





Problems faced



Data is growing rapidly and is unstructured

Body Worn Video captured by MPS in a single day = 52TB



Large amounts of Data that must be kept for a long time but not necessarily accessed

Assume 7% of police video is evidential

MOPI says keep for 7 - 99 years

Evidential BWV from MPS alone will be >100PB by 2022

By 2026, digital evidence store will be approaching 1 EB



Spiralling costs of storing and managing this data

Using current Police approach for storing, managing & sharing this would cost ~£500M/year





Digital evidence requirements

Collection & Ingestion -Officers, Public, CCTV, Social Media, etc.

MOPI Rules – keep for 7-99 years, delete at the right time Auditing -who's seen it, did anyone mess with it??

Security – only the right people can see it Share with interested parties -Investigators, CPS, HMCS,

Standard formats to facilitate sharing

ONE safe version of the truth master copy, with backup

Available and Resilient capability

Oh – and it's much bigger than you think









IBM Spectrum Software





and Control



Cloud-based Management and Support



Data Insight



Spectrum Discover







Protect





Copy Data Management



Spectrum

Software-Defined Storage

Virtualized Block



Scale-Out File



Scale-Out



Object Storage

Infrastructure **Platforms**



Flash













Tape

Containers





IBM Spectrum Software



	IBM Spectrum Control	Integrated data and storage management software that provides monitoring, automation and analytics for storage
	IBM Spectrum Protect	Scalable hybrid cloud data protection for physical file servers, applications, and virtual environments.
	IBM Spectrum Protect Plus	Complete VM protection and availability that's easy to set up and manage yet scalable for the enterprise
	IBM Spectrum Virtualize	Virtualization of block storage environments on-prem and public cloud to improve efficiency, reduce cost, and simplify management
	IBM Spectrum Archive	Direct, intuitive and graphical access to data stored in IBM tape drives and libraries
	IBM Spectrum Discover	Modern AI workflow and metadata management software for exabyte-scale file and object storage with hybrid multicloud support
©	IBM Spectrum Scale	Advanced storage management of unstructured data for cloud, big data, analytics, objects and more
	IBM Cloud Object Storage	Flexible and economical scalable hybrid cloud object storage with geo-dispersed enterprise availability and security
	IBM Spectrum CDM	Modernize, simplify and automate data center copy management processes





IBM Spectrum Suite key use cases for Police Forces



IBM Spectrum
control - Manage
your data
effectively – know
where data is and
how it's being
stored



IBM Spectrum
virtualize- Sweat
existing hardware
assets –
repurpose spend
on critical projects



IBM Spectrum
Protect - Secure
your evidential &
other critical data



IBM Spectrum
Archive – Utilise
and manage low
cost tape systems
for secure longterm archival of
data



IBM Spectrum
Scale – Advanced
management for
body camera
video data and
other cloud object
data



IBM COS-Flexible, secure and scalable storage for objects such as evidential CCTV data and body cam footage





