Fire
- Combination, Rim Fire
- Handgun
- Launcher
- Machine Gun
- Miscellaneous
- Rifle (Air/Centre/ Rim Fire)
- Shotgun

PROTECTIVE EQUIPMENT

- Ballistic Equipment
- Chemical, Biological, Radiological & Nuclear (CBRN)
- Duress Alarm
- Helmets
- Monitoring & Diagnostic Devices
- Transport Containers (Pelican Cases)
- Raincoats
- Safety Apparel

AUDIO/VISUAL EQUIPMENT

- Accessories
- Audio
- Body Worn Cameras
- Digital Cameras
- Night Vision
- Optics
- Speakers

ROAD & TRAFFIC

- Breath Testing Device
- (e)Flares
- Immobilisation Device
- Speed Measurement Device

COMMUNICATION & TECHNOLOGY

- Radios
- Phone
- IRIS Devices (Shared)
- Laptops (specific Types)

This major Australian police service required the assets at their 400 stations and specialist sites to be barcoded where required and data capture for new assets.

Hardcat and Accenture was responsible for the on-boarding of the 24-hour and 16-hour stations as well as specialist sites. This major Australian police service was requiring the 8-hour stations to be on-boarded by the project team.

Hardcat Lebosy was preloaded with data that was pre-known to the project team to performed an audit for assets for these items.

Assets that were not preloaded were captured using the Data Capture feature. Hardcat has written the online data capture apps that would be used in conjunction with the Zebra readers.

Hardcat provided the baseline project schedule for the roll out activity for the 24/16/specialist sites.

MISCELLANEOUS OFFICE EQUIPMENT

- Fire Kits
- Handcuffs (station Spare)
- OSE Carriage Equipment (station Spare)
- Metal Detector
- Passes & Keys
- Torches
- Specialist Equipment

MEDICAL EQUIPMENT

- Defibrillator
- First Aid Kits

LESS LETHAL WEAPONS

- OC Spray
- Munitions & Distraction Devices
- Conducted Energy Devices
- Batons

ACCOUNTABLE DOCUMENTS

- Personal Issue
- Station Issue

Data Capture - The Project - continued

The Team

Hardcat suggested that the data capture exercise could be carried out by Accenture with a Hardcat subject matter expert assisting with the project management and a team of 3 onsite SME's to provide guidance and assistance to the Accenture field service teams when required.

Accenture created a team which consisted of one project manager and 14 data capture persons, which made up seven teams comprised of two people per team. The majority of the team of fifteen staff came from the Accenture graduate program.

Training

The training of the Accenture staff was performed by Hardcat and consisted of two days of hands-on experience as well as exercises with multiple scenarios.

Instruction Collateral

Hardcat produced PowerPoint presentations on data capture, auditing, finding jobs, closing jobs, and resolving errors. Plus sample book of the assets types and associated pictures showing where the barcode was required to be placed on each of the asset types.

Data Capture

The Accenture Project Manager controlled the logistics and communications with their team, and coordinating locations, dates and times with this major Australian police service. The teams would begin at their stations and perform audit jobs and data capture in the field, whereby they would gain a local sign off from the OIC or delegate.

Support

Hardcat supported the Accenture team with the creation of the jobs and supporting team when issues arose and providing back filled audit team when Accenture had resourcing constraints.

Police staff created the locations and products identified by the Accenture team. Police had three dedicated project resources as leads to the Accenture teams onsite to assist, plus they also have two sworn members assisting and the OCM team following up ensuring stations start using the system after the on-boarding.

End Result

Accenture took three months to capture 57,000 pieces of equipment and load them into the Hardcat Lebosi system. This equipment was captured at 244 16/24 hour stations.

The project was completed on time as well as on budget. This major Australian police service was so impressed by the work performed by Accenture that each team member received a Certificate of Appreciation. Six of the team were contracted by This major Australian police service to continue to assist ongoing processing of the Hardcat Lebosi system.



**DON'T REMAIN
SILENT DON'T LET
STIGMA STAND IN
YOUR WAY**

Work Safety

Ensuring that officers who have been involved in stressful events at work or at home, do not have easy access to firearms.

During the issue of firearms, the issuing officer will be alerted via Hardcat Lebosi Law enforcement solution that this person is currently not to receive a firearm.

This will be across the whole state, so that that officer is protected from self harm.

Access to firearms, depression, anxiety, substance abuse, Post-Traumatic Stress Disorder (PTSD), and other mental health care needs are catered for in the Hardcat Lebosi Law Enforcement solution.

Maintenance and Alerts

Ensuring that equipment used by this major Australian police service in the performance of their duties is properly maintained and the audit trail of this maintenance can be used as proof of maintenance in a court of law.

Equipment can be any item; Firearms, Breathalysers, Body Worn Cameras, Tasers as well as CCTV for example.

A simple mistake like using a breathalyser which is past its calibration date can have a case thrown out of court and excess of hundreds of man hours wasted.



Each of these law enforcement organisations use a Hardcat solution to control Armoury, Property and Evidence, General Assets and more.

Australasia

- Australian Federal Police
- Corruption and Crime Commission Western Australia
- Independent Broad-based Anti-corruption Commission Victoria
- Independent Commission Against Corruption South Australia
- Independent Commission Against Corruption New South Wales
- New South Wales Police
- Queensland Police
- South Australia Police
- Victoria Police
- Western Australia Police

Europe, Middle East and Africa

- Essex Police, United Kingdom
- Kent Police, United Kingdom
- Royal Gibraltar Police, Gibraltar



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.

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