

Process, or outcome?

Two models sit in this market. One certifies that a method ran. The other verifies, on each device, that the data is gone. Everything else follows from that.

	CONVENTIONAL ERASURE PLATFORM	DSS SMART WIPE
Method selection	Chosen in advance by an operator or a configuration, applied across the batch	Determined by the engine from the individual device, bound per unit
Operator role	Chooses the method, runs the job, confirms completion	Starts the job. Nothing else, and no override
Failure handling	Substitutes a weaker method and certifies it 57 of 193 drives in four live erasure reports were certified erased by overwrite Clear after the selected Purge was refused	Fails closed. Quarantine, remediation or destruction Certificates carry the field "Fallback allowed: No"
Verification	Confirms the selected method completed, and at best that the addressable area reads clean	Confirms known data written before the erase cannot be read after it, at the device
Certificate basis	That a process was executed	That the data on this device has been rendered irretrievable
Responsibility	Sits with the ITAD and the controller. The vendor licence disclaims the outcome	Retained by DSS where destruction is successful

In a conventional platform, correctness depends on human judgement. **In DSS it is enforced by design.**

ONE • THE TECHNICAL MODEL

The decision moves from the human to the device.

Purge is a category, not a command. Cryptographic erase, block erase, SCSI Sanitize, ATA Sanitize and NVMe Sanitize are all Purge-class, and two identical-looking drives in one chassis can take different ones.

CONVENTIONAL

Select, then check

- 1 A method is selected in advance, by the operator or the configuration.
- 2 The tool checks the drive supports it.
- 3 If supported, it runs. If refused, a weaker method is substituted.
- 4 A pass is recorded either way.

DSS

Interrogate, determine, test, fail closed

- 1 The engine interrogates the drive: interface, controller, firmware, self-encrypting status.
- 2 It determines the one correct method for that unit and applies only that.
- 3 It tests the result at the device, not the return code.
- 4 If it cannot prove the outcome, no certificate is issued.

	SELECT, THEN CHECK	INTERROGATE, DETERMINE, TEST
What the check can reject	Only a method the drive cannot run Plain overwrite is supported on effectively every drive in service, so the safeguard passes precisely when it matters least	Any method that is not the correct one for that unit
Same model, different drives	One setting for all On 61 drives of one identical model, all reporting Purge support, the selected Purge did not complete on 57 and completed on 4	Read individually. The variation is resolved at the drive
Where the residue goes	Remapped and spare area is outside the method and outside the check Three drives carried remapped sectors under a status of Erased, one of them 2,045	Reported where readable, made unreadable by key destruction where it is not The control drive, where the Purge ran, went from 1 remapped sector to 0

A support check confirms the method already chosen is permitted. **It cannot tell you it is the wrong one.**

TWO • OPERATIONAL AND COMMERCIAL

Same rigs. Same drives. Same firmware.

95 drives from four live erasure reports, re-run against the correct method for each device.
Nothing else changed.

399h 02m

AS RUN

7h 16mCORRECT METHOD PER
DEVICE**88 of 95**WOULD HAVE
COMPLETED IN SECONDS**331**SLOT-HOURS HANDED
BACK

	AS RUN	CORRECT METHOD PER DEVICE
Drives finishing in seconds	0 of 95	88 of 95
Array time per batch	26h 12m, gated by the slowest drive One drive ran 12h 23m and held 28 other slots, most long finished	c. 3h 36m, hot swap on completion
Slots locked and idle	331 slot-hours	Zero
Wipe operations per device	Two on 29.5% of drives, the first producing nothing	One
Commercial model	Volume licences bought up front. On the illustrative basis below, £500,000 committed before a single drive is processed	No upfront commitment. Charged in arrears, and only for a successful wipe
Licence cost of the duplicates	c. £147,500 a year Illustrative basis: 250,000 devices a year at £2 a wipe, applying the observed 29.5% duplicate rate. Substitute your own volume and rate, the arithmetic is the same	£0
Drives a failed Purge condemns	Written off to destruction, resale value lost	Recovered to resale by correct selection

This is not a faster command. Two tools issuing the same firmware command take the same time. **The entire difference is correct per-device method selection.**

THREE • ASSURANCE AND COMMERCIAL POSITION

What the certificate is worth when it is tested.

	CONVENTIONAL ERASURE PLATFORM	DSS SMART WIPE
Certificate states	That a process was executed	That the data on the identified device is irretrievable
Warranty	None. Software supplied as is, certificates descriptive only	Outcome warranted at clause 5.1, with nothing contradicting it
Liability for data loss	Excluded or capped at fees paid	Uncapped for the outcome, clause 17.1
Insurance response	None behind the certificate	£10m Technology Professional Indemnity and £10m Public and Products Liability, each on an each and every claim basis The standard inefficacy exclusion is removed by endorsement, so the cover responds to the destruction having failed
Failure record	Reported as completed unless an error is detected	Recorded as an attempt, with no warranty and no charge
Resale impact	Drives the tool cannot handle are condemned	Correct selection recovers them, released in seconds
Independent assessment	Assurance level assessed once, as a process	ADISA Product Assurance Level 5. Fallback is not permitted under the certification
Protection	A settings change any competitor can copy	The integrated per device chain is patented and published, GB2638704

Proven

The outcome is tested at the device, not inferred from a return code

Warranted

The licence accepts uncapped liability for that outcome

Insured

£10m and £10m of cover, each and every claim, with the standard inefficacy exclusion removed by endorsement

A conventional certificate does not protect the ITAD if data is later recovered. **A DSS certificate is built to.**

TEST IT

Do not take our word for it. Take your own drives.

Every figure in this document came out of ordinary erasure reports. You can produce the same comparison on your own floor, and you do not need us to interpret it.

1

Run 100 drives through your current system.

Your rigs, your firmware, your operators, your normal configuration. Change nothing.

2

Run the same 100 drives through ours.

The same devices, not a second sample, so it is a true device by device match.

3

Compare them yourself.

Purge match rate, verified outcomes, drives recovered rather than condemned, and throughput.

You keep the results, whichever way they fall. There is no upfront commitment, no rip and replace, and nothing to unpick if you walk away. The OpenAPI and XML interfaces are already built.

Proof, not promises.

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