Platinum Business Partner

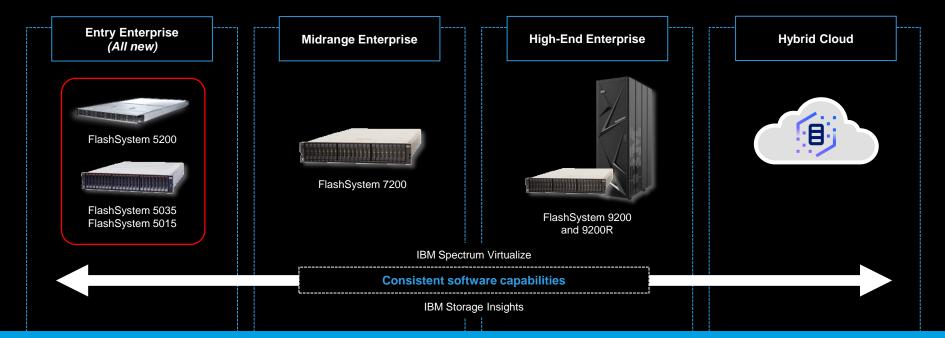


IBM FlashSystem Family

Storage made simple for hybrid cloud

Watch the demo

ibm.biz/flashsystemdemo





Platinum Business Partner



Storage made simple

Reduce Cost

Stop/Defer spending

Remove wastage

Repurpose assets and resources

Event Ready

Data & application mobility

'New Normal' demands

Cyber Resilient and Business Continuity

Never Compromise

Deliver highest service levels

Automate to optimize

Enable the business



Virtualise on premise and cloud

Simplify data management & protection

AI driven data mobility



Do much more with less Make it bullet proof The fastest foundation



Only pay for what you use

Don't fall short of capacity

All the performance always on

SCC Platin Busine Partne



IBM | The importance of data tiering







Reduce storage costs with automatic tiering of data whether onpremise or off.



IBM Cloud
Object Stores
for unstructured
data- a cost
effective way to
store



No vendor lockin. IBM Spectrum Suite Software works with over 400+ storage vendors



Utilise Tape to ensure air-gaps for security and lowest cost of storage.



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Entry Enterprise (All new)

Midrange Enterprise

High-End Enterprise
Integration

"With its new FlashSystem 5200, IBM has made a tremendous leap forward, packing impressive levels of performance and capacity into a 1U package. While capable enough for the data center, the form factor of the 5200 can offer transformational value for smaller organizations and edge locations."

Scott Sinclair Senior Analyst

ESG

Enterprise class storage made simple for Hybrid Multicloud



IBM FlashSytem Family

IBM Spectrum Virtualize Software

IBM Storage Insights (Al-based Monitoring, Predictive Analytics, and Proactive Support)



"Investments that lower IT costs are near the top of the spending list for organizations in 2021. It's a powerful statement when one of the leading new cost-saving solutions is the IBM FlashSystem storage family, normally associated with high-end enterprise class functionality, data resilience, and performance. The new FlashSystem 5200 also allows the entry storage space to have access to an end-to-end NVMe solution, with low CAPEX options, very cost-efficient growth pathways, and comprehensive capabilities. This offering from IBM raises the bar for other vendor seeking to serve organizations that strive to substantially reduce their IT costs."

Ashish Nadkarni

Group VP, Worldwide Infrastructure **IDC**

Why IBM FlashSystem













Unmatched Performance

Unique use of QLC flash enables fastest high capacity NVMe drives on the market.

Inline compression and encryption with zero performance impact

Engineered to last 5X longer than standard NVMe drives.

Storage Class Memory drives available across the entire FlashSystem family

Total Visibility and Control

FlashSystem virtualization supports over 500 different controllers as well as public cloud providers so you can unify your entire storage pool.

Transparent Cloud Tiering means that cold data can be seamlessly moved to low cost object storage.

IBM FlashSystem integrates with RedHat
OpenShift and comes with a library of Ansible
modules for automation.

Al Driven Data Placement

EasyTier fully automated tiering and Storage Virtualization means that your entire environment can get the benefit of IBM FlashSystem.

EasyTier differentiates between NVMe flash and Storage Class Memory. Can benefit every application.

Automatic fault logging and best practice recommendations.

IBM FlashSystem;

- ✓ Provides the fastest, densest and most reliable NVMe storage on the market.
- ✓ Leverages AI to boost performance, increase reliability and quickly resolve faults.
- ✓ Offers the opportunity to have single point of control for ALL storage assets



Driving improved outcomes





Application Owner

- · Accelerate the performance of current applications
- Always get the consistent and sustained performance required
- Faster provision of new applications, both on-prem and in the cloud
- · Promote line of business agility



Storage Administrator

- · Provision high performance services at speed
- Simplified management One tool to manage ALL storage assets
- Reduce maintenance time, as much as 65% of faults fix themselves
- Support data mobility with ease, enabling business additive



Finance

- Significantly reduce datacentre, software & power expense
- Sweat existing assets without limiting the business
- Improved ROI and reduced payback period on technology spend
- Program guarantees means no mid-life expense surprises

Platinum Business Partner



IBM FlashSystem

What customers are saying

"We achieved a compression rates that we estimate enabled us to avoid spending approximately £200,000. When you consider that we haven't compromised on performance at all – in fact, we've increased it considerably – these savings are even more impressive."

