

PFCC Decision Report

Report reference number: 172-23

Classification: Official

Title of report: Storage Hardware Replacement (Technical Refresh)

Area of county / stakeholders affected: Essex Police & Kent Police

Report by: Paul Saunders – Temporary Server Team Manager

Chief Officer: Claire Medhurst - Director of (Kent & Essex) Support Services

Date of report: 30/11/2023

Enquiries to: Paul Saunders / Phil Bartholomew

1. Executive Summary

As a part of our existing strategic server and storage replacement programme, and in line with the agreed IT Strategy for Essex Police and Kent Police, we are seeking to procure replacement storage hardware to ensure that the Digital Forensics Unit can continue to process digital evidence from a wide variety of sources and store that data appropriately and with confidence for the next refresh period. The Technical Refresh programme replaces all servers and storage hardware at the end of their five-year warranty period and, at the time of writing, the oldest of these storage arrays are now just over their five-year expected lifespan and due to be replaced.

2. Recommendations

This is a joint Kent Police and Essex Police contract.

It is recommended that, following review by their Monitoring Officer and Chief Financial Officer, the Essex Police, Fire and Crime Commissioner reviews the proposed contract between Essex Police and Kent Police and the preferred supplier and authorises the Kent Police and Crime Commissioner to sign the contract on behalf of both Essex Police and Kent Police to provide six storage nodes for the Digital Forensics Unit in Essex and six storage nodes for Digital Forensics Unit in Kent. Due to the timings of this procurement, as a result of the delays in progressing

the Digital Forensics Platform Business Case, it is recommended that this takes place between the December 2023 and March 2024 Strategic Boards.

The total cost for this investment will be £443,280 divided equally between Essex Police and Kent Police with each force spending £221,640 to refresh the older storage hardware on an equivalent basis, i.e. there will be no increase in storage capacity over the existing platform.

3. Background to the Proposal

This replacement programme is to replace the existing storage hardware which has reached the end of its warranted lifetime. These storage enclosures were purchased five years ago and have now reached the end of their warranty period and planned life cycle.

The devices are now exiting their warranty and it is reasonable to anticipate an increased risk of hardware failure which will have an impact on operational policing via delays in returns of digital evidence and analytical materials produced by the Digital Forensics team. It is the forces' strategy to replace their storage infrastructure on a rolling five-year basis in line with the ending of the normal warranty period for those devices. This replacement was included as part of the Technical Refresh Business Case approved via decision report 006-23 (IT Technical Refresh 2023/24) in April 2023.

The storage array for the Digital Forensics Unit forms an integral part of the operational workflow, enabling the analysts to store large quantities of data and images of suspects' devices which can be interrogated and analysed as part of investigations into serious offending.

The existing model has reached the end of its production life and been superseded by a new model upon which these costs are based. It has been determined by IT Services and the supplier that this will be the correct replacement path as the Isilon Storage Platform is the strategic storage platform for Essex and Kent Police.

4. Proposal and Associated Benefits

This proposal is to replace the existing six storage units in the Kent Digital Forensics Unit and the same in the Essex Digital Forensics Unit with new storage units as part of our IT Technical Refresh rolling replacement program. The operational benefits of this are that the Analysts and Technicians in the departments can continue to provide high quality digital evidence to support investigations and prosecutions of serious offences.

5. Options Analysis

There are three options presented here; to replace the end-of-life storage nodes, to extend the warranty on the storage nodes and accept the increased failure risk, or not to replace or extend the warranty and run unsupported hardware in the environment.

The recommended option is to replace the storage nodes with new model nodes.

The second option is to extend the warranty on the existing nodes. This option keeps the existing hardware beyond the intended service life but maintains supplier warranty on the hardware. It should be noted that extending the service life brings with it an increased risk of hardware failure and the resultant business impacts. It would cost £20,874 in each force for a single year warranty extension, and thus a total of £41,748 for both forces.

The third option is to leave the hardware to go out of support and for us to run in an unsupported state. While this option is available, it would be the highest risk to the forces as it leaves us unsupported in the event of a hardware failure and any resultant loss of data. Operating on an unsupported storage platform leaves both forces open to significant risk of data loss in the event of a failure of the hardware. This would bring with it reputational damage both within policing and within the wider criminal justice community. Additionally, it could substantially impact live investigations either by introducing delays or by losing vital evidence that might otherwise have been available to the prosecution.

