

COMPACT EXACT PERSISTENCE

GLYX Archive

Compact libraries.
Exact selected restoration.

Retain reusable structure together.
Restore selected content exactly.
Measure the complete retained size.

UK patent application GB2624952.4 (pending)

Recorded results and a proposed commercial route



THE OPPORTUNITY

The value of a growing shared archive

Related files and versions often repeat useful structure. Retaining it together creates an opportunity to reduce data overhead.

People and teams

Keep compatible libraries compact and restore selected files.

Business services

Evaluate storage, transfer and access costs on the same data.

AI applications

Retain exact tool data, structured histories and verified artifacts.

Devices and applications

Explore compact persistence within an agreed integration.

Prospective applications. Customer demand and deployment economics require evaluation.

WHAT THE PRODUCT DOES

The archive workflow

A simple archive experience, with exact restoration as the acceptance condition.

01 Choose content

Add supported files or folders to a shared archive.
Keep originals while checking the result.

02 Review the saving

Compare source size with the complete archive
and restoration record.

03 Restore selected files

Choose content and a destination. Other archived
content can remain compact.

04 Verify the result

Check exact restored bytes and retain a recovery
copy under your own policy.

REAL-WORK LIBRARY COHORT

742 files restored exactly

A private candidate compared the same 1.651 GB of source content with a same-content ZIP.

Retained size (decimal MB)

GLYX + restoration record



794

Same-content ZIP



1,490

46.8%

smaller than the same-content ZIP

1,490,471,935 bytes versus 793,564,456 bytes.
All 742 files restored exactly.

Runtime and installation are additional. Counting both conservatively gives about 845.4 MB, or 43.3% below ZIP.

SCALING OPPORTUNITY

Reuse can improve as the library grows

More compatible content can reduce the marginal storage needed for later additions.

One retained library

Related content can share applicable structure within the archive.

Exact changes remain

Unique information and reconstruction dependencies still count.

Selected access

Restore the requested content without materialising the whole library.

Measure each workload

File size alone does not guarantee higher compression or faster restoration.

Encrypted, already-compressed and unique data can behave differently.

Faster complete archive operations

Six authored workloads. Median complete-operation time, six repetitions per arm.

Workload	Existing	Candidate	Time change
Mixed content	351.729 ms	299.781 ms	14.77% less
Repeated content	1,155.853 ms	894.071 ms	22.65% less
Unique content	338.421 ms	288.503 ms	14.75% less
Structured records	577.064 ms	582.620 ms	0.96% more
Multiple sections	1,070.307 ms	1,034.495 ms	3.35% less
Append operation	435.288 ms	357.410 ms	17.89% less

4/6 workloads met the gate. All 1,656 exact-output checks passed; archive sizes unchanged. Peak child memory was about 129 MB versus about 34 MB on several baseline workloads.

Storage and time in one component study

One synthetic versioned-data workload. 96 formation versions and 1,536 fresh versions per arm.

Implementation	Pipeline	Logical data	Allocated space
Archive/state component	135.98 s	32.51 MB	246.02 MB
Trained Zstandard	82.81 s	76.09 MB	289.41 MB
Borg + compaction	918.48 s	52.31 MB	445.78 MB

57.3% fewer logical bytes than trained Zstandard

37.9% fewer than compacted Borg. All 9,216 fresh full and selected-range reconstruction checks passed.

Separate component study. Zstandard was faster. Logical data, allocated space and installation have different boundaries.

FEATURES AND BENEFITS

The product preserves exactness

The useful promise is an exact retained record with a clear storage and recovery boundary.

Growing shared archives

Reuse compatible structure across files and versions.

Large-file streaming

Process files in sections with a bounded working set.

Exact selected restoration

Reconstruct and verify the content requested.

Visible savings accounting

Show archive and restoration costs, with backups and application storage separately.

Capacity depends on available storage and the qualified platform.

PROPOSED COMMERCIAL MODEL

Licensing follows the deployment

Non-exclusive usage and distribution rights, with BBF retaining technology ownership.

People and small teams

Proposed device or team subscription. Set pricing for the qualified release.

Business and AI services

Proposed 50% share of verified net eligible savings, or annual capacity bands.

Application and device makers

Agree deployment rights, capacity bands and OEM terms.

Coordinated BBF stack

Use one cost ledger so the same saving enters the commercial calculation once.

Commercial proposals. No live checkout, automatic billing or accepted customer terms are implied.

PRODUCT READINESS

A focused route to customer release

Private engine and desktop-candidate evidence supports the next delivery steps.

Current evidence

Exact archive restoration and defined storage comparisons.

Platform acceptance

Windows archive/CLI: 92 scoped checks. Full workflow qualification remains in progress.

Distribution

Qualify installation, signing, updates and recovery on the target host.

Customer evaluation

Measure the actual data, access pattern and complete operating economics.

Hardware, operating systems and applications receive their own acceptance checks.

PROTECTION AND PRODUCT ROLES

An application within a product family

UK patent application GB2624952.4 is pending. The company licenses defined product capabilities.

GLYX Archive

Compact exact persistence and selected restoration.

Seed State OS

Qualified reconstruction of required working state.

TokenHoloFold

Supported local execution inside wider AI workflows.

Combined delivery

Qualify the full integration and count shared financial benefits once.

Applications are pending. Combined performance and customer economics require their own evaluation.

INVESTOR AND PARTNER DISCUSSION

The next commercial milestones

Turn recorded capability into qualified deployment.

Priorities for a product programme:

- 01 Complete target-host delivery and recovery acceptance.
- 02 Run a scoped customer evaluation on real retained data.
- 03 Agree licensing, support and repeatable distribution.

Discuss your dataset: www.beyondbruteforce.com | hello@beyondbruteforce.com