Peter Chase zLinux & Storage Specialist Met Office

"We constantly test other vendors and other storage, and we're always looking for alternatives—but we're consistently unsuccessful in finding anything that beats the IBM solution."

Owen Morley Director of Infrastructure Plenty of Fish

"With IBM Storage behind us, we're confident that we can support the UK's growing digital economy while continuing to deliver exceptional value for money to the taxpayer."

Simon Navin Senior Innovation Expert Ordnance Survey "We saw something like a 100-fold performance increase, with our month-end batch processing cut by 71 percent, from seven hours to two hours, and day-end batch processing by 85 percent, We immediately sent the specialist team we usually have on standby away, and haven't had to call them back since, which represents a big saving."

David Bywater

Senior Technical Specialist Coventry Building Society

"IBM all-flash solutions are so cost-effective we can support all workloads with premium storage. With IBM HyperSwap, we can offer a true business continuity solution, with no interruptions to services even if one of our sites fails."

Michael van Doorn Co-founder

TM-Solutions

"With the FlashSystem connected, we can download and process images straight away with the ridiculously fast throughput we have."

Sean Wilson

Al Technical Lead
Advanced Manufacturing Research Centre





IBM Cloud Object Store (COS)



Storage that scales with today's workloads- ideal for video footage & evidence



Reduce storage costs by up to 70%



Parallel concurrent
accessible data from
anywhere- ideal for sharing
evidential data quickly
between forces and other law
enforcement organisations



Integrated real-time analysis w/ Spectrum Discover using continuous data and actions with customizable metadata



Cost effective efficiency and easy to start with TB starter configs and scalable to PB or even proven EB capacity



Stays online and easy to manage with extreme data durability and no downtimes or data migrations



Built-in security with inflight and at rest patented SecureSlice encryption and SEC 17a-4 compliant WORM immutable storage





IBM COS use cases



Optimized file access or remote file collaboration- Evidence sharing between forces and CPS



Primary storage for Big Data, video/image distribution, containers, and cloud storage-Body worn camera data and other unstructured data



Backup data always-on and lower cost access to data-cheaper and reliable backup of evidence to MOPI standards



Active archive for always-on and lower cost access to data- store more efficiently driving down future costs



IBM COS use cases



Simple

TIERED STORAGE

Simple policy based data migration Easy data access



Secure

SECURITY / AIR GAP

Encryption / WORM, true offline data



Standardised

FOR CLOUD &
Hyperscale
Long term data retention
Easy data access



IBM TAPE use cases







Long term retention of evidential data adhering to MOPI policies



Secure data -Air-gap security, Encryption and WORM



Cheapest method of storage – reduce the cost of storing in the future



Scalable storage – 10TB per cartridge now – 220TB in the future- more storage is less footprint



Where to begin

Client Storage Assessment

- **Reality:** A true reflection of your current storage environment: issues, configuration, capacity, consumption, utilisation and efficiency metrics.
- A better option: An optimised strategic configuration designed to deliver improved levels of service coupled with enhanced levels of capacity utilisation and efficiency
- Business case: A financial business case substantiating the savings that can be realised by aligning to a proposed strategic solution instead of continuing as-is today
- Free of charge
- More information: https://www.ibm.com/sites/storage-made-simple/

How to consume



Either

Pay up-front in the usual CAP-EX way

Or

 Pay as you consume, monthly for a solution that flexes with you