6. Consultation and Engagement

The options and recommendations listed above have been developed through consultation and initial engagement with the supplier and the IT technical support teams. This is less advanced than would be desirable as it was expected that the previous Digital Forensics Platform business case would eliminate the need to make these replacements. The reasons for this are dealt with in DR 171-23.

7. Strategic Links

Replacing the older storage will ensure that the Analysts and Technicians in the Digital Forensics Unit are able to continue to enjoy robust and reliable storage that supports the essential investigative work they undertake.

8. Police operational implications

Any impacts to the Digital Forensics Unit storage will have an impact on its work backlog and as such will negatively impact open investigations by delaying the forensic analysis of digital media and evidence. Replacing this hardware in a timely manner hugely reduces the likelihood and impact of failure. Replacement via the standard IT process is performed in a non-impactive manner.

9. Financial implications

Capital funding for the DFU (Digital Forensic Unit) storage replacement programme is available and incorporated within the 2023/24 IT Technical Refresh capital programme approved via decision report 006-23 in April 2023. It should be noted that there are no set up revenue costs associated with the storage replacement programme.

There are no cashable savings or cost avoidance associated with this contract. Unquantifiable efficiency benefits will come from the avoidance of an unstable IT infrastructure as legacy technology that has not been updated can lead to poor performance and service delivery, inefficiencies in energy and space consumption, and bloated administrative and maintenance overhead.

10. Legal implications

The equipment will be procured in accordance with advice sought from and through 7F Commercial Services.

11. Staffing implications

This work will be undertaken as part of normal operations within the IT department and will not require additional or specialist staffing.

12. Equality, Diversity, and Inclusion implications

There are no additional equality, diversity and inclusion implications associated with the purchasing of these devices.

13. Risks and Mitigations

The risk refers to the force not proceeding with the recommendation. In this scenario, there is a heightened risk of hardware failure and that brings with it a risk of loss of evidential data, reputational damage and delays to ongoing investigations.

There is a small risk of complications during the installation of the new hardware however this is mitigated by the use of professional services to complete the installation and integration of the hardware. These professional services are factored in as part of the cost for the work.

14. Governance Boards

Capital funding for the 2023/2024 DFU (Digital Forensics Unit) storage replacement programme was approved via decision report 006-23 (IT Technical Refresh 2023/24) in April 2023.

Chief Officer Group - 29/11/23
PFCC's Strategic Board – 18/12/23

15. Links to Future Plans

This upgrade to the storage platform will support the migration of the Digital Forensics Unit in Kent from the HQ Site on Sutton Road in Maidstone to the new offices in Ashford Police Station.

After the completion of the Digital Forensics Platform Business Case, this hardware can be reused by both forces as it is a match for our strategic storage platform that has been deployed to the new co-located data centres.

16. Background Papers and Appendices

None

Report Approval

The report will be signed off by the PFCC's Chief Executive and Chief Finance Officer prior to review and sign off by the PFCC / DPFCC.

Chief Executive / M.O.

Sign:



Print: P. Brent-Isherwood

Date: 30 November 2023

Chief Finance Officer

Sign:



Print: Janet Perry

Date: 10 December 2023

Publication

Is the report for publication?

YES

NO

If 'NO', please give reasons for non-publication *(Where relevant, cite the security classification of the document(s). State 'None' if applicable)*

None

If the report is not for publication, the Chief Executive will decide if and how the public can be informed of the decision.

Redaction

If the report is for publication, is redaction required:

1. Of Decision Sheet?	YES	<input type="checkbox"/>	2. Of Appendix?	YES	<input type="checkbox"/>
	NO	<input checked="" type="checkbox"/>		NO	<input type="checkbox"/>

If 'YES', please provide details of required redaction:

N/A

Date redaction carried out:

Chief Finance Officer / Chief Executive Sign Off – for Redactions only

If redaction is required, the Treasurer or Chief Executive is to sign off that redaction has been completed.

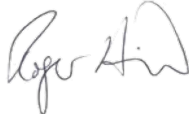
Sign:

Print:

Chief Executive / Chief Finance Officer

Decision and Final Sign Off

I agree the recommendations to this report:

Sign: 

Print: Roger Hirst

PFCC

Date signed: 21/12/2023

I do not agree the recommendations to this report because:

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Sign:

Print:

PFCC/Deputy PFCC